DOING BUSINNES AS

GROUND OPERATIONS MANUAL

COPY NO.: 03

MANUAL OWNER: Nominated Person Responsible for Ground Operations

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LIST OF CHANGES

REVISION: 00
DATE: 10th September 2018

REVISION: 01
DATE: 30th December 2018

REVISION: 02
DATE: 08th April 2019

REVISION: 03
DATE: 16th January 2020

REVISION: 04
DATE: 30th June 2020

REVISION: 05
DATE: 22nd September 2020

REVISION: 06
DATE: 21st December 2020

REVISION: 07
DATE: 7th September 2021

REVISION: 08
DATE: 7th January 2022

REVISION: 09
DATE: 5th May 2022

REVISION: 10
DATE: 30th September 2022

REVISION: 11
DATE: 09th January 2023

REVISION: 12
DATE: 19th May 2023

Details of changes:

REVISION	DESCRIPTION & PAGES
Rev01	F-HRAP and SE-DZA inserted in AOC
	0.3.2 updated distribution process
	0.1; 0.3.2; 0.4; 1.1; 1.2; 1.3; 5.3, 5.3.2.2 due to IOSA
	0.5 additional abbreviations
	2.3.7 and 2.3.8 due to possible forms
	2.3.7.1 due to clearer understanding
	2.3.10.8 & 3.5.2 due to missing info regarding weapons carriage
	3.3.5 AVI abbreviation added
	3.6.4; 4.15. additional elements added
	4.11 updated to reflect real situation
	5.2.3 Reference to NOTOC added
	5.3.2.2 masses for non-standard groups added
	6.5. F900 aircraft specifics updated
	Ch. 7 updated with missing information

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	Ch.8 anti-/de-icing program developed
	Ch.9 updated
	Ch. 10 additional codes added
	All GOM: renumbering of pages, due to inserted TOC before separate chapter and only Revision tracking is now applicable (Issue removed)
Rev02	2.3.1 Number of infants acceptable on SE-DZA updated
	Ch. 2.1.4 & 2.3.10.4 updated due to instructions on personal documents acceptation from A4M crew
	3.3.1 and 7.2.12 revised due to cabin seat cargo
	5.3.3.1 inserted due to NTC GO/03/2018
	ATR72-600: ch.2 (various subchapters); 4.4.4, 4.5.4 and ch. 6.6
	Ch. 6.4 updated handling procedures for ATR42 and additional information added
	Ch. 6.1.6.2; 6.2.6.2, 6.3.6.3 inserted due to GPU procedure
	Ch.7 and ch. 11 added contact for Aero4M cargo department
	8.1.1 and 8.2.1 due to wrong SAE references
	9.1.1 modified about reporting
Rev 03	**All:** Logo replaced Aero4M replaced with Amelia Intl Airplane, aeroplane nouns replaced with aircraft
	Chapter 0: 0.3.1.2 & 0.3.1.3 rewritten in order to be clearer 0.6 abbreviations added
	Chapter 1: 1.2.3.1 added emergency procedures during loading of cargo Ch. 1.2.4 inserted for Airside safety operational oversight
	Chapter 2: 2.1.13 additional requirements for check-in counter 2.3.7, 2.3.8, changed due to change in e-mail 2.3.7.1 written clearer definition on WCH pax categories 2.3.1 Number of infants changed on ATR42 and ATR72 and removed for ERJ145 EP 2.3.9 Reference inserted 2.3.12 procedure in case of policeman/personnel escorting state officials inserted 2.3.13.2 procedure inserted and updated 2.3.14 Procedure on Orthopedic seat added
	Chapter 3: 3.1.1 Weight of cabin baggage changed and added procedure when cabin baggage is removed from pax 3.5.3, 3.5.4 and 3.6.1 additional provisions inserted 3.3.5 change in PECT and AVIH acceptance and container requirements 3.3.5.1.2 when to increase number of accepted PETC
	Chapter 4: 4.1.3.1 Examples and results of FOD inserted Revised 4.15.3- Adverse Weather conditions 4.1.4.1; 4.1.4.2, 4.2.3.2, 4.4.2, 4.5, 4.6.1, 4.6.4, 4.7, 4.10.2; 4.12.1.1; 4.12.3, 4.13.5, 4.13.7 Provisions updated in accordance with iGOM 4.1.4.3; 4.1.4.6; 4.1.47 and 4.1.4.8 inserted

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	4.1.5 inserted due to iGOM revision 4.1.6 added and one subchapter moved here from ch. 4.10 4.6.4, 4.10.1 and 4.10.2 provisions inserted and removed 4.9.1 additional note of who can open/close the cabin doors. 4.10.8 additional information for tie down added 4.10.9 additional information for load spreading added 4.10.11 added 4.13.2, 4.13.4 provision added 4.13.7 Tasks in Incidents during towing inserted 4.14.5.3 changed due to internal audit finding
	Chapter 5 all due to change in iGOM Insertion of LIR
	Chapter 6: 6.3. insertion of F-HESR and F-HOXY 6.4 ATR42 chapter removed due to removal of aircraft form AOC 6.1.2, 6.3.2, indication where the balance zones can be found 6.1.5.2 servicing points connection indications added for each ERJ135 variant in Amelia Intl AOC 6.1.6 and 6.3.6 Aeroplane servicing arrangement added 6.3.2.6 change in Mass& centre of gravity data for HRAP 6.1.7; 6.2.7; 6.3.7; 6.4.7 & 6.5.7 Galley configuration added 6.5.6 picture changed
	Chapter 7: 7.1.4 as per iGOM 7.2.2., 7.2.10 & 7.2.11 procedure more detailed
	Chapter 8: 8 revised due to insertion of clearer definition 8.2.5 changed due to change in e-mail 8.3. inserted standard for procedures 8.7 inserted due to missing provisions for safety during de/-anti icing
	Chapter 9: Provisions for carriage of DG by pax and crew updated due to changes in IATA DGR 60th and 61st edition
	Chapter 11: 11 change in e-mails and contacts
	Appendix1 Marshalling hand signals and **Appendix2** Seat allocation created
Rev04	**Chapter 0:** 0.3 due to editorial changes
	Chapter 01 1.1. added another reference document 1.2.1 statement updated 1.2.3 Other ground handling job roles inserted 1.2.4. provision added
	Chapter 02: 2.1.2.2 & 2.1.6.1due to missing statement 2.3.8.4 text updated to avoid doubling 2.3.7.6 wheelchairs updated and moved to ch 3.3.4

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	Ch. 2.3.8.6 created due to MEDIF and FREMEC forms Ch. 2.3.7 and 2.3.8 revised due to changed procedure for MEDIF and FREMEC forms 2.3.8 insertion of stretcher procedures 2.3.8.8 Right of refusal of MEDA inserted
	Chapter 03: In Ch3 inserted a procedure for baggage that excesses normal allowance due to finding 3.3.1 provision changed Ch. 3.1.2.1 created, DAA tag 3.3.4.1 acceptance and handling moved here from 2.3.7.4 Ch. 3.3.4.2 created WCH tag 3.3.5.2 SE-DZA removed
	Chapter 4: 4.1.4.1 minor correction in text 4.5.3 water tank capacity for ATR42 inserted 4.6.1 minor modification 4.6.5.1 added a Walkaround check form. 4.14.6 refuelling changed to fuelling
	Chapter 5: 5.1.2 & 5.2 provisions modified 5.2.1.1.2 inserted LIR instructions due to editorial mistake in previous revision 5.3.3.1 cabin seat cargo removed 5.5.3 provision removed
	Chapter 6: 6.1.2.1, 6.1.2.2, 6.2.2.1, 6.3.2.1, 6.3.2.2, 6.3.2.3, 6.3.2.4, 6.3.2.5, 6.3.2.6, 6.5.2.1, Ch. 6.3 removal of SE-DZA and insertion of stretcher procedures Ch. 6.3.1.2 O2 mask location updated 6.5.4 change in picture 6.5.6.7 added for safety Ch. 6.6. for ATR42 inserted
	Chapter 7: 7.1.8 added some provisions 7.2.2.1 removal of SE-DZA 7.2.3 additional requirement for urns 7.2.10 VAL updated as per AHM331 7.2.13 provision for Cabin seat cargo changed 7.6.4 inserted due to implementation fo ATR42 in AOC
	Chapter 8: all updated to include some additional ICAO guidelines
	Chapter 9: 9.1.1 Change due to error Added ch. 9.1.3 due to possibility for Medical flights 9.2. additional provision 9.3. reference updated
	Chapter 11: change in email of Security department
	Appendix 2: changed seat allocation for INF for F-HRAP (now is same as F-HESR and F-HOXY) Inserted table for F-HLIA and F-HESR stretcher version
Rev05	**Chapter0:**

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	0.3.2 updated to include effective date 0.6 new abbreviations added
	Chapter 1: 1.2. reference updated 1.2.3.4 added station representative
	Chapter 2: 2.3.2 provision updated 2.3.3.1 seating for UMNR updated 2.3.3.6 updated 2.3.4 possibility for young person to be UNMR added 2.3.5 updated 2.3.7.2 examples of when safety assistant is needed 2.3.8 when is medical clearance also required 2.3.8.1 additional SSR codes added 2.3.8.5 Oxygen bottles added 2.3.8.6 chapter renamed 2.3.9. documentation required and seating allocation updated 2.3.10 number of escorts and INAD outlined 2.3.13.1 requirement added 2.3.15 Extra seat chapter added
	Chapter 3: 3.1.1.1. Cabin baggage for infants added 3.1.2.1 updated DAA tag procedure 3.3.1 Cabin seat baggage chapter updated with more information 3.3.3 update on Sporting Equipment 3.3.4.1.3 SSR code changed 3.3.5.2 updated provision for AVIH 3.3.6 Musical Instrument added
	Chapter 4: Ch. 4.8 reference updated 4.14.8 added due to joining IATA IFQP
	Chapter 5: 5.2.1.1.1. LIR example for ATR changed 5.3.2.3 statement added for clearer understanding
	Chapter 6: 6.5.4, 6.5.4.3, 6.6.4, 6.6.4.3 updated to include the cargo compartment numbers 6.6.2.2 Seat allocation for balance purposes inserted
	Chapter 7: 7.1.9.1 NOTOC modified Ch. 7.3. procedure for loading and unloading of non-revenue CGO by company's employees.
	Chapter 8: 8.9 added due to joining IATA DAQCP
	Chapter 9: 9.1.1. changes in references
	Chapter 10: added and changed ground codes
	Appendix 2: Change in number of pax on F-HIPY due to typo
Rev06	**Due to removal of ERJ135BJ from AOC changes in:** 6.2 removed and all chapters after it renumbered

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	Ch.2 ERJ135BJ removed from any relevant tables 3.3.1, 4.2.2, 4.4.4, 4.5.4, 7.2.3,
	Chapter0: Abbreviations added
	Chapter 1: 1.2.1 NPGO responsibilities and duties inserted and renumbering of following chapters performed, due to IOSA finding 1.2.4.4 requirements and duties of ground station representative are added and/or updated, due to IOSA finding 1.2.5 statement updated and iGOM removed
	Chapter 2: 2.1.2.2 reference added 2.3.3 & 2.3.8 Update due to installation of stretcher on F-HTOP 2.3.9 GRH code replaced due to error
	Chapter 3: 3.2.1 updated info on which baggage concept for determining the weight shall be used 3.5.4. reference updated 3.6 info about mishandled baggage procedure inserted
	Chapter 4: 4.1.7.1 operator replaced with Amelia Intl 4.10 updated to include warning about certain issues with the load itself 4.10.2.2 not relevant reference removed 4.10.3 updated due to several reports of left baggage in cargo after finished unloading and due to missing procedures 4.10.8 when load needs to be tied-down added i.a.w. AHM 311
	Chapter 5: 5.2.1.1 a statement inserted to clarify which LIR should be used 5.5.2 inserted due to several reports of left baggage in cargo after finished unloading
	Chapter 6: 6.1.1; 6.1.2.2, 6.1.7.1 Update due to installation of stretcher on F-HTOP 6.1.1.1 F-GRGP layout updated 6.1.7.1 galley layout for F-GRGP updated due to error 6.2.1.2 F-HESR O2 mask from AFT CCM seat moved to lavatory 6.3.1.1 layout updated due to mistaken seat location 6.3.1.2 Pax O2 mask location inserted 6.5.1.1 due to editorial mistake
	Chapter 7: 7.1.3 & 7.1.4 references updated 7.1.7.2 Securing of load inserted 7.1.9.3 Airway bill inserted 7.3.1 EIC and Company cargo chapters are combined
	Chapter 8: 8.4.5 inserted missing word 8.5. sentence updated to be clear
	Chapter 9: ICAO TI added and up-to date changed with current Changes due to IATA DGR Edition 62: 9.1.1, 9.1.1.3, 9.1.1.7, 9.1.1.10, 9.1.1.15.

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	Chapter 11: mobile phone of Security manager inserted
	Appendix 2 F-HTOP seat allocation added F-GRGP layout updated
Rev 07	**Chapter 0:** 0.6 abbreviations added 0.7 definitions added
	Chapter 1: 1.2 updated with some additional general operational requirements 1.2.5.2 moved spills from 4.10.10 1.5 added due to additional info from IGOM
	Chapter 2: All ch.2 besides the chapters mentioned below is revised to fit IGOM Rev10 2.3.1.3, 2.3.3.2, 2.3.8.3, 2.3.8.3, 2.3.10.2, 2.3.13.1, Due to removal of F900 from AOC 2.3.7 added possibility for PRM to be post-embarked 2.3.8 updated due to installation of 3rd stretcher on F-HTOP 2.3.8.5 update on provisions for carriage of POC and POB 2.4 updated
	Chapter 3: All ch.3 besides the chapters mentioned below is revised to fit IGOM Rev10 3.3 inserted statement for acceptance of cabin seat cargo due to a report 3.3.1 responsibility of handler and crew inserted 3.3.5.1.2 update in PETC quota on F-HTOP due stretcher configuration & on F900 due to removal from AOC 3.3.5.2, 3.3.5.2.2 due to removal of F900 from AOC
	Chapter 4: All ch.2 besides the chapters mentioned below is revised to fit IGOM Rev10 4.2.2, 4.2.2.1, 4.2.3.1, 4.4.4,4.5.4, 4.3, updated due to removal of F900 from AOC 4.10 renamed 4.10.3 updated due to not clear information 4.10.10 renamed 4.10.2.2 procedure inserted for deformed items 4.10.11 procedure on what to do when a leakage is discovered is updated
	Chapter 5: 5.2.1, 5.2.3.2, revised to fit IGOM Rev10 5.2.3.3 updated due to name in chapter 5.2.1.1.2 inserted instructions in which cmpt DAA to be inserted 5.2.1.1.3- updated on saving the LIR
	Chapter 6: 6.3 removed due to removal of F900 from AOC and subsequent subchapters renumbered 6.1.1.1, 6.1.1.2 & 6.1.2.2 updated due to installation of 3rd stretcher on F-HTOP 6.1.7.2 corrected max catering weight accepted in the galleys 6.2.1, 6.2.1, 6.2.4, 6.2.7,
	Chapter 7: 7.1. correction o wrong statement 7.1.1 inserted reference 7.1.7.2 updated reference

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	7.2.2, 7.2.3 updated due to removal of F900 from AOC 7.2.2 inserted info from IGOM 10th edition 7.2.13 inserted transportation of cargo in pax cabin as N/A 7.3.1.2.1 insertion of FKT & EIC labels
	Chapter 9: Update due to wrong reference 9.1.2 inserted amendment 2
	Chapter 11: OCC number revised
	Appendix 2: F-HTOP updated due to installation of 3rd STCR F-HESR STCR version updated due to missing limitation F-HLIA updated F-HYOG inserted
Rev 08	**All:** removal of ATR72-600 (pax version) from the AOC Insertion of ATR72-212F (freighter) in the AOC
	Chapter 00: 0.7 Definitions added
	Chapter 01: 1.2 reference to cargo responsibilities added 1.3. records to be kept updated Ch. 1.5.1 note added
	Chapter 02: 2.3.1.2, 2.3.3.2, 2.3.8.3, 2.3.10.2, 2.3.13.1, due to removal of ATR72-600 from AOC 2.3.3 & 2.3.8.8 email updated
	Chapter 03: 3.3.1 update in reference and email 3.3.5.1.2, 3.3.5.2.2, due to removal of ATR72-600 from AOC 3.10.6 email updated
	Chapter 04: 4.2.2, 4.4.4 & 4.5.3 due to removal of ATR72-600 and insertion of freighter with no toilet installed 4.3.2 & 4.3.4.4 email updated 4.6.5.1 updated walkaround checklist for EMB due to wrong picture and email updated 4.9.2 updated due to an observation from an audit 4.10.8 revised to fit AHM procedures and to ensure consistency with other procedures in the manual 4.12.2 email updated
	Chapter 05: Chapter sequence reorganized 5.3. inserted weight control requirements 5.4 inserted aircraft structural loading limitations 5.6.1.1 email updated and LIR for ATR72-212F inserted including instructions on filling
	Chapter 06: 6.1 inserted F-HLIP aircraft 6.2.1.2 location of O2 masks updated due to old revision and is now in align with App2 6.3 Removed ATR72-600 and inserted ATR72-212F (freighter)

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	Chapter 07: All chapter but ch. 7.2.12; 7.2.13; 7.3; 7.5 & 7.6 changed due to start of all cargo operation Procedures developed for previously not accepted special cargo shipments: PER, WET, FRA, HEA, BIG, OBX,
	Chapter 08: 8.4.5 email updated
	Chapter 10: Load information codes added
	Chapter 11: emails and phone numbers updated
	Appendix 2 F-HIPY removed due to removal from AOC F-HLIP inserted
Rev 09	**Chapter 0:** 0.6 abbreviations inserted 0.7 inserted definitions due to DG approval
	Chapter 1: 1.2.1 updated due to cargo manager position opened 1.2.3 updated responsibility due to DG approval 1.2.4.2 updated due to finding 1.2.5.1 modified to fit the DG approval 1.3 minor correction of text
	Chapter 2: 2.1.1.3; 2.1.5.1; 2.3.11 updated due to ISM changes 2.3.10 prior to the flight inserted 2.3.12 notification to Commander included
	Chapter 3: 3.7 policy updated 3.7.4 ch references updated 3.8.5 updated storage procedures.
	Chapter 4: 4.1.3 updated due to missing statement 4.2.9 inserted missing information 4.10 & 4.10.2.3 modified to fit the DG approval 4.10.8.2 inserted a note 4.12.5 verbal removed, as the communication may also be non-verbal.
	Chapter 5: Ch. 5, 5.3.3, 5.6.3, modified to fit the DG approval 5.6.1.2 due to additional instructions about certain EMB
	Chapter 6: 6.1.4 editorial mistake, limitation of load on F-HLIP & update in data to be clearer 6.2.4 update in data to be clearer 6.2.4.3 due to additional instructions about certain EMB 6.3.4.2 updated total max load allowed to be loaded on ATR72F 6.3.6.3.1 changed statement about DG due to DG approval Subchapters from 6.1.2, 6.2.2, 6.2.3 & 6.2.4 removed due to removed W&B data as the loadsheet is done by Amelia Intl crew
	Chapter 7:

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	7.7; 1.1; 7.1.3; 7.1.3.1; 7.1.4.4; 7.1.7.1; 7.3.1 revised due to DG approval 7.1.2 inserted a statement about the security department's responsibility 7.2.2 updated due to missing information about additional documentation 7.2.5 updated due to missing information about additional documentation 7.2.8 & 7.2.9 statement about lashing equipment inserted 7.3 statement added about training
	Chapter 8: 8.3.1 definition of preflight contamination check updated 8.6.2.1 should replaced by shall
	Chapter 9: All due to approval to carry DG on ATR72-212F
	Chapter 10: 10.1.1 IMP codes added
	Chapter 11: Updated safety email address Inserted contacts for OCC dealing with cargo operation
Revision 10	**Chapter 0:** 0: inserted statement about using latest rev of GOM. 0.6 abbreviations added 0.7 definitions added
	Chapter1: PRM replaced with PWD in all chapter 1.2 complete renumbering and adding of missing procedures as per finding in pre IOSA GRH 1.2.1 & 1.2.1.1 updated due to internal IOSA GRH & CGO findings, additionally modifying the responsibilities and due to IGOM Ed11 1.6.1 due to IGOM Ed11 changes
	Chapter 2: PRM replaced with PWD in all chapter 2.1.3.4; 2.2.4.1; 2.2.4.2; 2.5.1.3; 2.3.7; 2.3.8 & 2.3.10 updated due to changes in IGOM Ed11 2.3.9 updated due to changed company procedures 2.3.10 inserted a detailed process
	Chapter 3 3.2.1.2; .2.2, 3.2.4, 3.3, 3.3.4, 3.4.1, 3.4.2, 3.4.3, 3.4.5, 3.5, 3.6, 3.8 due to new IGOM Ed11 3.3.5.12 update due to introduction of F-HMOV in AOC 3.3.8 added due to missing procedures 3.7 & 3.7.1 added additional process and guidelines
	Chapter4: 4.2.3; 4.2.3.4; 4.5; 4.10.6.1; 4.12.1.1; 4.13.1.2; 4.13.1.3; 4.13.2 changed operating airline with Amelia Intl or this GOM, or a chapter to the GOM is provided 4.1.4.1; 4.5.1.3; 4.6.3; 4.12.1.3; 4.12.3.4; 4.15 due to new IGOM Ed11 4.1 inserted a statement due to removed details about operational oversight 4.1.7 copied and updated text from ch. 4.6.5- Aircraft walkaround to make it applicable for both arrival and departure 4.6.4 updated due to moved ch. 4.6.5 to 4.1.7 4.10.2.2.2 updated due to approval to carry DG on all fleet

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	4.12.2 updated due to pre-IOSA GRH finding 4.12.3.1 & 4.13.2 removed due to no type specific safety pins 4.14.1 updated due to pre-IOSA GRH finding 4.14 updated due to errors
	Chapter 5: Ch.5, 5.3.3; 5.6.3 updated due to approval to carry DG on all fleet
	Chapter 6: 6.1 update due to introduction of F-HMOV in AOC and change of F-HTOP from stretcher configuration into VIP configuration 6.1.4.2 & 6.2.4.2 inserted statement that there are no vertical nets on certain A/C 6.1.4.4 inserted a table for easier guidance 6.1.5.2.1; 6.2.5.2.1; 6.3.5.2.1; 6.4.5.2.1 inserted static grounding location 6.1.6.6; 6.2.6.6; 6.3.6.6; 6.4.6.6 inserted type specific ground deicing strategy
	Chapter 7: 7.1.2.1 updated due to existing cargo manager 7.1.1; 7.1.3.1: 7.2.12, 7.2.13: 7.3.1 updated due to approval to carry DG on all fleet
	Chapter 8: Complete chapter updated 8.1 updated responsibilities of the deicing company
	Chapter 9: all chapter updated due to approval to carry DG on all fleet 9.2.1 editorial 9.4 updated procedures due to changed procedures in IGOM Ed11
	Chapter 11: email for DG department added
	Appendix 2 Insertion of F-HMOV & F-HTOP VIP configuration
	Chapter 1: 1.2.5 inserted a policy about recruitment of personnel 1.4 & 1.3.3 due to IOSA finding
	Chapter 4: Removed ULD related notes
	Chapter 6: 6.1.6.5 & 6.2.6.5 defined for which A/C is towbarless towing allowed
	Chapter 7: Removed ULD related notes 7.1.1 corrected reference 7.1.4.1 added the need for ICAO TI or DGR 7.1.6 due to IOSA finding 7.2.5 removed whenever possible
	Chapter 9: 9.1 updated due to a mistake 9.1.5, 9.1.5.7, 9.1.5.8 & 9.1.5.9 updated due to implementation of changes in IATA DGR Ed64 9.3.4 on IOSA auditor's request 9.2.6.9 due to IOSA finding
Rev12	**Chapter 1:** 1.2 updated email 1.4 updated iaw IGOM Ed12
	Chapter 2:

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	2.3.1.2, 2.3.3.2, 2.3.8.3, 2.3.10, updated due to introduction of airbus in AOC 2.3.13.1 update of process to contain legible information
	Chapter 3: 3.3.2, 3.3.5.1.2, 3.3.5.2, updated due to introduction of airbus in AOC 3.3.1 updated to include all aircraft types
	Chapter 4: 4.1.4.5, 4.1.4.6, 4.2.2.1, 4.2.3.1, 4.2.3.2, 4.4.4, 4.5.3, due to A319/A320 4.3.4.4 , 4.15Email changed The rest of the changes were done in order to conform with IGOM Ed12.
	Chapter 5: 5.3.3.1.1 updated to include A319/A320 Other changes due to changes in IGOM Ed12 5.4.2.1 editorial update 5.4.4.1 possibility for deviation request added.
	Chapter 6: 6.1 updated to include F-HMOV as stretcher version 6.5 & 6.6 creation of chapters for A319/320
	Chapter 7: 7.2.2.2; 7.2.6 & 7.2.5 safety requirements for loading and unloading inserted 7.2.2.3 limitations inserted 7.2.8 statement on which A/C HEA can be transported is updated 7.3.1 email updated
	Chapter 9: 9.1.5 table corrected 9.2.3 email updated 9.2.4.1 acceptance checklists updated 9.2.6.1 & 9.2.6.4.3 safety requirements for loading and unloading inserted 9.2.6.4.1 & 9.2.6.4.2 due to introduction of A319/A320 in AOC
	Chapter 11: update in emails and phone numbers
	Appendix 2- insertion of A319/A320 Adding F-HMOV in stcr version

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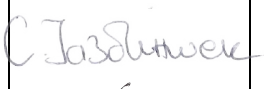
Person(s) who may approve the amendments of the revisions:

	Name and surname:	Function:	Date:	Signature:
Developed by	Sandra Jazbinšek	Nominated Person Responsible for Ground Operations	19.05.2023	
Checked by:	Breda Šprajcar	Compliance Monitoring Manager	19.05.2023	

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02	S.Jazbinšek	09.04.2019			
03	S.Jazbinšek	16.01.2020			
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05	S.Jazbinšek	22.09.2020			
06	S. Jazbinšek	21.12.2020			
07	S. Jazbinšek	07.09.2021			
08	S. Jazbinšek	07.08.2022			
09	S. Jazbinšek	05.05.2022			
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11	S. Jazbinšek	09.01.2023			
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02	All aircraft under Amelia Intl AOC	soft copy
03	Outsourced Ground Handling stations	soft copy
04	IQSMS	soft copy
05	Other Entities	soft copy

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0 INTRODUCTION AND ADMINISTRATION

This manual is protected by copyright. All rights reserved. No part of this manual may be reproduced in any form by any electronic or mechanical means (including photocopying, scanning or information storage and retrieval) without permission in writing from Amelia Intl accountable manager.

The ground operations manual, does not require approval from the Civil Aviation Authority.

The responsible person for updates and revision is the NPGO.

The Subcontracted service provider must use the latest valid GOM, distributed as per ch. 0.3.2.

0.1 PURPOSE AND SCOPE

This manual provides guidance for ground handling and cargo procedures to ensure that the ground operations and cargo handling activities on/ for Amelia Intl aircraft are safely, efficiently and consistently accomplished.

This manual is published in English language.

Masculine terms in this Manual such as him or his also imply female gender.

0.2 STATEMENT OF COMPLIANCE

Ground Operations Manual (GOM) has been prepared and published in accordance with valid legislation, regulation, Amelia Intl Operation Manuals and with the applicable Slovenian and international rules. See ch. 1.1 for additional information.

0.3 SYSTEM OF AMENDMENT AND REVISION

The GOM is divided into chapters, which are broken down into subchapters and subsections.

The header is presented at the top of each page and bears the effective revision numbers.

AMELIA INTL	*Name of Manual*	Section no.- Page no.
LOGO	*Name of Section*	*Rev No.*

In reference to valid legislation, handwritten amendments and revisions are not permitted except in situations requiring immediate amendment or revision in the interest of safety.

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0.3.1 Manual Revision Process

The Manual Owner is responsible to develop revisions, is responsible for GOM's contents and for keeping the instructions and information up-to-date. He must ensure that the content remains legible and readily identifiable.

This manual is a controlled document, which must not be amended in any way except through the procedures detailed in the Company Process Manual (Chapter 2.4). In the same chapter of the Company Process Manual, the process of notifying the relevant personnel regarding the revisions, is written.

In order to identify changes, a vertical line in the margin is used to outline revised or newly published paragraphs. In addition, the revised pages/ chapters and the reason why the changes are made, are described in the List of Changes, found at the beginning of the manual.

This manual is compliant with the latest issue of the valid legislation as written in chapter 0.2. It will be revised at least once a year to ensure the contents remain updated with the latest version of the valid legislation.

0.3.1.1 Temporary Revision

When it becomes necessary to effect changes to this manual at very short notice or to effect changes limited to a defined period of time, a “Notice to Crew” will be published.

0.3.1.2 Notice to Crew

Any information related to a change of procedure or information contained in any manuals, that must be distributed immediately to relevant ground staff may be sent by using an NTC: The process on preparing and distribution of NTC is described in OM-A.

0.3.1.3 Operational Information

Any information that should be transmitted to ground staff officially and it is not contained in any of the manuals, can be sent by using the OI. The process on preparing and distribution of OI is described in OM-A.

0.3.2 Distribution System

Distribution of revisions within the company will be performed as per Amelia Intl Company Standards Manual.

The GOM is available on Amelia Intl internal server and as well, on the external server accessible for the whole group Amelia.

Distribution of GOM to outsourced ground handlers and other not Amelia Intl entities, is done in two ways:

- Via e-mail when sending handling request: A link that provides access to the latest revision of the GOM is inserted in the mail sent to ground handlers, when handling is requested. When the ground handlers copy the GOM, they acknowledge the receipt by replying to the OCC.
- For regular flights when contract is signed with ground handlers or ACMI: The GOM and following revisions are sent to the e-mail address as stated in the contract. The receiver is obliged to acknowledge that he had received the manual.

Effective date of the manual is 3 work days after the distribution day which is presented in the preamble in the table Revision Record Sheet.

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0.4 COMMUNICATION

The communication within Amelia Intl is described in the OM general part.

All communication between ground and cargo operations in Amelia Intl and organizations that conduct outsourced operational functions, is done via e-mail and/or Safety reporting system, depending on the contract with the outsourced organizations.

0.5 WORDING CONVENTIONS

“Company” means Amelia Intl

“Amelia Intl” means Aero4M dba Amelia International

“Shall/ must/necessary/need/required"- indicates that compliance is considered mandatory

"Shall not/ must not"- indicates that something is not allowed, or is forbidden.

Should/if possible/ whenever possible"- indicates that compliance is considered optional, but desirable.

“May/need, might; not/ not necessary/not required” are used in a permissive sense to indicate the authority or the permission to do the mentioned act.

“Includes” means “included but not limited to…”.

0.6 ABBREVIATIONS

ACMI..... Aircraft, Crew, Maintenance and Insurance (Wet lease)

ADL..... Additions and Deletions List

AHM..... IATA Airport Handling Manual

APU ..... Auxiliary Power Unit

ASRA..... Aircraft Stand Restricted Area

ASU ..... Air Start Unit

ATA..... Actual Time of Arrival

ATD ..... Actual Time of Departure

AWB ..... Air Way Bill

BHS ..... Baggage Handling System

BRS ..... Baggage Reconciliation System

CAC..... Clean Aircraft Concept

CITES..... Convention on International Trade in Endangered Species of Wild Fauna and Flora

CRD..... Child Restraint Devices

DAQCP..... De-/Anti- Icing Quality Control Pool

DCS..... Departure Control System

DG..... Dangerous Goods

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DGR..... Dangerous Goods Regulation
DHC..... Dead Head Crew
ERA..... Equipment Restraint Area
FBO..... Fixed Base Operator
FOD..... Foreign Object Debris
FSZ..... Fuel Safety Zone
GHSP..... Ground Handling Services Provider
GOM..... Ground Operations Manual
GPU..... Ground Power Unit
GSE..... Ground Service Equipment
GSP..... Ground Service Provider
HEPA..... High-Efficiency Particulate Air (HEPA) filters
HOT..... Holdover Time
ICAO TI..... ICAO Technical Instructions
IFQP..... IATA Fuel Quality Pool
LIR..... Loading Instruction Report
LMC..... Last Minute Change
MLG..... Main Landing Gear
MLM..... Maximum Landing Mass
MRM..... Maximum Ramp Mass
MTOM..... Maximum Take Off Mass
MZFM..... Maximum Zero Fuel Mass
NLG..... Nose Landing Gear
NOTOC..... Notification to the Captain
NPFO..... Nominated Person Responsible for Flight Operations (Flight Operations Manager)
NPGO..... Nominated Person Responsible for Ground Operations (Ground Operations Manager)
PAX..... Passengers
PBB..... Passenger Boarding Bridge
PCA..... Pre-Conditioned Air
PED..... Portable Electronic Device
PNL..... Passenger Name List
PNR..... Passenger Name Record

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POC ..... Portable Oxygen Concentrator
PPU ..... Power Push Unit
PTM ..... Passenger Transfer Manifest
PWD ..... Passengers with Disabilities
OCC ..... Operations Control Centre
OEM ..... Original Equipment Manufacturer
OIR ..... Off-loading Instruction Report
OM ..... Operations Manual
OPS ..... Operations
SDS ..... Safety Data Sheet
SLA ..... Service Level Agreement
SSR ..... Special Service Request
TWL ..... towbarless tractor
TWT ..... towbar tractor
ULD ..... Unit Load Device
WCH ..... Wheelchair
WHO ..... World Health Organization

Note: *For abbreviations of special and normal codes, refer to ch.10 of this manual.*

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0.7 DEFINITIONS

Acceptance Checklist means a document used to assist in carrying out a check on the external appearance of packages of dangerous goods and their associated documents to determine that all appropriate requirements have been met with.

Accident (Aircraft) - An occurrence associated with the operation of an aircraft that takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked in which a person is fatally or seriously injured, the aircraft sustains substantial damage, or the aircraft is missing or is completely inaccessible. Equivalent Terms: Aircraft Accident, Hull Loss

Aircraft Towing

a) Maintenance towing. Towing an aircraft without passengers, without cargo, with minimum fuel on board.
b) Operational/Dispatch towing. Towing an aircraft, loaded with passengers and/or fuel, and/or cargo, to/from the terminal gate or parking area, to/from a remote location.
c) Repositioning towing. The movement of an aircraft to/from remote parking purposes. An aircraft can be loaded with cargo or fuel.

Airside - The movement area of an airport, adjacent terrain and building or portions thereof, access to which is controlled.

Airway Bill means the document made out by or on behalf of the shipper, which evidences the contract between the shipper and carrier(s) for carriage of goods over routes of the carrier(s).

Bulk - loading piece by piece

Cargo aircraft - is an aircraft which does not have installed passenger seats and on which only cargo is being transported.

Connection Baggage - Baggage that is connecting between flights during the baggage journey.

Consignee means any person, organization or government which is entitled to take delivery of a consignment.

Consignment means one or more packages of dangerous goods accepted by an operator from one shipper at one time and at one address, receipted for in one lot and moving to one consignee at one destination address.

Container - structured unit confined by ceiling, floor, and walls, into which deadload is bulk loaded and designed to be locked on a position/bay as a unit. See also unit load device.

Containerized aircraft - aircraft of which the cargo compartments are equipped with a ULD conveyance and restraint system to accommodate aircraft containers or pallets.

Contamination (Radioactive Material Only). The presence of a radioactive substance on a surface in quantities in excess of 0.4 Bq/cm2 (0.01 nCi/cm2) for beta and gamma emitters and low toxicity alpha emitters, or 0.04 Bq/cm2 (0.001 nCi/cm2) for all other alpha emitters. This is either:

- Fixed contamination—contamination other than non-fixed contamination; or
- Non-fixed contamination—contamination that can be removed from a surface during normal conditions of transport

Crew Baggage - Baggage which is the property of operating crew or supernumerary, which is separately identified

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Dangerous goods are articles or substances which are capable of posing a significant hazard to health, safety, property or the environment when transported by air and which are shown in the list of dangerous goods in the ICAO Technical Instructions and in the dangerous goods regulations or which are classified according to the Regulations.

Dangerous goods accident is an occurrence associated with and related to the transport of it which results in fatal or serious injury to a person or major property or environmental damage.

Dangerous goods incident is an occurrence, other than a dangerous goods accident, associated with and related to the transport of dangerous goods by air, not necessarily occurring on board an aircraft, which results in injury to a person, property or environmental damage, fire, breakage, spillage, leakage of fluid or radiation or other evidence that the integrity of the packaging has not been maintained. Any occurrence relating to the transport of dangerous goods which seriously jeopardizes the aircraft or its occupants is also deemed to be a dangerous goods incident.

Dangerous Goods Security: Measures or precautions to be taken by operators, shippers and others involved in the transport of dangerous goods aboard aircraft to minimize theft or misuse of dangerous goods that may endanger persons or property.

Exception means a provision which excludes a specific item of dangerous goods from the requirements normally applicable to that item.

Excess baggage (Baggage consigned as cargo) - Baggage which a passenger has presented to check-in as accompanied checked baggage, but which exceeds the passenger's baggage allowance specified by the operator and which is consequently consigned as cargo in order to be sent to the same destination as the passenger. *Note: This is commonly referred to as "unaccompanied baggage" or "baggage consigned as cargo".*

Exemption - Authorization, other than an approval, granted by an appropriate national authority providing relief from the provisions of these Regulations.

Ground Handling Services Provider (GHSP) - A provider acting as the handling agent for one or more customer airlines, providing one or more of the ground services as defined in SGHA.

IATA Dangerous Goods Regulation (DGR) means the latest effective edition of the Dangerous goods regulation prescribe the detailed requirements applicable to the international transport of dangerous goods by air under normal circumstances, including the Supplement and any Addenda, approved and published by the International Air Transport Association (IATA).

ID number - means a temporary identification number (ID) in the 8000 series assigned to an article or substance classified as dangerous goods for which no UN number has been assigned.

Incident - An occurrence (i.e. aircraft damage, injury, equipment damage, loading event/irregularities, aircraft servicing issues) other than an accident associated with the handling of the aircraft.

Incompatible means describing dangerous goods which, if mixed, would be liable to cause a dangerous evolution of heat or gas or produce a corrosive substance.

Integral Airstairs - Stairway contained within or built into the aircraft fuselage, which may be deployed on the ground to provide a means for persons to enter or exit the aircraft. Equivalent Term: Integral Stairway

Items with a Limited Release Tag - Items that are carried by the airline without accepting liability for damage or loss due to a pre-existing condition (i.e. baggage noticed as being damaged upon acceptance, baggage arriving to check-in late), etc.

Late Baggage - Baggage that has arrived late for a flight or late at the reclaim carousel.

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List of dangerous goods lists specific dangerous articles and substances which experience has shown are likely to be offered for transport by air. The list is not all-inclusive, therefore it contains a number of generic or not otherwise specified (n.o.s.) names or entries, under which unlisted items may be transported. The list of dangerous goods used by Amelia Intl is found in Subsection 4.2 of the IATA DGR.

Lithium battery means two or more cells which are electrically connected together and fitted with devices necessary for use, for example, case, terminals, marking and protective devices. A single cell lithium battery is considered a "cell" and must be tested according to the testing requirements for "cells" for the purposes of these Regulations and the provisions of the UN Manual of Tests and Criteria (see also the definition for "lithium cell"). The term "lithium battery" refers to a family of different chemistries, comprising many types of cathodes and electrolytes. For the purposes of the Dangerous Goods Regulations, they are separated into two types:

a) Lithium metal batteries are normally primary (non-rechargeable) batteries that have lithium metal or lithium compounds as an anode. The most common type of lithium cell used in consumer applications uses metallic lithium as anode and manganese dioxide as cathode, with a salt of lithium dissolved in an organic solvent;
b) Lithium-ion batteries (sometimes abbreviated Li-ion batteries) are a type of secondary (rechargeable) battery commonly used in consumer electronics. Also included within lithium- ion batteries are lithium polymer batteries.

Lithium cell means a single encased electrochemical unit (one positive and one negative electrode) which exhibits a voltage differential across its two terminals. Under Dangerous Goods Regulations and the UN Manual of Tests and Criteria, to the extent the encased electrochemical unit meets the definition of "cell" herein, it is a "cell", not a "battery", regardless of whether the unit is termed a "battery" or a "single cell battery" outside of Dangerous Goods Regulations and the UN Manual of Tests and Criteria.

Load Control - Process that ensures that an aircraft is safely and economically loaded for flight.

Load Planning - The part of the load control process that ensures a load is planned for safe transportation onboard the aircraft.

Mobility Aids - Aids used by passengers to assist in their journey.

Nose gear steering bypass pin - Deactivates the steering function. Equivalent Term: Nose Wheel Steering deactivation pin, Lock pin–Nose Gear Towing Lever, Steering Bypass Pin.

Overpack for the purpose of transporting dangerous goods, means an enclosure used by single shipper to contain one or more packages and to form one handling unit for convenience of handling and stowage.

Package (Non-Radioactive Material). The complete product of the packing operation consisting of the packaging and contents prepared for transport.

Packaging (Non-Radioactive Material). One or more receptacles and any other components or materials necessary for the receptacles to perform their containment and other safety functions and to ensure compliance with the minimum packing requirements of the Regulations.

Packing Groups -means an indication of the relative degree of danger presented by various articles and substances within a class or division. Roman numerals I, II and III are used to represent "high danger", "medium danger" and "low danger" respectively. The classes Class 1, 2 and 7, and Divisions 5.2 and 6.2, are not divided in groups.

Pallet - platform with a flat under-surface onto which deadload is bulk loaded and designed to be locked on a position/bay as a unit. See also unit load device.

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Passenger aircraft - an aircraft on which passengers are being carried and on which cargo can be carried in the available cargo holds.

Personal Electronic Device (PED) - PED is an item of electrically powered equipment that uses internally or externally supplied electrical power and is of a size that enables it to be portable. This includes devices that may be brought on board aircraft by passengers, such as:

a) laptop computers and mobile phones;
b) devices that are provided to the passengers by the aircraft crew, e.g. Digital Versatile Disc (DVD) players for on-board entertainment; and
c) devices that may be used by the aircraft crew when performing their duties, e.g. duty-free point of sale equipment.

Proper Shipping Name - The name to be used to describe a particular article or sub- stance in all shipping documents and notifications and, where appropriate, on packaging.

Radiation level (Radioactive Material Only) means the corresponding dose-equivalent rat expressed in millisieverts per hour or micro sieverts per hour

RUSH Baggage - Baggage that has missed the flight for which it was intended and will now travel without the passenger for the remainder of the journey.

Security Items - Items (e.g. weapons): that for security reasons must be removed from hand baggage and must be loaded in aircraft hold. Must be labelled to notify handlers.

Serious Injury - An injury which is sustained by a person in an accident and which:

- Requires hospitalisation for more than 48 hours, commencing within seven days from the date that the injury was received; or
- Results in a fracture of any bone (except simple fracture of fingers, toes or nose); or
- Involves lacerations which cause severe haemorrhage, nerve, muscle or tendon damage; or
- Involves injury to any internal organ; or
- Involves second or third degree burns, or any burns affecting more than 5% of the body surface; or
- Involves verified exposure to infectious substances or injurious radiation.

Shipment means the specific movement of a consignment from origin to destination.

Short Connection Transfer Baggage - Baggage that has a short connection time and may need assistance to make the intended connection. Equivalent Term: Hot Transfer Baggage.

Special Load - A load which requires special attention and treatment during the process of acceptance, storage, transportation, loading and unloading.

Special Provision means special conditions for the transport of some of the items in the List of dangerous goods. Special provisions are identified by the alpha-numeric indicator (a single, double or triple digit number preceded by the letter “A”) and listed in IATA DGR Subsection 4.4.

State of Destination - The country (State) in the territory of which the consignment is finally to be unloaded from an aircraft.

State of Origin - The country (State) in the territory of which the consignment is to first be loaded on an aircraft.

State of Registry - The country (State) on whose register the aircraft is entered.

State of the Operator - The country (State) in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent residence.

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Station - An airport where a ground handling services provider conducts ground operations for one or more customer airlines.

Technical Instructions (ICAO TI) means the latest effective edition of the Technical Instructions for the Safe Transport of Dangerous Goods by Air, including the Supplement and any Addenda, approved and published by the International Civil Aviation Organization (ICAO)

Transfer Baggage - Baggage that has been transported on a flight to a certain location, and then offloaded and transferred to another flight within a defined time period for transportation to another location.

Transfer Passenger - Passenger whose journey involves more than one flight on the same or a different carrier.

Transit Passengers - Passengers who arrive at an intermediate station on multi-leg flight and those who continue their journey on the same flight. They are issued only one flight coupon and one boarding pass.

Transport Index (TI) (Radioactive Material Only). A single number assigned to a package, overpack or freight container or to unpackaged LSA-I, SCO-I or SCO-III to provide control over radiation exposure.

UN Number - The four-digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals to identify an article or substance or a particular group of articles or substances. (The prefix "UN" must always be used in conjunction with these numbers).

Unit Load Device (ULD) - Aircraft unit load device (ULD) is an assembly of components comprising one of the following:

- aircraft pallet and pallet net
- aircraft pallet and pallet net over an igloo
- aircraft container

The purpose of the unit is to enable individual pieces of cargo, baggage or mail to be assembled into a standard-sized unit to facilitate rapid loading onto and offloading from aircraft having compatible handling and restraint systems that interface directly with the unit. See also pallet and container.

Watt-hour rating of lithium-ion battery is calculated by multiplying the rated capacity in amper hours (Ah) by its nominal voltage (V) and is expressed in Watt-hours (Wh).

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1 DOCUMENTS, DATA SYSTEMS, RESPONSIBILITIES

1.1 REFERENCE DOCUMENTS

To prepare the ground operations manual the current revisions of the following manuals and regulation were taken into consideration:

- 965/2012 (AIROPS);
- IATA Ground Operation Manual (IGOM);
- Airport Handling Manual (AHM);
- IATA Dangerous Goods Regulation (DGR);
- ICAO doc 9640 manual of aircraft De-icing/Anti-icing operations;
- SAE AS6285;
- Amelia Intl OM-A.

All information taken from approved documents, regulation, legislation and official publications, including any amendment thereof, is correctly reflected in the manual. The processes and procedures for the conduct of ground handling operations, found in this manual, are as a minimum, equivalent to processes and procedures contained in the IGOM.

All amendments of the manuals and regulations are checked by the NPGO on regular basis (twice per year), if notification of amendment has not already been received. The DGR and any other regulations, that are revised yearly, are checked every year upon issue of new revisions.

When revised manual or regulation is received, the NPGO goes through the Summary of the changes, identifies the changes and if they are applicable to Amelia Intl operation, they are inserted in the Ground Operations Manual.

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1.2 ROLES AND RESPONSIBILITIES

Amelia Intl does not have its own stations to perform ground handling, cargo handling or de-icing. Therefore, those services are outsourced. The only Amelia Intl staff involved in the support of ground operations are the ground station representatives. Their duties and responsibilities are described in the subchapter.

The companies performing the ground handling, cargo handling and de-icing/ anti-icing, are regularly monitored as per Amelia Intl compliance monitoring program. They are responsible to ensure that operational positions within the scope the perform are filled by personnel on the basis of knowledge, skills, and experience appropriate for the position and they are responsible to train their personnel in accordance with the applicable regulations and AHM 1110. The modules as per AHM 1110 are also reflected in Amelia Intl Ground Operations Training manual (GOTM). For latest copy of it, contact ground@aeh.flyamelia.com

The subcontracted companies are obliged to follow Amelia Intl manuals and procedures.

For the responsibilities of the cargo activities refer to ch. 7.1.1.

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1.2.1 Nominated Person Responsible for Ground Operations

The authority, accountability, duties and responsibilities of the NPGO presented in this chapter are only those concerning the ground and cargo operations. For operational control/ dispatch duties, roles and responsibilities refer to OM-A ch. 1.2.7.

The NPGO is nominated by the Accountable Manager and reports directly to him. Though NPGO may delegate some of his tasks, he is directly accountable for safety and security for ground and cargo operations.

Authority

- Take the necessary actions to guarantee safe ground and cargo operations;
- Take decisions regarding risk tolerability with respect to the safety and security of ground operations.
- Select the management members of the subordinate functions;
- Suspend subordinates from their duties, functions and rights where this seems necessary for a safe conduct of ground and cargo operations and operational control, or for disciplinary sanctions;
- Approve procedures valid for subordinate functions;
- Approve the conduct of flights or series of flights concerning safety aspects or operational aspects connected with ground and cargo operations;
- Prohibit flights or series of flights or to suspend ground and cargo operations for safety reasons.

Responsibilities

- to ensure that the ground operations, including established procedures and policies, are carried out in a safe manner in accordance with respective regulations and standards;
- to manage the safety and security outcomes of the ground operations;
- To maintain an effective and proactive Ground Operations safety policy.
- To liaise with regulatory authorities, original equipment manufacturers and other external entities relevant to ground operations;
- To organize handling at departure, destination and alternate airports (if required);
- To ensure the availability of fuel at destination with the best economical service;
- To reserve hotel and ground transportation for the crews;
- To advice the cabin crew of the requested catering;
- To establish passenger manifests and General Declarations as required;
- To ensure that all flight and ground documentation is correctly filled and stored according to the regulations.

Duties

- To ensure that all legal requirements and the provisions of the AOC relating to ground operations are strictly observed;
- To revise the Ground Operations Manual and Ground operations Training manual;
- To communicate and enforce Company policies and procedures and to adhere to Company policies in case of accident or incident;
- To take all required measures for the security of the crew, the passengers and the aircraft in cooperation with the authorities responsible for the security at foreign airports;
- To ensure the functioning of the Compliance Monitoring system within the ground operations;
- To maintain an effective and proactive Ground Operations safety policy;
- To ensure supervision of functions and activities within the scope of ground handling operations (including those outsourced) via proper monitoring, operational oversight and/or auditing;

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- to liaise with regulatory authorities, original equipment manufacturers and other external entities relevant to ground operations and operational control.

1.2.2 Cargo Manager

The Cargo manager is a person that reports to the Nominated Person Responsible for Ground Operations who is accountable for safety and security for cargo operations.

Authority

The Cargo Manager has the authority to:

- Take decisions regarding risk tolerability with respect to the safety and security of cargo operations in coordination with the NPGO;
- Intervene and liaise with local Customs Authorities in all relevant matters;
- Take the necessary actions to guarantee safe cargo operations;
- Suspend subordinates from their duties, functions and rights where this seems necessary for a safe conduct of cargo operations, or for disciplinary sanctions in coordination with the NPGO;
- Approve procedures valid for subordinate functions.

Responsibilities

- to ensure that the cargo operations, including established procedures and policies, are carried out in a safe manner in accordance with respective regulations and standards;
- to manage the safety and security outcomes of the cargo operations;
- to maintain an effective and proactive cargo operations safety policy;
- to liaise with regulatory authorities, original equipment manufacturers and other external entities relevant to cargo operations;
- To establish cargo manifests and other necessary documentation for the transportation of cargo;
- To ensure that all cargo documentation is correctly filled and stored according to the regulations;
- To ensure cargo handling is organized at departure and destination airports.

Duties:

- To ensure that all legal requirements and the provisions of the AOC relating to cargo operations are strictly observed;
- To assist and support the NPGO in establishing procedures in the Ground operations manual relevant to the cargo operations;
- To communicate and enforce Company policies and procedures and to adhere to Company policies in case of accident or incident;
- To take all required measures for the security of the cargo in cooperation with the authorities responsible for the security at foreign airports;
- To ensure the functioning of the Compliance Monitoring system within the cargo operations;
- To maintain an effective and proactive Cargo Operations safety policy;
- To ensure supervision of functions and activities within the scope of cargo handling, (including those outsourced) via proper monitoring and auditing.
- To cooperate with the DG manager in regards to transportation of DG as cargo.

To keep the NPGO in the loop about decisions regarding risk tolerability with respect to the safety and/or security of cargo operations and about decisions to suspend subordinates from their duties, functions and rights where this seems necessary for a safe conduct of cargo operations, or for disciplinary sanctions.

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1.2.3 Ground Station Representative

When needed due to the complexity of the operation or simply due to the need for assistance by an Amelia Intl personnel, a ground station representative may be delegated to certain station(s). They report directly to NPGO.

Requirements

- Minimum education: level 5 according to the International Standard Classification of Education (ISCED) (e.g. vocational school or BAK+2) with an airport specialization or an equivalent experience;
- Experience as coordinator;
- Experience in team management and operational coordination.

Their duty and tasks are to:

- Assist the contracted ground service providers with materials and products;
- Act as liaison between the GSP and the operator;
- Attends and represents the company, after approval from his superiors, at meetings and assemblies organized by the airport, subcontractors, regulatory authorities or any other body related to his scope of activity.
- Act as company representative for clients and passengers;
- Ensure a physical presence at the check-in or boarding of passengers according to his activity schedule.
- Search, in real time, the performance of daily operations and the achievement of operational objectives.
    - Make the link between the events and the crews (operational briefing), the sales representatives (commercial briefing) and the Company (managerial briefing and debriefing).
    - Takes operational decisions and intervenes on all requests (internal - external).
    - Supervise compliance with the commitments of subcontractors and partners the day of flight.
- Handle operating irregularities in agreement with the OCC: delay, cancellation, postponement in accordance with the instructions drawn up by the company.
- In an event of irregularity:
    - Proposes the solutions defined by the company's instructions and ensures their application by the subcontractors.
    - Supports and supervises passengers in the event of an irregularity until the end of the procedure
    - Establishes and manages irregularity files. Checks and validates the invoices of the subcontractors involved for accounting treatment.
- Ensure compliance with the application of safety, security and quality measures and procedures related to ground operations, aircraft, crew, passengers and baggage with subcontractors.
- Report to the NPGO any issues related to safety, security or commercial aspect of the relevant operation.
- Participate in the establishment and development of procedures and instructions related to his scope of activities.
- Provide all relevant information relating to customers to the managers concerned.

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1.2.4 Cargo Ramp Supervisor

Where Cargo ramp supervisor is not available the responsibilities presented below are transferred to the Ground handling supervisor.

Cargo ramp supervisor is responsible:

- For positioning of cargo and mail in due time before departure taking into account locally agreed deadlines and procedures;
- To protect the cargo against weather and contamination;
- To position the load separately for each destination on multi-sector flights;
- To separate special loads and provide loading accessories, i.e. supporting planks, tie-down fittings and ropes, etc;
- To check the nature of the goods and ensure that if there is CAO sticker or DG labels on the cargo, to be loaded on the aircraft approved to carry DG and in case of CAO that aircraft to be cargo aircraft;
- To ensure that the cargo is not damaged before being loaded to the aircraft.

1.2.5 Other Ground Handling Job Roles

As Amelia Intl does not have its own ground handling, Each GSP is responsible for defining the job roles and associated functional tasks according to the company's needs, for example “an engine start” task may be performed by different job functions e.g. Ramp Agent, Push-back Driver, or other.

The Ground service provider should have a recruitment process to ensure that operational positions within the scope of ground handling operations are filled by personnel on the basis of knowledge, skills, training and experience appropriate for the position.

Training modules shall be based on providing competencies in functional tasks which can then be grouped to match certain job roles as determined by the company to meet its scope of operations. For training modules and other details refer to GOTM.

Job roles listed in the tables below are but one of the of many possible ways in which the functional tasks can be grouped to define job roles.

Amelia Intl will ensure that all of the above is fulfilled by the GSP during the audits.

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1.2.5.1 Passenger Service Job Roles

Job Role	Description of Role	Functional Tasks
Meet and Greet Agent	The meet and greet agent provides direction and assistance to passengers at the check in area, or for kiosk/bag drop support.	• Provides basic customer service • Directs passengers • Assists PWD passengers • Kiosk or bag drop support
Check-in Agent	The check-in agent works in the check-in area and kiosk/bag drop area accepting passengers and baggage.	• Check in preparation • Passenger acceptance • Checked & carry-on baggage acceptance • Fee collection • Documentation checks, vetting • Kiosk or bag drop support
PWD Agent	The PWD Agent provides assistance to passengers requiring assistance and passengers with reduced mobility. Includes identification, physical assistance.	• Provide assistance through the airport, onto the aircraft • Use appropriate coding • Knowledge of medical equipment • Handling of UMNR, passengers with assist animals • Transfer of passengers using various lift devices/methods
Arrival Agent	The arrival agent meets inbound air craft and provides arrival support functions including operating of passenger bridge.	• Meet inbound aircraft, manage passenger offload • Provide transit/transfer/connection information/direction • Provide PWD assistance
Departure Agent	The departure agent manages the departure gate including boarding, information to crew and load control, securing the flight.	• Manage passenger on load including PWD, UMNR • Documentation checks • Secure the flight, provide load information to crew • Open ramp safety and direction • Baggage monitoring
Connection Agent	The connection agent coordinates inbound and outbound passenger movement and communication that includes transit/transfer and connection passengers and baggage.	• Flight monitoring • Communicate passenger and baggage information • Provide transit/transfer/connection information/direction to passengers • Manage IRROPS for transit/transfer/connection passengers

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Job Role	Description of Role	Functional Tasks
Baggage Agent	The baggage agent handles mishandled baggage and communicates with passengers and other stations.	• Processing of on hand, missing, delayed and damaged baggage • Tracing of missing baggage • Forwarding of found baggage • Completion of reports • Knowledge of customs and regulatory requirements
Claims & Settlement Agent	The claims and settlement agent processes baggage files/claims by providing financial settlement to passengers for mishandlings.	• Review of baggage claims • Communication with passengers • Claims settlements based on applicable tariff or convention
Passenger Services Supervision	Oversee and coordinate all Passenger Services according to the company, customer procedures and in accordance with legislation	• Management and organization of ticket counter personnel and passenger service operation • Constant liaison with Check-in, transfer desk, and other related areas ensuring a timely departure of the aircraft • Responding to passenger concerns, baggage handling and various trouble shooting • Monitor that service level agreements are met • Monitor safety, security procedures are followed • Coordinate and resolve any non-standard situations • Communicate with the customer, airport representatives, and other operational units regarding on operations issues, the delays, and non-standard situation

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1.2.5.2 Ramp Services Job Roles

Job Role	Description of Role	Functional Tasks
Baggage/ Cargo Loading Agent	The basic baggage/ cargo loading agent function works in the baggage make up areas.	• Sorting baggage/cargo • Preparing cargo for loading • Loading baggage/cargo into carts • Recording baggage/cargo details
Aircraft Loading Agent	Agent responsible for loading an aircraft using dedicated GSE	• Operates aircraft CLS • Operates Loaders to transfer cargo on/off aircraft • Operates conveyor loaders • Operates Transporter vehicles • Operates baggage tracking system
Aircraft Loading Supervision	Supervisor of aircraft loading process	• Coordinate all ramp activities during aircraft turnaround • Report to the appropriate departments any anomalies such as visible damage, hold inoperative, missing and/or damaged restraints not previously highlighted. • Ensure that the loading is consistent with the LIR • Check the apparent condition of special load, including dangerous goods

1.2.5.3 Load Control Job Roles

Job Role	Description of Role	Functional Tasks
Load Control	Responsible for load planning. Responsible for the accurate production of all weight and balance documentation	• Ensures loading of aircraft is safe with respect to • weight and balance • Manages safe planning of cargo commodities including priorities and safe segregation. • Issues loading instructions • Considers balance parameters. • Produces loadsheets for aircraft within safe limits

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1.3 OPERATIONAL OVERSIGHT

During the ongoing/daily operation there should be:

- **Direct Supervision**- provides specific instructions and frequently reviews work for completeness and accuracy.
- **General Supervision**- –generally oversees what is to be done and sets limitations, deadlines, and priorities.

1.3.1 Supervision

Supervision of airside operations covers all aircraft ground handling activities and focuses on appropriate general safety rules for aircraft turnaround (e.g. driving in the vicinity of the aircraft, walking around and approaching the aircraft).

During any operation, different persons may perform supervisory functions to ensure tasks are completed safely, according to relevant procedures and as per contracted SLAs.

A 'Supervisor' can commonly be described as a person who supervises activities and/or other persons performing tasks within a process as defined in ch.1.3.1.1. It should be noted that, while some organizations have a dedicated 'Supervisor' as part of an operations team, certain supervisory responsibilities may be delegated to any individual within a process regardless of their job title.

1.3.1.1 Scope and Responsibilities

Supervision scope of ground handling and related activities will include, but is not limited to, the following activities:

a) Passenger handling
b) Baggage handling
c) Ramp handling
d) Load control

Generally, the responsibilities of an individual with supervisory functions include:

a) Setting goals for operational performance and deadlines in ways that comply with the company's structure, plans and vision.
b) Organizing workflows and ensuring employees understand their duties or delegated tasks.
c) Monitoring employee activity and providing constructive feedback and coaching.
d) Providing oversight and guidance to personnel conducting operational functions.
e) Reporting any accidents, incidents, hazards and/or noncompliance as per the organization's procedures.

Supervision personnel shall be trained and qualified to perform the assigned functions as per the applicable regulations and AHM 1110.

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1.3.1.2 Turnaround Coordination

At stations where aircraft turnaround operations are conducted, supervision functions, roles and responsibilities shall be established in advance to ensure an adequate level of operational safety and security is achieved.

An aircraft turnaround plan ensures there is appropriate coordination among the entities (e.g. operator, ground service providers) involved in an aircraft turnaround. An aircraft turnaround plan shall be established by the handler.

The turnaround coordination is performed by a Turnaround Coordinator whose primary goal is to oversee and coordinate processes for both above and below the wing activities during a flight turnaround.

The Turnaround Coordinator may be described as a person who:

a) Provides a focal point of coordination for all ground activities and operational teams, including flight crew.
b) Ensures adherence to the station's Precision Time Schedule (PTS).
c) Ensures safe, secure and punctual performance.
d) Stops any turnaround activities that are not in compliance with safety, security and operational procedures and processes.

Note: *This function may be performed remotely.*

As the organizational structure may differ from company to company or due to local setup, it is important to make a distinction between a Supervisor and a Turnaround Coordinator. In some situations, the Turnaround Coordinator will also assume supervisory responsibilities, while in others the roles are split and assigned to specific individuals. A Turnaround Coordinator may be responsible for more than one aircraft turnaround/ stand simultaneously.

1.3.2 Oversight Checklists

When oversight is done the oversight checklists as presented in IGOM may serve as a guidance and ensure that all actions are covered during all phases of the ground handling.

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1.3.3 Responding to Emergencies and Reporting Accident and Near-Misses

During ground operations, there is a risk of incident, accident or other emergency situations, such as, but not limited to:

a) Fuel and oil spills
b) Dangerous goods events
c) GSE collisions/accidents
d) Situation requiring an aircraft evacuation without passengers
e) Personnel injuries
f) Severe weather emergencies
g) Illicit acts (e.g., security breach)

Depending on the severity and magnitude of the event, Amelia Intl and/or airport emergency response procedures might be activated (see AHM 620 for Crisis and Emergency Response at the Airport).

Note: *Some occurrences might be managed locally within the company's emergency response procedures.*

Any person carrying out a supervisory function must be familiar with:

1. The emergency response procedures and/or reporting protocol of:
   - Their own company or Amelia Intl;
   - The airport at which they are operating;
   - Regulatory authorities (e.g., dangerous goods)
2. Immediate actions per type of event, including aircraft evacuation (see ch.1.3.3.1 & 1.3.3.2)

The ground/cargo handler and the company contracted for de-icing shall ensure an emergency management plan is in place for responding to accidents, other emergencies or abnormal situations that may occur during aircraft ground handling operations. These emergencies may also be leakage or spillage of suspected dangerous goods, suspected bomb or explosives or damaged or leaking cargo. The crew must always be informed of any emergency that occurs.

Their plan shall also have procedures for responding to emergencies that require the evacuation of an aircraft during the conduct of ground handling operations.

The ground handler and the company contracted for de-icing shall ensure that procedures to respond to ground handling incidents are in place.

Emergency procedures should, as minimum, consist of those outlined in the subchapters below. Special emphasis shall be given to communication and cooperation with Amelia Intl flight and cabin crew, as applicable.

If during ground handling operations the handlers notice or cause any damage to the aircraft, they must report it immediately to the Commander.

A record of accidents, incidents and hazards associated with aircraft ground handling or de-icing/ anti-icing operations must be documented. In case the GSP does not have its form, an IATA ground Incident damage Report sheet may be used. This type of report besides as per company and local requirements, must be sent to Amelia Intl. For further distribution and storage refer to ch. 1.4.

Amelia Intl's OCC and as required, to local authorities. For contact of Amelia Intl's OCC refer to chapter 11 of this manual.

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1.3.3.1 Immediate Actions

In the event of an incident or accident, all frontline personnel shall understand and be familiar with the immediate response, which includes, but is not limited to the following actions:

a) Stop the activity/process, if applicable to the type of event.
b) Ensure all personnel are moved away from the incident unless they are involved in mitigating actions.
c) Immediately notify the relevant parties and any personnel directly involved or impacted by the nature of the incident (e.g., flight crew).
d) Report the event to the supervisor/line manager and emergency services/ local authorities, if deemed necessary and as required, who will then assume responsibility to initiate the local response plan:
    1. Secure the area of the event (must be frozen and isolated).
    2. Ensure compliance with all instructions from emergency services, if applicable.
    3. Report to the airline representative and, as required, to local authorities and be in constant communication.
    4. Complete incident/accident/hazard report(s) as required to collect all relevant information regarding the event.
    5. Support any post-incident investigation, analysis and/or review.

The actions, as documented above, are not in chronological order, which will depend on the nature and severity of the event.

Note: *Investigation shall be carried out in accordance with AHM 652 and/or company procedures.*

Important: If any accident or serious incident has occurred, Amelia Intl OCC must be contacted. For contact of Amelia Intl's OCC refer to chapter 11 of this manual.

1.3.3.2 Aircraft Evacuation

Aircraft evacuation without flight crew and passengers on board:

a) Roles and responsibilities for the evacuation.
b) Procedures and different methods of evacuation from the aircraft (e.g., mobile stairs, PBB). Escape slides are not intended as the primary means of exit.
c) Means of communicating the evacuation (e.g., radios, audible warnings).

Note: *Personnel should be trained in the evacuation procedures, including periodic evacuation drills/practices.*

Aircraft evacuation with flight crew and passengers on board:

a) It shall be always coordinated with Amelia Intl crew which is responsible for the aircraft.

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1.3.3.3 Emergency procedures during Loading of Cargo

Upon handling, loading and unloading, the personnel should at all times check the luggage or cargo parcels it handles to confirm:

- That no baggage or parcel identified as possibly (tag, marking or other reason) containing dangerous goods is loaded on an aircraft not authorized to carry DG (refer to ch. 9.1);
- That no shipment labelled “Cargo Aircraft Only” is loaded on passenger aircraft;
- No baggage or parcel shows apparent leakage or contamination.

A loading incident can be considered as any event which concerns the loading / unloading of an aircraft and the drafting of loading documents, which can or could compromise flight safety. These events can have been noticed in flight, during the transit stop, at the arrival station, or before flight departure after the flight manager has carried out the final inspection:

- weight and balance incident,
- hold pollution incident,
- load retaining incident (problems with chocking, securing or retaining of loads by the nets).

No parcel identified or suspected as such should be loaded, and should be reported to the station or assistance company, after taking any possibly required emergency measure.

Emergency procedures for leakage or contamination resulting from an incident likely to involve dangerous goods are described in chapter 9.4.

1.3.3.4 Spills in Cargo Holds

Spills can occur in cargo holds during loading and in flight due to:

- Improper packaging
- Damage due to mishandling prior to loading
- Improper loading in the compartment

Spills can be of liquids, gels, or material in a powdered or granulated form and they can be hazardous, corrosive, flammable, explosive, toxic, poisonous, etc. Even water can cause serious damage to electrical components and systems.

Spills can be corrosive to the aircraft structure. Mercury spills are particularly corrosive to the extent that the affected aircraft structure may have to be completely replaced if the spill is not cleaned up quickly.

It is essential that any spill be reported immediately to maintenance so that corrective action can be taken.

Initiate the local emergency response plan for spill events.

Request information from the respective Cargo Terminal Operator about the nature of what has leaked as well as the Safety Data Sheet, if applicable.

The area where the leakage had occurred has to be isolated. When information on the type of liquid is obtained it should be cleaned depending on the type:

1) If the liquid is identified as non-DG item and that it will not cause ANY damage to person’s health, to the environment or the aircraft it can be cleaned in accordance with the standard cleaning;
2) If the liquid is identified as DG or is identified to cause any health or environmental issues and/or damage to the aircraft structure, it should be cleaned/ removed in accordance with the information provided by the safety data sheet or by a specialized company. For details refer to ch. 9.4.

In case of any doubts on the type of liquid it should be cleaned by a specialized company.

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1.4 RECORDS

The following forms and documents, correctly filled, legible and signed, shall be retrained on ground, by the handler, after take-off:

- Aircraft Technical Logbook- ATL (one copy);
- Final Loadsheet including any LMC signed by the PIC;
- Passenger Manifest, when applicable;
- Notification(s) of special loads and/or special categories of passengers (NOTOC);
- De-icing and anti-icing form (if performed);
- Delivery order of the tanker and possibly the full order (if performed);
- Final Loading instructions Report completed and fully signed by all relevant entities;
- Cargo data sheet/ Cargo Manifest or message (if applicable);
- DG acceptance checklist.

Relevant documents shall be manually or electronically issued and signed as per regulatory requirements and as per requirements in this manual.

These records must be kept in a safe place as per airport's local regulation but in no case not less than three months. These records should be delivered to Amelia Intl compliance monitoring department, any representative of Amelia Intl or civil aviation authority, upon request. The retention period of the records within Amelia Intl is described in OM-A.

Disposal of documents may also be subject to state regulation of the handler.

All accidents, incidents, identified safety hazards, exposed safety deficiencies and raised safety concerns associated with aircraft ground and cargo handling operations including de-icing/ anti-icing, must be reported as per contracted organization reporting system, properly documented and saved for a minimum of 5 years. Additionally, those related to cargo handling must be sent to mbiscak@flyamelia.com and those related to ground operations including de-icing/ anti-icing must be sent to sjazbinsek@flyamelia.com.

Note: *Amelia Intl is not yet participating in IATA Ground Damage Database (GDDB). If the contracted ground handling company is part of the GDDB member list, all the aircraft ground damages should be additionally reported to IATA for further processing.*

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1.5 DEPARTURE CONTROL SYSTEM

For passenger check-in and boarding DCS system can used by the handler.

For sending passenger and crew data when performing flights in or out of United Kingdom, following procedures are applied:

- Passenger data
  1) Handler or FBO, which have DCS system that is connected to the UK governing body is sending information on passengers; or
  2) If Handler or FBO does not have a DCS system that is connected to the UK governing body: OCC submits file via Web APIS site, as applicable.
- Crew data
  OCC fills with crew data and submits Excel spreadsheet CSV file via Web APIS site, once between 48h to 1 h before the flight.

1.6 TECHNICAL REQUIREMENTS OF EQUIPMENT USED IN GROUND HANDLING

1.6.1 Scales Calibration

All scales used in ground and/or cargo handling must be calibrated and periodically checked. The usual check period is once a year or as required by the manufacturer of the scale or by the local authority responsible.

i. The local authority will issue a certificate after the calibration and deliver it to the airport authority and/or the contracted cargo company.
ii. Copy of the above certificate is kept in each station for record.
iii. A sticker is placed on each scale after the calibration, if applicable.

The periodical check of scale accuracy used in the baggage handling process lies in the equipment owner's responsibility who is also responsible to make available to ground handling services provider all relevant documentation, where applicable.

Calibration must be carried out as per requirement of the authority.

The records of those checks shall be retained in accordance with applicable regulations. They must be made available to Amelia Intl, during the periodical audits/monitoring.

Note: *Such scales might be referred to as weigh bridges.*

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2 PASSENGER HANDLING PROCEDURES

2.1 PASSENGER DEPARTURE

2.1.1 Pre-Departure Activities

2.1.1.1 Ticket Sales Counter

If a ticket sales counter is located at the airport an electronic or paper version of Amelia Intl logo and a Dangerous goods notification must be displayed.

If the flight is sold to single customer a Dangerous goods notification will be displayed at the check-in counter (see chapter 9 for the notification).

The ticket sales counter should also, as applicable, hold any relevant handling forms, information on passenger rights and any marketing material if required by Amelia Intl.

2.1.1.2 Passenger Pre-Flight Preparation

Prepare check-in for flights prior to the opening of web or airport check-in, and verify all necessary data has been transferred into the check-in system correctly.

a) Review the booking status (if applicable);
b) For code-share flights with an active blocked space agreement, check the allotment to ensure the block of seats, as agreed, is guaranteed to the partner (where applicable).
c) Review the curtain version (if applicable) and adjust cabin capacity if needed;
d) Confirm the Passenger Name List (PNL) and Additions and Deletions List (ADL) were properly transmitted and match the booking status.;
e) Block seats, if required, for security officers, crew, stretcher passengers, weight and balance, and if seats are unserviceable.
f) Confirm that the seating plan is set according to the actual aircraft type and version;
g) Review the flight remarks, if applicable;
h) Record status on PNR, if applicable;
i) Review the boarding time, departure time and gate. Brief staff about reason for any delays;
j) Apply payload restrictions, if any:
k) Check the Passenger list for any special passengers (e.g. WCH, UM, ESAN, etc.) and pre-assign a seat as per Amelia Intl policy and according to the aircraft type;
l) Review notifications and included handling instructions, if pre-advised for specific passengers and/or baggage by Amelia Intl.
m) Conduct staff briefing for check-in agent (s) before the check-in counters are opened. gents before the check-in counters are opened; receive and review any summarized flight information;
n) If not pre-reserved, prepare seating for families travelling with infants or children, as per Amelia Intl policy. Check total infants booked and confirm that there are enough infant seat belts and if needed, infant life jackets on board and ensure that the maximum number of infants as per ch. 2.3.3 is not exceeded.
o) Where free/open seating is applied, inform the crew and passengers and ensure special category passengers have appropriate seats.

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2.1.1.3 Check-In Counter Requirements

Prior to opening the check-in counters:

a) Start and test equipment;
b) Ensure scales are functioning and calibrated.
    1. For calibration details refer to ch. 1.5.
    2. The responsible check-in agent shall check that baggage scales are operating properly prior to check- in opening by:
        i. Checking the airport authority calibration sticker is current (if applicable);
        ii. Checking the weight indicator at the position to ensure it shows '0.0 kg'
            - If the weight indicator shows otherwise inform the relevant airport authorities department.
            - If the scale remains out of order, another check-in counter shall be requested.
c) Stock boarding card and bag tag printers, as applicable;
d) Ensure adequate stock of any other tags (e.g. cabin bag tags), handling forms, information on passenger rights and marketing material if required by Amelia Intl,
e) Display Amelia Intl logo and/or other signage as requested and mark counters per class, customer status or as 'baggage drop off' if applicable;
f) Ensure that Dangerous Goods listing of dangerous goods permitted and prohibited to be carried on board on Amelia Intl flight by the passenger or crew are prominently displayed at the check-in area as well as ticket offices, baggage drop-off areas, self-serve check-in areas and transfer counters, where applicable;
g) Prepare check-in queues, stanchions, carpets, baggage gauges, podiums etc. if specially requested by Amelia Intl.

Note: In case of self-serve check in, the passenger is required to acknowledge that the DG information has been presented.

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2.1.2 Passenger Check-In

Check-in is the complete sequence of steps that involves the registration of passengers and their baggage in a Departure Control System (DCS) or manual system, the labelling of the baggage and the issuance of one or more boarding passes. Boarding passes containing the registered passenger's name and additional unique identifying data must be issued to all passengers, either on paper or electronically.

Amelia Intl has the right to refuse the carriage of passenger if they fall in certain category (see ch. 2.3.8), if their travel documents are falsified or expired and if the passengers are disruptive in accordance with the four threat levels defined in Amelia Intl OM-A ch. 10.

The passenger must be advised of the operating carrier no later than at the time of check-in, in case it is different from the one noted as the ‘’carrier’’ on the ticket.

2.1.2.1 Check-in Deadlines

The times of opening and closing the check-in counter for Amelia Intl flights, depend on the type of flights (charter, scheduled, ACMI etc.).

When possible and if other information is not provided by Amelia Intl OCC or ground operations department, the check-in counter will be opened 2h30min before the flight and will be closed 45min before the scheduled time of departure. The check-in counter by all means must be closed 30min before the scheduled time of departure unless the applicable passenger rights must be respected. In case of scheduled flight under the flight number of Amelia Intl see GOM-CP.

2.1.2.2 Check-In Routine

Normal Scheduled Flight

- The passengers shall be welcomed and asked for the travel documents. (e-tickets may not be presented by the passenger.)
- The travel documents (visa, passport, ID etc.) must be checked.
- Priority is given to passengers who are in the special categories during check- in.
- Passenger’s name/surname shall be compared with the name/surname printed on the passport and on the ticket/e-ticket.
- Reservations status on the ticket shall be checked.
- The required documents are checked for approval during check-in regarding the features (child, senior, and likewise) of passenger’s ticket. The command of related approval must be entered to the system after the check.
- Baggage must be weighed according to piece or weight system.
- Every piece of cabin baggage shall be weighed by taking free baggage allowance into consideration. See details in ch. 3.2.1. In case the baggage, individual or cumulative weights, exceeds normal allowances it must be reported to the load control as per process presented in ch.3.
- Passenger shall be asked if the baggage contains any dangerous goods and necessary precautions shall be taken.
- Name/surname of the passenger on the baggage tags must be the same with the name/surname written on the ticket/e-ticket.
- Old baggage tags and barcode shall be removed.
- Baggage shall be inspected for existing damages. If the baggage is damaged, passenger must be informed and damaged baggage section at the back of the baggage tag must be filled in accordingly.

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- After completing the check-in process with respect to the demands of the passenger, baggage label/s and boarding card with the passenger's name and surname must be prepared.
- Boarding pass(es) and baggage tag(s) must be issued according to Passenger's request.
- Passenger must be informed about the destination where baggage will be claimed.
- Baggage tags and ticket should be given to passenger.
- Barcodes on the baggage tag shall be attached on both sides of the baggage.
- Baggage identification tag(s) must be attached to passenger's ticket cover.

Special flights

Those are chartered flights for special group of passengers like sport teams or similar and flights going through General aviation:

- The passengers shall be welcomed and asked for the travel documents.
- The travel documents (visa, passport, ID etc.) must be checked.
- Priority is given to passengers who are in the special categories during check- in.
- Passenger's name/surname shall be compared with the name/surname on the Passenger Information List.
- Baggage must be weighed preferably as per the weight concept, or alternatively as per the piece concept. For details see ch. 3.2.1.
- Every piece of cabin baggage shall be weighed by taking free baggage allowance into consideration. In case the baggage, individual or cumulative weights, exceeds normal allowances it must be reported to the load control as per process presented in ch.3.
- Passenger shall be asked if the baggage contains any dangerous goods and necessary precautions shall be taken.
- Old baggage tags and barcode shall be removed.

2.1.2.3 Check-In Types

Check-in may be provided at check-in counters, via self-service methods such as web check-in, kiosk or SMS, and may be performed using a DCS or manually. The check-in for Amelia Intl flights is provided at check-in counters. Web check-in is only possible for the certain scheduled flights.

2.1.2.3.1 DCS Check-in

- Check-in procedures are performed automatically.
- At off-line stations, check-in procedures are performed by the handling agency on a system equivalent to DCS.
- Unless a special request is stated, seat allocation is done automatically.
- Boarding passes and baggage tags are also issued automatically.
- All close-out procedures are performed automatically.

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2.1.2.3.2 Manual Check-in

Where no DSC is available, the following manual check-in procedures should be applied at a manned check-in counter:

- All necessary lists related to the flight(s) shall be made (if applicable) ready at check-in counters before manual check-in starts.
- The necessary Lists are:
  - Passenger's list both checked-in and unchecked.
  - Last check-in information.
  - Present Seat chart information.
- Flight numbers and destinations shall be assigned on the boards of the related counters.
- Staff in charge at the check-in counters shall ensure to make aircraft's stencilling pattern, manual boarding passes, check-list, interline baggage tags, manual passenger manifest ready at check-in counters.
- Correct aircraft's stencilling pattern shall be used, and seats taken in advance shall be removed.
- Different coloured boarding passes for each flight shall be numbered depending on the passenger list. Gate number shall be signified on boarding passes if it is cleared. Specific boarding passes shall be used for Infants.
- Check-in agents shall make interline baggage tags ready just before the check-in starts.
- Seat allocation planning shall be done for business class, wheel chaired, child, infant, local and transit passengers.
- Boarding pass for related flight is prepared by matching name of the passenger in the passport, ticket and the list the check-in agent has.
- Seat number detached from aircraft's stencilling pattern shall be attached on boarding pass, or written manually.
- A security number shall be given and written on interline baggage tags, with number of baggage, weight, surname, flight number, destination, and then the baggage shall be accepted.
- It shall be determined in advance by the station authorities who will pick up the flight coupons of the passengers whose check-in procedure is completed.
- All the outbound connection passengers, flight and baggage information with weighs shall be recorded in order to send PTM messages after boarding competes.
- The seat number shall be put on boarding pass and if the gate number is final, it shall be given to the passenger.
- Passengers' baggage tags shall be controlled during check-in at transfer desk and baggage information shall be recorded.
- All documents and information shall be delivered to the related personnel after check-in completes.
- All baggage and passenger figures (as M, F, CHD, INF, A) shall be written at the bottom of the manifest. For example; (15M 15F 05C 3I 70Pcs/900Kg,)
- A copy of manifest shall be given to boarding personnel.

2.1.2.3.3 Through Check-In

Through check-in means a passenger is accepted and receives boarding passes for the outbound flight as well as on one or more onward flights.

Perform through check-in whenever possible and as per the interline agreement. Travel documents shall be checked for all through-checked parts of the journey.

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2.1.2.3.4 Return Check-In

Return check-in means a passenger is accepted and receives boarding passes for the outbound and return flights.

The check-in for the return flight is permitted if the flight is open.

2.1.2.3.5 Self-Service Check-In

Web/mobile/kiosk/SMS check-in may be offered if the following conditions are met:

a) The passenger is holding an electronic ticket.
b) The passenger is departing from an airport where the operating airline's or ground handler's DCS is in use.
c) The passenger meets any other qualifying criteria set by the operating airline.

Currently Amelia Intl offers web self-check-in only for the certain scheduled flights.

2.1.2.3.6 Off-site Check-in

Off-site check-in means passenger acceptance at an off-airport location, e.g. at a train station or in a hotel. Currently this is not applicable for Amelia Intl flights.

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2.1.3 Passenger Acceptance

2.1.3.1 Requirements for Passenger Acceptance

When accepting a passenger observe the following:

a) Welcome and greet the passenger;
b) Ask for an itinerary/booking confirmation and an official travel document (e.g. passport), if necessary and verify validity, as per ch. 2.1.3.4;
c) Pay attention to any signs showing that the passenger might not be allowed to travel, e.g. unruly behaviour, signs of illness. Certain categories of passengers may be refused travel or may be accepted to travel under certain conditions. Refer to ch. 2.3 for any special category of passengers, their handling, acceptance and seating;
d) Identify the passenger in the check-in system, accept the passenger and assign a seat as per ch. 2.1.3.2;
e) The acceptance of passengers on the waitlist is based on booking status;
f) Update passenger and baggage information and add any Special Service Requests (SSR) to the DCS if required and apply any related fees, if applicable (for scheduled flight refer to GOM-CP);
g) If required, apply irregularity handling in line with the operating carrier procedures, e.g. “search for volunteers” in case of over-sales;
h) Observe through check-in or return check-in, if applicable, and issue all related boarding passes;
i) Hand over the boarding passes and give information about departure gate, boarding time and eventual flight irregularities if applicable in line with the operating carrier procedures;
j) Say goodbye and show the direction to the boarding gate.

Note: Certain categories of passengers may be refused travel. See ch. 2.3 for details.

2.1.3.2 Seating

Each passenger (except infants not occupying a separate seat) is assigned an individual seat number on each flight. The seat choice is offered at time of check-in.

At the time of passenger acceptance:

a) Check if a seat has been allocated already;
b) If not, allocate a passenger seat observing the passenger requests and the procedures for seating for special categories of passengers defined in the relevant subchapters of ch. 2.3; A seat map is also available in appendix 2 of this manual to assist with the allocation of special categories of passengers;
c) Observe seating restrictions for the emergency exit rows, refer to 2.1.3.3 in this section

Note: The jump/crew seats cannot be allocated to any passenger.

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2.1.3.3 Exit Row Seating

Passengers occupying emergency exit row seating shall be able-bodied (ABP). ABP must be a passenger who:

- Is healthy (no physical disability like PWD or MEDA);
- is sufficiently fit (to have enough physical strength and skill to open the emergency exit);
- is older than 16 years;
- is not pregnant;
- is not obese;
- is not in charge for another person (MEDA, PWD, infant etc.)
- understands the language the CCM uses;
- understands the instructions given by the CCM and is able to transmit them;
- is willing to assist the CCM in case of an emergency.

When possible, the check-in agent should, by having in mind and verifying the above-mentioned requirements, delegate seats to potential ABPs.

The cabin crew on board will perform the last check if the person seated on emergency exist is able-bodied and if needed will reseat them.

Note: For safety reasons, passengers with reduced mobility, children and infants, unaccompanied minors or any other special passenger category are not allowed to be allocated an emergency exit row seat.

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2.1.3.4 Documents Required for Travel

Passenger documents consist of:

a) Travel document (e.g., passport or national identify card, residence card).
b) If required, residence card, visa (e.g., entry or transit visa).
c) Health documents, if required–(e.g., vaccinations or other health-related proofs and requirements, which might be required to be presented by passenger before travel. Other additional documents, may include quarantine hotel confirmation, approval level of entry).

Note: *The regulatory framework including these health proofs as well as the responsibility for an airline are provided by ICAO Annex 9 and by the World Health Organization (WHO).*

Staff responsible for check-in and or boarding shall verify passenger documents and ensure an improperly documented person is not allowed to travel.

2.1.3.4.1 Verification

Verification is a process also known as document check, carried out by staff charged with responsibility of check-in and/or boarding at the point of embarkation.

Document check controls uses various technologies and can occur at various points of the passenger journey including the airline website/mobile application or at the airport through self-service check-in options up to the boarding gate. The depth of the controls will also depend on the flight destination and risk profile.

Increasingly, the use of trusted digital identities allows passengers to assert their identity earlier in the journey, reducing the need for face-to-face interaction with an airline's agent, especially when touchpoints are biometrically enabled.

However, the complexity of the entry requirements of the transit and/or destination country(ies) and depending on national legislations, the document check controls may have to be performed manually.

Note*: Verification of travel documents is performed visually and manually. Documents readers and basic inspection tools may be used in higher risk environments.*

Document checks

Prior to passenger check-in or boarding, personnel shall;

a) Determine ticket acceptability and confirm destination and or transit with passenger including the return ticket, if applicable
b) Verify the passenger's identity against the travel document presented e.g.,
    i. Citizenship and date of birth for entry requirements
    ii. Expiry status of the document
    iii. Visual comparison of the photo to the passenger
    iv. The name on the travel document matches the booked/ticketed name.

    Note*: Ensure every person holds a valid travel document*

c) Ensure where applicable, the visa or residence permit required to enter the State of transit and/or receiving State.
d) Review visa and/or entry conditions/limitations.
e) Review health documents status for destination and/or transit requirements, if required.
f) Collect or verify advance passenger information (API) data, if required.
g) Ensure irregularities are detected such as:

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i. Expired or invalid travel document or a visa for which the maximum number of entries set has been depleted;
ii. Counterfeit, forged or altered;
iii. Documents that belongs to another person; or
iv. Passenger without such document.

h) When an irregularity is identified, with the passenger document/s, the supervisor will be notified;
   i. To contact the appropriate authority for assistance to further verify documents, if applicable or
   ii. Deny a passenger check-in at the point of departure or boarding at the transit point, to the intended final destination, when the document(s) presented by the passenger is determined to be insufficient or inappropriate, leading to an inadmissible person, refer to GOM ch. 2.3.10.

i) Retrieve DCS record and review any special remarks.
   Note: *As per ICAO Annex 9, Contracting States have the obligation to assist in the evaluation/verification of travel documents presented by passengers, in order to deter fraud and abuse. Some contracting States may have liaison officers at airports in order to assist airlines to establish the validity and authenticity of the travel documents at the different touch point of the passenger journey.*

2.1.3.4.2 Advance Passenger Information (API)

Many governments require airlines to submit Advanced Passenger Information (API). API is made of two different datasets information related to the:

a) Flight
b) Identity of the passengers

The information related to the passenger are included in the Machine Readable Zone (MRZ) of the travel document (e.g., surname/given names, date of birth, nationality, travel document number, expiry date, etc.) at specified times for inbound and sometime outbound passengers.

Information is generally collected at the time of check-in, or provided from data collected during booking, and verified during presentation of the travel document.

Collect API data at the time of check-in, or review and verify data already provided.

Transmit API data as requested by authorities. Always protect passenger's personal information and securely dispose of any related paperwork not kept on file.

2.1.4 Baggage Acceptance

For all baggage relevant acceptance procedures refer to ch.3 of this manual.

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2.1.5 Passenger Boarding

Boarding is the process of embarking passengers, when the flight is ready for departure and only after the pilot's approval has been given.

Boarding personnel should be present in the hall one hour prior to scheduled departure.

2.1.5.1 Preparation for Boarding

a) Before boarding, ensure passengers and their cabin baggage have undergone security checks.
b) Start and test gate equipment or if required prepare manual boarding documentation when previously agreed with Amelia Intl.
c) Check that boarding facilities and gate monitors are displaying the correct flight information. In case of a delay, check the boards if the delay is shown or not.
d) Prepare the gate room for boarding (e.g. place stanchions, carpets, baggage sizers, podiums, etc.).
e) Ensure that Dangerous Goods listing of dangerous goods permitted and prohibited to be carried on board on Amelia Intl flight by the passenger or crew and a notice of prohibited articles are displayed at the boarding gate where passenger is gathered before boarding.
f) Prepare required handling material such as boarding passes, bag tags and other handling forms.
g) Review the flight and check the following:
    1. Number of booked and accepted passengers including waitlist;
    2. Passengers requiring special attention or pre-boarding;
    3. Passengers who are not authorized to board and if any related action is required, e.g. feeding API- data, selectee handling;
    4. In case of an overbooked flight assess the number of volunteers required and/or expected number of involuntarily denied boarding passengers;
    5. Inbound connections and arrival time;
    6. If applicable meal counts in relation to the number of passengers.
h) Lists of PNR, MEDA, UM, DEPORTEE, INAD, WCH etc. passengers who demand special attention and the passengers who have special demand must be taken and the passengers to be boarded primarily must be determined.
i) If required by Amelia Intl prepare for priority boarding (e.g. set up signage and barriers etc.).
j) Prepare boarding announcements.
k) Ensure the boarding route to the aircraft is safe and clearly marked where possible.
l) If passengers and staff need to walk on the ramp, ensure the route to the aircraft is safe and clearly marked. Passengers must be supervised on the ramp at all times.
m) In case of a delay, make sure that delay announcement is done and passengers are informed about the reason and the exact duration of delay.
n) Obtain clearance for boarding from the flight crew according to local procedures.
o) Check the adequacy of the number of buses when the aircraft is at open parking position, if applicable.

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2.1.5.2 Passenger Boarding Process

Passengers can be boarded by personnel in change of boarding process using a boarding application or manual process, or passengers can use self-service devices for boarding, if available at the airport.

The following must be observed during the boarding process:

a) When the boarding starts, accept special category of pax as PNR, MEDA, DEPO, INAD, UM (see details in subchapters 2.3) first. As second when applicable are boarded priority passengers. At then end are boarded all other passengers.
b) Make boarding announcements. If not provided by Amelia Intl a general one may be used.
c) Follow the procedures from subchapters .2.3 for passengers requiring assistance or pre-boarding.
d) Verify each passenger's identity. Check the name of the passenger identity document with the one on the ticket and visually match passenger with photograph.
e) Register each passenger boarding and make a notification in the DCS.
f) Apply the cabin baggage procedures as per ch. 3.1, and account for any gate tagged items:
   1. Collect any flight related paper revenue documents, if required
   2. Clarify any boarding discrepancies, refer to ch. 2.1.5.3.
g) Follow safety precautions when aircraft fueling is in progress or (fueling/defueling with passengers on board) as per procedure described in ch. 4.14.5.3, state or local regulation;
h) For manual or non-automated boarding, check the flight number and date on the boarding card/token, register the security number;
i) If a passenger is ineligible to board (refused boarding by the system) enter passenger records to resolve the passenger boarding issue.
j) Enforce cabin baggage procedures:
   1. Add any additional cabin baggage tag number(s) in the DCS collected at the gate as per procedure presented in ch. 3.1.2.3 and the system used (manually or automated). Inform load control.
   2. Advise ramp staff and/or load control of any gate tagged items to be loaded.
k) For Delivery At Aircraft, DAA, procedure refer to ch. 3.3.7.
l) The deadline of boarding application for the passenger who has got the boarding card depends on the type of flights (charter, scheduled, ACMI etc.). Unless other information is provided by Amelia Intl OCC or ground operations department, the gate should close 15 minutes prior to departure. In specific circumstances it can be less, after receiving approval of the Commander. In case of scheduled flight under the flight number of Amelia Intl see GOM-CP

Note: For Cabin baggage acceptance at the boarding gate refer to ch. 3.1.2.

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2.1.5.3 Passenger Boarding Discrepancies

If there are passenger discrepancies (minus or plus), they must be resolved prior to closing the aircraft door.

a) Make every attempt to locate missing passengers and obtain visual proof of boarding and verify documents if the missing passengers are found to be already onboard the aircraft.
b) Cabin Crew must count the passengers, minimum three times.
c) Passenger boarding tickets at boarding gate must be counted as well (if applicable). Otherwise check the number of boarded passengers on DCS.
d) Apply Amelia Intl procedures (ch. 3.7.6) and government regulations with respect to the removal of the checked baggage of passengers who checked in but failed to board and need to be off-loaded. Upon the request of the Commander, all necessary safety procedures shall be followed.

e) In case more passengers are on board than shown in the boarding count (PIL or otherwise), the boarding passes and identities of the passengers must be verified and the acceptance corrected and reconciled accordingly. If that passenger is removed, cabin baggage recognition must take place.
f) Notify crew and load control of any last-minute changes to passenger and/or baggage load.

Passenger who quits flying

If the passenger quits his/her flight after embarkation, all checked baggage or belongings of passenger are offloaded. Baggage recognition should take into place for the cabin baggage. The security department should be informed about the case.

2.1.5.4 End of Boarding

Before flight closure ensure that all accepted passengers have boarded the aircraft.

Based on the procedures described in this manual:

a) Secure the flight by matching the checked-in passengers to the boarded passengers, finish the boarding process and close the flight in the DCS, if required.
b) Add any additional cabin baggage tag number(s) in the DCS collected at the gate as per ch. 3.1.2.3 and the system used (manually or automated)
c) Provide final passenger numbers to cabin and/or flight crew.
d) Provide required flight documents to cabin and/or flight crew:
    1. Passenger Information list (had it to the cabin crew);
    2. The Final Passenger manifest;
    3. Other special information (e.g. INAD documents, UM documents with signature etc)
    4. Bag tag list for double destination flights;
    5. General declarations if asked by the company.
e) Ensure the flight crew is informed about final passenger and/or baggage information.
f) Ensure load control are informed about final passenger and/or baggage information, as per load control's procedures.

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2.1.5.5 Boarding in Case of DCS Breakdown

Where no DCS is available or in case of DCS failure, apply the following procedures:

Follow normal boarding routine but take into consideration the following:

a) Boarding staff shall be ready at boarding gate with passenger manifest, aircraft's stencilling pattern and manual check list.
b) Suitable seat numbers shall be given to the special categories of passengers and transfer passengers (if it is not a free seating flight).
c) When preparing the passenger manifest insert the following:
   1. The number of the boarding pass given.
   2. The person's gender (H for male, F for female, CHD for a child, INF for and infant).
   3. The passenger's name and surname.
   4. The number and weight of the bags.
   5. The seat and any necessary remark (UM, WCH, VIP etc).
g) When issuing the boarding pass:
   1. Allocate a seat on the boarding pass and hand it over to the passenger. Keep the flight coupon.
   2. Write the flight number and the destination.
   3. The passenger's name.
   4. The hour of boarding and the gate number if already available.
h) When preparing the baggage tag write:
   1. The name and surname of the passenger.
   2. The flight number and the destination.
   3. The number and weight of the baggage.

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2.1.6 Post Flight Departure Activities

2.1.6.1 Messages

Ensure all relevant messages are dispatched to the appropriate addresses, as required by Amelia Intl.

Messages may include (by prior request by Amelia Intl's OCC):

a) Teletype Passenger Manifest (TPM)
b) Passenger Transfer Message (PTM)
c) Passenger Service Message (PSM)
d) Passenger Protection Message (PPM)
e) Seat Occupied Message (SOM)
f) Industry Discount Message (IDM)
g) Advance Passenger Information (API)
h) Electronic Ticket List (ETL)

2.1.6.2 Flight Document Retention

Retain (electronically or in paper files) the flight documents as described in ch. 1.3 for a period of no less than three months unless otherwise specified by the local regulation:

2.1.6.3 Flight Close-Out

The accounting of all revenue documents for the respective flight and related services has to be ensured.

Electronic documents are transmitted automatically by appropriate flight closing activities in the check-in system.

Paper revenue documents (e.g. FIMs, excess baggage coupons) must be collected and forwarded to the respective Revenue Accounting.

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2.2 PASSENGER ARRIVAL, TRANSFER AND TRANSIT

2.2.1 Pre-Arrival

Review the pre-arrival information from the DCS and/or messages.

a) Prepare for short connections if applicable.
b) Arrange facilitation for passengers requiring assistance as identified by the applicable SSR and/or as procedures presented in ch. 2.3.
c) Check requirements for any gate delivery mobility aids.
d) In case of delay of arrival, check onward connections and make new reservations, if required and as instructed by the operating airline.

2.2.2 Arrival

a) Secure the disembarkation route for passengers and observe passengers' safety throughout the entire disembarkation process. If passengers are required to walk across the ramp, they shall be supervised.
b) The operation of the passenger doors is done by the Amelia Intl only.
c) Obtain all necessary documents for the special category of passengers from the cabin crew.
d) Give the OK to the crew in order to start the disembarkation.
e) Disembark passengers by disembarking first all the passengers and at the end the special category of passengers as per ch. 2.3 (UM, DEPU, INAD etc.)
f) If there is any UM passenger, it will be delivered to you by the cabin crew.
g) Provide assistance to passengers requiring it, if not previously identified.
h) Wait until information is given by cabin crew that all passengers are disembarked.
i) The ground personnel escorts the UM to arrival hall, identifies the person stated in the forms done by the departure station, checks the form and asks the person taking over the UM, to sign after checking his/her ID and after delivering the UM to him/her. All data and facts such as names/surnames declared on the UM Form, shall be compared with ID of the person who greets UM. After that, UM should be delivered to the greeter person.
j) If documentation is obtained by the purses for the DEPO/INAD, they should be handed to immigration office if the passenger has not been already taken over by them. Ground staff shall take the relevant copy of the form issued by immigration office. INAD/DEPORTEE passengers with escort shall also be escorted to be delivered to immigration office.

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2.2.3 Transfer (Passenger Handling at Connecting Airport)

a) Check the inbound/outbound connections and the number of passengers affected.
b) Check time-critical connections, and inform gate staff of onward transfers.
c) Prepare for handling of passengers requiring assistance.
d) Assist the transferring passengers upon arrival of the incoming aircraft.
e) Direct passengers:
   1. Through-checked passengers to the appropriate departure gate(s).
   2. Non-through-checked passengers to the transfer desk or gate for check-in, whichever is applicable.
f) The documents obtained for the INAD/ DEPO by the cabin crew must be checked about visa and passport requirements and check-in process shall be completed.

2.2.4 Transit

A transit passenger may be allowed to disembark when scheduled ground time and local circumstances and facilities permit, only by prior approval of the Commander who had coordinated his decision with the airport ground staff. Certain categories of passenger should be escorted during the transit time.

Local government requirements must be applied regarding security of transit passengers up to and including screening requirements.

2.2.4.1 Disembarkation Procedures

In case of an aircraft change

a) All transit passengers must be disembarked.
b) Passengers are advised to take their carry-on baggage.
c) Provide each passenger with a transit boarding pass or instruct passengers to retain their original boarding pass. In case the boarding pass is kept it must be checked by ground staff.
d) The number of boarding passes distributed must be the same number of transit passengers.
e) Passengers must be informed about boarding time and gate and available facilities.
f) Relevant departments must be alerted for special assistance needed passengers.
g) All transit passengers must be re-secured when re-boarding the flight. In example travel document checked, boarding status verified, transit card collected.

In case of same aircraft to be used

All transit passengers must be re-secured when re-boarding the flight. In example travel document checked, boarding status verified, transit card collected.

2.2.4.2 Transit Passengers Remain on Board

There may be categories of passengers that stay on board if locally permitted. The cabin crew will apply company procedures.

In this situation check the number of passengers with the cabin crew onboard to ensure a correct boarding count when re-boarding the flight, as described in the subchapter below.

Provide assistance to passengers who remain on board during the transit time

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2.2.4.3 Boarding Transit Passengers

a) Board transit passengers before local passengers.
b) Re-secure the flight by checking travel documents and validating boarding status through collection of transit cards or review of original boarding cards. Validation may also be done using the flight manifest or DCS.

2.2.4.3.1 Missing Transit Passenger

The flight must be re-secured before door closure. If passengers are missing, apply the procedure for missing passengers as per ch. 2.1.5.3.

2.2.4.4 Programmed Aircraft Change en Route

a) Advise cabin crew that all transit passengers must disembark with their carry-on baggage.
b) Distribute transit boarding passes (or instruct passengers to retain their original boarding pass) and inform passengers about boarding time and gate and available facilities.
c) Provide passenger assistance as required.
d) In case of a change of configuration, assign passengers new seat numbers if applicable, or apply free/open seating.

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2.3 SPECIAL CATEGORIES OF PASSENGER

2.3.1 Infant

An infant is a passenger who is less than two years old and they shall always be accompanied by an adult at least 18 years old (this person may be under 18 years only if he/he is one of the parents or the legal guardian of the infant),

Travel is permitted but not recommended for new-borns within seven days after birth. If the infant is younger than 48 hours a medical report stating “no risk for the infant and for the passenger in flying” shall be provided. There is no requirement for a medical agreement certificate for infants older than 48 hours but younger than 7days.

Only one infant per adult is acceptable. Those infants are provided Infant tickets.

For adults with more than one infant.

- They must fulfil the criteria for able body passengers;
- Infant ticket for the first infant and child ticket for other infants must be arranged.
- CRD or approved infant seat (further referred to as infant seat), as per ch. 2.3.1.3, must be provided for the second infant.
- Escorts (except parents) must be older than 18 years old.

Amelia Intl fleet is not equipped with bassinet.

Transport of infants in an incubator is not allowed except under the MEDEVAC operation.

2.3.1.1 Seating

- Infant must not be seated on first row, on emergency row or immediately forward or aft an emergency exit.
- Infant must be placed in a row where there is extra oxygen mask available, if applicable. For seats where there is extra oxygen mask refer to chapter 6.1.1. for the specific aircraft type.
- Adult must be provided with a suitable infant seat belt (as applicable) and infant life jacket where needed.
- The infant on lap must be forward facing.
- It is possible to seat only one infant on lap per half row.
- It is recommended that the passengers travelling with infants on lap are seated on a window seat.
- Infant must not occupy a seat of his/her own, unless in an infant seat where it is placed on window seat and the adult must be placed next to it (for infant seat refer to ch. 2.3.1.3);
- If an adult is travelling with a second infant, the second infant must be placed in an infant seat which is placed on window seat.
- An infant seat shall be placed on a window.
- It shall fit between the armrests of the passenger seat and may not interfere with the recline function of the seat in front of it.
- Passengers with infant should preferably be seated in such way that the infants are equally distributed over the cabin compartment.

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2.3.1.2 Number of Infants per aircraft

The number of infants accepted on board is determined according to the number of infant seat belts and number of infant life jackets and number of spare oxygen masks available in the cabin.

On ATR42 there are no automatic oxygen dispensing units therefore the number of spare oxygen masks on board does not limit the number of infants carried.

Where life jacket not mandatory to be used during flight, as per regulation, the number of infant life jackets on board does not limit the number of infants carried.

Aircraft Type	Number of infants*
EMB135	3
EMB145	5
ATR42	5

Aircraft Type	Number of infants*
A319	10
A320	28

***Note:** The number of accepted infants may be increased, provided:

- There is sufficient number of infant seat belts.
- There is sufficient number of infant life jackets.
- There is sufficient number of oxygen masks in oxygen dispensing units (see ch.6 for relevant, where applicable).
- Seating rules are respected.
- The Commander gives his agreement.

2.3.1.3 Infant seat

The infant seat used must be:

- approved for use in the aircraft as required by the European Technical Order ETSO-C100c on Aviation Child Safety; or
- Approved by EASA through a Type certificate or Supplemental Type Certificate; or
- Complies with one of the following standards/criteria:
  - UN Standard ECE R44-03 and 44-04 or ECE R129 bearing the respective ''ECE R'' label and German Tuv/958-01/2001 having the label ''For use in Aircraft''
  - US FMVSS nb.213 having one or two labels with the following sentences:
    This child restraint system conforms to all applicable federal motor vehicle safety standards; and
    This restraint is certified for use in motor vehicles and aircraft (in red letters)
  - Canadian CMVSS 213/213.1, having the respective label
  - Australia/New Zealand Technical standard AS/NZS 1754:2013, on which is seen the green part on the label displaying ''For use in Aircraft''.

Infant seats shall carry a visible seal of approval awarded by the European Union or any other official government agency.

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2.3.2 Children

A passenger of an age of 2 years and above, but less than 12 years of age is considered as child. Children must be accompanied by a responsible adult (able-bodied passenger) over the age of 18, otherwise they are considered and UM (see ch. 2.3.3).

The accompanying person may also be a passenger under age of 18, if he/she is one of the parents or the legal guardian. In case that the child travels with PWD who has a safety assistant, the child must have 5 years or more.

2.3.2.1 Seating

- Children must occupy an individual passenger seat.
- They must not be seated on emergency exit rows.

2.3.2.2 Number of Children on board

The number of children on board is not limited as long as there is one responsible adult per child.

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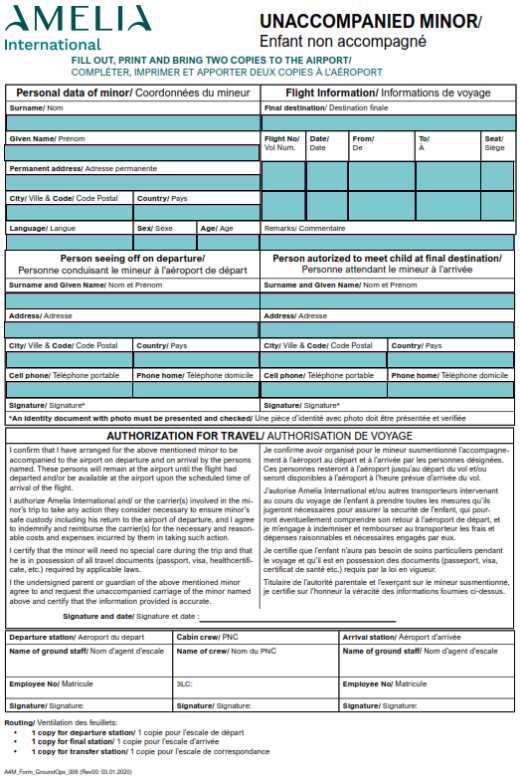
2.3.3 Unaccompanied Minor

Unaccompanied minor are children between 4 and up to 12 years that can travel alone without an escort on Amelia Intl flights. They are responsibility of the Cabin crew from the time they enter the aircraft until they are handed to the station representative or handling agents at destination.

For obtaining a copy of the UMNR form contact aeh.ground@flyamelia.com



AMELIA International

UNACCOMPANIED MINOR/
Enfant non accompagné

FILL OUT, PRINT AND BRING TWO COPIES TO THE AIRPORT/
COMPLÉTER, IMPRIMER ET APPORTER DEUX COPIES À L'AÉROPORT

Personal data of minor/ Coordonnées du mineur			**Flight Information/** Informations de voyage				
Surname/ Nom			**Final destination/** Destination finale				
Given Name/ Prénom			**Flight No/** Vol Num.	**Date/** Date	**From/** De	**To/** À	**Seat/** Siege
Permanent address/ Adresse permanente							
City/ Ville & **Code/** Code Postal	**Country/** Pays						
Language/ Langue	**Sex/** Sexe	**Age/** Age	Remarks/ Commentaire				

Person seeing off on departure/ Personne conduisant le mineur à l'aéroport de départ		**Person autorized to meet child at final destination/** Personne attendant le mineur à l'arrivée	
Surname and Given Name/ Nom et Prénom		**Surname and Given Name/** Nom et Prénom	
Address/ Adresse		**Address/** Adresse	
City/ Ville & **Code/** Code Postal	**Country/** Pays	**City/** Ville & **Code/** Code Postal	**Country/** Pays
Cell phone/ Téléphone portable	**Phone home/** Téléphone domicile	**Cell phone/** Téléphone portable	**Phone home/** Téléphone domicile
Signature/ Signature*		**Signature/** Signature*	

***An identity document with photo must be presented and checked/** Une pièce d'identité avec photo doit être présentée et vérifiée

AUTHORIZATION FOR TRAVEL/ AUTHORISATION DE VOYAGE

I confirm that I have arranged for the above mentioned minor to be accompanied to the airport on departure and on arrival by the persons named. These persons will remain at the airport until the flight had departed and/or be available at the airport upon the scheduled time of arrival of the flight.

I authorize Amelia International and/ or the carrier(s) involved in the minor's trip to take any action they consider necessary to ensure minor's safe custody including his return to the airport of departure, and I agree to indemnify and reimburse the carrier(s) for the necessary and reasonable costs and expenses incurred by them in taking such action.

I certify that the minor will need no special care during the trip and that he is in possession of all travel documents (passport, visa, healthcertificate, etc.) required by applicable laws.

I the undersigned parent or guardian of the above mentioned minor agree to and request the unaccompanied carriage of the minor named above and certify that the information provided is accurate.

Je confirme avoir organisé pour le mineur susmentionné l'accompagnement à l'aéroport au départ et à l'arrivée par les personnes désignées. Ces personnes resteront à l'aéroport jusqu'au départ du vol et/ou seront disponibles à l'aéroport à l'heure prévue d'arrivée du vol.

J'autorise Amelia International et/ou autres transporteurs intervenant au cours du voyage de l'enfant à prendre toutes les mesures qu'ils jugeront nécessaires pour assurer la sécurité de l'enfant, qui pourront éventuellement comprendre son retour à l'aéroport de départ, et je m'engage à indemniser et rembourser au transporteur les frais et dépenses raisonnables et nécessaires engagés par eux.

Je certifie que l'enfant n'aura pas besoin de soins particuliers pendant le voyage et qu'il est en possession des documents (passeport, visa, certificat de santé etc.) requis par la loi en vigueur.

Titulaire de l'autorité parentale et l'exerçant sur le mineur susmentionné, je certifie sur l'honneur la véracité des informations fournies ci-dessus.

Signature and date/ Signature et date : _____

Departure station/ Aéroport du départ	**Cabin crew/** PNC	**Arrival station/** Aéroport d'arrivée
Name of ground staff/ Nom d'agent d'escale	**Name of crew/** Nom du PNC	**Name of ground staff/** Nom d'agent d'escale
Employee No/ Matricule	3LC:	**Employee No/** Matricule
Signature/ Signature:	**Signature/** Signature:	**Signature/** Signature:

Routing/ Ventilation des feuillets:
- **1 copy for departure station/** 1 copie pour l'escale de départ
- **1 copy for final station/** 1 copie pour l'escale d'arrivée
- **1 copy for transfer station/** 1 copie pour l'escale de correspondance

AAM_Form_GroundOps_006 (Rev00: 03.01.2020)

2.3.3.1 Seating

- UM must not be seated in emergency exit row.
- Seat them side by side on a same block. If there are seats left on an UM seat block, do not seat an adult next to an UM unless the flight is full.
- Assign seat next to adult or each block should be followed by one or several row(s) of adults, in order to respect the rule that an adult must be seated close to an UMNR.
- They must be never seated next to DEPU/ DEPA, PWD or next to disabled passenger.

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2.3.3.2 Number of UMNR on board

Below are presented the maximum numbers of UMNR per aircraft type.

Aircraft Type	Maximum number of UMNR
EMB135	8 including 3 max under age of 8
F-HTOP & F-HLIP stretcher version	4 including 2 max under the age of 8
EMB145	10 including 4 max under age of 8
F-HESR stretcher version	5 including 2 max under the age of 8
ATR42	10 including 4 max under age of 8
A319/A320	12 including 4 max under age of 8

Note: **Exceptionally,** in case a larger number of UMNR shows up, they might be accepted, even if the limitation is reached, provided:

- The seating rules are respected (emergency exits, number of adult passengers able to assist the UMNR in case of emergency).
- The Commander gives his agreements.
- NPFO is advised and gives his agreement.

2.3.3.3 Procedures for Handling UMNRs

- Parent or appointed guardian (the person seeing off the UMNR at departure) shall fill and sign two (2) copies of the UMNR form to the airport.
- The ground staff shall ensure that all data are filled and must ask a proof of identity of the responsible adult.
- Parent or appointed guardian shall be informed to stay at the airport until the flight departs.
- Ensure the correct remarks and SSR codes are in the check-in record.
- Whole itinerary reservations status must be OK.
- All travel documents must be controlled at the time of check-in. (Passport, ticket, visa etc.)
- After check-in, UMNR baggage tag is attached to baggage.
- Ticket, passport, other documents are put in to the documentation pouch.
- UM is delivered to authorized ground staff in charge of the his/her escort to the aircraft.
- The authorized ground staff/handling agent shall sign both copies of the UM form.
- The UMNR must not be left unsupervised until handed over to the cabin crew.
- An UMNR never risks denied boarding, he has priority over the other passengers.
- The UMNR passenger is boarded as the first passenger.
- The two copies of UMNR forms must be signed by the purser.
- One copy of the UMNR form is then left on ground/at the station and the other one is put in the UMNR's documentation pouch. If required by the parent or appointed guardian, a copy can be provided to him as well.
- UMNR comment is sent to arrival/mid- points to make sure that the UM will be escorted upon arrival.
- Advise/release responsible adult once the flight is airborne.

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2.3.3.4 Transfer Station Procedures

The ground staff shall:

- Meet, assist UMNR and collect/sign any travel documents from the cabin crew.
- Hand over the UMNR to the cabin crew of the connecting flight.
- In case of interline transfer, hand over UMNR to the onward connecting airline agent.
- If flight is cancelled at transfer station, UMNR to be accompanied at all times.

2.3.3.5 Arrival Station Procedure

The UMNR is disembarked as the last passenger.

The Ground staff shall:

- Meet, assist UMNR and collect any travel documents from the cabin crew.
- Sign the UMNR form found in the UMNR's documentation pouch.
- Where applicable, ensure baggage of UMNR is collected.
- Hand over the UMNR only to the designated adult noted on the UMNR form after verifying the identity of this person and having received his signature for receipt of the UMNR.
- Keep the signed form.

2.3.3.6 UMNR with Reduced Mobility

A child with a physical handicap is accepted as UMNR if able to fasten and unfasten its seatbelt.

A child with mental handicap is accepted as UMNR.

- The PNR must include the IATA code UMNR and PWD IATA code.
- The UMNR PWD is included in the UMNR quota and in the number of PWD accepted.

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2.3.4 Young Person

The passenger that had celebrated the twelfth birthday but not celebrated the eighteenth is considered as young passenger.

Young passengers may travel alone. Companion is not required.

Upon request, young passengers with the age between 12 and 17 can be assigned as UNMR. For details on UNMR see ch. 2.3.3.

2.3.4.1 Seating

A young passenger could be placed on emergency exit only if the physical and mental state is acceptable in order for him/ her to act as Body Able Passenger.

2.3.5 Pregnant Passengers

- It shall be asked how many weeks the mother is pregnant.
- If a passenger is pregnant with one baby: She is permitted to travel without any medical reports up to 28 weeks. If she is pregnant between 28-36 weeks (beginning from 28th week end of 36th week) she must provide a medical report by the doctor specifying "there is no objection to travel by air". Pregnant passengers after 37 weeks pregnancy are strongly discouraged to travel and are only accepted with medical report and a written and signed consent from the pregnant passenger herself.
- If a passenger is expecting babies' twins or more: She is permitted to travel without any medical reports up to 28 weeks. If she is pregnant between 28-32 weeks (beginning from 28th week end of 32th week) she must provide a medical report by the doctor specifying "There is no objection to travel by air". These pregnant passengers after 33 weeks pregnancy are strongly discouraged to travel and are only accepted with medical report and a written and signed consent from the pregnant passenger herself. They are anyhow not permitted to travel after 38 weeks pregnancy even with a medical report.
- In case of haemorrhagic or painful pregnancy, a medical report which states "the pregnancy does not danger mother's or baby's life" is necessary to eliminate the risk.
- The medical report which shall be written on a stationary with a letterhead of the health institute or doctor and must be given by a specialist
- Medical clearance must be issued in last 30 days prior to the flight.
- Doctor's name and surname, diploma number, signature shall be seen clearly on the report.
- A medical clearance and the self-written & signed consent letter shall be minimum in English or French. If they are any other language, related personnel in the stations must translate "There is no objection to travel by air" into English or French. Translation shall include the related staff name, surname title, and signature. Upon completion of such formalities, passenger is accepted to the flight.

2.3.6 Overweight Passenger

Overweight passengers claiming a second seat belt shall not be allowed to be seated on exit seats and exit seat rows.

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2.3.7 Passenger with Disabilities

Passenger with disabilities or PWD is any person whose mobility when using transport is reduced due to any physical disability (sensory or loco motor, permanent or temporary), who have intellectual disability or impairment, or any other cause of disability, or age, and whose situation needs appropriate attention and the adaptation to his or her particular needs of the service made available to all passengers.

In order to manage the passengers requiring special assistance, Amelia Intl has Information sheet for passengers requiring special assistance and medical clearance. See ch. 2.3.8.6 for details on the usage and issuance of the forms.

For passengers with disabilities and those requiring or requesting assistance the ground staff should:

a) Ask the passenger what assistance they require and how they can be helped.
b) Assign a seat in their ticketed cabin which accommodates the passengers' needs, in consultation with the passengers, and ensure that they are not allocated or occupy seats where their presence could impede the emergency evacuation.
   If the PWD is travelling with a Personal Care Attendant and/or Safety Assistant, they shall be given seats immediately adjacent to or across the aisle from the passenger they are assisting- see ch. 2.3.7.2.
c) Advise passengers what services and assistance are available, based on their needs.
d) Advise the passenger of the available equipment such as on-board wheelchairs, braille or tactile markings, accessible lavatories etc..
e) Provide information to passengers in alternate formats upon request (eg. braille, captioning, large print)
f) Ensure accurate SSR codes and any other relevant information are recorded in the DCS and PNR.
g) Provide assistance with necessary service equipment (i.e. wheelchair, lift etc.), if needed, to and from the aircraft.
h) They should be pre-embarked and post-embarked (DEAF, BLND passengers might board with all other passengers if they want to).
   Note: *In case of full cabin the PWD should be, if possible, pre-embarked.*
i) Whenever feasible, PWDs using a wheelchair (manual or powered) or other mobility aid, should be
j) permitted to use their personal mobility aid throughout the airport until they reach the aircraft and
k) receive it back near the aircraft upon arrival. When in transit, if time permits between flights, the airline should offer to return to PWDs their personal mobility aid and allow PWDs to retain them until they need to be stored again for carriage. Inform the stations of transfer/arrival accordingly to allow the handling of the aid.

General Amelia Intl rules:

- Any presence of PWD must be notified to the Commander (remark on the PIL).
- A disabled passenger is responsible for any extra payment for medical treatment.
- A disabled passenger may travel alone or accompanied.
- A disabled passenger may accompany a child and/ or an infant unless he/she has severe mental disability, severe mobility impairment or severe seeing and hearing impairment.
- The blind passenger can travel with guide dog in cabin free of charge, provided that the rules for service animals written in the subchapter below are respected.
- All PWDs must be embarked/ disembarked using a proper handling equipment. The equipment used will depend on the type of disability (i.e. WCHS cannot walk up & down the stairs, so they should be boarded via the service door with a proper equipment).

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2.3.7.1 Categories of PWD

All PWD codes are also found in chapter 10 of this manual. Explanation of the codes is presented below. An appropriate SSR code must be presented to ensure proper assistance.

a) Codes to identify a type of disability;
   1. **BLND** (Blind Passenger)–specify if accompanied by service animal.
   2. **DEAF** (Deaf Passenger)–specify if accompanied by service animal.
   3. **DPNA** (Disabled Passenger Needing Assistance)—passenger with cognitive or invisible disabilities needing assistance (specify details)

b) Codes to identify assistive services provided to the passenger
   1. **MAAS** - Meet and Assist (specify details)
   2. **WCHR** (Wheelchair—R for Ramp)—passenger can ascend/descend steps and make own way to/from cabin seat but requires wheelchair for distance to/from aircraft, i.e., across ramp, finger dock or to mobile lounge as applicable. When service animal is accompanying passenger, specify the type of animal in free text of SSR Item
   3. **WCHS** (Wheelchair—S for Steps)—passenger cannot ascend/descend steps, but is able to make own way to/from cabin seat; requires wheelchair for distance to/from aircraft or mobile lounge and must be carried up/down steps. When service animal is accompanying passenger, specify the type of animal in free text of SSR Item.
   4. **WCHC** (Wheelchair—C for Cabin Seat)—passenger completely immobile; requires wheelchair to/from aircraft/mobile lounge and must be carried up/down steps and to/from cabin seat. When service animal is accompanying passenger, specify the type of animal in free text of SSR Item.

   Note: *Specify if the passenger is travelling with own wheelchair and use one the following applicable SSR codes which describe the wheelchair:*

   1. *WCBD - Dry or Gel battery operated wheelchair/mobility aid (non-spillable/dry cell battery)*
   2. *WCMP - Manual power wheelchair/mobility aid*
   3. *WCLB - Lithium battery operated wheelchair/mobility aid*
   4. *WCBW - Wet cell battery wheelchair/mobility aid)*

   If the passenger is requesting a wheelchair on board use SSR code WCOB.

c) Codes to identify animals accompanying a passenger with disabilities
   1. When service animal is accompanying passenger, specify the type of animal in free text of SSR.
   2. **ESAN** - for passengers travelling with an emotional support/psychiatric assistance animal in cabin (specify details). Subject to government regulations.
   3. **SVAN** - for passengers travelling with a service animal in cabin (specify details).

d) Codes to identify equipment accompanying the passenger:
   1. OXYG (Oxygen) - for passengers travelling either seated or on a stretcher, needing oxygen during the flight (only to be used in conjunction with SSR Code MEDA).
   2. STCR (Stretcher Passenger)
   3. AOXY (Airline Supplied Oxygen) - for passengers travelling either seated or on a stretcher, needing oxygen during the flight (only to be used in conjunction with SSR code MEDA). Amelia Intl does not provide AOXY.
   4. POXY (Passenger Own Oxygen) - for passengers travelling either seated or on a stretcher, needing oxygen during the flight (only to be used in conjunction with SSR code MEDA).
   5. PPOC (Personal Portable Oxygen Concentrator)
   6. WCOB (Wheelchair—O for Onboard) - 48 hours' notice recommended but not required.

Note: *For medical cases (MEDA) refer to ch. 2.3.8.*

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2.3.7.2 Safety Assistant for PWD (applicable for all PWD)

The safety assistant is a person aged over 12 willing and capable to actively and physically assist the PWD in case of emergency or to apply for him/her the safety instructions.

- he may be a person accompanying the PWD and in this case, must be seated next to the PWD
- he cannot accompany at the same time a baby or a child under 5.
- he cannot be the safety assistant of several PWD at the same time.
- He may be an extra crew member, already on board or launched for the purpose (on the OCC decision) or,
- another passenger of the flight (staff or revenue passenger) willing and complying with it.

If the safety assistant is a passenger, precise the NAME/Surname of the disabled passenger concerned with a notification in the check-in file to enable the identification on the PIL (use the code WC/passenger accompanying NAME/Surname when possible).

He will not have to be a “Medical escort” nor a “Personal assistant”.

Safety assistant is required if the PWD cannot:

- respond appropriately to flight safety instructions because of a severe mental disability or,
- physically assist in his/her own evacuation in case of severe mobility impairment or,
- establish a means of communicating with carrier personnel because of a severe seeing and hearing impairment.

Examples:

- A customer who has four paralysed limbs must travel with a Safety Assistant. On the contrary, a person who has paralysed or missing legs can contribute to their own evacuation.
- A customer affected by Down syndrome does not require a Safety Assistant.

***NOTE:* If one of the 3 conditions is not respected, the PWD is not able to travel alone, in that case the Safety Assistant required has not been found by the PWD: the PWD may be denied boarding for safety reason.**

2.3.7.3 Seating (applicable for all PWD)

- PWDs must not be seated in emergency exit row.
- They must be seated by the window.
- They must not occupy seats where their presence could impede the crew in their duties, obstruct emergency equipment or impede the emergency evacuation.
- PWD must never be seated next to an UMNR, or next to another PWD (except PWD travelling together or as a group + UMNR PWD with the other UMNRs)

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2.3.7.4 Number of PWD (Applicable for all PWD)

The acceptance of PWD is limited either for their own or the other passengers' safety.

Therefore, **the maximum number of PWD is limited to the number of valid passengers capable of assisting them in case of an emergency. The seating requirements must be taken into consideration.**

Note: According to the European regulation, apart from the limitation published in this chapter, any PWD refusal on a flight must be justified and be reported by the Commander.

The European regulation 1107/2006 of July 6th concerning PWD transport, put a ban on any type of discrimination.

Consequently, pursuant to the applicable regulations, any restriction dealing with PWD such as accompanying or seating, may only be justified by safety reasons or to enable the airline to deliver specific means for the assistance.

2.3.7.5 Assistance at Airport (applicable for all PWD)

- At departure PWDs should be present at airport at least 2 hours before departure, unless longer times are applicable at a station.
- At the time of departure and arrival, assistance PWD supports the passenger from the designated point to his seat on board and from the seat on board to the point indicated on the platform of the terminal.
- During check-in and in case of delay, let passengers remain in their own wheelchair as long as possible.
- When a delay is known after a wheelchair has been checked-in, and in case of a long delay expected, the checked-in wheelchair can be given back to the passenger until departure.
- In addition to the public announce about the irregularity and its consequences, PWD should be informed PERSONNALY.
- In case of cancellation without rerouting solution on the same day, local passenger shall be sent back home (the transfer being considered) instead of sending them to a hotel, unless they agree otherwise.

2.3.7.6 Wheelchair

For procedures on acceptance and handling of the battery-powered wheelchairs refer to ch. 3.3.4.

Using service door

- The service door can be used to board a WCH, provided a special vehicle equipped as HELP with lifting platform is used while complying with the safety requirements.
- If the handrails are not movable, the use of the equipment is not allowed on Amelia Intl fleet.

If station not equipped with HELP or vehicle is not adapted to accost the Amelia Intl fleet, the operations of boarding/disembark will be made "by carrying passengers" with 2 agents or with a wheelchair wheels adapted. This will be done by the passenger door.

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2.3.8 Passengers Requiring Medical Clearance

No transportation, under any circumstances, will be provided to (unless special medical/ ambulance flights is performed under the provisions of relevant regulation)**:**

- **Infant in an incubator;**
- **Passengers who have contagious/ infectious disease, e.g. open tuberculosis, infectious hepatitis, scarlet fever, diphtheria, chickenpox etc;**
- **Has suffered a heart attack or stroke within the last eight weeks;**
- **Requires medical treatment by pneumatically or electrically operated apparatus, which, for specific reasons is not allowed to be operated on board.**

No medical clearance or medical forms are required for passengers who only require special assistance in the airport or when embarking/disembarking.

Medical clearance is required for all other passengers:

a) Have any disease that is believed to be actively contagious/communicable.
b) Are considered to be a potential risk to the safety or punctuality of the flight, including the possibility of diversion or unscheduled landing.
c) Are incapable of caring for themselves and require special assistance during flight (e.g. passenger on stretchers, persons with acute medical conditions as recent heart attack, stroke, embolism, persons with recent surgery, persons needing extra oxygen or other medical treatment like infusions.)
d) Have a medical condition that may be adversely affected by the flight environment

Note: *Passengers not falling into these categories normally do not need medical clearance however, if in doubt, Amelia Intl should be advised so it can decide whether a medical clearance is required or not.*

Important: Passengers on stretchers are accepted only on certain aircraft when the stretchers are installed, see ch. 2.3.8.7. In case of count contact Amelia Intl.

In order to manage the passengers requiring special assistance and medical clearance, Amelia Intl has Information sheet for passengers requiring special assistance and medical clearance forms (MEDIF forms). See ch. 2.3.8.8 for details on the usage and issuance of the forms. The report should be in English. As majority of the flights are conducted with French speaking passengers for their convenience MEDIF form can also be submitted in French If the doctor report is in any other language, it should be translated into English. For acceptance of any other language contact Amelia Intl. If translated, it shall include the related staff name, surname title, and signature. The medical clearance should not be older than 15 days.

Safety assistant Escort) is required if the MEDA cannot administer his own medicines and medical procedures unaided and in case of stretchers.

Before accepting such passengers for transportation, the availability of staff trained and qualified to meet their needs and the availability of the appropriate medical equipment should be ascertained from departure to arrival.

An appropriate SSR code must be presented to ensure proper assistance.

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2.3.8.1 Categories of Medical Case Passengers

LEGL (Left Leg in Cast)–for passenger with a left leg in a full cast or fused knee, (only to be used in conjunction with SSR code MEDA). Possibly will need EXST.

LEGR (Right Leg in Cast)–for passenger with a right leg in a full cast or fused knee, (only to be used in conjunction with SSR code MEDA). Possibly will need EXST.

LEGB (Both Legs in Cast)–for passenger with both legs in a full cast, (only to be used in conjunction with SSR code MEDA). Possibly will need EXST.

MEDA (Medical Case)–company medical clearance may be required. Not to be used for passengers with disabilities or reduced mobility who only require assistance or handling and who do not require a medical clearance.

OXYG (Oxygen)–passengers travelling either seated or on a stretcher, needing oxygen during the flight (only to be used in conjunction with SSR Code MEDA).

AOXY (Airline Supplied Oxygen)—for passengers travelling either seated or on a stretcher, needing oxygen during the flight (only to be used in conjunction with SSR code MEDA) (by bilateral agreement). Amelia Intl does not provide AOXY.

STCR (Stretcher Passenger). Allowed only on aircraft with installed stretchers.

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2.3.8.2 Seating

See Appendix 2 for details on seat location but the general below must be respected.

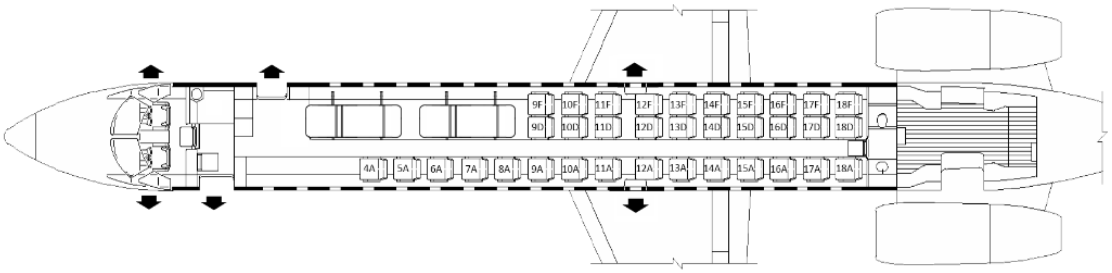
Seating for all MEDA except STCR

- They must not be seated in emergency exit row.
- They must be seated by the window

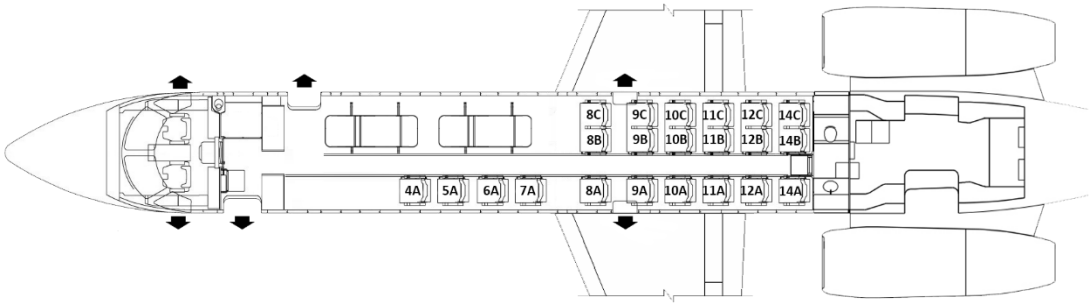
Seating for STCR:

The STCR passengers must be placed in the stretcher installation. The person accompanying the STCR shall be seated on the seat next to the stretcher installation:

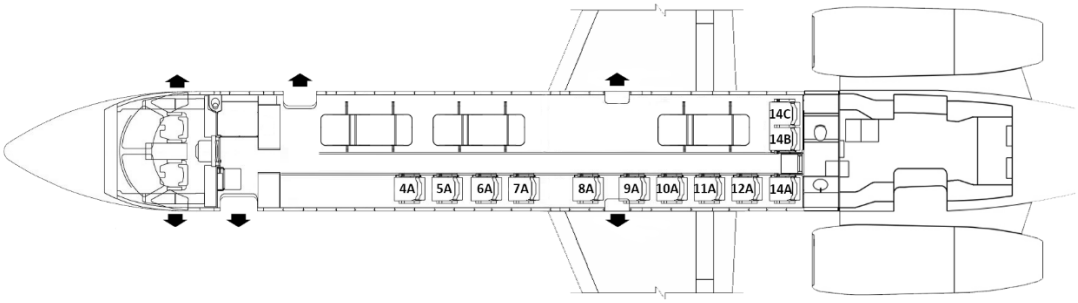
- On F-HESR those are seat 4A and/or seat 7A.



- On F-HTOP & F-HLIP with **two stretchers** those are seats 4A and/or 6A



- On F-HTOP & F-HLIP with **three stretchers** those are seats 4A, 6A and/or 11A



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2.3.8.3 Number of MEDA

Aircraft Type	Maximum number of MEDA excluding STCR
EMB135	2
EMB145	2
ATR42	2
A319/A320	4

The transportation of STCR passenger is allowed only on the aircraft with installed stretchers: F-HESR (EMB145LR), F-HTOP (EMB135LR) and F-HLIP (EMB135LR). **The maximum number of STCR is limited to the number of installed stretchers on board.** For example, on F-HESR when stretchers are installed are accepted maximum 2 STCR and on F-HTOP & F-HLIP are accepted 2 or 3 STCR depending on the number of installed stretchers on board.

2.3.8.4 Oxygen for Medical Use

Passenger requiring oxygen during the flight (respiratory insufficient patient) should provide a MEDIF form on which the need for use of oxygen is stated.

Amelia Intl cannot provide individual oxygen cylinders, therefore the passenger should bring its own.

This passenger shall be pre-boarded.

Allowed Oxygen:

Only small bottles which contain gaseous oxygen for medical use may be authorized in the cabin (maximum height 65 cm and weight 5 kg). **Liquid oxygen systems are forbidden for transport on Amelia Intl flights.**

These cylinders must be protected from damage that could cause inadvertent release of contents.

1. Portable Oxygen Bottle provided by the passenger
   It is the passenger's responsibility to ensure that the oxygen bottle being is certified to be carried on board- a certificate should be provided and that it is filled with a sufficient quantity of oxygen for the entire duration of the flight.
   During taxi, take-off, landing and severe turbulences or when not in use, the oxygen bottle must be properly stowed (in overhead compartment, under seat in front of passenger etc.).
   When in use the oxygen bottle must be attached to the fixed part of the seat, under the passenger, with a suitable mooring device or under the seat providing that it cannot move and become an obstacle.
2. Personal Portable Oxygen Concentrator (Kit) POC
   It is the responsibility of the passenger to ensure that the oxygen kit and the associated lithium batteries (number of watts) are certified to be carried on board.
   It is the responsibility of the passenger to ensure that the batteries are satisfactorily charged to ensure functionality of the kit for the entire duration of the flight.
   During taxi, take-off, landing and severe turbulences or when not in use, the POC must be properly stowed (in overhead compartment, under seat in front of passenger etc.).
   When in use the oxygen kit must be placed on the floor at the foot of the passenger

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2.3.8.5 Passengers with other Medical Equipment in Cabin

Acceptance in cabin of other medical devices is subject to approval from operations department according to the cabin baggage acceptance rules. For further information, see the table.

Syringes and other medical equipment	Any passenger requiring to travel with injectable medication or syringes in cabin must hold a prescription or a medical certificate delivered by his/her referring physician. Otherwise, he/she will be subject to the acceptance conditions of the Security Checkpoint. For Amelia Intl syringes and all injections items are not part of the forbidden items list nor of the dangerous goods list. As a consequence, they can be accepted onboard and in the hold with no conditions nor restrictions. ***Note:*** According to the European regulation 1546/2006, the liquid to be used with the syringes is subjected to a limitation and a medical prescription must be presented. Nevertheless, in order to make the acceptance of these items easier, Amelia Intl highly recommends the passengers: - to carry their syringes in their hold baggage, if possible; - to inform the company and to carry a medical prescription, whether there is liquid or not, in case of cabin transportation In all the cases, the passenger is identified in the PIL by the remark "WC/SYRINGE" or FRAG specifying: - in the cabin with syringes (stylets or lancets) - products (e.g. insulin) to be injected during the flight It is necessary to advise the Commander.
Other medical equipment	Acceptance in cabin of other medical devices (heart defibrillator, respirator and other medical equipment with lithium battery) is subject for acceptance as per the table: Provisions for Dangerous Goods Carried by Passengers or Crew, found in OM-A ch.9 or in ch.9 of this manual. ***Note:*** crutches and sticks are subject to approval from local Security inspectors. Walkers (1 per passenger) must be checked in the hold.

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2.3.8.6 Escort (Safety Assistant)

A Safety Assistant (Medical attendant) must be assigned to each patient travelling on a stretcher or for all other MEDA passengers when that is indicated on the MEDIF form. This assistant can be doctor and/or suitably qualified personnel competent to provide whatever attention is required.

The Safety assistant (Medical attendant) must be trained in the use/application of the medical systems used by the patient. He must stay close to the patient in order to help him during all flight phases. He is also in charge to monitor the patient and help him during emergency situations.

If Safety Assistant can't be assigned (following the patient's condition), a Cabin Crew is designated to give assistance to the patient. This cabin crew must be in trained in the use of the medical systems, as applicable and must be in addition to the minimum required for the flight.

The requirements for the STCR escort or MEDA escort must be noted on the MEDIF form.

2.3.8.7 Stretchers

Passengers on stretchers are MEDA cases. Medical clearance as explained in ch. 2.3.8.8 is required accordingly.

Acceptance of stretcher cases is linked to:

- The acceptance conditions on the PWD/ MEDA cases;
- The available installation on board.

See ch. 2.3.8.3 regarding the maximum number of stretcher cases and the aircraft registration on which they are accepted.

Update status details in the check-in record.

In case the passenger on stretcher requires oxygen or any other medical equipment during the flight the provisions as described in ch. 2.3.8.4 and 2.3.8.5 shall be taken into consideration.

2.3.8.7.1 Procedure for Handling of STCR

The Stretcher passenger should be boarded first, if possible, and disembarked last.

The passenger shall be brought on the aircraft on a stretcher through the service door.

Once the passenger is inside the aircraft, he must be transferred to the stretcher installed in the cabin. The transfer to stretchers in performed by qualified medical staff only.

The patient is always positioned in the aeroplane with the head pointing forward.

The medical assistant will be briefed by the CCM in order to perform certain normal procedures and evacuation procedures as per OM-A and CC manual.

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2.3.8.8 Medical Clearance

Medical clearance or special forms are not required for passengers who only require special assistance in the airport, or in embarking/disembarking.

Medical clearance shall be required for passengers:

- that suffer from any disease which is believed by such Member or person to be communicable in the course of air travel
- who, because of certain diseases, or disability may have or develop an unusual behaviour or physical condition, which may endanger or affect the safety, health, or materially affect the comfort of other passengers or crew,
- who can be considered to be a potential hazard to the safety of the flight or the punctuality thereof (including the possibility of a diversion of the flight and unscheduled landing);
- who would require medical attention and/or special equipment to maintain their health during the flight;
- who might have their medical condition aggravated during or because of the flight.

For the passenger requiring medical clearance the special forms can and should be used. All medical information in both forms is strictly confidential.

Medical clearance procedure:

- A passenger or his travel agent contacts Amelia Intl's reservation office to make a booking and notifies them that the passenger has medical condition.
- The reservation office takes the regular booking data and send the forms directly to the passenger/ travel agent and they forward it to the treating physician.
- Once the form is received back, the reservation office can approve the clearance if it is straightforward and meets pre-established criteria, or it sends it to the medical department or medical advisor for approval.
- In case it is forwarded, the medical department or medical advisor approves the clearance, denies it or contact the treating physician if more information is required to make the decision.
- Once the reservation office has received the decision of the medical department or the medical advisor, it advises the passenger or its travel agent of the decision and finalizes the reservation process. A note on the passenger's file specifies that a medical clearance has taken place and also specifies the special requirements if any.
- If special services (wheelchair, oxygen, stretcher, etc.) are required, the reservation office will make the arrangements with the relevant department(s).

The affected stations of each carrying airline are notified by Amelia Intl.

Complete details of special handling arrangements made at affected stations are included in the passenger name record (PNR).

To obtain these forms, contact ground@aeh.flyamelia.com

Arrangements for hospitals, ambulances, etc. should be made by the passenger or his physician and only after all air travel arrangements have been finalized.

Passengers asking for a Frequent Traveller Medical Clearance would go through that complete procedure only once their condition is stable.

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2.3.8.8.1 Information Sheet for Passenger Requiring Special Assistance

This form contains details of the air itinerary of the passenger and describes the special arrangements or assistance required by the passenger. The responses given to the questions will determine if a medical clearance is required by the airline. A medical clearance is required by the airline for passengers with recent and/or unstable medical conditions.

It must be completed, as early as possible, by the passenger/ travel agent/booking office.

2.3.8.8.2 MEDIF Form

The MEDIF form is required for each passenger:

- for which fitness to travel is in doubt, as evidenced by a recent instability, disease, treatment, or operation or other conditions outlined in ch. 2.3.8.7
- whose medical condition requires provision of special services, such as a stretcher, oxygen, and other medical assistance or the carriage of special medical equipment.

This form provides the airline with the specific medical data on the passenger and the special arrangements recommended by the physician.

It must be completed by the treating physician. It is of utmost importance that the treating physician gives precise and factual information and not merely a diagnosis together with a statement that, the patient is fit to travel by air.

On the form he must also write if the MEDA requires an escort and if any medicines should be given to the MEDA by the escort.

In certain, more demanding cases the airline physician which is not the same as the patient's physician, might be asked by the airline to give his opinion based on the data provided in this MEDIF form.

2.3.8.9 FREMEC Form

If a passenger travels frequently and has a stable medical condition established by the initial medic clearance (MEDIF form), a frequent traveller's medical clearance (FREMEC) may be given by Amelia Intl.

This avoids the necessity to obtain medical clearance for each journey and determines the passenger's special handling requirements.

To issue the FREMEC an MEDIF/Medical clearance is required.

Whenever special assistance or handling is required, the Information Sheet for Passengers Requiring Special Assistance (see 2.3.8.7.1) should be used for obtaining the detailed requirements.

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2.3.8.10 Right of Refusal

A PWD and/or MEDA case may be refused based on the General Conditions of Carriage (Right to Refuse Carriage).

Reasons for refusal

A passenger should not be refused unless one of the following reasons is applicable:

a) The person has such a degree of physical infirmity that the trip would likely result in complications or death, leading to a diversion.
b) The person requires individual nursing or care during the flight and is not accompanied by a suitable escort.
c) The person, because of their physical or medical condition, poses a direct threat to the health or safety of other passengers, their property, the aircraft or crew. And, the threat cannot be eliminated by providing additional aid or services or by other means (e.g., face masks, separate seating).
d) The person fails or refuses to submit themselves to the specific conditions of carriage required by Amelia Intl.
e) Information is required about the passenger's medical condition (diagnosis) where the passenger's own physician refuses to disclose such information to the Authorized Medical Service.
f) The person has a certain communicable disease and is in the infectious period (or does not have proper medical clearance).
g) Stretchers must be refused unless they are planned to board an aircraft with installed stretchers.

In case of refusal of a PWD and/or MEDA case, inform the passenger and explain the reason for refusal with reference to the General Conditions of Carriage.

If possible and another flight exists make the rebooking to a later date and/or make all efforts to accommodate the passenger on the next possible flight.

1. Enter all relevant information about the reason for refusal into the PNR or in the operating airline report (e.g., passenger refused [flight/date], lack of safety assistant [SITA address/agent name]).
2. Forward the PNR or report to aeh.ground@flyamelia.com. Document all details of the incident and submit as specified by operating airline procedures and local regulations.

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2.3.9 Service Animals and Emotional Support Animals

Task-trained service animals (SVAN) are animals trained to perform specific tasks for people who have physical, sensory, psychiatric, intellectual, or mental disabilities. The most common type of service animal is a dog.

Emotional support animals (ESAN) are usually untrained and mainly provide support, well-being and comfort to their owners through companionship, non-judgmental positive regard and affection.

They are accepted free of charge in the cabin and out of the standard PETC quotas.

Advance reservation/booking is required. It is allowed maximum one SVAN/ESAN per passenger.

If an animal shows a disruptive behaviour, it cannot be accepted as ESAN or SVAN.

The passenger must provide at check-in any document in order to comply with health and customs requirements. A SVAN/ESAN certificate is requested.

Amelia Intl is not responsible of guide dog's health before, during and after flight.

In case of blind passenger group or extra guide dogs, see ch. 2.3.13.2.

When possible, SITA shall be sent to inform the station of presence of SVAN/ESAN.

Add in the DCS a comment "SVAN/ESAN" to make sure this information appears on the PIL in order to inform the crew.

2.3.9.1 Seating (applicable for all pax with service animals)

- Must not be seated by exit.
- The passenger is seated on an aisle seat and the animal on a window seat on the floor, attached with his harness.
- On a full flight the passenger is placed on window seat and the animal is placed at the feet of the passenger.

2.3.9.2 Task-Trained Service Animals - SVAN

Documents: A trained dog/animal certificate is requested.

It is accepted in the cabin without muzzle and out of a cage. But it must be on a leash all the time.

2.3.9.3 Emotional Support Animals- ESAN

A passenger travelling with an ESAN must show a document no older than 1 year with the official letterhead of the licensed mental health professional stating that the passenger:

- has a mental or emotional disability or,
- needs the emotional support for air travel and/or for activity at destination.

Emotional support dogs must wear a muzzle. For any other animal (including dog) they must be on a short leash and all the time under the control of their owner.

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2.3.10 Inadmissible Passengers and Deportees

The following rules must be applied unless the local authorities require otherwise. In this case, these local rules shall give the same guarantees.

Before boarding, all the deportees and their hand luggage must be subjected to an extremely strict security check carried out by the authorities.

These passengers are pre-boarded and post disembarked.

In transit station, these passengers are kept on board, unless the local authorities require their disembarkation.

The Commander and the crew must be advised prior to the flight of INAD, DEPA, DEPU and passengers in custody. That can be either done by the ground staff prior the start of the boarding, by the company personnel once they were informed by the police or by indicating these types of passengers in Leon software in the operational notes section, which is inserted in the flight package by the dispatch as a trip brief. The ground staff must inform the crew prior the start of the boarding.

2.3.10.1 Seating

INAD, DEPO and their escorts seat in the rear of the cabin, but not directly adjacent to exits.

2.3.10.2 Limitations

Aircraft Type	DEPA	DEPU	Pax in custody	INAD
EMB135	2 (Escorts required: 1)	4	1 (Escorts required: 2)	Not limited (1 escort per 1 INAD)
EMB145	2 (Escorts required: 1)	4	1 (Escorts required: 2)	Not limited (1 escort per 1 INAD)
ATR42	2 (Escorts required: 1)	4	1 (Escorts required: 2)	Not limited (1 escort per 1 INAD)
A319/A320	4 (Escorts required: 2)	6	1 (Escorts required: 2)	Not limited (1 escort per 1 INAD)

The number of DEPU may be increased (consider family or group DEPU) only after obtaining acceptance from NPGO. Data in case of increased number of DEPU should be available to PIC.

Combination of all three, DEPA, DEPU and Pax in custody, should be carefully evaluated.

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2.3.10.3 Inadmissible INAD

A passenger who is or will be refused admission to a country by its authorities or during a transit for a reason of nonconformity of documents for the destination. The reasons could be:

- Lack of valid travel document,
- False documents
- Any attempt to bypass the regular immigration procedures.

An INAD should depart on the first available flight.

Usually they travel without an escort, but if assessed by the responsible authority, INADs may be accompanied if:

1) The INAD physically resists carriage.
2) He has already been denied transportation by another airline.
3) There is any sign that he might endanger the safety of the flight or passengers.

For the above reasons, unaccompanied INADs may also be refused at any stage. If an escort for INAD is needed, **it must be 1 escort per 1 INAD**.

The responsible local authority must inform the Commander no later than 30 minutes before boarding about the conditions and the state of the INAD.

The ground staff must insert the remark ''INAD'' the reservation file for notification on the PIL and on PSN ''Passenger Special Message to refuse a passenger to transport'', when applicable.

Advice the cabin crew and PIC of INAD persons with judicial proceedings.

The Commander may refuse to transport an INAD passenger resists transportation or gives rise to the assumption that he/she will be the source of annoyance to other passengers or crew members, then only accept him/her according to the procedure for DEPA.

Refuse the carriage of deportees or inadmissible passengers if they are likely to:

- Involve any risk to the safety of the flight.
- Involve any hazard or risk to himself, other passengers or crew members.
- Cause discomfort or make himself objectionable to other passengers.
- Require special assistance from ground or in-flight staff.

There is no limitation for the number or INADs.

Documents

The crew is not authorized to accept any personal documentation. Due to legal consequences, they may refuse even if the police officers insist.

As a will of good cooperation, the crew may accept copy of any personal documentation (preferably as COMAIL) which will be therefore handed to the station agent upon arrival at destination.

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2.3.10.4 Deportee DEPO

Deportee is a person who is decided to be deported by the immigration authorities of one country. They are escorted to the border either by administrative or legal decision (illegal stay, prison term with in addition as expulsion decision) or by ministerial expulsion decree.

A deportee can be unaccompanied, deported without an escort- DEPU, or accompanied, deported with an escort- DEPA.

In case of DEPU**, one escort per maximum three DEPUs**.

The responsibility for deportees lies fully with the state(s) concerned. Deportees will be accepted for carriage only on request of an Authority and upon Amelia Intl approval.

A travel notification must be prepared in writing and transmitted to the department concerned. This written request from the authorities must specify the category of the passenger determined by the reason for transport, the reservation and the composition of the escort.

The relevant department must be notified of this type of transport 3 hours before departure.

Documents

The crew is not authorized to accept any personal documentation. Due to legal consequences, they may refuse even if the police officers insist.

As a will of good cooperation, the crew may accept copy of any personal documentation (preferably as COMAIL) which will be therefore handed to the station agent upon arrival at destination.

Disembarkation

DEPU may disembark whenever with the rest of the passengers.

DEPA disembarks with the person accompanying them.

2.3.10.5 Passengers in Custody

Passengers indicted, sentenced and extradited are subject to an arrest warrant, or to a current prison term, or who are being transported for handover to the authorities of another country must be always **escorted by at least two escorting officers**.

The relevant department must be notified of this type of transport 24 hours before departure.

2.3.10.6 Escort

An escort must travel in civilian clothes, unless previously otherwise agreed. He must not carry firearms and weapons in the cabin. The escort shall keep the deportee under surveillance at the point of destination until all entry and inspection formalities have been completed.

If the administrative authorities consider that a person removed at the border does not need to be escorted, this must be notified on the transport request. In the absence of this notification transport may be refused.

2.3.10.7 Handcuffs and methods of Coercion

If handcuffs are used, they must be used as discreetly as possible and only in exceptional cases, especially during take-off and landing and shall be decided in agreement with the Commander at his request, within his prerogative as stipulated by the Tokyo Convention.

In no case may a person be handcuffed to the aircraft or any other fixed object.

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2.3.10.8 Weapons

Single weapon (gun) may be carried by policeman (without any security duty on the aircraft). In that case the procedure described in ch. 2.3.12 must be followed.

In case of weapons and munition of war and sporting weapons, refer to ch. 7.2.11 and ch. 7.2.12.

2.3.11 Unruly Passengers

For safety reasons the Commander may refuse carriage or onward carriage of an unruly passengers and/or those who appear by manner or physical indications, to be under the influence of alcohol or drugs.

Unruly passenger is any passenger who:

- endangers the aircraft or any person or property on board; or
- obstructs handling staff and/or crew in performing their duties; or
- fails to comply with any instructions of the crew and handling staff; or
- behaves in a manner which causes discomfort, inconvenience, damage or injury to other passengers, crew and/or handling staff; or
- fails to comply with carriers' rules or regulation; or
- violates the law.

Intoxicated passengers are also considered as unruly passengers. Once a passenger is discovered to be intoxicated, he must be refused boarding. This may be at check-in (a boarding pass must not be issued) and /or whenever after check-in.

Note: *In all cases the unruly passenger must be handled in accordance with the policy and procedures of the local laws and regulations.*

2.3.11.1 Threat Levels

There are 4 threat levels:

- **Level 1 Incident**- Disruptive behaviour: When a passenger has suspicious or threatening behaviour such as: disorderly behaviour due to effects of alcohol, drugs or other substances or offensive language, acts or body language, implying potentially threatening behaviour.
- **Level 2 Incident-** Physical abusive behaviour: This can be any form of physical abuse (grabbing, pushing, slapping, kicking another passenger, crew member or handling staff) or deliberate damage to company property (breaking of seats, panels etc.).
- **Level 3 Incident.** Life-threatening Behaviour: Indicator of this type of incident is use of a weapon of any form and clearly (verbally or non-verbally) expressed intention of the assailant to cause life-threatening bodily harm to a passenger, crew member or handling staff. Display or actual use of a weapon to cause harm, or even the threat of a concealed weapon is life-threatening behaviour.
- **Level 4 Incident**- Attempt or actual breach of flight deck: Any attempt to break into the flight deck or gain unauthorised access to the Flight Deck in order to gain control of the aircraft and use it as weapon of mass destruction.

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2.3.11.2 Handling the Incident in the Airport Terminal

Always report to superior if any unruly passenger behaviour is observed at check-in, in the lounge or at the boarding gate and put baggage of such passengers on standby.

If during check in, an unruly passenger comes forward, he must be refused to be checked-in.

If unruly passenger is discovered after check-in, he must be refused to board the aircraft.

When unruly passenger has been discovered during boarding or after boarding, if after first warning of ground staff or Amelia Intl crew, does not calm down, the crew will report to the ground handling for possible disembarkation. Flight crew or cabin crew will write a report in internal reporting platform, as applicable.

In whichever part of the check-in or boarding processes, in the case of level 1 incident, if the passenger keeps on being impolite, you may inform the Commander who decides, according to the passenger behaviour if he/she can board the plane. A report is filled.

If a passenger with an unruly behaviour of level 1 changes his/her behaviour he/she may be boarded, but the Commander must be informed.

Otherwise (if the passenger keeps on being impolite), the Commander can decide to classify the passenger behaviour in Level 2. He gives him/her a "warning letter "and informs him that the company reserves the right to deny boarding him.

If he is already Level 2 and continues behave the same, he is also handed the ''warning letter' is informed that the company reserves the right to deny boarding him.

If the passenger becomes violent, he will be classified in Level 3. In this case, after the Commander is informed and the handling staff should call the police who will certify the material damage and if necessary, a doctor who will certify any injuries. The proof and witness of the incident must be gathered. A report is filled and signed by the Commander. If needed the airport staff concerned and the Commander could file a personal complaint. A complaint in the name of the company can also be filed after consultation with the legal department.

In all the cases, if a passenger with Level 2 or Level 3 wants to continue his trip, he must start to behave in a normal courteous manner and write a signed statement. The statement must be sent to Amelia Intl Security department. If the passenger refuses to write and sign the statement, he must not be allowed to board and his ticket is returned to him.

In all cases the procedures to be applied will depend on the passenger's final behaviour.

2.3.11.3 Handling the Incidents in the Aircraft or During Flight

All processes of handling the incidents in the aircraft or during flight are described in OM-A ch.10 and in the Cabin crew manual.

The Commander can decide to disembark the passenger.

When needed, the Commander will contact the airport staff in order to assist him with the unruly passenger in disembarkation and offloading of the baggage.

If there will be passenger with behaviour of Level 3 the Commander will ask the airport staff to inform the local police authorities to disembark the passenger and record any material damage. If necessary, a doctor will be contacted.

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2.3.11.4 If Passenger is Denied Carriage

1) Offload the passenger in the DCS and offload his baggage.
2) Amelia Intl report with details of the passenger condition in coordination with the crew of the flight is filled, as per company procedure.

2.3.11.5 If Passenger is Accepted for Travel

1) Inform the Commander and the purser
2) Amelia Intl report with details of the passenger condition in coordination with the crew of the flight is filled, as per company procedure.
3) Report the incident to the applicable departments and the onward airport.

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2.3.12 Police and/or Personnel Escorting State Officials

Single weapon (gun) may be carried by policeman and/or personnel escorting officials (both without any security duty on the aircraft). In that case the procedure below must be applied and the PIC must be notified.

1. The ammunition of the gun acceptable is the one classified in 1.4 S, UN0012 and UN0014 only. If spare ammunition is carried procedures set in ch. 9.1.1 must be followed.
2. The ammunition and the weapon must be separated. It must be ensured that no cartridge is left in the gun after separating the magazine form the weapon.
3. The ammunition may be kept by the policeman and/or personnel escorting officials, but the weapon must be inserted in special envelope for carriage of weapons or in any other container which will hide the contents.
4. The weapon shall be stored:
   a) In case of reinforced door on the aircraft:
      - The envelope/container containing the weapon must be given to the Commander, before the passenger door is closed- normally should be done by the ground staff.
      - On disembarkation the envelope/container will be handed to the policeman and/or personnel escorting state officials- normally done by the CCM or the flight crew.
   b) In case of non-reinforced door on the aircraft:
      - The policeman and/or personnel escorting officials will be invited to insert the weapon (packed in envelope or other container) in the cargo compartment just before the cargo compartment is closed.
      - The policeman and/or personnel escorting officials are authorized to supervise closing of the cargo door.
      - After the cargo door is closed, then they can board the aircraft.
      - No person is allowed to re-open cargo door without special permission of Commander at any time.
      - After landing, with aircraft at parking position the Commander will inform the ground staff not to open the cargo door until instructed to do so.
      - Disembarkation has to be organized so that policeman and/or personnel escorting officials will be able to disembark first, before the other passengers (may be communicated already prior to flight that they are assigned seats in the front section of the cabin).
      - After the passenger door is opened and the area around the aircraft is secured, the policeman and/or personnel escorting officials will be allowed to disembark and proceed to the cargo door area.
      - They will supervise opening of the cargo door.
      - They will take their weapon out of the cargo compartment.
      - With their weapon in possession, the policeman and/or personnel escorting officials have to report and confirm to the commander that entire content with weapon is removed from cargo compartment (to confirm that no weapons or part of it was left in cargo compartment).
   c) For aircraft **where the cargo compartment is accessible from the passenger cabin**, the weapon must be stored in the cockpit which is equipped with reinforced door. In this case, if the cockpit door is not reinforced, the weapon is not acceptable.

Note: *The ground staff must inform the policeman and/or personnel escorting officials that they must handle the weapon discretely.*

Important: The Commander must be notified prior to the commencement of the flight of the number and seat location of the authorized armed persons, if the states involved permit that.

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In case of weapons and munition of war and sporting weapons, procedures presented in ch. 7.2.11 and ch. 7.2.12 must be respected**.**

2.3.13 Groups

Ten or more passengers travelling together are considered as a group, unless they are family. Infants are not included in this number.

Five or more passengers with reduced mobility travelling together are also considered as a group.

Unusual groups, excessive weights, or anything outside the standard need to be communicated to load control (i.e. sports teams with higher passenger weight).

2.3.13.1 Accompanied Children Group

Transportation of children group shall be performed under the following conditions:

- Children shall be at least 5 years old and younger than 12 years.
- Each child shall have his own seat and shall not be seated in emergency exit zones.
- There is one accompanying person is required for every 12 children. This can be also (if requested) an additional Cabin crew member, to the minimum CCM required per aircraft type.

When the escort is not one of the parents or legal guardians, a waiver of responsibility for a child of less than 12 years old must be completed.

2.3.13.2 Passengers Requiring Assistance/ Passengers with reduced mobility group

In case of group of passengers requiring assistance (BLND, DEAF etc.) contact operations department for details on operational procedure and NPGO for approval.

The transportation of this group of passengers, how many additional CCM are needed, or if needed at all, depends on:

- Type of passengers requiring assistance (BLND, BLND with SVAN, DEAF, WCH etc.);
- What kind of passengers (i.e. in case of WCH, are they a sports group);
- Number of passengers in that group;
- Number of valid passengers on board that could assist them in evacuation.

In case of WCH Engineering Department should check the number of WCH that can be accepted, the volume of the holds etc.

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2.3.14 Additional Items Carried by Special Categories of Passengers

2.3.14.1 Orthopedic Seat

An orthopedic seat may be carried by a passenger (adult or child) who has medical reason for the use.

This type of seat will be accepted only if it fits the passenger seat. The passenger must install it and fir it with the seat belt only.

Orthopedic seat dimensions: 37X34X66 cm

Maximum weight: 8kg

2.3.14.1.1 Seating

- They must be placed on one of the forward rows of the cabin.
- They must be seated by the window.
- They must not be seated in emergency exit row.

2.3.15 Extra Seat (EXST)

Extra seat is intended for passengers having an immobilized leg (with mobile or non-mobile knee).

Medical clearance is required for passengers having recently undergone an operation (not able to move within the cabin).

Medical clearance is not required for injured passengers (with walking cast and adequate self-reliance, able to move within the cabin).

Safety assistant is required if the person cannot physically assist in his/her own evacuation in case of severe mobility impairment regardless if a medical clearance is mandatory or not.

2.3.15.1 Seating

These passengers must not be seated on emergency exit rows.

2.3.15.2 Number

The number is limited to available seats in the cabin.

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2.4 PASSENGER DISRUPTION

Flight irregularities are delays, cancellations, diversions, misconnections, return of aircraft or change in equipment causing overbooking or class suppression.

Care and assistance must be provided to all passengers in case of a flight irregularity, no matter if the disruption is within or beyond control of Amelia Intl.

By decision in OCC and in some specific cases (local or vast crisis situation) assistance rules can be punctually changed.

***Note**:* Where an Amelia Intl station representative is not present, the OCC is the ONLY AND SINGLE POINT OF CONTACT for stations, the technical department and for the management of operational irregularities.

Therefore, the station representative or the OCC must be immediately contacted in case of any irregularity, as applicable.

In case of scheduled flights, the concerned stations have a copy of the GOM- complementary procedures, explaining the details on the pax irregularities concerning the scheduled flights.

When communicating with passengers adopt the following attitude:

a) Let the passenger state the case.
b) Keep calm.
c) Apologize for error.
d) Never blame other people or department organizations.
e) Listen to the passenger - do not argue.
f) Be discrete: handle specific problems or irregularities in a separate space, away from the crowd.
g) Give propriety and special attention to VIP passengers, passengers with children, UN, PWDs etc.

2.4.1 Information and Communication to Passengers

In general, immediate and accurate information at regular intervals shall be provided to passengers.

a) Ensure that staff are briefed for constant delivery of information.
b) Brief staff on the estimated time of departure, estimated time of arrival, and any provisions being offered.
c) Provide passengers written information about their rights according to applicable regulation, upon requested or as required.
d) Provide information in alternate formats to passengers with impairments.
e) Be pro-active: If known in advance, prepare solutions before the passengers arrive.
f) Anticipate: React immediately to the first signal of irregularity
g) Do not change decisions already taken and communicated, unless absolutely necessary.

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2.4.2 Delays

a) Passengers must be notified of delays and kept informed at regular intervals.
b) Where applicable, provide delay notice or passenger rights information and in alternate formats for passengers with impairments.
c) Brief staff on the estimated time of departure, estimated time of arrival, and any provisions being offered.

2.4.2.1 Disruptions Known Prior/ During Check-In

a) Update revised times in the DCS.
b) For any scheduled flights, rebook any connecting flights according to the airline's priority sequence (see ch. 2.4.4).
c) Check the passenger and baggage through on the rebooked flight.
d) Update the airport FIDS.
e) Arrange the needed amenities, e.g. meals, HOTAC, transportation(s), passenger assistance, lounge access, etc., according to nature of the disruption using the GOM-CP for scheduled flights or after obtaining confirmation by the OCC.

2.4.2.2 Disruption Known Prior/During Boarding

a) Reconfirm the departure gate and time and update the revised times in the DCS.
b) Advise passengers accordingly and at regular intervals.
c) Apply the specific procedures for certain category of passengers as written in ch. 2.3.
d) Update the airport FIDS.
e) Arrange the needed amenities, e.g. meals, HOTAC, transportation(s), passenger assistance, lounge access, etc., according to nature of the disruption using the GOM-CP for scheduled flights or after obtaining confirmation by the OCC.

2.4.2.3 Disruptions Upon Arrival

In case of the delayed arrival of a Flight:

a) The mis-connecting passenger and baggage shall be rebooked and re-flighted accordingly.
b) Update airport FIDS.
c) Arrange the needed amenities, e.g. meals, HOTAC, transportation(s), passenger assistance, lounge access, etc., according to nature of the disruption using the GOM-CP for scheduled flights or after obtaining confirmation by the OCC.

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2.4.3 Misconnections/ Cancellations/ Diversions

OCC gives regularly information about the evolution of the situation to the airports.

If possible, apply the following procedures:

- passengers must always be welcomed by station customer ground staff at the gate;
- provide dedicated staff for any UM and/or PWD;
- give passengers complete and regular information about the evolution of the flight and arrangements provided by the station in accordance with the OCC.
- Organise rerouting and support for passengers, use first and foremost collective transport, after confirmation from the OCC on the transportation company to be used.
- Before the departure of the bus or taxi, the intermediate landing station must give the OCC all the useful contacts in necessary: bus driver, taxi driver, accompanying staff…

In case of diversion on an intermediate landing without commercial ground handling:

The OCC makes sure that he has a reliable contact with the passengers (a crew member, fireman…).

If presence of UM, pick-up car by the commercial crew is to be planned.

Note: In a total absence of a coverage by an assistant, OCC in close collaboration with the crew will take in charge of the treatment of the passengers (hotel, transportation etc.).

2.4.4 Involuntary Change of Class

An involuntary change of class is necessary when the number of passengers holding an OK ticket exceeds the available allotment in the class concerned due to:

- A reservation error.
- Communication failure.
- Change of aircraft.
- Payload restrictions.
- Overbooking.
- Cancellation/Delay.

The following general rules apply in case of involuntary up-or downgrading:

a) Free baggage allowance- according to the class originally paid for.
b) Splitting up of parties when up- or downgrading should be avoided.

Note*: Amelia Intl currently does not recognize different types of passenger classes.*

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2.4.5 Denied Boarding due to Unavailability of Seats

Reasons for denied boarding can be:

- overbooking,
- Reduced aircraft seating capacity due to unserviceable equipment,
- Reduced weight/seat capacity due to a payload restriction,
- cabin crew limitation: reduction in the number of passengers,
- Change of aircraft or version.

Procedures to be applied:

a) Offload staff passengers if possible (take into account the aim of the trip).
b) Apologize for the inconvenience and express the appreciation for the cooperation and flexibility.
c) Inform the passengers about the rebooking and/or re-routing possibilities, if any.
d) Search for volunteers (financial compensation is given and the checking agent informs the passengers of the rerouting on available flights)
e) If not sufficient number of volunteers, sufficient number of passengers must be selected, following that some of the special categories of passengers shall not be disembarked.

Note: Volunteers receive financial compensation which is theirs whether they ultimately board or not. If volunteer passenger is denied boarded at last, not any additional compensation for denied boarding will be given.

2.4.5.1 Priority Sequence

1. Crew or engineers on positioning flights (DHC);
2. UM, WCH, MEDA, DEPO;
3. Passengers with connecting flight;
4. Passengers returning the same day as the departure day;
5. Passenger with INF;
6. Volunteers;
6. Order of Classes: Y / V / S / U / K / L / E / B / M / H / Q / T / R / N.

2.4.6 Mishandled or Unclaimed Baggage

Refer to ch. 3.8.

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2.5 PASSENGER SECURTY

2.5.1 Security of Documents

2.5.1.1 Boarding Passes, Transit Passes and Baggage Tags

To enforce the security and safe disposal of boarding passes, transit cards, baggage tags and passenger information, all materials must be always kept under surveillance and removed from counters to prevent unauthorized access and use.

2.5.1.2 Printed Documents

All printed material such as boarding passes, passenger lists and handling forms may have to be reprinted. These documents must be disposed according to data protection rules, as they contain passenger data.

Unauthorized persons shall not be given access to printed documents containing personal data or their contents.

2.5.1.3 Counter and Area Security

All systems, including DCS, passenger facing counters etc. must be controlled to prevent unauthorized access. Follow airport procedures to prevent unauthorized access to and use of un-issued (blank) boarding passes.

Before leaving the counter, remove boarding passes and baggage tags from the printers or lock them.

Before leaving the counter, sign out, log off and lock the system.

Adhere to regulations concerning the usage of sign-ins and passwords.

2.5.2 Passenger Suitability to Travel

Assess each passenger in terms of security risk by looking for anomalies and observing certain emotional characteristics and/or body language. Be on the lookout for overall fitness to fly, including potentially communicable diseases, medical conditions, intoxication, etc.

Further questioning may be required to assist with passenger assessment:

a) When you identify a potential problem passenger:
b) Suspend the passenger process for the identified passenger (check-in and/or boarding)
c) Notify your supervisor or the airline representative to agree on further action(s).
d) Depending on the situation the airline representative or if in absence of that person, the supervisor, will contact the appropriate local authority for assistance, if needed

2.5.3 Security of Passengers and their Baggage

It is the responsibility of supervision staff to ensure all security threats are immediately reported to Amelia Intl, the flight crew and the applicable authorities as per local requirements and Amelia Intl OM-A ch.10.

Amelia Intl's and applicable regulatory airport security procedures, shall be applied for the handling of passengers and their baggage in the event of:

a) A bomb threat condition.
b) An increased security threat condition.

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2.5.4 Restricted Areas

All gate and departure areas must be secured by keeping doors closed. Use appropriate barricades when directing passengers. The following should be respected:

a) Ensure all access doors are closed when not in use.
b) Position staff as required to direct passengers.
c) If passengers have to walk on the apron to aircraft, ensure passengers proceed directly to the aircraft.
d) If transportation has to be provided to passengers to move them from the terminal building to the aircraft, make sure only authorized personnel and screened passengers are allowed to board the vehicle.

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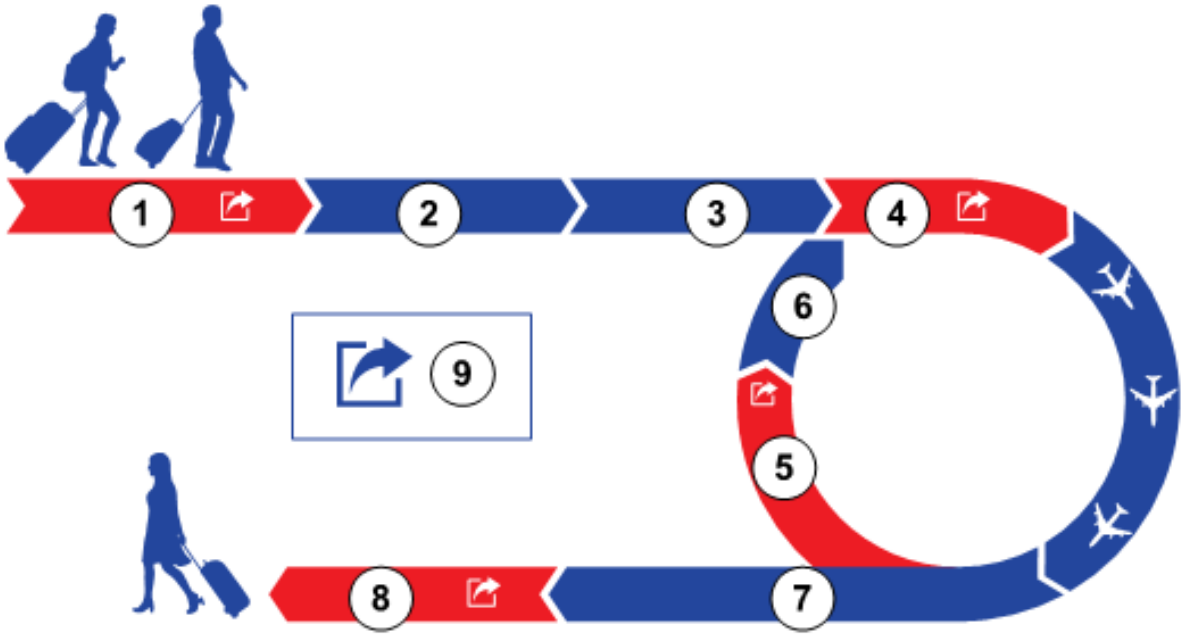
3 BAGGAGE HANDLING PROCEDURES

The typical baggage journey:



NUMBER	DESCRIPTION
1	DEPARTING BAGS
2	SECURITY
3	SORT
4	BAGGAGE BUILD (for LOADING See ch.5)
5	TRANSFER BAGS
6	SECURITY
7	UNLOAD
8	ARRIVAL
9	INFORMATION SHARING (Airline should share tracking info with interline partners)

Monitoring of baggage operation

Baggage performance monitoring is a key element of an airline and baggage handling operations. The key performance indicators are set with an SLA and are subject to an agreement.

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3.1 CABIN BAGGAGE

Cabin baggage is baggage that is carried and stowed in the cabin under the passengers' control and custody. It is commonly referred to as carry-on baggage or unchecked baggage.

Cabin baggage tags shall be placed on the hand baggage. Cabin baggage control shall be made during check in or/and boarding.

3.1.1 Cabin Baggage Allowance

Standard cabin baggage allowance that is free of charge:

- Size: Sum of three dimensions not exceeding 115cm (55+35+25);
- Weight: 10 kg
- Number of pieces: One

In addition to standard hand baggage allowance, every passenger may carry the following items free of charge in the cabin.

- Overcoat, topcoat or blanket;
- Woman/man small hand-bag;
- Camera bag;
- Baby stroller;
- Laptop computer;
- Baby bottle for feeding the baby in cabin etc.

Some special items may require prior arrangement, notification and/or specialized screening requirements or additional charges. Operations department must be informed in advance. Those items may be:

- Fragile items;
- Valuable items;
- Musical instruments;
- Diplomatic baggage;
- Live animals;
- Urn containing human remains.
- Medical equipment

3.1.1.1 Cabin Baggage for Infants

One baggage / 10Kg in both cases weight or piece concept and one checked infant collapsible stroller/pushchair.

Infants with a purchased seat benefit from normal baggage allowance.

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3.1.2 Acceptance

Cabin baggage can only be accepted if:

1) Is suitable for air carriage (conforms with the requirements for weight, size or nature, specified in this manual)
2) Can fit under the seat or be stowed in the overhead compartment.
3) Is suitably packed.
4) Conforms with airport security and safety procedures.
5) Restrictions:
   i. Certain items, because of their weight, size or nature can be accepted as per the procedures described in ch. 3.3 (e.g. musical instruments)
   ii. For security reasons, many countries restrict the carriage of liquids, aerosols and gels in cabin baggage.
   iii. Items refused by security screening shall be hold-checked or refused from transport completely if not allowed in checked baggage.
   iv. For Dangerous Goods items that are permitted or excluded from cabin baggage, refer to ch. 9.

3.1.2.1 Procedures at check-in

1) Assess the size, weight and intended number of pieces of cabin baggage referring to ch. 3.1.1 and doing the following:
   i. Weigh those cabin bags that appear to exceed the specified weight/size limit;
   ii. Refer the passenger to the baggage gauge, if available.
   iii. Attach an “approved cabin baggage” tag (ch. 3.2.4), if available.
2) If the cabin baggage exceeds the free allowance size and/or weight, it shall be checked in, with applicable charges, if the free baggage allowance is exceeded.
3) Ask the passenger if they have any Dangerous goods items by using the Dangerous Goods displays for visualization.
4) Perform security questioning: visual check of the baggage is mandatory.
5) Items that are removed by security screening personnel may only be accepted in checked baggage.

***Note**: Once checked, the baggage is under the responsibility of the station, which must make sure that only authorized persons will be in charge of it.*

3.1.2.2 Procedures at Boarding Gate

1) Check for items that are unacceptable, oversized and/or overweight or exceed the number of pieces as free cabin baggage, using the cabin baggage gauge if applicable.
2) Collect any cabin baggage that cannot be accommodated on board due to these reasons or due to limited storage space:
   i. Inform the person responsible for loading and supervision task to ensure the loading of DAA and WCH are noted on the Load Message (LDM) under SI–Remark.
   ii. If applicable, inform the flight crew of the number of DAA bags.
   iii. Inform the passenger to leave or hand-over the DAA-item in the designated area.

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3.1.2.3 Accepting Cabin Baggage into the Hold

1. Check with the passenger that the baggage contents comply with the IATA DGR and with ch.9. Verify whether the passenger has removed any items specifically prohibited in hold baggage (such as lithium batteries, etc.).
2. Advise the passenger to remove any personal documents or medications, valuables and sensitive or fragile objects.
3. Accept, with applicable charges when required by Amelia Intl.
4. Tag gate-checked bags in line with the through check-in procedures using a limited release tag.
5. Ensure the baggage tagged at the gate is considered for load control by adding the information in the DCS (number of pieces and weight) or use DAA labels and processes if applicable- see 3.3.7
6. Inform the passenger to pick up their gate-checked bags either at the baggage claim area, final destination or at the aircraft door (Delivery at Aircraft, DAA), if applicable.
7. Inform ramp staff and/or load control of the gate baggage to be loaded.

For DAA relevant procedures refer to 3.3.7.

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3.2 CHECKED BAGGAGE

Checked baggage is:

i. taken custody by the operator who issues, validates or updates a baggage tag.
ii. carried in the hold of the aircraft on which the passenger is travelling but remains inaccessible to the passenger during the flight.

In exceptional cases an unaccompanied baggage (RUSH) which shall be properly marked can be found in cargo The most common reason for unaccompanied baggage is to return the baggage to the passenger after a mishandling. See 3.8.5 for details on how to handle RUSH.

3.2.1 Checked Baggage Allowance

Passengers are entitled to a single piece of 23kg of checked baggage allowance.

This may vary depending on the type of flight. When Amelia Intl had informed the ground handler to apply additional fees then if this limit is exceeded, the fee of the **excess baggage** shall be charged from the passenger. Excess baggage fees per kilogram or piece or special item are generally applied at the time of checked baggage acceptance.

Excess baggage can only be carried on board up to the capacity of the holds either in cubic or weight capacity.

The maximum weight per baggage is 32kg.

For oversized/ bulky baggage refer to ch. 3.2.1.2.

There are two standard checked baggage allowance concepts:

a) Weight Concept: measured by the total weight of checked baggage (shown as weight amount on ticket e.g. 20 kg);
b) Piece Concept: measured by the number of pieces of checked baggage (shown as PC on ticket).

Whenever possible the weight concept must be implemented. In case the baggage cannot be weighted due to whichever reason, the piece concept shall be used. The number of pieces of checked baggage shall be transmitted to the Commander who in in charge of preparing the loadsheet.

Note: *PRM could transport for free the medical equipment related to disability and 1 wheelchair or others mobility devices.*

Infants under the age of 2 not occupying a seat have an allowance consistent with the need of the infant.

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3.2.1.1 Baggage that Exceeds Normal Allowances

The person accepting the baggage at check-in or the person in charge of the boarding at the gate, should stay vigilant and in case there is hold baggage or gate delivery baggage whose individual or cumulative weights exceed normal allowances, he/she must identify and communicate it to the Load Control. This is applicable also for any other non-normal items that must be considered in the load control process.

If the handler does not have already established procedure, they may perform the following:

If during the check-in it is discovered that there is a hold baggage whose individual or cumulative weights, exceed normal allowances, it must be noted on the LIR under the notes/comments section. When needed an HVY tag shall be placed on the baggage.

If during check-in or at the boarding gate it is discovered that a gate delivery item, whose including individual or cumulative weights exceed the normal allowances, it must be treated and accepted as checked baggage,

In case other non-normal items are discovered, they must be noted on the LIR under the notes/comments section.

In all cases above, after the Commander receives the final LIR, he will verify if the mass and balance is under acceptable limit.

3.2.1.2 Bulky and Oversized Baggage

Baggage is considered bulky or oversized when its weigh exceeds 32kg. These items are called out of gauge (OOG) items.

For example, in general baggage accepted in European airports may not exceed 32 kgs in weight, although exceptions may exist e.g., check-in of wheelchair or musical instrument. See relevant subchapter of ch. 3.3.

Passengers presenting such items should:

1. Complete the normal check-in process at the check-in counter.
2. Attach a baggage label to the OOG item.

The Check-in Agent should direct the passenger to drop the item to the OOG baggage acceptance point.

3.2.1.2.1 Maximum Single Weight and Dimensions

No single piece of baggage can be accepted if it weighs over 32kg.

If presented, the passenger should:

1. Repack it to be less thank 32kg, or
2. Send it as cargo.

Note: *Certain items e.g., AVIH, WCH, musical instruments, media equipment and large sports equipment, are excepted and shall be treated as it is explained in this chapter 3.3.*

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3.2.2 Acceptance

Amelia Intl may refuse to carry checked baggage which:

1) Endangers the aircraft or persons/property on board the aircraft,
2) Is not packed in a regular and safe way,
3) Is forbidden by law, regulations, security standards or safety standards of any state to be flown from, to or over,
4) Is unsuitable for carriage due to its weight, size and/or volume,
5) Perishable articles (medicine etc.),
6) Is not in conformity with the transportation rules of dangerous goods.

Amelia Intl may refuse to carry checked baggage which is within the context of valuable articles (money, jewellery, valuable mines, silver articles, commercial and valuable documents, passport and identity cards, etc.).

Some of the items above can be accepted with the consent of the operations department in Amelia Intl.

3.2.3 Standard Baggage Check-In

Accept checked baggage that is appropriately packaged and labelled with passenger identification.

1) Ensure dangerous goods notifications are on display and verify with the passenger that the checked baggage does not contain any forbidden dangerous goods- see ch. 3.7.4.
2) Be aware of items that, due to their nature, may contain dangerous goods. Refer to IATA DGR or ICAO TI and ch. 9.1 of this manual.
3) Perform security questioning: visual check of the baggage is mandatory.
4) Review weight and pieces information for recording in the DCS and for applying appropriate fees.
5) Ensure the number and weight of each piece checked in baggage has been transferred automatically or manually to the load control process. When special baggage is accepted, ensure that the person in charge of weight and balance calculation task is informed accordingly.
6) Attach appropriate baggage tag for the journey- see ch. 3.2.4 for details on the procedure.
7) Passengers who have used a self-service check-in facility may drop their checked baggage at a baggage drop-off. The following must be done in self-check in or standard check-in:
    i. Review the boarding pass and pull up the passenger data in the check-in system.
    ii. Verify identity and travel document, assess carry-on baggage, and accept checked baggage.
    iii. Update baggage information and any Special Service Requests (SSR) to the DCS, if required and apply any related fees (when this information is provided by Amelia Intl).

3.2.3.1 Baggage Drop-Off and Self-service Devices

Where baggage self-service devices are in use, please observe the following:

1. If Service Level Agreement (SLA) is signed, follow the operating procedures for the number of staff per machine undertaking assistance and supervision activities, as written in the SLA.
2. Proactively guide passengers to self-service options to manage waiting times.

3.2.3.2 Baggage Pooling

N/A for Amelia Intl.

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3.2.4 Baggage Tags

Every piece of checked baggage shall have a baggage tag attached showing the tag number, flight number and the passenger's name.

When accepting the baggage for carriage:

1) All old tags must be removed.
2) Apply appropriate destination tag. As a basic principle labelling must be through to final destination unless the passenger insists that his baggage is labelled only as far as the connection point (see table below).
3) Place tags in an easily readable location, and where they will not easily be torn off.
4) Follow tag instructions, and do not stick glue directly to passenger baggage.
5) If something requires extra care in handling put fragile sticker.
6) Apply appropriate handling tags if they are not already printed in the baggage tag, such as:
   i. Priority Tag–to identify priority baggage to be offloaded first and segregated;
   ii. Short Connection Tag
   iii. Limited Release Tag–used on fragile or unsuitably packaged items
   iv. Fragile Sticker–for items that require extra care in handling
   v. Heavy Tag–placed on items that exceed regular handling limits (for weight over 23kg).
   vi. Security Tag (e.g. weapons)

These tags may be provided by Amelia Intl or may be provided by the handler itself.

Transfer Baggage -Special cases

Case	Through-labelling	Remark
Customs clearance required at the transfer point	Yes	Advise passenger to pick up baggage at transfer point. Refer to TIM/TIMATIC for country rules
The passenger specifically wants his baggage at a transfer point	No	Inform the passenger about the risk of missing the connecting flight
AVIH	Yes	Only permitted if the continuing carrier has confirmed acceptance. Within permissible MCT

3.2.4.1 Type of Baggage Tags

Manual Baggage Tag

In case of manual baggage tag:

1. Complete any hand-written portions of the manual tag, writing legibly in permanent, waterproof pen.
2. When needed due to the number of transfer legs:
   i. Prepare a second tag by striking out the baggage identification number
   ii. Remove the barcode section
   iii. Attach the transfer part of the tag below the transfer line on the initial tag
   iv. Mark the 2nd tag as a conjunction tag
3. Record the baggage identification number in the departure control system if possible.
4. Inform the Ramp Agent when checked cabin baggage is accepted at the gate.

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Electronic Baggage Tag

These tags have a display that shows the baggage journey and are normally set to display the current journey during the passenger self-check-in process. Whilst the display of these tags does not use power to be shown, a battery is normally used to allow the display to be updated.

Note: *Amelia Intl does not have Electronic Baggage tags.*

Home Printed Baggage Tag

Where possible depending on the flight performed and the local regulations, passengers may have printed their own baggage details remotely. Home printed baggage tags, HPBT, show the baggage journey as a normal baggage label does and are folded to fit into a plastic holder and attached within the baggage:

1. Check that the baggage information is clearly displayed. If the baggage label is illegible for any reason (poor printing, incorrect folding, not matching the itinerary data, etc.) destroy the HPBT and cancel the HPBT number in the DCS, then generate and attach a normal baggage label and any other identifying labels as per 3.2.4
2. Check that the baggage information displayed matches the passenger itinerary, including the baggage license plate number shown for the bag. If the details are incorrect then destroy the HPBT and cancel the HPBT number in the DCS, then generate and attach a normal baggage label and any other identifying labels as per 3.2.4
3. Ensure that the bag tag number(s) are 'active' in the check-in system.

Fallback Baggage Tags

If in use, fallback baggage tags are issued when the baggage handling system at the airport is not able to process baggage messages, and therefore cannot work with demand baggage tags. These baggage tags are specific to the airport. These tags have an airline code and 2-digit pier, chute or lateral indicator.

When using fallback tags:

1. Generate a normal on-demand baggage tag or manual tag and affix to the baggage,
2. Ensure that the appropriate airline identifier code is shown on the tag,
3. Ensure that the appropriate pier/chute/lateral information is shown for the designated flight build,
4. Firmly attach the fallback tag to the baggage,
5. Ensure that the persons responsible for building and loading baggage tasks, are aware that the fallback tags are in use.

3.2.4.2 Baggage Destination

Through-label baggage to one of the following points, whichever occurs first:

a) The first stopover point of the passenger.
b) The point to which transportation has been confirmed (OK in ticket), requested (RQ in ticket) or listed (SA in ticket).
c) The point where a change of airport is involved.
d) The final destination specified in the ticket, including any tickets issued in conjunction with this ticket.

In addition, observe the following:

1. The Minimum Connecting Time (MCT) is respected.
2. Unless subject to specific agreement between airlines, through check-in baggage on separate tickets is prohibited.
3. If required by the passenger, then baggage may be labelled to a transfer destination on the ticket.

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3.3 SPECIAL BAGGAGE

The following needs to apply when handling special baggage:

a) Ensure special baggage to be accepted meets the dimension requirements (e.g., size, weight, volume) as specified by operating airline procedures.
b) Ensure any special baggage accepted for carriage that has not been pre-declared has the required documentation, as per operating airline procedures. This normally applies to Mobility aids, Firearms and AVIH.
c) Ensure all special baggage items are packed in a manner that is suitable for transport and cannot jeopardizethe safety of the aircraft, personnel and its contents.

Planning for departing of Special Baggage

Refer to ch. 3.4.2 for preparation and planning of departure baggage.

Special Baggage Handling

The handling of all the special baggage is presented in the subchapters below.

Planning Terminating Special Baggage

a) Review the incoming flight load for the numbers of special baggage items and their type (transfer or terminating).
b) Review the incoming flight parking details.
c) Plan any special handling equipment and briefings needed to meet the incoming aircraft.
d) Determine the duration of activities so that later activities can be planned.

Preparation for Terminating Special Baggage

a) Verify the reclaim allocated for the arriving flight, refer to ch. 3.6.2.
b) Verify that any GSE allocated are in good working order.
c) Ensure that the arrivals ground staff meeting the aircraft are aware of any special items processing, especially mobility aids.

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3.3.1 Cabin Seat Baggage (CBBG)

If a baggage is not suitable for loading in the aircraft hold, they may be put on the cabin seat providing that it:

- It can be adequately restrained and the restraints must be attached to the existing seat belt or to the seat itself. The restraint shall address in particular upward, forward and sideward load cases. Seat backrest are typically not designed to hold emergency landing forward loads induced by baggage.
- can be securely fastened by seat belt or restraint device having enough strength to eliminate the possibility of shifting under all normal anticipated flight and ground conditions;
- is packed or covered in a manner to avoid possible injury to passengers and CCM;
- does not impose any load on the seats that exceeds the load limitation for the seat;
- does not restrict access to or use of any required emergency or regular exit, or aisle in the cabin
- does not obscure any passenger's view of the seat belt sign, no smoking sign or required exit sign.

The handling agent is responsible to load the item in the seat and to guarantee that is properly secured, following the procedures above. During flight it is cabin crew's responsibility to verify that the item is kept at all time properly secured.

Such baggage can be any types of items that are typically large, valuable or fragile articles belonging to the passengers that are not conductive to transport as checked baggage or appropriate for stowage in the overhead bins/ lockers. This may include:

- Musical instruments.
- Works of art.
- Certain electronic equipment.
- Prominent trophies;
- Diplomatic baggage.
- Valuable baggage.
- Infant bassinets and carrying seat including car seat.

The maximum weight of the cabin seat baggage must not exceed 32kg/seat.

If needed, contact ground@aeh.flyamelia.com for information on maximum height and other seat limitation for relevant type.

Refer to ch. 4.10.8.2.2 for details on tie-down when needed.

Refer to ch. 5.3.2.5 for loadsheet insertion details.

Note: *Cabin Seat Cargo is not accepted on Amelia Intl flights.*

3.3.1.1 Seat Allocation

- The customer and the cabin seat baggage must travel on 2 adjacent seats
- Both may not be seated on an exit row or on seats subject to any conditions for their use.
- The cabin seat baggage must be placed on the window seat.

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3.3.2 Crew Baggage

Crew baggage may be presented at check-in, or airside and should be clearly identified with a crew label and when presented at check-in with all flight details.

The crew baggage whenever possible shall be usually placed in the hold separated from the rest of the baggage. That will be Section 61 on EMB135/145, Section 50 or 51 on ATR42 and on A319/A320 in Section 53.

3.3.3 Sporting Equipment (SPEQ)

Generally, sporting equipment is considered a standard checked baggage with a maximum weight of 23 kg and maximum sum of dimensions of 300cm.

It is recommended to get information from the passenger during reservation because of volume constraints.

While no special packing is required, it is necessary to protect the equipment with packing.

Regular baggage tag is used, if limited release tag is not available.

Apply special handling if needed.

For sporting weapon refer to ch. 7.2.12.

3.3.3.1 Bicycles

For the transportation of bicycles, the following should be observed:

1. The handle bars shall be fixed sideways,
2. The pressure of the tyres should be reduced, to avoid any problems in the event of pressurization changed during flight,
3. If possible, the pedals should be removed.
4. When possible, for easier transfer and damage avoidance the bicycle should be placed in a special bag meant for its transport.

Aircraft Type	Number of bike
EMB135/ EMB145	2*
ATR42	2

Aircraft Type	Number of bike
A319	6
A320	6

*check if the cargo hold door is big enough for the bike to be loaded.

The number may be increased upon prior approval by the NPGO.

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3.3.3.2 Scuba Diving Equipment

Scuba diving may be accepted as baggage provided that advance arrangement has been made with all carriers participating in the transportation.

No limitation on the number. IATA DGR table 2.3.A must be respected.

3.3.3.3 Wind Surf/ Surfing Boards

Wind surf and surfing boards may be accepted as baggage provided that advance arrangement has been made with all carriers participating in the transportation. The passenger must be advised to present the board at the airport check-in well in advance.

Number:

Aircraft Type	Number of bike
EMB135/ EMB145	2
ATR42	2

Aircraft Type	Number of bike
A319	2
A320	2

The number may be increased upon prior approval by the NPGO.

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3.3.4 Wheelchairs and Other Mobility Aids

Wheelchair and other mobility aids are the passenger's own wheelchair/mobility aids, collapsible or battery-powered, checked in at check-in level, labelled with a regular baggage tag including the name of the passenger and carried in the cargo hold.

They are most often custom-designed and tailored to promote safety, comfort and independence for the user and shall be treated with care. Mobility aids such as wheelchairs, rolling walkers, Segways style mobility wheelchairs or Swiss Tracs may be operated with manual or electric power and have to be handled according to instructions provided by the passenger and according to the IATA DGR..

There are specific rules and concerns when handling such aids, especially when they have batteries that also need special handling.

Handling of Wheelchairs and Mobility aids are to be carried out in accordance with ch.9 of this manual and with the acceptance of electric mobility aids subject to the IATA Dangerous Goods Regulations (DGR) Table 2.3A.

Passengers using a wheelchair (manual or powered) or other mobility aid should always be given the following options:

1. Where possible, retain their personal mobility aid throughout the airport,
2. Check it in and be provided with an airport wheelchair to autonomously reach the gate, where applicable,
3. Check it in and be accepted by a dedicated agent with an airport wheelchair or electric cart to reach the gate.
4. If the passenger's mobility aid:
    i. Is not checked-in, its usage should be permitted up to the aircraft door and the mobility aid stored in the cabin where facilities are available. Such requests will be handled on a first come first served basis and will depend on the size of the aircraft and local regulations. Although requested by the passenger, as the wheelchair or mobility aid cannot be stored on board, it shall be loaded in the aircraft hold where it is easily accessible for timely return to the passenger at the aircraft door.
    ii. Is preferred to be or (must be) checked-in, an identification tag will be attached to it. The tag alerts the baggage handling staff on the handling process or the need to deliver the mobility aid to the aircraft door or at the baggage claim.
    iii. When not provided at the time of booking, details of size, weight and battery type shall be validated at check-in to ensure the mobility aid is accepted and loaded on the aircraft in accordance with the IATA DGR

A special care label (Gate/Ramp Delivery Tag) is used for taking the wheelchair/other mobility aids at the gate of the aircraft or giving it primarily at arrival.

Two wheelchairs/other mobility aids per passenger could be transported for free.

The following wheelchairs may be transported (if the mobility aid has a same battery as those from the wheelchairs presented below, the same procedures should be applied):

- Wheelchair with non-spillable battery- WCBD (dry cell battery = resistant to leaks);
- Wheelchair with spillable battery- WCBW (wet cell battery = non-resistant to leaks);
- Wheelchairs with lithium batteries.

The kind of wheelchair/mobility aid must be described during the booking (agreement from OPS department).

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Pre-notification is recommended and acceptance is subject to approval by Amelia Intl.

Unless the batteries are non-spillable they should be fitted, where feasible, with spill-resistant vent caps.

Check GOM ch.9.1.1 to verify if the battery is allowed to be carried or not and apply proper handling procedures. When a wheelchair is supposed to be accepted the ground handler must ensure that the battery on the wheelchair (if any) is a type that is permitted.

Note: *The pilot in command must be informed of the location of a wheelchair/ mobility aids and/or batteries if they are removed.*

3.3.4.1 Acceptance and Handling of Battery-powered Wheelchair

In case of doubt about type of the batteries, apply procedures with spillable wet batteries WCBW.

Wheelchairs must be stored in the cargo hold.

The loading must be done in a manner that prevents movement and damage from other cargo, post and/or baggage.

Wheelchairs with batteries must be transported in upright position with no inclination. If it is not possible to transport it in upright position, the battery is removed and separately transported.

The battery-powered wheelchairs or other similar mobility aids equipped with battery spillable or non spillable must be transported in a way that prevents any unintentional operation.

3.3.4.1.1 WCBD- Wheelchair with non-spillable battery (dry cell battery)

The requirements written in ch. 9.1.1.7 must be followed.

In addition:

- The battery must be disconnected;
- The battery terminals must be protected and electrical circuits isolated (i.e. with adhesive tapes) to prevent short circuits;
- The battery must be securely attached to the wheelchair or mobility aid.
- Battery must not contain free liquid or unabsorbed liquid. Each powered battery or electric mobility aids must be prepared to transport.

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3.3.4.1.2 WCBW- Wheelchair with Spillable Battery (wet cell battery)

The requirements written in ch. 9.1.1.8 must be followed.

In addition:

- The battery must be disconnected;
- The battery terminals must be protected and electrical circuits isolated (i.e. with adhesive tapes) to prevent short circuits;
- The wheelchair must be loaded, stowed, secured and unloaded in an upright position;
- The battery must be securely attached to the wheelchair or mobility aid. If the wheelchair cannot be placed in the upright position during the whole handling process the battery must be removed- see below for handling details in case the battery is removed.

Handling and packing rules for WCBW with removed battery

If the wheelchair or mobility aid cannot be loaded, stowed, secured and unloaded always in an upright position, the battery must be removed and the wheelchair may then be carried as checked baggage without restriction.

The removed battery must be carried in strong, rigid outside packaging as follows:

- The outside packaging must be leak-tight, impermeable to the electrolyte of the battery (the battery fluid) and protected against spilling.
- The battery terminals must be protected and electrical circuits isolated (i.e. with adhesive tapes) to prevent short circuits;
- The battery must be maintained in vertically position in the packaging and must be surrounded by compatible absorbent material sufficient to absorb its total liquid contents.
- They must be stowed on the floor or on pallet with straps or appropriate equipment used to tie them down and prevent unwanted movement during the flight.
- The box must be labelled with:
  - “Wheelchair Wet Battery”
  - ‘’Corrosive”
  - “This Way Up”

3.3.4.1.3 WCLB- Wheelchair with Lithium Battery

The requirements written in ch. 9.1.1.9 must be followed.

In addition:

- The battery must be disconnected;
- The battery terminals must be protected and electrical circuits isolated (i.e. by being enclosed with a battery container) to prevent short circuits;
- The battery must be securely attached to the wheelchair or mobility aid.

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3.3.4.2 Wheelchair Tag

When a wheelchair with battery (attached or separated) is being shipped a proper label should be inserted. For ACMI flights this tag is usually provided by the company the flights are performed for. For charter flights this tag may be provided by the handler/ airport. For scheduled flights performed under the Amelia Intl flight numbers the following tag should be used:

The first tag is used to identify what kind of a wheelchair is it (with attached battery or with separated battery) or if the item is a battery only.

On the wheelchair and in case of a separated battery, the second tag must be inserted as well, to identify the flight number, the date and whose wheelchair and battery it is.

Note: *Whenever possible and feasible the same tagging procedure must be applied for the mobility aids.*

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3.3.5 Handling of Pets (AVIH and PETC)

The procedures and details explained in this chapter are applicable to passenger aircraft only. For cargo aircraft refer to ch. 7.2.2.

There are two methods of carriage of pets:

a) In the passenger cabin in an approved container (PETC);
b) In the cargo compartment in an approved container (AVIH or AVI)

Amelia Intl does not accept on passenger aircraft:

- live animals that are poisonous or infected;
- Sick or wounded animals;
- Mammals that are in an advance state of gestation;
- Mammals that have given birth within the previous 48 hours.

Depending on the type of animal, certain Counties may impose administrative and health formalities such as:

- Restrictions or prohibitions at entry or in transit;
- Special rules for acceptance (quarantine, vaccinations, age etc.);
- Conditions of transport (containers, etc.) that are more restrictive than those in the IATA regulations.

The owner is responsible of checking the special administrative and health formalities and to make sure the pet complies with them. The animal must have valid vaccines/health certificates.

Amelia Intl does not undertake any responsibility about the deterioration of the health condition of the animal before, during or after the flight, nor about the refusal of animal's entry/transfer by state authorities including the expenses caused about the already mentioned situations.

Prohibited in cabin: Staffordshire Terriers (pitbulls), American Staffordshire Terriers (pitbulls), Mastiffs (boobies), Tosas.

Snub-nosed animals:

In case of stress, snub-nosed animals such as pug dogs, bulldogs, boxers, Pekingese, shih tsu or Persian cats may suffer from breathing difficulties. Therefore, for transportation as PETC (in cabin) the passenger should seek advice with a veterinarian.

It is forbidden to transport these sub-nosed animals as AVIH (in cargo hold).

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3.3.5.1 Animals in Cabin- PETC

Small tame birds, rabbits and rodents are not allowed in the cabin. Only dogs, cats and ferrets are accepted in cabin.

The points below should be respected:

- The total weight of pet and container must not exceed 8 kg
- If there is a major risk of annoyance to other passengers, the pet may be refused.
- They must be carried in suitable kennel or pet travel bag allowing to animal to breathe normally. The pet container must be fit under the seat in front for safe stowage. The cage should have dimensions that not exceed 46x28x24 cm. The total of the 3 dimensions must not exceed 115 cm (L+l+h = 115 cm).
- They must be clean, scentless and harmless.
- Animal's health and vaccination certificate, identification card shall be checked according to the destination/transferring states' the laws.

The animal remains under the entire responsibility of the passenger. It must be kept in the container during the entire flight.

A passenger may transport several animals (puppies, kittens or small dogs such as Yorkshire terriers), but they must be in a single container, on condition that the total weight of the animals and container does not exceed 8kg and the standards for cabin baggage are observed.

If the animal cannot travel in cabin, it will travel in the hold.

3.3.5.1.1 Seating

There is no special allocation seat for PETC, except that **passengers with PETC must not be seated at emergency exists.**

The PETC must be placed with minimum distance of 3 rows, having in mind that the PETC on board are not natural enemy to each other.

3.3.5.1.2 Number of PETC

Maximum 2 PETC per passenger are accepted, considering that they are both transported in the same single container. Otherwise, 1 PETC per passenger is accepted.

The maximum number of PETC acceptable in the cabin depends on the aircraft type.

Aircraft Type	Maximum number of PETC
EMB135 (F-GRGP & F-HMOV)	3
EMB135 (F-HTOP & F-HLIA)	2
EMB145	4

Aircraft Type	Maximum number of PETC
ATR42	3
A319	6
A320	8

Note: *There is a special procedure concerning guide dogs. They are not included in the allowed PETC quota.*

The number of PETC may be increased only for a charter flight and only after obtaining acceptance from NPGO. Data in case of increased number of PETC should be available to PIC.

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3.3.5.2 Animals in Hold- AVIH

Animals may be transported in the cargo hold on all EMB135, on all EMB145 and ATR42 and only in compartment 4 and compartment 5 on A319/A320.

Animals in Hold transported as checked baggage in the aircraft hold should travel in accordance with IATA Live Animal Regulations, and the acceptance policies found in this manual. Ensure the flight crew is informed of AVIH loading to ensure sufficient heat and airflow are maintained.

As AVIH can travel:

a) Domestic animals such as dogs, cats, birds, ferrets etc.
b) Other small warm-blooded animals, such as guinea pigs, hamsters, rabbits, etc.

Local customs requirements must be applied. Animal's health and vaccination certificate, identification card shall be checked according to the destination/transferring states' the laws. Shipper's certification or equivalent document should accompany the AVIH.

For AVIH delivered for carriage in the check-in area:

1. Ensure that the AVIH is collected from the check-in area and taken to the baggage build area via the allocated out of gauge (OOG) baggage route, as defined by local airport regulations. At some locations the OOG baggage route will necessitate the AVIH being walked through a security checkpoint to reach the baggage build area.
2. Ensure the specific container requirements comply in accordance with the IATA LAR.
   The animal shall be kept in an appropriate area airside until loading. Depending on the environmental conditions, this area may be enclosed, heated, etc. so the animal does not suffer discomfort.
3. Deliver the animal to the aircraft loading team.

Note: *Domestic animals of unusual size or wild animals, reptiles and rodents must be transported as cargo.*

Container requirements:

- The container must be made of hard plastic or fiberglass;
- If the container has wheels, they must be removed. If they are retractable, they must be taped securely in place.
- The door must have a centralized locking mechanism that locks in 2 places: at the top and at the bottom of the door. (a)
- The door hinges must extend beyond the horizontal extrusions located above and below the door by 1.6 cm / 5/8 in. (b)
- The 2 halves of the container must be fastened together by bolts. All other lateral closing mechanisms are strictly prohibited. Another locking mechanism may be used in conjunction with bolts. (c)
- The animal must be able to stand, with its head completely straight, without touching the roof of the container. It should also be able to turn around and lay down comfortably.
- The container must contain separate food and water dishes, both of which must be empty, secured to the floor and refillable without opening the cage.

See pictures on the next page.

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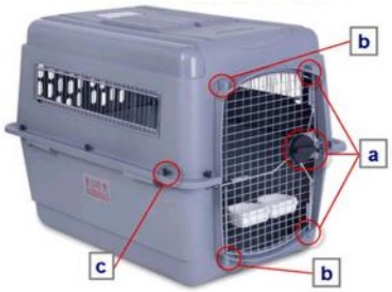
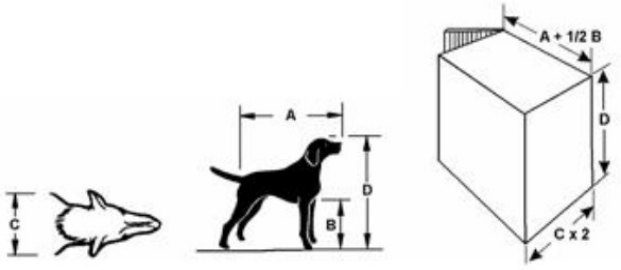
Authorized for transport



Prohibited from transport



Legend
A = Length of the animal from the nose to the base of the tail.
B = height from the ground to the top of the leg (elbow joint).
The length of the container must be at least equal to A + 1/2 B (½ B = half of the length of the leg).
C = Width of the animal's back. The width of the container must be at least equal to Cx2.
D = Height of the animal in a natural position, up to the top of the ears or head. The height of the container must be at least equal to D.

The maximum dimensions for AVIH container on EMB135/145 must not exceed 1m in width or height, because of the cargo door dimensions.

If 3 AVIH will be taken on board as per requirement below, two adult animals (or 3 young animals) may travel in a single container if neither one weighs more than 14 kg and if they are accustomed to cohabitation.

3.3.5.2.1 AVIH Handling

Refer to ch. 7.2.2 for AVIH handling and loading.

3.3.5.2.2 Number of AVIH

Aircraft Type	Maximum number of AVIH
EMB135*	1
EMB145*	1

Aircraft Type	Maximum number of AVIH
ATR42*	1
A319/A320	4 (for details refer to 7.2.2.3.1)

*Above is presented the recommended maximum number of transported animals in the hold. That number may be increased by maximum 3 AVIH per aircraft for EMB135/145 and ATR42 taking into consideration the handling requirements, free volume of the hold after checked-in baggage is uploaded and the possibility to place the AVIH on safe distance based on the fact if they are natural enemy to each other or not and their compatibility.

Approval of the NPGO is mandatory.

Operations department must be informed about the animal's weight, number and breed/type of AVIH.

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3.3.6 Music Instrument

3.3.6.1 Transportation in the Cabin

If the instrument fits in the overhead compartment it can be placed in it. Otherwise, it shall be accepted as extra seat under the conditions for cabin seat baggage as per chapter 3.3.1.

They must be packed in a hard case with rounded corners.

A double bass may never be carried in the cabin.

3.3.6.2 Transportation in the Hold

In general, a musical instrument is considered as a standard piece of baggage.

The instrument must be packed in a hard case suitable for the protection of the instrument.

Advance clearance is mandatory if the weight of the instrument exceeds 32 kg and/or the total dimensions exceed 300 cm (cello, bass or any similar size instrument). The comment XBAG must appear in the PNR.

Musical instruments weighing more than 45 kg are not accepted as checked baggage.

3.3.7 Delivery at Aircraft (DAA)

DAA procedure is not applicable for A319/A320.

If the cabin baggage cannot be accommodated on board due to limited storage space the cabin, baggage may be marked as DAA (delivery at aircraft) and may be placed in the hold. The DAA procedure may be applied for:

a) Fully collapsible baby strollers and pushchairs (larger baby carriages/prams shall be checked in).
b) Wheelchairs and mobility aids that are not needed during the flight and cannot be stored in the cabin.
c) Regular cabin baggage on small aircraft with limited stowage space in the cabin.

Note: *Do not use the DAA procedure for valuable items (e.g., laptop computers, large video cameras, important documents) as such items should remain with the passenger).*

To do this respect the following procedure:

1) Ask the passenger to remove any personal documents or medications, valuables and sensitive or fragile objects from the baggage.
2) Ask the passenger if they have dangerous goods that are not permitted in the cargo hold (e.g lithium batteries). If they have, they must be removed from the baggage before putting it in cargo;
3) When possible, ensure that the baggage is tagged, see ch. 3.1.2.4;
4) Inform the passenger to pick up their bags at the aircraft door (Delivery at Aircraft, DAA);
5) Ensure the baggage tagged at the gate is considered for load control by adding the information in the DCS (number of pieces and weight) or preferably use the DAA processes as described under 7.
6) Inform ramp staff and/or load control of the gate baggage to be loaded.
7) The number of DAA put in the cargo must be reported by the handling staff to the flight crew (or possibly to the cabin crew who transmits that information to the flight crew).
   The flight crew will then follow internal procedure in order to ensure that this number is being taken into account on the loadsheet and in the mass and balance calculations, accordingly.

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8) On arrival, Cabin baggage checked in the hold is offloaded first and returned to the passengers at the steps of the aircraft. It is delivered on the carrousel if it has not been recovered at the steps of the aircraft.

Observe local restrictions for DAA delivery at arrival stations and inform passengers accordingly.

IMPORTANT: Verify with the passenger that any dangerous goods items which are only permitted in cabin baggage are removed before DAA acceptance.

For procedure at boarding gate refer to ch. 3.1.2.

Preferred cargo hold for loading of DAA on AIB is cargo hold 3.

3.3.7.1 Delivery at Aircraft Tag

In case the cabin baggage is too big for cabin it should be placed in the hold (see ch. 3.3.7). Usually, a tag called Delivery at aircraft (DAA) should be placed on this baggage. For ACMI flights this tag is usually provided by the company the flights are performed for. For charter flights this tag is not mandatory. For scheduled flights performed under the Amelia Intl flight numbers the following tag should be used:

Explanation:

The number presented with XXXXXXXXX is a sequence number pre-printed on each tag. There is one number per tag. The upper number is torn out and is inserted in the flight folder luggage formula, by the ramp agent. The number found at the bottom is turn out and handed to the passenger (attached to the boarding pass).

The middle part stays on the cabin bag itself.

The number of DAA bags is communicated at the end of boarding, by the ramp agent to the Commander by providing the weight and balance sheet generated from DCS.

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3.3.8 Carriage of Firearms

***Note**: Firearms are among the articles prohibited for carriage in the aircraft cabin. The only exemption is for persons specifically authorized to carry a firearm in the cabin (e.g., air marshal).*

a) Carriage of Firearms On-Board
Only police and/or personnel escorting state officials are allowed to carry a gun on-board but only under the provisions written in ch. 2.3.12.
The PIC must be notified prior to the commencement of a commercial flight of person(s) authorized to carry a firearm on the flight in the passenger cabin. The notification shall include the seat number(s) of authorized armed person(s) when allowed by local regulations.

b) Carriage of Firearms in the Aircraft Hold
It can be either a firearm carried by police and/or personnel escorting officials as described in a) above and/or in ch. 2.3.12 or it can be a sporting weapon and/or munition of war.
In case of weapons and munition of war and sporting weapons, procedures presented in ch. 7.2.11 and ch. 7.2.12 must be respected.

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3.4 BAGGAGE HANDLING

There are several baggage activities that take place in an airport. These can be broadly classified as:

a) Passenger Baggage Acceptance–See relevant subchapters in 3.1 and 3.2
b) Baggage Handling–This Chapter
c) Aircraft Loading–See ch. 5

The baggage room must prepare sufficient and pre-determined number of baggage carts and containers in accordance with the expected passenger load for a flight.

Note: *Passenger baggage is baggage that remains with the passenger during their journey and travels in the hold of the same aircraft as the passenger. This may include cabin baggage retrieved for various reasons that may need to be checked in.*

Personnel Roles

Throughout this chapter, reference is made to tasks that are performed to execute baggage operations. These tasks may be undertaken by different types and groups of personnel depending upon the operation size and structure at the airport. Typical roles include:

a) Management staff member–responsible for overseeing the performance of the operation, making decisions on how to operate based on feedback from the operational staff.
b) Support staff member–responsible for planning baggage operations and collecting metrics, including rerouting misconnections to ensure a smooth baggage operation.
c) Baggage staff member–operational staff who are responsible for the movement and monitoring of baggage through the dedicated baggage makeup areas, including immediate reporting of any unauthorized persons in the baggage make-up area, reconciling baggage and collecting/delivering baggage from/to the aircraft.
d) Ramp loading staff member–operational staff who are responsible for ramp activities, including loading and/or offloading and immediate reporting of any unauthorized persons on the ramp (without a visible airport badge).

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3.4.1 Safe Baggage Handling

It is important that handling personnel is aware of the risks associated with baggage handling and are properly trained. To ensure their health and safety the guidance below should be followed as minimum:

a) Handling techniques:
   1. Baggage handling operations require personnel to manually handle equipment and baggage such as pushing and pulling non-motorized GSE (e.g. Baggage cart), loading heavy bags, etc.
   2. Baggage staff member should be aware of best lifting techniques to be utilized at all times to reduce the risk of injury whilst handling baggage.
   3. Refer to AHM 462 for handling techniques and principles of manual handling .
b) Baggage staff members should not lift more than their physical capabilities to avoid injuries.
c) Ensure appropriate care is taken regarding health and safety to ensure personnel do not sustain injuries while handling baggage Where available, make use of assistive devices for moving heavy loads.
d) Ensure that appropriate personal protective equipment (PPE) is available and used.
e) Ensure that baggage is handled in an appropriate manner, e.g. positioned rather than thrown onto the belts.
f) When using baggage carts or dollies use the safety precautions in ch.4.
g) Verify the coupling/uncoupling of the baggage carts, dollies/trailers and ensure nobody is working between or nearby prior to moving.

Important: Be extra careful of your hands, fingers, and feet when moving and connecting baggage carts or dollies to the tractor or another equipment. Always use the handle and never the tow ring. Seek assistance, if required.

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3.4.2 Departure Baggage Handling

3.4.2.1 Planning

Depending on the size of operation in a station it is important that for each departing flight, a pre-planning process is put in place to ensure:

a) Review all types of expected baggage for each departing flight and plan for:
   1. The number of baggage items and their categories (transferring baggage or terminating/local baggage).
   2. The required number of carts and ULDs.
   3. Handling of any special baggage items that are planned for departure.
   4. Staff assigned to deliver baggage to/from the aircraft/staging area as per ch. 4.10.6.2.

b) Review the arrival of transfer baggage for the departing flight:
   1. Determine which arrival flights have transfer baggage for the departing flight.
   2. Monitor these flights for the transfer baggage to ensure that the transfer baggage can make their connections.
   3. Plan for short-connection baggage to the baggage sorting system or on a tail-to-tail basis as needed.

c) Review the departure flight parking stand location to plan for on-time delivery of baggage.
   1. Determine the driving time to the departure stand.
   2. Determine any special conditions for the use of the stand, such as supervision of baggage awaiting loading or additional security measures in place for the flight.
   3. Consider adverse weather conditions and protection form extreme temperatures.

d) Plan for any special handling equipment that will be used and brief baggage staff members on their use, as needed. This may include processes and procedures for handling mobility aids, weapons, AVIH etc.

3.4.2.2 Preparation for Departing Baggage

a) Verify the build location that has been allocated for the departure flight. There may be more than one build location for the flight, such as:
   1. Specific segregations being built in different areas.
   2. Specific build location for out-of-gauge (OOG) items, e.g. sporting equipment etc.

b) Ensure that the baggage staff members working at the out-of-gauge baggage point are aware of the build and/or allocated stand for delivery of items that arrive at the out-of-gauge point.

c) Ensure that the signage for the flight departure is up to date (e.g. stand information is appropriately displayed).

d) Ensure that the ground staff members handling the flight are aware of any special baggage item requiring processing, especially mobility aids.

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3.4.2.3 Execution of Departing Baggage

a) Ensure that the baggage build location (e.g. baggage chute/carousel/lateral) and segregation for the departing flight is correct by validating against the baggage sortation plan:
If baggage destined for another build area arrives at the build output:
   1. Notify the baggage handling system (BHS) team.
   2. Move this baggage to the correct build output or pass to baggage handlers.

b) Ensure the ULD for the baggage to be loaded is serviceable.

c) Ensure that any baggage carts being used are serviceable refer to ch. 4.1.4.2.

d) Ensure all mandatory screening and securing of baggage is performed as required;

e) Produce baggage cart cards (or also known as ULD card) showing the correct flight and segregation of baggage for that ULD/ baggage cart;

f) To identify containers and baggage carts, and to allocate the appropriate segregation and flights, it is necessary to produce ULD cards (electronically or manually). These cards are often produced in the baggage reconciliation system (BRS) and show a barcode that can be scanned to identify the allocation of the container or cart to the baggage reconciliation/tracking system. These are known as ULD cards. Apply sorting and loading procedures for containers and carts based on procedures presented in ch.4 with respect to checked baggage tagged as:
   1. Priority baggage
   2. Heavy baggage
   3. Connection baggage
   4. Late baggage
   5. Fragile baggage
   6. Sporting equipment
   7. Mobility aids
   8. Live Animals (AVIH)
   9. Crew baggage
   10. Baby Strollers/Push chairs
   11. Gate Delivery Items
   12. Items containing dangerous goods (i.e., dry ice)
   13. Standby baggage
   14. Items with a limited release tag.

g) All baggage handling systems are subject to errors. This means that occasionally baggage will be directed to either a default output point or arrive at the wrong output point. Without human action, this baggage will miss their intended flight. Therefore, based on the local provider and/or airport authority, and subject to airline and ground handler's agreement, it is advised to have baggage teams that can take these bags from the incorrect output location to their intended location or flight;

h) Where baggage is being palletized, ensure the pallet is structurally safe and the net attachments are in place;

i) Where tracking/reconciliation is performed electronically in the baggage make-up area:
   1. Scan the ULD/baggage cart card for the designated appropriate category.
   2. Scan the barcode of the baggage tag.
   3. Verify the load has been confirmed as being on the correct flight ("Positive" passenger bag match, by visually inspecting that the baggage tag and electronically through scanning by ensuring a confirmed load response is received from the scanner).
   4. Place tagged baggage in the appropriate ULD/baggage cart. Ensure baggage is handled in an appropriate manner (e.g., positioned rather than thrown into the ULD/baggage cart).
   5. In case the baggage is identified as not being a "Positive" passenger bag matched or loaded to the incorrect flight/destination, place the baggage to one side for resolution.

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6. Expected baggage count and received baggage to be compared to achieve a zero-baggage missed rate. .

j) Where reconciliation is performed manually in the baggage make-up area:
   1. Visually inspect the baggage tag to check the flight number and destination.
   2. Detach one of the removable tabs and apply to the ULD/baggage 'Bingo' card.
   3. Loading order (numbered) sequence to assist during offloading if applicable.
   4. Place tagged baggage in the appropriate ULD/baggage cart. Ensure baggage is handled in an appropriate manner (e.g., positioned rather than thrown into the ULD/baggage cart).
   5. Expected baggage count and received baggage to be compared to achieve a zero-baggage missed rate.

k) When the ULD/baggage cart is filled and an appropriate number of ULD/baggage carts are available for delivery, the build is complete or at an operation specified time before departure:
   1. Close and seal the cover baggage carts as appropriate.
   2. Arrange delivery of the ULD/baggage carts to the aircraft for loading. If applicable coordinate with the ramp staff members responsible for aircraft loading.

l) Wheelchairs and Mobility aids delivered for carriage in the check-in area:
   1. Ensure that the mobility aid is collected from the check-in area and taken to the baggage build area via the allocated out of gauge (OOG) baggage route, as defined by local airport regulations. At some locations the OOG baggage route will necessitate the mobility aid being walked through a security checkpoint to reach the baggage build area.
   2. Handle all mobility aids in accordance with the IATA DGR.
   3. Ensure that the person responsible for the planning and loading the aircraft is advised of the number and types of mobility aids processed for carriage. Typically, this information is disseminated to the next station via a LDM or CPM;

m) Where tracking/reconciliation is performed at the aircraft side:
   1. Unload the baggage from the baggage cart and directly onto the loading conveyor for the appropriate aircraft hold into which the baggage will be loaded.
   2. Scan the baggage tag barcode or baggage license plate number for the bag to be loaded.
   3. Verify that the load has been confirmed as being on the correct flight (i.e. "Positive Passenger Bag Match' has succeeded for the baggage).
   4. In case the baggage is identified as not cleared to load then place the baggage to one side for resolution.
   5. When that baggage is loaded and a passenger does not board the flight or is removed from on board the aircraft, follow ch. 3.4.4 & 3.7.6 for treating the baggage (off loading or transporting the bag as unaccompanied), according to the risk assessment and locally applicable regulations.

n) At the completion of the baggage build process the baggage staff members should make a cross-check that the baggage has been built according to the load plan for the departing flight with load control. Discrepancies and variations need to be communicated to the load control, as soon as possible.

***Note**: Amelia Intl's fleet does not support ULDs.*

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3.4.3 Handling Gate Delivery Items

a) The passenger team will identify and label any baggage that is taken from a passenger at the gate due to size and/or weight restrictions.
b) Record the baggage tag for tracking and/or reconciliation as per ch. 3.3.7.
c) Mobility aids delivered for carriage at the boarding gate or aircraft door.
    1. Passengers with disabilities may wish to continue to use their own mobility aid until they are boarded onto the aircraft. In such circumstances:
        i. Ensure that the mobility aid is collected prior to the passenger has boarded and loaded on the aircraft.
        ii. Handle the mobility aid in accordance with the IATA DGR.
    2. Ensure that the person responsible for the planning and loading the aircraft is advised of the number and types of mobility aids processed for carriage. Typically, this information is disseminated to the next station via a LDM or CPM.
d) Collect the baggage from the gate area and transport it to the aircraft for loading.
e) To ensure special baggage required to be made available at the aircraft door (i.e., Wheelchairs, Mobility aids and/or Strollers):
    1. Ensure a DAA flag/exception code is updated in the BSM and/or BPM.
    2. Ensure a DAA tag is applied to readily identify the item in the aircraft hold.
    3. Scan the DAA's baggage tag.

Note: *Refer to ch. 3.3.7 for DAA (delivery at aircraft) procedures.*

3.4.4 Removal of Checked Baggage

If instructed by the Commander or Amelia Intl operations department including the OCC, the name, security number and number of pieces of baggage requiring approval, must be obtained. Refer to electronic records or the bingo sheets (if available) to identify where the baggage is located in order to offload.

The baggage is removed and must be re-screened prior to returning it to passenger services for further handling, subject to local security procedures.

In certain countries, higher baggage screening standards may apply and must therefore be followed.

Always communicate with gate or Amelia Intl staff with respect to the addition or removal of any checked baggage.

3.4.5 Monitoring the Departing Baggage Operation

Baggage performance monitoring is a key element of baggage handling operations. There are a number of metrics that can be captured and applied to key performance indicators. The actual metrics used to monitor the operation depend on the ground handling services providers and airlines involved. Metrics that may be useful include: Number of bags left behind, Number of bags accepted late from the check-in/baggage system, Number of bags received without tags, first bag loaded, last bag loaded, number of gate bags, number of bags delivered to the incorrect system output.

These KPIs are usually part of the SLA established between Amelia Intl and the handling company.

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3.5 TRANSFER BAGGAGE

3.5.1 Planning Transfer baggage

Depending on the number of transfer baggage expected, it is important for each transfer item that a preplanning process is put in place, to be aware:

a) Transferring baggage may arrive up to 24 hours prior to the departing flight and can also arrive close to the departure time of the departing flight.
b) Planning according to connection times of the arriving feeder flights.
Transfer baggage planning can make a big difference to the overall performance of an airport or airline. The most common causes of baggage mishandling are in the transfer baggage process.
c) Review the list of arrival flights to obtain:
    1. The number of transfer bags arriving before the departing flight is open for build. Allocate a storage for these early bags.
    2. The number of transfer bags that will arrive during the time the departing flight is open for build. In consultation with other stakeholders, as applicable decide if:
        i. These bags are being handled by the baggage handling system or being delivered tail to tail, if applicable/operationally permissible.
        ii. Baggage staff members will be allocated to deliver the bags rapidly to the baggage sortation system or on a tail-to-tail basis for those bags with short connections.
        iii. If tail to tail operations are planned, then inform baggage hall and ramp staff so additional loading units are made available on the ramp.
    3. The number of transfer bags that will arrive after their departure flight has closed for build and determine:
        i. If it is possible to have the departure flight to accept this baggage and to extend build time and facilities;
        ii. Identify which baggage is to be re-flighted (see ch. 3.8 Mishandled Baggage).
d) Plan the use of GSE such as baggage carts and ULD.
e) Mixed baggage is to be segregated for the departing flight in accordance with this manual.
f) Plan for any special handling equipment use and brief staff members on that use as needed. This may include processes and procedures for handling mobility aids, weapons, AVIH, etc.
g) For tail-to tail transfers (In accordance with approval by local authorities):
    1. Plan the collection of inbound transfer baggage and the delivery to the departing flight.
    2. Plan handover points for the tail-to-tail drivers for the departing flight.
h) Determine the categories for the departing flight (e.g., premium vs economy baggage, onward connecting baggage containers of baggage that will be unloaded from one flight and loaded to another during a transfer stop).

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3.5.2 Preparation for Transfer Baggage

a) Ensure the baggage handling team, know of storage locations for baggage that has arrived prior to departing flight opening. So that they can collect the transfer baggage as necessary.
b) Dispatch the baggage team and any necessary GSE as per their allocated tasks (e.g. collection, delivery).

3.5.3 Execution of Transfer Baggage

a) Collect the transfer baggage from the arrival flight.
b) Deliver the baggage to the appropriate location:
    1. Tail to tail
        i. Scan the baggage at the point of collection.
        ii. Deliver the baggage to the departure aircraft.
        iii. Scan the baggage upon loading into the departing aircraft.
    2. Baggage Handling System
        i. Deliver the baggage to the transfer baggage inject input.
        ii. Unload the baggage at the transfer baggage inject input.
        iii. Scan the baggage to record delivery to the baggage handling system.
    3. Storage areas
        i. Deliver the bag to the storage area.
        ii. Scan the bag to record delivery to the storage area.

3.5.4 Security of Transfer Baggage

Whenever there is a transfer baggage that baggage must be either:

- Subjected to screening prior being loaded onto the aircraft; or
- Screened at the point of origin and subsequently protected from unauthorized interference from the point of screening at the originating airport to the departing flight at the transfer airport.

This is applicable for domestic or for international passenger flights.

3.5.5 Monitoring of Transfer Baggage

Transfer baggage should be monitored in accordance with Resolution 753 to record the number of bags making their connections, as applied to departing baggage.

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3.6 TERMINATING BAGGAGE

3.6.1 Planning

a) Review relevant messages (Baggage Manifest Message, Cargo Pallet Message, Load Distribution Message, etc) for the arriving flight to determine the number and location of terminating and transfer baggage, including special baggage.
b) Review the arrival flight parking stand details.
c) Plan staff to meet the aircraft and determine the arrival activities , including the time at which they should be present at the stand.
d) Plan any special handling equipment and briefing needed to meet the incoming aircraft.

3.6.2 Preparation for Terminating Baggage

a) Allocate or confirm a reclaim point for the arrival flight based on the number of terminating items expected. Local airport regulations may apply.
b) Allocate or confirm the terminating baggage “inject” point.
c) Verify that all the GSE allocated is in good working order.
d) Ensure that the baggage team are aware of the delivery locations for terminating baggage including special baggage.
e) Ensure the arrivals ground staff meeting the aircraft are aware of any special items processing, especially mobility aids.
f) Ensure that the signage for the arrival flight is up to date and appropriately displayed.

3.6.3 Execution of Terminating Baggage

3.6.3.1 Collection

a) Liaise with the ramp team for the collection of baggage according to the unload plan (e.g.LDM, CPM)
b) Verify that the load collected is the appropriate load as per the unload plan/labelling of ILDs and/or baggage labelling.
c) Sign for the handover as appropriate.

3.6.3.2 Delivery

a) Deliver the baggage to the designated location for terminating baggage
    1. Observe the priority plan for the offload. Typically, the priority plan Is to place commercially important baggage (first, business, etc) onto the reclaim first, then to place economy baggage onto the reclaim.
    2. Observe such government required screening and securing of baggage as appropriate.
    3. First Bag/Last Bag Time Recording: These times are often key metrics for monitoring baggage performance. Some systems can record this time automatically when a bag is scanned by an Automatic Tag Reader, whilst others require manual action such as pushing a button.
        i. Where a system is provided that requires a manual operation to indicate the delivery of the first bag then use this when the first bag is delivered.
        ii. If no system exists then record the flight number and time of first bag delivery manually if this is required by local procedures.

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iii. Once baggage delivery is complete, record the time of the last bag either manually or using a system if such a system is provided.
iv. Where required, indicate that the last bag has been delivered by placing a baggage tub on the reclaim marked as “Last Bag Delivered” or alternatively by tagging the last bag injected to the reclaim with a “last bag” tag.

b) Ensure that there is good communication between the ramp and baggage operations teams and the passenger team regarding the process of the unload, especially in the event of issues or delays.
c) If a bag is visibly damaged, then the bag should be secured as per local requirements.
d) Baggage that has been delivered to the arrival hall must be rescreened before being loaded onto another aircraft.
e) Transfer baggage that is accidently delivered to the arrival hall should be stored securely until processing for transfer.

3.6.4 In the Arrivals Hall

a) If the reclaim belt is overloaded with bags, then bags should be removed from the belt and set aside in a secure manner (i.e. can be observed) in an area that does not present a safety risk for passenger.
b) Once all bags have been delivered to the reclaim and passengers have progressed away from the reclaim area then a sweep of the baggage belt should be undertaken to remove RUSH bags and any unclaimed/remaining bags to the lost and found office or other designated area for further processing.

3.6.5 Monitoring of Terminating Baggage Processes

The KPIs are usually part of the SLA established between Amelia Intl and the handling company.

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3.7 BAGGAGE SECURITY

Each piece of hold baggage (being loaded on domestic or international flight) shall be protected against unauthorized access from the point it is accepted for carriage (including off-airport check-in) or screened, whichever is earlier up until it is loaded into the aircraft hold and the aircraft had departed. Security measures shall be implemented for storage, handling systems and loading to ensure prevention of unauthorized access, tampering or introduction of prohibited articles into the hold baggage. Screened hold baggage should be kept under surveillance at all times.

If it is identified that a baggage has been subject to unauthorized interference it must be screened again, prior to being loaded on the aircraft.

When an international hold baggage has been security screened in accordance with the security manual and requirements, that shall be recorded either in the BRS (baggage reconciliation system) or on the manual bingo sheet when at a certain location the BRS is not available. It must be also marked if the baggage is accompanied or unaccompanied. These records must be made available to Amelia Intl upon prior request.

Whenever deemed necessary (based on increased security threat and/or based on risk assessment) the security manager may ask for additional security controls to be executed. He will inform the ground operations manager and/or relevant stations when this will be applicable.

3.7.1 Handling of Hold Baggage

All hold baggage must be screened before being loaded.

If passengers and crew members are required to personally identify their hold baggage before loading, the not identified baggage should not be loaded.

All the baggage being transported must be identified either as accompanied or unaccompanied (RUSH) baggage.

It must be ensured there is no opportunity for the exchange of cabin baggage for hold baggage which may contain items to be used in a planned act of unlawful interference.

When screening of hold baggage gives rise to suspicion regarding the contents, the local screening authority will proceed as per local regulation.

After acceptance, all hold baggage must be kept in a secure area.

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3.7.2 Security Removed Items

Items not permitted in hand baggage that are removed by security screening personnel may only be accepted in checked baggage.

They shall be dealt with in the following way:

a) Customer service must ask the security checker to ensure that a firearm is not loaded before accepting it for carriage;
b) Removed items should be placed in a suitable receptacle and then treated as checked baggage (see ch. 3.1.2.3 for details on accepting cabin baggage in the hold.). A separate receptacle must be used for each passenger's property;
c) A limited release tag, marked with the passengers' destination at the next point of stopover should be attached to the receptacle and the identification portion handed to the passenger;
d) The passenger should be told to claim his property at his destination together with any checked baggage;
e) The Commander should be informed;
f) If these possessions are missing on arrival, normal tracking procedures should be followed.
g) The receptacle must be loaded in the hold in the door area. Special action is not required for the load control and on the loadsheet, as the weight of the items is taken into account by the normal passenger weight entries and the effect on the balance is negligible.
h) The load message must include a warning, for example SEC62/3, meaning 3 pieces containing items loaded for security reasons in Compartment 62.
i) Upon arrival at destination, if these items must not be handed at the aircraft side or on the prier/gate area. They must be given special handling and not mixed with other items over baggage conveyor systems. The appropriate authority e.g. Police or Customs must be informed and should arrange attendance when these items are handled.

Note: *For checked sporting weapon or escort with fire arm refer to relevant chapters in this manual.*

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3.7.3 Baggage Reconciliation

Passenger/baggage reconciliation shall be maintained as required, including:

a) Standby passengers
b) Off-airport and group check-in passengers
c) Voluntary or involuntary deplaning
d) Transit passengers

Baggage that is separated from the passenger may be subject to additional security controls in accordance with local regulations.

Offload the hold baggage of any passenger who disembarks earlier than the station of arrival.

If the passenger fails to transfer for any reason, the passenger's checked baggage may be removed in accordance with local regulations.

Note: *Ensure each departing flight does not transport baggage for passengers who are not on board the aircraft unless the baggage is identified as unaccompanied and has been subjected to appropriate screening.*

3.7.4 Dangerous Goods in Baggage

In principle, passengers and crew are permitted to carry certain items of dangerous goods in their baggage as per IATA DGR or ICAO TI and in line with table and procedures found in ch.9.1.5. Specific transport conditions are applicable to define items that:

1. Require the approval of the operator prior to the acceptance
2. Are permitted in or as checked baggage
3. Are permitted in or as cabin baggage
4. Have to be carried on one's person only
5. Require notification of the pilot-in-command (NOTOC) on their location on the aircraft

All persons tasked with passenger and baggage acceptance shall:

1. Be trained according to the training requirements in the IATA DGR.
2. Have to verify with the passengers that they are not carrying forbidden dangerous goods during the check-in and baggage acceptance process.
3. Be aware of commonly carried items and question passengers where there is a suspicion of their carriage (e.g., camping equipment, hunters).
   Handle and report any dangerous goods occurrences, e.g. forbidden dangerous good identified in checked baggage or dangerous goods leaking. In this case for reporting and action refer to ch. 9.4.5 and 9.5. In any case These dangerous goods must be removed from the passenger's baggage and disposed of in accordance with local requirements.

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3.7.5 Disembarking Transit Passengers

Offload the cabin and hold baggage of any passenger who disembarks earlier than the station of arrival.

3.7.6 Manual Baggage Reconciliation at Originating Station

In case the number of passengers is lesser than the number of checked baggage and the excess does not belong to any passenger on board this baggage must be offloaded.

Make every attempt to locate missing passengers and obtain visual proof of boarding and documents if they are located on the aircraft.

Remove the checked baggage of the passenger who checked-in but failed to board.

If the baggage cannot be identified via the tags a manual baggage reconciliation must be made before the departure of the aircraft.

Notify the crew of any last-minute changes to passenger and/or baggage load.

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3.8 MISHANDLED BAGGAGE

Mishandled or unclaimed baggage include one or more of the following baggage disruption incidents:

1. Delay of checked baggage
2. Loss of checked baggage
3. Damage or partial loss of checked baggage
4. Pilferage of baggage or items from baggage

Enter mishandled or unclaimed found baggage details into the tracing system as defined in ch. 3.10.6 if possible.

Legal time limits apply to the reporting of loss, delay, damage or pilferage of baggage- see ch. 3.8.8 and applicable conventions.

For detailed procedure for mishandled baggage on Amelia Intl scheduled operation refer to latest revision of GOM-CP.

For mishandled baggage on charter operation, each case is handled separately by Amelia Intl in coordination with relevant ground handler and airport.

3.8.1 Pre-Departure Mishandling

Pre-departure baggage can have 2 possible issues–tagless bags where the baggage tag has become detached from the bag, and bags that have been delivered to the wrong build location or the default baggage system output.

a) Bags without tags
   1. Take the bag to the lost and found baggage office (note, a specific handler should have been nominated for tagless bags, as the actual intended flight is not known)
   2. Create an On-Hand Report (OHD) for the bag in the tracing system
b) Bags with tags in the wrong location
   1. Run the bag to the correct build location

3.8.2 Departure Mishandling

Baggage arriving for the flight post departure

1. RUSH the bag onto the next available flight to the same destination, regardless of carrier.
2. Send a Forward (FWD) message for the bag to the Lost Luggage office of the destination and any connection stations).
3. Send a Baggage Transfer Message (BTM) for the reflighting (if not done automatically).
4. Follow any additional screening requirements as per local regulation.

3.8.3 Tail to Tail Baggage

Not permitted.

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3.8.4 Missing Baggage

Missing baggage is baggage that was anticipated for a departing flight but has not been received by the operating carrier.

a) Create appropriate tracing files in the baggage tracing system is used,
b) Create an On-Hand (OHD) and Forward (FWD) messages for the baggage once it is received

3.8.4.1 On-Hand Baggage

On-hand baggage or unclaimed found baggage is baggage that has missed the flight upon which it was intended to travel. The station/handling agents that created the on-hand file are responsible for the tracing for the first five days. Then, it is sent to secondary/central tracing for further action.

3.8.5 Storage and Handling Mishandled Baggage

Any mishandled or unclaimed baggage shall be inserted into tracing system, with all the possible baggage details.

This baggage must be held in a safe and secure storage areas where access is controlled, and when applicable it shall be stored in accordance with the local laws.

Mishandled baggage is usually held in a locked and secure storage cage or room. Access and key control shall be properly supervised and the baggage must be subjected to additional screening before being loaded into an aircraft.

a) If required such baggage shall be subject to security controls before being loaded into an aircraft in line with the security requirements of the forwarding carrier, receiving carrier and relevant authorities.
b) Mishandling baggage shall be forwarded without any charge by the fastest possible means using the services of any member airline, if applicable, to the airport nearest to the passenger's address;
c) Ensure that the number of unaccompanied bags is included in baggage counts for load control;
d) Use a “RUSH” indicator (manual and/or electronic) when applicable.

***Note**: Under certain circumstances concerning local authorities and Amelia Intl restrictions it may not be possible to offload the checked baggage from the subsequent leg in case of a misconnection.*

Unclaimed baggage is kept for a period of time, as prescribed by the local authority, and disposed of through that authority as unclaimed property.

3.8.5.1 Delivery of Mishandled Baggage

For detailed procedure for mishandled baggage on Amelia Intl scheduled operation refer to latest revision of GOM-CP.

For mishandled baggage on charter operation, each case is handled separately by Amelia Intl in coordination with relevant ground handler and airport.

3.8.6 Mishandled Mobility Aids

Damaged, delayed or missing mobility aids should be handled as priority:

a) Document incident.
b) Make all possible efforts to provide a suitable equivalent loaned item or replacement, as needed.
c) Arrange for the repair of replacement of the item, if needed.

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3.8.7 AVIH

Delay of or damage/injury to AVIH should be handled as priority.

3.8.8 Delayed Checked Baggage/ Missing Baggage

Delayed baggage is checked baggage not available to passengers when they present the baggage dentification tag at the point of stopover or destination.

For the first five days, the station that created the tracing file is responsible for primary tracing and information to the passenger about the status of the file. The maximum tracing period should be 21 days (as per the Montreal Convention) but may be longer.

Baggage that has missed the flight upon which it was intended to travel should be considered to be on-hand.

3.8.9 Secondary Tracing

Secondary tracing is the process of taking over the responsibility for further action on open mishandled baggage tracing files by the department as defined by Amelia Intl, case by case.

3.8.10 Legal Time Limits for Reporting

Loss, delay, damage or pilferage of baggage must be reported immediately upon arrival, or within 7 days for damage, 21 days for delay.

As a minimum, IATA Baggage Services Manual standards should be followed.

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3.9 DISRUPTION

When planning for disruption, review any known disruptions planned for the operation and the contingency measures planned for the day

a) Anticipate any likely disruption scenarios
b) Plan any equipment that is needed to cope with the anticipated disruptions
c) Where planned software maintenance is taking place, ensure that there are manual processes available in case the systems being modified fail to restart

3.9.1 Dealing with Specific Outrages

3.9.1.1 Baggage Reconciliation System (BRS) Outrages

The baggage reconciliation system typically records the loading of the baggage into a container or aircraft hold. BRS failure can severely disrupt an operation, as the manual replacement processes are time consuming. Some BRS can fail "gracefully" where the most recent data remains available in the system and bags are reconciled against this data with changes highlighted when connectivity is restored. Training and guidance for such systems should be followed when disruption occurs. Where no graceful degradation is possible, manual processes should be adopted using bingo cards and baggage reconciliation stubs.

3.9.1.2 Baggage Handling System (BHS) Outrages

Most major airports have a baggage handling system to move bags from the check-in area to the build area. These systems vary in complexity, often having fallback modes and graceful degradation modes before the system fails totally.

When the baggage handling system fails there are 2 issues that need to be dealt with. These are the bags that are trapped in the baggage handling system and need to be removed, and the bags that are waiting to be checked in.

Local procedures will vary for when the BHS fails, as the system design will determine the state of the bags when there is a failure. Whilst the key stages of baggage processing (cleared as safe for transport, storage and building the bags) can be completed without a baggage handling system the capacity of the airport will be reduced.

3.9.1.3 Equipment Issues

Where equipment is found to be un-usable, damaged or non-functional during the planning phases of the operation then this equipment should be flagged as un-usable and moved to a location where it can be collected for repair or repaired

3.9.1.4 Staffing Issues

It is possible to have a large percentage of staff off work at the same time, and when this happens then there is a risk that the operation will be short-handed, leading to delays. Where possible, have a prepared list of staff on call that may be contacted to fill in roster gaps.

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3.9.1.5 Diversion

When a flight is diverted to a station, ensure that:

a) Review the flight documentation (Baggage Manifest Message, Load Distribution Message) for mobility aids, live animals in the hold (AVIH) and other items requiring special processing.
Ensure that the guidance under "Special Baggage Handling" is followed.
b) There is a plan to unload the baggage from the flight in line with the intention for the passenger movements:
    1. If the aircraft is being replaced, then transfer the bags to the new aircraft.
    2. If passengers are being transferred to other flights, then either move the baggage to the next flight or allocate a reclaim carousel for the flight so that passengers can collect their bags before continuing with their journey.
    3. If the passengers will be moved using ground transport, then ensure a reclaim carousel is allocated to
    4. the baggage and deliver the baggage to that reclaim carousel.

3.9.1.6 Cancelled Flights

When a flight is cancelled then either:

c) Deliver baggage to the alternative provided flight or;
d) Deliver bags to a reclaim allocated to the original flight so that the passengers' can collect their bags

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3.10 BAGGAGE SYSTEMS

This section presents a brief overview of the baggage systems that are typically used. Not all airports and airlines will make use of all the systems, and sometimes systems will have different names depending upon where they are being used.

For the moment Amelia Intl does not have its own baggage system.

3.10.1 Baggage Reconciliation System

a) Baggage reconciliation ensures that only accompanied or authorized unaccompanied checked baggage is loaded and transported.
b) Baggage reconciliation procedures, either manually or automated, shall be in place where required by local regulations and Amelia Intl's procedures. Baggage reconciliation systems automate the process of recording where bags are loaded onto the aircraft and matching baggage details to passengers.
c) In the event that the passenger is not onboard at departure then the bag may be located and removed.
d) A baggage reconciliation system will typically maintain passenger/baggage reconciliation as required, including:
    1. Standby passengers
    2. Off-airport and group check-in passengers
    3. Voluntary or involuntary deplaning
    4. Transit passengers
e) Checked baggage of any passenger who is withdrawn from the flight or didn't board (no-show) is to be considered unaccompanied and shall be off-loaded and if needed additional security controls should be applied. In addition, it may be handled in accordance with and local regulations.
f) The system is not the only component in reconciliation and once a flight has been closed for check-in, the baggage room flight lead, or the baggage supervisor will:
    1. Review total pieces for each baggage cart.
    2. Pass on all baggage figures, including baggage counts for each cart and total baggage numbers, so that the total load summary can be prepared.
    3. Conduct a baggage room sweep to ensure there are no left-behind bags.
g) If baggage is left behind, report this to Baggage Services. Appropriate messages shall be sent to the downline station and arrangements made to expedite the return of the bag to the passenger.

3.10.2 Baggage Handling Systems

A baggage handling system is used to move baggage through the airport. The system will also often be responsible for key aspects of ensuring baggage security, as the baggage screening machines are integrated into the system. Baggage handling systems often have many outputs that allow baggage to be built for an individual flight or segregations for a single flight. Other baggage handling systems output bags to carousels where several flights may be being built at the same time.

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3.10.3 Baggage Messaging Systems

Baggage messaging underpins all the movement and processing of baggage. Baggage messages are defined in RP 1745 and RP 1755–for type B and Modern Baggage Messaging respectively. Messages are sent to the airport from the airline (or its representative) either via a direct connection or through a message distribution provider such as SITA or ARINC.

3.10.4 Baggage Management Systems

A baggage management system combines baggage source messages and baggage process messages to provide a real time picture of the movement of baggage through an airport, often combining information from other systems (such as security, handling, reconciliation, flight data, etc.) in order to provide a complete picture for the check-in, handling and loading of aircraft. The system may also allow tasks to be allocated to different teams in order to handle the baggage. The Baggage Management System is often a component of an overall airport management system.

3.10.5 Baggage Re-flighting Systems

A baggage re-flighting system is used to allocate baggage to a new flight when mishandling occurs. The system will typically have a complete flight schedule for the airport and be capable of generating baggage messages and labels to support the new baggage movement. Some baggage handling systems incorporate baggage re-flighting, allowing bags to be allocated to a new flight automatically and sent directly to the build for that flight.

3.10.6 Tracing Systems

Amelia Intl does not have its own tracing system. When possible or as previously agreed with handlers, especially during scheduled flights World Tracer should be used.

See GOM-CP for details on scheduled flights and contact OCC or ground@aeh.flyamelia.com for mishandled baggage on any other flights.

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4 RAMP HANDLING

In this chapter is presented information concerning ramp handling of Amelia Intl fleet. Some specialities in regards to the different aircraft types can be found here therefore, for more aircraft details it is more appropriate to refer to subchapters of chapter 6 in this manual.

4.1 RAMP SAFETY

The minimum safety rules and procedures defined in this section shall always be applied and understood by all personnel working on the ramp.

Aircraft damage can endanger passengers, personnel and aircraft. Disruptions may also negatively impact safe airline operations. Even a slight scratch or dent on an aircraft may result in a serious accident.

Any aircraft damage discovered or caused shall be reported as presented in ch.1.3.3.

To ensure ground operational safety, all station activities, including, those outsourced to an external third-party ground service provider or its subcontractors, shall be conducted under the direct oversight of supervision personnel. For details refer to ch.1

Note**:** *Approaching the aircraft for baggage, passengers or any other handling is strictly forbidden, nor personnel or equipment are allowed to be in the vicinity of the aircraft, while the beacons (anti-collision lights) are lit and/or while the engines/ propellers are still running.*

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4.1.1 General Ramp Safety

4.1.1.1 Engine Danger Areas

There is a particular risk of injury or damage in areas affected by aircraft engine intakes, exhausts and propellers. The risk is further increased if for any reason an aircraft stops and then applies the additional thrust required to "break away" and continue the manoeuvre.

a) Vehicles and personnel shall remain clear of aircraft danger areas when aircraft engines are running and/or the anti-collision lights are on.
b) In order to prevent incidents and accidents caused by aircraft engines, personnel shall never position themselves or equipment in the following critical areas before or during aircraft departure and arrival:
    1. Engine Intake Area.
    2. Engine Blast Area.
    3. Propeller Rotation Area.
c) Make sure the engine intake/propeller rotation area is clear at all times when engines are running or the engine is about to start.
d) It is forbidden to pass through the blast area while the engines are running

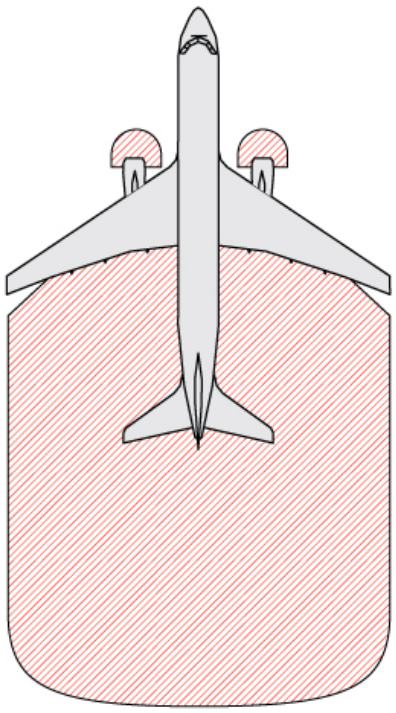
Passengers shall not be allowed to disembark as long as the left side engine is turning. This also applies to adjacent aircrafts: passengers walking to / from the terminal shall never be allowed to walk through or near a parking stand where another aircraft has running engines.

Before advising the crew of the possibility to start the engines, the responsible agent shall check that no staff or equipment stands in the vicinity of the defined danger area, or behind the wing and forward of the aircraft's tail.

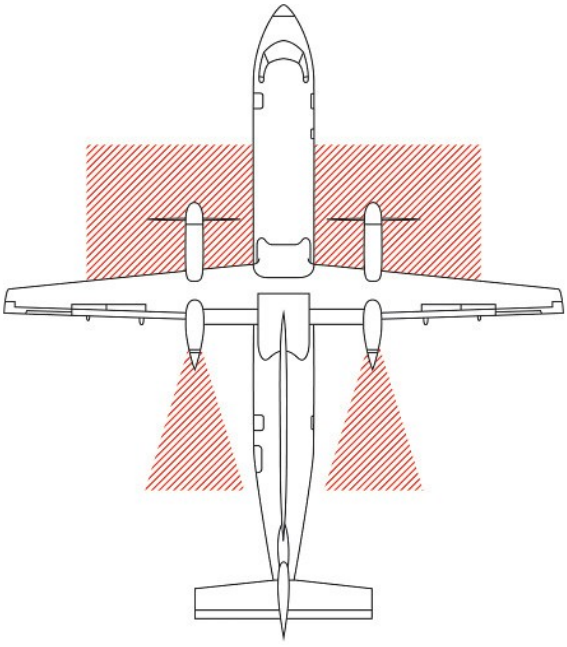
DANGER: Ground personnel and/or equipment shall stay clear of the intake and blast areas.

4.1.1.1.1 Engine Danger Area Diagrams

Example of Engine Danger Area – **Jet Aircraft**



Example of Engine Danger Area – **Propeller Aircraft**



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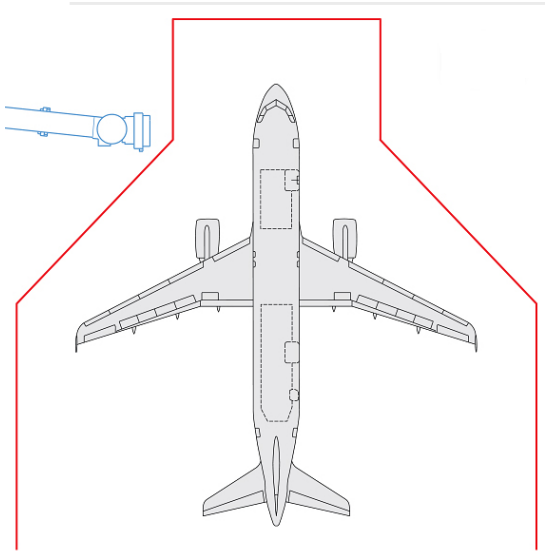
4.1.1.2 Equipment Restraint Area and Equipment Restraint Line

The Equipment Restraint Area (ERA) is the area of the apron where an aircraft is parked during ground operations. It may be indicated by a painted line which should be located from the aircraft to each of the wing tips in order to materialise the restricted area.

If no markings exist, local procedures shall establish safe parking areas, etc. Below is a picture that provides an example of the markings used at some locations.



The ERA is located at 7,50m (25ft) from any peripheric point of the most important aircraft that is allowed on the parking stand.

The ERA shall be free of personnel not involved in the aircraft arrival, obstructions, equipment (see exemption ch. 4.2.3.2) and foreign object debris (FOD) before and during aircraft arrival and departure.

CAUTION: *For safety reasons, spillage should be cleaned immediately to reduce the risk of personnel falling or risk of fire, in case of flammable substance spillage.*

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4.1.1.3 FOD- Foreign Object Debris

Foreign Object Debris (FOD) applies to all loose objects which are a danger to the safety and integrity of aircraft or personnel. FOD, therefore, shall not be left in any area where they would pose a hazard.

All personnel have a responsibility to ensure that the risk of damage to aircraft from FOD is minimized. All waste material shall be properly disposed of such that it does not become FOD and all FOD shall be removed and properly disposed of as soon as it is discovered.

Proper management of waste and debris is critical, as, if not disposed of correctly, it may become FOD. FOD can also move into airside locations during high winds.

Examples of FOD:

- Plastic and paper: bags, sheets and towels
- Metal: nuts and bolts, empty oil and hydraulic fluid cans, tools and equipment
- Natural objects: rocks, pebbles and wood
- Other debris: burst ballast bags, luggage handles and wheels, etc.

CAUTION**:** *FOD can:*

1. *Be sucked or ingested into aircraft engines, causing damage leading to engine failure.*
2. *Cause damage to tires, the undercarriage, control systems and other parts of the airframe, which can lead to in-flight failures.*
3. *Become a trip hazard for personnel working on or around aircraft..*

The following FOD checks shall be conducted prior to any aircraft movement and after servicing operations:

a) Check GSE staging and parking areas in proximity to area of operation.
b) Do routine checks of GSE (including floors of enclosed cabins) to ensure that everything is secure and operational and not about to fall off and become FOD.
c) In ramp areas ensure that anything carried in or on a vehicle is secured.
d) Before aircraft arrival, conduct a FOD walk-around of the aircraft parking stand, removing all FOD found.
e) Dispose of all FOD in designated garbage bins, where provided or as per local arrangements. FOD bins should be enclosed, to avoid FOD being blown out by wind.

Note: *An FOD prevention program is presented in AHM.*

4.1.1.4 Personnel Protective Equipment

Personal Protective equipment

Ramp agents must wear protective equipment to protect themselves from possible hazards.

Concerning Amelia Intl team, they are required to have the following equipment:

a. Safety footwear;
b. Hearing protection;
c. High visibility clothing;
d. Gloves;
e. Any other specified PPE as per local requirements.

Note*: Neckties or other loose hanging accessories which may pose risk shall be of the quick release type (clip).*

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4.1.2 Safety Instructions for Operating and Working with Ground Support Equipment (GSE) on the Ramp

Apply these procedures whenever operating GSE on the ramp:

a) Personnel shall only drive or operate GSE if trained and authorized for that specific equipment type. They must comply with the driving rules at the airside (safety distances, taxiway markings, respect of the maximum speed...).
b) GSE shall not be moved or driven across the path of:
   1. Taxing aircraft or aircraft under tow/pushback
   2. Embarking and disembarking passengers on the ramp
   3. Emergency vehicles.
c) When operating any GSE, check the aircraft for possible damage in the equipment contact zone before positioning and after removal of GSE to/from the aircraft.
d) Immediately report any damage found, or where contact has taken place or suspected to have taken place, especially for composite aircraft. The PIC of the aircraft must also be immediately informed.
e) Where damage has been found or where contact has taken place or is suspected to have taken place, do not move any GSE to/from the aircraft in the area where damage has been found until inspection is completed, and clearance given to proceed.
f) Personnel working with and around vehicles and equipment must protect themselves from loose clothing, long hair, and/or hanging accessories/jewellery from becoming a hazard, e.g., caught or trapped in equipment.
g) GSE must never be positioned in a way that may impede the possible evacuation.

4.1.2.1 Basic Operating Requirements for Ground Support Equipment

a) Securely stow GSE cables and hoses, where fitted, prior to transportation and when not in use.
b) GSE shall not impede the accomplishment of other aircraft handling operations in progress unless there is an important reason to do so.
c) Check that all areas of GSE are free of contamination, FOD and safe for use prior to and throughout the operation.
d) Operators shall check the GSE assigned to them prior to initial use, particularly the parking brakes, rubber protective bumpers, and safety systems. If found to be defective, the GSE shall be reported, tagged as “Out of Service” and removed from operations, when applicable.
e) All safety rails shall be fully retracted/lowered prior to positioning, where possible.
f) Extra personnel shall not be carried on moving GSE without an approved seat (i.e., apply the no seat–no ride principle).
g) Seat belts shall be worn, where fitted, except where repositioning equipment is within the same operational area, e.g., within the parking stand or baggage makeup area.
h) Before moving any GSE/Vehicle ensure all its doors are closed, where fitted.
i) GSE shall not be operated while using handheld Portable Electronic Devices (PEDs).
j) GSE shall only be used for its intended purpose, including for specific aircraft types.
k) Prior to movement of any GSE/Vehicles, the intended travel path shall be checked and confirmed clear of personnel, equipment or other obstacles.
l) GSE with lifting devices shall not be driven or towed in the raised position, except for final positioning onto the aircraft.
m) The GSE platform shall not be operated while in motion.
n) Use a guide person when vision is restricted. The guide person shall be able to accurately judge clearances and communicate signals to the driver/operator. Stop immediately if visual contact with the guide person is lost. Movement shall not continue until visual contact is re-established.

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o) Once motorized GSE is in its servicing position at or near the aircraft:
   1. Apply the parking brake with the gear selector in park or neutral (if no selection for park).
   2. Turn off the engine, unless required when in operating/servicing mode.
   3. Install GSE wheel chocks, where equipped.
   4. If equipped with stabilizers, ensure they are deployed before the GSE is used for servicing. Deploy other safety devices (e.g., active proximity sensors, safety rails), if fitted.
   5. When motorized GSE is in operating/servicing mode, remain in a position whereby the emergency controls can be promptly accessed. This includes the immediate vicinity of the controls or an immediately adjacent and accessible location.
   6. If motorized GSE is not fitted with external emergency controls, the operator shall remain in the operating position and in control of the equipment when in operating/servicing mode.
      Note: As an exception for pushback tractor, the engines may need to be left running unattended:
      - *While conducting a single person pushback operation;*
      - *To avoid specific restart by maintenance function.*

      If unattended, apply the parking brake and place the gear selector in park, or neutral if no selector for park.

p) When GSE is chocked:
   1. Place one chock at the front and one chock at the rear of the same wheel.
   2. Chocks shall be centered on and in contact with the wheel.

q) When unattended motorized GSE/vehicle is positioned in or adjacent to the ERA, other than as described in point (o) above:
   1. Turn off the engine. In extreme cold weather conditions where local procedures permit engines running unattended, the motorized GSE shall be chocked.
   2. Apply the parking brake with the gear selector in park or neutral, (if no selection for park) and, where equipped, install wheel chocks.

r) The ground power unit (GPU) and preconditioned air (PCA) may be left running unattended when connected to the aircraft, provided the serviceability and fuel levels are checked periodically.

s) A No-Touch policy (i.e., GSE shall not touch the aircraft) shall be employed for all GSE types.
   1. GSE and passenger boarding bridge (PBB) not equipped with self-leveling sensors shall be positioned in a way to ensure that:
      i. The protective rubber bumpers do not touch the aircraft fuselage to allow vertical movement of the aircraft during the whole ground handling process.
      ii. The gap between GSE and aircraft shall not allow a person or large piece of equipment to fall through. As a guideline, a gap of 5 cm (2 in.) or two fingers should be maintained between the device and the aircraft.
   2. Maintain clearance between the GSE and the aircraft fuselage at all times.
      Exception: *No-Touch policy does not apply to GSE and PBB equipped with self-levelling sensors. Protective rubber bumpers may slightly touch the aircraft but shall not be compressed against the aircraft fuselage.*

t) When positioning GSE to the aircraft, check that throughout the turnaround process a clearance is maintained between the GSE and the fuselage to allow vertical movement.

u) All safety rails shall be fully retracted/lowered during positioning and removal, where possible.

v) After positioning equipment on the aircraft, raise or extend all safety rails on conveyor belts, loaders, and other elevated devices, except where restricted by the aircraft type.

w) GSE shall be parked in the designated airside equipment parking areas when not in use.

x) Access to firefighting equipment or the fuel hydrant emergency stop switch shall not be obstructed.

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4.1.2.2 Non-Motorized Ground Support Equipment

The follow precautions must be taken when operating non-motorized GSE:

a) When parked and/or when not connected to motorized vehicles, all non-motorized GSE shall have brakes set or chocks in place, with the exception of aircraft tow bars.
b) Pallet and container dollies may only be towed with turntables in the locked position (straight ahead).
c) The number of carts and dollies allowed is usually limited by the local airport authority or ground service provider, however, in critical conditions (e.g., slippery surface conditions, congested facilities, low visibility) this number should be re-evaluated and might be reduced to ensure safe operations on the ramp.
d) Know the dolly types as some dollies are not compatible with others. Follow the recommended towing combinations when transferring dollies from one place to another. Do not tow more units than the recommended sets or combinations.
e) When connecting or disconnecting dollies/carts to/from the tow bar, hold only the tow bar handle and tow pin of the dollies/carts. Do not hold the tow eye when connecting or disconnecting.
f) Position oneself beside the tow bar when connecting or disconnecting dollies/trolleys ensuring the tow-pin is properly inserted before towing and use the tow bar handle to connect and or disconnect dollies/trolleys.
g) During transportation with carts and dollies, the load shall be properly secured by using appropriate locks, stops, rails, curtains and straps.
h) The overall height of loads shall permit safe lifting of each piece of the load during loading and offloading of carts by personnel standing on the ground.
i) Light packages shall not be wedged between heavier items.
j) When using tarpaulins, all straps shall be securely fastened to the baggage cart.
k) If equipped with stabilizers, ensure they are deployed before the GSE is used for servicing or access. Deploy other safety devices (e.g. active proximity sensors, handrails), if fitted.
l) If using maintenance stairs e.g., to open and close cargo hold doors:
    1. The stairs shall be fitted with safety rails to prevent falls.
    2. Maintenance stairs should be facing towards the panel which is being accessed. Retractable/extendable safety rails shall be lowered or retracted during positioning.
    3. Raise or extend retractable/extendable safety rails prior to any personnel accessing the stairs.
    4. Moving or repositioning the stairs is not permitted while personnel is on the stairs.
m) Towable Air Start Units (ASU), PCA, and GPU shall not be connected to the tow vehicle and aircraft at the same time, if possible. Before towing the unit away, the operator shall make sure the unit is disconnected from the aircraft.

Note**:** *While the movement of carts and dollies by hand is very simple, it can result in injuries. Therefore, additional care must be taken.*

4.1.2.3 Parking Area Cleanliness

The inspection of the parking stand is systematic before each arrival on the stand and after each departure from the stand and is an integral part of the tasks assigned to the agent in charge of the aircraft movement.

The agent in charge of the aircraft movement carries out the removal of any garbage and the cleaning of the area in case of liquid leakage. Any object on the parking stand can become a projectile and can be thrown across long distances due to the engine blast.

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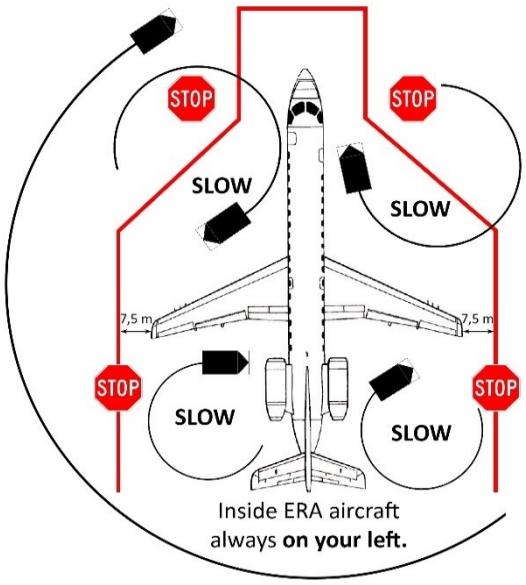
4.1.2.4 Safely Driving and Parking GSE inside the ERA

General:

- Respect the driving rules in the equipment restraint area;
- Respect of the following priority rules: Priority is given to the aircraft even if they are towed or pushed back, to the rescue vehicle, to the snow remover and the pedestrians.
- Respect the equipment parking rules;
- Respect the safety distances between ramp equipment and the aircraft.

To verify the serviceability of GSE and test the apron surfaces, operators shall apply the following precautions when driving or parking GSE within the ERA:

a) Make one complete stop with all motorized GSE prior to entering the ERA or at 5 m from the aircraft. This action shall be carried out even if there is no Equipment Restraint Line marked on the apron.
b) GSE shall not be driven faster than 5 km/h or 3 mph (walking speed).
c) Maneuver GSE carefully to prevent personnel injury and/or aircraft damage.
d) Avoid performing any sharp turns near the aircraft, particularly when towing equipment.
e) When GSE/PBB is being moved near the aircraft or positioned to the aircraft, and when the vision of the GSE operator is or might be restricted, the GSE operator shall be:
    1. Guided by a guide person using standard IATA signals. If visual contact with the guide person(s) is lost, the GSE operator shall stop movement of the GSE/PBB immediately. Movement shall not restart until visual contact is re-established;
    2. Assisted by means of appropriate proximity sensing and warning systems and/or visual aids such as cameras and mirrors.
f) GSE that are not directly involved in the handling or servicing of the aircraft shall not be driven through or parked within the ERA.
g) Any GSE (e.g., tractors, pallet transporters, carts and dollies) shall not be driven or positioned under the aircraft fuselage unless specifically required e.g., lavatory servicing, aircraft maintenance, towbarless tractor etc.
h) Driving or parking under the aircraft wings is not permitted, see exception.
    Exception: *Due to aircraft type or local restrictions may apply. Prior operator approval shall be given.*



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4.1.2.5 Passenger Boarding Bridge (PBB)

The operator of the PBB shall:

a) Be trained and authorized to operate the PBB.
b) Check that the PBB is serviceable before use.
c) Report any malfunction of the PBB to the appropriate person/authority.
d) Check that the walking surfaces are free of FOD, obstacles and safe for use.
e) Ensure only personnel required for the PBB operation are in the PBB while it is moving
DANGER: There is a risk of entanglement fall from height and distraction to operator.
f) Ensure the PBB is fully retracted or parked in its safe designated parking position prior to aircraft arrival and departure.
g) Ensure the safety barrier shall be in place whenever the PBB is not at the aircraft.
h) Ensure that the movement path is clear of personnel, equipment/vehicles and all other obstacles before moving the PBB.
i) When positioning the PBB at the cabin access door and driver/operator vision is restricted, use a guide person.
j) Prior to positioning/removal, ensure that all safety rails/canopies on the PBB are fully retracted.
k) Move the PBB slowly toward the aircraft, avoiding any aircraft sensors or protrusions.
l) Where the PBB is equipped with self-levelling device, continue movement until either the protective bumpers just touch the aircraft or the PBB's proximity sensors stop the movement.
m) When not equipped with self-levelling device, maintain a gap in accordance with No-Touch policy. Refer to IGOM 3.1.3.2 (s).
n) Ensure the PBB does not contact the wing root leading edge fairing that extends under certain cabin access doors or any other sensors or fairings.
o) Once the equipment is positioned, ensure any safety rails and canopies on the PBB are fully extended.
p) When positioning/removal is complete, secure/isolate the PBB controls to prevent movement by non-authorized persons.
q) Maintain adequate clearance between the PBB and the underside of the cabin access door, or as directed by the cabin door markings to prevent damage. This reduces the possibility that the aircraft door will rest on the PBB as the aircraft settles during loading and unloading.
r) Engage any safety systems (e.g., safety shoe) and auto-leveller features, if applicable. If the PBB is not equipped with an auto-leveller, the PBB shall be attended by an operator whenever it is positioned at an aircraft.
s) Ensure the cabin access door is closed before removing the PBB.
t) Where integrated with the PBB, ensure ground power cables and PCA hoses are disconnected from the aircraft prior to moving the PBB, unless required for operational purposes.

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4.1.2.6 Passenger Stairs

The following precautions shall also be taken when operating passenger stairs:

a) Check that the walking surfaces are free of contamination and safe for use.
b) Ensure the movement path is clear of personnel, equipment/vehicles and all other obstacles before moving the passenger stairs.
c) If passenger stairs are towed, disconnect them from the tractor and manually position them at the aircraft. Ensure brakes are engaged once stairs are positioned to the aircraft.
d) Ensure safety rails and canopies, if any, on the passenger stair platform are fully retracted prior to positioning.
e) Move the passenger stairs slowly toward the aircraft, avoiding any aircraft sensors or protrusions, until either:
    1. Where the passenger stairs are equipped with self-levelling device, continue movement until either the protective bumpers just touch the aircraft or the passenger stair proximity sensors stop the movement.
    2. When not equipped with self-levelling device, maintain a gap in accordance with No-Touch policy. Refer to ch.4.1.4.1 point (s).
f) The controls shall only be operated from inside the driver's cabin of the passenger stairs except where equipped with external controls.
g) Maintain adequate clearance between the passenger stairs and the underside of the cabin access door, or as directed by the cabin door markings, to prevent damage.
h) Engage any safety systems and auto-leveller features, if applicable. If the passenger stairs are not equipped with an auto-leveller, the level of the passenger stairs shall be monitored and adjusted, as required.
i) Deploy stabilizers, if fitted. Do not allow anyone (except the operator) to use the stairs until the stabilizers are deployed.
j) Ensure passenger stairs are positioned so that the cabin access door can be used as an unobstructed escape route in case of emergency.
k) Passenger stairs shall not be removed from the aircraft door unless the cabin access door is closed or a fall prevention device is in place across the door. Refer to ch. 4.9.1 point (b).
l) After the cabin access door has been closed, confirm there is no personnel on the stairs prior to retracting stabilizers.
m) If passenger stairs are towed when removed from the aircraft, manually position them clear or the aircraft to a suitable position before connecting them to the tractor.

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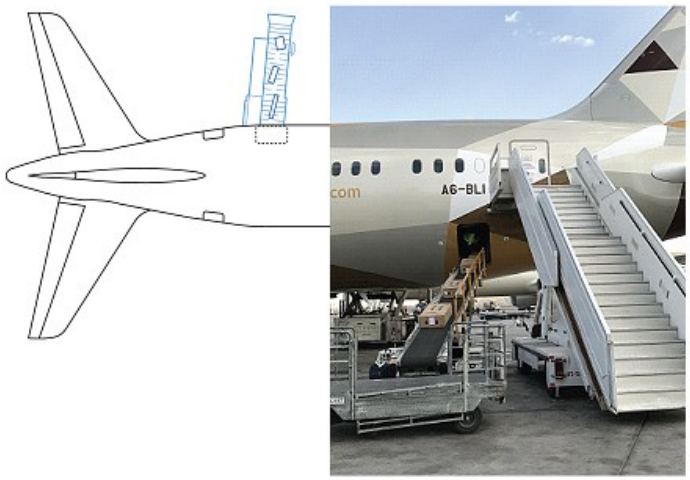
4.1.2.7 Belt Loader

The following precautions shall also be taken when operating a belt loader:

a) Stop operating the conveyor belt or raise or lower the boom when personnel are on the belt.
b) Do not stand or walk on the conveyor belt when the safety rails are lowered/retracted.
c) Do not sit or stand on a conveyor belt while it is in operation, nor while the boom is raised or lowered.
d) Belt loaders shall not be used to transport baggage, cargo or other items across the ramp.
e) The boom of the belt loader shall never be positioned inside the cargo hold of any aircraft.
Exception: *The rule does not apply to specially designed belt loaders (e.g., Ramp Snake and Power stow) that require the equipment to be extended/positioned inside the cargo holds.*
f) Position and remove a belt loader to/from the aircraft in a straight line.
g) Position the boom at an angle to the cargo hold doorsill that will:
    1. Allow tractors/trailers to access the belt loader without impeding slide deployment areas and passenger evacuation routes.
    2. Prevent items and personnel from falling between the boom and doorsill.
h) Once the belt loader is positioned ensure the wheels are left in straight ahead position.
Caution*: Speeding up operation of the conveyor belt using the accelerator pedal is not permitted.*
i) Where clearance allows, always raise the side safety rail as soon as the belt loader is positioned. Ensure it does not touch the aircraft fuselage.
Caution: *Care shall always be taken when working around a moving belt.*
Personnel shall remain vigilant to trap hazards while raising/lowering the safety rails. Keep hands/fingers away from the edges/ends of the belt where they may become trapped.
Belt movement shall be stopped before any attempt to clear any obstructions.
j) The safety rail shall also be deployed when a belt loader is used to gain access to aircraft cargo holds or cargo door controls. Caution shall be exercised where there is restricted clearance with the aircraft fuselage or engines.
k) Ensure proper separation between articles and appropriate belt speed to avoid jamming.
l) When unloading or loading items onto a belt loader, ensure they are stable, and correctly positioned on the conveyor belt to avoid items falling off.
m) When unloading or loading items between the belt and aircraft cargo hold, ensure items do not come into contact with aircraft fuselage/cargo hold door.
n) Adjust the back of the conveyor belt correctly to avoid dropping goods from the belt.
o) The safety rail may be lowered to accommodate large items during loading and unloading.
p) Ensure the boom is clear of the aircraft or other obstacles before making a turn.



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4.1.2.8 Elevating Equipment

Ground equipment with a lifting function must be compatible with the aircraft and in good working condition (lifting function adjustable). They shall not be driven towards the aircraft in the elevated position, except for final positioning.

The following precautions shall also be taken when operating elevating equipment:

a) For elevating equipment with a rear access platform, ensure all safety barriers/rails are secured in place prior to vertical movement of the platform.
b) Ensure the load is properly secured (e.g., cart brakes, stretchers, wheelchairs) and all doors and shutters are closed prior to raising or lowering the vehicle.
c) Any elevating equipment doors not being used for servicing at the aircraft shall be closed and latched.
d) The positioning of the elevating equipment shall allow the loading platform to be perpendicular and at the same level to the aircraft doorsill.
e) The final position of the elevating equipment shall allow for a safe working area and minimize the length of the walking surface between the aircraft and the elevating equipment while in the raised position.
f) Before accessing the platform at the front or the rear of the elevating equipment, ensure the platform is at the same level as the equipment cabin.
g) Carefully place the portable ramp/bridge on the doorsill from the platform side, as necessary.
h) Equipment (e.g., catering carts) and passengers in wheelchairs shall be pushed on and off the aircraft. Always ensure a hand-to-hand exchange. No elevating equipment is to be staged on the platform, and no loose items are to be transported on top of carts (e.g., catering equipment).
i) Continually observe and be aware of the clearance between the aircraft door and the elevating equipment platform.
j) When the servicing is finished, inform the crew in order to close the door; carefully remove the elevating equipment from the platform side and stow securely.
k) The passengers and/or the load shall be secured properly inside the elevating equipment. Passengers shall be seated and wearing seat belts. Passengers seated in wheelchairs shall have the wheelchair secured during elevating equipment movement.
l) Visually check for any obstructions over both sides of the elevating equipment before lowering.
m) Lower the truck body into the fully lowered position.
n) Close and secure all the doors of the elevating equipment when the servicing is finished.
o) Perform a walk-around to check for FOD and clearance around elevating equipment stabilizers.
p) All elevating equipment shall stop operating when the wind speed reaches 40 knots (gusting).

DANGER*: *Do not enter or place any part of the body inside the 'scissor' area beneath the elevating equipment.

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4.1.2.9 Tractor/ Electric Baggage Tug (EBT)

The following precautions shall also be taken when operating a tractor or electric baggage tug (EBT) and towing dollies/baggage carts:

a. Take care to avoid sudden sharp turns, jerks and stops.
b. Prior to moving with towed load, ensure there are no personnel between or near the towed load.
c. Only transport baggage, cargo, or other items in the designated areas, if equipped.
d. Use the remote push button control (inching operation) to connect dollies, carts, or towed load, where fitted.
e. When Tractor/EBT is near the belt loader during aircraft handling, a gap of at least 1 m (3 ft.) shall be maintained.
   Note: *Where necessary to position carts/dollies within 1 m (3 ft.) of the belt loader, adjust the position of the carts/dollies by hand.*
f. When removing carts during the loading on or unloading from smaller aircraft or aircraft with low wings, the tractor shall be positioned pointing away from the aircraft wing and the cart maneuvered by hand to the tractor, as required.
g. Ensure where possible dollies/carts are connected as a chain, apply brake, and insert chocks where applicable, to avoid the movement.

4.1.2.10 Safety of Use of Ramp Equipment and Vehicles

The use of ramp equipment shall be limited to qualified ramp staff, who have received previous training in the use of such equipment.

Ground service equipment and vehicle must be clean and in perfect working order, they have to be regularly checked (brakes, tires, light, battery, fuel...) according to a predefined maintenance program.

Usually, the following firefighting resources must be available at the parking point during refuelling:

- Chemical powder extinguishers: minimum 1x 25kg
- CO_2 extinguishers as alternate: minimum 2x 25kg

The use of carbon dioxide (CO2) fire extinguisher is acceptable though not recommended: 1 kg of CO2 is to be considered equivalent to 0,5 kg of powder.

The extinguishers must be placed less than 15 metres from ERA.

Note: *Water-type fire extinguishers shall never be used on a liquid fire (e.g.: fuel, hydraulic fluid, etc.). CO_2 fire extinguishers should not be used on hot aircraft brakes or immediately next to them (risk of potentially explosive breaking).*

The fire extinguishers shall be periodically inspected as required by local legislation to ensure they are in operative condition, and marked accordingly. They shall be present on the stand at least on aircraft arrival and departure, while passengers are on board or boarding / disembarking, and while a fuelling vehicle is connected to the aircraft.

This type of fire equipment is used to attack the fire source when located on the ground. On the contrary (engine fire for example) the aircraft extinction system is used in priority.

- If the required equipment is not available, the presence of an active airport Fire Department Vehicle nearby the aircraft shall be requested at all specified times.

All the ramp staff shall be trained to be able to use extinguisher.

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4.1.3 Safety During Fuelling/ Refuelling

4.1.3.1 Fuelling Safety Zone

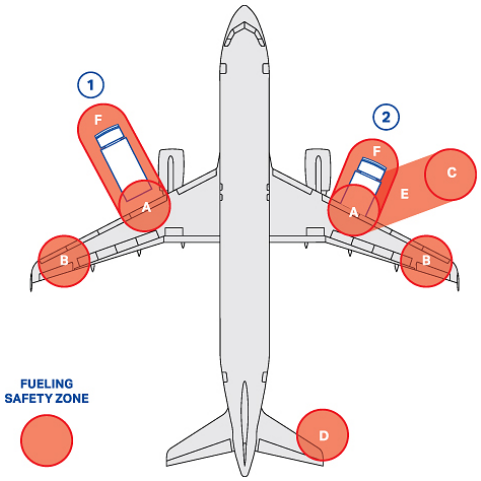
While the aircraft and the fuelling vehicle are parked in normal fuelling position, the immediate dangerous area surrounding the aircraft and vehicles is delimited by a fire safety perimeter or the fuelling safety zone (FSZ).

FSZ is defined as an area of at least 3 m (10 ft) in any direction from the centre- point of all fuel vent exits, refuelling plugs, aircraft refuelling ports, fuel hydrants, fuel hoses and fuelling vehicles. This distance may be further increased as required by local airport or civil aviation authorities.

Within the FSZ all personnel shall ensure they:

a) Do not Smoke;
b) Do not use any handheld portable electronic devices including cell phones, portable music player, portable game units or earpiece or headset.;
c) Do not connect or disconnect electrical equipment to the aircraft;
d) Battery chargers must not be operated;
e) Enter the FSZ only when required by your current job task/responsibility;
f) Assume that fuelling is taking place anytime a fuel vehicle is on the stand during aircraft servicing and fuel hoses are connected.
g) Do not leave vehicle engines running unnecessarily;
h) Position all GSE and vehicles so they do not obstruct the fuelling vehicles' escape route, this is not a mandatory requirement for hydrant type fuelling vehicles but every effort should be made to ensure a clear exit pathway.
i) Do not allow any passengers to enter the FSZ.
j) Avoid the use of motorized GSE within the FSZ.
k) Do not park any GSE in the FSZ.
l) Ensure fuel hoses are protected and all ground equipment is kept a minimum of 1 m (3 ft) away from any fuel hose on the stand that is connected between a fuel truck and an aircraft.

Example of FZS- Jet Aircraft



A	Aircraft refueling port/plug
B	Fuel vent exit
C	Fuel hydrant pit
D	Fuel vent exit (according to the A/C type)
E	Hoses
F	Fuel truck or hydrant dispenser
1	Fuel truck
2	Hydrant dispenser

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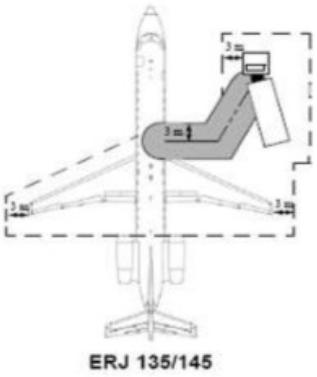
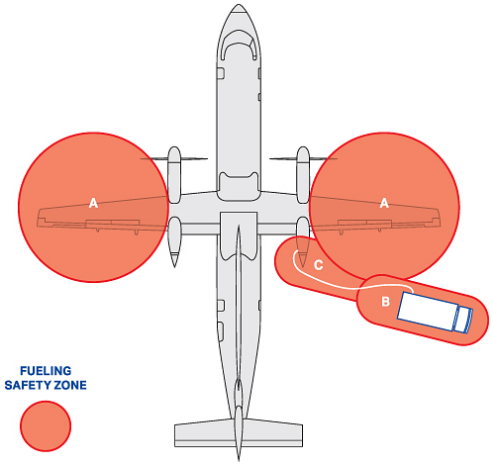


Very Dangerous Area

Fire Safety Parameter

Example of FZS- Propeller Aircraft



Example of fuelling safety zone on propeller aircraft

A	Aircraft refueling port/plug/fuel vent exit
B	Fuel truck or hydrant dispenser
C	Hoses

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4.1.3.2 Fuel Spillage

Take the following safety measures whenever a fuel spill occurs:

a) Fuelling shall be stopped.
b) Activate the emergency shut-off valve where installed.
c) Alert the person in charge of fuelling and the Pilot in Command.
d) Interrupt any activity around the aircraft (embarking included).
e) Contact the local fire service, if not already done.
f) Verify with authorities/supervisor whether to stop all activities around the aircraft.
g) As far as possible, restrict all activities inside and outside the spill area to prevent access and to reduce the risk of ignition.
h) Move away any equipment located around the aircraft (tankers included).
i) No vehicle is allowed within a radius of 15m around the fuel leakage.

Refuelling shall not resume prior to Fire Department intervention and the reason of leakage must be identified and eliminated.

4.1.3.3 Fire/ Smoke

In case of smoke or fire anywhere on or around the aircraft:

- Ramp staff shall immediately inform the crew of the presence of smoke, of the measures to be taken and shall inform the rescue and firefighting services, if not already there;
- Crew shall take decision regarding the evacuation of the passengers already on board:
- Ramp staff shall be connected with the crew to take instructions from the Commander;
- If necessary, before leaving the interphone contact it is mandatory to have the crew consent, and coordinate together;
- Ramp staff shall apply the following safety measures:
    - move away any equipment located around the aircraft (tankers included), interrupt any activity around the aircraft (boarding included),
    - In case of fire, attack the fire sources using powder, carbon dioxide or foam fire extinguishers, available on the stand or on the ramp vehicles, do not wait for the Fire Brigade which has been previously informed.

Any fire alarm or fire start in the immediate vicinity of the aircraft is considered as an important event and must be reported and the report must be sent to Amelia Intl ground ops department.

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4.1.4 Hand Signals

In order to standardize "ground staff–to-ground staff" communication and/or "ground staff–to-flight crew" communication and/or flight crew-to-ground staff communication, the following hand signals are defined:

a) **Guide Person Hand Signals–** to be used by a specific guide person in direct liaison with the equipment operator to facilitate movements of any type of GSE.
b) **Marshalling Hand Signals**– to be used by ground staff, to assist the flight crew during maneuvering of the aircraft and engine starting.
c) **Technical/Servicing Hand Signals**– to be used by ground staff to communicate technical/servicing information to flight crew, and by flight crew to communicate technical/servicing information to ground staff.
Note 1: *Only use hand signals when verbal communication is not possible.*
Note 2: *Make sure acknowledgement of all signals is received from flight crew.*
d) **Aircraft Movement Hand Signals**– use during the tractor/tow bar, TWL connection/disconnection process, as well as at the start and end of the aircraft ground movement operation.

4.1.4.1 General Conditions or Using Hand Signals

The person giving the hand signals shall:

a) Use only approved hand signals.
b) Wear a high visibility vest.
c) Maintain the same role throughout the procedure.
d) Keep in constant, visual contact with the other ground staff and flight crew throughout the maneuver. If visual contact is lost, the operation must stop and not re-commence until visual contact is re-established.
e) Remain clear of the intended pathway of the vehicle/aircraft where possible.

4.1.4.2 Specific Requirements for using Marshalling Hand Signals

a) Perform aircraft marshalling only if permitted by the local airport authority and personnel have been trained and authorized..
b) Give marshalling hand signals from a position forward of the aircraft while facing and within view of the flight crew.
c) Wear a high-visibility vest.
d) Use illuminated flashlights/wands to improve the visibility of the hand signals in the following situations:
    1. Insufficient apron lighting.
    2. Poor visibility.
    3. Night conditions.
    4. When required by local airport authorities or regulations.

Caution: To avoid any possible confusion by the flight crew, do not use guide person hand signals for equipment until all aircraft marshalling has been completed.

Note: *The hand signals printed on the following pages are illustrated with the use of wands. The meaning of the signals remains the same when bats, gloves or illuminated flashlights are used.*

Note**:** *It is not possible to give signals for engaging/releasing parking brakes with the use of bats or illuminated flashlights*.

4.1.4.3 Guide Person Signals for GSE

See appendix 1 for relevant signals.

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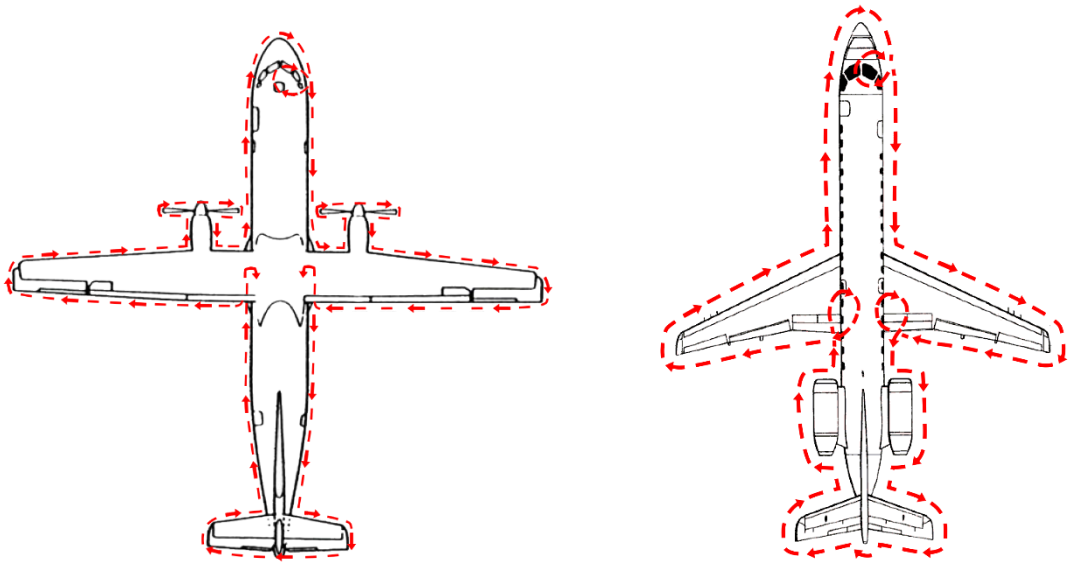
4.1.5 Aircraft Safety Inspection (Walkaround Check)

The supervisor responsible for arrival/departure operations shall inspect the aircraft to check if there is any abnormality found (like obvious, open hatches/panels, fluid leakage, unremoved pitot covers) on the aircraft as per the path shown on the diagram to the following check points:

a) all cargo and cabin doors including service doors;
b) all access panels and servicing access points;
c) sensors and antennas;
d) engine air intake & engine cowls or propellers;
e) fillet;
f) wings;
g) gear area and flaps;
h) contamination check (presence of frost, hoar frost, snow…);
i) Aircraft fuselage.

***Note*:** *If any discrepancy/ abnormality/damage is found shall be reported to a supervisor and to the flight crew.*



***Same for EMB135/145 and A319/A320**

The walkaround check on arrival must be done prior to positioning GSE and after the beacon lights are turned off.

The walkaround prior to departure must start as close as possible to departure time. If any part of the aircraft still has GSE engaged at the time of the check, or if GSE re-engages with the aircraft after the check, the applicable area(s) shall be reinspected.

Walk around the entire aircraft at a normal walking pace.

On the following page are presented checklists that can be used during the aircraft Walkaround check, if needed.

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4.1.5.1 Walkaround Form/ Check

For easier and more systematic walkaround check, Amelia Intl has created two checklists which may be used if needed.

A Walkaround checklist for A319/A320 is not available at the moment.

To request the available forms, contact ground@aeh.flyamelia.com

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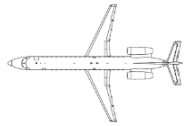
AIRCRAFT WALKAROUND HANDLING FORM - EMB135/145

DATE:		REGISTRATION:		ARRIVAL:	☐
FLIGHT Nb:		STATION:			

ASRA Check:	☐ Before Aircraft Arrival	Pre-arrival inspection that the parking position is free of FOD, obstacles and/or spillage
Incident/Event (insert the time of discovery):		

AIRCRAFT WALKAROUND AT ARRIVAL/ UNLOADING							
Cargo door and frames checked	☐ Yes	☐ No		Probes and antennas checked	☐ Yes	☐ No	
Cabin doors and frames checked	☐ Yes	☐ No		Engine air intakes checked	☐ Yes	☐ No	
Wings/ Winglet/ Fans checked	☐ Yes	☐ No		Landing gear and flaps zones checked	☐ Yes	☐ No	
Engine cowls checked	☐ Yes	☐ No		Cargo (Floor/Wall/Ceiling) checked	☐ Yes	☐ No	
Hatches and access panels checked	☐ Yes	☐ No		Cargo restraints/ nets checked	☐ Yes	☐ No	

Abnormalities found
All the abnormalities (leaks, drains), damage must be reported to the flights crew and below.
Time of discovery: ____H____ (local)
Where is the abnormality found?



Nature of abnormality to be specified:

Name and signature of the Commander (only in case of special damage)	Name and signature of the agent after the performed check

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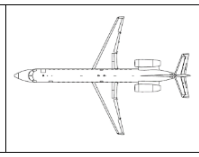
AIRCRAFT WALKAROUND HANDLING FORM - EMB135/145

DATE:		REGISTRATION:		DEPARTURE:	☐
FLIGHT Nb:		STATION:			

ASRA Check:	☐ Before Aircraft Departure	Inspection to ensure that the aircraft's engines can be started without a risk of damage due to FOD. It is carried out at the same time as the Aircraft walkaround before departure
	☐ After Aircraft Departure	Inspection to ensure that the next aircraft can be accepted without a risk of damage due to FOD or without a problem due to contamination at the parking stand.
Incident/Event (insert the time of discovery):		

AIRCRAFT WALKAROUND BEFORE DEPARTURE							
All access panels for start-up (GPU/ASU) checked	☐ Yes	☐ No		Access panels/ Fuel filler caps checked	☐ Yes	☐ No	
All servicing access panels (water and drainage) checked	☐ Yes	☐ No		Cabin and cargo doors: - Panel cover checked - Handles are placed in their housing	☐ Yes	☐ No	
Access panels for air conditioning unit (ACU) checked	☐ Yes	☐ No		Check that safety pins on landing gear removed	☐ Yes	☐ No	

Abnormalities found
All the abnormalities (leaks, drains), damage must be reported to the flights crew and below.
Time of discovery: ____H____ (local)
Where is the abnormality found?



Nature of abnormality to be specified:

Name and signature of the Commander (only in case of special damage)	Name and signature of the agent after the performed check

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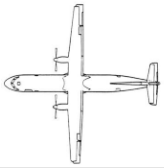
AIRCRAFT WALKAROUND HANDLING FORM - ATR42/72

DATE:		REGISTRATION:		ARRIVAL:	☐
FLIGHT Nb:		STATION:			

ASRA Check:	☐ Before Aircraft Arrival	Pre-arrival inspection that the parking position is free of FOD, obstacles and/or spillage
Incident/Event (insert the time of discovery):		

AIRCRAFT WALKAROUND AT ARRIVAL/ UNLOADING							
Cargo door and frames checked	☐ Yes	☐ No		Probes and antennas checked	☐ Yes	☐ No	
Cabin doors and frames checked	☐ Yes	☐ No		Engine air intakes checked	☐ Yes	☐ No	
Wings/ Winglet/ Propellers checked	☐ Yes	☐ No		Landing gear and flaps zones checked	☐ Yes	☐ No	
Engine cowls checked	☐ Yes	☐ No		Cargo (Floor/Wall/Ceiling) checked	☐ Yes	☐ No	
Hatches and access panels checked	☐ Yes	☐ No		Cargo restraints/ nets checked	☐ Yes	☐ No	

Abnormalities found
All the abnormalities (leaks, drains), damage must be reported to the flights crew and below.
Time of discovery: ____H____ (local)
Where is the abnormality found?



Nature of abnormality to be specified:

Name and signature of the Commander (only in case of special damage)	Name and signature of the agent after the performed check

A4M_Form_GroundOps_012 (Rev00: 15.04.2020)

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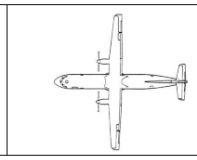
AIRCRAFT WALKAROUND HANDLING FORM - ATR42/72

DATE:		REGISTRATION:		DEPARTURE:	☐
FLIGHT Nb:		STATION:			

ASRA Check:	☐ Before Aircraft Departure	Inspection to ensure that the aircraft's engines can be started without a risk of damage due to FOD. It is carried out at the same time as the Aircraft walkaround before departure
	☐ After Aircraft Departure	Inspection to ensure that the next aircraft can be accepted without a risk of damage due to FOD or without a problem due to contamination at the parking stand.
Incident/Event (insert the time of discovery):		

AIRCRAFT WALKAROUND BEFORE DEPARTURE							
All access panels for start-up (GPU/ASU) checked	☐ Yes	☐ No		Access panels/ Fuel filler caps checked	☐ Yes	☐ No	
All servicing access panels (water and drainage) checked	☐ Yes	☐ No		Cabin and cargo doors: - Panel cover checked - Handles are placed in their housing	☐ Yes	☐ No	
Access panels for air conditioning unit (ACU) checked	☐ Yes	☐ No		Check that safety pins on landing gear removed	☐ Yes	☐ No	

Abnormalities found
All the abnormalities (leaks, drains), damage must be reported to the flights crew and below.
Time of discovery: ____H____ (local)
Where is the abnormality found?



Nature of abnormality to be specified:

Name and signature of the Commander (only in case of special damage)	Name and signature of the agent after the performed check

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4.2 RAMP EQUIPMENT

Respect procedures published in ch. 4.1.2 in regards to operating and working with GSE.

Before using any ramp equipment, make sure that it is compatible with the aircraft and in good working condition. In order to prevent any accident and to avoid any damage to the aircraft, the maximum care must be given during equipment positioning and removal manoeuvres.

Ramp agents have to check that ground service equipment is clean and in perfect working order.

When equipment must be positioned or removed near a cabin door, the manoeuvre must take place with cabin door closed.

In case of extended parking of the aircraft, servicing equipment and access mean must be removed from the aircraft or stowed outside the ERA in order to prevent the access to the cabin.

Precautions before positioning and removal of the ground support equipment

Before use, all materials used for the aircraft handling must be controlled (particularly parking brake). In the ERA are allowed only equipment necessary for the turnaround as specified above.

Positioning of the ground support equipment

To avoid damage to the aircraft, the handrails on conveyor belt, PRM vehicle and catering truck must be in back position during the manoeuvre. If the handrails are not removable, the use of the equipment is not allowed.

Note**:** *Crew is in charge of cabin doors operating, he is the only authorized to open the door of interior. ground staff is in charge of access means positioning.*

Removal of the ground support equipment

- Make sure that the removal railings are fully retracted.
- The equipment operator must advice any personnel on board the aircraft and the person responsible for the operation around the aircraft that the equipment will be removed.

For details refer to ch. 4.1.2.

Maintenance of ground support equipment

The GSE must be regularly maintained under a preventive maintenance program plan applicable for each type of equipment. Maintenance completed on such equipment shall be recorded. The GSE shall remain serviceable and in good mechanical condition.

Monitoring of the maintenance of GSE will be performed on regular intervals as per the compliance monitoring program prescribes.

4.2.1 Access Means

All EMB3135/145 and ATR42 are equipped with drop door that includes stairs- air stairs. The boarding flow has to be strictly controlled and limited to 1 passenger at a time on the aircraft stairs.

Note**:** *For the aircraft equipped with a drop door, the ground staff responsible of the aircraft arrival should confirm to the crew that the dangerous area on the ground is safe before the door opening.*

The access on A319/A320 is gained with Passenger Boarding Bridge (PBB) or with Passenger stairs.

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4.2.2 PRM and Catering Vehicles

PRM

Passenger reduced mobility boarding with a special vehicle equipped with lifting platform is possible for all aircraft. That vehicle is used while complying with the safety requirements relating to the ground handling activities (refuelling, catering).

Due to the fact that the reduced mobility passengers' vehicles are stationed for short periods and that the driver is constantly present, the platform may be lifted to height of the aircraft door sill. Service door is used for this purpose.

CATERING

A standard catering truck may be used on all aircraft types. Trucks height is usually adequate for all other aircraft.

Catering is loaded in the presence of CCM or commercial crew on board. Agent in charge of catering loading shall knock at the service door and wait that the commercial crew opens.

Catering vehicles must be positioned or removed to/from the aircraft with care.

In order to avoid any risk of contact between the service door and the truck floor due to vertical movement of the aircraft during loading and unloading, a 20 to 30 cm gap must be left between the cabin door threshold and the truck floor. In order to protect the cabin door thresholds, a moving bridge should always be used for catering transfer.

4.2.2.1 Rules of Positioning

This equipment shall be used on the following aircraft doors:

Aircraft Type	After disembarkation and before boarding	During disembarkation and boarding	During refuelling
EMB135/145	FWD Right service door	Not allowed	Forbidden
ATR42	AFT Right service door	Not allowed	Forbidden
A319/A320	1R and 4R (Alternatively, 4L may be used upon prior agreement with the Commander)	Not allowed	Forbidden

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4.2.3 Electrical Generation

Regarding the aircraft specifics in the following subchapters refer to chapter 6.

4.2.3.1 Use of APU/ Hotel Mode

The use of APU on ERJ135/145 and A319/A320 or Hotel mode on ATR42/72 during transit time is not systematic. On ground they are used to provide electrical generation for the major equipment, normal and emergency lighting, air conditioning, heating of the cabin, hydraulic generation and to start the engines before departure.

For environmental and economic reasons, the use of the APU/ Hotel mode during the turnaround should be exceptional. Whether on a short turnaround or a long turnaround, the GPU should be connected as soon as the aircraft is arrived on its parking stand.

***Note*:** *Do not start nor turn off the APU during refuelling.*

4.2.3.2 Ground Power Unit – GPU and Fixed Power Unit - FPU

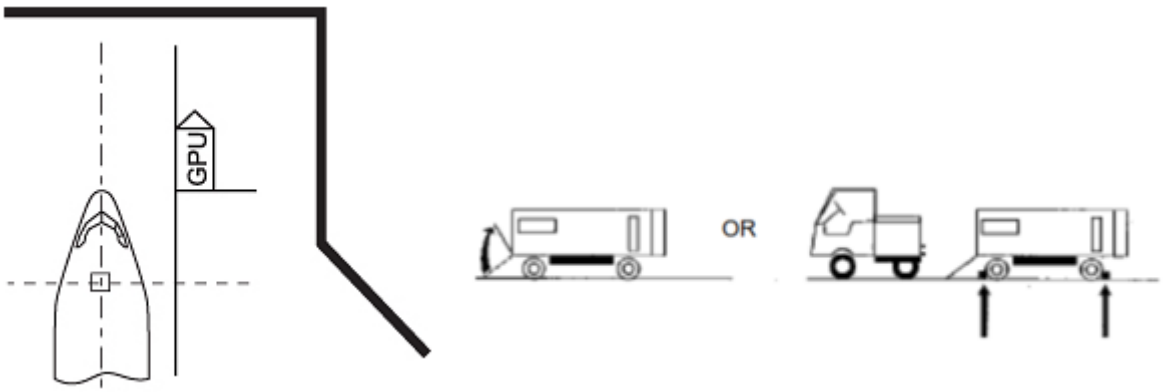
Ground electrical power should be used during the turnaround to supply power on ground.

For engine start on EMB135/145 and ATR42, GPU of **28V DC** should be used.

For engine start on A319/A320, GPU of 115/200V, 400 Hz AC should be used.

GPU positioning

a) It is permitted to pre-position a Ground Power Unit (GPU) inside the ERA provided there is a marked GPU parking position.
b) Position the GPU on the appropriate side of the aircraft as shown on the picture below.
c) Set parking brake/chock for the GPU.
d) Ensure the GPU, while in operation, is positioned a minimum of 3 m (10 ft) from any fueling vehicles and aircraft fuel vent exits.
e) Fixed Power Units (FPU) and leads shall be fully stowed/retracted during aircraft arrival as per the system design.



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GPU connecting

a) Only connect GPU(s)/FPU(s) if required/requested by Amelia Intl.
b) Before connecting to the aircraft, check the aircraft receptacles, lead(s) and plug(s) are clean and undamaged with no sign of excessive wear or electrical burning to the contacts.
c) Do not energise the GPU/FPU power output until the unit is connected to the aircraft.
d) Connect the external power sources according to this GOM, including number of supplies, required output, sockets to be used, etc. Advise the flight crew of any discrepancies.
e) Attach the power lead lanyards to the aircraft attachment point (where fitted).

GPU disconnecting

a) Request approval from flight deck before turning off and disconnecting the GPU/FPU cables.
b) Turn off the GPU/FPU power output before disconnecting the cable(s).
c) Always disconnect and stow the GPU power cables BEFORE connecting a tow tractor to the GPU.
d) After the disconnection, the GPU should be coupled to the tractor and removed from immediate vicinity of the aircraft.

4.2.3.3 Air Start Unit- ASU

***Note*:** *ASU is not applicable for ATR42/72.*

ASU positioning

This equipment is parked outside the engine hazard areas (blast area and suction area) and outside the Fire Security perimeter.

For the towed ASU, towbar is directed away from the aircraft and coupled to the tractor to simplify its removal after engine start-up.

If the ASU is positioned within the engine hazard area, ensure that the applicable engine will be started only after disconnecting/removal of the ASU.

ASU connecting and disconnecting

- Make sure that the air supply hose touches the ground and avoid small-radius elbows. When the hose is connected to the aircraft, please check the locking.
- Engine starting shall be coordinated with the crew in order to avoid wrong operations.
- Once one of the engines has started, and after crew approval, shut off the air supply unit and disconnect the air hose from the aircraft. When removing the ASU, avoid to enter the engine hazard area. The ASU shall also be towed away perpendicular to the aircraft.
- Until the ASU removal, it is mandatory to keep wheel chocks on the nose gear.

***Note*:** *A single air start unit is necessary on the whole Amelia Intl fleet. A current ASU with standard performance levels (40PSI, airflow 155 lbs/min).*

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4.2.3.4 Cooling/ Heating Units/ Pre-Conditioned Air

DANGER: Before supplying air by an external source, make sure that at least one cabin door is open and remains open during air unit operation. Consult the flight crew if needed.

Make sure that a motorized ground air supply unit is not near the aircraft. The engine exhaust pipe of the unit shall point away from the aircraft. Heat from the unit's exhaust can cause damage to the aircraft structure.

Note: *Make sure there is no blockage of the hose.*

a) To connect PCA:
   1. Open the access panel.
   2. Connect ground PCA unit to the aircraft.
   3. Start up ground PCA unit.
   4. On the ground PCA unit, select the desired cooling or heating settings (air temperature and flow rate) or position the selector in the appropriate position.

b) To disconnect:
   1. Shut down ground PCA unit.
   2. Disconnect ground PCA unit from aircraft.
   3. Close the access panel.
   4. Retract the PCA hose to the fully stowed and secured position

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4.2.4 Loading Equipment

4.2.4.1 Baggage Cart

Loading and offloading should normally be performed using baggage or cargo open top trailers or carts brought under the cargo doors, on which loading staff can stand to reach the cargo floor height.

Baggage cart can be composed of 4 carts maxi, it should not exceed 22 m length.

In order to prevent any risk of damage to the aircraft, trailers or carts brought to cargo compartment(s) shall never be backed with a tractor toward the aircraft. They shall be towed and stopped in parallel to it, uncoupled, then individually brought by hand to their working position at or under the cargo compartment door. The same precautions must be taken when removing carts: it must be brought by hand to the tractor.

In case of bad weather, carts shall be covered.

4.2.4.2 Conveyor Belt

In case conveyor belt for loading baggage is used it must be approached to the aircraft very slowly in lowered position. It may be uncoupled at 3 meters from the fuselage and must be secured with chocks before opening cargo door. Avoid any contact between the belt and the fuselage (hold threshold).

The use of forklift truck is forbidden.

***Note*:** *Before removing the loading equipment (conveyor belt or baggage cart), completely replace the nets inside the cargo hold.*

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4.2.5 Pushback and Towing Equipment

A safe connection, operation and disconnection of the pushback or towing equipment must be ensured.

Tractor

Tractor used shall be in good working order (brakes, tires, light, battery, fuel...) and adapted to the aircraft weight to be moved.

Standard tractor is used for all Amelia Intl fleet due to the relatively low MRM.

Caution: In any case it is forbidden to use a tractor type which weight exceeds the aircraft weight.

Towbar

Towing or push-back with a towbar must be done using a specific towbar suitable with the aircraft types. Refer to chapter 6 Aircraft Specifics for the information on towbars that shall be used in regards to the applicable aircraft type.

Towbarless Tractor

This type of tractor is used to push back the aircraft, it is a towbarless tractor which comes to enclose the nose gear to raise it upon departure.

Towing and push back with a towbarless vehicle is authorized when a specific type of tractor is used. This equipment must be specifically approved for the aircraft type.

The tractor approval must include:

- Towing and braking force limitations according to the aircraft type,
- An alarm system shall be installed on the tractor to give to the driver a warning when the allowable maximum steering may have been exceeded.
- The tractor manufacturer should provide to the airline company a certificate which confirms that the above requirements are met,
- A tractor maintenance and periodic recalibration system shall be in effect (oversteering alerting, draw bar pull setting).

Refer to chapter 6 Aircraft Specifics for the information on towbarless vehicles that shall be used in regards to the applicable aircraft type.

Note: *Towing with towbarless system is prohibited on ATR42/72.*

Remote-Controlled Tractor

This is a towbarless and remotely controlled tractor.

The operator is allowed to maintain a very safe distance and observe as the aircraft nose tires are captured by the tug. He is never anywhere in harm's way during the process. Because the remote tugs have a very low profile, he can safely observe every critical movement of the operation with ease and transparency.

The remote tug is battery operated which makes it virtually silent to operate.

Note: *Towing with towbarless system is prohibited on ATR42/72.*

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4.3 AIRCRAFT CLEANING AND DISINFECTION

a) Aircraft Cleaning: The removal of visible dirt or particles through mechanical action, normally undertaken on a routine and frequent basis. Cleaning and disinfection can be combined into one process if disinfectants are used during the cleaning.
b) Disinfection/Sanitization/Sanitation: The procedure whereby measures are taken to control or kill infectious agents on a human or animal body, on a surface, on goods or in/on baggage, cargo, containers, and/or conveyances by direct exposure to chemical or physical agents.
c) Event: An occurrence of suspected or confirmed communicable disease on board an aircraft; or aircraft contaminated with body fluids, or other non-standard (uncommon) situation necessitating additional cleaning and disinfection.

4.3.1 Aircraft Cleaning Intervals

a) Turnaround Cleaning: Performed on aircraft while on the ground prior to departure within a defined ground time.
b) Transit Cleaning: Type of turnaround cleaning that may be performed with transit passengers on board.
c) Layover/Night-Stop Cleaning: Performed when the aircraft is on a longer predefined ground time. The cleaning does not involve removal of cabin panels and/or gallery inserts.
d) Inflight Cleaning: Performed by cabin crew while the aircraft is airborne.
e) Deep Cleaning: Performed when the aircraft is on a longer predefined ground time. The cleaning may include the removal of cabin panels and/or galley inserts. Includes cleaning performed during maintenance.

***Note*:** *Cleaning done during aircraft maintenance is not addressed within the scope of this section.*

4.3.2 Cleaning and Disinfection Products

The cleaning procedures as well as cleaning and disinfecting products used by the ground handling or cleaning company should be airline-approved and based on the aircraft's Original Equipment Manufacturer (OEM) recommendations. This includes following local health organization recommendations and using proper Personal Protective Equipment (PPE). If procedures here within are not clear enough, or additional explanation is needed contact ground@aeh.flyamelia.com

Informed selection and correct use of products is vital in ensuring effective cleaning and disinfection of an aircraft without damaging the aircraft interior, systems and/or equipment while minimizing the likelihood of transmission of any communicable diseases.

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4.3.2.1 Product Selection

a) Refer ch.4.3.2.1 about the guidance for the most recent recommendations on products to be used.
b) Refer to local health authorities for recommendations on products effective against a contagious disease outbreak or pandemic.
c) The International Civil Aviation Organization (ICAO) Council Aviation Recovery Taskforce (CART) Takeoff Guidance recommends the use of a 70% Isopropyl Alcohol (IPA) solution as a disinfectant for the touch surfaces in the cockpit, cabin and cargo holds. Cleaning and disinfection products should comply with and be certified according to OEM standards and/or industry test standards, such as SAE International standards:
    1. AMS1452C, Disinfectant, Aircraft, General Purpose (concentrated liquid).
    2. AMS1453A Disinfectant Cleaner for Aircraft Interior General Purpose Liquid (diluted).
    3. AMS1525D Cleaner for Aircraft Exterior Metallic Surfaces, Wipe Solvent, Cold Operations.
    4. AMS1526C Cleaner for Aircraft Exterior Surfaces, Water-Miscible, Pressure-Spraying Type.
    Note**:** *These standards might need to be approved by the local authorities, if applicable.*
d) Consultation with OEMs or with Amelia Intl ground ops department before using any disinfection agents that do not comply with SAE standards is required.
e) Refer to the cleaning and disinfection product manufacturer's instructions to ensure the proper application, ventilation and PPE is used.

4.3.2.2 Product Use

The following recommendations are based on OEM guidelines:

a) It is important that the cleaning and disinfection liquids are used exclusively according to the product specifications and manufacturer Safety Data Sheet (SDS).
b) Use premixed cleaning and disinfection liquids where possible to avoid mixing ratio errors.
c) Special attention must be paid to the application instructions and mixing ratios (e.g., wipe on, wipe off, water rinsing, drying after cleaning).
d) Use only the allowed bottle sizes on board to minimize the risk of spilling the cleaning and disinfection solutions.
e) Do not spray cleaning and disinfection liquids in the cargo compartment. Instead, apply as per the product and/or airline application instructions (e.g., wet wipe on/off).
f) Do not allow cleaning and disinfection liquids to contact critical equipment (e.g., smoke detector, electronic door operation equipment and fire extinguishing discharge nozzle).
g) Disinfectants are flammable. Take precautions around potential sources of ignition, especially hidden sources such as electronic boxes mounted in the cargo compartment.
h) Airlines should periodically inspect the aircraft interior and cargo holds to ensure there are no long-term effects or damage over time due to frequent use of cleaning and disinfection products. If damage is observed, contact the OEM.

Caution:

1. **Use of non-certified cleaning and disinfection liquids can lead to severe damage to material in the aircraft's interior.**
2. **Use of cleaning and disinfection liquids in the wrong mixing ratio or using the wrong application method can lead to severe damage to material in the aircraft's interior.**
3. **Cleaning and disinfectant solutions tend to be oxidizers. The interior of an aircraft contains many materials susceptible to damage from oxidization. Care must be exercised when using cleaning products and disinfectants.**
4. **Metals used in aircraft construction may corrode upon exposure to cleaning and disinfection products.**

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5. **Safety-critical cables and wires may deteriorate upon exposure and aircraft furnishings may have their fire-resistant properties reduced.**
6. **Some cleaning and disinfection products, such as IPA, are flammable. Care must be exercised in the aircraft interior, especially near various electric installations and boxes as these are sources of ignition.**

4.3.2.3 Cleaning Equipment

All equipment and materials used to clean aircraft shall be in accordance with the approved standards.

a) Vacuum Cleaners: Aircraft-powered or battery-powered vacuum cleaners can be used for carpets, air vents, seat arm storage, seat rails, behind-the-seat storage, etc. Manual (non-electric) carpet sweepers are not an adequate substitute, but may be necessary when time is limited or a large number of passengers remain on board.
Caution: Do not unplug a vacuum cleaner by pulling on the cord. Pull from the plug.
b) Hand Brushes: For use in areas inaccessible to vacuum cleaners.
c) Chewing Gum Remover: To remove chewing gum.
d) Mops and Brooms: For cleaning floors and other hard surfaces. Must be clearly identified or color-coded for toilet cleaning and general cleaning to avoid cross-contamination (e.g., red/blue for lavatories, yellow for galleys, green for cabin). They shall be separated at all times, including during cleaning activities.
e) Towels/Cloths: There are different types according to airline requirements for general purpose cleaning and polishing. Must be clearly identified or color-coded for toilet cleaning and general cleaning (top-down approach). They shall be separated at all times, including during cleaning activities.
f) Absorbent Wipes: For mopping up spillages.
g) Hand Sprayers: For dispensing detergents and disinfectants.
h) Runners: For floor and/or carpet protection.
i) Soft Rolls/Wipes: For wiping up spillages.
j) Buckets: Buckets need to be checked to ensure the cleaning liquid is being replaced regularly.

4.3.3 Cleaning and Disinfection Tasks

The cleaning and disinfection tasks serve as a guideline on how to provide a safe and sanitary operating environment for passengers, crew and cleaning personnel.

The tasks, as defined in the following tables, are established based on the suggested IGOM tasks and the recommendations presented there.

Take the following in considerations:

a) Ensure the cleaning and disinfection products are used in the correct mixing ratio according to the application instructions and/or product SDS.
b) Ensure the correct mixing ratio is used for relevant areas as per the SDS. There might be a different mixing ratio for the same product for different areas (e.g., 1:10 for cleaning in cabin surroundings and 1:5 for lavatories and galleys).
c) Ensure the correct application method is used according to the application instructions and/or product SDS (e.g., apply with premoistened wipes or single-use wetted cloths).
d) To avoid contamination on board, cleaning staff shall carry their own cleaning equipment to avoid unnecessary exchanges of cleaning items between different teams or persons.

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Caution:

1. **If spraying methods are used, do not spray directly into power supply panels, lighting, vents, interphone, coffeemakers or other electrical systems. Disinfectant should only be applied using a cloth in these areas.**
2. **Immediately inform an airline representative if any of these areas are accidentally sprayed.**
3. **Ensure cleaning and disinfection products are wiped off after application using a slightly moist towel, if required by the SDS. Residues of cleaning and disinfection products left on surfaces (e.g., tables) may lead to severe discoloration and permanent damage of the cabin interior.**
4. **Ensure a suitable cloth is used for aircraft cabin cleaning.**

4.3.3.1 Cleaning and Disinfection tasks checklist

AMELIA International

CLEANING AND DISINFECTION TASKS

This checklist serves as a guideline on how to provide a safe and sanitary operating environment for passengers, crew and cleaning personnel.

The person(s) performing the cleaning and disinfection should, when possible, use this checklist. He/she could either mark the tasks performed or only use the list as a reminder of the tasks to be performed. It is recommended to tick the tasks performed.

There is no specific need to send the filled checklist back to Amelia Intl. It could be saved and processed as per cleaning company's internal procedures.

Instructions:

The following basic guidelines should be followed:

a) Ensure the cleaning and disinfection products are used in the correct mixing ratio according to the application instructions and/or product SDS.
b) Ensure the correct mixing ratio is used for relevant areas as per the SDS. There might be a different mixing ratio for the same product for different areas (e.g., 1:10 for cleaning in cabin surroundings and 1:5 for lavatories and galleys).
c) Ensure the correct application method is used according to the application instructions and/or product SDS (e.g., apply with premoistened wipes or single-use wetted cloths).
d) To avoid contamination on board, cleaning staff shall carry their own cleaning equipment to avoid unnecessary exchanges of cleaning items between different teams or persons

Caution:

1. If spraying methods are used, do not spray directly into power supply panels, lighting, vents, interphone, coffeemakers or other electrical systems. Disinfectant should only be applied using a cloth in these areas.
2. Immediately inform Amelia Intl's representative if any of these areas are accidentally sprayed.
3. Ensure cleaning and disinfection products are wiped off after application using a slightly moist towel, if required by the SDS. Residues of cleaning and disinfection products left on surfaces (e.g., tables) may lead to severe discoloration and permanent damage of the cabin interior.
4. Ensure a suitable cloth is used for aircraft cabin cleaning.

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AMELIA International **CLEANING AND DISINFECTION TASKS**

FLIGHT DECK Tasks	Turn around	Layover
Clean and disinfect the pilot and first officer seats, including armrests, table and seat controls.		
Clean and disinfect seatbelt buckles.		
Clean and disinfect flight controls (e.g., control column).*		
Clean and disinfect the sidewall lining and associated controls (e.g., nose wheel steering tiler, display controls, electronic flight bag).*		
Clean and disinfect the instrument panel and associated controls (e.g., gear lever).*		
Clean and disinfect the glareshield and associated controls (e.g., autopilot, warning/caution buttons).*		
Clean and disinfect the sun visors and surrounding area.*		
Clean and disinfect the overhead panel, including grips and handles.*		
Clean and disinfect the central console, including engine controls, flaps, communication units, etc.*		
Clean and disinfect the pilot and first officer headsets.*		
Clean the inside of the windshield with the designated product.*		
Clean and disinfect the cabin access door (both sides), handle and lock.		
Extend, clan and disinfect the folding seats/jump seats and any associated equipment.		
Clean down pedals.*		
Clean floor, vacuum carpet, empty waste boxes, wipe shelves.		

Caution:

a) Frequency of cleaning of the flight deck should account for both separation of the flight deck from the passenger compartment and frequency of crew transitions.
b) The cleaning of the flight deck can be done only after being permitted to enter the flight deck by the flight crew or maintenance personnel.
c) Cleaning and disinfection fluids for the flight deck can be different from fluids used in the cabin.
d) Do not spray disinfectant directly onto panels and screens; it should be applied with cloth.
e) Ensure liquid does not seep into controls.
f) Any accidental adjustment of important instruments during the cleaning process must be reported to the flight crew or maintenance personnel.
g) Buckets shall not be brought into the cockpit.

Note: Cleaning and disinfecting of areas designated with an asterisk (*) above shall be done by personnel specifically trained for flight deck cleaning.

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AMELIA International **CLEANING AND DISINFECTION TASKS**

LAVATORIES Tasks	Turn around	Layover
Clean mirrors using authorized glass cleaners.		
Ensure all soap dispensers are functional and refilled with liquid soap (only if instructed by the crew or Amelia Intl representative)		
Clean and disinfect soap dispensers.		
Clean and disinfect hand basin, handles and steel fittings.		
Clean and disinfect sidewall panels and ceiling.		
Clean and disinfect shelves.		
Clean and disinfect diaper changing table, where available.		
Clean and disinfect toilet bowl, shroud, seat and flushing mechanism (lever or button).		
Empty waste bin(s) and replace waste sac, if applicable. Clean and disinfect compartment, including flap, before reinstalling bin(s).		
Clean and disinfect floor.		
Ensure toilet compartment is dressed and stocked with amenities required for flight (only if instructed by the crew or Amelia Intl representative)		
Clean and disinfect lavatory door (both sides), including the door lock, knob/lever, grip, door grilles and coat hook(s), if applicable.		

Caution:

a) Immediately wipe off any cleaning/disinfectant liquid spills on the surfaces to prevent damage or deterioration.
b) Toilet cleaning shall be performed from top to bottom for hygienic reasons.
c) Use only towels identified specifically for toilet cleaning.
d) Do not reuse mops and towels used for toilet cleaning outside of lavatories.

AMELIA International **CLEANING AND DISINFECTION TASKS**

GALLEYS Tasks	Turn around	Layover
Clean and disinfect worktops, countertops and service table.*		
Clean ovens.*		
Clean coffeemakers.*		
Clean water boilers.*		
Clean and disinfect panels and doors.		
Clean and disinfect switcher panels and handles.*		
Empty and clean waste compactor; add waste sac/box, if needed.		
Clean and disinfect lockers/drawers.*		
Clean and disinfect trolley containers and storage.*		
Drain and disinfect sinks, including taps and drain plug.*		
Remove trash from bin compartments and clean/disinfect bin area, including flap.		
Sweep, mop and disinfect floor.		

Caution:

a) Clean ovens and aluminium surfaces with detergents as per recommended standards.

* Do these tsks only if required by Amelia Intl, its crew or any other representative.

CABIN CREW SEATS AND SERVICE/ENTRY DOOR LINING PANELS Tasks	Turn around	Layover
Clean and disinfect each attendant seat, seatbelt and surrounding location.		
Clean and disinfect cabin crew intercom.		
Empty and clean seat pockets.		
Inspect emergency leaflets for damage and clean, disinfect or inform crew to replace.		
Arrange or remove and replace literature and amenities, where applicable.		
Clean and disinfect seat upholstery and remove any evident stains.		
Clean and disinfect door frames, including door panels, sills and exit doors.		

AMELIA International **CLEANING AND DISINFECTION TASKS**

PASSENGER SEATING AREA Tasks	Turn around	Layover
Use vacuum cleaner to remove loose particles from seats, floors, carpets and curtains after cleaning and disinfecting.		
Remove headcovers and pillow covers from seats, if applicable.		
Clean and disinfect cabin windows, window shades, dimmable window controls, if applicable, sidewall lining and ceiling, including air nozzles.		
Clean and disinfect interior and exterior of overhead bins, including handles.		
Remove all waste from seat pockets, arm rests, back rest pockets, shoe bins and seat lockers, then clean and disinfect.		
Clean and disinfect or inform crew to replace emergency leaflets.		
Clean, disinfect and dry both sides of tray tables (including cocktail table, if applicable), including the locking mechanism.		
leather seat covers, wipe and ensure seats are dry.		
Remove any visible stains on seats or inform crew about a change of fabric.		
Clean and disinfect seat belts and buckles.		
Clean and disinfect arm rests and passenger control units (e.g., reading lights, air nozzles, IFE remote control, seat controls).		
Clean and disinfect extra seat belts and other amenities, when requested by crew.		
Clean ventilation grids/grilles.		

Caution:

a) Be careful while handling disposable bags to avoid sharp objects that may have been disposed of by passengers.
b) If there is a chewing gum stain on the floor or seats, use gum remover to remove the stain rather than sharp objects.
c) For some parts of the aircraft (e.g., closets, doghouse), assistance from crew or Engineering may be requested to remove emergency equipment to enable cleaning and disinfection.

AMELIA International **CLEANING AND DISINFECTION TASKS**

CARGO HOLD Tasks	Turn around	Layover
Clean and disinfect cargo door surroundings and door handles for all lower deck cargo holds (FWD, AFT and Bulk), in addition to main deck cargo door for cargo aircraft.		
Clean and disinfect cargo loading control (CLS) panels, including cargo joystick in ceiling and latches, where applicable.		
Clean and disinfect all access panels and service access points, including cargo door control panels.		
Clean and disinfect door net stanchions, net attachment fittings and tie-down points, if applicable, in bulk compartment.		
Clean and disinfect light switches.		
Clean and disinfect main deck (all cargo aircraft).		

Caution:

a) When cleaning and disinfecting the complete cargo hold, please refer to OEM guidance for further clarification of appropriate techniques to be used.
b) Any aircraft where personnel have to work inside the compartment to manually load/unload, cleaning of floor areas should be considered (e.g., bulk loaded cargo holds).

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4.3.4 Aircraft Cleaning and Disinfection During a Pandemic

During a pandemic, all existing cleaning best practices are, in principal, still applicable. However, they need to be revised and amended based on the regulatory requirements, airport cleaning plan, and OEM recommendations to include new measures addressing the threat.

Based on a conducted risk assessment, each airline may implement different cleaning and disinfection schedules, techniques and products, which consider the operational circumstances and duration of the disinfecting effects of the substance(s) use.

Amelia Intl will normally hire specialized companies to perform a proper disinfection of the aircraft.

4.3.4.1 Actions Prior to Cleaning

To minimize person-generated contaminant concentrations during ground and flight operations, OEMs recommend maximizing total cabin airflow; therefore, care should be taken to avoid blocking air vents (particularly along the floor).

The following are general recommendations for cabin air considerations and there may be exceptions for specific aircraft models. It is strongly recommended that operators consult with the aircraft OEM for questions specific to an aircraft type.

a) The aircraft Auxiliary Power Unit (APU) should be permitted to be used at the gate/stand to enable the aircraft's air conditioning system to be operated, if equivalent filtration from the external Pre-Conditioned Air (PCA) is not available.
b) If the aircraft has an air recirculation system, but does not have High-Efficiency Particulate Air (HEPA) filters installed, refer to OEM documents or contact the OEM to determine the recirculation system setting (applicable for EMB135145 and ATR42/72)
c) It is recommended that fresh air and recirculation systems be operated to exchange the volume of cabin air before cleaning crew enter the aircraft for cleaning purposes.
    1. For those aircraft with air conditioning, run the air conditioning packs (with bleed air provided by the APU or engines) or supply air via an external PCA source for at least 10 minutes prior to the boarding process, throughout boarding and during disembarkation (applicable for EMB135145 and ATR42/72)
    2. For aircraft with HEPA filters, run the recirculation system to maximize flow through the filters (N/A for Amelia Intl fleet).
    3. For those aircraft without an air conditioning system, keep the aircraft doors open during the turnaround to facilitate cabin air exchange (passenger doors, service door and cargo door) as much as practical (N/A for Amelia Intl fleet).
    Caution: Ensure access doors are only in the open position if there is an appropriate boarding device or other equipment positioned at the door.

***Note*:** *Ensure cleaning equipment and tools (e.g., vacuum cleaners, brushes, brooms) are clean and hygienic prior entering the aircraft cabin and between use.*

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4.3.4.2 Actions During Cleaning and Disinfection

a) Once on board, ventilation systems should be kept running while cleaning takes place.
Note: *In some cases, depending on the technique used for disinfection, regulators may recommend that the air conditioner be turned off during the disinfection operation and the passenger cabin fully ventilated after disinfection.*
b) To avoid contamination on board, cleaning crew shall:
   1. Be assigned specific tasks, as much as possible.
   2. Use different cleaning materials in each task area (e.g., cloths, buckets, brushes, mops), potentially using color-coded items.
   3. Carry their own cleaning items on board to avoid unnecessary exchange of cleaning items between different teams/persons.
   4. Use new disposable gloves in each area. Disposable gloves shall not be reused in other sections of the cabin.
   5. Follow the correct sequence of cleaning; for example, from top to bottom or front to back, as relevant (e.g., toilets, galleys, floors).
c) Use disinfection product(s) as per the recommendation in ch. 4.3.2.2.
d) Clean and disinfect all defined areas as specified in ch. 4.3.3 by using approved disinfection products as defined in ch. 4.3.2.2.and appropriate cleaning materials/tools such as mopping, wiping, or any other approved methods.

4.3.4.3 Actions after Cleaning and Disinfection

After cleaning and disinfection, ensure cleaning crew disembark with all items for cleaning, including all garbage, and that the following provisions are followed:

a) Disposal of waste must be done in accordance with local airport authority regulations.
b) Personnel disembarking the aircraft with waste materials shall wear gloves to protect themselves and dispose of gloves after the disposal process.
c) Keep PBB or steps unobstructed by waste bags.
d) Do not throw waste bags onto the ramp from the aircraft or steps.
e) If any amenities are to be loaded prior to departure, ensure this is done and indicated in the handover documentation.

4.3.4.4 Handover Procedures

When required, a handover protocol should be established by the ground handling or the cleaning company, including a record to indicate that the aircraft has been cleaned and disinfected according to the ICAO aircraft disinfection sheet or any other official sheet issued by the disinfection company ensuring that the needed information is included. To obtain the ICAO aircraft disinfection sheet contact ground@aeh.flyamelia.com

4.3.4.4.1 Lost, found, damaged or suspicious items

- Do not check/open any items found as the nature of the contents is unknown and has the potential of being harmful/dangerous.
- Any lost property found must be handed in according to local procedures.
- Any seat or cabin interior/area found damaged must be reported, as appropriate.
- Any suspicious item found must be immediately reported as per local procedures.

Caution: Limit the number of personnel moving into/out of a cleaned aircraft to maintain the sterile environment prior to boarding.

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4.3.5 Cleaning and Disinfection During an Event

4.3.5.1 Suspected or Confirmed Case of Communicable Disease on Board

The following are guidelines for cleaning crew who have to clean an arriving aircraft with a suspected case of communicable disease. During an outbreak of a specific communicable disease, the World Health Organization (WHO) or the national health authorities may modify or add further procedures to these guidelines.

a) Wear PPE as recommended by the national public health authority.
***Note*:** *PPE requires appropriate training before use.*
b) Remove and discard gloves after cleaning or if they become soiled or damaged.
c) Use only cleaning agents and disinfectants at recommended concentrations and contact times that have been approved by OEMs.
d) Begin cleaning at the top (light and air controls) and proceed downward progressively working from clean to dirty areas.
    1. Surfaces to be cleaned include:
        i. Affected seat
        ii. Adjacent seats in the same row
        iii. Back of seats in the row in front
        iv. Light and air controls
        v. Adjacent walls and windows
        vi. Seatbacks (the plastic and/or metal part)
        vii. IFE video monitor
        viii. Tray tables
        ix. Armrests
        x. Remove seat pocket contents and replace (safety briefing card can be cleaned with approved disinfectant)
    2. Clean lavatory(ies) used by the sick passenger, including:
        i. Door handle
        ii. Locking device
        iii. Faucet
        iv. Wash basin
        v. Adjacent walls
        vi. Counter
        vii. Toilet seat

    ***Note*:** *In exceptional circumstances, public health authorities may require additional cleaning.*

e) Disinfection of upholstery, carpets, or storage compartments is only indicated when they have been soiled by body fluids. In such cases, use an absorption agent first, if required, clean any visible soil and disinfect before vacuuming to eliminate the risk of re-aerosolization.
f) Wash hands with soap and water immediately after PPE is removed. An alcohol-based hand sanitizer may be used as an alternative if the hands are not visibly soiled.
g) Dispose of soiled material and PPE in a biohazard bag if one is available. If not, place in an intact plastic bag, seal it, and label it as biohazard.
h) Do not use compressed air. It might re-aerosolize infectious material.

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4.3.5.2 Aircraft Contaminated with Body Fluids

When contaminated with blood, respiratory secretions, vomit, excretions and other bodily liquid (contaminants), the aircraft cabin should be disinfected by ground cleaning crew or specially qualified personnel after disembarkation.

Air Conditioning Unit (ACU) should be adjusted to ensure full ventilation is completed and then turned off.

Once the air ventilation is finished:

a) Wear disposable gloves and other PPE according to local instructions.
b) Absorb the contaminant(s) into a towel or apply absorbent powder and disinfectant to the contaminants evenly.
   Note: *Absorbent and disinfectant used must have been tested and approved for the interior material being cleaned.*
c) Place the used towel and gloves in a biohazard or other waste bag. When using absorbent powder, remove the coagulated contaminants with portable pickup shovels and place into biohazard waste bags.
d) Clean and disinfect the contaminated area wearing new gloves. It is important to follow the application method and effective contact time as per the OEM SDS.
e) Remove gloves and clean/disinfect hands before removing other PPE in the following order:
   1. Take off protective suits (aprons) and gloves.
   2. For visibly soiled hands, wash with soap and water thoroughly.
   3. Take off goggles and facial mask/shield.
   4. Apply skin disinfection/hand sanitizer to clean hands and other parts of the body that may have been exposed to contaminants.
   5. Place all used PPE and contaminated items in a biohazard waste bag and seal the bag.
   6. Dispose of the biohazard as per local regulations.

Note**:** *When cleaning and disinfection was initially performed by cabin crew during flight, they should inform ground departments at destination to prepare for additional cleaning and/or disinfection, if need be, and disposal of biohazard.*

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4.4 TOILET SERVICING

All aircraft in Amelia Intl fleet have an outside lavatory servicing connection. See chapter 6 for relevant aircraft type concerning the service panel location.

The complete procedure for servicing the aircraft toilet waste tank(s) consists of the following three steps:

a) Draining the waste tank(s)
b) Flushing of waste tank(s)
c) Adding an amount of pre-charge and/or concentrated deodorant pre-charge product, as applicable

Caution:

1. ***Toilet fluids are corrosive.***
2. ***Prior to servicing, inspect the toilet servicing panel on the aircraft for signs of leakage.***
3. ***If any horizontal blue streaks are observed, the blue streak must be cleaned prior to servicing.***
4. ***After cleaning, look again for signs of leakage.***
5. ***Blue ice build-up in higher altitudes may influence airworthiness. In case of a possible leak, immediately inform the airline representative, ground engineer, or advise the flight crew.***

4.4.1 Hygiene Precautions

The person when performing the toilet servicing must wear heavy rubber gloves, full face protection and protective clothing against harmful wastes.

Do not park the toilet service unit in the same area as the water service unit nor at the water filling point.

Once an agent has performed toilet servicing on an aircraft, the same agent cannot perform water servicing during the same shift

4.4.2 Toilet Servicing Procedure

See chapter 6 for applicable aircraft type. Below are presented general procedures:

a) Prior to opening a toilet service panel, check for stains around the panel.
b) While opening the service panel, stay clear and watch for signs of leakage.
c) Stay clear of the drain fitting cap while opening and watch for signs of leakage.
d) Make sure the drain hose Y-fitting coupling is connected correctly, before a drain valve handle is pulled.
e) Empty the waste tank(s).
f) Flush the waste tank(s) twice and empty them again.
g) Recharge the tank(s) with the correct quantity of water and disinfectant–as applicable.
h) Fill the waste tank(s) with the correct amount of water as presented in subchapter 4.2.4.4 and concentrated deodorant recharge packets or pre-mixed fluid as applicable.
i) After servicing ensure that there are no leaks at the drain fitting cap and the end of the drain hose Y-fitting coupling.
j) Close the nozzle tightly in order to prevent the accumulation of ice during flight and wipe off residual water and disinfectant.
k) Check for possible leakage.
l) After servicing close and latch the fitting caps and service panel door.

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***Note*:** *Inform flight crew if:*

1. *Fluid leakage is observed.*
2. *The drain valve will not open or the waste tank cannot be drained.*

Report any spillage of waste to supervisor.

4.4.2.1 Draining

Drain the aircraft waste system into the waste tank of a toilet service unit.

Observe the waste drain hose during draining to confirm that the waste tank is completely emptied. The hose will vibrate for a few seconds as the contents of the waste tank pass into the waste tank of a toilet service unit.

Note: *Drain the waste tanks one at a time for optimal results.*

4.4.2.2 Servicing During Freezing Conditions

It is mandatory to drain the toilet waste water tank if temperature is near or below 0°.

Take the following measures to prevent freezing of the fluid in the aircraft toilet tanks and lines during freezing conditions:

a) Drain the waste tanks if the aircraft is parked in the open for several hours without electrical power supply and the temperature is, or is expected to be, below the freezing point.
b) Fill the aircraft toilet system only after electrical power supply has been restored, and as close to flight departure time as possible.
c) Ensure the fill line is fully drained before closing the cap to prevent freezing of fluid in the fill line.

Caution*: *Do not attempt to remove the frozen substance in the fill lines or connections or on the service panels. Inform the flight crew/ maintenance immediately.

4.4.2.3 Inoperative Toilet Systems

If defects in the toilet system prevent regular servicing, ask qualified technical personnel, if available, for assistance (e.g., removal of panels).

If no technical personnel are available, inform the flight crew.

4.4.3 Waste Tank Capacity

Aircraft Type	Waste Tank capacity in Litters
EMB135	7
EMB145	7
ATR42	8
A319/A320	170

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4.5 POTABLE WATER SERVICING

a) The water used for uplift shall fully meet the hygiene and testing requirements detailed in AHM 440 7.5, 8.11.1 and 9.1 and those detailed in GOM section 4.5.1.
b) Equipment used shall fully comply with the specifications detailed in AHM 970 for water servicing vehicles, or AHM 981 for towed service carts.
c) All equipment shall be serviced according to the manufacturer's recommendations. Records shall be kept of all servicing, cleaning, disinfection and maintenance tasks performed.
d) All equipment and facilities used shall be maintained to the highest possible hygienic standard.
e) Only uplift water to aircraft if authorized or requested by Amelia Intl.
f) Replenish the aircraft tank according to Amelia Intl's instructions. Any deviation shall be reported to the supervisor or the Commander.
g) The Commander shall be informed of any issue that may affect (or may have affected) the standard of water uplifted to their aircraft, including contamination incidents, maintenance findings and test failures

4.5.1 Hygiene Precautions

4.5.1.1 Fill Points and Water Cabinets

a) Daily, weekly and monthly tasks shall be conducted and recorded as per AHM 440 7.5 and 9.1.
b) Hoses, connectors and water quality shall meet AHM 440 specifications and hygiene requirements.
c) The water shall only be used as potable water for aircraft.
d) The area around the fill point/water cabinet shall be kept clean and free from rubbish.
e) When not in use, all fill point hoses shall be secured and locked in a metal pest proof enclosure. Fill points without attached hoses shall be capped.
f) When not in use, hose-ends shall be:
    1. Kept capped or;
    2. Attached to a dummy connector or;
    3. Kept in a container filled with disinfectant solution or;
    4. Treated with disinfectant before use.
g) Do not place hose ends on the ground

4.5.1.2 Water Service Vehicles and Towed Service Carts

The water service vehicles and towed service carts shall:

a) Daily, weekly and monthly tasks shall be conducted and recorded as per AHM 440 8.11.1.
b) Only be filled at a designated potable water fill point using approved hoses and couplings.
c) Only be used to fill aircraft potable water tanks.
d) Be parked in a clean and secure area, away from toilet servicing vehicles.
e) Not be positioned close to toilet servicing units at any time, particularly when toilet servicing or toilet waste disposal is taking place.

Note 1: *The water service vehicles and towed service carts should be parked in a shaded area during hot sunny weather, particularly if filled.*

Note 2: *The tank shall be drained completely at least once per calendar day.*

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4.5.1.3 Water Servicing Staff

The water servicing staff shall:

a) Be dressed with clean working clothes in accordance with the WHO Drinking Water Quality Standard and shall be assigned to the drinking water servicing.
b) For hygiene reasons, if operators conduct both toilet and water servicing functions during the course of their shift, the operators must service potable water before servicing aircraft toilets.
Caution: Should the operator be reassigned to perform water servicing after he/she has performed toilet servicing, the operator shall shower and change into clean external clothes/overalls and PPE.
c) The operator should wear single use or disposable gloves during the drinking water servicing. AHM 440 10.9.

4.5.1.4 Water Treatment Chemicals (Sanitiser)

Water uplifted to aircraft potable water tanks shall contain a low concentration of disinfectant chemical (sanitiser), of a type suitable for potable water. The most common sanitisers are based on chlorine or hydrogen peroxide. Refer to AHM 440 for details.

4.5.1.5 Water Service Vehicle Cleaning and Disinfection

Water service vehicles, towed service cart tanks and hoses shall be checked every day, disinfected at least once per week and 'deep' cleaned at least once per month. Refer to AHM 440 for details.

4.5.1.6 Fill Point and Water Cabinet Cleaning and Disinfection

a) Fill points, hose cabinets and their surroundings shall be checked daily for general cleanliness.
b) Fill points and hoses shall be disinfected at least once a week. Refer to AHM 440 for details.

4.5.2 Potable Water Servicing Procedures

4.5.2.1 Filling Aircraft Water Tanks

a) Before connecting the aircraft filling hose to the aircraft, flush the hose.
Note: *The hose needs to be flushed in a basket or waste container before connecting the hose to the aircraft filling port. (Not required on consecutive servicing).*
b) Do not place hose ends on the ground.
c) On immediate turnaround sequence, water service shall always be performed before toilet service.
d) The aircraft filling port shall be cleaned/wiped dry with antiseptic wipes before the hose is connected to the aircraft adaptor.
Note: *Cleaning may be carried out either by wiping with a towelette or equivalent soaked with a disinfecting solution or wiping with a disinfectant pre-soaked "towelettes". The spray-and-wipe procedure is accepted if sprayed directly on the towelette. However, they should not spray directly into the aircraft coupling.*
e) Fill the water tank(s) to the required level.
f) Each aircraft type has specific requirements for filling and draining. Refer to the ch. 6 for the relevant aircraft type.
g) When not in use, hose-ends shall be:
    1. Kept capped or;
    2. Attached to a dummy connector or;
    3. Kept in a container filled with disinfectant solution or;
    4. Treated with disinfectant before use.

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4.5.2.2 Water Servicing During Freezing Conditions

The following actions must be followed to prevent freezing of the water in the aircraft water tanks and lines during freezing conditions:

a) Drain the aircraft water tanks if instructed by the flight crew. Dispose of the water in accordance with airport operator requirements.
b) Ensure the fill line is fully drained before closing the cap to prevent freezing of fluid inside.

Caution*: *Keep aircraft cargo doors closed to prevent water lines from freezing when the cargo compartments are not being loaded or unloaded.

Do not attempt to remove the frozen substance in the fill lines or connections or on the service panels. Inform the flight crew/ maintenance immediately.

4.5.3 Water Tank Capacity

Aircraft Type	Water Tank capacity in Litters
EMB135	20
EMB145	20

Aircraft Type	Water Tank capacity in Litters
ATR42	15
A319/A320	200

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4.6 AIRCRAFT ARRIVAL

4.6.1 Actions Prior to Arrival

a) Conduct FOD check on entire stand removing all debris just prior to arrival.
b) Make sure the stand surface condition is sufficiently free of ice, snow, etc., to ensure safe aircraft movement.
c) Make sure all required GSE, chocks and safety cones are available and serviceable, and are positioned well clear of the aircraft path, outside the ERA.
d) Make sure the aircraft guidance docking system is activated, where applicable, or a marshaller is in position. Where an aircraft docking guidance system is in use, ensure it is operative and only activated when it is confirmed that conditions are safe to accept the aircraft. See ch. 4.13.1.3 for wing walker positioning for Aircraft Arrival.
e) Make sure required ground personnel are present including any additional personnel (i.e. wing walker) if applicable. See ch. 4.13.1.3 for wing walker positioning for Aircraft Arrival.
f) All personnel shall remain well clear of the arriving aircraft and its maneuvering path, outside the ERA, other than those whose functions require them to be inside the ERA during aircraft arrival, e.g., marshaller(s) and/or wing walker(s), until::
    - The engines have been shut down and are spooling down.
    - The anti-collision lights have been switched off,
    - The main gear wheel chocks are positioned.

4.6.1.1 Aircraft guidance

Person responsible for arrival shall:

- use the conventional signals (App.1).
- be in constant view of the captain and make precise gestures.
- Adapt the rhythms of the gesture to the aircraft speed.
- Comply with ground markings
- Stop the aircraft with the nose landing gear aligned with the fuselage axis and on the stop marking.

***Note*:** *During a turn, the outer wingtip and sometimes the stabilizer may swerve to the exterior. See page "turn" radius" in chapter 6.*

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4.6.2 Actions During Aircraft Arrival

a) For a standard arrival at a stand without an automated guide-in system or at an open ramp:
   1. As the aircraft approaches the stand area, the marshaller points to the guide-in line on the ramp to be followed by the aircraft by standing at the top of the guide-in line and giving the "Identify Gate/Stand" signal. Wing walkers, if required, will be positioned approximately 1 m (3 ft.) outside the path of the wingtips. Wing walkers shall maintain visual contact with the marshaller until the aircraft has come to a complete stop. See picture on next page for positioning of wing walker during aircraft arrival on stand.
   2. While the aircraft taxies along the guide-in line, the marshaller gives the "Continue to Taxi Straight Ahead" signal with marshalling wands.
   3. The nose wheel should follow the guide-in line all the way to the appropriate stop point. Use the "Turn Left (from the flight crew's point of view)" or "Turn Right (from the flight crew's point of view)" signals to correct the track of the aircraft as required.
   4. If at any time during the aircraft movement the marshaller is unsure or identifies an imminent danger, signal the aircraft to "STOP".
   5. If at any time during the aircraft movement the wing walkers are unsure or identify an imminent danger, signal the marshaller with the "STOP" signal.
   6. As the aircraft approaches the stop position, use the "Slow Down" signal, if required. As the nose wheel reaches the stop point, slowly cross the wands in the "STOP" signal.

b) For a standard arrival at a stand with an automated guide-in system:
   1. The ground personnel responsible for aircraft arrival operations shall verify that the correct aircraft has been selected for the arrival and the equipment is operational.
   2. The agent responsible for staffing the emergency stop button shall be positioned with an unobstructed view of the arriving aircraft and within reach of the system to stop the aircraft in the event it is needed. It is essential to maintain a continuous unobstructed view between the agent responsible for staffing the emergency stop button and the ground personnel ensuring clearance (e.g., wing walker).
   3. If the emergency stop is activated, and only after verification by the ground personnel operating the guidance system that the risk is no longer there, the aircraft docking guidance system can be reactivated. If not, standard aircraft arrival procedures shall be used.
   4. Wing walkers, if required, will be positioned approximately 1 m (3 ft) outside the path of the wingtips. Wing walkers shall maintain visual contact with the agent responsible for the aircraft arrival operations until the aircraft has come to a complete stop. See picture on next page for positioning of wing walker during aircraft arrival on stand.

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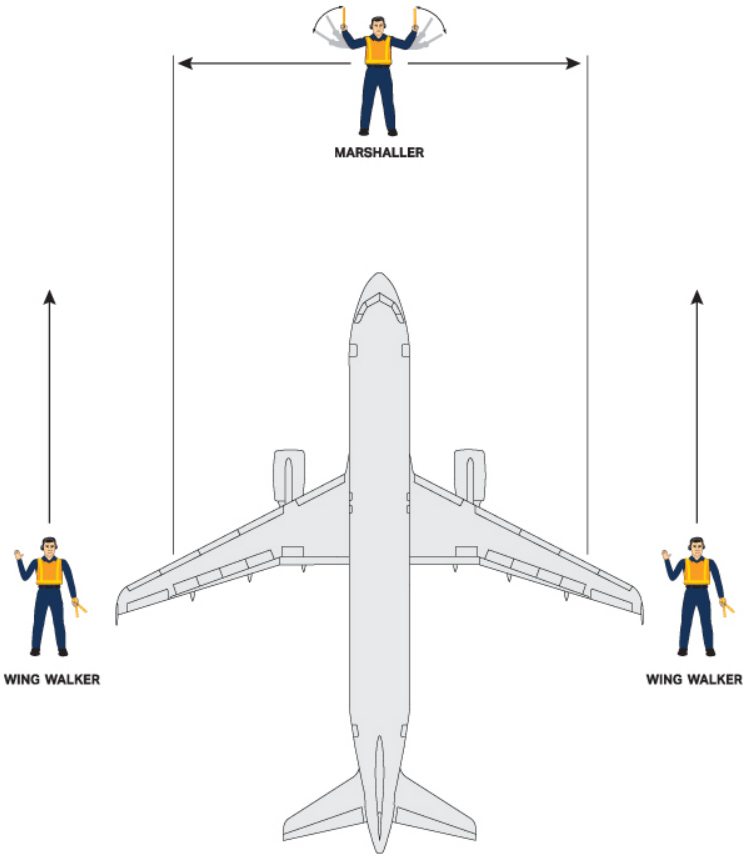

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4.6.3 Actions After Aircraft After Arrival

a) Upon aircraft stopping:
   1. position wheel chocks at nose landing gear wheels as per chapter 4.7.1
   2. position and connect the Ground Power Unit (GPU) or fixed power unit (FPU), if required, before engine shut down in accordance with ch. 4.2.3.

b) After engines have been shut down, are spooling down and anti-collision lights have been switched off:
   1. The person responsible for arrival operations shall give clearance for placement of the remaining wheel chocks and safety cones.
   2. Remaining wheel chocks shall be placed in accordance with ch. 4.7.1 and verbal/visual confirmation shall be given to the flight crew.
   3. Safety cones shall be placed in accordance with ch. 4.8. After placement, GSE may enter the ERA to approach the aircraft.
      Note: *Positioning of GSE at its final servicing position shall only take place after inspection of the door/service panel and surrounding area where the GSE shall position and clearance given.*
   4. An inspection shall be carried out to confirm there is no damage to the cabin access door and surrounding area prior to positioning the passenger boarding bridge (PBB).

c) Before positioning GSE, conduct an arrival walkaround to inspect for damage of the aircraft as per ch. 4.1.5

d) Give clearance for GSE to approach aircraft.

Note**:** *If any damage is found, report it immediately to supervisor and do not approach the aircraft with any GSE in the area where the damage has been found.*

Note**:** *"Spooling down" of engine can be identified as follows: reduced engine noise, visible fan or propeller speed reduction, lack of exhaust heat/thrust plume.*

Paying attention to the beacon lights if operative or not is the key element to comply with the adequate procedure. The Ground Staff must contact the Flight Crew by interphone after chocking the nose gear wheels in following cases:

- Beacon lights not operative during the taxiing.
- Perception of an imminent danger or anomaly.
- Beacon lights left in operation after chocking the nose gear wheels.

Caution**:** *If an aircraft arrives with unserviceable beacon light, do not approach it until headset communication has been established with the flight crew.*

In case of **abnormally hot brakes** (this case can occur on main gear only), flight crew shall inform the ground staff, and shut down the engines, and keep the beacon lights ON until wheel chocks are positioned at nose gear**. Ground staff shall not approach the main gear if notified of a brake overheat.**

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4.7 AIRCRAFT CHOCKING AND MARKING

4.7.1 Wheel Chock Placement

Aircraft chocking may be done using wheel chocks in suitable conditions.

a) Make sure the required number of serviceable chocks are available taking account of the aircraft type and/or weather conditions.
b) Chocks shall be kept clear of the lead-in line and kept in a safe area away from arriving aircraft and engine danger areas.
c) Wait for aircraft to come to a complete stop before approaching the aircraft to position chocks.
d) One designated ground personnel will immediately place chocks forward and aft of the nose gear if the aircraft type allows and according to the options listed in ch. 4.7.1.1. This is the first action to take place around the arriving aircraft and shall be completed before any other activity takes place.
e) Before approaching the main gear, wait until:
    1. engines have been shut down and are spooling down.
    2. beacon lights are switched off.
    3. Clearance to approach the aircraft has been given by the personnel responsible for the arrival operation.
f) Walk towards the main gear in a path parallel to the fuselage, avoiding engine intake areas.
g) Place chocks forward and aft of the main gear in accordance with the applicable normal chock placement diagram. See ch. 4.7.1.1.
h) Notify the flight crew that the chocks are inserted.

Aircraft parking brake application during transit time is limited to strong winds and slippery parking stands (snow, ice, de-icing fluid on the ground…).

***Note*:**

1. *If choking is done in accordance with option 2 from the chapter below, after the main gear has been choked, the nose gear chocks may be removed and positioned at the other main gear.*
2. *When the aircraft is parked on a slope, the chock on the down-slope side should just touch the wheels and the chock on the up-slope should not touch the wheels*

DANGER: For propeller aircraft with a nose-engine, the nose gear cannot be chocked until the engine has been shut down and the propellers have come to a complete stop.

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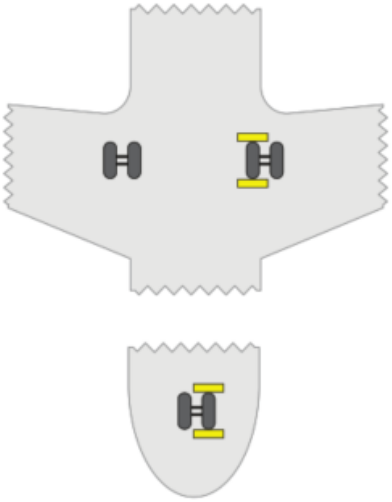
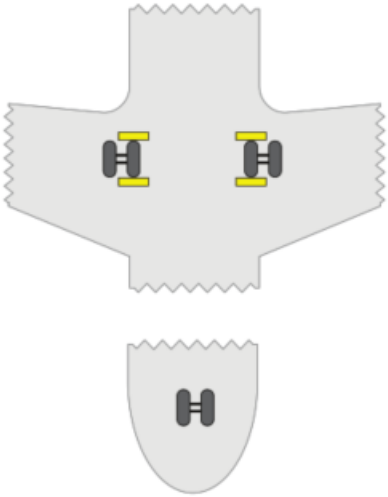
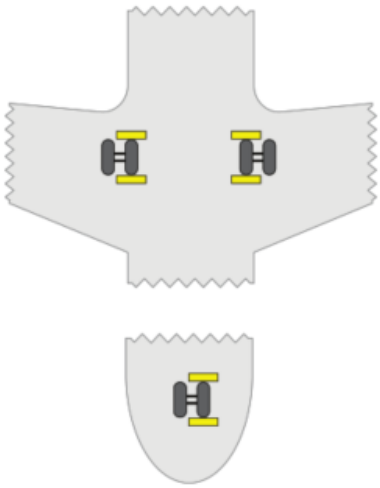
4.7.1.1 Chock Placement Diagrams

<table>
<tr><th colspan="2">Normal Operation</th></tr>
<tr><td>Aircraft with single axle main gear bogie
Option 1- preferable
  </td><td>Aircraft with single axle main gear bogie
Option 2
  </td></tr>
<tr><td colspan="2">Note:
• No nose gear chocks on aircraft with spray deflection.
• Inside or outside main gear chocks are acceptable.</td></tr>
<tr><th colspan="2">Parking Aircraft out of Service/ Night-Stop/ High Winds</th></tr>
<tr><td colspan="2"> 
Note:
• No nose gear chocks on aircraft with spray deflectors.
• Inside or outside main gear chocks are acceptable.</td></tr>
</table>

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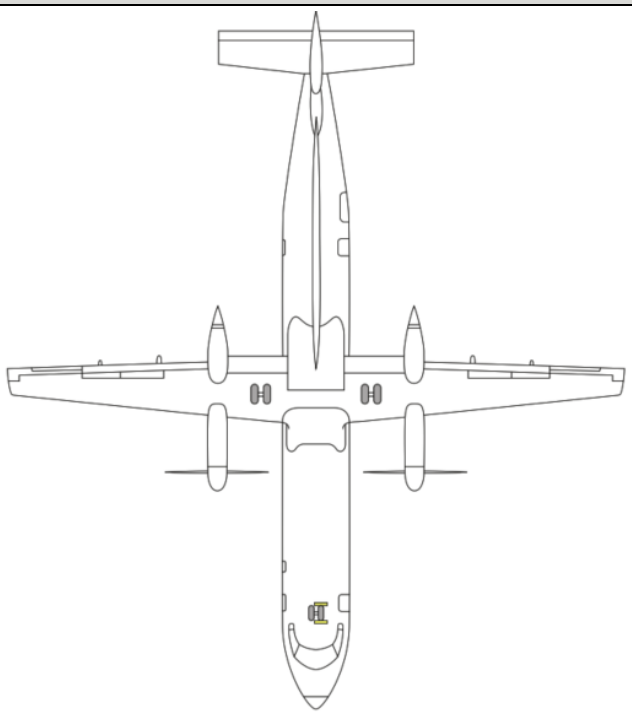
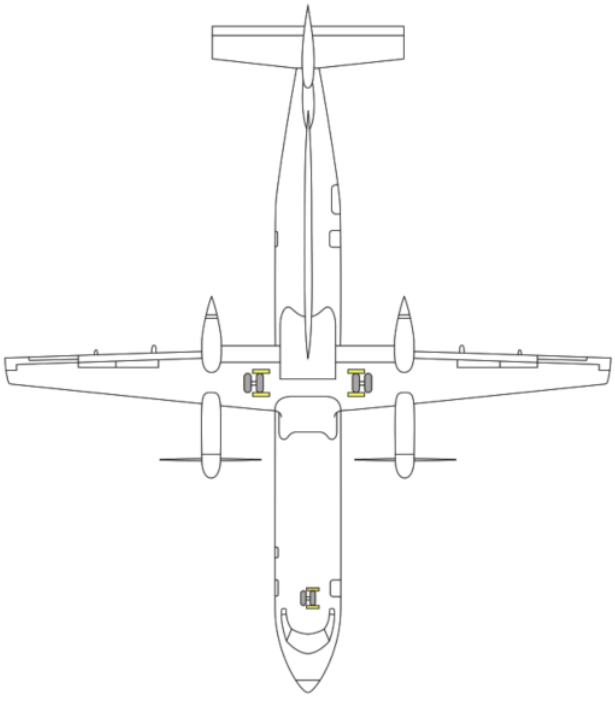
Regional Aircraft Choking

Normal Turnaround	
	***Note*:** *Place chocks forward and aft of nose gear, then secure propellers using appropriate tie-down straps.*
Parking Aircraft out of Service/ Night-Stop/ High Winds	
	***Note*:** *Place chocks forward and aft of nose gear, then secure propellers using appropriate tie-down straps.*

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4.7.2 Wheel Chock Removal

Prior to removal of chocks the responsible ground staff member (Headset Operator) shall:

a) Via the interphone or hand signals, confirm the aircraft parking brake is set.
b) Check all GSE have been disconnected from the aircraft, except for Ground Power Unit (GPU) and Air Start Unit (ASU) when air start is required.
c) Check the passenger boarding devices have been retracted from the aircraft, if applicable.
d) Check the pushback tractor and towbar are fully secured to the nose gear and the parking brake is set on the tractor.
e) For towbarless tractor operation, check that equipment is fully secured to the NLG and parking brake is set on the tractor.
f) Give clearance to ground staff to remove chocks. After removal, chocks shall be placed in their designated location.

***Note1**: If a chock is stuck, the responsible personnel remove it by tapping it with a spare chock. If this does not work, the stuck chock can be removed by moving the aircraft after the aircraft brakes have been released with precautions and in coordination with the responsible ground staff member for the departure.*

***Note 2**: Once high wind or icy conditions have passed, any additional chocks that were added to the aircraft may be removed so that chock placement reverts to that for normal conditions.*

***Note 3:** If hand signals are used (i.e. aircraft interphone system is inoperative) the person performing the hand signal shall:*

1. *Display the 'Set Brakes' hand signal.*
2. *Receive confirmation from the flight crew when they display the 'Brakes' hand signal in response.*
3. *Remove chocks.*

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4.8 AIRCRAFT CONING

4.8.1 Safety Cone Placement and Removal

Safety cones are a caution sign for operators/drivers to maintain required safety clearances. Cones protect parts of the aircraft against collision by GSE.

a) Prior to arrival of the aircraft, make sure there are sufficient serviceable safety cones to protect the aircraft type to be handled.
b) Approach the aircraft to position cones only when the following criteria are met:
   1. aircraft has come to a complete stop.
   2. engines have been shut down and are spooling down (or propellers completely stopped).
   3. anti-collision lights are switched off.
   4. aircraft has been chocked.
c) The safety cones shall be placed on the ground in accordance with the diagrams in ch. 4.8.1. They must be placed within a maximum of 1 m (3 ft.) radius outward from the point where the aircraft is being protected. Cones shall not be placed in high-wind conditions.
d) Additional safety cones may be needed as per operational requirements or local regulations.
e) GSE shall not approach the aircraft until all safety cones have been placed (not applicable for the PBB or GPU, if required).
f) All required safety cones shall remain in place until GSE and vehicle activities around the aircraft have ceased prior to departure of the aircraft.
   ***Note*:** *In some situations, it may be necessary to re-position cones to allow GSE to be positioned. Cones must not be placed under engines.*
   Reposition the cones when the GSE is removed.
g) Ensure all vehicles have been removed from the ERA.
h) Remove the safety cones from around the aircraft.
i) When not in use, place the safety cones in the designated storage area.

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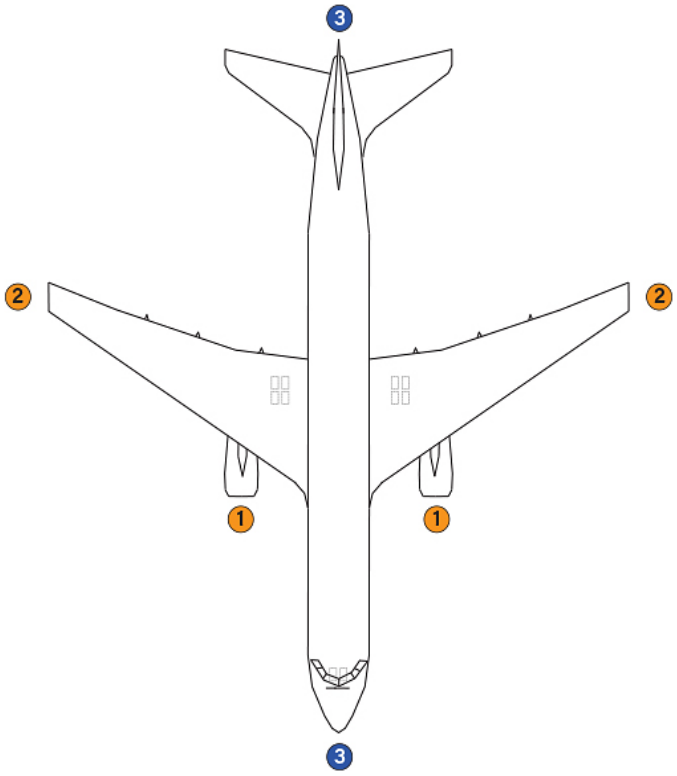
4.8.2 Safety Cone Placement Diagram

4.8.2.1 Wing-mounted twin engine jet aircraft

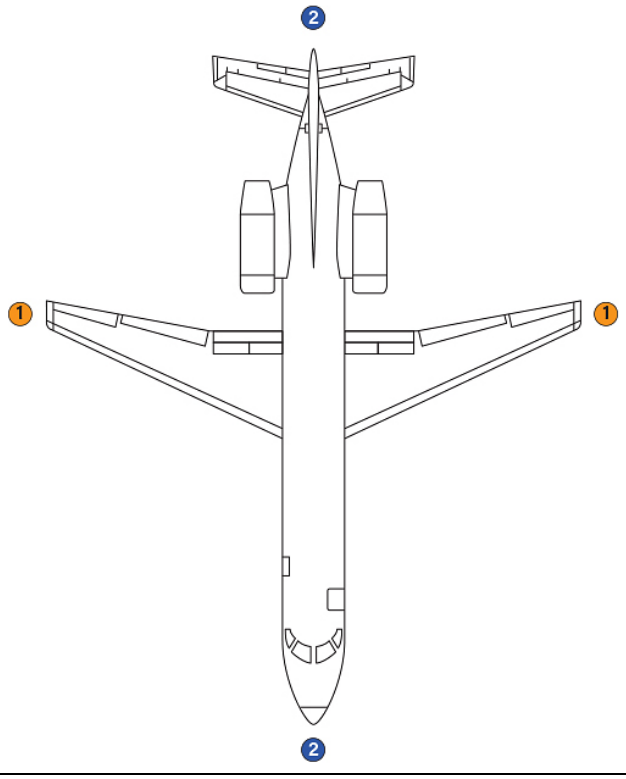


Cone number 1:
Cones placed max. 1m from engines.

Cone number 2:
Cones placed max. 1m from wingtips

Cone number 3:
Additional cones to be placed at the applicable end(s) of the aircraft where immediately adjacent to a service road.

4.8.2.2 Fuselage mounted twin engine jet aircraft



Cone number 1:
Cones max. 1m from wingtip.

Cone number 2:
Additional cones to be placed at the applicable end(s) of the aircraft where immediately adjacent to a service road, and always on aircraft with low ground clearance- applicable for ERJ135/145.

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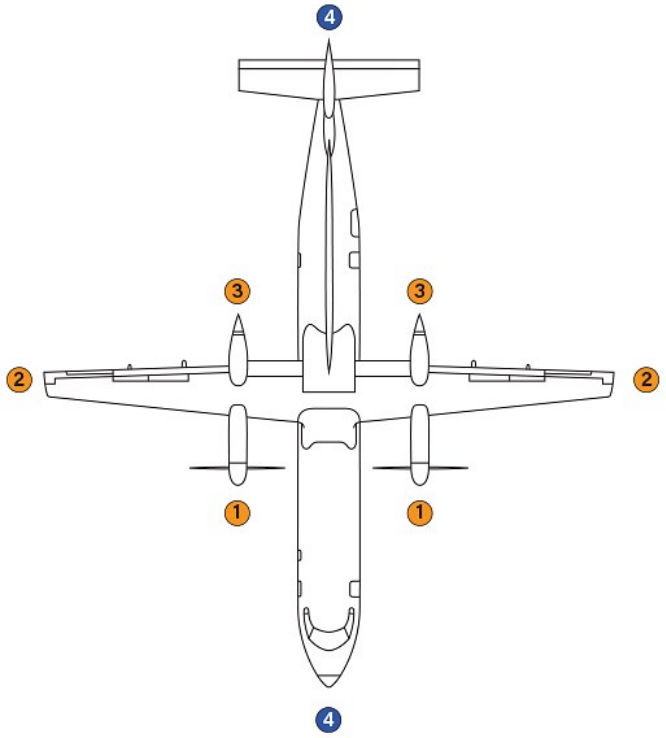
4.8.2.3 Cone placement for wing mounted twin propeller aircraft



Cone number 1:
Cones max. 1m in front of engine.

Cone number 2:
Cones max. 1m from wingtip.

Cone number 3:
Cones max. 1m behind engine.

Cone number 4:
Additional cones to be placed at the applicable end(s) of the aircraft where immediately adjacent to a service road, and always on aircraft with low ground clearance- applicable for ATR42/72.

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4.9 AIRCRAFT DOORS

Do not operate **ANY** aircraft doors unless you have been trained and authorized to do so.

Seek assistance from maintenance personnel if any difficulty is experienced during normal door operation and/or inform the Commander.

If damage or irregularity is discovered, immediately report it to the supervisor and if available aircraft maintenance personnel and flight crew.

Caution: Do not operate or leave doors open in winds exceeding those ch. 4.15.3.

Note: *For door operations during severe weather, refer to ch. 4.15.*

4.9.1 Cabin Access Doors

a) All cabin access doors can be opened only by the cabin crew and by the flight crew. In rare instances they can also be opened by the company engineers when needed to perform maintenance/towing, when crew is not available.
Note: *Some ground staff after received proper training on opening/closing the doors may be authorized by Amelia Intl to open/close the doors by themselves without presence of the flight and/or cabin crew. Prior authorization by Amelia Intl ground ops department is necessary.*

b) Cabin access doors shall only be operated or left in the open position if there is a GSE or a PBB with platform at its final height positioned at the door or if an appropriate fall prevention device is placed across the door.
Note:
1. *An appropriate fall prevention device consists of equipment or material, or a combination of both, that is designed to stop or prevent the fall of a person from an open door (e.g., an industrial safety net, catch platform or safety harness system).*
2. *The cabin door strap installed in aircraft doors is not considered an appropriate fall prevention device.*

DANGER: There is a risk of falling when operating cain access doors.

c) GSE or PBB shall be removed after the cabin access door is closed and acknowledged by cabin crew or by another authorized person.
DANGER: Slide deployments can be fatal. If an armed door begins to open, do not attempt to hold the door from outside, to prevent risk of serious injury or death.

d) If a cabin access door is found open without a GSE or PBB positioned at the door, personnel shall immediately notify a supervisor or the airline representative.

e) Before allowing passenger/crew embarkation or disembarkation via a cabin access door, ensure the boarding device is properly positioned at the door. If stairs or integral airstairs are to be used, ensure both guard rails are extended, if applicable. Normally for the flight crew and the cabin crew are responsible to extend the guard rails on the integral airstairs.
Exception: *Cabin access doors shall only be open without GSE or PBB in position when the height of the door from the ground is such that GSE is not required to be positioned to perform servicing/loading operations.*

DANGER: Personnel shall remain aware of increased risk of a fall from a height while retracting stair platform and safety rails.

For instructions on opening, closing and re-opening of cabin access doors refer to ch.6 for relevant aircraft type.

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4.9.1.1 Opening Cabin Access Doors from Inside by Crew

When the ground staff needs the cabin crew to open the service door on EMB135/145 and ATR42/72 or whichever door on A319/A320, the ground staff should:

a) Knock twice on the door from outside to indicate that a GSE or a PBB is properly positioned outside a door to be opened and that the door swing area is free of obstructions. Provide a conventional "thumbs up" signal through the door window to the crew
b) Stand clear of the door and wait for the cabin crew to open.
c) Assist cabin crew when required, with moving the door to the fully opened position and engaging the gust lock.

4.9.1.2 Opening of Cabin Access Doors from Inside by Authorized and Trained Ground Personnel

Only if authorized and asked to do so, by Amelia Intl.

a) Check that the door is disarmed (for A319/A320).
b) Check that all indicators show that it is safe to open the door.
c) Check that a GSE or PBB is positioned correctly at the door.
d) The door shall be fully opened and the gust lock engaged.

4.9.1.3 Opening Cabin Access Doors from Outside with Crew/Ground Personnel on Board

Only if authorized and asked to do so, by Amelia Intl.

Where there is a requirement for ground personnel to open door from outside with crew/ground personnel on board:

a) Visually inspect the cabin access door and the surrounding fuselage for signs of damage.
b) Check all indications as per aircraft type that the door is disarmed and safe to open, e.g., residual pressure warning lights or flags
Caution: If there is no confirmation that the door is disarmed or safe to open, do not open the door.
c) Knock twice on the door to indicate that the door is ready to be opened. Receive a "thumbs up" acknowledgement if required from the crew/ground personnel on board.
d) If there is no "thumbs up" or indication from the cabin that the door is disarmed, knock twice again.
e) If there is still no "thumbs up" or indication from the cabin crew/ground personnel onboard, contact the flight deck via an open cockpit window or the aircraft interphone system to seek confirmation that it is safe to open the cabin doors.
f) Once it is confirmed that the cabin access door is disarmed and safe to open, open the door in accordance with the instructions and markings labelled on the door, and the specific instructions for the aircraft type.
g) Move the cabin access door to the fully opened position and engage the gust lock.
h) If integral airstairs are to be used (other than those permanently affixed to a boarding door), fully extend the airstairs prior to opening the door.
i) If using integral airstairs permanently affixed to a boarding door, stand clear of the door and slowly open the door until the airstairs are fully extended.

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4.9.1.4 Opening Cabin Access Doors from Outside with No Crew/Ground Personnel on Board

Only if authorized and asked to do so, by Amelia Intl.

a) Visually inspect the cabin access door and the surrounding fuselage for signs of damage.
b) Check all indications as per aircraft type that the door is disarmed and safe to be opened. E.g., residual pressure warning lights or flags.
Caution: If there is no indication that the door is disarmed or safe to open, do not open the door.
c) Once it is confirmed that the door is disarmed and safe to open, open the door in accordance with the instructions and markings labelled on the door, and the specific instructions for the aircraft type.
d) Move the door to the fully opened position and engage the gust lock.
e) If integral airstairs are to be used (other than those permanently affixed to a boarding door), fully extend the airstairs prior to opening the door.
f) If using integral airstairs permanently affixed to a boarding door, stand clear of the door and slowly open the door until the airstairs are fully extended.

4.9.1.5 Closing of Cabin Access Doors from Inside by Crew

Prior to removing or repositioning GSE or PBB, the responsible ground personnel shall:

a) Notify crew that equipment needs to be removed or repositioned (as applicable) and that the cabin access door needs to be closed.
b) Receive confirmation from the crew that the cabin access door will be closed.
c) Visually inspect the exterior of cabin access door and surrounding areas for signs of damage, debris, or obstructions.
d) Retract equipment safety rails and canopy (where fitted) where necessary to close the door.
e) Assist cabin crew when required, with moving the door to the fully closed position.
f) Where using passenger stairs or PBB, remain on the platform until the door is fully closed.
g) Where using elevating equipment (e.g., catering truck or medical loader) retreat from the platform prior to the door being closed.
h) Check that the cabin access door is closed and that the door and handle are flush with the surrounding fuselage.
i) Descend passenger stairs before they are moved.

4.9.1.6 Closing of Cabin Access Doors from Inside by Authorized and Trained Ground Personnel

Only if authorized and asked to do so, by Amelia Intl.

a) Coordination between applicable ground personnel inside and outside the aircraft to confirm that the cabin access door will be closed shall take place prior to closing the door.
b) The trained ground personnel onboard shall:
    1. Visually inspect the cabin access door and inside surrounding areas for signs of damage, debris or obstructions.
    2. Move the door to the fully closed and locked position in accordance with the instructions and markings labelled on the door, and the specific instructions for the aircraft type.
c) The GSE/PBB operator shall follow the same steps as documented in 4.4.2.6 b-i and additionally:
    1. Where using elevating equipment (e.g., catering truck or medical loader) personnel shall retreat from the platform prior to the door being closed.
    2. Retract equipment stabilizers after the door is closed and personnel are clear of the equipment.
    3. Remove GSE or PBB from the door.

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4.9.1.7 Closing of Cabin Access Doors from Outside with Crew/Ground Personnel on Board

Only if authorized and asked to do so, by Amelia Intl.

a) Coordination between applicable ground personnel inside and outside the aircraft to confirm that the cabin access door will be closed, shall take place prior to closing the door.
b) Prior to closing the cabin access door from outside, the person responsible for closing the door shall:
    1. Visually inspect the exterior of cabin access door and surrounding areas for signs of damage, debris or obstructions.
    2. Retract equipment safety rails and canopy (where fitted) where necessary to close the door.
    3. Release the gust lock and move the door to the fully closed and locked position in accordance with the instructions and markings labelled on the door, and the specific instructions for the aircraft type.
    4. After the door is closed, check that the door and handle are flush with the surrounding fuselage.

    Where closing the door from passenger stairs, descend the stairs before they are moved.
c) The GSE/PBB operator shall:
    1. Retract equipment stabilizers after the door is closed and personnel are clear of the equipment.
    2. Remove GSE or PBB from the door.
d) If integral airstairs are used (other than those permanently affixed to a boarding door), fully retract and stow the airstairs.

4.9.1.8 Closing Cabin Access Doors from Outside with No Crew/Ground Personnel on Board

Only if authorized and asked to do so, by Amelia Intl.

Prior to closing the cabin access door from outside, the person responsible for closing the door shall follow the same steps as documented in GOM ch. 4.9.1.7 from b) to c).

4.9.1.9 Reopening Cabin Access Doors

In situations where a cabin access door needs to be reopened and reclosed after initial closing (e.g., not closed properly, additional delivery of catering and/or supplies, requirement to reconnect boarding device), the following shall apply:

a) Where flight crew or other qualified personnel are in the cockpit, but they did not initiate the request to reopen the cabin access door:
    1. Seek authorization from the flight crew or other qualified personnel in the cockpit for the cabin access door to be reopened via an open cockpit window (if applicable) or use the flight interphone system.
    2. Await clearance to re-open the cabin access door. If authorization to reopen the door is not granted, do not attempt to reopen the door.
b) Follow the applicable actions/steps in the in the Opening Cabin Access Doors from ch. 4.9.1 to 4.9.1.4, as applicable.

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4.9.2 Cargo Hold Doors

Manual operation of an electrically or hydraulically operated cargo hold access door may only be performed by trained personnel.

Do not operate cargo doors unless trained and authorized.

To access the cargo access door control panel where it is out of reach from the ground, use maintenance stairs in accordance with ch. 4.1.2.2 or a belt loader in accordance with ch. 4.1.2.7.

Note: *Not applicable to main deck cargo access doors.*

Allow adequate space for door clearance to avoid equipment obstructing the free passage of the door during opening/closing.

The cargo access door control panel, where applicable, shall be closed when not opening/closing the cargo hold access door.

Whenever a GSE (maintenance steps, belt loaders or other GSE) is used to reach (including to open and/or close) the cargo hold doors they must be equipped with safety rails to prevent falls when reaching the cargo hold doors.

If GSE has to be used, approach or leave the aircraft doors with the rails in stowed position. Raise or extend the safety rails after the GSE is positioned next to the cargo door or before it leaves that position, and before the personnel accesses, opens and closes the doors. This will prevent the personnel to fall from height.

4.9.2.1 Opening Cargo Hold Doors

Manual operation of an electrically or hydraulically operated cargo door may only be performed by maintenance personnel or flight crew.

Do not open the cargo doors until the aircraft engines have been shut down and the anti-collision lights have been switched off.

Before positioning loading equipment or any other ground support equipment at cargo doors and opening cargo doors, perform a visual check for any signs of damage to the doors or surrounding areas. If any irregularities are discovered during this visual check, report them to the Pilot-in-Command.

Where applicable, check cargo hold access door control indicators, residual pressure warning lights or flags to ensure it is safe to operate the door or open the cargo access door vent flap.

Open the cargo doors in accordance with the respective aircraft type specific instructions written in ch.6.

If the cargo door will not open, do not use excessive force, tools or ground support equipment to push or pull on the door to open it. Contact the flight crew for assistance.

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4.9.2.2 Closing Cargo Hold Doors

Before closing the cargo doors, ensure:

1. The anti-roll-out system (door sill guards/latches) if installed, is in the raised position.
   Note: *At each cargo compartment door sill, there are two types of latches.*
   - The overridable lateral latch, which stops the accidental roll-out of a unit. This latch is overridden in the loading direction and is lowered for unloading.
   - The other type of latch is an upward latch and locks the unit at the doorsill.
2. Load restraint and door protection nets are properly fitted, if applicable.
3. Door area, including the door sill and frame, are free of debris and other obstructions.
4. Door and surrounding area show no visible signs of damage. If any irregularities are discovered during this visual check, report them to the Pilot-in-Command.

Close the cargo doors in accordance with the respective aircraft type specific instructions written in ch.6.

All cargo doors must be closed using technical steps or belt loaders equipped with raised safety rails to reach the cargo doors. ULD loaders must not be used. ***Note*****:** *Not applicable to main deck cargo doors.*

After closing the cargo hold access door, ensure:

1. The lock indicators are engaged/properly set, as applicable, and that the door is properly locked, handles are properly stowed, and panels are properly closed.
2. A visual check is performed for any signs of damage to the doors and surrounding areas.
3. The vent flaps are also closed, if required.

If a cargo compartment door is not closed properly, it must be re-opened and re-closed.

Note**:** *If a cargo door must be re-opened prior to aircraft movement, approval from the flight crew via the ground staff responsible for the departure must be obtained.*

4.9.2.3 Re-opening of Cargo Hold Doors

If a cargo compartment door is not closed properly, it must be re-opened and re-closed.

Once the pre-departure walkaround has taken place, do not attempt to re-open any aircraft door without the authorization of the flight crew.

If a door needs to be reopened, the ground personnel responsible for the departure shall notify the flight crew via the use of the flight interphone system or where practical use the cockpit open window.

If the flight or cabin crew requires a door to be re-opened, they will notify ground staff.

Regardless of which party requested that the door be re-opened, if the flight crew gives clearance for the door to be re-opened, follow the actions/steps in: **Opening Cabin Access Doors**.

If authorization to re-open the door is not granted, do not attempt to re-open the door.

If authorization to re-open the door is granted by the flight crew, repeat the pre-departure walk-around checks according to 4.12.2.1 for this door area.

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4.10 AIRCRAFT LOADING/ UNLOADING

Before loading, the hold shall be visually inspected for damage that can affect the load capacity. See Cargo Hold Inspection in ch. 4.10.5.

Before loading commences, verify the aircraft registration with the registration on the loading instruction report (LIR).

a) Ensure onload has been checked against LIR, where applicable. Weights must be cross checked.
b) Ensure special equipment (tie-down straps, etc.) is available, as required.
c) Ensure LIR is received and understood by loading crew.
d) Before loading commences, carry out inspection of cargo compartments and restraint system. Report any defects to the flight crew and the supervisor, if applicable.
e) For cargo shipments, ensure the nets or tie-down straps are tight and the load is secure.
f) Items with directional handling labels should be loaded so that the labels will be visible during offload.
g) Ensure separator nets, fire barriers, door nets, pallet locks and container stops are installed and locked as required as the hold is loaded.
h) Document all changes to the load and sign the Load Instruction Report.
i) Carry out load verification prior to finalising the weight and balance.

Note *for ERJ135/145*: *For the flight safety, do not plug the sight hole located on the hold wall separating the cabin and the hold. This sight hole allows the crew to check the hold and eventually the presence of smoke in the event of smoke alarm "Bag smoke".*

Upon handling, loading and unloading, the personnel should at all times check the luggage or cargo parcels it handles to confirm:

- That no baggage or parcel can be identified as possibly (tag, marking or other reason) containing dangerous goods is loaded on an aircraft not authorized to carry DG (refer to ch. 9.1);
- That no shipment is labelled "Cargo Aircraft Only" is loaded on passenger aircraft;
- No baggage or parcel shows apparent leakage or contamination.

A loading incident can be considered as any event which concerns the loading / unloading of an aircraft and the drafting of loading documents, which can or could compromise flight safety. For further details and details on reporting refer to ch. 1.2.5.

Note: *For loading of cargo and of dangerous goods additionally refer to ch. 7 and ch.9.*

4.10.1 Supervision of Aircraft Loading and Unloading

4.10.1.1 Supervision Responsibility

The person performing the aircraft loading supervision task is responsible for the safe and efficient loading and unloading of the aircraft as well as the protection of the loads carried.

The responsibility will ensure the aircraft is:

1. Unloaded in accordance with LDM/CPM/OIR or any other incoming messages
2. Loaded in accordance with the corresponding loading instruction report (LIR)

Note*: Any aircraft loading/unloading operation shall only start with the presence of the person responsible for the aircraft supervision task.*

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4.10.1.2 Communication

When verbal communication is used it is critical that combination of letters and numbers are pronounced and understood by those who transmit and receive voice messages by radio or telephone, regardless of their native language. The ICAO phonetic alphabet and numbering system shall be used by all parties when involved in aircraft turn-around (e.g. A- Alfa, B- bravo etc).

To ensure all load is accounted for accurately prior to departure, the parties responsible for loading and load planning shall clearly communicate and confirm:

1. Flight Number
2. Aircraft Registration
3. Flight Leg (Destination), as applicable
4. LIR edition number
5. All load by position/in compartments, including NIL-Position/Compartment(s)
6. Return load (stand-by load which is not loaded)
7. All commodities and sub-commodities shall be reported
   When communicating load figures using verbal communication between the person reporting the load and the person responsible for load planning task, the person responsible for load planning task shall always read back the information given according to the same guidelines above.

Note 1*: The same principle will also apply when load control office is verbally communicating information to the person responsible for the loading supervision task, and when loading information is verbally communicated between loading team members and loading team supervisor.*
Note 2: *To further prevent miscommunication during the aircraft turnaround handling and close out reconciliation process, implementation of standard verbiage for load discrepancy communication (see the table below) should be used between the person responsible for the loading supervision task and person responsible for load planning task and between the person responsible for loading supervisor task and loading team members.*
Note 3: *Efficient communication devices (e.g. headsets, high performance radio, phones etc.) should be provided to relevant involved teams in case of verbal communication in order to avoid misunderstanding in a noisy environment.*

Table Load discrepancy communication

Discrepancy	Description
Offload	Planned load removed from aircraft for any reason (e.g. missing passenger/baggage, damaged cargo etc.)
Position change	Change of position within the cargo compartment or change of cargo compartment location
Missing	Load not received for any reason, but planned on loading instruction report
Weight	Difference between deadload weight as shown on LIR and actual weight of the load
Incorrect Load	Mismatch of received load for flight (e.g., wrong flight number, incorrectly documented special load)
Restraints	Missing, damaged or malfunctioning floor locks, load restraints or nets
Technical	Compartment technical issues (e.g. faulty locks, unserviceable stanchions, divider nets, other defects)
Not planned	Any deadload not included in LIR

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4.10.1.3 Actions Prior to Unloading

Prior to unloading, the person responsible for the aircraft loading supervision task shall:

a) Brief the unloading team members on safety and unloading requirements in accordance with the LDM/OIR (as applicable) including any special requirements, e.g., unloading sequence, special load items, restraint requirements, aircraft defect. Check to ensure the briefing and unloading instructions are understood by the persons responsible for aircraft unloading.
Note 1: *The offloading instructions report (OIR), which is a systematic plan for unloading, should be issued prior to aircraft arrival.*
Note 2: *For transit flights, an OIR, as defined in ch. 5.6.2, may be issued.*
Note 3: *It is highly recommended, but not mandatory to issue an OIR.*
b) Verify the arriving aircraft registration with the registration on the CPM/LDM/OIR.
c) Ensure the necessary equipment for unloading is available on the aircraft parking stand.

4.10.1.4 Actions During Unloading

During unloading, the person responsible for the aircraft loading supervision task shall:

a) Cross-check the load against the LDM/OIR as the unloading progresses to ensure the correct sequence of unloading takes place in accordance with the specified timelines.
b) For bulk unloading:
    1. Perform a visual inspection of all items during unloading to ensure no damage/leakage.
    2. Ensure the load distribution is in accordance with the LDM.
c) Ensure special equipment (e.g., tie-down straps, load spreaders, plastic sheeting for wet cargo) is unloaded, as required.
d) Log any irregularities in the unload sequence noted during unloading and report to ground@aeh.flyamelia.com
e) Ensure, where applicable, transit loads are not offloaded or over-stowed.
f) If required, Delivery at the Aircraft (DAA) bags/items shall be delivered as per ch. 3.3.7.
g) If possible, organize immediate transportation of arriving carts containing baggage, cargo and/or mail.

4.10.1.5 Actions After Unloading

After unloading has been completed, the person responsible for the aircraft loading supervision task shall:

a) Carry out a hold inspection, in accordance with ch. 4.10.5 and action issues accordingly.
b) Ensure the nets and straps are properly stowed and cargo access door checks are performed in accordance with ch.4.9.2 in case the cargo access doors need to be closed.
c) Sign the OIR if applicable, (See AHM 514 and AHM 515) and in doing so confirm that:
    1. Aircraft has been unloaded in accordance with OIR;
    2. Load was unloaded in a manner that prevents damage or spillage.
d) Close the cargo access doors if the aircraft is to be left unattended.
e) If irregularities are reported during the unload sequence report in accordance with operating airline procedures.

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4.10.1.6 Actions Prior to Loading

Prior to loading, the person responsible for aircraft loading supervision task shall:

a) Brief the loading team members on safety and loading requirements in accordance with the LIR, including any special requirements, e.g., loading sequence, special load items, restraint requirements, aircraft defect.
Note: *Check to ensure the briefing and loading instructions are understood by the persons responsible for aircraft loading.*
b) Verify the aircraft registration with the registration on the LIR.
c) Carry out a hold inspection prior to commencing loading, in accordance with the requirements detailed in 4.10.5 and action issues accordingly.
d) Assemble and check the load against the LIR in order to ensure compliance:
   1. Special handling codes and complimentary information
   2. Destination airport. (Confirm destination of the loads)
   3. Confirm preliminary Notification to the Captain (NOTOC) as per ch 5.2.1.3., where applicable.
   4. Special load requirements, e.g., live animals, perishable, valuables, DG, temperature sensitive products etc.
e) Ensure all loads are protected from adverse weather. Special attention shall be given to live animals and/or perishables.
f) For bulk loading, confirm:
   1. Carts identification labels are correctly filled in, where applicable.
   2. Loose pieces/weight information is correct, where applicable.
g) A visual inspection of all items of bulk load shall be performed prior to loading to ensure they are properly packed and will not damage/leak or contaminate the aircraft. (All items are fit to be loaded on the aircraft).
h) Ensure the load is protected from adverse weather conditions, if applicable.
i) Allow no contamination (e.g., snow, ice, water, wood, plastic) on the bulk load/loose load pieces.
j) Ensure special equipment is available (e.g., tie-down straps, load spreaders, plastic sheeting for wet cargo), as required.
k) Where possible, organize and position the carts containing baggage, cargo and/or mail in hold and load order.

4.10.1.7 Actions During Loading

During loading, the person responsible for the aircraft loading supervision task shall:

a) Crosscheck the load against the LIR, as the loading progresses to ensure the correct sequence of loading takes place in accordance with the specified timelines (e.g., where applicable, transit loads are not over-stowed for transit stations).
b) Regularly check with loading staff members who are physically loading the aircraft and in particular, attend to any issues raised concerning loading.
Note: *Stop/suspend loading operations where an irregularity is discovered e.g., aircraft/cargo hold damage, damage to or leakage from load items, cargo loading system malfunction*
Log any irregularities in the load sequence noted during loading and report to ground@aeh.flyamelia.com
c) Liaise with the person responsible for weight and balance calculation task and receive authorization for any deviations including any last-minute changes to the LIR. The person responsible weight and Balance Calculation task shall check the deviation and confirm if possible or give an alternative solution. (Normally on Amelia Intl flights, that will be the Commander).

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Note: *Any load information change between the LIR and actual loading (e.g., changes in transfer bag figures, cargo figures) shall be communicated to the person responsible for the weight and balance calculation task as soon as known to avoid unnecessary reloads, weight and balance issues, and last-minute pressure.*

d) If an authorised change of load order occurs, provide confirmation of change to the persons responsible for aircraft loading task prior to recommencing loading in the hold.
e) Protect all loads from adverse weather. Special attention shall be given to live animals and/or perishables.
f) Ensure special loads are handled and loaded as per instructions provided.
g) Where applicable remove any loose plastic or any other material used to protect load from bad weather.
h) Visually inspect all loads requiring special handling to ensure they are secured against shifting. Ensure all necessary nets have been closed. See ch. 4.10.7.
i) If required, Delivery At the Aircraft (DAA) bags/items shall be loaded as per ch. 3.3.7 and local authority requirement.
j) For tracking/reconciliation during loading see ch. 3.4.2.3.

4.10.1.8 Actions After Loading

After loading has been completed the person responsible for aircraft loading supervision task shall:

a) At the completion of loading, receive confirmation of the following from the persons performing the aircraft loading task:
   1. Loading status of the aircraft is in compliance with the latest edition of the LIR.
   2. Loads are secured and that all locks, stops, nets, net stanchions, fire blankets are raised, closed, locked or installed and that load securing is correctly applied
b) Ensure the applicable person(s) have signed the required fields on the LIR.
   Note: *The person responsible for the aircraft loading supervision task still maintains overall responsibility for the loading of the aircraft.*
c) Sign the LIR, and in doing so, confirm that:
   1. The aircraft has been loaded in accordance with the final edition of the LIR including any authorized changes:
   2. Load is secured (in a manner that prevents movement or spillage during flight) and locks, stops, nets, fire blankets etc. are correctly installed, raised, locked etc.
d) If applicable, sign a NOTOC to confirm or otherwise state that:
   1. There was no evidence of leakage from the package(s) loaded on the aircraft.
   2. The package is loaded in the designated position and secured.
      Note: *The LIR and the NOTOC shall be retained in accordance with applicable regulations and with ch.1.4.*
e) If irregularities are reported during the load sequence to ground@aeh.flyamelia.com
f) Ensure cargo hold access door checks are performed in accordance with ch. 4.9.2.2

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4.10.2 Aircraft Ground Stability

Loading or unloading may cause the aircraft to become unstable or could cause tipping. For some aircraft, a tail prop (i.e. ATR72) or nose tether is available and may be used. Check ch.6 for relevant aircraft type.

The unloading sequence may be reported in the OIR/LDM and loading sequence in the LIR. When detailed information about the unloading and loading sequence is not available, as a general principle for cargo aircraft and passenger aircraft sensitive to tail tipping, ensure the sequence below is adhered to:

a) Unload the aft hold first.
b) Unload the main deck in sequence to always have more load in front of the wing box than aft of the wing box.
c) Unload the forward hold last.
d) Load the forward hold first.
e) Load the main deck in sequence to always have more load in front of the wing box than aft of the wing box.
f) Load the aft hold and bulk last.
Note: *If this sequence cannot be followed, contact ground@aeh.flyamelia.com for instructions about the correct unloading/loading sequence.*

4.10.3 Safety Requirements Specific to Aircraft Loading and Unloading

4.10.3.1 General Safety Loading Precautions

a) Holds and compartments shall only be entered or exited by using the appropriate loading equipment, which shall be positioned and secured at the aircraft door.
b) Loading equipment shall not be removed from the aircraft when personnel are still in the cargo hold.
c) Equipment operators shall ensure that other personnel are not entrapped by movement of loads, pallets and/or containers, either in the aircraft or on the loading equipment.
d) Carts shall not be used to gain access to cargo compartments.
e) Personnel shall walk around chains of carts and dollies to access required areas. Do not walk or stand between carts and dollies even when they are stationary on the ramp.
f) Hinged side gates of loaded carts should be lowered carefully in case loads fall out and cause injury.
g) Take care when pulling or pushing carts especially when ramp conditions are slippery. When necessary, obtain assistance.
h) Use tarpaulins or covered carts during adverse weather.
i) Use correct manual handling techniques and practices when handling heavy items. Get assistance when moving heavy articles.
j) When loading has been completed, equipment operators shall move all loading equipment to the designated parking location outside of the ERA.

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4.10.3.2 Bulk Loading and Unloading

a) Where a belt loader is used, position items on/off the belt loader see ch. 4.1.2.7.
b) Where possible avoid placing loads directly on the ramp, especially if the ramp is contaminated.
c) When loading/unloading aircraft directly from the ramp without the use of equipment:
    1. Position carts/dollies to/from the aircraft in a parallel direction to the fuselage, maintaining a gap of at least 1m (3 ft.) from the fuselage.
    2. Always turn tractors and carts/dollies away from the aircraft.

    Note: *For any load items that cannot be safely loaded directly from the ramp, appropriate loading equipment (e.g., belt loader) should be used to avoid injury or damage*.
d) Ground personnel carrying out bulk loading task shall:
    1. Use the right lifting techniques to reduce on the risk of injury
    2. Be accounted for once inside the aircraft hold and after completion of loading for safety reasons.

DANGER: There is a risk of suffocation due to poor ventilation in the holds.

4.10.3.3 Shipments Requiring Special Handling

General

a) All shipments requiring special handling shall be identified on the load message (LDM) for arriving flights or under a NOTOC for departing flights.
b) Comply with any special handling requirements. Be alert for special load and/or dangerous goods shipments.
c) Always follow the orientation markings and/or special handling instructions, as applicable, while handling.
d) Make sure packages with directional handling labels are kept in the correct orientation (e.g., THIS WAY UP).
e) Always observe the specific instruction labels and markings (i.e., Cargo Aircraft Only (CAO), FRAGILE, TOP, THIS SIDE UP).
f) Ensure shipments labelled “Cargo Aircraft Only” are not loaded into a passenger aircraft.
g) Always handle fragile items with care.

For details on special cargo refer to ch.7 and ch.9.

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4.10.4 Unloading

4.10.4.1 Scaling Process

If the Flight crew experiences handling irregularity on take-off, they may request aircraft scaling (weighing of all baggage and cargo on board) at the arrival station. Aircraft shall not be unloaded when a scaling has been requested until the process has been completed. Contact the airline representative or write to ground@aeh.flyamelia.com for details.

4.10.4.2 Safety Precautions for an Unload

a) Before positioning GSE and/or opening cargo hold access doors, perform a visual check for any signs of damage to the doors or surrounding areas.
b) Check to ensure that the aircraft hold load has not shifted during the flight.
    1. Verify the contour of the cargo loads passing through the doorway shall be made to ensure sufficient space between the doorway depressor seals and the cargo load is assured.
    2. Contact the person responsible for the aircraft loading supervision task if the shifted load will not safely exit the door.
c) Check load during unload for damage, leakage and load stability.
d) Check for damage to the aircraft hold as the unload progresses and also after completion of unloading.
e) (Take care if load has shifted during flight, a check to verify the contour of the cargo loads passing through the doorway shall be made to ensure, sufficient space between the doorway depressor seals and cargo load is assured. Contact the person responsible for aircraft loading supervision task if shifted load will not safely exit the door.

***Note 1**: Report any discrepancies e.g. spills, unusual fumes or smells, etc. prior to or during the unloading process to the person responsible for aircraft loading supervision task, as per ch. 1.3.3 and if required by the state, to the authority.*

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4.10.5 Cargo Hold Inspection

A cargo hold inspection shall be performed:

1. After aircraft unload is complete
2. Prior to loading if this does not follow immediately after unloading is complete
3. In case the aircraft was unattended between unloading and loading; or
4. There was a change of persons responsible for the aircraft loading and supervision task.

The person undertaking the cargo hold inspection shall perform a visual check of all cargo holds to ensure:

a) No damage to the compartment (floors, walls, ceiling, door frames, panels, door).
b) No missing, damaged or malfunctioning floor locks, load restraints or nets.
c) No spills in the hold that may have occurred.
d) No baggage or cargo left onboard the aircraft (except transit loads) in any cargo hold compartments or cargo areas even if they are reserved only for crew baggage and company cargo.
e) Any other items that should not be present in the hold have been unloaded.

Prior to commencing the loading of the aircraft, the person responsible for undertaking the cargo hold inspection shall provide positive confirmation that the inspection has been carried out to the person responsible for the aircraft loading supervision task, if appropriate.

If any damage is found to the compartment or locks, if a spill has occurred, or if any other irregularity is found, it must be immediately reported to the person responsible for the aircraft loading supervision task or the weight and balance calculation task (if this is not the flight crew) as a minimum, who must then inform the Commander.

Note: *A check shall be conducted in a hold even if on arrival the hold was reported as being empty.*

Any items that should not be present in the hold shall be removed.

4.10.5.1 Cargo Hold Damage

Any damage to compartment liners (i.e., holes, tears, detachment) may reduce their effectiveness, permitting air to enter the compartment and fire suppression agent to escape, reducing the capability to handle a fire event and may lead to specific loading limitations, therefore:

a) Any technical malfunction, damage or irregularity discovered shall be reported to the supervisor, the Commander and to the maintenance personnel, if available.
b) Adhere to any resulting load limitations according to the instructions presented in this manual.
c) If the defect cannot be rectified before departure inform the onward stations of the load limitations according to the instructions of Amelia Intl's representative (e.g. Commander, station representative, station engineer).

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4.10.5.2 Spills in Cargo Holds

a) Spills can occur in cargo holds during unloading and/or loading as well as in flight due to:
   1. Improper packaging
   2. Damage due to mishandling prior to loading
   3. Improper loading in the compartment
b) Spills can be of liquids, gels or materials in powdered or granulated form.
c) Spills can be hazardous, corrosive, flammable, explosive, toxic, poisonous, etc. Even water can cause serious damage to electrical components and systems.
d) Spills can be corrosive to the aircraft structure. Mercury spills are particularly corrosive to the extent that the affected aircraft structure may have to be completely replaced if the spill is not cleaned up quickly.
e) It is essential that any spill is reported immediately so that corrective action can be taken.
f) Initiate the local spill response plan for spill events.
g) Request information from the respective cargo terminal operator about the nature of what has leaked as well as the safety data sheet, if applicable.
h) Packages, baggage or containers showing leaks or deformations shall not be loaded on the aircraft.

If evidence of leakage is found follow the procedure described in ch.1.3.3.4.

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4.10.6 Loading

4.10.6.1 Load Handover

The handover process between cargo handling (cargo warehouse), baggage handling (baggage make-up area) and ground handling (ramp) departments shall be done systematically to ensure a safe departure.

Depending on the airport infrastructure and/or local agreements, the handover of cargo, mail and baggage to the ramp should be done at a dedicated handover point.

4.10.6.2 Load Transportation

Prior to transporting cargo and/or mail from the cargo warehouse or baggage from the baggage make-up area or baggage claim area, the equipment operator shall ensure that:

a) The GSE used for transportation is serviceable.
b) Baggage carts appear to be serviceable and gates/covers/doors are correctly closed/installed prior to transportation.
c) They comply with any limitations regarding the maximum number of dollies in a 'train of dollies' as per local requirements.
d) A visual inspection of all loads is carried out to ensure that:
    1. The cargo, mail and/or baggage for transport is the correct load for the departing/arriving flight(s).
    2. No nets, ropes, straps or protective materials can drag on the ground or get jammed in rollers, ball-mats or wheels.
    3. All built-up cargo/mail/baggage is safe to move and will not shift, roll or topple.
    4. All dollies are serviceable, and all restraints are engaged to secure the load on the dollies.
    5. The load has no obvious distortion/damage.
    6. Nets and straps are correctly attached to the load when needed and have no signs of damage that may impair their performance (e.g. cuts, tears or fraying).
e) All loads are protected from adverse weather via use of tarpaulins or covered carts. Special attention shall be given to live animals and/or perishables. When using tarpaulins, all straps shall be securely fastened to the cart.

4.10.6.3 Load Delivery for Departure

Depending on the location of the handover point, the person responsible for aircraft loading supervision task or the person responsible for receiving the load shall:

a) Receive all documentation, pouches and special instructions for the specific flight, if applicable
b) Carry out an inspection of all the load to ensure that:
    1. The load is correct for the departing flight(s).
    2. No damage has occurred during the transport process.
    3. There is no evidence of tampering with the load (e.g cuts, tears to plastic foil etc.)
    4. No nets, ropes, straps, protective materials, etc. should drag on the ground or get jammed in rollers, ball-mats or wheels whilst manoeuvring or whilst being loaded onto aircraft.
    5. There are no signs of leakage from the load.
    6. All load is safe to move and will not shift, roll or topple whilst maneuvering/loading onto aircraft.
c) Immediately report any damage to the load/s, whether it discovered when the load arrives on stand or occurs during loading.
    1. Report torn or missing baggage tags and cargo labels.
    2. Do not load unless discrepancies are corrected.
d) Report torn or missing baggage tags and cargo labels, and do not load unless corrected.

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4.10.6.4 Loading Procedures

a) General (refer to ch. 4.10.1.7)
   1. Loading of cargo shall not commence if there is no LIR (electronic or hard copy). For loading of baggage and passenger items it is mandatory to use the LIR for A319/A320 and it is highly recommended to use it for EMB135/145 and ATR42.
   2. Prior to loading commencing, a cargo hold inspection check 4.10.5, shall be performed.
   3. Carry out a visually detectable damage check prior to loading
   4. Carry out a visual inspection of all items of bulk load prior to loading to ensure no damage/leakage.

b) Report any issues, errors, changes or other loading matters to the person responsible for the aircraft loading supervision task immediately.

c) Any signs of hold damage must be reported immediately.

d) While loading into bulk holds the person carrying out the loading of baggage/cargo/mail shall:
   1. Load in accordance with LIR requirements.
   2. Cross check cart labels to ensure that the load is correct.
   3. Check cargo, mail and baggage labels to ensure correct destination/flight number.
   4. Inspect all loads, including visible dangerous goods packages for leakage and damage prior to loading and immediately raise issues found to the supervisor. Any contaminated load is kept separately.
   5. Report any issues, errors, changes or other loading matters to the supervisor immediately.
   6. Ensure bulk load is correctly secured.
   7. Ensure applicable special load items are tied down (see ch. 4.10.7) or otherwise secured in accordance with this manual.
   8. Install/close/secure compartment/bay divider nets, barrier nets, fire curtains, door nets and stanchions, as applicable.
   9. Ensure light packages are not loaded or wedged between heavier items.
   10. Ensure the necessary clearance between the load and the aircraft hold ceiling is achieved to avoid any obstruction or damage to aircraft smoke detector/fire suppression system. Specific requirements when given by Amelia Intl shall be followed.
   11. Loads shall be correctly stacked to achieve maximum volume.
   12. Confirm the final loading status to the person responsible for the aircraft loading supervision task.

Note1: *Any load information change between LIR and actual (e.g. changes in transfer bag figures, cargo figures) shall be communicated to the Commander as soon as known to avoid unnecessary re-loads, weight and balance issues and last-minute pressure.*

Note 2*: Between unload and onload, compartment nets shall be secured inside aircraft compartments and not left hanging outside to avoid clips and attachment points striking the fuselage, especially during adverse weather.*

Note 2: *Ensure the ramp area is clear of all wooden and/or plastics pallets after completion of loading or unloading.*

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4.10.6.5 Baggage Loading Considerations

The loading must be done in a way that will provide quick delivery of the baggage that was handed at the steps of the aircraft. This baggage must be positioned in the relevant section of the cargo, which are closest to the cargo door, in order to be delivered first.

When the baggage is handed at the steps of the aircraft ask to the passenger if he has dangerous goods in it, that are prohibited in hold, but are authorized in cabin.

Wheelchairs must be handled with the greatest care to prevent damage. Loose parts shall preferably be removed and carried as cabin baggage or taped securely to the wheelchair.

For power driven wheelchair, passengers must hand over the wheelchair in free wheel.

In case of spillable battery: both battery clamps must be disconnected and isolated with adhesive tape.

In case of non-spillable battery, the battery clamps must be disconnected, provided that they are insulated against short circuits.

Wheelchairs must be protected using a special packaging. For non-foldable wheelchairs, a cardboard partition shall be used to prevent damages.

They must be placed in the section, close to the cargo door. They also must be properly tied down.

AVIH/AVI

For transportation of life animals refer to 3.3.5.2 and to ch. 7.2.2. The following provisions must be respected:

- Cages are mandatory;
- They shall be loaded last and unloaded first;
- The cages must be tied-down.

4.10.7 Securing of Load

When transporting a load in an aircraft, it shall be secured such that it shall not:

a) Move during the flight, which could dangerously affect the weight and balance of the aircraft.
b) Cause damage to the aircraft structure or other important parts of the aircraft.
c) Cause damage to another load or become damaged itself.
d) Cause injury to passengers and crew in case of an emergency landing.
e) Cause injury to ground handling personnel during loading and unloading.

Load in compartments is secured by divider nets and by door nets. When the certified net restraint system is used, additional tie down is normally not required except as shown in the subchapter 4.10.7.2.

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4.10.7.1 Bulk Compartments

a) The Load in bulk compartments is generally secured by door nets and net sector divider nets. Ensure that following items are always secured:
   1. Barrels or drums filled with liquids.
   2. Cages or boxes with live animals (AVI).
   3. Heavy pieces (HEA) weighing 150 kg or more.
   4. Coffins with human remains (HUM). **Caution: Do not load baggage or other shipments on top of the coffin.**
   5. Dangerous Goods (see 7.1.3).
   6. Powered mobility devices.
   7. Load which needs spreading.
   8. Fragile loads.

b) The following loads shall not move vertically upward or horizontally during flight. If the available volume of the compartment or net section is not volumetrically filled (three quarters of the height) with load, additional securing is necessary for:
   1. Load which is sensitive against shocks or tilting.
   2. Wet cargo.
   3. High density packages.
   4. Pipes, tubes, bars, beams, planks, poles or other objects of a penetrating nature.

c) If long pieces do not fit into one net section, and the divider net cannot be closed correctly refer to ch. 7 and/or ch.6 for further requirements. In general, they can be accepted if all the load including the long pieces are tied down.

d) For battery-powered wheelchair and mobility devices ensure:
   1. It is loaded/unloaded in such a manner that prevent unintentional activation during transport and the battery terminals shall be protected from short circuits (refer to IATA DGR).
   2. The battery is either adequately protected against damage by the design of the mobility aid and securely attached to the device with the electrical circuits being isolated following the manufacturer's instructions, or
   3. Removed from the mobility aid following the manufacturer's instructions
      Note: *Battery-powered wheelchairs or mobility devices for use by passengers are classified in three main categories based on the battery type that powers the device as defined in DGR.*
   4. It does not roll when moving up the loading belt in an upright position. If tilting is necessary ensure the passenger has consented, and can only be done on the side without the device controls
   5. It shall be secured against movement in the cargo compartment, by use of straps, tie-downs or other restraint devices.
   6. The mobility aid, including batteries, electrical cabling and controls shall be protected from damage, including damage caused by the movement of baggage, mail and cargo.
   7. Any battery-powered mobility aid shall not be stowed together with loose loaded (bulk) items within a unit load device (ULD) or other loads loaded on top.
      Note1: *When securing use tie-down points, keep the mobility aid in an upright position where possible, secure the mobility aid using the base frame, avoid unnecessary tilting of the mobility aid, ensure adequate clearance when loading/unloading, avoid over-tightening tie-down straps or other securing devices, load last when possible.*
      Note 2: *The pilot-in-command shall be informed of the location of the mobility aid with installed batteries, removed batteries and spare batteries.*

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4.10.7.2 Tie-Down

All individual items of load which by their nature, shape or density may constitute a hazard, shall be restrained.

Particular attention must be given to restraining all loads in an upright position if that is indicated. Following loads must be restrained to prevent shifting, crushing, tipping or damage by another load (if the compartment is not volumetrically full):

- Long pieces, bars, pipes, tubes, planks etc;
- Barrels or drums filled with liquids;
- Power driven wheelchairs (cargo compartment);
- AVIH (including kennels);
- Human remains (HUM):
- Pieces between 50 and 150kg;
- Heavy pieces weighting 150kg or more (HEA);
- High-density cargo (density over 240 kg/m^3);
- Items sensitive to shocks or tilting, fragile items, etc.

***Note**: Compartments, which are filled up to three-quarters of their heights, are considered volumetrically full.*

Sharp edged and dense cargo must either be located so that crushable type cargo acts as a buffer to prevent hazard, or restrained to prevent shifting.

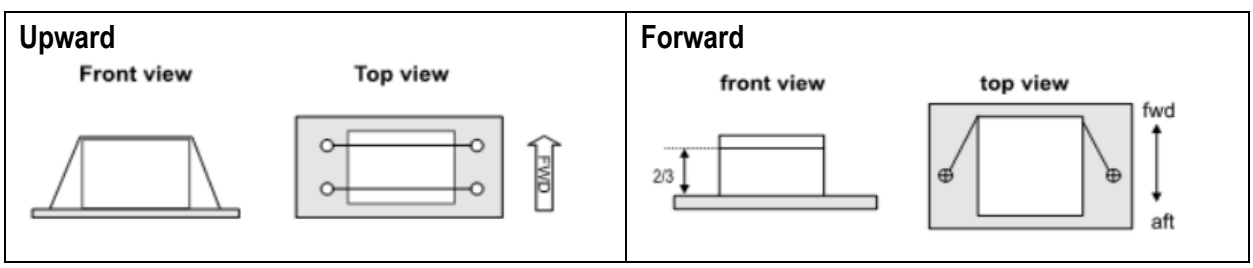
Sharp edged and dense cargo are defined as follows:

- Weighs 45 kg or more with the smallest end having height and width dimensions both less than 15 cm;
- Slender tubing or rods with a density equal to or greater than 250 kg/m^3;
- Weighs 150 kg or more;
- Weighs 100 kg or more with a density equal to or greater than 250 kg/m^3
- Weighs 45 kg or more and due to package shape (cylindrical, spherical, etc.) is likely to topple or roll during airplane operation.

When applying tie-down of cargo, it must ensure restraint in at least upward, forward & Aft and Sideward directions. A single tie-down fitting may receive up to 3 straps in three different directions: one up and two opposite horizontal directions.

Definition of the forces:

- Forward: Horizontal forces effective during landing and steep angles of descent;
- Backward: Horizontal forces effective during take-off and steep angles of climb
- Sideward: Horizontal forces effective during rough landing, turbulence and close turns
- Upward: Vertical forces effective during landing and heavy turbulence in flight



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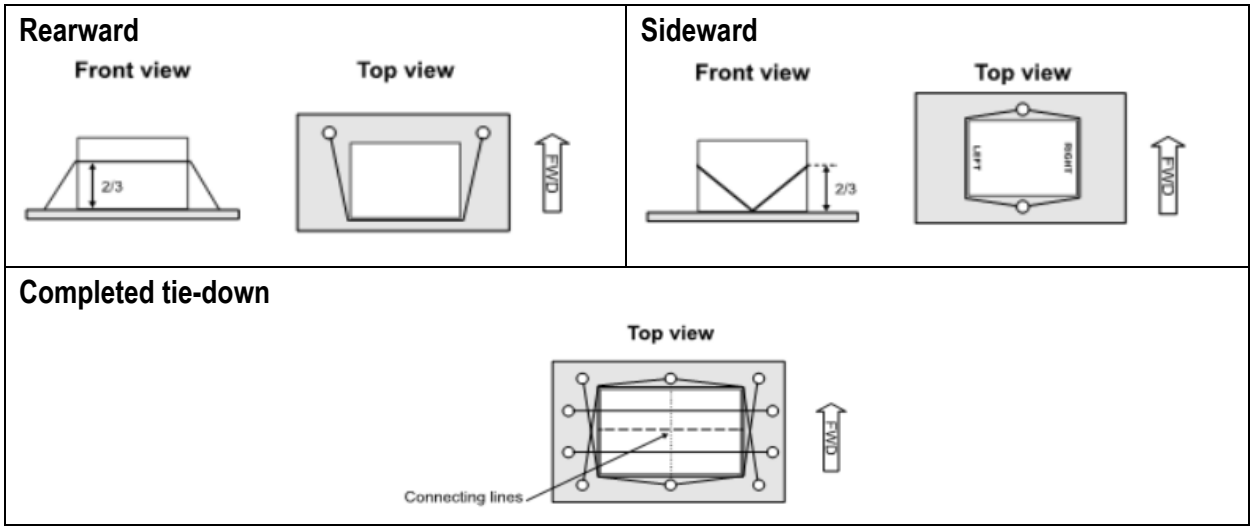


***Note**: Internal restraint must be used when loading compartments containing rollers, balls or other devices designed to assist in moving objects within compartment.*

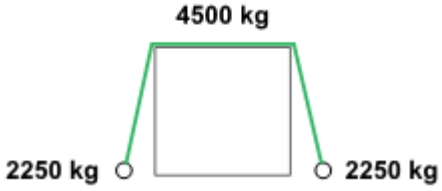
Tie-down of load with straps or ropes

If the primary restraint of the load is done by straps, tie-down must be carried out in accordance with AHM311 (details presented in the subchapters below).

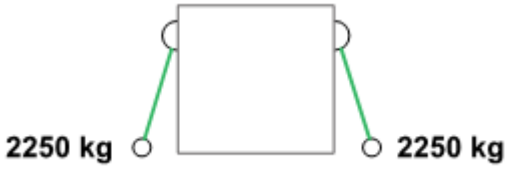
Important: The usage of tie-down material with different capacities is not allowed.

There are two ways to secure a package with tie-down ropes or tie-down straps:

a) *Lashing across or around a package (embraced lashing)*
The embraced lashing method with tie-down straps or tie-down ropes is to fasten the strap or rope from one tie-down fitting across or around the load to a second tie-down fitting on the opposite side.
A strap attached to the fittings on opposite sides of the load is rated for twice its ultimate load capacity, e.g. an ETSO/TSO-C172 strap with 2,250 kg (5000 lb) rated restraint capacity will provide up to maximum 4,500 kg (10000 lb) ultimate load for standard lashing.



b) *Lashing directly fastened to the package (direct lashing)*
If a tie-down strap is directly fastened to the load with one tie-down fitting, the ultimate restraint capacity of the strap, e.g. an ETSO/TSO-C172 strap with 2,250 kg (5000 lb) ultimate load, will apply.



***Note:** Aircraft load and restraining limitations must not be exceeded, including requirements for Rigid Cargo (RC) limitations for CRS, inoperative equipment.*

The lashing of heavy and outsized cargo is done (if applicable) using relevant materials and limitations for such materials must not be exceeded.

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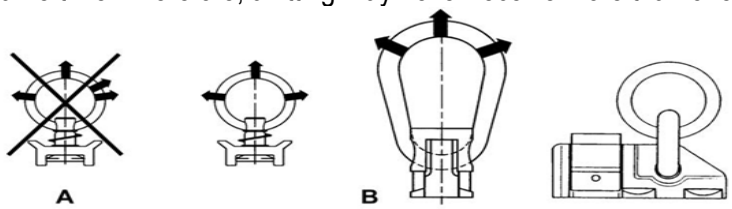
4.10.7.2.1 Use of Tie Down Material

Ensure that the tie-down material is in serviceable condition.

a) Tie down ropes
   1. Fix tie-down ropes to the aircraft floor tracks or tie-down fittings.
   2. Make sure that the overlapping ends of the tie-down ropes are long enough and will not loosen in the case of sudden stress.
   3. Fix the tie-down ropes to the tie-down rings in a way that they may be easily loosened for unloading.
   4. Do not fix tie-down ropes to other parts of the aircraft.
   5. Do not use the same attachment points for lashing, which are used to secure the net sector divider nets.

b) Tie down fittings

   A single tie-down fitting may receive up to three straps/ropes in three different restraint directions (one up and two opposite horizontal directions). Forces generated by the load can never act in more than one direction at the same time; thus, the fitting will never be pulled by more than one strap/rope at the same time. Therefore, a fitting may never receive more than one strap/rope in the same direction.

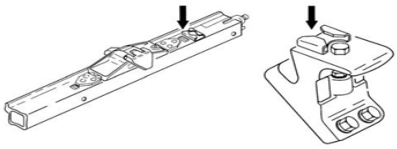


A- Forbidden B- Allowed

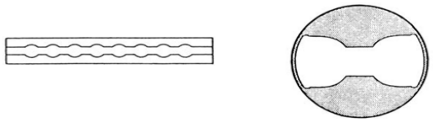
Fix tie-down rings to the aircraft floor only at tie-down points or tie-down tracks.

Distribute the attachment points of the tie-down rings evenly (nearly equal distances) over the length of the piece.

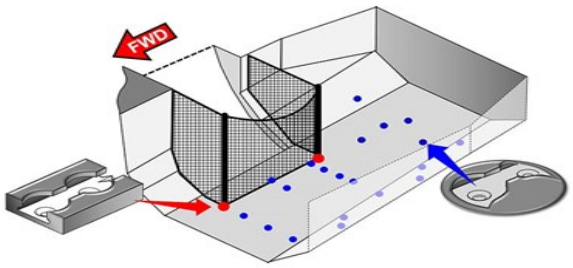
Example of tie down attachment points on outboard side lock and side guide:



Example of tie down attachment points on track and anchor plate:



Example of tie down attachment points in the bulk compartment:



Important: Tie-down on any other part of the aircraft structure, or on other restraints than those above, even if equipped with rings or tie-down points, is forbidden.

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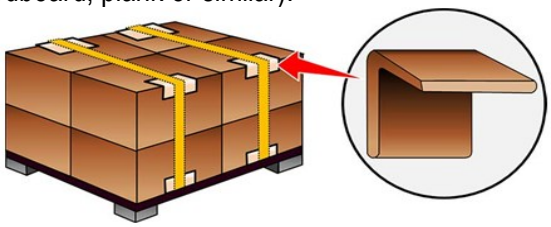
c) Tie down straps
Use only certified ETSO/TSO C172 tie-down straps.
Fix tie-down straps to the aircraft with their fixed tie-down rings only at tie-down points or tie-down tracks.

d) Tightening
1. Tighten the lashing strongly, but not so strong that load or tie-down material is damaged
2. Make sure that all tie-down ropes or tie-down straps used for lashing the same piece have the same tension
3. To protect fragile or sensitive cargo or dangerous goods, use cloth, cardboard or similar material for edge protection

e) Sharp edges
To avoid cutting or grinding of tie-down ropes or tie-down straps smoothen sharp edges with a piece of soft materials (e.g. cloth, cardboard, plank or similar):

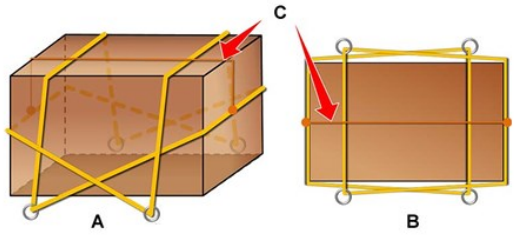


4.10.7.2.2 Standard Lashing

For standard lashing use:

a) 4 tie-down rings
b) 4 tie-down ropes or tie-down straps
1. 2 against upward forces
2. 1 against forward forces
3. 1 against backward forces
4. 1 safety rope

The safety rope prevents the tie-down ropes or tie-down straps used against forward and backward forces from sliding down.



A- Isometric View B- Top View C- Safety Rope

Sideward forces

Sideward forces are normally covered by the standard lashing for upward, forward and aft, but the rope/straps shall be close to the pieces.

Exception

If a piece is more than twice as high as wide:

a) Tie-down against sideward forces additionally to the standard lashing
b) Place this additional lashing between half and two third of the height
c) Secure this lashing by two safety ropes to prevent them from sliding down

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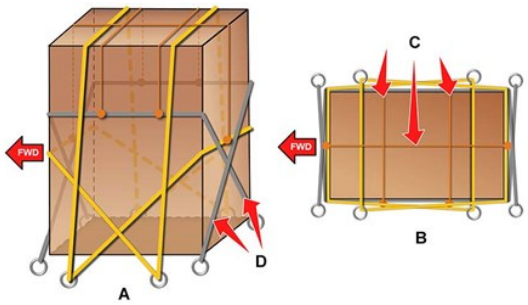


A- Isometric View B- Top View C- Safety Rope D- Additional Lashing

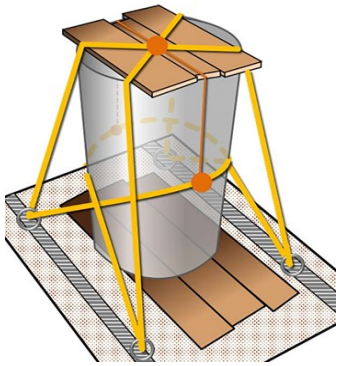
Note 1: *Ropes may be used to maintain straps in correct position.*

Note 2: *This standard tie-down restrains a load weighing up to 3,000 kg against 3G upwards or 1.5G horizontally when 2,250 kg fittings and straps are used.*

Barrels

Barrels are difficult to lash because of their round shape and mostly sharp rims.

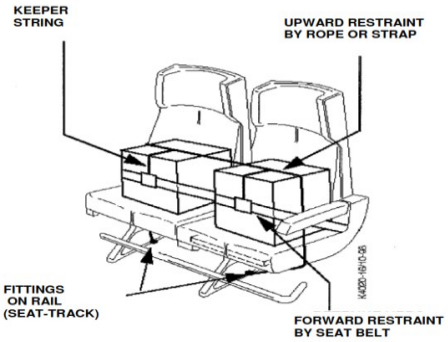
Use supporting planks for a safe lashing.



Packages on passenger seats

In exceptional circumstances some baggage might be accepted in the passenger cabin- see ch. 3.3.1. In that case the maximum weight can be 50kg and it must be placed in the aft part of the cabin excluding the emergency exit rows/seats. The baggage must not hide the safety belt, nor hinder the smoking/ fasten seat belt signs or required exit sign. The nature of this baggage might be flexible package without sharp edges, like suitcases, shopping bags, music instrument etc.

It is mandatory to take all precautions not to damage the seat by placing a blanket or tarpaulin over the seat. Packages are tied down using seat belt and/or straps/ropes, in a way that the package will not fall off the seat during turbulences or any other abnormal position of the aircraft.



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4.10.7.2.3 Calculation of Lashings Required

The overall strength of a tie down scheme depends on the weakest point within that scheme. This strength is known as Breaking Strain.

When the load is tied down on two sides the system can support twice the breaking strain of the weakest part. Therefore, if the strap goes from one side of the load to the other the braking strain will be doubled.

It is important the angles at which the load is restrained.

Taking into account all these factors. The number of restraints required in any one direction can be calculated by using the following formula:

Number of restraints= (Weight of item x Restraint factors)/ Breaking strain

The following table produced by IATA, can be used for guidance for the number of required restraints, for a given weight and various items of equipment, which itself accounts for all the considerations mentioned above:

Load to be restrained (kilos)	No of Single Stud Fittings	Number of ropes hooked on two fittings* (one on each side of the load)				
		1.5G				3G
		Left**	Right**	Fwd	Aft	Upward
Less than 300	2	1	1	1	1	1
301-600	4	1	1	1	1	2
601-900	6	2	2	2	2	3
901-1200	8	2	2	2	2	4
1,201–1,500	10	3	3	3	3	5
1,501–1,800	12	3	3	3	3	6
1,801–2,100	14	4	4	4	4	7
2,101–2,400	16	4	4	4	4	8

*When the rope is hooked on a fitting on one end and to the piece of cargo on the other end, then the number of ropes is double the number indicated in the tabulation.

**For a normal shaped load the sideways restraint is provided by the restraints in the other directions. Load with irregular shape or high centre of gravity requires left-right restraint.

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4.10.7.3 Cargo Nets

The loads put in the cargo compartment shall be restrained to avoid movement during the flight. Cargo door barrier nets and compartment separator nets must be secured inside the aircraft compartments and not left hanging outside between offload and onload.

There are several different restraining nets:

- Baggage compartment door safety net secures the baggage not to fall when the cargo door is opened and prevents the cargo door from jamming;
- Cargo Restraint Net (Horizontal net) or tie down provides vertical restraint for the baggage and cargo. It is attached to the cargo compartment floor with anchor plates. Adjustable straps allow the arresting net to extend and retract;
- Cargo barrier net (vertical net)- this is optional cargo barrier net and is a two-piece assembly that divides the cargo compartment into three areas and provides horizontal restraint. This is solely intended to optimize the cargo compartment loading.

The cargo nets found on aircraft in Amelia Intl fleet, are written in the chapter 6 under hold characteristics.

All nets must be properly installed prior all flight departures even if cargo hold is empty.

Note: *If door net shows any damage (missing tie-down ring or damaged net, etc., do not load anything in this compartment or lash all pieces/loads.*

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4.10.8 Load Spreading

When the weight of item(s) to be loaded exceeds the maximum floor load per square meter or the maximum floor load per running meter of a compartment, the weight has to be spread to prevent damage to the compartment floor and overloading. This may also apply to smaller items weighing less than 150 kg. The item must be fully restrained.

Caution*: *Overloading can cause damage to aircraft frames and ribs and consequently can have serious implications for the safety of the aircraft.

The weight can be spread by making use of spreading wood, in which case:

a) The surface to support the weight will be enlarged.
b) The length will be enlarged.

When using spreading wood, following instructions must be taken into consideration:

- Boards should be thick enough to provide rigidity so that the weight placed on them is adequately spread over their full area;
- Boards should be free from wraps which would have the effect of concentrating the load on bumps or edges;
- Load should be placed as centrally as possible to ensure adequate load spreading;
- Boards should be used in pairs (as a minimum) to provide stability;
- Other loads should be kept off the boards unless their extra weight is taken into account in the calculations;
- Two single tie-down studs;
- Approved rope;
- Two wood planks with two 20/25mn thick, 20/25cm width and 1m long, respecting the distance between the board (30cm up to 150kg)- for details refer to ch.5.

The Load Agent or Cargo agent will advise the spreading requirements for each item. The information will be notified on the LIR.

The floor strength of the holds is written in chapter 6 of this manual depending on the aircraft type.

Details on the aircraft structural loading limitations are presented in ch. 5.

4.10.8.1 Calculation of Load Spreading

If the piece of load exceeds the floor strength for the concerned aircraft, then spreading is required.

Actual floor loading = (weight of package) / (contact area with floor)

If the actual loading under the piece exceeds the maximum, the area of spreader board must be calculated:

Area of boards required= (weight of package) / (max floor loading)

For details refer to ch.5.

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4.10.9 Use of Different Loading Aids

4.10.9.1 Use of Carts and Dollies

- Do not wedge light packages between heavier items.
- Ensure the overall height of load permits safe lifting of each piece of load during loading and offloading of carts by personnel standing on the ground.
- When not in use the braking system shall be engaged on all strings of baggage carts.

4.10.9.2 Use of Tractors

- Limit the number of carts and dollies in a train to the maximum specified by the local airport regulations.
- Do not attempt sharp turns close to the aircraft. Keep at least 1 m away from the fuselage.

4.10.9.3 Use of Belt Loaders

- Ensure proper separation between articles on the conveyor belt to avoid jamming.
- Adjust the back of the conveyor belt correctly to avoid dropping goods from the belt.
- Handrails shall be deployed when a belt loader is used to gain access to aircraft cargo holds; however, caution shall be exercised where there is restricted clearance with the aircraft fuselage or engines.

4.10.9.4 Low-Wing Aircraft

To prevent damage to aircraft with low wings, baggage tractors shall stop approximately 1 m from the belt loader to unhook the carts. Move the tractor away and position the carts by hand.

Take care when pulling or pushing carts especially when ramp conditions are slippery. When necessary, obtain assistance.

When removing baggage carts, the tractor shall be positioned pointing away from the aircraft wing and the baggage cart pulled to the tractor.

Extreme caution must be used when using covered baggage carts.

4.10.9.5 Bulk Loading of Smaller Aircraft

Use belt loaders if the door sill height does not allow items to be passed into the doorway without undue lifting. Always consider the use of belt loaders for heavy items (over 23 kg).

Keep a gap of at least 1 m between baggage carts/dollies and the cargo belt when towing, to prevent collisions when approaching the belt loader.

Carts or dollies must be disconnected from the tractor and manoeuvred by hand if the carts or dollies need to be closer than 1 m.

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4.11 OPEN RAMP DEPARTURE

An open ramp is a taxi-in and taxi-out operation area. In some locations, the aircraft may be towed from an open ramp to a taxiway, prior to engine start.

a) Complete all pre departure checks.
b) Refer to Departure Communication and follow the required phases of dialogue.
c) Ensure all staff and equipment is clear of the aircraft and behind the ERA.
d) Position for marshalling in an area behind the ERA while being in clear view of the flight crew on either side of the aircraft, depending on facility.

4.12 AIRCRAFT DEPARTURE

A departure is normally conducted with a dialogue between flight crew and ground staff member in charge of the departure operation via an interphone*. This procedure ensures the highest level of safety during departures based on a precise exchange of information. The ground staff member in charge of the departure operation shall maintain continuous contact with the flight crew and is responsible for the ground maneuver.

The scope of this departure procedure is limited to conventional towbar and towbarless pushback operation.

***Note**: The term "headset" also applies whether a wired or wireless interphone system is used.*

Other staff are also involved in the departure process. The number of other staff and their functions/responsibilities can change depending on the:

a) Operating airline procedures
b) Aircraft type
c) Ground Support Equipment (GSE) used for the maneuver
d) Airport infrastructure
e) Stand configuration

Chapter 4.12.1 describes the responsibilities for the main functions involved in the pushback maneuver.

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4.12.1 Ground Staff Member Responsibilities

4.12.1.1 Ground Staff Member Responsible for Departure

The responsible ground staff member is defined as the person performing the communications with the flight crew. A responsible ground staff member shall be in charge of each aircraft pushback. This function can be performed by different agents in different roles and positions. The specific assignment in duty may vary from handler to handler.

The ground staff member responsible for the departure shall:

a) Be in charge of the entire pushback, once clearance to begin pushback has been given by the flight crew;
b) Ensure the pushback tractor and/or towbar/towbarless (TWL) tractor is suitable for the specific aircraft type.
c) Conduct briefings with all persons involved in the aircraft movement to review and confirm how the aircraft will be maneuvered.
d) Have ultimate responsibility to review pushback procedures based on conditions observed and advise flight crew of any anticipated changes to pushback.

4.12.1.2 Pushback Tractor Driver

The pushback tractor driver shall:

a) Ensure the pushback tractor and towbar/TWL tractor is suitable for the specific aircraft type
b) Stand by for clearance-to-push communication from the flight crew or responsible ground staff member or brake operator in case of towing.

Note: *When a single person pushback is conducted, the pushback tractor driver shall also carry out the function of the for departure as defined in ch. 4.12.1.1.*

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4.12.1.3 Wingwalker

This manual and the ground handler's manual establish requirements for wing walkers. The presence of such personnel may also be controlled or restricted by civil aviation authorities or local airport authorities.

Where applicable, wingwalker or other assist personnel must:

a) Be under the direction of the responsible ground crew at all times.
b) Use 2 marshalling wands, either day-wands or illuminated wands for low visibility operations.
c) Be positioned before and during movement of aircraft as follows where applicable and/or permitted:
   1. approximately 1 m (3 ft) outboard of the wingtip and with a clear view of wingtip clearance and any potential hazards.
   2. in line with the rearmost main gear wheel.
   3. able to maintain visual contact with person responsible for pushback/towing.
   4. At a safe distance from the moving aircraft/pushback tractor during the entire pushback
   5. Maintain situational awareness to avoid personal injury hazards e.g., moving equipment and vehicles, aircraft, slip, trip and fall hazards such as chocks, cones, GSE, uneven ground, spillages, etc.

   Note: *See the diagrams in the subchapters below for positioning of wing walkers during aircraft arrival on stand and during pushback.*

d) Ensure the aircraft movement path is clear of any obstructions (i.e. Other aircraft, vehicles etc.).
e) Provide "Clear to Move Aircraft" clearance signals at all times to the person responsible for pushback by using a distinct pendulum arm motion.
f) Continue to monitor the aircraft path until the aircraft is stopped at the departure point.
g) If at any time during aircraft movement, the wingwalkers are unsure or identify an imminent danger, signal the person responsible for the pushback with the "STOP" signal.
h) When the aircraft is stopped at the departure point, position themselves either at the 11 o'clock or 1 o'clock position in clear visibility of the flight crew on the terminal side at a safe distance away from the aircraft.
i) Give the "Hold movement of aircraft" signal to the flight crew when the visual "Brakes Engaged" signal has been received from the person responsible for pushback (refer to appendix 1).
j) Remain in position until the responsible ground staff member takes over to take over the marshalling clearance of the aircraft.
k) Return to terminal once marshalling duty has been transferred.

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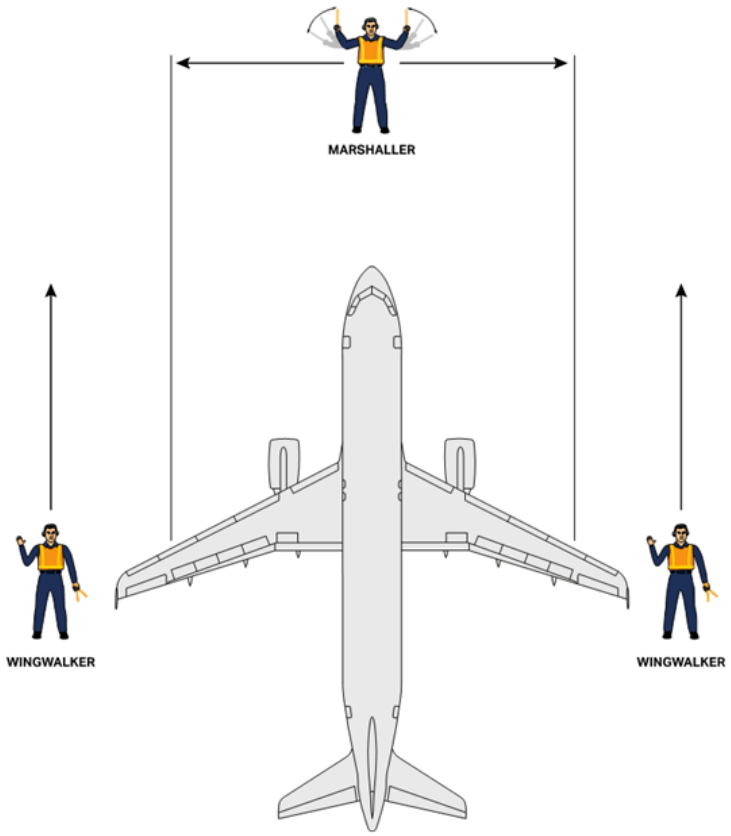
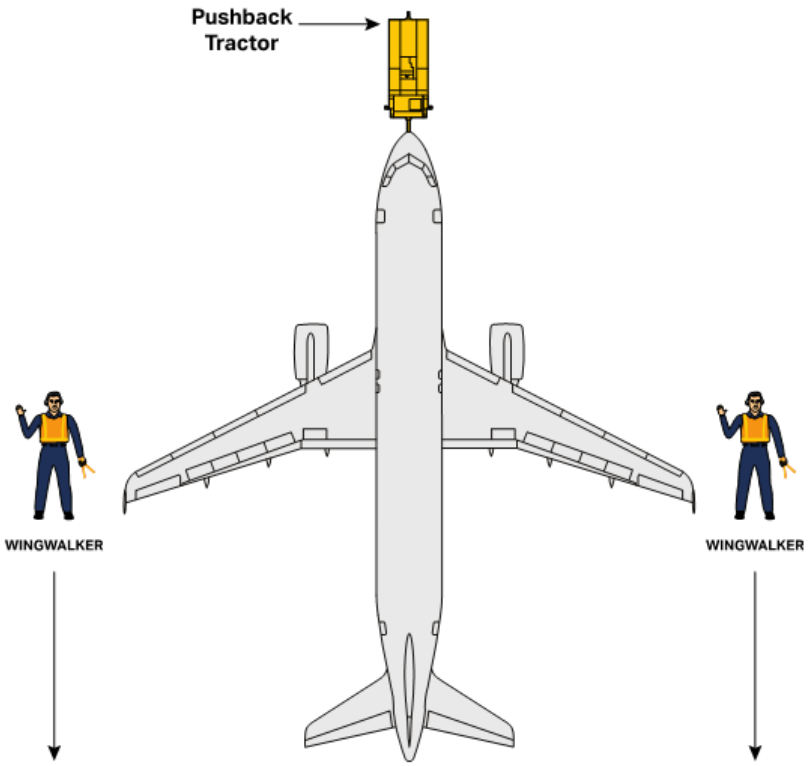
4.12.1.3.1 Wing Walker Positioning for Aircraft Arrival



4.12.1.3.2 Wing Walker Positioning for Aircraft Pushback



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4.12.2 Predeparture Activities

During the predeparture activities the following must be ensured and completed prior to an aircraft departing the parking gate or stand:

a) Personnel not involved in the aircraft departure are positioned outside the ERA;
b) Perform the predeparture walkaround check as described in ch. 4.12.2.1
c) If applicable, wing walkers and/or other applicable personnel are present;
d) If applicable, communication with the flight crew on air starter unit (ASU) positioning, engine start sequence and identification of minimum specifications for volume and pressure of air supply;
e) Anti-collision lights are only turned on as described in ch. 4.12.6.1;
f) Communication is established with the flight crew as per ch. 4.12.2.3 & 4.12.5;
g) Vehicles and personnel remain clear of aircraft engine intake and/or blast areas during engine start.

4.12.2.1 Predeparture Walkaround Check

An aircraft walking around check must be performed by the agent in charge of departure operations. It should be done in the same path as shown in the picture in chapter 4.1.7.

The walkaround should start as soon as possible after all ground servicing activities have been completed. Walk around the entire aircraft at a normal walking pace. The check shall start as close as possible to departure time. If any part of the aircraft still has GSE engaged at the time of the check, or if GSE re-engages with the aircraft after the check, the applicable area(s) shall be reinspected.

During this walkaround, the agent shall check:

a) The apron/ramp area is free of:
   i. Debris that could cause foreign object damage (FOD);
   ii. Contamination that could be hazardous to aircraft movement;
   iii. Objects that could be impacted by the aircraft or subjected to jet blast effect.
b) All GSE and passenger boarding devices are detached.
c) The stand area is clear of obstructions.
d) GSE and vehicles are positioned clear of the aircraft path.
e) Adequate clearance exists between the aircraft and facilities or fixed/ loose obstacles and objects along the aircraft movement path.
f) All aircraft servicing panels and/or hatches are closed and secured (exception- external power and headset panels).
g) Cabin/cargo doors:
   1. handles are flush with the fuselage;
   2. there is no visible damage on the aircraft, particularly around cabin and cargo doors.
h) Any observed abnormalities on the aircraft observed (e.g. obvious damage, fluid leakage, unremoved pitot covers) are immediately brought to the attention of the pilot in command, the person responsible for supervision and where applicable the maintenance personnel.
i) Items such as propeller straps and tail stands are removed
j) Landing gear safety pins are removed.
k) There are no obvious signs of unmarked dents or other skin panel damage.

Note1: *It is essential to have adequate lighting when doing the walk around check. If the lighting is insufficient, use a flashlight.*

Note 2: *In the event of the aircraft returning to stand, the predeparture walk around check shall be repeated.*

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Caution: If any of the above conditions or actions are not met inform the pilot in command, your supervisor and the maintenance personnel if any. This may affect the safety of the intended flight.

For easier and more systematic walkaround check, Amelia Intl has created checklists which may be used if needed. To request the forms, contact ground@aeh.flyamelia.com See ch. 4.1.5.1.

4.12.2.2 Pre-Departure Table

Prior to aircraft movement, the responsible ground staff (headset operator) shall ascertain that the following requirements are met/carried out:

Legend: TWT–towbar tractor TWL–towbarless tractor

ACTION	APPLICABLE TO				
	Pushback		Towing		Taxi Out
	TWT	TWL	TWT	TWL	
The required pre departure servicing checks are completed	√	√	√	√	√
Fire protection devices are available and correctly positioned (as per local rules).	√	√	√	√	√
The tractor and towbar combination, if applicable, are suitable for the operation, considering the aircraft type and weight, weather and surface conditions.	√	√	√	√	
The nose gear steering bypass pin is installed correctly, or the nose gear steering torque links are disconnected, if applicable, or the nose gear steering mechanisms are set as required for pushback (as applicable to the aircraft type).	√	√	√	√	
Communication with flight crew/brake operator and ground staff is established via interphone system.	√	√	√	√	√
Aircraft Main Landing Gear (MLG) chocks are installed and nose gear chocks are removed, if applicable	√	√	√	√	
Aircraft nose gear chocks are installed and MLG chocks removed, if applicable					
Additional staff, such as wing walkers, are present, if applicable/required.	√	√	√	√	
If an air start unit (ASU) is required, check the equipment is correctly positioned and suitable for the operation.	√	√			
If an ASU engine start is undertaken, communicate to confirm ASU positioning and engine start sequence with the flight crew.	√	√			
All persons not involved in the aircraft departure operation are clear of the departing aircraft, outside the ERA, and remain clear of the aircraft and pushback equipment throughout the pushback maneuver.	√	√	√	√	√
The GSE is parked in designated locations outside the ERA, and the intended path of the aircraft remains clear of equipment and other obstacles throughout the pushback maneuver.	√	√	√	√	√
The PBB is fully retracted and parked in its designated parking location, if applicable.	√	√	√	√	√

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ACTION	APPLICABLE TO				
	Pushback		Towing		Taxi Out
	TWT	TWL	TWT	TWL	
The ERA and the path/area that the aircraft will move toward is clear of FOD, and remains so throughout the pushback maneuver, ensuring safe aircraft movement.	√	√	√	√	√
The stand surface condition is sufficiently free of ice, snow, etc., to ensure safe aircraft movement.	√	√	√	√	√
The ramp area is free of objects/obstacles that may be impacted by the aircraft or may endanger others due to jet blast effects	√	√	√	√	√
The air intake and blast areas of the aircraft engines are clear of persons and obstacles, such as GSE.	√	√			
All persons involved in the aircraft movement stay well clear of the danger areas around the tractor, landing gear and aircraft engines	√	√	√	√	
Flight crew/brake operator confirm that the aircraft parking brake is set.	√	√	√	√	
Completion of the pre-departure table is indicated to the flight crew.	√	√	√	√	
A qualified brake operator is in the cockpit.			√	√	
Cross reference with GOM section:	4.12.3.1	4.12.3.2	4.13.3.3		

Note: *Where a remote-control pushback tractor connected to the nose gear is used, TWL pre-departure activities shall apply.*

Caution: It is critical that the responsible ground staff member (headset operator) establishes verbal communication with the flight crew via the aircraft interphone system, as departures using marshalling hand signals without headset communication shall only be conducted in exceptional cases.

4.12.2.3 Pre-Departure Communication

An aircraft departure shall always be conducted using interphone communications. If the interphone becomes/is unserviceable, use conventional hand signals (refer to Appendix 1).

a) Connect the Interphone and:
   1. Verify the communication system is functional.
   2. Update flight crew on the progress of the ramp operation.
b) Prior to departure, conduct a briefing with the flight crew and the ground staff member responsible for the departure, to:
   1. Review departure specifics (e.g., direction of movement, ASU requirement, final positioning, taxi out direction).
   2. Review standard hand signals to be used, including emergency signals.

Caution:
Repeat all given instructions or acknowledge them in a manner clearly indicating that they have been understood and will be complied with.

c) Request permission to disconnect ground power, if applicable.
d) Disconnect GPU/FPU after approval is received from flight crew.
   Note*: The ground staff responsible for departure should be in continuous communication with flight crew by interphone*.

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4.12.3 Connecting the Pushback Vehicle

a) Prior to connecting the tractor to the aircraft, as per Table in ch. 4.12.2.2, the tractor may be parked in front of the aircraft or outside of the ERA, but never behind the wings.
b) Ensure the nose gear steering bypass pin is correctly installed prior to towbar/TWL connection to the aircraft and/or ensure the nose gear steering mechanisms are set as required for pushback (as applicable to the aircraft type). **The steering bypass pin shall be:**
   1. Labelled with the specific aircraft type(s) for which it can be used.
   2. Identified with a "Remove Before Flight" streamer.
   3. Checked regularly for proper technical condition, or as per manufacturer instructions.

   Note: *Each aircraft type has specific requirements for the bypass of the nose gear steering mechanism. Refer to ch.6 for nose gear steering bypass pin details.*
c) Ensure the steering hydraulic system is depressurized or the nose gear steering torque links are disconnected, as applicable for aircraft not fitted with a nose gear steering by-pass system. Coordination with the flight deck would be required to ensure a safe depressurization and repressurization of the aircraft hydraulic system.
d) The Pushback tractor (with Towbar/TWL) shall only be connected to the aircraft once all GSE is detached from the aircraft.
e) A guide person shall be used to assist in the final approach to the towbar/nose gear when a tractor and towbar is used for the pushback process. When a TWL tractor is used, a guide person shall be used when the vision of the tractor driver is/might be restricted.

General connection procedures are showed below. For specific aircraft type check the relevant subchapter in chapter 6 Aircraft Specifics.

4.12.3.1 Connecting Pushback Tractor and Towbar

a) Where applicable, remove the chocks from the nose gear and reposition at the main gear.
   Note: *Nose gear wheel chocks may be removed without notification, provided the Main Landing Gear wheel chocks are still positioned.*
b) Connect the towbar to the nose gear first.
c) Ensure the towbar connection is secured and a locking pin is in place.
d) Ensure the towbar is aligned with the centerline of the aircraft while connecting.
e) Raise the towbar so its head is at the same height as the tractor connection.
f) Approach the towbar slowly until the connection aligns with the pushback tractor.
g) Ensure the front wheels of the tractor remain straight and the tractor is in line with the centerline of the aircraft.
h) Secure the towbar connection to the pushback tractor.
i) Raise the towbar wheels by releasing pressure on the hydraulic pump.
j) Select the "Park" or "Neutral" gear (if no selection for Park) and set the parking brake of the pushback tractor.
k) To minimize the possibility of injury, Ground handling personnel shall:
   1. Face the tractor when connecting the towbar to the tractor.
   2. Stand with both legs on the same side of the towbar during the connection/disconnection procedure (i.e. do not stand astride/over the towbar).

Important: Ground handling personnel must not stand astride/over the towbar during the connection/disconnection procedure.

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4.12.3.2 Connecting Towbarless Tractor

a) Ensure the correct aircraft type is selected on the TWL control panel, where applicable and in accordance with TWL operating procedures.
b) Remove the chocks from the nose gear (where installed) and reposition at the main gear.
Note: *Nose gear wheel chocks may be removed without notification, provided the Main Landing Gear wheel chocks are still positioned.*
c) On final approach to the aircraft, the tractor shall be properly aligned and correctly positioned.
d) Ensure the aircraft nose wheels are safely locked into the tractor cradle by the tractor locking mechanism.
e) Position TWL tractor to standby for lifting.
f) Select "Park" or "Neutral" gear (if no selection for Park) and set the parking brake of the pushback tractor.
g) Ensure aircraft is not lifted while any GSE or PBB are connected to the aircraft.

Note: *Towing with towbarless system is prohibited on ATR42/72.*

4.12.3.3 Connecting Remote-Controlled Tractor to Nose Gear

a) Ensure the remote control unit's battery is sufficiently charged.
b) Ensure the tractor is sufficiently charged for the task/pushback maneuver.
c) Switch on the remote control unit and ensure it connects to the tractor.
Note: *See ch. 4.12.3.2 for other points related to connecting the TWL.*

4.12.4 Wheel Chock Removal

Refer to ch. 4.7.2

4.12.5 Departure Communication

Departure communications procedures outlined in this section are a basic standard for both pushback and open ramp (taxi out) departures. Amelia Intl does not have any specific requirements in the departure communication.

Aircraft departure must always be conducted using interphone communications. In the event that the interphone becomes unserviceable or under extreme circumstances where the interphone is not available refer to ch. 4.12.5.4.

The specific dialogue contained herein does not forbid the exchange of additional important information between flight crew and ground staff member using non-standard phraseology (e.g., request for authorization to disconnect ground support units).

Note:

1. *If the pushback must be stopped, the following call will be made: STOP PUSH BACK.*
2. *Where applicable, use "pull out" instead of "pushback"*
3. *Only engage the towbarless tractor and lift the aircraft once the passenger boarding device has been removed from the aircraft and flight crew has requested for pushback.*

In general, standardized communication is used between the ground crew and the flight crew. This may be accomplished verbally by using the aircraft interphone system or visually using hand signals.

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4.12.5.1 Departure Communication Dialogue

The dialogue is a sample communication to be used for a departure:

Note: *In case of an aircraft taxi-out, "Pushback" and "Pushback completed" phases are not applicable.*

Dialogue between Ground Staff Member and Flight Crew				
Phase	**Ground Staff**		**Flight Crew**	
Preparation		Inform the Flight Crew about the use of a towbar or TWL tractor (if applicable)		
	Call:	CONFIRM PARKING BRAKE SET		
			Reply:	PARKING BRAKE SET
			Call:	CONFIRM STEERING BYPASS PIN INSERTED/NOSE WHEEL STEERING DEACTIVATED (if applicable)[1]
	Reply:	STEERING BYPASS PIN INSTALLED/NOSE WHEEL STEERING DEACTIVATED (if applicable)[1]		
			Call:	CONFIRM CLEAR TO PRESSURIZE? (if applicable)
	Reply:	CLEAR TO PRESSURIZE (if required)		
After completion of the pre-departure servicing checks	**Call:**	PRE-DEPARTURE CHECKS COMPLETED		
	Call:	ELEVATING AIRCRAFT[2]		
	Call:	READY FOR PUSHBACK[1]		
Pushback			**Reply:**	STANDBY
			Call	PUSHBACK APPROVED (MENTION AIRCRAFT NOSE DIRECTION, START-UP POINT, PULL FORWARD, ETC.)
	Call:	CONFIRM PARKING BRAKE RELEASED		
			Reply:	PARKING BRAKE RELEASED
	Call:	COMMENCING PUSHBACK (MENTION AIRCRAFT NOSE DIRECTION, START-UP POINT, PULL FORWARD, ETC.).		
Engine start	**Call:**	CLEAR TO START ENGINES.		
			Reply:	STARTING ENGINES (MENTION ENGINE START-UP SEQUENCE)
Pushback completed	**Call:**	PUSHBACK COMPLETED, SET PARKING BRAKE.		
			Reply:	PARKING BRAKE SET.
Disconnecting			**Call:**	CLEAR TO DISCONNECT.
	Reply:	DISCONNECTING, HOLD POSITION AND WAIT FOR HAND SIGNAL ON YOUR LEFT/FRONT/RIGHT (DISPLAY THE STEERING BYPASS PIN (IF APPLICABLE TO THE AIRCRAFT TYPE) TO THE FLIGHT CREW		
			Reply:	HOLDING POSITION AND STANDING BY FOR HAND SIGNAL ON THE LEFT/FRONT/RIGHT

*Applicable for departures with towbar and towbarless tractor.

**Applicable for towbarless tractors.

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4.12.5.2 Items to be Communicated Between Responsible Ground Staff Member and Flight Crew

Phase	Task	Ground Staff Action
Departure Preparation	GPU removal	When instructed by flight crew, remove GPU.
	Towbar/ Towbarless Tractor connection	a) Get confirmation that the aircraft's parking brake is set. b) Get confirmation that the nose wheel steering is depressurized or advise flight crew that the bypass pin is inserted (if applicable). c) Connect the Towbar. d) Connect the Towbarless t
	Chock removal	a) Get confirmation from flight crew that aircraft parking brakes are set. b) Remove chocks.
	Pre-departure check	Advise the flight crew that the pre-departure check has been completed or communicate any discrepancies
Engine start	Starting engines	When requested by the flight crew, advise when the engines may be started and the start sequence.
	ASU (if used)	When requested by the flight crew, signal to the ASU operator to supply the required pressure.
Pushback (and engine start)	Brakes	Get confirmation that aircraft's parking brakes have been released.
	Movement of the aircraft (pushback/pull out)	Get permission from flight crew, to commence the pushback.
	Direction of push/ nose	If applicable, ask in which direction the aircraft has to be pushed/in which direction the nose should point after pushback.
	Engine start	When requested by the flight crew, advise when the engines may be started.
Pushback completed & Engine start completed	Towbar/ Towbarless Tractor disconnect	a) Get confirmation that the aircraft's parking brake is set. b) Disconnect c) Remove the steering bypass pin- where applicable.
	Headset removal	a) Get permission from flight crew to disconnect the headset. b) Advise flight crew to hold position and wait for visual signal at left/ right of the aircraft.
Departure	‘’All clear’’ signal	a) Ensure verification of pin removal has been completed–if applicable. b) Give the “All Clear” signal when the path of the aircraft is clear of all obstacles. c) Get acknowledgement of “All Clear” signal.

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4.12.5.3 Departure Communication without Interphone

An aircraft departure shall always be conducted using interphone communications.

Only if the interphone becomes unserviceable or under extreme circumstances where the interphone is not available, shall the responsible ground staff member and flight crew use conventional hand signals. Refer to Appendix 1 for the Marshalling Hand Signals for Aircraft and Technical/Servicing Hand Signals-Ground Staff to Flight Crew and technical hand signals flight.

In this case preliminary agreement on the procedures shall be done between the ground staff and the crew.

Caution: For safety reasons, the interphone communication system cannot be used when there is thunderstorm activity over the airport as there is a risk of electrical discharges between the aircraft and the interphone system. Under these conditions communication headsets cannot be worn.

Caution: Repeat all given instructions or acknowledge them in a manner clearly indicating that they have been understood and will be complied with.

4.12.5.4 Interphone Communication Failure

Aircraft pushback requires a communication interphone. If the interphone becomes unserviceable or communications is lost, the following procedure shall be followed:

a) In the case of a single person operation and if no other means of communication are available, stop the movement and immediately request assistance to continue the movement (depending on local situations and regulations).
b) In the case of a multiple person operation, communication with the flight crew will be established using hand signals. The tractor driver shall be able to receive the visual signals as relayed from the flight crew. Once hand signal communication has been established, the pushback can resume.
c) Notify Air Traffic Control (ATC), if radio available, and continue the movement in cooperation with ATC, depending on local regulations.

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4.12.6 Pushback Maneuver

4.12.6.1 Anti-Collision Lights

During a standard departure, once all aircraft doors are closed, the flight crew requests pushback clearance from ATC. Once clearance is obtained, the flight crew will switch on the aircraft's anti-collision lights.

Caution: Anti-collision lights that are switched on are a visual indication to ground staff of imminent engine start-up or aircraft movement. Vehicle traffic shall stop until the aircraft has departed from the area.

Caution: If the anti-collision lights are switched on unexpectedly (other than in preparation for the departure or towing operation), ground personnel shall move away and remain outside the ERA. The responsible ground staff member shall check with the flight deck before resuming ground handling activities.

Caution: In case of the lower anti-collision light failure, the flight crew shall inform the responsible for the departure operation to inform staff involved in the operations about the imminent engine startup or aircraft movement.

4.12.6.2 Pushback Requirements

a) Prior to the aircraft movement, make sure the parking brake is released and the anti-collision lights are switched on, in accordance with local airport regulations.
b) Headset operator shall signal "Clear to Push" to the pushback tractor driver and wing walkers (if applicable) once advised by the flight crew that the aircraft brakes have been released and approval for pushback is given by the flight crew.
   Note: *In case of single person pushback operation, the pushback operator performs headset functions.*
c) Select the appropriate gear on the tractor and slowly begin movement. Start the pushback operation in a straight line.
d) Carry out the pushback maneuver at a pace no greater than 5 km/h or 3 mph (walking speed) and where required, apply the vehicle brakes gently.
e) During the maneuver, the pushback tractor driver shall ensure the taxiway (including other movement areas in the intended aircraft path) is free of other aircraft/equipment/obstacles. If an obstacle is identified, the pushback shall stop immediately until the obstacle is clear.
f) During pushback, ensure the steering turn limits are not exceeded and advise the flight crew if any are exceeded. Damage may occur to the nose gear. Refer to ch.6 for relevant aircraft type for the specific limits and how they are marked on the aircraft.
   Caution: The flight crew shall be notified immediately in the event any connection between the tractor and the aircraft is lost during aircraft movement.
g) At the end of the maneuver, the aircraft/pushback tractor set shall be correctly aligned with the taxiway centerline.
h) When the pushback maneuver is complete, headset operator will receive the "Vehicle Brakes On/Stop" signal from the tractor driver to confirm that the tractor parking brake is set. Prior to the disconnection of the tow bar or towbarless tractor from the aircraft nose gear, headset operator:
   1. Request flight crew to set the aircraft parking brake and hold the existing position until final clearance signal to taxi.
   2. When confirmation that the aircraft brakes have been set is received from the flight crew:

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i. Give the "Vehicle Brakes On/Stop" signal to the tractor driver and wing walkers, if applicable. Tractor driver releases the tractor parking brake and puts the gear in neutral to release any pressure on the towbar.
ii. Give authority to disconnect pushback equipment.

4.12.6.3 Staff Safety During Pushback Maneuver

a) Towbar/TWL tractor operations:

1. Throughout the pushback operation, all staff walking on ramp (including the headset operator when the aircraft is moving) shall remain clear of:
   i. The area on the ground directly underneath any part of the aircraft (including, but not limited to, the fuselage, wings, stabilizer, engines, nose gear).
   ii. The aircraft's path.
   iii. The tractor's path.
   iv. Engine danger areas
2. The headset operator shall:
   i. Be in visual contact with the tug driver throughout the pushback.
   ii. Avoid walking backwards and maintain situational awareness to reduce the possibility of tripping.
   iii. Use a headset cable long enough to operate safely and be allowed freedom of movement while not posing a trip or tangle hazard (not applicable when a wireless headset is used).
   iv. Ensure the headset cable remains clear of aircraft/pushback wheels.
3. If the responsible ground staff member is too close to the nose gear or pushback equipment, the tractor driver shall stop the pushback and review the required safety clearance conducted.

b) Remote-controlled pushback operations:

When pushback operations are undertaken using remote-controlled pushback equipment connected to the NLG, the responsible ground staff member in charge shall:

1. Stand forward of the aircraft.
2. Follow its movements and always be in sight of the flight crew.
3. Stay outside the engine's intake/suction area and wheel path of the aircraft during the entire pushback maneuver.
4. Maintain sufficient clearance between the equipment and themselves throughout the pushback maneuver, where the pushback equipment is connected to the nose landing gear.
5. Be in continuous communication with the flight crew via the interphone system.

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4.12.6.4 Pushback and Pull Forward

When a pull forward maneuver is performed after a pushback maneuver, particular attention must be paid to the end of the pushback maneuver and during the whole pull forward maneuver. To prevent the aircraft from overtaking/pushing the pushback vehicle during the pull forward phase, the following precautions shall be applied:

a) The aircraft engines shall be at idle thrust during all of the pushback/pull forward maneuver.
Note: *If the requirement to pull forward is known in advance, consider not starting the engines until the pull forward maneuver is completed.*
b) The pull forward maneuver shall be performed with the pushback vehicle in the lowest gear available.
c) Braking shall be performed smoothly and without jerks.
d) The flight crew shall be alerted immediately to stop the aircraft using gentle braking if aircraft control cannot be ensured/maintained from the pushback vehicle.

Note: The following factors increase the risk that the aircraft will overtake/push the pushback vehicle and shall be, therefore, taken into account:

1. The aircraft type and number of engines started/running
2. The slope of the parking stand and taxiway
3. The use of a tractor and towbar to undertake the pushback/pull forward maneuver.
4. Adverse weather conditions

Caution: Care shall be taken to avoid a 'jackknife' situation between the aircraft and the pushback vehicle due to asymmetric thrust from the aircraft (one engine running) during the transition from push to pull or vice versa. Do not exceed the manufacturer's maximum tow angles.

DANGER: If the aircraft overtakes/pushes the pushback vehicle, the responsible ground staff member shall ensure they stay well clear of the path of the pushback vehicle and the aircraft nose landing gear wheels.

Caution: Flight crew and aircraft maintenance personnel must be informed if the aircraft overtakes/pushes the pushback vehicle, as both the pushback vehicle and the aircraft nose landing gear may be damaged by the incident.

To relieve torsional stresses applied to the landing gear components and tires, move the aircraft in a straight line for a few meters to ensure the nose wheels are in the straight-ahead position when completing the pushback maneuver.

DANGER: If the nose wheels are not in the centered position, they can turn quickly to their centered position when the steering bypass pin is removed. This can result in personnel injury and aircraft damage.

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4.12.6.5 Maneuvering during Adverse Weather

4.12.6.5.1 Maneuvering During Wintery or Slippery Conditions

During adverse weather conditions (e.g., fog, rain, ice, snow) visibility and traction will be affected. The tractor driver shall reduce and adapt vehicle speed as required by the current conditions.

When maneuvering the aircraft on slippery apron surfaces, extreme caution is required to avoid losing control of the tractor due to skidding which may also lead to jack-knifing (where the tractor is pushed around by the aircraft in an uncontrolled movement). Many elements can contribute to the hazards involved (i.e., strong winds, slippery road surfaces, pavement slopes).

Observe the following minimum precautions:

a) Avoid sudden turns, deceleration or acceleration.
b) Except when using an ASU, do not start aircraft engines unless:
    1. The condition of the pavement is such that reasonable traction is ensured.
    2. The aircraft parking brakes are set.
    3. the aircraft is disconnected from the tow tractor/towbarless tow tractor.

4.12.6.5.2 Maneuvering During Low Visibility Conditions

a) Airport operators are responsible for developing low visibility procedures that are relevant for the airport.
b) Ground handling personnel shall be trained/authorized, as appropriate, prior to undertaking low visibility aircraft ground movement operations.
c) Ground handling personnel shall observe the movement limitations and other regulations applicable to the airport's low visibility procedures at all times.
d) Pushback tractors should be equipped with an airfield map, where this is available.
e) If there is any doubt as to the exact position of the pushback tractor/aircraft, the tractor driver shall stop the tractor/aircraft and inform ATC immediately.

Caution: The responsible for the departure (headset operator) should be positioned outside the tractor at safety distance during:

1. **Low-visibility conditions (heavy rain, fog, bad lighting)**
2. **Lack of sufficiently visible markings**
3. **Obstructions behind the pushback (e.g., GSE, light post)**

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4.12.7 Engine Start

During the engine start, vehicles and personnel remain clear of aircraft engine intake and/or blast areas.

4.12.7.1 Communication

4.12.7.1.1 Communication During Engine Start

Coordinate the engine starting sequence with the flight crew by conducting a pre-departure briefing:

a) During the engine start communicate with the flight crew only if he responsible ground staff member observe circumstances that require immediate notification and action by the flight crew.
b) When starting up with an ASU, supply the pressure at the request of the flight crew.
c) If ramp conditions are below standard for a normal pushback (e.g., hazards, obstacles, slippery, icy), the in charge of pushback will inform the flight crew that engine start clearances will not be given until either:
    1. The aircraft is moving over an area of the ramp where the conditions are safe for an engine start, or
    2. The pushback has been completed, the aircraft has come to a complete stop and the parking brake has been set.

***Note**: From the flight crew's seat facing forward, engine on the left is referenced as engine number one.*

4.12.7.1.2 Communication During Engine Fire

1. Engine Fire
   The Flight Crew normally detects an engine or APU fire and will take action using the engine/APU fire extinguishing system. However, the responsible ground staff member shall alert the flight crew immediately via the headset if flames are noticed from the engine or engine pylon.
   In the event that a headset is not available, the appropriate “Fire” hand signal must be used.
2. Engine Tailpipe/Exhaust Fire
   If flames from the engine tailpipe are noticed during engine starting, the responsible ground staff member shall alert the flight crew immediately, as such a fire might not be detectable via temperature sensors and/or fire warning systems in the aircraft.

Caution: Do not fight engine fires with fire extinguisher on the ground when the flight crew is in the flight deck. The flight crew will take all necessary action.

4.12.7.2 Engine Start Using an ASU

a) Only personnel and equipment involved in engine starting or aircraft pushback are permitted within the ERA during engine start.
b) Personnel and equipment involved in the engine start shall remain clear of engine danger areas.
c) Establish communications with the flight crew and confirm the total number of engines to be started, the engine start sequence to be used, number of ASUs being used and their positioning.
d) Advise the engine start sequence to the ASU operator(s) and any other ground personnel.
e) Where possible, the ASU should be positioned on the opposite side of the aircraft to the engine being started.
f) If the aircraft is to be pushed back, connect the pushback tractor and set the tractor’s parking brake, where this is possible without disconnecting ground electrical power.
g) If a pushback tractor is not connected, position a chock in front of the nose wheel.
h) Confirm with the flight crew that the aircraft parking brake is set, then remove main gear chocks.

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i) The ASU operator shall ensure the unit is ready to supply air pressure.
j) The headset operator shall inform the flight crew that the ground crew are ready for engine start.
k) Prepare for engine(s) start. Refer to section 4.12.5.1, Departure Communication Dialogue and Signals, for communications requirements.
l) When engine start is complete, the headset operator shall signal the ASU and ground power operator(s) to disconnect the ASU and remove ground power.
m) Disconnect the ASU hose(s).
n) Close and latch external air start and electrical panels

Important: When connecting and disconnecting ASU hose(s), walk directly underneath the fuselage, or close alongside it, keeping clear of engine danger areas.

4.12.7.3 Engine Start Using Cross-Bleed

Engine start using cross-bleed can only be performed once the pushback has been completed, the aircraft brakes have been engaged, and the area around the aircraft is clear.

Caution: With engine(s) above idle thrust, blast and suction effects are great

4.12.8 Pushback Disconnection

4.12.8.1 Pushback Tractor and Towbar Disconnection

a) The responsible ground staff member shall remove the tow pin securing the towbar to the pushback tractor
b) The Towbar shall be disconnected from the tractor before disconnecting from the aircraft (except where the towbar is specifically designed to be disconnected from the aircraft first).
c) The pushback driver shall check that other staff are clear of the intended travel path and slowly drive the pushback tractor to a position in the aircrafts path and be visible to the flight crew, if possible, ready for the towbar to be reconnected.
d) The responsible ground staff member shall disconnect the towbar from the nose landing gear and reconnect to the pushback tractor and move clear of the pushback tractor, in view of the driver.
e) The responsible ground staff member shall give an 'OK' signal to the pushback driver to confirm that the towbar is reconnected and it is clear to drive away.
f) The pushback driver/operator shall check that other staff are clear of the intended travel path and slowly drive the pushback tractor to a position visible to the flight crew until the responsible ground staff member on the interphone has disconnected and is in view of the flight crew.

Note: *Ensure the towbar is disconnected from the tractor before disconnecting from the aircraft (except where the towbar is specifically designed to be disconnected from the aircraft first).*

4.12.8.2 Towbarless Tractor/Remote Controlled Tractor Disconnection

a) The pushback driver/operator shall ensure that the tractor wheels are centralized and lower the aircraft nose-wheel and open the tractor cradle.
b) The pushback driver/operator shall check that other staff are clear of the intended travel path and slowly drive the pushback tractor to a position in the aircrafts path and be visible to the flight crew, ensuring that the wheel cradle is completely clear of the aircraft nose landing gear before commencing a turn.
c) The pushback driver shall rotate the driver's seat to the direction 'drive away', if applicable.
The pushback driver shall remain in a position visible to the flight crew until the responsible ground staff member on the interphone has disconnected and is in view of the flight crew.

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4.12.9 Pushback Completion

Pushback completion includes repositioning of the pushback tractor, removal of the nose gear steering bypass pin and displaying the steering bypass pin to flight crew, if equipped.

a) Remove the nose gear steering bypass pin and/or ensure the nose gear steering mechanisms are set to normal conditions for taxiing (as applicable to the aircraft type).
b) If previously disconnected, reconnect the torque link and inform flight crew.
c) Complete the headset communication and, after receiving flight crew approval, disconnect the headset and close the access panel (if applicable to the aircraft type).
d) Move clear of the aircraft to a safe position visible to the flight crew and away from its intended path.
e) Display the steering bypass pin to the flight crew (if applicable to aircraft type).
f) Give the "All Clear" signal once eye contact has been made with the flight crew and they are expecting the signal. In low-light conditions, the flight crew will turn on the interior lights of the flight deck.
g) Remain in position until an acknowledgement from the flight crew is received.
h) Drive the tractor back to the terminal, the appropriate holding position, or to the next task.

Danger: If the nose wheels are not in the centered position, they can turn quickly to their centered position when the steering bypass pin is removed. Personnel injury and/or aircraft damage could result.

Do not disconnect the interphone communication cable until the towbar or TWL tractor has been disconnected from the nose gear.

Danger: After disconnection of the headset, no attempt shall be made to approach the aircraft unless cleared by the flight crew to do so via hand signals.

4.12.10 Incidents During Pushback

4.12.10.1 Incidents During Pushback Involving Pushback Tractor/ Towbar or Towbarless Tractor

The list of incidents below outlines the recommended actions to be undertaken immediately by flight crew and/or tractor drivers in the event of an incident during the pushback operation. The list of incidents is not exhaustive and the recommended actions should only be applied if they are deemed the safest course of action given the exact circumstances of the incident. If airport procedures differ from the recommended actions below, those shall be followed.

Flight crew	Tractor Driver
Tractor Failure	
(a) Inform ATC. (b) Apply the aircraft parking brake. (c) Listen to VHF and wait for assistance. (d) Relay information from ATC to headset operator	(a) Stop aircraft/tractor set. (b) Apply tractor parking brake. (c) Inform the flight crew. (d) Contact supervision and equipment maintenance to advise of the situation, as required. (e) Follow instructions received from headset operator, as applicable. (f) If the TWL/towbar connection with the tractor needs to be reset (i.e., removed and reconnected), the aircraft shall be chocked while the tractor is being replaced.

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Flight crew	Tractor Driver
Tractor/Aircraft Separation	
(a) Apply the aircraft brakes. (b) As soon as the aircraft is at a standstill, apply the aircraft parking brake before releasing the pedal. (c) Inform ATC. (d) Relay information received from ATC to headset operator, if applicable.	(a) Do not apply tractor brakes. (b) Inform the flight crew of separation. (c) Follow the aircraft path attentively and stop the tractor according to the aircraft position. (d) Apply the tractor parking brake. (e) Confirm the aircraft parking brake is set then chock the aircraft. (f) Assess the reason for the separation. (g) Contact supervision, equipment maintenance and aircraft maintenance to advise of the situation, as required. (h) Follow instructions and/or complete pushback maneuver, as applicable.
Towbar/Shear Pin Failure (remains attached to the aircraft)	
(a) Apply the aircraft parking brake. (b) Inform ATC. (c) Relay information received from ATC to headset operator, if applicable.	(a) Stop aircraft/tractor set. (b) Apply the tractor parking brake. (c) Inform the flight crew of the towbar/shear pin failure. (d) Contact supervision, equipment maintenance and aircraft maintenance to advise of the situation, as required. (e) Chock the aircraft and replace the towbar. (f) Complete the pushback maneuver.
Pushback Tractor Fire	
(a) Inform ATC and headset operator. (b) Apply the aircraft parking brake. (c) Determine the need for aircraft emergency evacuation and confirm to ATC and headset operator.	(a) Inform the flight crew. (b) Stop aircraft/tractor set immediately. (c) Conduct an assessment of the situation and consider tackling the fire with the onboard tractor firefighting equipment only if it is deemed safe to do so. (d) Consider disconnecting and moving the tractor to a safe distance from the aircraft, if deemed safe and appropriate to do so. (e) Contact supervision, equipment maintenance and emergency services to advise of the situation, as required. (f) If flight crew confirm emergency evacuation, assist in the evacuation as far as is possible/practical by directing passengers/crew toward a safe location.

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Flight crew	Tractor Driver
Aircraft Fire	
(a) Inform ATC and headset operator. (b) Apply the aircraft parking brake. (c) Execute onboard emergency procedures.	(a) Stop aircraft/tractor set immediately. (b) Inform the flight crew. (c) If safe to do so, disconnect and move the tractor to a safe distance from the aircraft, where possible. (d) If safe to do so, headset operator should maintain communication with the flight crew and follow instructions. (e) Contact supervision and emergency services to advise of the situation, as required. (f) If flight crew confirm emergency evacuation, assist in the evacuation as far as is possible/practical by directing passengers/crew toward a safe location.
Accident with Other Aircraft or Vehicle	
(a) Contact ATC stating position and nature of the accident. (b) Listen to VHF and wait for assistance. (c) Relay information received from ATC to headset operator, if applicable.	(a) Stop aircraft/tractor set immediately. (b) Apply tractor parking brake. (c) Inform the flight crew. (d) Contact supervision, aircraft maintenance, equipment maintenance and emergency services to advise of the situation, as required. (e) Follow instructions received from the headset operator and/or wait for assistance. (f) Do not disconnect the tractor unless specifically instructed to do so by the headset operator and/or ATC. (g) If disconnecting the tractor, the aircraft must be chocked.
Interphone Communication Failure	
If during the pushback operation the interphone fails, the aircraft must be immediately stopped and an alternate means of communication established before continuing. If this is not possible, assistance must be requested.	
Visual Contact with the Wing Walkers Is Lost (if used)	
In the event that the tractor driver is unable to establish visual contact with one or both of the wing walkers, when used, the pushback shall be stopped and not recommence until visual contact is re-established.	

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4.12.11 Re-establishing Communication after Departure

This procedure is to be used when the responsible ground staff member or flight crew need to re-establish interphone communication after it has been disconnected.

4.12.11.1 Initiated from the Flight Deck

The flight crew sets the parking brake and re-establishes communication with the responsible ground staff member via a company channel or ATC.

If visual communication with the responsible ground staff member is still established then visual signals may be used.

4.12.11.2 Initiated from the ground

If the responsible ground staff member needs to re-establish communication with the aircraft after dispatch, do NOT approach the aircraft. If communication cannot be established using hand signals, make contact via company channel or through ATC.

When preparing to re-establish communication with the aircraft, the responsible ground staff member shall take the following precautions:

a) Make sure the responsible ground staff member has been seen by the flight crew and the intention to approach the aircraft to re-establish interphone communication is understood.
b) Approach the aircraft from the direction where visual contact with the flight crew is maintained as long as possible.
c) Only the responsible ground staff member establishing the interphone communication shall approach the aircraft.
d) Stay outside the aircraft's engine danger area when approaching the aircraft.
e) If possible, position pushback tractor in front of aircraft in clear view of flight crew to act as a safety barrier and prevent premature movement of the aircraft.

Caution: For safety reasons, the interphone communication system cannot be used when there is thunderstorm activity over the airport as there is a risk of electrical discharges between the aircraft and the interphone system. Under these conditions, communication headsets cannot be worn.

4.12.12 Aircraft Powerback Operations

N/A for Amelia Intl.

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4.13 TOWING

Aircraft towing may be carried out for three different reasons:

a) MAINTENANCE TOWING–Towing an aircraft without passengers, without cargo, and with minimum fuel on board.
b) OPERATIONAL/DISPATCH TOWING–Towing an aircraft loaded with passengers and/or fuel and/or cargo to/from the terminal gate or parking area to/from a remote location.
c) REPOSITIONING TOWING–Movement of an aircraft to/from a remote parking area with/without cargo or fuel.

4.13.1 Ground Staff Member Responsibilities

4.13.1.1 Responsible Ground Staff Member for Towing

The responsible ground staff member is defined as the person who has overall responsibility for the towing maneuver and is normally the pushback tractor driver, although the function may be performed by different ground staff members in different roles. Refer to this manual for the specific assignment of this duty.

The responsible ground staff member in charge of each towing maneuver shall check to ensure all requirements for the towing operation are met prior to commencing towing operations.

See ch. 4.12.1.2 for Pushback Tractor Driver's responsibilities.

See ch. 4.12.1.3 for Wing Walker's responsibilities.

4.13.1.2 Brake Operator

Where applicable, in accordance with local procedures, the brake operator shall:

a) Be responsible for communication with ATC
b) Complete a flight deck checklist for towing.
c) Ensure all aircraft doors are closed by authorized personnel.
d) During towing, the brake operator must be seated with the seat belt fastened.
e) Apply the 'Brakes On' and 'Brakes Off' procedures in coordination with the headset operator.
f) Switch on and switch off the external and anti-collision lights of the aircraft.
g) Position the seat in such a way that the brakes can be easily applied when required.
h) Inform the headset operator immediately if potential contact with any object(s) is detected.
i) Only apply the brakes during the tow when instructed by the headset operator or when it is clear that the aircraft has become separated from the tractor.

Note:

1. For procedures related to incidents during towing, refer to 4.13.4.

2. Presence on board of staff, other than the brake operator, is forbidden throughout the maintenance or repositioning towing operations, except for flight crew and maintenance staff. The brake operator must inform them that they must be seated with the seat belt fastened and must follow his safety orders if necessary.

4.13.1.3 Headset Operator

The headset operator is responsible for communications with the brake operator and/or VHF operator.

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4.13.1.4 VHF Operator

The VHF operator is responsible for communications with ATC and/or GMC (ground movement control).

Note: *The VHF operator may be positioned in the pushback tractor or on the flight deck depending on the ground staff member functions carrying out the towing maneuver.*

4.13.2 Pre-Towing Activities

The following requirements shall be met to perform an aircraft tow:

a) Carry out a pre-departure walk around in accordance with Section 4.12.2.1.
b) Carry out the requirements, as identified in the pre-departure table in Section 4.12.2.2, that are relevant to the towing maneuver.
c) Make sure the flight crew or a qualified brake operator (VHF operator where required) is in the flight deck, if applicable.
d) Communication shall be established between the headset operator and the flight crew, brake (VHF operator where required), if applicable.
e) Responsible ground staff member shall conduct a briefing with all persons involved in the aircraft movement to review and confirm how the aircraft will be maneuvered.
f) Ensure the hydraulic system pressure for aircraft braking and/or the brake accumulator is within the required pressure range.
g) Ensure any electrical systems required for towing are energized.
h) Ensure all landing gear safety pins are installed. After the tow, ensure all pins are removed and stowed.
   i. Connect the pushback tractor/equipment in accordance with the relevant instructions contained in ch. 4.12.3.
   ii. Remove the wheel chocks once ready to do so in accordance with ch. 4.7.2.

Caution: Inform the brake/VHF operator, headset operator and/or maintenance department for technical inspection if anyone:

- **Observes any type of excessive fluid leakage.**
- **Notices any signs of unmarked aircraft damage.**
- **Observes any fault, failure, malfunction or defect that may affect the safe operation of the aircraft for the intended flight.**

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4.13.2.1 Pre-Towing Preparation

The following checklist tis to be used in preparation for an aircraft tow.

ACTION	PERFORMED BY	
	Brake Operator	Tractor Driver
Apply the flight deck checklist for towing.	√	√
Test the means of communication between the tractor and flight crew.	√	√
Insert the steering bypass pin and deactivate steering.	√	√
Give permission to connect the towbar and tractor or TWL tractor after applying the aircraft parking brake.	√	
Install the landing gear safety pins, when required by the procedures.	√	√
Connect the towbar; first to the aircraft, then to the tractor and set the parking brake.		√
Before connecting the TWL tractor, ensure the aircraft MLG are symmetrically chocked		√
Connect the TWL tractor and set the parking brake		√
Once all GSE has been cleared away from the aircraft, remove or check removal of aircraft chocks.		√
Ensure the aircraft is clearly visible to other parties according to local regulations, especially after dark (e.g., switch on external and anti- collision lights).	√	
Contact the ATC for clearance to start moving the aircraft (depending on local regulations)	√	√
After receiving clearance, release the aircraft parking brake.	√	
Give clearance and instruction to the tractor driver to start moving the aircraft.	√	
Request confirmation from the brake operator that the aircraft parking brake has been released.		√
Conduct tow.		√

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4.13.2.2 Towing Communications

An aircraft towing maneuver shall always be conducted using interphone communications when the brake/VHF operator is present. Unless otherwise stated, this communication standard shall apply. The specific dialogue contained herein does not forbid the exchange of additional important information between the brake/VHF operator and ground staff using non-standard phraseology (e.g., request for authorization to disconnect ground support units).

Additionally, two-way radio communication shall be maintained between aircraft/tractor set and ATC, except when under escort by an airport operations or emergency vehicle. Always follow local airport regulations for communication and aircraft movement operations.

Dialogue between Ground Staff and Brake/VHF Operator				
Phase		**Ground Staff**		**Brake/VHF Operator**
Pre-departure check	**Call:**	CONFIRM PARKING BRAKE SET		
			Reply:	PARKING BRAKE SET
			Call:	CONFIRM STEERING BYPASS PIN INSERTED/NOSE WHEEL STEERING DEACTIVATED/LANDING GEAR SAFETY PINS (if applicable)
	Reply:	STEERING BYPASS PIN INSTALLED/NOSE WHEEL STEERING DEACTIVATED/LANDING GEAR SAFETY PINS (if applicable)		
			Call:	CONFIRM CLEAR TO PRESSURIZE (if applicable)
	Reply:	CLEAR TO PRESSURIZE (if required)		
	Call:	Request permission to connect the towbar and tractor or TWL tractor)		
			Call:	CLEAR TO CONNECT (towbar and tractor or TWL tractor)
	Call:	CONNECTING		
After completion of the pre-departure check	**Call:**	PRE-DEPARTURE CHECKS COMPLETED[1]		
			Reply:	ROGER
	Call:	ELEVATING AIRCRAFT (TWL tractor)		
	Call:	READY FOR TOWING		
			Reply:	STANDBY
Towing		REQUEST TOW (company name, aircraft type) FROM (location) TO (location)[2]		REQUEST TOW (company name, aircraft type) FROM (location) TO (location)
			Call:	TOW APPROVED VIA (mention specific routing to be followed).
	Call:	CONFIRM PARKING BRAKE RELEASED		
			Reply:	PARKING BRAKE RELEASED
	Call:	COMMENCING TOWING (mention specific routing to be followed)		
Towing completed	**Call:**	TOWING COMPLETED, SET PARKING BRAKE		
			Reply:	PARKING BRAKE SET
Disconnecting	**Call:**	AIRCRAFT CHOCKED		
			Call:	CLEAR TO DISCONNECT
	Reply:	DISCONNECTING		
	Call:	TOWBAR/TRACTOR DISCONNECTED		

*1 Carry Out a check in accordance with specifications in the pre-departure table in ch. 4.12.2.2

*2 Transmission from ground staff member depends on local regulations.

Caution: All given instructions must be read back or acknowledged in a manner clearly indicating that they have been understood and will be complied with.

Caution: When interphone communication is not possible, standard hand signals must be used for communication between the tractor driver and brake operator. Such communication may occur only when the aircraft has stopped

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4.13.3 Towing Maneuver

See ch. 4.12.6 for pushback maneuver.

a) Use relevant apron lines as guidance during maneuvering to ensure safe obstacle clearances. Be aware of the size of the towed aircraft.
b) Keep a minimum safety distance between vehicles to allow sufficient space to stop. Where required, apply the pushback tug brakes gently.
c) Stop 50 m (55 yd.) before a taxiway intersection if a stop is required.
d) Relieve torsional stresses applied to the landing gear components and tires by moving the aircraft in a straight line for a few meters to ensure the nose wheels are in the straight-ahead position when arriving at the allocated/relevant parking position.

4.13.3.1 Towing Speeds

Aircraft weight, tractor performance and airfield topography can affect the towing speeds. Towing speeds shall be kept to a minimum and shall not exceed the towing speed limit as regulated by the towing equipment, aircraft and airport.

If requested by ATC/GMS to 'Expedite' due to a live runway crossing, ATC must be informed if this is not possible. ATC/GMC shall also be informed if towing speeds are restricted when towing on live taxiways, as this can lead to congestion on the airfield.

4.13.3.2 Towing Limits

Fuel and other loads can affect an aircraft's balance. To avoid "tail tipping" during towing, ensure that the actual center of gravity of the aircraft is forward of the critical center of gravity. If unable to determine this, he responsible ground staff member must request assistance from the Commander.

Note: *For information relating to requirements and precautions that shall be taken when aircraft towing maneuvering takes place during adverse conditions, refer to the following sections above, as applicable:*

- *Wintery or Slippery Conditions, refer to ch. Section 4.12.6.5.1*
- *Low-Visibility Conditions, refer to Section 4.12.6.5.2.*

4.13.3.3 Towing onto Parking Stand

Immediately prior to the aircraft being towed onto the stand or gate, the responsible ground staff member shall check and confirm that the area is 'ready' (e.g., clear of obstacles, equipment, FOD, wing walkers, if required).

4.13.3.4 Movement into/out of Hangars

a) Only those personnel trained and qualified in the movement of aircraft into/out of hangars shall perform this operation and a person in charge of the operation must be designated.
b) Sufficient personnel (wing/tail walkers) shall be assigned to the operation to ensure clearances between the aircraft and objects in the hangar are maintained.
c) The method of communication between the ground staff members involved in the aircraft movement into/out of the hangar shall be agreed upon before any movement is started by means of a briefing conducted by the responsible ground staff member in charge of the operation.
d) Floor markings and stop signs shall be in accordance with the aircraft type operating into/out of the hangars.

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4.13.4 Incidents During Towing

After completion of the towing maneuver, report VHF failure to equipment maintenance and follow instructions accordingly

BRAKE/VHF OPERATOR	TRACTOR DRIVER
VHF Communication Failure	
a) Set the aircraft parking brake. b) Communicate the issue to ATC. c) Relay appropriate information received from ATC to the headset operator d) Continue to monitor the ATC frequency and maintain communications with the headset operator/tractor driver. e) Release the parking brake prior to recommencement of the towing maneuver.	a) Stop aircraft/tractor set as soon as it is safe to do so. It is not safe to stop on an active runway. b) Apply tractor parking brake. c) Communicate the issue to the brake/VHF operator. d) Attempt to contact ATC via alternative frequency/means. e) Await assistance (e.g., from "Follow Me" vehicle) before completing the towing maneuver. f) After completion of the towing maneuver, report VHF failure to equipment maintenance and follow instructions accordingly
Tractor Failure	
a) Inform ATC. b) Apply parking brake. c) Listen to VHF and wait for assistance. d) Relay information from ATC to headset operator/tractor driver.	a) Stop aircraft/tractor set. b) Apply tractor parking brake. c) Inform the brake/VHF operator. d) Inform ATC (TWL towing with one-person operation). e) Contact supervision and equipment maintenance to advise of the situation, as required. f) Follow instructions received from headset/brake operator, as applicable. g) Listen to VHF (TWL towing with one-person operation). h) If the TWL/towbar connection with the tractor needs to be reset (i.e., removed and reconnected), the aircraft shall be chocked while the tractor is being replaced.
Tractor/Aircraft Separation	
a) Apply the aircraft brakes. b) As soon as the aircraft is at a standstill, apply the aircraft parking brake before releasing the pedal. c) Inform ATC. Relay information received from ATC to the headset operator/tractor driver, if applicable.	a) Do not apply tractor brakes. b) Inform the brake/VHF operator of separation c) Follow the aircraft path attentively and stop the tractor according to the aircraft position. d) Apply the tractor parking brake. e) Confirm the aircraft parking brake is set, then chock the aircraft. f) Assess the reason for the disconnection. g) Contact supervision, equipment maintenance and aircraft maintenance to advise of the situation, as required h) Follow instructions to complete the towing maneuver, as applicable.
Towbar/Shear Pins Failure (remains attached to the aircraft	
a) Apply the aircraft parking brake. b) Inform ATC. c) Relay information received from ATC to the headset operator/tractor driver, if applicable.	a) Stop the aircraft/tractor set. b) Apply the tractor parking brake. c) Inform the brake/VHF operator of the towbar/shear pin failure. d) Contact supervision, equipment maintenance and aircraft maintenance to advise of the situation, as required. e) Chock the aircraft and replace the towbar. f) Follow instructions to complete the towing maneuver.

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BRAKE/VHF OPERATOR	TRACTOR DRIVER
Pushback Tractor Fire	
a) Inform ATC and headset operator/tractor driver. b) Apply the aircraft parking brake. c) Determine the need for aircraft emergency evacuation and confirm to ATC/headset operator/tractor driver	a) Inform the brake/VHF operator. b) Stop aircraft/tractor combination immediately. c) Conduct an assessment of the situation and consider tackling the fire with the onboard tractor firefighting equipment only if it is deemed safe to do so. d) Consider disconnecting and moving the tractor a safe distance from the aircraft, if deemed safe and appropriate to do so. e) Contact supervision, equipment maintenance and emergency services to advise of the situation, as required. f) If the brake/VHF operator confirms emergency evacuation, assist in the evacuation as far as is possible/required.
Aircraft Fire	
a) Inform ATC and the headset operator/tractor driver. b) Apply the aircraft parking brake. c) Fight the fire with the on-board extinguisher, where possible. d) Evacuate the aircraft using on-board means, if required.	a) Stop the aircraft/tractor set immediately. b) Inform the brake/VHF operator. c) If safe to do so, disconnect and move the tractor to safe distance from the aircraft, where possible. d) If deemed safe to do so, the headset operator/tractor driver should maintain communication with the brake/VHF operator and follow instructions. e) Contact supervision and emergency services to advise of the situation, as required. f) If brake/VHF operator confirms emergency evacuation, assist in the evacuation as far as is possible/required.
Accident with Other Aircraft or Vehicle	
a) Contact the ATC stating position and nature of the accident. b) Listen to VHF and wait for assistance. c) Relay information received from ATC to headset operator/tractor driver, if applicable.	a) Stop the aircraft/tractor set immediately. b) Apply tractor parking brake. c) Inform the brake/VHF operator. d) Contact supervision, aircraft maintenance, equipment maintenance and emergency services to advise of the situation, as required. e) Follow instructions received from the headset/brake operator and/or wait for assistance. f) Do not disconnect the tractor unless specifically instructed to do so by the operator and/or ATC. g) If disconnecting the tractor, the aircraft must be chocked.
Interphone Communication Failure	
If during the tow the interphone fails, the tow must be immediately stopped and an alternate means of communication established before continuing. If this is not possible, assistance must be requested.	
Visual Contact with the Wing Walkers and/or Marshaller Is Lost (if used)	
In the event that the tractor driver is unable to establish visual contact with one or both of the wing walkers or the marshaller, when required, the towing maneuver shall be stopped and not recommence until visual contact is re-established.	

Caution: A standard communication procedure for abnormal pushback/towing situations (e.g., towbar shear pin failure) cannot consider every possibility that may arise. Therefore, the tractor driver and brake operator shall keep each other informed. Actions should be taken using common sense, taking into account the circumstances of a particular situation.

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4.13.5 Towing Completion

The following checklist is to be used at the end of an aircraft tow.

ACTION	PERFORMED BY	
	Brake Operator	Tractor Driver
Set tractor parking brake.		√
Request the brake operator to set the aircraft parking brake.		√
Inform ATC that towing is completed, and the frequency will be left, depending on local regulations.	√	√
Set the aircraft parking brake and check the pressure. Inform the tractor driver: *Parking Brake Set, Pressure Checked."*	√	
Chock the aircraft MLG.		√
Switch off the external and anti-collision lights of the aircraft.	√	
Inform the brake operator: *"Aircraft chocked"*		√
Give permission to disconnect the towbar or TWL tractor. Disconnect the tractor ground power, where applicable.		√
Disconnect the towbar (disconnecting from the pushback tractor first, then the aircraft) or TWL tractor		√
Remove the steering bypass pin and activate steering		√
Place additional chocks, where applicable.		√
Inform the brake operator: *"Towbar/Tractor Disconnected".*	√	
Release the aircraft parking brake and inform the tractor operator: *"Parking Brake Off"* (where applicable).		√
After permission from the brake operator, shut down and disconnect the tractor GPU.		√
Install and connect a GPU.	√	
If installed, remove and stow gear safety pins in the dedicated location		√

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4.14 REFUELLING

The following chapter defines the different refuelling / defueling procedures. All procedures apply to refuelling from a truck, trailer or any other system.

4.14.1 Refuelling Precautions

During aircraft fuelling the following precautions should be taken into consideration:

- The engines must not be running;
- It is forbidden to use radio transmitter/receiver, the onboard radar equipment, to manipulate the electrical circuit except those required for refuelling and it is forbidden to connect or disconnect electrical equipment to the aircraft;
- Fire extinguishers shall be readily available. They may remain on the fuelling vehicle, provided they are carried in open housing or in racks with quick-opening fastenings;
- In order to avoid any accident caused by static electricity, an electrical equipotential link must be installed between the aircraft and the tanker. If the equipotential link disconnects during refuelling, it is mandatory to stop refuelling and wait few minutes that fumes dissipate, then reconnect and continue refuelling. The decision to initiate continue refuelling in storm situation is taken in agreement with the commander and the station manager.
- Refuelling should be avoided when severe thunder storms are in vicinity of the airport and prohibited when close to the refuelling point. The decision to stop the refuelling can be made by either the crew or the ground personal. The airport manager can also, according to weather brief, prohibit refuelling.
- When refuelling is in progress, the fuel operator shall use the ‘’dead man’’ control system which allows him to stop refuelling immediately.
- Refuelling is forbidden in hangar;
- The danger area must be respected. For details see chapter 4.1.2.

During pressure refuelling, some maintenance actions are authorised if:

- The tools are used without provoking a spark;
- No electrical tools are used.

Delivery order of the tanker is given to the crew, for checking and retraining in the flight file. One copy shall be kept in the station departure file.

4.14.2 Training of the Fuelling Personnel

The personnel that are assigned to perform aircraft refuelling must be given initial training and every 36 months a recurrent training. The following must be covered at minimum:

- Fuels: characteristics, uses, density, fuel quality check;
- Fuel vehicles: inspection, positioning, removing;
- Safety rules: safety regulations, hazards, human factors, emergency situation etc.
- Aircraft preparation for fuelling /defueling;
- Completion and delivery of fuelling order, records of fuelling/ defueling;
- Practice regarding the use of fuelling facilities and equipment.

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4.14.3 Fuel

The aircraft shall normally be fuelled with **JET A-1**, or if not available **JET A** and **JET B** corresponding to the specification ASTM-D 1655 or DEF STAN 91-091 or equivalent. Jet B because of its higher flammability is difficult to handle and it is mostly used in very cold areas.

The fuel corresponding to the norm MIL-T-5624 types JP4, JP5 and JP8 are also acceptable alternative. The engines will normally run with any of these fuels or their combination.

Type	Designation	Freezing Point	Flash Point	Density at 15°C Mini/Maxi
JET A-1	kerosene	Maximum -47°C	+38°C	0,79 to 0,84
JET A		Maximum -40°C		
JET B	Wide-cut	Maximum -60°C	-18°C	0,76

4.14.3.1 Fuel Quality

The fuel quality and its continuous monitoring are part of the fuelling company's responsibilities. The fuel suppliers must maintain the standards of fuel safety and quality. The fuel delivered and loaded onto the aircraft shall be of the correct grade and specification for each aircraft type and must be free of contamination

To prevent any risk of aircraft fuel tanks water contamination:

- Fuel tankers and servicers shall be daily drained (draining after each tank filling);
- Fuelling company shall take a fuel sample for analysis in order to control the water quantity contained in the fuel. Fuel sampling procedure must be applied at the first fuelling of the day, the first fuelling after loading or topping-up the fuelling truck, the first fuelling after truck left the fuel depot, the first fuelling following heavy rain or snowfall.

If there is any doubt about the quality of fuel indicated by the standard of the refuelling facilities then in addition to the visual inspection the crew can ask the supplier to carry out a sampling check for a positive reaction to water finding paste, paper or a chemical water detector.

Unless it is evident in the form of globules the only conclusive check on the presence of water in fuels can only be made using the above sampling check.

The paste and paper check will show the presence of free water only, to show the presence of water held in suspension in turbine fuels the chemical water detector should be used. Evidence of the presence of free or suspended water is indicated by a distinct change in the colour of the paste, paper or detector element.

In the event of poor quality of the fuel, refuelling operations must be stopped, and the anomaly is reported to the station manager or the Commander and will be subject to an Air Safety Report (ASR). In some cases, fuel can be considered improper, it is necessary to defuel.

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4.14.4 Fuel Truck Position

The refuelling truck should always be in a position to depart rapidly from his position. The vehicle should never be parked under the wings, unless equipped with a quick disconnect system that does not damage the aircraft being refuelled, and without spraying fuel everywhere. Most of the trucks capable of pressure refuelling are equipped with those systems.

Vehicles shall be positioned safely, taking account of the following:

- Extreme care shall be taken to avoid the possibility of collision with any part of the aircraft or ground servicing equipment while manoeuvring into (and aways from) the designated fuelling position.
- For fuellers, a clear exit path shall be maintained throughout the fuelling operation to allow the fuelling vehicle to be driven away quickly in the event of an emergency. If the exit path becomes obstructed by vehicles or equipment, then the fuelling operation shall be stopped until the vehicle/equipment is moved clear of the fueller exit path. For hydrant dispensers, a clear exit path should also be maintained, but this is not considered mandatory, given the lower inherent risk in a hydrant dispenser, and given that a hydrant dispenses would not normally be driven away in the event of an emergency during fuelling.
- Aircraft vent pipe safety zones (minimum 3 metre radius), APU exhaust gasses or other danger areas should be avoided.
- Hoses should be positioned to minimize the risk of baggage handling equipment or other aircraft servicing vehicles driving over them and causing damage.
  If underwing deck hoses are to be used, it shall be possible to connect hoses to the aircraft fuelling point without exerting any sideways pressure that could damage the aircraft adapters. Once connected, hoses should hand freely and vertically from the fuelling point.

4.14.5 Fuelling Procedures

The Commander or a crewmember nominated by him, should always be present during the refuelling.

4.14.5.1 Refuelling Procedure

A Fuelling Order shall be submitted for all flights, well prior to departure when ordering fuel or other fluids. The Block Fuel Quantity to be ordered, is shown on the OFP prepared for each flight leg and shall be inserted on the Fuelling Order form.

Having decided upon a final fuel figure, the Commander will complete a "Fuelling Order" form, which specifies the total fuel-in-tanks requirement. By deducting the fuel remaining from the previous flight, as recorded in the technical log and indicated on the Aircraft gauges, the refuelling supervisor will calculate the actual fuel uplift and distribute it in tanks according to the Operations Manual Part B.

During fuel delivery, the operator shall be positioned with a clear view of the vehicle control panels and aircraft fuelling points. Deadman control shall always be used and shall never be wedged or blocked open.

During fuelling, the fuelling operator shall conduct following checks:

- Periodically check the vehicle, hoses and couplings for leaks and take corrective actions, when needed.
- Fuelling pressure shall be periodically monitored during fuelling operation for correct control pressure. It shall read no grater then 50 psi (3,5 bar) under normal flow conditions.
- Observed dP pressure shall be lower than the maximum allowed of the filter.

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During fuelling, no aircraft maintenance shall be conducted that could provide a source of ignition for fuel vapours.

Any connection or disconnection of any electrical equipment with the aircraft is prohibited during fuelling activities.

Prior to departure, the Commander shall make sure that the fuel quantities on board, those shown on the completed Fuelling Order, correspond with the fuel quantities indicated on the OFP and on the cockpit fuel gages. The added fuel is reported in the Aircraft Technical Log.

The Commander is responsible to check the correct Fuelling Order (JET A-1, JP4, etc.) and shall ascertain that sufficient fuel and oil are ordered to complete the planned flights. He is also responsible to check up on the fuel for any contamination.

4.14.5.2 Bonding

The aircraft, fuelling vehicles and overwing nozzles shall be electrically bonded together throughout the fuelling operation to ensure that no difference in electrical potential exists between the units.

Bonding between the fuelling vehicle and aircraft shall be completed before any hoses are connected or tank filler caps are opened. Bonding shall be maintained until all hoses have been disconnected.

4.14.5.3 Defueling Procedure – Fuel Draining

Fuel draining is subject to the same regulation as refuelling, but must also comply to the following restrictions:

- Fuel draining of large fuel quantity is strictly prohibited;
- Fuel draining is authorized only when a small quantity of fuel remains in the reservoir after defueling. In that case, it must be done using the lowest drain of the reservoir. A tube must be used from the drain to the recipient located at a safe distance of the aircraft.
- The fire department must be advised.

It is strictly forbidden for anybody, not essential to the operation to be in vicinity of the aircraft. Any possible source of fire should be proscribed.

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4.14.5.4 Fuelling with Passengers Embarking, on Board or Disembarking

***Note*:** *Always consult airport authorities when performing fuelling with passengers on board/embarking or disembarking, especially if there are PRMs on board.*

Fuelling personnel is usually the person in charge of refuelling on ground, unless otherwise specified by the airport. In that case the Commander must be informed.

With the commander's authority, passengers may embark, disembark or remain on board during refuelling /defueling provided that the following precautions are observed:

Prior to refuelling /defueling:

- Keep designated escape exits clear. An escape exit may be either a PBB into a terminal building, a cabin access door or a passenger stair truck positioned on an open cabin access door.
- Do not hinder escape routes of passengers on board by ensuring that passenger stairs and PBB are clear of FOD.
- Ensure that all areas on stand below designated escape exits are kept free of any equipment and vehicles that would impede evacuation and/or impede the deployment of an escape slide;
- Establish a bonding connection between the fuelling vehicle and the aircraft, to provide for dissipation of electrical energy that may develop;
- CCM must remain at his stations. If there is no mandatory cabin crew on board, another qualified person capable of handling emergency procedures concerning fire protection and fire-fighting, handling communications, initiating and directing an evacuation, will be appointed by the Commander;
- Two-way communication shall be established and shall remain available by the Aircraft's inter-communication system or other suitable means between the ground crew responsible for the refuelling and the crew on board the Aircraft;
- Responsible person shall notify the crew or other qualified personnel on board the aircraft and other appropriate personnel engaged in aircraft ground handling activities when fuelling is about to begin and has been completed unless an equivalent procedural means has been established to ensure the flight crew or other qualified personnel on board the aircraft are aware of fuelling operations and are in a position to, if necessary, effect an expeditious evacuation of the aircraft;
- Fasten Seat Belts' signs must be off;
- NO SMOKING' signs must be on, together with interior lighting to enable emergency exits to be identified;
- Passengers must be instructed to unfasten their seat belts and not to smoke;
- Sufficient qualified personnel must be on board and be prepared for an immediate emergency evacuation;
- If the presence of fuel vapour is detected inside the Aircraft, or any other hazard arises during re/defueling, fuelling must be stopped immediately;
- Provision is made for a safe and rapid evacuation.
- Weather radar OFF.
- HF OFF.
- Passengers are asked to switch OFF all personal electronic devices.
- Passengers embarking or disembarking during refuelling:
  - Boarding passengers are informed that fuelling is in progress by the ground staff;
  - Boarding is done in groups of up to 10 passengers maximum;
  - Refuelling announcement is repeated during the entire procedure.

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During refuelling /defueling:

- Smoking is strictly forbidden;
- The entry door(s) is open;
- One pilot must always be in the aircraft ready to order the aircraft evacuation if necessary;
- If presence of fuel vapours is detected inside the aircraft, or any other hazard arises the fuelling must be stopped.

End of refuelling/ defueling:

- Responsible person for fuelling shall inform Crew, other appropriate personnel engaged in ground handling activities and passengers that re/defueling had ended.

The responsible person for fuelling must provide notification to the crew when a hazardous condition or situation has been determined to exist, whenever in the fuelling process.

***Note*:** *When passengers are embarking, with passengers on board or during passenger disembarkation fuelling/defueling is not authorized for Avgas or wide cut fuels (Jet B or equivalent).*

4.14.5.5 Emergency Evacuation During Fuelling

The emergency evacuation, in case of major spill or fire requires:

- Ground area located underneath emergency exits to be unused and free form any equipment;
- No vehicle shall be in the embarkation path;
- Instructions detailed in chapters chapter 4.14.6 and 4.14.7 shall be applied.

4.1.1 Fuel Spillage

Take the following safety measures whenever a fuel spill occurs:

a) Fuelling shall be stopped.
a) Activate the emergency shut-off valve where installed.
a) Alert the person in charge of fuelling and the Pilot in Command of the spillage.
a) Interrupt any activity around the aircraft (embarking included).
a) Contact the local fire service and appropriate ground response personnel, if not already done.
a) Bring the extinguishers.
a) Verify with authorities/supervisor whether to stop all activity around the aircraft.
a) Move away any equipment located around the aircraft (tankers included).
a) No vehicle is allowed within a radius of 15m around the fuel leakage.
a) As far as possible, restrict all activities inside and outside the spill area to prevent access and to reduce the risk of ignition.

Refuelling shall not resume prior to Fire Department intervention and the reason of leakage must be identified and eliminated.

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4.1.1 Fire/ Smoke

In case of smoke or fire anywhere on or around the aircraft:

- Ramp staff shall immediately inform the crew of the presence of smoke, of the measures to be taken and shall inform the rescue and firefighting services, if not already there;
- Crew shall take decision regarding the evacuation of the passengers already on board:
- Ramp staff shall be connected with the crew to take instructions from the Commander;
- If necessary, before leaving the interphone contact it is mandatory to have the crew consent, and coordinate together;
- Ramp staff shall apply the following safety measures:
    - move away any equipment located around the aircraft (tankers included), interrupt any activity around the aircraft (boarding included),
    - In case of fire, attack the fire sources using powder, carbon dioxide or foam fire extinguishers, available on the stand or on the ramp vehicles, do not wait for the Fire Brigade which has been previously informed.

Any fire alarm or fire start in the immediate vicinity of the aircraft is considered as an important event and must be reported and the report must be sent to Amelia Intl Compliance Monitoring department.

4.14.6 Station Quality Assurance

Amelia Intl is an active member of IATA's Fuel Qualit Pool (IFQP). As a member Amelia Intl has access to fuel quality reports that the pool performs around the world.

The audits are mandated by the IFQP to Amelia Intl on a yearly basis. The checklists used are standardized by IFQP. IFQP contains a list of stations and providers audited by members and also gives restrictions if any are active.

With the IFQP audits it is ensured that:

- The fuel facilities are in line with applicable standards
- Safety and quality procedures are in place and followed
- Performance lever of personnel is checked

Once audit report is published by the IFQP, Amelia Intl is notified. Report is reviewed by Amelia Intl staff in order to verify that the fuel is handled in accordance with either JIG, ATA or IFQP standards. In case of severe deviations or safety related issues, restrictions are imposed, when deemed necessary.

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4.15 ADVERSE WEATHER CONDITIONS

Airside operational personnel should use the following procedures during adverse or poor weather conditions, which may have a negative impact on aircraft handling activities and ground safety. If additional information is required, refer to supervisory personnel.

4.15.1 Wintery or Slippery Apron Conditions

Winter weather brings extra hazards, which require awareness and more care on the part of personnel working on the apron to prevent accidents. The following precautions to reduce accident risk must be taken:

a) Plan additional time for all ramp activities and take extra care when walking across apron surfaces, which can be slippery.
b) Take extra care when driving, especially when approaching the aircraft. Remember that GSE require greater distances to stop safely on slippery surfaces.
c) Operators of potable water tankers and toilet servicing units must be vigilant that there is no spillage or leakage that can lead to subsequent freezing. Care must be taken to keep spillage and overflow to a minimum.
d) If apron conditions are hazardous, contact the competent authority to mitigate the hazard. In the event the hazard cannot be mitigated, suspend the affected operations.
e) Close all entrance and cargo hold doors as soon as possible and keep them closed to avoid precipitation entry into the aircraft.

Note: *Reduce speeds on slippery roads in slippery apron conditions. Adjust all activities and operations on the ramp to suit the conditions at the time.*

4.15.2 Thunderstorms and Lightning

Levels	Action
Amber- ALERT Lightning activity is detected at a distance in excess of 8 km (5 miles) from your operation	Disseminate lightning warning to airside operating staff so they can prepare and plan their activities to be ready in case of a Red Alert in accordance with local regulatory requirements
Red- STOP/SUSPEND Lightning activity is detected within 5 km (3 miles) of your operation	Disseminate the order to stop all airside activities and seek shelter to all airside operating staff
Green- ALL CLEAR Lightning activity has moved beyond 5 km (3 miles) and is heading away from your operation	Disseminate the order to resume normal activities to all airside operating staff

Note: *The distances referred to above may vary depending on local climatic parameters.*

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4.15.2.1 Work Instructions

On receipt of an ALERT:

a) Make preparations for the STOP phase.
   1. Suspend non-essential activities in open areas and ensure any staff using or about to use headsets are informed of the alert.
   2. Fueling operations can continue, however the proximity of the thunderstorm/lightning should be continually monitored.
   3. Avoid using highly conductive equipment.

b) On receipt of STOP
   1. Stop fueling. Fueling hoses cannot be left attached to the aircraft during any Thunderstorm/Lighting event
   2. Discontinue aircraft communication by head set.
   3. Stop all ramp activity and clear ramp.
   4. Personnel should seek shelter inside buildings or inside metal bodied vehicles. No one should seek shelter under any part of the aircraft, loading bridge, near light poles, fences, under trees.
   5. In accordance with local procedures, the aircraft may come on stand but the aircraft doors should remain closed and ground servicing suspended

In case of thunderstorms, it is also necessary to follow the instructions in the chapter linked to “strong wind”.

DANGER: Failure to follow procedures could result in a fatal accident.

4.15.2.2 Lighting Alert Callout

In the absence of an integrated airport notification system, all airside operating staff shall be aware of the following procedures:

a) Use the counting method to detect/predict lightning activity. Determine the corresponding level based on the counting method diagram, see 4.15.2.3.
b) The responsible person notifies all airside operating staff of the lightning alert level. If the person responsible is not available, the counting method should be used by all airside operating staff for self-protection.
c) In case of a Red Alert, proceed to a designated shelter.

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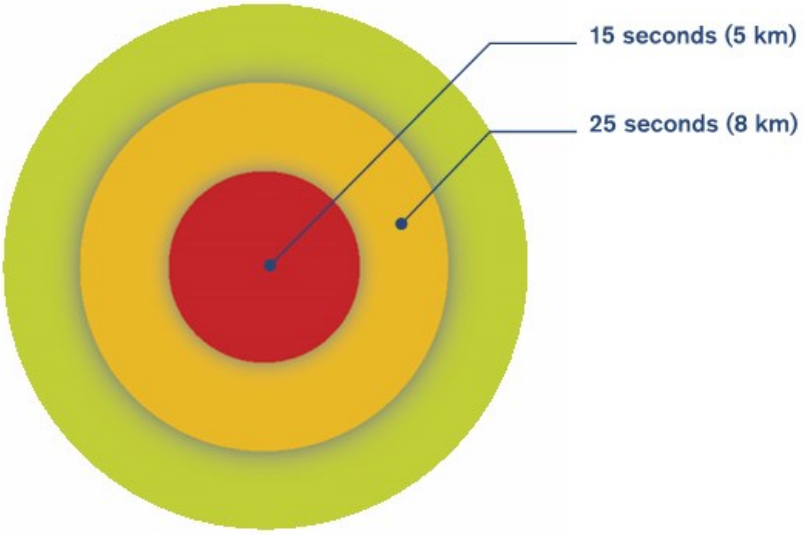
4.15.2.3 Counting Method

The counting method is used when an integrated airport notification system is absent. It is used to estimate the level of lightning activity.

Counting method chart:



***Note**: The time indicated is the time between the lightning and the sound of thunder.*

1. *If the counted time is less than 15 seconds, the lightning activity is less than 5 km from the airport.*
2. *If the counted time is between 15 seconds and 25 seconds, the lightning activity is between 5 and 8 km from the airport***.**

4.15.2.4 Refuelling

Since the early phase of storm, the refueler must set up an equipotential link between the aircraft and the fuelling vehicle, this link must be particularly checked during the pre-alert phase.

The decision to initiate or carry on with refuelling shall be taken in full agreement with the handling and the Commander according to the level of alert. Airport director has the possibility to prohibit the refuelling operations in agreement with meteorological department.

Refuelling operations are forbidden or should be stopped in the event of an active storm at the airport.

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4.15.3 High Wind Conditions

The following actions shall be taken when sustained winds and/or gusts of wind 25 knots or greater are predicted however it is the actual wind speed at the aircraft parking position, which constitutes the risk for injuries and damages.

Staff Actions	25 to 39 kt 46 to 72 km/h	40 to 56 kt 73 to 110 km/h	Above 60kt Above 111 km/h
Chock aircraft landing gear as per Aircraft Out of Service/Night–Stop/High Wind	✓	✓	✓
Remove safety cones	✓	✓	✓
Secure PCA hoses	✓	✓	✓
Remove FOD	✓	✓	✓
Secure rolling stock	✓	✓	✓
Strap all propellers on propeller aircraft	✓	✓	✓
Secure PBB and position to minimize surface exposed to the direct force of the wind		✓	✓
Close cargo hold, passenger doors and access panels		✓	✓
Do not initiate the elevation of high-lift equipment and stairs		✓	✓
Park GSE closely together, and adjacent to a building, if possible			✓
Retract PBB			✓

DANGER*: *High winds pose a great risk of damage and injury.

In case of gusts between 40 and 65 kt (75 and 110 km/h), whatever the aircraft type, handling and servicing remain possible taking into account the following precautions:

- Systematically position the propellers retainers which are part of the aircraft's flight kit, on both propellers;
- Check if the parking brake of all the ramp equipment and vehicles is set (wheel chocks must be used to stop the aircraft in both directions). Elevating equipment stabilizers, if used, must be in perfect working order and effectively used;
- Set parking brakes and secure by additional means if necessary, all non-motorized ramp equipment (e.g. baggage carts);
- All precautions taken to make sure nothing light or loose can be blown away by the wind;
- Towing an empty aircraft is forbidden on wet or iced ground, it is allowed when there is less than 50kt wind on dry ground;
- The handling company shall keep a check on meteorological forecast (including if higher gusts have been foreseen) in order to decide, in consultation with the Commander, when it is better to board or disembark the passengers;
- Doors opening towards the outside (such as the service doors and the main door) are limited in case of winds. Do not operate (open and close) the doors when there are winds gusts of more than 40 Kt. If wind gusts are more than 65 kt, do not leave the door open;
- Take extreme care when opening or closing aircraft hold doors.

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When wind is over 65 kt (110 km/h), even in gusts, all the handling operations shall be stopped:

- concerning disembarkation or passengers boarding it is possible when the aircraft is equipped with drop door including air stairs;
- all equipment in contact with the aircraft must be removed,
- aircraft doors must be closed,
- towing of an empty aircraft is forbidden even if ground is dry.

4.15.3.1 Parking when Strong Wind

When there is strong wind it is recommended to park the aircraft into the wind. Chocking, ballast, mooring precautions may be necessary in case of strong wind depending on the ground conditions (ice, snow...).

4.15.4 Sandstorms and Low Visibility

The following minimum precautions should be taken:

a) Issue appropriate Personal Protective Equipment (PPE) such as goggles, masks, covered clothing.
b) Ensure the provision of shelter, as required.

4.15.5 Intense Heat

The following minimum precautions should be taken:

a) Issue appropriate PPE (i.e., covered clothing)
b) Ensure the provision of rehydration for staff
c) Ensure the provision of a temperature-controlled environment during rest breaks

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4.16 AIRCRAFT PARKING

4.16.1 Extended Parking and Overnight Stay

It is of utmost importance to protect the aircraft and its equipment of any weather and adverse condition during overnight stay and longer parking periods.

The aircraft should be parked only in secure areas within an airport operating area and under conditions that permit maximum security and protection.

In case of extended parking of the aircraft, servicing equipment and access mean must be removed from the aircraft or stowed outside the ERA in order to prevent the access to the cabin.

In all cases the cargo and the cabin doors must be closed and where applicable, sealed, as per Amelia Intl sealing procedures presented in OM-A ch.10. Amelia Intl crew is responsible for sealing the aircraft. Sealing procedure is especially applied, if the aircraft is no longer under security control, and if nobody is on board, and that whatever the turnaround time.

In winter conditions, all fluids which could freeze and cause damage, must be drained.

In case of overnight parking, it is necessary to make sure that the aircraft is in safe conditions. This is to prevent injury to persons and damage to the equipment. Please make sure that:

- The probe protective covers are installed;
- The landing gear down lock safety pins are correctly installed on the main and nose landing gear;
- The inlet cover is in place.

Depending on weather conditions, additional precautions must be taken:

- mooring the aircraft in high winds
- draining of the water circuits and water tanks in case of freezing hazard.

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4.16.2 Long-Term Parking

Successful execution of the long-term parking operation, as well as the recovery and reintroduction of the aircraft back into service after long-term parking, requires close coordination and cooperation between all of the relevant airside and aviation stakeholders, including (but not limited to) the aircraft operator, airport authority, ground handling provider, and maintenance provider.

In anticipation of the possible long-term parking of multiple aircraft, ground service providers shall proactively engage with the relevant stakeholders to develop a long-term parking plan. This plan shall be regularly reviewed (minimum once per year) to ensure the plan is still valid. The plan will require ad hoc review in response to changes to the airside environment, such as changes to operators, aircraft types and numbers, airport layout, ground handling service providers and manufacturers' Aircraft Maintenance Manual (AMM).

Depending on each airport's emergency plan, the airport may require the aircraft to proceed to a designated bay, possibly a remote bay, according to its plans and requirements.

a) The long-term parking plan shall ensure:
b) Spacing between adjacent aircraft.
c) When not parked at a bay (e.g., taxiway), aircraft are parked facing into the prevailing wind.
d) Anchor points are available for high-wind conditions.
e) Processes to monitor and adjust for severe weather conditions.

Caution: In regions with hot climates, it is preferable to park aircraft on hard surfaces such as concrete or high module asphaltic material rather than on flexible surfaces such as bituminous asphalt. This will avoid indenting those areas during long parking periods.

4.16.2.1 Aircraft Movement

Based on the airport parking plan, once resumption of operations begins it is important to ensure there is a well-coordinated aircraft movement plan to ensure there is no damage to the aircraft.

Note 1: *Ensure all procedures during aircraft ground movement are adhered to as documented in ch 4.11. to 4.13.*

Note 2: *Ensure during any non-normal operations, a robust safety risk assessment is performed, and implementation of the mitigation plan is followed.*

Note 3: *Ensure timely consultation with the airport operator regarding the aircraft movement.*

Note 4*: If any surface damage is observed, liaise with the airport management team as per the airport's directives.*

Caution: After long-term parking, anticipate extra pull or push force required for aircraft wheels to exit any indentations in the pavement and/or to overcome the aircraft tires being out of round. This is to avoid shear pin breakage and/or sudden movement in direction of travel. Refer to the pushback and pull forward procedure in ch.4.12.6.4.

Long-term parking of aircraft requires a variety of specific measures to be in place to ensure the continued safety, security and general airworthiness of the aircraft. These measures are both manufacturer and aircraft type specific and are detailed in the operator's manuals and manufacturer's AMM. These documents must be complied with.

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5 LOAD CONTROL

Load control is a process that ensures the production of all applicable documentation to comply with operator and regulatory authorities for the safe and secure handling on an individual flight. This includes planning, reporting and recording of the loading of the aircraft.

The load control department's purpose is to guarantee the safety of a flight, to respect the loading requirements taking into account handling quality and punctuality and the most economical utilisation of the aircraft. It includes accurate planning, recording and reporting of all load distributed on an aircraft.

Information about the hold baggage, cargo and any other items that should be loaded in the cargo holds should be communicated to the Load control department, as per airport internal procedures.

The responsibility of the load control department is:

- respect of the aircraft weight and balance limitations:
- aircraft is loaded in accordance with the Amelia Intl regulations (respect of the loading instructions for the special shipments...);
- information on the loadsheet reflects the actual loading of the aircraft.

To guarantee the safety requirements as described above the load control process is comprised of the following tasks:

a) **Load Planning**:
   1. Production of a loading instruction report (LIR)
   2. Weight and balance calculation

b) **Aircraft Loading and Unloading Supervision**
   1. Verification and recording of aircraft loading
   2. Communicating final loading figures

c) Weight and Balance Calculation
   1. Loadsheet production
   2. Other loading documents, such as Notification to Captain (NOTOC), if applicable

d) Post-Departure Messages
   1. Transmission of messages
   2. Document retention, as applicable

The scope of this chapter is to establish standard procedures for the load control process that meet the minimum standards established in the IATA Airport Handling Manual (AHM)–Section 500 Load Control and operating airline procedures.

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5.1 LOAD CONTROL PRINCIPLES

Load Control is an essential process with the purpose of ensuring that the aircraft is safely loaded within operational limits, considering both the weight and center-of-gravity parameters.

To ensure flight safety, all items to be loaded into an aircraft must be precisely planned, documented and filed. Documented communication is required to guarantee accurate weight and balance calculations for the pilot in command (PIC) prior to an aircraft's departure.

Therefore, the Load Control system shall ensure that for each flight:

a) Aircraft weight and balance conditions are correct and within limits.
b) Aircraft is loaded in accordance with applicable regulations and the specific loading instructions.
c) Information about dangerous goods and other special loads is taken into account.
d) The final loadsheet reflects the actual loading of the aircraft, including last minute changes (LMC).
e) Operational messages are dispatched to relevant bodies.
f) All approved documentation is filed for retention.

5.2 REGULATORY AND QUALIFICATION REQUIREMENTS

5.2.1 General Requirements

Load control function can be carried out by Amelia Intl or a third party.

It can be performed at any dedicated location locally at the departure airport or at a remote centralized load control facility. Load control may be performed with manual or computerized Departure Control System as long as it is accepted by Amelia Intl.

Amelia Intl flight crew after receiving final confirmation of final loading, issues the Loadsheet.

The aircraft shall be loaded in accordance with the written loading instructions found in this manual and it must be loaded in a manner that satisfied weight and balance requirements.

5.2.2 Qualification Requirements

Personnel performing Load Control tasks shall be duly qualified. Training must be in accordance with AHM591 and AHM1110.

Training for the Load Control task shall be performed by a qualified instructor authorized by the operator.

Load Control licensing, training and documentation shall be in compliance with regulations.

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5.3 LOAD CONTROL TASKS

5.3.1 Load Planning Task

The person charged with the load planning task shall ensure loads are planned safely and distributed in the aircraft compartments and/or holds considering all aircraft limits.

The Load Planner shall:

a) Check aircraft basic weight/index (BW/BI)*.
b) Check all items to be included in the dry operating weight/index, (DOW/DOI)*.
c) Check operational messages from the previous flight or leg, including any special loads, if applicable.
d) Check aircraft operational limitations or any other restrictions that may limit load planning*.
e) Calculate expected traffic load.
f) Check any other dangerous goods and special loads (DGSL) that require special handling and segregation.
g) Allocate loading positions for all traffic load and special loads, if applicable, taking into consideration all flight legs.
h) Calculate the estimated zero fuel (EZFW) and transmit to flight dispatch, as applicable, for flight planning purposes*.
i) EZFW should be communicated every time there is a significant difference from the previous calculation, as per operator requirements*.
j) Check fuel load and distribution*.
k) Perform a pre-calculation of the aircraft weight and balance should be done to ensure that the aircraft operational limits are not exceeded*.
l) Give consideration to aircraft ground stability to avoid tail tipping, as per operator requirements and aircraft specifications. Particular attention must be paid to the distribution of the transit load on multi-sector flights. The distribution of the load remaining in the compartments at the next station should be planned such that it meets the above condition. When this is condition cannot be met, the offloading/loading sequence in the transit station shall be planned to ensure aircraft ground stability is maintained.
   Methods to ensure ground stability include use of tables or graphs to determine the weight required in forward compartments to counteract weight to be loaded in aft compartments, or calculation of center of gravity for comparison against the applicable tipping and/or towing limit:
   - Method 1—a scale or table determining the distribution of the loads weight-wise, showing the weight required in the forward compartments to secure ground stability and the load which can be placed in the aft compartments.
   - Method 2—calculation of the dead load index/%MAC which shall be forward of the dead load index limit on the balance chart and transmitted on the LDM.
   - Method 3—dynamic calculation of aircraft ground stability by using a software application that takes every movement of load into account.
m) Produce a LIR.

The tasks marked with * in Amelia Intl can also be performed by the Commander, who after receiving final confirmation of final loading, issues a Loadsheet.

The load distribution shall be planned by the Load Controller adhering to the Amelia Intl specific requirements and procedures. Optionally, when the operation requires that, the load distribution shall be planned by the Commander after he had received the final numbers of passengers and baggage/cargo weight.

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5.3.2 Aircraft Supervision Task

For details on this task refer to Ch. 4.10.1 of this manual.

5.3.3 Weight and Balance Calculation Task

The objective of the weight and balance calculation task is to ensure that a final and accurate load sheet is issued and this has been crosschecked with:

a) Final LIR from the person in charge of the Loading Supervision task.
b) Final passenger close-out data.
c) Final fuel figures.
d) All aircraft operational and structural limitations for the appropriate aircraft registration.
   Note 1: *If a preliminary loadsheet is produced, one or more criteria may not have been finalized.*
   Note 2: *The person designated with the weight and balance calculation task shall ensure all data is finalized or confirmed for manual or electronic load sheet production*
e) Loadsheet accuracy check will continuously be performed prior to production or transmission of the final loadsheet:
   1. Correct flight number and date (flight identifier).
   2. Correct aircraft registration.
   3. Correct DOW/DOI used according to aircraft type, registration, version, number of crew and pantry.
   4. Underload (total traffic load not exceeding allowed traffic load).
   5. Correct entry of final fuel figures.
   6. Correct entry of transit load data from incoming load-message/loadsheet.
   7. Correct passenger close out data.
   8. Hold baggage weight and gate delivery items shall be added
   9. Actual loading positions of any special load indicated on the NOTOC, if applicable.
   10. Balance calculation and conditions of loaded aircraft, including LMCs, are within prescribed limits.
   11. The loadsheet -shall be checked against the final LIR and other information related to the actual load.
   12. Any operator-specific requirements as indicated in this manual are adhered to, when applicable.
   13. All specified documents shall be signed by means of manual or electronical identifiers.
f) A copy of the loadsheet signed by the Commander then shall be given to the ground handler.
g) Any changes occurring after the final loadsheet has been produced must be accounted for by either production of a new edition of Loadsheet or via documented Last-Minute Change process.
h) If a discrepancy is discovered after the final loadsheet has been issued, the PIC must be informed via the available channels without delay and provided with relevant and requested information to prevent unsafe takeoff and/or landing.

Note: *As Amelia Intl's crew is responsible for production and distribution of the weigh and balance calculation, it must be assured by the handler responsible for the flight, that correct and final data regarding the load and passengers are provided to the flight crew.*

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5.3.3.1 Loadsheet

In order for the PIC to produce the Loadsheet, the following criteria shall be met:

a) Passenger acceptance finalised;
b) All hold load confirmed;
c) Fuel figures finalised;
d) Crew configuration confirmed.

The Loadsheet is done by the flight crew of the Amelia Intl aircraft. The handling should provide the applicable information presented above.

The loadsheet form is presented in the Operations Manual Part B.

5.3.3.1.1 Loadsheet Last Minute Changes (LMC)

a) When there is need for last minute changes, they are possible as presented below:
EMB135/145 and ATR42:
LMC of 8 persons and/or 200 kg of cargo load is allowed.
When combined load (persons + baggage + cargo) is 200kg or more new balance has to be calculated and aircraft weights (TOM/ ZFM/ LM) have to be adjusted properly.

A319/A320:
No values for LMC. The updated total values must be provided to the PIC who will issue a new loadsheet.

b) LMCs/updated values should be preferably given to the PIC, by the responsible person in writing.
For LMC normally a special LMC slip should be used. The information to be recorded on this form may be limited to the following:
   1. Total weight of all LMCs
   2. Total number of LMC passengers
   3. Corrected balance conditions, even if it is not allowed by the operator (e.g., "BAL not corrected")

   If they are given verbally (after agreement with the PIC) either directly or by using the internal communication facilities of the aircraft (interphone, intercommunication system, ACARS), or by radio communication the following details must be recorded in writing and kept in the flight file:

      1. Name of responsible person
      2. Time of transmission
      3. Confirmation that the flight crew has acknowledged the changes

c) Then the Commander includes the LMC in the loadsheet in order to get the final figures or includes the new values in the loadsheet in order to issue a new Loadsheet corresponding to the updated values.

This record shall be kept in the flight file.

5.3.3.1.2 Delivery of the Loadsheet

One copy of the final loadsheet output form is left on ground to the handler or sent via e-mail to the applicable e-mail address, whichever possible.

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5.3.3.1.3 Loadsheet Discrepancies

Any discrepancy in weight and balance documentation shall be reported to the person responsible for the weight and balance calculations, to the Commander and/or to Amelia Intl ground ops department at ground@aeh.flyamelia.com

5.3.3.2 Information Exchange

All data pertaining to aircraft weight and balance calculations shall be communicated to the person charged with the load planning task; this information shall be documented and filed using one of the following methods:

a) Digitally
b) Written via documentation
c) Verbal communication; in this case, the person receiving the information must assure that one of the following is applied:
    1. Read back all information received by radio or telephone or other electronic means to guarantee accuracy of the data.
    2. Record all verbal transmissions in written format (manually or digitally) to be able to clarify all discrepancies before the final load sheet is transmitted.
    3. Digitally record all verbal communications.
d) A written transmission is always the recommended method. If it is necessary to use verbal communication, ensure that the following details are recorded:
        1. Name of the agent
        2. Time of transmission
        3. Confirmation that the receiving party has acknowledged the changes
        This record must form part of the flight file for retention.

5.3.3.3 Remote Load Control

Remote Load Control is a process of performing the load planning task and/or weight and balance calculation task for a departing flight in a remote location.

a) The key roles of remote Load Control are:
    1. To perform the load planning task.
    2. To compute the weight and balance calculation task in liaison with the departure station.
b) The key roles of the departure station are:
    1. To supervise aircraft loading and unloading as defined in 4.10.2.
    2. Communicate to the remote Load Control any discrepancies and/or deviations during the loading/offloading process.
    3. Report final loading of the aircraft to the remote Load Control.

Information exchange is essential for a safe remote Load Control process. Data shall be transmitted between remote Load Control, departure station and cockpit crew either directly or indirectly, using predetermined means of communication as established by the operator.

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5.3.4 Post-departure Message Task

All post-departure messages and any other relevant messages pertaining to flight handling shall be sent to the defined stations as per operator requirements. OCC will inform relevant stations if and how to send these messages or it will be included in the contract. Such messages may include, but are not limited to:

a) Load Departure Message (LDM)
b) Statistical Load Summary (SLS)

Messages shall be produced and delivered in accordance with respective AHM chapters.

A flight file shall be maintained for each departing flight in a secure location according to local regulations and/or operator requirements

5.3.5 Load Control Task Job Responsibility

The responsibilities of persons performing the load control task may vary depending on the organizational set up. It is recommended that:

a) The load planning task and weight and balance calculation task may be performed by the same person. The person performing these two tasks should not combine the responsibilities with those for the aircraft loading and unloading supervision task.
b) The aircraft supervision task, the weight and balance calculation task and the post-departure message task may all be performed by the same person. However, the person performing these three tasks should not include the responsibility for the load planning task as well.
c) At a station where ACARS is used, finalization of the weight and balance calculation task may differ.
d) When load control processes are centralized, the person performing the aircraft loading and supervision task is charged with transmitting all final data to the remote load control center.

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5.4 WEIGHT CONTROL

Aircraft weight and balance data presented in this manual take into account the limitations of the manufacturer and Amelia Intl. These data are current and accurate.

Different systems of weight control are applied, depending on: aircraft type; destination of the flight; local conditions at the departure station.

Actual weight must be used for load control purposes for:

- Baggage,
- Cargo and
- Mail.

The actual weight is obtained by means of bulk weighing or from the actual weight established at check-in.

1) **Bulk weighing** must be applied to baggage, cargo and mail if weighbridges with the required capacities are installed.
   The following must be observed:
   - loaded transport carts must be weighed before being dispatched to the aircraft;
   - tare weight of cart must be deducted from the total weight;
   - weight thus established must be entered on weight slips attached to the carts.

2) **Weight established at check-in**
   - Actual piece weights must be transmitted to the loadsheet agent.
   - These weights might be different from entries in the passenger ticket.
   - Pieces must be counted when loaded onto carts. Total number put into each compartment must be recorded on the loading instruction form.

   ***Note**: All above shall be applied also to baggage exceeding normal allowances, gate delivered items as well as other non-normal items, which have to be considered for the load control process.*

Standard baggage weight must be used for load control purposes if the actual baggage weight cannot be established (e.g. missing scale, unserviceable scale).

Pieces must be counted when loaded onto carts. Total number put into each compartment must be recorded on the loading instruction form.
For application of standard mas values refer to ch. 5.3.2.

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5.4.1 Aircraft Mass

The maximum mases for each aircraft are presented in the chapter 6. Below is description of EEM/ MEM, BEM, OEM/ DOM.

EQUIPPED EMPTY MASS (EEM) OR MANUFACTURER EMPTY MASS (MEM)

It is the mass of structure, power plant, instruments, interior furnishings, systems, optional, portable, and emergency equipment and other items of equipment that are an integral part of the aircraft configuration.

BASIC EMPTY MASS (BEM)

It is the MEM plus the mass of the following items:

- APU oil;
- Engine oil;
- Hydraulic fluid;
- Unusable fuel.

OPERATIONAL EMPTY MASS (OEM) OR DRY OPERATING MASS (DOM)

It is the BEM plus the mass of the operational items necessary for aircraft operation and not included in the BEM, like:

- Crew and crew baggage;
- Navigation kit (manuals, charts, etc.);
- Lavatory rinse water (may be included in BEM);
- Lavatory chemical fluid (may be included in BEM).

MAXIMUM DESIGN ZERO FUEL MASS (MZFM)

This is the maximum authorized mass before usable fuel is loaded. The MZFM is related to aircraft structural limitations.

MAXIMUM DESIGN RAMP MASS (MRM)

This is the maximum authorized ramp mass.

MAXIMUM DESIGN TAKEOFF MASS (MTOM)

This is the maximum authorized mass for takeoff.

MAXIMUM DESIGN LANDING MASS (MLM)

This is the maximum authorized mass for landing.

MINIMUM OPERATING MASS (MOM)

This is the minimum authorized mass to operate the aircraft.

HOLD CONFIGURATIONS

In order to know the location and the maximum capacity of each hold of the Amelia Intl aircraft, see chapter 6 for the relevant aircraft type.

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5.4.2 Standard Mass Values

5.4.2.1 Standard Mass for Operating Crew

a) The standard mass value to be used for operating flight crew is 85 kg/ 188 lbs.
b) The standard mass value to be used for operating cabin crew is 75 kg/ 165 lbs.

The standard crew masses include any hand baggage up to 10 kg (22 lbs). Any additional baggage piece must be taken into account.

5.4.2.2 Standard Mass Values for Passengers and Persons other than Operating Crew

The Standard Mass Values include hand-baggage and the weight of any infant below 2 years of age carried by an adult on one passenger seat. Infants occupying separate passenger seats must be considered as children.

The following standard mass values shall be used for Amelia Intl flights:

Passenger seats		Male	Female	Children	All adult
10-19		92kg/ 203lbs	74kg/ 77lbs	35kg / 77 lbs	N/A
20-29	All flights except holiday charters	88kg/ 194lbs	70 kg/ 154lbs	35kg / 77 lbs	N/A
	Holiday Charters*	83kg/ 183lbs	69 kg/ 152lbs	35kg / 77 lbs	N/A
30 and more	All flights except holiday charters	88kg/ 194lbs	70 kg/ 154lbs	35kg / 77 lbs	84kg/ 186lbs
	Holiday Charters*	83kg/ 183lbs	69 kg/ 152lbs	35kg / 77 lbs	76kg/ 168lbs

* Holiday charter means a charter flight that is part of a holiday travel package. As all e-loadsheet are based on the values for all flights except holiday charter, when operating a flight that is defined as Holiday charter paper loadsheet shall be used and proper values must be used. Alternatively, where possible, and only after the NPFO had agreed, e-loadsheet with Holiday charter mass values may be prepared by the operations department.

On flights performed on ***aircraft with seating configuration less than 19 seats***, where no hand baggage is carried in the cabin or where hand baggage is accounted for separately, 6 kg/ 13 lbs may be deducted from the above male and female standard masses. Articles such as an overcoat, umbrella, small handbag or purse, reading material or a small camera are not considered as hand baggage.

5.4.2.3 Mass Values for Non- Standard Groups

For non-standard group of passengers (i.e. sports teams, like rugby players) that have excessive weights and do not comply with conventional weight allowances, as presented above, the weight per passenger taken into account is: 105kg.

Further detail: weight 105 kg has to be respected for all passengers on such flight (not only for those passengers that are exceeding the standard weights) since 105 kg is the definition of the average weight of all persons on board.

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5.4.2.4 Standard Mass Values for Baggage

a) Crew baggage: The standard mass value to be used for crew baggage is 15 kg (33 lbs) per crew member.
b) Passenger baggage: To determine the total mass of the passenger baggage, **the actual mass shall be determined by weighing.**

Only for aircraft with total number of passenger seats of 20 or more, in cases when the baggage cannot be weighted, the mass shall be determined using the table presented below:

Type of Flight	Maximum number of UM
Domestic	11 kg
Within European Union	13 kg
Intercontinental	15 kg
All other	13 kg

Domestic flight means a flight with origin and destination within the borders of one State.

Within European Region are those flights, other than domestic flights, whose origin and destination are within the areas stated below and as seen on the figure:

- N7200 E04500
- N4000 E04500
- N3500 E03700
- N3000 E03700
- N3000 W00600
- N2700 W00900
- N2700 W03000
- N6700 W03000
- N7200 W01000
- N7200 E04500

Intercontinental flight means, flight beyond the European region with origin and destination in different continents.

5.4.2.5 Cabin Seat Baggage

If the seat baggage weights **less than 10kg**, it is considered as **infant** for weight and balance purpose.

If the seat baggage weights **more than 10kg**, it is considered as **child** for weight and balance purpose.

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5.4.3 Cargo, Mail, EIC

Before accepting a package, it is necessary to verify the nature of its content using appropriate loading codes (IATA Coding), in order to check if the nature of goods respects specificities. For details refer to ch.7.

There are limits to respect for the package acceptance:

- 70 kg maximum weight per piece for passenger aircraft (exemptions possible e.g. HUM);
- Respect for the floor strength;
- Compliance with the package size limitation appropriate for each aircraft type (see chapter 7.6 for appropriate aircraft type).

5.4.3.1 Determination of the Weights

Contracted agents guarantee that the weights of cargo and mail loads to be loaded into an aircraft and transmitted to the aircraft handling department are correct.

Bulk load

Trolleys, carts, etc. loaded with bulkload shall be weighed prior to dispatch to the aircraft by use of a weighbridge of acceptable accuracy. In the absence of such facilities, a tally should be made of the individual weights of each piece loaded in a trolley, etc. Cargo Manifest weights shall not be used for this purpose.

Note: *If standard baggage weights are used, a loaded trolley/cart need not be weighed.*

The determined net weight of the bulk load shall be entered on a trolley tag or weight slip which is to be attached to the trolley/cart, etc.

The tag or the weight slip shall contain the following minimum information:

- destination;
- flight number;
- net weight or number of pieces of baggage.

These weight figures shall be recorded in the Bulk Section of the ULD/Bulk Load Weight Statement and/or on the LIR and be checked with the Loadsheet figures.

The tare weight marked on the trolleys/carts shall be periodically checked for validity, especially after technical modifications have been made.

As an alternative: acceptance of weights stated on air waybills, AV-7s or other recognized weighing documents, provided that it has been ascertained, for instance by spot checks, that the stated weights can be accepted as correct.

For loadsheet purposes, weights on cargo manifest must be used if the actual weight of cargo and mail cannot be established.

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5.4.4 Ballast

In Amelia Intl two types of ballast are possible:

- Ballast bags (hold loaded);
- Ballast fuel.

5.4.4.1 Ballast Bags

The ballast bags shall be in accordance with the following standard:

1. Weight- 25 kg.
2. Contents- only dry shingle, coarse round gravel or pebbles of an average diameter of 12–15 mm must be used. Sand shall not be used.
3. Material- canvas or hessian with an inner plastic bag effectively closed.
4. Marking- weight and name of owner.

It is recommended that ballast bags are stored indoors. If this is not possible, they shall be placed on planks and protected against weather by means of canvas covers or other suitable covering.

Ballast bags shall periodically be checked for weight and condition.

They are treated as EIC.

For deviation of any of the above agreement from Amelia Intl Ground Ops department is needed. For deviation request write to ground@aeh.flyamelia.com

5.4.4.2 Ballast Fuel

Ballast fuel must be shown as an adjustment to the dry operating weight which will then be included in the ZFW.

If ballast fuel is carried over a sector where it is not required, it will be considered either as further ballast or usable fuel and included appropriately in the loadsheet.

When ballast fuel is carried, it should be shown in the supplementary information (SI) of the load message as information to the next station.

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5.5 LOAD PLANNING

The purpose of load planning is to achieve the most economical utilization of aircraft capacity taking into account the following aspects:

- Maximum safety;
- Efficient handling of aircraft and load;
- Most accurate planning of the ZFW for efficient fuel planning.
- Planning the special loads according to restrictions, maximum quantities, separation and segregation requirements.
- Maximum regularity.

The load planning is normally done at the departing station. In case load planning is not available at departure station it can be done by the Commander himself or exceptionally at Amelia Intl cargo department in headquarters. In this case, all stations concerned must inform the responsible for load planning of the deviations in the amount and/or nature of the excess load.

5.5.1 Load Distribution

The following instructions must be carried out:

- load must be distributed according to the loading instruction.
- all structural loading limits of the aircraft and the compartments must be observed
- all incompatibilities of special loads must be observed,
- Loaded Index at Zero Fuel Weight (LIZFW) and the center of gravity at take-off (% MAC at Take-off Weight) must be within the limits;
- on multi-sector flights aircraft must be loaded in such a way that it does not need to be re-loaded for balance reasons at transit stations;
- only load that can be unloaded must be loaded at the destination station. The available loading equipment must be checked at the destination station.

5.5.1.1 Passenger Distribution

The passenger cabin is divided in several zones. There are several ways of distributing passengers in the cabin:

- **Distribution with seat assignment:** each passenger is given a precise seat. The seat number is printed on the boarding card and the passenger must occupy this seat.
- **Uniform distribution:** Distributing passengers proportionally in the different balance zones. Passengers must seat where they like, but at the end it must be assured that the number of passengers seating in each zone is the same as written on the loadsheet.
- **Special distribution:** due to mass and balance requirement reasons some passengers may be moved and reseated in order to comply with the balance zone distribution on the loadsheet.

The seating mode used shall be communicated between the crew and ground personnel.

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5.5.1.2 Load Distribution in Holds

The actual weight of all load positioned in the hold must be considered. Where not possible to actually weight the baggage, standard masses as described in 5.3.2.3 shall be used.

The load distribution is determined by the agent in the load planning who takes into account the estimated load. When distributing the load, it is necessary to consider:

- load must be distributed according to the loading instruction.
- all structural loading limits of the aircraft and the compartments must be observed
- all incompatibilities of special loads must be observed,
- Loaded Index at Zero Fuel Weight (LIZFW) and the center of gravity at take-off (% MAC at Take-off Weight) must be within the limits;
- on multi-sector flights aircraft must be loaded in such a way that it does not need to be re-loaded for balance reasons at transit stations;
- only load that can be unloaded must be loaded at the destination station. The available loading equipment must be checked at the destination station.
- commercial regulations: baggage location rules.
- tie-down instructions shall be respected in case of special shipment;

Final load distribution in the holds shall be mentioned in the loading instruction report validated by the loading supervisor. That report shall be transmitted to the person that prepares the loadsheet (pilots or agent) to include the latest modifications, before issuing the final loadsheet.

Important: If due to insufficient place or any other reason, a passenger baggage is inserted in the part of the cargo hold that is meant only for the company cargo and crew baggage (i.e. section61 of EMB cargo hold) and if this is not clearly identified on the LIR, the loading supervisor must inform the Commander.

The loadsheet must reflect the actual loaded state of the aircraft before departure.

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5.5.2 Load Densities

For estimating the load, the expected figures of the following load must be observed:

- number of passengers;
- number and weight of baggage;
- booked cargo;
- mail;
- service cargo, reduced rate cargo, EIC, comail.

Attention must be given to the special loads and other specialties, for example bulky passenger baggage, wheelchairs.

The average densities presented in the table below must be used to estimate the volume of the load:

Type of load	Density in kg/m^3
Baggage (Baggage volume is approx. 10-12 pcs/m$^{3)}$	150-160
Ballast	1400
Booked Cargo	180
Stand-by cargo	160
Mixed letter/ parcel mail	220
Parcel mail	130

Note: *The density figures given for baggage, cargo and mail include stowing loss.*

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5.6 LOADING LIMITATIONS

It is mandatory to respect:

- the maximum loading height marked on the wall of the hold (this upper limit must be respected); and
- the floor strength. This information can be found in section 6.

For general load instructions including load restraints/cargo nets, load tie-down and load spreading instructions see chapter 4.10.

5.6.1 Aircraft Structural Loading Limitations

An aircraft is designed to carry load at minimum structure weight. The aircraft structure is not strong enough to permit loading without regard to certain limitations.

The Airframe Manufacturers Weight and Balance Manual is the authority that specifies the allowable limits on aircraft loading.

The data contained in this manual reflects the design limits established by the airframe manufacturer and approved by the aviation regulatory authorities.

The structural loading limitations are as follows:

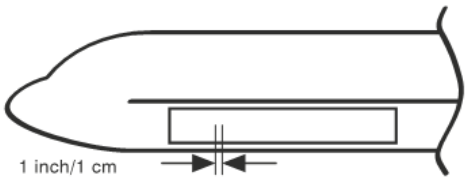
- Running (Linear) Load Limitation
- Area Load Limitation
- Compartment Load Limitation
- Contact Load Limitation
- Point Load Limitation
- Asymmetrical Load Limitation
- Combined Load Limitation
- Cumulative Load Limitation
- Barrier Net Load Limitation

Note: For applicable structural load limitations refer to ch.6.

5.6.1.1 Running (Linear) Load Limitation

Running (linear) load limitation determines the total maximum load acceptable on any given fuselage length, measured in the longitudinal (fore-aft) direction, and is expressed in kg/m.

In practice it shall be checked dividing the weight of the piece of cargo by the given length of that piece in flight direction. Example:



If it is stated that the Running (Linear) Load Limit is 625 kg/m, this means that on 1 m length of the floor in flight direction, not more than a total amount of 625 kg may be loaded, with one or several pieces of cargo and irrespective of the way the piece(s) of cargo is (are) in contact with the floor within the length

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considered. In this case the length to take into account is defined by the external contour of its contact points:

$$\text{Divide } \frac{\text{Weight}}{\text{Length}} = \frac{350 \text{ kg}}{0.70 \text{ m}} = 500 \text{ kg/m} < 625 \text{ kg/m}$$

If the resulting figure is higher than the limitation, the load cannot be accepted as it is and a spreader floor will have to be provided.

5.6.1.2 Compartment Load Limitation

Refer to relevant aircraft type in ch.6.

5.6.1.3 Area Load Limitation

It is also referred to as '' "Compartment Area Load Limit", "Uniformly Distributed Floor loading" or "Maximum Distributed Load".

The Area Load Limitation, expressed in kg/m2 (lb/ft2), is to prevent the weight of the load (expressed in kg or lb) resting upon a certain area of the compartment floor (expressed in m2 or ft2) to exceed the capability of the aircraft structure (floor beams, floor posts, floor panels and frames).

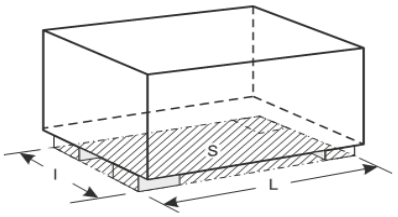
If it is stated that the area load limit is 750 kg/m2, this means that on 1 m2 of the floor, not more than a total amount of 750 kg may be loaded, with one or several pieces of cargo, and irrespective of the way the piece (or pieces) of cargo is (are) in contact with the floor within the square meter considered.

In practice, the area load limitation shall be checked dividing the weight of the piece of cargo by the area defined by the external contour of its contact points on the floor. Example:

In this case the area to take into account is not the crates or the surface of its feet but the area S = L × l defined by the external contour of its contact points

$$\text{divide } \frac{W}{S} \quad S = 0.4 \times 0.6 = 0.24 \text{ m}^2$$

$$\frac{W}{S} = \frac{240}{0.24} = 1{,}000 \text{ kg/m}^2 > 750 \text{kg/m}^2$$



If the resulting figure is higher than the limitation, the load cannot be accepted as it is. It will be necessary to provide a spreader floor to be placed under the load.

To determine the area load required the following calculation is made:

Area of boards required= (weight of package) / (max floor loading)

Example:

Load = 240 kg

Area Load Limit = 750 kg/m^2

Minimum surface defined by the external contour of the contact points of the spreader floor:

$$\frac{240}{750} = 0.32 \text{ m}^2.$$

Spreader = 10 kg.
$S = L \times l = 0.7 \text{ m} \times 0.5 \text{ m} = 0.35 \text{ m}^2$

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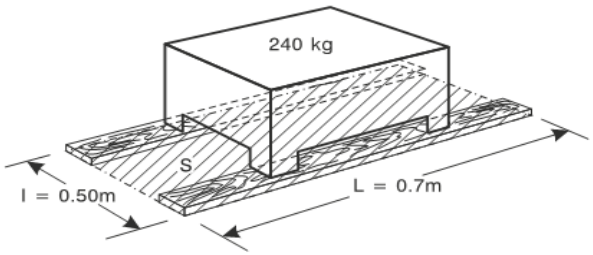

***Note**: The total weight is a combination of the load and spreader(s).*

The load imposed by the total weight of cargo and spreader(s) on the aircraft structure may now be compared with the area load limit dividing the weight by the new area S:

$$\frac{240 + 10\text{kg}}{0.35\text{m}^2} = 715\ \text{kg/m}^2 < 750\ \text{kg/m}^2$$

***Note:** The total weight is a combination of the load and spreader(s).*

Important: When a spreader floor is required, the maximum area load limitation is reached. No other cargo must be loaded on the package itself or on the accessible parts of the spreader floor unless the spreader floor was calculated to accept the additional cargo.

5.6.1.3.1 Spreader Floor

Supporting platforms or planks must meet two requirements:

1. it must possess a sufficient degree of stiffness to effectively accomplish the load transfer; this degree of stiffness will be dictated by the weight of the load and the length of supporting platforms or planks projecting beyond or within each contact point;
2. the resulting area and length, defined by the external contour of the contact points of the supporting platforms or planks, must distribute the load below or up to the maximum permitted area load.

The minimum plank thickness given in the table below is applicable for planks widths up to 15 cm. For planks widths over 15 cm, minimum thickness must be increased by 0,5 cm for each 5 cm above 15 cm.

Weight of Load < 500kg	**Total protruding length (cm)**			
No. of Planks	Up to 25	26-58	59-103	104-161
2	2.5	4.0	5.0	6.5
3	2.5	4.0	5.0	6.5
4	2.5	4.0	4.0	5.0
5	2.5	2.5	4.0	5.0
6	2.5	2.5	4.0	4.0
7	2.5	2.5	4.0	4.0
8	2.5	2.5	2.5	4.0

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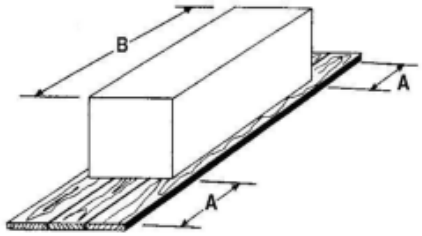
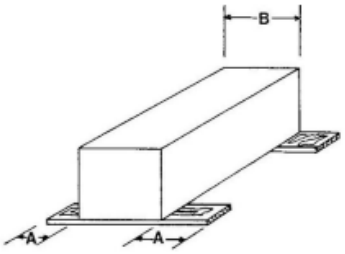




A- protruding length B- length/width of a piece Total protruding length = 2 x A

To determine the area and length required the following calculation must be made:

$$\frac{\text{Weight of item (kg)}}{\text{Maximum area load } (\text{kg/m}^2)} = \text{Mimimum required area } (\text{m}^2)$$

$$\frac{\text{Weight of item (kg)}}{\text{Maximum running load (kg/m)}} = \text{Maximum required lenght of floor area (m)}$$

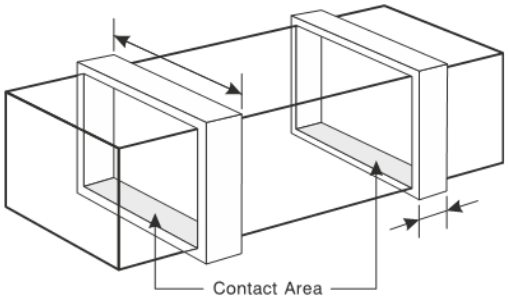
The number and length of supporting appliances must cover an area, which is larger than the minimum required according to the calculations.

The weight of supporting appliances (platforms and planks) must be added to the weight of the item for the final calculation.

5.6.1.4 Contact Load Information

It is also referred to as “Concentrated (Foot Print) Load”, “Contact Load Limitation” or “Maximum Local Load”.

The floor contact load limitation is used to prevent the weight imposed by those parts of the load in direct contact with the floor from exceeding the capability of the horizontal floor panels and is expressed in kg/m^2.



$$\text{When } \frac{W}{S \cdot (L \cdot x \cdot l)} \text{ (actual contact area load)}$$

Example:

Actual contact area = 30 cm × 5 cm × 2 battens = 0.03 m^2

$$\frac{480\text{kg}}{0.03\text{m}^2} = 16{,}000 \text{ kg/m}^2 > 2{,}000 \text{ kg/m}^2$$

If the resulting figure is higher than the limitation the load cannot be accepted as it is. It is necessary to provide a spreader floor to be placed under the load.

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5.6.1.4.1 Spreader Floor

The spreader floor shall meet two requirements:

1. It shall possess a sufficient degree of stiffness to effectively accomplish the load transfer, this degree of stiffness will be dictated by the weight of the load and the length of spreader projection beyond or within each actual contact point of the package with the spreader floor;
2. Its actual contact area with the aircraft floor will distribute the load below or up to the maximum permitted contact load. To determine the contact area required, the following calculation is made: divide the weight of the piece of cargo by the floor contact load limit.

Example:

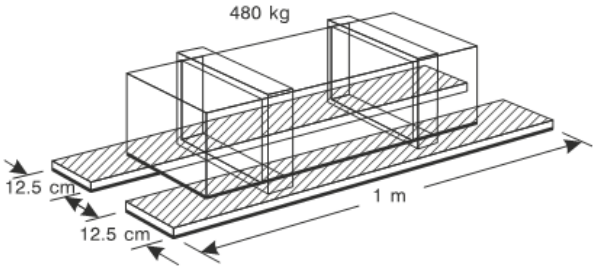
Load= 480kg

$$\text{Minimum contact surface} = \frac{480}{2{,}000} = 0.24 \text{ m}^2.$$

Floor contact load limit= 2,000 kg/m^2

Weight of spreader= 20kg

Spreader floor contact surface = 1 m × 0.125 m × 2 = 0.25 m^2



Note: *The total weight is a combination of load and spreader.*

The load imposed by the cargo on the aircraft floor panels through the spreader floor may be compared with the contact load dividing the weight by the new contact area.

$$\frac{480+20 \text{ kg}}{0.25 \text{ m}^2} = 2{,}000 \text{ kg/m}^2$$

Important: When a spreader floor is required, the maximum area load limitation is reached. No other cargo must be loaded on the package itself or on the accessible parts of the spreader floor unless the spreader floor was calculated to accept the additional cargo.

Where no Contact Load Limitation is provided by the airframe manufacturer, it is recommended to take the following steps when loading heavy pieces of cargo:

1. Check with Area Load Limitation as per ch. 5.5.1.3
2. Even if the Area Load Limitation is not exceeded, but if the actual contact area of the piece of cargo with the floor is small, e.g. narrow battens, rims, adjustment pads under machinery etc., place spreader material between the piece of cargo and the aircraft floor (or pallet surface). The contact surface of the spreader should be at least equivalent to one quarter of the external contour area used for check calculation in step 1.

Step 2. Is not required if it has been found necessary to use a spreader floor after checking step 1

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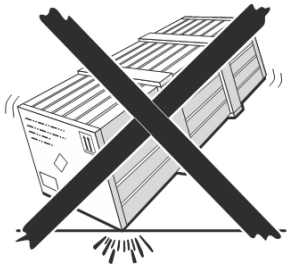
5.6.1.5 Point Load Limitation

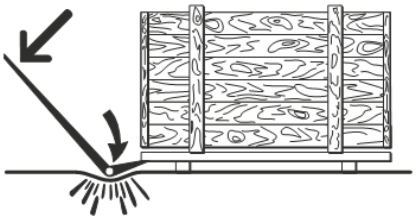
Point load limitation defines the resistance for puncture by a heavy load bearing onto a very small surface to the material used in a bulk hold floor and is expressed in kg/cm^2.

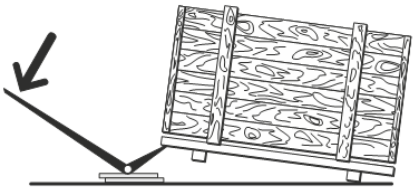
It is mandatory to apply the elementary package handling precautions in order to avoid floor puncture by a point load during handling in a bulk hold:

- never lay a more than 50 kg package on one corner;
- never roll a drum on its rim;
- never drop down a more than 50 kg package on an edge or a corner.



When using a pinch bar place a floor protector device beneath the “Pinch Bar” prior to applying the load, e.g. a plank or piece of plywood





5.6.1.6 Asymmetrical Load Limitation

N/A

5.6.1.7 Combined Load Limitation

The Combined Load Limitation (expressed in kg or lb) is used to prevent the weight imposed by the load positioned on a fuselage section from exceeding the capability of the frames and skin stringers defined by the manufacturer.

If it is stated that the Combined running load Limit is 3,510 kg/m this means that on 1 running meter of the aircraft fuselage (main deck + lower deck) no more than a total amount of 3,510 kg may be loaded. The limitation shall be checked by adding the weight applied on the main deck to the weight applied on the lower deck for a pre-defined section of the fuselage.

If the resulting figure is higher than the limitation, the load cannot be accepted as it is. It will be necessary to redistribute the load over the aircraft compartments.

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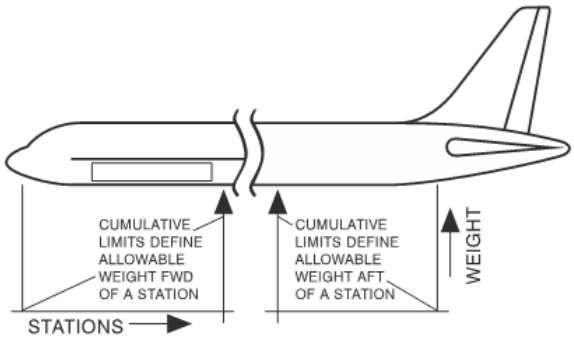
5.6.1.8 Cumulative Load Limitation

The Cumulative Load Limitation is used to prevent the weight imposed by the load positioned in the forward and aft fuselage sections exceeding the capability of the frames and skin stringers (fuselage bending moments).

In the airframe manufactures Weight and Balance Manual, it is generally referred to as “Cumulative Load Limitation” “Fuselage Shear Load Limitation” or “Integrated Load Limitation.



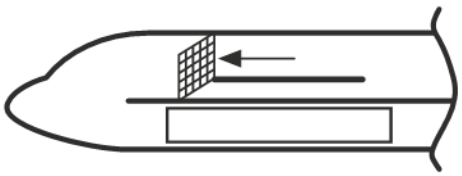
The limitation shall be checked by adding the weight applied on the main deck to the weight applied on the lower deck for pre-defined sections of the fuselage. The total weight applied on each section must be added to the next section (cumulative) from aft to forward (aft fuselage section) and from fwd to aft (forward fuselage section).

Note: *The maximum Cumulative load limits may differ per aircraft fuselage section and/or depending on the MACTOW (Mean Aerodynamic Chord at Take Off weight)*

If the resulting figure is higher than the limitation, the load cannot be accepted as it is. It will be necessary to redistribute the load over the aircraft compartments (sections).

5.6.1.9 Barrier Net Load Limitation

The Barrier Net Load Limitation (expressed in kg or lb) is used to prevent shifting of the load positioned forward or aft of a barrier net. A barrier net may be installed as a save guard to passengers and/or crew positioned in front of the barrier net (e.g. combi aircraft) from shifting load.



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5.7 DOCUMENTATION

All data pertaining to aircraft weight and balance calculations shall be communicated to the person responsible for the loadsheet and manually or electronically documented and/or filed. The ground handler is responsible for providing all relevant documentation for load planning and Amelia Intl is responsible for weight and balance calculations, as applicable.

The loadsheet is filled by the Commander after the final figures are provided to him by the load control. Amelia Intl has both, electronical and manual loadsheet. When and where possible an electronic loadsheet output form is send/given to the Handling/Loading department, at the departure airport before the flight. If for any reasons the loadsheet cannot be sent electronically, a manual output form is handed.

Refer to ch.1 for details on retention, distribution and other documentation processes.

5.7.1 Loading Instructions/ Report (LIR)

LIR must be issued for each departing cargo flight to ensure all safety parameters specific to each flight are adhered to.

It is mandatory to use LIR for A319/A320. But due to the simplicity of the cargo holds on the EMB135/145 and ATR42 passenger aircraft the LIR is not obligatory for those aircraft but strongly recommended. If LIR is not used, information about the final load can also be provided to the Commander in any other written means.

The format to be used is presented in the subchapter below.

The load distribution for the departing flight shall be completed using provisional data and adhering to the segregation policy, as per AHM 514 and AHM 515, ch.7 and ch.9.

The complete Loading Instruction Report shall be filled at the issuing station.

Any figures passed verbally to the loadsheet staff must be confirmed before aircraft departure, preferably in writing or by means of other effective pre-departure checks.

When a standard weight is used for hold baggage, the number of checked pieces per compartment may be entered as an alternative to the weight.

The accuracy of the calculations must be checked before departure of the flight concerned.

The aircraft shall be loaded in accordance with the LIR. All deviation requests shall be approved as per Amelia Intl requirements.

LIR revisions shall be immediately communicated via appropriate means to loading staff and flight crew.

5.7.1.1 LIR examples

Below are presented LIRs for EMB135/145, ATR42/72 and for A319/A320.

In case a copy is needed contact ground@aeh.flyamelia.com

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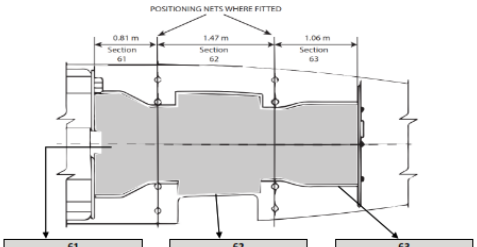
AMELIA International

LOADING INSTRUCTION REPORT (LIR) - EMB135/145

DATE:		**REGISTRATION:**	
FLIGHT:		**ROUTE:**	



61		
Type	Number	Weight
TOTAL		

62		
Type	Number	Weight
TOTAL		

63		
Type	Number	Weight
TOTAL		

	Number of pieces	Weight
TOTAL (Compartment 6)		

**For maximum weight allowed in the cargo compartment refer to GOM ch.6 for relevant aircraft type in chapter named "Hold Dimensions and Limits"*

Special Instruction/Deviation/Notes:

Prepared by:	
Load supervisor:	
Commander:	

A4M_Form_GroundOps_005 (Rev01: 15.04.2020)

AMELIA International

LOADING INSTRUCTION REPORT (LIR) - ATR42/72

DATE:		**REGISTRATION:**	
FLIGHT:		**ROUTE:**	

Right Forward Compartment (11R)		
Type	Number	Weight
TOTAL		

Left Forward Compartment (11L)		
Type	Number	Weight
TOTAL		

Rear Compartment (50 & 51)			
Circle	Type	Number	Weight
50/51			
50/51			
50/51			
50/51			
50/51			
50/51			
TOTAL			

**For maximum weight allowed in each compartment refer to GOM ch.6 for relevant aircraft type in chapter named "Hold Dimensions and Limits"*

	Number of pieces	Weight
TOTAL (All compartments)		

Special Instruction/Deviation/Notes:

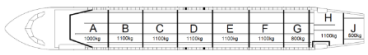
Prepared by:	
Load Supervisor:	
Commander:	

A4M_Form_GroundOps_004 (Rev02: 31.08.2020)

AMELIA International

LOADING INSTRUCTION REPORT (LIR) - ATR72F

Date:		**Flight Number:**		**Registration:**	
Sector		**Prepared by:**			



Compartment	A	B	C	D	E	F	G	H	J
Length, cm	2132	2151	2151	2187	2267	2151	1584	2134	1259
Max Weight, kg	1000	1100	1100	1100	1100	1100	800	1100	500
ARRIVAL (multi sector flight only)									
LOADING INSTRUCTION									
LOADING REPORT									

Special Instruction/Deviation/Notes:

A/C Holds empty before loading
Transit load on before loading
(delete as appropriate)

Commander (signature):	*I certify that the aircraft has been loaded as per this instruction with any deviations as noted.* Finalized by:
	(Name, signature)

A4M_Form_GroundOps_017 (RevO0: 05.11.2021)

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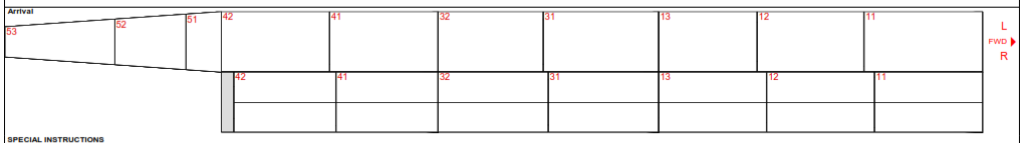
LOADING INSTRUCTION REPORT - A320-214

ADDRESS	ORIGIN	CPM	FLIGHT N°	A/C REG	DEST.	DATE	PREPARED BY/CERT N° :

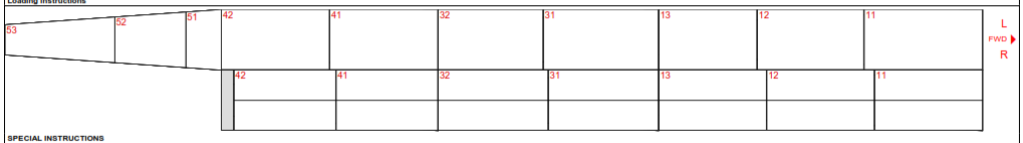
BULK COMPARTMENT N°5	COMPARTMENT N°4 MAX 2110 kg	COMPARTMENT N°3 MAX 2426 kg	COMPARTMENT N°1 MAX 3402 kg
MAX 1497 kg	MAX 4536 kg		MAX 3402 kg

Arrival



SPECIAL INSTRUCTIONS

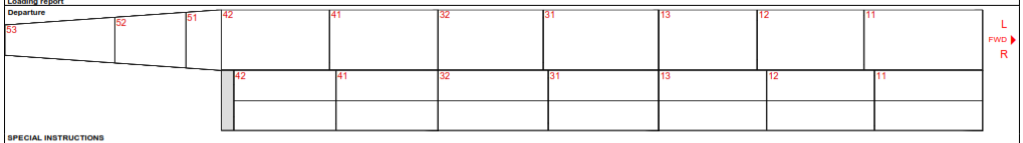
Loading instructions



SPECIAL INSTRUCTIONS

Loading report

Departure



SPECIAL INSTRUCTIONS

THIS AIRCRAFT HAS BEEN LOADED IN ACCORDANCE WITH INSTRUCTIONS. INCLUDING THE DEVIATIONS SHOWN ON THE REPORT ALL CONTAINERS/PALLETS AND BULK LOAD HAVE BEEN SECURED IN ACCORDANCE WITH COMPANY REGULATIONS.

PERSON RESPONSIBLE FOR LOADING

INFORMATION CODES

B – BAGGAGE	D – CREW BAGGAGE	N – NO ULD AT POSITION	0 – FULL X – EMPTY
C – CARGO	E – EQUIPMENT	P – PALLET	1 – ¼ VOLUME AVAILABLE
M – MAIL	F – F/C BAGGAGE	T – TRANSFER	2 – ½ VOLUME AVAILABLE
S – SORT	J – PRIORITY BAGS	U – U/S CONTAINER	3 – ¾ VOLUME AVAILABLE
		UCRC – CREW REST	

Completed by:
(Signature)

A4M_Form_GroundOps_019 (Rev00: 18.04.2023)

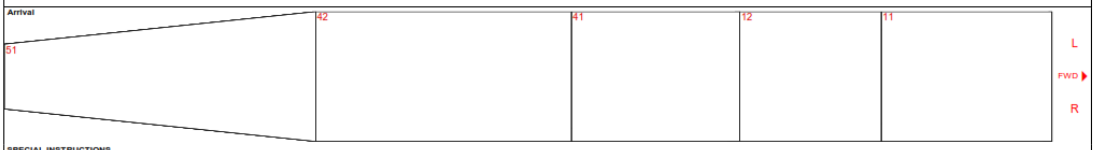
AMELIA International

LOADING INSTRUCTION REPORT - A319-111

ADDRESS	ORIGIN	CPM	FLIGHT N°	A/C REG	DEST.	DATE	PREPARED BY/CERT N° :

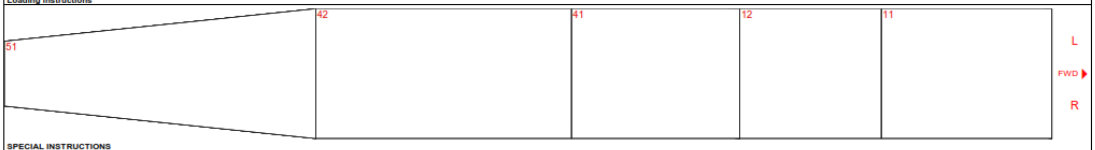
BULK COMPARTMENT N°5	COMPARTMENT N°4 MAX 3021 kg	COMPARTMENT N°1 MAX 2268 kg
MAX 1497 kg	MAX 3021 kg	MAX 2268 kg

Arrival



SPECIAL INSTRUCTIONS

Loading instructions



SPECIAL INSTRUCTIONS

Loading report

Departure

SPECIAL INSTRUCTIONS

THIS AIRCRAFT HAS BEEN LOADED IN ACCORDANCE WITH INSTRUCTIONS. INCLUDING THE DEVIATIONS SHOWN ON THE REPORT ALL CONTAINERS/PALLETS AND BULK LOAD HAVE BEEN SECURED IN ACCORDANCE WITH COMPANY REGULATIONS.

PERSON RESPONSIBLE FOR LOADING

INFORMATION CODES

B – BAGGAGE	D – CREW BAGGAGE	N – NO ULD AT POSITION	0 – FULL X – EMPTY
C – CARGO	E – EQUIPMENT	P – PALLET	1 – ¼ VOLUME AVAILABLE
M – MAIL	F – F/C BAGGAGE	T – TRANSFER	2 – ½ VOLUME AVAILABLE
S – SORT	J – PRIORITY BAGS	U – U/S CONTAINER	3 – ¾ VOLUME AVAILABLE
		UCRC – CREW REST	

Completed by:
(Signature)

A4M_Form_GroundOps_020 (Rev00: 19.05.2023)

Instructions on how to fill the LIR are presented on the next page.

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5.7.1.2 Where to Insert Certain Type of Baggage/ Cargo

DAA

The DAA should be preferably inserted in:

- Cargo compartment 62 for all EMB135/145
- Cargo compartment 11L for all ATR42.

If the flight crew requests for the DAA to be inserted in any other compartments than those stated above their request takes precedence and shall be respected.

DAA procedure is not applicable for A319/A320.

Crew Baggage

The Crew baggage should be preferably inserted in:

- Cargo compartment 61 for all EMB135/145
- Cargo compartment 51 for all ATR42.
- Cargo Compartment for 5 all A319/A320

If the flight crew requests for the DAA to be inserted in any other compartments than those stated above their request takes precedence and shall be respected.

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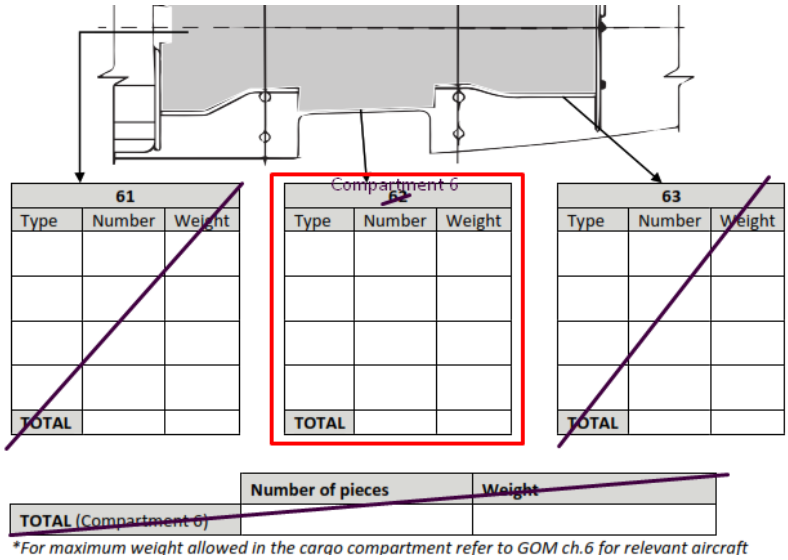
5.7.1.3 LIR instructions

Write any notes under the Special instructions/Deviation/Notes section. These can be: Goods which require special handling or stowage i.e. AVIH, HVY baggage and similar; DAA; Lashing and supporting of heavy items; Securing of items which may cause a hazard; Load to be located in the passenger cabin; Temperature/ventilation setting if applicable or any other information which is useful for the Loading Supervisor may be given in this part, e.g. summary of planned onload, Airway Bill Number of special cargo items, etc.

Important: Due to not incorporated SB some EMB135/145 do not offer the possibility to separate the cargo sections with vertical nets. In this case the loaded item details shall be inserted under section 62 adding the text '' Compartment 6'' or ''Cmpt 6'' by hand.

As the total will already be presented in this table there is no need to fill in again the last table named ''TOTAL (Compartment 6)''. In order to be clearer if the ground staff wants to, they can also put a line across the sections- see below:



Note: *As all sections of the compartment 6 are within the same ARM, whether all load is loaded in one section or divided into three, it will not have any influence on the balance of the aircraft.*

This is currently applicable for F-HYOG and F-HLIP.

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5.7.1.4 Passenger aircraft

The person who will prepare the LIR, should:

- Specify the number and weight of each type of parcel to be loaded in a certain cargo hold or section of the cargo hold. In case of any special information that could affect loading must be indicated in the Supplementary Information (SI) section.
- Sum up the number and weight of parcels per cargo hold/ section to show the total loaded in each cargo hold or section of the cargo hold.
- Sum up the number and weight of cargo loaded in all cargo holds/sections.
- Sign the LIR.
- Hand it to the person in that supervises the loading.

The Load supervisor should:

- Confirm that the load has been loaded and secured in accordance with the LIR and Amelia Intl instructions.
- Sign the document when the loading has finished.
- Hand the LIR to the Commander.

The Commander should:

- Copy the data provided on the LIR in the Loadsheet.
- After verification he shall sign the form, scan it and upload it in the flight envelope on the EFB.
- Hand it back to the Load supervisor.

The form must be saved in the flight dossier found at the ground handling station, as per company's internal procedures, but not less than 3 months.

Either a copy shall be handed to the Commander or he must be allowed to scan it and upload it directly to the flight package.

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5.7.1.4.1 Cargo Aircraft

The instructions of filling the LIR are as presented in AHM 515. The procedure in general is:

The load planner should:

- Fill the header and the loading instruction (when needed also the arrival info).
- Insert any special information.
- Sign the LIR.
- Hand it to the person that supervises the loading.

The Load supervisor should:

- Fill in the loading report.
- Confirm that the load has been loaded and secured in accordance with the LIR and Amelia Intl instructions.
- Sign the document when the loading has finished.
- Hand the LIR to the Commander.

The Commander should:

- Copy the data provided on the LIR in the Loadsheet.
- After verification he shall sign the form.
- Hand one copy back to the Load supervisor.
- Scan it and upload it in the flight envelope on the EFB.

The form must be saved in the flight dossier found at the ground handling station, as per company's internal procedures, but not less than 3 months.

When not possible to provide a separate copy for the Commander, he must be allowed to scan it and upload it directly to the flight package.

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5.7.2 Off-Loading Instruction Report (OIR)

OIR may be issued prior to aircraft arrival. Consideration shall be given to ensure aircraft stability during the offloading process and passenger disembarkation.

For transit flights, produce offloading instructions as per AHM 514 and AHM 515 where transit load, off-load and all positions are reported.

Amelia Intl does not use OIR.

5.7.3 Notification to the Captain (NOTOC)

The flight crew must be provided with a notification concerning any dangerous goods or other special load (i.e. PER, AVI, HEG, HUM) onboard the aircraft carried as cargo or mail in the form of a NOTOC.

The cargo department is responsible for providing DGSL information in legible written, printed or digital form and transmitting it to the person charged with load planning task. The Load Planner shall produce LIR taking into consideration DGSL information, their compatibility and segregation criteria.

The loading positions will be reflected in the right-hand side of the NOTOC. Any change must be agreed and communicate in advance with load controller.

The information contained in the NOTOC shall be made available to the person charged with aircraft loading and supervision task. The person shall:

a) Verify that DGSL are not damaged or leaking.
b) Ensure the correct positioning of DGSL as per the LIR and NOTOC.
c) Report actual loading position.
d) Signs the NOTOC.
e) Deliver the signed NOTOC to PIC for signature.

The NOTOC must be issued in adequate number of copies, in order to provide information to all concerned and for file retention.

DGSL information shall be made available to the next downline airport before the flight arrives.

Finalized NOTOC shall be signed and delivered to the Commander.

For NOTOC document refer to ch. 9.3.3.

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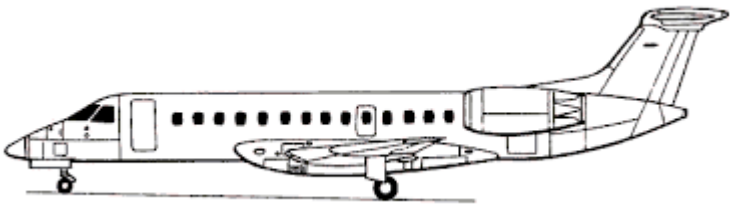
6 AIRCRAFT SPECIFICS

6.1 ERJ135

6.1.1 Basic Data

CHARACTERISTICS				
Manufacturer: EMBRAER	ERJ 135 ER	ERJ 135 LR		
	F-GRGP	F-HTOP	F-HLIP	F-HMOV
EXTERNAL DIMENSIONS				
Length Wingspan Height	26,33 m 20,04 m 6,76 m			
CABIN DIMENSIONS				
Length Width Height	12,80 m 2,10 m 1,82 m			
ENGINES				
Two Rolls-Royce AE3007A3				
APU				
T-62T-40 C14				
PERFORMANCES				
Maximum range	1760 Nm/ 3260 km			
Cruise speed	436 Kt/ 808 km/h			
Maximum altitude	37 000 ft/ 11 300 m			
FUEL QUANTITY				
Max useable fuel per tank	2573 l / 2087 kg	3198 l / 2594 kg		
	Maximum permitted imbalance between tanks is **363 kg.**			

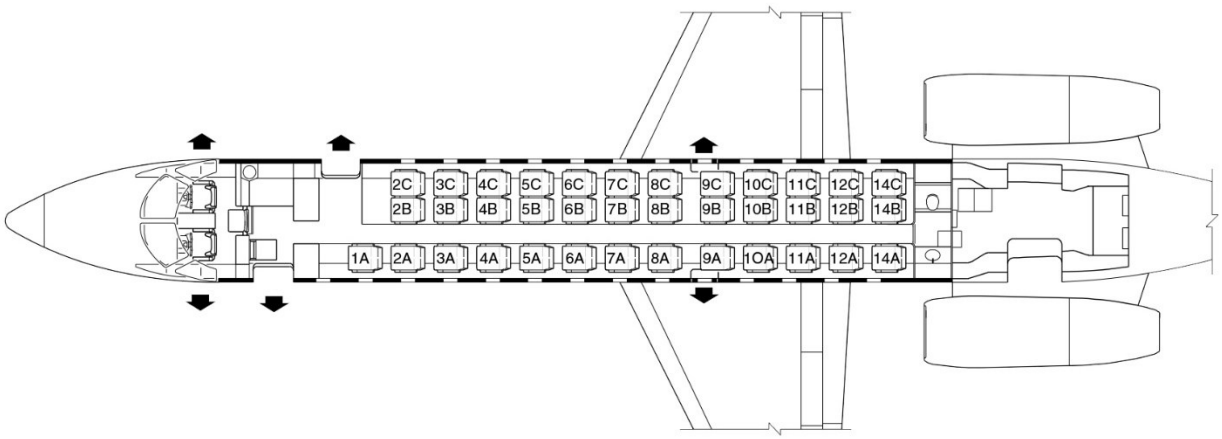


6.1.1.1 Seating Capacity and Cabin Balance Zones

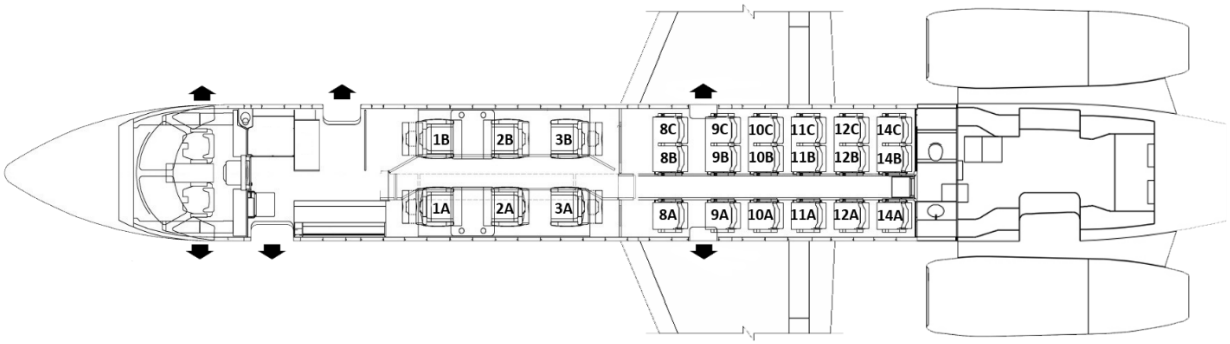
Aircraft	Seating capacity	ZONE and rows per zone		
		A	B	C
F-GRGP & F-HMOV	37	1-5	6-9	10-14
F-HTOP Vip config	24	There are no zones on F-HTOP. Each row is considered separately		
F-HTOP & F-HLIP & F-HMOV Stretcher Version	22+2 STCR or 12+3 STCR	There are no zones on F-HTOP & F-HLIP. Each row is considered separately.		

F-GRGP & F-HMOV

- 37 Seats on 13 rows in total;
- **The last row is Row 14, but Row 13 does not exist.**
- the seats are marked with following letters: **A (LH window seat); B (Aisle seat) and C (RH window seat)**.



F-HTOP VIP CONFIGURATION

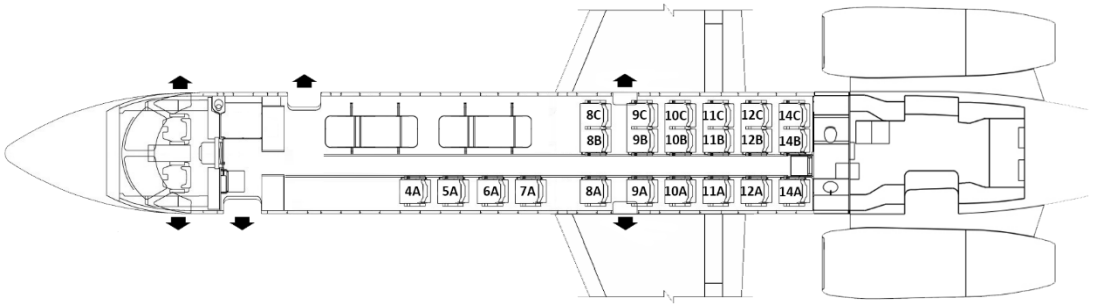


- 24 Seats on 9 rows, 6 seats in front in VIP section and 18 seats in the aft part of the cabin, each seat is designated by a letter.
- The seats are marked with following letters: **A (LH window seat); B (Aisle seat) and C (RH window seat)**

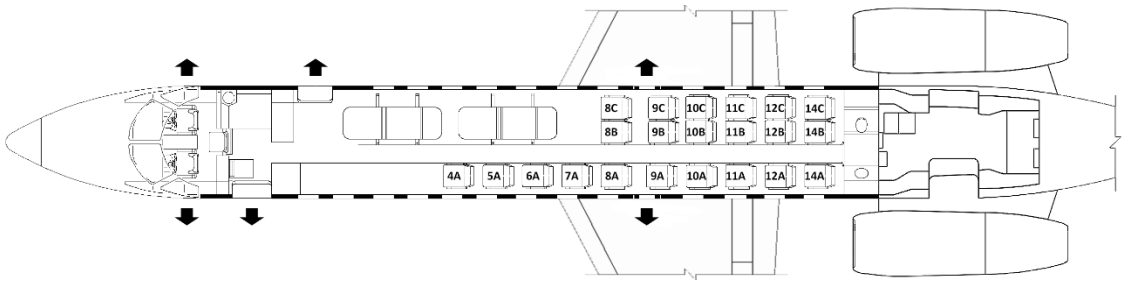
F-HTOP & F-HLIP ¸F-HMOV- 2 Stretcher Version

- 22 Seats on 10 rows in total;
- 2 stretchers in the front of the cabin on the RH side- not marked with rows nor letters;
- **Rows start with Row number 4 and ends with Row number 14, but Row 13 does not exist.**
- Seats are marked with the following letters: **A (LH window seat); B (Aisle seat) and C (RH window seat).**

F-HTOP layout



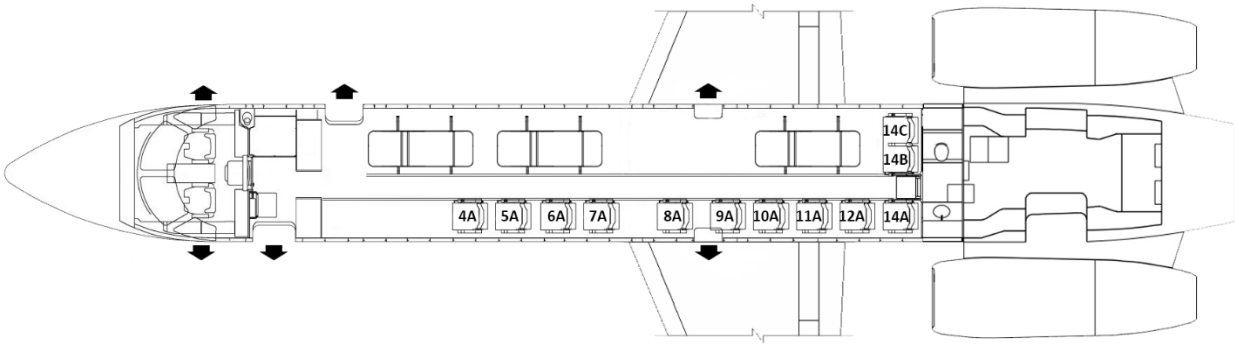
F-HLIP layout



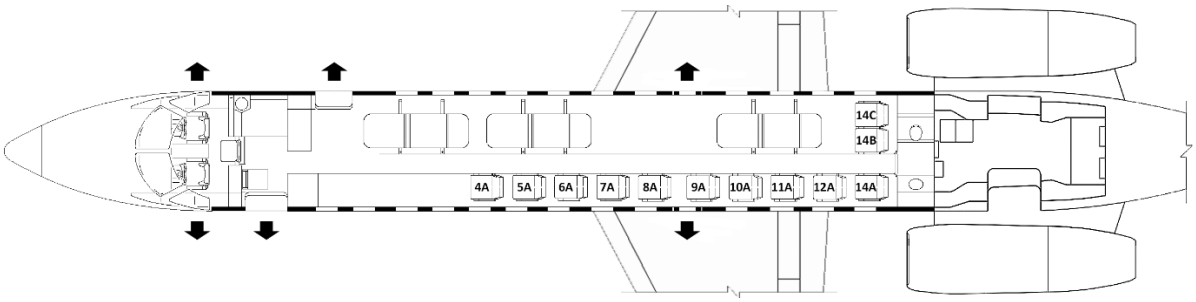
F-HTOP & F-HLIP @ F-HMOV- 3 Stretcher Version

- 12 Seats on 10 rows in total;
- 2 stretchers in the front of the cabin on the RH side and 1 stretcher in the aft of the cabin on the RH side (3 stretchers in total)- not marked with rows nor letters;
- **Rows start with Row number 4 and ends with Row number 14, but Row 13 does not exist.**
- Seats are marked with the following letters: **A (LH window seat); B (Aisle seat) and C (RH window seat).**

F-HTOP layout

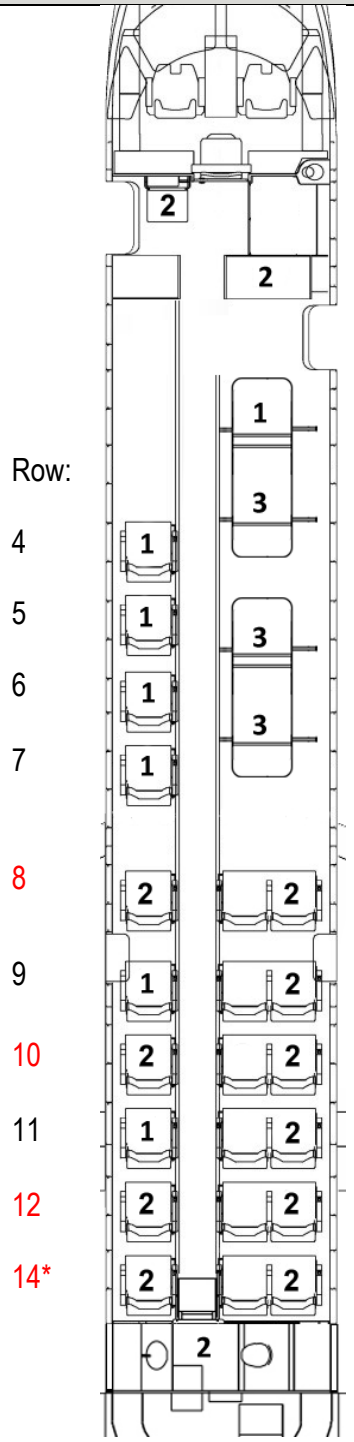
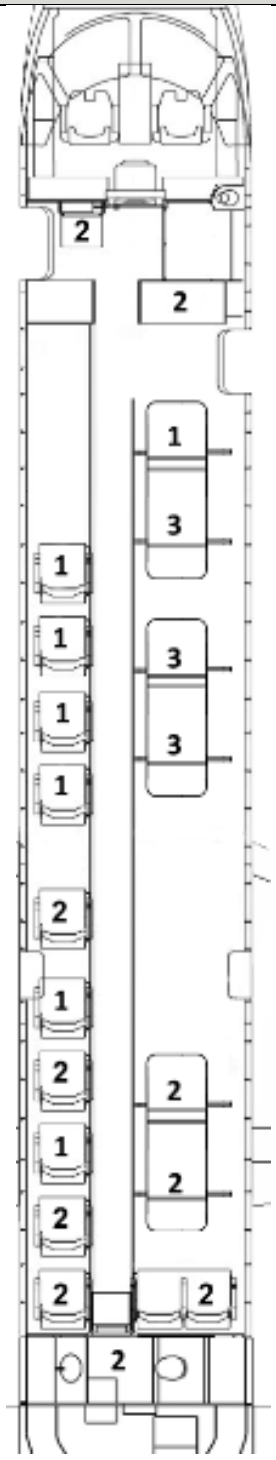


F-HLIP layout

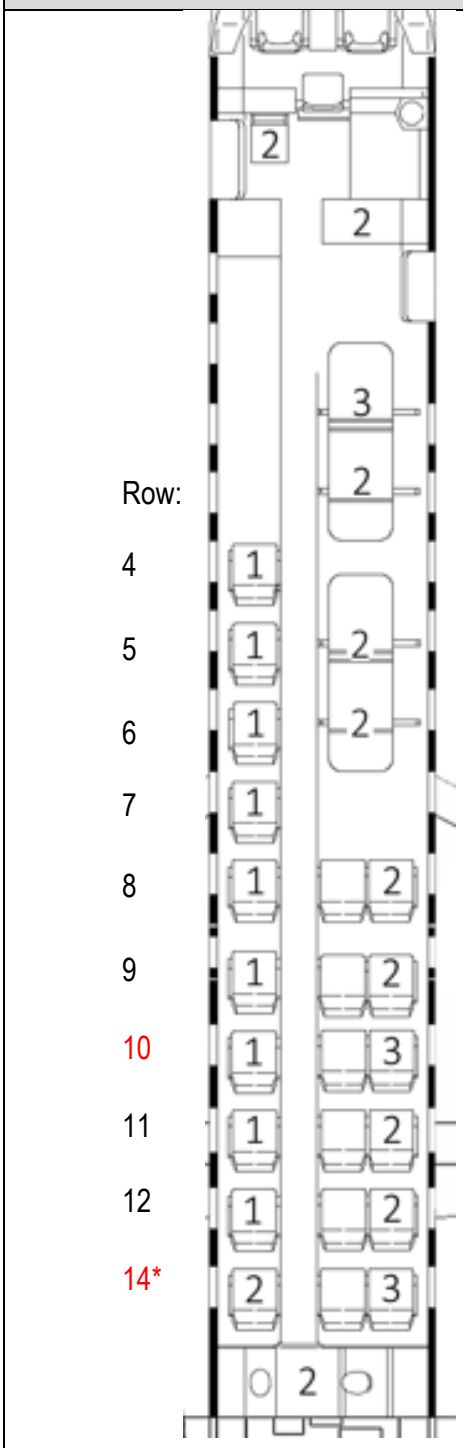
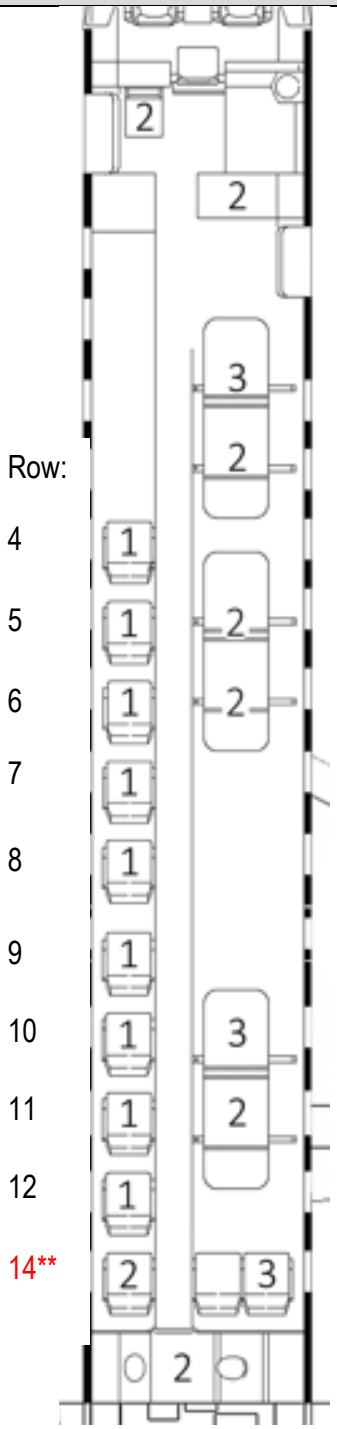


6.1.1.2 Passenger Oxygen Mask Location

The row numbers marked with red, are those where extra oxygen mask, to be used by infant is located. **Important: Infants may not be seated on emergency exit even if there is an extra oxygen mask.** Passenger with infants on F-GRGP should be seated on seat C.

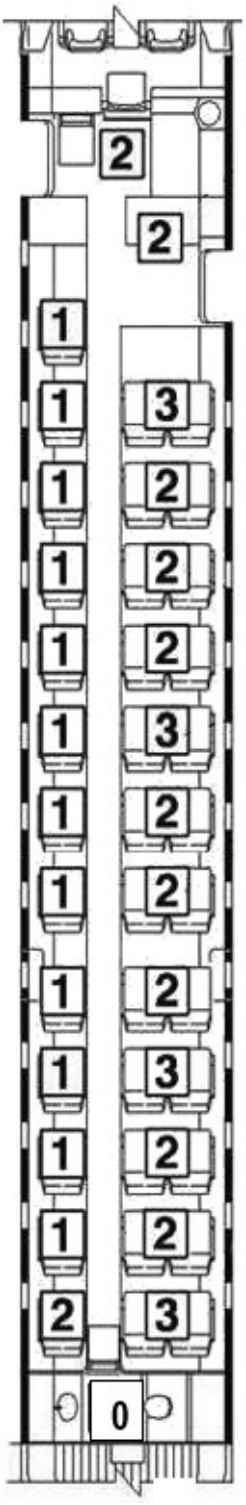
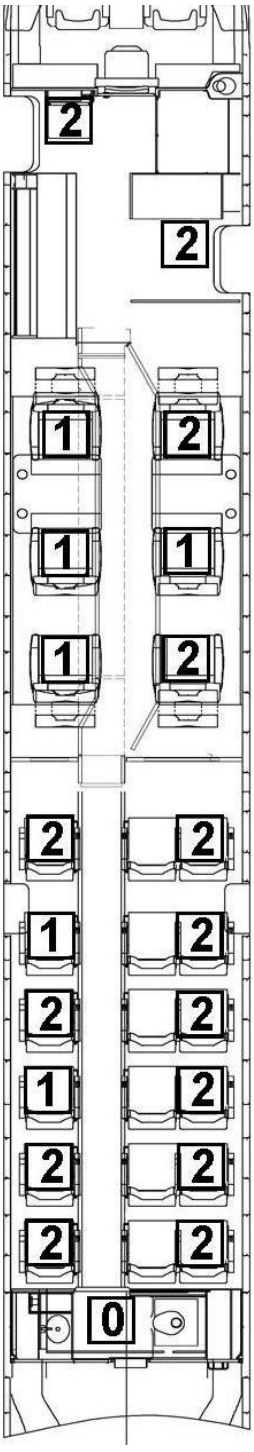
F-HTOP- 2 Stretcher version	F-HTOP- 3 Stretcher version
	

* ***Note:*** *On F-HTOP on seat 14A an infant may be placed only if there is no additional CCM on board that occupies the CCM seat in the AFT*

F-HLIP - 2 Stretcher version	F-HLIP - 3 Stretcher version
	

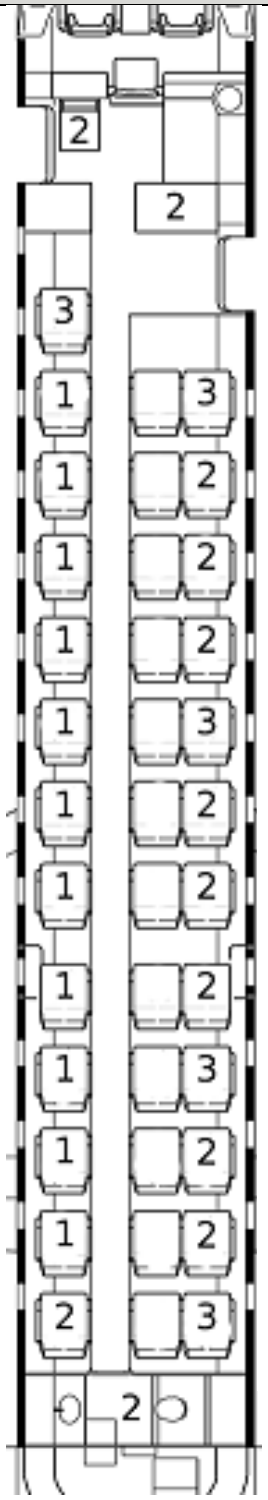
**Note: When there is already a passenger with infant on the row 10, when needed, two passengers with infants may be placed on Row 14. In that case one passenger with infant must be seated on 14A and the other on 14F.*

***Note: When two passengers with infants are travelling on F-HLIP with 3 stch layout, one passenger with infant must be seated on 14A and the other on 14F.*

F-GRGP	F-HTOP
	

** Note: Due to the repartition of the extra oxygen masks in the cabin, infants placed on these rows must be exclusively seated on 2F on F-GRGP.*

*** Note: On F-HTOP on last row an infant may be placed only if there is no additional CCM on board that occupies the CCM seat in the AFT*

F-HMOV	TBD
	

** Note: Due to the repartition of the extra oxygen masks in the cabin, infants placed on these rows must be exclusively seated on 2F on F-HMOV.*

6.1.2 Weight and Balance Data

	MRM	MTOM	MLM	MZFM
F-GRGP	19090	18990	18500	15600
F-HTOP F-HMOV	20090	19990	18500	16000
F-HLIP	20090	19990	18500	16000

The DOM is BEM plus the mass of the operational items, i.e. crew, documents etc.

The crew included in the DOM is 2 flight crew. The mandatory cabin crew and, if needed, the additional one, should be added when filling in the loadsheet. When cabin crew is added the DOM will be updated.

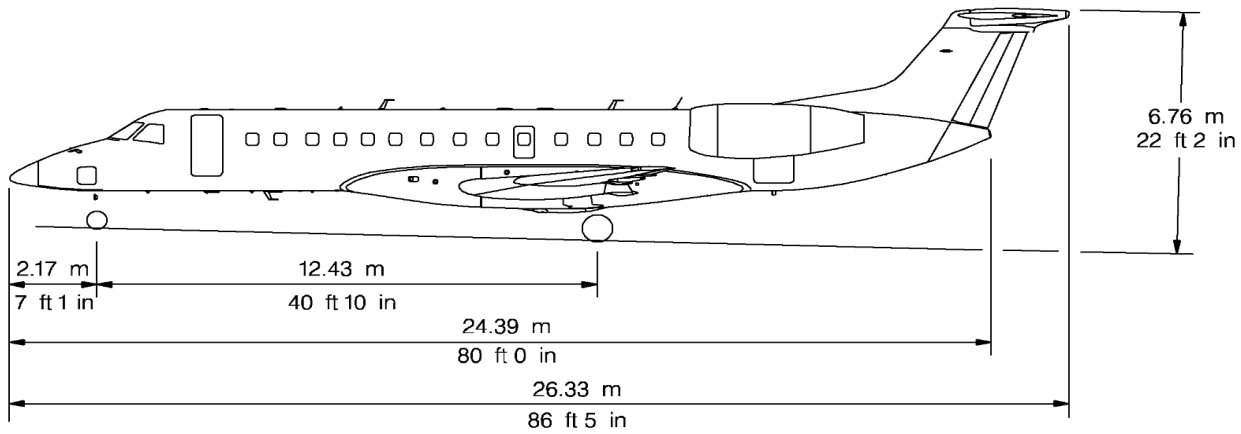
For the current BEM and DOM, refer to OM-B Chapter6.

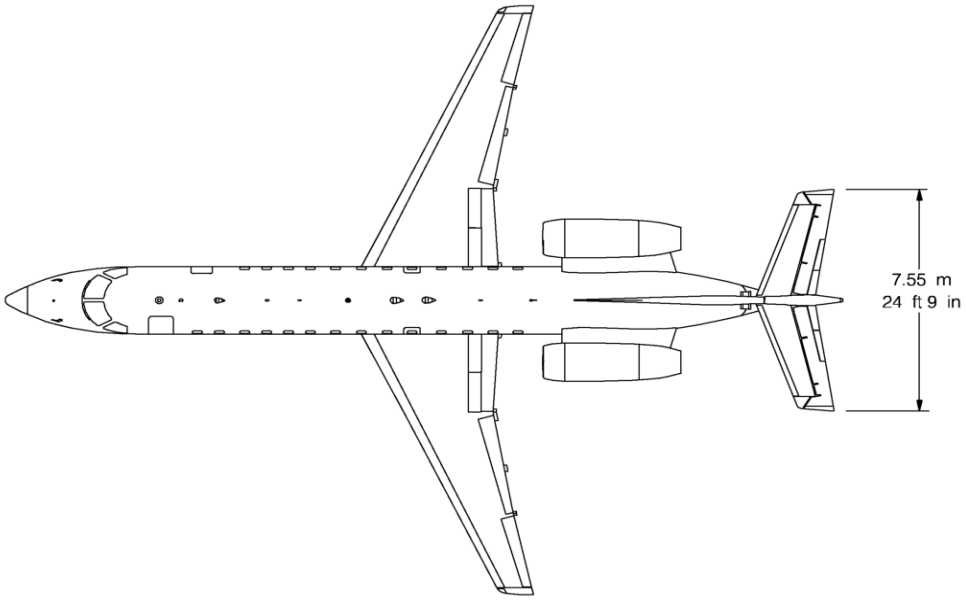
All the index adjustments for passengers, cargo and fuel are presented in the tables in the subchapters below depending on the applicable aircraft.

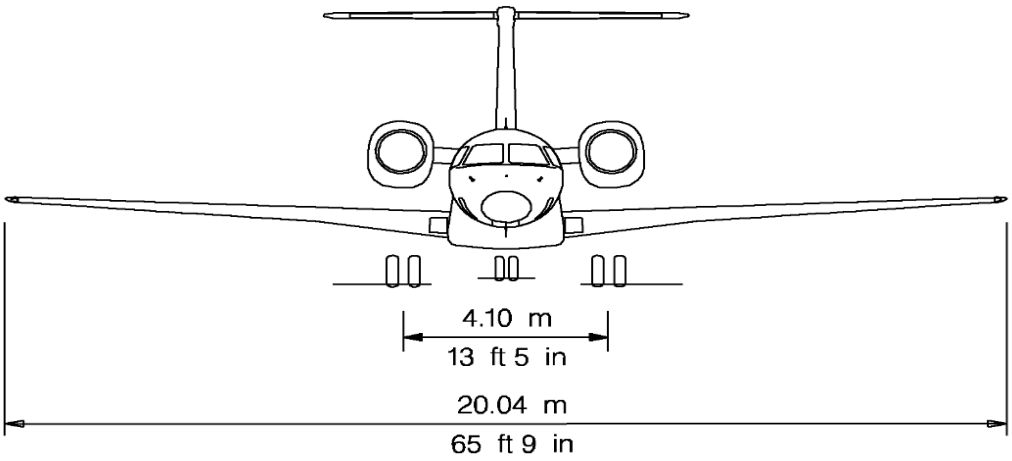
For Balance zones refer to ch. 6.1.1.1.

6.1.3 Aircraft Dimensions

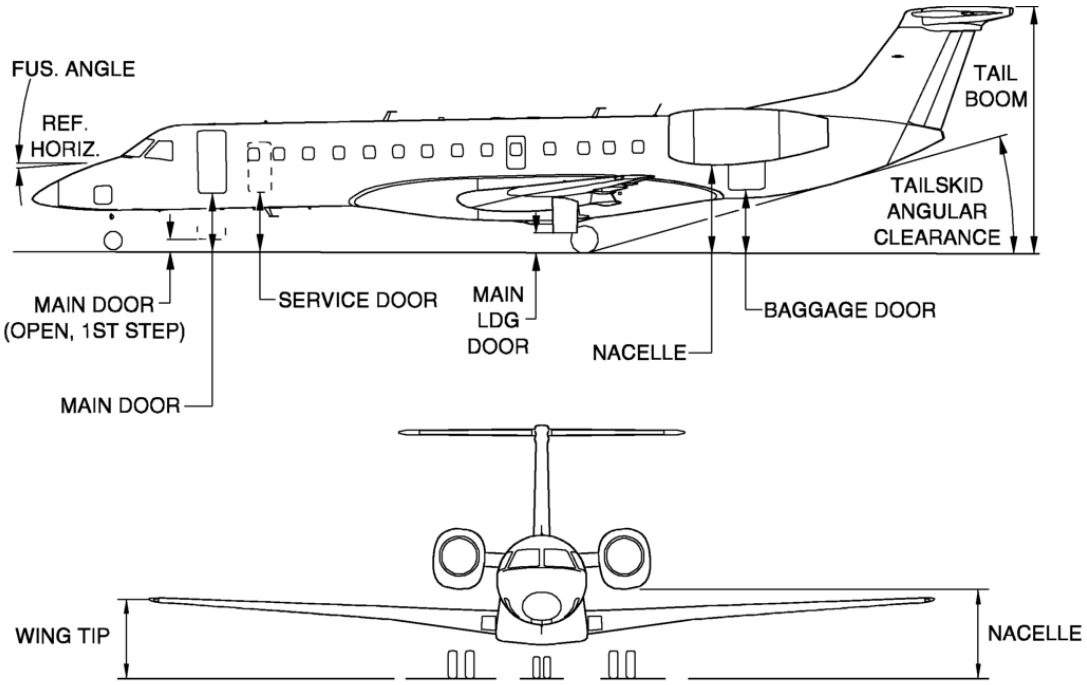
6.1.3.1 External Dimensions







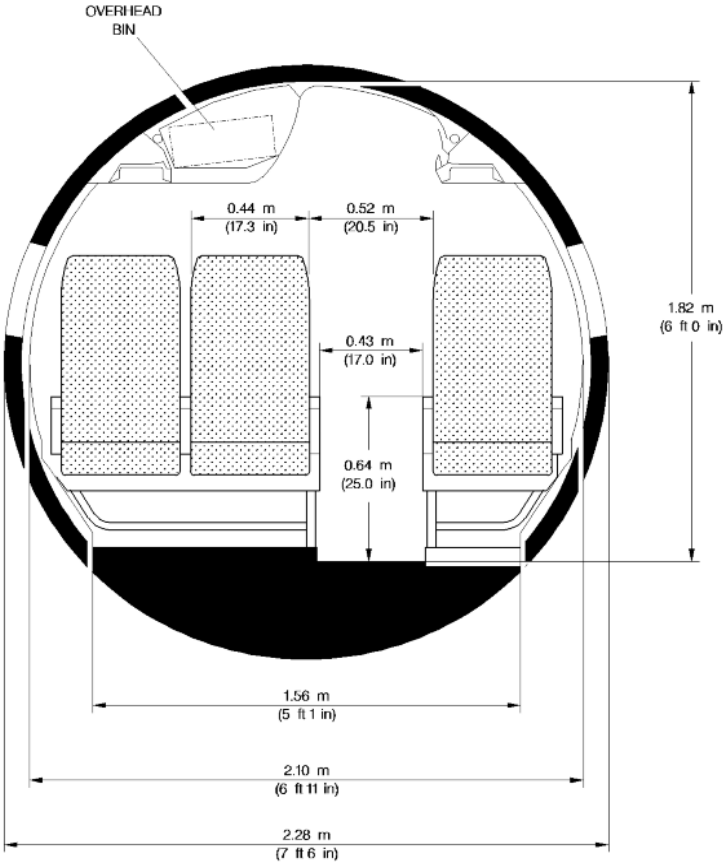
6.1.3.2 Ground Clearance



	Maximum (m)	Minimum (m)
Fuselage angle	-1.80°	-1.33°
Main Door	1.566 m	1.489 m
Main Door Open (1st step)	0.374 m	0.297 m
Service Door	1.574 m	1.494 m
Main Landing Gear Door	0.281 m	0.181 m
Nacelle	2.445 m	2.317 m
Baggage Door	1.803 m	1.670 m
Tail Boom	6.837 m	6.659 m
Wing Tip	2.141 m	2.029 m
Tailskid Angular Clearance	16.16°	14.88°

6.1.3.3 Passenger Cabin Dimensions

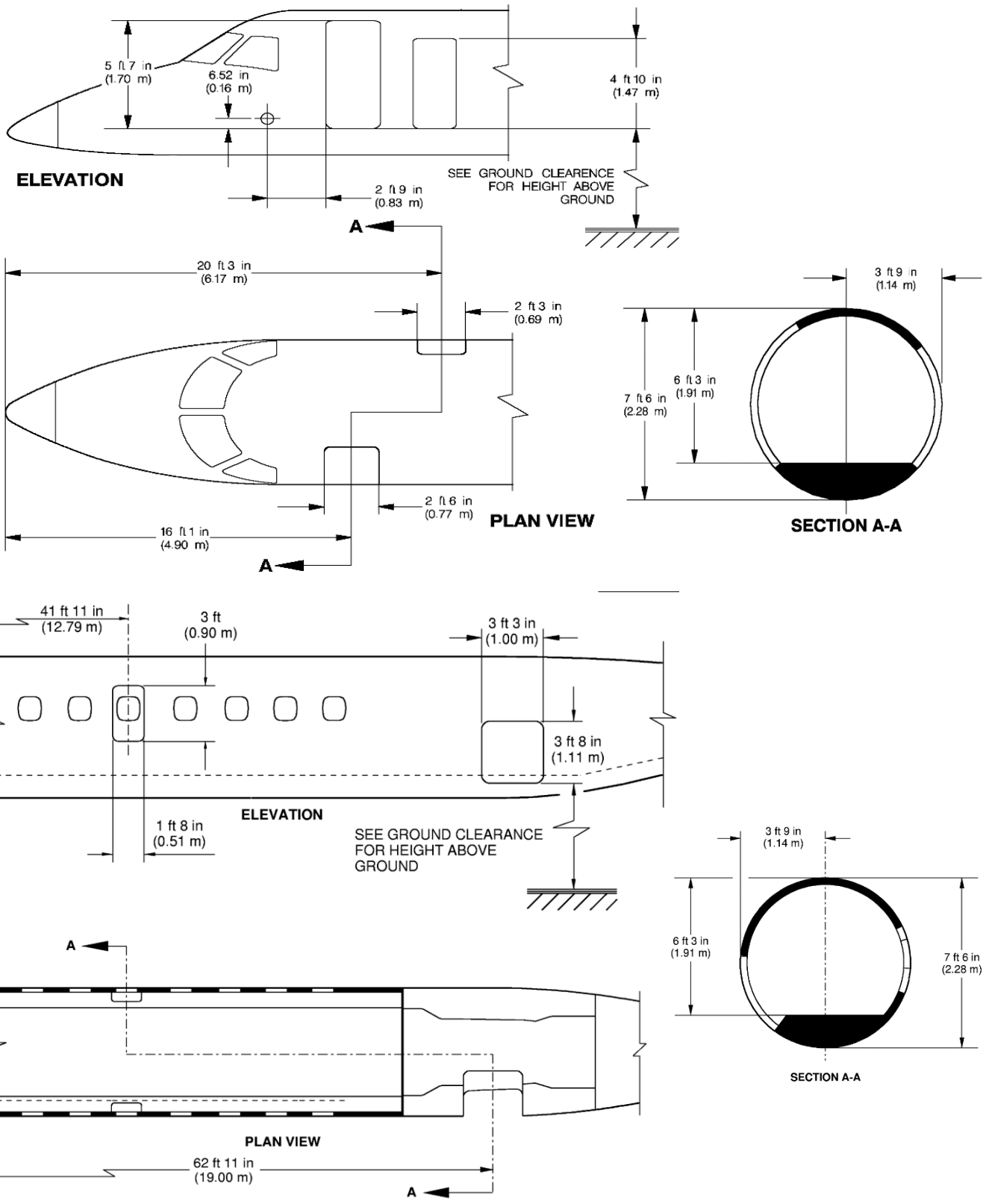
Width on the ground	1.56 m
Maximal width	2.10 m
Maximal Height (aisle)	1.82 m
Aisle width	0.43 m



6.1.3.4 Door Dimensions and Clearances

Door dimension

Door type	Height	Width
Boarding Door	1.70 m	0.77 m
Service Door	1.42 m	0.62 m
Overwing Exit	0.92 m	0.51 m
Cargo Door	1.11 m	1.00 m


5 ft 7 in
(1.70 m)
6.52 in
(0.16 m)
4 ft 10 in
(1.47 m)
ELEVATION
SEE GROUND CLEARENCE
FOR HEIGHT ABOVE
GROUND
2 ft 9 in
(0.83 m)
A
20 ft 3 in
(6.17 m)
2 ft 3 in
(0.69 m)
2 ft 6 in
(0.77 m)
16 ft 1 in
(4.90 m)
PLAN VIEW
A
3 ft 9 in
(1.14 m)
7 ft 6 in
(2.28 m)
6 ft 3 in
(1.91 m)
SECTION A-A
41 ft 11 in
(12.79 m)
3 ft
(0.90 m)
3 ft 3 in
(1.00 m)
3 ft 8 in
(1.11 m)
ELEVATION
1 ft 8 in
(0.51 m)
SEE GROUND CLEARANCE
FOR HEIGHT ABOVE
GROUND
3 ft 9 in
(1.14 m)
6 ft 3 in
(1.91 m)
7 ft 6 in
(2.28 m)
SECTION A-A
A
PLAN VIEW
62 ft 11 in
(19.00 m)
A

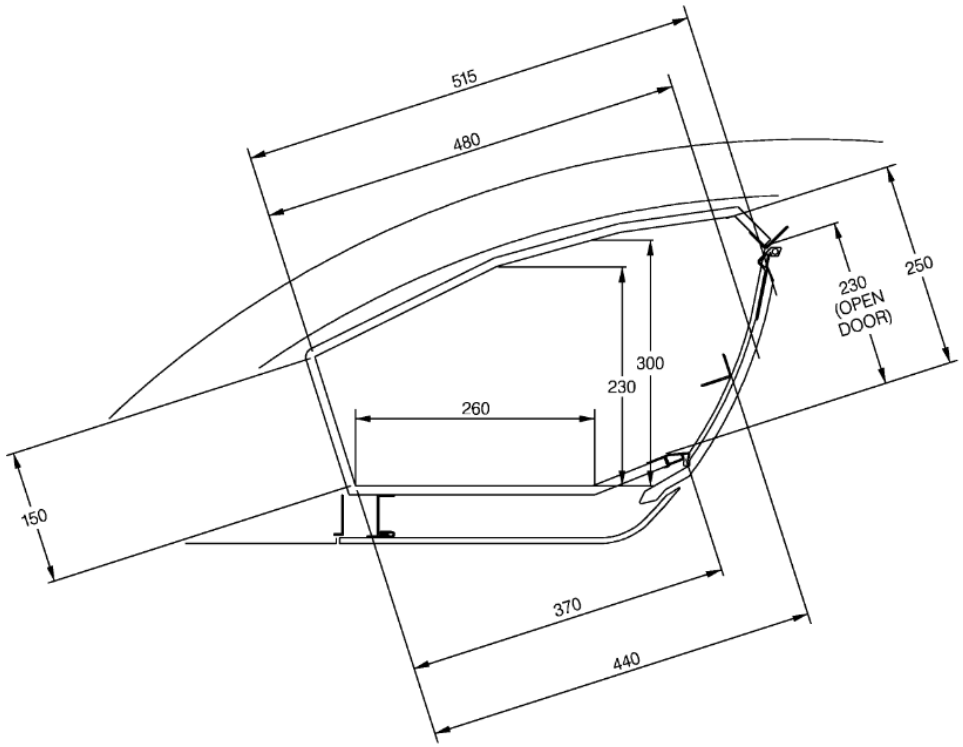
6.1.3.5 Overhead Bin

All ERJ135 except F-HLIP and F-HTOP have 8 standard overhead bin assemblies, 1 short overhead bin assembly and 1 very-short overhead bin assembly. They are installed on the right side of the passenger cabin.

The total volume is 1.2 $m^{3.}$

Overhead bin capacity and length	Length	Max Load
Standard Assembly	1.16 m	27 kg
Short Assembly	0.83 m	20 kg
Very-Short Assembly	0.49 m	14 kg

Overhead bin cross section (dimensions in mm)



Note: *There are no overhead bins on F-HLIP and on F-HTOP when in stretcher version. When F-HTOP is in VIP configuration there are no overhead bins in the VIP part of the cabin. There are only several bins in the aft part of the cabin on the RH side.*

6.1.4 Hold Characteristics and Net Installation

The hold of the ERJ135 is located aft **(compartment 6).**

Amelia Intl ERJ135 are fitted with ''class -C'' baggage compartment. Aircraft with ''class- C'' baggage compartment have the following systems installed:

- Baggage Compartment Smoke Detection System;
- Baggage Compartment Fire Extinguishing System;
- Baggage Ventilation System.

The hold is pressurized.

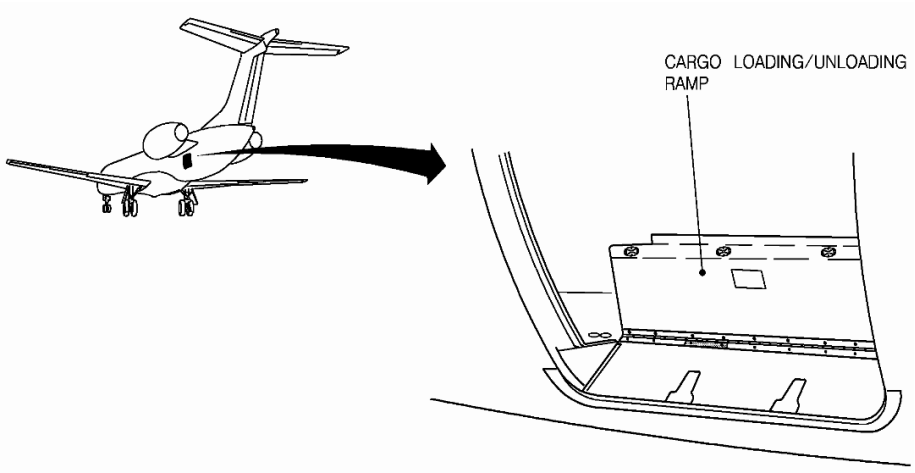
There is no special heating system installed: the hold is heated indirectly by the flow of air from the passenger cabin, which is exhausted into it.

If the baggage compartment is to be loaded with more than 800kg, the following conditions must be observer:

- Aircraft shall be with minimum required fuel of 907kg.
- No more than one person can be at the aircraft cone either inside the baggage compartment or inside the rear electronic compartment.

If the conditions above are not observed, aircraft tilting (tail down) may occur.

Before loading/ unloading the hold, the Cargo Loading/Unloading Ramp (Door Jamb Barrier) must be lowered in order to protect the baggage door latching mechanism.



Important for F-HLIP & F-HMOV only (due to no SB145-25-0261):

Due to no additional reinforcement of the cargo hold the maximum acceptable load in F-HLIPs is 990kg.

6.1.4.1 Opening of Cargo Door

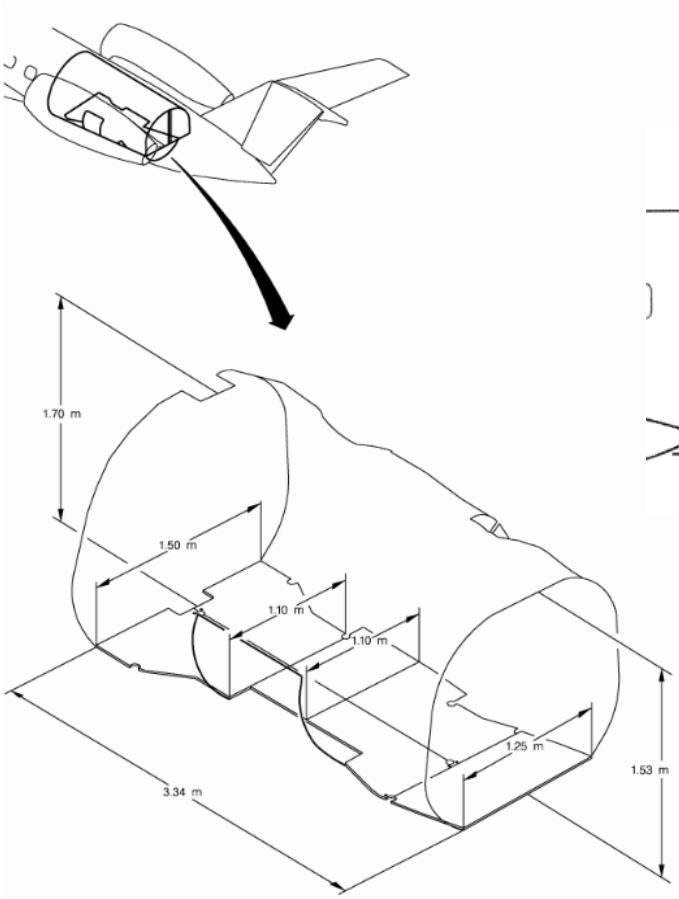
Opening and closing of the cargo door is the same on ERJ135 and ERJ145. Therefore, to see instructions how to secure them refer to chapter 6.2.4.1.

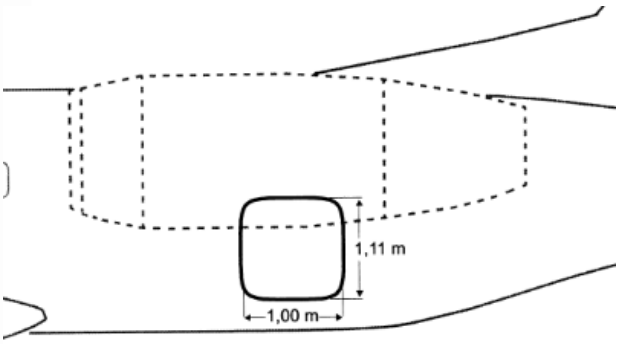
6.1.4.2 Cargo Nets

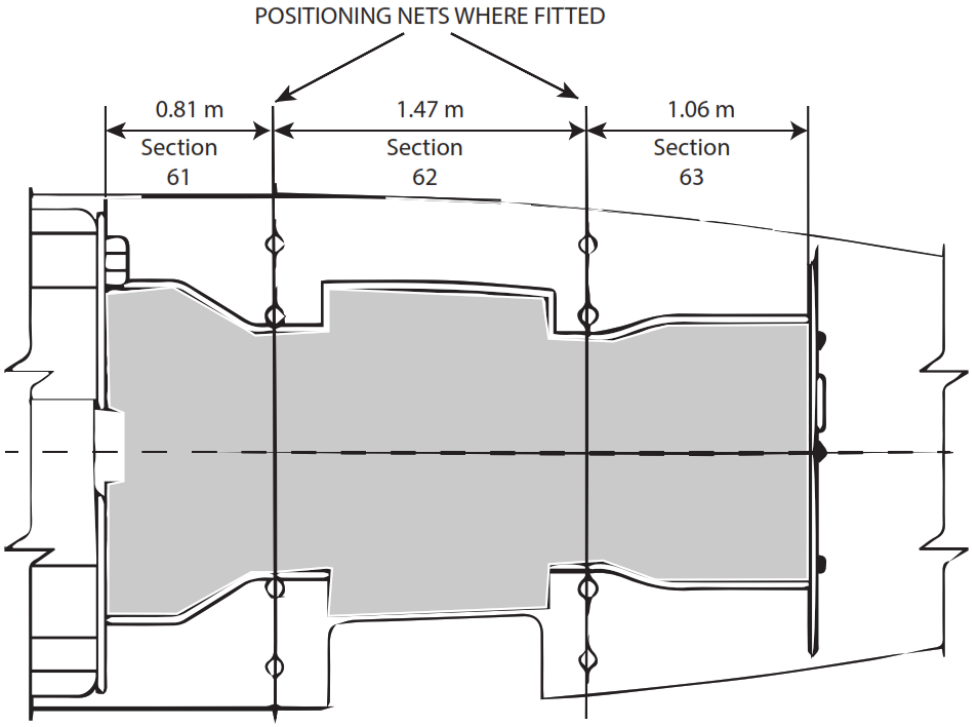
The cargo nets installation is the same on ERJ135 and ERJ145. Therefore, to see instructions how to secure them refer to chapter 6.2.4.2.

Important: There are no cargo vertical nets installed on F-HLIP and F-HMOV:

6.1.4.3 Hold Dimensions and Limits







The Compartment 6, in general, is usually divided in 3 sections: Section 61, Section 62 and Section 63

The door of the hold is 1m wide and 1.11m high.

Hold dimensions

Section 62 is opposite the door opening.

	Length	Floor Width	Height
Compartment 6	3.34 m	Between 1.50m and 1.10m	Between 1.70m and 1.53m
Section 61	0.81 m	1.50 m	1.70 m
Section 62	1.47 m	1.10 m	1.60 m
Section 63	1.06 m	1.25 m	1.53 m

ERJ135 Compartment limits

	Floor Strength	Volume	Surface	Max load per section
Compartment 6	390 kg/m^2	9.2 m^3	4.14 m^2	1000 kg
Section 61		2.76 m^3	1.21 m^2	333 kg
Section 62		3.68 m^3	1.61 m^2	333 kg
Section 63		2.76 m^3	1.32 m^2	333 kg

Compartment and Vertical Net positions

Forward Division Position	17.42 m
Forward Vertical Net *	18.23 m
Aft Vertical Net *	19.7 m
Aft Division Position	20.76 m

* If vertical net is installed

For Cargo Compartment package size dimensions see ch. 7.6.

Important: Some EMB135/145 due to not incorporated SB, do not offer the possibility to separate the cargo sections with vertical nets. In this case it is impossible to divide the load loaded in the cargo hold per section.

But as all sections of the compartment 6 are within the same ARM, this will not have any influence on the balance of the aircraft.

Those EMB135 are: F-HLIP and F-HMOV.

6.1.4.4 Loading of Special Baggage/Cargo

The table below presents recommendation on in which section of the aircraft hold to load certain baggage and/or cargo. It is not exhaustive.

The recommendation below should be followed whenever possible. The Commander or the load planner/load control may plan another loading depending on the available volume, number of special load, weight etc.

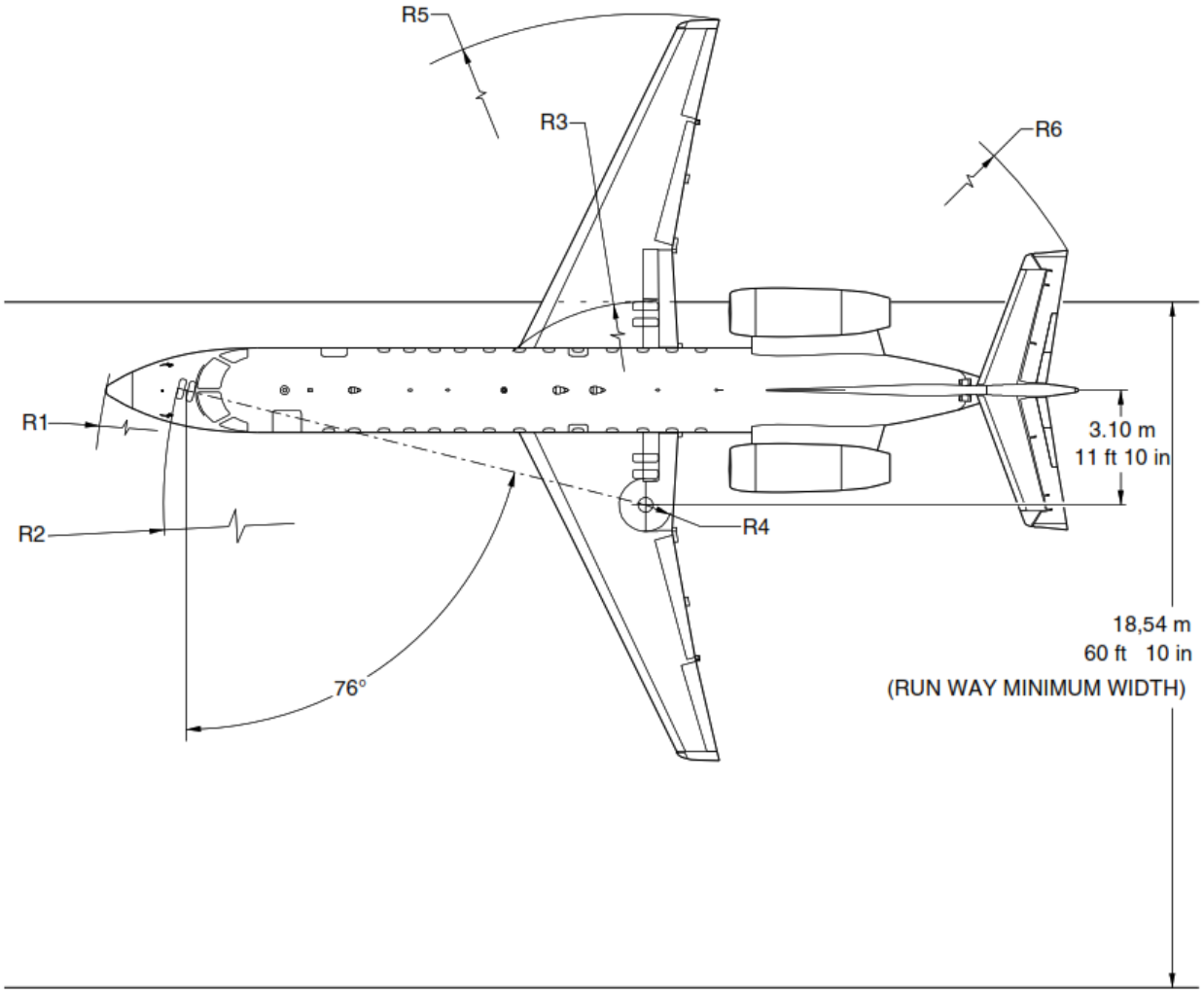
Section	Type of baggage
61	Crew baggage, FKT, EIC, COMAT, Catering
62	DAA, AVIH, Checked baggage, Firearms,
63	SPEQ, Wheelchair, AVIH (if not possible in 62), Checked baggage,

Those items not mentioned may be placed where it is deemed logical to the loading planner/loading staff.

Note: *This does not apply for aircraft whose holds are not equipped with vertical net.*

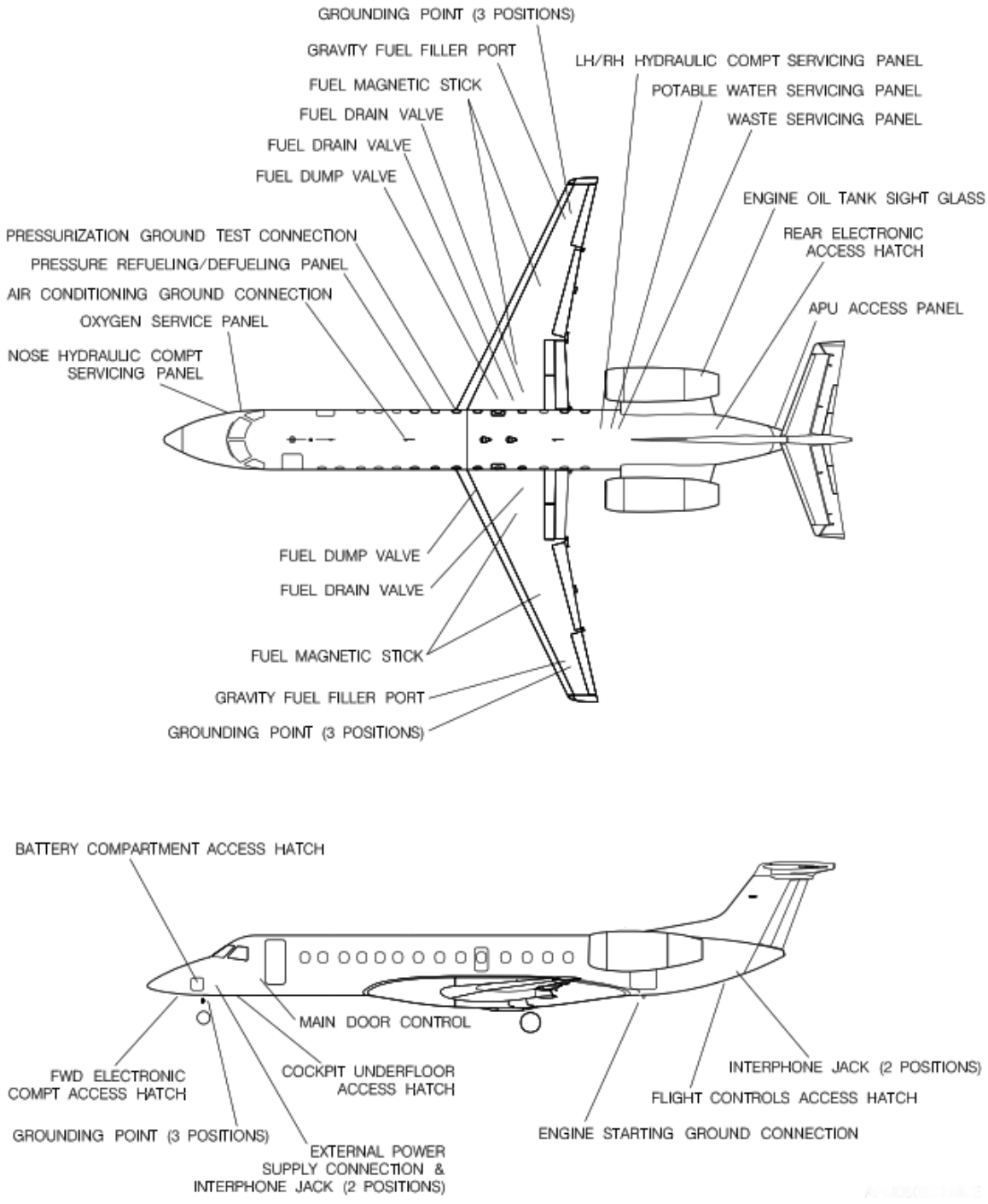
6.1.5 Servicing Points, turn radius and position of equipment

6.1.5.1 Turn Radius

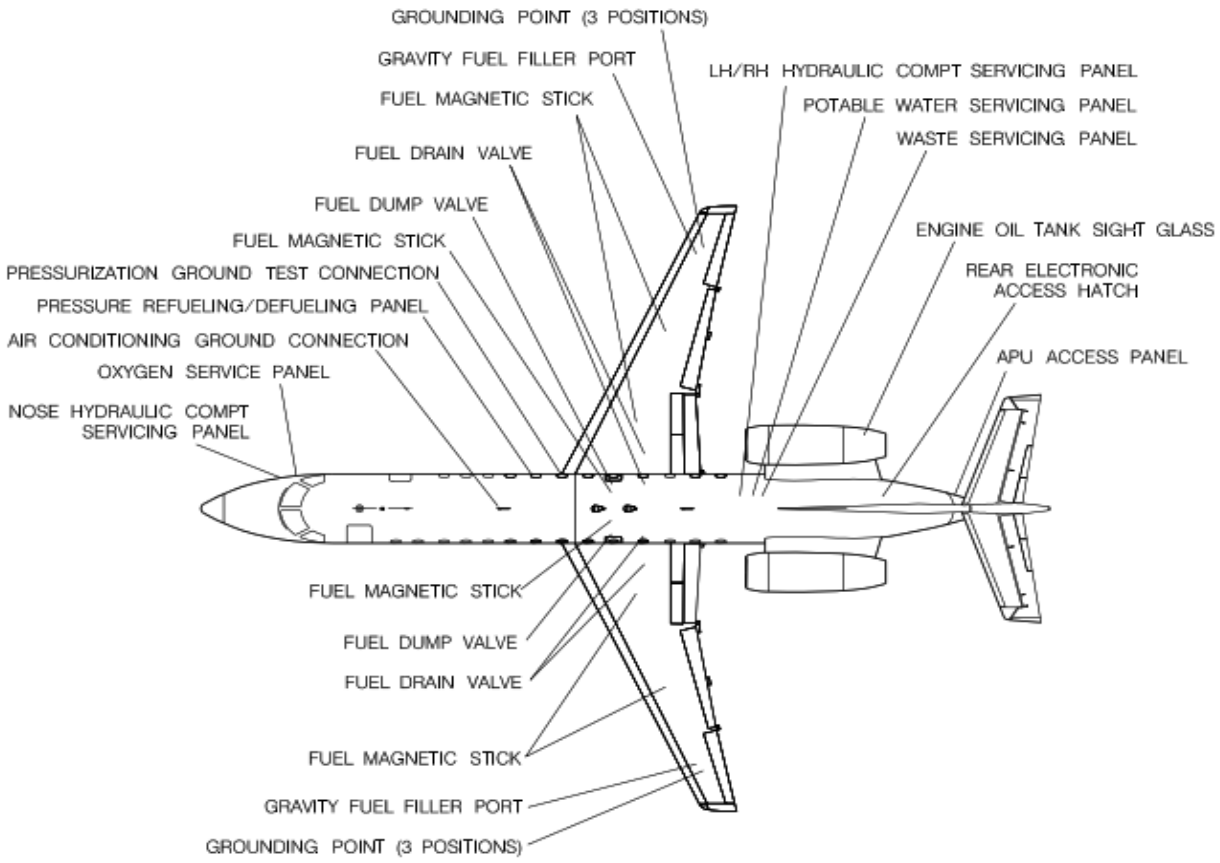


STEERING ANGLE	NOSE R1	NOSE GEAR R2	OUTBOARD GEAR R3	INBOARD GEAR R4	RIGHT WINGTIP R5	RIGHT TAIL TIP R6
76°	14.94 m	13.05 m	5.49 m	0.72 m	13.27 m	13.34 m
	49 ft 0 in	42 ft 10 in	18 ft 0 in	2 ft 4 in	43 ft 7 in	43 ft 9 in

6.1.5.2 Servicing Points



ERJ-135 ER (F-GRGP) Ground Servicing Connections



ERJ-135 LR (F-HTOP) Ground Servicing Connections

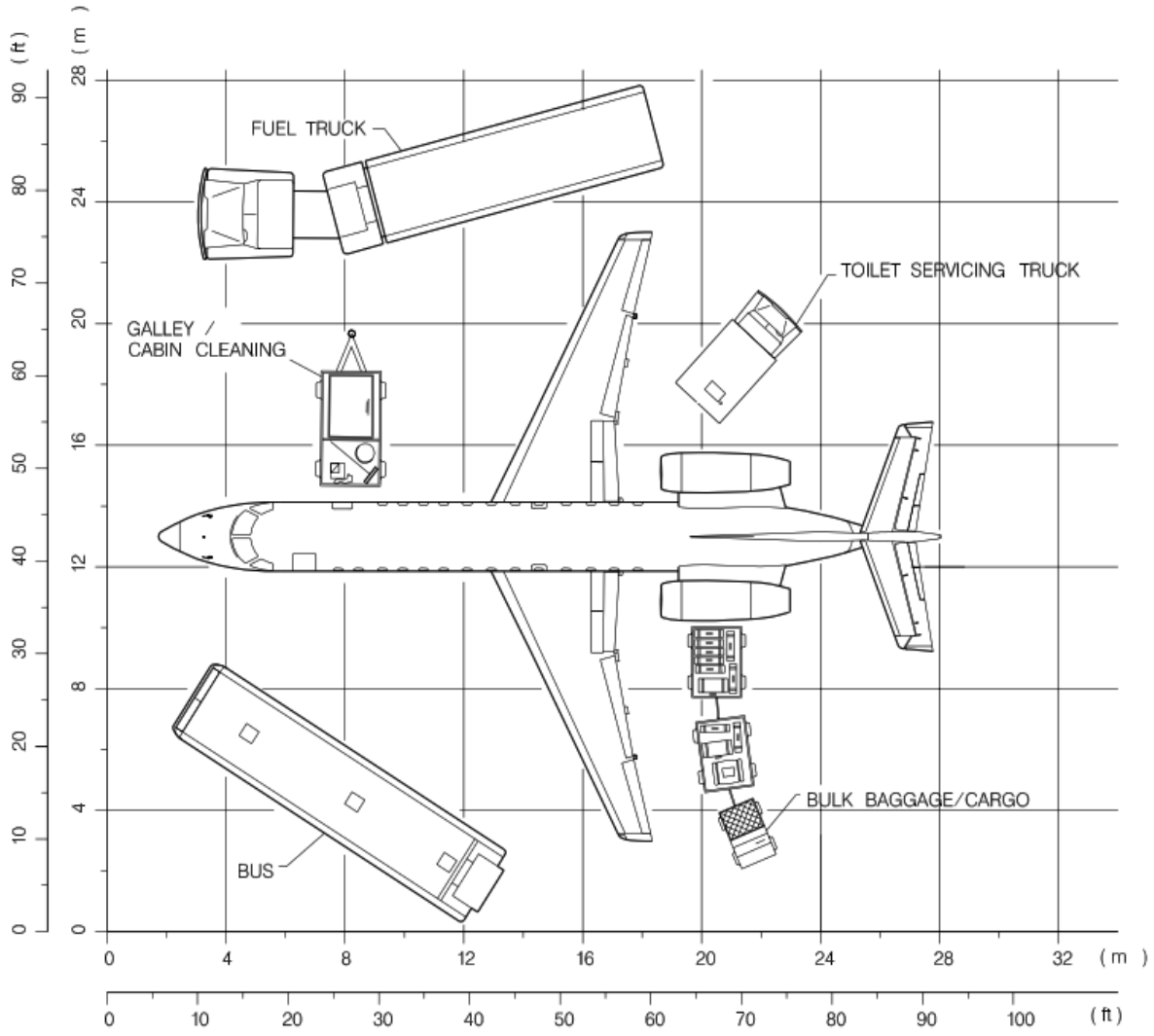
Valid for all ERJ135

Electrical Power	Use 28V DC GPU, 300A (1 600A needed to start the engine)
Oxygen	Refill through connector is not allowed during ramp servicing, only during maintenance in hangar.
Engine Start	Use GPU 28 V DC, 1 600A GPU is needed if APU is not used
Air Conditioning	Minimum thermal capacity around 10 kw (36 000 BTU/h), maximum pressure 8 kPa

6.1.5.2.1 Static Grounding

The grounding points are the same on ERJ135 and ERJ145. Therefore, to see instructions where they are refer to chapter 6.2.5.2.1.

6.1.6 Ramp Handling

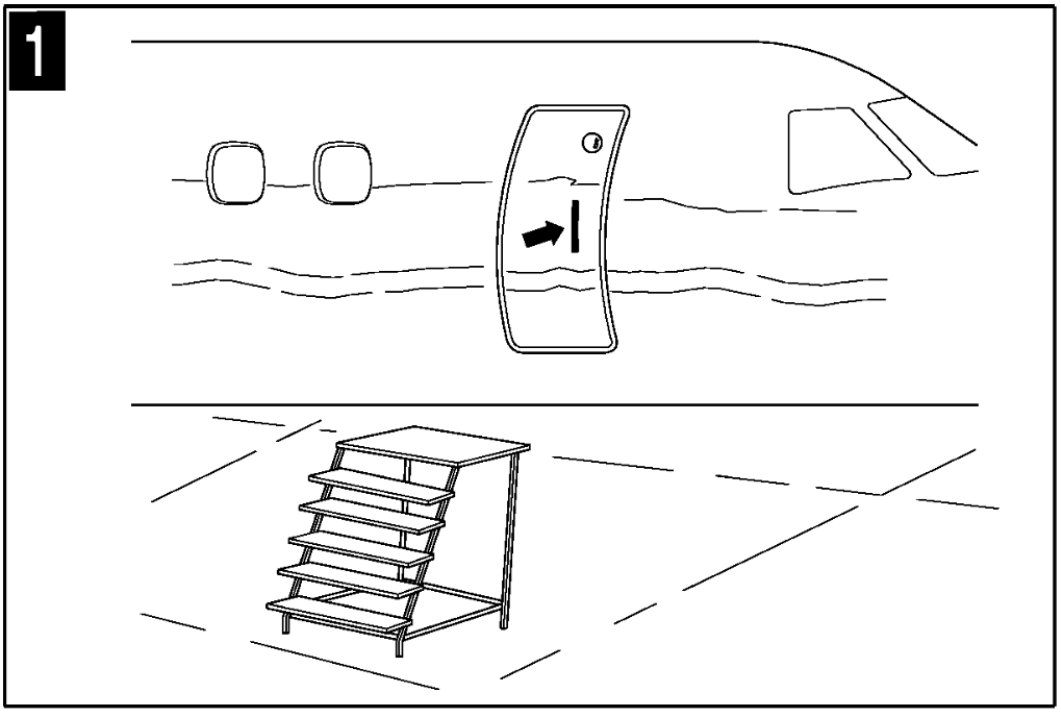


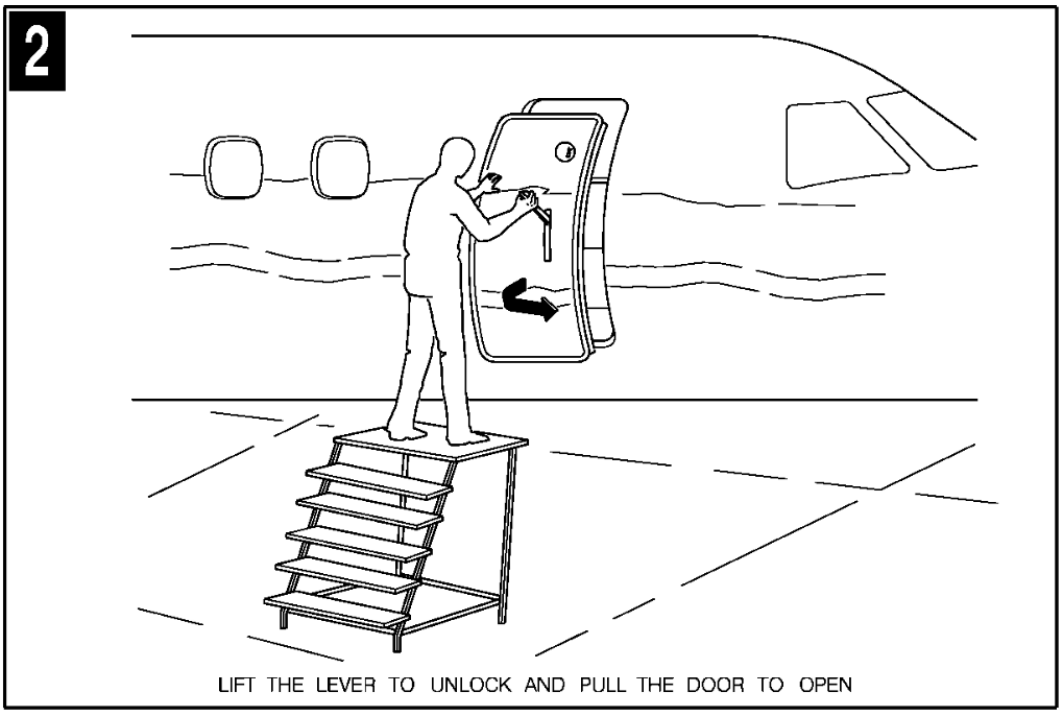
6.1.6.1 Operating of Service door

Always ask the CCM to open the door. Unless properly trained, no one else but the active crew on board is allowed to open any door.

In case a proper training has been performed, follow the steps below.

To open from outside first knock on the door to advise the CCM that you will open it.





6.1.6.2 Ground Power Unit

The GPU is connected to the aircraft through an external receptacle. The GPU supplies 28 VDC (Volt Direct Current) to the load buses or for ground operation and APU starting, independently of the internal batteries.

Operation:

For APU starting, the GPU must have 1,600 Amps minimum.

But 300Amps will be sufficient for maintenance and servicing.

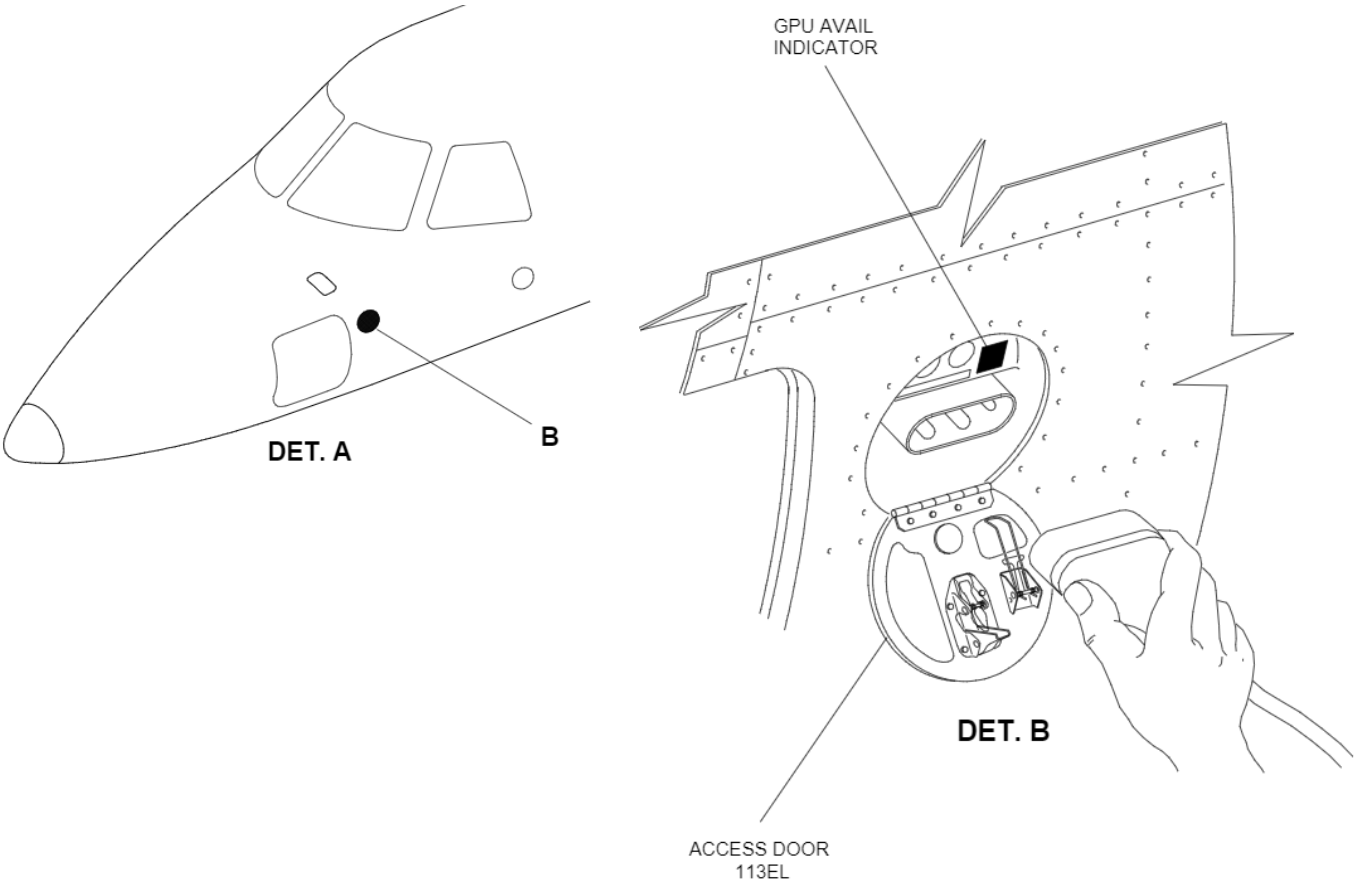
When the GPU is plugged to the aircraft, the Ground Service Bus is energized, if the GPU is the only power supply energized.

At this time, the GPU lights, above the GPU receptacle and in the upper half of the GPU pushbutton, come on.

In this condition, the Ground Service Bus can supply some lights. They are used for internal services at night.

If the GPU AVAIL pushbutton is pushed, the GPU AVAIL inscription, on the push button, goes off and the striped bar comes on. The lights are disconnected from the Ground Service Bus and connected to the related buses, and the GPU is connected to the Central Bus.

The figure “EXTERNAL POWER - GROUND SERVICE BUS BLOCKDIAGRAM" shows the operation of the sub-subsystem.



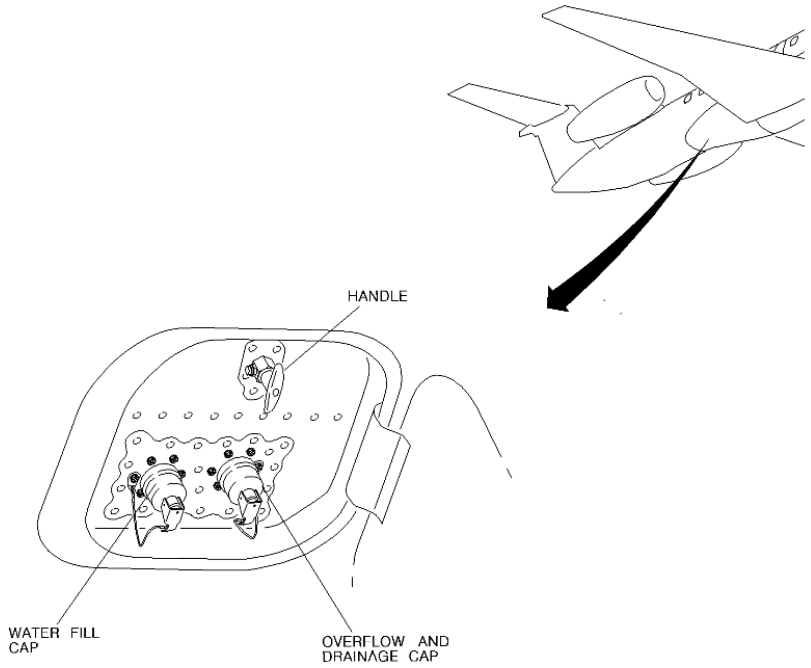
6.1.6.3 Water and Toilet Servicing

Water Tank Servicing

Filling and draining of water is done through a panel installed on the lower right side of the fuselage aft section. **Draining shall be done during night stop in freezing or icing conditions.**

The tank has 20 l capacity.

- To drain: It is done through the water drain installed on the servicing panel near its control handle. To drain remove the cup and pull the handle.
- To fill: caps from the water filling connection and from the tank overflow must be removed. The tank is full when water starts to flow through the overflow.

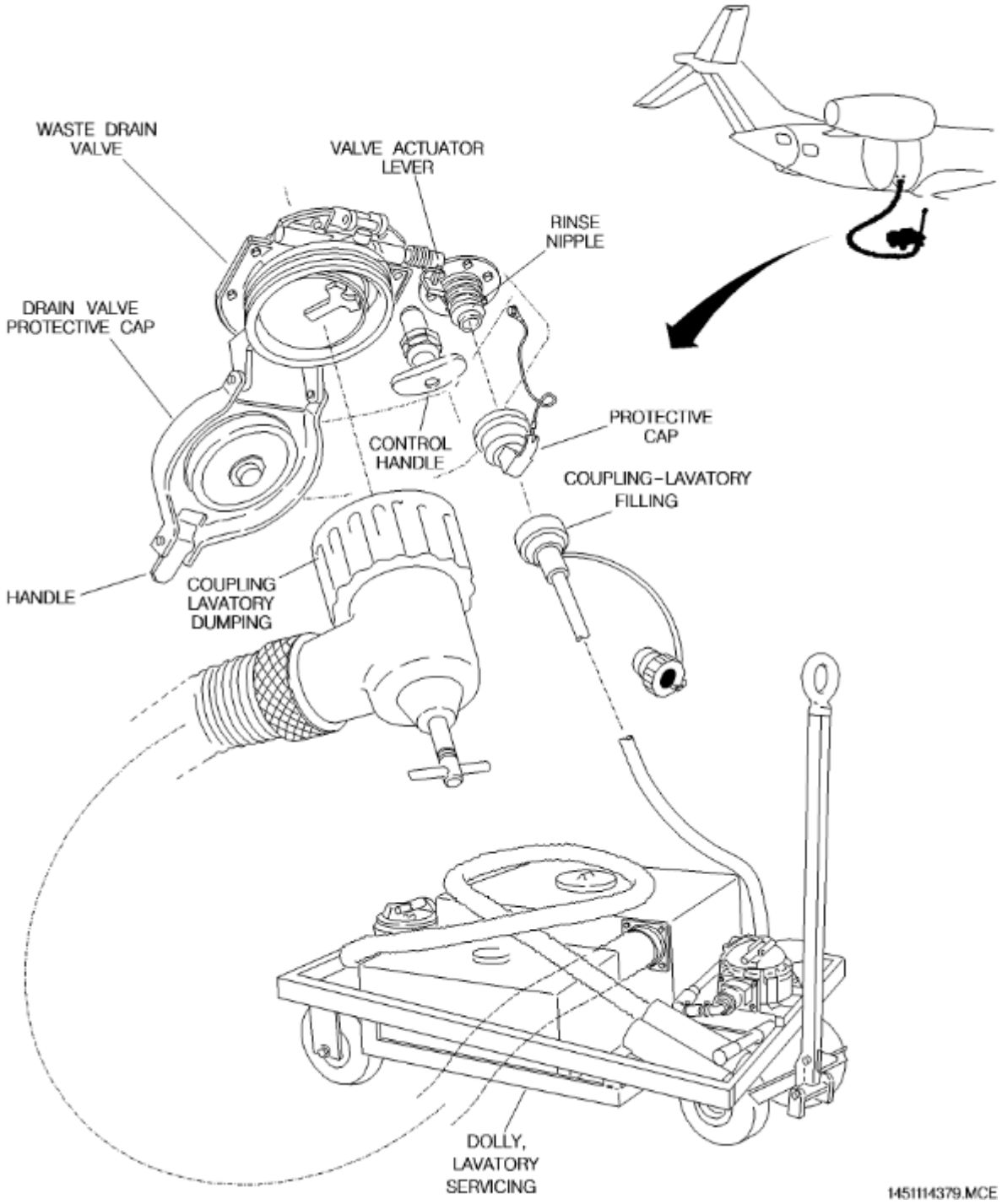


Toilet Servicing

Toilet waste disposal servicing is done through a panel at the rear right side of the fuselage. A sanitary service unit must be connected to the air service panel.

It is accomplished in the following way:

- Open waste service panel door;
- Remove protective cap of the waste drain valve;
- Connect the lavatory dumping coupling of the lavatory servicing dolly to the waste drain valve;
- Push the lever of the waste drain-valve actuator to open its internal flapper valve. Do not operate the coupling handle; its operation is not necessary;
- Pull and lock the drain control handle to open the holding tank drain valve;
- Continue the tank drainage until the waste flow stops;
- Flush with water through the rinse nipple for approximately 3 minutes;
- Release the control cable;
- Fill the waste holding tank with 15 l of water;
- Pull and lock the drain control handle to open the holding-tank drain valve;
- Release the drain control handle after all liquid is drained;
- Fill the waste holding tank with maximum **7 l** of water and add:
  - 57 g of Monogram MC-1000 germicidal deodorant, or
  - 170 g of Mirabowl ''Q'' germicidal deodorant;
- Disconnect the lavatory dumping and filling couplings;
- Close the cap and latch the handle of the waste drain valve. The flapper valve will close automatically when the cap is closed;
- Install the cap on the toilet rinse nipple.
- Close waste-service-panel door.


WASTE DRAIN VALVE
VALVE ACTUATOR LEVER
RINSE NIPPLE
DRAIN VALVE PROTECTIVE CAP
CONTROL HANDLE
PROTECTIVE CAP
COUPLING-LAVATORY FILLING
HANDLE
COUPLING LAVATORY DUMPING
DOLLY, LAVATORY SERVICING
1451114379.MCE

6.1.6.4 Loading

6.1.6.4.1 General and Speacial Cargo

Dangerous Goods

All Dangerous Goods except Class 7 are accepted.

6.1.6.5 Towing

The following towbars are accepted by the manufacturer. For any other towbar to be used, contact ground operations department.

ITEM NAME	MANUFACTURER	PART NUMBER	GSE NUMBER	Aircraft	USED FOR:
Towbar - Aircraft	TRONAIR	01-1201-0010	008	ALL	A/C towing, pushing and steering. Used in conjunction with towbar attachment 009
Head-Towbar attachment		01-0582-0011	009	ALL	A/C towing, pushing and steering. Used in conjunction with towbar GSE 008
Aircraft towing vehicle	LEKTRO	AP8850SDA-AL-100/50	198	F-HTOP	A/C towing, pushing and steering
	LEKTRO	AP8750B-AL	297	F-HTOP	
	DOUGLAS	TBL-50	397	F-HTOP	
	TLD	TPX-100E	494	F-HTOP	
	GOLDHOFER	AST-3L	514	F-HTOP	A/C towing (short distances), pushing and steering Used in conjunction with towbarless adapter GSE 515
		515501	515	F-HTOP	A/C towing (short distances), pushing and steering Used in conjunction with towing vehicle GSE 514
	LEKTRO	AP8950SDB-AL-200/150/100/50	585	ALL	A/C towing, pushing and steering
	TRONAIR	JP100SSCUS	595	ALL	
	TRONAIR	JP100SSCOS	569	ALL	
	LEKTRO	AP8925SDB-AL/HS-200/150/100/50	597	ALL	

Maximum recommended wind speeds for aircraft towing, pivoting, turning and taxi

Runway	Wind Speed
Dry runways	50 kts
Wet runways	45 kts
Snow covered runways	30 kts
Ice covered runways	10 kts

Maximum nosewheel displacement during towing is **170°** to the left or to the right.

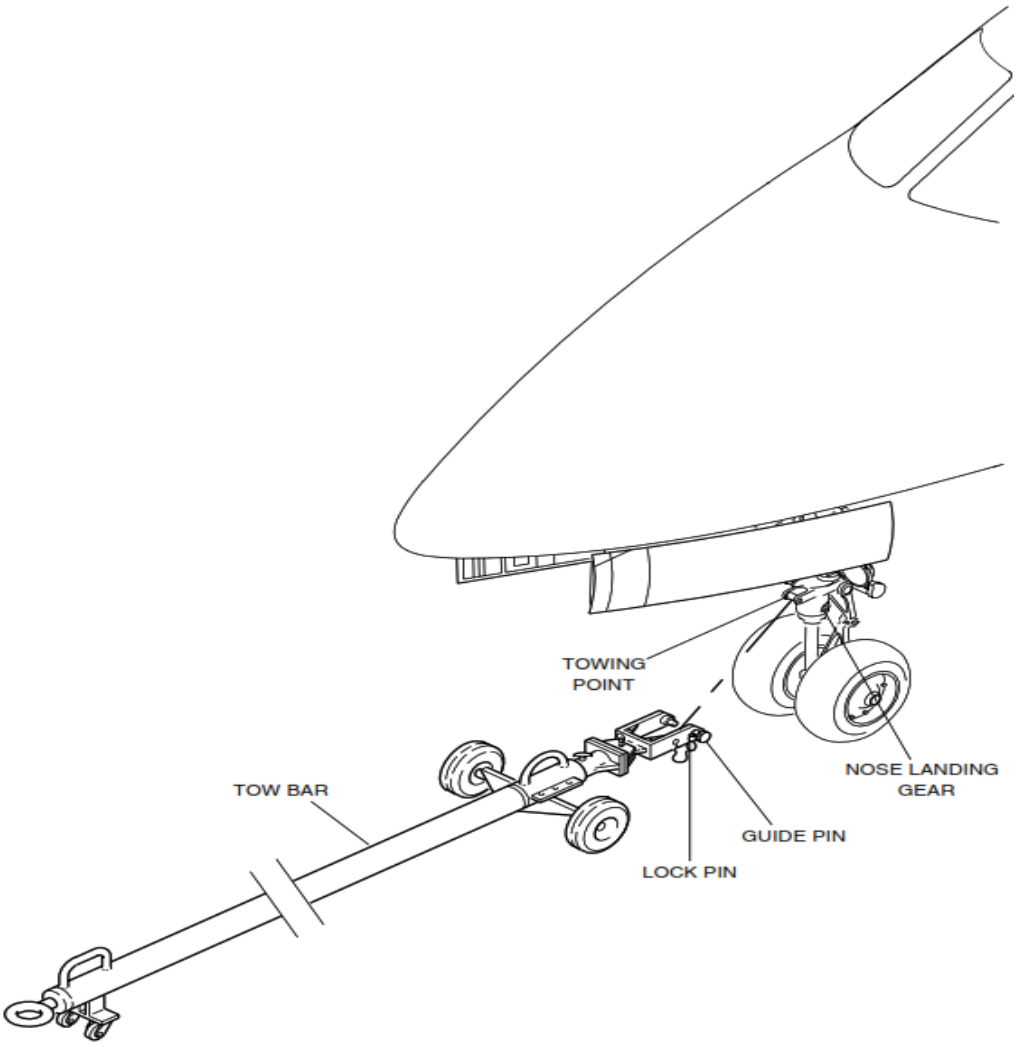
Instructions

See chapter 4.13 for detailed instructions. Below is presented brief information and pictures how the towbars are installed.

The normal procedure consists in starting engine 2 at the parking stand, then push back. It is possible to start engine 1 during the push back. According to the aircraft area, both engines could be started during or at the end of the push back.

Towbar towing

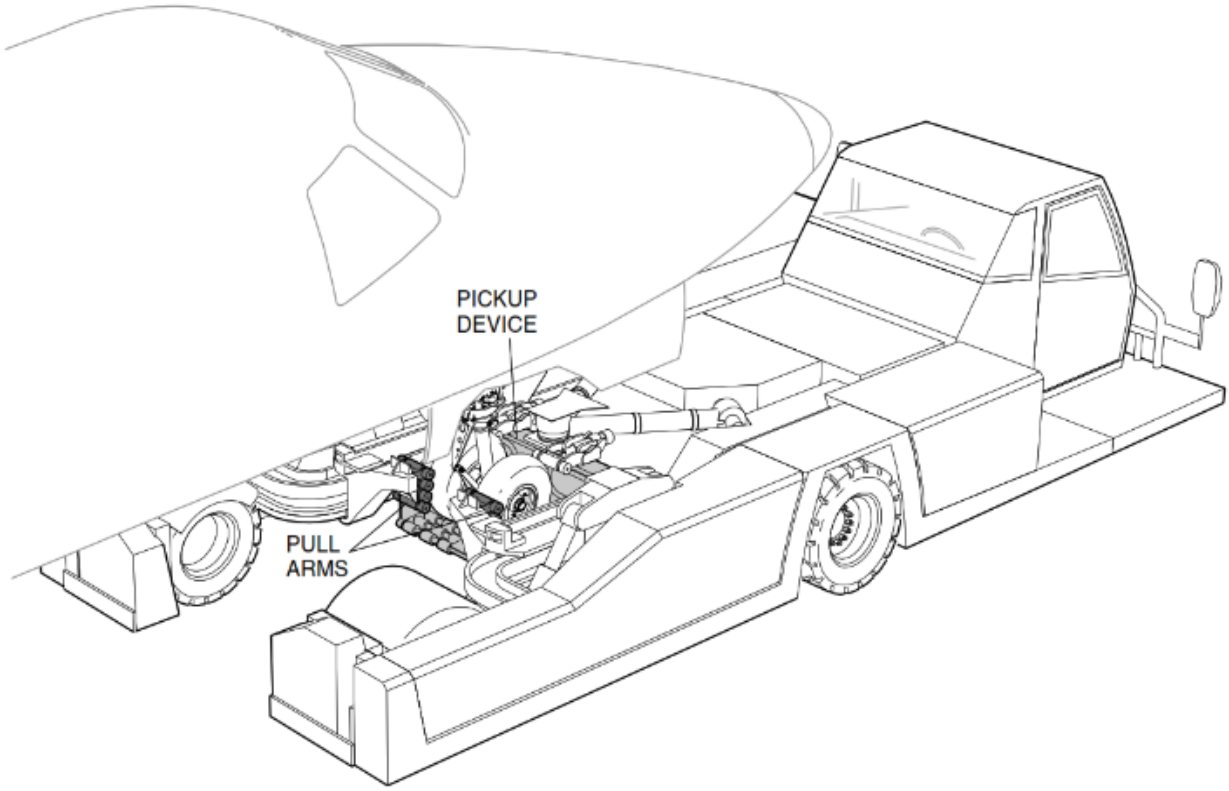
- Remove lock pin from the guide pin on towbar assemblies
- Install towbar on the nose landing gear;
- Put the guide pin into the towing point of the nose landing gear;
- Lock the guide pin into the towing point of the nose landing gear;
- Lock the guide pin with the lock pin;
- Install the other side of towbar assemblies to the tractor;
- Remove wheel chocks;
- Release the emer/parking brake;
- Tow the A/C slowly straight ahead before turning.
- Complete the towing in a straight line for a min of 3m in order to align the steering as close as possible to 0° position;
- After finished apply the emer/parking brake or install the wheel chocks;
- Make sure the nose wheel displacements are below the max operational limit.
- Remove towbar;
- Remove lock pin from the guide pin on the towbar assembly.
- Remove the guide pin from the towing point of the nose landing gear.



Towbarless towing

Note: *Towbarless towing is allowed on all EMB135 on Amelia Intl fleet.*

- Put the tug vehicle in the correct position near the nose wheel;
- Remove wheel chocks from main wheels;
- Connect the tug vehicle to the A/C;
- Release the emergency/parking brake;
- Tow the A/C slowly straight ahead before turning;
- Complete the towing in a straight line for a min of 3m in order to align the steering as close as possible to 0° position;
- After finished set the emergency/parking brake and, with A/C energized make sure that the brake light is ON;
- Make sure that nose wheel displacements are below the max operational limit;
- Install chocks forward and aft of the left and right main landing gearwheels;
- Remove aircraft towing vehicle.



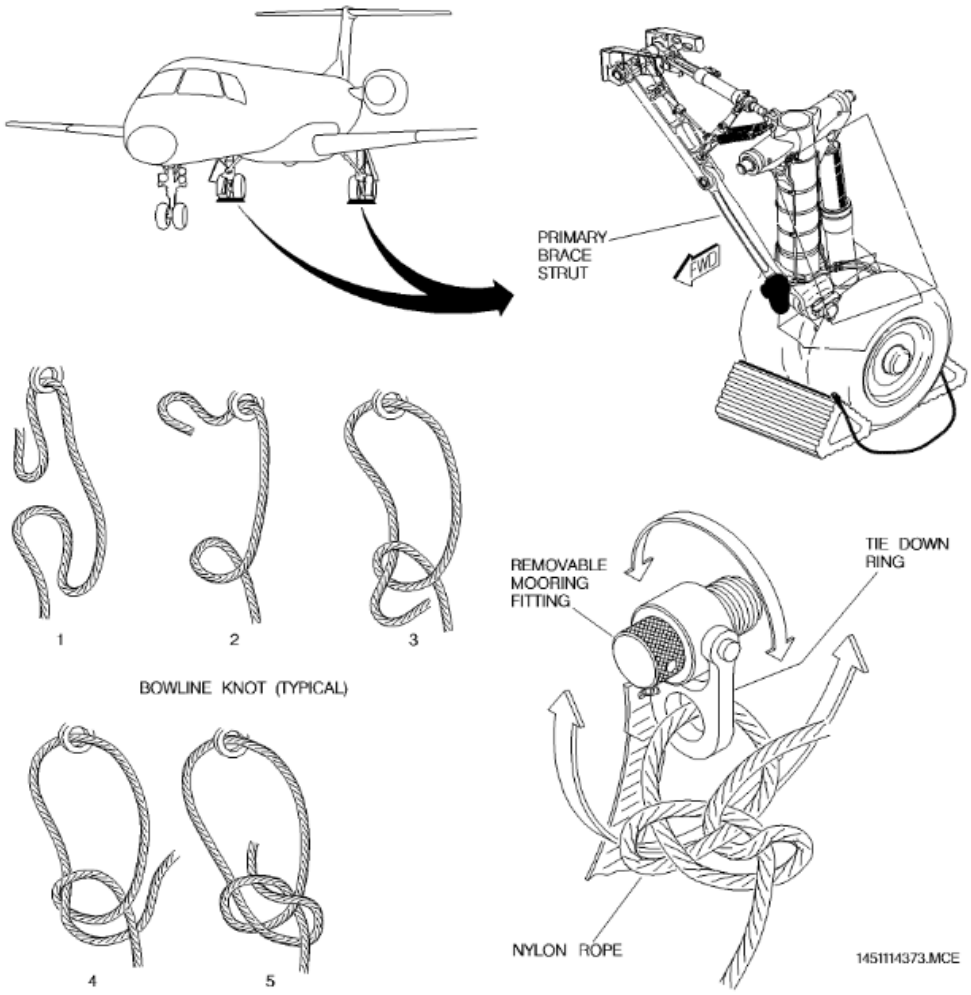
6.1.6.6 Mooring

After parking, in case of bad weather conditions mooring is necessary. Below is a table which shows the surface conditions and wind velocities at which mooring is necessary:

Surface Condition	Wind Velocity
Ice	25 kt
Snow	40 kt
Wet Concrete	55 kt
Dry Concrete	60 kt

To moor the aircraft, apply the following:

- Tow the aircraft to a parking area where there are tiedown anchors available;
- Carry out normal parking procedure;
- Install the tiedown rings (two), one in each primary brace strut of the main landing gear;
- Attach a nylon rope to the tiedown ring with a bowline knot, and then attach the other end of the rope to the tiedown anchor on the ground by knotting it with a bowlike knot. See the corresponding illustration below.



6.1.6.7 Ground Deicing Strategy

As the applications of de-/anti-icing fluids on the EMB135 is the same as on the EMB145, refer to ch. 6.2.6.6 for further instructions.

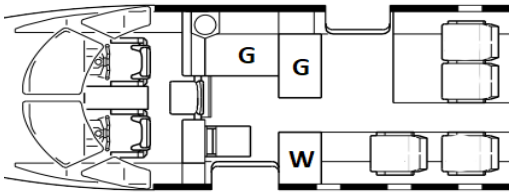
6.1.7 Galley

The galley on the ERJ135 is found in the FWD part of the cabin next to the service door.

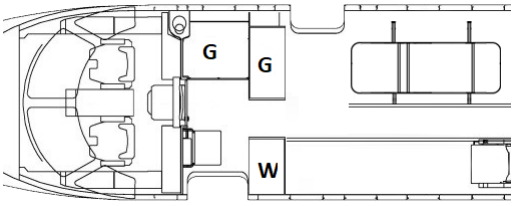
6.1.7.1 Galley Layout

Symbols: W - wardrobe

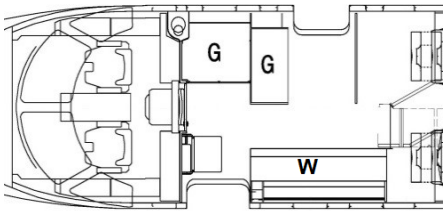
G - Galley



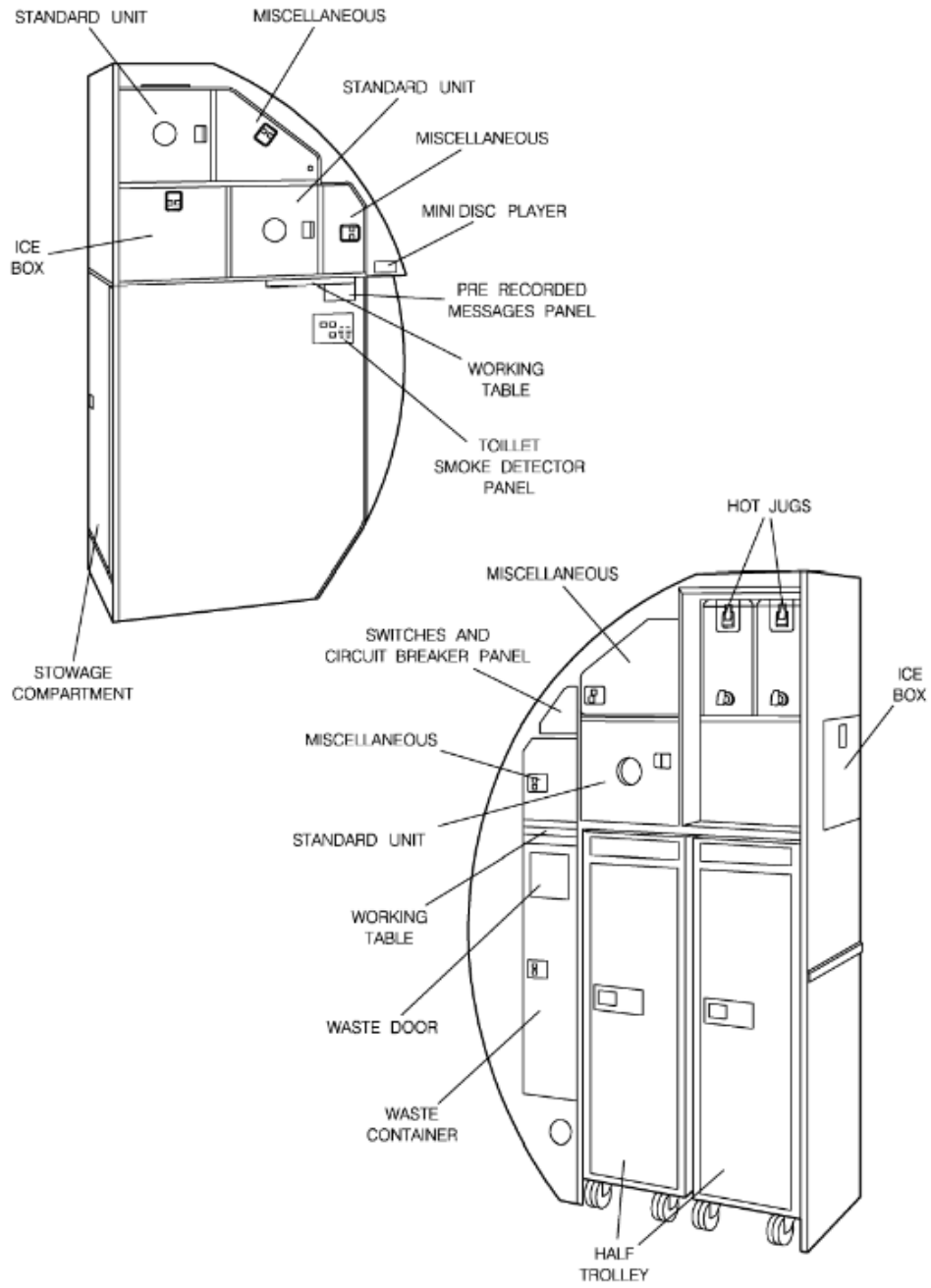
ERJ135ER & ERJ135LR
(F-GRGP) & (F-HMOV)



ERJ135LR
(F-HTOP & F-HLIP stretcher option)



ERJ135LR VIP Configuration
(F-HTOP)



6.1.7.2 Galley Equipment Units and Dimensions

	Wardrobe		Half Trolley	Galley	Catering	Hot Jugs	Oven
	Volume	Capacity					
F-GRGP	0.31 m^2	40 kg	04x60 kg	1.63 m^2	FWD galley:80 kg AFT Galley: 140 kg	02	/
F-HTOP	0.31 m^2	100 kg					01
F-HLIP	/	60 kg	02x60 kg	/	AFT Galley: 226 kg	02	03

Besides the equipment presented above, in the galley also can be found different storage compartments including one for holding ice and one waste bin with a flap cover.

6.1.8 Cleaning and Disinfection Products

As the approved products to disinfect the passenger cabin are the same as for the EMB145 refer to ch. 6.2.8 for further details and guidelines.

6.2 ERJ145

6.2.1 Basic Data

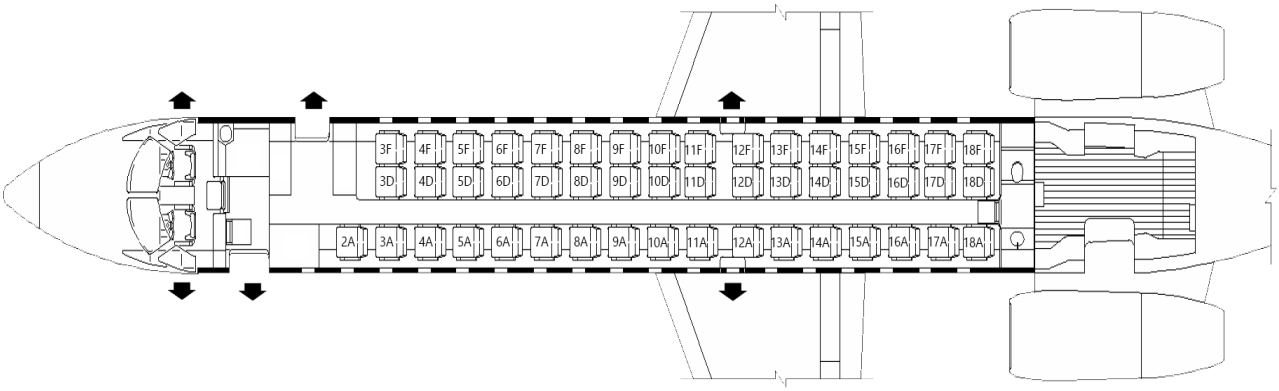
CHARACTERISTICS				
Manufacturer: EMBRAER	ERJ 145 LU			
	S5-ACJ	F-HRGD	F-HRAM	F-HRAV
EXTERNAL DIMENSIONS				
Length Wingspan Height	29,87 m 20,04 m 6,76 m			
CABIN DIMENSIONS				
Length Width Height	12,80 m 2,10 m 1,82 m			
ENGINES				
Two Rolls-Royce AE3007A1				
APU				
Hamilton SunT-62T-40 C14				
PERFORMANCES				
Maximum range	1550 Nm/ 2873 km			
Cruise speed	436 Kt/ 808 km/h			
Maximum altitude	37 000 ft/ 11 300 m			
FUEL QUANTITY				
Max useable fuel per tank	3198 l/ 2594 kg			
	Maximum permitted imbalance between tanks is **363 kg.**			

CHARACTERISTICS				
Manufacturer: EMBRAER	ERJ 145 LR			
	F-HRAP	F-HESR	F-HOXY	F-HYOG
EXTERNAL DIMENSIONS				
Length Wingspan Height	29,87 m 20,04 m 6,76 m			
CABIN DIMENSIONS				
Length Width Height	12,80 m 2,10 m 1,82 m			
ENGINES				
Two Rolls-Royce AE3007A1				
APU				
T-62T-40 C14				
PERFORMANCES				
Maximum range	1550 Nm/ 2873 km			
Cruise speed	436 Kt/ 808 km/h			
Maximum altitude	37 000 ft/ 11 300 m			
FUEL QUANTITY				
Max useable fuel per tank	3198 l/ 2594 kg			
	Maximum permitted imbalance between tanks is **363 kg.**			

6.2.1.1 Seating Capacity and Cabin Balance Zones

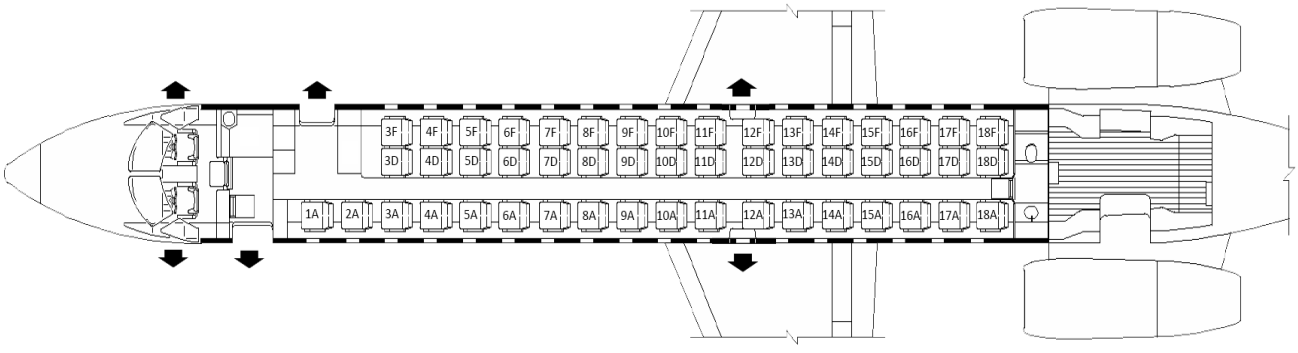
Aircraft	Seating capacity	ZONE and rows per zone		
		A	B	C
S5-ACJ, F-HRGD, F-HRAM, F-HRAV & F-HYOG	49	2-6	7-12	13-18
F-HRAP, F-HESR & F-HOXY	50	1-6	7-12	13-18
F-HESR Stretcher version	35+2 STCR	1-8	9-13	14-18

S5-ACJ, F-HRGD, F-HRAM, F-HRAV & F-HYOG



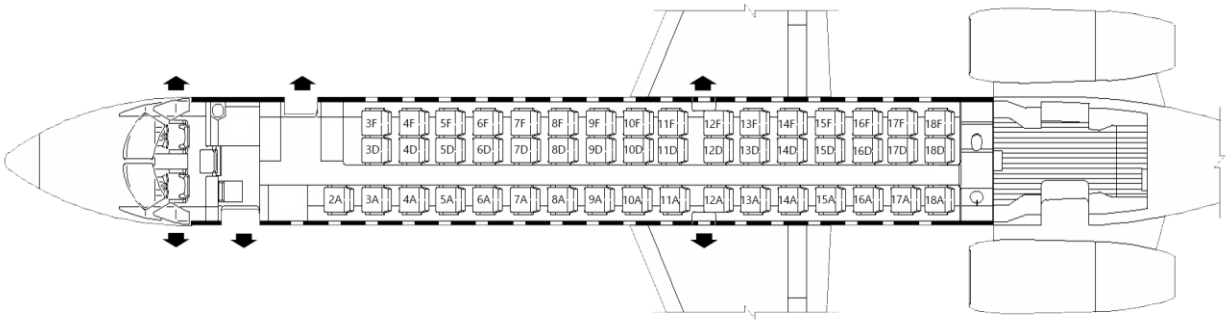
- 49 Seats on 17 rows in total, each seat is designated by a letter.
- **Rows start with Row number 2.**
- Seats are marked with the following letters: **A (LH window seat); D (Aisle seat) and F (RH window seat)**.

F-HRAP, F-HESR & F-HOXY



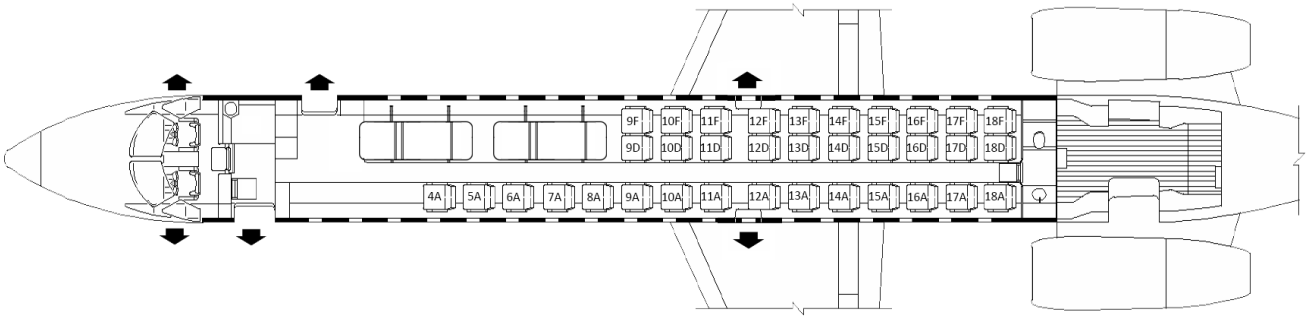
- 50 Seats on 18 rows in total, each seat is designated by a letter.
- Seats are marked with the following letters: **A (LH window seat); D (Aisle seat) and F (RH window seat)**.

F-HYOG



- 49 Seats on 17 rows in total, each seat is designated by a letter.
- Seats are marked with the following letters: **A (LH window seat); D (Aisle seat) and F (RH window seat)**.
- All seatbacks are reclining except at over wing exit row.
- Life jackets are located under the seats.

F-HESR -Stretcher version

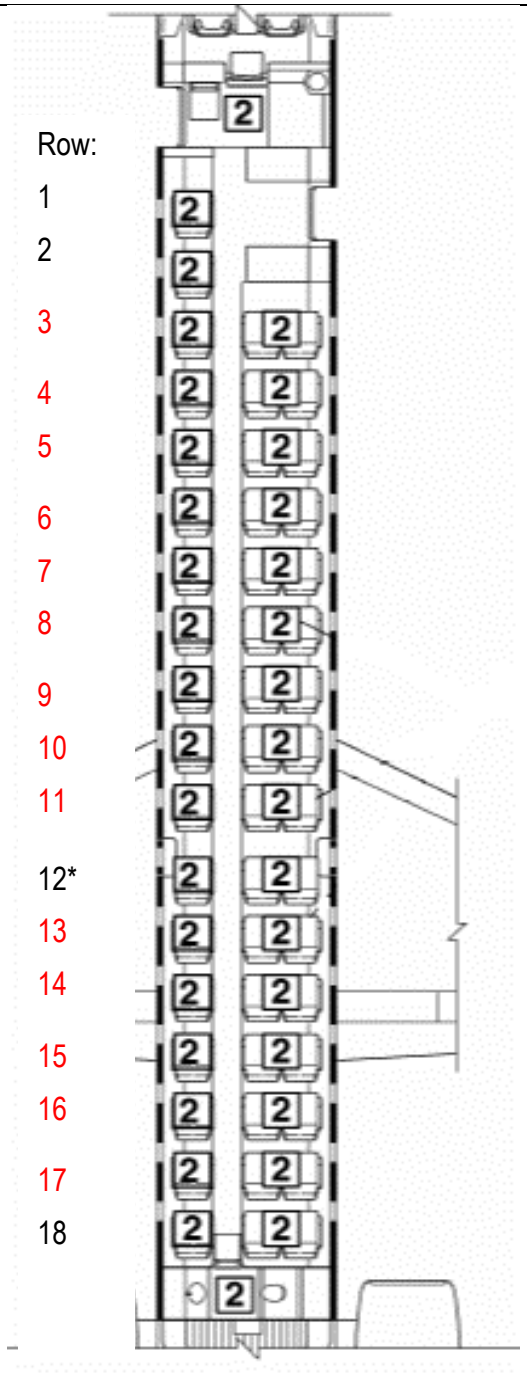
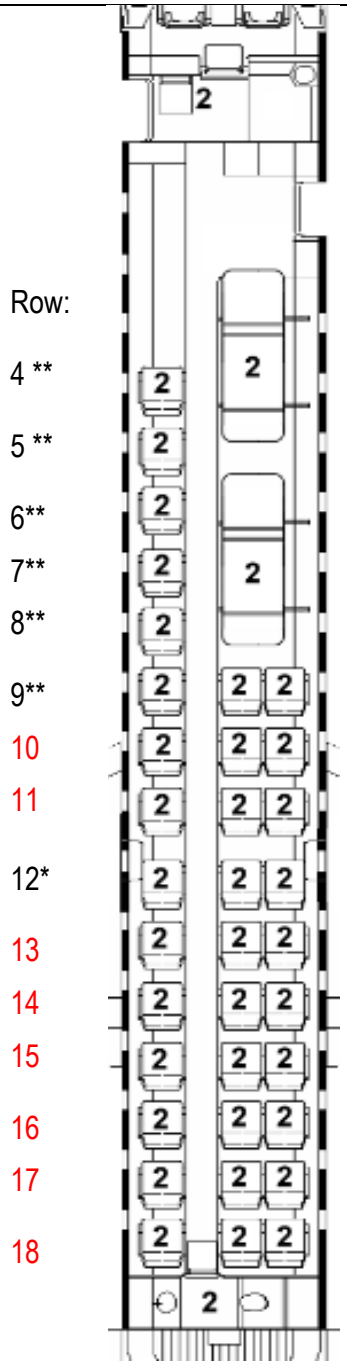


PASSENGER SEATS:

- 35 Seats on 15 rows in total, each seat is designated by a letter.
- 2 stretchers in the front of the cabin on the LH side- not marked with rows nor letters;
- **Rows start with Row number 4.**
- Seats are marked with the following letters: **A (LH window seat); D (Aisle seat) and F (RH window seat)**.
- All seatbacks are reclining except at over wing exit row.
- Life jackets are located under the seats or under the stretcher.

6.2.1.2 Passenger Oxygen Mask Location

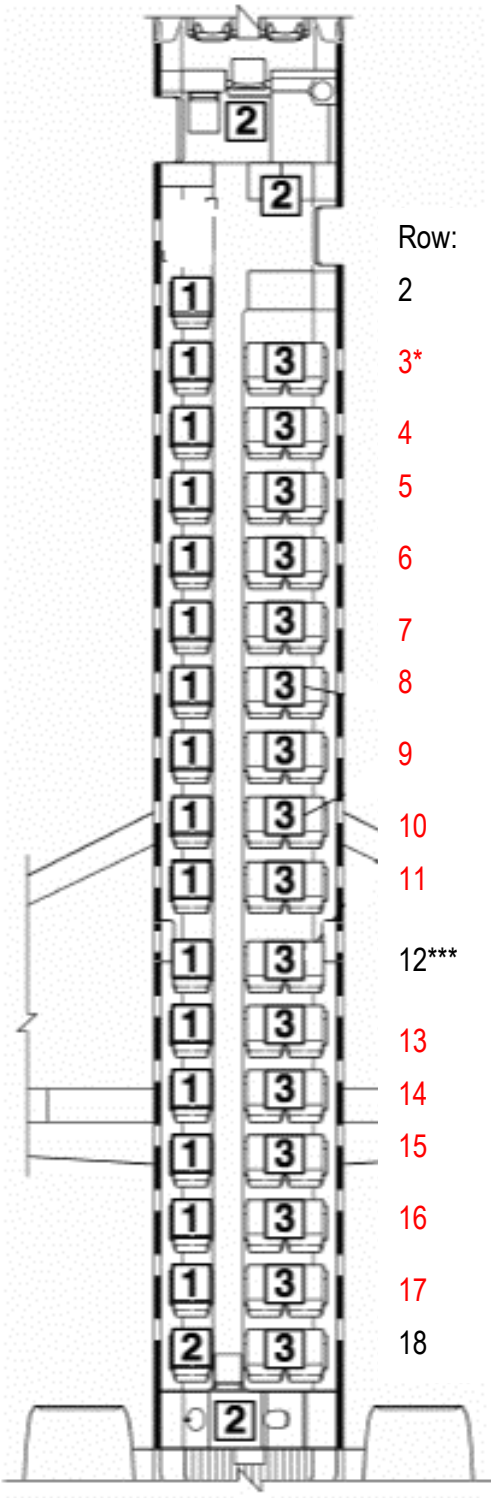
The row numbers marked with red, are those where extra oxygen mask, to be used by infant is located. **Important: Infants may not be seated on emergency exit even if there is an extra oxygen mask.**

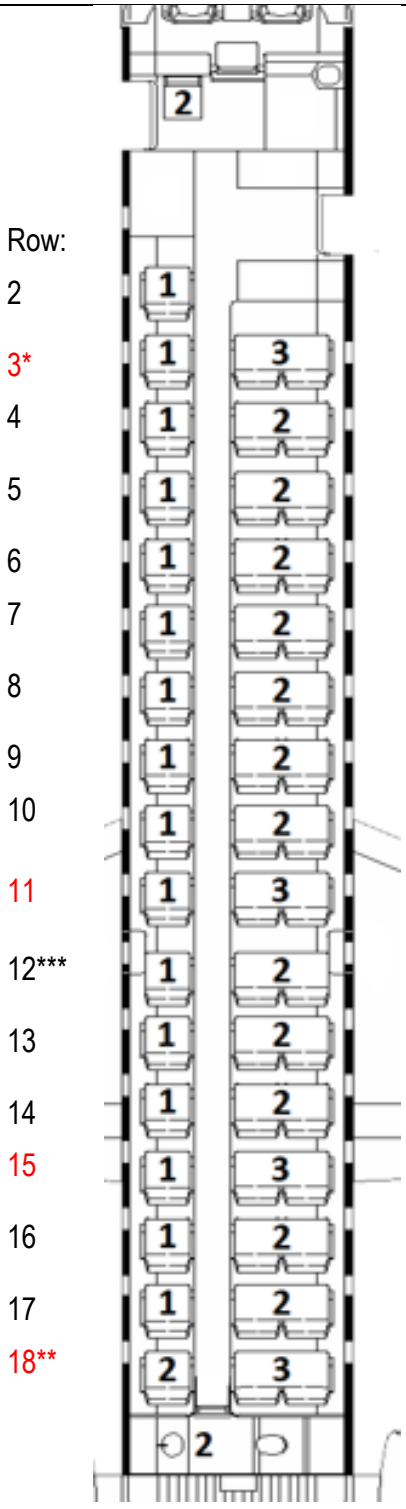
F-HRAP, F-HESR, F-HOXY	F-HESR - Stretcher version
	

* *Note for F-HRAP, F-HESR&F-HOXY: Even if there is extra oxygen mask, infants must not be placed there, because row 12 is emergency exit row.*

** *Note for F-HESR stretcher version: Even if there is extra oxygen mask, infants must not be placed there, for the convenience of the stretcher passengers*

S5-ACJ, F-HRGD, F-HRAM, F-HRAV	F-HYOG





** Note: Due to the repartition of the extra oxygen masks in the cabin, infants placed on these rows must be exclusively seated on 3F.*

***Note: When there are already passengers with infants on the other three rows (3,11&15), when needed, two passengers with infants may be placed on Row 18. In that case one passenger with infant must be seated on 18A and the other on 18F.*

****Note: Even if there is extra oxygen mask, infants must not be placed there, because row 12 is emergency exit row.*

6.2.2 Weight and Balance Data

	MRM	MTOM	MLM	MZFM
S5-ACJ	22090	21990	19300	17900
F-HRGD	22090	21990	19300	17900
F-HRAM	22090	21990	19300	17900
F-HRAV	22090	21990	19300	17900
F-HRAP	22100	22000	19300	17900
F-HESR	22100	22000	19300	17900
F-HOXY	22100	22000	19300	17900
F-HYOG	22100	22000	19300	17900

The DOM is BEM plus the mass of the operational items, i.e. crew, documents etc.

The crew included in the DOM is 2 flight crew. The mandatory cabin crew and, if needed, the additional one, should be added when filling in the loadsheet.

For the current BEM and DOM, refer to OM-B Chapter 6.

All the index adjustments for passengers, cargo and fuel are presented in the tables in the subchapters below depending on the applicable aircraft.

For Balance zones refer to ch. 6.2.1.1.

Ballast on F-HRAP and F-HOXY

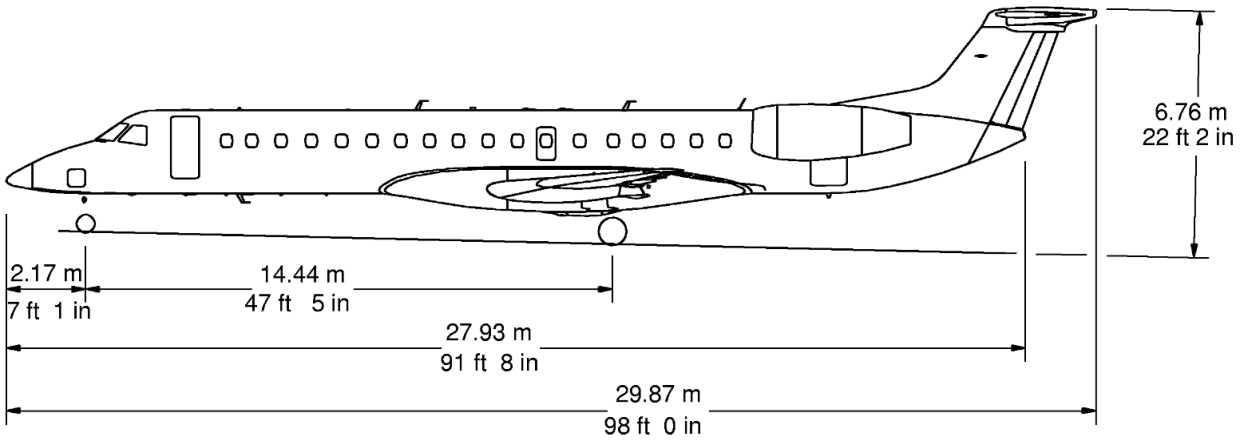
Due to full AFT CG position of empty aircraft, minimum conditions for flight operations of the aircraft are:

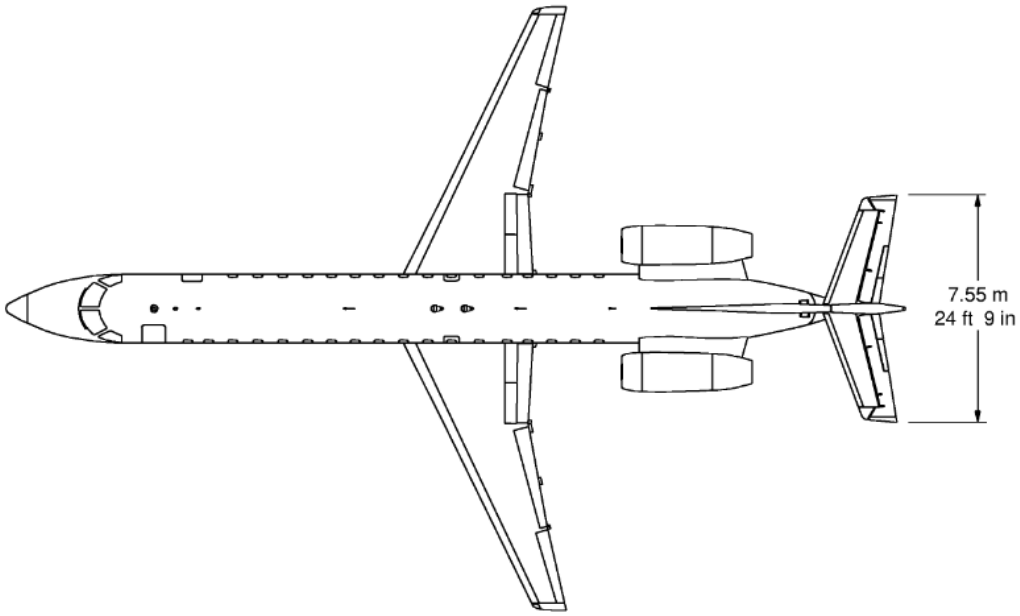
two pilots and 100kg of load in forward galley (preferably trolley with bottles of water meant for passenger service) regardless of fuel passenger and other load configuration.

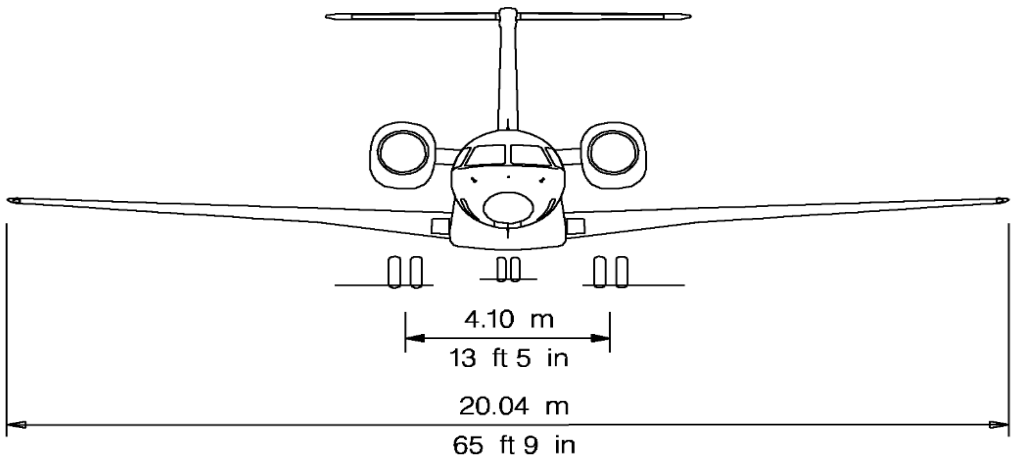
Other aircraft do not require mandatory ballast. If needed the Commander might anyhow request it, when needed.

6.2.3 Aircraft Dimensions

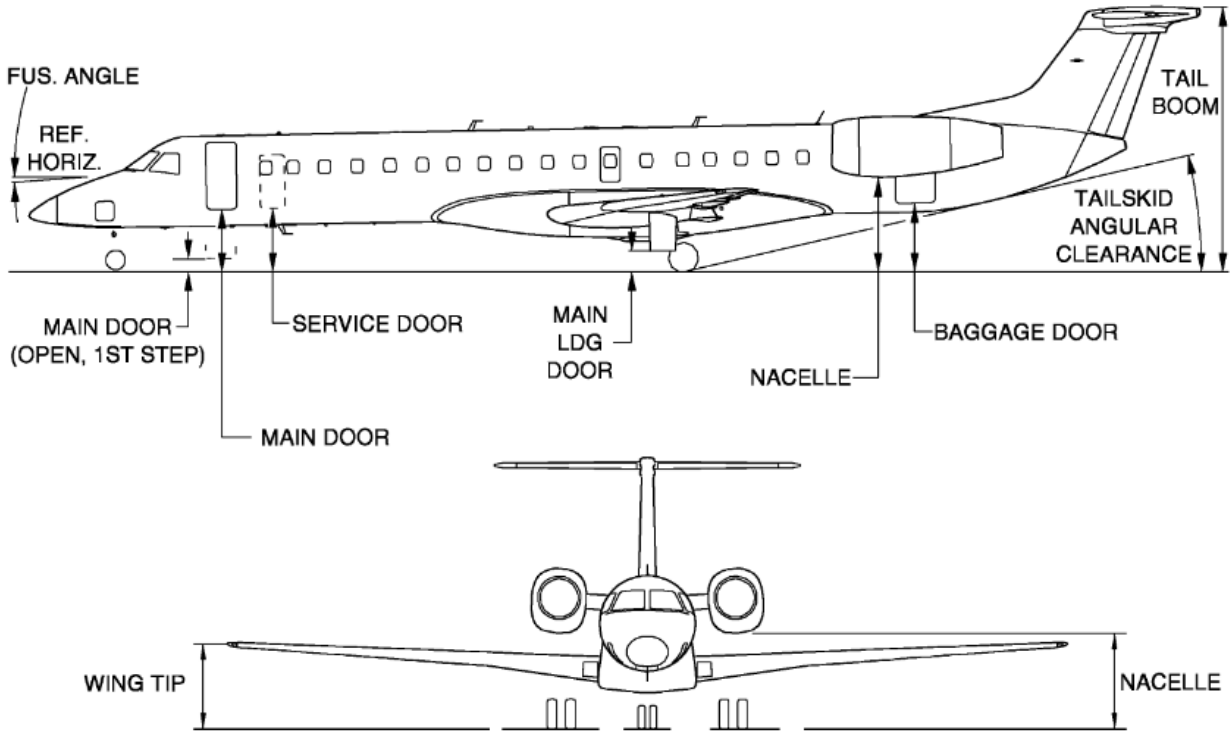
6.2.3.1 External Dimensions







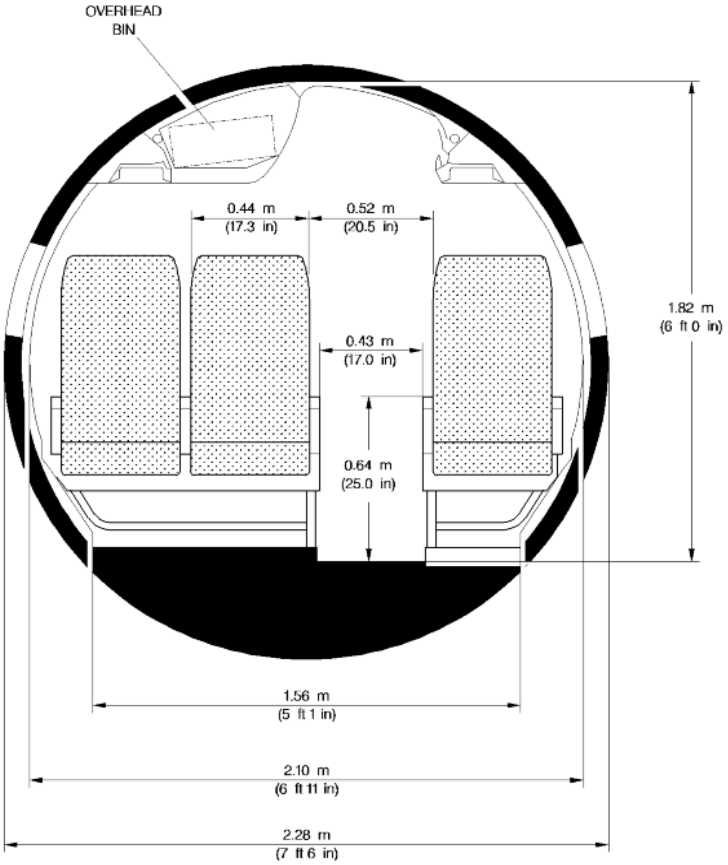
6.2.3.2 Ground Clearance



	Maximum (m)	Minimum (m)
Fuselage angle	1°21'24"	0°52'00"
Main Door	1.598 m	1.481 m
Main Door Open (1st step)	0.480 m	0.360 m
Service Door	1.595 m	1.408 m
Main Landing Gear Door	0.471 m	0.398 m
Nacelle	2.425 m	2.315 m
Baggage Door	1.803 m	1.663 m
Tail Boom	6.810 m	6.619 m
Wing Tip	2.022 m	1.920 m
Tailskid Angular Clearance	12°41'00"	11°43'59"

6.2.3.3 Passenger Cabin Dimensions

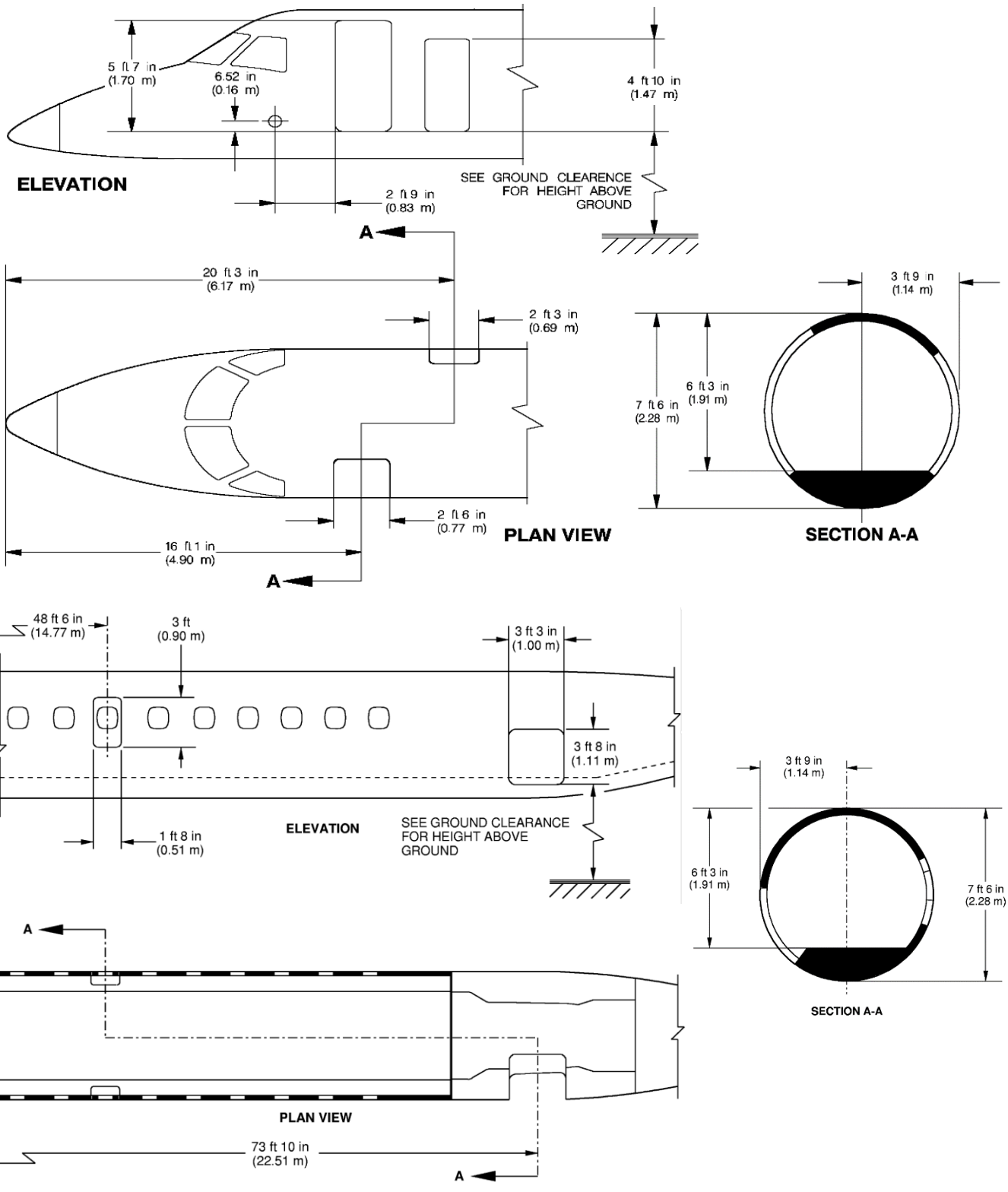
Width on the ground	1.56 m
Maximal width	2.10 m
Maximal Height (aisle)	1.82 m
Aisle width	0.43 m



6.2.3.4 Door Dimensions and Clearances

Door dimension

Door type	Height	Width
Boarding Door	1.70 m	0.77 m
Service Door	1.42 m	0.62 m
Overwing Exit	0.92 m	0.51 m
Cargo Door	1.11 m	1.00 m


5 ft 7 in
(1.70 m)
6.52 in
(0.16 m)
4 ft 10 in
(1.47 m)
ELEVATION
SEE GROUND CLEARENCE
FOR HEIGHT ABOVE
GROUND
2 ft 9 in
(0.83 m)
A
20 ft 3 in
(6.17 m)
2 ft 3 in
(0.69 m)
2 ft 6 in
(0.77 m)
16 ft 1 in
(4.90 m)
PLAN VIEW
A
3 ft 9 in
(1.14 m)
7 ft 6 in
(2.28 m)
6 ft 3 in
(1.91 m)
SECTION A-A
48 ft 6 in
(14.77 m)
3 ft
(0.90 m)
3 ft 3 in
(1.00 m)
3 ft 8 in
(1.11 m)
1 ft 8 in
(0.51 m)
ELEVATION
SEE GROUND CLEARANCE
FOR HEIGHT ABOVE
GROUND
3 ft 9 in
(1.14 m)
6 ft 3 in
(1.91 m)
7 ft 6 in
(2.28 m)
SECTION A-A
A
PLAN VIEW
73 ft 10 in
(22.51 m)
A

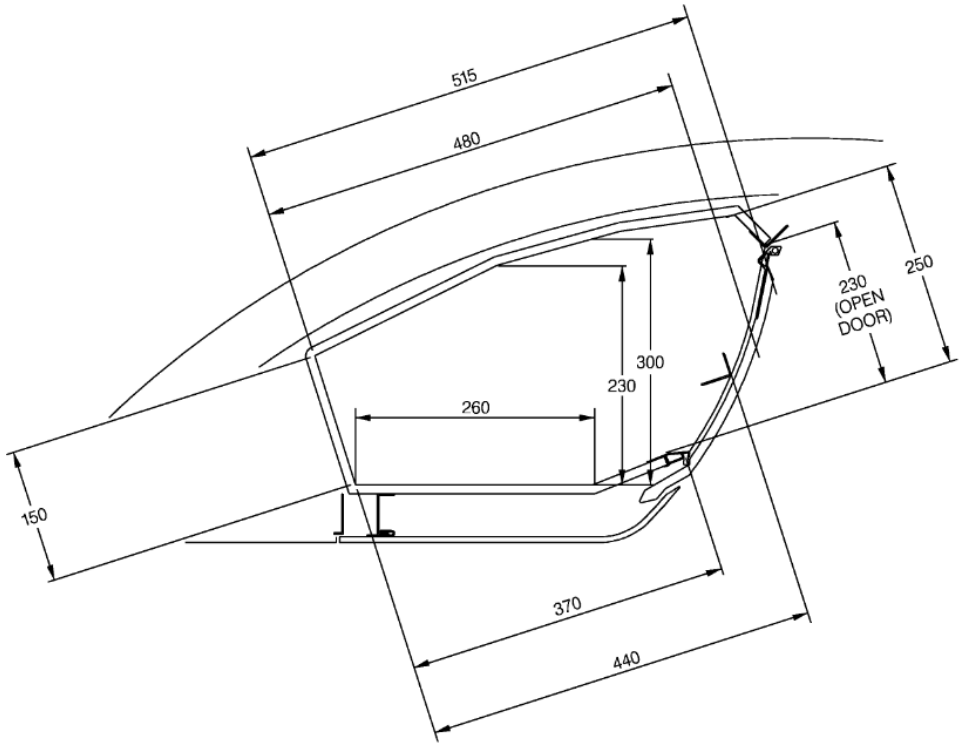
6.2.3.5 Overhead Bin

ERJ145 has 10 standard overhead bin assemblies and 1 short overhead bin assembly. They are installed on the right side of the passenger cabin.

The total volume is 1.9 m^3.

Overhead bin capacity and length	Length	Max Load
Standard Assembly	1.16 m	27 kg
Short Assembly	0.83 m	20 kg

Overhead bin cross section (dimensions in mm)



6.2.4 Hold Characteristics and Net Installation

The hold of the ERJ145 is located aft **(compartment 6).**

All of Amelia Intl ERJ145 are fitted with ‘’class -C’’ baggage compartment. Aircraft with ‘’class- C’’ baggage compartment have the following systems installed:

- Baggage Compartment Smoke Detection System;
- Baggage Compartment Fire Extinguishing System;
- Baggage Ventilation System.

‘’Class -D’’ baggage compartment has only:

- Baggage Compartment Smoke Detection System;

therefore, it is not recommended for the transport of AVIH. Amelia Intl does not have aircraft with ‘’class -D’’ baggage compartment.

The hold is pressurized.

There is no special heating system installed: the hold is heated indirectly by the flow of air from the passenger cabin, which is exhausted into it.

If the baggage compartment is to be loaded with more than:

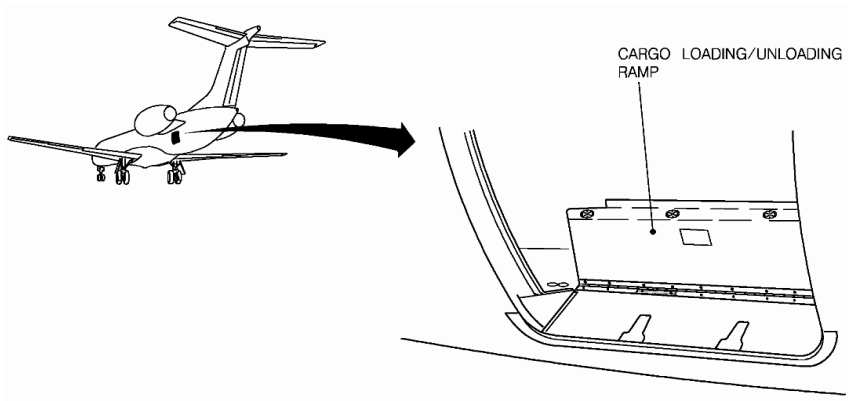
EMB-145 with Thrust Reverses: 800 kg
EMB-145 without Thrust Reverses (F-HYOG): 1000 kg

the following conditions must be observed:

- Aircraft shall be with minimum required fuel of 907kg.
- No more than one person can be at the aircraft cone either inside the baggage compartment or inside the rear electronic compartment.

If the conditions above are not observed, aircraft tilting (tail down) may occur.

Before loading/ unloading the hold, the Cargo Loading/Unloading Ramp (Door Jamb Barrier) must be lowered in order to protect the baggage door latching mechanism.



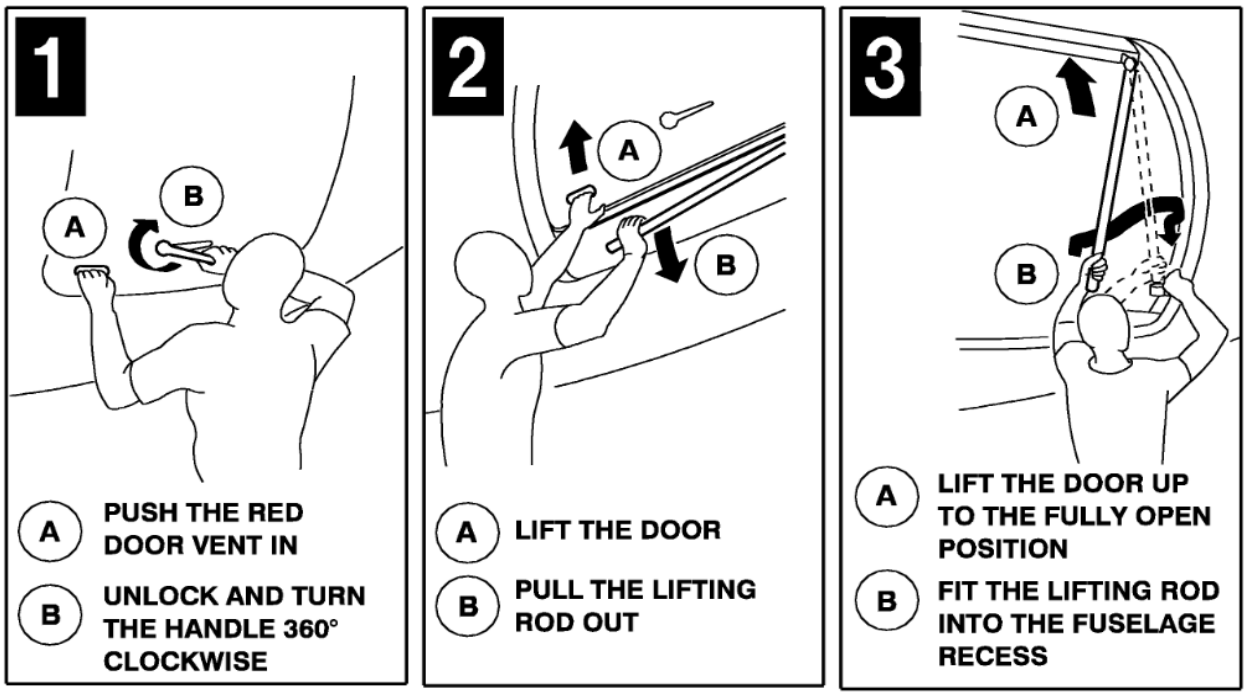
Important for F-HYOG, F-HRAP, F-HESR, F-HOXY only (due to no SB145-25-0261):

Cargo and baggage loading up to 990 kg are not required to be tied down. If the baggage compartment is loaded with more than 990kg, only the exceeding load must be tied down with the horizontal net. See ch. 6.2.4.2 for details on installation of horizontal net.

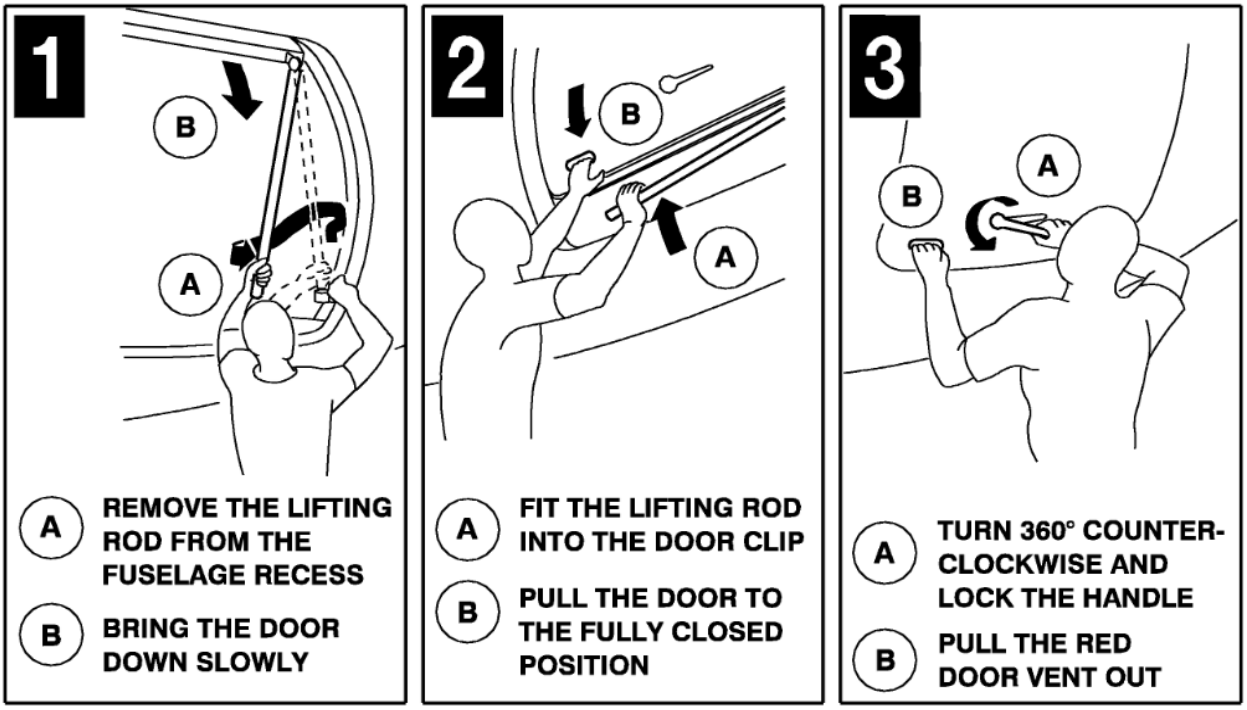
If not possible to obtain horizontal net for the concerned flight the load must be limited to 990kg.

6.2.4.1 Opening of Cargo Door

To Open

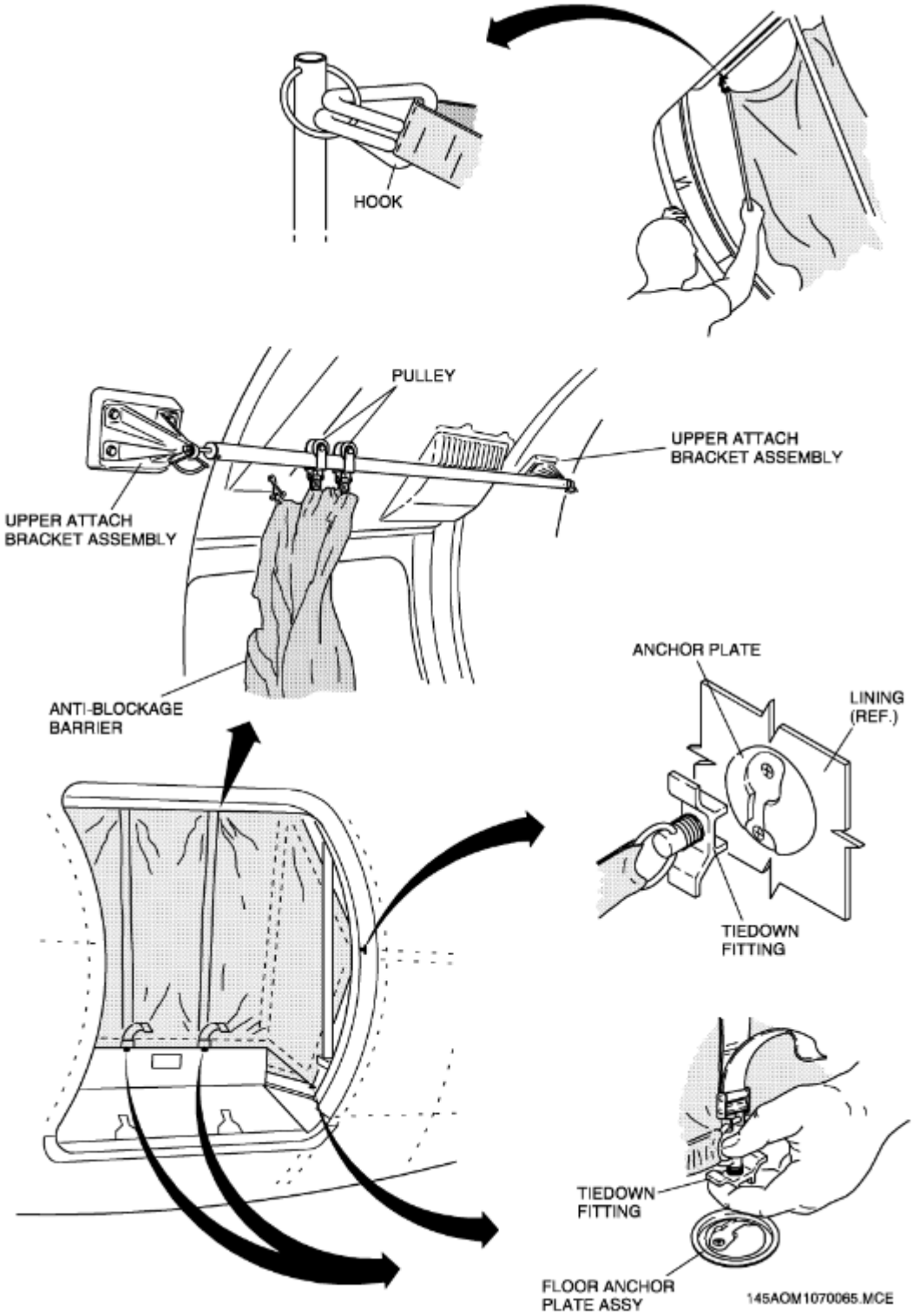


To close

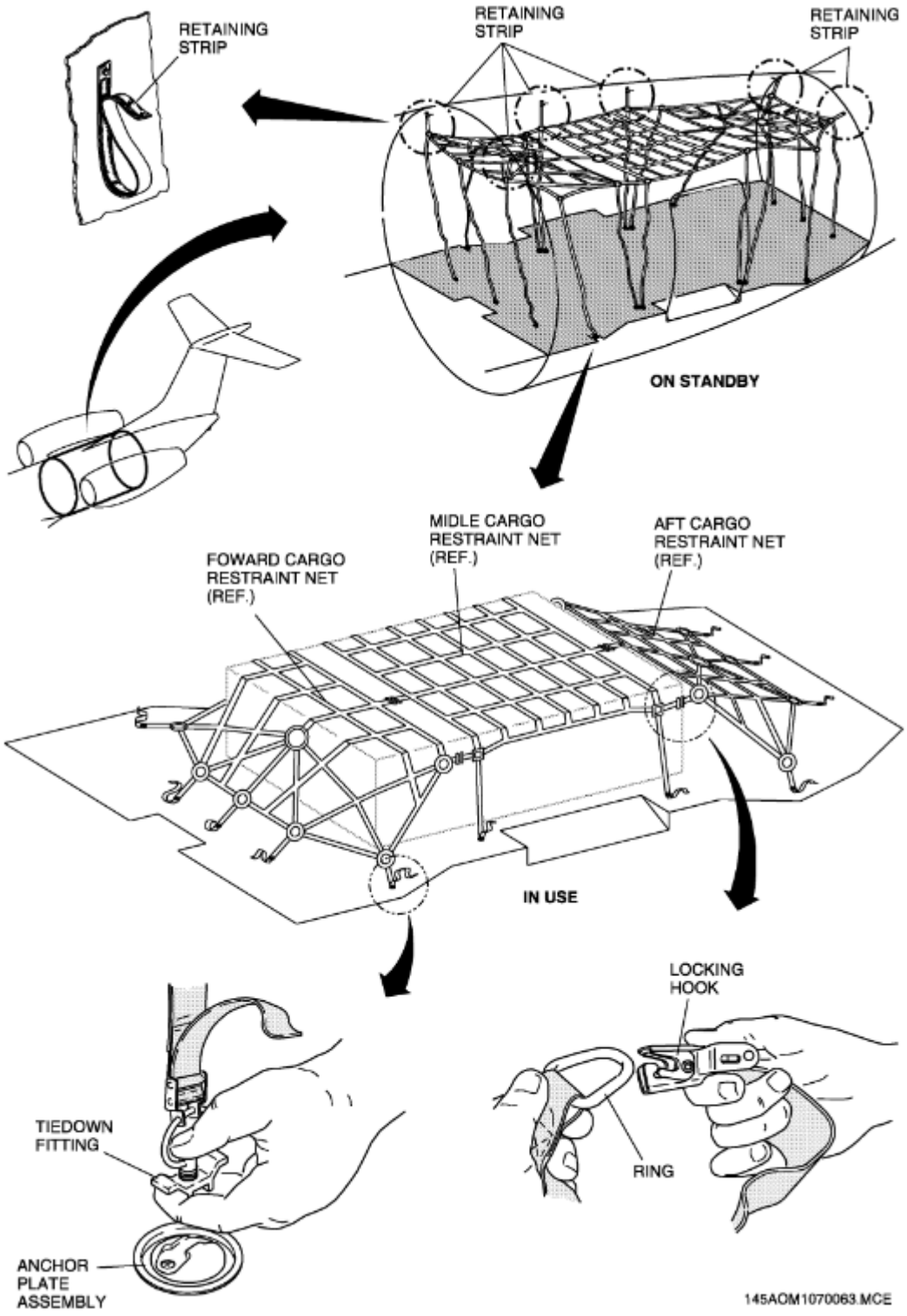


6.2.4.2 Cargo Nets

- Baggage compartment door safety net

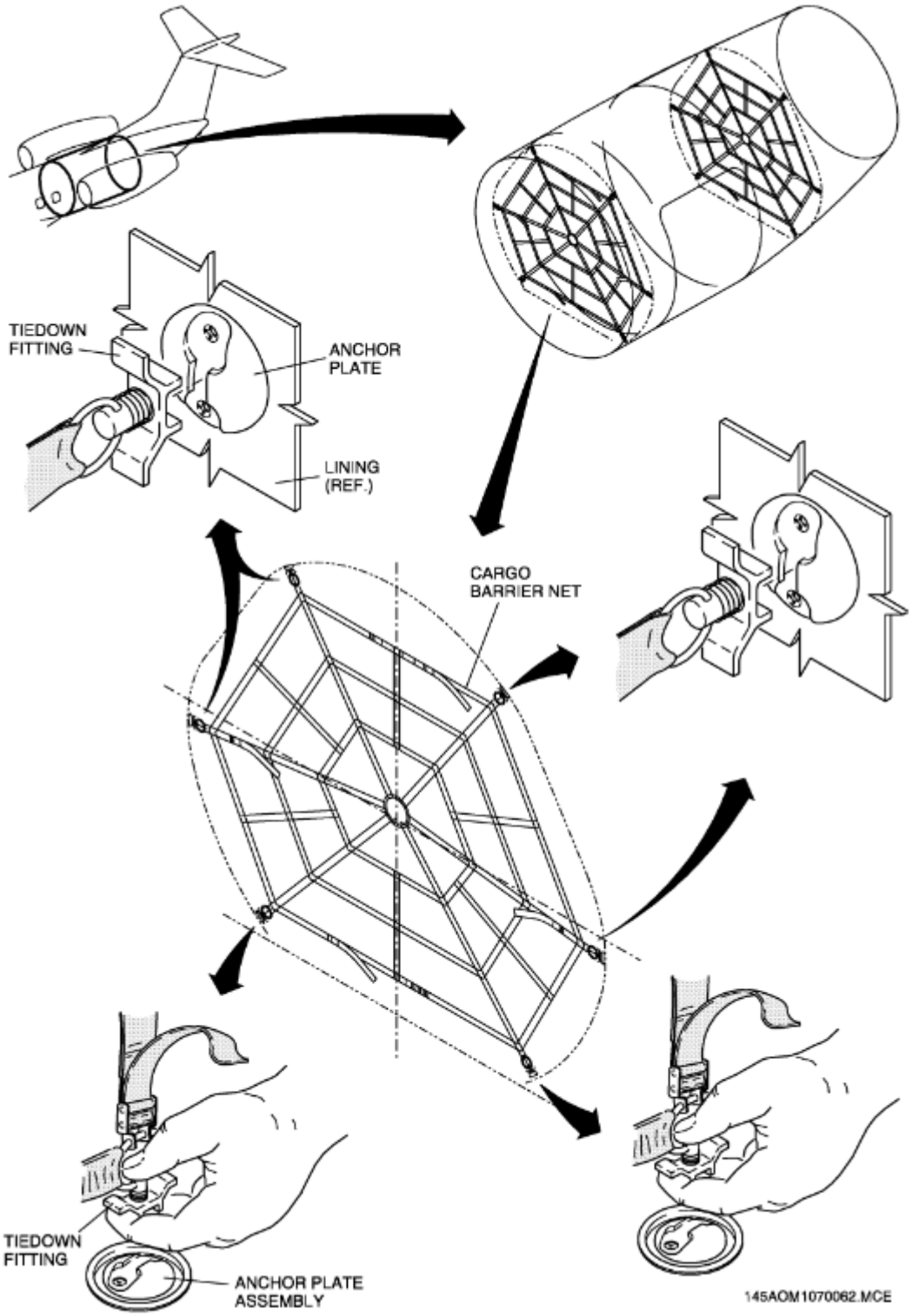


- Cargo restraint net (horizontal net)

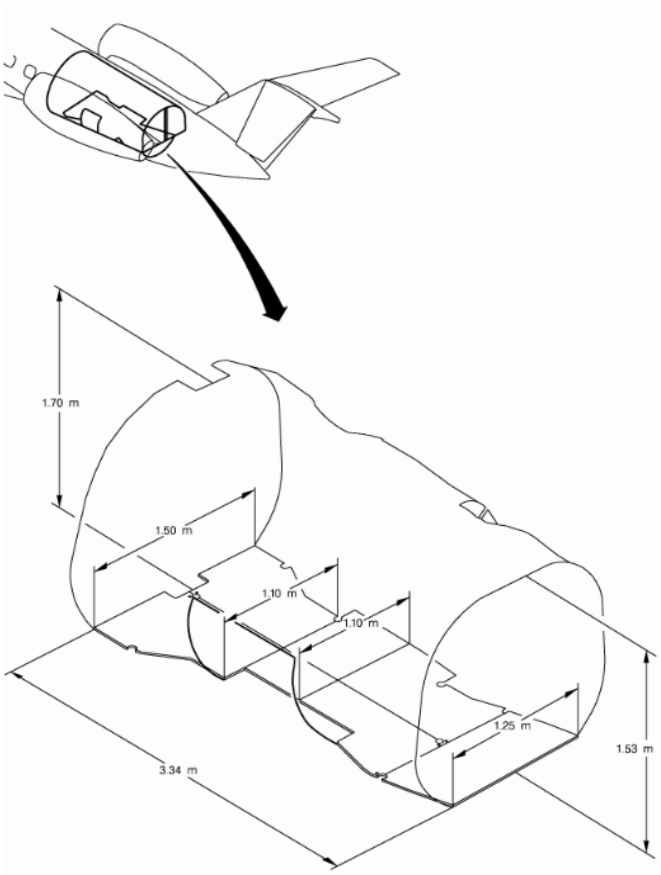


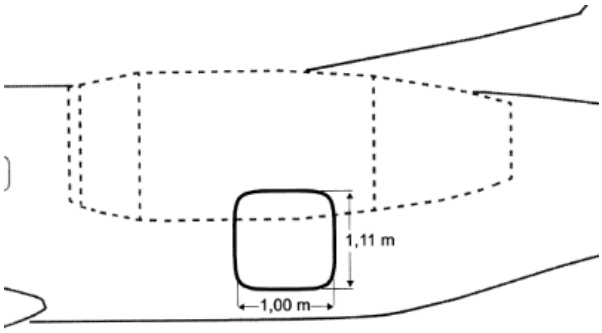
- Cargo barrier net (Vertical net)

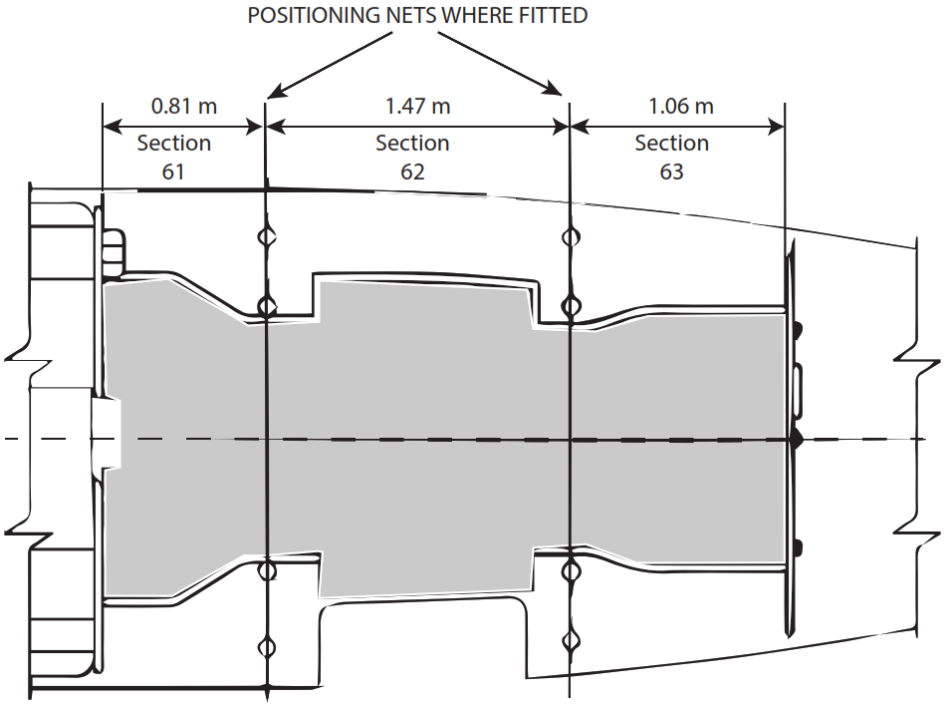
Important: There are no cargo vertical nets installed on F-HYOG.



6.2.4.3 Hold Dimensions and Limits







The Compartment 6, in general, is usually divided in 3 sections: Section 61, Section 62 and Section 63.

The door of the hold is 1m wide and 1.11m high.

Hold dimensions

Section 62 is opposite the door opening.

	Length	Floor Width	Height
Compartment 6	3.34 m	Between 1.50m and 1.10m	Between 1.70m and 1.53m
Section 61	0.81 m	1.50 m	1.70 m
Section 62	1.47 m	1.10 m	1.60 m
Section 63	1.06 m	1.25 m	1.53 m

ERJ145 Compartment limits

	Floor Strength	Volume	Surface	Max load per section
Compartment 6	390 kg/m^2	9.2 m^3	4.14 m^2	1200 kg
Section 61		2.76 m^3	1.21 m^2	400 kg
Section 62		3.68 m^3	1.61 m^2	400 kg
Section 63		2.76 m^3	1.32 m^2	400 kg

For F-HYOG's additional compartment limits see the important note in ch. 6.2.4,

Compartment and Vertical Net positions

Forward Division Position	20.97 m
Forward Vertical Net *	21.78 m
Aft Vertical Net *	23.25 m
Aft Division Position	24.31 m

* If vertical net is installed

For Cargo Compartment package size dimensions see ch. 7.6.

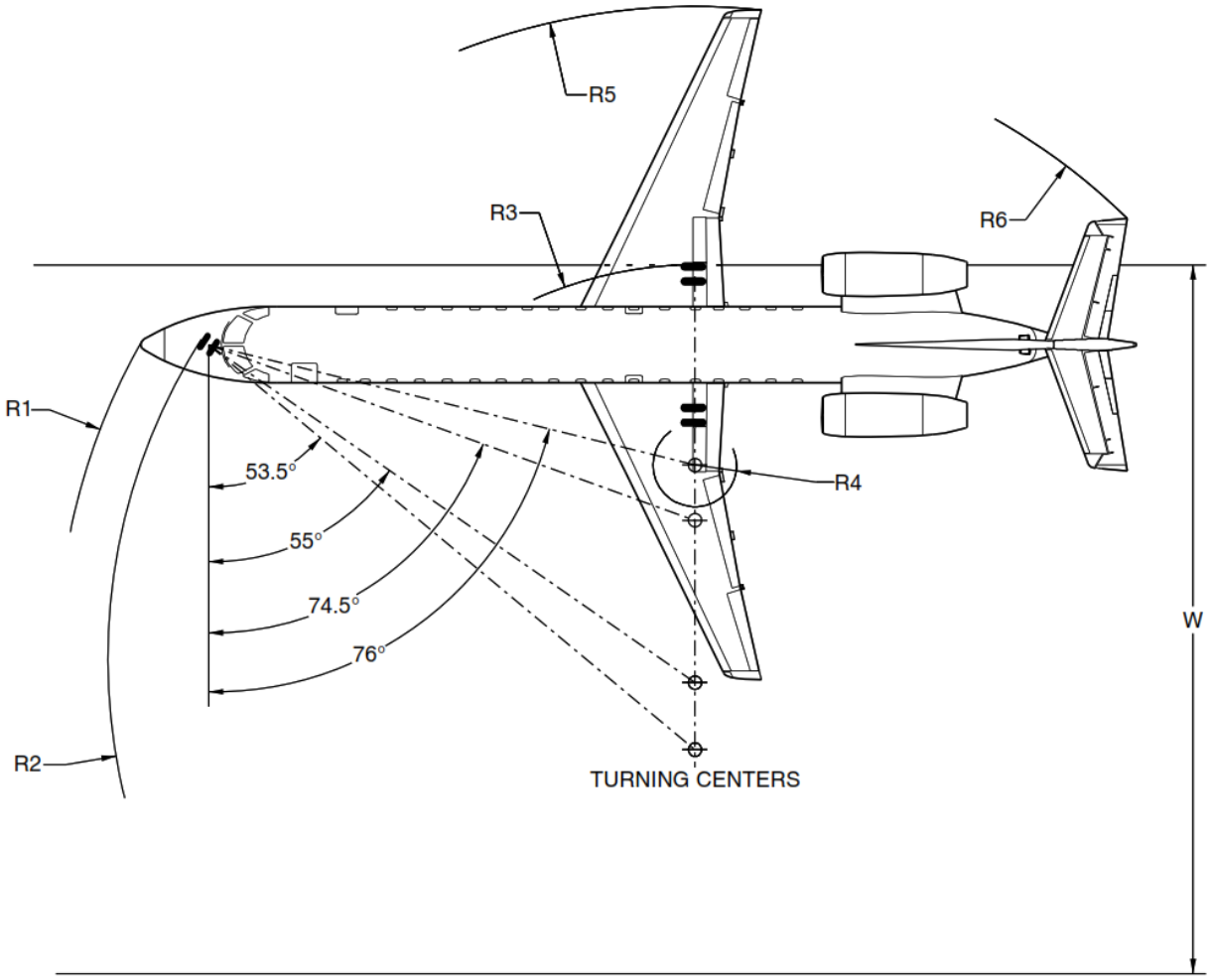
Important: Some EMB135/145 due to not incorporated SB, do not offer the possibility to separate the cargo sections with vertical nets. In this case it is impossible to divide the load loaded in the cargo hold per section.

But as all sections of the compartment 6 are within the same ARM, this will not have any influence on the balance of the aircraft.

That EMB145 is: F-HYOG.

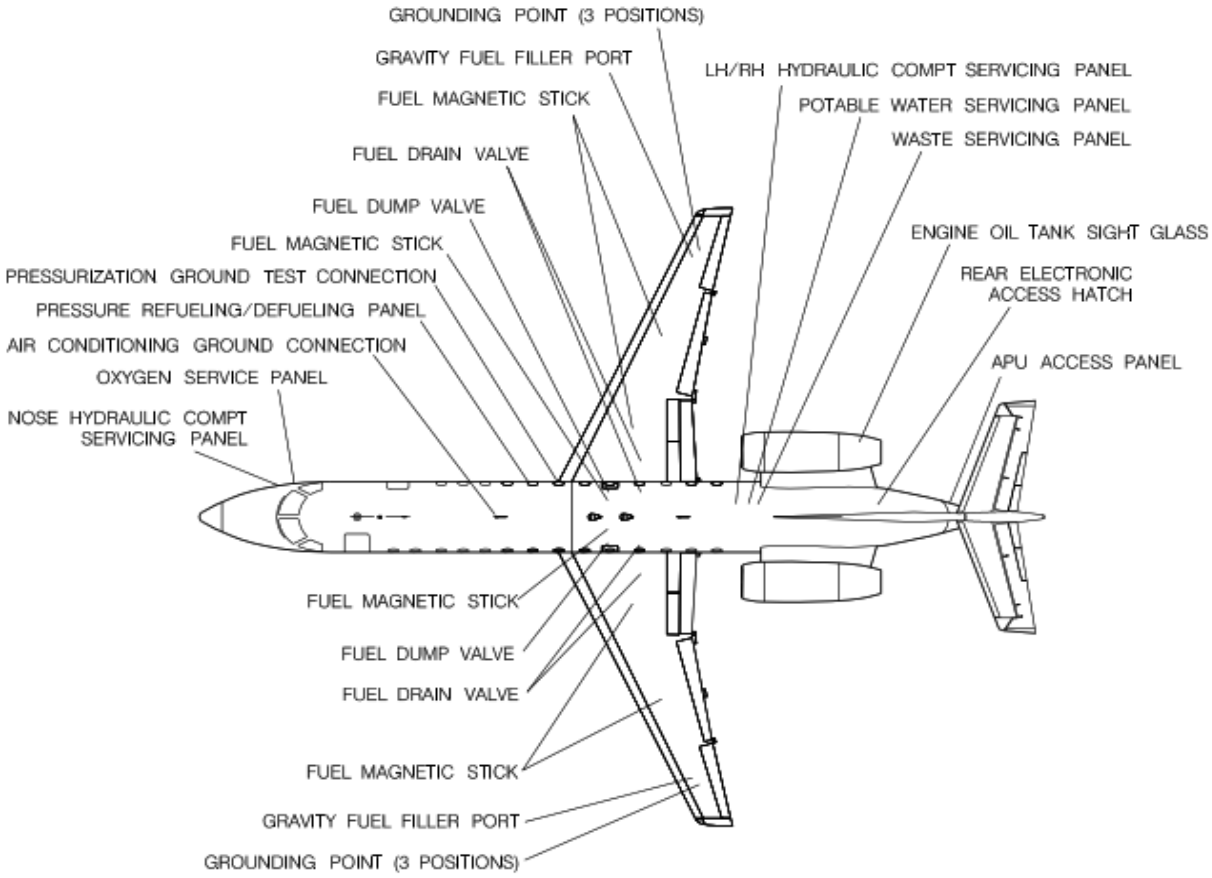
6.2.5 Servicing Points, turn radius and position of equipment

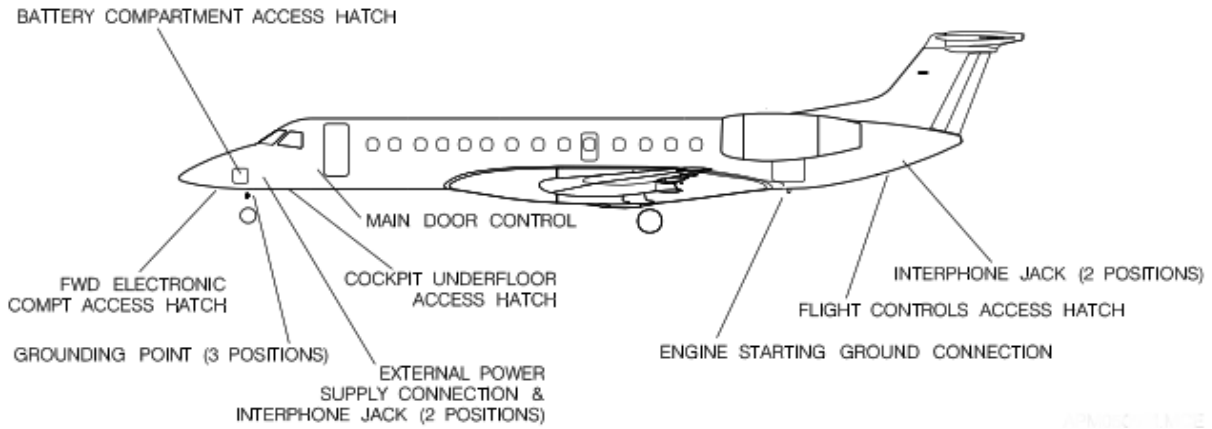
6.2.5.1 Turn Radius



STEERING ANGLE	NOSE R1	NOSE GEAR R2	OUTBOARD GEAR R3	INBOARD GEAR R4	RIGHT WINGTIP R5	RIGHT TAIL TIP R6	WIDTH
53.5°	19.79 m	18.19 m	13.08 m	8.31 m	20.81 m	19.43 m	31.27 m
	64 ft 11 in	59 ft 8 in	42 ft 3 in	27 ft 3 in	68 ft 3 in	63 ft 9 in	102 ft 6 in
55°	19.48 m	17.86 m	12.50 m	7.74 m	20.24 m	19.00 m	30.36 m
	63 ft 11 in	58 ft 7 in	41 ft 0 in	25 ft 5 in	66 ft 5 in	62 ft 4 in	99 ft 6 in
74.5°	17.10 m	15.21 m	6.39 m	1.62 m	14.17 m	15.12 m	21.94 m
	56 ft 1 in	49 ft 11 in	21 ft 0 in	5 ft 4 in	46 ft 6 in	49 ft 7 in	72 ft 0 in
76°	17.01 m	15.11 m	5.99 m	1.25 m	13.77 m	14.92 m	21.21 m
	55 ft 9 in	49 ft 7 in	19 ft 8 in	4 ft 1 in	45 ft 2 in	48 ft 11 in	69 ft 7 in

6.2.5.2 Servicing Points

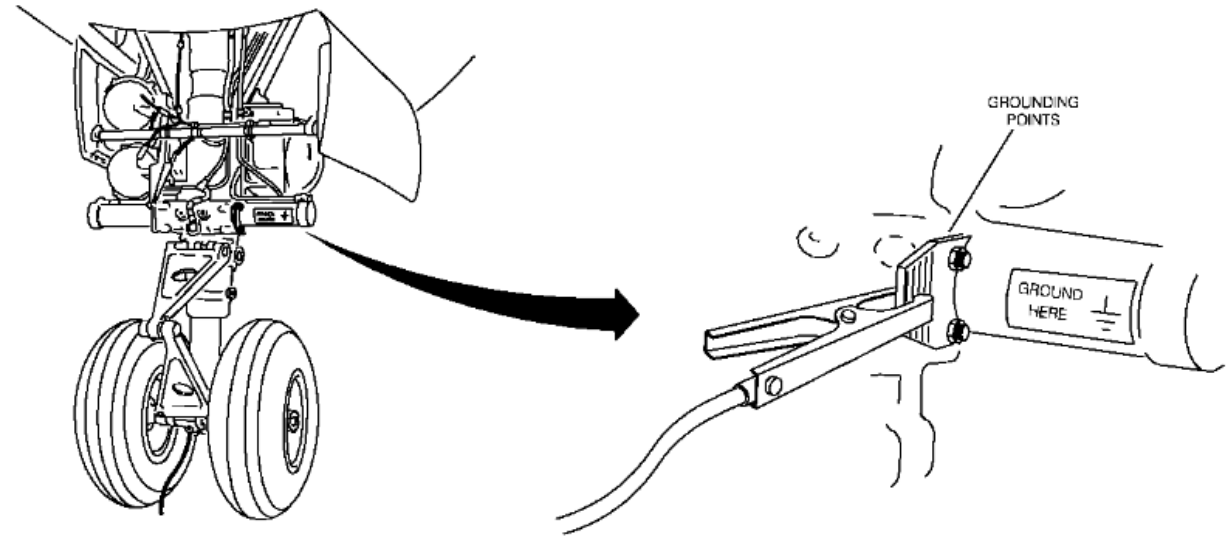


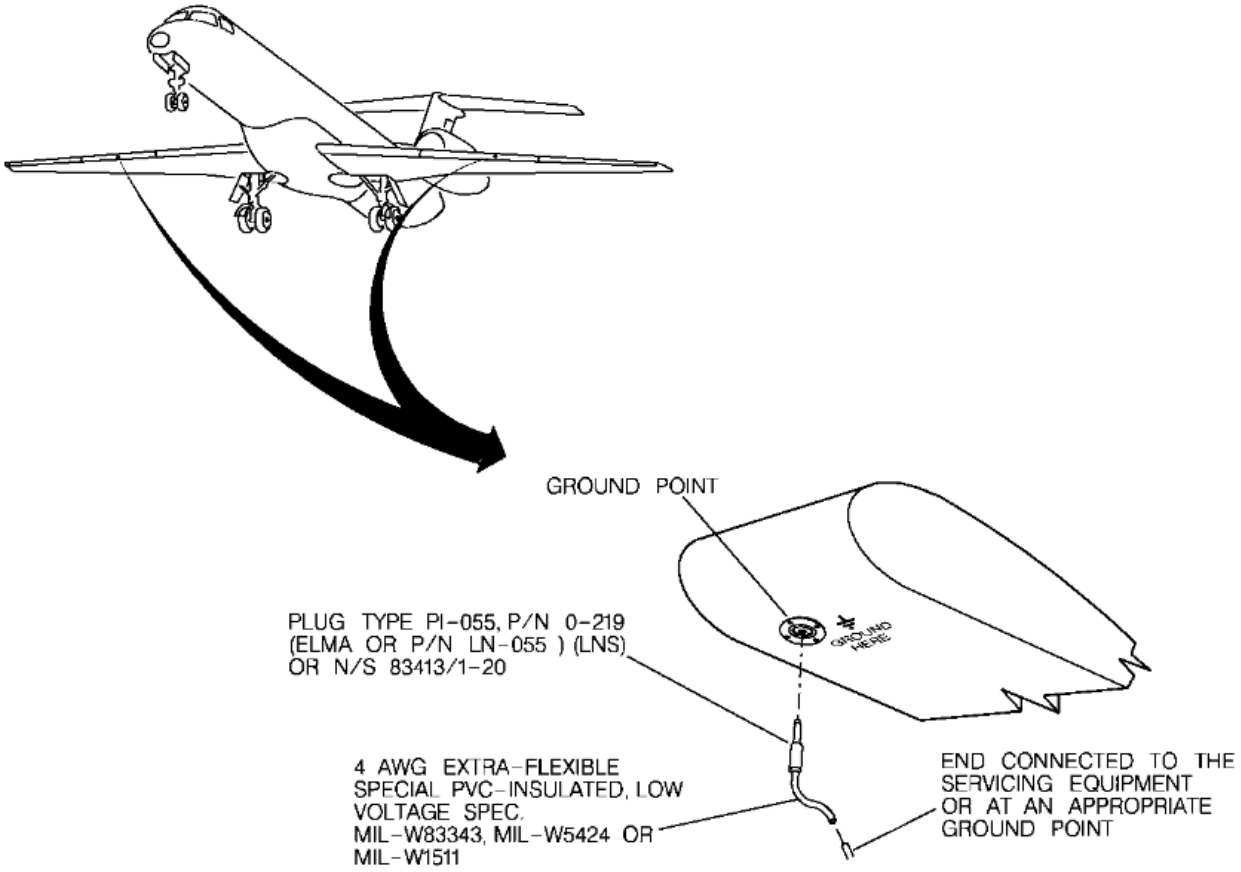


Electrical Power	Use 28V DC GPU, 300A (1 600A needed to start the engine)
Oxygen	Refill through connector is not allowed during ramp servicing, only during maintenance in hangar.
Engine Start	Use GPU 28 V DC; 1 600A GPU is needed if APU is not used
Air Conditioning	Minimum thermal capacity around 10 kw (36 000 BTU/h), maximum pressure 8 kPa

6.2.5.2.1 Static Grounding

There are three grounding points on the aircraft. Two of them are installed on the lower surface of each wing leading edge and one is aft of the nose landing gear.

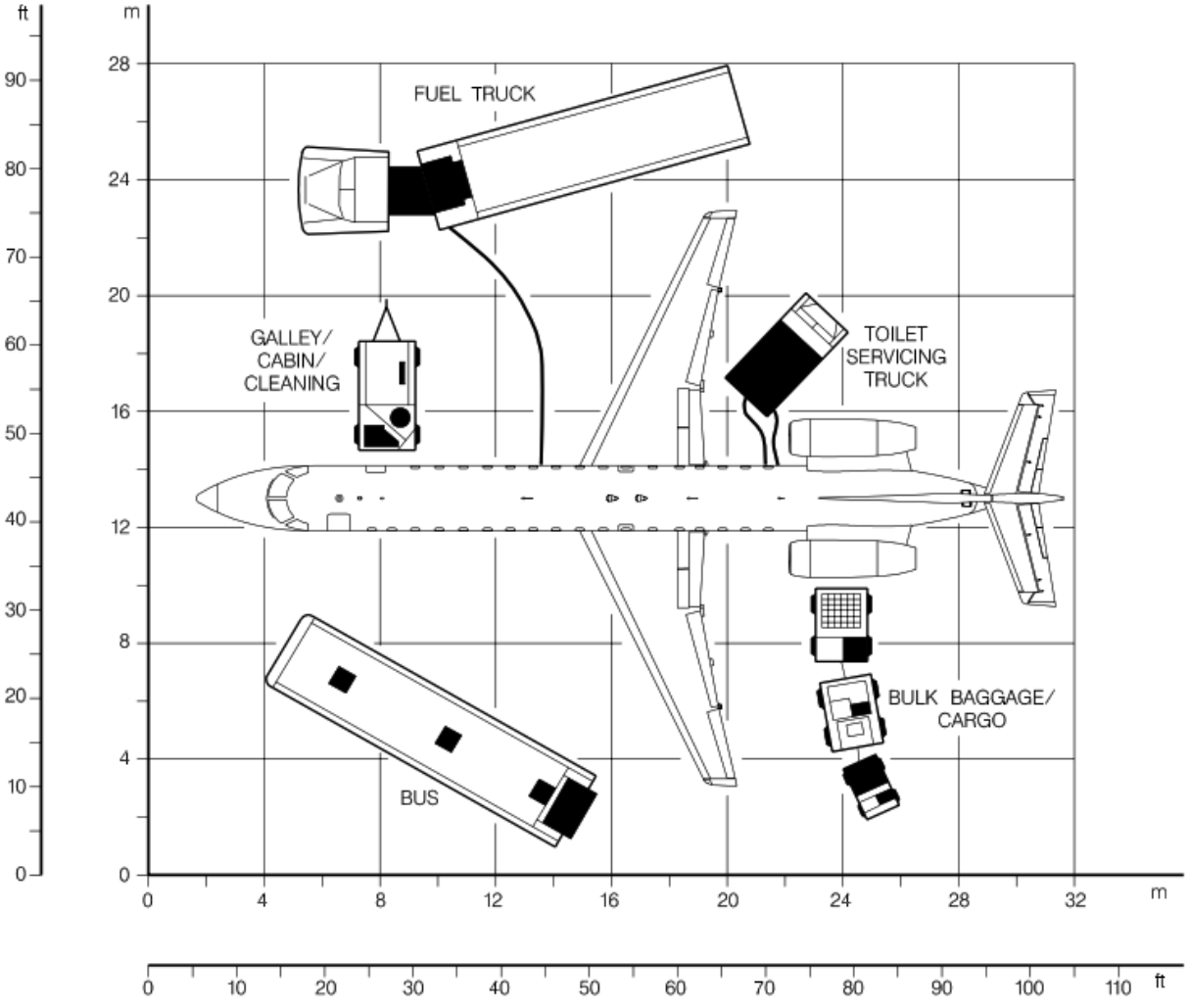




To ground the aircraft properly, proceed as follow:

- Make sure that the aircraft is parked adjacent to an approved grounding point.
  Note:
  - *For general grounding, use a 4-AWG extra-flexible special PVC-insulated, low voltage cable, and a PL-055-type plug (specification MS 3493).*
  - *To ground the refuelling nozzle or the oxygen charger adapter, use a 3/32"-diameter steel cable (specification MILW-83343, MIL-W-5424 or MIL-W-1511) with plug (specification MIL-C-83413/4) and an alligator clip.*
- Examine the static ground cable for damage and to make sure that the end-fittings are correctly attached.
  IMPORTANT: Use the grounding points shown in figure above only. The use of other points may result in poor grounding.
- Connect the static ground cable plug to one of the grounding points on the lower surface of each wing leading edge and the other end to an earth grounding point.
- Connect the static grounding cable of the ground support equipment to an earth grounding point.
- Connect static grounding cable plug of ground support equipment to one of the aircraft grounding points.
- Connect the applicable ground support equipment.

6.2.6 Ramp Handling

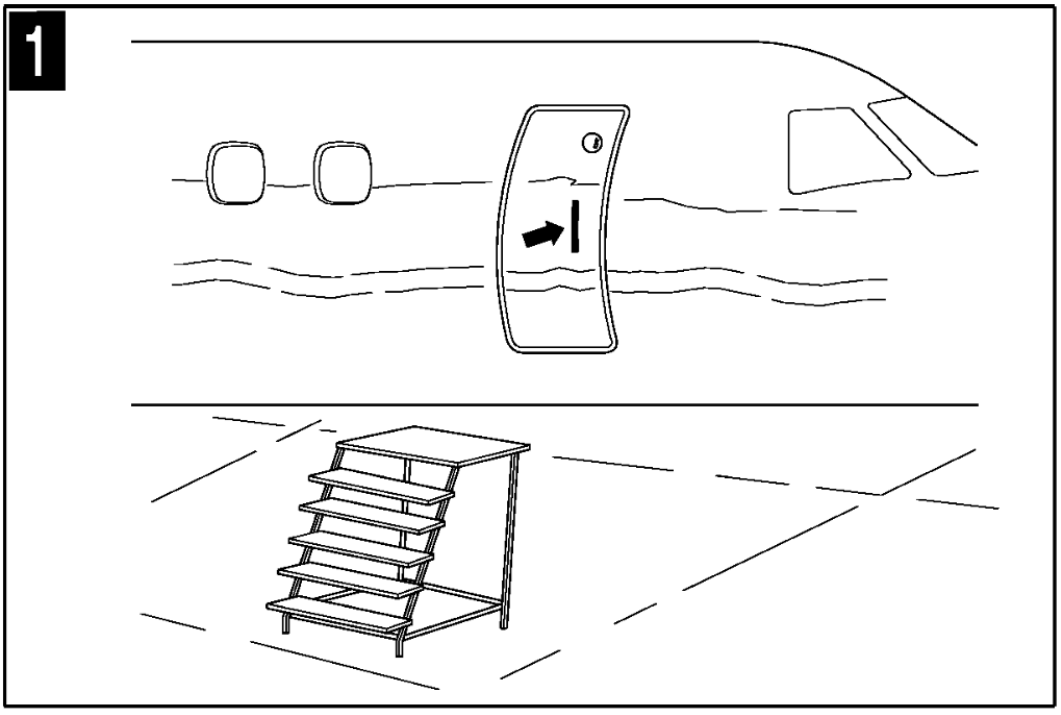


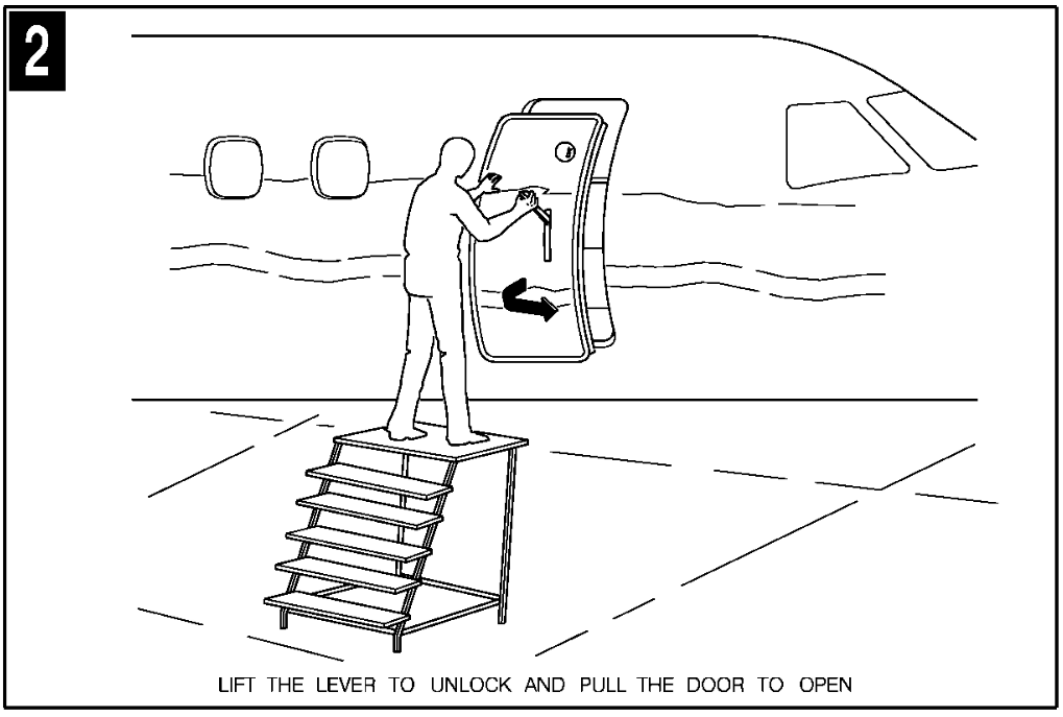
6.2.6.1 Operating of Service door

Always ask the CCM to open the door. Unless properly trained, no one else but the active crew on board is allowed to open any door.

In case a proper training has been performed, follow the steps below.

To open from outside first knock on the door to advise the CCM that you will open it.





6.2.6.2 Ground Power Unit

The GPU is connected to the aircraft through an external receptacle. The GPU supplies 28 VDC (Volt Direct Current) to the load buses or for ground operation and APU starting, independently of the internal batteries.

Operation:

For APU starting, the GPU must have 1,600 Amps minimum.

But 300Amps will be sufficient for maintenance and servicing.

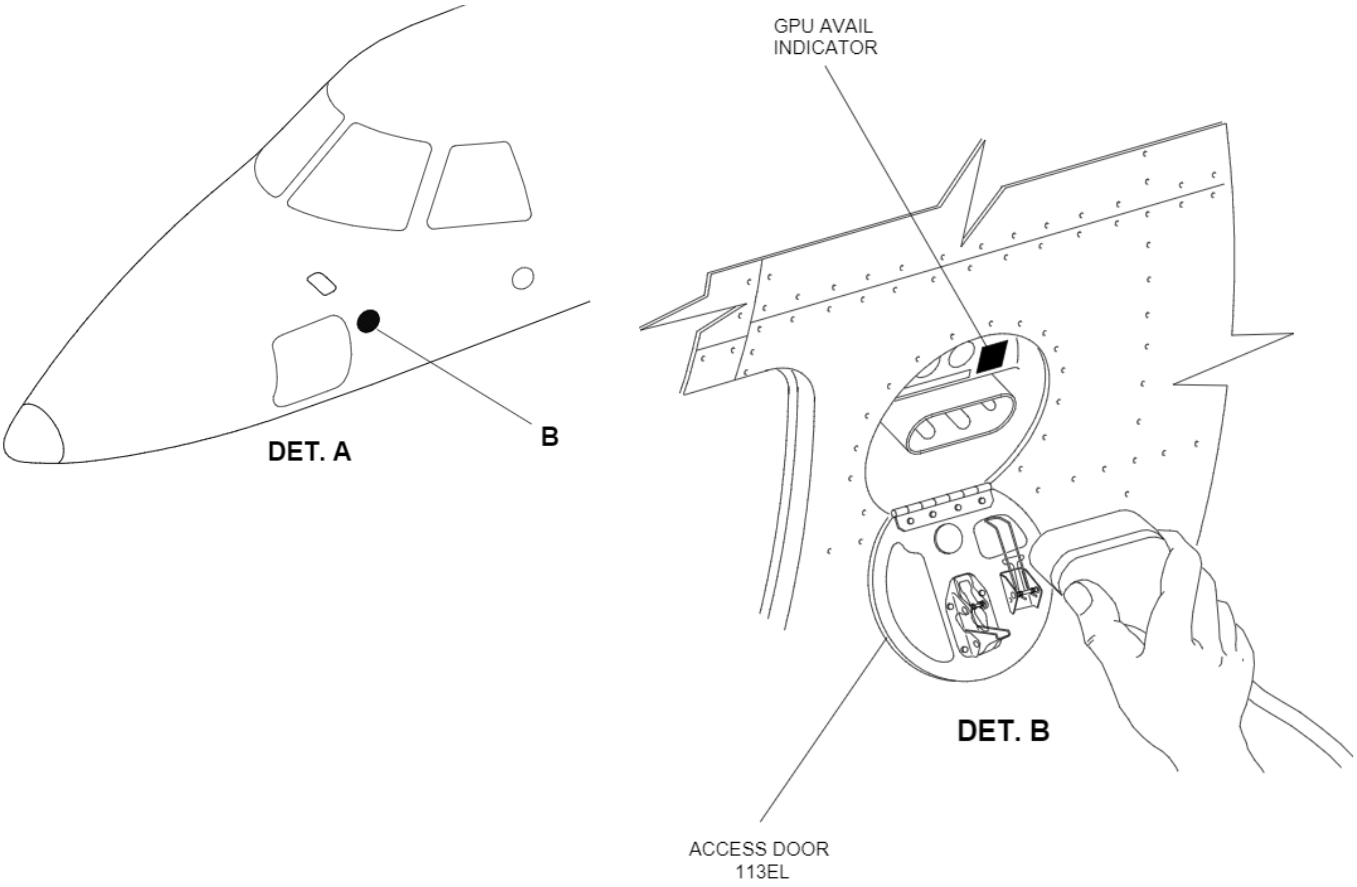
When the GPU is plugged to the aircraft, the Ground Service Bus is energized, if the GPU is the only power supply energized.

At this time, the GPU lights, above the GPU receptacle and in the upper half of the GPU pushbutton, come on.

In this condition, the Ground Service Bus can supply some lights. They are used for internal services at night.

If the GPU AVAIL pushbutton is pushed, the GPU AVAIL inscription, on the push button, goes off and the striped bar comes on. The lights are disconnected from the Ground Service Bus and connected to the related buses, and the GPU is connected to the Central Bus.

The figure “EXTERNAL POWER - GROUND SERVICE BUS BLOCKDIAGRAM" shows the operation of the sub-subsystem.



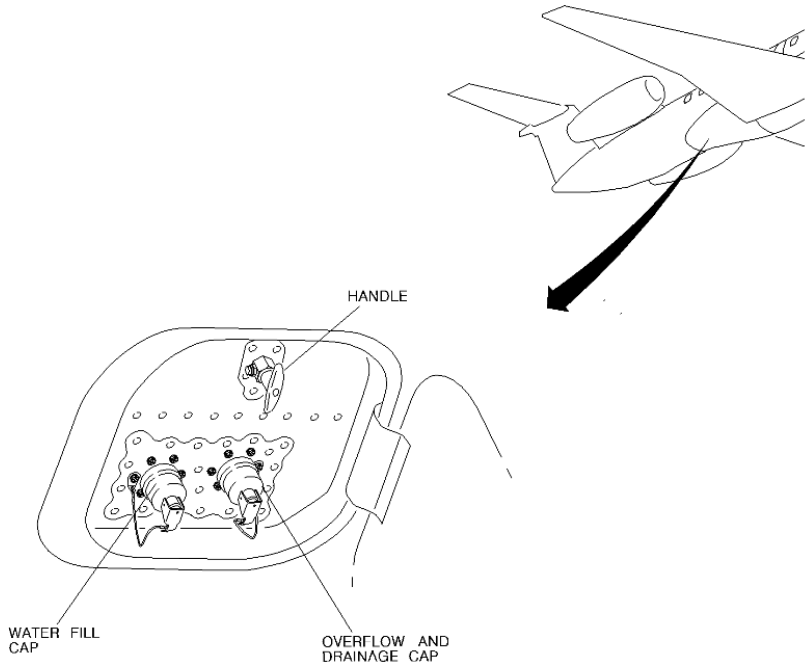
6.2.6.3 Water and Toilet Servicing

Water Tank Servicing

Filling and draining of water is done through a panel installed on the lower right side of the fuselage aft section. **Draining shall be done during night stop in freezing or icing conditions.**

The tank has 20 l capacity.

- To drain: It is done through the water drain installed on the servicing panel near its control handle. To drain remove the cup and pull the handle.
- To fill: caps from the water filling connection and from the tank overflow must be removed. The tank is full when water starts to flow through the overflow.

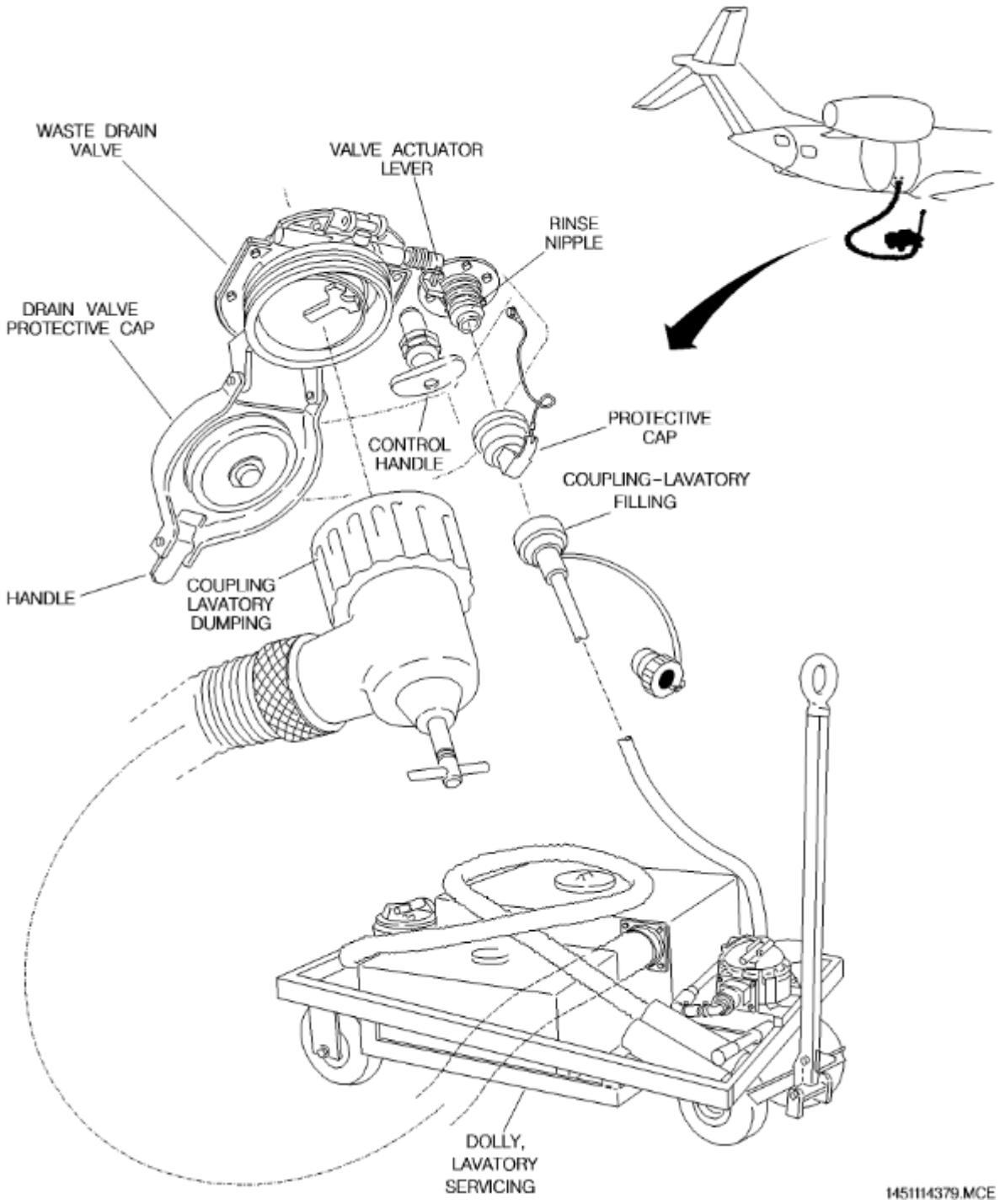


Toilet Servicing

Toilet waste disposal servicing is done through a panel at the rear right side of the fuselage. A sanitary service unit must be connected to the air service panel.

It is accomplished in the following way:

- Open waste service panel door;
- Remove protective cap of the waste drain valve;
- Connect the lavatory dumping coupling of the lavatory servicing dolly to the waste drain valve;
- Push the lever of the waste drain-valve actuator to open its internal flapper valve. Do not operate the coupling handle; its operation is not necessary;
- Pull and lock the drain control handle to open the holding tank drain valve;
- Continue the tank drainage until the waste flow stops;
- Flush with water through the rinse nipple for approximately 3 minutes;
- Release the control cable;
- Fill the waste holding tank with 15 l of water;
- Pull and lock the drain control handle to open the holding-tank drain valve;
- Release the drain control handle after all liquid is drained;
- Fill the waste holding tank with maximum **7 l** of water and add:
  - 57 g of Monogram MC-1000 germicidal deodorant, or
  - 170 g of Mirabowl ''Q'' germicidal deodorant;
- Disconnect the lavatory dumping and filling couplings;
- Close the cap and latch the handle of the waste drain valve. The flapper valve will close automatically when the cap is closed;
- Install the cap on the toilet rinse nipple.
- Close waste-service-panel door.


WASTE DRAIN VALVE
VALVE ACTUATOR LEVER
RINSE NIPPLE
DRAIN VALVE PROTECTIVE CAP
CONTROL HANDLE
PROTECTIVE CAP
COUPLING-LAVATORY FILLING
HANDLE
COUPLING LAVATORY DUMPING
DOLLY, LAVATORY SERVICING
1451114379.MCE

6.2.6.4 Loading

6.2.6.4.1 General and Special Cargo

Dangerous Goods

All Dangerous Goods except Class 7 are accepted.

6.2.6.5 Towing

The following towbars are accepted by the manufacturer. For any other towbar to be used, contact ground operations department.

ITEM NAME	MANUFACTURER	PART NUMBER	GSE NUMBER	Aircraft	USED FOR:
Towbar - Aircraft	TRONAIR	01-1201-0010	008	ALL	A/C towing, pushing and steering. Used in conjunction with towbar attachment 009
Head-Towbar attachment		01-0582-0011	009	ALL	A/C towing, pushing and steering. Used in conjunction with towbar GSE 008
Aircraft towing vehicle (towbarless towing)	LEKTRO	AP8850SDA-AL-100/50	198	ALL	A/C towing, pushing and steering
	LEKTRO	AP8750B-AL	297	ALL	
	DOUGLAS	TBL-50	397	ALL	
	TLD	TPX-100E	494	ALL	
	GOLDHOFER	AST-3L	514	ALL	A/C towing (short distances), pushing and steering Used in conjunction with towbarless adapter GSE 515
		515501	515	ALL	A/C towing (short distances), pushing and steering Used in conjunction with towing vehicle GSE 514
	LEKTRO	AP8950SDB-AL-200/150/100/50	585	ALL	A/C towing, pushing and steering
	TRONAIR	JP100SSCUS	595	ALL	
	TRONAIR	JP100SSCOS	569	ALL	
	LEKTRO	AP8925SDB-AL/HS-200/150/100/50	597	ALL	

Maximum recommended wind speeds for aircraft towing, pivoting, turning and taxi

Runway	Wind Speed
Dry runways	50 kts
Wet runways	45 kts
Snow covered runways	30 kts
Ice covered runways	10 kts

Maximum nosewheel displacement during towing is **170°** to the left or to the right.

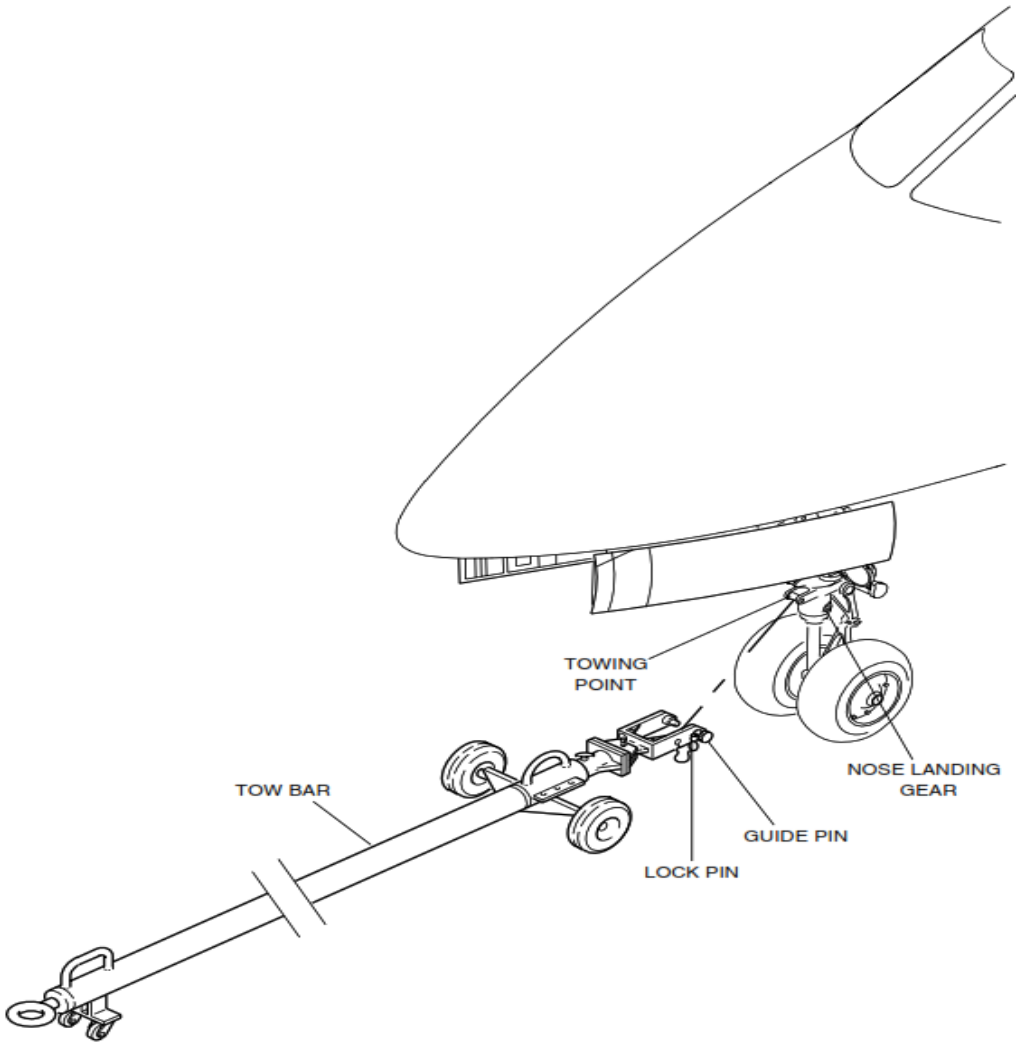
Instructions

See chapter 4.13 for detailed instructions. Below is presented brief information and pictures how the towbars are installed.

The normal procedure consists in starting engine 2 at the parking stand, then push back. It is possible to start engine 1 during the push back. According to the aircraft area, both engines could be started during or at the end of the push back.

Towbar towing

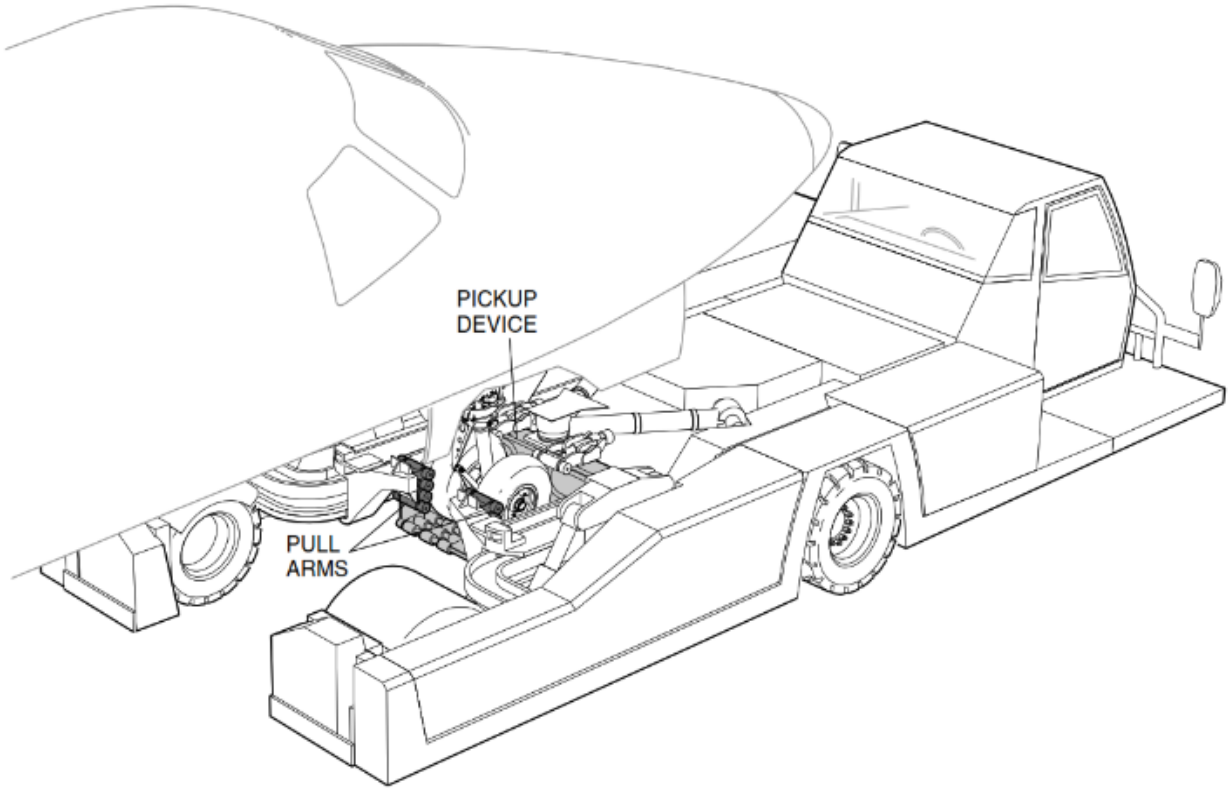
- Remove lock pin from the guide pin on towbar assemblies
- Install towbar on the nose landing gear;
- Put the guide pin into the towing point of the nose landing gear;
- Lock the guide pin into the towing point of the nose landing gear;
- Lock the guide pin with the lock pin;
- Install the other side of towbar assemblies to the tractor;
- Remove wheel chocks;
- Release the emergency/parking brake;
- Tow the A/C slowly straight ahead before turning.
- Complete the towing in a straight line for a min of 3m in order to align the steering as close as possible to 0° position;
- After finished apply the emergency/parking brake or install the wheel chocks;
- Make sure the nose wheel displacements are below the max operational limit.
- Remove towbar;
- Remove lock pin from the guide pin on the towbar assembly.
- Remove the guide pin from the towing point of the nose landing gear.



Towbarless towing

Note: *Towbarless towing is allowed on all EMB145 on Amelia Intl fleet.*

- Put the tug vehicle in the correct position near the nose wheel;
- Remove wheel chocks from main wheels;
- Connect the tug vehicle to the A/C;
- Release the emergency/parking brake;
- Tow the A/C slowly straight ahead before turning;
- Complete the towing in a straight line for a min of 3m in order to align the steering as close as possible to 0° position;
- After finished set the emergency/parking brake and, with A/C energized make sure that the brake light is ON;
- Make sure that nose wheel displacements are below the max operational limit;
- Install chocks forward and aft of the left and right main landing gearwheels;
- Remove aircraft towing vehicle.



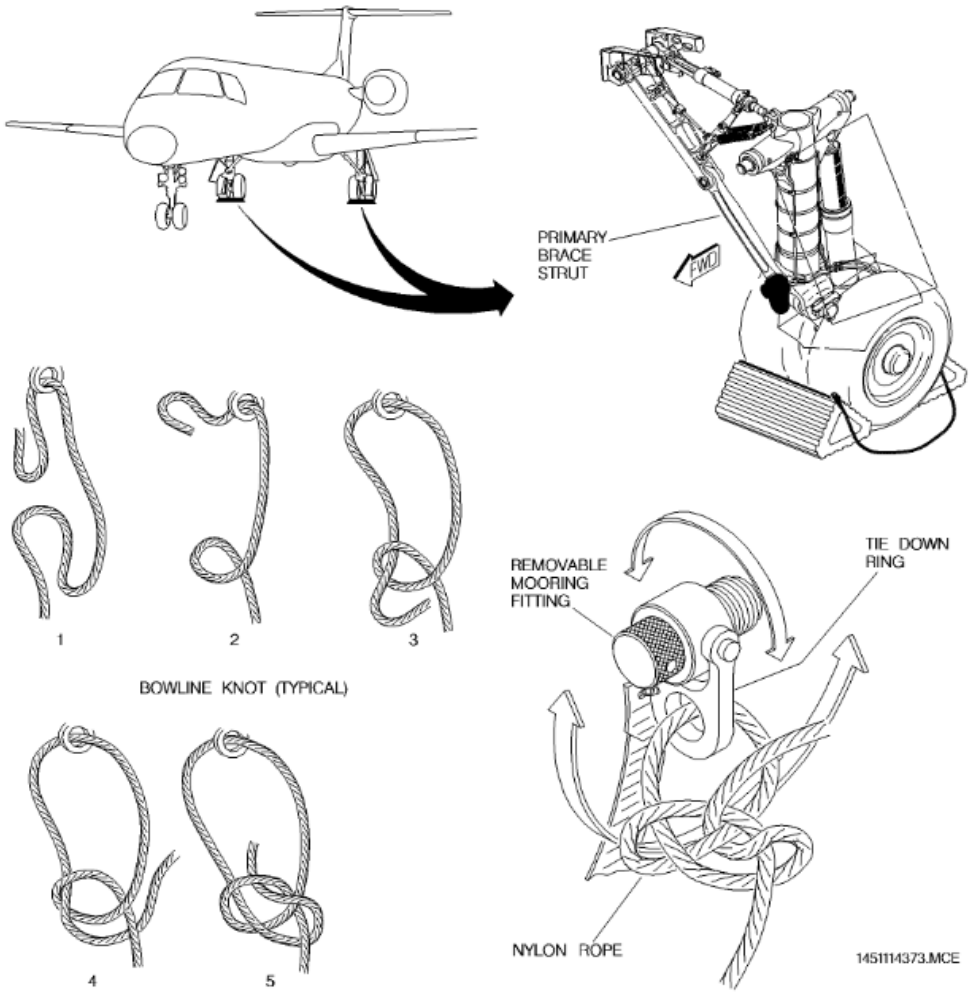
6.2.6.6 Mooring

After parking, in case of bad weather conditions mooring is necessary. Below is a table which shows the surface conditions and wind velocities at which mooring is necessary:

Surface Condition	Wind Velocity
Ice	25 kt
Snow	40 kt
Wet Concrete	55 kt
Dry Concrete	60 kt

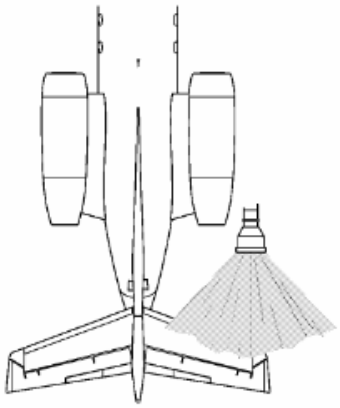
To moor the aircraft, apply the following:

- Tow the aircraft to a parking area where there are tiedown anchors available;
- Carry out normal parking procedure;
- Install the tiedown rings (two), one in each primary brace strut of the main landing gear;
- Attach a nylon rope to the tiedown ring with a bowline knot, and then attach the other end of the rope to the tiedown anchor on the ground by knotting it with a bowlike knot. See the corresponding illustration below.

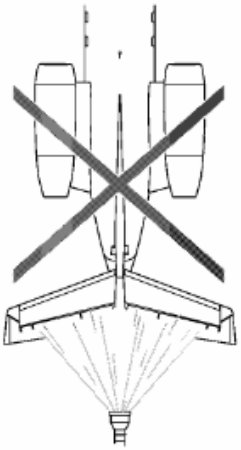


6.2.6.7 Ground Deicing Strategy

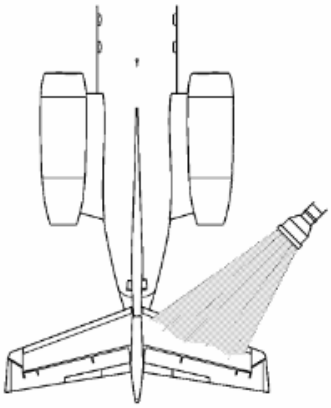
Follow the general procedures and precautions published in ch.8 when performing de-/anti-icing. The pictures below are providing guidelines about the application of the fluids on EMB135/145:



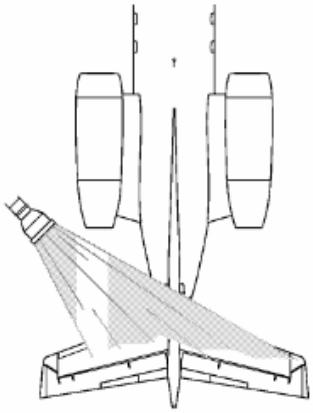
STRAIGHT APPLICATION IN RELATION TO AIRPLANE CENTERLINE



BACK SPRAYING



45° FLUID APPLICATION



CROSS SPRAYING APPLICATION

Vertical Stabilizer and Rudder: Apply the fluid at a low, side angle (see figure), to prevent fluid spills into the APU. The rudder should be in the neutral position. Application on the rudder surface can also cause the fluid to be ingested by the APU.

6.2.7 Galley

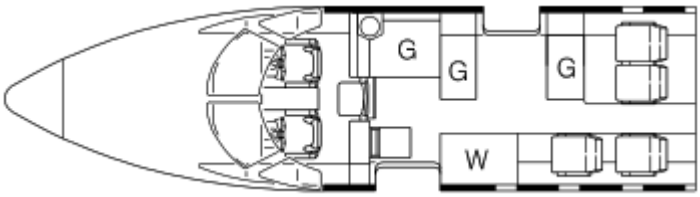
The galley on the ERJ145 is found in the FWD part of the cabin next to the service door.

6.2.7.1 Galley Layout

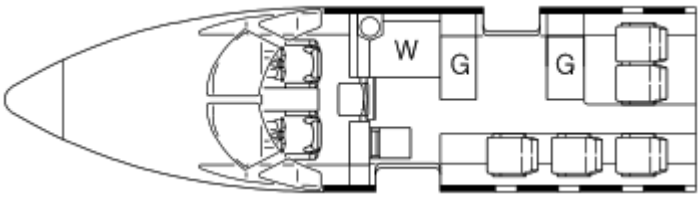
Symbols: W - wardrobe

G - Galley

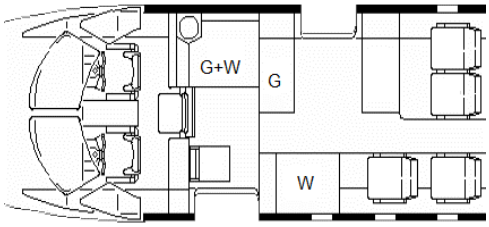
S5-ACJ, F-HRGD, F-HRAM & F-HRAV



F-HRAP, F-HESR, F-HOXY

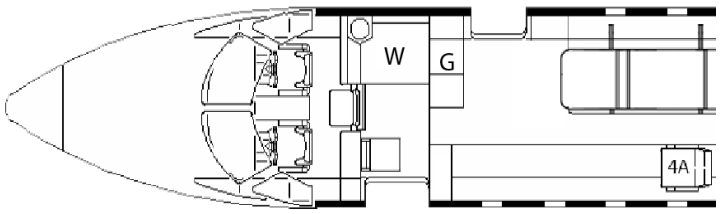


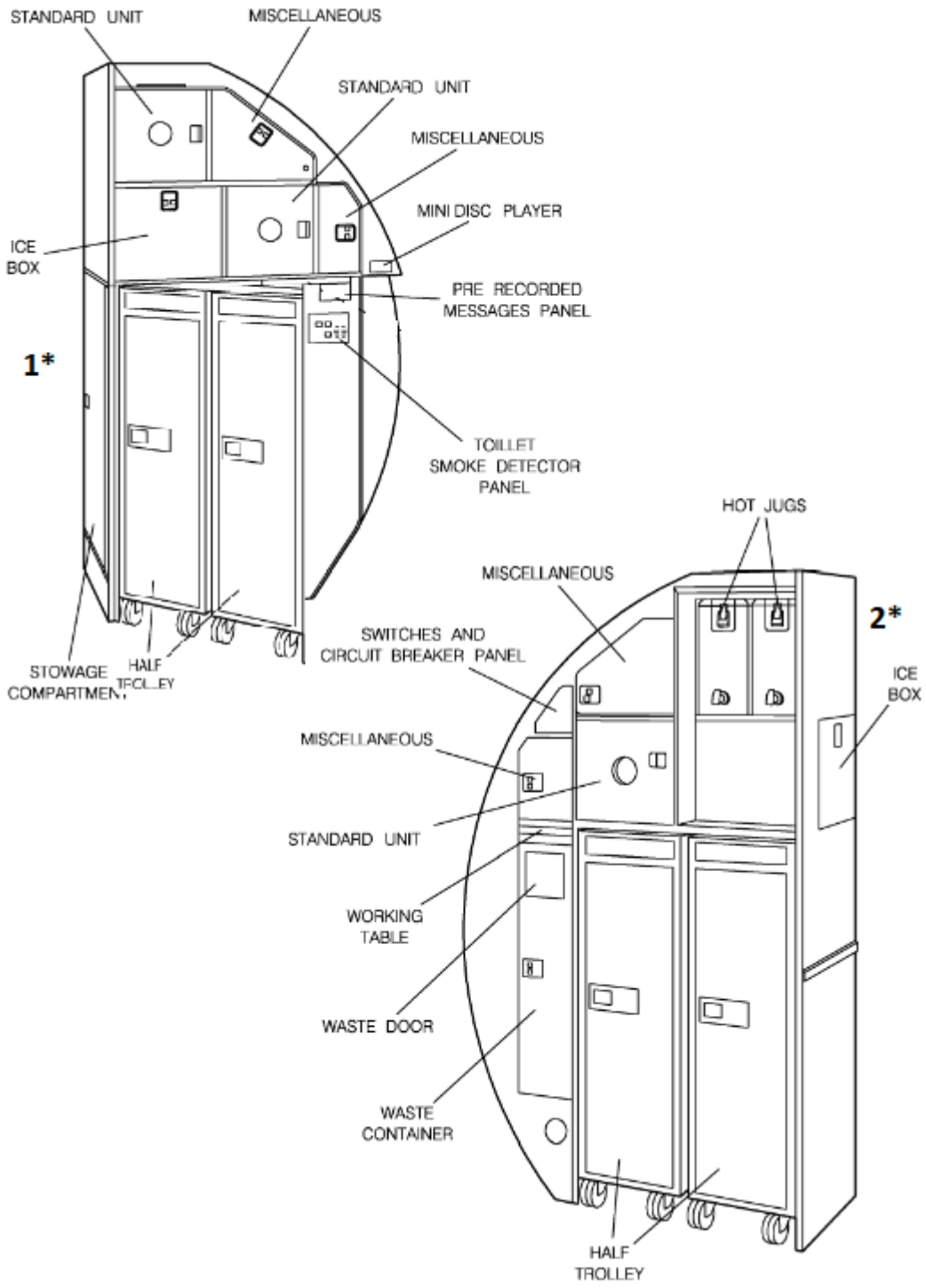
F-HYOG



STRETCHER OPTION

F-HESR





Note: *On stretcher version number 2* is not available.*

6.2.7.2 Galley Equipment Units and Dimensions

	Wardrobe		Half Trolley	Galley	Catering	Hot Jugs	Oven
	Volume	Capacity					
S5-ACJ	0.57 m^3	57 kg	06x60 kg	2.42 m^3	FWD galley:82 kg MID Galley: 113 kg AFT Galley: 149 kg	02	/
F-HRGD	0.57 m^3	57 kg	06x60 kg	2.42 m^3	FWD galley:82 kg MID Galley: 113 kg AFT Galley: 149 kg	02	/
F-HRAM	0.57 m^3	57 kg	06x60 kg	2.42 m^3	FWD galley:82 kg MID Galley: 113 kg AFT Galley: 149 kg	02	/
F-HRAV	0.57 m^3	57 kg	06x60 kg	2.42 m^3	FWD galley:82 kg MID Galley: 113 kg AFT Galley: 149 kg	02	/
F-HRAP	0.93 m^3	70 kg	04x60 kg	1.49 m^3	FWD galley:113 kg AFT Galley: 149 kg	02	/
F-HESR	0.93 m^3	70 kg	04x60 kg	1.49 m^3	FWD galley:113 kg AFT Galley: 149 kg g	02	/
F-HOXY	0.93 m^3	70 kg	04x60 kg	1.49 m^3	FWD galley:113 kg AFT Galley: 149 kg	02	/
F-HESR stretcher version	0.93 m^3	70 kg	02x60 kg	N/A	FWD galley:113 kg	00	/
F-HYOG	N/A	72 kg	04x60 kg	N/A	FWD galley:226 kg	02	03

Besides the equipment presented above, in the galley also can be found different storage compartments including one for holding ice and one waste bin with a flap cover.

6.2.8 Cleaning and Disinfection Products

The approved product to disinfect the passenger cabin of the EMB135/145 is AMS 1452 Neutral Disinfectant Concentrated Cleaner PN CALLA 1452 and the procedure below should be followed to comply with the Pax Cabin disinfection.

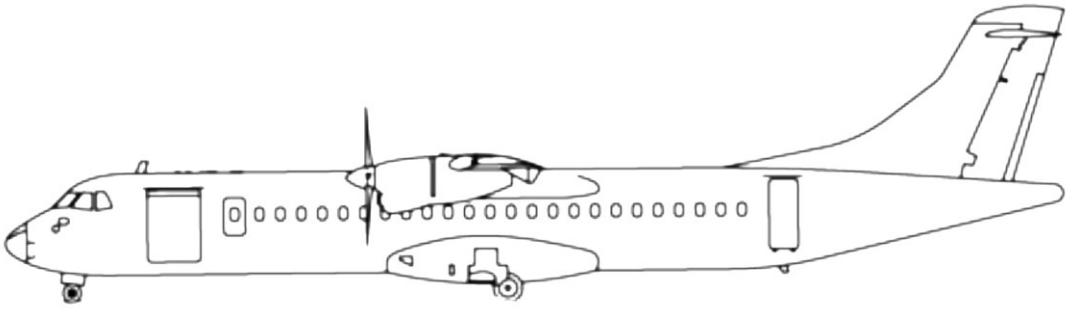
1) Prepare a solution of 120 ml (0.032 gal.) of CALLA 1452 disinfectant per 3.8 l (1 gal.) of water.
2) Apply solution with a mop, cloth, sponge, hand pump trigger sprayer, or low-pressure coarse sprayer.
   Note: *That way, all of the surfaces can be thoroughly coated with water.*
3) Allow the surfaces to remain wet for 10 minutes.

Any disinfectant other than the approved above, if in compliance with Aerospace Material Specification standards AMS1452C or AMS1453A, can be used for the disinfecting or sanitizing process of the EMBRAER commercial aircraft interior parts.

6.3 ATR72F (CARGO VERSION)

6.3.1 Basic Data

CHARACTERISTICS	
Manufacturer: G.I.E. ATR AÉROSPATIALE and AERITALIA	ATR 72-212 (noted in this manual as ATR72F)
	EI-SLP
EXTERNAL DIMENSIONS	
Length Wingspan Height	27,166 m 27,05 m 7,65 m
CABIN DIMENSIONS	
Length Width Height	18,02 m 2,56 m 1,83 m
ENGINES	
Two Pratt and Whitney engines, PW-127	
PROPELLERS	
Hamilton Sundstrand 247F-1E	
PERFORMANCES	
Maximum range	1000 Nm/ 1852 km
Cruise speed	280 Kt/ 510 km/h
Maximum altitude	25 000 ft/ 7620 m
FUEL QUANTITY	
Max useable fuel per tank	3185 l / 2500 kg
	Maximum permitted imbalance between tanks is **730 kg**.



6.3.2 Weight and Balance Data

	MRM	MTOM	MLM	MZFM
EI-SLP	22030	22000	21350	20000

The DOM is BEM plus the mass of the operational items, i.e. crew, documents etc.

The crew included in the DOM is 2 flight crew.

For the current BEM and DOM, refer to OM-B Chapter6.

All the index adjustments for passengers, cargo and fuel are presented in the tables in the subchapters below depending on the applicable aircraft.

For Balance zones refer to ch. 6.5.1.1.

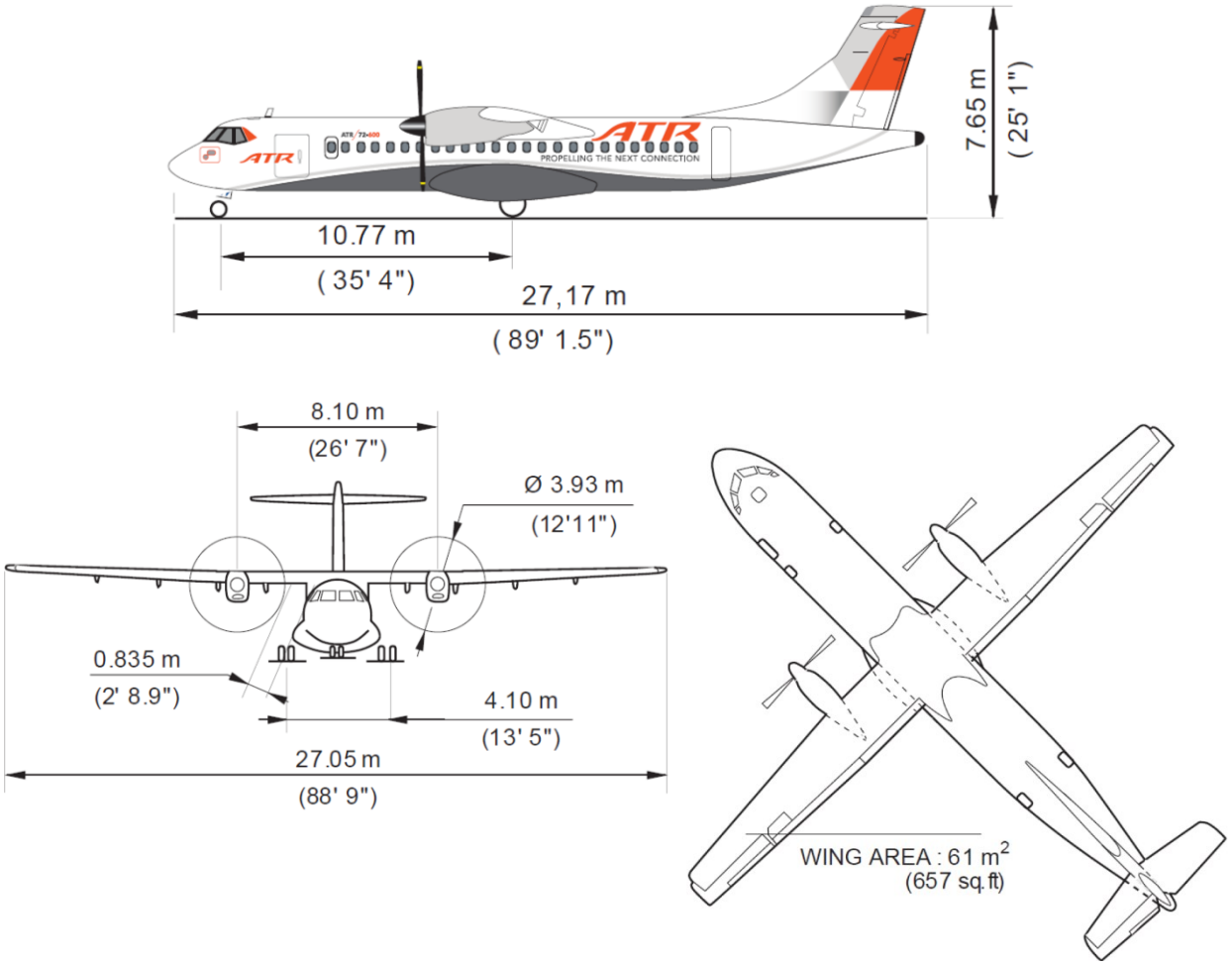
EI--SLP is very nose heavy when empty and requires a ballast pack to trim for a positioning flight. This point must be taken into account when loading cargo. The ballast shall be as follows:

- Minimum 300 kg of ballast in compartment “J” in case of 2 flight crew configuration
- Minimum 400 kg of ballast in compartment “J” in case of 3 flight crew configuration

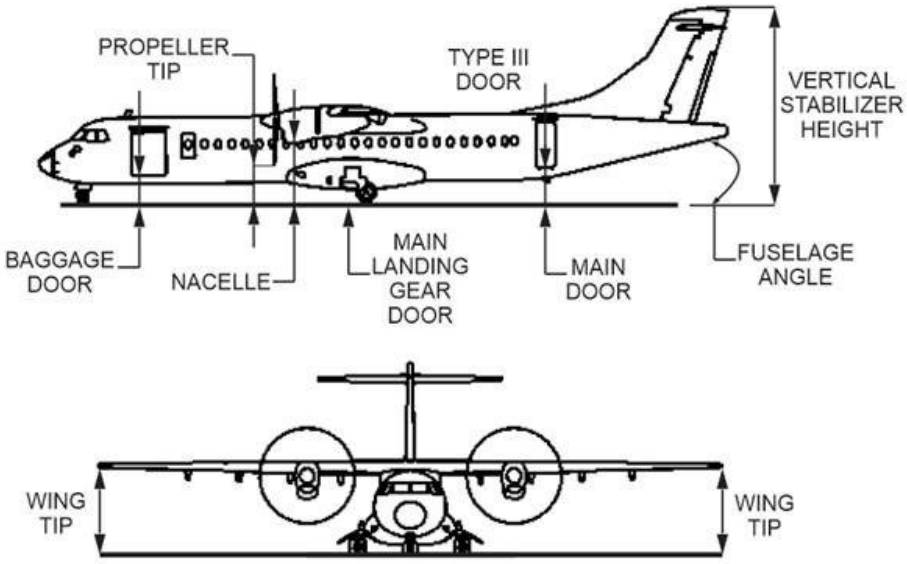
Additionally, empty aircraft does not meet the Aircraft Minimum Empty Flight Weight (limited to minimum weight of 13.000 kg) where Amelia Intl recommends up to 1.100 kg of fuel to be taken as ballast.

6.3.3 Aircraft Dimensions

6.3.3.1 External Dimensions



6.3.3.2 Ground Clearance



*Maximum Ramp Mass	C.G. 12% MAC (m)	C.G. 36% MAC (m)
Fuselage angle	-1°.183	-0°.550
Main Door (AFT LH)	1,42	1,34
Main Landing Gear Door	0,54	0,63
Nacelle	3,09	3,12
Propeller tip	1,11	1,14
Baggage Door (Cargo door)	1,1	1,18
Vertical Stabilizer Height	7,67	7,52
Wing Tip	3,72	3,71

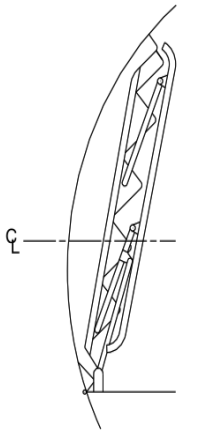
6.3.3.3 Door Dimensions and Clearances

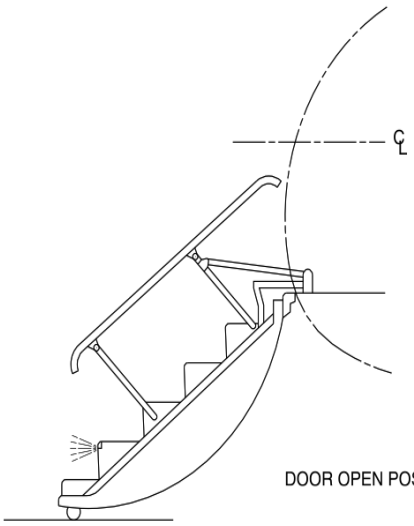
Door dimension

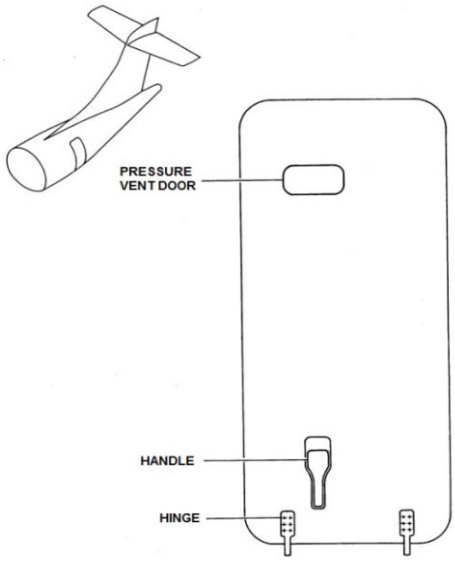
Door type	Height	Width	Distance from Sill to Ground
AFT LH Door	1.75 m	0.82 m	1.35 m
AFT RH Door	1.27 m	0.69 m	1.35 m
Flight Crew compartment emergency hatch	0.51 m	0.48 m	3.18 m
Forward Cargo Door (when opened) *	1.53 m	1.294 m	1.35 m

*Do not operate Cargo Door with a Cross wind component of more than 45 KT

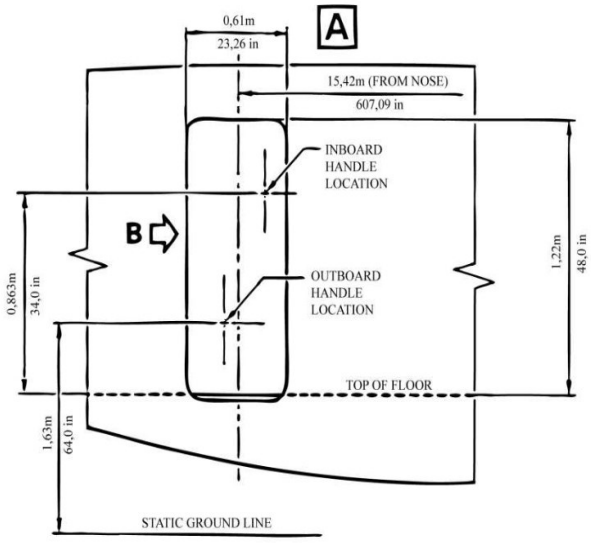
AFT LH Door

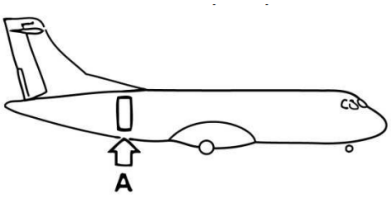

DOOR CLOSED POSITION



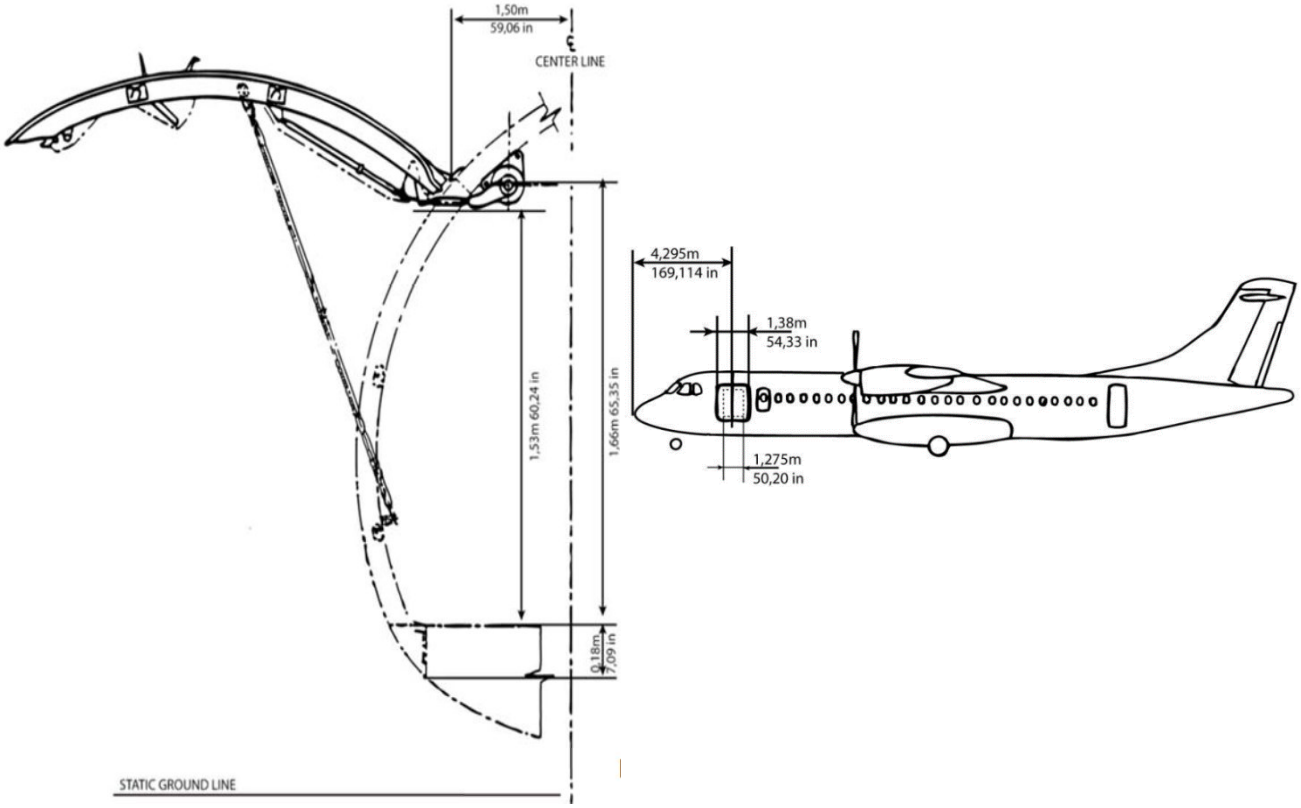


AFT RH Door

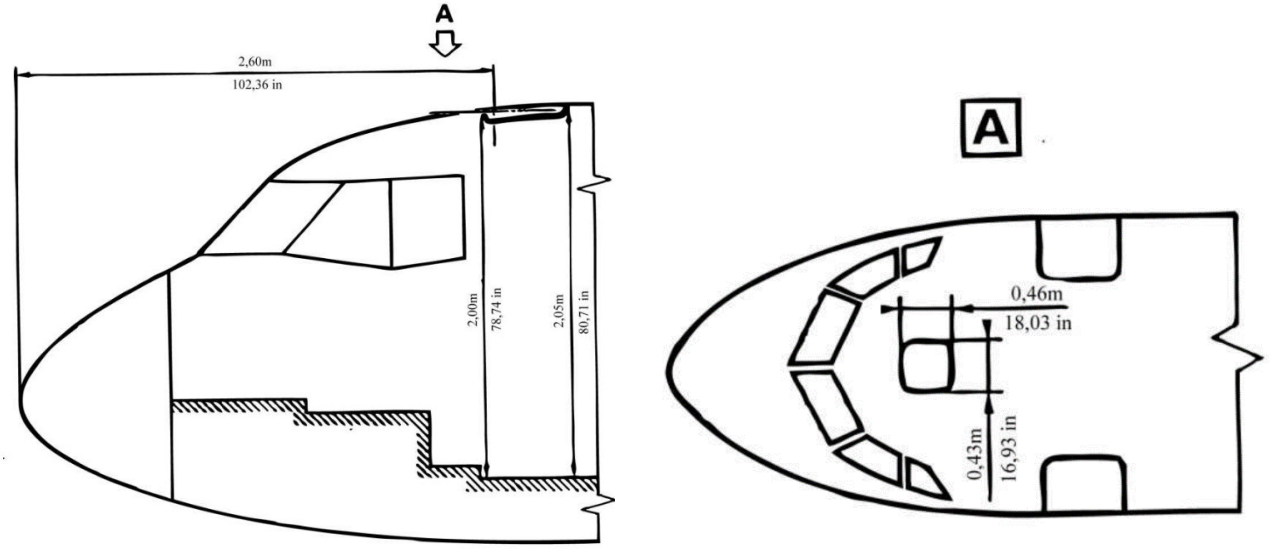




Forward Cargo Door



Flight Crew Compartment Emergency Hatch



6.3.4 Hold Characteristics and Net Installation

The cargo compartment is class E. here is no fire extinguishing or suppression system. The fire protection in this compartment relies on oxygen starvation by aircraft depressurization. There is a separate approved smoke/fire detection system. The flight crew can shut off the ventilating airflow to, or within, the compartment.

It is divided into 9 sections/compartments: A, B, C, D, E, F, G, H & J. Se details in ch. 6.3.4.2 for details.

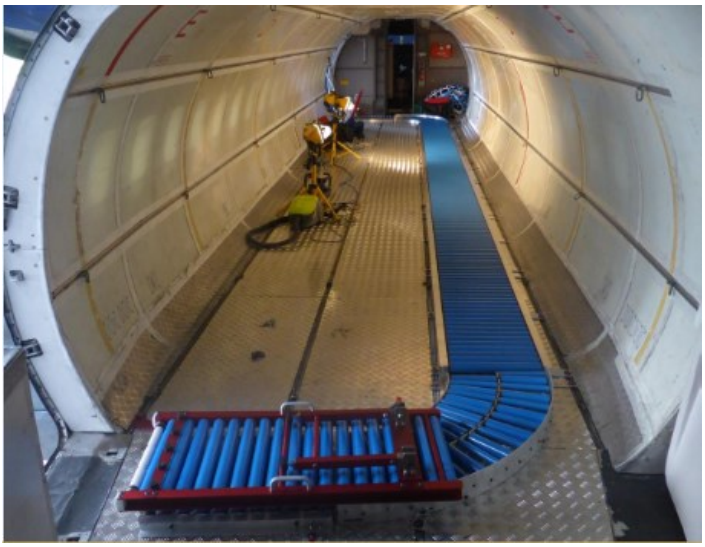
Loading/unloading can be done via:

- AFT LH and/or RH door for packages up to 20 kg.
- FWD LH cargo door for all cargo.

The hold is pressurized and has the following air-conditioning:

- Temperature: 15°C-32°C
- Heating: Yes
- Heat adjusts: Yes
- Cooling: Yes
- Ventilation: Yes

The ATR72F has installed rolling system used to move the bulk cargo throughout the cargo. Each roller unit has a strength of 28 kg when loaded equally. Meaning if you have a parcel of 40 x 40 cm it will sit on 8 roller units. This parcel could weigh up till 224 kg.



6.3.4.1 Cargo Nets

Each bay is divided by vertical cargo nets.

Wherever any cargo is carried, all bay / zone nets should be secured correctly prior to departure irrespective of whether there is cargo loaded in a particular bay to provide additional restraint in the case of a 9G event.

The vertical nets are attached to the four existing seat rails on floor, and onto six new seat tracks (3 on each side) on walls. On some fitting points in the forward or afterward zone, the nets will be attached by specific fittings.

The restraint system is made of:

- Front Net (Zone A) P/N 0110-09-A-6100EPA rated at 1000kg (2210 lb).
- Standard net (Zones B to H) P/N 0110-09-A-6101EPA rated at 1100Kg (2425 lb).
- Aft Net (Zone J) P/N 9000-01-A-6017EPA rated at 500Kg (1102 lb).

***Note**: the nets are all composed of:*

- *Strap 45 mm polyester, P/N 303007/45 rated at 3000 daN,*
- *Strap 25mm polyester, P/N 6584/25 rated at 1800 daN,*
- *Strap 18mm polyester, P/N 723/18 rated at 2000 daN,*
- *flat snap hooks P/N 40 084-14 rated at 3500 daN,*
- *Tightener 25 mm P/N 42195-10 rated at 700 daN,*
- *Quick connection double stud rings GPI P/N FS 2010 A rated at 3300 kg (7275 lb),*
- *Rachel netting P/N FX 999 (not part of the load restraint).*

Acceptance check is required before use of barrier net as follows:

If conditions exceed the following limits, the net should not be used:

1. If current date is 5 years older than the date of installation
2. Attached fitting or ring is bent, cracked, broken or missing
3. Hook keeper is inoperative or missing
4. If webbing is cut, frayed or knotted
5. Frayed, worn, loose, cut or missing sewn stitching

A non-conforming net should be rejected and replaced by a new one. No repair is acceptable.

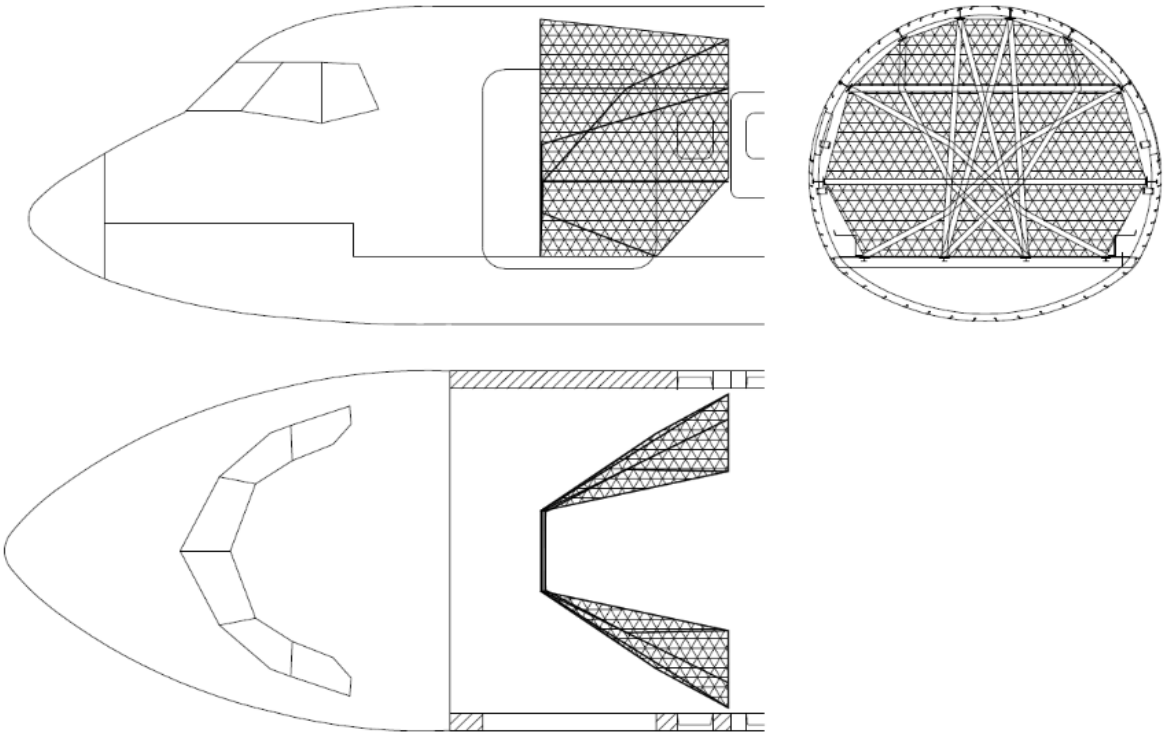
***Note:** There is no use limitation of the nets if the Rachel netting is damaged.*

6.3.4.1.1 Nets Installation

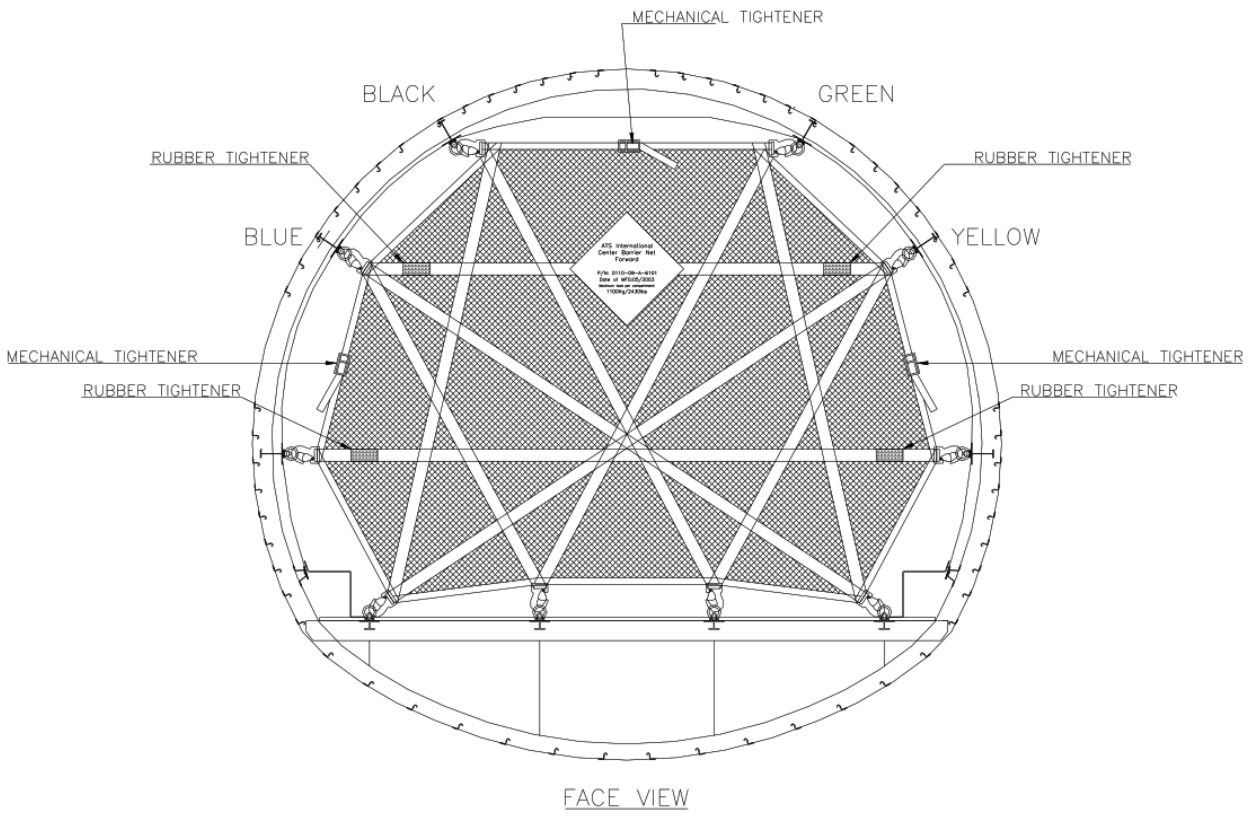
For an easy installation of the net, a colour code is used on the upper and medium hooks. This colour shall match with those painted on the rails.

- Attach the upper hooks of the net on the ring of the double stud according to the colour code.
- Attach the other hooks from the top to the bottom.
- Pull the strap through the upper tightener to minimize the gap between the upper strap and the ceiling.

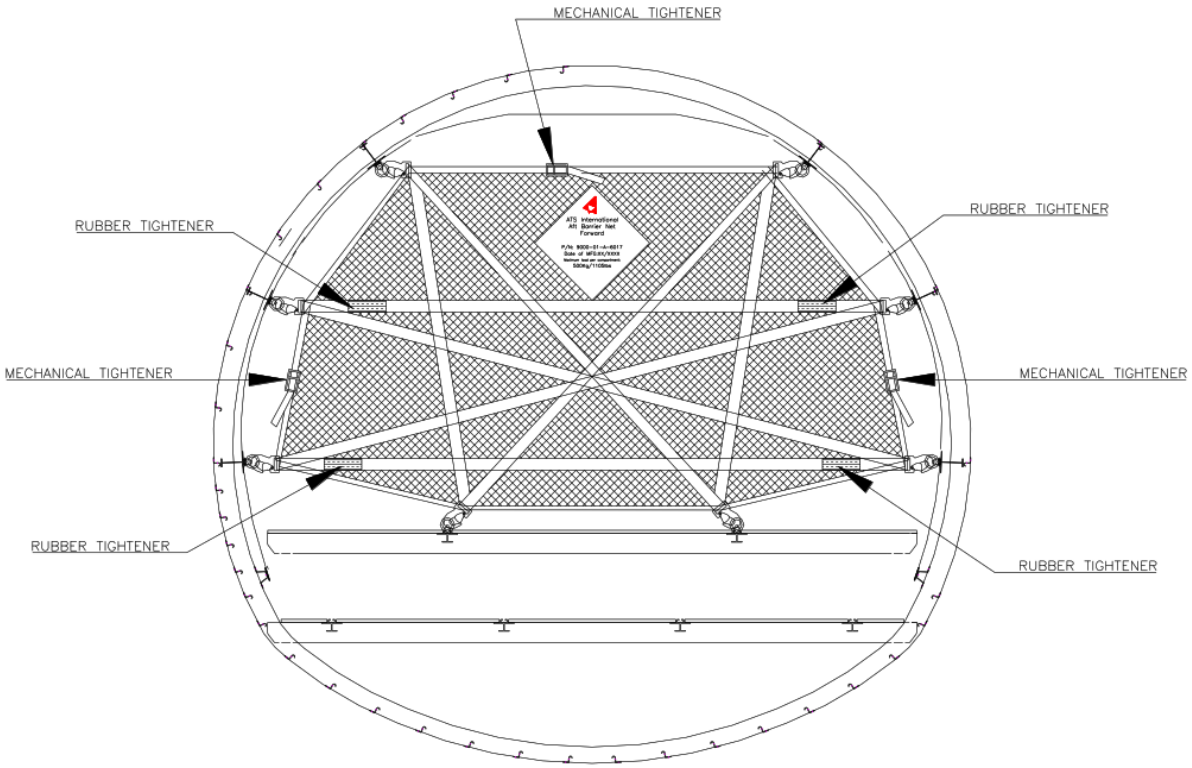
Pull the lateral strap through the lateral tighteners to minimize the gap between the surrounding strap and the lateral liners.



FRONT NET (Zone A)

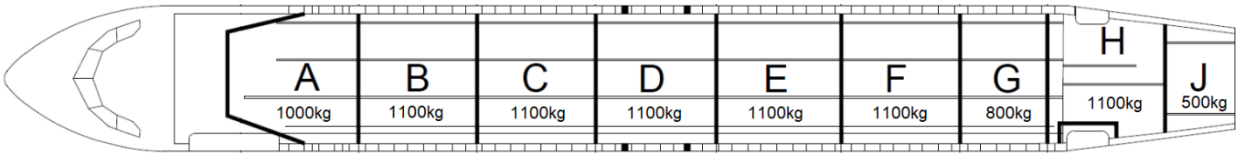


STANDARD NET (Zones B to H)



AFT NET (Zone J)

6.3.4.2 Hold Dimensions and Limits



Total max load: 7700kg

Total net usable volume: 73.3m^3

The compartments details are as follows:

	Position								
	A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**J**
Max weight, kg	1000	1100	1100	1100	1100	1100	800	1100	500
Length, cm	2132	2151	2151	2187	2267	2151	1584	2134	1259
Floor area, m^2	4.2	4.6	4.6	4.8	4.9	4.6	3.3	3.4	1.4
Net usable volume, m^3	8	9.5	9.5	9.5	10	9.5	7	7.3	3
Max floor load, kg/m^2	400								

Note: *If no vertical net used, the freight must be restrained to the seat tracks by straps and tie down attachment fittings required by NAS 3610 specification conformity. Those tie-downs will be capable to bear at least the track allowable* loads.

Load the compartment within the compartment markings on the sidewalls.

6.3.4.2.1 Cargo Compartment Floor

The following imitations of the cargo compartment floor are applicable:

1) Structure: cargo compartment floor structure is designed to support the allowable load per unit length of **510 kg/m** (28.55 lb/in). **.**
2) Floor Panels: All floor panels are designed to support a load distribution of **400 kg/m²** (400 kg/sq.m, 0.569 psi or 882 Lbs) with no deformation, moreover they can bear a local indentation load of **1.27 kg/mm²** (1.27 kg/sq.mm or 1815 psi) without any panel crushing.

If spreaders are to be used the table below that defines define whether spreaders are required for a range of packages sizes can be used by ramp staff to avoid having to make repeated calculations.

Max weight without spreaders		PACKAGE CONTACT LENGTH (cm)											
WEIGHT (kg)		20	40	60	80	100	120	140	160	170	180	185	190
PACKAGE CONTACT WIDTH (cm)	5	4	8	12	16	20	24	28	32	34	36	37	38
	10	8	16	24	32	40	48	56	64	68	72	74	
	15	12	24	36	48	60	72	84	96	102	108	111	
	20	16	32	48	64	80	96	112	128	136	144	148	
	25	20	40	60	80	100	120	140	160	170	180		
	30	24	48	72	96	120	144	168	192	204	216		
	35	28	56	84	112	140	168	196	224	238	252		
	40	32	64	96	128	160	192	224	256	272	288		
	45	36	72	108	144	180	216	252	288	306			
	50	40	80	120	160	200	240	280	320	340			
	55	44	88	132	176	220	364	308	352	374			
	60	48	96	144	192	240	288	336	384	408			
	65	52	104	156	208	260	312	364	416	442			
	70	56	112	168	224	280	336	392	448	476			
	80	64	128	192	256	320	384						
	90	72	144	216	288	360	432						
	100	80	160	240	320	400	480						
	110	88	176	264	352	440	528						
	120	96	192	288	384	480	576						
	A	-	-	-	-	-	-	-	-	-	-	-	A
		102	204	306	408	510	612	714	816	867	910	943	969

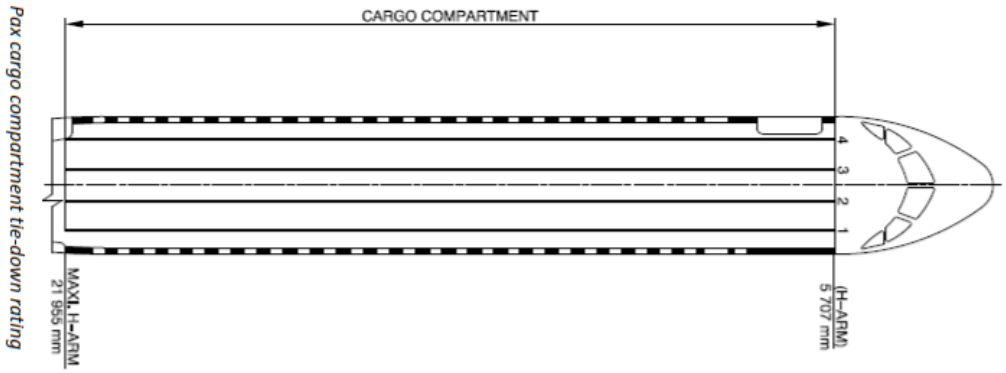
Above A, spreading is controlled by areal weight limitation of 400kg/m^2.

Below A, spreading is controlled by running load limitation of 510kg/m^2.

6.3.4.2.2 Securing of Load

Details on securing of load are described in ch. 4.10.8.

Below is presented the pax cargo compartment tie-down rating.



The loads are for individual fittings and apply in any direction. The minimum spacing requirement must be maintained even though fittings can be locked into tracks at 25.4 mm / 1 in intervals.

	TIE-DOWN FITTING RATING		
Tie-down fittings minimm spacing - in (mm)	10 (254)	20 (508)	40 (1016)
Tie-down device rating - lbs (kg)	3306 (1500)	4409 (2000)	6613 (3000)

Tie-Down fitting rating for 4 seat tracks loaded

Determination of the Required Number of Tie-Down Devices

Even though the calculation of lashings required is already explained in ch. 4.10.8.2.3, below are presented more detailed tables to be used for determination of required number of lashes on the ATR72-212F.

To restrain the cargo properly, the required number of tie-down devices may be calculated by using the following method (data are given for three fittings pitch: 254 mm / 10 in, 508 mm / 20 in and 1 016 mm / 40 in):

- The tie-down devices must be installed at equal angles and planned before installing.
- Tables 1, 2, 3, allow calculating the restraint for FWD–AFT and UP-SIDE inertial loads directions.
- Table 1 gives the number of devices required on the floor, to restrain FWD and AFT load per different package weight, when tie-down devices are installed in a plane parallel to seat tracks, with load direction 30° and 60° from horizontal, per three fittings pitch (254 mm / 10 in, 508 mm / 20 in and 1 016 mm / 40 in).
- When the tie-down devices are positioned in a plane 45° from track, for 30° and 60° from horizontal and per three fittings pitch (254 mm / 10 in, 508 mm / 20 in and 1 016 mm / 40 in), table 2 gives the required tie-down devices on the floor to restrain FWD and AFT load for different package weight.
- Table 3 gives the number of devices required on the floor, to restrain vertical UP an SIDE load, per different package weight, when tie-down devices are installed in a plane perpendicular to a seat track with load direction 90°, 30°, 60° from horizontal, at three fittings pitch (254 mm / 10 in, 508 mm / 20 in and 1 016 mm / 40 in).

Tie-down device angle		30° from horizontal			60° from horizontal		
Minimum spacing - in (mm)		10(254)	20 (508)	40 (1016)	10(254)	20 (508)	40 (1016)
Package weight lbs (kg)	Load restrain direction	Tie-down fittings					
UP -TO							
220 (100)	FWD	2	2	2	6	2	2
	AFT	2	2	2	2	2	2
440 (200)	FWD	4	4	4	8	4	4
	AFT	2	2	2	2	2	2
660 (300)	FWD	6	6	6	16	8	4
	AFT	2	2	2	4	2	2
880 (400)	FWD	8	6	6	22	12	6
	AFT	2	2	2	4	2	2
1100 (500)	FWD	10	8	8	26	14	8
	AFT	2	2	2	6	4	2
1430 (650)	FWD	12	10	10	34	20	10
	AFT	2	2	2	6	4	2

Table 1: Tie-down fittings requested for devices in plane parallel to tracks

Note: *The required tie-down devices are half the tie-down fittings of the above table, because the device is passing above the package.*

Tie-down device angle		30° from horizontal			60° from horizontal		
Minimum spacing - in (mm)		10 (254)	20 (508)	40 (1016)	10 (254)	20 (508)	40 (1016)
Package weight lbs (kg)	Load restrain direction	Tie-down fittings					
UP -TO							
220 (100)	FWD	4	4	4	8	4	4
	AFT	2	2	2	2	2	2
440 (200)	FWD	6	6	6	16	8	6
	AFT	2	2	2	4	2	2
660 (300)	FWD	10	10	10	22	12	10
	AFT	2	2	2	4	2	2
880 (400)	FWD	12	12	12	30	16	12
	AFT	2	2	2	6	4	2
1100 (500)	FWD	16	16	16	38	20	16
	AFT	4	2	4	8	4	4
1430 (650)	FWD	20	20	20	48	24	20
	AFT	4	4	4	8	4	4

Table 2: Tie-down fittings requested for devices in plane 45° to tracks

Note: *The required tie-down devices are half the tie-down fittings of the above table, because the device is passing above the package.*

Tie-down device angle			90° from horizontal			30° from horizontal			60° from horizontal		
Minimum spacing in (mm)			10 (254)	20 (508)	40 (1016)	10 (254)	20 (508)	40 (1016)	10 (254)	20 (508)	40 (1016)
Package weight lbs (kg)	Load restrain direction		Tie-down fittings								
UP-TO											
220 (100)	Vertical	UP	2	2	2	2	2	2	2	2	2
	Lateral	LH	-	-	-	2	2	2	2	2	2
	Lateral	RH	-	-	-	2	2	2	2	2	2
440 (200)	Vertical	UP	2	2	2	4	4	4	2	2	2
	Lateral	LH	-	-	-	2	2	2	2	2	2
	Lateral	RH	-	-	-	2	2	2	2	2	2
660 (300)	Vertical	UP	2	2	2	4	4	4	2	2	2
	Lateral	LH	-	-	-	2	2	2	2	2	2
	Lateral	RH	-	-	-	2	2	2	4	2	2
880 (400)	Vertical	UP	4	2	2	6	6	6	4	2	2
	Lateral	LH	-	-	-	2	2	2	4	2	2
	Lateral	RH	-	-	-	2	2	2	4	2	2
1100 (500)	Vertical	UP	4	2	2	6	6	6	4	2	2
	Lateral	LH	-	-	-	4	4	4	6	4	4
	Lateral	RH	-	-	-	4	4	4	6	4	4
1430 (650)	Vertical	UP	6	4	2	8	8	8	8	4	4
	Lateral	LH	-	-	-	4	4	4	6	4	4
	Lateral	RH	-	-	-	4	4	4	6	4	4

Table 3: Tie-down fittings requested for devices in plane perpendicular to tracks

***Note**: The required tie-down devices are half the tie-down fittings of the above table, because the device is passing above the package.*

Restraint example

A package 1320 mm / 51,9 in long by 600 mm / 23,6 in wide by 600 mm / 23,6 in high, weighing 250 kg / 551 lb, is placed with FWD edge at STA 9020 and AFT edge at STA 10340 according to the pertaining allowable unit weight and balance limits (running load 510 kg/m, areal weight 400 kg/m²).

The package must be restrained against any movement due to FWD-AFT and UP-SIDE inertia loads. Proper cargo restraint is achieved by using tie-down devices and track fittings obtained in table 1 and table 3 for a package at maximum weight Up-To 300 kg (661 lb).

In fact, planning tie-down devices at equal angles 30° from horizontal and minimum pitch of fittings 254 mm:

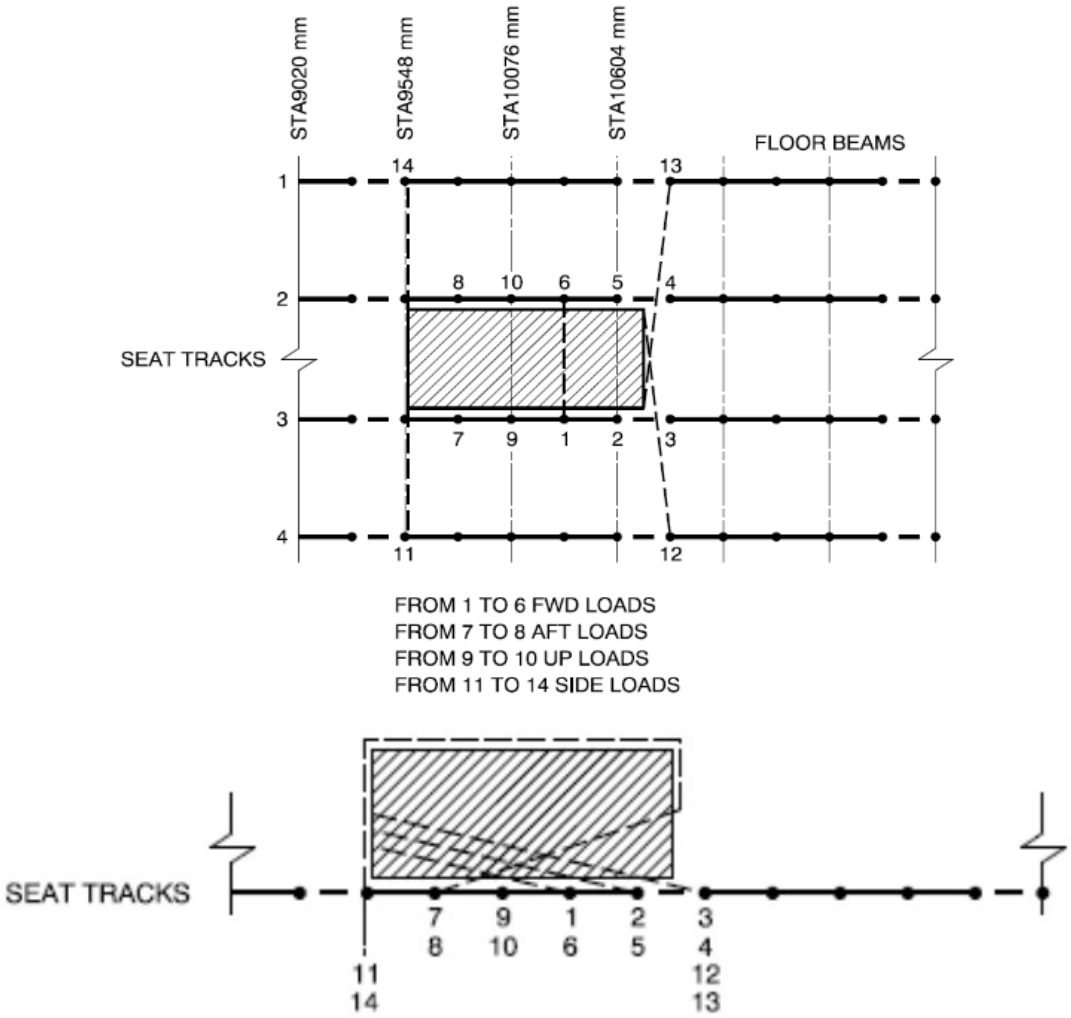
From Table 1 it is obtained:

- 6 tie-down fittings (that is three tie-down device positioned in plane parallel to tracks passing over the FWD edge) to restrain the FWD inertia forces.
- Tie-down fittings (that is one tie-down device) to restrain the AFT inertia forces.

From Table 3 it is obtained:

- Tie-down fittings (that is one tie-down device positioned in plane perpendicular to tracks passing above the package) to restrain the vertical up inertia forces.
- 2 + 2 tie-down fittings (that is two tie-down device positioned in plane perpendicular to tracks passing above the package) to restrain the LH and RH side inertia forces.

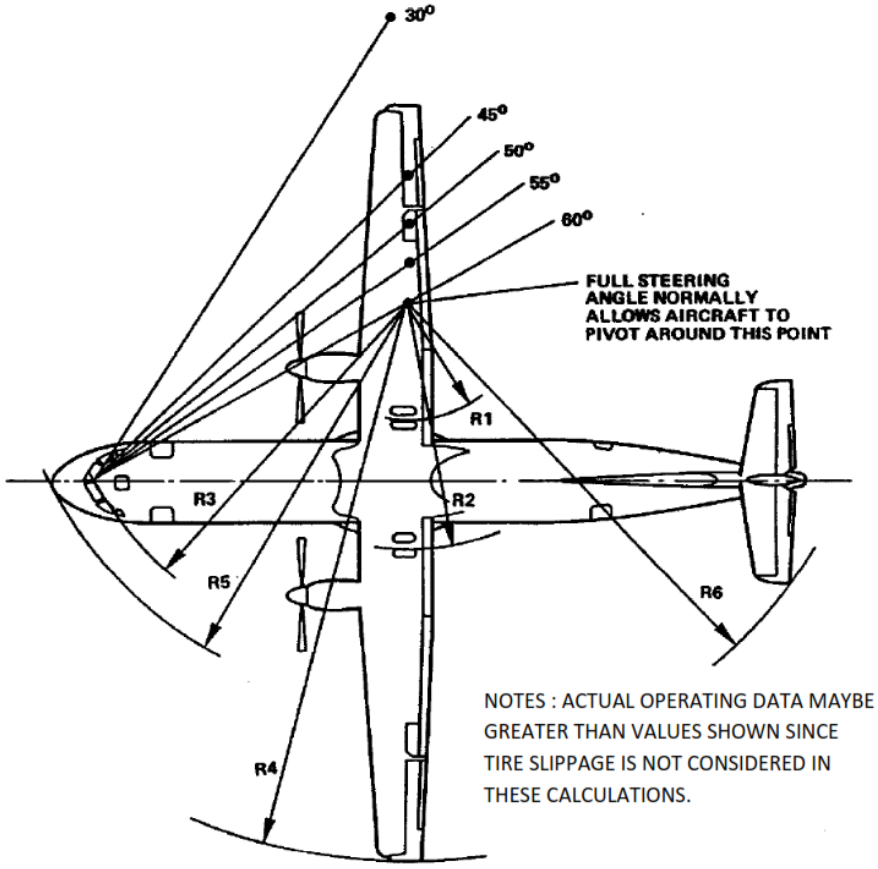
Fourteen tie-down fittings and seven tie-down devices, both rated at 1 500 kg / 3303 lb, were found necessary to completely restrain the 250 kg / 551 lb package, and they were arranged as illustrated below:



Note: *Additional tie-down and devices 1.6 for vertical-up loads to avoid any asymmetry are suggested, and a securing rope, for FWD -AFT devices above the package.*

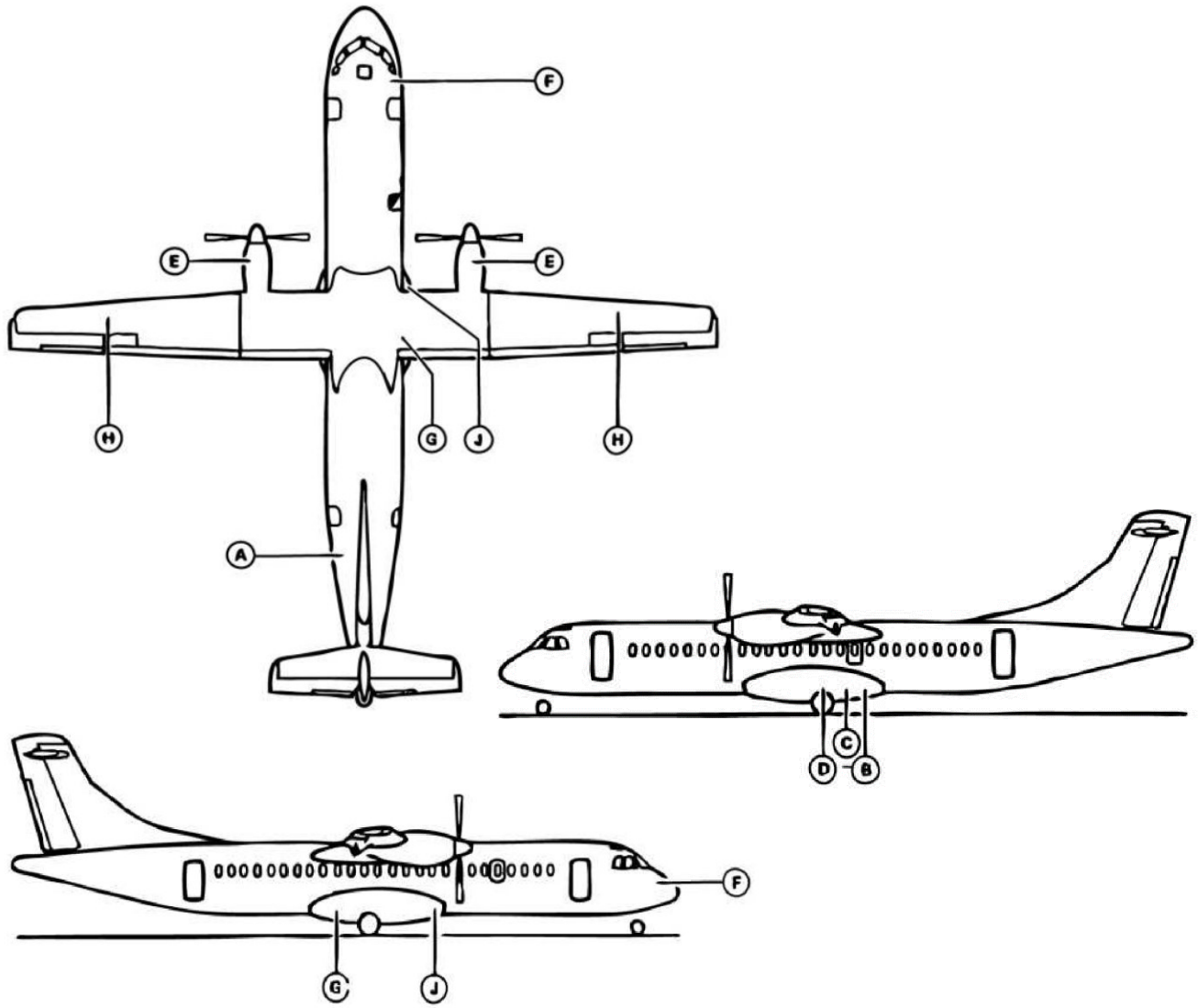
6.3.5 Servicing Points, Turn Radius and Position of Equipment

6.3.5.1 Turn Radius



STEERING ANGLE	R1 INNER GEAR		R2 OUTER GEAR		R3 NOSE GEAR		R4 WING TIP		R5 NOSE		R6 TAIL	
	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m
30°	54	16.60	67	20.70	70	21.53	105	32.18	73	22.45	86	26.27
45°	28	8.72	42	12.82	49	15.23	79	24.30	54	16.50	65	20.02
50°	22	6.98	36	11.08	46	14.05	74	22.56	50	15.42	61	18.80
55°	18	5.49	31	9.59	43	13.14	69	21.07	47	14.60	58	17.83
60°	13	4.16	27	8.26	40	12.43	64	19.74	45	13.96	55	17.03

6.3.5.2 Servicing Points

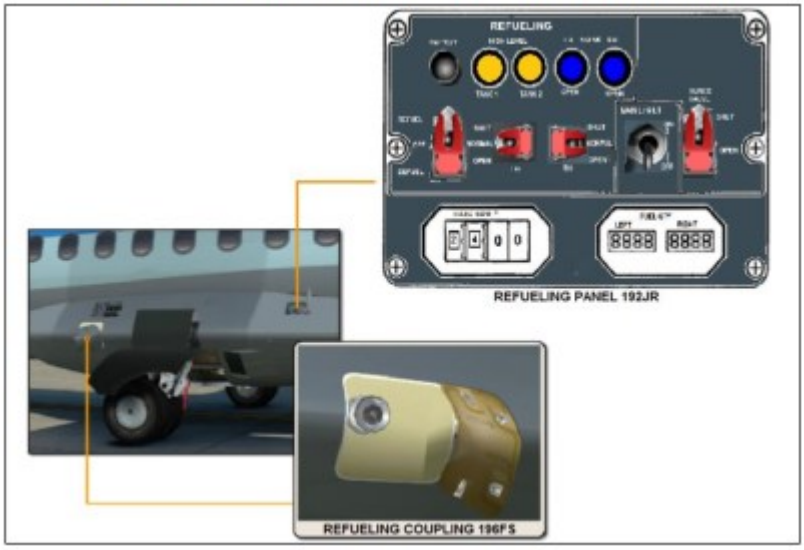


	CONNECTION		CONNECTION
A	LAVATORY SERVICING	E	ENGINE OIL FILLING
B	ACCUMULATOR AIR CHARGING	F	ELECRICAL GROUND
C	HYDRAULIC POWER GROUND	G	PRESSURE FUELING
D	HYDRAULIC TANK FILLING	H	GRAVITY FUELING
J	PRE-CONDITIONING		

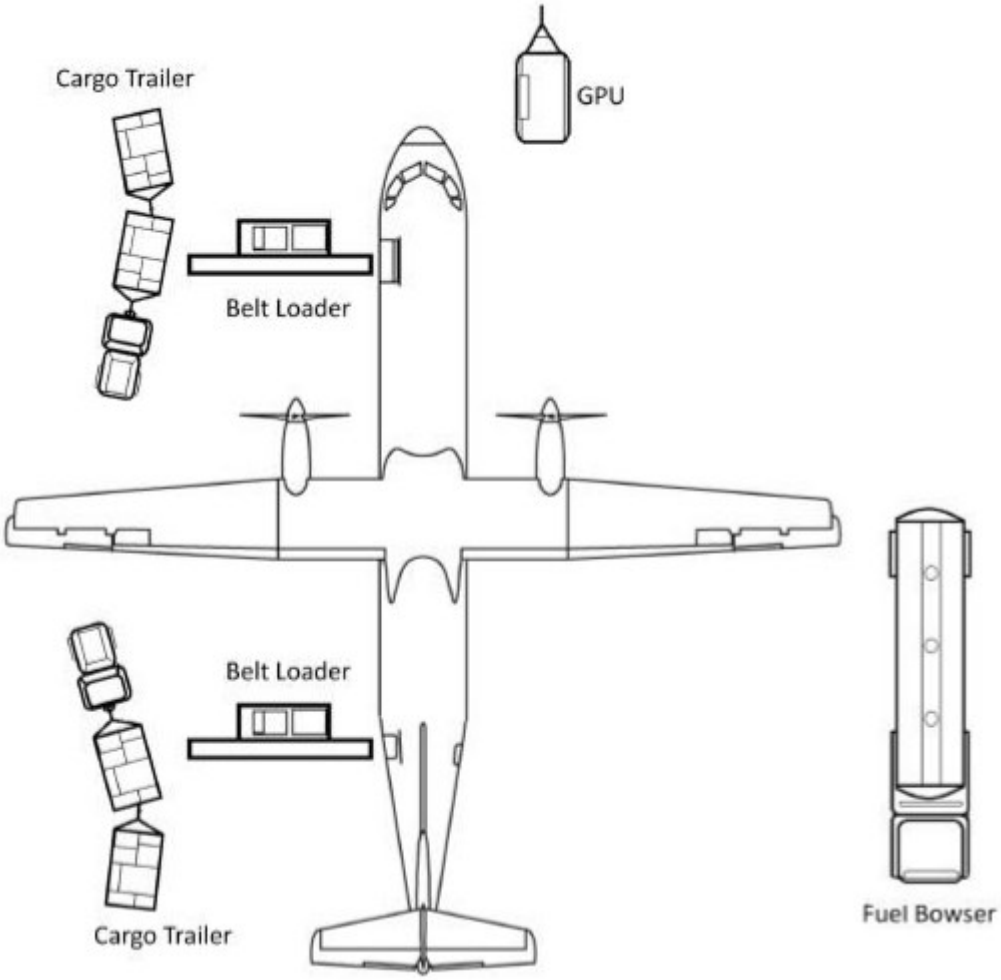
Electrical Power	Use 28V DC GPU or 115V AC GPU
Engine Start	Use 28V DC GPU

6.3.5.2.1 Static Grounding and Refuelling Location Panels

Figure 6-27 Equipotential (grounding connection) bonding



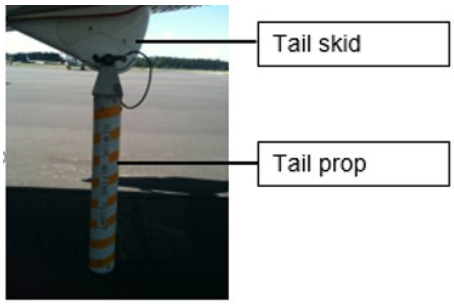
6.3.6 Ramp Handling



The standard minimum turnaround is: 120 minutes.

Important: During ground handling activities the tail prop (the anti-tip up device) must be installed.

The tail prop is installed below the tail by inserting its metal pin into the aircraft tail skid connector.



The installation and removal of the tail prop is under the responsibility of the flight crew

If you notice that the tail prop is still installed after all the doors have been closed and the aircraft is ready for departure, inform the Commander immediately.

6.3.6.1 Operating of Doors

Unless properly trained, no one else but the active crew on board is allowed to open any door. If not properly trained ask the flight crew to open the doors.

In case a proper training has been performed, follow the steps presented in the subchapters below.

6.3.6.1.1 Forward Cargo Door

The aircrafts cargo door is located on the FWD LH side of the aircraft. It can be operated electrically or manually in case of the electrical power not being supplied.

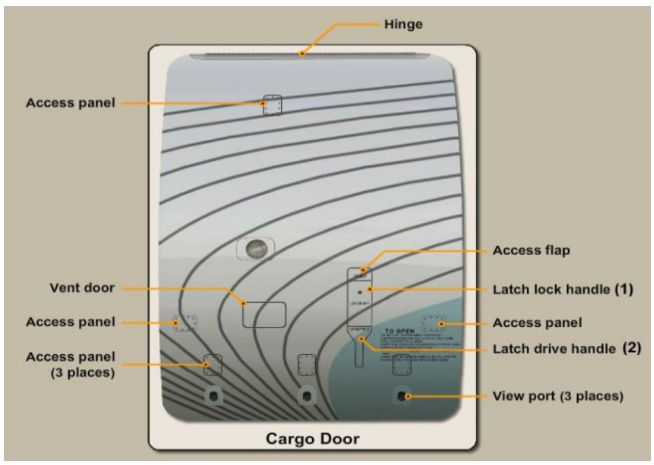
The cargo door is operated externally from a panel located outside.

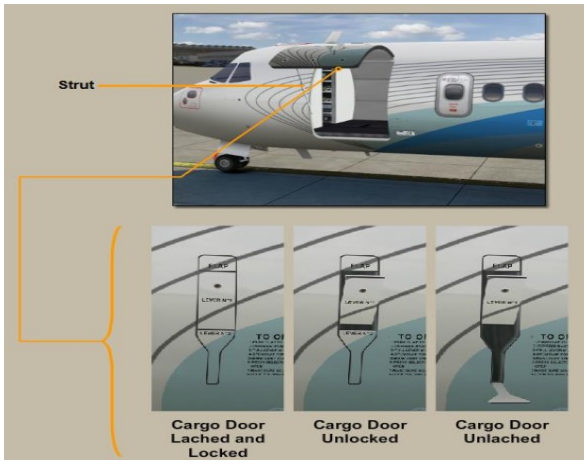
CAUTION:

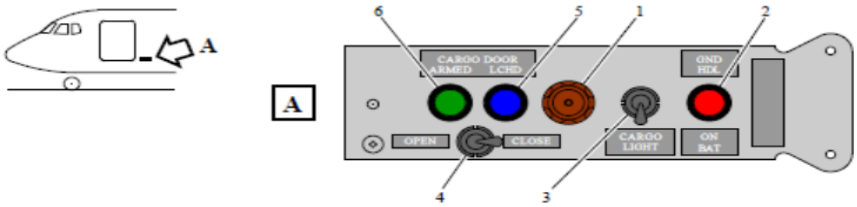
- Before opening the cargo door, ensure that the maximum wind limit is not exceeded (45 kt)
- The cargo door hinges upwards. When opening or closing cargo doors, the lower edge of the door will swing down before moving upward.
- If the cargo door does not open, do not use excessive force, tools or GSE to push or pull on the door to open it.
- The holding strut is not a handle to ease the ground crew access into the cargo hold. Its purpose is to safely secure the cargo door. Any sustained actions on the strut may lead to damage of the strut and the actuator.

To open the FWD cargo door perform the following steps (refer to the picture on the next page):

1. Push ACCESS FLAP to grasp handle of lever (1).
2. Depress handle and pull lever (1) fully down.
3. Pull lever (2) fully down.
4. Open the flap 221AL for access to cargo door control panel 5001VU and verify that:
5. Handles are fully down.
6. Blue light is OFF.
7. Green light is ON.
8. Set the actuator selector switch (4) to open position until the door is completely open.
9. Release the actuator selector switch (4). The switch will come back to its neutral position.
10. Strike softly on the right side of the folding strut.
11. Lock hold open strut by locking collar.
12. If the strut is locked do not set the actuator selector switch (4) to close position.
13. Close flap 221AL on cargo door control panel 5001VU.







1. PANEL COVER SWITCH
2. GROUND HANDLING BUS ON BATTERY
3. CARGO BAY LIGHT SWITCH
4. ACTUATOR SELECTOR SWITCH
5. CARGO DOOR LATCHED - LIGHT ON (BLUE)
6. CARGO DOOR UNLATCHED AND UNLOCKED - LIGHT ON (GREEN)

To close the FWD cargo door, perform the following steps:

1. Unlock the hold open strut by locking collar.
2. Strike softly on the left side of the left side of the folding strut.
3. Open the flap 221AL for access to cargo door control panel 5001VU and verify that:
4. Green light is ON.
5. Blue light is OFF.
6. Set actuator selector switch (4) to close position until the door is completely closed.
7. Fold back the lever (2) in its recess.
8. Verify on the control panel that the green light turns OFF.
9. Fold back lever (1) in its recess.
10. Verify on the control panel that the blue light turns ON.
11. Make sure that actuator selector switch (4) returns to neutral position.
12. Make sure that lever (1) is fully in its place, flush with the door skin.
13. Make sure that the spring-loaded catch located inside the flap is depressed and fully pushed in the lever (1). The handle should reach the travel end.
14. Make sure that the light 'LCHD' is on.
15. Verify that the lever (1) is positively engaged and locked by pulling it outwards, applying a small force, parallel to the spring-loaded catch.
16. Close flap 221AL on cargo door control panel 5001VU.
17. Door closing and locking must be verified from outside through the three view ports. The ground crew must check that the indication on latch lock pins appears.

Note: *The cargo door holding strut is not a handle and shall not be used to assist accessing the cargo holds. The strut ensures the door safely remains open. Any additional loads placed on the strut may damage the actuator.*

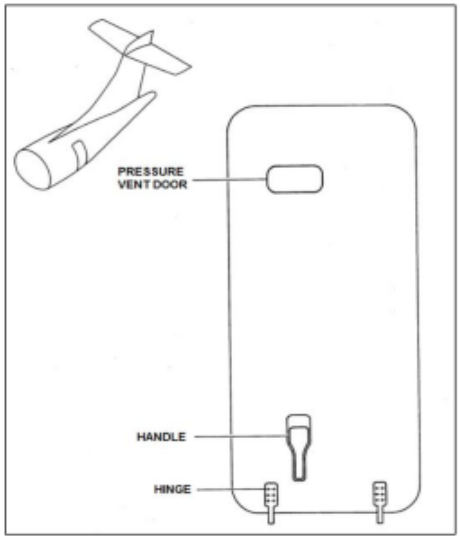
6.3.6.1.2 LH AFT Door

Note: *The ground staff should be sure that the cabin has been depressurized before opening the doors.*

Opening the door

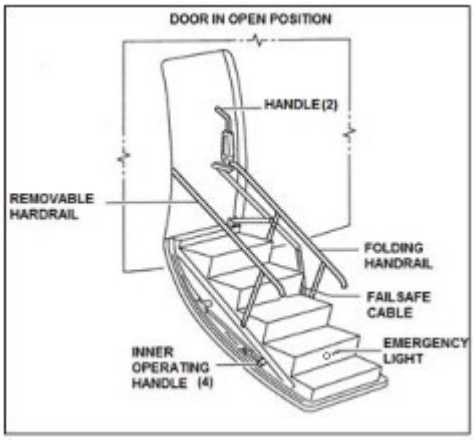
To open the door **from outside:**

1. Pull out and downwards the outer operating handle to the fully extended position.
2. Pull the door outwards by the extended operating handle to start the door opening movement.
3. Release the handle and manually assist door lowering until ground support roller contacts the ground.



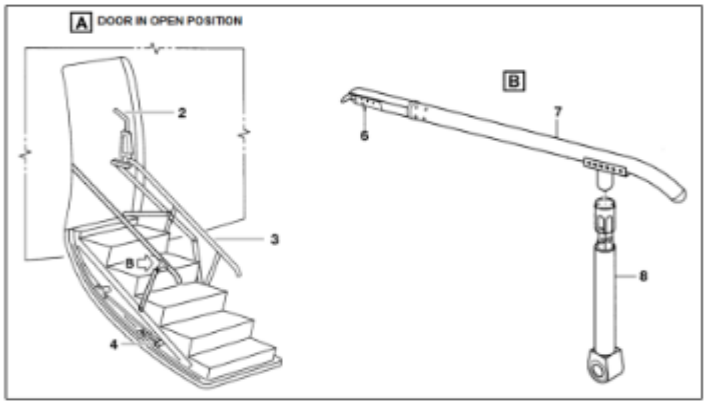
To open the door **from the inside:**

1. Operate the inner handle (4) to unlock the door.
2. Lower the door by handle (2) installed on balance mechanism.



Procedure for installation of FWD handrail:

1. Unfold stanchion (8).
2. Position handrail (7) to stanchion (8).
3. Lock with the mechanism (6).



Closing the door

Important:

- The ground crew should make sure that shoot bolts do not protrude from the holes.
- Door handle should not be forced into the locked position. The ground crew should take care while closing as forcing the handles might damage the locking mechanism.
- Door handles should be flush with the fuselage contour and must fit correctly into the door handles recess.
- When the door is closed from inside, ground crew outside the aircraft should not assist the person closing the door. This can cause the door to close faster than normal and trap the hands of the person closing the door from inside.
- All doors and panels must be properly and securely closed before releasing the aircraft for flight.

Procedure for removing of the FWD handrail:

1. Unlock mechanism at point (6).
2. Lift and pull the handrail (7) to disengage from stanchion (8).
3. Stow the handrail (7) inside the aircraft.
4. Release the stanchion (8).
5. Fold to stowed position.

To close the door **from the outside:**

1. Manually, lift the door from the ground and push it inside the fuselage opening.
2. Push inward the outer operating handle until it is flush with the door outer skin inside the handle box.
3. Look through the view port, located on lower forward area of door skin to make sure that the word ‘LOCKED’ appears. This will confirm that the door latching and locking operations have been carried out.

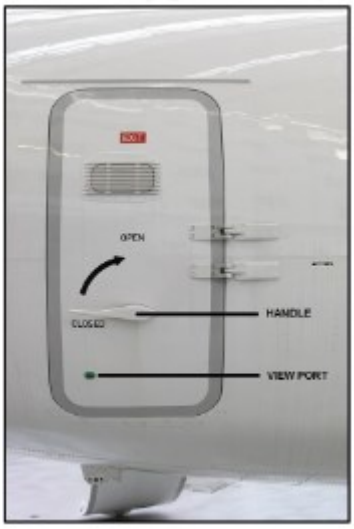
To close the door **from the inside:**

1. Lift the door handle (2) installed on balance mechanism and then by handrail (3).
2. Operate the internal handle (4) to close the door.
3. Look through the view port, located on lower forward area of door skin to make sure that the word 'LOCKED' appears. This will confirm that the door latching and locking operations have been carried out.

Important: If the cabin door is not closed properly then the doors must be reopened and reclosed. Clearance to do this is needed from the flight crew.

6.3.6.1.3 RH AFT Door

Opening the door



To open **from outside:**

1. Turn the outer handle 90 degrees clockwise, from the horizontal to the vertical position.
2. Pull the door until the outer handle engages the hold open mechanism.

To open **from the inside:**

1. Push the gust lock button (when fitted) on the internal handle.
2. Pull the inner handle and then rotate it 90 degrees counter clockwise.
3. Release the door until the outer handle engages the hold open mechanism.

Closing the door

Important: Ensure that the service door handle is kept in the open position at the time of closing. If not, the shoot bolt will be deployed early and will damage the aircraft and potentially cause injury to the ground crew.

To close **from outside:**

1. Pull the gust lock lever to disengage the outer handle from the hold open mechanism.
2. Push gust lock button to disengage the outer handle from the hold open mechanism – See pic on the right.
3. Ensure that shoot bolts do not protrude from holes.
4. Push the door into the closed position.
5. Rotate the outer handle 90 degrees counter clockwise (AFT direction).

To close **from inside:**

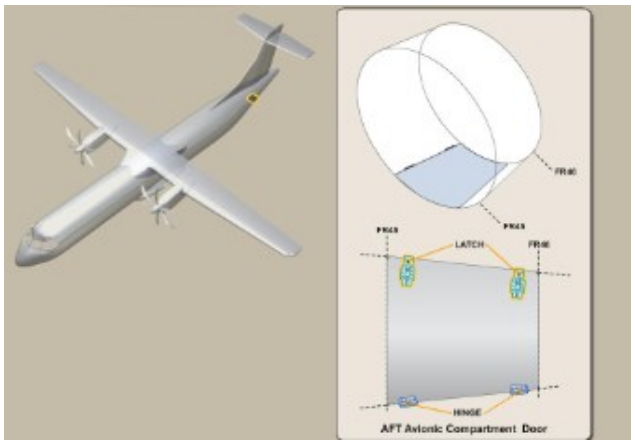
1. Pull the gust lock lever to disengage the outer handle from the hold open mechanism.
2. Pull the door by inner handle.
3. Ensure that the shoot bolts do not protrude from the holes.
4. Utilize the additional inner handle in order to place the door in its seat.
5. Rotate the outer handle 90 degrees clockwise.
6. Look through the view port located on door to ensure that the word 'LOCKED' appears. This will give confirmation that the door latching and locking operations have been carried out.
7. Remove the lock pin.

6.3.6.1.4 AFT Avionics Compartment Door

In this compartment the tail prop is stored.

It is located lower AFT of the fuselage. It is a non-plug type door hinged on the RH side by means of two piano hinges and is closed by the use of two latches.

The operating procedure is performed by unlocking/locking the two latches.



6.3.6.2 Ground Power Unit

On aircraft arrival the DC GPU should be positioned outside the ERA. This will allow the aircraft to approach its final parking position in safe conditions.

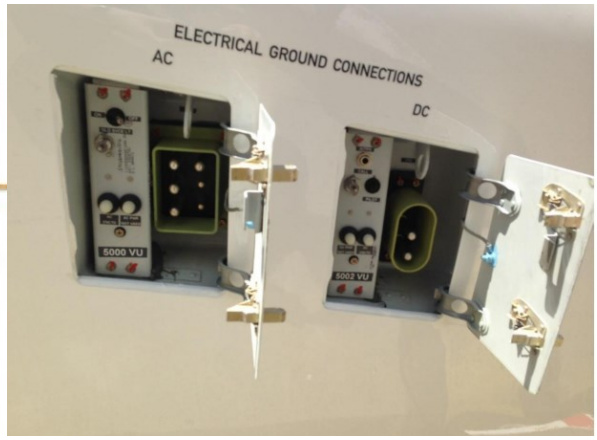
The GPU should approach the aircraft as soon as the aircraft is parked and the nose landing gear is chocked.

In order to maintain a continuous electrical supply upon arrival, Eng. No.2 with the propeller brake on will be operating. This procedure will provide a continuous supply of electricity to power cabin lightning and cargo opening door functions until the GPU is connected.

CAUTION: The DC GPU should be positioned forward facing away from the aircraft nose in full view of the pilot in command.

The Aircraft has two external receptacles to allow an electrical supply on ground, using DC and AC GPU.

The AC and DC electrical distribution systems can be supplied from ground power sources, connected via separate “External Power” receptacle, which is located on the lower left ride of the fuselage, just AFT the nose gear.



The AC external receptacle allows the aircraft to be supplied on ground with three phase 400Hz – 115/200 VAC power from the GPU.

The DC external receptacle allows the aircraft to be supplied on ground with 28 VDC power from the GPU.

CAUTION:

- The connection/disconnection of the GPU is not only a ground crew procedure, but also a procedure for flight crew. The ground crew must ensure proper communication with the flight crew while performing the connection/disconnection procedure.
- Before connecting the GPU, the ground crew should ensure that the aircraft is electrically bonded.
- The operation of only AC external power supply, without any other DC sources (Hotel Mode or DC external power), causes discharge of both main and emergency batteries.

GPU Connecting Procedure

1. Open the access door to have access to the DC or AC external power receptacle.
2. Plug in the DC GPU or AC GPU connector to the receptacle as applicable.
3. Start the GPU to supply the aircraft with external power.
4. On the corresponding panel check that:
   a. 'DC connected' or 'AC connected' indicator light comes on.
   b. 'DC power not used' or 'AC power not used' indicator light comes on.
5. Let the flight crew know that ground power is available.
6. Once the flight crew activates the external power pushbutton:
7. If the ACW or DC ground service busses are selected 'OFF':
   a. Check that on corresponding panel, 'DC or AC power not used' indicator light turns off for corresponding power not used.

CAUTION: It is recommended to avoid disconnecting the GPU connector when the aircraft is energized. This may cause arcing that is dangerous for the ground crew and can damage equipment.

GPU Disconnecting Procedure

1. First wait for the confirmation that the flight crew has released the external power pushbutton.
2. Check that on corresponding panel the 'DC or AC power not used' indicator light comes on.
3. Cut off the external power to the aircraft and shut down the GPU.
4. On the corresponding panel check that:
   a. ''DC connected' or 'AC connected' indicator light turns off.
   b. 'DC power not used' or 'AC power not used' indicator light turns off.
5. Unplug the GPU connector from the panel 5002VU or panel 5000VU, as applicable.
6. Close the access doors
7. Remove the GPU from the ERA.

6.3.6.3 Loading

For procedures on loading/unloading and when using the aircraft loading equipment, follow the safety precautions and the procedures described in ch.4.

Once the cargo is inside the aircraft it can be moved from one compartment to another by using the rollertrack system installed in the cargo.

Important: Special attention must be given to the use of specially designed belt loaders (example: rampsnake, or rollertrack system). Serious damage to the aircraft structure can occur if the equipment is not properly handled.

Due to the possibility for the aircraft to tip over, the loading/unloading has to be done with extreme caution. For better awareness tail-tipping happens with 7 persons occupying area around cabin doors at the same time.

There are various possibilities on how to load the cargo in order to prevent tipping over. They all depend on the volume and weight of the cargo and whether it is presented as single boxes, EU pallets, combination of both or even other types of bulk cargo.

In any case counter balance must be made between cargo compartments A+B+C+D+E and cargo compartments F+G+H+J or more weight must be present in the compartments A+B+C+D+E than in F+G+H+J.

During loading:

1. Loading through FWD cargo door only

Below is presented one example on loading principles when full cargo hold is anticipated, which may be followed:

- Start the loading from compartment B, then load in C, then in D and so on until H not covering the rollers and leaving enough space to move the cargo on them or leaving enough space to move the manual (hydraulic) forklift in case it is used for EU pallet loading.
- Subsequently compartment J may be filled up.
- Continue filling up the remaining free space in the cargo compartments, moving from H to G, to F, and so on until B.
- When B to J is loaded, load compartment A

Note: *When moving from one compartment to another on the way ''back'' ensure that the cargo nets are fully installed before starting the loading of the free space in the next compartment.*

2. Simultaneously loading through FWD cargo door and AFT LH door

When simultaneous loading is possible compartments shall be loaded in following order:

- FWD cargo doors: first “D”, thereafter “C”, “B” and “A”
- AFT doors: first “E”, thereafter “F”, ”G” and ”H”

Compartment “J” should be loaded as the last one. Consider proper manipulation with ballast which might have been positioned into “J” on previous (positioning) flight.

Load in compartment F+G+H+J shall never overweight the load in compartments A+B+C+D+E.

During unloading:

The unloading principle shall be the same as the loading.

1. Unloading through FWD cargo door only

Below is presented one example on loading principles when full cargo hold is anticipated, which may be followed:

- Start the unloading by completely unloading compartment A to C
- Unload half of compartment D and E in order to make enough space to move the cargo on the rollertrack or to make enough space to move the manual (hydraulic) forklift in case it is used for EU pallet loading.
- Then unload J, followed by H, followed by G and then F.
- Unload the remaining of the load in compartments D and E

2. Simultaneously unloading through FWD cargo door and AFT LH door

When simultaneous unloading is possible compartments shall be unloaded in following order:

- AFT doors first: first J, thereafter H, G and F
- FWD cargo doors: first A, thereafter B, C, D and E

Compartment “J” should be loaded as the last one. Consider proper manipulation with ballast which might have been positioned into “J” on previous (positioning) flight.

Load in compartment F+G+H+J shall never overweight the load in compartments A+B+C+D+E.

6.3.6.3.1 General and Special Cargo Limitations

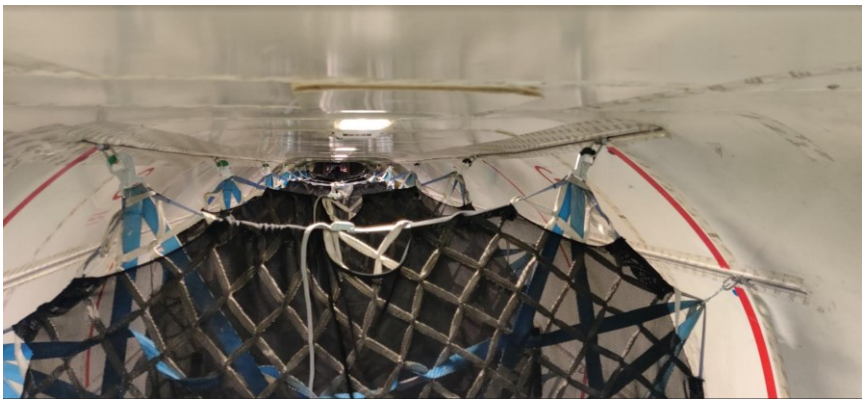
When preparing freight for this aircraft, the cargo should be sorted in the warehouse into loads suitable in weight and volume for each aircraft bay. These loads should be segregated, preferably onto separate trailers, marked with the cargo weight. This operation must be supervised very carefully by the flight crew and the loading supervisor.

Only bulk cargo is accepted on EI-SLP.

Load should never be loaded higher than the upper part of the barrier net.

Loads which are heavier than the standard allowed gross compartment weights as presented in ch. 6.3.4.2 may be loaded on the main deck as the compartment limit is limited by net strength rather than floor strength. However, permission must be obtained from Amelia Intl Cargo Operations department before accepting any loads such as this. Such permission should only be granted for certain charter flights.

Details about the load and loading must be final in order to obtain the permission. The permission including a special loading instruction (including updated loadsheet for the flight crew) will be distributed by Amelia Intl.



EU Pallet

The bulk cargo may be built up and transported on an EU pallet (120cmx80cm). The max height allowed is 143cm.

For moving the pallet throughout the cargo compartments a manual (hydraulic) forklift can be used.

Dangerous Goods

All Dangerous Goods except Class 7 are accepted.

6.3.6.3.2 Use of the Roller Track System

When the roller track system is used it must be extended outside the aircraft.

When extending it at the AFT LH door, it is placed on the stairs at a 180° angle of the roller track system inside the aircraft.

When extending it at the FWD cargo door in is only extended outside the door.

A GSE with conveyor belt is used to connect to the extended roller track system.

6.3.6.3.3 Recommended Load Distribution

Whenever possible in order to obtain optimum CG position the following recommended load distribution shall be respected:

TOTAL LOAD, Kg	RECOMMENDATION FOR LOAD DISTRIBUTION, ATR-72F BY COMPARTMENTS, Kg								
	A	B	C	D	E	F	G	H	J
300									300*
500								500	
750						300	300	150	
1000					300	300	300	100	
1250				100	400	400	300	50	
1500				300	500	400	300		
1750				450	600	500	200		
2000			100	500	700	500	200		
2250			150	700	700	500	200		
2500			350	700	700	550	200		
2750		100	500	700	700	550	200		
3000		100	600	700	700	700	200		
3250		150	700	700	800	700	200		
3500		200	700	800	800	800	200		
3750		300	800	800	800	800	250		
4000		300	900	900	800	800	300		
4250		350	900	900	900	900	300		
4500		500	900	900	900	900	400		
4750	100	550	900	900	900	900	400	100	
5000	100	600	900	1000	1000	1000	400		
5250	150	700	900	1000	1000	1000	400	100	
5500	200	800	900	1000	1000	1000	500	100	
5750	250	900	900	1000	1000	1000	600	100	
6000	250	900	1100	1000	1000	1000	600	150	
6250	400	900	1100	1000	1000	1000	700	150	
6500	400	900	1100	1100	1100	1100	700	100	
6750	550	900	1100	1100	1100	1100	800	100	
7000	600	1000	1100	1100	1000	1100	800	200	100
7250	700	1000	1000	1100	1100	1000	800	400	150
7500	800	1000	1100	1100	1100	1000	700	400	300
7750	850	1100	1100	1100	1100	1000	800	300	400
8000	1000	1100	1100	1100	1100	1100	700	300	500

***Note:** 300kg in compartment J are valid in 2/0 configuration. In case of 3/0 configuration recommended load is 400kg.

6.3.6.4 Towing

The following towbars are accepted by the manufacturer. For any other towbar to be used, contact ground operations department.

ITEM NAME	MANUFACTURER	PART NUMBER	GSE NUMBER	USED FOR:
ATR 42/72 towbar - basic	/	98S09008019000	/	It is towbar with shock absorb. Used for day and night towing.
Towbarless tug	Douglas- Kalmar	TBL-50	397	A/C towing, pushing and steering. It has oversteer protection and alerting system.
Towbarless tug	LEKTRO	AP8750C-AL80/50/35*	/	A/C push back and maintenance towing. It has oversteer alerting system.
Towbarless tug	LEKTRO	AP8750C-AL80/50/35*	/	A/C push back and maintenance towing. It has oversteer alerting system.

*GPU option not qualified by ATR

It is possible to tow or push the aircraft, at maximum ramp weight using a tow bar attached to the nose gear leg. One tow bar fitting is installed at the front of the leg.

Push-back can be operated in Hotel Mode if tail wind is under **10kts**, including aircraft direction changes throughout the procedure. If the tail wind is above this limit, the push-back has to be done, with the propeller(s) running and unfeathered, and respecting ground safety rules and airport local rules.

Towbar attachment height on the NLG varies due to aircraft loading. See table below for max range height.

Instructions

See chapter 4.13 for detailed instructions. Below is presented brief information and pictures how the towbars are installed and used in regards to their specifics. All those procedures are for towing the aircraft in maintenance configurations only. For operational push-back, refer to local authority regulations and adapt this procedure to comply.

Towbar with shock absorb towing

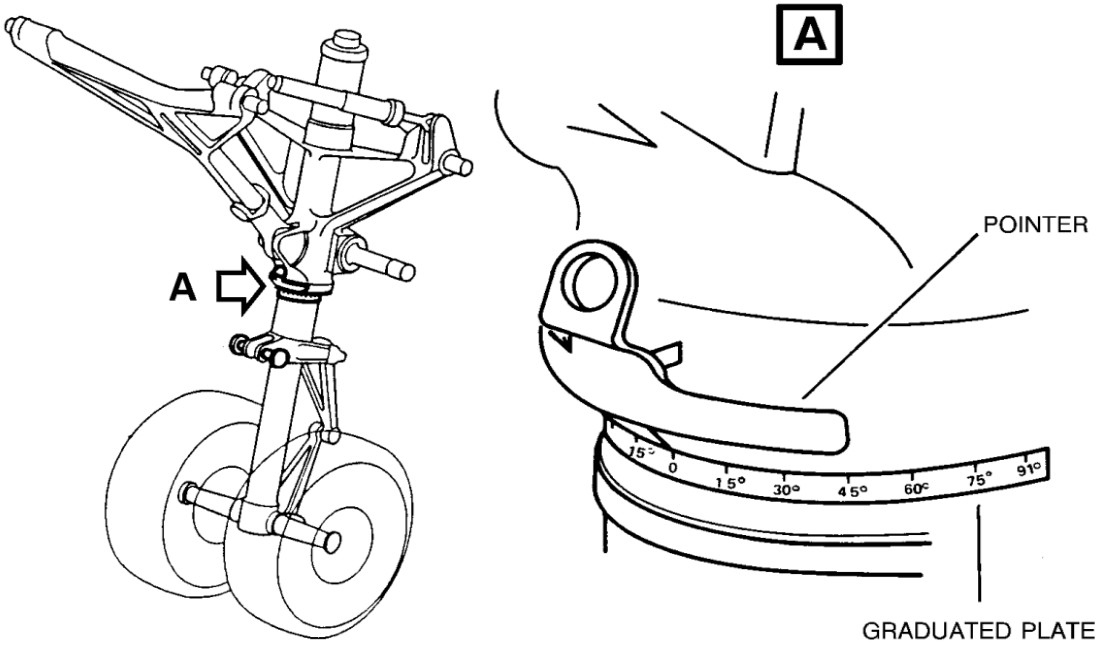
- Make certain that the N/W steering wheel is in the ‘’OFF’’ position;
- On panel 27VU: place EXT LT/ NAV switch in ‘’NAV’’ position;
- Make certain that the landing gear ground locking pins are installed (locking pins installation is optional to tow or push the aircraft during flight operations);
- Make certain that static ground cables have been removed;
- Connect towbar to nose landing gear at point B;
- Connect tractor to towbar;
- Pull wheel chocks and keep them readily available for use;
- When towing from the nose gear do not exceed the turning angle indicated by the pointer and the red graduated plate;
- When towing operation is complete, turn nose wheel to centre or to near centre position chock aircraft wheels. Connect static ground cables and remove towbar clear on aircraft panel 1 VU, put the N/W steering switch in ‘’ON’’ position;
- On panel 27 VU: Return EXT LT/NAV switch to ‘’OFF’’ position.

When using HOTEL mode, usually for towing at night with ANTI-COLL and NAV light which are supplied by the generated electricity, make right engine start in HOTEL mode before the first point of the procedure and make engine shut down, at the end of the towing.

Towbarless tug

The use of towbarless towing vehicles (TLTCs) is authorized only for classical towing operations, i.e. pushback and maintenance towing. The use of TLTVs for towing an aircraft to a dispatch area close to runway thresholds, usually referred to as "dispatch towing or operational towing", is not authorized.

- Make certain that the N/W steering wheel is in the ''OFF'' position;
- Make sure that the pressure of the ''EMER BRK ACCU'' shows at least 2000 PSI;
- Make certain that the landing gear ground locking pins are installed (locking pins installation is optional to tow or push the aircraft during flight operations);
- Make certain that static ground cables have been removed;
- Connect towbarless tug to nose landing gear;
- Connect tractor to towbar;
- Select ATR aircraft type on the towbarless tug;
- Make sure that the aircraft parking brake is applied and/or put the wheel chocks in position;
- Approach the aircraft and alight the nose wheel cradle of the tractor with the NLG axis;
- Capture the NLG following proper manufacturer's instructions;
- Make sure that the nose landing gear is correctly positioned on the centre of the cradle and cannot be disengaged from the tractor;
- If not already required by manufacturer's instructions, release the aircraft parking brake and/or remove the wheel chocks (when towing the aircraft with towbarless towing vehicle, the aircraft parking brake shall only be used in case of emergency);
- Start towing. Turn the nose gear only while aircraft is moving. When using the towbarless tug, wait until the aircraft has started moving, before turning the nose gear.
- After towing, make sure that the nosewheels are aligned with the aircraft centreline and chock the aircraft or apply aircraft parking brake.
- Disconnect towbarless tug from aircraft: lower and unlock the NLG and remove the towbarless tug from aircraft.
- Put the N/W steering switch in ''ON'' position.



Power Back

ATR72 has the possibility to perform Power back. The power-back procedure is the ability for the aircraft to move backwards under its own power using reverse. This procedure should only be carried out at authorised airports.

Performing this procedure requires no GSE. Flight Crew control the aircraft using nosewheel steering. The ground crew responsible for departure procedures should be in continuous contact with the flight crew using headset communications or hand signals.

Guidance ground crew should be positioned at the wing tips to assist the aircraft from the parking position until it is released for taxi.

The ground staff have to use safety glasses, because of the possibility of projection.

The ground crew should perform the pre-departure walk around check before clearing the aircraft for power back.

Power back is done after ATC clearance;

During procedure, the ground personnel should ensure there is sufficient clearance for the procedure to take place. If there is any doubt about the clearances required for the power-back procedure, the ground crew should stop the procedure and inform the flight crew via headset/hand signals.

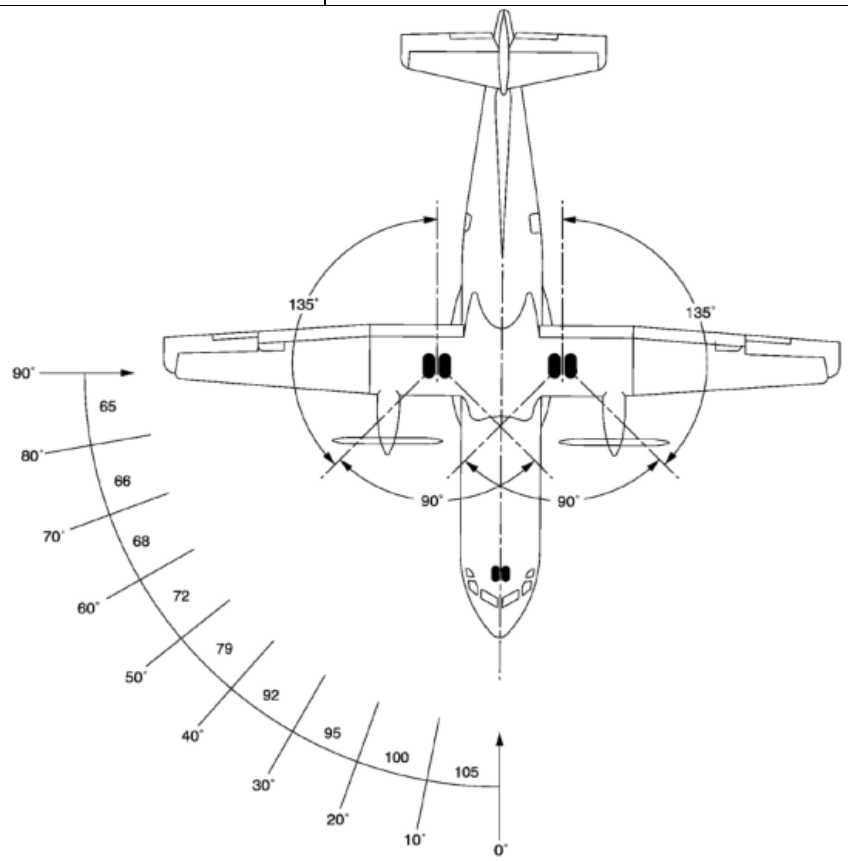
6.3.6.5 Mooring

After parking, in case of bad weather conditions mooring is necessary. Mooring must always be performed when the aircraft is parked on snow or ice-covered surfaces.

Ground mooring is carried out at each main landing gear and at nose landing gear. 7 mooring gears are required.

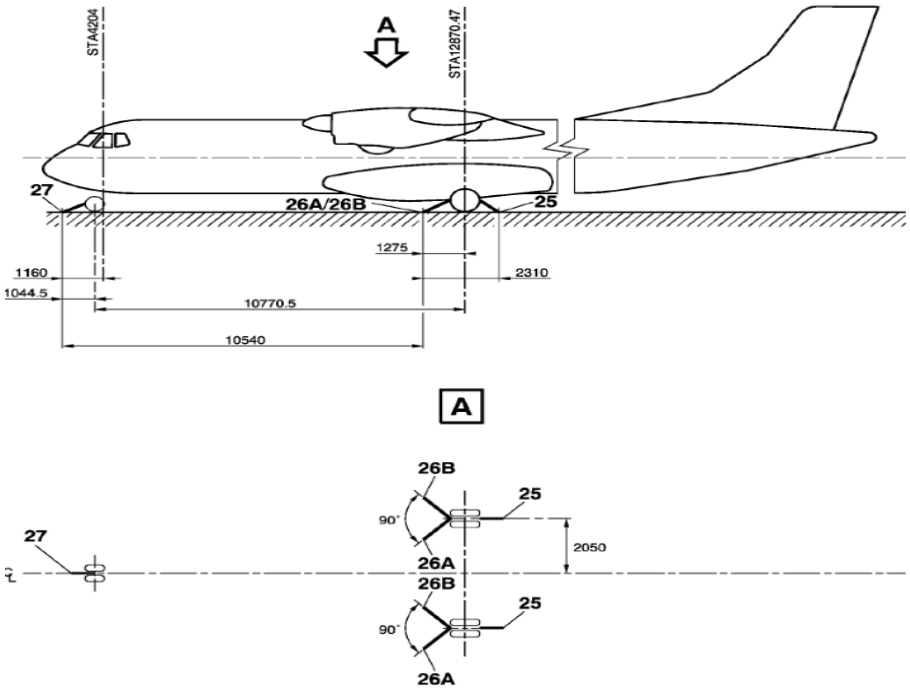
For winds greater than the reported below the aircraft has to be sheltered in hangar.

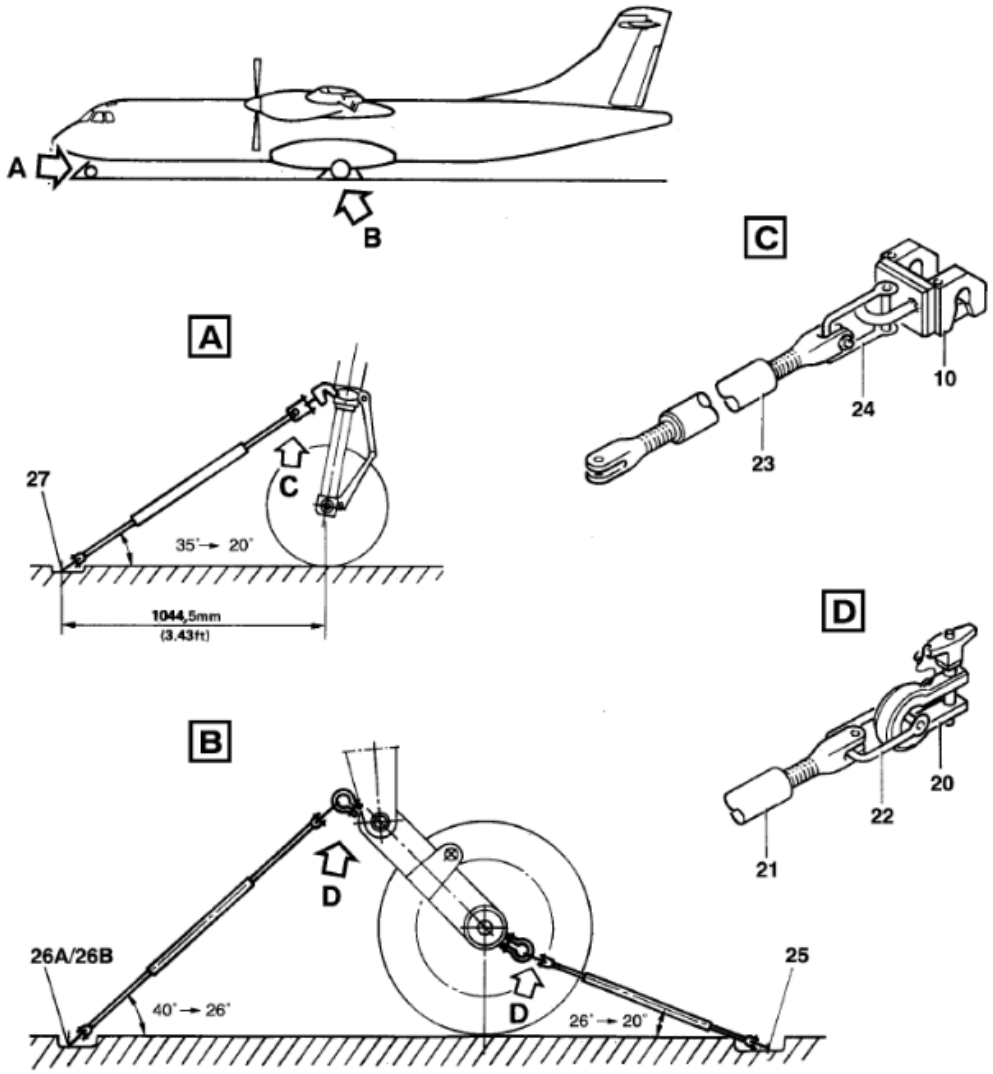
Wind direction degrees from X'AXIS	Wind speed (kt) limitations
0-10	105
10-20	100
20-30	95
30-40	92
40-50	79
50-60	72
60-70	68
70-80	66
80-90	65



Mooring Procedure Using ATR Mooring Kit

1. Main landing gear mooring
   a) Install adapter (20) on rear de-bogging fixture of each MLG.
   b) Install turnbuckle (21) and its shackle (22) on adapter (20) of each MLG.
   c) Secure turnbuckle (21) with ground mooring ring (25) of each MLG.
   d) Install adapter (20) on forward de-bogging fixture of each MLG.
   e) Install 2 turnbuckles (21) and their 2 shackles (22) on adapter (20) of each MLG.
   f) Secure the 2 turnbuckles (21) with ground mooring rings (26a/26b) of each MLG
   g) Simultaneously tighten all the turnbuckles to eliminate gaps. Compress the shock absorbers by a minimum of 30% while insuring the following angles between turnbuckles and ground:
      - on AFT point (25): 20 to 26 deg.
      - on FWD points (26a/26b): 26 to 40 deg.
2. Nose landing gear mooring
   a) Install fitting (10) on towing receptacle on NLG.
   b) Install turnbuckle (23) and its shackle (24) on fitting (10).
   c) Secure turnbuckle (23) with ground Mooring ring (27).
   d) Tighten turnbuckles to eliminate gaps. Compress shock absorber by a minimum of 30% while insuring the following angle Between turnbuckle and ground:
      - NLG point (27): 20 to 35 deg.
3. Removal
   a) Disconnect mooring turnbuckles.
   b) Remove all shackles and adapters from Landing gear legs.
   c) Check that no tooling obstructs landing Gear operating mechanism.
   d) Clean area around aircraft.





Close-up:

1. Remove all protections previously installed.
2. Place wheel chocks as necessary.
3. Make certain that the working area is clean, clear of tools and miscellaneous items of equipment.

6.3.6.6 Ground De-icing Operations

Hotel mode is specific to ATR. It allows the aircraft to be de-iced while the right engine is running with the propeller stopped and bleed air valve off. Thus, the ATR could be de-iced and anti-iced like jet aircraft at the holding point.

6.3.6.7 Ramp Handling with Hotel Mode On

On the ground Hotel mode provides:

- Cabin heating in winter.
- Cabin cooling in summer.
- Power to the aircraft electrical system.

When the Hotel mode is in operation the rear service door can be safely used. But anyhow special attention and extreme caution is required from the ground crew during turn-around times while engine 2 is running in Hotel Mode.

General safety provisions (i.e. hearing protection) must be respected, as usual, by the ground staff involved in the turnaround/ramp handling while the Hotel mode is on.

Hotel Mode Start-up prior to engine start up

Once the servicing around the RH side of the aircraft is complete and all GSE are behind the ERA, the ground crew is required to advise the flight crew that they have clearance to start Eng. No.2 in Hotel Mode.

Prior to start-up, the ground crew should ensure that:

- The area is clear of all personnel and equipment.
- The service door is closed and locked (subject to operators' requirements).

Once Eng. No.2 is running in Hotel Mode, ground crew should request confirmation to disconnect the GPU and proceed following the recommended procedure.

The ground crew should remain in communication with the flight crew, either by the use of headsets or by conventional marshalling signals. The ground crew should remain in full view of the flight crew throughout operations.

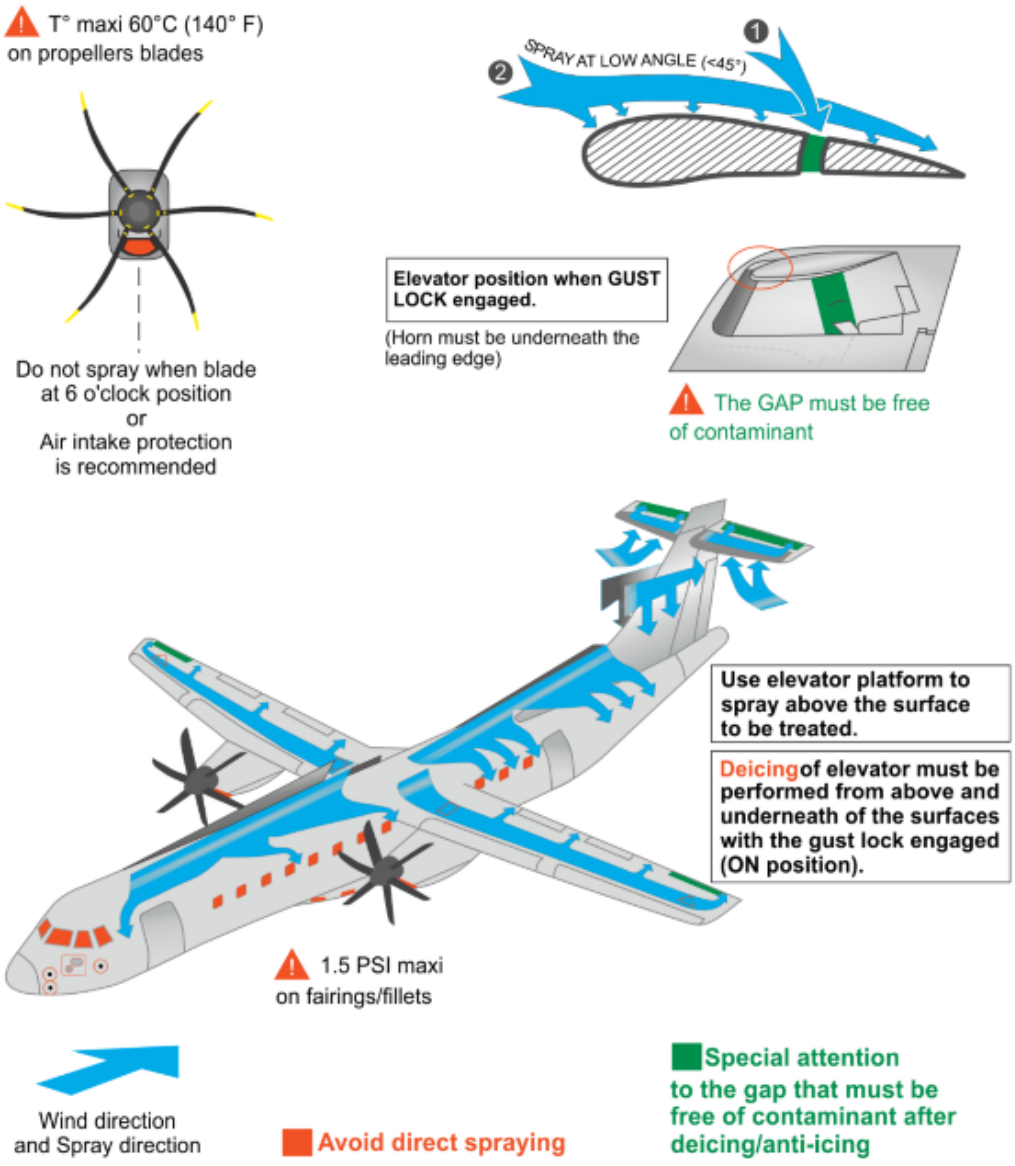
6.3.6.8 Ground Deicing Strategy

Follow the general procedures and precautions published in ch.8 when performing de-/anti-icing. The pictures below are providing additional guidelines about the application of the fluids on ATR72:

De-icing of the propellers

- Propeller covers should be used when possible.
- Propeller blades should be aligned so that no blade is in front of the air intake, otherwise the air intake covers should be installed to ensure no fluid ingress occurs.
- In case of de-icing fluid ingestion into air intakes, the fluid must be removed/area cleaned.
- Fluid sprayed on the blades shall not exceed 60°C.

De-icing/ anti-icing Method



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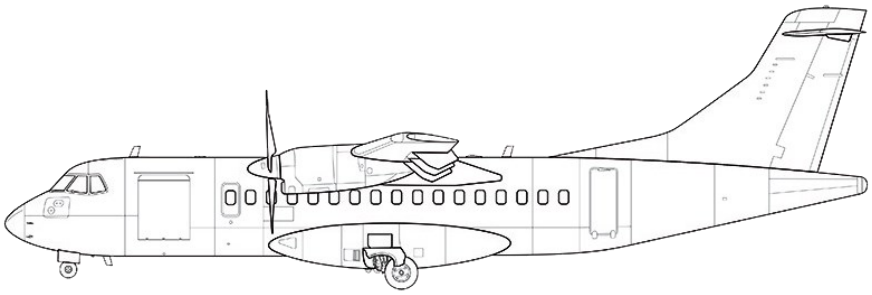
6.4 ATR42

6.4.1 Basic Data

CHARACTERISTICS	
Manufacturer: G.I.E. ATR AÉROSPATIALE and AERITALIA	ATR 42-212A (500)
	F-HLIA
EXTERNAL DIMENSIONS	
Length Wingspan Height	22,67 m 24,57 m 7,59 m
CABIN DIMENSIONS	
Length Width Height	9,59 m 2,57 m 1,91 m
ENGINES	
Two Pratt and Whitney engines, 127E	
PROPELLERS	
Hamilton Standard HS 568F-1	
PERFORMANCES	
Maximum range	801 nm / 1483 km
Cruise speed	250 Kt/ 463 km/h
Maximum altitude	25 000 ft/ 7620 m
FUEL QUANTITY	
Max useable fuel per tank	2866 l /2250 kg
	Maximum permitted imbalance between tanks is 550kg



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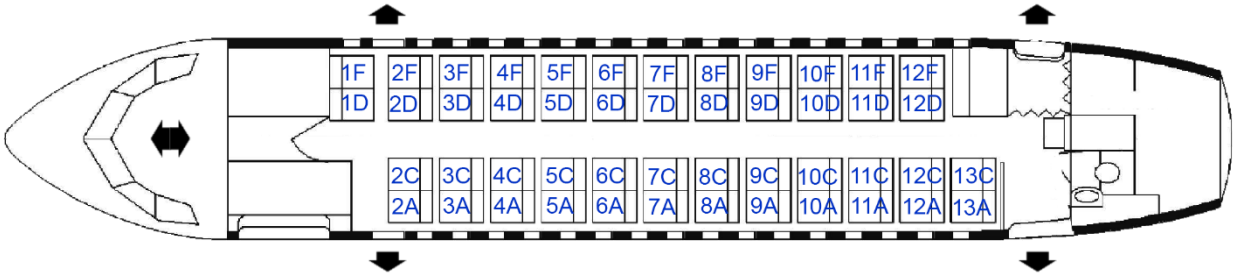
6.4.1.1 Seating Capacity

Aircraft	Seating capacity	ZONE and rows per zone		
		A	B	C
F-HLIA	48	1-4	5-9	10-13

F-HLIA

- 48 Seats on 13 rows in total.
- Rows start with Row 1 and the last row is Row 13.
- On row 1 there are only 2 seats (positioned in the opposite direction of the flight) and on row 13 there are only two 2 as well.
- Seats are marked with the following letters: **A (LH window seat); C (LH aisle seat); D (RH aisle seat) and F (RH window seat)**.



6.4.1.2 Passenger Oxygen Mask Location

ATR42 does not have automatic drop-down oxygen system. The number of masks available on board is 25% of the total seating capacity. In case the passenger has need of additional oxygen, he requests it to the cabin crew, who will open the oxygen module using a manual release tool. There is one mask per oxygen module.

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6.4.2 Weight and Balance Data

	MRM	MTOM	MLM	MZFM
F-HLIA	18770	18600	18300	17000

The DOM is BEM plus the mass of the operational items, i.e. crew, documents etc.

The crew included in the DOM is 2 flight crew. The mandatory cabin crew and, if needed, the additional one, should be added when filling in the loadsheet.

For the current BEM and DOM, refer to OM-B Chapter6.

All the index adjustments for passengers, cargo and fuel are presented in the tables in the subchapters below depending on the applicable aircraft.

For Balance zones refer to ch. 6.4.1.1.

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6.4.2.1 Seat Allocation for Balance Purpose ATR42

Number of passengers « booked + GP »	Number of seats to be blocked	Seats to be blocked
0 – 4	44	1D,1F,2A,2C,2D,2F,3A,3C,3D,3F,4A,4C,4D,4F,5A,5C,5D,5F,6A,6C,6D,6F,7A,7C,7D,7F,8A,8C,8D,8F,9A,9C,9D,10A,10F,11C,11D,11F,12A, 12C,12D,12F,13A,13C **(0/1/3)**
5 - 8	40	1D,1F,2C,2D,3A,3C,3D,3F,4A,4C,4D,4F,5A,5C,5D,5F,6A,6C,6D,6F,7A,7C,7D,7F,8A,8D,9A,9C,9D,10A,10F,11C,11D,11F,12A,12C,12D,12F, 13A,13C **(2/3/3)**
9 – 12	36	1D,1F,2C,2D,3A,3C,3D,3F,4A,4C,4D,4F,5A,5C,5D,5F,6A,6C,6D,6F,7A,7C,7D,7F,8A,8D,9C,10A,10F,11C,12A,12C,12D,12F,13A,13C **(2/5/5)**
13 – 16	32	1D,1F,2C,2D,3A,3C,3D,3F,4A,4C,4D,4F,5A,5C,5D,5F,6D,6F,7A,7C,7F,8A,8D,10A,10F,11C,12A,12C,12D,12F,13A,13C **(2/9/5)**
17 – 20	28	1D,1F,2C,2D,3A,3C,3D,3F,4A,4D,4F,5A,5C,5F,6D,6F,7A,7C,7F,8D,10A,11C,12A,12C,12D,12F,13A,13C **(3/11/6)**
21 - 24	24	1D,1F,2C,2D,3A,3C,3D,3F,4A,4F,5A,5C,6D,6F,7C,7F,8D,11C,12A,12C,12D,12F,13A,13C **(4/13/7)**
25 - 28	20	1D,1F,2C,2D,3A,3C,3D,3F,4F,5A,5C,6D,7C,8D,12A,12C,12D,12F,13A,13C **(5/15/8)**
29 - 32	16	1D,1F,2C,2D,3C,3D,3F,4F,5C,6D,12A,12C,12D,12F,13A,13C **(6/18/8)**
33 – 36	12	1D,1F,2C,2D,3C,4F,12A,12C,12D,12F,13A,13C **(8/20/8)**
37 - 40	8	1D,1F,2C,2D,12C,12D,13A,13C **(10/20/10)**
41 - 44	4	1D,1F,13A,13C **(12/20/12)**
45 - 48	0	**(14/20/14)**

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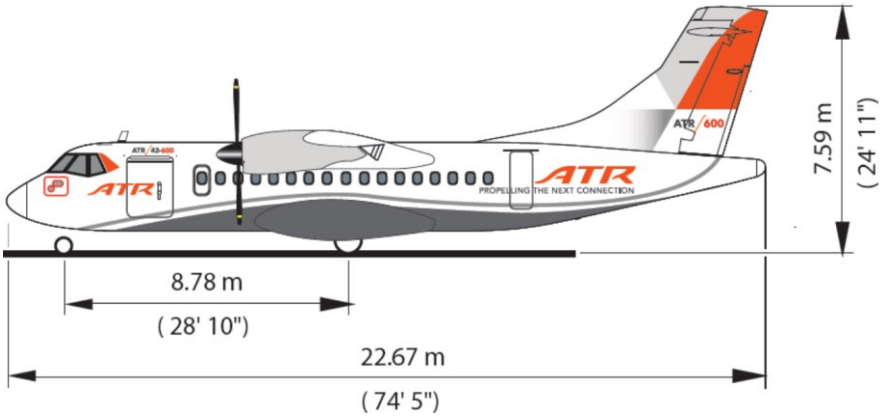
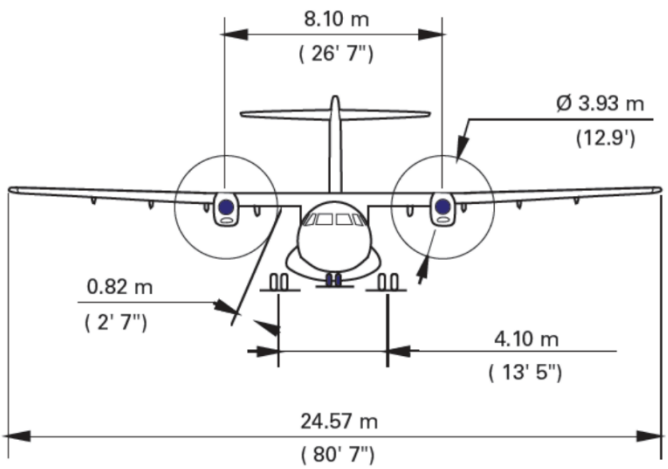
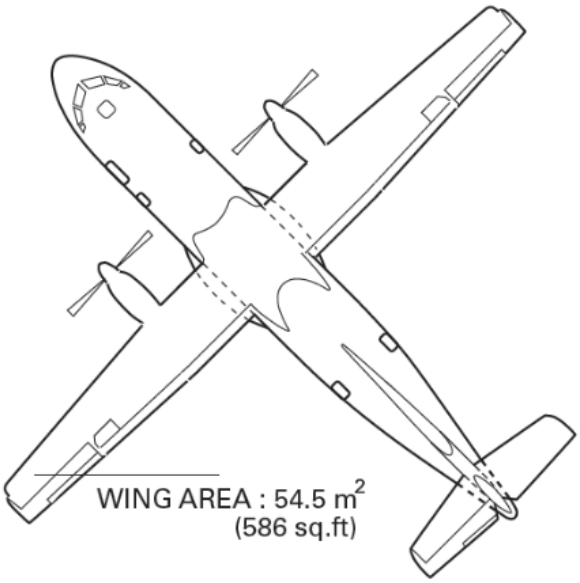
6.4.3 Aircraft Dimensions

6.4.3.1 External Dimensions







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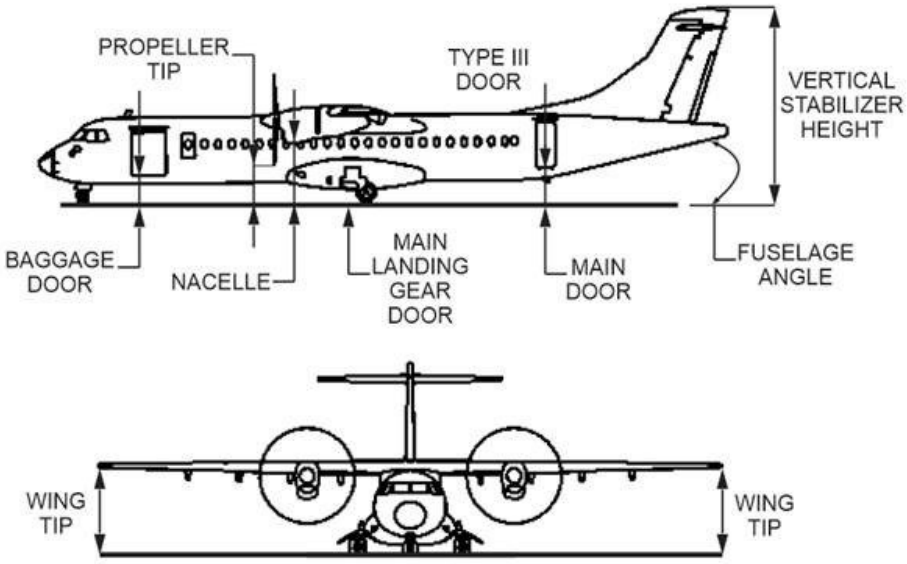
6.4.3.2 Ground Clearance



*Maximum Ramp Mass	C.G. 12% MAC (m)	C.G. 36% MAC (m)
Fuselage angle	-1°.445	-0°.921
Main Door	1.38	1,33
Type III door	1,65	1,68
Main Landing Gear Door	0,52	0,58
Nacelle	3,06	3,08
Propeller tip	1,07	1,1
Baggage Door	1,1	1,15
Vertical Stabilizer Height	7,66	7,55
Wing Tip	3,69	3,68

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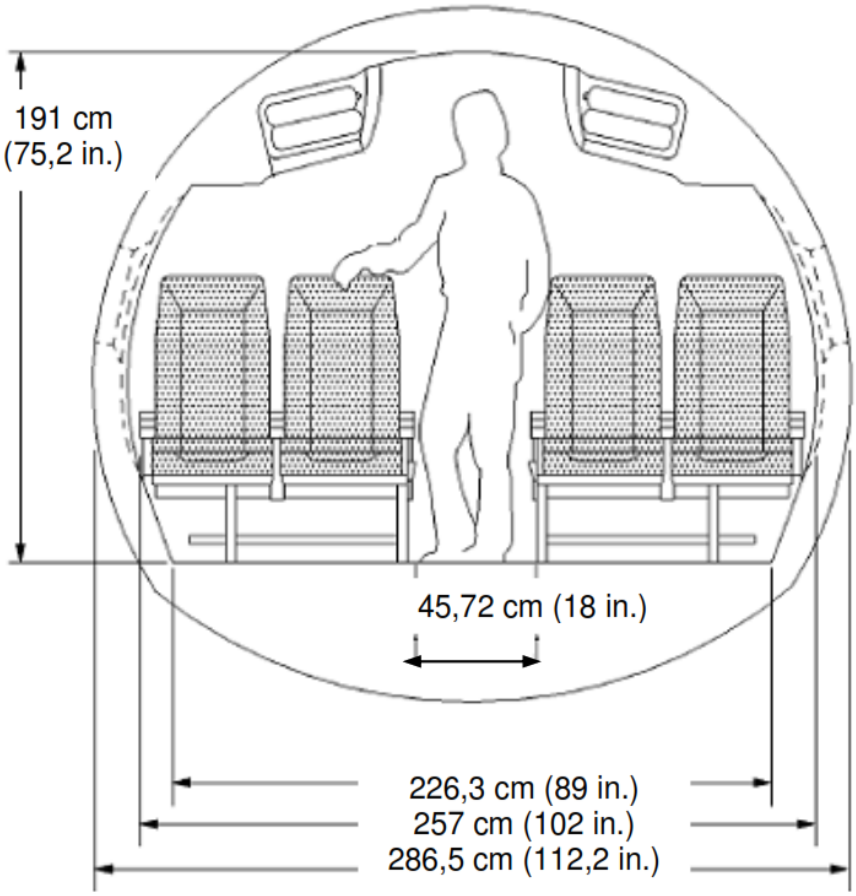
6.4.3.3 Passenger Cabin Dimensions

Maximal width	2.57 m
Maximal Height (aisle)	1.91 m



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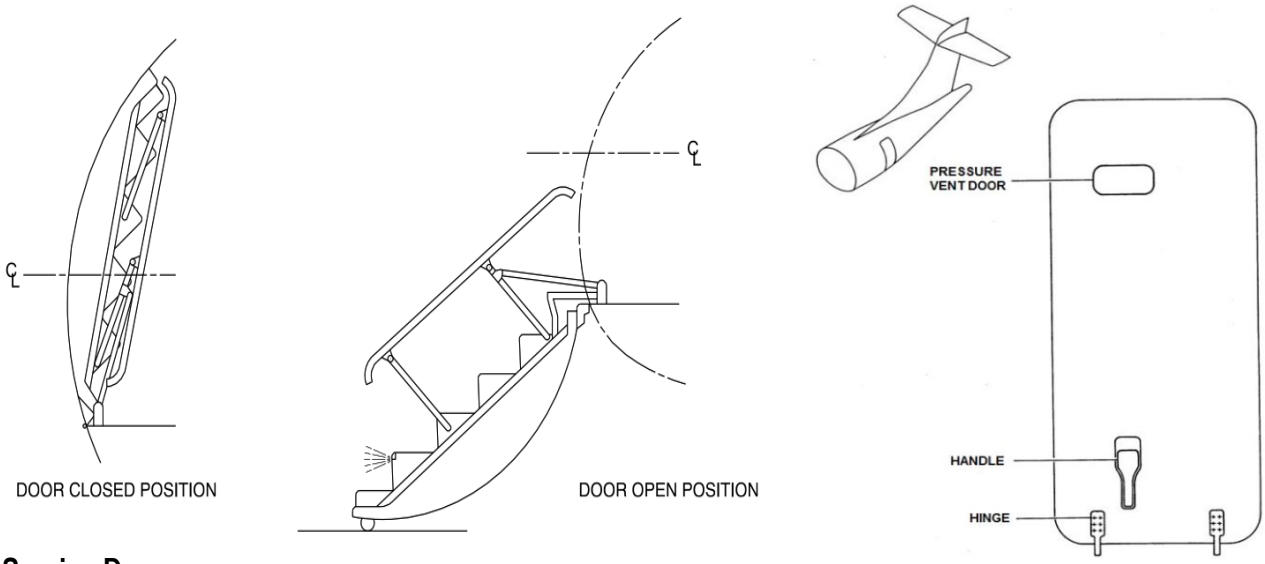
6.4.3.4 Door Dimensions and Clearances

Door dimension

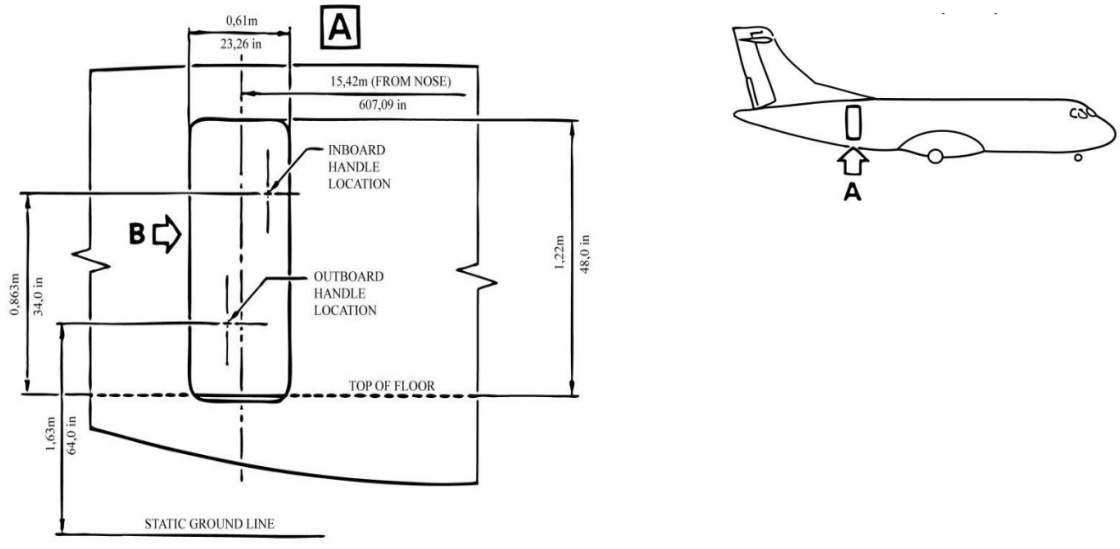
Door type	Height	Width	Distance from Sill to Ground
Boarding Door	1.75 m	0.82 m	1.35 m
Service Door	1.27 m	0.69 m	1.35 m
Forward type III Exit	0.91 m	0.51 m	1.80 m
Flight Crew compartment emergency hatch	0.51 m	0.48 m	3.18 m
Forward Cargo Door (when opened) *	1.53 m	1.255 m	1.35 m

*Do not operate Cargo Door with a Cross wind compšonent of more than 45 KT

Boarding Door



Service Door



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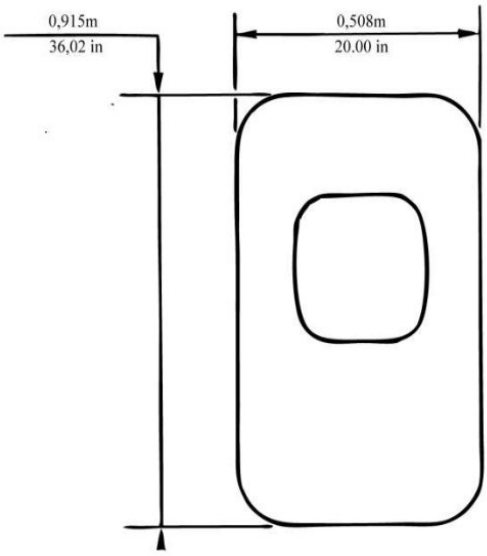
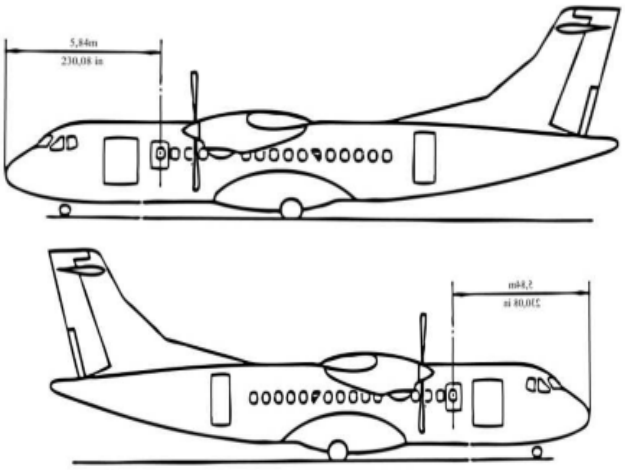
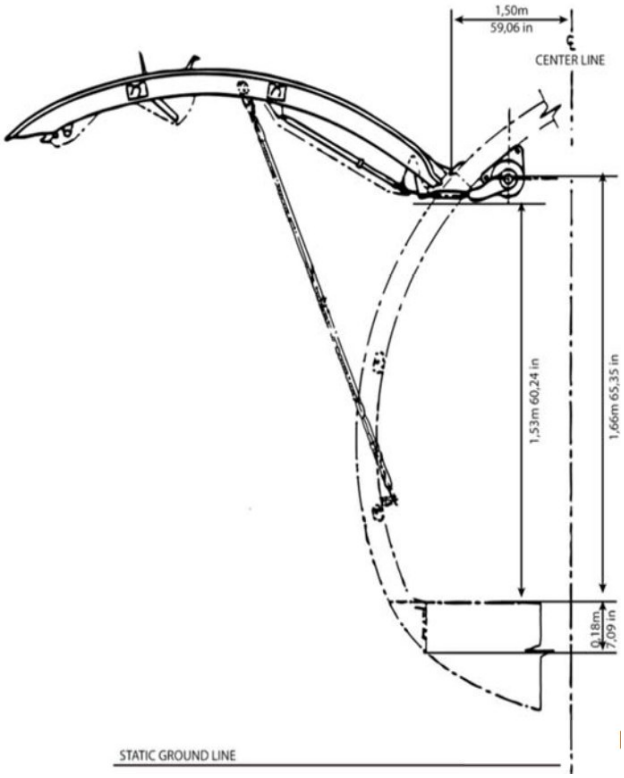
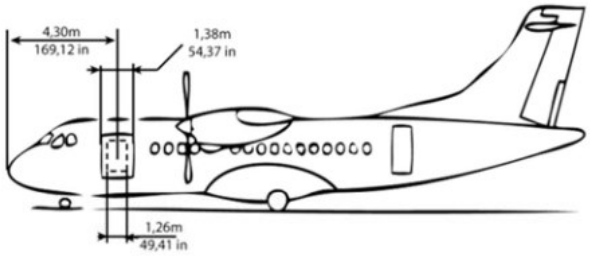
Forward Type III Exit





Forward Cargo Door





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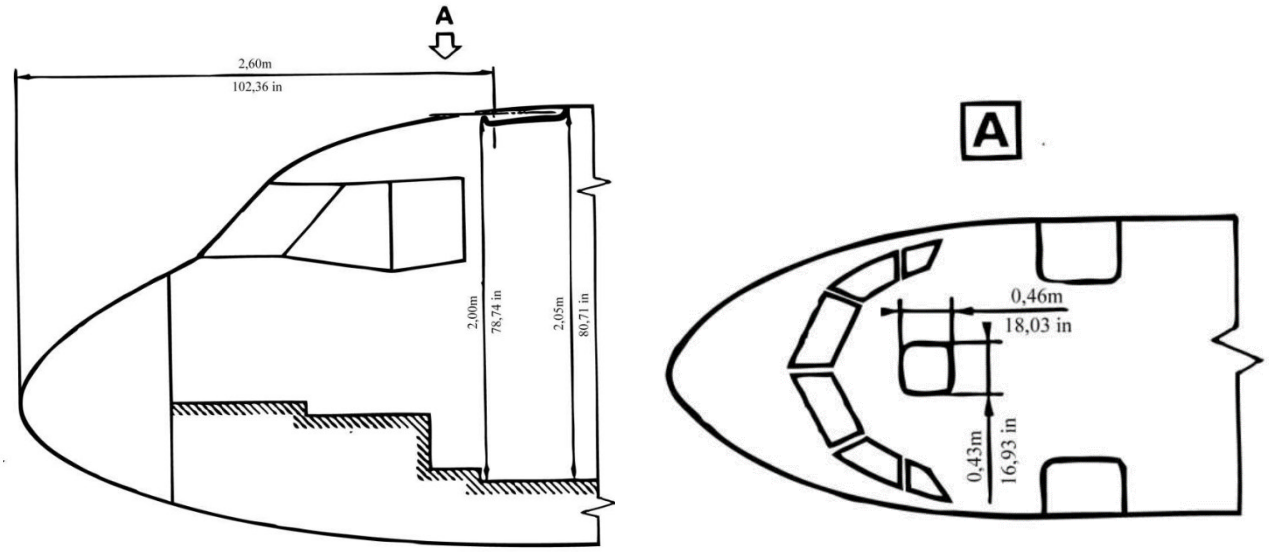
Flight Crew Compartment Emergency Hatch



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6.4.3.5 Overhead Bin

F-HLIA has 14 standard overhead bin assemblies (8 on LH side and 6 on RH side) and 7 short overhead bin assembly (2 on LH side and 5 on RH side).

Overhead bin capacity and length	Length (m)	Height (m)	Volume (m^3)	Max Load (kg)
Standard Assembly	0.985	0.24	0.115	40 kg
Short Assembly	0.745	0.24	0.087	30 kg

Carry-on volumes may be stowed in the overhead bins.

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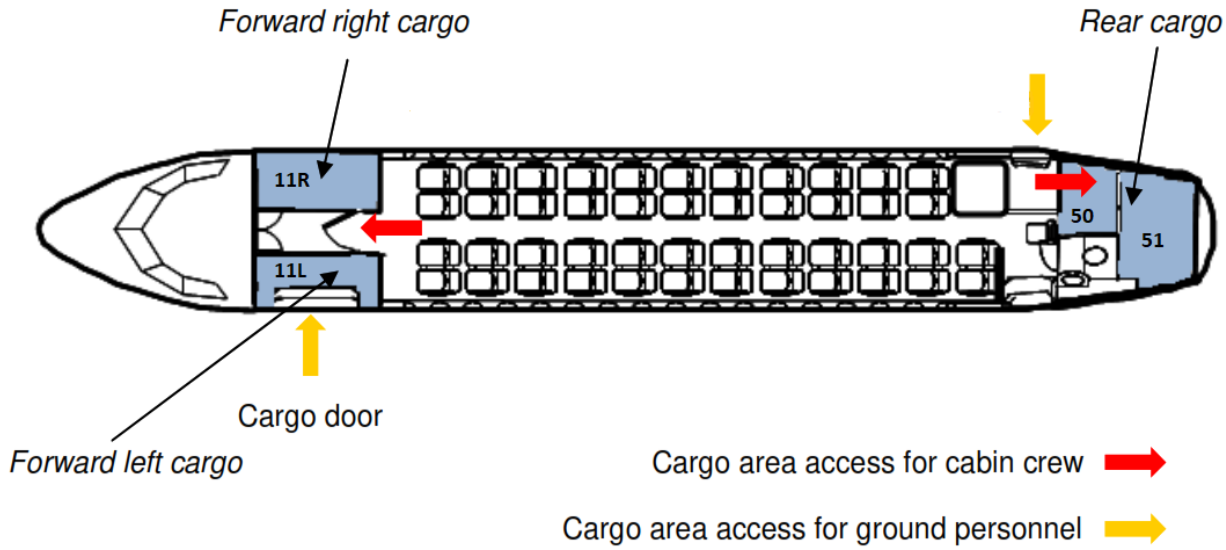
6.4.4 Hold Characteristics and Net Installation

The cargo compartments are found on the same level as the passenger cabin and are accessible from it.



Rear cargo compartment baggage loading and off-loading is done through service door found in the rear of the cabin on the RH side (in front of the passenger door).

Forward cargo compartments baggage loading and off-loading is done through the dedicated cargo door, FWD left hand side. It must be ensured that the cargo is not loaded in a way that can block the safe and easy passage from the cabin to the flight deck and opening of both, cabin and flight deck doors.

Being part of the cabin, the hold is pressurized.

High density volumes must be tied down.

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6.4.4.1 Opening of Cargo Door

1) Forward Cargo Door

The aircrafts cargo door is located on the FWD LH side of the aircraft. It can be operated electrically or manually in case of the electrical power not being supplied.

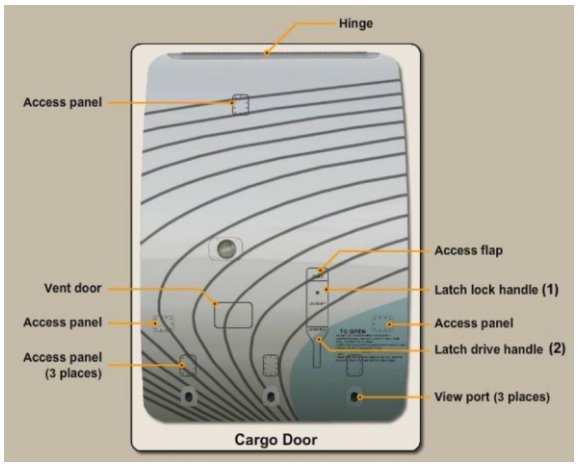
The cargo door is operated externally from a panel located outside.

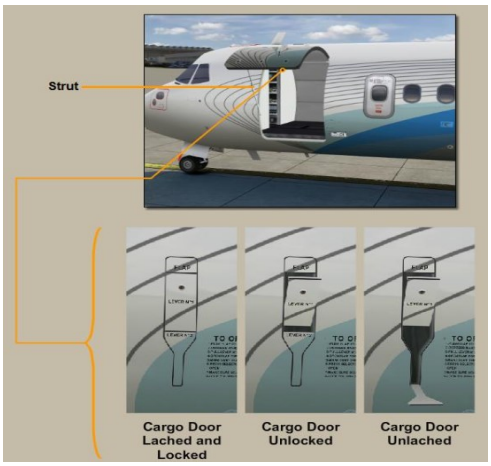
CAUTION:

- Before opening the cargo door, ensure that the maximum wind limit is not exceeded (45 kt)
- The cargo door hinges upwards. When opening or closing cargo doors, the lower edge of the door will swing down before moving upward.
- If the cargo door does not open, do not use excessive force, tools or GSE to push or pull on the door to open it.
- The holding strut is not a handle to ease the ground crew access into the cargo hold. Its purpose is to safely secure the cargo door. Any sustained actions on the strut may lead to damage of the strut and the actuator.

To open the FWD cargo door perform the following steps (refer to the picture on the next page):

1. Push ACCESS FLAP to grasp handle of lever (1).
2. Depress handle and pull lever (1) fully down.
3. Pull lever (2) fully down.
4. Open the flap 221AL for access to cargo door control panel 5001VU and verify that:
   a) Handles are fully down.
   b) Blue light is OFF.
   c) Green light is ON.
5. Set the actuator selector switch (4) to open position until the door is completely open.
6. Release the actuator selector switch (4). The switch will come back to its neutral position.
7. Strike softly on the right side of the folding strut.
8. Lock hold open strut by locking collar.
9. If the strut is locked do not set the actuator selector switch (4) to close position.
10. Close flap 221AL on cargo door control panel 5001VU.





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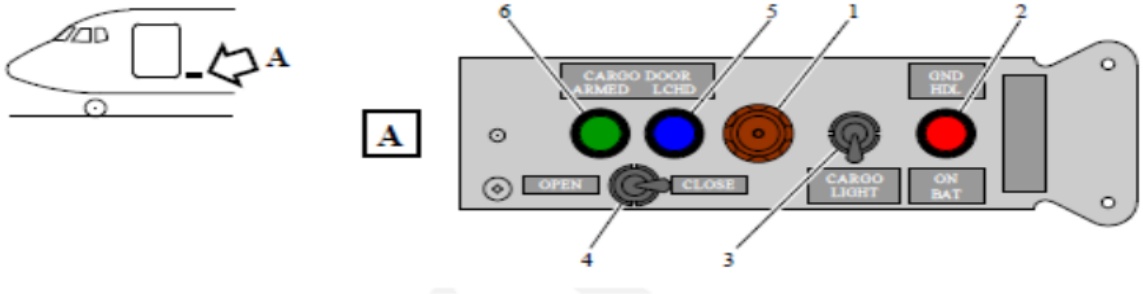

1. PANEL COVER SWITCH
2. GROUND HANDLING BUS ON BATTERY
3. CARGO BAY LIGHT SWITCH
4. ACTUATOR SELECTOR SWITCH
5. CARGO DOOR LATCHED - LIGHT ON (BLUE)
6. CARGO DOOR UNLATCHED AND UNLOCKED - LIGHT ON (GREEN)

To close the FWD cargo door, perform the following steps:

1. Unlock the hold open strut by locking collar.
2. Strike softly on the left side of the left side of the folding strut.
3. Open the flap 221AL for access to cargo door control panel 5001VU and verify that:
   a) Green light is ON.
   b) Blue light is OFF.
4. Set actuator selector switch (4) to close position until the door is completely closed.
5. Fold back the lever (2) in its recess.
6. Verify on the control panel that the green light turns OFF.
7. Fold back lever (1) in its recess.
8. Verify on the control panel that the blue light turns ON.
9. Make sure that actuator selector switch (4) returns to neutral position.
10. Make sure that lever (1) is fully in its place, flush with the door skin.
11. Make sure that the spring-loaded catch located inside the flap is depressed and fully pushed in the lever (1). The handle should reach the travel end.
12. Make sure that the light 'LCHD' is on.
13. Verify that the lever (1) is positively engaged and locked by pulling it outwards, applying a small force, parallel to the spring-loaded catch.
14. Close flap 221AL on cargo door control panel 5001VU.
15. Door closing and locking must be verified from outside through the three view ports. The ground crew must check that the indication on latch lock pins appears.

2) Aft Cargo

To enter the AFT Cargo, the service door must be opened. For operation of the service door see chapter. 6.4.6.1.

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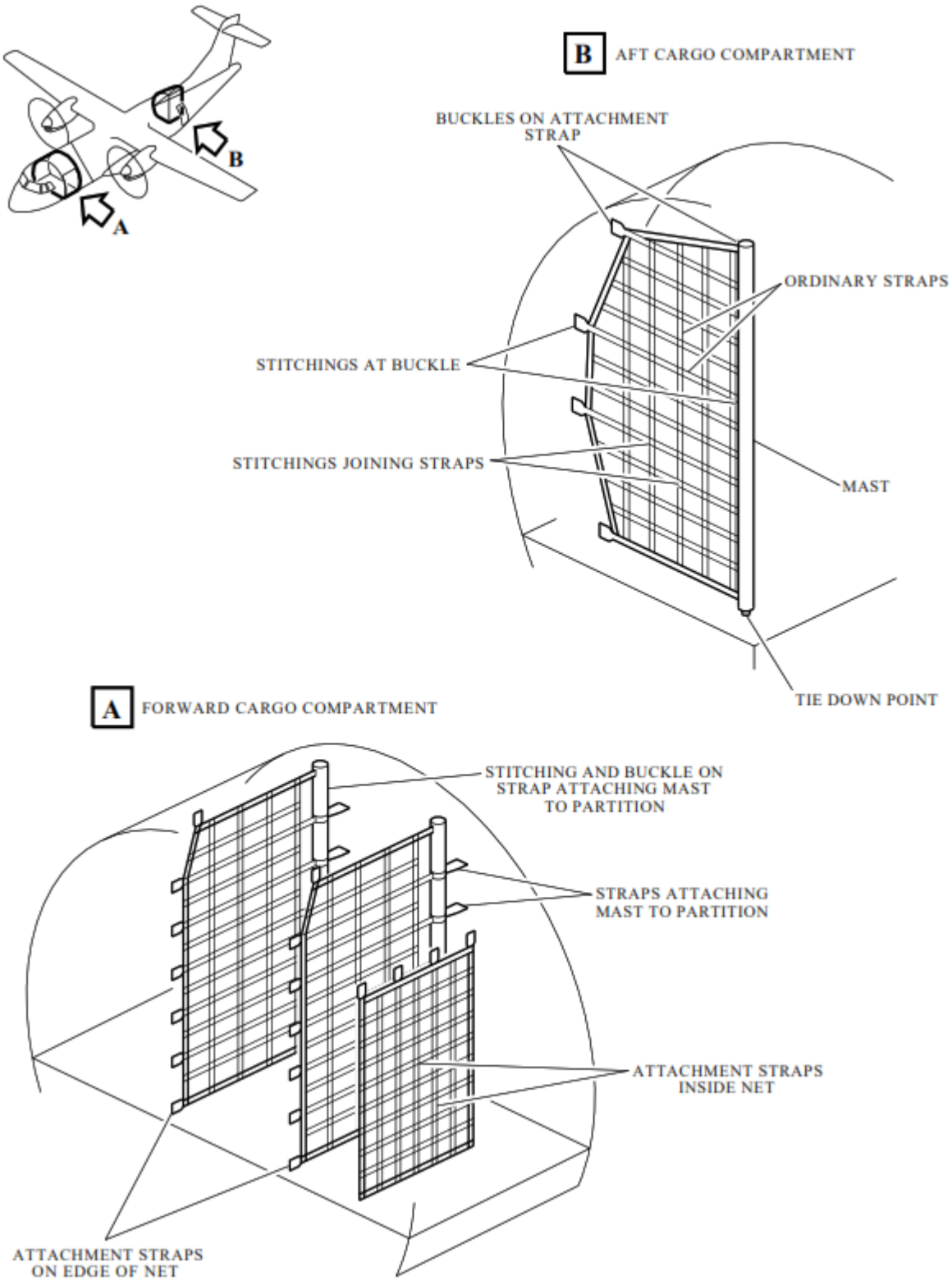
6.4.4.2 Cargo Nets

The following cargo nets may be installed in the baggage compartment:



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6.4.4.3 Hold Dimensions and Limits

ATR42 Compartment limits

LOCATION	VOLUME	MAX LOAD
Right FWD Compartment (11R)	1.8 m^3	288 kg
Left FWD Compartment (11L)	3 m^3	480 kg
FWD Right Rear Compartment (50)	1.9 m^3	302 kg
AFT Right Rear Compartment (51)	2.75 m^3	442 kg
Total Maximum Capacity	9.45 m^3	1512 kg

3) Structure: The FWD and AFT cargo compartment floor structure is designed to support a load distribution of **510 kg/m.**
4) Panels: Each floor is designed to support a load distribution of **400 kg/m²** with no deformation, moreover it can bear a local indentation load of **0.921 kg/mm²** without any panel crushing.

For Cargo Compartment package size dimensions see ch. 7.6.

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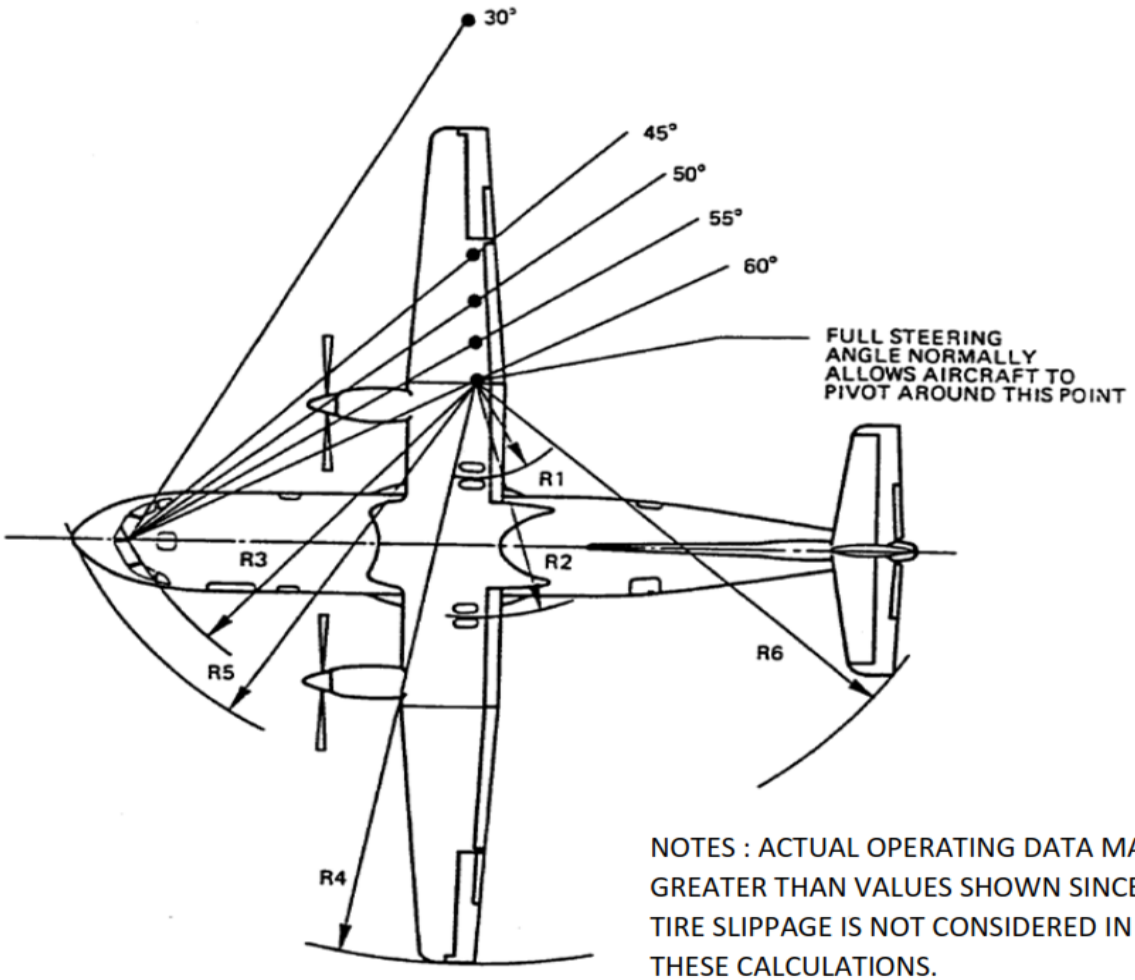
6.4.5 Servicing Points, turn radius and position of equipment

6.4.5.1 Turn Radius



STEERING ANGLE	R1 INNER GEAR		R2 OUTER GEAR		R3 NOSE GEAR		R4 WING TIP		R5 NOSE		R6 TAIL	
	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m
30°	43	16.60	67	20.70	70	21.53	105	32.18	73	22.45	86	26.27
45°	28	8.72	42	12.82	49	15.23	79	24.30	54	16.50	65	20.02
50°	22	6.98	36	11.08	46	14.05	74	22.56	50	15.42	61	18.80
55°	18	5.49	31	9.59	43	13.14	69	21.07	47	14.60	58	17.83
60°	13	4.16	27	8.26	40	12.43	64	19.74	45	13.96	55	17.03

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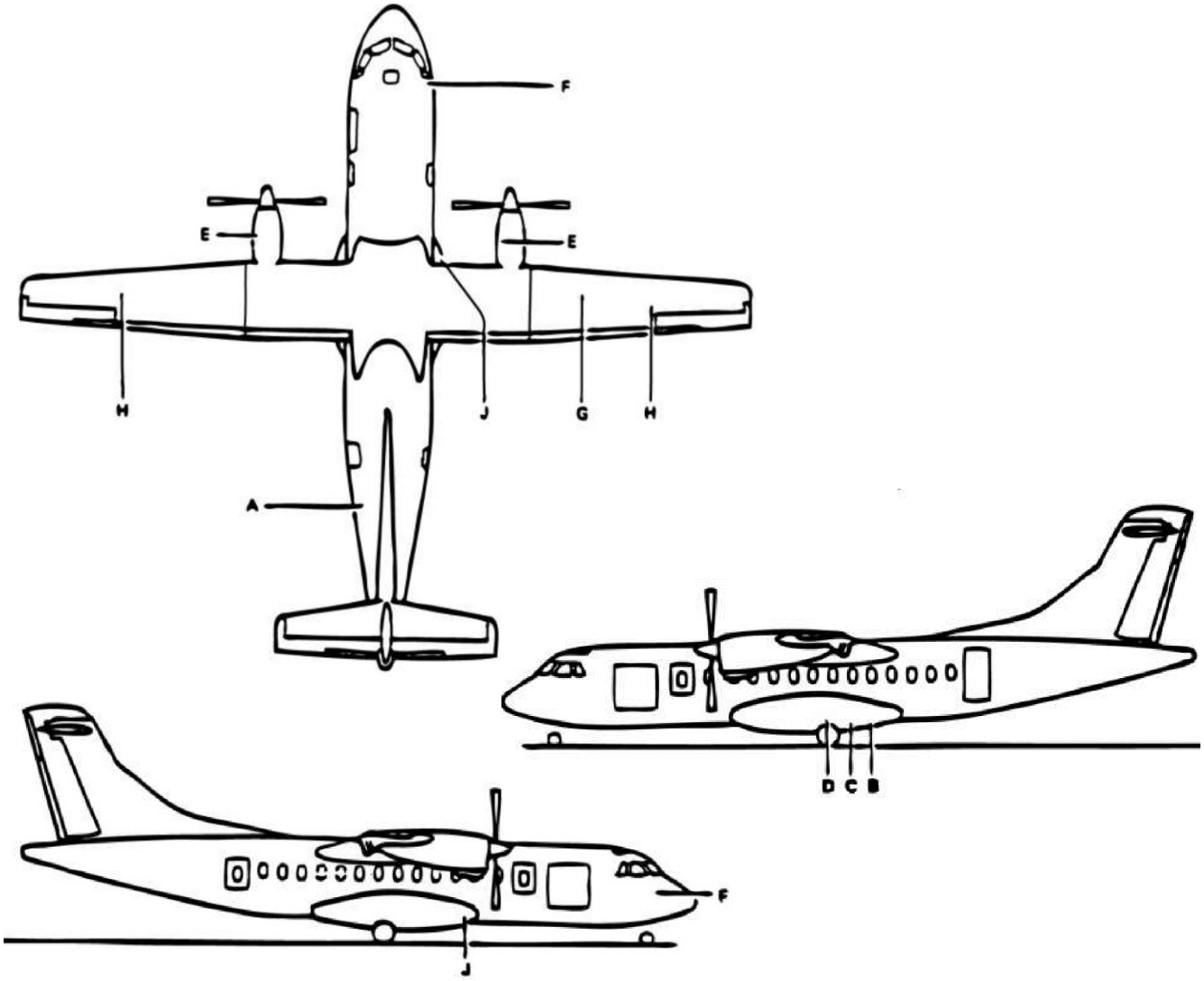
6.4.5.2 Servicing Points



	CONNECTION		CONNECTION
A	LAVATORY SERVICING	E	ENGINE OIL FILLING
B	ACCUMULATOR AIR CHARGING	F	ELECRICAL GROUND
C	HYDRAULIC POWER GROUND	G	PRESSURE FUELING
D	HYDRAULIC TANK FILLING	H	GRAVITY FUELING
J	PRE-CONDITIONING		

Electrical Power	Use 28V DC GPU or 115V AC GPU
Engine Start	Use 28V DC GPU

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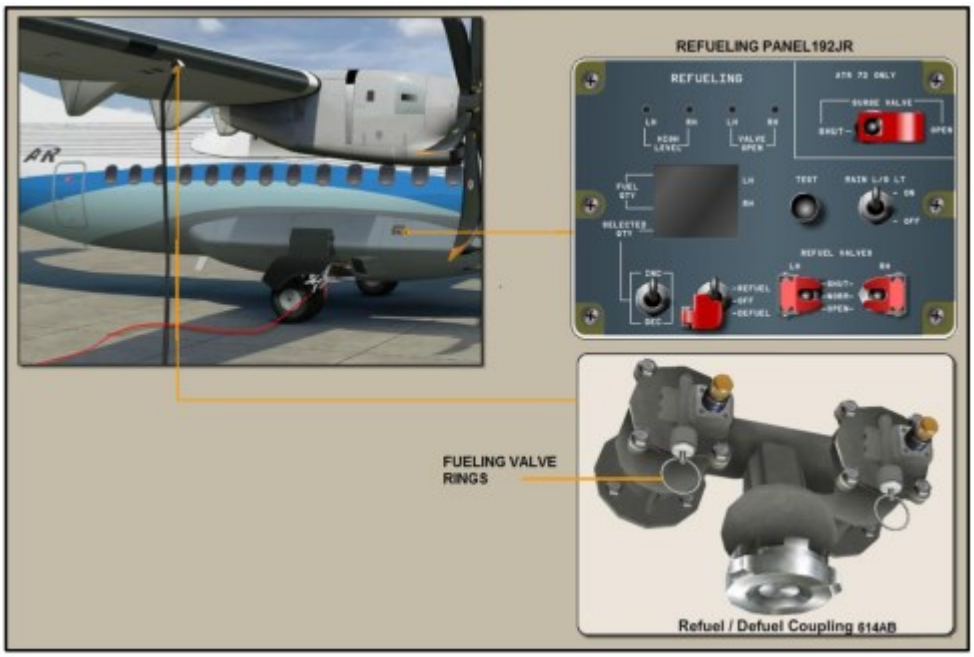
6.4.5.2.1 Static Grounding



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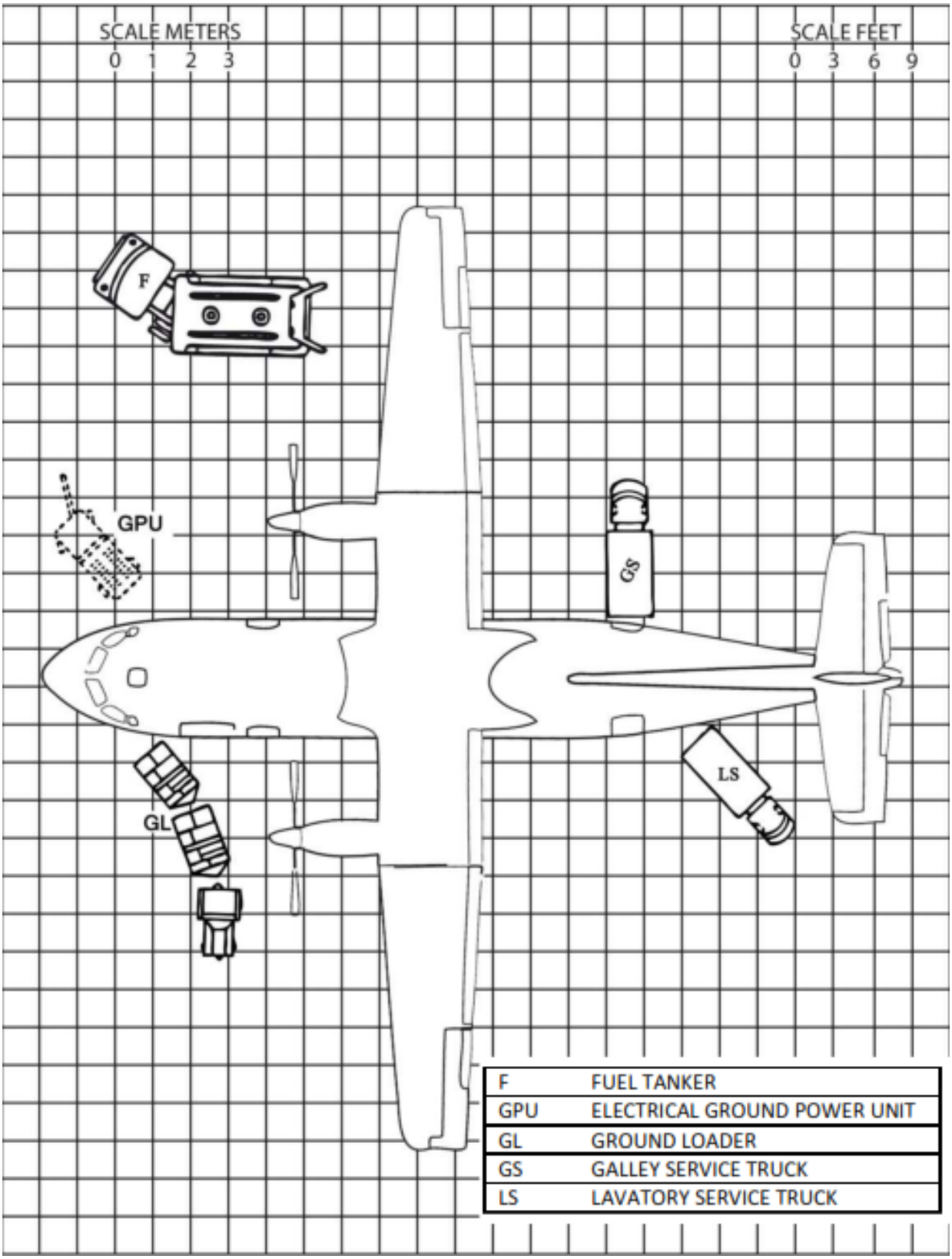
6.4.6 Ramp Handling



F	FUEL TANKER
GPU	ELECTRICAL GROUND POWER UNIT
GL	GROUND LOADER
GS	GALLEY SERVICE TRUCK
LS	LAVATORY SERVICE TRUCK

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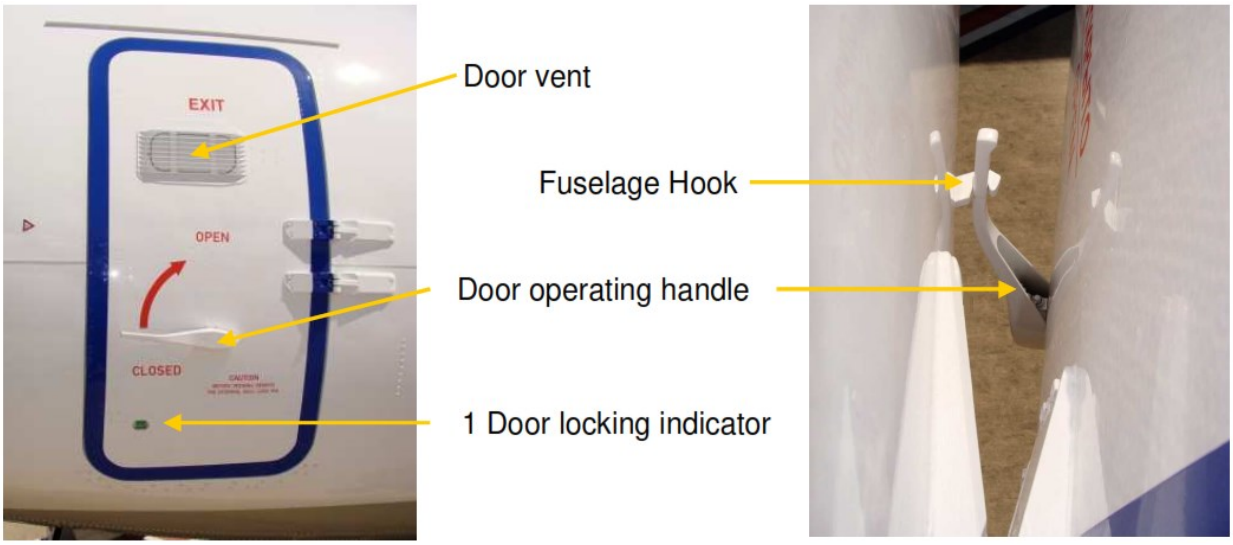
6.4.6.1 Operating of Service door

Unless properly trained, no one else but the active crew on board is allowed to open any door. Always ask the CCM to open the door.

In case a proper training has been performed, follow the steps below.

To open from outside:

- Knock on the door to advise the CCM that you will open it;
- Rotate the door operating handle forward;
- Open the door and rotate it forward;
- The door will lock automatically against the fuselage. When the door is opened, it releases out a fuselage hook in order for the door handle to engage into the hook



To close from outside:

- Pull the gust lock lever to release door operating handle from the fuselage hook;
- Bring the door backwards and into the door frame;
- Rotate the door operating handle rearward;
- Check the green locking indicator, to ensure correct locking of the door.

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6.4.6.2 Ground Power Unit

On aircraft arrival the DC GPU should be positioned outside the ERA. This will allow the aircraft to approach its final parking position in safe conditions.

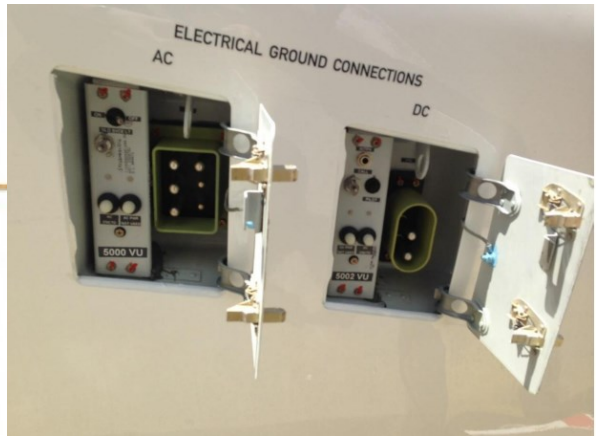
The GPU should approach the aircraft as soon as the aircraft is parked and the nose landing gear is chocked.

In order to maintain a continuous electrical supply upon arrival, Eng. No.2 with the propeller brake on will be operating. This procedure will provide a continuous supply of electricity to power cabin lightning and cargo opening door functions until the GPU is connected.

CAUTION: The DC GPU should be positioned forward facing away from the aircraft nose in full view of the pilot in command.

The Aircraft has two external receptacles to allow an electrical supply on ground, using DC and AC GPU.

The AC and DC electrical distribution systems can be supplied from ground power sources, connected via separate “External Power” receptacle, which is located on the lower left ride of the fuselage, just AFT the nose gear.



The AC external receptacle allows the aircraft to be supplied on ground with three phase 400Hz – 115/200 VAC power from the GPU.

The DC external receptacle allows the aircraft to be supplied on ground with 28 VDC power from the GPU.

CAUTION:

- The connection/disconnection of the GPU is not only a ground crew procedure, but also a procedure for flight crew. The ground crew must ensure proper communication with the flight crew while performing the connection/disconnection procedure.
- Before connecting the GPU, the ground crew should ensure that the aircraft is electrically bonded.
- The operation of only AC external power supply, without any other DC sources (Hotel Mode or DC external power), causes discharge of both main and emergency batteries.

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GPU Connecting Procedure

8. Open the access door to have access to the DC or AC external power receptacle.
9. Plug in the DC GPU or AC GPU connector to the receptacle as applicable.
10. Start the GPU to supply the aircraft with external power.
11. On the corresponding panel check that:
    a. 'DC connected' or 'AC connected' indicator light comes on.
    b. 'DC power not used' or 'AC power not used' indicator light comes on.
12. Let the flight crew know that ground power is available.
13. Once the flight crew activates the external power pushbutton:
14. If the ACW or DC ground service busses are selected 'OFF':
    a. Check that on corresponding panel, 'DC or AC power not used' indicator light turns off for corresponding power not used.

CAUTION: It is recommended to avoid disconnecting the GPU connector when the aircraft is energized. This may cause arcing that is dangerous for the ground crew and can damage equipment.

GPU Disconnecting Procedure

1. First wait for the confirmation that the flight crew has released the external power pushbutton.
2. Check that on corresponding panel the 'DC or AC power not used' indicator light comes on.
3. Cut off the external power to the aircraft and shut down the GPU.
4. On the corresponding panel check that:
    a. ''DC connected' or 'AC connected' indicator light turns off.
    b. 'DC power not used' or 'AC power not used' indicator light turns off.
5. Unplug the GPU connector from the panel 5002VU or panel 5000VU, as applicable.
6. Close the access doors
7. Remove the GPU from the ERA.

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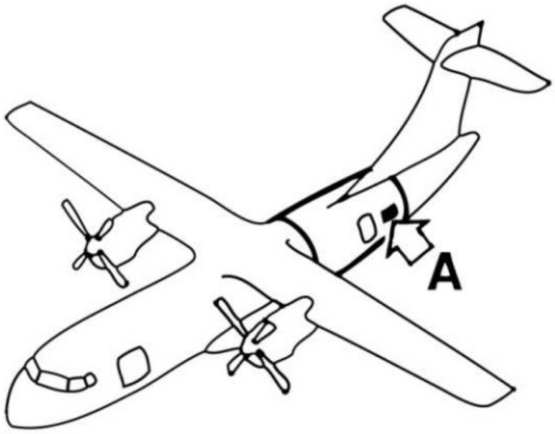
6.4.6.3 Water and Toilet Servicing

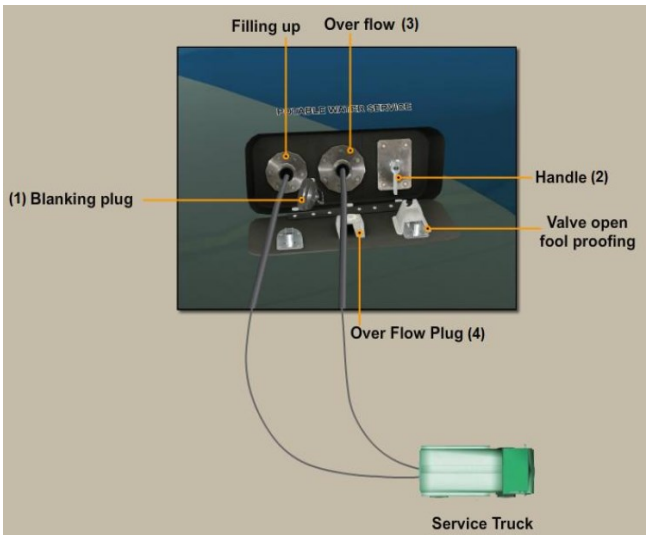
Water Tank Servicing

Filling and draining of water are done through a panel installed on the left side of the fuselage rear section. **Draining shall be done during night stop in freezing or icing conditions.**

The water system is easily and completely drainable by gravity.

The tank has 15 l capacity.





Draining

1. On potable water service panel, place handle (2) in open position; drain water tank into recovery container/service truck.
2. During draining, push regularly the faucet lever of the wash basin inside the cabin.

Replenishing

Note: *Filling pressure must not exceed 1 bar (14 psi). During topping up operations, stop replenishing when water flows through the overflow port (3).*

1. On potable water panel, place the valve handle (2) in 'OPEN' position.
2. Connect the service vehicle and replenish the water tank.
3. Place valve handle (2) in closed position.

Close Up:

1. Disconnect service vehicle from filling connector. Allow aircraft system pipe to drain.
2. Install blanking plug (1).
3. Make sure that overflow plug (4) is in correct position.
4. Close access door.

CAUTION: To avoid blocking of plugs and valves by ice, thoroughly wipe dry the threads, the potable water service panel and the access door.

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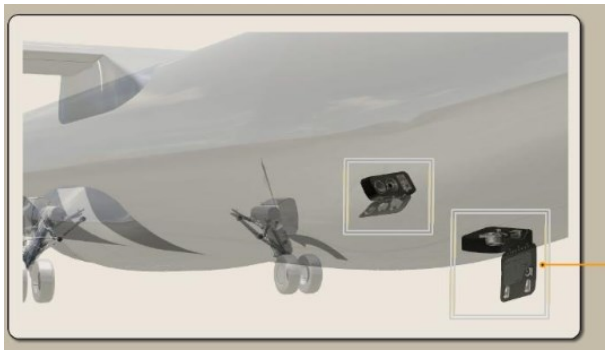
Toilet Servicing

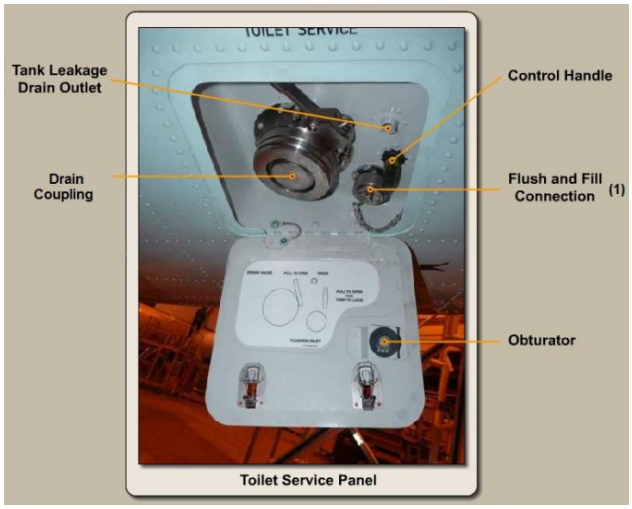
The toilet flushing is obtained from a motorized pump filter unit. The flushing cycle is automatically controlled by an electrical timer. Draining, flushing and charging of the tank are accomplished at the toilet service panel, located underneath the rear fuselage.

The maximum Toilet water that can be filled in the tank is **8 l.**

It is accomplished in the following way:

- Open waste service panel door;
- Remove protective cap of the waste drain valve;
- Connect the lavatory dumping coupling of the lavatory servicing dolly to the waste drain valve;
- Pull and lock the drain control handle to open the holding tank drain valve;
- Continue the tank drainage until the waste flow stops;
- Flush with water through the rinse nipple for approximately 3 minutes;
- Release the control cable;
- Fill the waste holding tank with 15 l of water;
- Pull and lock the drain control handle to open the holding-tank drain valve;
- Release the drain control handle after all liquid is drained;
- Fill the waste holding tank with maximum **8 l** of water and add:
  - 57 g of Monogram MC-1000 germicidal deodorant, or
  - 170 g of Mirabowl ''Q'' germicidal deodorant;
- Disconnect the lavatory dumping and filling couplings;
- Close the cap and latch the handle of the waste drain valve. The flapper valve will close automatically when the cap is closed;
- Install the cap on the toilet rinse nipple.





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6.4.6.4 Loading

6.4.6.4.1 General and Special Cargo

Dangerous Goods

All Dangerous Goods except Class 7 are accepted.

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6.4.6.5 Towing

The following towbars are accepted by the manufacturer. For any other towbar to be used, contact ground operations department.

ITEM NAME	MANUFACTURER	PART NUMBER	GSE NUMBER	USED FOR:
ATR 42/72 towbar - basic	/	98S09008019000	/	It is towbar with shock absorb. Used for day and night towing.
Towbarless tug	Douglas- Kalmar	TBL-50	397	A/C towing, pushing and steering. It has oversteer protection and alerting system.
Towbarless tug	LEKTRO	AP8750C-AL80/50/35*	/	A/C push back and maintenance towing. It has oversteer alerting system.
Towbarless tug	LEKTRO	AP8750C-AL80/50/35*	/	A/C push back and maintenance towing. It has oversteer alerting system.

*GPU option not qualified by ATR

It is possible to tow or push the aircraft, at maximum ramp weight using a tow bar attached to the nose gear leg. One tow bar fitting is installed at the front of the leg.

Push-back can be operated in Hotel Mode if tail wind is under **10kts**, including aircraft direction changes throughout the procedure. If the tail wind is above this limit, the push-back has to be done, with the propeller(s) running and unfeathered, and respecting ground safety rules and airport local rules.

Towbar attachment height on the NLG varies due to aircraft loading. See table below for max range height.

Instructions

See chapter 4.13 for detailed instructions. Below is presented brief information and pictures how the towbars are installed and used in regards to their specifics. All those procedures are for towing the aircraft in maintenance configurations only. For operational push-back, refer to local authority regulations and adapt this procedure to comply.

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Towbar with shock absorb towing

- Make certain that the N/W steering wheel is in the ‘’OFF’’ position;
- On panel 27VU: place EXT LT/ NAV switch in ‘’NAV’’ position;
- Make certain that the landing gear ground locking pins are installed (locking pins installation is optional to tow or push the aircraft during flight operations);
- Make certain that static ground cables have been removed;
- Connect towbar to nose landing gear at point B;
- Connect tractor to towbar;
- Pull wheel chocks and keep them readily available for use;
- When towing from the nose gear do not exceed the turning angle indicated by the pointer and the red graduated plate;
- When towing operation is complete, turn nose wheel to centre or to near centre position chock aircraft wheels. Connect static ground cables and remove towbar clear on aircraft panel 1 VU, put the N/W steering switch in ‘’ON’’ position;
- On panel 27 VU: Return EXT LT/NAV switch to ‘’OFF’’ position.

When using HOTEL mode, usually for towing at night with ANTI-COLL and NAV light which are supplied by the generated electricity, make right engine start in HOTEL mode before the first point of the procedure and make engine shut down, at the end of the towing.

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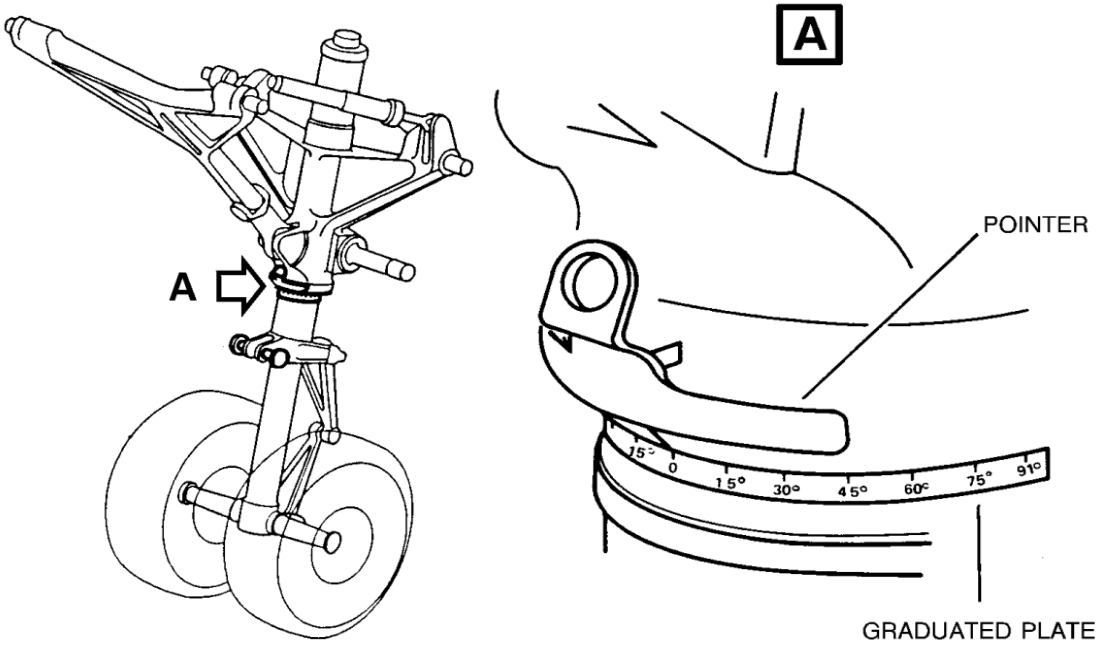
Towbarless tug

The use of towbarless towing vehicles (TLTCs) is authorized only for classical towing operations, i.e. pushback and maintenance towing. The use of TLTVs for towing an aircraft to a dispatch area close to runway thresholds, usually referred to as "dispatch towing or operational towing", is not authorized.

- Make certain that the N/W steering wheel is in the ‘’OFF’’ position;
- Make sure that the pressure of the ‘’EMER BRK ACCU’’ shows at least 2000 PSI;
- Make certain that the landing gear ground locking pins are installed (locking pins installation is optional to tow or push the aircraft during flight operations);
- Make certain that static ground cables have been removed;
- Connect towbarless tug to nose landing gear;
- Connect tractor to towbar;
- Select ATR aircraft type on the towbarless tug;
- Make sure that the aircraft parking brake is applied and/or put the wheel chocks in position;
- Approach the aircraft and alight the nose wheel cradle of the tractor with the NLG axis;
- Capture the NLG following proper manufacturer’s instructions;
- Make sure that the nose landing gear is correctly positioned on the centre of the cradle and cannot be disengaged from the tractor;
- If not already required by manufacturer’s instructions, release the aircraft parking brake and/or remove the wheel chocks (when towing the aircraft with towbarless towing vehicle, the aircraft parking brake shall only be used in case of emergency);
- Start towing. Turn the nose gear only while aircraft is moving. When using the towbarless tug, wait until the aircraft has started moving, before turning the nose gear.
- After towing, make sure that the nosewheels are aligned with the aircraft centreline and chock the aircraft or apply aircraft parking brake.
- Disconnect towbarless tug from aircraft: lower and unlock the NLG and remove the towbarless tug from aircraft.
- Put the N/W steering switch in ‘’ON’’ position.



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Power Back

ATR72 has the possibility to perform Power back. The power-back procedure is the ability for the aircraft to move backwards under its own power using reverse. This procedure should only be carried out at authorised airports.

Performing this procedure requires no GSE. Flight Crew control the aircraft using nosewheel steering. The ground crew responsible for departure procedures should be in continuous contact with the flight crew using headset communications or hand signals.

Guidance ground crew should be positioned at the wing tips to assist the aircraft from the parking position until it is released for taxi.

The ground staff have to use safety glasses, because of the possibility of projection.

The ground crew should perform the pre-departure walk around check before clearing the aircraft for power back.

Power back is done after ATC clearance;

During procedure, the ground personnel should ensure there is sufficient clearance for the procedure to take place. If there is any doubt about the clearances required for the power-back procedure, the ground crew should stop the procedure and inform the flight crew via headset/hand signals.

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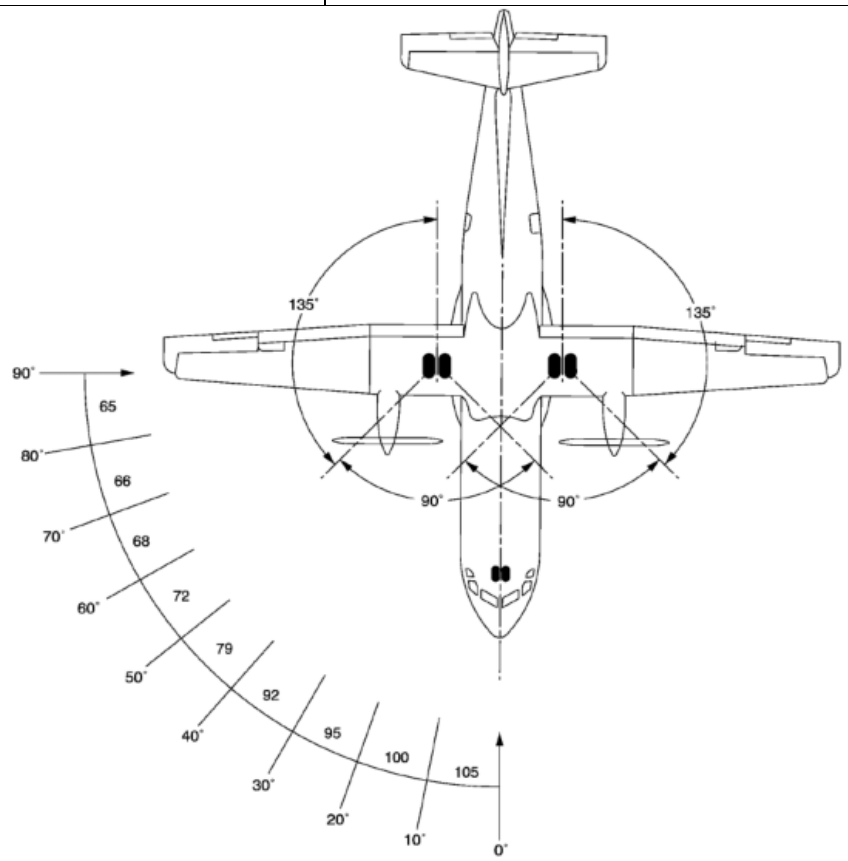
6.4.6.6 Mooring

After parking, in case of bad weather conditions mooring is necessary. Mooring must always be performed when the aircraft is parked on snow or ice-covered surfaces.

Ground mooring is carried out at each main landing gear and at nose landing gear. 7 mooring gears are required.

For winds greater than the reported below the aircraft has to be sheltered in hangar.

Wind direction degrees from X'AXIS	Wind speed (kt) limitations
0-10	105
10-20	100
20-30	95
30-40	92
40-50	79
50-60	72
60-70	68
70-80	66
80-90	65



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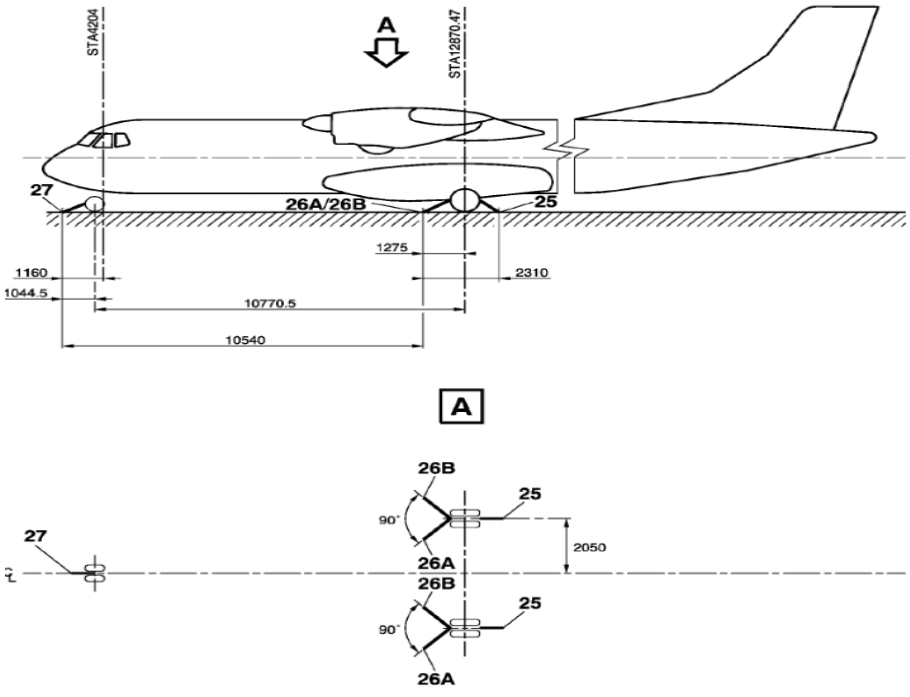
Mooring Procedure Using ATR Mooring Kit

4. Main landing gear mooring
   h) Install adapter (20) on rear de-bogging fixture of each MLG.
   i) Install turnbuckle (21) and its shackle (22) on adapter (20) of each MLG.
   j) Secure turnbuckle (21) with ground mooring ring (25) of each MLG.
   k) Install adapter (20) on forward de-bogging fixture of each MLG.
   l) Install 2 turnbuckles (21) and their 2 shackles (22) on adapter (20) of each MLG.
   m) Secure the 2 turnbuckles (21) with ground mooring rings (26a/26b) of each MLG
   n) Simultaneously tighten all the turnbuckles to eliminate gaps. Compress the shock absorbers by a minimum of 30% while insuring the following angles between turnbuckles and ground:
      - on AFT point (25): 20 to 26 deg.
      - on FWD points (26a/26b): 26 to 40 deg.
5. Nose landing gear mooring
   e) Install fitting (10) on towing receptacle on NLG.
   f) Install turnbuckle (23) and its shackle (24) on fitting (10).
   g) Secure turnbuckle (23) with ground Mooring ring (27).
   h) Tighten turnbuckles to eliminate gaps. Compress shock absorber by a minimum of 30% while insuring the following angle Between turnbuckle and ground:
      - NLG point (27): 20 to 35 deg.
6. Removal
   e) Disconnect mooring turnbuckles.
   f) Remove all shackles and adapters from Landing gear legs.
   g) Check that no tooling obstructs landing Gear operating mechanism.
   h) Clean area around aircraft.



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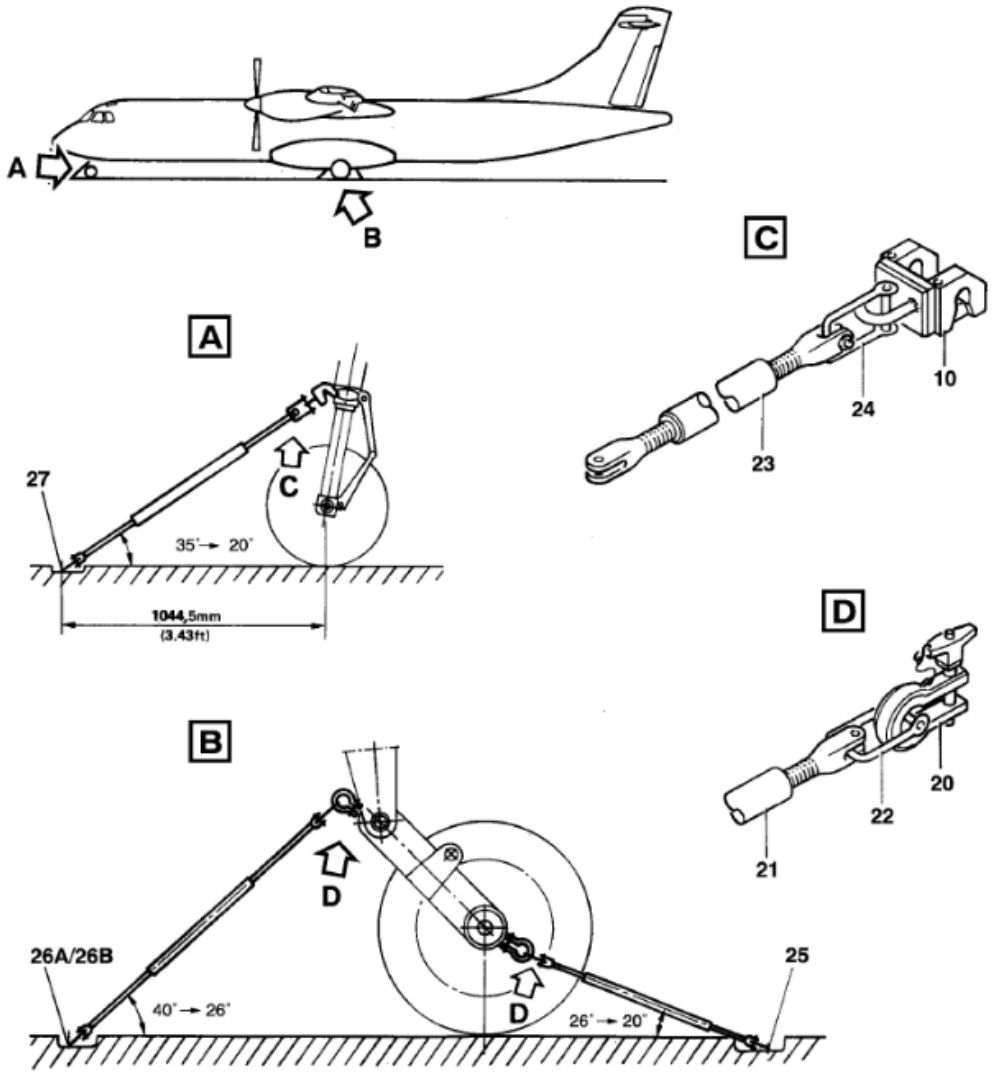

Close-up:

4. Remove all protections previously installed.
5. Place wheel chocks as necessary.
6. Make certain that the working area is clean, clear of tools and miscellaneous items of equipment.

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6.4.6.7 Ground De-icing Operations

Hotel mode is specific to ATR. It allows the aircraft to be de-iced while the right engine is running with the propeller stopped and bleed air valve off. Thus, the ATR could be de-iced and anti-iced like jet aircraft at the holding point.

6.4.6.8 Ramp Handling with Hotel Mode On

On the ground Hotel mode provides:

- Cabin heating in winter.
- Cabin cooling in summer.
- Power to the aircraft electrical system.

When the Hotel mode is in operation the rear service door can be safely used. But anyhow special attention and extreme caution is required from the ground crew during turn-around times while engine 2 is running in Hotel Mode.

General safety provisions (i.e. hearing protection) must be respected, as usual, by the ground staff involved in the turnaround/ramp handling while the Hotel mode is on.

Hotel Mode Start-up prior to engine start up

Once the servicing around the RH side of the aircraft is complete and all GSE are behind the ERA, the ground crew is required to advise the flight crew that they have clearance to start Eng. No.2 in Hotel Mode.

Prior to start-up, the ground crew should ensure that:

- The area is clear of all personnel and equipment.
- The service door is closed and locked (subject to operators' requirements).

Once Eng. No.2 is running in Hotel Mode, ground crew should request confirmation to disconnect the GPU and proceed following the recommended procedure.

The ground crew should remain in communication with the flight crew, either by the use of headsets or by conventional marshalling signals. The ground crew should remain in full view of the flight crew throughout operations.

6.4.6.9 Ground Deicing Strategy

As the applications of de-/anti-icing fluids on the ATR42 is the same as on the ATR72, refer to ch. 6.3.6.6 for further instructions.

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6.4.7 Galley

On ATR42 there is **one** galley installed at the rear right hand side of the cabin, next to the service door that is supplied with electricity.

6.4.7.1 Galley Layout

Galley Cabin

Oven

6.4.7.2 Galley Equipment Units and Dimensions

	Half Trolley	Standard Units	Catering	Hot Jugs	Oven	Front of Galley Stowage
F-HLIA	02 x 60 kg	01 x 20 kg	120 kg	02	01	20 kg

Besides the equipment presented above, in the galley also can be found different storage compartments and one waste bin with a flap cover.

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6.4.8 Cleaning and Disinfection Products

On ATR42/72 can be used any disinfection product that complies with the widely used industry specifications AMS 1451 (CMD 14-009), AMS1550 (CMD 11-001S), AMS1452 (CMD 14-007) or AMS1453 (CMD14-008) (see table below). Disinfection agents that do not comply with the above-mentioned specifications may not be compatible with the aircraft.

Specifications	Manufacturer	Description	ATR reference
AMS1451	Local Purchase	Disinfectant, Aircraft, for Use in Cargo Compartments	ATR CMD14-009
AMS1452	Local Purchase	Disinfectant, Aircraft General purpose	ATR CMD14-007
AMS1453	Local Purchase	Disinfectant Cleaner for Aircraft Interior general Purpose Liquid	ATR CMD14-008
AMS1550	Local Purchase	Cleaner, Water Base, Aircraft interior Hard Surface Materials	ATR CMD11-001S
Product Name	**Manufacturer**	**Description**	**Specifications**
Dasic Aerokleen ACS A 810 Disinfectant	Dasic international	Aircraft Cabin Disinfectant Cleaner	AMS1550, EN1276
QUARTASEPT	SCHUELKE & MAYR GMBH	Disinfection and cleaning surface	CMD14-005
Disinfectant 20R	PPG	Virucidal and Bactericidal disinfectant for multi-surfaces	EN14476, EN13697, EN1276
AERODIS 7127	ZIP-CHEM	Disinfecting	AMS1550, AMS1452
KI-OSE 320 wipe	CALLINGTON / PSA	Disinfecting	AMS1453, EN 1276
KI-OSE 321 - 325	CALLINGTON / PSA	Disinfectant	EN14476, EN1276, AMS1453
ZEP-RTU-CLEAN-DISINFECTANT with TURQUOISINES-EFPFCC	ZEP Aviation	Disinfectant	AMS1452, AMS1550
CALLA 1452/CALLA 1452 RTU	ZIP-CHEM	Neutral Disinfectant Concentrated Cleaner	EN14476, AMS1452, AMS1453, AMS1550
NOVIRUCLEAN 3471	ORAPI APPLIED	Disinfectant	AMS1453

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6.5 A319

6.5.1 Basic Data

CHARACTERISTICS	
Manufacturer: AIRBUS	A319-111
	F-HDRA
EXTERNAL DIMENSIONS	
Length Wingspan Height	33,84 m 34,1 m 11,76 m
CABIN DIMENSIONS	
Length Width Height	23,78 m 3,95 m 2,21 m
ENGINES	
Two CFM International CFM56-5B6	
APU	
One Allied Signal APU 131-9	
PERFORMANCES	
Maximum range	4200 km
Cruise speed	850 km/h
Operating altitude	39 800 ft
FUEL QUANTITY	
Max useable fuel per tank	TTL wing fuel: 15 959 l Center Tank Fuel: 8250 l

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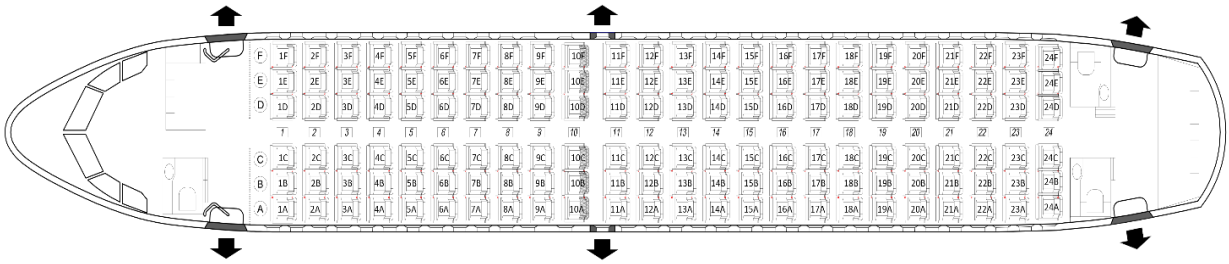
6.5.1.1 Seating Capacity and Cabin Balance Zones

Aircraft	Seating capacity	ZONE and rows per zone		
		A	B	C
F-HDRA	144	1-8 (48 seats)	9-16 (48 seats)	17-24 (48 seats)

F-HDRA

- 144 Seats on 24 rows in total, each seat is designated by a letter;
- the seats are marked with following letters**: A (LH window seat); B (LH Middle seat) and C (LH Aisle seat), D (RH Aisle seat); E (RH Middle seat) and F (RH window seat).**
- All seatbacks are reclining except at over wing exit row.
- Life jackets are located under the seats.



6.5.1.2 Passenger Oxygen Mask Location

On F-HDRA there are extra oxygen masks for the use by infants on all seats in the cabin.

Important: Infants may not be seated on emergency exit even if there is an extra oxygen mask. See ch.2 and App2 for details on INF seating requirements.

6.5.2 Weight and Balance Data

	MRM	MTOM	MLM	MZFM
F-HDRA	75 900 kg	75 500 kg	62 500 kg	58 500 kg

The DOM is BEM plus the mass of the operational items, i.e. crew, documents etc.

The crew uses Flysmart application for issuance of the loadsheet.

For Balance zones refer to ch. 6.5.1.1.

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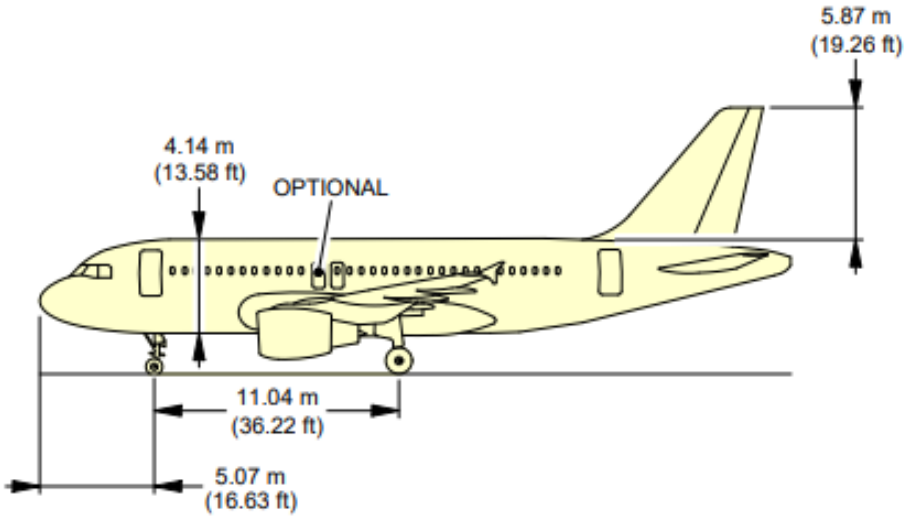
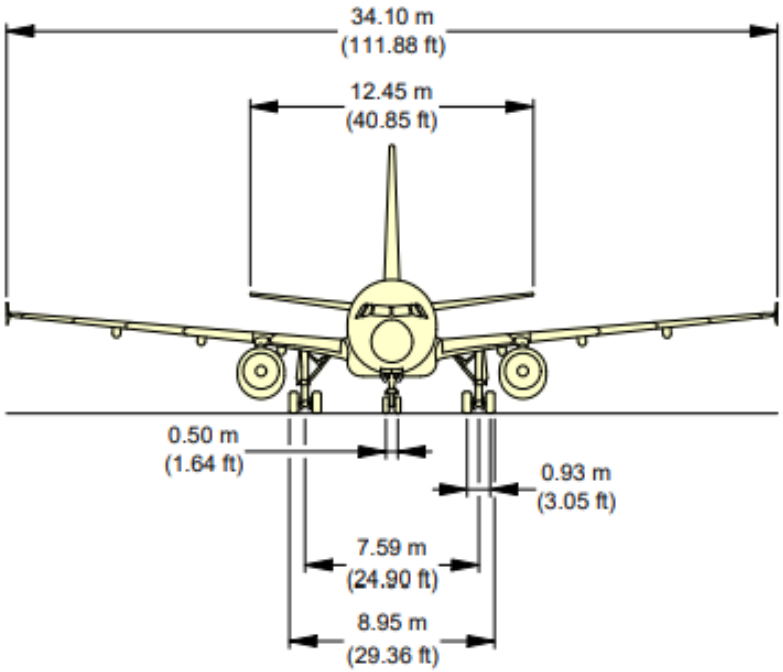
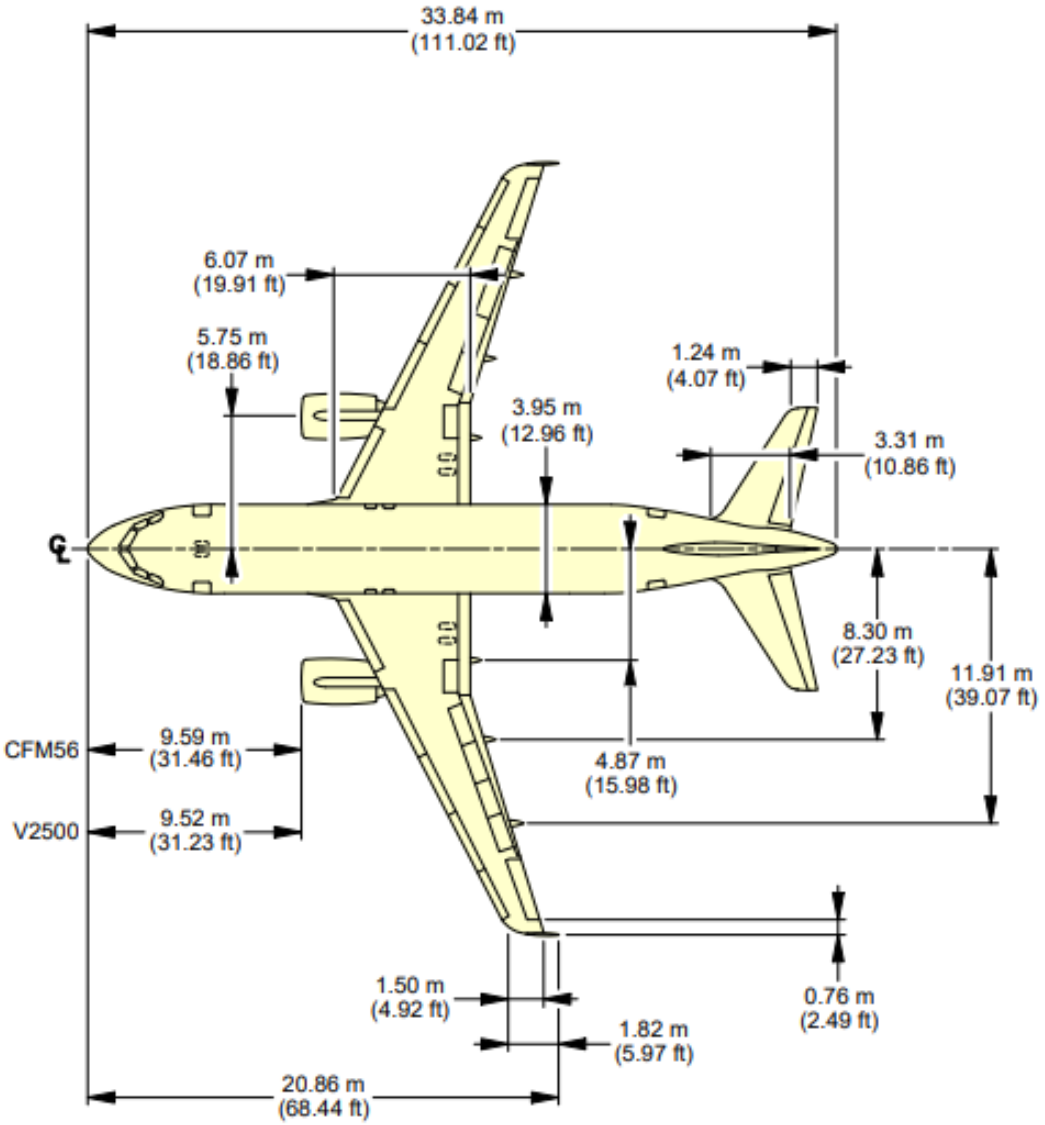
6.5.3 Aircraft Dimensions

6.5.3.1 External Dimensions





© Aero4M


33.84 m
(111.02 ft)
6.07 m
(19.91 ft)
5.75 m
(18.86 ft)
1.24 m
(4.07 ft)
3.95 m
(12.96 ft)
3.31 m
(10.86 ft)
8.30 m
(27.23 ft)
11.91 m
(39.07 ft)
CFM56
9.59 m
(31.46 ft)
V2500
9.52 m
(31.23 ft)
4.87 m
(15.98 ft)
1.50 m
(4.92 ft)
0.76 m
(2.49 ft)
1.82 m
(5.97 ft)
20.86 m
(68.44 ft)

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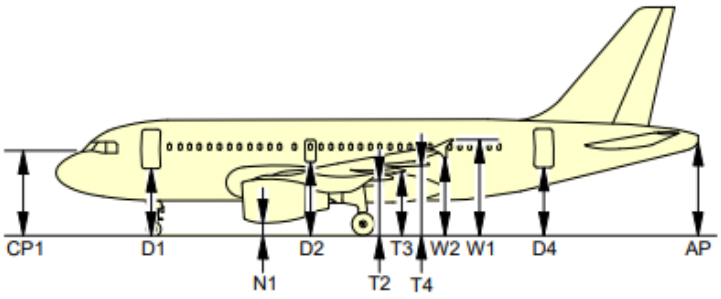
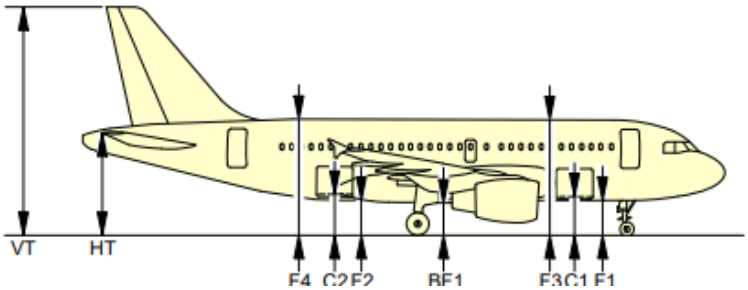
6.5.3.2 Ground Clearance





Location			FWD CG (m)	AFT CG(m)
PASSENGER DOORS	Door 1	D1	3.391	3.451
	Emergency hatch	D2	3.902	3.905
	Door 2	D4	3.652	3.575
CARGO DOORS	FWD cargo door	C1	1.830	1.869
	AFT cargo door	C2	1.965	1.933
REFERENCE POINT	Pilot view	CP1	4.171	4.256
FUSELAGE	Bottom FWD	F1	1.750	1.780
	Bottom AFT	F2	1.873	1.838
	Top FWD	F3	5.897	5.924
	Top AFT	F4	6.020	5.982
	Belly fairing	BF1	1.661	1.644
WING	Flap track 2	T2	2.656	2.637
	Flap track 3	T3	3.092	3.070
	Flap track 4	T4	3.434	3.405
	Wing tip fence top	W1	4.809	4.765
	Wing tip fence bottom	W2	3.836	3.794
TAILPLANE	Horizontal tail plane	HT	5.529	5.410
	APU exhaust	AP	4.822	4.693
	Vertical tail plane	VT	12.054	11.930

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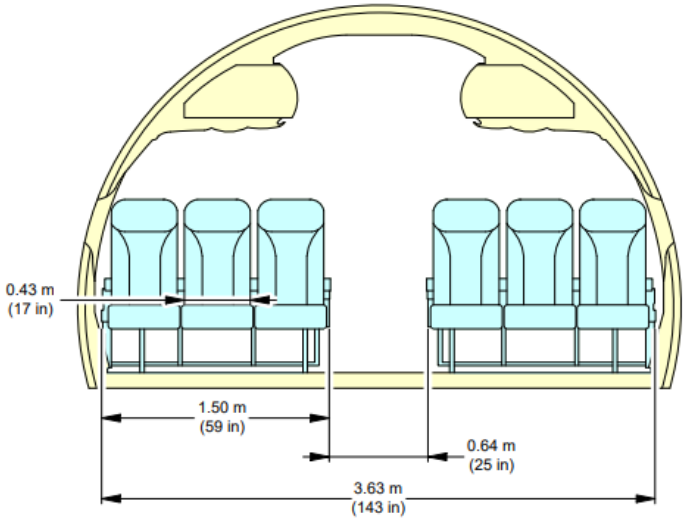
Location			FWD CG (m)	AFT CG(m)
ENGINE/ NACELLE	CFM 5A Nacelle low point	N1	0.594	0.604
	CFM 5B Nacelle low point	N1	0.595	0.604
	V2500 Nacelle low point	N1	0.779	0.784

6.5.3.3 Passenger Cabin Dimensions

Width on the ground	3.63 m
Maximal Height (aisle)	
Aisle width	0.63 m



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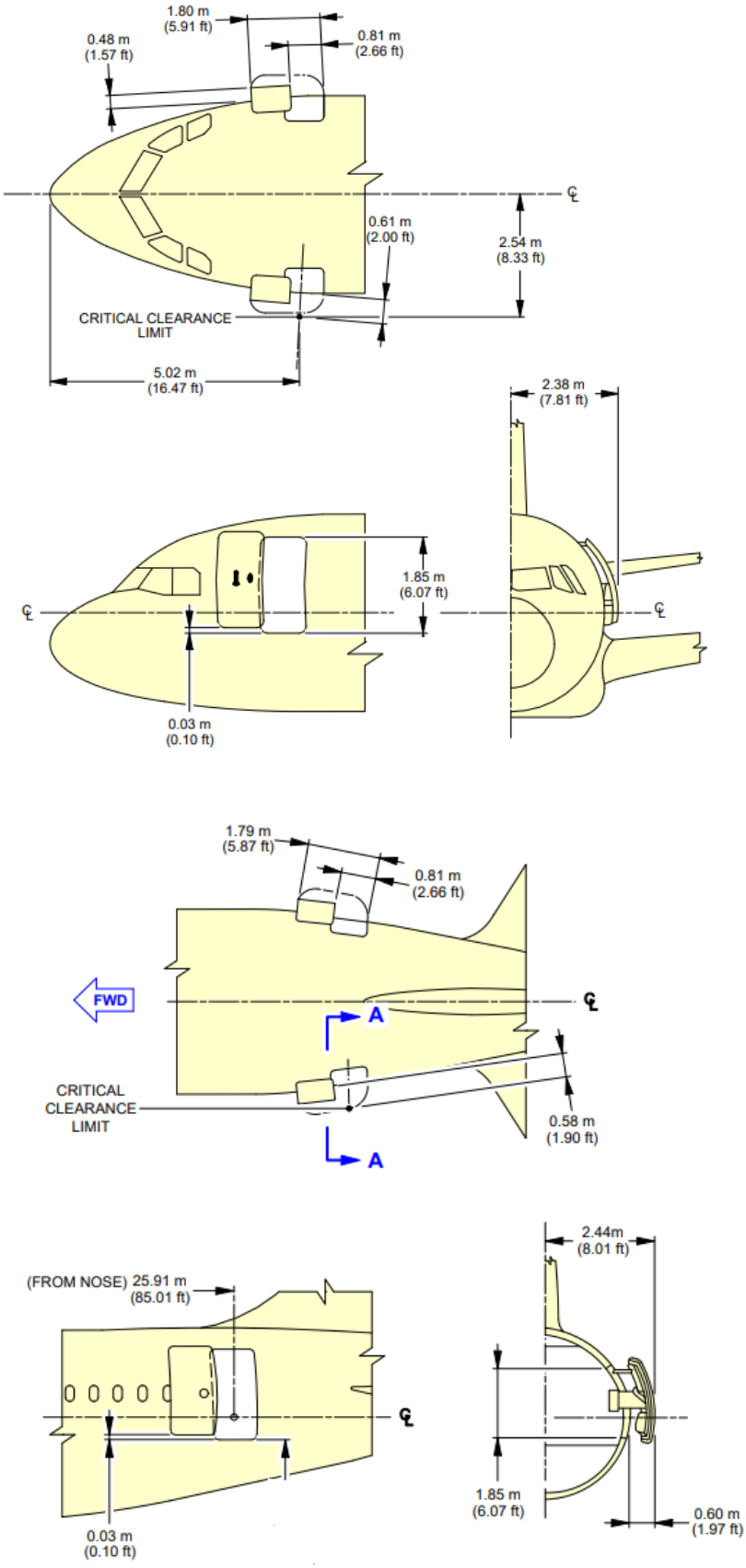
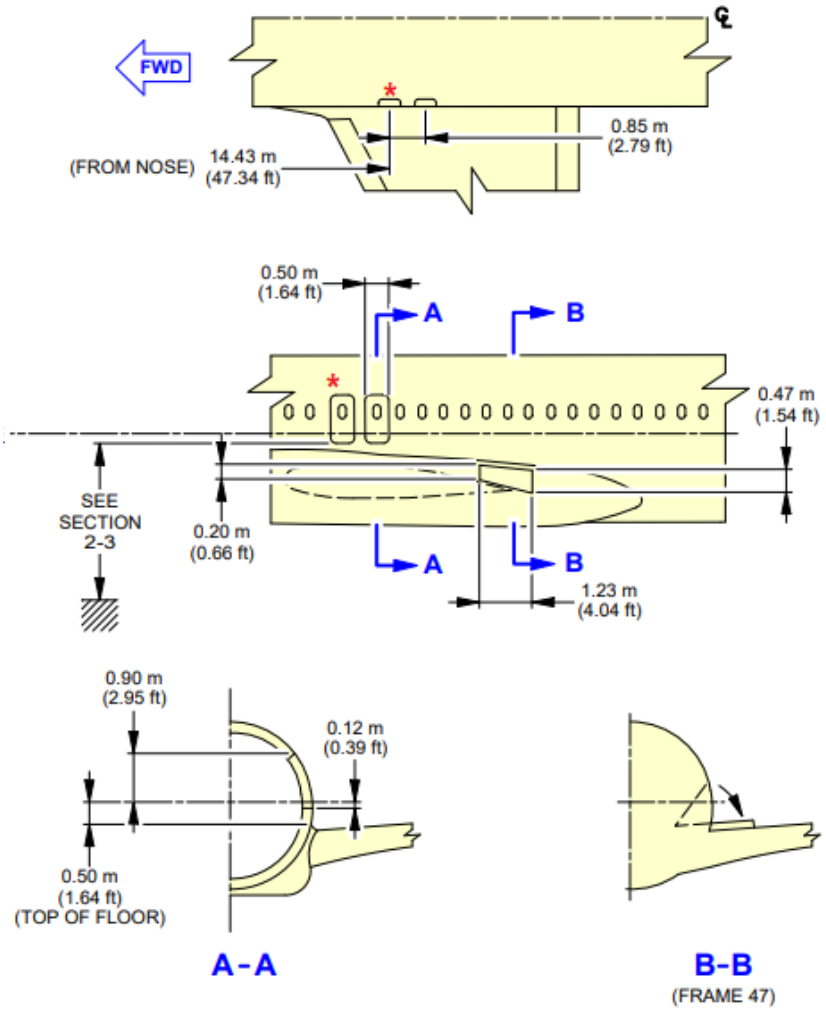
6.5.3.4 Door Dimensions and Clearances

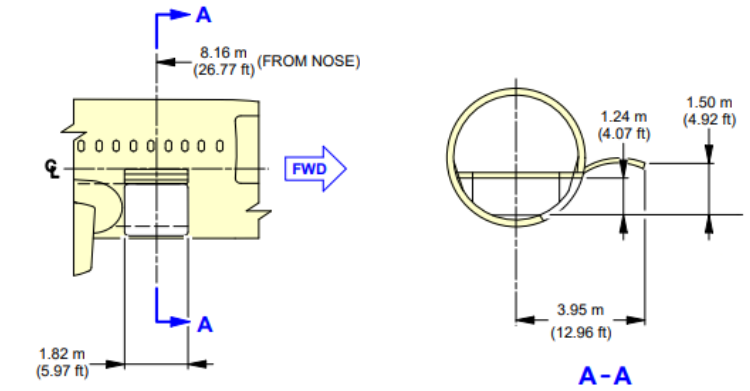


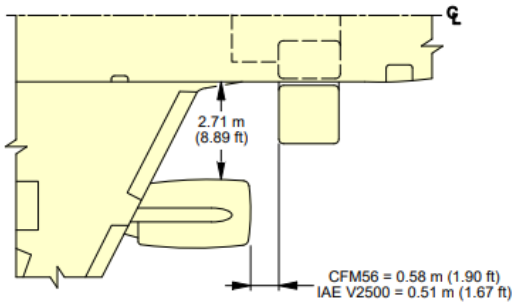
© Aero4M

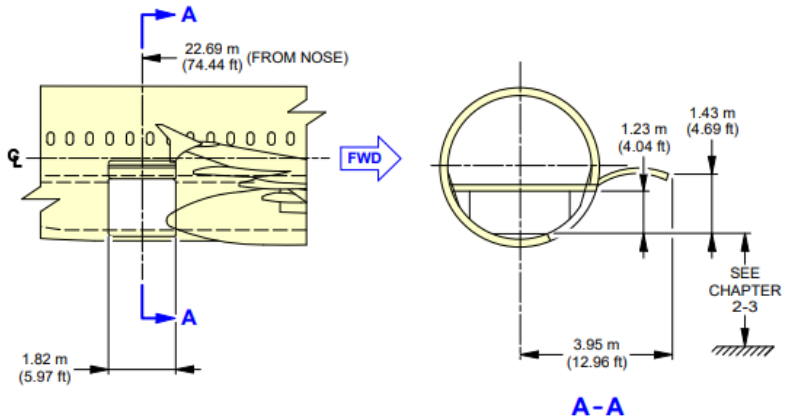
The overwing door marked with * below does not exist on F-HDRA

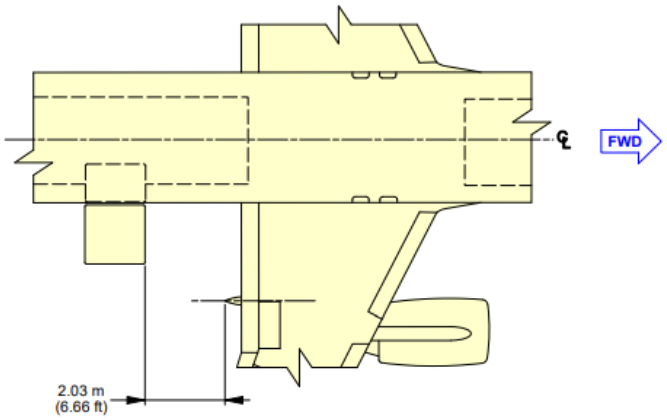


© Aero4M

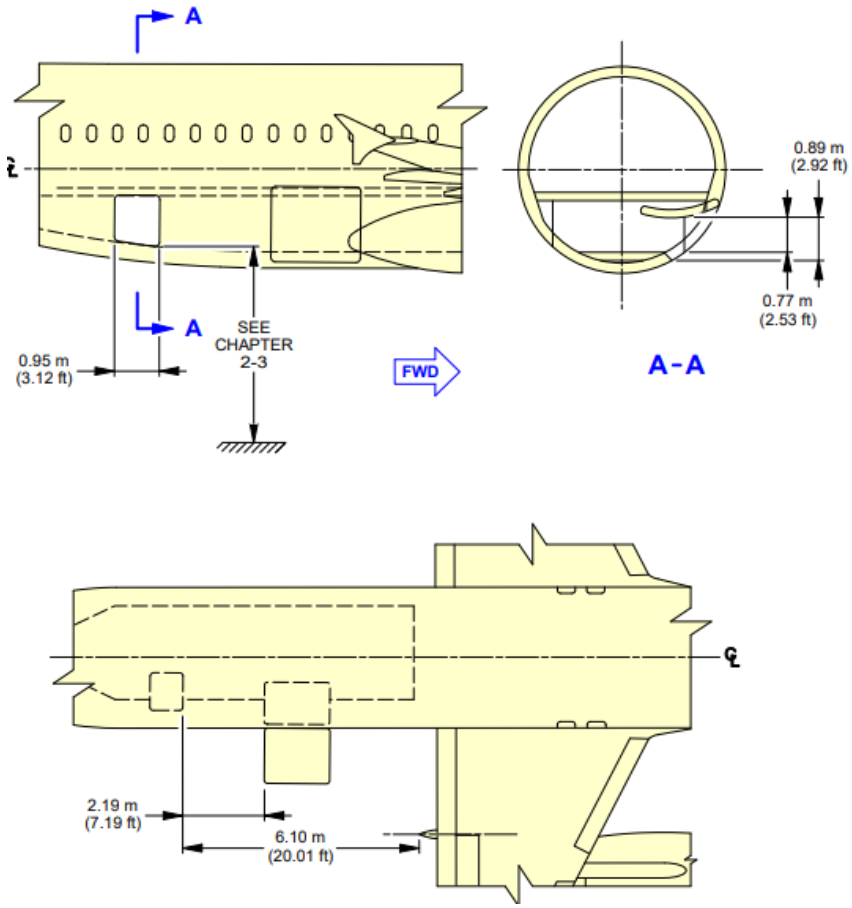

A
8.16 m
(26.77 ft)
(FROM NOSE)
FWD
A
1.82 m
(5.97 ft)
1.24 m
(4.07 ft)
1.50 m
(4.92 ft)
3.95 m
(12.96 ft)
A-A


2.71 m
(8.89 ft)
CFM56 = 0.58 m (1.90 ft)
IAE V2500 = 0.51 m (1.67 ft)


A
22.69 m
(74.44 ft)
(FROM NOSE)
FWD
A
1.82 m
(5.97 ft)
1.23 m
(4.04 ft)
1.43 m
(4.69 ft)
SEE
CHAPTER
2-3
3.95 m
(12.96 ft)
A-A


FWD
2.03 m
(6.66 ft)

© Aero4M


A
A
SEE
CHAPTER
2-3
0.95 m
(3.12 ft)
FWD
0.89 m
(2.92 ft)
0.77 m
(2.53 ft)
A-A
2.19 m
(7.19 ft)
6.10 m
(20.01 ft)

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6.5.3.5 Overhead Bin

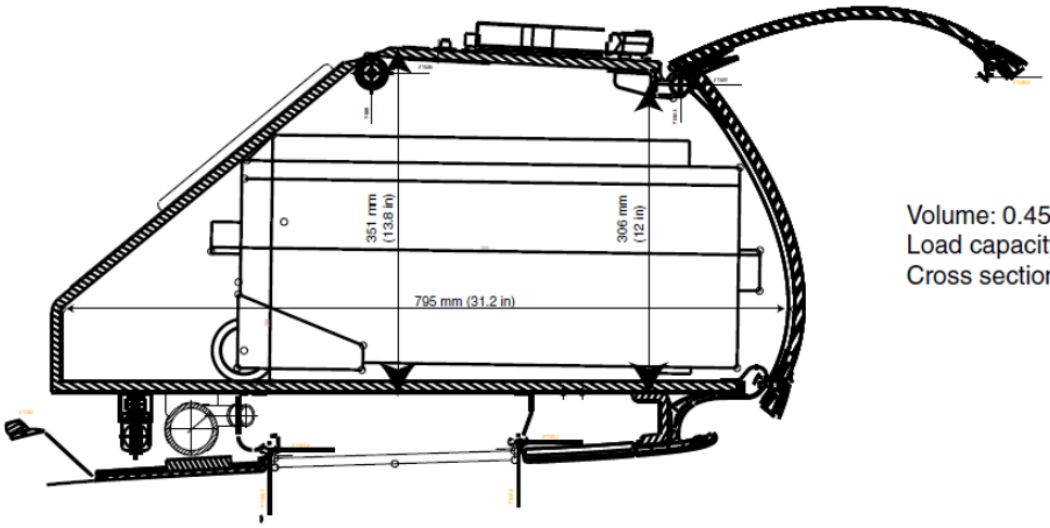
There are different volumes of overhead compartments on the A319. Below are presented the various possibilities.

Most of the overhead compartments are 4-frame boxes.

OHSC boxes

		Loading capacity
①	4-frame box 1042 mm 1042 mm	38-38 kg
②	Special box C26 to C34 (A318 Only) 1042 mm 788 mm	38-28 kg
③	Special box C63 to C66 557 mm 1036 mm	19-38 kg
④	2-frame conical box 1018 mm	38 kg
⑤	1-frame conical box 484 mm	19 kg
⑥	Spacer conical box C20 to C21 245 mm	15 kg
⑦	Special conical box C63 to C64 485 mm 210 mm	19-8 kg
⑧	Special box C38 to C43 1042 mm 1060 mm 96 mm	38-38-9 kg
⑨	Special 2-frame box C35-1 to C35-3 and C47-2 to C47-4 (A321 only) * 1018 mm	20 kg
⑩	Special box C61 to C62 (LH shown) 503 mm 325 mm	19-11 kg
⑪	Special box C30 to C36 (A319 only) 508 mm 1042 mm	19-38 kg

Dimensions shown are "inner" dimensions of OHSC.
* Reduced volume due to installed bottle for slides.



Volume: 0.456 m³ (16.10 cu ft)
Load capacity: 76 kg (168 lb)
Cross section: 2186 cm² (338.8 sq in)

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6.5.4 Hold Characteristics and Net Installation

Amelia Intl A319/A320 are fitted with ''class -C'' baggage compartment. Aircraft with ''class- C'' baggage compartment have the following systems installed:

- Baggage Compartment Smoke Detection System;
- Baggage Compartment Fire Extinguishing System;

They are found in the lower deck. The lower deck includes the forward, aft, and rear bulk cargo holds. The holds are pressurized.

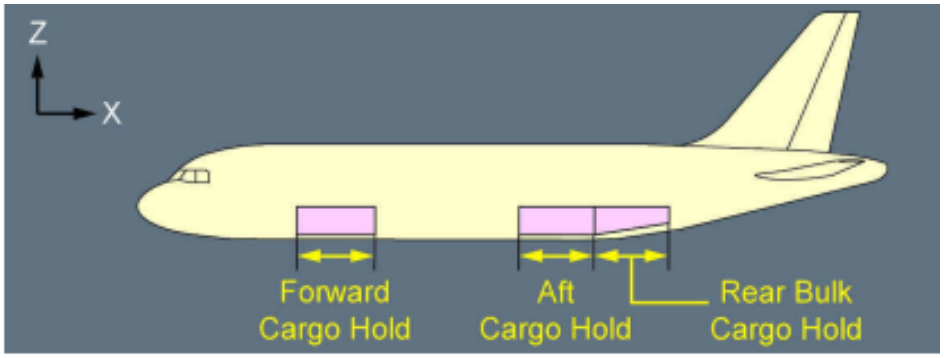
The forward cargo hold On A319 is not equipped with ventilation and temperature control systems.

The Aft cargo on A319 is not equipped with temperature control system.

The rear bulk cargo compartment on A319 is not equipped with temperature control system

In the lower deck of the aircraft, there are two lower holds (forward hold and aft hold) which are divided into cargo compartments.

- The forward hold is referred to as the forward cargo compartment No. 1.
- The aft hold is divided into the:
  - aft cargo compartments No. 4 and
  - the bulk cargo compartment No. 5.



The forward, aft and bulk cargo compartments have tie down/attachment points for the nets, and straps which keep the bulk cargo in position. Two additional door nets are installed in the forward and aft cargo compartments

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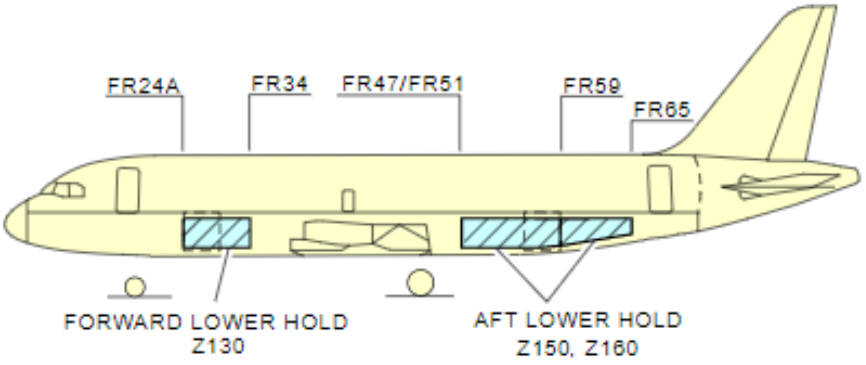

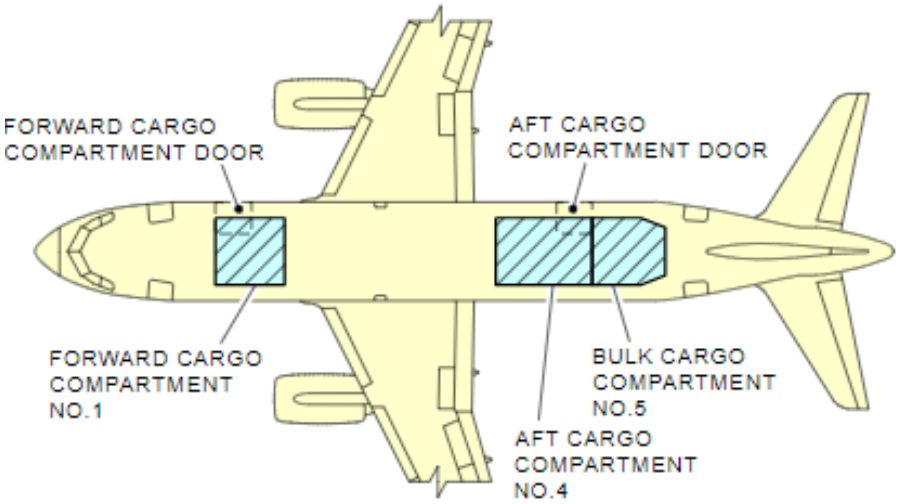

The FWD compartment No.1 is divided into the following sections: 11 & 12

The AFT compartment is divided compartment No 4 with sections 41 & 42 and compartment No 5 has the sections 51.

.

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6.5.4.1 Cargo Compartment Doors

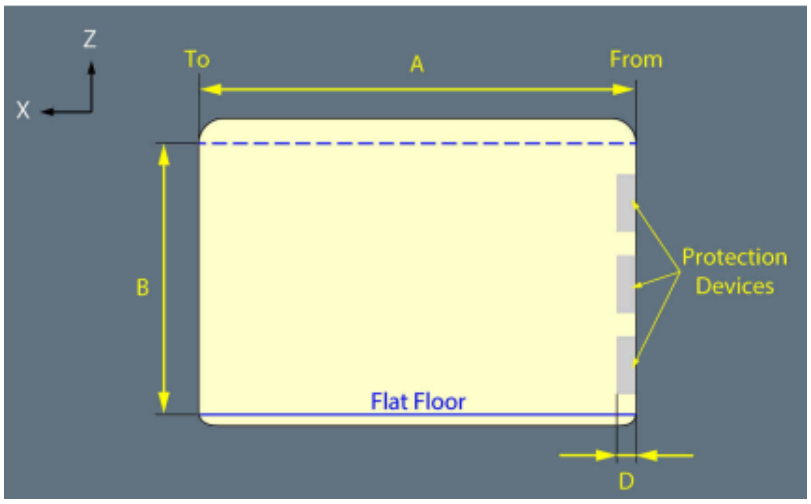
Note: *For A319 the rear bulk cargo hold is not equipped with a door. To load and unload the rear bulk cargo hold, the operator must use the door of the aft cargo hold after removal of the divider net between the aft and rear bulk cargo holds.*

6.5.4.1.1 Forward Cargo Compartment Door

The forward cargo hold is equipped with a door on the right side of the fuselage.

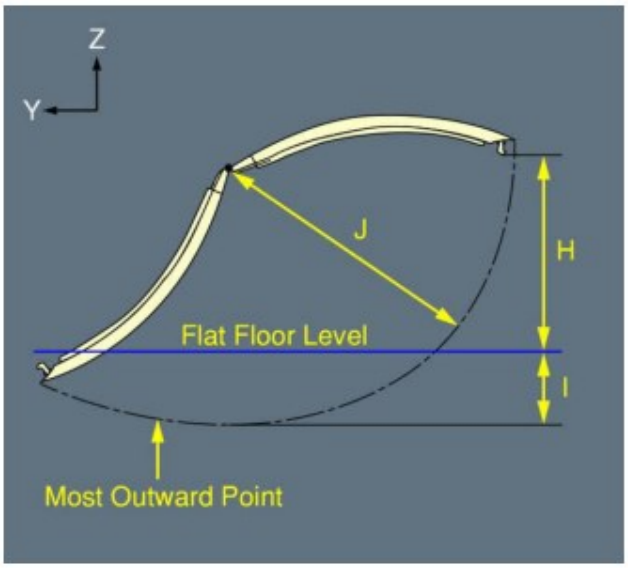
The door opens outward. The operator must use the forward door to load and unload the forward cargo hold.

FRONT VIEW OF THE DOOR



Legend		Dimensions	
		(m)	(in)
A	Clear opening width	1.817	71.54
B	Clear opening height	1.233	48.54
D	Protection device thickness	0.067	2.64

SIDE VIEW OF THE DOOR



© Aero4M

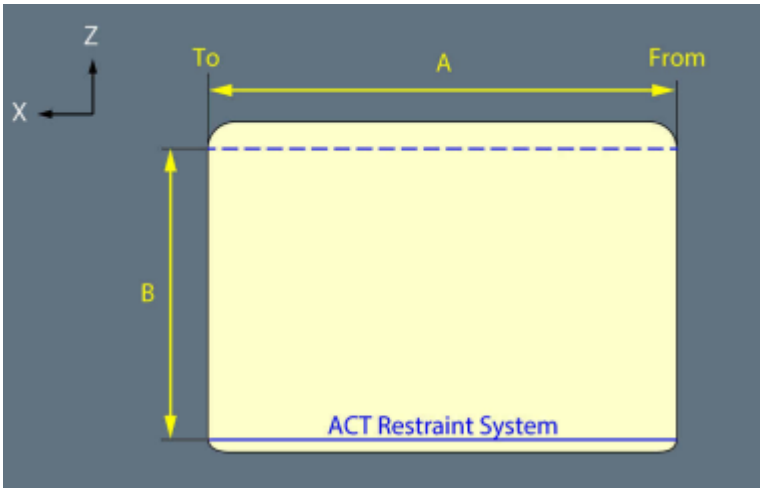
Legend		Dimensions	
		(m)	(in)
H	Clearance between the flat floor level and the hooks (when the door is in fully opened position)	1.420	55.90
I	Clearance below the flat floor level when the door is operated	0.652	25.67
J	Door opening radius	2.024	79.68

6.5.4.1.2 Aft Cargo Compartment Door

The aft cargo hold is equipped with a door on the right side of the fuselage.

The door opens outward. The operator must use the aft door to load and unload the aft cargo hold.

FRONT VIEW OF THE DOOR



Legend		Dimensions	
		(m)	(in)
A	Clear opening width	1.817	71.54
B	Clear opening height	1.198	47.16

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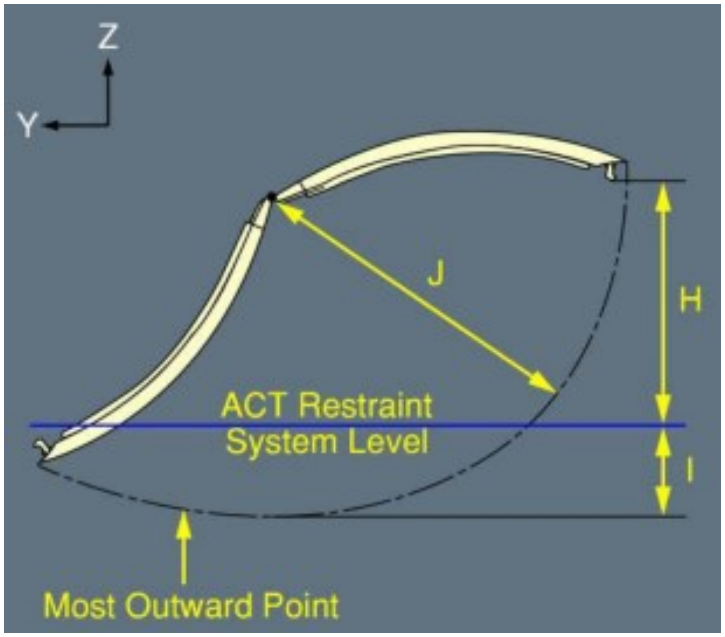
Side View of the Door



Legend		Dimensions	
		(m)	(in)
H	Clearance between the ACT restraint system level and the hooks (when the door is in fully opened position)	1.333	52.48
I	Clearance below the ACT restraint system level when the door is operated	0.739	29.09
J	Door opening radius	2.073	81.61

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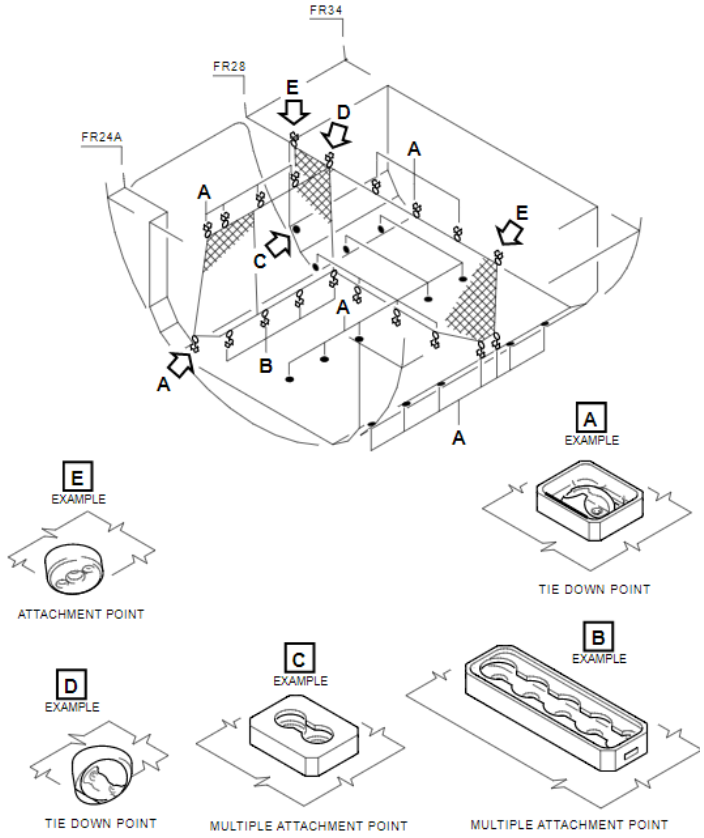
6.5.4.2 Cargo Nets

Net sections are as indicated below

6.5.4.2.1 Forward Cargo Nets Attachment Points



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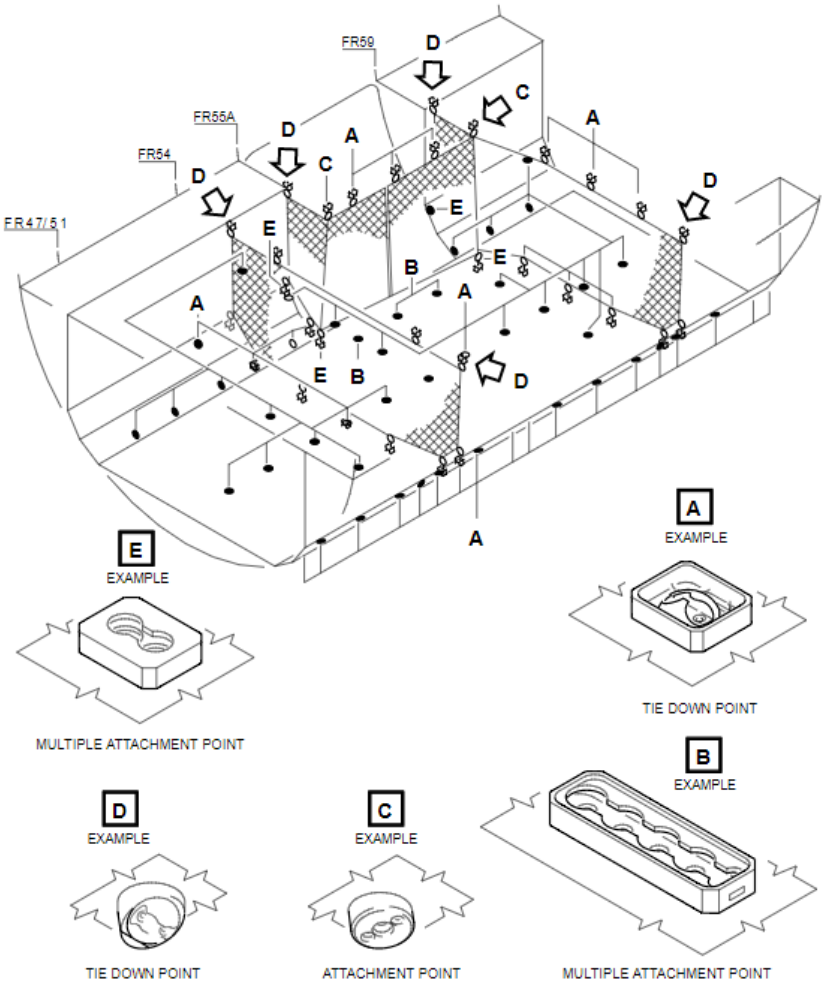
6.5.4.2.2 Aft Cargo Nets Attachment Points



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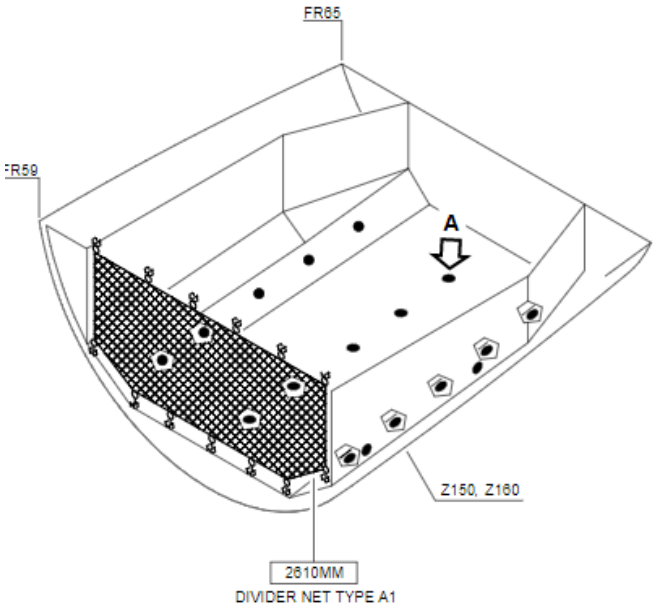
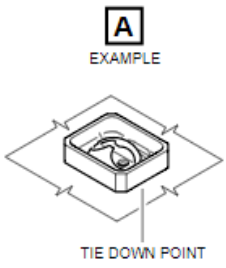
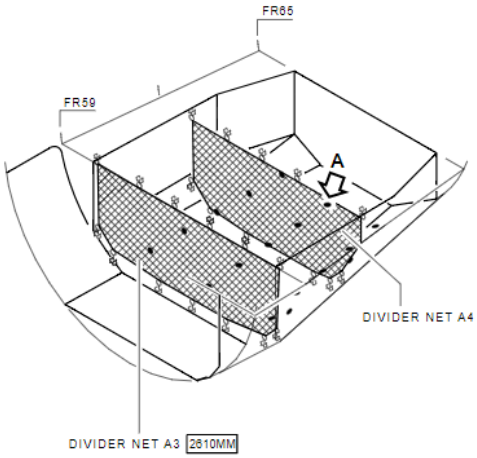
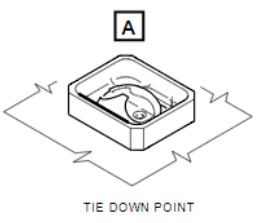
6.5.4.2.3 Bulk Cargo Nets Attachment Points









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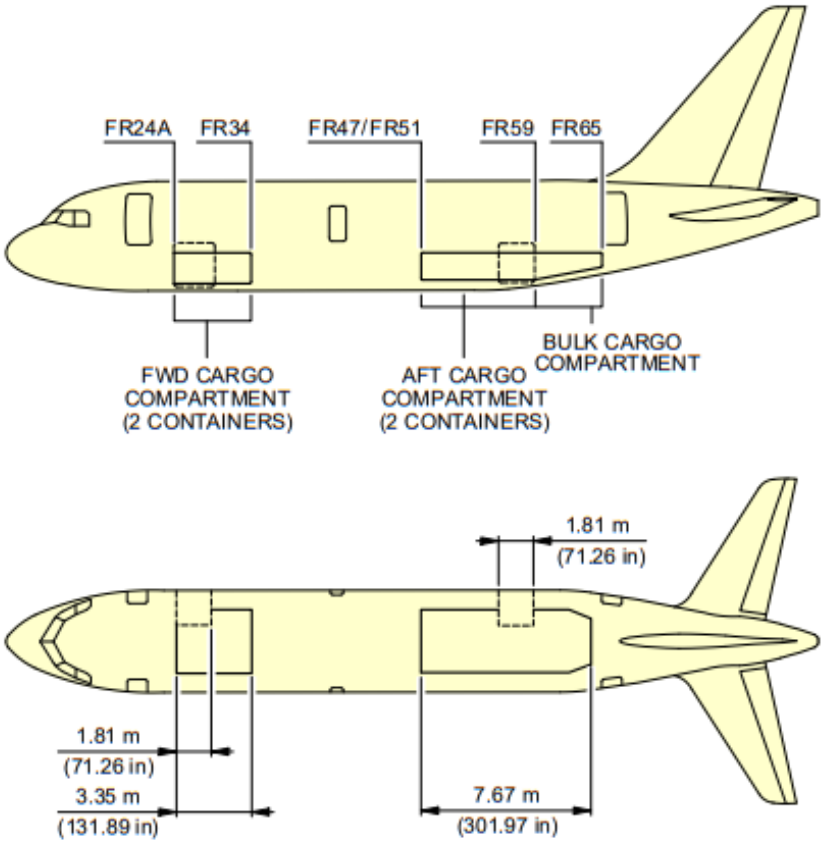
6.5.4.3 Hold Dimensions and Limits

For Cargo Compartment package size dimensions see ch. 7.6.



	Floor Strength Via floor panels	Volume	Max load
Compartment 1	732 kg/m³	Section 11: 4140 m³ Section 12: 4390 m³ **Total: 8.530 m³**	Section 11: 1045 kg Section 12: 1223 kg **Total: 2268 kg**
Compartment 4	732 kg/m³	Section 41: 5210 m³ Section 42: 6690 m³ **Total: 11.900 m³**	Section 41: 1326 kg Section 42: 1695 kg **Total: 3021 kg**
Compartment 5	732 kg/m³	**7220 m³**	**1497 kg**

Each floor panel can sustain the following loads:

	Local Load		Point Load	
	(kg/0.093m²)	(lb/1ft²)	(kg/cm²)	(lb/in²)
On the flat floor	906	2 000	6.6	94
On the sloped floor	906	2 000	6.6	94

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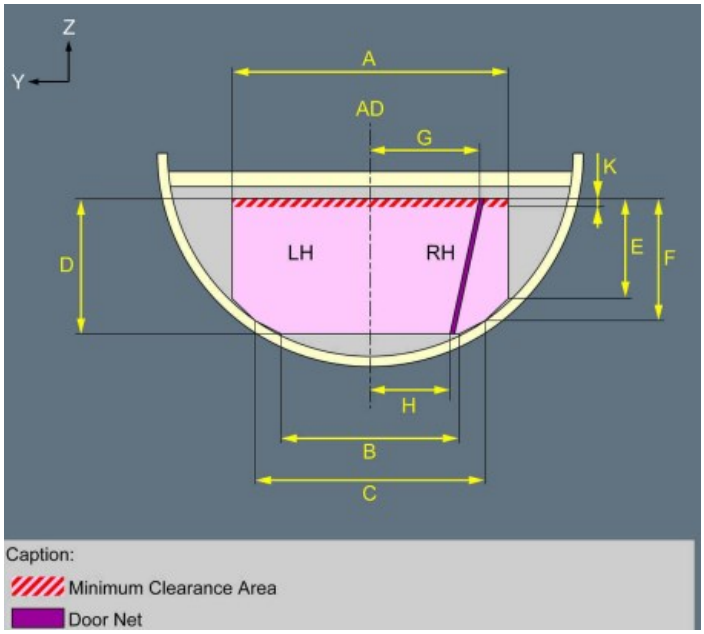
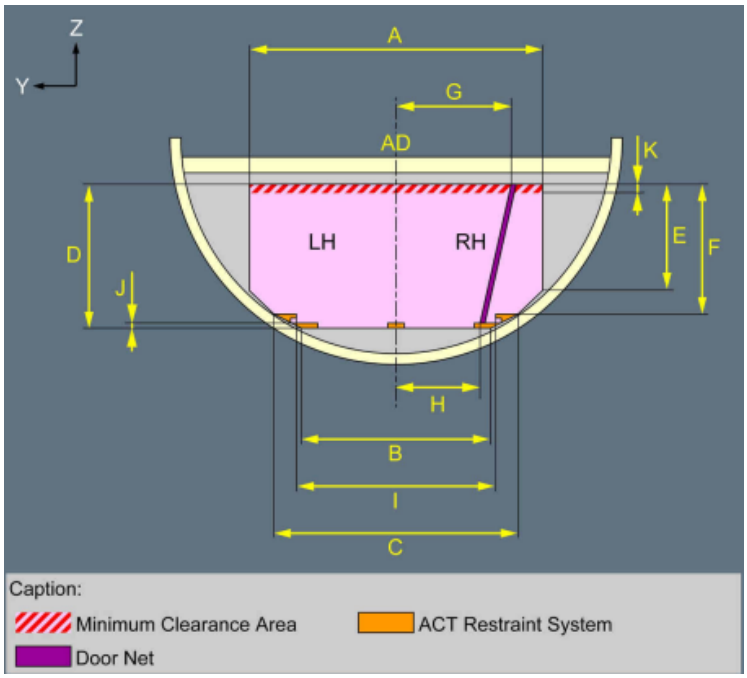
6.5.4.3.1 Cross section Limits

FORWARD CARGO COMPARTMENT



H-ARM (m)	Dimensions (m)								
	A	B	C	D	E	F	G	H	K
9.858	2.630	1.430	2.098	1.242	0.797	1.065	0.765	0.577	0.051
11.633	2.630	1.430	2.098	1.242	0.797	1.065	0.765	0.577	0.051
13.107	2.630	1.430	2.098	1.242	0.797	1.065	-	-	0.051

AFT CARGO COMPARTMENT



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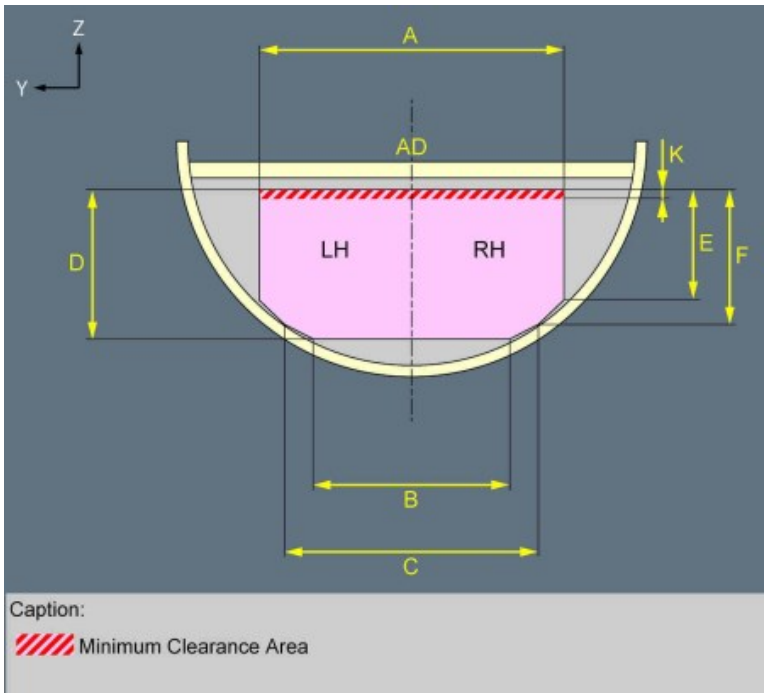
H-ARM (m)	Dimensions (m)										
	A	B	C	D	E	F	G	H	I	J	K
19.608	2.630	1.430	2.098	1.242	0.797	1.065	-	-	1.520	0.035	0.051
22.162	2.630	1.430	2.098	1.242	0.797	1.065	0.765	0.577	1.520	0.035	0.051
23.495	2.630	1.430	2.098	1.242	0.797	1.065	0.765	0.577	1.520	0.035	0.051
24.028	2.630	1.408	2.098	1.208	0.756	1.024	0.765	0.577	-	-	0.051

BULK CARGO COMPARTMENT



H-ARM (m)	Dimensions (m)						
	A	B	C	D	E	F	K
24.028	2.630	1.408	2.098	1.211	0.756	1.027	0.051
24.562	2.630	1.368	2.098	1.147	0.682	0.953	0.051
25.095	2.630	1.328	2.098	1.084	0.608	0.879	0.051
25.629	2.630	1.288	2.098	1.020	0.533	0.805	0.051
26.162	2.630	1.248	2.098	0.957	0.459	0.731	0.051
26.695	2.113	1.113	1.839	0.891	0.558	0.699	0.051
27.270	1.558	0.968	-	0.820	0.664	-	0.051

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6.5.4.4 Loading of Special Baggage/Cargo

The table below presents recommendation on in which section of the aircraft hold to load certain baggage and/or cargo. It is not exhaustive.

The recommendation below should be followed whenever possible. The Commander or the load planner/load control may plan another loading depending on the available volume, number of special load, weight etc.

A319

Compartment	Type of baggage
1	Firearms, Wheelchair, Checked baggage,
4	SPEQ, Wheelchair, AVIH, Checked baggage, Firearms,
5	Crew baggage, FKT, EIC, COMAT,

Those items not mentioned may be placed where it is deemed logical to the loading planner/loading staff.

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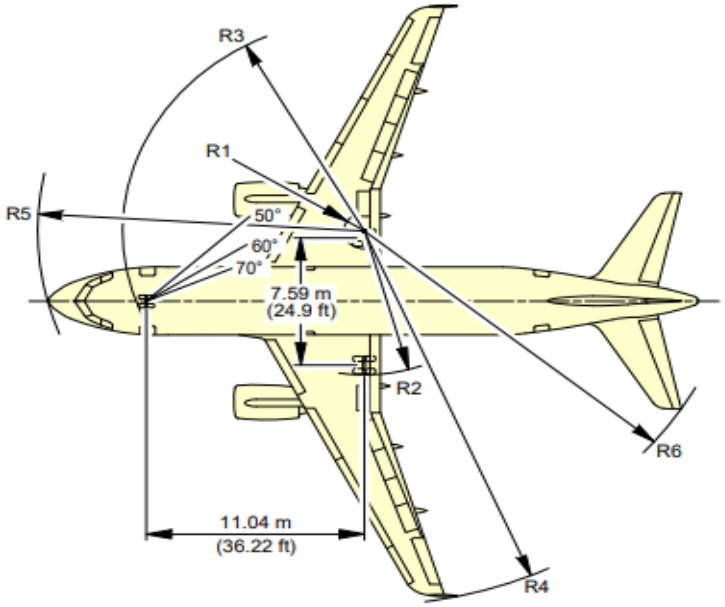
6.5.5 Servicing Points, turn radius and position of equipment

6.5.5.1 Turning Radii



NOTE: FOR STEERING DIMENSION TABLE SEE SHEET 2.

TURN TYPE:

1. ASYMMETRIC THRUST DIFFERENTIAL BRAKING (PIVOTTING ON ONE MAIN GEAR).
2. SYMMETRIC THRUST NO BRAKING.

TYPE OF TURN	MAXIMUM RAMP WEIGHT		R1 RMLG		R2 LMLG		R3 NLG		R4 - WING				R5 NOSE		R6 THS	
	STEERING ANGLE (deg)	EFFECTIVE STEERING ANGLE (deg)	m	ft	m	ft	m	ft	WINGTIP FENCE		SHARKLET		m	ft	m	ft
									m	ft	m	ft				
2	20	19.4	28.2	92	35.8	117	33.5	110	48.6	159	49.4	162	35.2	116	41.2	135
2	25	24.3	21.4	70	29.0	95	27.2	89	41.8	137	42.6	140	29.3	96	35.1	115
2	30	29.1	16.7	55	24.3	80	23.0	76	37.1	122	38.0	125	25.6	84	31.1	102
2	35	33.9	13.3	44	20.9	69	20.1	66	33.7	111	34.6	113	23.0	75	28.3	93
2	40	38.8	10.6	35	18.2	60	17.9	59	31.1	102	31.9	105	21.2	69	26.2	86
2	45	43.6	8.5	28	16.1	53	16.3	53	29.0	95	29.8	98	19.8	65	24.6	81
2	50	48.4	6.7	22	14.3	47	15.0	49	27.2	89	28.0	92	18.9	62	23.3	76
2	55	53.2	5.2	17	12.7	42	14.0	46	25.7	84	26.5	87	18.1	59	22.3	73
2	60	57.9	3.8	13	11.4	37	13.2	43	24.4	80	25.2	83	17.5	58	21.4	70
2	65	62.5	2.6	9	10.2	34	12.6	41	23.2	76	24.0	79	17.1	56	20.7	68
2	70	66.9	1.6	5	9.2	30	12.2	40	22.2	73	23.0	76	16.8	55	20.1	66
2	75 (MAX)	70.3	0.8	3	8.4	28	11.8	39	21.4	70	22.3	73	16.6	54	19.7	65
1	50	48.6	6.6	22	14.2	47	14.9	49	27.1	89	28.0	92	18.8	62	23.2	76
1	55	53.5	5.1	17	12.6	41	14.0	46	25.6	84	26.4	87	18.1	59	22.2	73
1	60	58.3	3.7	12	11.3	37	13.2	43	24.3	80	25.1	82	17.5	57	21.3	70
1	65	63.1	2.5	8	10.1	33	12.5	41	23.1	76	23.9	78	17.1	56	20.6	68
1	70	67.7	1.4	5	9.0	30	12.1	40	22.0	72	22.8	75	16.7	55	20.0	66
1	75 (MAX)	71.9	0.5	2	8.1	27	11.7	38	21.1	69	22.0	72	16.5	54	19.6	64

NOTE: ABOVE 50°, AIRLINES MAY USE TYPE 1 OR TYPE 2 TURNS DEPENDING ON THE SITUATION.
TYPE 1 TURNS USE: ASYMMETRIC THRUST DURING THE WHOLE TURN; AND DIFFERENTIAL BRAKING TO INITIATE THE TURN ONLY.
TYPE 2 TURNS USE: SYMMETRIC THRUST DURING THE WHOLE TURN; AND NO DIFFERENTIAL BRAKING AT ALL.
IT IS POSSIBLE TO GET LOWER VALUES THAN THOSE FROM TYPE 1 BY APPLYING DIFFERENTIAL BRAKING DURING THE WHOLE TURN.

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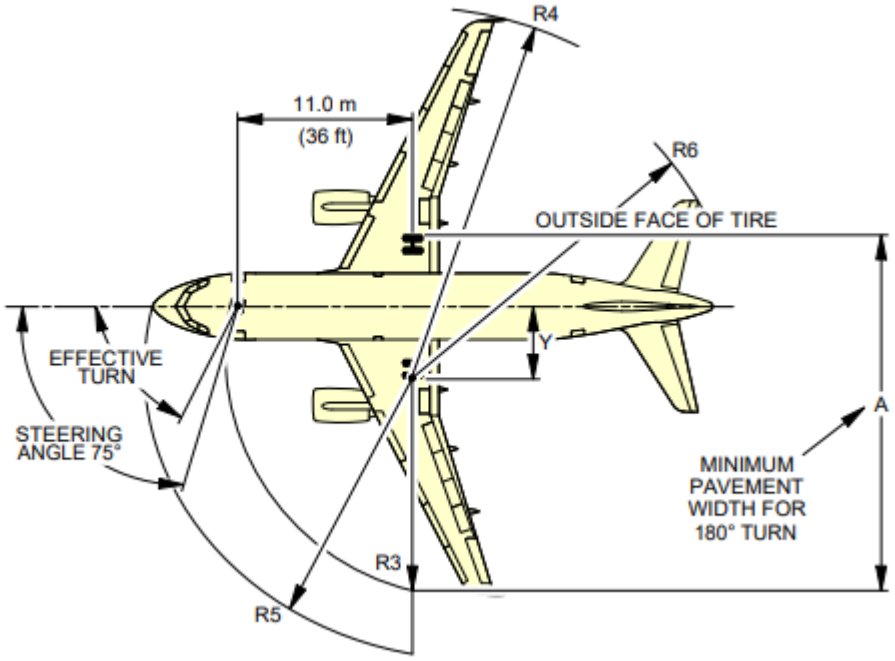
6.5.5.1.1 Minimum Turning Radii



NOTE: NOSE GEAR RADII TRACK R3,
MEASURED FROM OUTSIDE FACE OF TIRE.
MODEL 100 TURN DIMENSION SHOWN.
THEORETICAL CENTER OF TURN
FOR MINIMUM TURNING RADIUS.
SLOW CONTINUOUS TURNING.
APPROXIMATELY IDLE THRUST
ON ALL ENGINES.
NO DIFFERENTIAL BRAKING.
DRY SURFACE.

TYPE OF TURN	STEERING ANGLE (DEG)	EFFECTIVE STEERING ANGLE		Y	A	R3 NLG	R4 WING		R5 NOSE	R6 THS
							WING TIP FENCE	SHARKLET		
1	75 (MAX)	71.9°	m	3.6	20.1	11.7	21.1	22.0	16.5	19.6
			ft	12	66	38	69	72	54	64
2	75 (MAX)	70.3°	m	3.9	20.5	11.8	21.4	22.3	16.6	19.7
			ft	13	67	39	70	73	54	65

NOTE: IT IS POSSIBLE TO GET LOWER VALUES THAN THOSE FROM TYPE 1
BY APPLYING DIFFERENTIAL BRAKING DURING THE WHOLE TURN.

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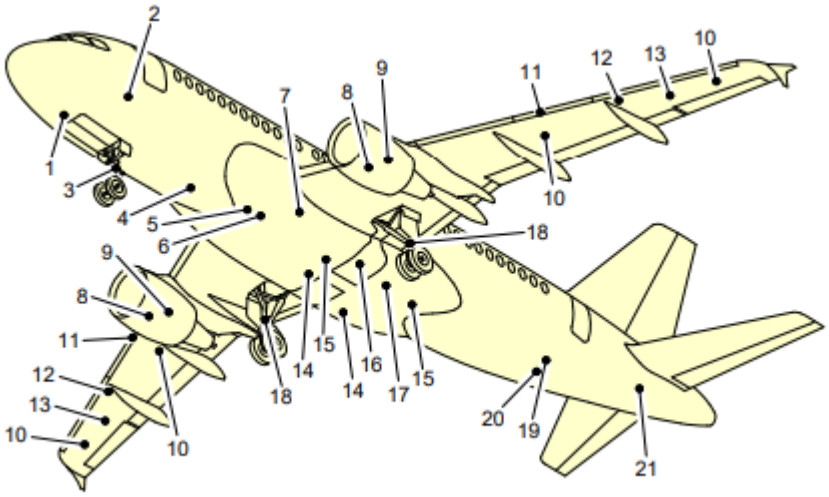
6.5.5.2 Servicing Points



1 - GROUND ELECTRICAL POWER CONNECTOR
2 - OXYGEN SYSTEM
3 - NLG GROUNDING (EARTHING) POINT
4 - POTABLE WATER DRAIN PANEL
5 - LOW PRESSURE AIR PRE-CONDITIONING
6 - HIGH PRESSURE AIR PRE-CONDITIONING
7 - REFUEL/DEFUEL INTEGRATED PANEL
8 - IDG/STARTER OIL SERVICING
9 - ENGINE OIL SERVICING
10 - OVERPRESSURE PROTECTOR
11 - REFUEL/DEFUEL COUPLINGS (OPTIONAL-LH WING)
12 - OVERWING REFUEL (IF INSTALLED)
13 - NACA VENT INTAKE
14 - YELLOW HYDRAULIC-SYSTEM SERVICE PANEL
15 - BLUE HYDRAULIC-SYSTEM SERVICE PANEL
16 - ACCUMULATOR CHARGING (GREEN SYSTEM) AND RESERVOIR DRAIN (GREEN SYSTEM)
17 - GREEN HYDRAULIC-SYSTEM SERVICE PANEL
18 - MLG GROUNDING (EARTHING) POINT
19 - WASTE WATER SERVICE PANEL
20 - POTABLE WATER SERVICE PANEL
21 - APU OIL SERVICING

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6.5.5.2.1 Static Grounding

	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	
On Nose Landing Gear leg:	5.07 m (16.63 ft)	On Centerline		0.94 m (3.08 ft)
On left Main Landing Gear leg:	16.11 m (52.85 ft)	3.79 m (12.43 ft)	-	1.07 m (3.51 ft)
On right Main Landing Gear leg:	16.11 m (52.85 ft)	-	3.79 m (12.43 ft)	1.07 m (3.51 ft)

A319

a) The grounding (earthing) stud on each landing gear leg is designed for use with a clip-on connector (such as Appleton TGR).
b) The grounding (earthing) studs are used to connect the aircraft to an approved ground (earth) connection on the ramp or in the hangar for:
    - Refuel/defuel operations
    - Maintenance operations
    - Bad weather conditions.

***Note**: In all other conditions, the electrostatic discharge through the tire is sufficient. If the aircraft is on jacks for retraction and extension checks or for the removal/ installation of the landing gear, the grounding (earthing) alternative points (if installed) are:*

- *In the hole on the avionics-compartment lateral right door-frame (on FR14),*
- *On the engine nacelles,*
- *Adjacent to the high-pressure connector,*
- *On the wing upper surfaces.*

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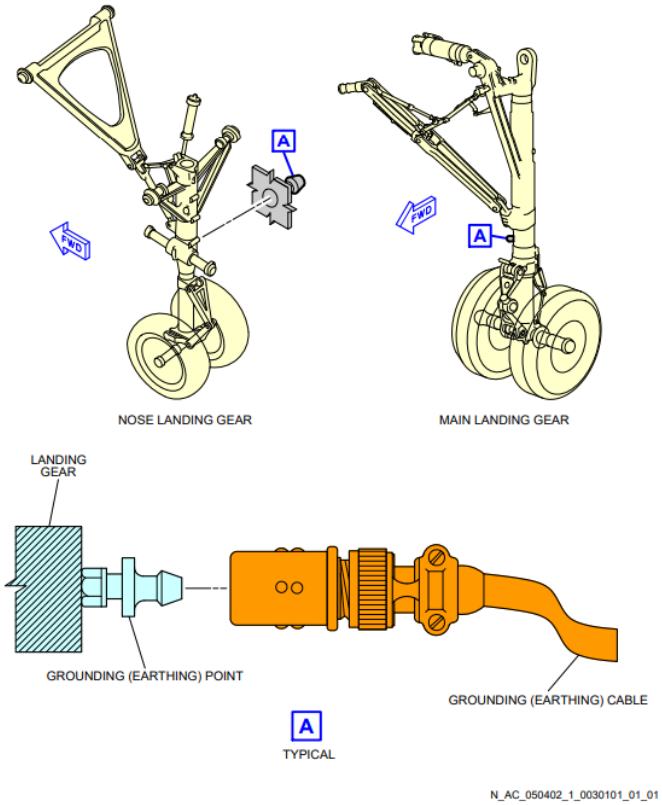
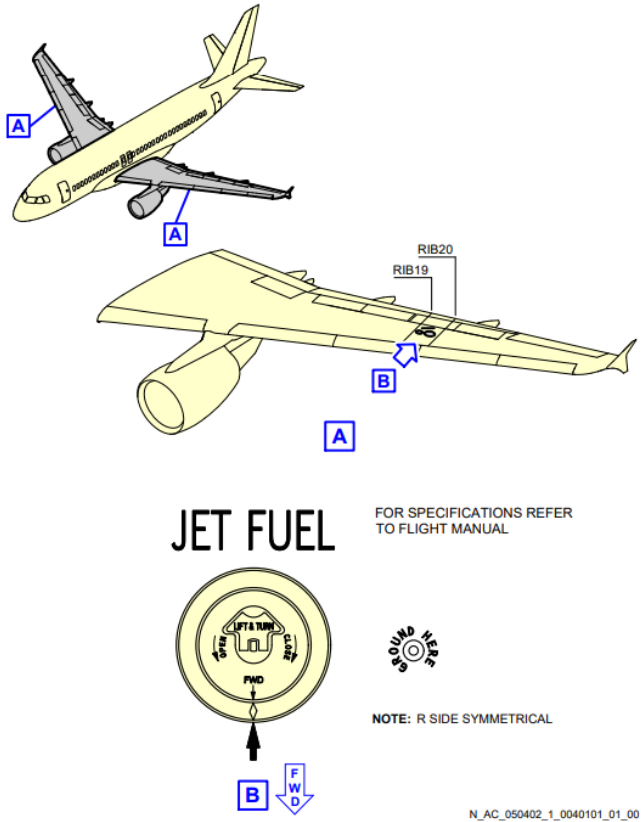


Ground Service Connections
Grounding (Earthing) Points - Landing Gear



Ground Service Connections
Grounding (Earthing) Points - Wing

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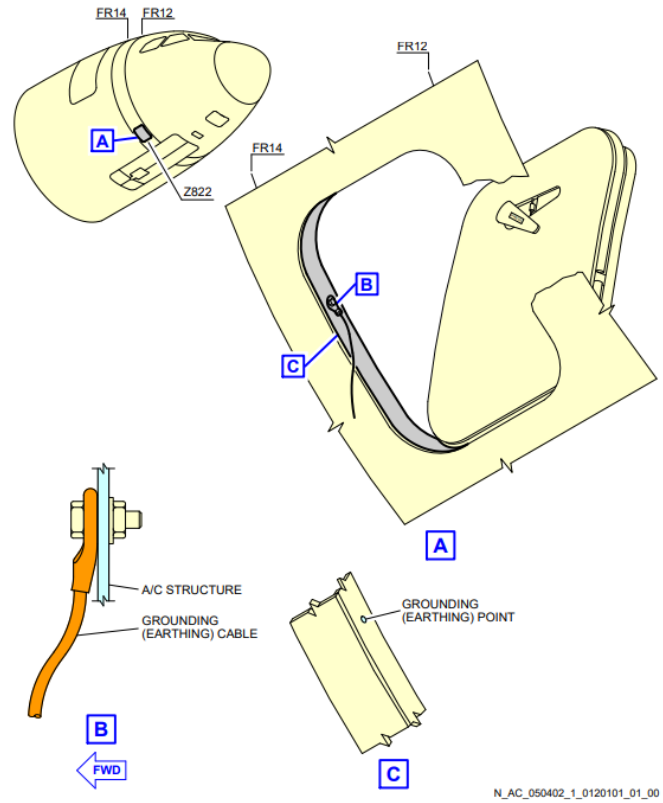
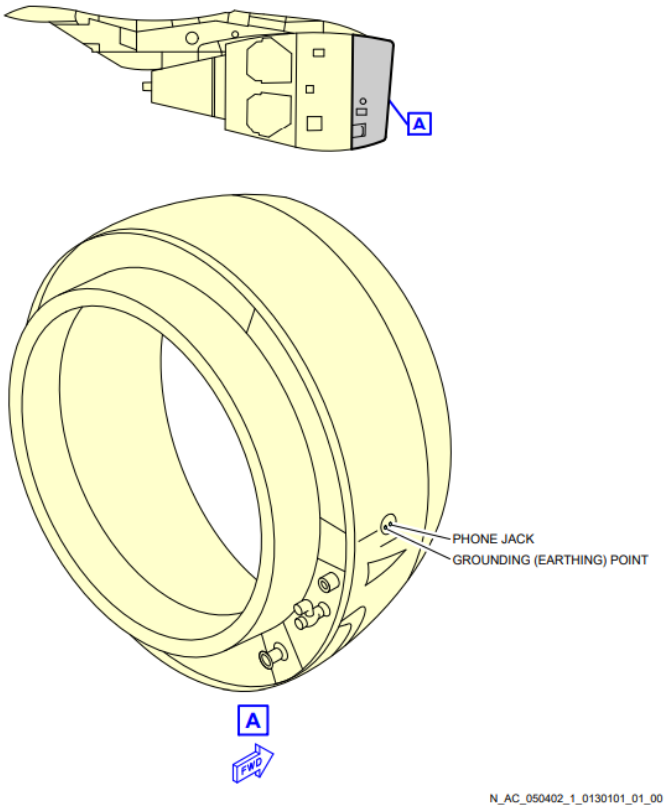


Ground Service Connections
Grounding (Earthing) Point - Avionics Compartment Door-Frame



Ground Service Connections
Grounding (Earthing) Point - Engine Air Intake

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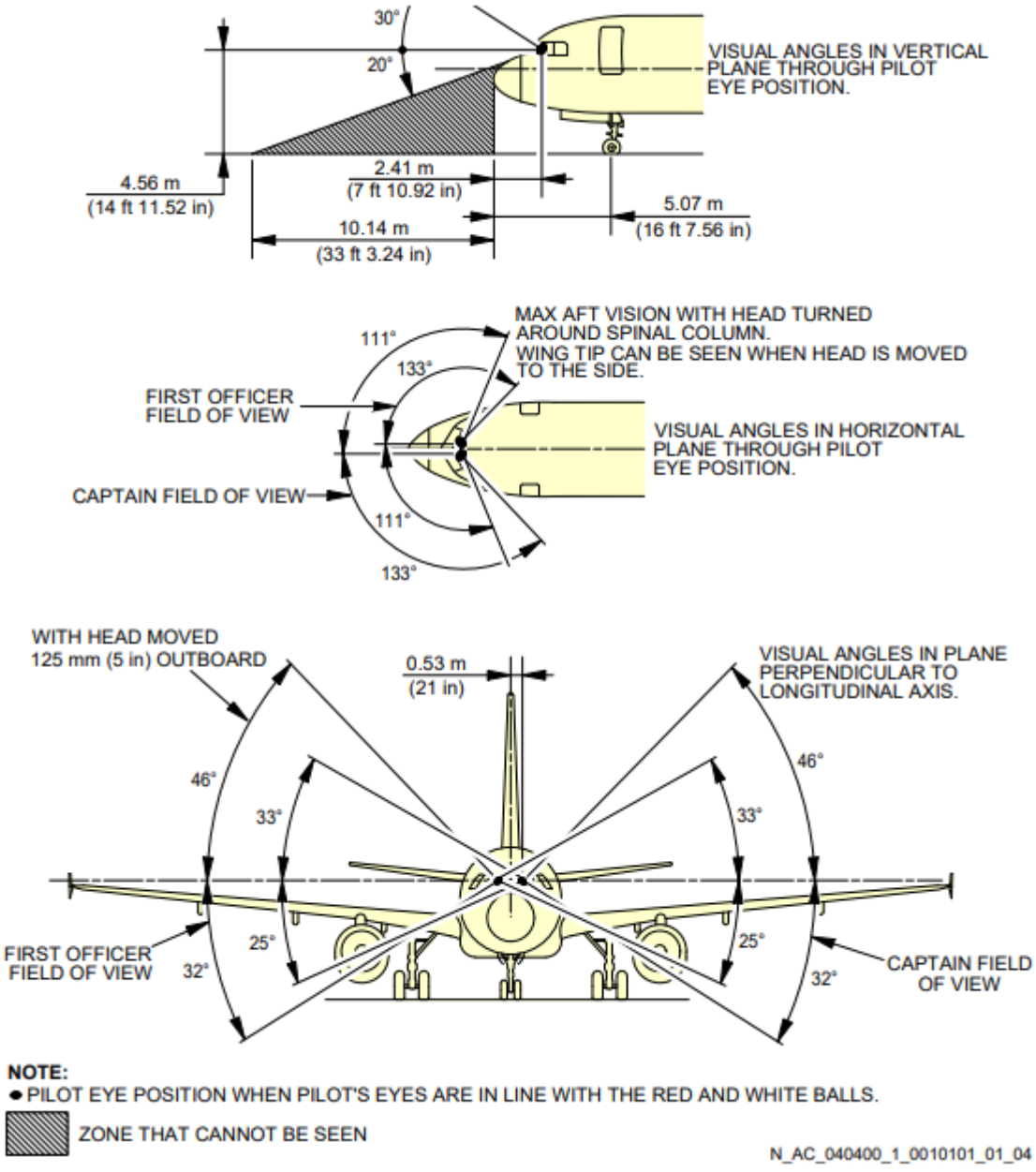
6.5.5.3 Visibility from Cockpit in Static Position



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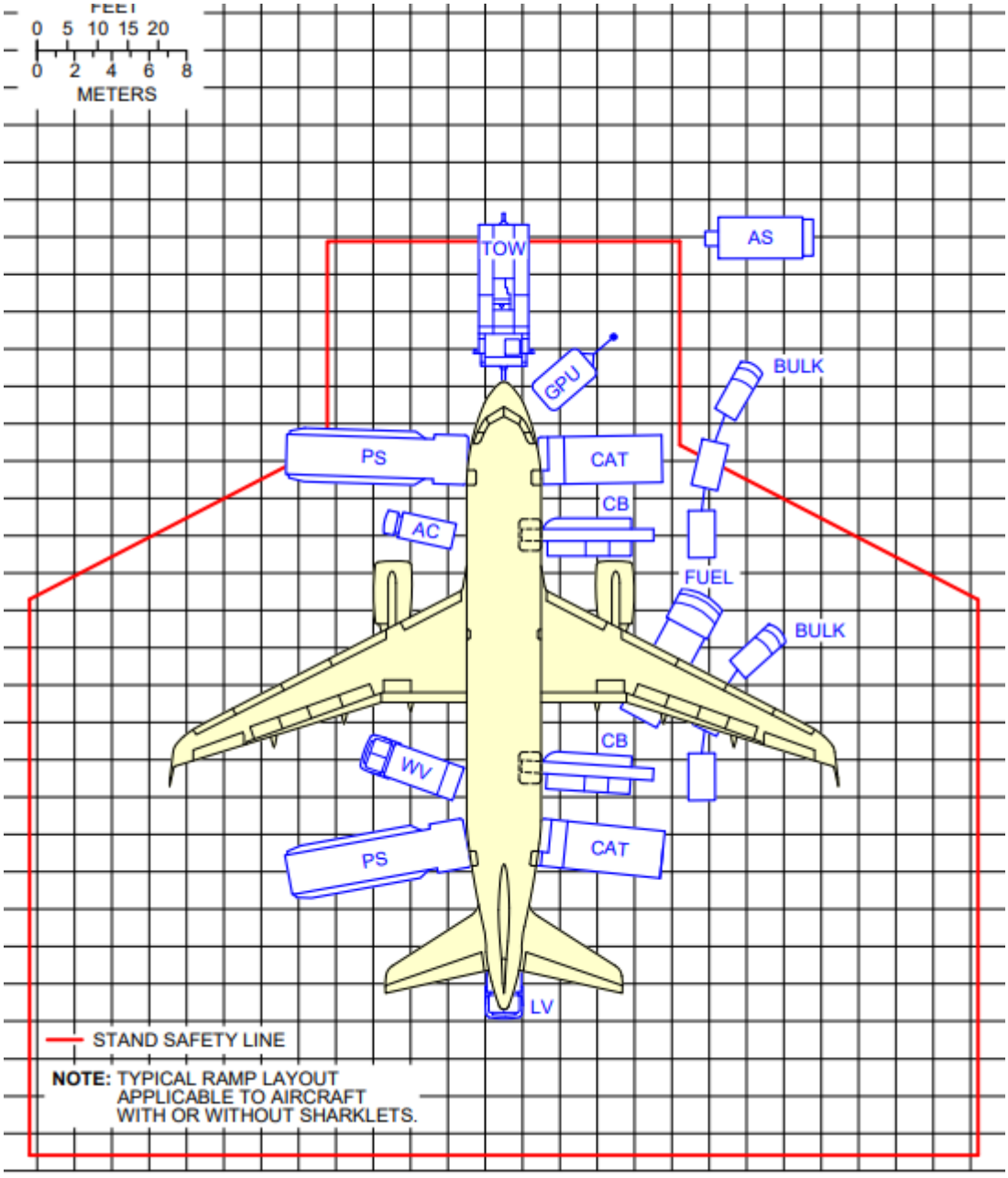
6.5.6 Ramp Handling

OPEN APRON

This section gives the typical servicing arrangement for pax version (Open Apron). The Stand Safety Line delimits the Aircraft Safety Area (minimum distance of 7.5 m from the aircraft). No vehicle must be parked in this area before complete stop of the aircraft (wheel chocks in position on landing gears).



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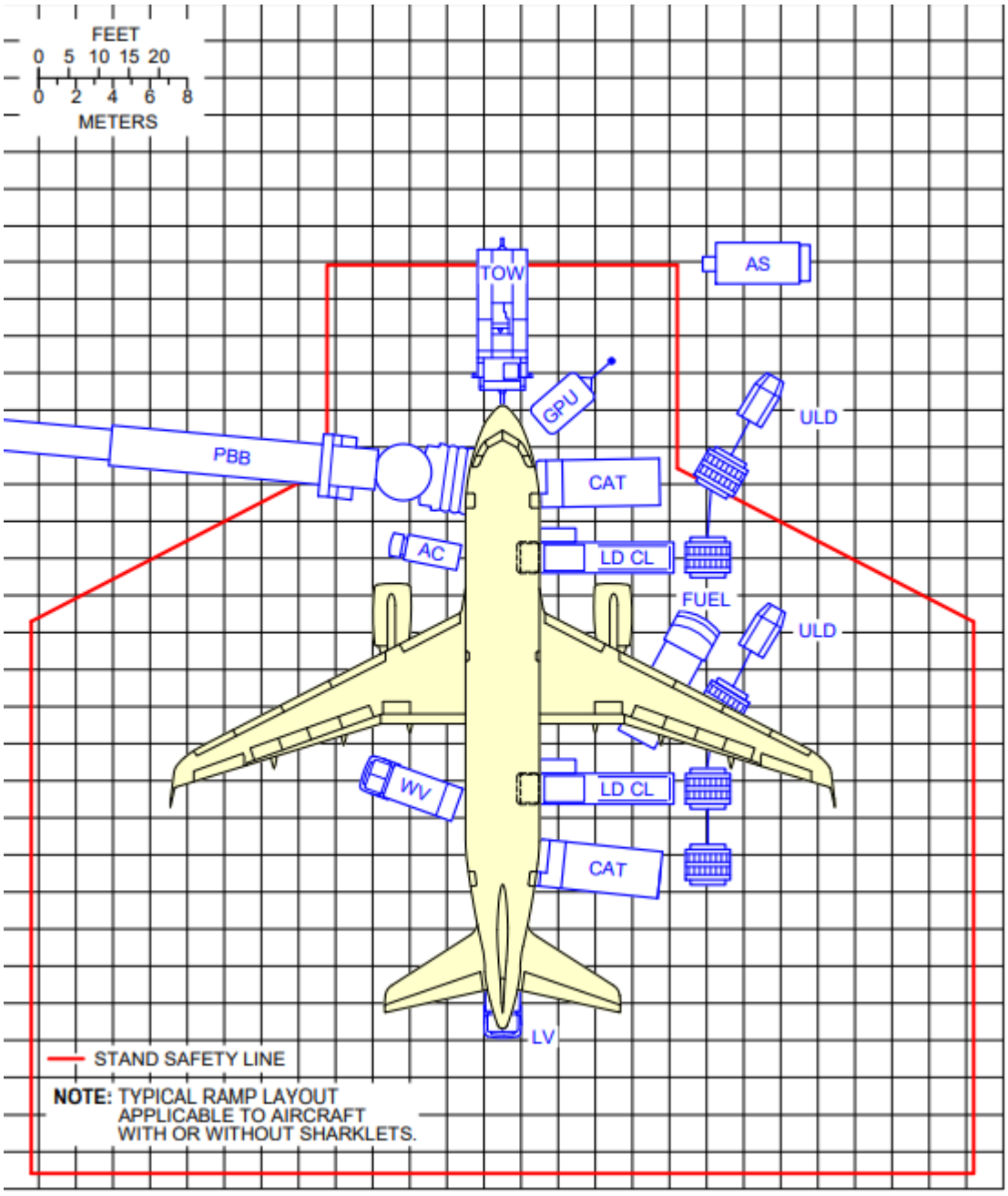
GATE

This section gives the typical servicing arrangement for pax version (Passenger Bridge). The Stand Safety Line delimits the Aircraft Safety Area (minimum distance of 7.5 m from the aircraft). No vehicle must be parked in this area before complete stop of the aircraft (wheel chocks in position on landing gears).



6.5.6.1 Operating of Cabin Door (1L/1R & 4L/4R)

Always ask the CCM to open the door. Unless properly trained, no one else but the active crew on board is allowed to open any door.

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6.5.6.2 Ground Power Unit

The GPU is connected to the aircraft through an external power receptacle.

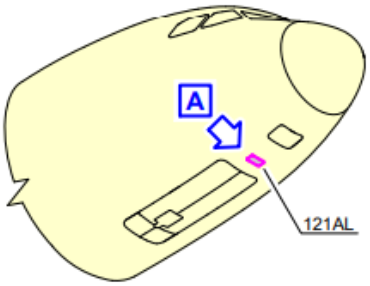
ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	
A/C External Power: Access Door 121AL	2.55 m (8.37 ft)	On centerline		2.00 m (6.56 ft)

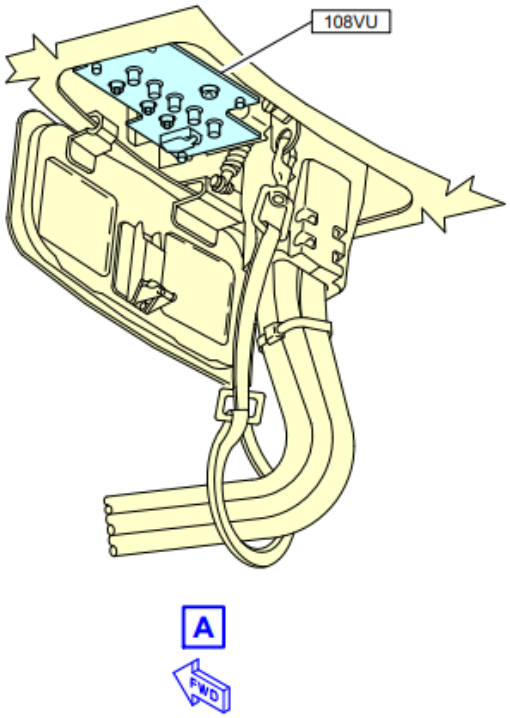
***Note** : Distances are approximate.*

Technical Specifications

a) External Power Receptacle:
   - One receptacle according to MS 90362-3 (without shield MS 17845-1) – 90 kVA.

   ***Note**: Make sure that for connectors featuring micro switches, the connector is chamfered to properly engage in the receptacle.*
b) Power Supply:
   - Three-phase, 115/200V, 400 Hz.
c) Electrical Connectors for Servicing:
   - AC outlets: HUBBELL 5258
   - DC outlets: HUBBELL 7472.





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6.5.6.3 Water and Toilet Servicing

The water/waste system includes a potable-water system, which is pressurized by bleed-air, and a waste disposal system

6.5.6.3.1 Potable Water Servicing

Filling and draining of water is done through the connectors as indicated below:

a) On the potable-water service panel (Access Door 171AL)
   - Fill/Drain Nipple 3/4 in. (ISO 17775)
   - One ground air-pressure connector.

b) On the potable-water drain panel (Access Door 133AL and/or 192NB)
   - Drain Nipple 3/4 in. (ISO 17775).

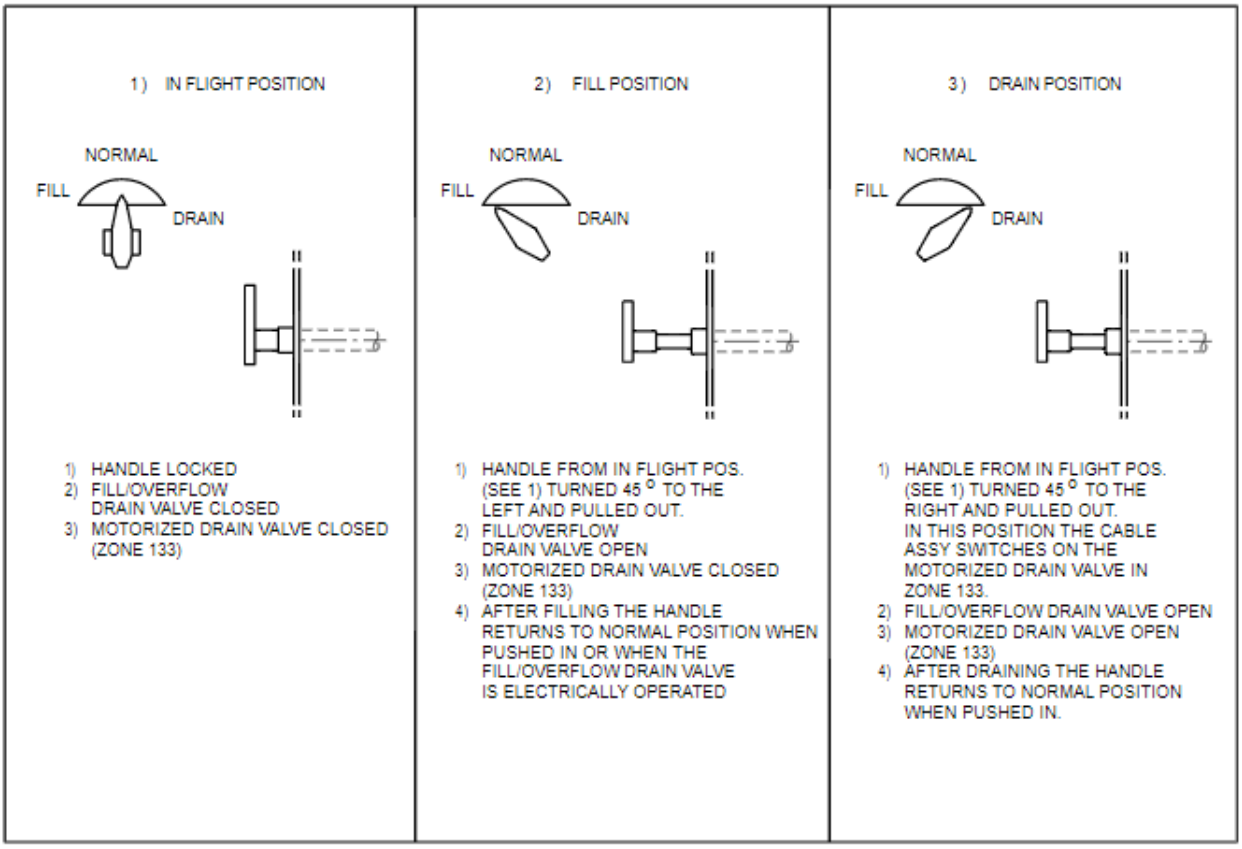
Filling pressure: 3.45 bar (50 psi).

The tank has 200 l capacity.

Typical flow rate: 50 l/min (13 US gal/min).

- To drain: It is done through the water drain installed on the servicing panel as indicate d in the picture below. To drain remove the cup and pull the handle. **Draining shall be done during night stop in freezing or icing conditions.**
- To fill: caps from the water filling connection and from the tank overflow must be removed.

Operation:



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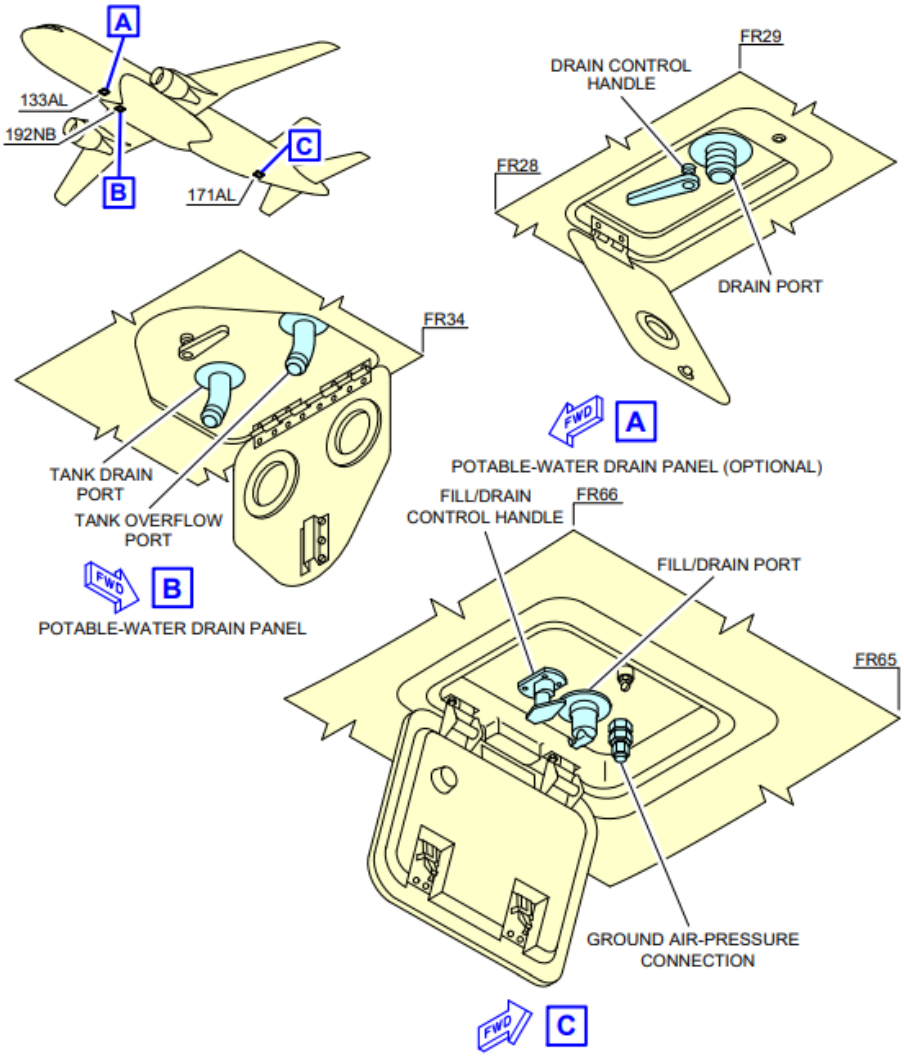
You can only fill the water tank when fill/overflow drain valve 8MA is open. The valve opens when you turn the control handle on the service panel from 'NORMAL' to 'FILL' and pull the control handle out. With the control handle pulled out to its stop, the 'fill-drain' and 'overflow' ducts open.

The maximum pressure necessary to fill the tank is 50 psi (3.4 bar). When the tank is full, the quantity transmitter closes the fill/overflow drain valve. The control handle automatically goes back to the 'NORMAL' position and the tank full control-light comes on.

When you fill the system without electrical power, there is no indication when the tank is full. The control handle will stay in the PULL TO FILL position. You must manually turn the control handle to the NORMAL position to close fill/overflow drain valve 8MA.



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6.5.6.3.2 Toilet Servicing

Toilet waste disposal servicing is done through a panel at the rear right side of the fuselage. A sanitary service unit must be connected to the air service panel.

Connectors:

- Draining: 4 in.
- Flushing and filling: 1 in.

Waste tank - Rinsing: Operating pressure: 3.45 bar (50 psi).

Waste tank - Precharge: 10 l (3 US gal).

It is accomplished in the following way:

- Open waste service panel door;
- Remove protective cap of the waste drain valve;
- Connect the lavatory dumping coupling of the lavatory servicing dolly to the waste drain valve;
- Push the lever of the waste drain-valve actuator to open its internal flapper valve. Do not operate the coupling handle; its operation is not necessary;
- Pull and lock the drain control handle to open the holding tank drain valve;
- Continue the tank drainage until the waste flow stops;
- Flush with water through the rinse nipple;
- Release the control cable;
- Fill the waste holding tank;
- Pull and lock the drain control handle to open the holding-tank drain valve;
- Release the drain control handle after all liquid is drained;
  - Fill the waste holding tank with maximum **170 l** of water and add Monogram MC-1000 germicidal deodorant, or Mirabowl ‘’Q’’ germicidal deodorant as per instructions.
- Disconnect the lavatory dumping and filling couplings;
- Close the cap and latch the handle of the waste drain valve. The flapper valve will close automatically when the cap is closed;
- Install the cap on the toilet rinse nipple.
- Close waste-service-panel door.

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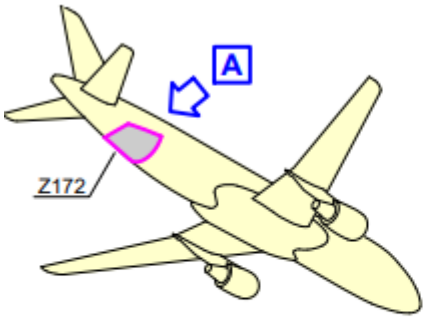
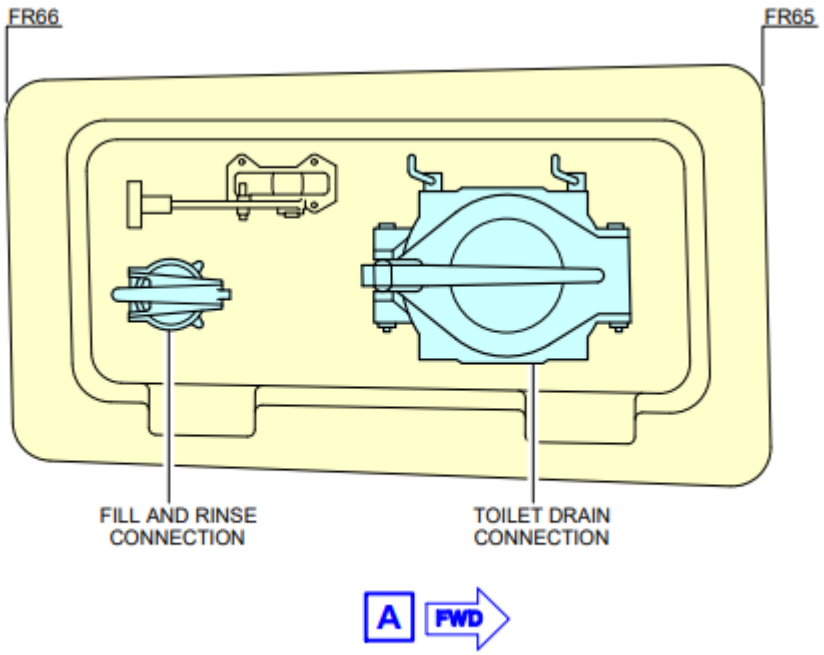
Ground Service Connections Waste Water Ground Service Panel





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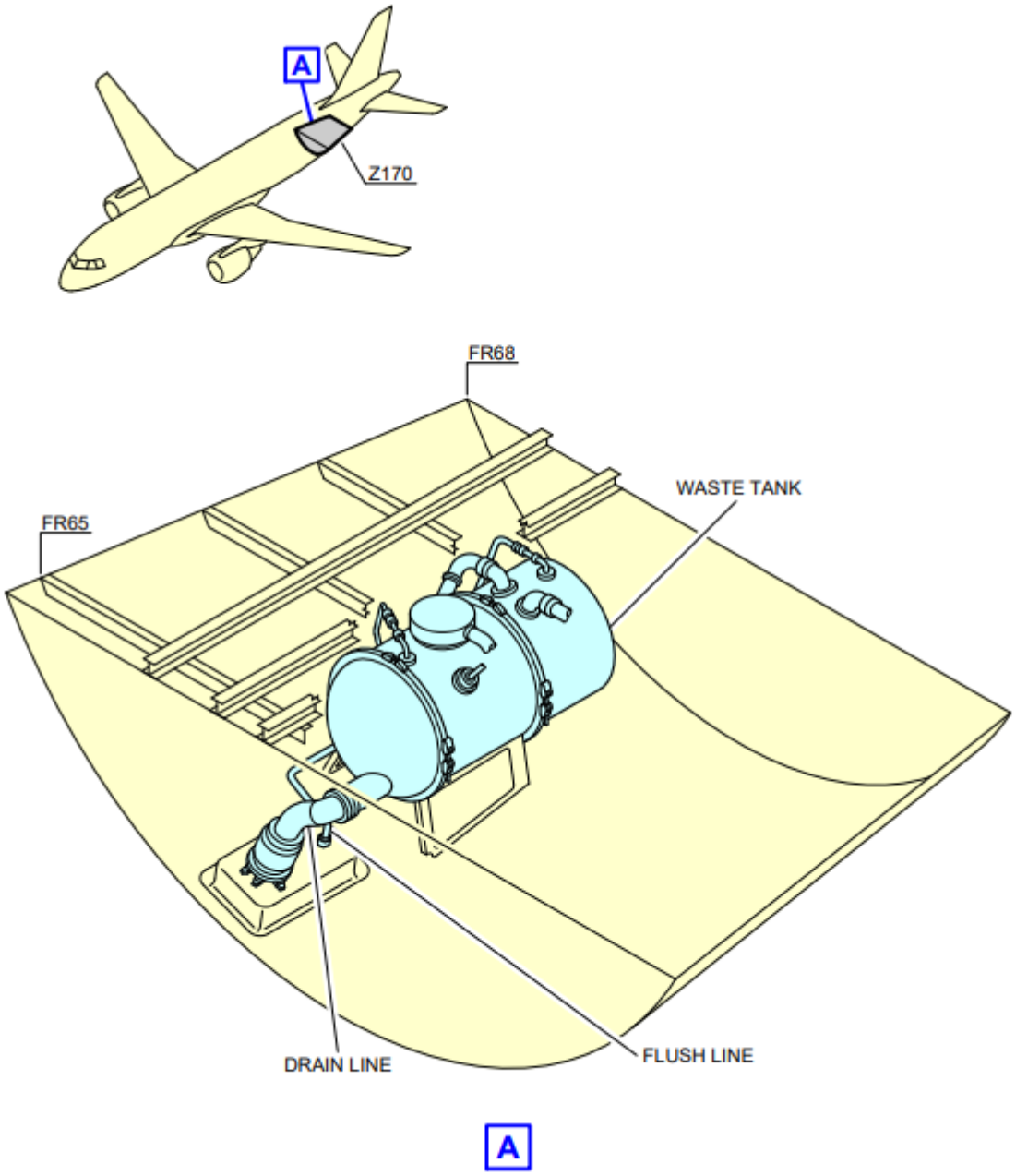
Ground Service Connections Waste Tank Location



6.5.6.4 Loading

6.5.6.4.1 General and Special Cargo

Dangerous Goods

All Dangerous Goods except Class 7 are accepted.

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6.5.6.5 Towing

This aircraft is designed with means for standard or towbarless towing.

See chapter 4.13 for detailed instructions.

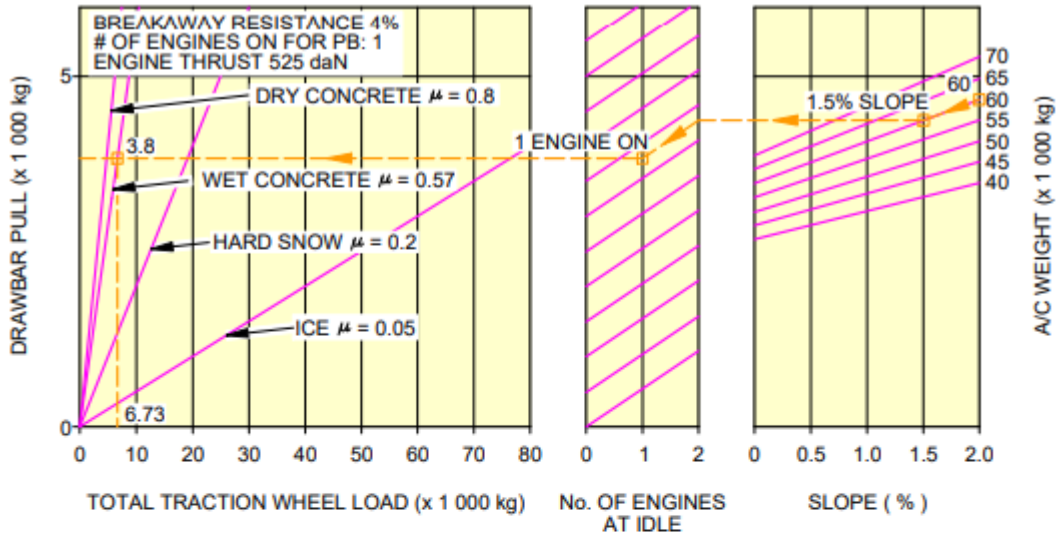
Note: *The NLG steering deactivation pin has the same design for all Airbus programs.*

One towbar fitting is installed at the front of the leg. The main landing gears have attachment points for towing or debogging

This section shows the chart to determine the drawbar pull and tow tractor mass requirements as a function of the following physical characteristics:

- Aircraft weight,
- Number of engines at idle,
- Slope.

The chart is based on the engine type with the highest idle thrust level.



EXAMPLE HOW TO DETERMINE THE MASS REQUIREMENT TO TOW A A319 AT 60 000 kg, AT 1.5% SLOPE, 1 ENGINE AT IDLE AND FOR WET TARMAC CONDITIONS:

- ON THE RIGHT HAND SIDE OF THE GRAPH, CHOOSE THE RELEVANT AIRCRAFT WEIGHT (60 000 kg),
- FROM THIS POINT DRAW A PARALLEL LINE TO THE REQUIRED SLOPE PERCENTAGE (1.5%),
- FROM THE POINT OBTAINED DRAW A STRAIGHT HORIZONTAL LINE UNTIL No. OF ENGINES AT IDLE = 2,
- FROM THIS POINT DRAW A PARALLEL LINE TO THE REQUESTED No. OF ENGINES (1),
- FROM THIS POINT DRAW A STRAIGHT HORIZONTAL LINE TO THE DRAWBAR PULL AXIS,
- THE Y-COORDINATE OBTAINED IS THE NECESSARY DRAWBAR PULL FOR THE TRACTOR (3 800 kg),
- SEARCH THE INTERSECTION WITH THE "WET CONCRETE" LINE.
  THE OBTAINED X-COORDINATE IS THE TOTAL TRACTION WHEEL LOAD (6 730 kg).

NOTE:

USE A TRACTOR WITH A LIMITED DRAWBAR PULL TO PREVENT LOADS ABOVE THE TOW-BAR SHEAR-PIN CAPACITY.

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6.5.6.5.1 Towbar Design Guidelines

The aircraft towbar shall comply with the following standards:

- ISO 8267-1, ”Aircraft - Towbar Attachment Fitting - Interface Requirements - Part 1: Main Line Aircraft",
- SAE AS 1614, ”Main Line Aircraft Towbar Attach Fitting Interface",
- SAE ARP 1915, ”Aircraft Towbar",
- ISO 9667, ”Aircraft Ground Support Equipment - Towbar - Connection to Aircraft and Tractor",
- EN 12312-7, ”Aircraft Ground Support Equipment - Specific Requirements - Part 7: Aircraft Movement Equipment",
- IATA Airport Handling Manual AHM 958, ”Functional Specification for an Aircraft Towbar".

A standard type towbar is required which should be equipped with a damping system (to protect the nose gear against jerks) and with towing shear pins:

- A traction shear pin calibrated at 9 425 daN (21 188 lbf),
- A torsion pin calibrated at 826 m.daN (6 092 lbf.ft).

The towing head is designed according to ISO 8267-1, cat. I.

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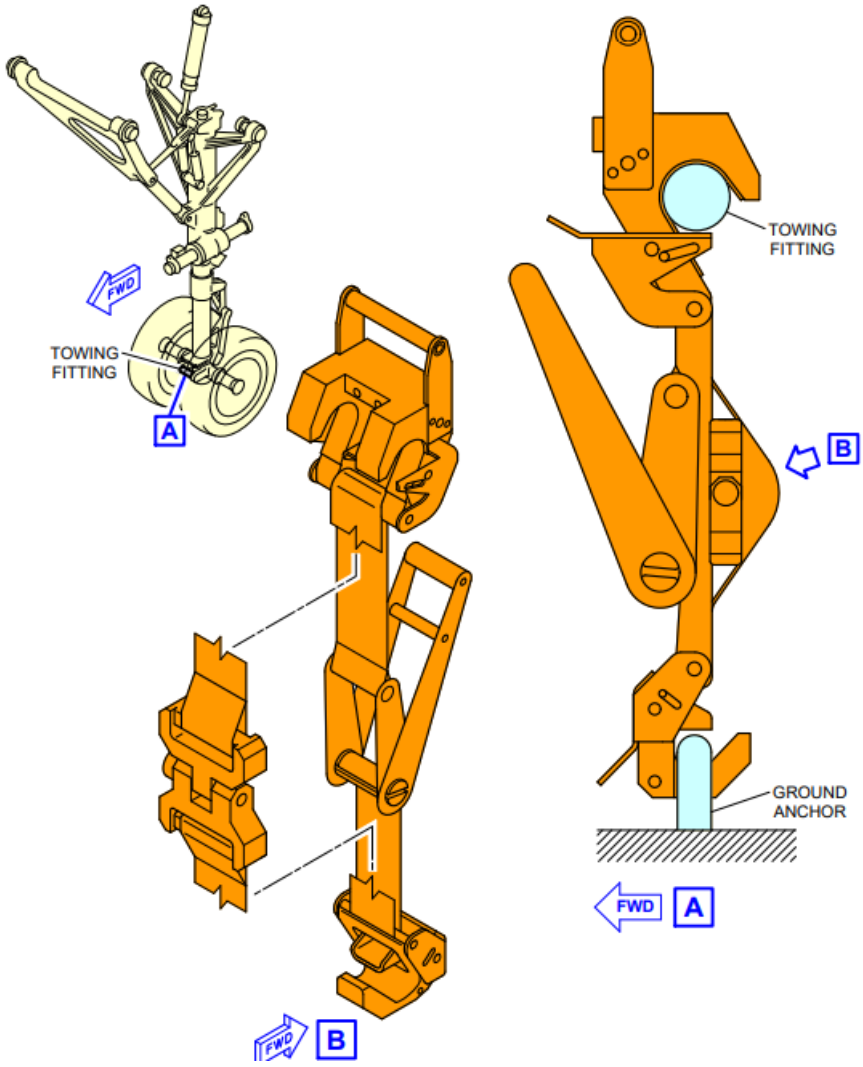
6.5.6.6 Mooring

After parking, in case of bad weather conditions mooring is necessary. Below is a table which shows the surface conditions and wind velocities at which mooring is necessary:

Surface Condition	Wind Velocity
Ice	25 kt
Snow	40 kt
Wet Concrete	55 kt
Dry Concrete	60 kt

To moor the aircraft, apply the following:

- Tow the aircraft to a parking area where there are tiedown anchors available;
- Carry out normal parking procedure;
- Install the tiedown rings (two), one in each primary brace strut of the main landing gear;
- See the corresponding illustration below.



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6.5.6.7 Ground Deicing Strategy

TBD

6.5.7 Galley

A319/A320 have 2 wet galleys on board the aircraft. One at the front and another one at the back.

6.5.7.1 Galley Layout

F-HDRA

G1	G4

6.5.7.2 Galley Equipment Units and Dimensions

TBD.

6.5.8 Cleaning and Disinfection Products

TBD

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6.6 A320

6.6.1 Basic Data

CHARACTERISTICS	
Manufacturer: AIRBUS	A320-214
	F-HBNA
EXTERNAL DIMENSIONS	
Length Wingspan Height	37,57 m 34,1 m 11,76 m
CABIN DIMENSIONS	
Length Width Height	27,51 m 3,95 m 2,21 m
ENGINES	
Two CFM International CFM56-5B6	
APU	
One Allied Signal APU 131-9	
PERFORMANCES	
Maximum range	3700 km
Cruise speed	850 km/h
Operating altitude	39 800 ft
FUEL QUANTITY	
Max useable fuel per tank	TTL wing fuel: 15 959 l Center Tank Fuel: 8250 l l

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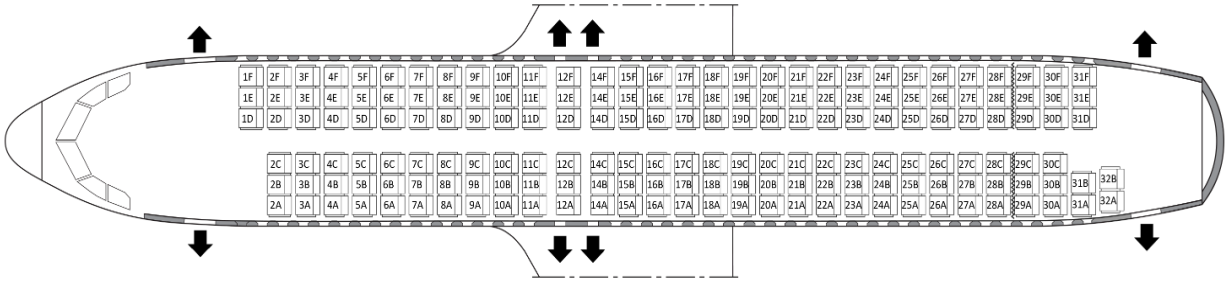
6.6.1.1 Seating Capacity and Cabin Balance Zones

Aircraft	Seating capacity	ZONE and rows per zone		
		A	B	C
F-HBNA	178	1-10 (57 pax)	11-21 (60 pax)	22-32 (61 pax)

F-HBNA

- 178 Seats on 31 rows in total, each seat is designated by a letter.
- **The last row is Row 32, but Row 13 does not exist**
- the seats are marked with following letters**: A (LH window seat); B (LH Middle seat) and C (LH Aisle seat), D (RH Aisle seat); E (RH Middle seat) and F (RH window seat).**
- All seatbacks are reclining except at over wing exit row.
- Life jackets are located under the seats.



6.6.1.2 Passenger Oxygen Mask Location

On F-HBNA there are extra oxygen masks for the use by infants on all seats in the cabin.

Important: Infants may not be seated on emergency exit even if there is an extra oxygen mask. See ch.2 and App2 for details on INF seating requirements.

6.6.2 Weight and Balance Data

	MRM	MTOM	MLM	MZFM
F-HBNA	73 900kg	73 500kg	64 500 kg	61 000kg

The DOM is BEM plus the mass of the operational items, i.e. crew, documents etc.

The crew uses Flysmart application for issuance of the loadsheet.

For Balance zones refer to ch. 6.6.1.1.

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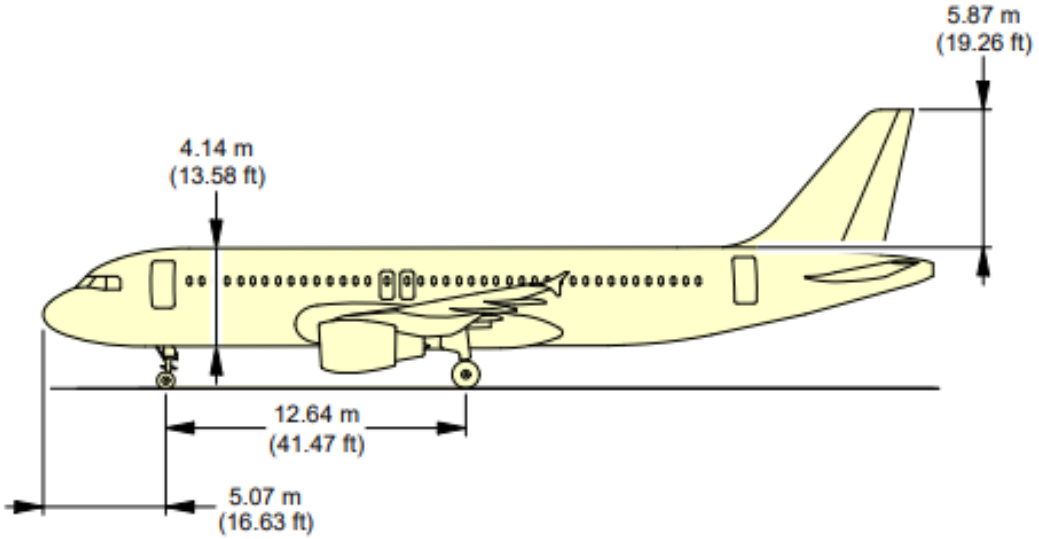
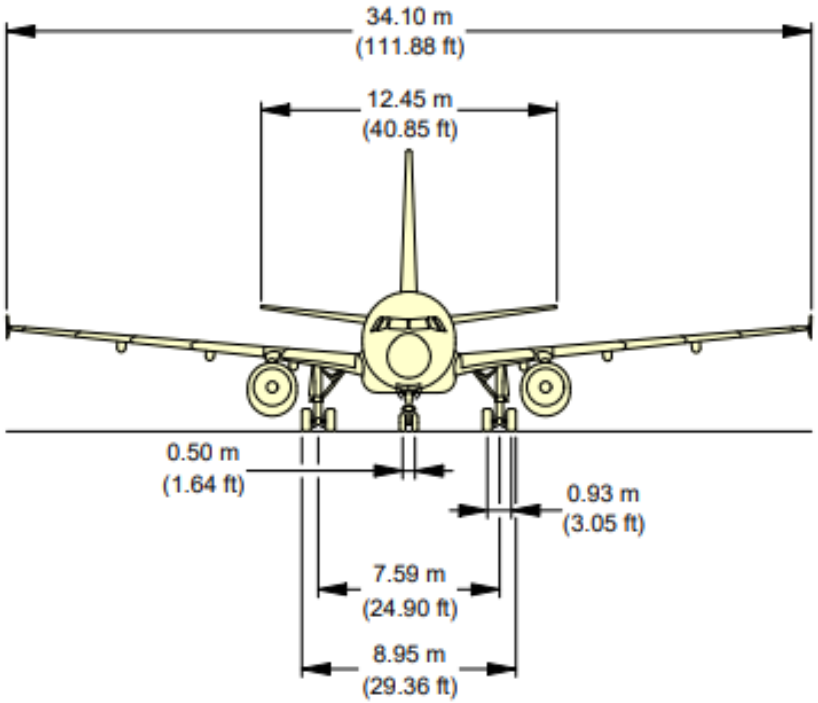
6.6.3 Aircraft Dimensions

6.6.3.1 External Dimensions





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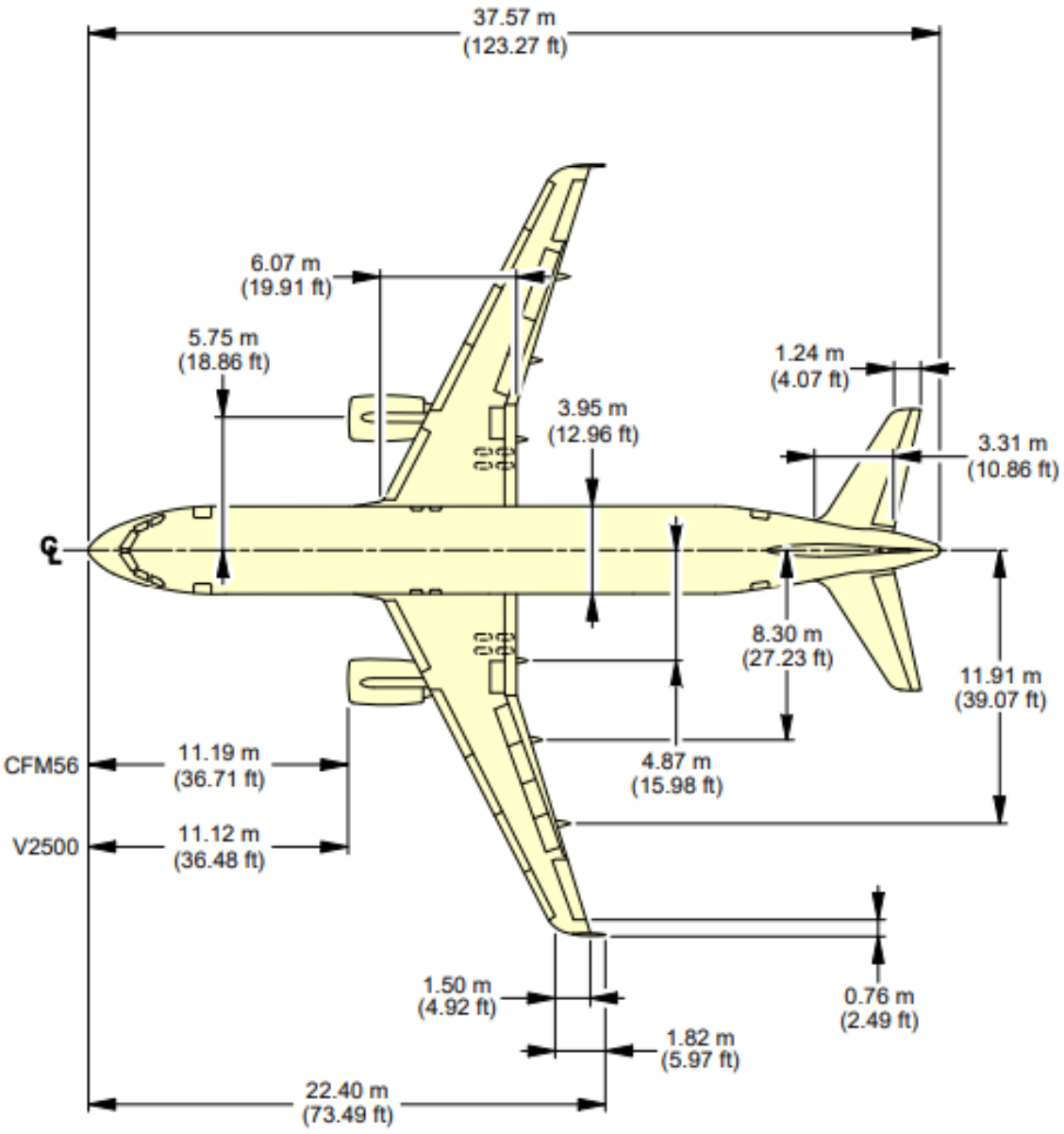
37.57 m
(123.27 ft)
6.07 m
(19.91 ft)
5.75 m
(18.86 ft)
1.24 m
(4.07 ft)
3.95 m
(12.96 ft)
3.31 m
(10.86 ft)
8.30 m
(27.23 ft)
11.91 m
(39.07 ft)
CFM56
11.19 m
(36.71 ft)
4.87 m
(15.98 ft)
V2500
11.12 m
(36.48 ft)
1.50 m
(4.92 ft)
0.76 m
(2.49 ft)
1.82 m
(5.97 ft)
22.40 m
(73.49 ft)

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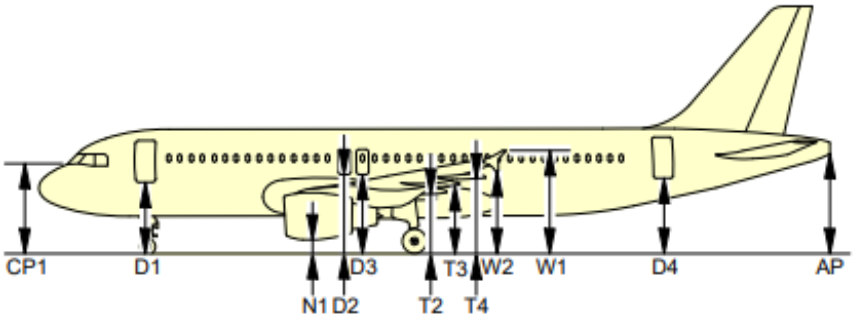
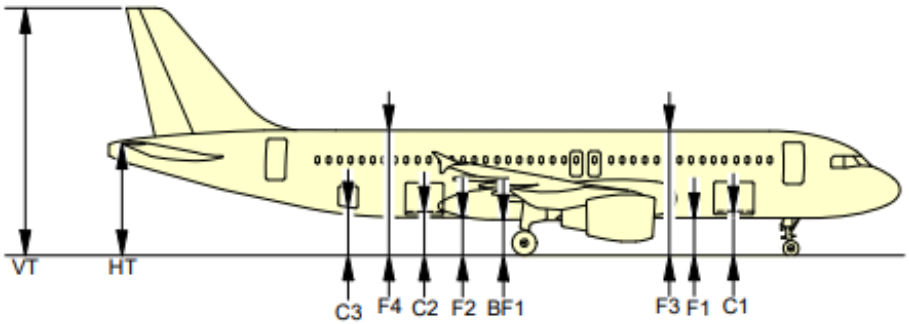
6.6.3.2 Ground Clearance





Location			FWD CG (m)	AFT CG(m)
PASSENGER DOORS	Door 1	D1	3.381	3.482
	Emergency hatch 1	D2	3.874	3.888
	Emergency hatch 2	D3	3.882	3.888
	Door 2	D4	3.615	3.490
CARGO DOORS	FWD cargo door	C1	1.811	1.883
	AFT cargo door	C2	1.949	1.888
	Bulk cargo door	C3	2.200	2.106
REFERENCE POINT	Pilot view	CP1	4.173	4.308
FUSELAGE	Bottom FWD	F1	1.727	1.786
	Bottom AFT	F2	1.856	1.790
	Top FWD	F3	5.872	5.927
	Top AFT	F4	6.001	5.931
	Belly fairing	BF1	1.631	1.610
WING	Flap track 2	T2	2.626	2.602
	Flap track 3	T3	3.060	3.032
	Flap track 4	T4	3.399	3.360
	Wing tip fence top	W1	4.767	4.709
	Wing tip fence bottom	W2	3.795	3.739

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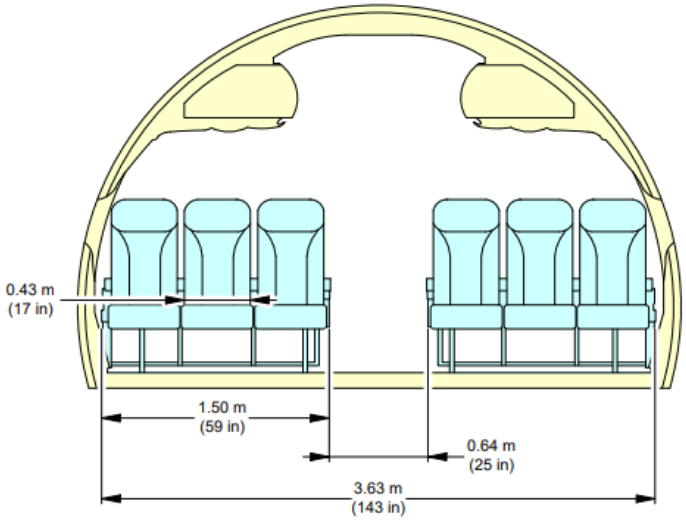
Location			FWD CG (m)	AFT CG(m)
TAILPLANE	Horizontal tail plane	HT	5.473	5.290
	APU exhaust	AP	4.761	4.563
	Vertical tail plane	VT	11.996	11.805
ENGINE/ NACELLE	CFM 5A Nacelle low point	N1	0.577	0.592
	CFM 5B Nacelle low point	N1	0.577	0.592
	V2500 Nacelle low point	N1	0.759	0.769

6.6.3.3 Passenger Cabin Dimensions

Width on the ground	3.63 m
Maximal Height (aisle)	
Aisle width	0.63 m



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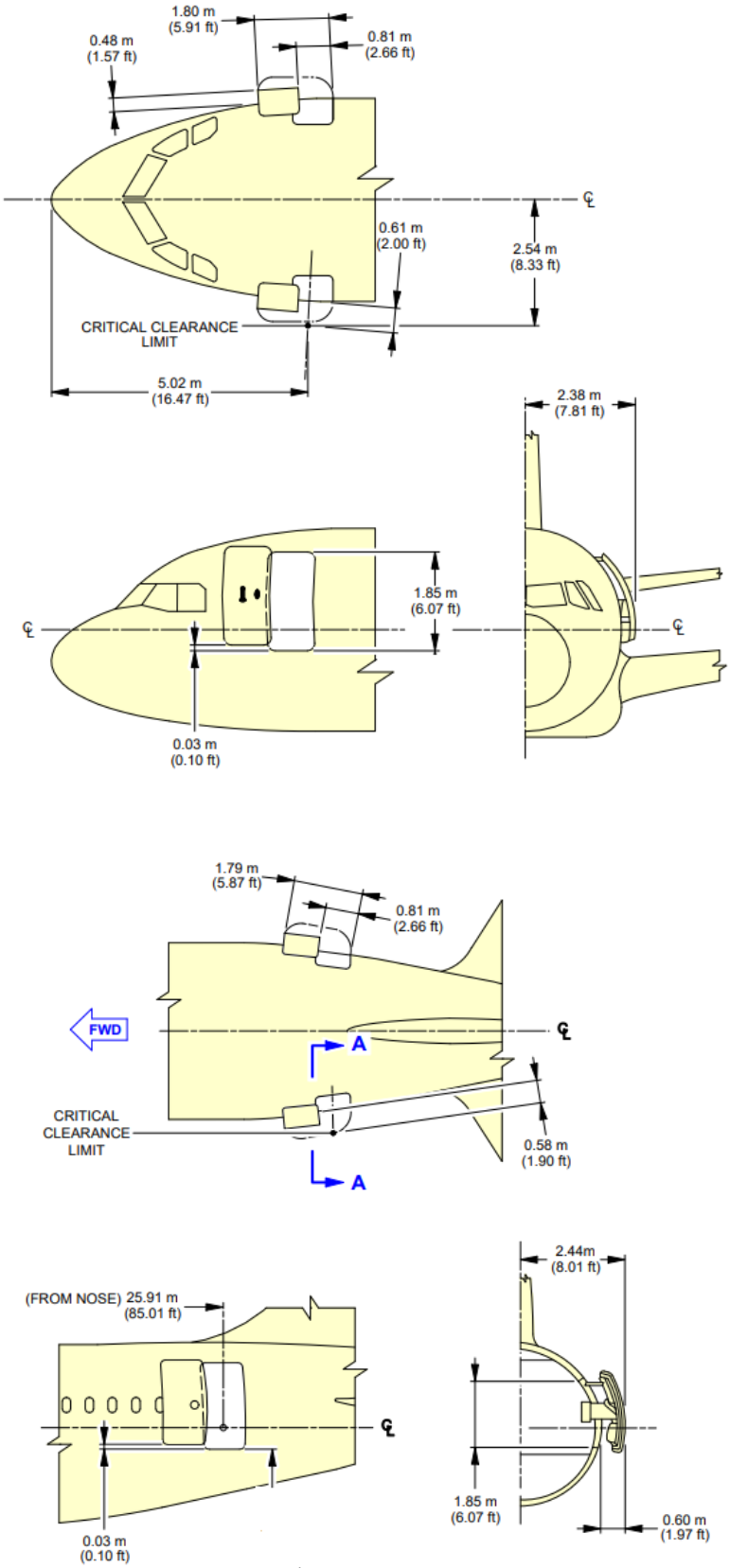
6.6.3.4 Door Dimensions



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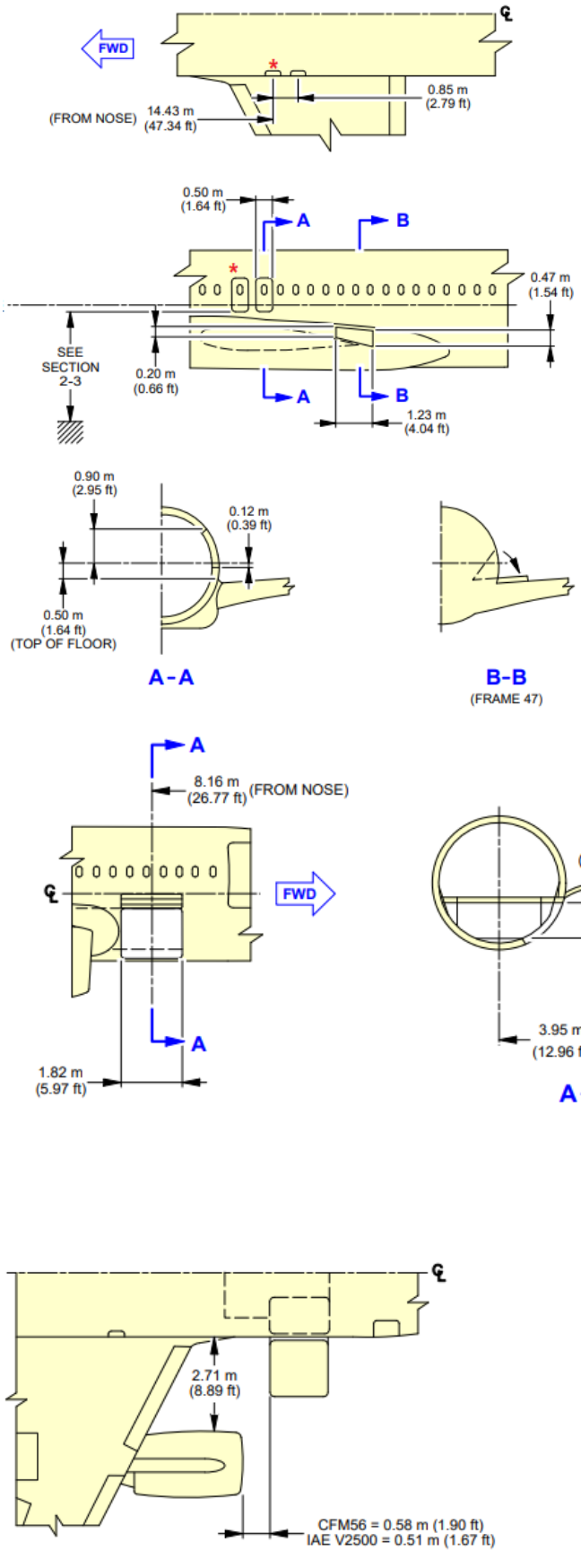
FWD
(FROM NOSE)
14.43 m (47.34 ft)
0.85 m (2.79 ft)
0.50 m (1.64 ft)
A
B
0.47 m (1.54 ft)
SEE SECTION 2-3
0.20 m (0.66 ft)
1.23 m (4.04 ft)
0.90 m (2.95 ft)
0.12 m (0.39 ft)
0.50 m (1.64 ft) (TOP OF FLOOR)
A-A
B-B
(FRAME 47)
8.16 m (26.77 ft) (FROM NOSE)
1.82 m (5.97 ft)
1.24 m (4.07 ft)
1.50 m (4.92 ft)
3.95 m (12.96 ft)
2.71 m (8.89 ft)
CFM56 = 0.58 m (1.90 ft)
IAE V2500 = 0.51 m (1.67 ft)

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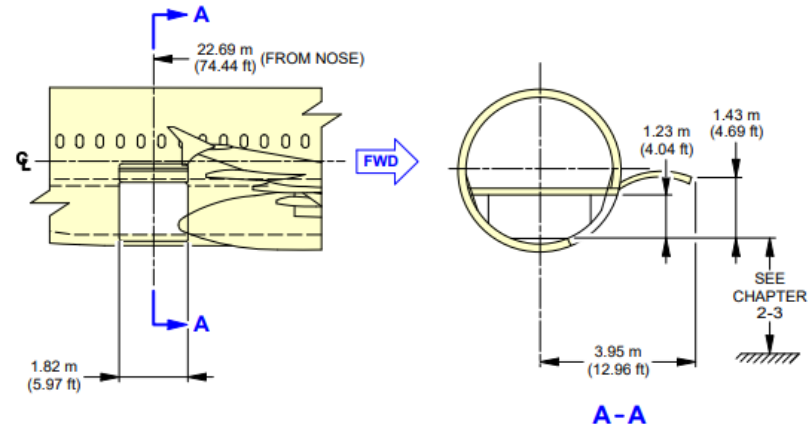
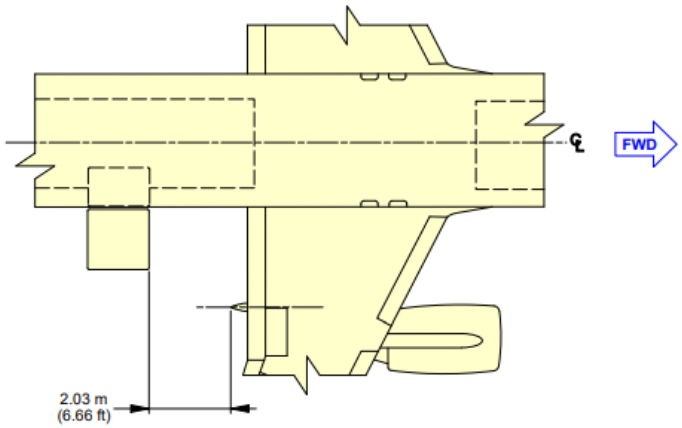
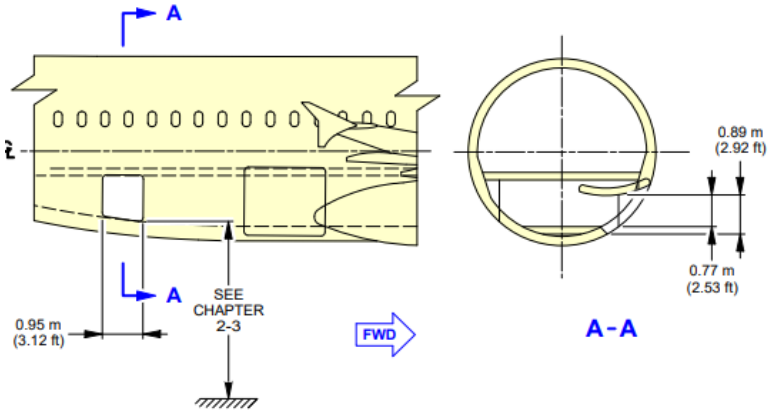
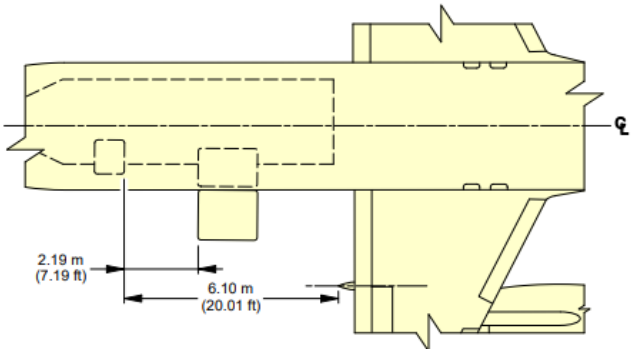

A
22.69 m
(74.44 ft) (FROM NOSE)
FWD
1.23 m
(4.04 ft)
1.43 m
(4.69 ft)
SEE
CHAPTER
2-3
3.95 m
(12.96 ft)
A
1.82 m
(5.97 ft)
A-A


FWD
2.03 m
(6.66 ft)


A
0.89 m
(2.92 ft)
0.77 m
(2.53 ft)
A
SEE
CHAPTER
2-3
0.95 m
(3.12 ft)
FWD
A-A


2.19 m
(7.19 ft)
6.10 m
(20.01 ft)

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6.6.3.5 Overhead Bin

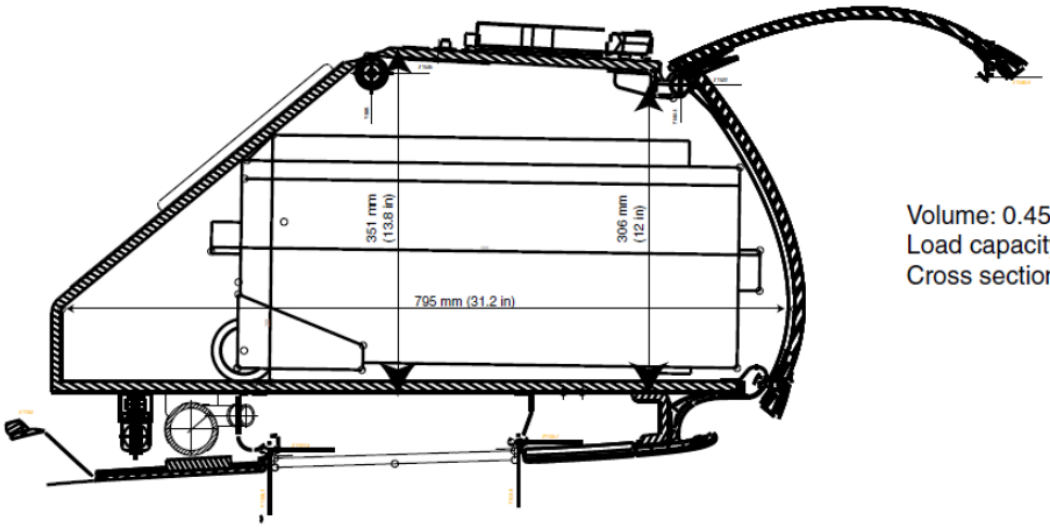
There are different volumes of overhead compartments on the A320. Below are presented the various possibilities.

Most of the overhead compartments are 4-frame boxes.

OHSC boxes

		Loading capacity
①	4-frame box 1042 mm 1042 mm	38-38 kg
②	Special box C26 to C34 (A318 Only) 1042 mm 788 mm	38-28 kg
③	Special box C63 to C66 557 mm 1036 mm	19-38 kg
④	2-frame conical box 1018 mm	38 kg
⑤	1-frame conical box 484 mm	19 kg
⑥	Spacer conical box C20 to C21 245 mm	15 kg
⑦	Special conical box C63 to C64 485 mm 210 mm	19-8 kg
⑧	Special box C38 to C43 1042 mm 1060 mm 96 mm	38-38-9 kg
⑨	Special 2-frame box C35-1 to C35-3 and C47-2 to C47-4 (A321 only) * 1018 mm	20 kg
⑩	Special box C61 to C62 (LH shown) 503 mm 325 mm	19-11 kg
⑪	Special box C30 to C36 (A319 only) 508 mm 1042 mm	19-38 kg

Dimensions shown are "inner" dimensions of OHSC.
* Reduced volume due to installed bottle for slides.



Volume: 0.456 m³ (16.10 cu ft)
Load capacity: 76 kg (168 lb)
Cross section: 2186 cm² (338.8 sq in)

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6.6.4 Hold Characteristics and Net Installation

Amelia Intl A319/A320 are fitted with ''class -C'' baggage compartment. Aircraft with ''class- C'' baggage compartment have the following systems installed:

- Baggage Compartment Smoke Detection System;
- Baggage Compartment Fire Extinguishing System;

They are found in the lower deck. The lower deck includes the forward, aft, and rear bulk cargo holds.

The holds are pressurized.

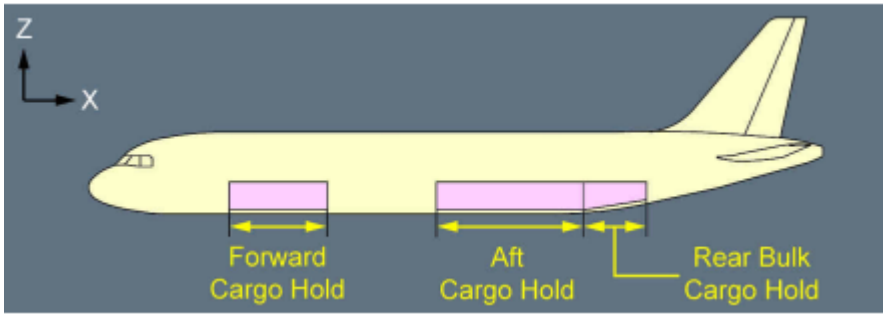
The forward cargo hold On A320 is not equipped with ventilation and temperature control systems.

The Aft cargo on A320 is not equipped with temperature control system.

The rear bulk cargo compartment on A320 is not equipped with temperature control system

In the lower deck of the aircraft, there are two lower holds (forward hold and aft hold) which are divided into cargo compartments.

- The forward hold is referred to as the forward cargo compartment No. 1.
- The aft hold is divided into the
  - aft cargo compartments No. 3 and
  - aft compartment No. 4
- the bulk cargo is referred to as compartment No. 5.



The forward, aft and bulk cargo compartments have tie down/attachment points for the nets, and straps which keep the bulk cargo in position. Two additional door nets are installed in the forward and aft cargo compartments.

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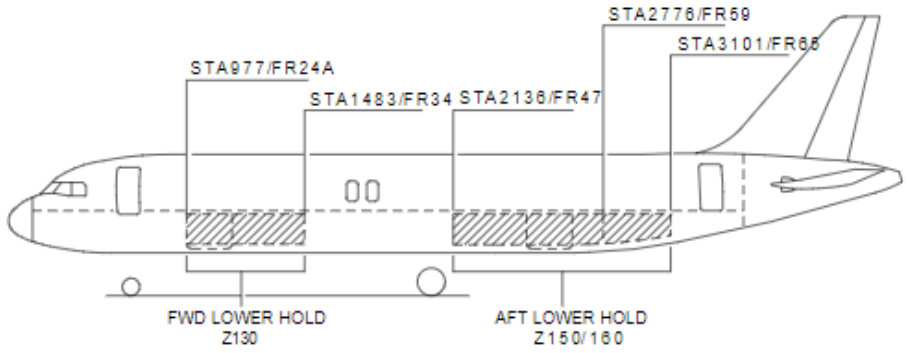

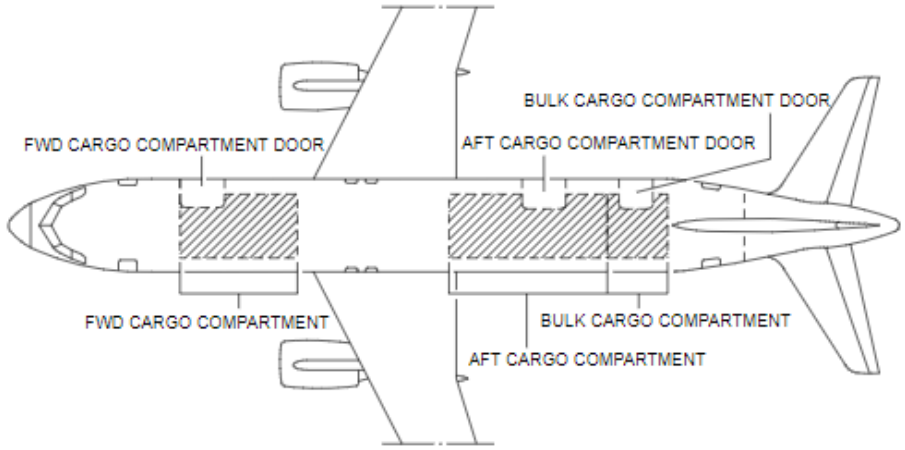

The FWD compartment No.1 is divided into the following sections: 11, 12 & 13

The AFT compartment is divided compartment no 3 with sections 31 & 32 and into compartment No 4 with sections 41 & 42 and into the following

Bilk compartment No 5 has the sections 51, 52 & 53.

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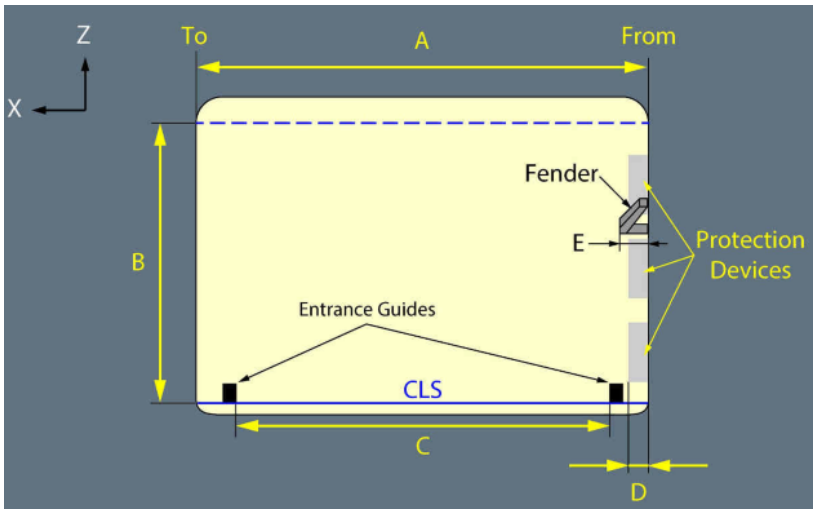
6.6.4.1 Cargo Compartment Doors

6.6.4.1.1 Forward Cargo Compartment Door

The forward cargo hold is equipped with a door on the right side of the fuselage.

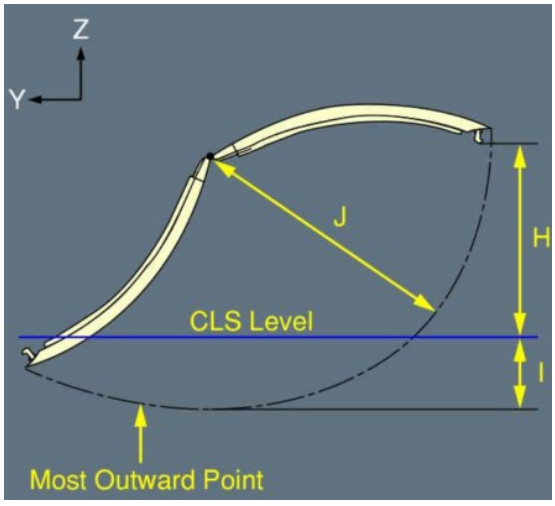
The door opens outward. The operator must use the forward door to load and unload the forward cargo hold.

FRONT VIEW OF THE DOOR



Legend		Dimensions	
		(m)	(in)
A	Clear opening width	1.817	71.54
B	Clear opening height	1.198	47.16
C	Door width at CLS level	1.541	60.67
D	Protection device thickness	0.067	2.64
E	Fender thickness	0.096	3.78

SIDE VIEW OF THE DOOR



© Aero4M

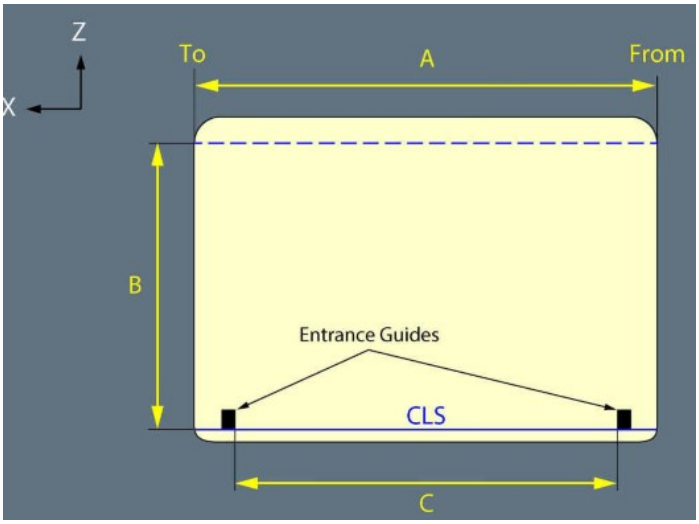
Legend		Dimensions	
		(m)	(in)
H	Clearance between the CLS level and the hooks (when the door is in fully opened position)	1.385	54.53
I	Clearance below the CLS level when the door is operated	0.687	27.05
J	Door opening radius	2.024	79.68

6.6.4.1.2 Aft Cargo Compartment Door

The aft cargo hold is equipped with a door on the right side of the fuselage.

The door opens outward. The operator must use the aft door to load and unload the aft cargo hold.

FRONT VIEW OF THE DOOR



Legend		Dimensions	
		(m)	(in)
A	Clear opening width	1.817	71.54
B	Clear opening height	1.198	47.16
C	Door width at CLS level	1.541	60.67

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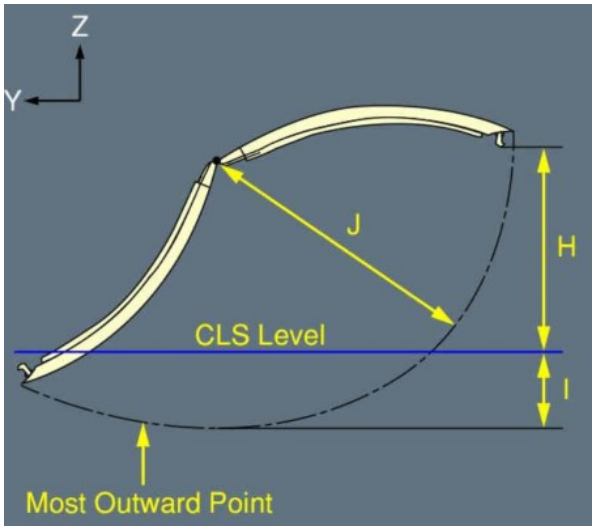
SIDE VIEW OF THE DOOR



Legend		Dimensions	
		(m)	(in)
H	Clearance between the CLS level and the hooks (when the door is in fully opened position)	1.385	54.53
I	Clearance below the CLS level when the door is operated	0.687	27.05
J	Door opening radius	2.024	79.68

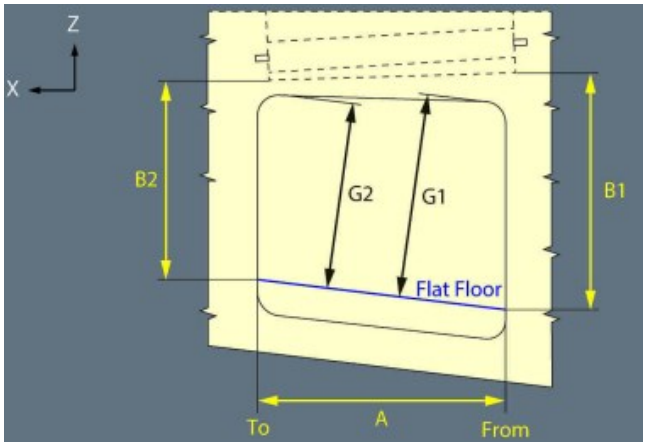
6.6.4.1.3 Bulk Cargo Compartment Door

On A320 the rear bulk cargo hold is equipped with a door on the right side of the fuselage.

The door opens inward. To load and unload the rear bulk cargo hold, the operator must use:

- The door of the rear bulk cargo hold, or
- The door of the aft cargo hold, after removal of the divider net between the aft and rear bulk cargo holds.

FRONT VIEW OF THE DOOR



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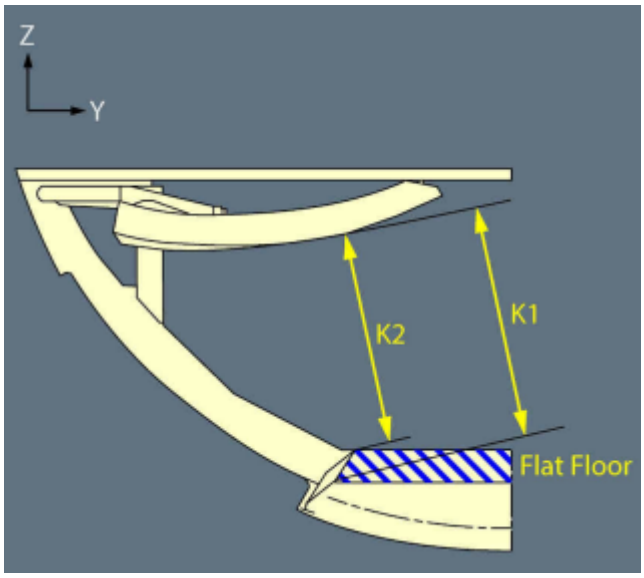
Legend		Dimensions	
		(m)	(in)
A	Clear opening width	0.954	37.56
B1	Clearance opening height at H-ARM 28.352 m (1 116.22 in)	0.880	34.64
B2	Clearance opening height at H-ARM 29.305 m (1 153.74 in)	0.765	30.12
G1	Clear door height at H-ARM 28.352 m (1 116.22 in)	0.773	30.43
G2	Clear door height at H-ARM 29.305 m (1 153.74 in)	0.704	27.72

SIDE VIEW OF THE DOOR



Legend		Dimensions	
		(m)	(in)
K1	Clearance between the flat floor and the door (when the door is in fully open position) at H-ARM 28.352 m (1 116.22 in)	0.900	35.43
K2	Clearance between the flat floor and the door (when the door is in fully open position) at H-ARM 29.305 m (1 153.74 in)	0.810	31.89

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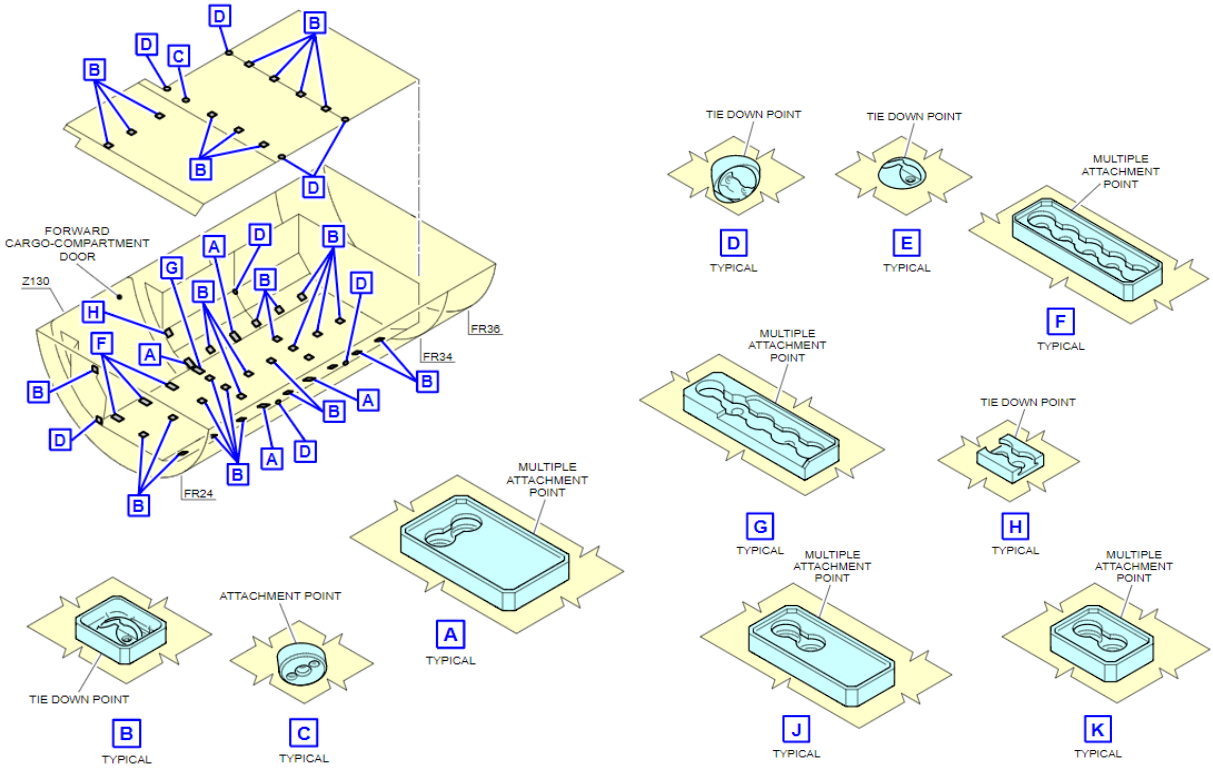
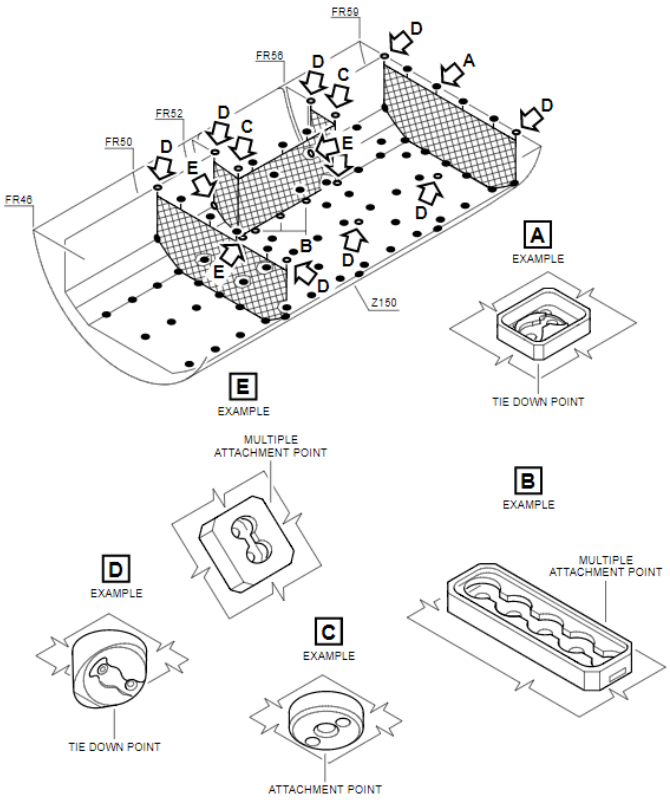
6.6.4.2 Cargo Nets

6.6.4.2.1 Forward Cargo Nets Attachment Points



6.6.4.2.2 Aft Cargo Nets Attachment Points



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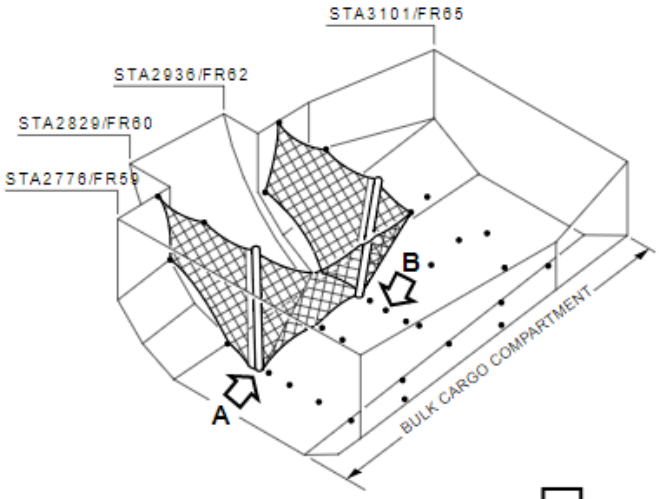
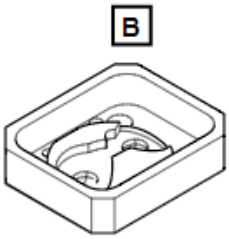
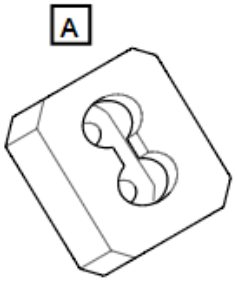
6.6.4.2.3 Bulk Cargo Nets Attachment Points





TYPICAL ATTACHMENT/TIE DOWN POINT



TYPICAL ATTACHMENT/TIE DOWN POINTS

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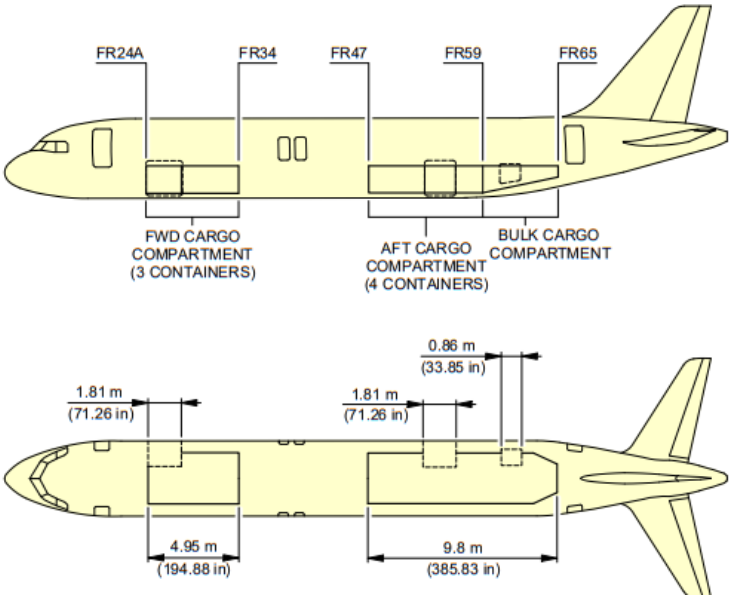
6.6.4.3 Hold Dimensions and Limits

For Cargo Compartment package size dimensions see ch. 7.6.



	Floor Strength Via floor panels	**Volume**	**Max load**
Compartment 1	732 kg/m³	Section 11: 3990 m³ Section 12: 4770 m³ Section 13: 4390 m³ **Total: 13 150 m³**	Section 11: 1045 kg Section 12: 1225 kg Section 13: 1132 kg **Total: 3402 kg**
Compartment 3	732 kg/m³	Section 31: 5230 m³ Section 32: 4510 m³ **Total: 9740 m³**	Section 31: 1301 kg Section 32: 1125 kg **Total: 2426 kg**
Compartment 4	732 kg/m³	Section 41: 3660 m³ Section 42: 4750 m³ **Total: 8410 m³**	Section 41: 928 kg Section 42: 1182 kg **Total: 2110 kg**
Compartment 5	732 kg/m³	Section 51: 1490 m³ Section 52: 1390 m³ Section 53: 3040 m³ **Total: 5920 m³**	Section 51: 374 kg Section 52: 353 kg Section 53: 770 kg **Total: 1497 kg**

Each floor panel can sustain the following loads:

	Local Load		**Point Load**	
	(kg/0.093m²)	**(lb/1ft²)**	**(kg/cm²)**	**(lb/in²)**
On the flat floor	906	2 000	6.6	94
On the sloped floor	906	2 000	6.6	94

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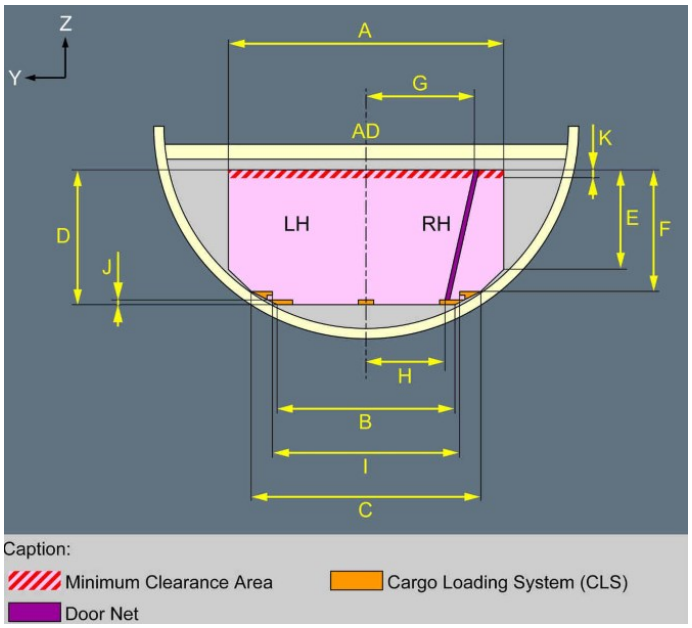
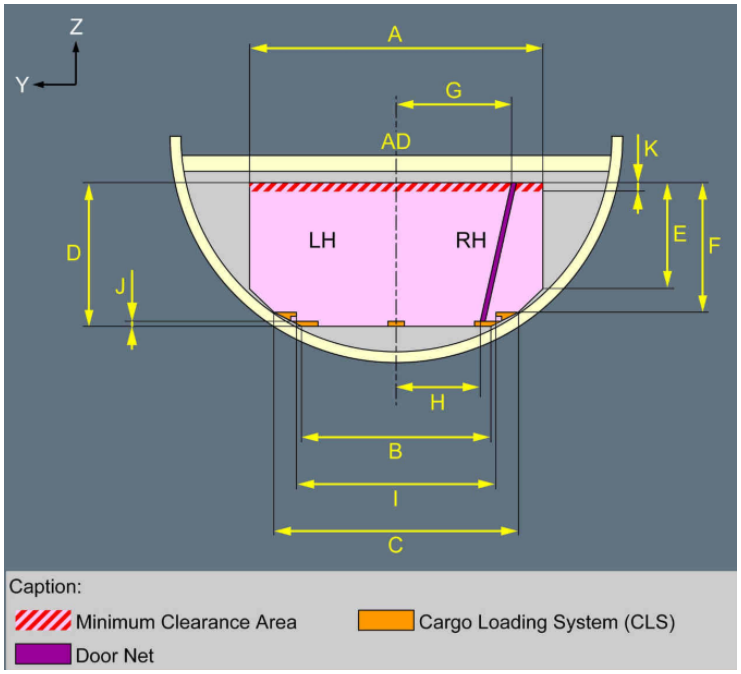
6.6.4.3.1 Cross section

FORWARD CARGO COMPARTMENT



H-ARM (m)	Dimensions (m)										
	A	B	C	D	E	F	G	H	I	J	K
9.858	2.630	1.430	2.098	1.242	0.797	1.065	0.765	0.577	1.520	0.035	0.051
11.633	2.630	1.430	2.098	1.242	0.797	1.065	0.765	0.577	1.520	0.035	0.051
14.708	2.630	1.430	2.098	1.242	0.797	1.065	-	-	1.520	0.035	0.051

AFT CARGO COMPARTMENT



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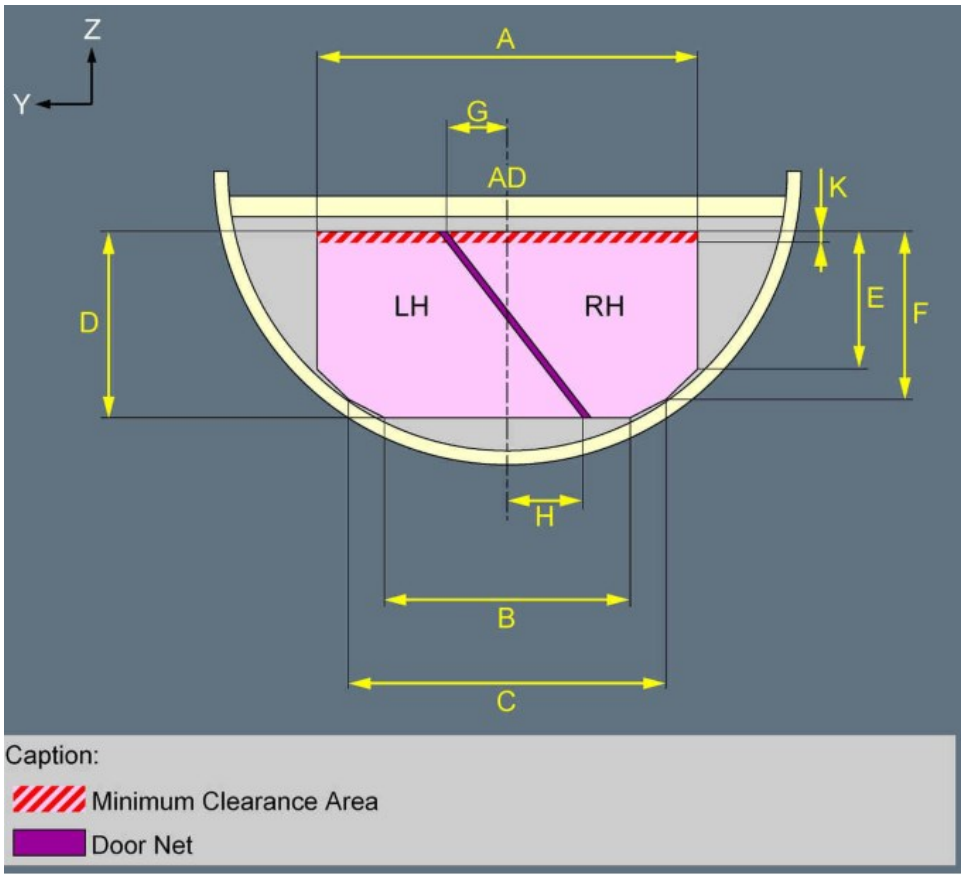
H-ARM (m)	Dimensions (m)										
	A	B	C	D	E	F	G	H	I	J	K
21.208	2.630	1.430	2.098	1.242	0.797	1.065	-	-	1.520	0.035	0.051
24.295	2.630	1.430	2.098	1.242	0.797	1.065	0.765	0.577	1.520	0.035	0.051
26.162	2.630	1.430	2.098	1.242	0.797	1.065	0.765	0.577	1.520	0.035	0.051
27.229	2.630	1.430	2.098	1.242	0.797	1.065	-	-	1.520	0.035	0.051
27.762	2.630	1.408	2.098	1.208	0.756	1.024	-	-	1.520	-	0.051

BULK CARGO COMPARTMENT



H-ARM (m)	Dimensions (m)								
	A	B	C	D	E	F	G	H	K
27.762	2.630	1.408	2.098	1.211	0.756	1.027	-	-	0.051
28.296	2.630	1.368	2.098	1.147	0.682	0.953	0.254	0.421	0.051
28.829	2.630	1.328	2.098	1.084	0.608	0.879	0.254	0.389	0.051
29.362	2.630	1.288	2.098	1.020	0.533	0.805	0.254	0.404	0.051
29.896	2.630	1.248	2.098	0.957	0.459	0.731	-	-	0.051
30.429	2.113	1.113	1.839	0.891	0.558	0.699	-	-	0.051
31.003	1.558	0.968	-	0.820	0.664	-	-	-	0.051

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6.6.4.4 Loading of Special Baggage/Cargo

The table below presents recommendation on in which section of the aircraft hold to load certain baggage and/or cargo. It is not exhaustive.

The recommendation below should be followed whenever possible. The Commander or the load planner/load control may plan another loading depending on the available volume, number of special load, weight etc.

A320

Compartment	Type of baggage
1	Firearms, Wheelchair, Checked baggage,
3	AVIH, Checked baggage, Firearms,
4	SPEQ, Wheelchair, AVIH, Checked baggage,
5	Crew baggage, FKT, EIC, COMAT,

Those items not mentioned may be placed where it is deemed logical to the loading planner/loading staff.

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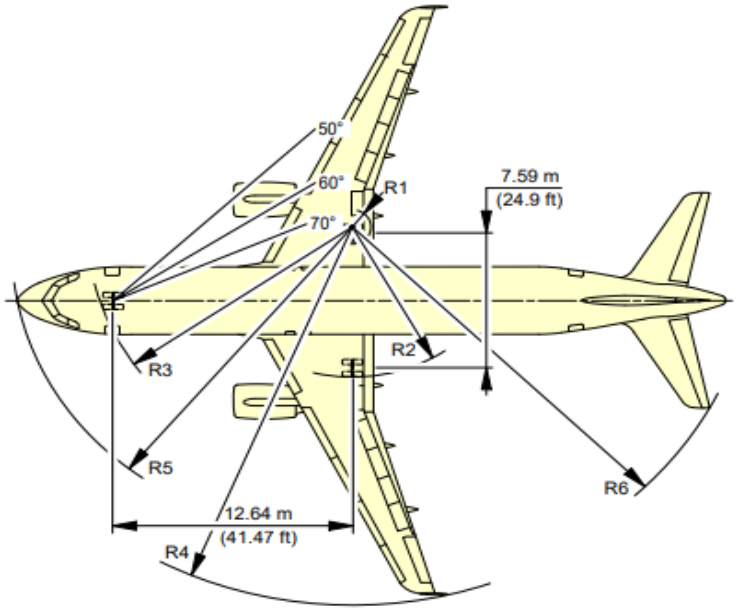
6.6.5 Servicing Points, turn radius and position of equipment

6.6.5.1 Turning Radii

A320 -dual landing gear



NOTE: FOR STEERING DIMENSION TABLE SEE SHEET 2.

TURN TYPE:

1. ASYMMETRIC THRUST DIFFERENTIAL BRAKING (PIVOTTING ON ONE MAIN GEAR).
2. SYMMETRIC THRUST NO BRAKING.

TYPE OF TURN	MAXIMUM RAMP WEIGHT		R1 RMLG		R2 LMLG		R3 NLG		R4 - WING				R5 NOSE		R6 THS	
	STEERING ANGLE (deg)	EFFECTIVE STEERING ANGLE (deg)	m	ft	m	ft	m	ft	WINGTIP FENCE		SHARKLET		m	ft	m	ft
									m	ft	m	ft				
2	20	19.5	32.6	107	40.2	132	38.2	125	52.9	174	53.8	176	39.8	131	46.0	151
2	25	24.4	24.8	81	32.3	106	30.9	101	45.1	148	46.0	151	33.0	108	39.0	128
2	30	29.3	19.4	64	27.0	89	26.2	86	39.8	131	40.7	133	28.7	94	34.4	113
2	35	34.2	15.5	51	23.1	76	22.8	75	35.9	118	36.8	121	25.7	84	31.3	103
2	40	39.0	12.5	41	20.1	66	20.4	67	32.9	108	33.8	111	23.6	77	28.9	95
2	45	43.8	10.1	33	17.6	58	18.5	61	30.5	100	31.4	103	22.1	72	27.1	89
2	50	48.6	8.0	26	15.6	51	17.1	56	28.5	94	29.4	96	20.9	69	25.7	84
2	55	53.3	6.3	21	13.9	46	16.0	52	26.8	88	27.7	91	20.1	66	24.6	81
2	60	57.9	4.8	16	12.4	41	15.1	50	25.4	83	26.2	86	19.4	64	23.7	78
2	65	62.4	3.5	12	11.1	36	14.4	47	24.1	79	24.9	82	18.9	62	22.9	75
2	70	66.8	2.4	8	9.9	33	13.9	46	22.9	75	23.7	78	18.5	61	22.3	73
2	75 (MAX)	70.2	1.5	5	9.0	30	13.6	44	22.0	72	22.9	75	18.3	60	21.8	72
1	50	48.8	8.0	26	15.5	51	17.0	56	28.4	93	29.3	96	20.9	68	25.6	84
1	55	53.6	6.2	20	13.8	45	15.9	52	26.7	88	27.6	90	20.0	66	24.5	80
1	60	58.4	4.7	15	12.3	40	15.0	49	25.2	83	26.0	85	19.3	63	23.6	77
1	65	63.1	3.3	11	10.9	36	14.3	47	23.9	78	24.7	81	18.8	62	22.8	75
1	70	67.8	2.1	7	9.6	32	13.8	45	22.6	74	23.5	77	18.4	61	22.1	73
1	75 (MAX)	71.9	1.1	4	8.6	28	13.4	44	21.6	71	22.5	74	18.2	60	21.6	71

NOTE: ABOVE 50°, AIRLINES MAY USE TYPE 1 OR TYPE 2 TURNS DEPENDING ON THE SITUATION.
TYPE 1 TURNS USE: ASYMMETRIC THRUST DURING THE WHOLE TURN; AND DIFFERENTIAL BRAKING TO INITIATE THE TURN ONLY.
TYPE 2 TURNS USE: SYMMETRIC THRUST DURING THE WHOLE TURN; AND NO DIFFERENTIAL BRAKING AT ALL.
IT IS POSSIBLE TO GET LOWER VALUES THAN THOSE FROM TYPE 1 BY APPLYING DIFFERENTIAL BRAKING DURING THE WHOLE TURN.

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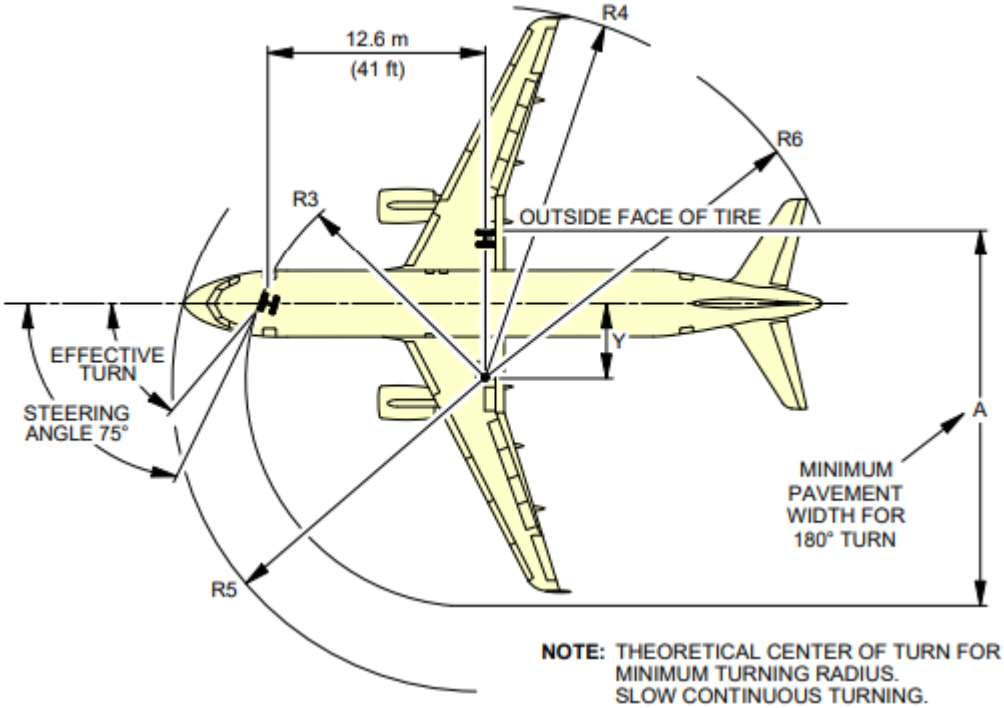
6.6.5.1.1 Minimum Turning Radii



NOTE: THEORETICAL CENTER OF TURN FOR MINIMUM TURNING RADIUS.
SLOW CONTINUOUS TURNING.
APPROXIMATELY IDLE THRUST ON ALL ENGINES.
NO DIFFERENTIAL BRAKING.
NOSE GEAR RADII TRACK MEASURED FROM OUTSIDE FACE OF TIRE.

DUAL LANDING GEAR

TYPE OF TURN	STEERING ANGLE (DEG)	EFFECTIVE STEERING ANGLE		Y	A	R3 NLG	R4 WING		R5 NOSE	R6 THS
							WING TIP FENCE	SHARKLET		
1	75 (MAX)	71.9°	m	4.1	22.3	13.4	21.6	22.5	18.2	21.6
			ft	14	73	44	71	74	60	71
2	75 (MAX)	70.2°	m	4.5	22.8	13.6	22.0	22.9	18.3	21.8
			ft	15	75	44	72	75	60	72

NOTE: IT IS POSSIBLE TO GET LOWER VALUES THAN THOSE FROM TYPE 1 BY APPLYING DIFFERENTIAL BRAKING DURING THE WHOLE TURN.

BOGIE LANDING GEAR

STEERING ANGLE (DEG)	EFFECTIVE STEERING ANGLE		Y	A	R3 NLG	R4 WING	R5 NOSE	R6 THS
						WING TIP FENCE		
75 (MAX)	70.0°	m	4.6	22.8	13.8	22.0	18.3	21.9
		ft	15	75	45	72	60	72

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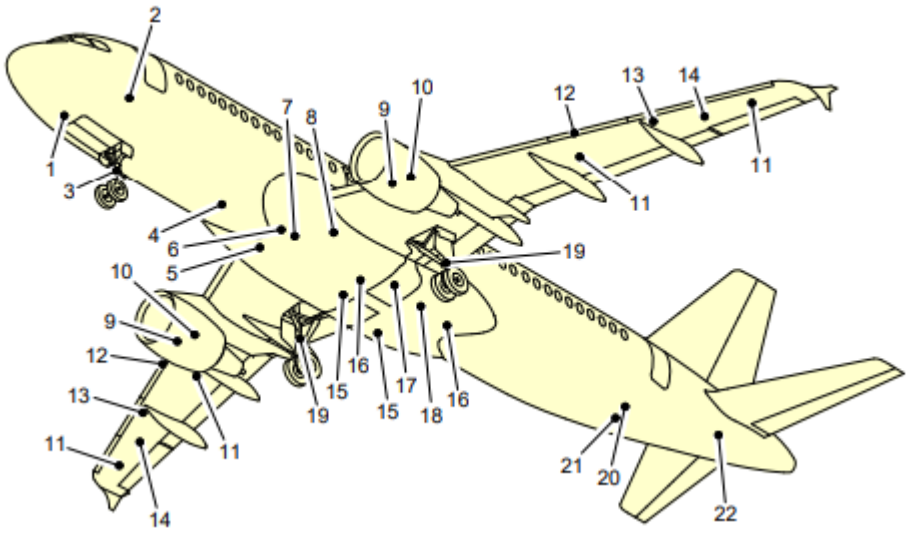
6.6.5.2 Servicing Points



1 - GROUND ELECTRICAL POWER CONNECTOR
2 - OXYGEN SYSTEM
3 - NLG GROUNDING (EARTHING) POINT
4 - POTABLE WATER DRAIN PANEL (OPTIONAL)
5 - POTABLE WATER DRAIN PANEL
6 - LOW PRESSURE AIR PRE-CONDITIONING
7 - HIGH PRESSURE AIR PRE-CONDITIONING
8 - REFUEL/DEFUEL INTEGRATED PANEL
9 - IDG/STARTER OIL SERVICING
10 - ENGINE OIL SERVICING
11 - OVERPRESSURE PROTECTOR
12 - REFUEL/DEFUEL COUPLINGS (OPTIONAL-LH WING)
13 - OVERWING REFUEL (IF INSTALLED)
14 - NACA VENT INTAKE
15 - YELLOW HYDRAULIC-SYSTEM SERVICE PANEL
16 - BLUE HYDRAULIC-SYSTEM SERVICE PANEL
17 - ACCUMULATOR CHARGING (GREEN SYSTEM) AND RESERVOIR DRAIN (GREEN SYSTEM)
18 - GREEN HYDRAULIC-SYSTEM SERVICE PANEL
19 - MLG GROUNDING (EARTHING) POINT
20 - WASTE WATER SERVICE PANEL
21 - POTABLE WATER SERVICE PANEL
22 - APU OIL SERVICING

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6.6.5.2.1 Static Grounding

	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	
On Nose Landing Gear leg:	5.07 m (16.63 ft)	On Centerline		0.94 m (3.08 ft)
On left Main Landing Gear leg:	20.25 m (66.44 ft)	3.79 m (12.43 ft)	-	1.07 m (3.51 ft)
On right Main Landing Gear leg:	20.25 m (66.44 ft)	-	3.79 m (12.43 ft)	1.07 m (3.51 ft)

A320

a) The grounding (earthing) stud on each landing gear leg is designed for use with a clip-on connector (such as Appleton TGR).
b) The grounding (earthing) studs are used to connect the aircraft to an approved ground (earth) connection on the ramp or in the hangar for:
    - Refuel/defuel operations
    - Maintenance operations
    - Bad weather conditions.

***Note**: In all other conditions, the electrostatic discharge through the tire is sufficient. If the aircraft is on jacks for retraction and extension checks or for the removal/ installation of the landing gear, the grounding (earthing) alternative points (if installed) are:*

- *In the hole on the avionics-compartment lateral right door-frame (on FR14),*
- *On the engine nacelles,*
- *Adjacent to the high-pressure connector,*
- *On the wing upper surfaces.*

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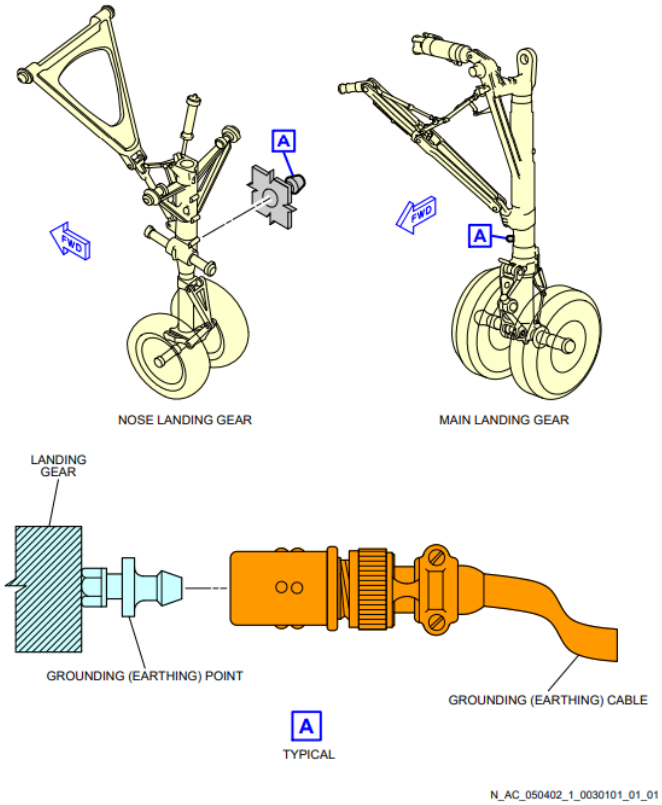
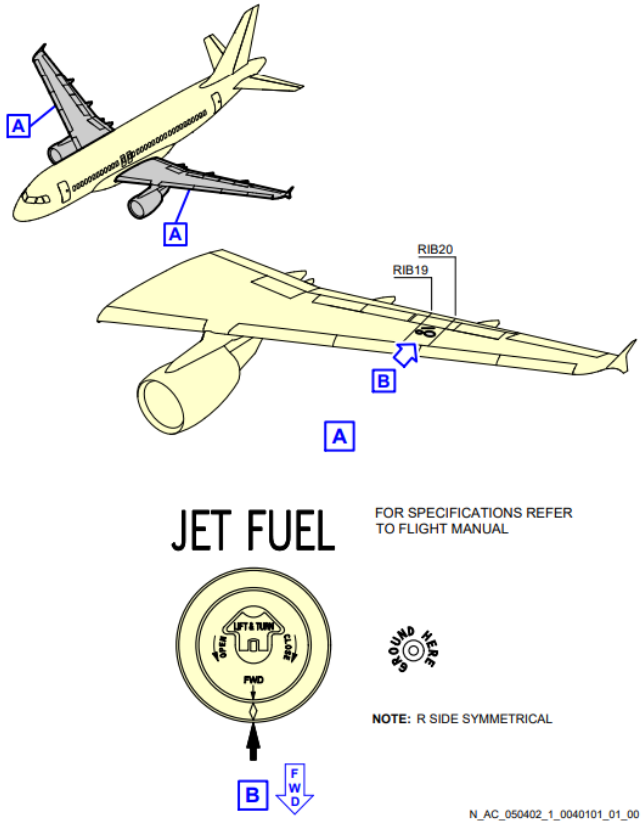


Ground Service Connections
Grounding (Earthing) Points - Landing Gear



Ground Service Connections
Grounding (Earthing) Points - Wing

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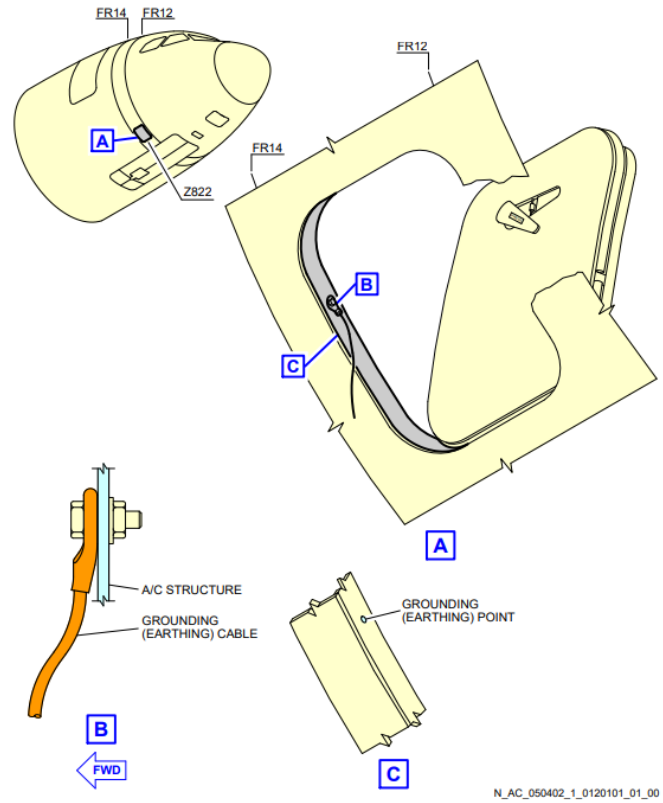
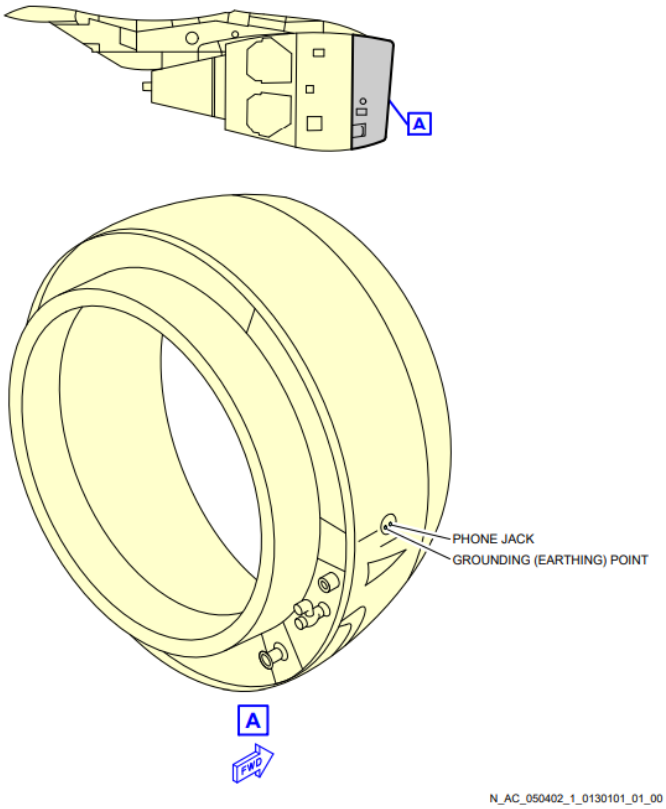


Ground Service Connections
Grounding (Earthing) Point - Avionics Compartment Door-Frame



Ground Service Connections
Grounding (Earthing) Point - Engine Air Intake

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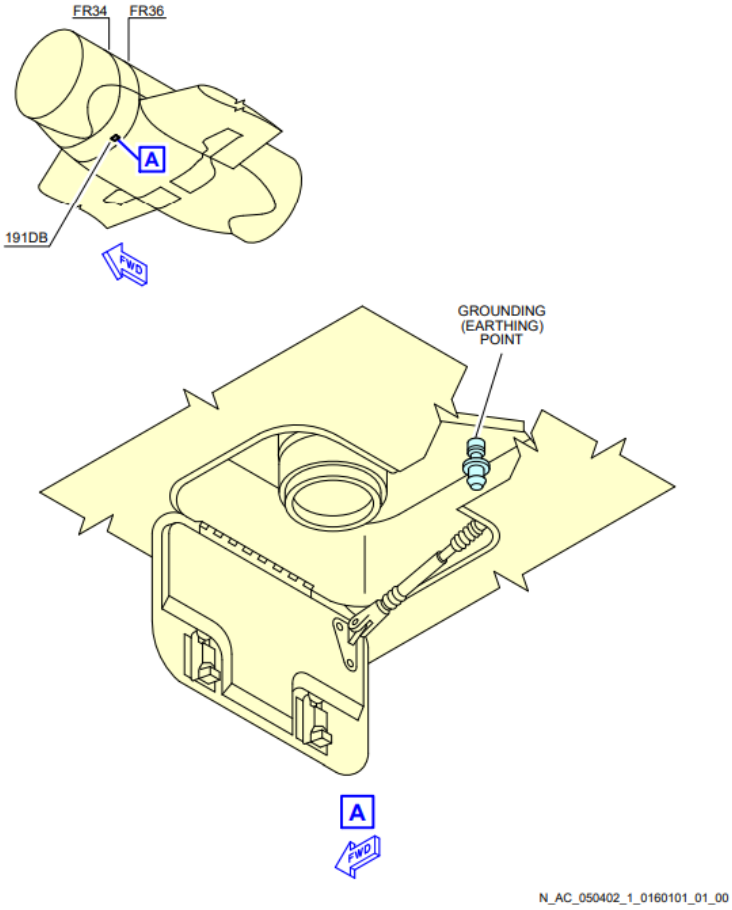
A320 only



Ground Service Connections
Grounding (Earthing) Point - High-Pressure Connector

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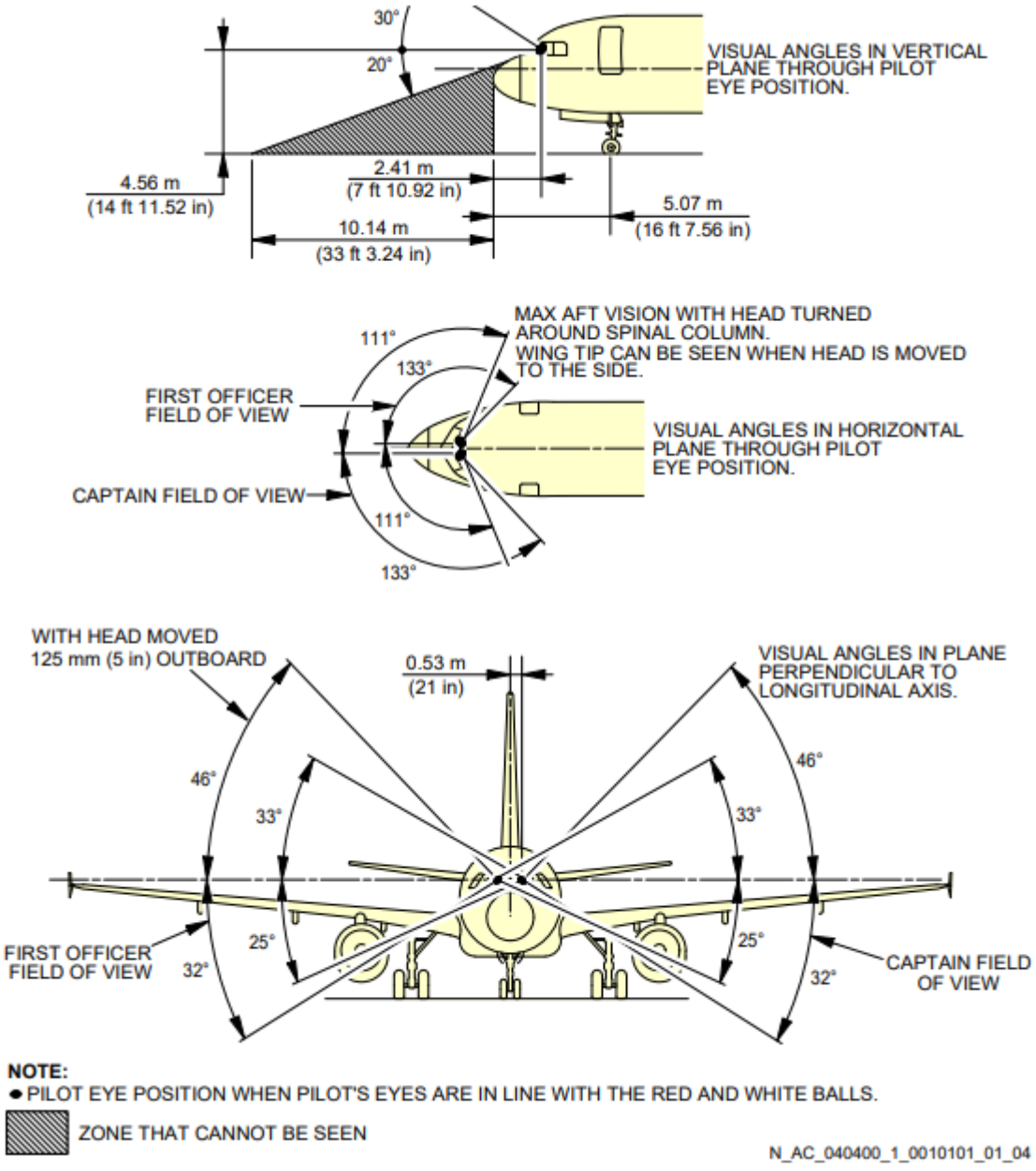
6.6.5.3 Visibility from Cockpit in Static Position



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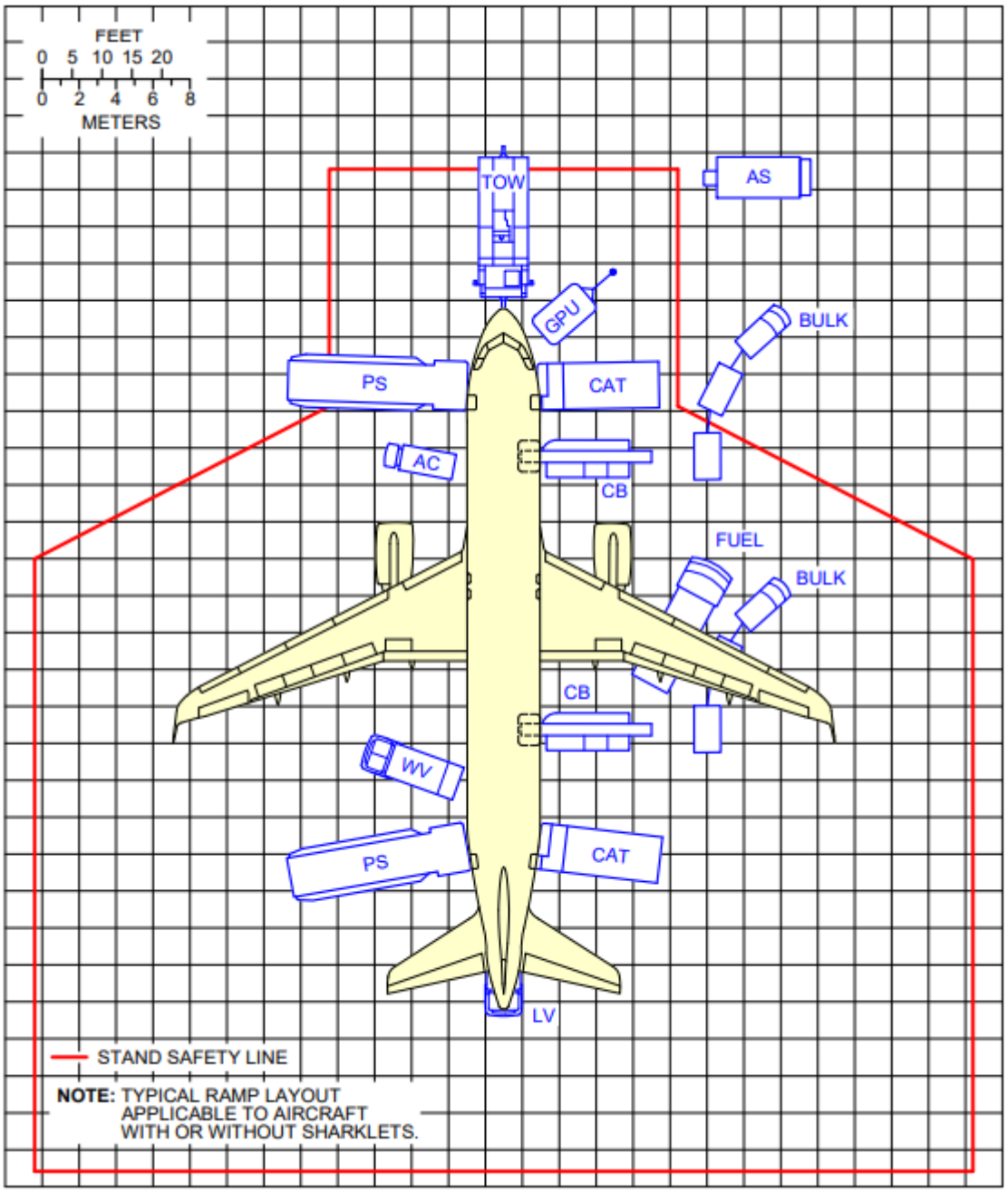
6.6.6 Ramp Handling

OPEN APRON

This section gives the typical servicing arrangement for pax version (Open Apron). The Stand Safety Line delimits the Aircraft Safety Area (minimum distance of 7.5 m from the aircraft). No vehicle must be parked in this area before complete stop of the aircraft (wheel chocks in position on landing gears).



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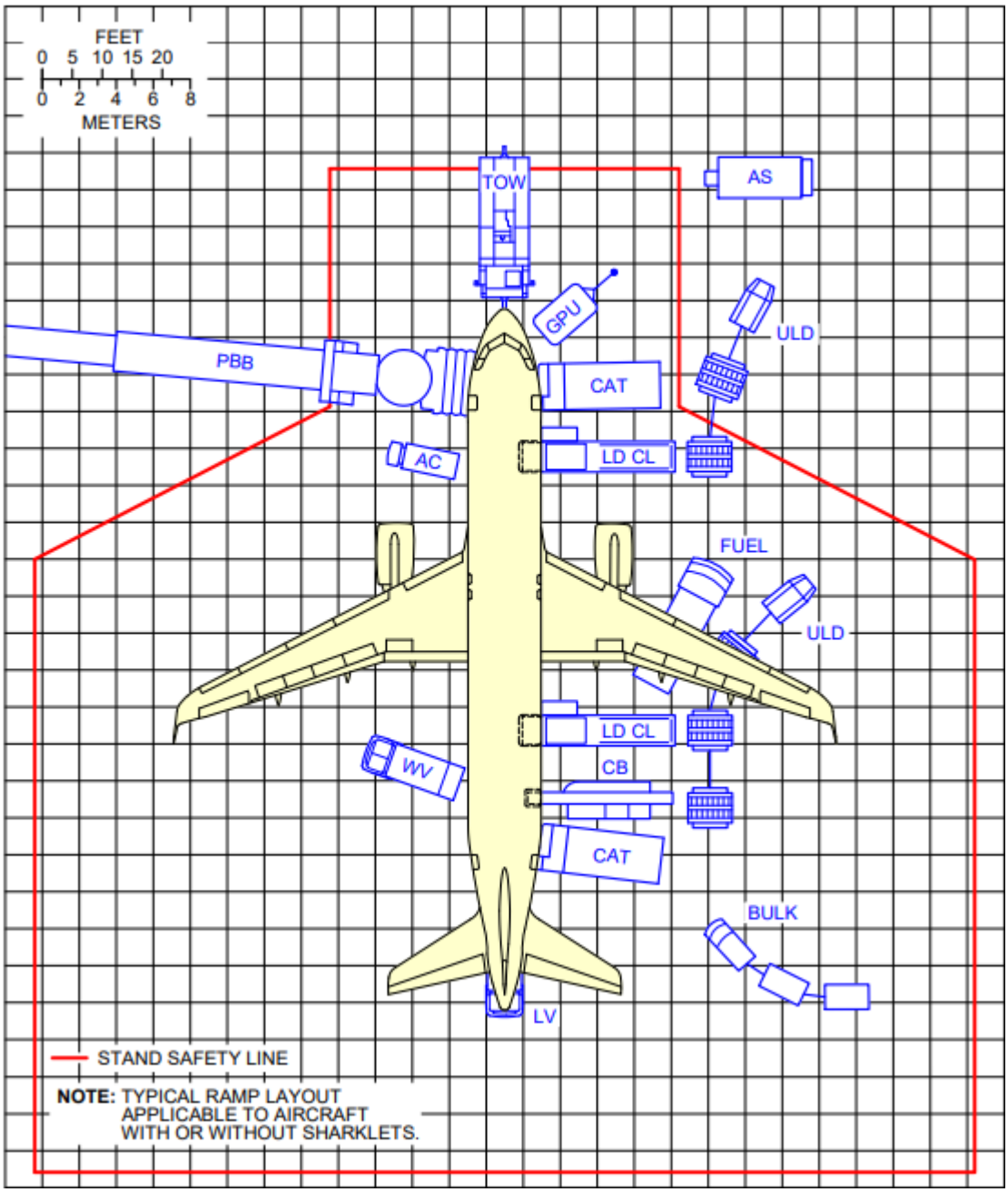
GATE

This section gives the typical servicing arrangement for pax version (Passenger Bridge). The Stand Safety Line delimits the Aircraft Safety Area (minimum distance of 7.5 m from the aircraft). No vehicle must be parked in this area before complete stop of the aircraft (wheel chocks in position on landing gears).



6.6.6.1 Operating of Cabin Door (1L/1R & 4L/4R)

Always ask the CCM to open the door. Unless properly trained, no one else but the active crew on board is allowed to open any door.

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6.6.6.2 Ground Power Unit

The GPU is connected to the aircraft through an external power receptacle.

ACCESS	DISTANCE			
	AFT OF NOSE	FROM AIRCRAFT CENTERLINE		MEAN HEIGHT FROM GROUND
		LH SIDE	RH SIDE	
A/C External Power: Access Door 121AL	2.55 m (8.37 ft)	On centerline		2.00 m (6.56 ft)

***Note** : Distances are approximate.*

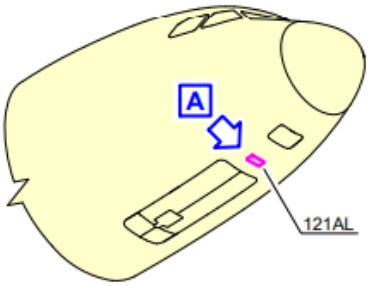
Technical Specifications

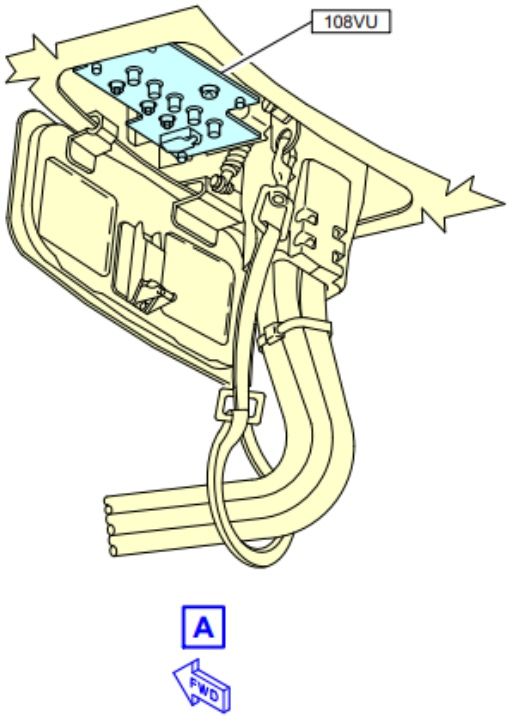
d) External Power Receptacle:
- One receptacle according to MS 90362-3 (without shield MS 17845-1) – 90 kVA.

***Note**: Make sure that for connectors featuring micro switches, the connector is chamfered to properly engage in the receptacle.*

e) Power Supply:
- Three-phase, 115/200V, 400 Hz.

f) Electrical Connectors for Servicing:
- AC outlets: HUBBELL 5258
- DC outlets: HUBBELL 7472.





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6.6.6.3 Water and Toilet Servicing

The water/waste system includes a potable-water system, which is pressurized by bleed-air, and a waste disposal system

6.6.6.3.1 Potable Water Servicing

Filling and draining of water is done through the connectors as indicated below:

c) On the potable-water service panel (Access Door 171AL)
- Fill/Drain Nipple 3/4 in. (ISO 17775)
- One ground air-pressure connector.

d) On the potable-water drain panel (Access Door 133AL and/or 192NB)
- Drain Nipple 3/4 in. (ISO 17775).

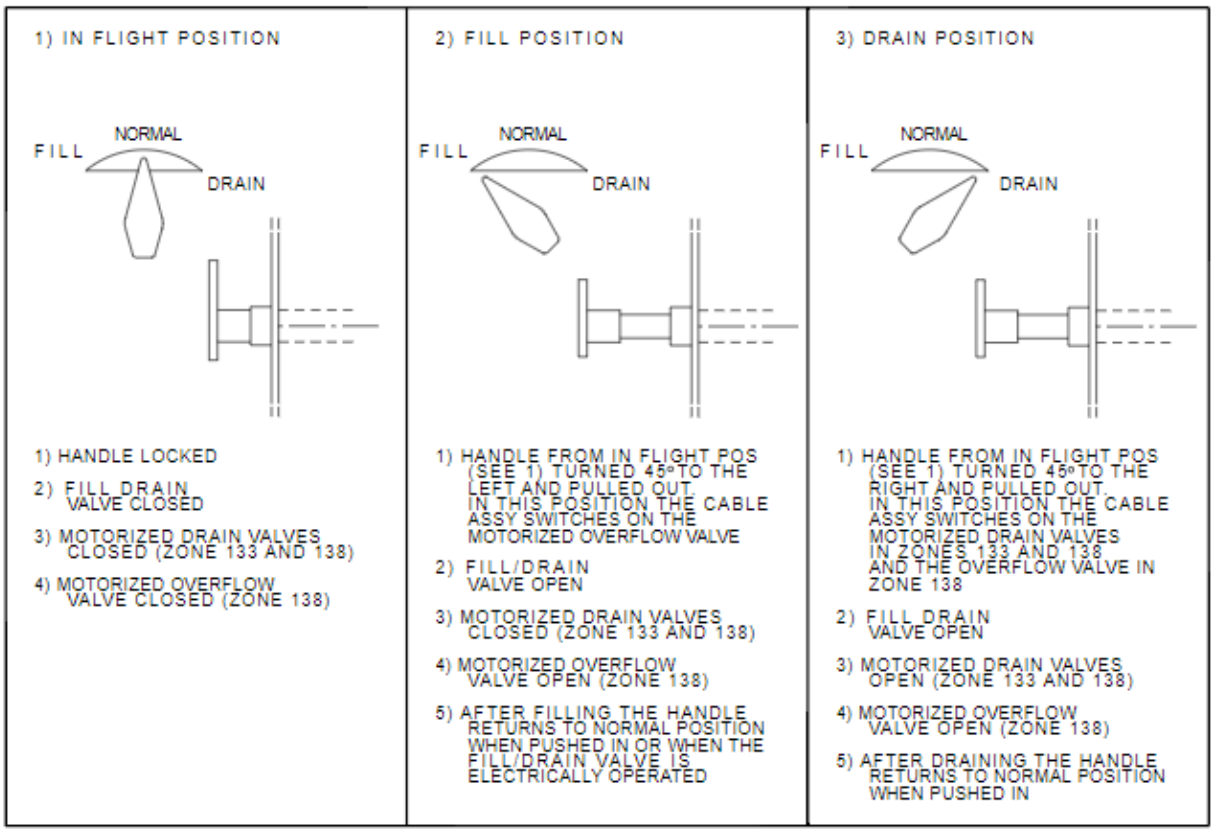
Filling pressure: 3.45 bar (50 psi).

The tank has 200 l capacity.

Typical flow rate: 50 l/min (13 US gal/min).

- To drain: It is done through the water drain installed on the servicing panel as indicate d in the picture below. To drain remove the cup and pull the handle. **Draining shall be done during night stop in freezing or icing conditions.**
- To fill: caps from the water filling connection and from the tank overflow must be removed.

A320 Operation



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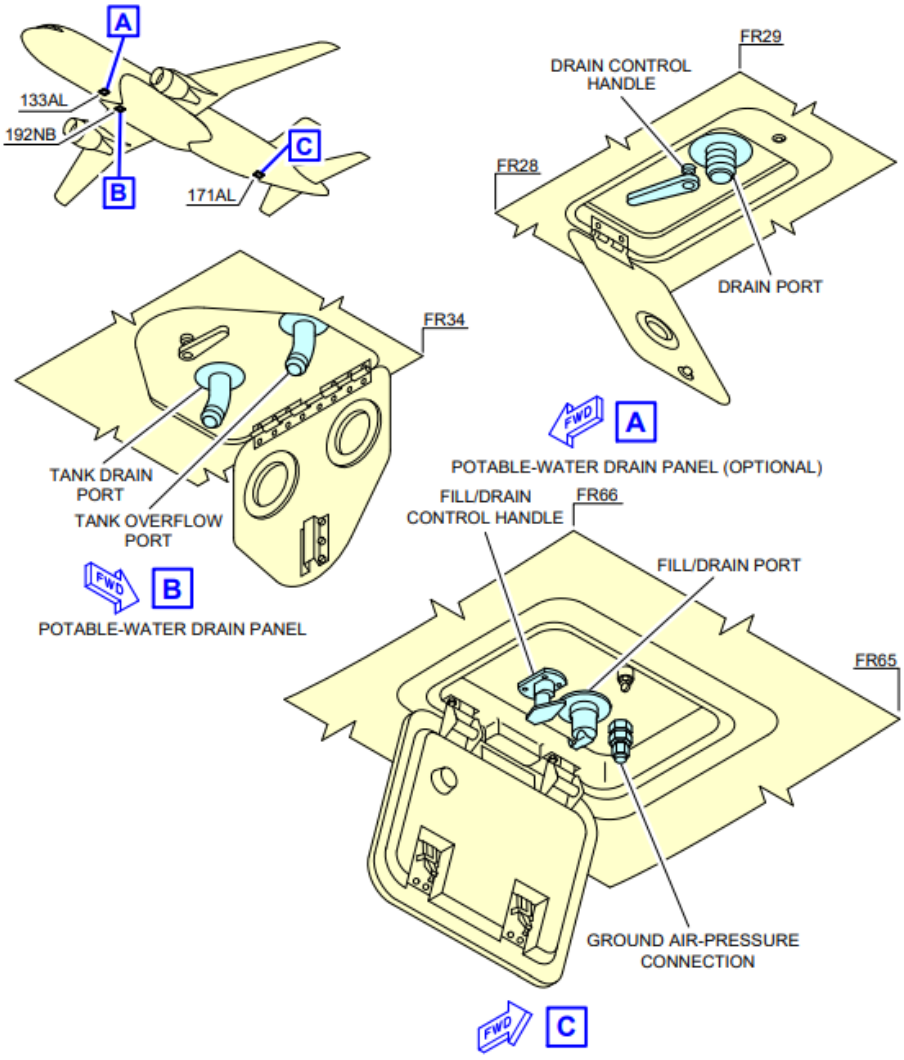
You fill the water tank, when fill/drain valve 16MA is open. The valve opens when you turn the control handle on the potable water service-panel from "NORMAL" to "FILL" and pull the control handle out. With the control handle pulled out to its stop, fill/drain valve 16MA opens. Limit switch 5MP is energized and opens overflow/ventilation valve 8MP and control light 6MP comes on.

The maximum pressure required to fill the tank is 50 psi (3 bar).

When the tank is full, the quantity transmitter closes the fill/drain valve. The control handle is automatically pulled in and returns to the normal position. In this position, limit switch 5MP is de-energized and closes the motorized overflow/ventilation valve 8MP.



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6.6.6.3.2 Toilet Servicing

Toilet waste disposal servicing is done through a panel at the rear right side of the fuselage. A sanitary service unit must be connected to the air service panel.

Connectors:

- Draining: 4 in.
- Flushing and filling: 1 in.

Waste tank - Rinsing: Operating pressure: 3.45 bar (50 psi).

Waste tank - Precharge: 10 l (3 US gal).

It is accomplished in the following way:

- Open waste service panel door;
- Remove protective cap of the waste drain valve;
- Connect the lavatory dumping coupling of the lavatory servicing dolly to the waste drain valve;
- Push the lever of the waste drain-valve actuator to open its internal flapper valve. Do not operate the coupling handle; its operation is not necessary;
- Pull and lock the drain control handle to open the holding tank drain valve;
- Continue the tank drainage until the waste flow stops;
- Flush with water through the rinse nipple;
- Release the control cable;
- Fill the waste holding tank;
- Pull and lock the drain control handle to open the holding-tank drain valve;
- Release the drain control handle after all liquid is drained;
  - Fill the waste holding tank with maximum **170 l** of water and add Monogram MC-1000 germicidal deodorant, or Mirabowl ‘’Q’’ germicidal deodorant as per instructions.
- Disconnect the lavatory dumping and filling couplings;
- Close the cap and latch the handle of the waste drain valve. The flapper valve will close automatically when the cap is closed;
- Install the cap on the toilet rinse nipple.
- Close waste-service-panel door.

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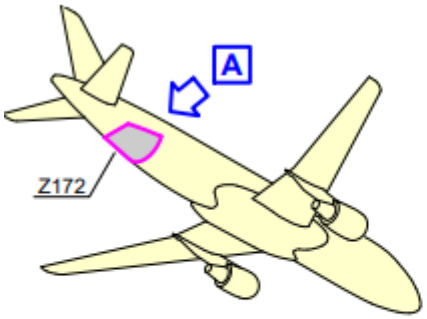
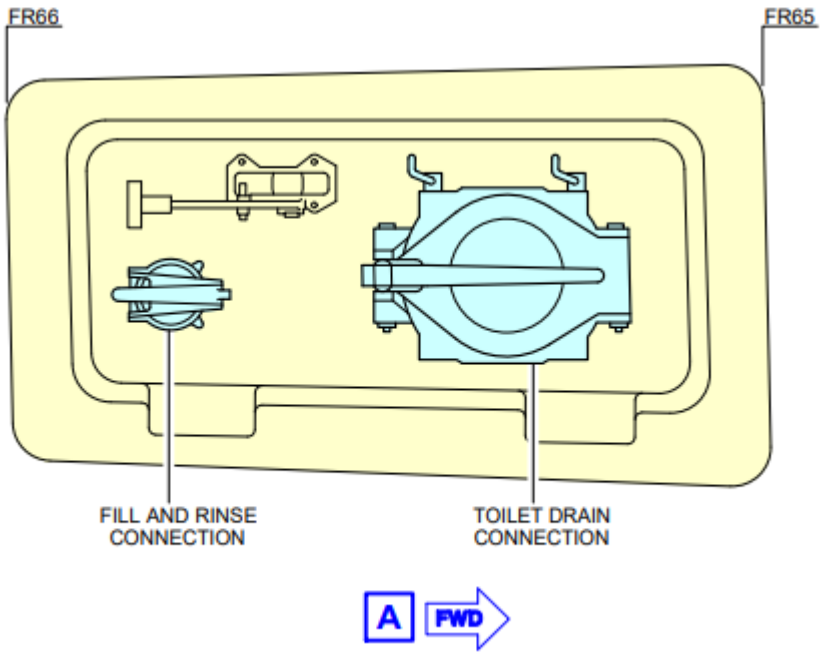
Ground Service Connections Waste Water Ground Service Panel





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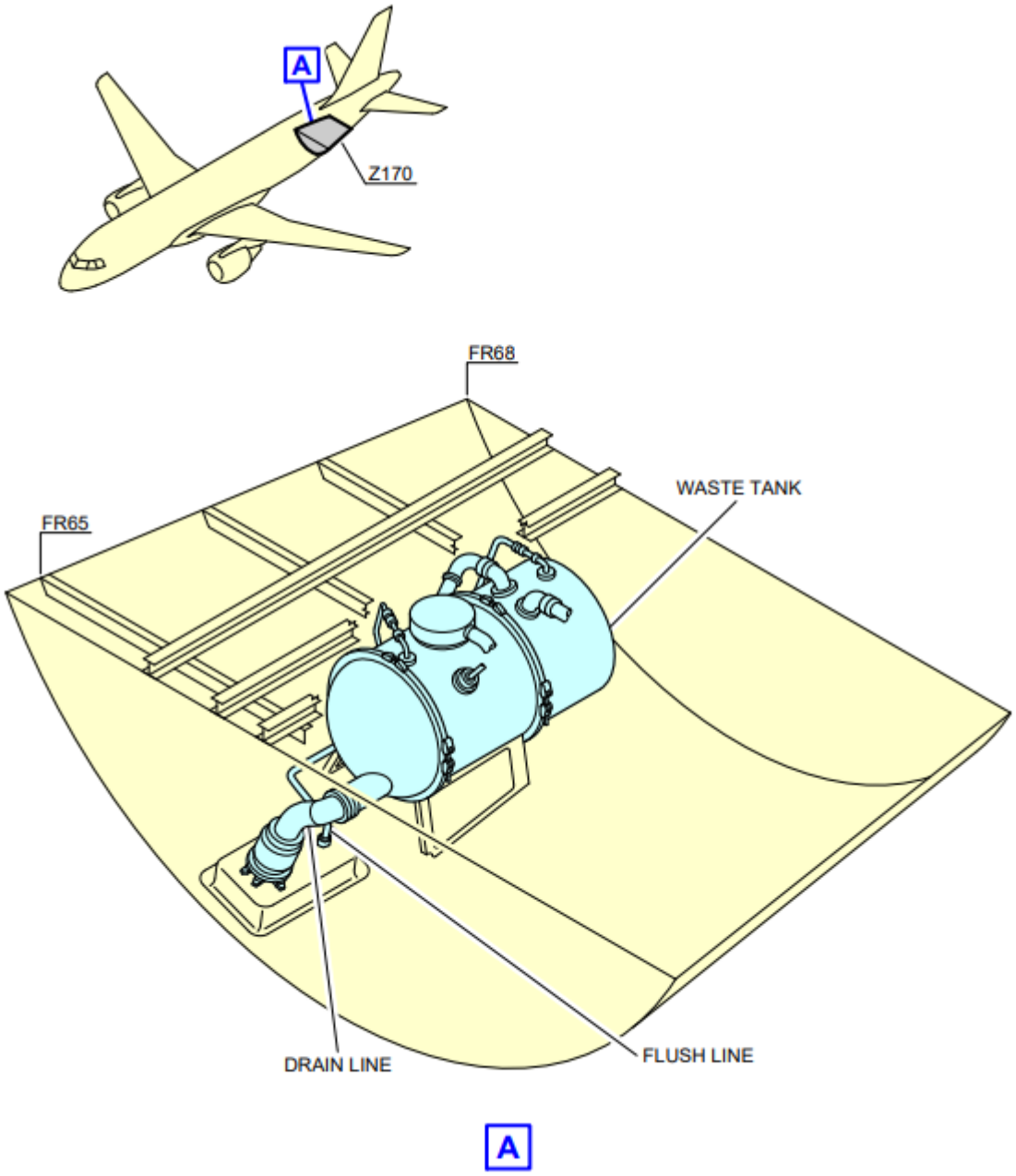
Ground Service Connections Waste Tank Location



6.6.6.4 Loading

6.6.6.4.1 General and Special Cargo

Dangerous Goods

All Dangerous Goods except Class 7 are accepted.

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6.6.6.5 Towing

This aircraft is designed with means for standard or towbarless towing.

See chapter 4.13 for detailed instructions.

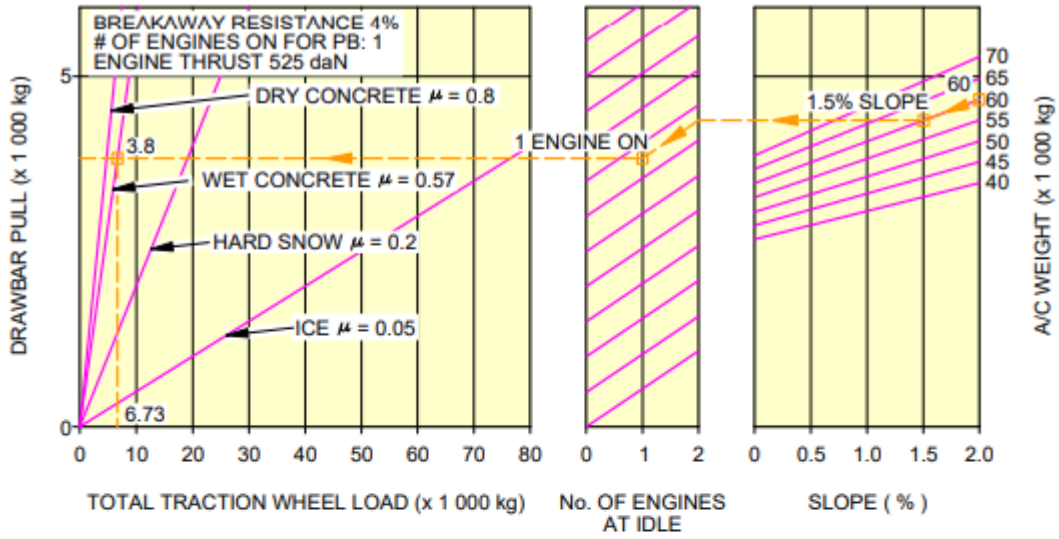
Note: *The NLG steering deactivation pin has the same design for all Airbus programs.*

One towbar fitting is installed at the front of the leg. The main landing gears have attachment points for towing or debogging

This section shows the chart to determine the drawbar pull and tow tractor mass requirements as a function of the following physical characteristics:

- Aircraft weight,
- Number of engines at idle,
- Slope.

The chart is based on the engine type with the highest idle thrust level.



EXAMPLE HOW TO DETERMINE THE MASS REQUIREMENT TO TOW A A319 AT 60 000 kg, AT 1.5% SLOPE, 1 ENGINE AT IDLE AND FOR WET TARMAC CONDITIONS:

- ON THE RIGHT HAND SIDE OF THE GRAPH, CHOOSE THE RELEVANT AIRCRAFT WEIGHT (60 000 kg),
- FROM THIS POINT DRAW A PARALLEL LINE TO THE REQUIRED SLOPE PERCENTAGE (1.5%),
- FROM THE POINT OBTAINED DRAW A STRAIGHT HORIZONTAL LINE UNTIL No. OF ENGINES AT IDLE = 2,
- FROM THIS POINT DRAW A PARALLEL LINE TO THE REQUESTED No. OF ENGINES (1),
- FROM THIS POINT DRAW A STRAIGHT HORIZONTAL LINE TO THE DRAWBAR PULL AXIS,
- THE Y-COORDINATE OBTAINED IS THE NECESSARY DRAWBAR PULL FOR THE TRACTOR (3 800 kg),
- SEARCH THE INTERSECTION WITH THE "WET CONCRETE" LINE.
  THE OBTAINED X-COORDINATE IS THE TOTAL TRACTION WHEEL LOAD (6 730 kg).

NOTE:

USE A TRACTOR WITH A LIMITED DRAWBAR PULL TO PREVENT LOADS ABOVE THE TOW-BAR SHEAR-PIN CAPACITY.

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6.6.6.5.1 Towbar Design Guidelines

The aircraft towbar shall comply with the following standards:

- ISO 8267-1, ”Aircraft - Towbar Attachment Fitting - Interface Requirements - Part 1: Main Line Aircraft",
- SAE AS 1614, ”Main Line Aircraft Towbar Attach Fitting Interface",
- SAE ARP 1915, ”Aircraft Towbar",
- ISO 9667, ”Aircraft Ground Support Equipment - Towbar - Connection to Aircraft and Tractor",
- EN 12312-7, ”Aircraft Ground Support Equipment - Specific Requirements - Part 7: Aircraft Movement Equipment",
- IATA Airport Handling Manual AHM 958, ”Functional Specification for an Aircraft Towbar".

A standard type towbar is required which should be equipped with a damping system (to protect the nose gear against jerks) and with towing shear pins:

- A traction shear pin calibrated at 9 425 daN (21 188 lbf),
- A torsion pin calibrated at 826 m.daN (6 092 lbf.ft).

The towing head is designed according to ISO 8267-1, cat. I.

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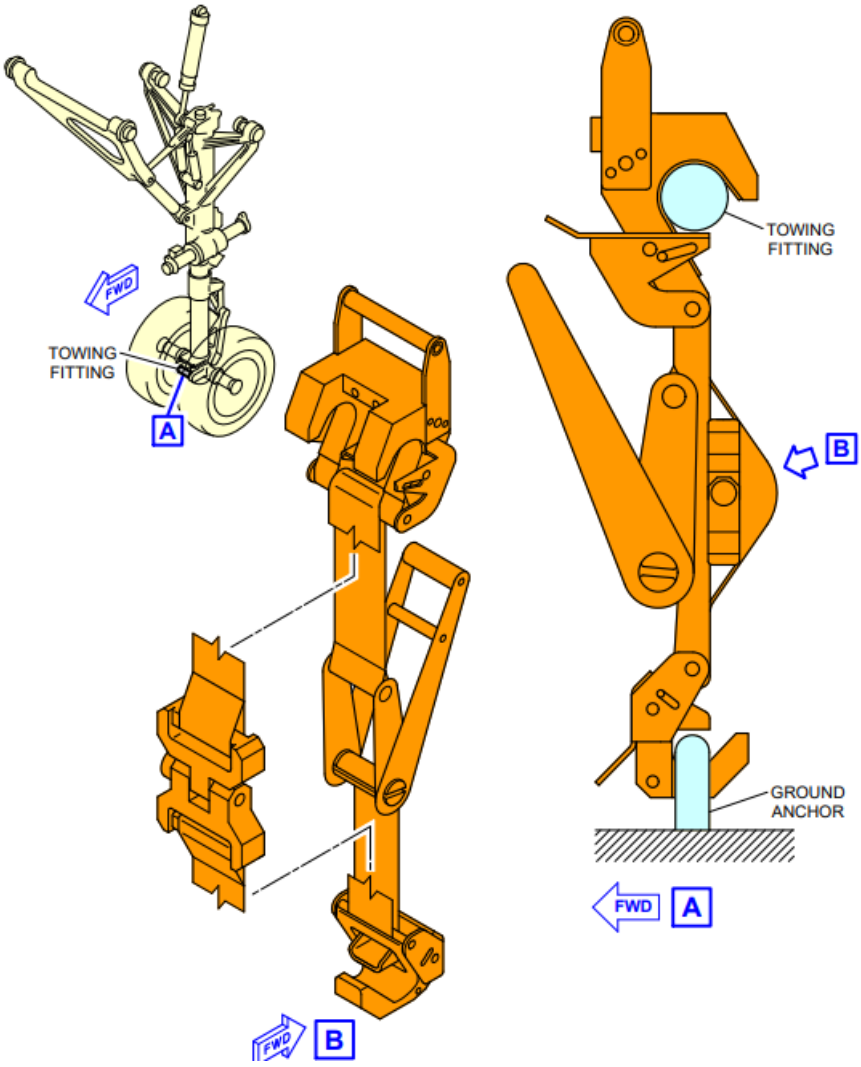
6.6.6.6 Mooring

After parking, in case of bad weather conditions mooring is necessary. Below is a table which shows the surface conditions and wind velocities at which mooring is necessary:

Surface Condition	Wind Velocity
Ice	25 kt
Snow	40 kt
Wet Concrete	55 kt
Dry Concrete	60 kt

To moor the aircraft, apply the following:

- Tow the aircraft to a parking area where there are tiedown anchors available;
- Carry out normal parking procedure;
- Install the tiedown rings (two), one in each primary brace strut of the main landing gear;
- See the corresponding illustration below.



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6.6.6.7 Ground Deicing Strategy

TBD

6.6.7 Galley

A320 has 2 wet galleys on board the aircraft. One at the front and another one at the back.

6.6.7.1 Galley Layout

F-HBNA

G1	G4

6.6.7.2 Galley Equipment Units and Dimensions

TBD.

6.6.8 Cleaning and Disinfection Products

As the approved products to disinfect the passenger cabin are the same as for the EMB145 refer to ch. 6.2.8 for further details and guidelines.

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7 CARGO AND MAIL

Cargo is considered any goods transported or carried on board the aircraft. Cargo excludes the transport of mail and personal effects carried by passenger.

There can be bulk cargo or Unit load devices (ULDs). On Amelia Intl aircraft, only bulk cargo is accepted.

For any questions related to cargo shipments contact the Amelia Intl cargo department (refer to ch. 11 for the contact information).

For details on the acceptance, storing, handling and loading of Dangerous goods refer to ch. 9.

7.1 GENERAL

Parcels sent in cargo are listed by the loading agent or cargo agent (final responsibility by ground handling supervisor), if there is computer terminal at the cargo department, connected to the DCS used by the station. After the list is validated by DCS and ground handling supervisor the final information must be provided to the Commander in order to insert it in the loadsheet. The loading codes must be copied on the Cargo manifest.

The procedures presented in this chapter are the industry standard operating procedures for each aspect of cargo acceptance and handling.

7.1.1 Responsibilities

Responsibility of the sender or his agent

The sender or his agent is responsible:

- For identification of the content of the parcel;
- To ensure it does not fall under IATA DGR;
- For proper packaging of the shipment;
- For accompanying documentation.

Responsibility of Amelia Intl and of the contracted Cargo company:

- Services provide by its subcontractors meet the requirements;
- Staff involved has been trained in every domain relevant to cargo and loading activity;
- Operational manager shall ensure that the level of service provided by the subcontractors meet Amelia Intl requirements;
- Documentations necessary for cargo activity is available (even if the activity is subtracted).

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Responsibility of the contracted Cargo company

The company performing the cargo acceptance and loading, must ensure that the scales used to weight the revenue and non-revenue cargo, are periodically checked and calibrated. The records and documentation proving this calibration must be made available to Amelia Intl, during the periodical audits/monitoring. See ch. 1.6.1 for further information.

The contracted cargo company is also responsible for the following:

- Package receipt;
  - Check that acceptance rules are respected (general acceptance rules described in this chapter of the manual), taking into account hold sizes, maximum admissible weights per parcel as well as floor resistance specific to each aircraft type, as per ch.6.
  - Notices providing information about dangerous goods transportation shall be displayed at the office where cargo shipment is accepted;
  - Check that packaging rules are respected (packaging);
- Cargo handling in warehouse:
  - Parcel shall be weighted using scales which must be calibrated as presented above;
  - Must ensure that cargo terminals are equipped with facilities appropriate for proper storage of dangerous goods and any special cargo (AVIH, HUM, VAL etc.), offering the needed segregation.
  - Parcel shall be secured from the acceptance until it is in their holding;
- Transmission of information relating to cargo:
  - Information to station agent/ handler (if applicable also through DCS system). The loading codes are copied to the LDM message;
  - Issuing a NOTOC to inform the crew of any special cargo.

Note**:** *In case of Company cargo, the sender of the company cargo is responsible for weighting, safety and issuing documents. He should comply with local procedure and advise the loading agent so he can take parcel weights into account. Refer to ch. 7.3.*

Responsibility of the station subcontracted:

- Cargo transport between cargo warehouse and the aircraft as defined in the local cargo agreement;
- Ramp handling (loading/unloading)
  - Cargo is loaded by baggage handlers (the same staff as for loading baggage)
  - The loading agent checks the nature of the goods mentioned in the airway bill in order to
  - check that they do not contain materials whose transport is not allowed on Amelia Intl flight;
  - The loading agent should check the presence and content of the safety certificate. Whatever cargo statuses, ground handling agent must specify on SI of the LDM the airway bill number and the nature of good, and give a copy of the LDM to the crew;
  - On passenger aircraft avoid mixing baggage and freight or mail in the same cargo hold section;
  - Under no circumstances should cargo and/or mail be loaded in the hold section reserved for crew baggage, where exiting;
  - All packages must be kept secured to the fullest extent as applicable.
  - It is prohibited to load a package or baggage likely to damage or pass through the net, without putting another package or baggage between it and the net in order to avoid this risk. The volume initially reserved for baggage is a priority and must be protected all along the line;
  - Should loading capacity be exceeded, apply the “Loading priority” procedure;
  - Freight and mail unloading should not be hampered by the presence of loads intended for downstream stations.

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- Upon receipt of the parcel before each flight departure, the loading agent should check that a copy of the manifests is sent;
- The cargo envelope should contain as minimum the airway bill and the cargo manifest and should accompany the parcels up to their final destination (the documentation is required for customs clearing the parcel upon arrival).
- A copy of the cargo manifest and airway bill should be handed to the flight crew, and another should be kept in the station departure file for the flight.

***Note*:** *Amelia Intl or its representative shall ensure that the shipments which are delivered are accessible only to persons authorised by them, from their receipt to shipment.*

***Note*:** *The same agent must verify that the intended cargo load is taken into account in the loading documents (Loading plan, messaging). The flight crew must ensure that this data is present on the Loadsheet.*

7.1.2 Management of Cargo Activities

7.1.2.1 Management of Cargo Activity within Amelia Intl

Role of the Cargo Manager

Cargo Manager is in charge of cargo activity oversight when it is transported on Amelia Intl fleet.

In cooperation with the Compliance monitoring Department, Cargo Manager should update the cargo capacity purchase agreement (each IATA season) and the generic cargo protocol if necessary. Taking into account the experience feedback, he shall contribute to the contract, specifications and protocol in order to ensure that our requirements are met.

He is responsible for updating the GOM in regards to the cargo procedures and policies, taking into account:

- Changes of regulations: storage rules for baggage and cargo pieces detailed in the AIROPS, and in the AHM.
- Changes in company procedures.
- Monitoring the statistics related to transported cargo volumes

He shall ensure operational support in case of incidents or for the risk assessment as regards flight safety or carried goods integrity. Those types of incidents are managed together with the Amelia Intl SMS (Safety Management System) department and the Dangerous Goods coordinator of the company.

Role of the Station Personnel

Due to the nature of the operation, Amelia Intl does not have its own station personnel. A subcontracted person from the mother company may act as station support for stations where scheduled flights are performed. Where existing his role in this case is:

- To act as liaison between the subcontracted ground handling and Amelia Intl.
- To support the subcontracted ground handling on any issues and doubts.
- To inform the Ground operations manager of any issues and doubts concerning safety and security.

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Cargo Activity Management by Other Departments

Amelia Intl's Compliance Monitoring Department is responsible for:

- performing ramp entity audits
- overseeing cargo warehouse audits

Amelia Intl's Security department has the right to control the safety-related aspects (preventive measures). They are responsible for the implementation of the security measures.

7.1.2.2 Management of the Subcontracted Cargo Activities

The subcontractor for cargo activities is in charge of minimum:

- providing to the staff facilities and means of communications to ensure exchange of operational information;
- monitoring the local cargo/station protocol;
- Distributing the information contained in this chapter to all the cargo warehouse which may load cargo on aircraft of Amelia Intl fleet;
- Supervising warehouse;
- Training of all staff working in the cargo warehouse;
- Making the cargo security procedures for applicable stations available to Amelia Intl.

Cargo Warehouse is responsible for:

- Cargo package handling and acceptance.
- Transmitting cargo information to the station.

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7.1.3 Acceptance

As a general rule, the shipper/ agent shall deliver the shipment ready for carriage. Therefore, when accepting any type of cargo, ensure that:

- It is packed properly, in a manner:
  - For safe transport with ordinary care in handling;
  - To preclude injury or damage to any person, cargo or property;
- it is not damaged;
- it has all needed documentation (customs clearances, address of consignor and consignee etc.);
- It is labelled/ marked properly.

Additional procedures about the acceptance of special type of cargo are presented in the subchapters below.

Shipments labelled with ''Cargo Aircraft Only'' (CAO) shall not be loaded on Amelia Intl passenger aircraft.

Always ask the shipper if the cargo contains DG that are forbidden in cargo either on the aircraft authorized to carry DG or on aircraft not authorized to carry DG. If needed refer to ch. 9.

All cargo, must be weighted.

All shipments, without exceptions, must be security checked at the time of acceptance in order to verify that they do not contain anything that may present a potential risk for the safety of aircraft's occupants. The cargo security requirements must be followed and respected.

Each shipment must comply with Amelia Intl specific requirements.

7.1.3.1 Dangerous Goods in Cargo

Amelia Intl is authorized for the transport of dangerous goods, except radioactive material.

A copy of the current edition of the DGR or the ICAO TI, including agenda as appropriate must be available at each location where revenue or non-revenue cargo operations are conducted and dangerous goods are accepted.

Notices providing information about DG transportation shall be prominently displayed and must contain visual examples of DG, including batteries. Example of this information can be found in ch. 9.3.

If undeclared or mis-declared dangerous goods are discovered in cargo refer to ch. 9.4.5.

For DG incidents or accidents refer to ch. 9.4.

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7.1.4 Handling and Storing

Proper storing and handling, that will prevent any exposure on extreme weather (hot, cold, rain, snow etc) which could lead to damage, shall be applied.

Some types of cargo must be segregated between each other. Other types of cargo require special storage facility to be stored in. For this to be easily identified two tables have been created in the subchapters below. The subcontracted ground handling agents must also ensure that local government regulations applicable to the storage and handling of certain types of cargo are complied with. In case of any greater requirement that will influence the loading of the aircraft must be communicated to Amelia Intl.

The cargo must be stowed in secured area where unauthorized access is prohibited. Security in all aspects including aviation security measures as mandated by local enforcement agencies - not only for security of valuable cargo, but reducing to a minimum the possibilities of damage, pilferage and mishandling of all cargo.

A copy of the current edition of the DGR or the ICAO TI must be available at each location where revenue or non-revenue cargo operations are conducted and dangerous goods are handled.

7.1.4.1 Cargo and Mail Handover

The procedures address the handover process between cargo handling (cargo warehouse) and ground handling (ramp) departments. But these procedures are depending on:

- the airport infrastructure and/or local agreements, the handover of cargo/mail to the ramp should be done at a dedicated handover point.
- local agreements, transportation from the cargo warehouse to the ramp may be performed by either cargo personnel or ground handling personnel

At the handover point:

- Receive all documentation and instructions for the specific flight.
- Make sure that any GSE used for transportation is serviceable for loose cargo/mail.
- Comply with any limitations regarding the maximum number of dollies in a “train of dollies” as per local requirements.
- Expect all cargo/mail to ensure that:
  - The cargo/mail intended for transport is the correct cargo/mail for the departing flight(s).
  - The cargo/mail has no signs of being tampered with.
  - No damage has occurred during the transport process.
  - No nets, ropes, straps, protective materials, etc. are able to drag on the ground or get jammed in rollers, ball-mats or wheels.
  - All built-up cargo/mail is safe to move and will not shift, roll or topple.
- Hand over all documentation, pouches and special instructions for the applicable flight, as per operating airline procedures.
- Ensure the cargo/mail is protected from adverse weather conditions, if applicable.

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7.1.4.2 Segregation

Some types of cargo must be segregated. They must be segregated during acceptance, handling and loading.

The table below shows the segregation requirements of the types of cargo:

Type of cargo	AVI	HUM	EAT	LHO	PER	HEG
AVI	(2)	(3)	(1)	-	(1)	(6)
HUM	(3)	-	(1)	(1)	(4)	(1)
EAT (a)	(1)	(1)	-	-	(5)	(1)
LHO	-	(1)	-	-		(1)
PER	(1)	(4)	(5)	-	-	-
HEG	(6)	(1)	(1)	(1)	-	-

(a) Foodstuffs (EAT) include fresh Meat (PEM), Vegetables/Fruits (PEP) and Seafood (PES).

***Note:** A "number" at the intersection of a row and a column indicates that this cargo must be segregated followed the number notes described below. A "—" at the intersection of a row and a column indicates that the cargo do not require segregation.*

(1) These special loads should be loaded in different aircraft holds, if possible. If not possible, they may be loaded in the same aircraft hold but in different compartment sections and must be separated and secured at a minimum distance 2 m (or more).
(2) Live Animals (AVI) and Laboratory Animals (SPF) must not be loaded in close proximity (separate min. 0.5 m). Animal natural enemies not next to each other (no eye contact).
(3) Live animals (AVI) and Human Remains (HUM) may be loaded in same compartment as there is no scientific reason for segregation, however, if possible, avoid loading in close proximity due to cultural reasons.
(4) Must not be loaded in the same hold. If not possible, ensure a segregation in a way that there are at least 3 compartment hold sections between them.
(5) Must not be loaded in the same hold as EAT if not hermetically sealed. If not possible, ensure a segregation in a way that there are at least 3 compartment hold sections between them.
(6) HEG must not be loaded in the same hold as day-old chickens and other poultry.

7.1.4.3 Storage Facility

Suitable storage facilities shall be provided for special types of cargo as provided in the table below. For further details refer to the subchapters relevant to the special types of cargo.

Type of cargo	Storage facility requirements
AVI	Rooms or areas used for accommodation of animals
LHO	In a cool place at 4°C (if not delivered immediately upon arrival at a/c site)
PER	In adequate facilities as required for particular perishable shipment type
WET	In adequate facilities as required for particular shipment type
VAL	Airport warehouse safe room

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7.1.4.4 Inspection

All cargo must be inspected for signs of damage, leakage or contamination upon loading and unloading from the aircraft and during handling. If evidence of damage, contamination or leakage is found, the position where the cargo was stowed on the aircraft must be inspected for damage or contamination. This cargo must not be loaded or transported on the aircraft unless the cargo has been repacked and does not show any signs of damage, leakage or contamination.

Any contamination or damage discovered must be properly removed, cleaned and/ or repaird before any other flight is perfomred.

7.1.5 Loading

Prior to the loading and during the loading several procedures must be respected:

i. All shipments loaded with bulkload must be weighted prior to dispatch to the aircraft by use of a weighbridge of acceptable accuracy
ii. All shipments must be manifested
iii. The cargo loaded on the aircraft must not exceed the aircraft loading limitations in regards to weight and dimensions.
   - As the cargo loading compartments differ in size, contour, size of access doors, compartments equipment, floor bearing strength, restraint possibilities and positions it is essential to refer to ch. 6 to see the limits and characteristics of the cargo holds for the relevant aircraft type.
   - Refer to ch. 7.6. for details on package dimensions acceptable in the cargo hold (except for cargo aircraft)
iv. Proper segregation must be applied. Refer to the table in ch. 7.1.4.2 for details.
v. For all cargo loaded on the aircraft the Commander must be informed of the location, number and weight, in order to insert it in the Loadsheet.

For details on load control and loading/ unloading refer to ch.4 and ch.5.

Cargo load could be excluded from transport:

- if it is not properly packed and/or may cause damage to the aircraft and/or other load,
- if the weight of the load is not properly determined,
- if it may contaminate the compartment and/or other load (wet freight, dirty pallets, dirty tarpaulin, etc.),
- if it is not packed according to the applicable packing requirements (e.g. for dangerous articles, human remains, live animals, etc.),
- if special handling instructions cannot be observed,
- if necessary, loading accessories and gear are not supplied or are not held available,
- if cargo documentation is not complete or incorrect.

Important: For loading and securing of dangerous goods refer to ch. 9.2.6.

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7.1.5.1 Loading Priorities

7.1.5.1.1 Passenger aircraft

The cargo loading priorities should be in this order:

- LHO Live Human Organs
- SHL Life Saving Products and Equipment
- AOG (Aircraft on Ground) Spare parts for aircraft on Ground
- HUM Human remains
- AVI Live Animals
- DIP Diplomatic bag
- VAL Valuables
- Perishable cargo only as provided in ch. 7.2.5
- NWP unloaded newspapers
- NWP flight/date newspapers

Collating these priorities within the general outline of loading and boarding rules

When the number of passengers or the load to be boarded are greater than the useful loading capacity in terms of number of seats, weight and volume, contents of loads expected to be boarded downstream, the order of priorities of the loading elements given in the table below must be applied:

Priority	Load Category
1	LHO Live Human Organs SHL Life Saving Products and Equipment AOG Spare parts for aircraft on Ground Service mail EIC Equipment in compartment
2	Crew travelling for training or mission and mechanics in emergency repair
3	Passengers in transit and their baggage (where existing)
4	Passengers booked on the flight and their baggage (where existing)
5	Delayed baggage, routed using a ‘’Rush’’ tag (where existing)
6	Passengers who can be, but are not booked on the flight and their baggage
7	Tranship mails
8	Chargeable tranship cargo
9	Mail
10	Chargeable cargo being locally boarded: HUM, VAL, AVI NWP, XPS VIP cargo Perishable cargo only as provided in ch. 7.2.5 DIP Other chargeable cargo
11	Tranship service cargo classified as FSB

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12	Crew or mechanics during a non-urgent positioning or mission
13	Local service cargo classified FSB
14	Other company staff

Note 1: *The loading elements called "passengers and their baggage" refer to the passenger and his/her baggage as a whole, and must therefore be routed on the same flight.*

Note 2: *The cargo departments can freely change the order of priority between points 7 to 14. This decision is sent to the traffic service in the "priority" field of the document used to forward cargo information.*

Cargo which is not Loaded

When some of the cargo cannot be loaded (weight / volume and balance limit), the operations or the flight crew will inform the cargo service as soon as possible.

7.1.5.1.2 Cargo Aircraft

Load priorities in case of overload of the flight (more load than available weight or volume of compartments) will be determined as per customer's request. For details contact Amelia Intl's cargo department.

Cargo which is not Loaded

When some of the cargo cannot be loaded (weight / volume and balance limit), the operations or the flight crew will inform the cargo service as soon as possible.

7.1.5.2 Securing of Load

All individual items of load which by their nature, shape or density may constitute a hazard, shall be restrained. Restraint can be achieved by filling the compartment, net section volumetrically, or by tie-down.

Compartments and net sections which are filled up to three-quarters of their heights are considered to be volumetrically full.

Pieces weighing 150 kg or more, when bulk-loaded in compartments or net sections, should always be tied down, except that tie-down is not necessary on single sector flights when the compartment/net section is volumetrically full. On some aircraft lesser limitations may be applied. Refer to ch.6 for details on the relevant aircraft type.

For details on securing of load refer to ch. 4.10.8 and to ch.6 for the aircraft specifics of securing the cargo hold itself.

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7.1.6 Cargo Security Requirements

All cargo, as well as transfer cargo, before being accepted for transport on an aircraft, shall be subject to screening and security control, in accordance with the requirements of the relevant authority. These must be performed and confirmed by a regulated agent or another entity that is approved by the applicable regulatory authority.

For cargo destined to EU country, the application of screening or other security controls by a regulated agent that holds RA3 validation issued by an EU independent validator is evidence the agent has approval by the relevant authority.

The cargo contracted facility must ensure that security measures in accordance with applicable regulatory and airport authorities' security program, are implemented throughout the cargo facilities. This addresses to security measures for landside and airside access of vehicles and personnel, as well as the protection of cargo so as to prevent acts of unlawful interference. This also includes protecting any unauthorised interference with the cargo, from the point of acceptance after screening or security controls, until the departure of the aircraft.

They also must ensure that security procedures are applied to all personnel and vehicles that have access to security restricted area where the cargo is, whether it has already been screened or had security controls applied to and/or is under protection to prevent unlawful interference.

The cargo contracted facility, as a minimum, must implement the following steps, in order to maintain or protect the "known" status of the shipment from the time the shipment is accepted until it is finally loaded into an aircraft. The cargo must be:

- Delivered by a regulated agent, a nominated representative of an entity approved by the relevant authority, or a known representative of the operator;
- Free from any signs of tampering;
- Accompanied by all required information (paper or electronic) corresponding to the cargo being delivered, including documentation that details the security status (e.g. consignment security declaration). This documentation should be examined;
- Protected from unauthorized interference throughout the chain of custody since the point that cargo gained its secured status;
- Subjected to additional security controls as required by risk assessment.

Prior to be loaded the load control would typically examine the documentation (e.g. consignment security declaration) and check the shipment for evidence of tampering prior to loading onto the aircraft.

If for some reason a shipment is not properly maintained or protected in its known status, the shipment then reverts to unknown cargo. In such case, the cargo contracted company, in order to return the shipment to known cargo status, would have to ensure the shipment is again subjected to the application of screening or other security controls as accepted by the applicable state.

In regards to transfer cargo, in case appropriate security controls may have been applied at the point of original uplift, it is possible that the shipment may not be securely checked again, but only if It is protected from unauthorised interference and only if that is accepted by the applicable state. The transfer cargo coming from third countries must be subject to appropriate security controls in any case.

Note: *If at a certain location, cargo security measures are under the entity or which Amelia Intl has no oversight capabilities (e.g. airport authority, law enforcement agency), Amelia Intl must be made aware of it and of the details of the access control measures. Amelia Intl would not have to be directly involved in the implementation of such procedures.*

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Details of Cargo Security are written in Amelia Intl Security Programme.

High risk cargo

Cargo presented by an unknown entity, cargo for which specific intelligence indicates that it poses a threat to civil aviation, cargo that shows anomalies that rise suspicion or the nature of the cargo is such that baseline security measures alone are unlikely to detect prohibited items that could endanger the aircraft, will not be accepted on Amelia Intl aircraft, until the status of that cargo has changed due to applied security measures as per applicable regulatory authority and is no longer considered as high-risk.

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7.1.7 Documentation Used and Forms

Cargo acceptance is the responsibility of the subcontractors at relevant airports. To accept cargo on Amelia Intl fleet, the cargo warehouse should use the following documents:

- IATA regulations: DGR (Dangerous Goods Regulation) and LAR (Live Animal regulations)
- This manual.

The cargo handling company shall send the following documentation prior to the flight to Amelia Intl's cargo department on the email aeh.cargo.ops@flyamelia.com :

- Cargo manifest;
- Air waybill;
- NOTOC.

For any last-minute changes on the documentation, the Commander will scan and send the changed documents to Amelia Intl's cargo department.

For documentation to be sent in case DG is carried refer to ch. 9.

7.1.7.1 NOTOC

For NOTOC details refer to ch. 9.3.3.

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7.1.7.2 Cargo Manifest

AMELIA International

CARGO MANIFEST

Operator:					
Registration:		Flight Number		Date:	
Point of loading (Place)		Point of unloading (Place)			

AIR WAYBILL NUMBER	NUMBER OF PACKAGES	NATURE OF GOODS	WEIGHT (in KG)	CUSTOMS

A4M_Form_GroundOps_001 (Rev02: 10.12.2021)

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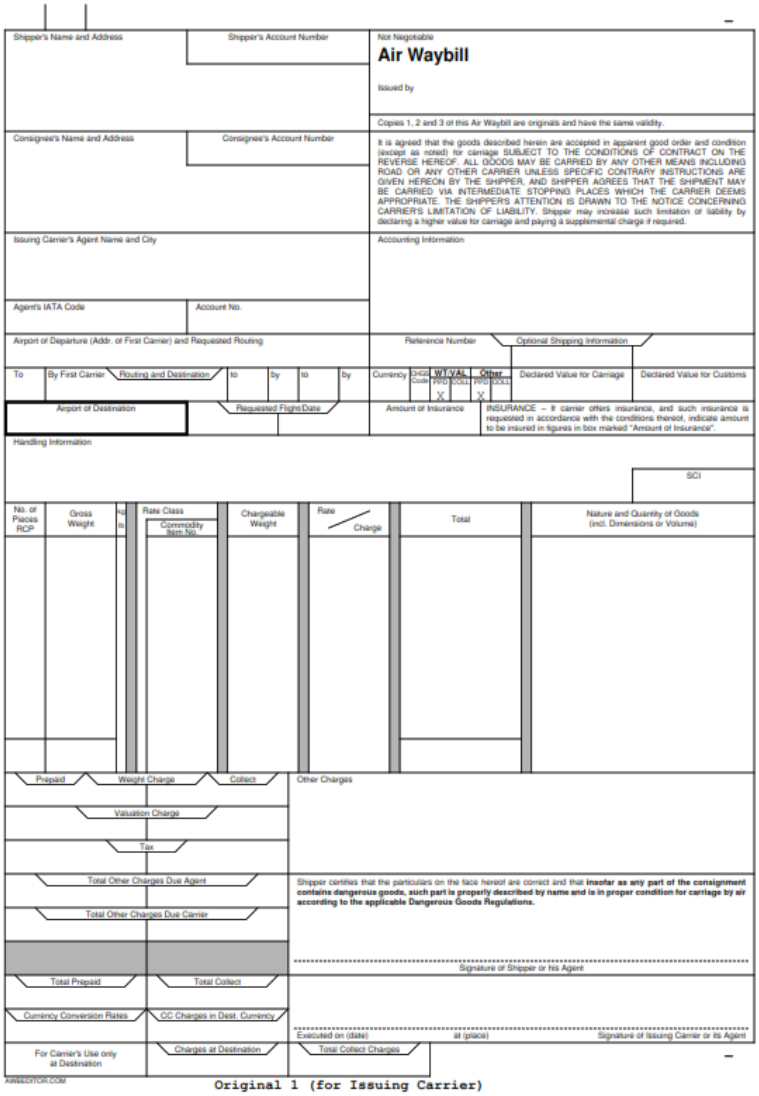
7.1.7.3 Air Waybill

Air Waybill document that accompanies goods shipped by an international air courier to provide detailed information about the shipment and allow it to be tracked.

Amelia Intl's 2letter code is: NL. Amelia Intl's 3 letter numeric code is: 152



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7.2 REVENUE CARGO

Any cargo that does not meet the characteristics of non-revenue and mail is classified in the category ''Revenue Cargo''.

Revenue cargo can be general cargo and or special cargo (AVI, HUM, PER, FRA, BIG, VAL, etc.).

Maximum weight per piece to be accepted for carriage as cargo depends on the floor strength, developed procedures and the availability of handling equipment at the loading and unloading airport. Normally on passenger aircraft the maximum weight per piece accepted, excluding HUM, is 70 kg. If needed, an exception may be granted following an approval from the ground operations manager is obtained. For maximum weight per piece for cargo aircraft refer to ch, 7.2.8.

Any package that is damaged must be rejected.

The general acceptance, storing, loading and security requirements as described in the chapter 7.1 above must be respected.

Special cargo is subject to acceptance in accordance with:

- documents and certificates required for the transport of goods
- respect of the packaging rules defined in the IATA standard manual (such as DGR, LAR...) and in this manual.
- Restrictions related to the aircraft are respected, restrictions linked the company authorizations are respected (those restrictions are detailed in the present chapter)

Special shipments are identified using the IATA code as mentioned in this chapter. Codification used on Amelia Intl flights must comply with IATA standards type AHM510. These codes are used to identify the nature of goods.

These codes must be listed in the following loading documents, as applicable:

- Load Instruction report
- Loading messages: LDM
- NOTOC (Notification to Captain) for some of the special goods

7.2.1 General Cargo

Amelia Intl aircraft support only the loading of bulk cargo. ULD is not accepted.

The loading of general cargo shall be done in accordance with the policy, processes and procedures as in ch. 7.1, ch. 4 and ch.5.

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7.2.2 Animals in Hold (AVI)

The following general principles apply when loading live animals, carried as cargo or passengers' checked baggage.

On passenger aircraft are accepted only:

a) Domestic animals such as dogs, cats, birds, ferrets etc.
b) Other small warm-blooded animals, such as guinea pigs, hamsters, rabbits, etc.

Local customs requirements must be applied. Animal's health and vaccination certificate, identification card shall be checked according to the destination/transferring states' the laws.

Shipper's certification or equivalent document, as well as other required documents should accompany the AVI. The other required documents may be, but are not limited to, animal's health and vaccination certificates, export or import permits etc.

Note: *Domestic animals of unusual size or wild animals, reptiles and rodents must be transported as cargo.*

Animals are to be transported in accordance with the IATA Live Animals Regulations (LAR) except where governmental restrictions or limitations are applicable.

Amelia Intl cargo department is responsible for the acceptance and for the handling of live animals, considering inflight conditions (temperature range and oxygen needs) and possible climatic effects on ground during transit stops, as these affect the welfare and comfort of the animals.

Laboratory animals, carrying infectious diseases communicable to humans, shall only be carried by special prior arrangement with Amelia Intl and authorities concerned.

Note*: Certain live animals' shipments shall be treated as wet shipments, and must be manifested in all documents as AVI.*

Forbidden: Transportation of live animals sick or injured must not be accepted.

Limitations for the AVIH acceptance in the cargo hold are defined by temperature, carbon dioxide concentration and humidity. These items are compensated with the cargo compartment ventilation system For number of AVI accepted on passenger aircraft refer to ch. 3.3.5.

The temperature variations of each cargo aircraft are presented in ch. 6 under the hold characteristics for relevant aircraft type.

AVI transportation is limited by the on-ground temperature, as follow:

- Minimum Temperature on ground: -7C
- Maximum Temperature on ground: +35C (up to half load) or +30C (from half to full load).

Note: *In the hot season, it should be preferable to schedule the animal shipment for the night period when the temperatures are lower than during the day.*

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7.2.2.1 Acceptance

Ground transportation and loading/unloading should be performed smoothly in order not to startle the animals.

The following general acceptance requirements shall be followed:

a) AVI must be delivered for shipping in suitable clean containers which must be leak-proof and escape-proof, complying with the IATA LAR. The container must be constructed in a manner, which will permit handling staff to give necessary attention to the animals without risk of the animals harming them.
b) IATA Live Animals Acceptance Checklist, or equivalent, to be used for the acceptance of AVI;
c) the shipper/passenger should provide feeding, ventilation and temperature requirements. Those requirements should appear on the container
d) Loading and unloading of the animals into or out of the animal container should be carried out by the Cargo Agent/passenger, the consignee or, when agreed, by qualified handling staff.
e) Ensure that the animal to be transported has sufficient food and water required for the journey.
a) Only one animal per container, unless they are used to cohabiting, in which case the following applies:
   - a maximum of two adult animals of comparable size up to 14 kg. each, that are compatible, may be shipped in the same container. Animals over that weight must travel individually.
   - 2. animals up to six months old from the same litter, up to 14 kg. each, up to a maximum quantity of three, may be shipped in the same container/compartment.
f) The container must be large enough to permit the animal to stand in a natural position, turn around and lie down.
g) There must be label indicating passenger's name and address and the pet's name on the cage when the AVI is travelling with the passenger on the same flight.

Maximum weight for AVI on passenger aircraft is 60kg.

The flight crew and station should be informed of AVIH loading to ensure sufficient heat and airflow are maintained.

7.2.2.2 Loading

Ramp Handling Agent is responsible for the loading/unloading of the live animals and must comply with the following general principles:

a) The scheduled block time of the flight must not exceed 5 hours.
b) Live animal containers should be inspected prior to loading.
c) The compartment must be maximum filled up to ⅔ rd of its volume in order to guarantee a sufficient air supply. For full aircraft loads of live animals, air conditioning units shall be used at loading and transit and be connected immediately upon arrival at destination.
d) Keep other luggage at least 150 mm (6 inches) away from the container sides.
e) The orientation of the animal in relation to the longitudinal or lateral axis of the aircraft should be checked with the Cargo Agent/passenger.
f) Most live animal shipments should be treated as Wet Cargo. Therefore, plastic sheeting or tarpaulin should be placed under live animal containers in order to avoid soilage of aircraft holds. The use of hay or straw shall be avoided due to combustibility and quarantine regulations by some countries.
g) It is recommended that live animal shipments be located in such way that they will not immediately be affected by local temperatures when the cargo compartment doors are opened.

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h) At least one “Live Animals” label or tag, properly completed must be attached, to each live animal container.
i) The animal shall be kept in an appropriate area airside until loading and should not be left standing unnecessarily in the open, nor on standing aircraft when the departure is delayed. Depending on the environmental conditions this area may be enclosed, heated, etc. so that the animal does not suffer discomfort.
j) Live animal containers must be loaded in an upright and level position.
k) Live animals should not be loaded directly onto the floor of the aircraft but should be placed on spreader boards to stop the transfer of cold from the airframe to the containers.
l) The containers must not be loaded directly in front of or below air ventilation outlets.
m) The ventilation apertures of containers must not be blocked by other loads or compartment walls.
n) The containers shall always be tied down or be otherwise secured against any kind of movement at take-off, landing and during flight, to prevent shifting or falling of the animal container.
o) The containers must be stowed in such a way that there is enough space between cages and other load to guarantee a sufficient air circulation. Cages should not be placed under other loads.
p) When special care for the animal is required, e.g., during transit stops, containers should be accessible.
q) Animals should be loaded last and unloaded first
r) After they are unloaded take the AVI travelling with the passenger as soon as possible to the terminal for claim by their owners. Never use the baggage chute to deliver an animal. If the animal cannot be immediately claimed, take the animal to a climate-controlled waiting room.
s) Life animas shall not be exposed to adverse weather or environmental conditions during transportation, loading and unloading.
t) They shall be Handled with care and in a manner which minimizes the waiting period and is in compliance with the shipper's specific handling instructions, if required.

Segregation

The following load incompatibilities must be observed:

a) Live animals must not be loaded in the same aircraft hold together with:
   - Dry Ice (ICE);
   - Cryogenic liquids (RCL), such as liquid nitrogen.
b) Live animals must not be loaded in close proximity of foodstuffs, if not hermetically sealed;
c) animals which are natural enemies, e.g. cats and dogs, may be loaded in the same hold providing they are not in sight of one another;
d) if male and female animals are loaded in the same compartment or hold, they should be stowed as far apart as possible;
e) shipments labelled "Laboratory Animals" (SPF) must be loaded apart from other animals to reduce the risk of cross-infection or contamination;
f) strong smelling animals must not be loaded in the same hold as EAT and/or baggage, if possible;
g) day-old chickens and hatching eggs (HEG) must not be loaded in the same hold.
h) Preferably they should be separated from any dangerous goods;
i) Live animals may be loaded together with radioactive materials, provided that the separation distances stated in the IATA LAR are complied with.

For segregation table see ch. 7.1.4.2.

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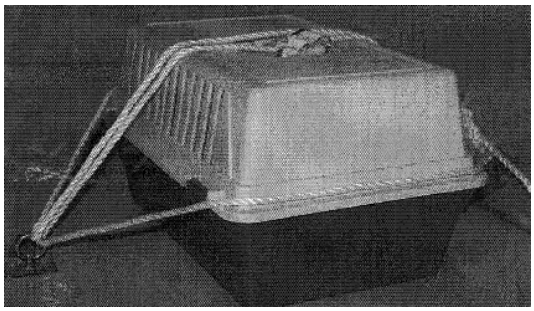
7.2.2.2.1 Tie-Down Instructions

- The container shall not be fixed but fastened in the compartment by leaving sufficient air above and on the sides. The AVIH boxes must imperatively be tied-down by following the tie-down instructions
- Tie down must ensure that the box is restrained in the three directions (upward, forward, aft)
- 2 symmetrical attachment points on each side of the box are necessary, the attachment point to use are the net single stud fitting (excepted the net of the crew section) provided nets are not tightened and no other load is placed in the section concerned. The maximum weight that can be attached to each tied-down pin is 60 kg.
- To tie-down some straps or ropes could be used.



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7.2.2.3 Special Procedures for Different Types of AVI

7.2.2.3.1 Small Mammals or Birds

The regulations apply only for the loading and air-transport of the following species:

- small domestic cats and dogs
- dogs (foxes, hyenas, wolves etc.)
- small mammals (mice, rats, rodents like hamsters, guinea pigs, rabbits, chinchillas, ferrets, squirrels, etc., but except monkeys)
- birds up to the size of falcons (except day-old chicken or similar)
- large birds (ostriches, flamingos, eagles, etc.) up to 10 animals per shipment, if they are domestic animals or breeding animals from breeding farms or zoos.

Local customs requirements must be applied. Animal's health and vaccination certificate, identification card shall be checked according to the destination/transferring states' the laws. Shipper's certification or equivalent document should accompany the AVI.

The container requirements are described in ch. 3.3.5.2.

Temperature range:

- Dogs, cats, small mammals: 5°C - 25°C
- Birds, including tropical birds: 15°C - 25°C.

For carriage of birds on long haul flights, the cargo compartment lights shall be left switched on, to enable the birds to feed during flight.

Limitations:

Maximum quantity of small mammals and birds in cargo holds differs on various a/c types.

- ATR 42

Aircraft Type	Maximum number of AVIH
ATR42*	1

- EMB 135/145:

Aircraft Type	Maximum number of AVIH
EMB135*	1
EMB145*	1

*Above is presented the recommended maximum number of transported animals in the hold. That number may be increased by maximum 3 AVIH per aircraft for EMB135/145 and ATR42 taking into consideration the handling requirements, free volume of the hold after checked-in baggage is uploaded and the possibility to place the AVIH on safe distance based on the fact if they are natural enemy to each other or not and their compatibility.

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- A319/320:

Aircraft Type	Maximum number of AVIH		
Compartment	**1**	**4**	**5**
A319	Forbidden	Flight duration up to 1:30 Flight duration from 1:31 – 3:00 Flight duration from 3:01– 5:00	max 600kg max 300kg max 120kg
A320	Forbidden	Flight duration up to 1:30 Flight duration from 1:31 – 3:00 Flight duration from 3:01– 5:00	max 600kg max 300kg max 120kg

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7.2.2.3.2 Poultry

The words "poultry" or "poults" are applicable to:

- day-old-chicks (baby chicks)
- young turkey poults
- ducklings
- goslings
- pheasant chicks or similar (n.o.s.).

Poultry may be affected by temperature extremes and drafts. Poults must not be exposed to direct heat, such as placing them in direct sunlight. Rain, wind, or cold, are also very harmful to all kind of poults. The mortality rate of the poults is very high if environmental aspects are not considered.

Positioning at the ramp

The following rules must be observed:

a) Temperature range should be kept within 18°C – 24°C. Poults should not be subjected to temperatures above 27°C for longer than a few moments.
b) Baby chicks and poults must not be accepted on a multi-sector flight when ground temperature is expected to exceed 25°C. At transit stations make sure that the chicken is unloaded and stored in a protected, shaded area during ground time.
c) Protect boxes from rain, direct sunlight, aircraft exhausts and extreme weather (hot or cold).
d) Cargo Handling Department should position poults at the aircraft as late as possible. Loading into the aircraft should be as quickly as possible, especially if the outside temperature exceeds 25°C.
e) At destination, unload day-old chicken as soon as possible

Loading

a) Provide for sufficient air circulation in the compartment, since they produce a lot of heat, especially when loaded in large quantities. They can increase the compartment temperature by up to 10°C.
b) Provide for sufficient air circulation between the boxes. When poultry boxes are stacked, a minimum space of approximately 40 cm must remain between the top boxes and the compartment ceiling. Maximum stacking is 5 layers of poultry boxes.
c) Spacers must be used to maintain the necessary separation distance between the boxes and guarantee sufficient air circulation. Minimum space around each stack of boxes should be 10 cm (20 cm between boxes and compartment walls).
d) Do not let the cooling air blowing directly towards the boxes.
e) Boxes must not have direct contact with the compartment walls or the compartment floor. Put at least one layer of insulating material, for example supporting planks, between the boxes and the compartment floor.
f) If boxes are placed on top of other cargo, make sure that cargo can properly support the boxes. Surrounding cargo whether below or around the boxes, must be tied-down properly, so that it cannot shift and crush the boxes.
g) Tie down the individual stacks so that these spaces will stay during flight.
h) During transportation and storage, poultry boxes must never be covered with plastic sheets or tarpaulins.

Messages

Enter the appropriate remark in the SI box, about load on board i.e., .AVI/4, SI LIVE CHICKS, etc.

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7.2.2.3.3 Tropical Fish

Make sure that tropical fish are transported as booked. Do not offload tropical fish from the booked flights!

Most shipments of tropical fish are packed thermo-proof. They may be loaded into any compartment and do not need further protection.

Tropical fish not packed thermo-proof may only be transported in compartments with a usually lower temperature range from 20°C - 25°C, and if a pre-heating unit is available at the station of loading.

- Cargo reservations must check this before booking tropical fish.
- Pre-heat the compartment to the needed temperature before loading.
- The Cargo Handling Department /Agent is responsible:
- to keep tropical fish in heated areas before loading or during longer ground times to connecting flights. Minimum temperature: 20°C
- to transport tropical fish to and from the aircraft as quickly as possible
- in cold weather to use a thermo-car for transport to and from the aircraft, if available
- to position shipments with tropical fish at the aircraft as late as possible (not earlier than 10 minutes before loading).

Loading

a) Boxes must not have direct contact with the compartment walls, the compartment floor.
b) Put at least one layer of insulating material, for example supporting planks, supporting platform or insulating mat, between the boxes and the compartment walls or floor;
c) Cover the bulk compartment floor with absorption sheets for wet cargo
d) If fish boxes are not very strong load shipments with tropical fish on top of other load.
e) Do not load other pieces on top of the fish boxes.

7.2.2.3.4 Reptiles and Amphibians

Reptiles are, for example, chameleons, lizards, snakes turtles, tortoises, etc.

Amphibians are, for example, frogs, toads, salamanders, etc.

Reptiles and amphibians are very sensitive to temperature variations.

Temperature range should be kept between 10°C - 25°C.

- Keep reptiles and amphibians in heated areas at optimal temperature of 20°C before transporting them to the ramp
- Transportation to/from the aircraft shall be performed as quickly as possible.
- In cold weather a thermo-van shall be used for transportation to/from the aircraft
- Position shipments with reptiles and amphibians at the aircraft as late as possible

Loading

a) Boxes must not have direct contact with compartment walls or floors.
b) Put at least one layer of insulating material, e.g. supporting planks between the boxes and compartment floor

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7.2.2.3.5 Bees and Insects

Temperature range:

- Bees and other insects between 15°C – 25°C
- Queen Bees between 20°C – 25°C

Storage and Ground transport

a) Avoid cold draft
b) If outside temperature exceeds 25°C, spray water on and through ventilation grids of the boxes if possible.
c) Stray bees may be attracted to consignments in the warehouse and the presence of bees on the outside does not necessary indicate bees are escaping.

Loading

a) Use spacers to separate bee boxes from each other
b) Boxes must not have direct contact with compartment walls and floor
c) Put at least one layer of insulating material, e.g. supporting planks between the boxes and compartment floor

7.2.2.3.6 Crustaceans and Molluscs

Crustaceans are, for example, lobsters and crayfish.

Molluscs are, for example, snails, worms and mussels.

Temperature range should be between 6°C – 10°C, unless packed in thermos-proof box.

If packed thermo-proof they may be loaded into any compartment and do not need any further protection.

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7.2.2.4 Health and Hygiene

After delivery of the animals at destination, the carriers' container shall be cleaned and washed thoroughly before returning, and disinfected before re-use, in accordance with the requirements of the exporting, transiting and importing countries.

It is recommended that no equipment, with which animals will come into direct contact, be replaced in the aircraft until it has been disinfected. The station of (animal) offloading must follow the procedures set forth by HQ. Countries may refuse entry of an aircraft into their territory if a certificate of cleanliness has not been issued by the competent authority. Any such disinfectant used may be species specific and shall in consultation with aircraft maintenance departments and the aircraft OEM be deemed non-destructive to the airframe or its components prior to its application.

When feasible, arrange for injured animals, or those which have apparently become ill during carriage, to receive veterinary treatment.

When feasible, arrange for the removal of sick or dead animals from containers. Such action should only be taken in consultation with the best expert advice available at short notice. When, for whatever reason, such action cannot be carried out, the next enroute station(s) and destination station should be informed.

After off-loading the containers, the relevant aircraft holds shall be inspected and cleaned in case of leakage or spillage.

7.2.2.5 Information and Documents

AVIH shipment should be reported on LIR, NOTOC and LDM.

On the NOTOC the required action on hold heating/ventilation controls must be noted.

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7.2.3 Human Remains (HUM)

HUM in coffins can be transported on all Amelia Intl aircraft.

Mourning ceremonies on the apron should be avoided.

When the family accompanying the HUM on the same aircraft, mention ''FAMILY ON BORD'' must be captured under "Observations" in the NOTOC. In case of off-loading of HUM and the HUM is accompanied by family, the KK must be informed immediately in order to advise the family.

In case of transit: Immediately report any change in the stowing position as well as any irregularity at stations enroute by means of a Load Message. Human remains may never be off-loaded enroute.

7.2.3.1 Loading

Funeral Urns

a) the urn can be transported whether in the cabin or in the hold and must be efficiently cushioned by suitable packaging, against breakage,
b) for transportation in the cabin: dimensions must be fit with the dimensions of the cabin baggage,
c) the sealed urn must be wrapped in a packaging that may not allow other passengers identify the urn,
d) to avoid any request concerning the opening of the urn from the security agent, the passenger must hold the crematorium certificate.

The passenger must hold an authorization from the regional government authorities for transportation of the funeral urn.

Coffin

Non-cremated human remains shall be packed in a hermetically sealed inner containment which may be constructed of a flexible material or may be a rigid coffin of lead or zinc. lead or zinc. The inner containment must then be packed inside a wooden or metal coffin. The wooden or metal coffin may be protected from damage by an outer packing and covered by canvas or tarpaulin so that the nature of its contents is not apparent.

a) Only one coffin can be loaded on a passenger aircraft. Coffins may be loaded to full capacity on a freighter.
b) It should have outside marking confirming the presence of an approved gas purifier system. Such a system is not required if the body is embalmed.
c) It should be loaded a horizontal position, on the compartment floor and tied-down.
d) It is forbidden to load luggage or shipments, on top of the coffin in the bulk compartments.
e) Some clearance distance should be provided from the rest of the loading.
f) The dimensions of the coffin shall not exceed the maximum dimensions of the aircraft.
g) Such human remains shall not be loaded in close proximity to food for human or animal consumption or edible materials.
h) Flowers and funeral wreath are not authorized with the HUM expedition.

Note**:** *Always inspect the visible HUM packing to ensure that it has no leakage or other indicator that the coffin has been damaged. If a coffin seems damaged or is leaking do not load it.*

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7.2.3.2 Information and Documents

HUM shipment should be reported on LIR, NOTOC and LDM.

When accepting HUM, consideration shall be given to governmental regulations and orders (e.g. permits, packaging requirements etc.) concerning export/import or transit and/or referring to required documents to accompany shipment (e.g. death certificate, mortuary pass, sanitary certificate etc.) shall be checked.

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7.2.4 Live Human Organs (LHO) and Save Human Lives (SHL)

LHO applies to live organs for surgical grafts, human tissue growth, blood and blood plasma. Excluded from these are serum and infected blood.

SHL is code used for materials intended to save human lives during humanitarian operations, like vaccines and certain types of medicines which are urgently needed and are subject to decay within a very short period of time. It is advisable to also include in this category any equipment, item, instrument or product other than medication (health and surgical appliances, uninfected blood, serum…) which must be sent as an emergency so as to contribute to saving lives.

Packages do not require a security check.

They are normally transported as manifested cargo. In exceptional and urgent cases, they may be accepted unmanifested, but ground operations department must be contacted in order to inform the crew.

Note*: *Never offload LHO or SHL shipment from a flight! Offloading and / or delay in forwarding must under all circumstances be avoided.

In urgent cases, LHO or other life-saving vaccines or pharmaceuticals may get the status **Life and Death (L+D)**. Priority regulation Eurocontrol gives priority to a flight transporting Life and Death shipments in an urgent life-saving mission. Outside the Eurocontrol area, this depends on the respective national regulations.

Human organ and transplant transport are authenticated by the ‘’hospital’’ at the origin of the shipment and by the ‘’control and natural support department’’ of the state transplant institution.

7.2.4.1 Loading

Transport of LHO and SHL has priority over any other loading, LHO and SHL shall never be unloaded.

When special temperature requirements should be met, they should be maintained at all times.

Cargo

Live organs are allowed in an isotherm packaging containing refrigerated liquid nitrogen if their design prevents inside pressure increases and any loss of nitrogen.

LHO is normally loaded into cargo from easily accessible position (e.g. door section), and if not packed thermo-proof, in place where the required temperature range can be kept. It is secured with a special purpose belt to avoid tipping over. The exact loading location must be given to the Commander and to the station of arrival.

Ground handling agent at the destination is responsible to remove the belt from the LHO and return it to the crew after offloading, if it was taken from them.

Cabin

When the package is fragile or not thermo-proof and must be cooled during flight, Life and Death shipments may be transported in passenger cabin on Commander’s discretion. It must be securely stowed in a compartment (galley, rack, wardrobe...) to maintain the required temperature.

The following information, if available, must be given to the crew:

- copy of the request, delivery document or SITA telex, describing the kind of LHO or SHL;
- the name of the consignee;
- the name of the person collecting the package from the aircraft.

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Emergency Transport

In case of direct delivery to the aircraft, LHO parcels are the only ones for which acceptance is automatic in cabin (including if the packaging contains a dry ice type cooling agent) and this, provided the dimensions of the package are suitable.

- The station manager (or deputy) shall check the personality of the sender by contacting (e.g.by phone) the hospital at the origin of the shipment
- If the LHO is delivered straight to the aircraft by Emergency Medical Service (EMS) or similar and accepted by the Commander, the agent in charge of the Station Coordination (function K) or somebody else, locally defined, creates the item in Ramp FM's EIC screen, using the "E" nature code (and the "LHO" loading code) and informs the Commander that this item will not be reported on the NOTOC.
- To cater for the closing times of Cargo departments and for the delivery of LHO shipments directly to the plane, a local procedure can be set up with the Station's departments.

7.2.4.2 Information and Documents

LHO/SHL shipment should be reported on LIR, NOTOC and LDM.

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7.2.5 Perishable (PER)

Perishable goods are any goods which when not maintained within certain conditions, elements or other criteria as defined by their life cycle, lose their inherent properties or essential quality components thereof and as a consequence can no longer perform as originally intended.

Note: *Perishables including temperature-sensitive healthcare products (e.g. pharmaceuticals) except LHO* ***are not allowed on EMB135/145 and ATR42*** *as they do not have temperature regulators in the cargo (this excludes the perishables intended for catering and items falling under SHL).* ***They are accepted only on cargo aircraft and on A319/A320.*** *In this case whenever possible the acceptance and handling of such shipments should be in accordance with the procedures and requirements of the Temperature Control Regulations (TCR) with regards to documentation, packing and classifications. Additional requirements may be mandated by the local regulations.*

Due to individual procedures being applicable for different perishable goods, the following different load information codes are used:

- Foodstuffs - food for human or animal consumption (EAT)
- Hatching eggs (HEG)
- Live human organs (LHO)- refer to ch. 7.2.4. for details
- Flowers/plants (PEF)
- Meat (PEM) and seafood/fish (PES) shall be handled as WET
- Fruits and vegetables (PEP)
- All perishable goods other than flowers, meat, seafood or fish (PER)

Articles refrigerated with wet ice and perishable cargo containing fluid or moisture which could leak onto the compartment floor shall be treated as wet cargo might contain liquids. In that case ch. 7.2.6 is also applicable.

Important: Temperature-sensitive perishable loads (fresh or frozen), requiring cooling by dry ice (ICE can be only accepted on cargo aircraft only respecting the dry ice limits as presented in ch. 9.

When perishables are transported the acceptance and handling of such cargo, with regards to documentation, packing and classifications, should be in accordance with the requirements of the Perishable Cargo Regulations (PCR). Additional requirements may be mandated by the local regulations.

During transportation, loading and unloading of perishable and temperature-sensitive healthcare products, ensure that they are:

1. Handled in a manner to minimize the waiting period;
2. Not exposed to adverse environmental conditions.

Notes:

Perishables must be moved into storage (e.g., cooler, freezer) appropriate for the type, in accordance with the Perishable Cargo Regulations (PCR).

Pharmaceuticals must be moved into storage (e.g., cooler, freezer) appropriate for the type, in accordance with the Temperature Control Regulations (TCR).

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7.2.5.1 Acceptance

Perishable cargo shall only be accepted for carriage when it is reasonably certain that it will reach its destination in good condition.

Written instructions about the shipment shall be provided by the shipper or his agent.

Prior to acceptance Amelia Intl will ensure that the necessary en-route arrangements have been made including:

- ensuring that the shipper is advised of the maximum time before flight departure that Amelia Intl will accept the cargo;
- making any necessary onward reservations;
- ensuring that special handling facilities such as re-icing are available and arranged if agreed and required.

“Perishable” or “Time and Temperature Sensitive’’ label shall be attached to each package and where applicable ‘’This Way Up’’ label.

7.2.5.2 Loading

The temperature variations of each cargo aircraft are presented in ch. 6 under the hold characteristics for relevant aircraft type.

When loading PER cargo, the following precautions shall be taken:

- Perishable loads may be accepted for carriage only if properly packed.
- Perishable cargo may only be accepted for carriage when it is reasonably certain that it will reach its destination in good condition.
- Perishable cargo cooled with wet ice or containing fluid/moisture which could leak (e.g. meat, fish or other seafood, fresh, salted smoked or frozen) must be treated as "wet cargo" and handled accordingly.
- Perishable items shall be loaded so that they are suitably accessible in case any handling is required at an en-route and/or destination station.
- Special care must be taken when stacking single packages containing perishable items (especially in case of fruit, vegetables, live plants) so that the lower layers of the stack are not damaged by the weight of the upper layers.

Pallets with flowers, fruit or vegetables must not be covered with plastic foils.

For specific segregation requirements refer to ch. 7.1.4.2.

7.2.5.3 Information and Documents

Perishable cargo that requires special stowage, special care at transit stops, in-flight attention or special handling in the case of delays or diversions shall be included on the NOTOC. They should be also included on the LIR and LDM.

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7.2.5.4 Irregularities

7.2.5.4.1 Actions in Delay Situations

Delays in the carriage of perishable cargo should be kept to a minimum. In the event of a delay to a flight carrying such cargo, one of the following courses of action should be considered, the choice depending on such factors as length of delay and availability of facilities, equipment and alternative flights:

- provision of air conditioning to the aircraft if the perishable cargo would benefit from such action;
- transferring the perishable cargo to a warehouse with adequate facilities such as air conditioning or cold store;
- off-loading the cargo and rebooking on another flight;
- monitoring temperature control and refilling Carbon dioxide, solid (dry ice) supply, in case refrigerated/temperature control containers are used.

At the destination the shipper and consignee shall be kept informed. Additionally, in the event of a change of flight/routing any onward carriers holding space for the cargo shall also be kept informed.

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7.2.6 Wet Products (WET)

Shipments containing liquids, or shipments which by their nature may produce liquids, and which are not subject to the IATA Dangerous Goods Regulations (DGR), shall be designated as “wet cargo”.

The following types of cargo are to be considered as wet cargo:

- shipments of liquids in watertight containers;
- shipments of wet materials not packed in watertight containers, e.g. fish packed in wet ice, fresh meat, casings (fresh animal guts), wet hides, skins, etc.;
- goods which may produce liquid, e.g. AVI,
- fresh fruit and vegetables (PEP), flower and plants (PEF) when they contain liquids.
  Note: *Live animals such as birds, reptiles, insects and certain mollusks (terrestrial) in appropriate animal containers do not pose a higher risk for corrosion than normal baggage/cargo and are, therefore, exempted. Refer to IATA LAR.*

Note: *the fact that the cargo appears to be dry on the ground does not guarantee against leakage during flight due to the pressure difference.*

Caution: Spillage or leakage during carriage by air could lead to corrosion or other damage to the aircraft structure or its components, or damage to other loads. In case of spillage or leakage, inform responsible ground staff, maintenance and fight crew if on board.

7.2.6.1 Package Requirements

There are variations in atmospheric pressure and temperature during air transportation. Watertight containers shall be able to withstand these conditions without rupture or leakage to the contents. These watertight containers shall be in accordance with the general requirements of the IATA DGR.

Additionally, during climb and descent, the aircraft in normal flying conditions can assume angles, i.e. angle of the aircraft floor compared to the horizontal, up to approximately 30°. Packing design shall allow for such angle changes without release of the liquid contents.

Other containers shall be constructed of good quality waterproof materials. They shall also be constructed to withstand stacking.

Cargo which by its nature may produce liquid, for example live animals which make a large amount of urine, must be in leakproof packages or must contain sufficient absorbent material. Additionally, plastic sheet or tarpaulins must be used. Live animals shall be in containers as specified in ch. 7.2.2.

‘’This way up’’ labels or imprints must be affixed.

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7.2.6.2 Loading

The person responsible for the aircraft loading supervision task shall ensure the wet cargo is properly packed and free of leakage. Do not load damaged or leaking packages.

When loading wet cargo, the following precautions shall be taken:

1. To protect the aircraft floor, plastic sheets or tarpaulins should be spread on the aircraft floor and walls, so as to catch any spillage or leakage.
2. Containers shall be stowed and secured upright, i.e. the closure must be at the top.
3. Special Handling instructions (labels or imprints, e.g. “This Way Up” label) shall be strictly observed.
4. Damaged packages or packages where damage can be assumed to have occurred shall not be loaded on the aircraft, e.g. packages with holes, indentations, traces of leakage, defective caps or closure devices.
5. It should be noted that when it is wet or damp, the strength of some packagings can be considerably reduced. Special attention shall be given to avoid crushing of the packages when stacking to several levels.

Cargo which by its nature may produce liquid, for example AVI which make a large amount of urine, shall be in leak- proof containers or shall contain sufficient absorbent material. Additionally, plastic sheet or tarpaulins shall be used.

Other wet cargo such as PEM, PES (fresh meat, casings, wet hides and skins), whether packed in leak-proof containers or not, shall be prevented from having direct contact with the aircraft floor as in point 1. This serves to protect the aircraft from corrosion or contamination by blood or other liquids, and to maintain the hygiene standards of food products.

Important: For wet cargo in containers which are not watertight it is essential that secondary measures are taken to ensure that any spillage can be contained. This can be achieved by:

- **placing and securing the shipment in a bowl, or similar receptacle, the volume of which is sufficient to contain any spillage;**
- **following the instruction from point 1 above and additionally turning the edges up against the aircraft wall, or other cargo, so as to create a waterproof basin around the shipment.**

7.2.6.3 Information and Documents

WET shipment should be reported on NOTOC and LDM.

7.2.6.4 Irregularities

7.2.6.4.1 Action in case of spillage

If spillage or leakage of liquids takes place onto the aircraft floor or walls, the person in charge of the loading/unloading shall immediately notify the captain so that the appropriate follow-up measures may be taken.

The aircraft's documentation should be checked to assist the identification of the liquid concerned.

For handling of damaged cargo refer to 7.7.

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7.2.6.4.2 Action in case of other irregularities

In the event of delay (weather, technical failure etc.), appropriate actions must be taken to prevent deterioration of the goods, such as off-loading of the perishable goods and transfer to a warehouse with adequate facilities such as cool-room, cold store etc.

The shipping details along with the corresponding special handling codes (EAT, HEG, LHO, or PER) as well as precise details concerning the condition of the goods, temperature requirements, type of packing loading position on aircraft and ex-flight/date must be forwarded by telex-message to the cargo office (and/or handling agent) at the airport of unloading, to ensure that appropriate measures are taken or prearranged for.

7.2.7 Fragile (FRA)

Fragile cargo are fragile shipments such as porcelain, glass, electricity materials, optics and cameras, radio, TV, sculptures etc.

7.2.7.1 Acceptance

Fragile cargo shall only be accepted if it is adequately packed in good quality packaging material that prevents damage at normal cargo handling procedure.

General cargo that is not adequately packed must not be accepted and labelled as fragile cargo.

Marking and labelling

Each fragile cargo piece must be marked with a special label ‘’Fragile’’ and a label ‘’This way up’’.

7.2.7.2 Loading

When loading FRA pay special attention to its handling.

Ensure that no other shipment is placed on the fragile cargo.

7.2.7.3 Information and Documents

Fragile cargo that requires special attention during handling shall be included on the NOTOC, LIR, AWB and LDM.

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7.2.8 Heavy (HEA)

Heavy items are individual items of load weighting 150kg or more when bulk loaded in cargo compartment.

Bulky items (BIG) are pieces with overall dimensions (length + width + height) of300 cm or more, which due to their size require special handling/equipment for loading and off-loading.

Heavy bulky items are pieces of 150 kg and more, and whose extreme dimensions and weight require special attention for loading and unloading through the compartment doors.

For details on BIG refer to ch. 7.2.9.

Important: HEA and BIG are not accepted on Amelia Intl EMB135/145 and ATR42/72 passenger aircraft because of no possibility for tie-down.

The maximum permissible weight for each heavy item depends on the aircraft type, airport facilities (equipment and manpower) and scheduled ground times. For aircraft specifics (max floor strength, max net strength, max load accepted in a compartment etc.) refer to ch.6 for the relevant aircraft type.

7.2.8.1 Acceptance and Loading

The cargo agent is responsible for acceptance of HEA.

Before accepting heavy/bulky items for carriage on a specific flight, due consideration must be given to the following:

a) heavy/bulky items must have to be loaded/unloaded without the risk of injury to persons and damage to aircraft, equipment and load;
b) aircraft limitations must not be exceeded. Due consideration must be given to the compartment structure limitations, ch.6. The methods of overcoming load limitations are described in ch.4 and ch.6.
c) suitable ground handling equipment and manpower must be available at airports of loading/ unloading;
d) lashing equipment must be available at airport of loading;
e) handling can be performed within the scheduled ground times.

If suitable ground handling equipment and manpower is not available the Amelia Intl's cargo department must be informed immediately.

The lashing of heavy cargo must be done (if applicable) using relevant materials and limitations for such materials must not be exceeded.

Marking and labelling

Each heavy cargo piece must be marked with a special label that indicates that it is heavy with corresponding gross weight clearly marked on each piece. If applicable for the relevant type of cargo other labels such as ''This Way Up'' or ''Fragile'' must also be placed.

Important: If a cargo piece is not marked with HEA label, but it is recognized as a heavy piece because it is not liftable by several persons, or of any other circumstances, handle this piece as HEA.

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7.2.8.2 Information and Documents

In order to ensure correct performance of loading and unloading as well as safe carriage, the following handling instructions must be given:

- on the Air Waybill: handling code “HEA” in the box “Nature and Quantity of Goods”; weight and dimensions of each heavy piece in the box “Handling Information”.
- in SITA messages: in the cargo reservations message to state the abbreviation “HEA” and true weight and dimensions of each piece, regardless whether shipped as single piece or within consolidated shipments. In the telex-pre advice to the station of unloading requesting special services/advance arrangements, always indicate the loading position on the aircraft (compartment).

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7.2.9 Oversized Cargo (BIG)

Bulky items are pieces with overall dimensions (length + width + height) of 300 cm or more, which due to their size require special handling/equipment for loading and off-loading.

Sometimes they might be also HEA, but not necessary.

7.2.9.1 Acceptance

When accepting BIG, ensure that the overall dimensions are not bigger than the cargo door itself.

Important: BIG are not accepted on Amelia Intl passenger aircraft.

The shipment must be packed properly and in case it is HEA or FRA, it also must be marked and labelled properly, by using the ''HEA'' labels, ''This Way Up'' and ''Fragile'' labels.

7.2.9.2 Loading

The number of persons loading the BIG shipment, will depend on its dimensions and weight.

When loading BIG pay special attention to the aircraft structure, to the cargo already found in the compartment and to the BIG shipment itself.

The lashing of oversized cargo must be done (if applicable) using relevant materials and limitations for such materials must not be exceeded.

7.2.9.3 Information and Documentation

BIG shipment should be reported on NOTOC and LDM.

7.2.10 Obnoxious Cargo (OBX)

Obnoxious cargo is a shipment spreading obnoxious smell due to its structure or contents.

Packaging and loading of both wet and obnoxious parcels can be conducted just like wet cargo.

Unprocessed animal skin, volatile oils obtained from plants (rose oil, spicy type garlic essence oil, etc.) and other shipments such as salted casings are both wet and obnoxious cargo.

Obnoxious oils are slightly oiled liquids and they release inflammable vapours in high temperatures. However, they are not dangerous goods except for some exceptions. They can cause damage or incapacitation by releasing odours in the slightest leakage.

For this reason, these liquids should be transported in accordance with IATA DGR rules.

7.2.10.1 Acceptance

This cargo is acceptable only when packed in strong, watertight packaging that prevents escape of any annoying smells.

Marking and labelling

A ''This Way Up'' label must be placed on this type of cargo.

7.2.10.2 Loading

Handle with care. If suspected damage exists do not load it.

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7.2.11 Valuable (VAL)

Valuable shipments such as defined by the IATA Cargo Resolutions are acceptable in compliance with the AHM 331 IATA procedure, Handling and protection of valuable cargo. Valuable shipments are designated by the IATA Code VAL.

VAL should be handled as a separate category, distinct from regular air cargo. Special service and protection should be provided to valuable cargo and special charges should be applied to compensate for the expense of this special protection.

Advance arrangements, bearing in mind that the consignment should arrive during normal business hours to facilitate at the airport of destination customs clearance and quick delivery. Storage times should be minimised and avoided during weekends and holidays;

VAL shipments must be packed in security equipment (bag collectors, small packages…)

The shipper is responsible to provide Amelia Intl with:

- proper security procedures, including a person that will accompany the shipment; if applicable; and
- documents, on which the responsibility for the VAL throughout each stage of the transportation, will be clearly stated. These documents should state as well:
  - package identification;
  - date and time placed in the security area and identity of person who enters area
  - date and time removed from security area and identity of person who enters area;
  - any other pertinent data as the circumstances or local laws may require
    The documents shall be countersigned by an authorised individual.

When valuable cargo arrives at a carrier's cargo terminal for shipment, delivery or transfer, the valuable cargo shall be immediately checked against the air waybills and be placed in an area secured against unauthorised entry. For any valuable cargo which due to its size or other reason cannot be stored in the carrier's security area the carrier must make special arrangements for its security.

The VAL will be always delivered prior to scheduled flight departure.

Packaging:

- Whenever dimensions of items permit, shipments of valuable cargo shall be stowed into specially designed valuable cargo pouches or security boxes;
- several shipments of valuable cargo may be packed together in the valuable cargo pouch or security boxes if consigned via the same routing from the same airport of loading to the same airport of unloading;
- each valuable cargo pouch or security boxes shall have a label attached showing airport of unloading and air waybill number(s) of shipment(s) contained in the pouch;
- valuable cargo pouches or security boxes should be constructed of bright orange canvas or similar opaque material;
- 3the pouch or security boxes shall be capable of being locked/sealed.
- Chock package with luggage and / or cargo nets.

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If special security-controlled containers or lockers are to be used, it is recommended that such containers and lockers are constructed and equipped in such a manner that:

- no goods can be removed from, or introduced into the sealed part of the container without leaving visible traces of tampering or without breaking the carriers seal;
- carriers locks and seals can be simply and effectively affixed to them;
- they contain no concealed spaces where goods may be hidden;
- all spaces capable of holding goods are readily accessible for inspection

Use and control of seals is presented by the customer.

7.2.11.1 Loading

The station management shall be informed in advance when valuable cargo is to be loaded.

The detailed procedures for safeguarding valuable cargo shipments during transport from the cargo terminal to the aircraft, also prior to and during loading, shall be agreed and arranged locally between those responsible for the cargo handling and for the ramp handling. Such consignments shall always be accompanied to the aircraft by an authorised person.

Loading and unloading provisions:

a) Valuable Shipments (VAL) must never be left unattended.
b) All transfers must be executed under signature for receipt only.
c) It must be immediately reported to the supervisor on duty of any VAL missing or damaged. Stop (un)loading if necessary.
d) In some cases, an armed escort is required, and there is reason to call the police, gendarmerie or private security company to ensure surveillance. This type of escort service is requested by the cargo department or, failing that, by the responsible of the handling company.
e) Shipments of values must be protected throughout the duration of ramp handling (transport on the ramp, loading and unloading). It is mandatory to control the number of packages, the condition and sealing of the package.
f) Valuable package must be loaded last and unloaded at the opening of the cargo hold.
g) The opening of the cargo hold will be delayed in the absence of responsible for values protection.
h) After unloading, it is necessary to check the Number of the AWB, the number of parcels, the state and the number of seals.
i) The shipment shall be immediately transmitted to the cargo department.
j) In case of irregularities, the station manager will inform the responsible of the cargo.

During transit:

- If possible, handle only one compartment at a time.
- Close cargo hold as soon as possible.
- Remove the loader or conveyor belt as soon as possible.
- Check carefully that the bags or collectors are not unloaded involuntarily.
- If possible, check the state outside and the sealing of the package.

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7.2.11.2 Information and Documents

These shipments are announced by the cargo department through an alert message sent to the airports of departure, transit and destination.

Announcement Message:

The text of the announcement message includes:

1. The flight number and date;
2. The VAL Code;
3. The AIRWAY BILL number;
4. The final destination;
5. The number of parcels and their weight in kg;
6. Sizes, as needed, in cm.

VAL shipment must be reported on LIR and NOTOC.

A document on which the responsibility for the VAL throughout each stage of the transportation, will be clearly stated must be provided by the responsible shipper to the ground operations department.

Details about value, contents, routing and storage must be kept confidential and only those details which are absolutely necessary for handling purposes should be made available to the personnel directly involved.

7.2.11.3 Irregularities

In the event of any item of valuable cargo showing signs of being tampered with or missing, it should immediately be considered as having been pilfered or stolen, and immediate action is to be taken to trace, locate and report the state of the consignment.

The management of the handling company may only advise the public authorities of an irregularity after consultation with Amelia Intl, if such representative is available.

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7.2.12 Weapons and Munition of War (MUW)

There is no internationally agreed definition of Weapons and Munitions of War. Some States may have defined them for their particular purposes or for national need.

In Amelia Intl weapons of war and munitions of war are firstly considered to be all weapons that do not fall under the category of sporting weapons (e.g. those used by police, army, etc.).

Note: *Where weapons of war or munitions of war are also dangerous goods by definition (e.g. torpedoes, bombs, etc.), Transport of dangerous goods also applies*

7.2.12.1 Loading

The weapons and munitions shall be loaded in a place that is inaccessible to passengers during flight. In case of firearms or other weapons that contain ammunition, they must be unloaded.

They must be properly packed in special weapon crates.

In case of single weapon (gun) carried by policeman (without any security duty on the aircraft), the ammunition and the weapon must be separated.

7.2.12.2 Information and Documents

Amelia Intl shall only transport weapons of war and munitions of war by air, if an approval to do so has been granted from all States whose airspace is intended to be used, including the state of origin, destination and Republic of Slovenia.

Before the flight, the Commander must be notified of the details and location on board the aircraft of any sporting weapons and ammunitions intended to be carried.

The notification is performed via NOTOC provided by the ground handling. The ground handler can use Amelia Intl or any other type of NOTOC, as long as the required information is presented.

The Commander will then include it in the final flight envelope.

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7.2.13 Sporting Weapons and Ammunition (SWP)

Sporting weapons include hunting knives, bows and other similar articles. An antique weapon, which at one time may have been a weapon of war or munitions of war, such as a musket, may now be regarded as a sporting weapon.

The following firearms are generally regarded as being sporting weapons:

- those designed for shooting game, birds and other animals;
- those used for target shooting, clay-pigeon shooting and competition shooting, providing the weapons are not those on standard issue to military forces; and
- airguns, dart guns, starting pistols, etc.

When possible a label/tag that indicates Weapons should be put on the baggage.

If they are also dangerous goods by definition, they may be transported as cargo only, under the provisions for dangerous goods transportation.

They may only be transported in the checked baggage, provided that firearms are unloaded and suitably packed in accordance with technical instructions.

7.2.13.1 Loading

Hunting or sporting rifles must be suitably packed in containers made of wood, metal, fibre etc. They must be checked for strength before accepted for transportation.

Ammunition, in quantities not exceeding 5 kg gross weight per person for that person ‘s own use, must be packed (as laid down in the ICAO TI) in a strong outer container and inside be protected against shock and secured against movement, that it cannot function accidentally.

7.2.13.2 Documents

The notification is performed via NOTOC provided by the ground handling. The ground handler can use Amelia Intl or any other type of NOTOC, as long as the required information is presented.

The Commander must include it in the final flight envelope.

7.2.14 Cabin Seat Cargo/ Transport of Cargo and Mail in the Passenger Cabin

Not allowed, as the passenger cabin is not certified for transportation of cargo.

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7.3 NON-REVENUE CARGO

The non-revenue cargo presented in this chapter is referring to cargo needed for the company's operation.

This type of non-revenue cargo is being security checked as per procedures required by EU 2015/1998 and described in the Security program.

As this is company material, the maintenance engineers or other relevant Amelia Personnel are authorized to load and unload it.

The following procedures have to be followed by the person loading this cargo:

- Weight the cargo by using calibrated scales and note it down;
- Respect the floor and cargo limits as presented in ch.6 for the relevant aircraft;
- Respect the procedures described in this chapter 7.3;
- Tie-down the cargo in order to prevent unwanted movement during the flight using the tie-down straps, if needed and if properly trained to;
- Inform the Commander on the actual weight of the cargo, its location and content, by preferably using the LIR.
- In case of EIC, place a tag accordingly as per ch. 7.3.1.

The Commander has the final responsibility to check if the non-revenue cargo is properly loaded and secured, before closing the cargo hold door.

The following procedures have to be followed by the person unloading this cargo:

- After unloading it, remove any tie-down straps or other equipment used during the transport, like wooden boards used for increasing the floor limits and similar.
- Inform the Commander.

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7.3.1 Equipment in Compartment (EIC)

EIC is any company items carried on the aircraft, not manifested and not included in the DOM/DOI data. This type of cargo is also known as Company cargo. They are also not covered by airway bill.

Such shipments are identified by a general code EIC, possibly replaced with a specific code (see below in the table).

Examples of EIC can be:

EIC type	Code	Description
Company Mail	COM	Any company mail which may be sent between Amelia Intl (or airline for which Amelia Intl performs ACMI) and its contract partners, other airlines, IATA, ICAO, EASA and other aviation authorities, provided they only contain company documents or electronic media, excluding any other mail or private shipment.
Aircraft ballast	BAL	Deadload weight carried to achieve a balanced condition
Catering equipment in hold	CSU	Catering and food supplies, hold loaded and not used on flight
Flight kit	FKT	Occasional technical equipment, tools, non-standard flight -kit transported This can be set of aircraft spare parts specific to the aircraft type. It is placed on board when the station does not have such parts available. A flight kit can be permanent, and in that case, its weight and influence on the balance are included in the dry operating weight and dry operating index of the aircraft. When a flight kit is included in the DOW/DOI, it shall be identified with flight kit tag or sticker (see example) and no mention of the flight kit shall be made as EIC. In case a FKT is placed on board and it is not already calculated in the DOM/DOI follow instructions in the subchapters below and inform Commander as described.
Aircraft on Ground	AOG	Documents or spare parts for an aircraft on ground. These items sent as AOG if containing DG must obtain prior approval/confirmation to be carried. To do this send the contents to dangerousgoods@aeh.flyamelia.com . After the carriage is confirmed, they may be loaded. This is a priority shipment.
Other loading items	EIC	Types of equipment in compartments not covered by other specified categories

Examples of Company mail:

- Airline revenue documents including tickets, airway bills and other passenger and cargo documentation;
- Business correspondence including letters, papers etc;
- Instruction manuals and publications;
- Office material, forms etc;
- Technical or advertising materials, including books, photos, audio/video tapes; data disks etc.

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Important: The agent in charge of preparing the EIC for shipping, including aircraft parts or returned parts, should be qualified to check and guarantee that they do not contain any dangerous goods or dangerous goods quantities that are forbidden to be carried. For details refer to ch. 9.

***Note*:** *Shipments that are not covered in the table above are given to the ramp service for loading. The ramp agent should check the compliance with the information on the summary list.*

The EIC undergoes security check as per the local airport procedures.

7.3.1.1 Loading

COM is loaded last at the passenger door and must not be left unattended at any time.

When using ballast bags only the quantity actually required after check-in closure must be loaded. They must be in proper condition, separated from other cargo and must be unloaded at each station. As appropriate the ballast bags must be loaded next to cargo compartment door.

7.3.1.2 Information and Documents

All EIC should be properly marked by label/tag, possibly replacing it with a specific code as shown in the table in the previous chapter. Originator and destination should be noted on it.

In case of flight kit, a FKT label/ tag, the name of the carrier owning it and the weight in kg should be noted.

The number and weight of the EIC should be mentioned on the LIR which is handed to the Commander in order to insert the data in the loadsheet. If LIR is not used the correct data can be provided in any other written means.

If cargo manifest is to be used for other type of revenue cargo, the EIC should be included as well. The specific code used to describe the nature of the goods should be written down.

7.3.1.2.1 EIC and FKT Labels

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7.4 MAIL

Mail and postal parcels handed over by official Post services can be carried with no limitation other than the capacity available on the flight in volume and load.

Mail can either be high priority traffic or space available traffic depending on the nature of the goods being mailed and on the transport agreement established with the contracting Postal Operator.

The Universal Postal Union Convention forbids the carriage of dangerous goods in mail except as permitted in IATA DGR.

Mail or parcels given by a competing mail company should be processed not as mail, but as express cargo (XPS).

Mail and postal parcels are subject to specific safety inspection requirements (postal parcels are made secure by undergoing an X ray inspection).

When the mail is accompanied by an escort, the bags can be carried on board the aircraft on an extra seat (EXST/XBAG) next to the escort. The extra seat is subject to payment of the applicable rate and the mail shall be fastened on the seat.

Note: *This case can also occur with a diplomatic mail escort (DIP). That type of mail should be subjected to security check.*

As Amelia Intl currently does not have any contracts with Postal Operators this chapter is not completely developed.

In case of charter cargo flight with mail contact the Amelia Intl cargo department for details.

7.5 INTERLINE CARGO

Currently, Amelia Intl does not have interline Cargo.

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7.6 PACKAGE DIMENSIONS

For hold dimensions, limits and characteristics, refer to ch.6 of this manual.

7.6.1 Package Dimensions on ERJ135

Height in cm	Width - cm							
	12.7	25.4	38.1	50.8	63.5	76.2	88.9	101.6
	Maximum Length of parcels - cm							
12.7	264.1	246.3	241.3	228.6	215.9	190.5	152.4	114.3
20.3	264.1	246.3	241.3	228.6	215.9	190.5	152.4	114.3
25.4	264.1	246.3	241.3	228.6	215.9	190.5	152.4	114.3
33.0	264.1	246.3	241.3	228.6	215.9	190.5	152.4	114.3
40.6	264.1	246.3	241.3	228.6	215.9	190.5	152.4	114.3
48.2	254	246.3	241.3	228.6	215.9	190.5	152.4	114.3
55.8	254	246.3	241.3	228.6	203.2	177.8	152.4	114.3
63.5	254	246.3	241.3	228.6	203.2	177.8	152.4	114.3
71.1	254	246.3	241.3	228.6	203.2	177.8	152.4	114.3
78.7	254	246.3	241.3	228.6	203.2	177.8	152.4	114.3
86.3	254	246.3	241.3	228.6	203.2	177.8	152.4	114.3

Table reading method:

- Height of the package = 50 cm
- Width of the package = 80 cm
- Maximum length (approx.) = 177 cm

MAXIMUM WEIGHT PER PIECE MUST NOT EXCEED 70 KG EXCEPT FOR HUM.

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7.6.2 Package Dimensions on ERJ145

Height in cm	Width - cm							
	12.7	25.4	38.1	50.8	63.5	76.2	88.9	101.6
	Maximum Length of parcels - cm							
12.7	264.1	246.3	241.3	228.6	215.9	190.5	152.4	114.3
20.3	264.1	246.3	241.3	228.6	215.9	190.5	152.4	114.3
25.4	264.1	246.3	241.3	228.6	215.9	190.5	152.4	114.3
33.0	264.1	246.3	241.3	228.6	215.9	190.5	152.4	114.3
40.6	264.1	246.3	241.3	228.6	215.9	190.5	152.4	114.3
48.2	254	246.3	241.3	228.6	215.9	190.5	152.4	114.3
55.8	254	246.3	241.3	228.6	203.2	177.8	152.4	114.3
63.5	254	246.3	241.3	228.6	203.2	177.8	152.4	114.3
71.1	254	246.3	241.3	228.6	203.2	177.8	152.4	114.3
78.7	254	246.3	241.3	228.6	203.2	177.8	152.4	114.3
86.3	254	246.3	241.3	228.6	203.2	177.8	152.4	114.3

Table reading method:

- Height of the package = 50 cm
- Width of the package = 80 cm
- Maximum length (approx.) = 177 cm

MAXIMUM WEIGHT PER PIECE MUST NOT EXCEED 70 KG EXCEPT FOR HUM.

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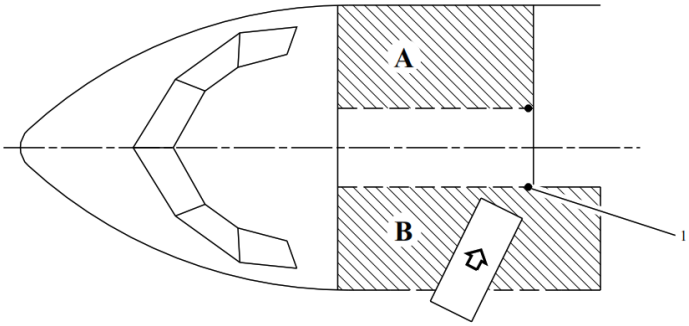
7.6.3 Package Dimensions on ATR42

Forward Cargo Compartment package size dimensions



1) Right Forward Compartment A

Height (cm)	5 to 143	150	155	165
Width (cm)	**Length (cm)**			
5	115	110	110	105
10 to 20	110	110	110	105
25 to 35	105	105	105	
40	105			
45 to 70	95			

2) Left Forward Compartment B

Height (cm)	5 to 143
Width (cm)	**Length (cm)**
5 to 35	180
40 to 50	170
Removing the mast (1)	
40 to 50	180

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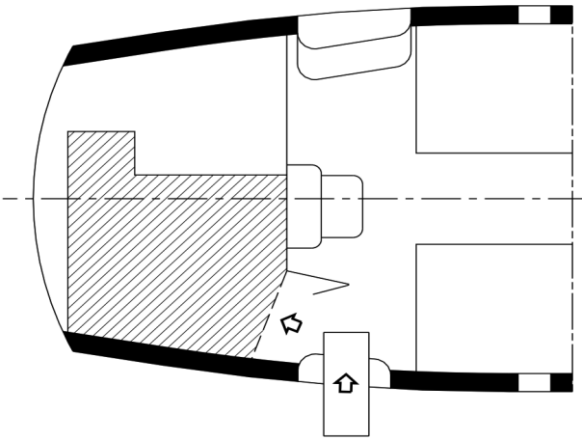
Aft Cargo Compartment package size dimensions



Height (cm)	5 to 50	50 to 80	80 to 100	100 to 110
Width (cm)	**Length (cm)**			
5 to 30	170	160	80	80
35	150	150	80	80
40	150	150	80	80
45	130	130	80	80
50	60	60	60	50

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7.6.4 Package Dimensions on A319

7.6.4.1 Forward Cargo Hold

MAXIMUM PACKAGE DIMENSIONS WITH THE MANDATORY DIVIDER NET INSTALLED

The following tables provide the maximum dimensions of the packages that can be loaded in the largest net section (net section 12) with the mandatory divider net installed.

Package Width (m)	Package Height (H)		
	H ≤ 0.746 m	0.746 m < H ≤ 1.014 m	H > 1.014 m
	Maximum Package Length (m)		
0.000	2.787	2.422	1.909
0.100	2.703	2.329	1.809
0.200	2.623	2.239	1.709
0.300	2.547	2.152	1.609
0.400	2.477	2.069	1.509
0.500	2.427	1.996	1.410
0.600	2.427	1.996	1.372
0.700	2.427	1.996	1.372
0.800	2.427	1.996	1.372
0.900	2.427	1.996	1.372
1.000	2.427	1.996	1.372
1.100	2.427	1.996	1.372
1.200	2.427	1.996	1.372
1.300	2.427	1.996	1.372

MAXIMUM PACKAGE DIMENSIONS WITH THE MANDATORY DIVIDER NET REMOVED

Package Width (m)	Package Height (H)		
	H ≤ 0.746 m	0.746 m < H ≤ 1.014 m	H > 1.014 m
	Maximum Package Length (m)		
0.000	3.650	3.508	3.364
0.100	3.564	3.430	3.301
0.200	3.480	3.357	3.243
0.300	3.399	3.287	3.192
0.400	3.321	3.224	3.149
0.500	3.248	3.166	2.985
0.600	3.180	3.116	2.782
0.700	3.118	3.075	2.579
0.800	3.064	2.921	2.374
0.900	3.019	2.721	2.167
1.000	2.940	2.521	1.956
1.100	2.739	2.320	1.739
1.200	2.538	2.120	-
1.300	2.336	1.919	-
1.400	2.134	1.718	-
1.500	1.931	1.648	-
1.600	1.850	-	-

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7.6.4.2 Aft Cargo Hold

MAXIMUM PACKAGE DIMENSIONS WITH THE MANDATORY DIVIDER NET INSTALLED

The following tables provide the maximum dimensions of the packages that can be loaded into the net section 41 or 42 with the mandatory divider nets installed.

Section 41

Package Width (m)	Package Height (H)		
	H ≤ 0.746 m	0.746 m < H ≤ 1.014 m	H > 1.014 m
	Maximum Package Length (m)		
0.000	2.935	2.590	2.176
0.100	2.842	2.492	2.077
0.200	2.752	2.395	1.979
0.300	2.664	2.298	1.882
0.400	2.579	2.202	1.785
0.500	2.498	2.109	1.691
0.600	2.427	2.018	1.652
0.700	2.427	1.996	1.652
0.800	2.427	1.996	1.652
0.900	2.427	1.996	1.652
1.000	2.427	1.996	1.652
1.100	2.427	1.996	1.652
1.200	2.427	1.996	1.652
1.300	2.427	1.996	1.652
1.400	2.427	1.996	1.652
1.500	2.427	1.996	-
1.600	2.427	1.996	-
1.700	2.427	-	-

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Section 42

Package Width (m)	Package Height (H)		
	H ≤ 0.746 m	0.746 m < H ≤ 1.014 m	H > 1.014 m
	Maximum Package Length (m)		
0.000	3.328	3.014	2.866
0.100	3.142	2.926	2.789
0.200	3.046	2.840	2.715
0.300	2.952	2.758	2.648
0.400	2.858	2.680	2.588
0.500	2.767	2.607	2.537
0.600	2.678	2.541	2.497
0.700	2.592	2.484	2.467
0.800	2.511	2.438	2.437
0.900	2.436	2.402	2.401
1.000	2.370	2.362	2.194
1.100	2.317	2.317	1.985
1.200	2.266	2.262	1.768
1.300	2.211	2.061	-
1.400	2.149	1.859	-
1.500	2.080	1.715	-
1.600	1.996	-	-
1.700	1.978	-	-

MAXIMUM PACKAGE DIMENSIONS WITH THE MANDATORY DIVIDER NETS NOT INSTALLED

Package Width (m)	Package Height (H)		
	H ≤ 0.746 m	0.746 m < H ≤ 1.014 m	H > 1.014 m
	Maximum Package Length (m)		
0.000	4.749	4.600	4.221
0.100	4.675	4.537	4.020
0.200	4.604	4.264	3.819
0.300	4.536	4.064	3.617
0.400	4.472	3.864	3.416
0.500	4.216	3.664	3.214
0.600	4.015	3.464	3.012
0.700	3.815	3.264	2.809
0.800	3.614	3.063	2.605
0.900	3.413	2.863	2.401
1.000	3.212	2.663	2.194
1.100	3.011	2.462	1.985
1.200	2.810	2.262	1.768
1.300	2.608	2.061	-
1.400	2.406	1.859	-
1.500	2.202	1.715	-
1.600	1.996	-	-
1.700	1.978	-	-

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7.6.4.3 Bulk Cargo Hold

Package Width (m)	Package Height				
	0.400 m	0.600 m	0.750 m	0.900 m	1.000 m
	Maximum Package Length (m)				
0.000	3.728	3.663	3.473	2.421	1.720
0.100	3.651	3.582	3.402	2.337	1.620
0.200	3.574	3.502	3.335	2.255	1.520
0.300	3.498	3.424	3.271	2.175	1.421
0.400	3.422	3.348	3.211	2.099	1.321
0.500	3.347	3.274	3.156	2.027	1.228
0.600	3.274	3.204	3.108	1.962	1.228
0.700	3.202	3.137	3.067	1.909	1.228
0.800	3.133	3.077	3.035	1.867	1.228
0.900	3.066	3.023	2.958	1.821	1.228
1.000	3.004	2.977	2.810	1.768	1.228
1.100	2.948	2.940	2.670	1.707	1.228
1.200	2.901	2.901	2.474	1.554	1.228
1.300	2.857	2.836	2.274	1.498	-
1.400	2.809	2.631	2.055	1.498	-
1.500	2.692	2.423	1.805	-	-
1.600	2.528	2.211	1.733	-	-
1.700	2.528	2.153	1.733	-	-

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7.6.5 Package Dimenstions on A320

7.6.5.1 Forward Cargo Hold

MAXIMUM PACKAGE DIMENSIONS WITH THE MANDATORY DIVIDER NET INSTALLED

The following tables provide the maximum dimensions of the packages that can be loaded in the largest net section (net section 12) with the mandatory divider net installed.

Package Width (m)	Package Height (H)		
	H ≤ 0.746 m	0.746 m < H ≤ 1.014 m	H > 1.014 m
	Maximum Package Length (m)		
0.000	3.838	3.581	3.169
0.100	3.740	3.489	3.096
0.200	3.642	3.398	3.026
0.300	3.545	3.310	2.963
0.400	3.449	3.224	2.907
0.500	3.353	3.140	2.859
0.600	3.259	3.061	2.711
0.700	3.166	2.986	2.511
0.800	3.074	2.917	2.310
0.900	2.985	2.855	2.110
1.000	2.899	2.803	1.909
1.100	2.818	2.762	1.708
1.200	2.743	2.689	1.507
1.300	2.677	2.484	1.438
1.400	2.622	2.278	-
1.500	2.566	2.068	-
1.600	2 427	1.996	-

MAXIMUM PACKAGE DIMENSIONS WITH THE MANDATORY DIVIDER NET REMOVED

Package Width (m)	Package Height (H)		
	H ≤ 0.746 m	0.746 m < H ≤ 1.014 m	H > 1.014 m
	Maximum Package Length (m)		
0.000	5.332	5.150	3.912
0.100	5.252	5.080	3.712
0.200	5.174	4.703	3.511
0.300	5.099	4.503	3.311
0.400	5.026	4.302	3.111
0.500	4.672	4.101	2.911
0.600	4.469	3.900	2.711
0.700	4.265	3.699	2.511
0.800	4.061	3.498	2.310
0.900	3.855	3.296	2.110
1.000	3.649	3.094	1.909
1.100	3.441	2.892	1.708
1.200	3.232	2.689	1.507
1.300	3.019	2.484	1.438
1.400	2.802	2.278	-
1.500	2 578	2.068	-
1.600	2 427	1.996	-

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7.6.5.2 Aft Cargo Hold

MAXIMUM PACKAGE DIMENSIONS WITH THE MANDATORY DIVIDER NETS INSTALLED

The following tables provide the maximum dimensions of the packages that can be loaded inthe largest net section (net section 32/41/42) with the mandatory divider nets installed.

Package Width (m)	Package Height (H)		
	H ≤ 0.746 m	0.746 m < H ≤ 1.014 m	H > 1.014 m
	Maximum Package Length (m)		
0.000	4.020	3.776	3.293
0.100	3.924	3.687	3.222
0.200	3.829	3.600	3.155
0.300	3.734	3.515	3.094
0.400	3.641	3.433	3.041
0.500	3.549	3.355	2.911
0.600	3.458	3.280	2.711
0.700	3.370	3.211	2.511
0.800	3.284	3.148	2.310
0.900	3.201	3.093	2.110
1.000	3.123	3.047	1.909
1.100	3.051	3.010	1.708
1.200	2.986	2.836	1.507
1.300	2.930	2.634	1.438
1.400	2.883	2.431	-
1.500	2.759	2.227	-
1.600	2.537	2.021	-
1.700	2.427	1.996	-

MAXIMUM PACKAGE DIMENSIONS WITH THE MANDATORY DIVIDER NETS NOT INSTALLED

Package Width (m)	Package Height (H)		
	H ≤ 0.746 m	0.746 m < H ≤ 1.014 m	H > 1.014 m
	Maximum Package Length (m)		
0.000	5.425	5.247	3.912
0.100	5.346	5.178	3.172
0.200	5.269	4.843	3.511
0.300	5.195	4.643	3.311
0.400	5.124	4.443	3.111
0.500	4.820	4.242	2.911
0.600	4.618	4.042	2.711
0.700	4.415	3.841	2.511
0.800	4.212	3.640	2.310
0.900	4.008	3.440	2.110
1.000	3.804	3.239	1.909
1.100	3.598	3.037	1.708
1.200	3.392	2.836	1.507
1.300	3.184	2.634	1.438
1.400	2.973	2.431	-
1.500	2.759	2.227	-
1.600	2.537	2.021	-
1.700	2.437	1.996	-

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7.6.5.3 Bulk Cargo Compartment

Package Width (m)	Package Height	
	0.400 m	0.600 m
	Maximum Package Length (m)	
0.000	2.155	1.989
0.100	2.100	1.815
0.200	2.053	1.613
0.300	1.957	1.409
0.400	1.757	1.203
0.500	1.556	0.991
0.600	1.355	-
0.700	1.154	-
0.800	0.959	-

LOADING THROUGH THE AFT CARGO DOOR

Package Width (m)	Package Height				
	0.400 m	0.600 m	0.750 m	0.900 m	1.000 m
	Maximum Package Length (m)				
0.000	2.664	2.601	2.585	2.050	1.031
0.100	2.618	2.574	2.497	2.031	0.975
0.200	2.580	2.557	2.384	2.017	0.965
0.300	2.552	2.381	2.269	1.715	0.965
0.400	2.533	2.219	2.149	1.715	-
0.500	2.443	1.965	1.907	1.715	-
0.600	2.313	-	-	-	-
0.700	2.177	-	-	-	-
0.800	2.031	-	-	-	-
0.900	1.809	-	-	-	-

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7.7 CARGO IRREGULARITIES

7.7.1 Damaged Cargo

When cargo is found to be damaged, action must be taken:

1. to assess the extent of the damage;
2. to assess the possible effects of the damage on:
   - the safety of the proposed flight,
   - the safety of handling staff,
   - the shipment itself, including other load, i.e. is it in a fit state to continue its journey;
3. if necessary to remove the damaged item from the aircraft or the remainder of the consignments, etc.;
4. record details of the damage so that proper notification can be given to the aircraft captain and the cargo operations department. These personnel will provide the necessary instructions.

If it is detected during the acceptance phase that the cargo is damaged or not suitable for freight, the cargo is not accepted for transportation.

If the damage is detected at the departure airport during any phase after the acceptance and before transportation, then a damage report is prepared including the information such as damage definition, phase of detection, etc. and then it is ensured that the cargo is rendered suitable for freight upon contacting the customer, if possible. If it is not possible, cargo is returned to the shipper in condition as being recorded.

If the cargo is damaged in the warehouse or under the aircraft and it cannot be assessed in a timely if it is still fit for journey, it should be offloaded. The shipper and the airport of destination should be informed. The cargo should be isolated so that other cargo and the aircraft don't get damaged and necessary precautions should be taken upon considering the risks on the contents of the cargo.

If the cargo is damaged during offloading at the arrival station or at any phase until the delivery process, the standard cargo damage report should be filled, goods should be secured to prevent further damage and departure point should be informed by message.

In all cases if the goods are damaged in a way that can influence on the safety of the flight they must not be accepted for transport.

7.7.1.1 Damaged Cargo Fit for Journey

If damaged cargo is nevertheless considered fit to continue its journey:

1. ensure that all details of the extent, time, location, etc. are recorded on the Damage Report, Loading Instruction/Report, etc.;
2. notify by message the enroute and destination stations of the fact that damage has been recorded and if necessary, give any instructions for the safe handling of the items.

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7.7.1.2 Damaged Cargo not Fit for Journey

If damaged cargo is not fit to continue its journey:

1. remove the packages to a safe place;
2. remove from the normal storage area;
3. amend documents as necessary:
   - Loadsheet,
   - Loading Instruction/Report,
   - Cargo Manifest,
   - Air Waybill;
4. complete an IRP form immediately so that information can be actioned to the shipper, consignee and your company head office.

7.7.2 Pilfered Cargo

If a shipment of cargo has been pilfered or pilferage is suspected, follow the procedures below:

1. inform Amelia Intl's cargo department and security department (contact information presented in ch.11)
2. inform by message the airport of departure and intermediate stations, as necessary. This may enable immediate investigations to take place;
3. complete the Damage Report Form.

Note: The "Details" box should be completed to include as much information regarding the pilferage or suspect pilferage. This may assist in establishing responsibility for pilferage.

7.7.3 Missing Cargo in Contrast to the Manifest

If a certain part or all of the goods stated in the manifest are not received, firstly the departure airport should be warned.

If the origin confirms that the goods were dispatched without any deficiency, necessary inspections should be executed in the ramp area and cargo/mail warehouses and it should be ensured that the aircraft is completely offloaded. In case it becomes evident that the cargo did not reach the station in question, the deficiency should be recorded, and the departure station of the cargo should be informed about the final status.

7.7.4 Excess Cargo in Contrast to the Manifest

In the event of excess cargo apart from the goods defined in the manifest, the origin should be informed, and the cargo should be defined. If the cargo reached the station in question accidentally instead of a different station, the origin point should be informed for the return of the cargo as soon as possible.

7.7.5 Missing Airwaybill

In case that the airway bill is missing at the arrival, the airport of departure should immediately be informed and requested to send the airway bill. If the customs regulations of the state in question permit, the customs proceedings of the cargo can be started with the copy of airway bill until the original AWB is obtained.

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8 DE-ICING AND ANTI-ICING

No aircraft shall attempt takeoff when frozen or freezing contamination is present on or adhering to the wings, propellers, control surfaces or other critical surfaces, therefore aircraft must be free of all frozen contaminants before take-off. This is known as the ICAO 'Clean Aircraft Concept'.

Compliance with this requirement can be achieved by appropriate use of anti-icing or deicing procedures, or where necessary a combination of both.

De-icing and anti-icing shall be performed by properly qualified personnel using specialized equipment and vehicles, as applicable.

The de-icing/ anti-icing program ensures adherence to the Clean Aircraft Concept (CAC). The policies and procedures set in this chapter will results in a clean aircraft through proper treatment of applicable surfaces, using standardized methods of fluid application and done in compliance with specific aircraft limitations, where applicable.

This program would address to commercial and non-commercial operations (like ferry flights, test flights etc.).

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8.1 RESPONSIBILITY AND TRAINING

It is the responsibility of the company contracted for de-icing/ anti-icing to maintain the vehicles, equipment, fluids, training and procedures in accordance with the current edition of relevant SAE standard. They must be clearly designated, trained and qualified.

The responsibility to determine the need for de-icing/ anti-icing before dispatch lies either with contracted de-icing company, or with the Commander.

The responsible de-icing company must:

- Initiates de-icing/anti-icing upon the confirmation of the Commander;
- Make sure personnel and equipment (including fluids and sufficient quantities) are positioned on time (according to local procedures) at the aircraft;
- Make sure adequate facilities for aircraft de-icing/ anti-icing operations are available, if applicable;
- Are responsible for the correct and complete de-icing/anti-icing treatment of the aircraft.
- Inform the Commander before beginning of de-icing/ anti-icing.
- Provide anti-icing code to the Commander.

Note: If not anticipated or timely planned, de-icing/ anti-icing operations might influence punctuality.

The Commander is responsible to ensure that de-icing/ anti-icing performed conforms to the present requirements and those which are specific to the Aircraft type. He holds the final responsibility for accepting the aircraft after de/anti-icing.

Therefore, his instructions concerning the treatment and the fluid mixtures to be used take precedence over local de-icing/ anti-icing procedures.

It is the responsibility of the de-icing operator to ensure that the treatment is performed symmetrically and that on completion all frozen deposits have been removed.

The flight crew is responsible to perform the normal walk around pre-flight inspection in order to note any Aircraft surface contamination and direct any required de-icing/ anti-icing operations.

The ground handling agent releasing the aircraft after de-icing/ anti-icing is responsible for the performance and the verification of the results of the treatment and to report it to the Commander.

Note: The Commander has the ultimate responsibility to determine if the aircraft is clean and that the aircraft is in a condition for safe flight.

It is the responsibility of the de-icing operator to ensure that all frozen deposits are removed from the specified surfaces during the de-icing/ anti-icing process.

De-icing/ anti-icing must not be performed in the absence of flight crew.

8.1.1 Training Requirements

Everyone involved in each step of the de-icing/ anti-icing process must be properly trained and qualified in accordance with current revision of SAE AS6286 Aircraft Ground Deicing/Anti-Icing Training and Qualification Program. These personnel can be de-icing crews, release persons, de-icing managers and supervisors, quality assurance personnel, and other personnel performing similar duties such as de-icing engines or aircraft sensors etc. using hot air.

Companies providing de-icing/ anti-icing services shall have both a Qualification Programme and a Quality Assurance Programme to monitor and maintain an acceptable level of competence.

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8.1.2 When is De/Anti-icing done

De-icing/ anti-icing is done in all places where icing conditions are present.

8.2 AERODROME DE-ICING/ANTI-ICING FACILITIES

The de-icing/ anti-icing operation shall be performed at that part of the airport, where it would not oppose any hazard to the rest of the airport activities, to the aircraft itself, the personnel involved nor to the environment, due to the hazardous nature of the fluids used.

De-icing/anti-icing facilities should include, but are not limited to the following components:

a) de-icing/anti-icing pads for the manoeuvring of aircraft;
b) de-icing/anti-icing system comprising of one or both of the following:
    1) mobile vehicles,
    2) fixed equipment;
c) bypass taxiing capability;
d) environmental run-off mitigation measures;
e) permanent or portable night-time lighting system; and
f) support facilities that may include:
    1) storage tanks and transfer systems for de-icing/anti-icing fluids; and
    2) de-icing crew shelter.

De-icing/anti-icing facilities must be designed in accordance with local environmental rules and regulations. Environmental factors that have to be considered are:

a) protecting the environment against toxic substances;
b) isolating and collecting used glycol and any other de-icing/anti-icing contaminants to prevent run-off into the aerodrome storm drainage system; and
c) recycling used glycol.

The size and number of de-icing/anti-icing facilities at an aerodrome should be determined by at least the following factors:

a) Methods and procedures used
b) Variations in meteorological conditions.
c) Types of aircraft receiving treatment.
d) Minimizing time between de-icing/anti-icing and take-off.
e) Bypass taxi capability.

The primary consideration in determining the location of an aerodrome de-icing/anti-icing facility is the time required to taxi from the facility to the take-off runway. This is because the taxi time begins at the conclusion of the anti-icing process and ends with take-off. The taxi time should be such that throughout the time required for an aircraft to taxi to the runway and take-off, the HOT of the de-icing/anti-icing fluid used is not exceeded. Different factors like environmental issues and considerations, types of fluid applicators, access for mobile de-icing/anti-icing vehicles or other de-icing/anti-icing operations support vehicles, types and size of aircraft required to be de-iced/anti-iced, winter taxi routes in use on the aerodrome, airspace protection and obstacle clearance, safety clearances on the ground and navigation/approach aid clearances on the ground might affect the location of the facility.

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8.3 DE-ICING/ANTI-ICING CHECK PROCEDURES

Each performance of de-icing/ anti-icing must be supervised and checked according to the SAE standards, local procedures and the contract with the local de-icing company.

The Commander is responsible for ensuring that the aircraft complies with the CAC prior to take-off. Certain checks are required before an aircraft can be safely dispatched. These checks can be grouped under three main headings:

a) checks prior to the application of de-icing/anti-icing fluids;
b) checks after the application of de-icing/anti-icing fluids; and
c) special checks.

8.3.1 Checks prior to the application of de-icing/anti-icing fluids

A contamination check shall include all areas (wings, tail, control surfaces, different sensors, pitot tubes, engines, air conditioning inlets and outlets, landing gear, landing gear doors, fuel tank vents, fuselage, flight deck windows, nose and radome area. Any contamination found on the surfaces or components of the aircraft that are critical to safe flight shall be removed by a deicing procedure; this shall be followed by anti-icing treatment when required.

8.3.2 Checks after the application of de-icing/anti-icing fluids

The post de-icing/anti-icing check ensures that the treated surfaces are no longer contaminated and are free of contamination. This check is made visually immediately following the application of de-icing/anti-icing fluids and is carried out by a qualified person in accordance with the approved plan and procedures of the company contracted for de-icing/ anti-icing. This check shall include any part of the aircraft on which a de-icing/anti-icing treatment was performed according to the requirements identified during the contamination check.

The pre-takeoff check, which is the responsibility of the Commander, continuously monitor the weather conditions after the deicing/anti-icing treatment. Prior to takeoff, a flight crew member shall assess whether the applied holdover time is still appropriate and/or if untreated surfaces may have become contaminated. This check is normally performed from inside the flightdeck.

The pre-take-off contamination check is an examination of the critical surfaces for contamination. This check shall be performed when the condition of the critical surfaces of the aircraft cannot be effectively assessed by a pre-take-off check or when the applied HOT has been exceeded. This check may be performed from inside or outside the aircraft, or both, depending on the specific procedures of the company contracted for de-icing/ anti-icing.

The Commander has the responsibility to continually monitor the weather and aircraft condition to ensure compliance with the CAC. If stipulated by the CAA, aircraft manufacturer, or operational specification or if requested by the Commander, an external check of the aircraft's critical surfaces should be conducted by qualified ground personnel.

If the requirement of the CAC cannot be satisfied by either an internal or external check of aircraft critical surfaces, then another de-icing/anti-icing of the aircraft must be accomplished. Special equipment or procedures may be required to carry out this check at night or under severe weather conditions.

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8.3.3 Special Checks

A check for the presence of clear ice, frequently caused by cold-soaked fuel in the wing tanks, may be required during rain or high humidity conditions and for certain types of aircraft. This type of ice is very difficult to detect, especially in conditions of poor lighting or when the wings are wet. Special check procedures are required to detect this type of icing and should be included in the programme of the company contracted for de/anti-icing.

A functional flight control check using an external observer may be required after de-icing/anti-icing depending upon aircraft type. This is particularly important in the case of an aircraft that has been subjected to extreme ice or snow conditions.

8.4 FLUIDS

De-icing/ anti-icing fluid is a chemical product with environmental impact. During fluid handling, avoid unnecessary spillage and comply with local environmental and health laws and the fluid manufacturer's safety data sheet.

Different products shall not be mixed.

All fluids must be properly stowed, handled, applied and fuel sampling checks shall be performed in accordance with the fluid manufacturer's guidelines, health and environmental regulations, with the procedures set in this chapter and with current revision of SAE AS6285.

This table below shows the specifications of the fluids that are permitted to be used on Amelia Intl aircrafts.

Fluid	Consistency	Specifications
Type I	unthickened	SAE AMS 1424 (latest revision)
Type II	thickened	SAE AMS 1428 (latest revision)
Type IV	thickened	SAE AMS 1428 (latest revision)

Amelia Intl does not allow using Alkali Organic Salt-based Aircraft De-Icing Fluid. Although they indeed fulfil above mentioned specifications, there are possible negative effects on flight operation.

Amelia Intl also does not allow using Acetate- or Formate based fluids. That kind of fluid may:

- significantly shorten the Holdover Times of Type II and IV fluids when used in combination with these fluids.
- cause corrosion on aircraft materials.

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8.4.1 Type of Fluids

The contracted de-icing company must ensure that all fluids used, are in accordance with the specifications set in SAE and are manufactured in accordance with the specifications set in SAE.

The appropriate types of fluids (Types I, II, III or IV) are utilized in the proper manner for conditions under which de-icing and anti-icing operations are being conducted, each diluted as required to achieve desired results.

8.4.1.1 Type I Fluids

Type I fluids have a relatively low viscosity which changes mainly as a function of temperature. They are typically used for de-icing purposes although they also have some anti-icing protection capability. These fluids are normally heated when applied and mixed with water. Type I fluid shall never be applied undiluted.

The majority of Type I fluids contain a high percentage of glycol (i.e. ethylene glycol, diethylene glycol, or propylene glycol or a mixture of these glycols) while a minority of Type I fluids are based on other chemicals. The remainder consists of water, corrosion inhibitors, wetting agents, anti-foaming agents and often orange dye. Type I fluids are available in concentrated or diluted (ready-to-use) forms.

Type I fluids must be heated to provide an effective de-icing capability. Concentrated Type I fluids must be diluted with water to achieve a freezing point that is in accordance with the appropriate application procedure.

Note: See SAE document AMS1424 - Deicing/Anti-Icing Fluid, Aircraft SAE Type I (latest version) for more information on Type I fluids. See also the latest versions of any associated sub-documents, for example, SAE AMS1424/1 and SAE AMS1424/2.

8.4.1.2 Type II, III and IV Fluids

Type II, III and IV fluids, contrary to Type I fluids, contain a thickener agent and have, therefore, a higher viscosity which changes as a function of shear force, fluid/water ratio and fluid temperature. Type II, III and IV fluids have better anti-icing properties than Type I fluids.

Type II, III and IV fluids are used in diluted and undiluted forms. The majority of Type II, III and IV fluids contain a significant amount of ethylene glycol, diethylene glycol or propylene glycol. The remainder of the mixture is water, a thickener, corrosion inhibitors, wetting agents and dye (yellow or green for Type II, bright yellow for Type III and green for Type IV). The higher viscosity of the fluid compared to Type I fluid, combined with the wetting agents, results in a thick coating when sprayed on the aircraft.

Type II, III and IV fluids, however, are also used in a diluted condition for de-icing/anti-icing applications at the higher ambient temperatures and low precipitations. For de-icing purposes, the fluid must be heated to ensure a temperature of 60°C minimum at the nozzle.

The airflow, during the take-off roll, exposes these fluids to a shear force that causes a reduction of viscosity, thereby allowing the fluid to flow off the critical portion of the wings prior to rotation so that the aerodynamic performance of the aircraft is not adversely affected.

Falling precipitation will steadily dilute all types of anti-icing fluids until either the fluid coating freezes or frozen deposits start to accumulate. This is called “fluid failure”. This can be avoided by using a fluid dilution with a higher mixture providing a higher film thickness and, hence, a greater volume of fluid can be applied. The greater volume of fluid can absorb more freezing precipitation before its freezing point is reached and therefore its holdover time is increased. This protective advantage becomes important during freezing precipitation conditions when longer taxi times are expected. In general, Type IV fluids provide longer protection than Type II or III fluids.

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Note: See SAE document AMS1428 - Fluid, Aircraft De-Icing/Anti-Icing, Non-Newtonian (Pseudoplastic), SAE Types II, III, and IV (latest version) for more information on Type II, III, and IV fluids.

Caution: Type III fluid should not be used on Amelia Intl aircraft.

8.4.2 Heating

De-icing/ anti-icing fluids shall be heated according to the fluid manufacturer's guidelines.

For Type I fluids, water loss may cause undesirable aerodynamic effects.

For Type II / IV fluids thermal exposure and/ or water loss may cause a reduction in fluid viscosity leading to lower holdover times.

Caution: Avoid unnecessary heating of fluid in vehicle tanks. Prolonged or repeated heating of fluids (directly or indirectly) may result in loss of water which can lead to performance degradation of the fluid.

8.4.3 Storage

Tanks dedicated for the storage of de-icing/ anti-icing fluids shall be used. They shall be conspicuously labelled to avoid contamination. As a minimum, the following information must be identified: type of fluid, fluid product name, fluid concentration (or mixture).

Storage tanks shall be of a material of construction compatible with the de-icing/ anti-icing fluid, as specified by the fluid manufacturer (corrosion resistant steel, plastic, etc). Care should be taken to avoid using dissimilar metals in contact with each other, as galvanic couples may form and degrade thickened fluids.

The storage temperature limits shall comply with the fluid manufacturer's guidelines.

The physical properties of the fluid may be degraded when the fluid is subjected to chemical contamination, including rust in tanks, improper transportation or storage, excessive heating or when exposed to excessive shear forces during fluid transfer or use.

The stored fluid shall be checked routinely to ensure that no degradation/contamination has occurred.

8.4.4 Application

Application equipment shall be cleaned thoroughly before being initially filled with de-icing/ anti-icing fluid in order to prevent fluid contamination.

De-icing/ anti-icing fluid in trucks shall not be heated in confined or poorly ventilated areas.

The integrity of the fluid at the spray nozzle shall be checked periodically.

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8.4.5 Holdover Time

Holdover time (HOT) is the estimated time for which an anti-icing fluid will prevent the formation of frost or ice and the accumulation of snow on the protected surfaces of an aircraft. These HOTs are generated by testing fluids under a variety of temperature and precipitation conditions simulating the range of weather experienced in winter.

Numerous factors that can affect the de-icing/anti-icing performance and HOTs of de-icing/anti-icing fluids have been identified. These factors include, but are not limited to:

a) type and rate of precipitation;
b) ambient temperature;
c) relative humidity;
d) wind direction and velocity; including jet blast;
e) aircraft surface (skin) temperature; and
f) de-icing/anti-icing fluid (type, fluid/water ratio, temperature).

The HOT begins with the start of the de-icing/anti-icing application in the case of a one-step operation, or the beginning of anti-icing in a two-step process and ends after an elapsed time equal to the appropriate HOT. A pilot will monitor the time elapsed from the start of the HOT identified and ensure that taxi and take-off are achieved before the HOT elapses. If not, additional de-icing/anti-icing will be required.

At very low ambient temperatures (below approximately –30°C), some fluids are no longer effective and other methods of frozen contamination removal must be used. Fluids should not be used in temperatures that are below their lowest operational use temperature.

Holdover times are summed in Holdover time tables and shall be provided by the de-icing company to its employees and the HOTs given on these tables should not exceed those given by the regulator. Current HOT tables are published by both TC and the FAA on their public websites, and can be found using the term ‘aircraft ground de-icing’ in the website search function.

If needed, the de-icing company may contact ground@aeh.flyamelia.com for a copy of the HOT tables which are used by Amelia Intl crew.

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8.5 PROCEDURES

The procedures below shall be done in accordance with SAE AS6285.

When aircraft surfaces are contaminated, they shall be de-iced prior to dispatch. When there is a risk of contamination of the aircraft surfaces at the time of dispatch, these surfaces shall be anti-iced. If both de-icing and anti-icing are required, the procedure may be performed in one or two steps. The selection of a one- or two-step process depends upon weather conditions, available equipment, available fluids and the holdover time to be achieved.

One-step procedure: This is performed using heated deicing/anti-icing fluids. The correct fluid concentration is chosen with regard to desired holdover time, dictated by OAT and weather conditions. The fluid used to deice the aircraft remains on the aircraft surfaces to provide limited anti-ice capability.

Two-step procedure: This process involves both de-icing and anti-icing procedure. The correct fluid(s) shall be chosen with regard to OAT. The second step is performed with anti-icing fluid to protect the surfaces. This fluid and its concentration are chosen with regard to desired holdover time, which is dictated by OAT and weather conditions (see application tables). The second step shall be performed before the first step fluid freezes, if necessary, area by area. Service providers shall ensure the first step fluid and the second step fluid used on aircraft are compatible.

Where refreezing occurs following the initial treatment, both the first and second step must be repeated.

Note: Slippery conditions can exist on the ground or equipment following the de-icing/ anti-icing procedure.

> Where holdover time is critical, a two-step procedure using undiluted Type II or IV fluid for the second step should always be considered.

De-icing/anti-icing is generally carried out by using heated fluids dispensed from spray nozzles mounted on specially designed de-icing/anti-icing trucks. It is also possible to perform Aircraft ground de-icing/anti-icing alternatives as presented in ch. 8.8. General techniques are outlined in ch. 8.5.1 & 8.5.2 below. General limits and precautions are presented in the ch. 8.5.3.

Spraying usually starts with the fuselage. Aircraft must be treated symmetrically.

All actions related to de-icing/ anti-icing must be coordinated between the station responsible and the flight crew.

The Commander has the final decision and may give additional instructions.

In all cases both sides of the aircraft must be treated identically (same areas, same amount and type of fluid, same mixture strength), even if the contamination is only present on one side.

The procedures presented in the subchapters below will be efficient and the aircraft will be clean, through proper treatment of surfaces.

Note: There are no aircraft type related limits or specifics that should be applied for Amelia Intl aircraft by the ground staff performing the de-icing/ anti-icing. Standard/ general de-icing/ anti-icing procedures shall be applied.

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8.5.1 De-icing

Ice, snow, slush or frost may be removed from aircraft surfaces by heated fluids, mechanical methods, alternate technologies or combinations thereof.

Ice, snow or frost dilutes the fluid. Apply enough hot de-icing fluid ensure that re-freezing does not occur and all contaminated fluid is driven off.

a) Fuselage: Spray along the top centre-line and then outboard. Ensure that it is clear of snow, slush or ice. Hoarfrost may be allowed. Avoid spraying directly on windows.
b) Wings, horizontal stabilizers and elevators**:** Spray from the leading edge to the trailing edge. Do not spray from the rear. Start at the highest point of the surfaces and work to the lowest parts, i.e. on most aircraft start at the wing tip and work towards the wing root.
c) Vertical surfaces**:** Start at the top and work downwards, spraying from the leading edge toward the trailing edge.
d) Landing gear and wheel bays: The application of de-icing fluid in this area shall be kept to a minimum. De-icing fluid shall not be sprayed directly onto brakes and wheels.
Note: Accumulations such as blown snow may be removed by other means than fluid (mechanically, air blast, heat etc). However, where deposits have bonded to surfaces, they can be removed by the application of hot air or by spraying with hot de-icing fluids.
e) Engine/ APU**:** Avoid spraying fluids into engines or APU inlets. Deposits of snow shall be removed mechanically from engine intakes prior to departure. Any frozen deposits that have bonded to either the lower surface of the intake, the fan blades including the rear side, or propellers, shall be removed by hot air or other means recommended by the engine manufacturer. Ensure that engines are free to rotate before start up and that the front and back of the fan blades are free of ice. Air-conditioning bleed systems must be switched off during de-icing/anti-icing operations when engines or APUs are running. Do not spray directly onto exhausts or thrust reversers.
f) Nose/ Radome area and flight deck windows: Avoid spraying directly onto pitot heads, static ports or air stream direction detector probes and angle of attack sensors.
Type I fluid/ water mixture, hot air or manual methods of removal (such as squeegees or brushes) are recommended.
When thickened fluids are used, avoid spraying near flight deck windows, as fluid can cause a severe loss of visibility during flight.
Any thickened fluid remaining on nose areas where it could blow back onto the windscreens should be removed prior to departure, using squeegees or equivalent.
If flight deck windows are contaminated with thickened fluids use water or an approved windshield cleaner (use of a low freezing point windscreen washing fluid is recommended when OAT is at or below 0 °C (32 °F)). **Caution:** Prior to cleaning of Flight Deck Windows ensure that the window heating system is switched off.
g) Vents and outlet valves: Avoid spraying directly onto electronic bay vents, fuel tank vents, air outlet valves or any other similar type of opening.

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8.5.1.1 Removal of Frost and Light Ice

A nozzle setting giving a solid cone (fan) spray should be used.

Removal of local area contamination

When no precipitation is falling or expected, a "local area" de-icing may be carried out under the below mentioned or similar conditions.

In some cases, a full or complete de-icing is not necessary. When the presence of frost and/or ice is limited to localised areas on the surfaces of the aircraft and no holdover time is likely to be required, only the contaminated areas will require treatment.

This type of contamination will generally be found on the wing and/ or stabilizer leading edges or in patches on the wing and/or stabilizer upper surfaces.

Spray the affected area(s) with a heated fluid/water mixture suitable for a One-Step Procedure. Then spray the same area(s) on the other side of the aircraft.

Underwing De-icing Procedure

Treatments must be symmetrical and may include flaps lower surfaces. Spray the affected areas with a heated fluid/ water mixture suitable for a One-Step Procedure or a Two Step Procedure, as required and then spray the same areas under the other wing.

Caution: Underwing frost and ice are usually caused by very cold fuel in the wing tanks. Use a fluid/ water mixture with a higher concentration of glycol than is usually required by the OAT to prevent re-freezing.

8.5.1.2 Removal of Snow

A nozzle setting sufficient to flush off deposits and minimise foam production is recommended. Foam could be confused as snow.

The procedure adopted will depend on the equipment available and the depth and type of snow; i.e. light and dry or wet and heavy. In general, the heavier the deposits the heavier the fluid flow that will be required to remove it effectively and efficiently from the aircraft surfaces.

For light deposits of both wet and dry snow, similar procedures as for frost removal may be adopted.

Wet snow is more difficult to remove than dry snow and unless deposits are relatively light, selection of high fluid flow will be found to be more effective.

Under certain conditions it will be possible to use the heat, combined with the hydraulic force of the fluid spray to melt and subsequently flush off frozen deposits.

However, where snow has bonded to the aircraft skin, the procedures detailed for Removal of Ice should be utilised.

Heavy accumulation of snow will always be difficult to remove from aircraft surfaces and vast quantities of fluid will invariably be consumed in the attempt. Under these conditions, serious consideration should be given to removing the worst of the snow manually before attempting a normal de-icing procedure.

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8.5.1.3 Removal of Ice

Heated fluid shall be used to break the ice bond. The method makes use of the high thermal conductivity of the metal skin.

A stream of hot fluid is directed at close range onto one spot at an angle of less than 90°, until the aircraft skin is just exposed. The aircraft skin will then transmit the heat laterally in all directions raising the temperature above the freezing point thereby breaking the adhesion of the frozen mass to the aircraft surface. By repeating this procedure, a number of times, the adhesion of a large area of frozen snow or glazed ice can be broken. The deposits can then be flushed off with either a low or high flow, depending on the amount of the deposit.

Non-metallic surfaces (e.g. composites) have a lower heat transfer than metallic surfaces.

De-icing may take longer and more fluid may be needed.

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8.5.2 Anti-icing

Ice, snow, slush or frost will, for a period of time, be prevented from accumulating on aircraft surfaces by the application of anti-icing fluids.

Anti-icing fluid shall be applied to the aircraft surfaces when freezing rain, snow or other freezing precipitation may adhere to the aircraft at the time of aircraft dispatch.

For effective anti-icing, an even layer of sufficient thickness of fluid is required over the prescribed aircraft surfaces, which are clean (free of frozen deposits). For longer anti-icing protection, Type II or Type IV fluid should be used.

The high fluid pressures and flow rates normally associated with de-icing are not required for this operation and, where possible, pump speeds should be reduced accordingly. The nozzle of the spray gun should be adjusted to provide a medium spray.

Note: Type I fluids provide limited holdover effectiveness when used for anti-icing purposes. Little benefit is gained from the minimal holdover time generated.

8.5.2.1 Anti-icing Application Strategy

The process should be continuous and as short as possible. Anti-icing should be carried out as near to the departure time as operationally possible in order to utilise maximum holdover time.

The anti-icing fluid shall be distributed uniformly and with sufficient thickness over all surfaces to which it is applied. In order to control the uniformity, all horizontal aircraft surfaces shall be visually checked during application of the fluid. For usage of Type I HOT in all conditions, including active frost, an additional minimum of 1 l/m2 of heated Type I fluid mixture with a nozzle temperature of at least 60 °C (140 °F) must be applied to the surfaces after all frozen contamination is removed. This application is necessary to heat the surfaces, as heat contributes significantly to the Type I fluid holdover times.

For Type II and IV fluids which flow readily over the surfaces, the correct amount is indicated by fluid just beginning to run off the leading and trailing edges. For fluids which form a more static fluid layer, the minimum quantity required will typically be 1l/ m^2, applied in an even layer across the surface.

For further guidance on amount of fluid refer to the current HOT tables.

Spray from the leading edge to the trailing edge. Do not spray from the rear.

Start at the highest point of the surfaces and work to the lowest parts, i.e. on most aircraft start at the wing tip and work towards the wing root. On vertical surfaces, start at the top and work down.

The following surfaces shall be treated:

- wing upper surfaces including leading edges and upper control surfaces;
- horizontal stabilizer upper surfaces including leading edges and elevator upper surfaces;
- vertical stabilizer surfaces including the rudder surfaces (both sides);
- when necessary, fuselage upper surfaces depending upon the amount and type of precipitation (especially important on centre-line engine aircraft).

Caution: Anti-icing fluids may not flow evenly over wing leading edges, horizontal and vertical stabilizers. These surfaces should be checked to ensure that they are properly coated with fluid.

It is the responsibility of the de-icing operator to ensure that the surfaces mentioned above are free of frost, ice, slush and snow, prior to the start of the anti-icing treatment. Ensure that on completion of the treatment these surfaces are fully covered with an adequate layer of anti-icing fluid.

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8.5.3 General Limits and Precautions

- Ice, snow, slush and frost shall be removed from aircraft surfaces prior to dispatch or prior to anti-icing.
- Do not use tools to scrape or chip ice from surfaces.
- Do not attempt to loosen ice by using physical force.
- When using hot air do not overheat structure or system components, especially plastic parts.

Applying de-icing/anti-icing fluids close to the skin of the aircraft avoids surface damage and minimizes heat loss. Depending on the type of application equipment and spray pattern, direct spraying at angles approaching 90 degrees should be avoided. Instead, the operator should use a lower angle such as 45 degrees or less to avoid damaging aircraft surfaces. Spraying directly at the nose cone, cockpit windows and fuselage windows should also be avoided to ensure that the pilot's view is not impeded by fluid runoff during the aircraft acceleration phase, and to avoid damage to the nose cone and to mitigate the risk of the window cracking from thermal shock. Unique procedures for different levels of contamination and to accommodate aircraft design differences may be required.

Any specific parts requiring treatment should be mentioned prior to the start of the procedure.

Fluid application and aircraft-related limits such as correct fluid mixtures, fluid temperature, pressure at the nozzle, application procedure and spraying techniques have to be observed.

Under no circumstances shall an aircraft that has previously been anti-iced receive a further coating of anti-icing fluid directly on top of the contaminated fluid film. When it becomes necessary to apply another coating of anti-icing fluid, the aircraft surfaces must first be de-iced before the final coating of anti-icing fluid is applied. It should be ensured that any residues from previous treatment are flushed off. Performing only the anti-icing step should not be permitted.

Caution: Repeated applications of Type II, III or IV fluids, without an application of Type I or hot water, may cause fluid to collect in aerodynamically quiet areas, cavities, and gaps, which can dry out and leave dried residues. These dried residues may rehydrate following a period of high humidity and/or rain conditions, and then freeze in temperatures below zero. It may also block or impede critical flight control systems and may require removal prior to flight. After several applications of de-icing/anti-icing, it is advisable to check aerodynamically quiet areas and cavities for dried residues of thickened-icing/anti-icing fluid. Consult airframe manufacturers for details and procedures.

8.5.3.1 Application Limits

Under no circumstances shall an aircraft that has been anti-iced receive a further coating of anti-icing fluid directly on top of the contaminated film. If an additional treatment is required before flight, a complete de-icing/anti-icing shall be performed. Ensure that any residues from previous treatment are flushed off. Anti-icing only is not permitted.

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8.5.3.2 Type of Fluid Precautions

- Type I fluids supplied as concentrates for dilution with water prior to use shall not be used undiluted. For exceptions refer to fluid manufacturer's documentation.
- The freezing point of the Type I fluid / water mixture used either as second step (Anti-Icing) in a two-step procedure or in a one-step procedure (De-icing/Anti-Icing) must be at least 10°C below the OAT or wing skin temperature (whichever is lower).
  Type II and IV fluids used as de-icing/anti-icing agents may have a lower temperature application limit of -25°C. The application limit may be lower, provided a 7°C buffer is maintained between the freezing point of the neat fluid and outside air temperature or wing skin temperature (whichever is lower). In no case shall this temperature be lower than the lowest operational use temperature (LOUT).

8.5.3.3 General Procedure Precautions

- With regard to hold-over time provided by the applied fluid, the objective is that it will be equal to or greater than the estimated time from start of anti-icing to start of take-off based on existing weather conditions.
- De-icing/ anti-icing treatments shall be symmetrical, that is, left-hand and right-hand side of the aircraft shall receive the same treatment, even when only one side of the aircraft is contaminated. Anti-icing treatments shall always cover the entire wing and the entire horizontal stabilizer/elevator on both sides of the aircraft.
- Engines are normally shut down but may remain running at idle during remote/ off-gate de-icing/ anti-icing operations. Air conditioning and/or APU air shall be selected OFF, or as recommended by the airframe and engine manufacturer.
- De-icing/ anti-icing fluids shall not be sprayed directly on wiring harnesses and electrical components (receptacles, junction boxes, etc.), onto brakes, wheels, exhausts, or thrust reversers.
- De-icing/ anti-icing fluid shall not be directed into the orifices of pitot heads, static ports or directly onto airstream direction detectors probes/angle of attack airflow sensors.
- All reasonable precautions shall be taken to minimise fluid entry into engines, APU, other intakes/ outlets and control surface cavities.
- De-Icing/ anti-icing fluid shall not be directed into engine inlets or directly onto engines probes / sensors.
- Fluids shall not be directed onto flight deck or cabin windows as this can cause crazing of acrylics or penetration of the window seals.
- Any forward area from which fluid can blow back onto windscreens during taxi or subsequent take-off shall be free of residues prior to departure.
- If Type II or IV fluids are used, all traces of the fluid on flight deck windows must be removed prior to departure, particular attention being paid to windows fitted with wipers. De-icing/ anti-icing fluid may be removed by rinsing with an approved cleaner and a soft cloth.
- Landing gear and wheel bays shall be kept free from build-up of slush, ice or accumulations of blown snow.
- When removing ice, snow, slush or frost from aircraft surfaces care shall be taken to prevent it entering and accumulating in auxiliary intakes or control surface hinge areas. Remove snow from wings, stabiliser, aileron and elevators by spraying from the leading edge to the training edge. Start at the highest point of the surfaces and work to the lowest parts, i.e. on most aircraft start at the wing tip and work towards the wing root.
- Ice can build up on aircraft surfaces when descending through dense clouds or precipitation during an approach. When ground temperatures at the destination are low, it is possible for flaps to be

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retracted and for accumulations of ice to remain undetected between stationary and moveable surfaces. It is therefore important that these areas are checked prior to departure and any frozen deposits are removed.

- Under freezing fog conditions, the rear side of the fan blades shall be checked for ice build-up prior to start-up. Any deposits discovered shall be removed by directing air from a low flow hot air source, such as a cabin heater, onto the affected areas.

8.6 COMMUNICATION

The person communicating with the flight crew shall have a basic knowledge of the English language in order to communicate properly.

Communication between the Commander and the de-icing crew will usually be achieved using a combination of printed forms and verbal communication. For treatments carried out after aircraft doors are closed, use of flight interphone (headset) or VHF radio will usually be required.

8.6.1 Communication Prior to Starting De/Anti-icing Treatment

Before de-icing/ anti-icing, the Commander shall be requested to confirm the treatment required (areas to be de-iced, anti-icing requirements, special de-icing procedures).

Before fluid application starts, the Commander shall be requested to configure the aircraft for de-icing/ anti-icing (surfaces, controls and systems, as per aircraft type requirements).

The de-icing crew shall wait for confirmation that the above has been completed before commencing the treatment.

8.6.2 Post De/Anti-icing Communication

An aircraft shall not be dispatched for departure after a de-icing/ anti-icing operation until the Commander has been notified of the type of de-icing/ anti-icing operation performed.

This basic information with weather data will assist the Commander in estimating an appropriate HOT from the range provided in the HOT table distributed by Amelia Intl.

The Anti-icing Code shall be provided by a qualified person at the completion of the treatment, indicating that the checked surfaces are free of ice, frost, snow, and slush, and in addition includes the necessary information to allow the Commander to estimate the holdover time to be expected under the prevailing weather conditions.

When a treatment is interrupted for a significant period of time (e.g. truck runs out of fluid) the flight crew shall be informed stating the reason, the action to be taken and the estimated time delay.

When continuing the treatment, the previously treated surfaces must be fully de-iced and anti-iced again, when the holdover time of the treatment from before the interruption is not sufficient.

The company carrying out the de-icing/ anti-icing treatment shall be responsible for the treatment and pass all information about the treatment to the company carrying out the post de-icing/ anti-icing check.

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8.6.2.1 Transmission of the Anti-icing Code to the Commander

Upon completion of the de-icing/anti-icing procedure and the associated check of the aircraft, the flight crew shall be provided with information about the final step of the de-icing/anti-icing process which ensures that the aircraft is in compliance with the CAC; this information shall be given in the form of an anti-icing code.

The anti-icing code which is to be recorded shall be communicated to the flight crew in the following sequence:

a) the fluid type (i.e., Type I, II, III, or IV);
b) the fluid name (manufacturer and brand/trade name) of the Type II, III, or IV anti-icing fluid, if applicable;
   Note: Communication of this element is not required for Type I fluid.
c) the concentration of fluid (dilution) within the neat fluid/water mixture, expressed as a percentage by volume for Type II, III, or IV (i.e., 100% ("neat") = 100% fluid, 75% = 75% fluid and 25% water, 50% = 50% fluid and 50% water)
   Note: Communication of this element is not required for Type I fluid.
d) the local time (hours and minutes), either for a:
   - one-step de-icing/anti-icing operation: at the start of the final treatment; or
   - two-step de-icing/anti-icing operation: at the start of the second step (anti-icing);
e) the date in the following format: day, month, year (DDMMMYY (e.g. 31JAN18 = January 31, 2018)
   Note: This element is required for record keeping and is optional for flight crew notification.
f) the statement, "Post-de-icing/anti-icing check completed."

If two different companies are involved in the de-icing/ anti-icing treatment and post de-icing/ anti-icing check, it shall be clearly defined which company is responsible for carrying out the post de-icing/ anti-icing check and providing the Commander with the Anti-icing Code. It must be ensured that the Anti-icing Code is not given before the post de-icing/ anti-icing check is completed.

8.6.2.2 All Clear Signal

The flight crew shall receive a confirmation from the ground crew that all de-icing/ anti-icing operations are complete, that the aircraft is clean of contamination and that all personnel and equipment are clear, before reconfiguring or moving the aircraft.

The ''All clear signal'' is received by the ground staff after de-icing/anti-icing completion and prior to moving the aircraft, indicating that all de-icing related equipment is away from the aircraft.

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8.6.3 Example

8.6.3.1 Example 1 of an off-gate de-icing/anti-icing communication procedures script

- GC = Ground crew
- P = Pilot

GC: “Standing by to de-ice. Confirm brakes set and treatment required.”

P: “Brakes set, request… (specify type of de-icing/anti-icing fluid and areas to be treated.)”

GC: “Hold position and confirm aircraft configured.”

P: “Aircraft configured, ready for de-icing.”

GC: “De-icing starts now.”

GC: “De-icing on (areas treated) complete. Advise when ready for information.”

GC: “Anti-icing code is: Type of fluid (Type I, II, III, or IV), percentage of fluid (except for Type I), HOT time started at (time), date).”

GC: “Post de-icing check completed, personnel and equipment clear of aircraft.”

8.6.3.2 Example 2 of the format to be used for flight crew notification

“Type IV/full fluid name/100%/1400 hrs LT/20 March 2018”;

“Type II/full fluid name/75%/1200 hrs LT/02 January 2017”; or

“Type I/0800 hrs LT/04 April 2018”.

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8.7 SAFETY DURING AIRCRAFT DE/ANTI-ICING OPERATIONS

De-icing/ anti-icing operations must be performed with extreme caution to prevent injury to personnel and damage to aircraft and equipment. De-icing/ anti-icing is not permitted during the fueling process

8.7.1 Personnel Safety

The safety factors given below are designed to ensure that in the performance of de-icing/ anti-icing an aircraft, the safety of personnel performing the task is not compromised.

a) Appropriate personal protection equipment should be checked for serviceability and worn by all personnel engaged in de-icing/ anti-icing operations.
b) Cones should be removed as necessary to allow access to the aircraft surfaces. Replace the cones on completion of the de-icing/ anti-icing operation, if the aircraft is not departing.
c) To prevent injury, caution must be taken when filling de-icing/ anti-icing vehicles with hot fluid.
    1. When handling de-icing/ anti-icing fluids, personnel should understand and follow the precautions contained in the fluid manufacturer's Safety Data Sheets.
    2. Before de-icing/ anti-icing operations start, de-icing/ anti-icing should be coordinated between the de-icing/ anti-icing and ground handling personnel.
    3. De-icing/anti-icing fluids may be very hot; 60°C/140°F or even warmer. To prevent injuries, ground personnel, passengers and flight crew shall be prevented from walking near an aircraft that is being deiced.
    4. Slippery conditions can exist on the ground and on the equipment surfaces during and following the de-icing/ anti-icing processes. Caution should be exercised, particularly in low humidity or nonprecipitating weather conditions, due to increased slipperiness following the use of glycol that is not diluted by the weather element.
    5. When de-icing/ anti-icing on a stand, all ramp equipment, including steps, should be clear of the area to be sprayed to avoid contamination by fluid.
    6. Care should be taken to prevent the transfer of fluid by foot onto GSE (e.g., steps, jet bridges), interiors of aircraft and aircraft cargo holds.

Refer to ch. 4.15.1 for detailed safety precautions for ramp operations in winter conditions.

8.7.2 Open Basket Operations

The following minimum precautions should be taken when deicing from an open basket:

a) Ensure that the fall restraint device is securely anchored and the safety harness is always worn when deicing from an open basket.
b) Ensure that the basket door or safety chain is securely latched.
c) Caution should be taken to avoid exposure to a running Auxiliary Power Unit (APU).

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8.7.3 Closed Basket Operations

The following minimum precautions should be taken:

a) Ensure the seat belt is always worn.
b) Ensure the windows of the cabin are clean. Check wiper(s) for condition and check window washer fluid level.
c) Ensure the door of the cabin is securely closed.
d) Ensure there are no obstructions to the cabin heater/ventilation system

8.8 AIRCRAFT GROUND DE-ICING/ANTI-ICING ALTERNATIVES

The cost and environmental impact of de-icing/anti-icing with conventional fluids has driven the demand for developing alternate de-icing technologies. It is fundamental that even though the methods are different compared to the methods used with conventional fluids, the basic objectives of de-icing/anti-icing processes still apply. Conventional and more recent technologies employ different principles such as forced air systems for de-icing of aircraft. This method can be used in conjunction with de-icing fluid applications to eliminate large amounts of frozen contamination.

8.8.1 Forced air

Forced air de-icing is another method to blow frozen contaminants or snow off aircraft surfaces. Some forced air de-icing systems use high-pressure air or an air/fluid mix while others are based on delivering large air volumes at low pressure. The effectiveness of the method depends on a number of factors, including air stream velocity, air stream temperature, operator training and experience, outside air temperature and other weather conditions.

The use of forced air is subject to approval from the aircraft manufacturer.

8.8.2 Mechanical techniques

Mechanical means can also be used to remove contamination from aircraft surfaces. These techniques can include: ropes where two persons seesaw back and forth across the surface being cleaned; brooms with which the aircraft surface is swept clean of light contamination; or scrapers, which should be used in a pulling motion from leading edge to trailing edge, or from the highest point of the wing chamber to the lowest.

8.8.3 Heated hangar

Placing an aircraft inside a heated hangar is a good technique to ensure that the aircraft is de-iced and all critical surfaces are clean of contamination. If precipitation is present, anti-icing requirements must be addressed. Depending on the facility, it may be possible to apply anti-icing fluids before exiting the hangar. The HOT begins immediately after the start of the anti-icing application while the aircraft is still in the hangar as the fluid runs off and thins.

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8.9 STATION QUALITY ASSURANCE

Amelia Intl is a member of the IATA's De-Icing/Anti-Icing Quality Control Pool (DAQCP). As a member Amelia Intl has access to de-icing/anti-icing reports that the quality pool performs around the world.

The audits are mandated by the DAQCP to Amelia Intl on a yearly basis. The checklists used are standardized by IATA. DAQCP contains a list of stations and providers audited by members and also gives restrictions if any are active.

The list that contains overview of all relevant findings and restrictions is distributed to the NPFO and the NPGO, during the winter season. Based on this list the NPFO and/or the NPGO will issue an OI to inform the crew on relevant matters.

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9 DANGEROUS GOODS

9.1 GENERAL

Transportation of Dangerous Goods is authorized by the CAA of Republic of Slovenia (SPA.DG.100), which is reflected on the Air Operator's Certificate.

In designing the Amelia Intl policies, procedures and instructions with regard to dangerous goods transportation the following documents were taken into account:

a) ICAO Standards and Recommended Practices
   - Annex 18 to the Chicago Convention, last effective edition;
   - Technical Instructions for the Safe Transport of Dangerous Goods by Air, Doc 9284AN/905 (ICAO TI), last effective edition including addenda and corrigenda;
   - Emergency Response Guidance for Aircraft Incidents involving Dangerous Goods, Doc 9481-AN/928), last effective edition.

b) European Community (EC) Regulation
   - AIR OPS - Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council.

c) National Regulation of Republic Slovenia
   - Aviation Act (ZLet), Official Gazette RS No. 81/10 with subsequent amendments;
   - Transport of Dangerous Goods Act (ZPNB), Official Gazette RS No. 33/06 with subsequent amendments.

d) IATA Regulations
   - IATA Dangerous Goods Regulations (IATA DGR), last effective edition including addenda;
   - IOSA Standards Manual (ISM), last effective edition.

Amelia Intl is committed to follow all regulatory changes as published in IATA Dangerous Goods Regulations. The current edition of IATA DGR is applicable and revisions of documents are made accordingly.

Amelia Intl holds the latest revision of DGR.

Contracted ground and cargo handlers are obliged to keep their DGR or ICAO TI current.

Note: *The IATA Dangerous Goods Regulations (DGR) meets the requirements of the latest applicable ICAO Technical Instructions and the Regulations for the Safe transport of Radioactive Material published by the international Atomic Energy Agency (IAEA).*

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9.1.1 Policy

AMELIA INTL IS AUTHORIZED FOR THE TRANSPORT OF DANGEROUS GOODS EXCEPT RADIOACTIVE MATERIAL ON ALL AIRCRAFT ON ITS AOC.

Only shipments, which meet all the requirements and limitations detailed in the regulations can be carried.

General transport requirements:

- All dangerous goods must be properly classified, documented, certified, described, packed, marked and labelled.
- All persons involved must be trained according to the ICAO TI and DGR.
- No dangerous goods may be transported by air unless those goods are accepted, handled and transported in accordance with the ICAO TI and DGR.
- No dangerous goods is permitted as checked/ carry-on baggage or on person, unless permitted as in chapter 9.1.5.

For Amelia Intl all markings and transport documents related to the shipment of dangerous goods must be in English. If required by the State of origin they may also be additionally provided in other language(s).

9.1.1.1 Exception

The DG provisions contained in IATA DGR and ICAO TI do not apply for dangerous goods carried by an aircraft as follows:

1. to provide, during flight, medical aid to a patient or to preserve organs intended for use in transplantation (ch. 9.1.7);
2. to provide veterinary aid or a humane killer for an animal during flight;
3. contained within items of excess baggage provided that:
   - the excess baggage has been consigned as cargo by or on behalf of a passenger;
   - the dangerous goods may only be those that are permitted by and in accordance with OM-A 9.1.5 to be carried in checked baggage;
   - the excess baggage is marked with the words “Excess baggage consigned as cargo.
4. Dangerous goods in Operator’s property that are required on board an aircraft in accordance with pertinent airworthiness requirements and operating regulations but excluding the carriage of replacements) are permitted on board Amelia Intl flights; (see OM-A 9.1.6);
5. Dangerous goods that are permitted to be carried by passengers and crew as listed in IATA DGR Table 2.3.A. (see OM-A 9.1.5) are permitted on board Amelia Intl flights;

There are several more possibilities when certain DG are not subject to the ICAO TI and DGR, but they are not presented in this manual as they are not relevant for the aircraft types and/or the type of operation performed under Amelia Intl’s AOC.

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9.1.1.1.1 Radioactive Materials Exception

The DG Regulations do not apply to any of the following:

a) radioactive material implanted or incorporated into a person or live animal for diagnosis or treatment;
b) radioactive material in or on a person who is to be transported for medical treatment because the person has been subject to accidental or deliberate intake of radioactive material or to contamination, taking into account the necessary radiological protection measures with respect to other passengers and crew, subject to approval by the operator:
c) radioactive material in consumer products which have received regulatory approval, following their sale to the end user;
d) natural material and ores containing naturally occurring radionuclides (which may have been processed), provided the activity concentration of the material does not exceed 10 times the values specified in IATA DGR Table 10.3.A or calculated in accordance with IATA DGR 10.3.2.2(a) and 10.3.2.3 to 10.3.2.5. For natural materials and ores containing naturally occurring radionuclides that are not in secular equilibrium, the calculation of the activity concentration must be performed in accordance with IATA DGR 10.3.2.4. For the chapters and further explanation contact the Dangerous Goods Manager;
e) non-radioactive solid objects with radioactive substances present on any surfaces in quantities not in excess of the limit specified in the definition of contamination in ch. 9.1.11.

9.1.1.2 Exemption

In instances of extreme urgency or when other forms of transport are inappropriate or when full compliance with the prescribed requirements is contrary to the public interest, the States concerned may grant exemption from the provisions of the DGR provided that in such instances every effort is made to achieve an over-all level of safety in transport which is equivalent to the level of safety provided for in the DGR.

Although exemptions are most likely to be granted for the carriage of dangerous goods that are not permitted in normal circumstances, they may also be granted in other circumstances, such as when the packaging to be used is not provided for by the appropriate packing method or the quantity in the packaging is greater than that permitted.

The states concerned in this case are: States of origin, operator, transit, overflight and destination. For the State of overflight, if none of the criteria for granting an exemption are relevant, an exemption may be granted based solely on whether it is believed that an equivalent level of safety in air transport has been achieved.

A copy of the exemption issued by all States concerned must be provided to Amelia Intl and must accompany the consignment. If the exemption documents are not in English, an accurate translation in English must accompany the consignment.

The following must be part of the exemption:

a) the UN/ID number, proper shipping name and classification;
b) packaging and quantity applicable;
c) any special handling required and any special emergency response information;
d) name and address of shipper and consignee;
e) airports of departure, transit and destination and the proposed dates of transport;
f) duration of validity of the exemption.

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9.1.2 Responsibility

9.1.2.1 Responsibility of Shipper

The shipper is legally responsible for the preparation of the dangerous goods. This preparation includes identification, classification, packing, marking, labelling and of producing the needed documentation.

He is also responsible to obtain customs clearance.

The shipper must ensure that his personnel is fully trained and qualified. He must provide such information to their employees as will enable them to carry out the functions for which they are responsible with regard to the transport of dangerous goods by air.

The shipper must comply with IATA DGR.

9.1.2.2 Responsibility of the Operator

Amelia Intl is responsible for:

- Acceptance;
- Storage;
- Loading/ unloading;
- Inspection;
- Provision of information, including to passengers, at cargo areas and emergency response information
- Reporting;
- Retention of records;
- Training of the personnel involved in the transport of DG;
- Provide the appropriate Information/ Notification to Commander (NOTOC).
- Must provide in the operations and/or other appropriate manuals, information to employees so as to enable flight crews and other employees to carry out the functions for which they are responsible with regard to dangerous goods. This information must also be available to the handling staff where applicable.

Note: *Even though many of Amelia Intl's responsibilities (e.g acceptance, storage, loading/unloading, handling) are performed by subcontracted ground service providers, it is the ultimate responsibility of Amelia Intl that all the tasks are performed in accordance with the procedures described in the manuals and in IATA DGR. This will be done mainly through the compliance system by auditing and by monitoring the relevant ground handlers. Duties and responsibilities of the ground service providers related to DG are listed in the chapters below.*

9.1.2.3 Responsibility of General Cargo and Mail Acceptance and Handling Personnel at Cargo Terminals

- Displaying notices at cargo acceptance points providing information about transport of dangerous goods to shippers and agents.
- Inspection for hidden hazards and recognition of undeclared dangerous goods.
- Dealing with dangerous goods that are found damaged or leaking during processing for transport.
- Reporting undeclared or mis-declared dangerous goods detected in general cargo or mail and dangerous goods incidents or accidents in accordance with reporting requirements.

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9.1.2.4 Responsibility of Dangerous Goods Acceptance and Handling Personnel at Cargo Terminals

- Displaying notices at cargo acceptance points providing information about transport of dangerous goods to shippers and agents.
- Acceptance procedures for dangerous goods are carried out as required by IATA DGR.
- Dangerous goods are stored and segregated as required by IATA DGR.
- Inspection procedures during the processing of dangerous goods for transport are carried out as required by IATA DGR.
- Dealing with dangerous goods that are found damaged or leaking during processing for transport.
- Completion of written information to the commander (NOTOC) for dangerous goods and distribution to Load Control.
- Retention of DG documentation on the ground.
- Recognition of undeclared dangerous goods.
- Reporting occurrences of mis-declared dangerous goods, dangerous goods discovered not to have been loaded, segregated, separated and secured in accordance with IATA DGR requirements, dangerous goods discovered to have been carried without information (NOTOC) been provided to the Commander and dangerous goods incidents or accidents.

9.1.2.5 Responsibility of Load Planners and Ramp Handling Supervisors and Personnel Responsible for Loading/ Unloading an Aircraft

- Completion of written information to the commander (NOTOC) in accordance with Load Plan (inserting loading positions for dangerous goods).
- Dangerous goods are loaded, segregated, stowed and secured on an aircraft as required by the procedures in this manual.
- Inspection procedures for dangerous good before and during loading and at unloading are carried.
- Dealing with dangerous goods that are found damaged or leaking during processing for transport.
- Presentation of NOTOC for dangerous goods loaded on board to the commander for signature.
- Generation of NOTOC to Amelia Intl's Operations Control Centre by e-mail.
- Retention of DG documentation on the ground.
- Recognition of undeclared dangerous goods.
- Reporting occurrences of undeclared dangerous goods, dangerous goods discovered not to have been loaded, segregated, separated and secured in accordance with IATA DGR requirements, dangerous goods discovered to have been carried without information (NOTOC) been provided to the Commander and dangerous goods incidents or accidents.

9.1.3 Forbidden Dangerous Goods

There are three types of forbidden dangerous goods:

1) Forbidden under any circumstances: usually they are presented in the list of dangerous goods without an UN number, in all columns is written forbidden and there are no special provisions.
2) Forbidden unless approved: usually they are presented in the list of dangerous goods as forbidden but a special provision exists. In this case an approval from certain States will be required.
3) Forbidden unless exempted: Some dangerous goods must not be carried on aircraft unless exempted by States as presented in ch. 9.1.1.2. For the list of these dangerous goods refer to the DGR.

It is the responsibility of the shipper to obtain all needed approvals from relevant states.

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9.1.4 Hidden Dangerous Goods

Cargo declared under a general description may contain hazardous articles that are not apparent. Such articles may also be found in baggage.

The acceptance staff and handling agent's staff must be adequately trained to identify and detect dangerous goods presented as general cargo.

Besides a proper training provided to the cargo acceptance and passenger check-in staff, they are provided with the following information contained in the GOM:

a) general descriptions that are often used for items in cargo or in passengers' baggage which may contain dangerous goods;
b) other indications that dangerous goods may be present (e.g. labels, marks); and
c) those dangerous goods which may be carried by passengers in accordance with ch. 9.1.5.

Examples of hidden dangerous goods are provided in IATA DGR.

Special attention should be given to certain groups of passengers (diving groups, construction workers etc.) whose reason for travel may also be an indication of them carrying of DG.

When shippers offer packages containing commodities like aircraft spare parts or AOG spares, aerosols, automobile parts, medical supplies etc (additional examples available in IATA DGR) they must be asked to check their consignments against the class definitions in the IATA DGR and confirm by endorsement of the “Air Waybill”, e.g. “Not restricted”, that no part of the consignment contains dangerous goods.

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9.1.5 Provision for Dangerous Goods Carried by Passenger or Crew

Everyday items that are classified as dangerous goods but are required for practical reasons may be carried by passengers or crew. But they are subject to specific requirements and controlled quantities as written in the table below which is written in accordance with IATA Table 2.3.A.

The regulations specify what items may be carried on person or packed in carry-on or checked baggage.

The items that are listed in Table 2.3.A but are in excess of permitted quantities and those being classified as dangerous goods but not listed in Table 2.3.A must be refused.

Dangerous goods including excepted packages of radioactive material, **are forbidden for carriage** by passengers or crew:

- As or in checked baggage;
- As or in-carry baggage: or
- On their person;

except as permitted in the table below for personal use.

An item or article that contains more than one item of dangerous goods must meet the provisions of all applicable entries from the table below. In example an avalanche rescue backpack containing lithium batteries and gas cartridges must meet the applicable provisions for avalanche rescue backpack and for Portable Electronic Devices (PED) (Including Medical Devices) Containing Batteries.

The entry in the table that most appropriately describes the item or article must be applied. For example, electronic cigarettes must meet the requirements set out for electronic cigarettes and not for portable electronic devices containing batteries.

IMPORTANT: *Baggage intended to be carried in the cabin that is placed in the cargo compartment, due to different reasons, must only contain dangerous goods permitted in checked baggage. When baggage intended as carry-on is taken by the ground handler, or any crew member and placed into the cargo compartment for carriage, the ground handler/crew member must confirm with the passenger that dangerous goods which are only permitted in carry-on baggage have been removed.*

Dangerous goods for which there is an exception from IATA DGR have not been included in the table. The following dangerous goods are not subject to IATA DGR:

a) radiopharmaceuticals contained within the body of a person as the result of medical treatment;
b) energy efficient lamps when in retail packaging intended for personal or home use as described in IATA DG ch. 1.2.11.

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The pilot-in-command must be informed of the location		
Permitted in or as CARRY-ON baggage		
Permitted in or as CHECKED baggage		
The approval of the operator is required		
A. DANGEROUS GOODS ITEMS THAT ARE FORBIDDEN FOR CARRIAGE by ICAO/IATA		
	Disabling devices such as mace, pepper spray, etc. containing an irritant or incapacitating substance are forbidden on one's person, in checked and carry-on baggage.	**FORBIDDEN**
	Electro shock weapons (e.g. Tasers) containing dangerous goods such as explosives, compressed gases, lithium batteries, etc. are forbidden in carry-on baggage or checked baggage or on the person.	**FORBIDDEN**
	Security-type attaché cases, cash boxes, cash bags, etc. incorporating dangerous goods, such as lithium batteries and/or pyrotechnic material, are totally forbidden, except as provided in ch. *9.1.5.1*	**FORBIDDEN**
	Liquid oxygen systems, even in personal portable medical oxygen devices are forbidden for transport. ***Note***: *Liquid oxygen systems should not be confused with portable oxygen concentrators.*	**FORBIDDEN**
	Premixing burner (''Blue flame) lighter or ''Cigar'' lighters are forbidden on one's person, in carry-on or checked baggage.	**FORBIDDEN**
	Strike anywhere matches are forbidden on one's person, in carry-on or checked baggage. ***Note:*** *Safety matches are permitted on one's person only.*	**FORBIDDEN**
	Baggage with installed lithium batteries non-removable batteries exceeding- 0.3 g lithium metal or 2.7. Wh	**FORBIDDEN**
	Lithium Battery-Powered lighters powered by a lithium ion or lithium metal battery (e.g. laser plasma lighters, tesla coil lighters, flux lighters, arc lighters and double arc lighters) without a safety cap or means of protection against unintentional activation	**FORBIDDEN**

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The pilot-in-command must be informed of the location					
Permitted in or as CARRY-ON baggage					
Permitted in or as CHECKED baggage					
The approval of the operator is required					
B. DANGEROUS GOODS ITEMS ACCEPTABLE WITH OPERATOR'S APPROVAL					
	Ammunition, securely packed (in Division 1.4S, UN 0012 or UN 0014 only), in quantities not exceeding 5 kg gross weight per person for that person's own use. Allowances for more than one person must not be combined into one or more packages. ***Note:*** *Ammunition with explosive or incendiary projectiles is forbidden.*	**YES**	**YES**	**NO**	**NO**
	Avalanche rescue backpack, one (1) per person, containing a cartage of compressed gas in Division 2.2. May also be equipped with a pyrotechnic trigger mechanism containing less than 200 mg net of Division 1.4S. The backpack must be packed in such a manner that it cannot be accidentally activated. The airbags within the backpacks must be fitted with pressure relief valves.	**YES**	**YES**	**YES**	**NO**
	Camping stoves and fuel containers that have contained a flammable liquid fuel with empty fuel tank and/or fuel container. *See ch. 9.1.5.11 for details.*	**YES**	**YES**	**NO**	**NO**
	Chemical Agent Monitoring Equipment, when carried by staff members of the Organization for the Prohibition of Chemical Weapons on official travel. *See ch. 9.1.5.12 for details.*	**YES**	**YES**	**YES**	**NO**
	Dry Ice (Carbon dioxide, solid), in quantities not exceeding 2.5 kg per person when used to pack perishables not subject to the IATA DGR in checked or carry-on baggage provided the baggage (package) permits the release of carbon dioxide gas. Checked baggage must be marked "dry ice" or "carbon dioxide, solid" and with the net weight of dry ice or an indication that there is 2.5 kg or less dry ice.	**YES**	**YES**	**YES**	**NO**
	Gas cartridges, small, non-flammable containing carbon dioxide or other suitable gas in Division 2.2. Up to two (2) small cartridges fitted into a self-inflating personal safety device, intended to be work by a person, such as a life jacket or vest. Not more than two (2) devices per passenger and up to two (2) spare small cartridges per device, not more than four (4) cartridges up to 50 mL water capacity for other devices. *See ch 9.1.5.10 for details.*	**YES**	**YES**	**YES**	**NO**

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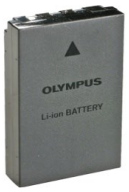
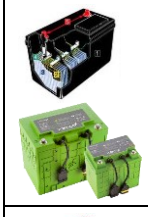
The pilot-in-command must be informed of the location					
Permitted in or as CARRY-ON baggage					
Permitted in or as CHECKED baggage					
The approval of the operator is required					
B. DANGEROUS GOODS ITEMS ACCEPTABLE WITH OPERATOR'S APPROVAL					
	**Lithium batteries, spare/loose** with a Watt-hour rating exceeding 100 Wh but not exceeding 160 Wh for consumer electronic devices and portable medical electronic devices (PMED) or a lithium content exceeding 2g but not exceeding 8 g for PMED only. Maximum of two spare batteries in carry-on baggage only. These batteries must be individually protected to prevent short circuits. ***Note:*** *For Lithium batteries, spare/loose including power banks see Batteries, spare/ loose.*	**YES**	**NO**	**YES**	**NO**
	Lithium battery-powered electronic devices. Lithium ion batteries for portable (including medical) electronic devices, a Wh exceeding 100 Wh but not exceeding 160 Wh. For PMED only, lithium metal batteries with a lithium content exceeding 2 g but not exceeding 8g. Devices in checked baggage must be completely switched off and must be protected from damage	**YES**	**YES**	**YES**	**NO**
 	Mobility Aids: Battery-powered wheelchairs or other similar mobility services **with non-spillable wet batteries or with batteries which comply with IATA DGR special provisions A123 or A199.** *See ch. 9.1.5.7 for details.*	**YES**	**YES**	**NO**	**YES**
	**Mobility Aids:** Battery-powered wheelchairs or other similar mobility services **with Spillable batteries or with Lithium Batteries** *See ch. 9.1.5.8 and ch. 9.1.5.9 for details.*	**YES**	**YES**	**NO**	**YES**
	Mobility Aids: Battery-powered wheelchairs or other similar mobility devices with **lithium ion batteries** where the design of the mobility aid does not provide adequate protection for the battery(ies) *See ch. 9.1.5.9 (c)(2) for details.*	**YES**	**NO**	**YES**	**YES**

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The pilot-in-command must be informed of the location					
Permitted in or as CARRY-ON baggage					
Permitted in or as CHECKED baggage					
The approval of the operator is required					
B. DANGEROUS GOODS ITEMS ACCEPTABLE WITH OPERATOR'S APPROVAL					
	Oxygen or air, gaseous, cylinders required for **medical use.** The cylinder must not exceed 5kg gross weight. ***Note:*** *Liquid oxygen systems are forbidden for transport*.	**YES**	**YES**	**YES**	**YES**
	Thermometer or barometer, mercury filled carried by a representative of a government weather bureau or similar official agency. *See ch. 9.1.5.13 for details.*	**YES**	**NO**	**YES**	**YES**
	Security-type equipment *See ch. 9.1.5.1*	**YES**	**YES**	**NO**	**NO**

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The pilot-in-command must be informed of the location					
Permitted in or as CARRY-ON baggage					
Permitted in or as CHECKED baggage					
The approval of the operator is required					
C. DANGEROUS GOODS ITEMS ACCEPTABLE WITHOUT OPERATOR'S APPROVAL					
	Alcoholic beverages, when in retail packaging containing more than 24% but no more than 70% alcohol by volume in receptacles not exceeding 5 L, with total net quantity per person of 5 L. ***Note:*** *Alcoholic beverages containing 24% or less alcohol by volume are not subject to any restrictions.*	**NO**	**YES**	**YES**	**NO**
	Baggage with installed lithium batteries: - Non-removable batteries. Batteries must contain no more than 0.3 g lithium metal or for lithium ion must not exceed 2.7 Wh - removable batteries. Batteries must be removed if baggage is to be checked in. Removed batteries must be carried in the cabin.	**NO**	**YES**	**YES**	**NO**
	Batteries, spare/loose, including lithium batteries, non-spillable batteries, nickel-metal hydride batteries and dry batteries (see ch. 9.1.5.3), for portable electronic devices must be carried in carry-on baggage only. Articles which have the primary purpose as a power source, e.g. power banks are considered as spare batteries. These batteries must be individually protected to prevent short circuits. Lithium metal batteries: the lithium metal content must not exceed 2 g (see 9.1.5.3). Lithium ion batteries: the Watt-hour rating must not exceed 100 Wh (see 9.1.5.3). Each person is limited to a maximum of 20 spare batteries. *For more than 20 spare batteries, **Operator's approval is needed** Non-spillable batteries: must be 12 V or less and 100 Wh or less. Each person is limited to a maximum of 2 spare batteries (see 9.8.5.3).	**NO***	**NO**	**YES**	**NO**
	E-cigarettes (including e-cigars, e-pipes, other personal vaporizers) containing batteries must be individually protected to prevent accidental activation. *See ch. 9.1.5.3 for details.*	**NO**	**NO**	**YES**	**NO**

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The pilot-in-command must be informed of the location					
Permitted in or as CARRY-ON baggage					
Permitted in or as CHECKED baggage					
The approval of the operator is required					
C. DANGEROUS GOODS ITEMS ACCEPTABLE WITHOUT OPERATOR'S APPROVAL					
	Fuel cells containing fuel, powering portable electronic devices (e.g. cameras, cellular phones, laptop computers and camcorders). *See ch. 9.1.5.6 for details.*	**NO**	**NO**	**YES**	**NO**
	Fuel cell cartridges, spare for portable electronic devices. *See ch. 9.1.5.6 for details.*	**NO**	**YES**	**YES**	**NO**
	Gas cylinders, non-flammable, non-toxic worn for **operation of mechanical limbs.** Also, spare cylinders of a similar size if required to ensure an adequate supply for the duration of the journey.	**NO**	**YES**	**YES**	**NO**
	Hair styling equipment containing a hydrocarbon gas cartrige, up to one (1) per passenger or crew member, provided that the safety cover is securely fitted over the heating element. This hair styling equipment must not be used on board the aircraft. ***Note:*** *Spare gas cartridges for such hair styling equipment are not permitted in checked or carry-on baggage.*	**NO**	**YES**	**YES**	**NO**
	Insulated packagings containing refrigerated liquid nitrogen (Dry Shipper) fully absorbed in a porous material containing only non-dangerous goods.	**NO**	**YES**	**YES**	**NO**
	Internal combustion or fuel cell engines must meet requirements set in *ch. 9.1.5.2*	**NO**	**YES**	**NO**	**NO**

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The pilot-in-command must be informed of the location					
Permitted in or as CARRY-ON baggage					
Permitted in or as CHECKED baggage					
The approval of the operator is required					
C. DANGEROUS GOODS ITEMS ACCEPTABLE WITHOUT OPERATOR'S APPROVAL					
	Lithium batteries: Portable electronic devices (PED) containing lithium metal or lithium ion cells or batteries, including medical devices such as portable oxygen concentrators (POC) and consumer electronics such as cameras, mobile phones, laptops and tablets, when carried by passenger or crew for personal use- *See ch. 9.1.5.3 for details.* For lithium metal batteries the lithium metal content must not exceed 2 g and for lithium ion batteries the Watt-hour rating must not exceed 100 Wh. Devices in checked baggage must be completely switched off and must be protected from damage. Each person is limited to a maximum of 15 PED. Baggage equipped with a lithium battery, other than lithium button cells, the battery must be removable. If offered as checked baggage the battery must be removed and carried in the cabin. *The operator must approve the carriage of more than 15 PED.	**NO***	**YES**	**YES**	**NO**
	Matches, safety (one small packet) or a small cigarette lighter that does not contain unabsorbed liquid fuel, other than liquefied gas, intended for use by an individual when carried on the person. **Lighter fuel and lighter refills** <u>are not permitted</u> on one's person or in checked or carry-on baggage. *For details see ch. 9.1.5.14* ***Note:*** *''Strike anywhere'' matches, Blue flame" or "Cigar" lighters or lighters powered by a lithium battery without a safety cap or means of protection against unintentional activation are forbidden.*	**NO**	**ON ONE'S PERSON**		**NO**

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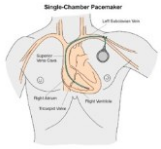
The pilot-in-command must be informed of the location					
Permitted in or as CARRY-ON baggage					
Permitted in or as CHECKED baggage					
The approval of the operator is required					
C. DANGEROUS GOODS ITEMS ACCEPTABLE WITHOUT OPERATOR'S APPROVAL					
	Non-radioactive medicinal or **toilet articles** (including aerosols) such as hair sprays, perfumes, colognes and medicines containing alcohol; and **Non-flammable, non-toxic (division 2.2.) aerosols**, with no subsidiary hazard, for sporting or home use. The total net quantity of non-radioactive medicinal or toiletry articles and non-flammable, non-toxic (Division 2.2) aerosols must not exceed 2 kg or 2 L and the net quantity of each single article must not exceed 0.5 kg or 0.5 L. Release valves on aerosols must be protected by a cap or other suitable means to prevent inadvertent release of the contents.	**NO**	**YES**	**YES**	**NO**
	Permeation Devices Only permeation devices used for calibrating air quality monitoring equipment. These devices must meet the *requirements set in ch. 9.1.5.*5	**NO**	**YES**	**NO**	**NO**
	**Radioisotopic cardiac pacemakers** or other devices, including those powered by lithium batteries, implanted into a person or fitted externally.	**NO**	**ON ONE'S PERSON**		**NO**
	Specimens, non-infectious packed with small quantities of flammable liquids must meet the *requirements in ch. 9.1.5.4.*	**NO**	**YES**	**YES**	**NO**
	Thermometer, medical or clinical, which contains mercury, one (1) per passenger for personal use, when in its protective case.	**NO**	**YES**	**NO**	**NO**

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9.1.5.1 Attaché cases, Cash Boxes/Bags

Security type equipment such as attaché cases, cash boxes, cash bags, etc. Incorporating dangerous goods as part of this equipment, for example lithium batteries or pyrotechnic material, may be carried as checked baggage only if the equipment complies with the following:

a) The equipment must be equipped with an effective means of preventing accidental activation.
b) If the equipment contains an explosive article, this article or substance must be excluded from Class 1 by the appropriate national authority of the State of Manufacture in compliance with IATA DGR 3.1.7.1.
c) If the equipment contains lithium cells or batteries, these cells or batteries must comply with the following restrictions:
    1. for lithium metal cell, the lithium content is not more than 1 g;
    2. for a lithium metal battery, the aggregate lithium content is not more than 2 g;
    3. for lithium ion cells, the Watt-hour rating is not more than 20 Wh;
    4. for lithium ion batteries, the Watt-hour rating is not more than 100 Wh;
    5. each cell or battery is of the type proven to meet the requirements of each test in the UN Manual of Tests and Criteria, Part III, Section 38.3.
d) If the equipment contains gases to expel dye or ink, only gas cartridges and receptacles, small, containing gas with a capacity not exceeding 50 mL, containing no constituents subject to IATA DG Regulations other than a Division, are allowed. The release of gas must not cause extreme annoyance or discomfort to crew members so as to prevent the correct performance of assigned duties. In case of accidental activation all hazardous effects must be confined within the equipment and must not produce extreme noise.
e) Security type equipment that is defective or that has been damaged is forbidden for transport.

9.1.5.2 Internal Combustion or Fuel Cells Engines

Internal combustion or fuel cell engines or machinery being shipped either separately or incorporated into a vehicle, machine or other apparatus, without batteries or other dangerous goods, may be carried as cargo or baggage only provided that:

a) for **flammable *liquid* powered** engines:
    1. The engine is powered by a fuel that does not meet the classification criteria for any class or division (i.e. non-flammable fuel such as biodiesel); or
    2. The fuel tank of the vehicle, machine or other apparatus has never contained any fuel, or the fuel tank has been flushed and purged of vapours and adequate measures taken to nullify the hazard;
    3. the shipper/passenger has provided the operator with written or electronic documentation stating that a flushing and purging procedure has been followed; and
    4. The entire fuel system of the engine has no free liquid that is subject to DGR and all fuel lines are sealed or capped or securely connected to the engine and vehicle, machinery or apparatus.
b) for **flammable *gas*-powered** engines:
    1. the entire fuel system must have been flushed, purged and filled with a non-flammable gas or fluid to nullify the hazard;
    2. the final pressure of the non-flammable gas used to fill the system does not exceed 200 kPa at 20°C;
    3. the passenger/shipper has made prior arrangements with the operator; and
    4. the passenger/shipper has provided the operator with written or electronic documentation stating that the flushing, purging and filling procedure has been followed and that the final contents of the engine(s) have been tested and verified to be non-flammable.

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9.1.5.3 Portable Electronic Devices (Including Medical Devices) Containing Batteries

Battery-powered electronic device means the equipment or apparatus for which the batteries will provide electrical power for its operation. These devices (PED), which may include medical devices such as portable oxygen concentrators (POC) and consumer electronics such as cameras, mobile phones, laptops and tablets containing batteries when carried by passengers or crew for personal use, which should be carried in carry-on baggage. Batteries and heating elements must be isolated in portable electronic devices capable of generating extreme heat, by removal of the heating element, battery or other components. These provisions apply to dry batteries, nickel-metal hydride batteries, lithium batteries and wet, non-spillable batteries. Additional specific requirements for lithium batteries and wet, non-spillable batteries are set out below.

If devices are carried in checked baggage:

a) measures must be taken to protect the device from damage and to prevent unintentional activation;
b) the device must be completely switched off (not in sleep or hibernation mode).

Electronic cigarettes including e-cigars and other personal vaporisers containing batteries must be in carry-on baggage only. Recharging of these devices and/or batteries on board the aircraft is not permitted, and measures must be taken to prevent accidental activation.

Spare batteries must be individually protected to prevent short circuits by placement in the original retail packaging or by otherwise insulating terminals, e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch and carried in carry-on baggage only. Each person is limited to a maximum of 20 spare batteries; however, the operator may approve the carriage of more than 20 spare batteries. This is valid for all but the non-spillable wet batteries.

Additional requirements for <u>lithium batteries:</u>

a) each installed or spare battery must not exceed:
   1. for lithium metal or lithium alloy batteries, a lithium content of not more than 2 g; or
   2. for lithium ion batteries, a watt-hour rating of not more than 100 Wh.
b) batteries must be of a type that meets the requirements of the UN Manual of Tests and Criteria, Part III, subsection 38.3;
c) each person is limited to a maximum of 15 PED, however the operator may approve the carriage of more than 15 PED;
d) articles containing lithium metal or lithium ion cells or batteries, the primary purpose of which is to provide power to another device, e.g. power banks, are permitted in carry-on baggage only. These articles must be individually protected to prevent short circuits by placement in the original retail packaging or by otherwise insulating terminals, e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch;
e) electronic cigarette lighters (see also above for electronic cigarettes) powered by lithium batteries, the following conditions must also be met:
   1. only lighters with a safety cap or means of protection against unintentional activation are permitted on one's person;
   2. recharging of these devices and/or batteries on board the aircraft is not permitted, and measures must be taken to prevent accidental activation.
f) Baggage with installed lithium batteries, with a lithium metal content exceeding 0.3 g or a Watt-hour rating exceeding 2.7 Wh:
   1. if the baggage is to be checked in, the lithium battery must be removed from the baggage and the lithium battery must be carried in the cabin; or
   2. the baggage must be carried in the cabin.
   3. Baggage where lithium battery exceeds the limits in (f) and cannot be removed, is forbidden for carriage.

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Additional requirements for non-spillable wet batteries:

Each person is limited to a maximum of two spare batteries in carry-on baggage only, subject to the following conditions:

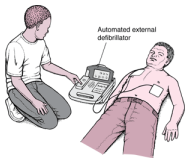
a) batteries must meet the requirements of Special Provision A67 and must not contain any free or unabsorbed liquid;
b) the voltage of each battery must not exceed 12 V and the Watt-hour rating must not exceed 100 Wh;
c) each person is limited to a maximum of two spare batteries in carry-on baggage only and each spare battery must be protected from short circuit by insulation of the battery terminals.

Lithium Battery-Powered Electronic Devices & Spare Lithium Batteries

Spare lithium batteries including articles containing lithium metal or lithium ion cells or batteries, the primary purpose of which is to provide power to another device, e.g. power banks, are permitted in carry-on baggage as follows:

a) no more than 2 lithium ion batteries with a watt-hour rating exceeding 100 Wh but not exceeding 160 Wh or 2 lithium metal batteries, with a lithium content exceeding 2 g but not exceeding 8 g. Lithium metal batteries are only permitted for portable medical electronic devices (PMED), such as automated external defibrillators (AED), portable oxygen concentrators (POC) and continuous positive airway pressure (CPAP);
b) spare batteries must be individually protected so as to prevent short circuits (by placement in original retail packaging or by otherwise insulating terminals, e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch);
c) batteries must be of a type that meet the requirements of the UN Manual of Tests and Criteria, Part III, subsection 38.3. No more than two individually protected spare batteries per person may be carried.

Examples of Medical devices containing batteries

 Automated External Defibrillator (AED)	Nebulizer	Continuous Positive Airway Pressure (CPAP)	Portable Oxygen Concentrators (POC)

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9.1.5.4 Non-Infectious Specimens Packed with Small Quantities of Flammable Liquids.

In checked or carry-on baggage non-infectious specimens, such as specimens of mammals, birds, amphibians, reptiles, fish, insects and other invertebrates containing small quantities of flammable liquid provided that the requirements set below are met:

a) specimens are:
   1. wrapped in paper towel and/or cheesecloth moistened with alcohol or an alcohol solution and then placed in a plastic bag that is heat-sealed. Any free liquid in the bag must not exceed 30 mL; or
   2. placed in vials or other rigid containers with no more than 30 mL of alcohol or an alcohol solution;
b) the prepared specimens are then placed in a plastic bag that is then heat sealed;
c) the bagged specimens are then placed inside another plastic bag with absorbent material then heat sealed;
d) the finished bag is then placed in a strong outer packaging with suitable cushioning material;
e) the total quantity of flammable liquid per outer packaging must not exceed 1 L; and
f) the completed package is marked “Scientific research specimens, Not Restricted Special Provision A180 applies”.

The words “not restricted” and the special provision number A180 must be included in the description of the substance on the Air Waybill as required by 8.2.6, when an Air Waybill is issued.

9.1.5.5 Permeation Devices

In checked baggage only permeation devices for calibrating air quality monitoring equipment. These devices must comply with the requirements of Special Provision as stated below.

Permeation devices that contain dangerous goods and that are used for purposes of calibrating air quality monitoring devices are not subject to DGR when carried as cargo provided the following requirements are met:

a) each device must be constructed of a material compatible with the dangerous goods it contains;
b) the total quantity of dangerous goods in each device is limited to 2 mL and the device must not be liquid full at 55°C;
c) each permeation device must be placed in a sealed, high impact-resistant, tubular inner packaging of plastic or equivalent material. Sufficient absorbent material must be contained in the inner packaging to completely absorb the contents of the device. The closure of the inner packaging must be securely held in place with wire, tape or other positive means;
d) each inner packaging must be contained in a secondary packaging constructed of metal, or plastic having a minimum thickness of 1.5 mm. The secondary packaging must be hermetically sealed;
e) the secondary packaging must be securely packed in strong outer packaging. The completed package must be capable of withstanding, without breakage or leakage of any inner packaging and without significant reduction in effectiveness:
   1. the following free drops onto a rigid, non-resilient, flat and horizontal surface from a height of 1.8 m:
      - one drop flat on the bottom;
      - one drop flat on the top;
      - one drop flat on the long side;
      - one drop flat on the short side;
      - one drop on a corner at the junction of three intersecting edges; and
   2. a force applied to the top surface for a duration of 24 hours, equivalent to the total weight of identical packages if stacked to a height of 3 m (including the test sample).

      Note: *Each of the above tests may be performed on different but identical packages.*

f) the gross weight of the completed package must not exceed 30 kg.

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9.1.5.6 Fuel Cells contained in Portable Electronic Devices

Fuel cells used to power portable electronic devices (for example cameras, cellular phones, laptop computers, and camcorders), and spare fuel cell cartridges are acceptable under the following conditions:

a) Fuel cells and fuel cell cartridges may only contain flammable liquids, corrosive substances, liquefied flammable gas, water-reactive substances or hydrogen in metal hydride.
b) Refueling of fuel cells on board an aircraft is not permitted except that the installation of a spare cartridge is allowed.
c) The maximum quantity of fuel in any fuel cell or fuel cell cartridge must not exceed:
    1. for liquids, 200 mL;
    2. for solids 200 g;
    3. for liquefied gases, 120 mL for non-metallic fuel cells or fuel cell cartridges or 200 mL for metal fuel cells or fuel cell cartridges;
    4. for hydrogen in metal hydride the fuel cell cartridges must have a water capacity of 120 mL or less.
d) Each fuel cell and each fuel cell cartridge must conform to IEC PAS 62282-6-1 Ed. 1, and must be marked with a manufacturer's certification that it conforms to the specification. In addition, each fuel cell cartridge must be marked with the maximum quantity and type of fuel in the cartridge.
e) No more than two spare fuel cell cartridges may be carried in checked baggage, carry-on baggage, or on the person.
f) Fuel cells containing fuel are permitted in carry-on baggage only.
g) Interaction between fuel cells and integrated batteries in a device must conform to IEC PAS 62282-6-1 Ed. 1. Fuel cells or fuel cell systems whose sole function is to charge a battery in the device are not permitted.
h) Fuel cells must be of a type that will not charge batteries when the portable electronic device is not in use and must be durably marked by the manufacturer: "APPROVED FOR CARRIAGE IN AIRCRAFT CABIN ONLY" to so indicate.
i) In addition to the languages which may be required by the State of Origin for the markings specified above, English should be used.

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9.1.5.7 Wheelchairs/ Mobility Aids with Non-Spillable Wet Batteries, Nickel-Metal Hydrate Batteries or Dry Batteries

Battery-powered wheelchairs or other similar mobility aids for use by passengers whose mobility is is restricted by either a disability, their health or age, or a temporary mobility problem (e.g. broken leg), with non-spillable wet batteries which comply with IATA DGR special provisions A67 or nickel-metal hydride batteries which comply with Special Provision A199 or dry batteries which comply with Special Provision A123. These batteries must meet the following requirements:

a) The mobility aid must be prepared from transport to prevent:
   1. unintentional activation; and
   2. non-spillable batteries are not permitted to contain any free or unabsorbed liquid.

b) Amelia Intl must secure, by use of straps, tie-downs or other restraint devices, a battery powered mobility aid with installed batteries. The mobility aid, the batteries, electrical cabling and controls must be protected from damage including by the movement of baggage, mail or cargo;

c) Amelia Intl must verify that:
   1. the passenger has confirmed that the battery is a non-spillable wet battery that complies with special provision A67 (including the vibration and pressure differential tests requirements), or a nickel-metal hydride battery that complies with Special Provision A199 or dry battery that complies with Special Provision A123;
   2. the battery terminals are protected from short circuits, e.g. by being enclosed within a battery container;
   3. the battery is either:
      - adequately protected against damage by the design of the mobility aid and securely attached to the wheelchair or mobility aid. The electrical circuits must be isolated following the manufacturer's instructions; or
      - removed from the mobility aid following the manufacturer's instructions.

d) a passenger may carry a maximum of:
   - one spare wet, non-spillable battery meeting Special Provision A67; or
   - two spare nickel-metal hydride batteries meeting Special Provision A199 or dry batteries meeting Special Provision A123;

e) Amelia Intl must ensure that any battery(ies) removed from the wheelchair/mobility aid and any spare batteries are carried in strong, rigid packagings which must be carried in the cargo compartment.
   It is recommended that passengers make advance arrangements to inform Amelia Intl in advance and to make sure that batteries which are spillable are fitted with spill-resistant vent caps when feasible. A Battery-powered wheelchair and mobility aid label as described in ch. 3.3.4.2 should be used.

f) the pilot-in-command must be informed of the location of mobility aids with installed batteries, removed batteries and spare batteries;

g) it is recommended that passengers make advance arrangements with each operator.

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9.1.5.8 Wheelchairs/Mobility Aids with Spillable Batteries

Battery-powered wheelchairs or other similar mobility aids for use by passengers whose mobility is restricted by either a disability, their health or age, or a temporary mobility problem (e.g. broken leg), with spillable batteries must meet the following requirements:

a) Amelia Intl must secure, by use of straps, tie-downs or other restraint devices, a battery powered mobility aid with installed batteries. The mobility aid, the batteries, electrical cabling and controls must be protected from damage including by the movement of baggage, mail or cargo;
b) Amelia Intl must verify that:
   1. the battery terminals are protected from short circuits, e.g. by being enclosed within a battery container;
   2. the battery is fitted, where feasible, with spill-resistant vent caps;
   3. the battery is either:
      - adequately protected against damage by the design of the mobility aid and securely attached to the wheelchair or mobility aid. The electrical circuits must be isolated following the manufacturer's instructions; or
      - removed from the mobility aid following the manufacturer's instructions when the mobility aid cannot be maintained in an upright position, see (c).
c) Amelia Intl must load, stow, secure and unload a mobility aid with a spillable battery in an upright position. If the wheelchair or mobility aid cannot be loaded, stowed, secured and unloaded always in an upright position or if the mobility aid does not adequately protect the battery, the operator must remove the battery. The removed battery must be carried in strong, rigid packagings as follows:
   1. packagings must be leak-tight, impervious to battery fluid and be protected against upset by securing to pallets or by securing them in cargo compartments using appropriate means of securement (other than by bracing with freight or baggage) such as by use of restraining straps, brackets or holders;
   2. batteries must be protected against short circuits, secured upright in these packagings and surrounded by compatible absorbent material sufficient to absorb their total liquid contents; and
   3. these packagings must be marked "BATTERY, WET, WITH WHEELCHAIR" or "BATTERY, WET, WITH MOBILITY AID" and be labelled with the "Corrosive" label and with the "Package Orientation" label as described in the ICAO TI and/or IATA DGR.
d) the pilot-in-command must be informed of the location of mobility aids with installed batteries and removed batteries;
e) it is recommended that passengers make advance arrangements with each operator.

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9.1.5.9 Wheelchairs/Mobility Aids with Lithium Batteries

Lithium ion battery powered wheelchairs or other similar mobility aids for use by passengers whose mobility is restricted by either a disability, their health or age, or a temporary mobility problem (e.g. broken leg), subject to the following conditions:

a) the batteries must be of a type which meets the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3;
b) Amelia Intl must secure, by use of straps, tie-downs or other restraint devices, a battery powered mobility aid with installed batteries. The mobility aid, the batteries, electrical cabling and controls must be protected from damage including by the movement of baggage, mail or cargo;
c) Amelia Intl must verify:
    1. the battery terminals are protected from short circuits, e.g. by being enclosed within a battery container;
    2. the battery is either:
        - adequately protected against damage by the design of the mobility aid and securely attached to the wheelchair or mobility aid. The electrical circuits must be isolated following the manufacturer's instructions; or
        - removed from the mobility aid following the manufacturer's instructions. Each battery removed from the mobility aid must not exceed 300 Wh.
d) a passenger may carry a maximum of one spare lithium ion battery not exceeding 300 Wh or two spare batteries each not exceeding 160 Wh;
e) Amelia Intl must ensure that any battery removed from the mobility and any spare batteries are carried in the passenger cabin. The removed or spare batteries must be protected from damage (e.g. by placing each battery in a protective pouch);
f) the pilot-in-command must be informed of the location of the mobility aid with installed batteries, removed batteries and spare batteries;
g) it is recommended that passengers make advance arrangements with each Operator.

Note: *A label as presented in GOM ch. 3.3.4.2 or DGR 9.3.14.6 should be attached to the wheelchair and/or battery identifying whether or not a wheelchair has had the battery removed.*

9.1.5.10 Small Non- Flammable Gas Cartridges Fitted into Devices

Small Cartridges fitted into a self-inflating personal safety device such, intended to be worn by a person, such as a life-jacket or vest:

a) no more than two personal safety devices per person;
b) the personal safety device(s) must be packed in such manner that they cannot be accidently activated;
c) limited to carbon dioxide or other suitable gas in Division 2.2. without a subsidiary hazard;
d) cartridge(s) must be for inflation purposes;
e) each device must be filled with no more than two small cartridges; and
f) not more than two spare cartridges per device.

Other devices

a) no more than 4 small cartridges of carbon dioxide or other suitable gas in Division 2.2 without subsidiary hazard, per person;
b) the water capacity of each cartridge must not exceed 50 ml.

Note: *For carbon dioxide a gas cartridge with water capacity of 50 ml is equivalent to a 28 g cartridge.*

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9.1.5.11 Camping Stoves and Fuel Containers that have Contained a Flammable Liquid Fuel

Camping stoves and fuel containers for camping stoves that have contained a flammable liquid fuel may be carried provided the fuel tank of the camping stove and/or fuel container has been completely drained of all liquid fuel and action has been taken to nullify the danger.

To nullify the danger, the empty fuel tank and/or container must be allowed to drain for at least 1 hour, the fuel tank and/or container must then be left uncapped for a minimum of 6 hours to allow any residual fuel to evaporate.

Alternative methods, such as adding cooking oil to the fuel tank and/or container to elevate the flash point of any residual liquid above the flash point of flammable liquid and then emptying the fuel tank and/or container, are equally acceptable.

The fuel tank and/or container must then have the cap securely fastened and be wrapped in an absorbent material such as paper towel and placed in a polyethylene or equivalent bag. The top of the bag must then be sealed or gathered and closed with an elastic band or twine.

***Note*:** *Provided the above cleaning method is followed, the fuel stove or container can be classified as non-hazardous. However, to control the carriage of these items, it is listed in the table presented in 9.1.5*

9.1.5.12 Chemical Agent Monitoring Equipment

Instruments containing radioactive material not exceeding activity limits in IATA DGR Table10.3. C, i.e. Chemical Agent Monitor (cam) and/or Rapid Alarm and Identification Device Monitor (RAID-M), securely packed and without lithium batteries, only when carried by staff members of the Organization for the Prohibition of Chemical Weapons (OPCW) on official travel.

9.1.5.13 Mercury Barometer or Thermometer

The barometer or thermometer must be packed in a strong outer packaging, having sealed inner liner or bag of strong leak-proof and puncture-resistant material impervious to mercury, which will prevent the escape of mercury from the package irrespective of its position.

The PIC must be informed of the location of the barometer or thermometer.

9.1.5.14 Safety Matches or Cigarette Lighter

One small packet of safety matches or a small cigarette lighter that does not contain unabsorbed liquid fuel, other than liquefied gas, intended for use by an individual when carried on the person. Matches and lighters are not permitted in checked or carry-on baggage. Lighter fuel and lighter refills are not permitted on one's person nor in checked or carry-on baggage.

Notes:

1. *"Strike anywhere" matches are forbidden for air transport.*
2. *"Blue Flame" or "Cigar" lighters are not permitted on one's person, carry-on or checked baggage.*
3. *Cigarette lighters should have two independent actions by the user to activate ignition.*
4. *Cigarette lighters, powered by a lithium ion or lithium metal battery without a safety cap or means of protection against unintentional activation are not permitted on one's person, carry-on or checked baggage (for details see ch. 9.1.5.3 Additional requirements for lithium batteries (e))*

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9.1.6 Dangerous Goods in Operator's Property

The provisions contained in IATA Dangerous Goods Regulations do not apply to the following articles and substances in operator's property as written below.

9.1.6.1 Exceptions

Aircraft Equipment

Articles and substances which would otherwise be classified as dangerous goods (e.g. fire extinguishers, life-saving appliances, etc.) but which are required to be aboard the aircraft with pertinent airworthiness requirements and operating regulations or that are authorised by the State of the Operator to meet special requirements.

Consumer Goods

Aerosols, alcoholic beverages, perfumes, colognes, liquefied gas lighters and portable electronic devices containing lithium ion or lithium metal cells or batteries provided that the lithium batteries meet the provisions set in ch. 9.1.5.3 carried aboard an aircraft by the operator for use or sale on the aircraft during the flight, or series of flights, but excluding non-refillable gas lighters and those lighters liable to leak when exposed to reduced pressure.

Carbon Dioxide, Solid (Dry Ice)

Carbon Dioxide, solid (dry ice) for use in food and beverage service aboard the aircraft.

Hygiene Products

Alcohol-based hand sanitizers and alcohol-based cleaning products carried aboard an aircraft by the operator for use on the aircraft during the flight or series of flights for the purposes for passenger and crew hygiene.

Battery-Powered Electronic Equipment

Electronic devices such as electronic flight bags, personal entertainment devices, credit card readers, containing lithium metal or lithium ion cells or batteries and spare lithium batteries for such devices carried aboard an aircraft by the operator for use on the aircraft during the flight or series of flights, provided that the batteries meet the provisions set in ch. 9.1.5.3. Spare lithium batteries must be individually protected so as to prevent short circuits when not in use. Conditions for the carriage and use of these electronic devices and for the carriage of spare batteries must be provided in the operations manual and/or other appropriate manuals as will enable flight crew, cabin crew and other employees to carry out their responsibilities.

9.1.6.2 Aircraft Spares

Unless otherwise authorised by the state of the operator, articles and substances intended as replacements for those referred in ch. 9.1.6.1, must be transported in accordance with the provisions of IATA DGR. Therefore, are considered as DG and cannot be transported on Amelia Intl aircraft.

Tyre assemblies may only be transported provided that:

- unserviceable or damaged tyre assemblies, the tyre is deflated to a gauge pressure of less than 200 kPa at 20°C; or
- serviceable tyre assemblies, the tyre is not inflated to a gauge pressure exceeding the maximum rated pressure for that tyre. However, such tyres (including valve assemblies) must be protected from damage during transport, which may require the use of a protective cover.

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9.1.7 Dangerous Goods on Medical Flights

On medical flights some medical equipment may be carried provided that a previous approval has been granted by the Ground Operations department.

9.1.8 Dangerous Goods in Excepted Quantity

Dangerous goods in excepted quantities are very small quantities of certain classes of dangerous goods (from 1g or mL to max. 1 kg or L per package) that are allowed in non-specification packing without a shipper's declaration. They must comply with ICAO TI and DGR.

They are not permitted in or as checked or carry-on baggage nor in the mail.

Not all dangerous goods are permitted under the excepted quantity provision. The details on which dangerous goods is permitted and which is not permitted under this provision is seen in the ICAO TI and DGR.

They must be properly classified, identified, packed and marked- refer to 9.2.1.

Documentation:

- Shippers' declaration is not required;
- Acceptance checklist is not required;
- NOTOC is not required;
- Airwaybill is required and must include the statement ''Dangerous goods in excepted quantities'' and the number of packages.

9.1.8.1 De Minimis Quantities

Dangerous goods of certain excepted quantities whose maximum net quantity per inner package is limited to 1mL for liquids and gases and 1g for solids. The maximum net quantity of dangerous goods per outer packaging does not exceed 100 mL for liquids and gases or 100 g for solids.

They must meet the packing provisions for excepted quantities.

9.1.9 Dangerous Goods in Limited Quantity

Dangerous goods in limited quantities are dangerous goods when in reasonably limited quantities present a reduced hazard during transport and can safely be carried in good quality packagings of the types specified in the Recommendations but which have not been tested and marked accordingly.

Which dangerous goods can be accepted in limited quantities is seen in the list of dangerous goods.

A specific mark as presented in ch. 9.2.2 must be used. Package is tested according to certain test requirements as explained in IATA DGR.

The Dangerous goods in limited quantity must be packed in combined package.

The gross weight of the ''Limited quantity'' must not exceed 30kg.

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9.2 REQUIREMENTS

Dangerous goods must be properly:

- identified (assigned to UN or ID identification number and to a Proper Shipping Name from the List of Dangerous Goods);
- classified (assigned to one or more of nine UN Hazard Classes and, where applicable, to one of three UN Packing Groups according to the classification criteria of IATA DGR);
- packed (in accordance with the relevant Packing Instruction);
- marked (with relevant Packaging Use Markings and, where applicable, UN Specification Packaging Markings);
- labelled (with Hazard Labels for primary and, where applicable, subsidiary risks and, where applicable, with Handling Labels);
- documented (where applicable, by Shipper's Declaration for Dangerous Goods and appropriate entry in the AWB);

They must be also in accordance with the provisions of IATA DGR and without any signs of damage or leakage before they are delivered for transportation to the operator.

9.2.1 Classification, Identification, Packing, Marking and Hazard Labels

Classification:

Dangerous goods are divided into nine hazard classes. Some hazard classes are further subdivided into hazard divisions due to the wide scope of the class. Where applicable they are also assigned to one of three Packing Groups.

The nine classes relate to the type of hazard whereas the packing groups relate to the applicable degree of danger within the class.

When a substance is not specifically listed by name in the list of dangerous goods and has more than one hazard, the primary and subsidiary hazards must be determined in accordance with the criteria presented in the DGR by using the Precedence of hazards and packing group table. This is possible only for certain classes and divisions.

Identification:

Dangerous goods are assigned to UN numbers and proper shipping names according to their hazard classification and their composition. These are usually presented in the list of dangerous goods found in IATA DGR.

Packing:

With few exceptions, dangerous goods must be packed for transport, according to a specific Packing Instruction. Packaging must be of good quality, be compatible with their contents and be able to withstand the normal conditions of air transport. They must meet general packing requirements and, in addition, most of them are required to meet prescribed specifications and performance tests for the design type of the packaging. These packaging bear a packaging specification marking.

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Marking and Labelling:

Packages are always marked to indicate what they contain. There may be other markings giving further information about the contents. The standard markings found on all packages of dangerous goods are:

- Proper shipping name;
- UN/ID number;
- Full name and address of Shipper and Consignee;
- Net quantity (not always required, but can be placed);
- Packaging specification markings;
- Hazard labels;
- Handling labels;
- Special marks, when applicable, like: Limited quantity mark, UN3373, Environmentally Hazardous Substances, Lithium battery; Orientation marks etc.
- All packed in one mark (when two or more different dangerous goods are packed within the same outer packing)

The mark must be applied on one face of the package. Where the mark is applied by way of a label, the label must not be folded or affixed in such a manner that parts of the same mark appear on different faces of the package.

Hazard labels are used to identify primary and subsidiary risk(s) of hazardous articles or substances contained within the packages.

They must be in the form of a square set at an angle of 45° (diamond shaped). The upper half of the label must contain the pictorial symbol (except for explosives in division 1.4, 1.5 and 1.6) and the lower half must contain the class or the division number and the compatibility group letter in case of explosives. The text indicating the nature of the risk may be inserted in the lower half of the hazard label(s).

When at any point, subsequent to the time of acceptance of the dangerous goods consignment, a dangerous goods hazard label is found to be missing, illegible or detached from the shipments, such labels must be replaced in accordance with the information provided on the Shippers Declaration for Dangerous Goods by a person qualified to do that.

The Handling labels and other marks are presented in ch. 9.2.2.

In the table below are presented the classes of dangerous goods (Description of Hazard Classes/ Divisions, Labels and Cargo IMP Codes).

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<table>
<tr><th>Hazard Class</th><th colspan="3">Hazard Divisions, Labels and Cargo IMP Codes</th></tr>
<tr><td rowspan="2">Class 1
Explosives</td><td>Divisions 1.1, 1.2, 1.3
(REX)
(1.3C-RCX,1.3.G- RGX)

• Only 1.3C and 1.3.G are permitted on Cargo Aircraft Only
• All the other explosives in divisions 1.1, 1.2 and 1.3 in all Compatibility Groups are <u>forbidden</u> for transport by air.
 </td><td colspan="2">Division 1.4
(Compatibility Groups: B, C, D, E, G, S, F)
(RXB, RXC, RXD, RXE, RXG, RXS, REX)

• ‘B/C/D/E/G’ permitted on Cargo Aircraft Only
• ‘S’ Permitted on PAX A/C
• ’F’ <u>Forbidden</u> for Air transport
 </td></tr>
<tr><td>Division 1.5
(REX)
<u>Forbidden</u> for air transport
 </td><td colspan="2">Division 1.6
(REX)
<u>Forbidden</u> for air transport
 </td></tr>
<tr><td>Class 2
Gases</td><td>Division 2.1
(RFG)
Flammable gas

*May be printed with symbol, text, numbers and borderline in black on red background
 </td><td>Division 2.2
(RNG or RLC)
Non-Flammable Gas,
Non-toxic Gas

*May be printed with symbol, text, numbers and borderline in black on green background
 </td><td>Division 2.3
(RPG)
Toxic Gas
 </td></tr>
</table>

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<table>
<tr><th>Hazard Class</th><th colspan="3">Hazard Divisions, Labels and Cargo IMP Codes</th></tr>
<tr><td>Class 3
Flammable
Liquids</td><td>
</td><td colspan="2">No Divisions established for this class
(RFL)

*May be printed with symbol, text, numbers and borderline in black on red background</td></tr>
<tr><td>Class 4
Flammable Solids</td><td>Division 4.1
(RFS)
Flammable Solid
</td><td>Division 4.2
(RSC)
Spontaneously Combustible
</td><td>Division 4.3
(RFW)
Dangerous when wet

*May be printed with symbol, text, numbers and borderline in black on blue background
</td></tr>
<tr><td>Class 5
Oxidizing
Substances &
Organic Peroxides</td><td>Division 5.1
(ROX)
Oxidizer
</td><td colspan="2">Division 5.2
(ROP)
Organic Peroxides
*May be printed with symbol, text, numbers and borderline in black on red background
</td></tr>
<tr><td>Class 6
Toxic (Poisonous)
and Infectious
Substances</td><td>Division 6.1
(RPB)
Toxic
</td><td colspan="2">Division 6.2
(RIS)
Infectious Substance
</td></tr>
</table>

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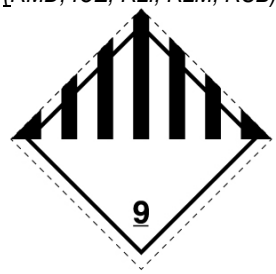
<table>
<tr><th>Hazard Class</th><th colspan="2">Hazard Divisions, Labels and Cargo IMP Codes</th></tr>
<tr><td rowspan="2">Class 7
Radioactive
Material</td><td>Category I- White
(RRW)

</td><td>Category II- Yellow
(RRY)

</td></tr>
<tr><td>Category III- Yellow
(RRY)

</td><td>Critically Safety Index Label

</td></tr>
<tr><td>Class 8
Corrosives</td><td>
</td><td>No Divisions established for this class

(RCM)</td></tr>
<tr><td>Class 9
Miscellaneous</td><td>No Divisions established for this class
(RMD, ICE, RLI, RLM, RSB)
 
</td><td>Lithium battery
(EBI, EBM. ELI, ELM)

</td></tr>
</table>

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9.2.1.1 Packing Groups

Within some hazard classes or divisions, criteria are developed for dangerous goods to be assigned to the relevant packing group according to the degree of danger. They are as follows:

- Packing Group I—high danger.
- Packing Group II—medium danger.
- Packing Group III—low danger.

9.2.1.2 Multiple Hazards

Some articles or substances may have more than one hazard and can be classified into two or more hazard classes or divisions. In such case, primary risk and subsidiary risks must be identified by using the Precedence of hazards and packing group table presented in the DGR.

However, the most stringent packing group based on the different hazards must then be the packing group for the article or substance

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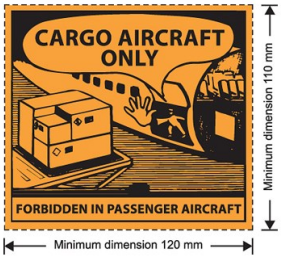
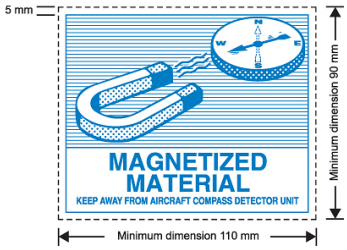
9.2.2 Handling Labels and Other Marks

Operators have to be aware that the presence of diamond-shaped pictograms on packages may indicate the presence of dangerous goods. These diamond-shaped pictograms are required by the *Globally Harmonized System for Classification and Labelling of Chemicals* (GHS) and form part of the hazard communication system for supply and use. The GHS pictograms and their criteria are presented in ch. 9.2.2.1.

Like already mentioned, there are two types of labels. Packages are labelled to indicate the hazard(s) the contents present in transport. In addition, other labels may specify handling conditions:

1. Hazard labels: They correspond to the code as shown in the table of ch. 9.2.1.
2. Handling labels: They are used to provide information on the proper handling and stowage of a package. (see pictures below).

Handling Label	Description	Where to use
	CAO Cargo Aircraft Only Label	CAO Label must be used on packages containing dangerous goods that are NOT permitted on passenger aircraft. NOT PERMITTED in passenger carry-on or checked baggage.
	MAG Magnetized Material Label	It indicates that the magnetized material must be stowed away from the aircraft compass. NOT PERMITTED in passenger carry-on or checked baggage.
	RCL Cryogenic Liquids Label (deeply refrigerated and liquefied gases)	Must be used in addition to the non-flammable gas hazard label (division 2.2) on packages containing cryogenic liquids. This label highlights that gas may flow from venting device and because it is extremely cold, this can result in water vapour condensation in the air which may look like smoke. This phenomenon is normal and non-dangerous. Such shipments should be segregated from live animals. NOT PERMITTED in passenger carry-on or checked baggage.

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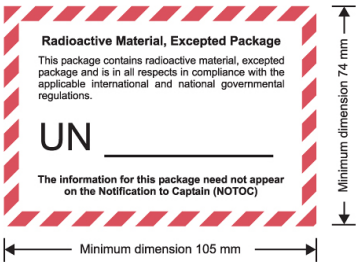
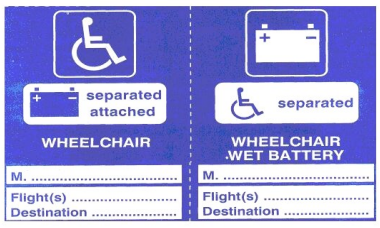
Handling Label	Description	Where to use
	This Way Up Label (may be printed in red or black)	Must be used on combination packaging and over packs containing liquid dangerous goods. This label must be attached to at least two opposite sides of the package.
	Keep Away from Heat Label	This is handling label for: self-reactive substances in Division 4.1; and Organic peroxides in Division 5.2. NOT PERMITTED in passenger carry-on or checked baggage.
	RRE Radioactive Material Excepted Package Label	This label must be affixed to all excepted packages of radioactive material. Excepted Package of radioactive material is generally material with a very low activity. NOT PERMITTED in passenger carry-on or checked baggage. NOT PERMITTED on any aircraft in Amelia Intl AOC
	Battery-powered Wheelchair and Mobility Aid Label (for use in passenger service only)	May be attached to the battery-powered wheelchair or mobility aid to assist with the handling of wheelchairs and mobility aids with spillable (wet) batteries. The label may be used to assist in identifying whether or not a wheelchair has had the battery removed.
	Dry ice label (for use on crew and pax checked baggage)	Crew and passenger checked baggage containing dry ice must be marked to identify that the baggage contains dry ice and shows the quantity of dry ice or identifies that there is 2.5 kg of dry ice or less.

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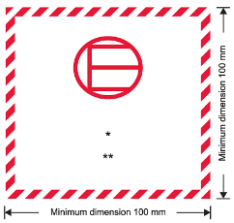
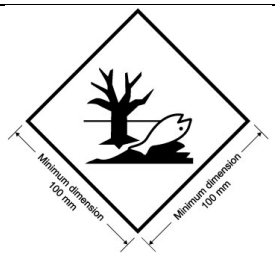
Mark	Description	Where to use
	Limited Quantities Mark	This mark must be affixed to all packages containing dangerous goods in limited quantities NOT PERMITTED in passenger carry-on or checked baggage.
	REQ Excepted Quantitiy Package Mark	This mark must be affixed to all packages containing dangerous goods in excepted quantities. NOT PERMITTED in passenger carry-on or checked baggage.
	Lithium Batteries Mark	The mark must be in the form of a rectangle with hatched edging. Where a package contains lithium cells or batteries assigned to different UN numbers, all applicable UN numbers must be indicated on one or more marks.
	Environmentally Hazardous Substance Mark	This mark must be displayed on all packages containing solid or liquid substances posing a hazard to the aquatic environment. NOT PERMITTED in passenger carry-on or checked baggage
	Genetically modified micro-organisms (GMMOs) or Genetically modified organisms (GMOs)	This mark must be displayed on all packages containing GMMOs or GMOs. Note: Miscellaneous Class 9 hazard label is not required on packages containing GMMOs and GMOs. NOT PERMITTED in passenger carry-on or checked baggage
	UN3373 Biological substance, Category B	This mark must be displayed on packages containing Biological Substances, Category B (infectious substances that do not meet the criteria for inclusion in Category A). NOT PERMITTED in passenger carry-on or checked baggage

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9.2.2.1 GHS Pictograms and their Criteria

Diamond-shaped GHS pictograms are not required to be placed on packages containing dangerous goods according to IATA DGR marking and labelling requirements. If pictograms from the table B.4.A are placed on packages not being declared to contain dangerous goods may indicate the presence of dangerous goods. They contain symbols that also appear on the hazard label used in transport.

Table B.4.B identifies GHS pictograms that identify substances that pose a hazard other than an acute hazard and which do not pose a risk in transport.

Pictogram			
Pictogram Name	**Explosive**	**Gassess under pressure**	**Flammable**
Appears on	Explosives		Gases Aerosols Liquids Solids
	Self Reactive Substances and Mixtures		Self Reactive Substances and Mixtures Pyrophoric Liquids and Solids
	Organic Peroxides		Self-Heating Substances and Mixtures
			Substances and Mixtures, Which in Contact With Water, Emit Flammable Gases
			Organic Peroxides
Pictogram			
Pictogram Name	**Oxidizer Organic Peroxide**	**Toxic**	**Corrosive**
Appears on	Oxidizing Gases Oxidizing Liquids Oxidizing Solids	Acute Toxicity Skin Oral Inhalation	Corrosive to Metal Skin Corrosion Serious Eye Damage

Table B.4.A

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Pictogram		
Pictogram Name	**Harmful**	**Respiratory**
Appears on	Harmful to Skin Oral Inhalation	Respiratory Sensitization Carcinogenicity Toxic to Reproduction
	Skin Irritation Eye Irritation	Specific Target Organ Systemic Toxicity Single Exposure
	Respiratory Tract Irritation Narcotic Effects	Specific Target Organic Systemic Toxicity Repeated Exposure
	Skin Sensitization	Aspiration Hazard Germ Cell Mutagenicity

Table B.4.B

Whenever packages bearing these GHS pictograms are found in general cargo, a check must be made if the contents are classified as dangerous goods.

When a package bearing GHS pictogram(s) is offered for transport without being declared as dangerous goods and after it is verified by checking Safety Data Sheet that the contents are not classified as dangerous goods for air transport, the shipper should indicate “Not Restricted” on the air waybill. If the information in the Safety Data Sheet (Section 14 Transport Information), states that a substance or article bearing such GHS pictograms is also classified as dangerous goods for air transport than the shipment must be stopped and returned to the shipper for proper preparation in accordance with IATA DGR provisions.

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9.2.3 Documentation

Each dangerous goods shipment, unless exempted as per the dangerous goods provisions, must be accompanied by the following dangerous goods transport documents as completed by the person offering the dangerous goods for air transport, except when the information applicable to dangerous goods is provided in electronic form:

- Shipper's declaration for dangerous goods
- Airway Bill

The shipper is responsible to complete a ''Shipper's Declaration for Dangerous Goods'' for each consignment of dangerous goods except for certain articles and substances as prescribed in the DGR. The dangerous goods declaration (DGD) must be properly filled in according with the instructions set out in DGR and must be in two copies. If not properly filled the shipment will be rejected.

Air Waybill(s) accompanying dangerous goods consignment(s) for which a dangerous goods declaration is required must include the following statements, as applicable, in the "Handling Information" box:

a) "Dangerous goods as per associated Shipper's Declaration" or "Dangerous Goods as per associated DGD";
b) "Cargo Aircraft Only" or "CAO".

When DGD is not required (as described above), the "Nature and Quantity of Goods" box of the Air Waybill, or in the appropriate location on alternate transport documentation, must show the following information (in any order):

- UN or ID number (not required for Magnetized Material);
- Proper shipping name;
- Number of packages (unless these are the only packages within the consignment); and
- Net quantity per package (only required for UN 1845).

Important: The cargo handler must send the following documents to Amelia Intl's cargo department on cargo.ops@aeh.flyamelia.com prior to the flight:

- **Dangerous Goods Declaration;**
- **Airway Bill;**
- **Acceptance Checklist;**
- **Other documentation (except customs declaration).**

If a dangerous goods consignment does not pass the acceptance check due to errors or omissions by the shipper, the applicable documentation must also be retained under the same policy as the one that had passed the acceptance check. Therefore, the relevant documentation must be sent to cargo.ops@aeh.flyamelia.com and it will be kept as per company retention periods.

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9.2.4 Acceptance

The acceptance staff must be adequately trained to be able to identify and detect dangerous goods present as general cargo.

They should seek confirmation from shippers about the contents of any item of cargo where there are suspicions that it may contain dangerous goods, with the aim of preventing undeclared dangerous goods from being loaded on an aircraft as general cargo.

Any package, overpack or freight container containing dangerous goods must be is inspected and shall not be accepted if:

- It is not properly marked and labelled;
- It is damaged or leaking;
- Its integrity has been compromised.

A package or overpack containing dangerous goods must not be accepted for transport aboard unless:

a) it is accompanied by two copies of the “Shipper’s Declaration for Dangerous Goods”; or
b) the information applicable to the consignment is provided in electronic form; or
c) it is accompanied, where permitted, by alternative documentation.

In the case of a) one copy of the declaration form must accompany the consignment to final destination. The other copy must be retained at a location on the ground where it will be possible to obtain access to it within a reasonable period; until the goods have arrived at final destination, after which time it may be stored elsewhere. A scan of the DGD must be sent to Amelia Intl’s cargo department via e-mail.

9.2.4.1 Acceptance Checklist

The person first accepting a consignment consisting of a package or overpack containing dangerous goods for carriage by air should, by using an acceptance checklist, confirm if the consignment can be accepted verifying the following:

a) the documentation complies with the detailed requirements of IATA DGR Section 8 for other than radioactive dangerous goods;
b) the quantity of dangerous goods stated on the Shipper's Declaration is within the limits per package on a passenger or cargo aircraft as appropriate;
c) the marks on package(s), overpack(s) or freight container(s) accord with the details stated on the accompanying Shipper's Declaration and are clearly visible;
d) where required, the letter in the packaging specification mark designating the packing group for which the design type has been successfully tested is appropriate for the dangerous goods contained within. This does not apply to overpacks where the specification marks are not visible;
e) proper shipping names, UN numbers, labels and special handling instructions appearing on the interior package(s) are clearly visible or reproduced on the outside of an overpack;
f) the labelling of the package(s), overpack(s) or freight container(s) is as required IATA DGR section 7.2 for other than radioactive dangerous goods;
g) the outer packaging of a combination packaging or the single packaging is permitted by the applicable packing instruction and when visible is of the type stated on the accompanying Shipper's Declaration;
h) the package or overpack does not contain different dangerous goods which require segregation according to IATA DGR Table 9.3.A and/or table presented in ch. 9.2.6.1;
i) the package, overpack, freight container or unit load device is not leaking and there is no indication that its integrity has been compromised;

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Amelia Intl uses the last revision of IATA DG acceptance checklist which reflects applicable requirements contained in the current DGR.

There are three IATA Dangerous Goods Checklists that must be used, as applicable:

- Dangerous Goods checklist for a non-radioactive shipment (presented below)
- Dangerous Goods checklist for a radioactive shipment (not presented below as Amelia Intl is not allowed to transport Class 7)
- Dangerous Goods checklist for dry ice (used only when dry ice is packed as a refrigerant for other than DG commodities) (presented below)

If any of the items found on the checklist is marked with NO, the consignment must be declined and the shipper must be informed by sending him a scan of the Acceptance checklist.

The checklist must be properly filled and signed by the person performing it. In that way it identifies the person performing the acceptance check.

If a dangerous goods consignment does not pass the acceptance check due to errors or omissions by the shipper, the applicable documentation must also be retained under the same policy as the one that had passed the acceptance check. Refer to ch.9.2.3.

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DANGEROUS GOODS CHECKLIST FOR A NON-RADIOACTIVE SHIPMENT

The recommended checklist appearing on the following pages is intended to verify shipments at origin. Copies of the checklist can be obtained from:

Website: http://www.iata.org/whatwedo/cargo/dgr/Pages/download.aspx

Never accept or refuse a shipment before all items have been checked.

Is the following information correct for each entry?

SHIPPER'S DECLARATION FOR DANGEROUS GOODS (DGD)

Air Waybill No.:	Origin:	Destination:

	YES	NO*	N/A
1. Two copies in English and in the IATA format including the air certification statement. This question may be indicated as not applicable "N/A" only when the Shipper's Declaration data is submitted electronically [8.0.2.1, 8.1.1, 8.1.2, 8.1.6.12]	☐	☐	☐
2. Full name and address of Shipper and Consignee [8.1.6.1, 8.1.6.2]	☐	☐	
3. If the Air Waybill number is not shown, enter it. [8.1.6.3]	☐		
4. The number of pages shown. This question may be indicated as not applicable "N/A" only when the Shipper's Declaration data is submitted electronically [8.1.6.4]	☐	☐	☐
5. The non-applicable Aircraft Type deleted or not shown [8.1.2.5.2, 8.1.6.5]	☐	☐	
6. If full name of Airport or City of Departure or Destination is not shown, enter it. [8.1.6.6 and 8.1.6.7]	☐		
7. The word "Radioactive" deleted or not shown [8.1.2.5.2, 8.1.6.8]	☐	☐	
Identification			
8. UN or ID number(s), preceded by prefix [8.1.6.9.1, Step 1]	☐	☐	
9. Proper Shipping Name and the technical name in brackets for entries with ★ [8.1.6.9.1, Step 2]	☐	☐	
10. Class or Division and for Class 1, the Compatibility Group, [8.1.6.9.1, Step 3]	☐	☐	
11. Subsidiary hazard, in brackets, immediately following Class or Division [8.1.6.9.1, Step 4]	☐	☐	☐
12. Packing Group [8.1.6.9.1, Step 5]	☐	☐	☐
Quantity and Type of Packing			
13. Number and Type of Packages [8.1.6.9.2, Step 6]	☐	☐	
14. Quantity and unit of measure (net, or gross followed by "G", as applicable) within per package limit [8.1.6.9.2, Step 6]	☐	☐	
15. For Class 1 (Explosives), the net quantity supplemented with the net explosive mass followed by unit of measurement [8.1.6.9.2, Step 6]	☐	☐	☐
16. When different dangerous goods are packed in one outer packaging, the following rules are complied with:			
16.1 – Compatible according to Table 9.3.A.	☐	☐	☐
16.2 – Conditions met for UN packages containing Division 6.2 [5.0.2.11(c)]	☐	☐	☐
16.3 – Wording "All packed in one (type of packaging)" [8.1.6.9.2, Step 6(f)]	☐	☐	☐
16.4 – Calculation of "Q" value which must not exceed 1 [5.0.2.11 (g) & (h); 2.7.5.6; 8.1.6.9.2, Step 6(g)]	☐	☐	☐
17. Overpack			
17.1 – Compatible according to Table 9.3.A	☐	☐	☐
17.2 – Wording "Overpack Used" [8.1.6.9.2, Step 7]	☐	☐	☐
17.3 – If more than one overpack is used, identification marks shown and total quantity of dangerous goods [8.1.6.9.2, Step 7]	☐	☐	☐
Packing Instructions			
18. Packing Instruction Number [8.1.6.9.3, Step 8]	☐	☐	
19. For lithium batteries in compliance with Section IB, "IB" follows the packing instruction [8.1.6.9.3, Step 8]	☐	☐	☐
Authorizations			
20. Check all verifiable special provisions. The Special Provision Number A1, A2, A4, A5, A51, A81, A88, A99, A130, A190, A191, A201, A202, A211, A212, A331 if used [8.1.6.9.4, Step 9]	☐	☐	☐
21. Indication that governmental authorization is attached, including a copy in English and additional approvals for other items under [8.1.6.9.4, Step 9]	☐	☐	☐
Additional Handling Information			
22. Additional handling information shown for self-reactive and related substances of Division 4.1 and organic peroxides of Division 5.2, or samples thereof, PBE, infectious and controlled substances, fireworks (UN0336 & UN0337) and viscous flammable liquids [8.1.6.11]	☐	☐	☐
23. **Name of Signatory and Date** indicated and **Signature** of Shipper [8.1.6.13, 8.1.6.14 and 8.1.6.15]	☐	☐	
24. **Amendment** or alteration signed by Shipper [8.1.2.6]	☐	☐	☐

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	YES	NO*	N/A
AIR WAYBILL–HANDLING INFORMATION			
25. The statement: "Dangerous goods as per associated Shipper's Declaration" or "Dangerous Goods as per associated DGD" [8.2.1(a)]	☐	☐	
26. "Cargo Aircraft Only" or "CAO", if applicable [8.2.1(b)]	☐	☐	☐
27. Where non-dangerous goods are included, the number of pieces of dangerous goods shown [8.2.2]	☐	☐	☐
PACKAGE(S) AND OVERPACKS			
28. Packaging free from damage and leakage [9.1.3 (i)]	☐	☐	
29. Packaging conforms with packing instruction	☐	☐	☐
30. Same number and type of packagings and overpacks delivered as shown on DGD [9.1.3]	☐	☐	
Marks			
31. UN Specification Packaging, marked according to 6.0.4 and 6.0.5:			
31.1 – Symbol and Specification Code [6.0.4.2.1 (a), (b)]	☐	☐	☐
31.2 – X, Y or Z meets or exceeds Packing Group/Packing Instruction requirements [6.0.4.2.1 (c)]	☐	☐	☐
31.3 – Gross Weight within limits (Solids, Inner Packagings or IBCs [SP A179, 6.0.4.2.1 (d)]	☐	☐	☐
31.4 – Plastic drums, jericans and IBCs within permitted period of use [5.0.2.15]	☐	☐	☐
31.5 – Infectious substance package mark [6.5.3.1]	☐	☐	☐
32. UN or ID number(s), preceded by prefix [7.1.4.1(a)]	☐	☐	
33. The Proper Shipping Name(s) including technical name where required [7.1.4.1(a)]	☐	☐	
34. The full name and address of Shipper and Consignee [7.1.4.1(b)]	☐	☐	
35. For consignments of more than one package of all classes (except ID 8000 and Class 7) the net quantity, or gross weight followed by "G", as applicable, unless contents are identical, marked on the packages [7.1.4.1(c)]	☐	☐	☐
36. Carbon Dioxide, Solid (Dry Ice), the net weight marked on the packages [7.1.4.1(d)]	☐	☐	☐
37. The Name and Telephone Number of a responsible person for Division 6.2 Infectious Substances shipment [7.1.4.1(e)]	☐	☐	☐
38. The Special Marking requirements shown for Packing Instruction 202 [7.1.4.1(f)]	☐	☐	☐
39. Limited Quantities mark [7.1.4.2]	☐	☐	☐
40. Environmentally Hazardous Substance mark [7.1.5.3]	☐	☐	☐
41. Lithium Battery mark for Section IB [7.1.5.5]	☐	☐	☐
Labelling			
42. The label(s) identifying the Primary hazard as per 4.2, Column D properly affixed [7.2.3.1; 7.2.6]	☐	☐	
43. The label(s) identifying the Subsidiary hazard, as per 4.2, Column D properly affixed [7.2.3.1; 7.2.6.2.3]	☐	☐	☐
44. "Cargo Aircraft Only" label [7.2.4.2; 7.2.6.3]	☐	☐	☐
45. "Orientation" labels on two opposite sides, if applicable [7.2.4.4]	☐	☐	☐
46. "Cryogenic Liquid" label, if applicable as per 4.2, Column D [7.2.4.3]	☐	☐	☐
47. "Keep Away From Heat" label, if applicable as per 4.2, Column D [7.2.4.5]	☐	☐	☐
48. Any irrelevant marks and labels removed or obliterated [7.1.1; 7.2.1]	☐	☐	☐
For Overpacks			
49. Packaging use marks and hazard and handling labels, as required must be clearly visible or reproduced on the outside of the overpack [7.1.7.1, 7.1.7.2, 7.2.7]	☐	☐	☐
50. The word "Overpack" marked if marks and labels are not visible on packages within the overpack [7.1.7.1]	☐	☐	☐
51. If more than one overpack is used, identification marks shown and total quantity of dangerous goods [7.1.7.3]	☐	☐	☐
GENERAL			
52. State and Operator variations complied with [2.8]	☐	☐	☐
53. Cargo Aircraft Only shipments, a cargo aircraft operates on all sectors	☐	☐	☐

Comments:

Checked by:

Place: Signature:

Date: Time:

*** IF ANY BOX IS CHECKED "NO", DO NOT ACCEPT THE SHIPMENT AND GIVE A DUPLICATE COPY OF THIS COMPLETED FORM TO THE SHIPPER.**

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ACCEPTANCE CHECKLIST FOR DRY ICE (Carbon Dioxide, solid) (For use when a Shipper's Declaration for Dangerous Goods Is not required)

A checklist is required for all shipments of dangerous goods (9.1.4) to enable proper acceptance checks to be made. The following example checklist is provided to assist shippers and carriers with the acceptance of dry ice when packaged on its own or with non-dangerous goods.

Copies of the checklist can be obtained from:

Website: http://www.iata.org/whatwedo/cargo/dgr/Pages/download.aspx

Is the following information correct for each entry?

DOCUMENTATION

Air Waybill No.:	Origin:	Destination:

	YES	NO*	N/A
The "Nature and Quantity of Goods" box of the Air Waybill or an alternate transport documentation contains the following information [8.2.3]			
1. "UN1845"	☐	☐	
2. The words "Carbon dioxide, solid" or "Dry ice"	☐	☐	
3. Number of packages (unless these are the only packages within the consignment)	☐	☐	
4. The net weight of dry ice in kilograms	☐	☐	
State and Operator Variations			
5. State and operator variations complied with [2.8]	☐	☐	☐
***Note:** The following questions do not apply where the dry ice, or packages containing dry ice, is offered in a ULD.*			
Quantity			
6. The quantity of dry ice per package is 200 kg or less [4.2]	☐	☐	
PACKAGES AND OVERPACKS			
7. Same number of packages as shown on the Air Waybill	☐	☐	
8. Packages free from damage and leakage	☐	☐	
9. The packaging conforms with Packing Instruction 954 and the package is vented to permit the release of gas	☐	☐	
Marks & Labels			
10. "UN1845" marked [7.1.4.1(a)]	☐	☐	
11. The words "Carbon dioxide, solid" or "Dry ice" [7.1.4.1(a)]	☐	☐	
12. Full name and address of the shipper and consignee [7.1.4.1(b)]	☐	☐	
***Note:** The name and address of the shipper and consignee marked on the package may differ from that on the AWB.*			
13. The net weight of dry ice within each package [7.1.4.1(d)]	☐	☐	
14. Class 9 label properly affixed [7.2.3.9, 7.2.6]	☐	☐	
15. Irrelevant marks and labels removed or obliterated [7.1.1(b); 7.2.1(a)]	☐	☐	☐
For Overpacks			
16. Packaging Use marks and hazard and handling labels, as required must be clearly visible or reproduced on the outside of the overpack [7.1.7.1, 7.2.7]	☐	☐	☐
17. The word "Overpack" marked if marks and labels are not visible on packages within the overpack [7.1.7.1]	☐	☐	☐
18. The total net weight of carbon dioxide, solid (dry ice) in the overpack [7.1.7.1]	☐	☐	☐

Comments:

Checked by:

Place: Signature:

Date: Time:

*** IF ANY BOX IS CHECKED "NO", DO NOT ACCEPT THE SHIPMENT AND GIVE A DUPLICATE COPY OF THIS COMPLETED FORM TO THE SHIPPER.**

Clear Form Print

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9.2.4.2 Applicable Acceptance Procedures Summary

Lithium Battery Mark						
Statement on the air waybill, when air waybill used						
Provision of information to pilot-in-command (NOTOC)						
IATA Shipper's Declaration for Dangerous Goods						
Formal Acceptance and Acceptance Checklist						
UN No	**Proper shipping name and/or description**					
UN 3164	Articles, pressurized, hydraulic containing non-flammable gas when meeting the requirements of Packing Instruction 208(a)	NO	NO	NO	YES	N/A
UN 3164	Articles, pressurized, pneumatic containing non-flammable gas when meeting the requirements of Packing Instruction 208(a)	NO	NO	NO	YES	N/A
UN 3373	Biological substance, Category B	NO	NO	NO	YES	N/A
N/A	Dangerous Goods in Excepted Quantities	NO	NO	NO	YES	N/A
UN 3245	Genetically modified micro-organisms or genetically modified organisms	NO	NO	NO	YES	N/A
UN 2807	Magnetized material (not subject to an approval)	NO	NO	NO	YES	N/A
UN 3091	Lithium metal batteries contained in equipment (including lithium alloy batteries) in compliance with Section II of Packing Instruction 970 with more than 4 cells or 2 batteries	NO	NO	NO	YES*	YES
UN 3091	Lithium metal batteries contained in equipment (including lithium alloy batteries) in compliance with Section II of Packing Instruction 970 with no more than 4 cells or 2 batteries installed in equipment	NO	NO	NO	NO	NO
UN 3091	Lithium metal batteries packed with equipment (including lithium alloy batteries) in compliance with Section II of Packing Instruction 969	NO	NO	NO	YES*	YES
UN 3481	Lithium-ion batteries contained in equipment (including lithium polymer batteries) in compliance with Section II of Packing Instruction 967 with more than 4 cells or 2 batteries	NO	NO	NO	YES*	YES
UN 3481	Lithium-ion batteries contained in equipment (including lithium polymer batteries) in compliance with Section II of Packing Instruction 967 with no more than 4 cells or 2 batteries installed in equipment	NO	NO	NO	NO	NO
UN 3481	Lithium-ion batteries packed with equipment (including lithium polymer batteries) in compliance with Section II of Packing Instruction 966	NO	NO	NO	YES*	YES
UN 2909	Not allowed on Amelia Intl aircraft as not approved to carry Class7					
UN 2908						
UN 2911						
UN 2910						

***Note:** The air waybill statement is as shown in the applicable packing instruction.*

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9.2.5 Storage

Storage procedures have to be followed according to the ICAO TI, Part 7, and IATA DGR, Section 9.

During the course of transport, packages or unit load devices containing self-reactive substances of Division 4.1 or organic peroxides of Division 5.2 must be protected from direct sunlight and all sources of heat and be placed in adequately ventilated area.

Dangerous goods shall be separated from other cargo or from other incompatible materials in accordance with the published category restrictions. Refer to chapter 9.2.6.1 and its subchapters for details.

During the course of air transport, including storage, marks and labels required by the Regulations must not be covered or obscured by any part of or attachment to the packaging or any other label or mark.

9.2.6 Loading and Handling

Dangerous goods must not be carried in an aircraft cabin occupied by passengers or on the flight deck of an aircraft, except as permitted by ch. 9.1.5, 9.1.6 and 9.1.7.

Dangerous goods bearing the “Cargo Aircraft Only” label must not be carried on a passenger aircraft.

The dangerous goods shipments must be transported and loaded to/ from an aircraft in a manner that no damage will be made to them.

All the packages containing dangerous goods must be secured in a way that will prevent any movement during the flight which could change their location or orientation. Securing of packages must be affected by tie-down of packages or by blocking with other load and securing by compartment net to prevent any movement.

Incompatible dangerous goods must be loaded and secured in accordance with applicable segregation requirements, as per ch. 9.2.6.1.1.

Dangerous goods shall be separated from other cargo as presented in ch. 9.2.6.1.2.

Handling, load planning, loading, stowing and securing of dangerous goods shall only be performed by personnel having completed proper dangerous goods training in order to be sufficiently qualified.

Once the goods are placed into position on the aircraft but before they are secured, the Loading Supervisor should request the clearance of the flight crew to proceed.

9.2.6.1 Safety Requirements Specific to Loading and Unloading of Dangerous Goods

a) Transportation shall be in accordance with the IATA DGR. Refer to the corresponding sections of the operator's GOM for airline specifications or restrictions.
b) Ensure dangerous goods are handled and secured or stowed in a manner that:
    1. Prevents damage to packages and containers during aircraft loading and unloading.
    2. Provides for separation and segregation of packages on the aircraft to prevent interaction in the event of leakage.
    3. Prevents movement that could change the orientation of packages on the aircraft.
    4. Is in accordance with the information provided on the notification to captain (NOTOC).
c) In case dangerous goods package or shipment appears to be damaged or leaking, to ensure:
    1. Such package or shipment is prevented from being loaded into an aircraft.
    2. In the case of leakage, conduct an evaluation to identify and prevent from transport any other cargo, baggage or transport devices that have become contaminated by the leakage of dangerous goods, and the removal of the hazardous contamination.

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3. If already loaded, the package or shipment is removed from the aircraft.
4. Immediate notification to Amelia Intl and relevant authority.

9.2.6.2 Incompatible Dangerous Goods (Segregation)

Packages containing dangerous goods, which might react dangerously with each other, must not be stowed on an aircraft next to each other or in a position that would allow interaction between them in the event of leakage. To maintain acceptable segregation between packages containing dangerous goods having different hazards, the segregation requirements shown in DGR Table 9.3.A must be observed. The table is presented in this chapter to ensure easier access to Amelia Intl employees.

The segregation requirements apply based on all hazard labels applied on the package, irrespective of whether the hazard is the primary or subsidiary hazard.

Divisions 1.4S and Classes 6, and 9 (other than lithium batteries) are not included in Table 9.3.A as they do not require segregation from other classes of dangerous goods

Hazard label	1 excl 1.4S	2.1	2.2, 2.3	3	4.1	4.2	4.3	5.1	5.2	8	9 note 2
1 excl 1.4S	See note 1	X	X	X	X	X	X	X	X	X	X
2.1	X	-	-	-	-	-	-	-	-	-	X
2.2, 2.3	X	-	-	-	-	-	-	-	-	-	-
3	X	-	-	-	-	-	-	X	-	-	X
4.1	X	-	-	-	-	-	-	-	-	-	X
4.2	X	-	-	-	-	-	-	X	-	-	-
4.3	X	-	-	-	-	-	-	-	-	X	-
5.1	X	-	-	X	-	X	-	-	-	-	X
5.2	X	-	-	-	-	-	-	-	-	-	-
8	X	-	-	-	-	-	X	-	-	-	-
9 note 2	X	X	-	X	X	-	-	X	-	-	-

Explanation of the symbols:

- A "-" at the intersection of a row and a column indicates that packages containing these classes/divisions of dangerous goods do not require segregation.
- An "x" at the intersection of a row and a column indicates that packages containing these classes/divisions of dangerous goods must be segregated in the following order of preference:
  a) packages must be loaded in the different aircraft holds, if possible; or
  b) packages must be separated at a minimum distance 1 m with other general cargo stowed in between and compartment section secured by net or
  c) packages must be separated at a minimum distance 1 m in between and secured/ tied down.

Note 1: *For segregation rules between different Divisions of Class 1, excluding 1.4S (Cargo Aircraft Only explosives), please refer to IATA DGR.*

Note 2: *Refer to IATA DGR for Packages and overpacks containing UN 3480 & UN 3090.*

Packages containing dangerous goods with multiple hazards in the class or divisions which require segregation in accordance with the above table need not be segregated from other packages bearing the same UN number.

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9.2.6.2.1 Separation of Explosive Substances and Articles

Only explosives in Division 1.4, compatibility group S, are permitted to be transported on passenger aircraft. Only the following explosives may be transported on a cargo aircraft:

- Division 1.3 Compatibility groups C, G;
- Division 1.4 Compatibility groups B, C, D, E, G, S.

Explosives in Compatibility Group S may be stowed with explosives in all compatibility groups.

9.2.6.2.2 Separation of Dangerous Goods and Other Special Load

The segregation requirements between dangerous goods and some categories of other special cargo/load are shown in the table below.

Dangerous Goods	**Hazard Label**	2.2	9
Other Special Cargo	**Cargo IMP Code**	RCL	ICE
Live animals and laboratory animals	AVI/ SPF	1	1
Hatching eggs	HEG	1	1
Living human organs	LHO	-	-

Explanation of symbols:

- ‘’-‘’ Packages containing these dangerous goods and packages of other special cargo not require segregation.
- ‘’1’’ AVI/SPF (except airtight packed live aquatic fish) and HEG must NOT be loaded in the same aircraft hold with RCL (Cryogenic liquids) and ICE (Carbon dioxide, solid; Dry Ice)

9.2.6.3 Handling and Loading of Packages Containing Liquid Dangerous Goods

During the course of transport, packages bearing the package orientation “This Way Up” label or marking "This End/ Side Up" must be loaded, stowed and handled at all times in accordance with such a label or marking orientation.

Single packagings with end closures, containing liquid dangerous goods must be loaded and stowed aboard an aircraft with such closures upwards, notwithstanding that such single packagings may also have side closures.

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9.2.6.4 Loading of Carbon Dioxide, Solid (Dry Ice)

Dry Ice (Carbon dioxide, solid; UN1845) is used as a refrigerant for perishable and other commodities. It is usually:

- Packed as refrigerant for other commodities, e.q. frozen fish, meat, perishables etc.
- Packed as refrigerant for Dangerous Goods.

It can be found:

a) in cargo shipments to keep cool or frozen perishables (biological materials, medicines, etc.);
b) in operator's property to keep food and beverages cold in a galley;
c) in passenger baggage for cooling non-dangerous products in quantities not exceeding 2.5 kg per passenger.

When dry ice is carried as per point a) the maximum allowed quantities in the subchapters below must be respected.

Any package containing dry ice must be designed and constructed to permit the release of CO gas and to prevent build-up of pressure.

Dry ice may be carried provided that suitable prior arrangements have been made dependent on the aircraft type, the aircraft ventilation rates, the method of packing and stowing, whether or not animals will be carried on the same flight and other factors.

Dry ice must not be stored in aircraft for extended periods of time unless adequate and continuous ventilation is provided.

Note: *Ground staff must be informed that dry ice is being loaded or is onboard the aircraft.*

For ATR42: Both air conditioning packs must be operating while passengers are on board and aircraft is transporting dry ice. It is recommended to use aft cargo compartment for dry ice transportation.

9.2.6.4.1 Cargo compartment considerations

When dry ice is loaded on main deck, the air conditioning and ventilation must be on.

Before entering the compartment where a large amount of dry ice is stocked, ensure that adequate ventilation is provided or open the cargo door for 3 (three) min. Otherwise, the use of portable oxygen is recommended.

In case of failure of the cargo ventilation system during flight, the CO2 sublimated in the cargo compartment may spread in the airplane, but the fresh air flow that comes from the packs dilutes the CO2 concentration below 0.5% CO2 in volume. The airplane can continue the flight normally, but after landing it is required to follow special procedures to ventilate the place in which CO2 build-up is suspected.

Important: In case of inoperative ventilation system, the ground personnel shall be informed to leave the cargo door open for 5 (five) minutes before entering the cargo compartment.

When entering any area adjacent to a cargo compartment loaded with dry ice it is recommended to wear oxygen mask and portable oxygen cylinder inside these areas if adequate ventilation is not provided.

Both air conditioning packs (or equivalent ground cart ventilation) shall be operating while persons are on board of an airplane transporting dry ice.

The structure of compartments, pallets and containers shall be protected against direct contact with dry ice by insulating material.

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For A319/A320, EMB135/145 and ATR42-500: AVIH and/or HEG shall not be transported in the same cargo compartment where dry ice is loaded.

For ATR42: It is recommended to use aft cargo compartment for dry ice transportation.

For ATR72-212F: AVIH shall not be transported in the same cargo compartment where dry ice is loaded if the ventilation is not functioning or not existing. Where ventilation is existing, if possible, avoid loading them in the same cargo compartment. If not possible, they may be transported together, following that they are not loaded in close proximity and the AVIH should be transported on a higher level than the dry ice. In this case the max amount of dry allowed is 200kg. This is also applicable for the loading of refrigerating units together with live animals in the same compartment.

Exception: These restrictions are not valid for live animals packed air-tight (e.g., tropical fish).

9.2.6.4.2 Maximum Quantity of Dry Ice

The maximum quantity of dry ice allowed on board can be calculated and is depending on different factors.

On ATR72-212F:

2 A/C PACK WORKING	SINGLE A/C PACK WORKING
475 kg	210 kg

On ATR42-500:

2 A/C PACKS WORKING
350 kg

On EMB135/145:

EMB135	322.50 kg
EMB145	347 kg

On A319/A320

The calculation is based on single pack operation as in an MMEL configuration (one pack only) but the aircraft is recommended to be dispatched with two packs operating for this kind of operation. Hence in case of a loss of one pack in flight a diversion is not necessary.

A319	Compartment 1	100 kg	Compartment 4 + Compartment 5*	500 kg
A320	Compartment 1 + 3	100 kg		

*in case ventilation system in cargo compartment 4 and 5 is inoperative, the maximum amount of dry ice shall be reduced to 100kg.

Maximum quantity per package size is 200 kg.

The flight crew must be notified whenever the amount of dry ice stowed in the cargo compartment exceeds 200 kg.

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9.2.6.4.3 Safety Requirements Specific to Loading and unloading of Dry Ice

a) Where dry ice is present in the cargo being loaded or unloaded the ramp, staff must be aware of the precautions required to ensure that there is no risk of suffocation from elevated CO2 levels from sublimating dry ice.
b) Verify the documentation for the presence of dry ice as a refrigerant (code ICE) and instruct the personnel that the cargo compartment shall be allowed to vent after the cargo access door is opened and before entering the cargo compartment
c) Open the cargo compartment door and stand back. No person shall enter the hold. Cargo compartment where dry ice is present must be allowed to vent after cargo compartment door is opened.
d) Cargo access doors shall remain open to clear dry ice vapors before you enter the hold or compartment.

Danger:

1. **There is a risk of suffocation when entering a compartment containing dry ice.**
2. **Anyone entering a cargo compartment before the dry ice vapor has dispersed may be overcome with dizziness and shortage of breath due to lack of oxygen. In such circumstances the person should be removed immediately to fresh air and, if his breathing is seriously affected, call a doctor.**

9.2.6.5 Loading of Magnetized Materials

Magnetized materials must be loaded in locations where they would not have significant effect on the direct-reading magnetic compasses or on the master compass detector units and so that headings of aircraft compasses are maintained within the tolerances prescribed by the applicable aircraft airworthiness requirements.

Packing Instruction 953 allows the carriage of such material when the magnetic field strength at a distance of 4.6 m causes a compass deflection of not more than 2 degrees (equivalent to 0.418 A/m or 0.00525 Gauss measured at a distance of 4.6 m). Material with a magnetic field strength exceeding these limits may only be carried with the prior approval of the State of Origin and the State of the Operator.

The minimum stowage distance of the magnetized materials from the aircraft compasses or compass detector units will depend on the intensity of the magnetized materials field strength and varies from 1.5 m (5 ft) for those materials which just meet the threshold level of the magnetized material definition, to 4.6 m (15 ft) for materials which possess the maximum field strength permitted. If the minimum stowage distance of a specific item in its packed form from the compass or detector units is not known and cannot be estimated, or if materials which are to be transported affect the aircraft's compasses, a special minimum stowage distance check must be made on the freight to be transported.

Multiple packages may produce a cumulative effect.

The Commander must be informed concerning loading and position of magnetized materials.

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9.2.6.6 Loading of Cryogenic Liquids

Packages containing liquefied refrigerated gases in open and closed cryogenic receptacles may be carried provided that the operator has made suitable arrangements dependant on the aircraft type, loading of other temperature-sensitive cargo and whether or not animals will be carried on the same flight.

Note: *Cryogenic liquids (RCL) and Live animals (AVI, SPF, AVIH) except air-tight packed live aquatic fish must never be loaded together in same compartment.*

Ground staff must be informed that packages containing cryogenic liquids are being loaded or are on board the aircraft and that appropriate precautions are taken to ensure that after the cargo door is opened any gas build up is allowed to vent before loading personnel enter the cargo compartment.

Important: Special care must be taken to maintain handling, loading, stowing, securing and unloading of cryogenic liquids in open receptacles always in UPRIGHT POSITION due to danger of spillage of deeply refrigerated liquefied gas that can cause severe eye and skin tissue damage.

9.2.6.7 Loading of Expandable Polymeric Beads

A total of not more than 100 kg net weight of expandable polymeric beads (or granules) or plastics moulding compound, referenced to Packing Instruction 957, may be carried in any inaccessible cargo compartment on any aircraft.

9.2.6.8 Handling of Self-Reactive Substances and Organic Peroxides

Packages or unit load devices containing packages of self-reactive substances of Division 4.1 and/or organic peroxides of Division 5.2 must be protected from direct sunlight and all sources of heat and be placed in adequately ventilated areas during the course of loading.

9.2.6.9 Loading of Radioactive Material

It is not allowed to transport radioactive material on Amelia Intl aircraft.

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9.2.6.10 Loading of Cargo Aircraft Only Shipments

CAO dangerous goods must be loaded only on cargo aircraft in such manner that in the event of emergency involving these packages or overpacks are accessible and can be handled by the crew. If the size and weight permits, they should be separated from the other cargo.

Whenever possible, the CAO DG (with the exception of magnetized materials and lithium batteries) should be loaded in:

- Compartment A on EI-SLP

Packages or overpacks bearing the "Cargo Aircraft Only" label should be made available to the crew for inspection prior to departure.

The requirements above do not apply to:

- UN 3529, Engine, internal combustion, flammable gas powered or Engine, fuel cell, flammable gas powered or Machinery, internal combustion, flammable gas powered or Machinery, fuel cell, flammable gas powered;
- flammable liquids (Class 3), Packing Group III, other than those with a subsidiary hazard of Class 8 or UN 3528, Engine, internal combustion, flammable liquid powered or Engine, fuel cell, flammable liquid powered or Machinery, internal combustion, flammable liquid powered or Machinery, fuel cell, flammable liquid powered;
- toxic substances (Division 6.1) with no subsidiary hazard other than Class 3;
- infectious substances (Division 6.2);
- radioactive materials (Class 7) - not allowed on Amelia Intl aircraft;
- miscellaneous dangerous goods (Class 9).

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9.2.7 Inspection

Packages or overpacks containing dangerous goods must be inspected for signs of damage, leakage or contamination upon loading and unloading from the aircraft and during handling.

During loading

Packages or overpack must not be loaded on the aircraft unless they have been inspected immediately prior to loading and are found free from visible leaks or damage. The inspection must be confirmed by Loading Supervisor by signing the NOTOC.

Any package found to be damaged or leaking must be stopped and returned to the cargo terminal, observing safety precautions.

Any package found to be damaged or leaking during the loading process must be safely removed from the aircraft/ the transport device. In case of leakage, an evaluation must be done to ensure that the remainder of the consignment is in proper condition from transport by air and that no other package, baggage, cargo or aircraft compartment has been contaminated.

During unloading

Packages or overpacks containing dangerous goods must be inspected for signs of damage or leakage upon unloading from the aircraft.

If evidence of damage or leakage is found, the position where the dangerous goods were stowed on the aircraft must also be inspected for damage or contamination.

Applicable for both:

If other package, baggage or cargo has been contaminated follow the procedure as per ch. 9.2.7.2.

Any contamination or damage discovered must be properly removed, cleaned and/ or repaired before any other flight is performed.

9.2.7.1 Infectious Substances

If any person responsible for the carriage of packages containing infectious substances becomes aware of damage to or leakage from such a package, that person must:

- avoid handling the package or keep handling to a minimum;
- inspect adjacent packages for contamination and put aside any that may have been contaminated;
- inform the appropriate public health authority or veterinary authority and provide information on any other countries of transit where persons may have been exposed to danger; and
- notify the shipper and/or the consignee.

9.2.7.2 Disposal of Damaged or Leaking Packages of Dangerous Goods

Safe disposal of damaged or leaking packages of dangerous goods must be arranged in accordance with company, airport or local government procedures.

In the case of spillage or damage of packages containing radioactive material or infectious substances, the appropriate national authority must be immediately advised.

For details on procedures in case of spillage or leakage, removal of contamination, etc. refer to relevant subchapters of ch. 9.4.

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9.3 PROVISION OF INFORMATION

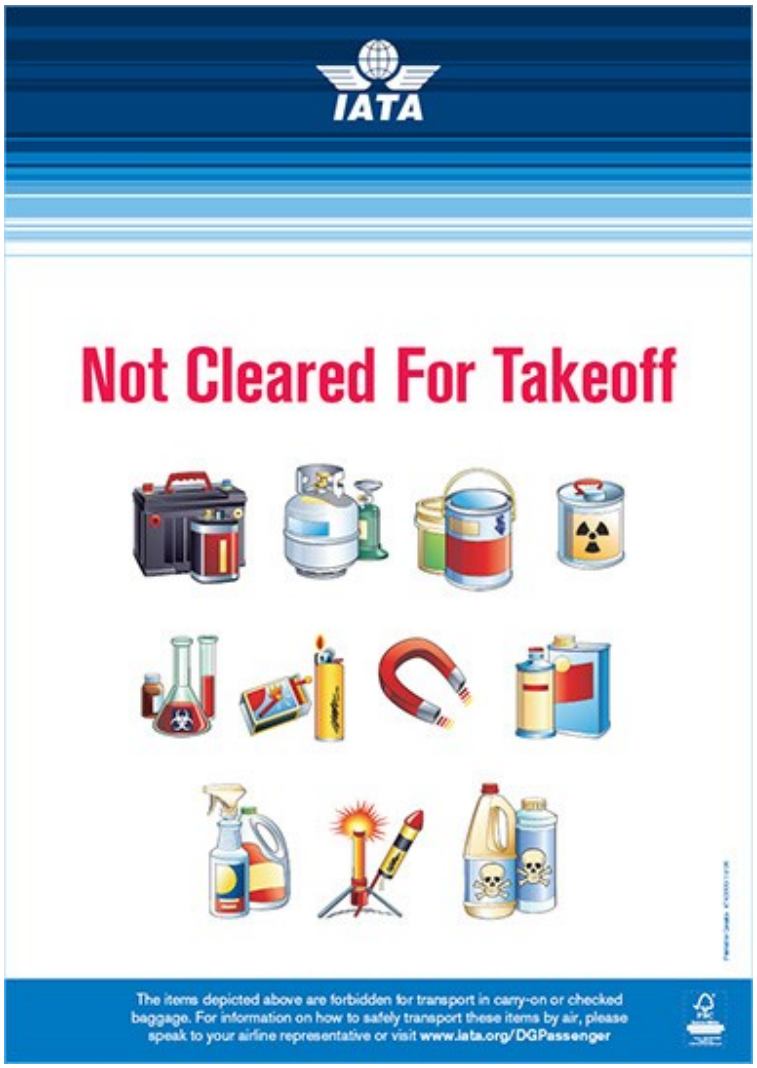
9.3.1 Information to Passengers

A current edition of the IATA Dangerous Goods Regulations (DGR) or the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (Technical Instructions) or equivalent documentation shall be accessible at locations where passenger check-in and/or boarding operations are conducted.

Information as to the types of dangerous goods which a passenger is forbidden from transporting aboard an aircraft shall be **provided at the point of ticket purchase.** In case of online ticket purchase this information must also be displayed.

In addition to the above, a dangerous goods listing containing information as to the types of dangerous goods which are allowed and forbidden to be carried by passenger or crew must be available and prominently displayed in sufficient number, at the airport, on-line or elsewhere, where:

a) tickets are issued;
b) boarding passes are issued;
c) passenger baggage (checked or carry on) is dropped off/ accepted;
d) in aircraft boarding areas;
e) at baggage claim areas.



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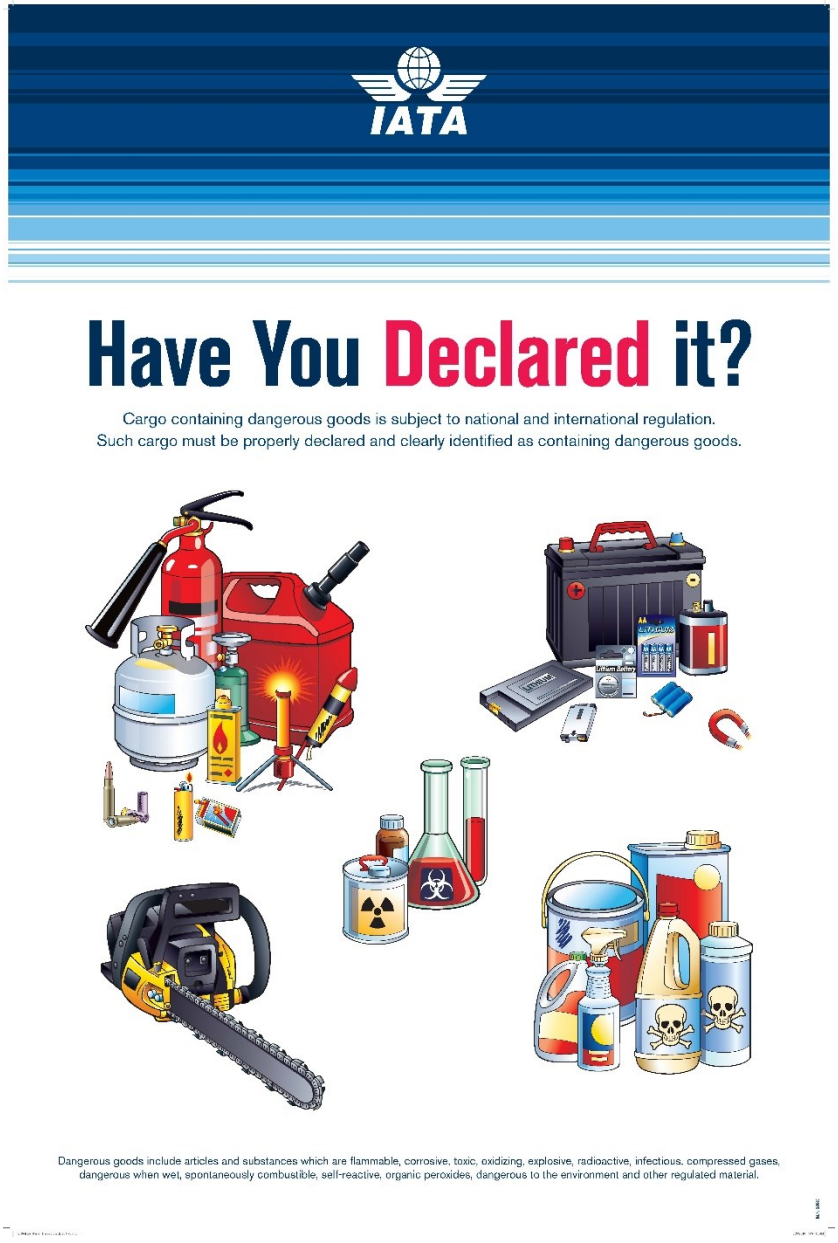
9.3.2 Information at Cargo Acceptance Areas

Sufficient notices, prominently displayed, are provided at visible location(s) at cargo acceptance points, giving information about the transport of dangerous goods to alert shippers/agents about any dangerous goods that may be contained in their cargo consignment.

Note: *This poster may be also used when accepting cargo in order to confirm with the shipper that the cargo package does not contain any dangerous goods or any undeclared dangerous goods.*



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9.3.3 Notification to Captain (NOTOC)

As early as practicable prior to departure of the aircraft in which dangerous goods are to be carried but in no case later than when the aircraft moves under its own power:

a) the Commander must be provided with accurate and legible, written or printed information concerning dangerous goods that are to be carried as cargo. The information must be provided on a dedicated form "Notification to Captain (NOTOC)" completed in English language;
b) the operations control centre must be provided with the copy of the same NOTOC that was provided to the Commander in order to facilitate in notifying emergency services and authorities in the event of an aircraft in-flight emergency, incident or accident. They will keep the copy until the aircraft transporting dangerous goods has arrived at the destination airport.

NOTOC is used whenever dangerous goods or other special loads, e.g. livestock, are loaded on the aircraft.

Amelia Intl accepts both, manual and EDP NOTOC format. In case of manual, it is preferrable that Amelia Intl's NOTOC. This NOTOC and the details on how to be completed are presented in the subchapters below.

The NOTOC is issued in duplicate. Two (2) copies of the NOTOC must be produced, signed and distributed as below:

1) One copy is kept at the station of departure;
2) One copy retained on the aircraft for the duration of the flight and retained in the flight document envelope and where a crew change is taking place, a new NOTOC must be generated for the replacement crew for the subsequent sectors. When a Commander takes over a transit aircraft, a notification for all the dangerous goods loaded at previous airports, and which remain on board the aircraft must be readily available.

It must be signed (in paper or electronic format) by the loading supervisor, ramp agent, or any other responsible agent, in accordance to local procedures.

It must also be signed by the Commander as proof that he has received the information and that the loading position is taken into account during operation.

Ground service providers/ Cargo handlers may use their own forms provided that they contain the information specified in the subchapters below and must include the ERG drill code.

The Cargo Department is responsible for completion of all of the required information (including the ERG code) with the exception of loading position and is responsible for communication of these information to the appropriate person(s) in the Load Control. The loading position shall be completed by the Load Planner or inserted by the Loading Supervisor/Ramp Agent based on advice provided by the Load Planner.

Note: *The Loading Supervisor must inform immediately the Cargo Department of:*

- *Any deviations from the planned loading position;*
- *Any DG items listed on the NOTOC but not delivered to the aircraft for loading;*
- *Any DG items not listed on the NOTOC prepared by the Cargo Department but delivered to the aircraft.*

9.3.3.1 Transmission of the NOTOC

The Load control office shall send a scan of the final NOTOC containing all needed signatures to Amelia Int's OCC responsible for the relevant flight via email.

Note*: The " subject" in the e-mail must be shown as: NOTOC Flight number/Date, e.g. NOTOC AEH529/07JAN*

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9.3.3.2 NOTOC Completion Requirements

AMELIA International

NOTIFICATION TO CAPTAIN (NOTOC)

Station of loading: (1)	Flight number: (2)	Aircraft reg: (3)	Date: (4)

DGs PREPARATION CERTIFICATE:
(To be completed by a properly certified person when dangerous goods are to be carried as freight)
I certify that this NOTOC has been prepared in compliance with the procedures for the acceptance and dispatch of DG as detailed in the ICAO IT/ IATA DGR.

Prepared by (Print Name & Signature): (5)

Page of Pages: (6) of (7)

DANGEROUS GOODS — Note: In case of in-flight emergency adice ATC

Destination	Air Waybill Number	Proper Shipping Name	Class or Division	UN or ID Number	Sub Risk	Pack Group PG	No. of packages	Net quantity or Gross weight (G) per package (in kg or L)	Radioactive Material		Cargo IMP Code	CAO	Loaded-Position (CPT No)	ERG Drill Code
									TI	Cat. I, II, III				
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)

OTHER SPECIAL LOAD

Destination	AWB/Ticket Number	Contents and Description	Number of pieces	Gross Weight (kg)	Supplementary Information	Cargo IMP Code	Loaded-Position (CPT No)
(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)

ACCEPTANCE BY CAPTAIN:
I accept the loading locations of the items specified on this NOTOC
Captain's Name (or 3LC): (31)
Captain's Signature (32)

CERTIFICATION BY PERSON SUPERVISING THE LOADING OPERATIONS
I certify that this aircraft has been loaded in accordance with the procedures detailed in the Ground Operations manual and ICAO TI or IATA DGR and that the items have been checked and that this NOTOC accurately reflects the locations of the DGs and/or Special load items on this aircraft.
I confirm: there is no evidence that any damaged or leaking packages containing DG or any Special Load loaded on the aircraft.
Certified by (Print name): (33)
Signature: (34)

A4M_Form_GroundOps_002 (Rev03: 04.10.2021)

NO.	BOX HEADING	COMPLETION
1	Station of Loading	Station of loading for this flight (IATA or ICAO code)
2	Flight number	Self-explanatory
3	Aircraft Registration	Self-explanatory
4	Date	Self-explanatory
5	Prepared by	Name and signature of person in Cargo Department preparing NOTOC prior transmittance to Load Control Office/ Handler
6	Page	This page number
7	Of Pages	Total pages number
	DANGEROUS GOODS	
8	Destination	Station of unloading for this flight (IATA or ICAO code)
9	Air Waybill Number	Air Waybill number as per Shipper's Declaration
10	Proper Shipping Name	Proper shipping name as per Shipper's Declaration (without Technical name) *Note: When chemical oxygen generators contained in Protective Breathing Equipment (PBE) are being transported under Special Provision A144, the proper shipping name of "Oxygen generator, chemical" must be supplemented with the statement "Air crew Protective Breathing Equipment (smoke hood) in accordance with Special Provision A144"*
11	Class or Division	Class or division number and for explosives the compatibility group as per Shipper's Declaration
12	UN or ID Number	UN or ID Number as per Shipper's Declaration
13	Sub Risk	Subsidiary Risk (if applicable) as per Shipper's Declaration

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NO.	BOX HEADING	COMPLETION
14	Pack Group PG	Packing group I, II or III (if applicable) as per Shipper's Declaration
15	No. of Packages	The number of packages in each loading location
16	Net Quantity or Gross Weight (G) per package (in kg or L)	(for non-radioactive material only) the net quantity or gross mass (G), if applicable, per package in kg or L at each loading location
		When dangerous goods packages are contained in an overpack, the information should show the overpack information immediately following the entries within it
		When different dangerous goods are packed in one outer packaging, the number of pieces (Box 8) may be left blank for each entry and shall be shown only for the outer packaging. The information should show the all-packed-in-one (APIO) information immediately following the entries within it
17	Radioactive Material (TI)	Transport Index for radioactive material Cat II and III only
18	Radioactive Material Cat. I, II, III	For radioactive material the applicable Category I, II or II
19	Cargo IMP Code	Relevant Cargo IMP Code applicable to stated class or division
20	CAO	Mark if it is a cargo aircraft only package
21	Loaded Position (CPT No)	The loading position (Compartment No.) to be entered by the Loading Supervisor
22	ERG Drill Code	Emergency Response (ERG) Drill Code, as per IATA DGR 4.2 column N
OTHER SPECIAL LOAD		
23	Destination	Station of unloading for this flight (IATA or ICAO code)
24	Air Waybill Number	Air Waybill Number
25	Contents and description	Other special load description of contents, e.g. live dog, human remains, living human organ (kidney) etc.
26	Number of Pieces	The number of packages in each loading location
27	Gross weight (kg)	Gross weight of shipment
28	Supplementary Info	Applicable supplementary info, e.g “ventilation-on” (in case of live animals)
29	Cargo IMP Code	Relevant Cargo IMP Code applicable to Other Special Load category
30	Loaded Position (CPT No)	The loading position (Compartment No. as per Aircraft Manual) to be entered by Loading Supervisor
31	Captain's Name (or 3LC)	Name or 3 Letter Code of the Pilot-in-Command
32	Captain's Signature	Signature of the Pilot-in-Command
33	Certified by (Print Name)	Name of the Person supervising the loading operations
34	Signature	Signature of the Person supervising the loading operations after

It is acceptable for the subcontracted ground service provider/ cargo handler to use any other manual form than the one above, but the following information must be included, as a minimum:

- the date of the flight, the flight number, the aircraft registration, the airport of loading and of unloading for each package if different;
- the Air Waybill number;
- The proper shipping name and UN number or ID number as listed in the ICAO TI or IATA DGR. When chemical oxygen generators contained in Protective Breathing Equipment (PBE) are being transported under Special Provision A144, the proper shipping name of "Oxygen generator, chemical” must be supplemented with the statement "Air crew Protective Breathing Equipment (smoke hood) in accordance with Special Provision A144”;

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- the class or division and the potential subsidiary risk(s);
- the number of packages and their net quantity;
- the Packing Group instructions;
- the potential number of States authorizations (if required)
- the check if the dangerous good can only be transported on a Cargo Aircraft Only (CAO)
- the location of the dangerous good in the aircraft
- the emergency response code (ICAO Doc 9481/AN 928).

***Note**: For UN 1845, Carbon dioxide, solid (dry ice), the information required above may be replaced by the UN number, proper shipping name, class, total quantity in each cargo compartment on the aircraft and the aerodrome at which the package(s) is to be unloaded need to be provided.*

9.3.3.3 Dangerous Goods not Required to Appear on the NOTOC

The dangerous goods listed in the table in ch. 9.1.5 do not need to appear on the NOTOC.

In addition to that the following dangerous goods are also not required to appear on the NOTOC:

UN number	Cargo IMP Code	Item
UN 3164	RNG	Articles, pressurized, hydraulic containing non-flammable gas when meeting the requirements of Packing Instruction 208 (a)
UN 3164	RNG	Articles, pressurized, pneumatic containing non-flammable gas when meeting the requirements of Packing Instruction 208 (a)
UN 3373	RDS	Biological substance, Category B
N/A	REQ	Dangerous goods in excepted quantities
UN 3245	RMD	Genetically modified micro-organisms or genetically modified organisms
UN 3481	ELI	Lithium-ion batteries contained in equipment (including lithium polymer batteries) when meeting the requirements of Section II of Packing Instruction 967
UN 3481	ELI	Lithium-ion batteries packed with equipment (including lithium polymer batteries) when meeting the requirements of Section II of Packing Instruction 966
UN 3091	ELM	Lithium metal batteries contained in equipment (including lithium alloy batteries) when meeting the requirements of Section II of Packing Instruction 970
UN 3091	ELM	Lithium metal batteries packed with equipment (including lithium alloy batteries) when meeting the requirements of Section II of Packing Instruction 969
UN 2807	MAG	Magnetized material with field strength causing a compass deflection of not more than 2° at a distance of 4.6 m

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9.3.4 Information to Load Control

When a dangerous goods consignment is to be loaded on a flight, the following information must be communicated to the appropriate person(s) responsible for load control:

1. If applicable, Air Waybill number;
2. Proper shipping name and/or UN/ID number;
3. Class or division, and subsidiary risk(s) corresponding to label(s) applied, and for Class 1, compatibility group;
4. If applicable, packing group;
5. For non-radioactive material, number of packages, exact loading location and, as applicable, net quantity or gross weight of each package, except:
   a) For UN 1845, carbon dioxide, solid (dry ice): At the option of the Operator, only the UN number, proper shipping name, classification, total quantity in each aircraft hold and offload airport are required;
   b) For UN 3480, (Lithium-ion batteries) and UN 3090 (lithium metal batteries): At the option of the Operator, only the UN number, proper shipping name, class, total quantity at each loading location, and whether the package must be carried on a cargo-only aircraft are required. UN 3480 (Lithium-ion batteries) and UN 3090 (lithium metal batteries) carried under a State exemption shall meet all requirements specified in 4 and 5.
6. Any restriction for transport on cargo aircraft only;
7. Offload airport;
8. If applicable, dangerous goods transported under a state exemption.

This information is usually contained on the NOTOC. Once the NOTOC is sent by the cargo handler to the Load control. The proper loading position shall be completed by the Load Planner or inserted by the Loading Supervisor/Ramp Agent in the NOTOC based on advice provided by the Load Planner.

Note: *The Loading Supervisor must inform immediately the Cargo Department of:*

- *Any deviations from the planned loading position;*
- *Any DG items listed on the NOTOC but not delivered to the aircraft for loading;*
- *Any DG items not listed on the NOTOC prepared by the Cargo Department but delivered to the aircraft.*

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9.4 EMERGENCY SITUATIONS

Emergency response procedures must be available wherever dangerous goods are accepted for carriage, loaded, stowed, transported, unloaded or stored. Such procedures may be established by government or airport authorities, operators or other bodies. It is important that everyone is familiar with local requirements and emergency contacts.

Dangerous Goods Ground Occurrences and Incidents- General

In case of dangerous goods occurrences and incidents occurring during handling in cargo terminal or on the ramp not directly compromising the aircraft and flight safety, the personnel involved in these occurrences and incidents must follow the local emergency procedures at each station and notify the emergencies services as per those procedures.

Dangerous Goods Ground Occurrences and Incidents Affecting Flight Safety- General

In case of dangerous goods occurrences and incidents occurring during loading/unloading and directly affecting the aircraft and flight safety, in addition to the above, notify immediately the Commander and the Handling Supervisor shall notify Amelia Intl's Operations Control Center in charge of that flight. The numbers of the OCCs are presented in ch. 11.

The Commander will therefore, follow Amelia Intl procedures of DG incident/accident and will fill in the proper report(s).

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9.4.1 General Emergency Response Guidelines

Whenever a suspected damage or leakage involving dangerous goods occurs, the following actions shall be taken:

STEPS	ACTIONS TO BE DONE
1.	Identify the nature, source and associated hazard of the contamination
2.	Stop the handling activities or reduce them to a minimum in the vicinity of the hazard.
3.	Prevent access by unauthorized personnel.
4.	Do not walk through, touch, sniff or taste any substance or spilled material
5.	Notify the relevant parties, including crew and any personnel in the vicinity
6.	Restrict/block access to the damaged item using any suitable means
7.	Contact and report the event immediately to the supervisor/line manager and emergency services, if deemed necessary, who will then assume responsibility to initiate the local response plan. If the incident happened on the aircraft, inform the Commander.
8.	Coordinate the response in conjunction with Dangerous Goods Regulations (DGR) experts or emergency services, for example: a) Use the NOTOC (review emergency code as provided) or Load Messages–LDM (e.g., Offloading Instruction, container pallet message (CPM), LIR or similar) to identify the substance b) Follow emergency response procedures as per the DGR category in ch. 9.4.1.1 c) Verify the ground connection of electrical equipment (e.g., GPU) and remove all possible sources of ignition, if deemed necessary d) Isolate all staff suspected of being contaminated and refer for treatment e) Seek confirmation from emergency services that the area is safe to re-enter.
9.	Identify and prevent from transport any other cargo, baggage or transport devices that have become contaminated by the leakage of dangerous goods.
10.	Staff involved in such incidents should have their names noted.
11.	Follow the reporting company's requirements

If contents come in contact with body or clothes

- thoroughly wash off body with plenty of water,
- remove contaminated clothes,
- do not eat or smoke,
- keep hands away from eyes, mouth and nose,
- seek medical assistance.

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9.4.1.1 Emergency Response Chart for Ground Incidents

The following Emergency Response Chart shall be used as guidelines for ground incidents involving dangerous goods.

Hazard Class, Division and Compatibility Group	Dangerous Goods Class	Hazard Description	Immediate Action Minimize leakage and contact with other cargo
1.3C 1.3G	Explosives (Acceptable on Cargo Aircraft Only – CAO)	Fire and minor blast hazard and/or minor projection hazard	Notify Fire Department Guard against fire
1.4B 1.4C 1.4D 1.4E 1.4G		Fire but no other significant hazard	
1.4S	Explosives (safety) Permitted for passenger aircraft	Small fire hazard	
2.1	Flammable gas	Ignites when leaking High pressure cylinder bursting	Notify fire department Guard against fire Evacuate goods Ventilate area **Keep away minimum 25 m**
2.2	Non-flammable gas Cryogenic liquid	High pressure cylinder bursting Subcooling	
2.3	Toxic gas (acceptable on Cargo Aircraft Only)	High pressure cylinder bursting Toxic inhalation	
3	Flammable liquid	Gives off flammable vapour	Notify fire department Guard against fire
4.1	Flammable solid	Combustible, contributes to fire	Notify fire department Guard against fire Do NOT use water under any circumstances
4.2	Spontaneously combustible	Ignites in contact with air	
4.3	Dangerous when wet	Ignites in contact with water	
5.1	Oxidizer	Ignites combustibles on contact Contributes to fire	Notify fire department Guard against fire Do NOT use water
5.2	Organic peroxides	Thermally unstable Explosive decomposition Contributes to fire	
6.1	Toxic substance	Harmful if swallowed, inhaled or in contact with skin	Isolate area Do NOT touch **Keep away minimum 25 m** **Obtain qualified assistance**
6.2	Infectious substance	Causes disease in humans and animals	
7 Cat I	Radioactive material	Radiation hazards Harmful to health	
7 Cat II	Radioactive material		
7Cat III	Radioactive material		
8	Corrosive	Hazardous to skin and metal	Notify fire department Guard against fire Avoid contact with skin
9	Miscellaneous dangerous goods	Hazards not covered by other classes	Avoid contact with skin No immediate action required
	Polymeric beads	Evolves small quantities of flammable gas	
	Carbon dioxide, solid (Dry Ice)	Causes subcooling and suffocation in confined space	
	Magnetized material	Affects the aircraft navigation system	

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9.4.2 Incidents Involving Infectious Substances and Radioactive Material

In case of incidents involving infectious substances of division 6.2 (UN2814, UN2900, UN3291 or UN3373) in addition notify immediately the appropriate local public health authority. See 9.2.7.1 for additional procedures.

In case of incidents involving radioactive material of class 7 (including radioactive material, excepted packages) in addition notify immediately the appropriate local competent authority for radioactive material.

9.4.3 Handling of Cargo/Baggage Contaminated by Dangerous Goods

If cargo is found leaking or contaminated the handling agent must take reasonable steps to identify if it is dangerous goods involved and its potential hazard. They must also identify the nature and source of contamination.

If the contaminating substance is found or is suspected to be a substance classified as dangerous goods by IATA DGR, the cargo must be isolated and appropriate steps must be undertaken to nullify any identified hazards before being transported further by air.

The general emergency procedures guidelines must be followed.

In addition, the Handling supervisor must:

- Seek confirmation from the shipper about the contents of the cargo suspected to be the cause of contamination and if necessary, request Safety Data Sheet to verify proper classification and identification of goods.
- Arrange for removal and safe disposal of identified dangerous goods and decontamination of the remainder of the cargo consignment including baggage, mail or transport device (s), if applicable by an appropriate authority or organization especially in case of infectious substances (RIS or RDS) and radioactive material (RRE, RRW, RRW).

9.4.3.1 Damaged or Leaking Packages

If it is evident that a package is damaged or leaking, or if it is suspected that the package may have leaked or been damaged, access to the package should be restricted. Local safety and emergency procedures should then be followed.

When necessary, additional steps for the protection of persons, property and the environment, in accordance with the provisions established by the relevant competent authority (e.g. occupational health and safety authority, environmental agency, etc.), should be taken to overcome and minimize the consequences of such leakage or damage. The presence of GHS pictograms on a package which indicates that contents may pose a risk to persons or the environment may need to be taken into account even though the contents are not classified as dangerous goods.

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9.4.4 Handling of Incidents when Aircraft is Contaminated by Dangerous Goods

Any contamination of aircraft found as a result of the leakage or damage of dangerous goods must be removed without delay.

In general, the handling agent shall:

1. Immediately stop further handling of the aircraft such as cargo loading/unloading.
2. Inform the supervisor or duty officer immediately and follow local notification procedures.
3. Inform the Commander.

The Handling supervisor shall:

1. Notify Amelia Intl OCC responsible for the flight (phone number available in ch.11)

Any hazardous contamination must be removed from the aircraft without delay.

In general further procedures for decontamination of the aircraft will be provided to the relevant facility/provider by Amelia Intl's dangerous goods department and/or maintenance department.

9.4.4.1 Guidelines for Dangerous Goods Except Radioactive Material

In the event of a spillage or leakage of dangerous goods within an aircraft, the position where the dangerous goods were stowed on the aircraft must be inspected for damage or contamination and any hazardous contamination removed. The hazard of the dangerous goods within packages concerned may be established by checking the entry on the NOTOC for that loading position or from hazard labels applied to the packages. Persons responding in the event of damage to or leakage of dangerous goods from packages must:

- identify the hazards and wear appropriate protective clothing;
- avoid handling the package or keep handling to a minimum;
- inspect adjacent packages for contamination and put aside any that may have been contaminated;
- arrange for decontamination of the aircraft and equipment; and

In the case of infectious material (RDS, RIS), inform the appropriate public health authority or veterinary authority, and provide information to any other countries of transit where persons may have been exposed to danger; and notify the shipper and/or the consignee.

9.4.4.2 Radioactive Material Inspection

Radioactive Material is not accepted on Amelia Intl aircraft. In case a radioactive shipment has been discovered and it is damaged or leaking the following shall be applied.

If it is evident that a package (or an overpack or a freight container) of radioactive material (RRE, RRW, RRY) is damaged or leaking, or if it is suspected that the package may have leaked or been damaged, access to the package must be restricted and a qualified person must, as soon as possible, assess the extent of contamination and the resultant radiation level of the package. The scope of the survey must also include the aircraft, aircraft equipment, the adjacent loading and unloading areas, and, if necessary, all other material which has been carried on the aircraft. When necessary, additional steps for the protection of human health, in accordance with provisions established by the relevant competent authority, must be taken to overcome and minimize the consequences of such leakage or damage.

Packages damaged or leaking radioactive contents in excess of allowable limits for normal conditions of transport may be removed to an acceptable interim location only under supervision and must not be forwarded until repaired or reconditioned and decontaminated.

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An aircraft and equipment used regularly for the carriage of radioactive material must be periodically checked to determine the level of contamination. The frequency of such checks must be related to the likelihood of contamination and the extent to which radioactive material is transported.

Any aircraft, or equipment or part thereof which has become contaminated above the limits specified in IATA DGR Table 10.9.F in the course of the transport of radioactive material, or which shows a radiation level in excess 5 µSv/h at the surface, must be decontaminated as soon as possible by a qualified person and must not be re-used unless the following conditions are met:

a) non-fixed contamination must not exceed the limits specified in IATA DGR Table 10.9.F; and
b) the radiation level resulting from the fixed contamination must not exceed 5 µSv/h at the surface

9.4.4.3 Guidelines for Removal of Contamination

Amelia Intl will organize the removal of contamination from the aircraft.

9.4.5 Undeclared or Mis-declared Dangerous Goods

In general, should dangerous goods be identified that are not permitted in passenger baggage or on person, or that are leaking, or when undeclared or mis-declared DG are discovered during aircraft loading, it must be reported to the Commander, the supervisor and to the national aviation authority of Amelia Intl and if needed as per local requirements to the state where the DG were discovered.

The Commander will therefore, follow Amelia Intl procedures of DG reporting and will fill in the proper report(s).

The outsourced handling company is responsible to file a report, report to the appropriate authorities of the state where it occurred as per their company procedures.

a) Passenger and Passenger baggage

During boarding the ground staff should pay attention to the carry-on baggage or personal items of the passengers that could carry dangerous goods e.g. by excessive care of a passenger for a piece of carry-on luggage. If there is any reason for suspicion, the passenger should be asked about the contents of his baggage.

Should dangerous goods be identified that are not permitted in passenger baggage or on person the Commander must be informed.

If the Dangerous Goods has been identified by the flight or cabin crew, the Commander will inform the ground handling to make arrangements for the discovered dangerous goods is removed.

These dangerous goods must be removed from the passenger's baggage, from the passenger itself and disposed of in accordance with local requirements.

Note: *A report must be made by the ground handling according to their local requirements.*

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b) In general cargo or mail:

The process written below must be followed if you strongly suspect or discover undeclared or mis-declared dangerous goods in general cargo or mail on the aircraft approved to carry dangerous goods, or on aircraft not approved to carry dangerous goods:

STEPS	ACTIONS TO BE TAKEN BY THE HANDLING AGENT PERSONNEL
1	Immediately stop further processing of such cargo until contents are identified
2	Inform the supervisor or duty officer immediately and follow local notification procedures. In case the discovered DG has been identified during loading/unloading inform the Commander.
3	If cargo or mail appears to be damaged or leaking follow the process described in ch.9.4.3, steps 3 to 8.

STEPS	ACTIONS TO BE TAKEN BY HANDLING AGENT SUPERVISOR
1	Seek confirmation from the shipper about the contents and if necessary, request Safety Data Sheet to verify proper classification and identification of goods
2	If cargo or mail bears any dangerous goods hazard labels or marks or the contents are identified as dangerous goods return the complete shipment to the shipper or his agent ***Note:*** *If the contents are NOT classified and identified as dangerous goods, shipper must remove all dangerous goods hazard labels or marks before delivering such cargo again for transportation on Amelia Intl services as general cargo shipment.*
3	Follow the reporting requirements.

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9.5 REPORTING

This chapter is applicable for dangerous goods and non-dangerous goods operation.

Dangerous goods occurrence report must be made for:

1) **Undeclared or mis-declared dangerous goods**
   - When undeclared or mis-declared dangerous goods have been discovered in cargo;
   - when discovered to have been carried when not loaded, segregated, separated or secured in accordance with ICAO/IATA requirements;
   - when discovered to have been carried by passengers or crew members, or in their baggage, when not in line with ch. 9.1.5
   - if discovered to have been carried without information having been provided to the Commander as per ch. 9.3.3).
2) **Dangerous goods accidents or incidents**
   irrespective of whether the dangerous goods are contained in cargo, mail, passengers' baggage or crew baggage.

Occurrence report must be made to the Slovenian authority and to the State in which it occurred within72 hours.

The Commander will follow Amelia Intl procedures of DG incident/accident and will fill in the proper report(s).

The outsourced handling company is responsible to file a report to the appropriate authorities of the state where it occurred, as per their company procedures and in accordance with the reporting requirements of the authorities concerned.

Copies of relevant documents and any photographs taken should be attached to the report.

Providing it is safe to do so, all dangerous goods, packaging, documents, etc., relating to the occurrence should be retained until after the initial report has been sent to the authorities. They will indicate whether or not these should continue to be retained.

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10 SPECIAL AND NORMAL GROUND CODES

CODE	MEANING
A/C	Aircraft
AOG	Aircraft on ground
ASTH	Asthmatic
AVI/ AVIH	Live Animal in Hold
BAL	Ballast
BIG	Oversized cargo
BIKE	Bicycle
BLND	Blind PAP
BULK	Bulky baggage (out of the normal dimensions and weight)
CANX	Cancelled
CBBG	Cabin Seat Baggage
CHLD	Child
CIP	Commercially important person (heads of corporate companies with direct business to airline)
COM	Company mail
CSU	Catering loaded in hold
DCS	Departure Control System
DEAF	Deaf PAP
DEPA	Deportee (ACCOMPANIED)
DEPO	Deportee
DEPU	Deportee (UNACCOMPANIED)
DIPL	Diplomatic mail
DPNA	Mentally deficient passenger travelling alone
DHC	Dead Head Crew
EAT	Foodstuff
EIC	Equipment in Compartment
ESAN	Emotional Support/ Psychiatric Assistance Animal in cabin
EXST	Extra Seat
FKT	Flight Kit
FQTR/ FQTS/ FQTU/ FQTV	Frequent Traveller (PAP who is affiliated to an airline award programme)

CODE	MEANING
FRAG	Fragile cargo
FSA	Priority
FSB	According to available capacity
GRPS	Groups
HEA	Heavy cargo
HUM	Human Remains (do not use for funeral urn)
INAD	Inadmissible Passenger
INCS	Infant car seat (in conjunction to extra seat procedure)
INFT/ INF	Infant on lap (Infant travelling on parent's lap)
L+D	Life and Death LHO shipments
LANG	speaks language other than that of board city
LEGB	Both legs in plaster
LEGL	Left leg in plaster
LEGR	Right leg in plaster
LHO	Live Human Organs
LMC	Last minute change (this may also be used to describe LRP)
LRP	Late reporting PAP
MAAS	Meet and Assist
MCO	Miscellaneous Change Order
MCT	Minimum Connecting Flight
MEDA	Medical Case; Used in conjunction with the CODE identifying the case
MUW	Weapons of War and Munitions of War
NWP	Newspapers
OSI	Other Service Information
OWCH	Own Wheelchair in Hold (use with other codes)
OXYG	Passengers requiring oxygen during flight
PAD	Staff PAP
PAP	Passenger
PAX	Passengers

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CODE	MEANING
PETC/ PET	Pet in Cabin
PEM	Fresh Meat
PEP	Vegetables/ Fruits
PIL	Passenger information list
PNL	PAP Name List
PREG	Pregnant PAP; After 28 weeks need doctor's Fit to Fly letter
PROC	Personal Portable Oxygen Concentrator
PTM	PAP Transfer Message
PWD	Passenger with disabilities
RQST	Request for a Service from PAP
RQST	Request
SHL	Save Human Lives
SI	Service Information
SOM	Seat Occupied Message
SPEQ	Sport Equipment
SPF	Laboratory Animals
STCR	Stretcher
STR	Station
SVAN	Service Animal in Cabin
SWP	Sporting Weapons
TCI	Through Check-in
TKT	Ticket
UM/ UNMIN/ UMNR	Unaccompanied Minor
VAL	Valuables
VIP	Very Important Person (members of parliament, royals etc.)
VUN	Vulnerable Cargo
WCBD	Battery powered Wheelchair (dry cell)
WCBW	Battery powered Wheelchair (wet cell)
WCHC	Wheelchair totally immobile (CABIN assist)
WCHR	Wheelchair assist to/from gate, aircraft (RAMP)
WCHS	Wheelchair- assist on steps (STEPS)

CODE	MEANING
WCLB	Wheelchair with Lithium ion Battery
WCMP	Wheelchair- Manual Power
WET	Wet Products
XBAG	Extra Bag
XPS	Express Cargo
YP	Young Passenger
YPTA	Young Person Travelling Alone

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10.1 LOAD INFORMATION CODES

CODE	MEANING
Load information codes	
B	baggage not otherwise specified
C	general cargo or mixed units
D	crew baggage (when not included within "E" or "S")
E	equipment, e.g. unmanifested flight spares, in compartment
F	st class baggage and/or priority handled baggage
H	ULD and/or its load to be transhipped to a connecting flight (onward destination and/or flight to be shown in SI element on CPM)
M	mail
N	no ULD at position
Q	courier baggage
S	sort on arrival (describes a rummage container, i.e. contents of different categories and on-line destinations)
T	Load for transfer to various connecting flights
U	unserviceable ULD
W	cargo in security controlled ULD
X	empty ULD
Z	load deliberately mixed by destination when these destinations are known to be beyond a planned reloading station
CODE	MEANING
Additional baggage load information codes	
BF	First Class
BC	Business Class
BJ	Business Class long-haul
BP	Priority
BY	Economy
BU	Special economy
BT	Transfers
BA	Alliance Transfer
BO	Online Transfer

CODE	MEANING
BI	Interline transfer
BD	Domestic transfer
BS	Short connection transfer
BH	Hub-container/groups or large flows
BG	Tail-to-Tail
BZ	Crew
BQ	Courier
BX	Rush (expedite) bags
BM	Mixed Container (containing baggage only)
BE	Transit baggage not subject to customs (like ITI)
BB	Trans-border transfer
CODE	MEANING
Additional cargo load information codes	
CA	Domestic Transfer
CG	Through Units
CI	International Transfer
CL	Local.
CP	Priority
CODE	MEANING
Additional load information codes	
N/A	NA—position not available (e.g. tie down straps passing through position, CLS not operating in that position, contamination in the position)
CODE	MEANING
ULD Load volume codes	
0	no volume available.
1	quarter volume available
2	half volume available
3	three quarters volume available

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10.1.1 IMP Codes

CODE	MEANING
AOG	Aircraft on ground
AVI	Live Animal in Hold
BAL	Ballast
DIP	Diplomatic mail
EAT	Foodstuffs, Dairy products
EIC	Equipment in Compartment
PEA	Articles made from species listed in CITES
FRA	Fragile cargo
FRO	Frozen goods
HEA	Heavy cargo, single pieces over 150 kg
HEG	Hatching eggs
HUM	Human remains
LHO	Living Human Organs
MUW	Weapons of War
OBX	Obnoxious cargo
PEF	Flowers and plants
PEM	Meat
PEP	Fruits and vegetables
PER	Perishable cargo (in general)
PES	Fish and Seafood
SHL	Save Human Life shipments
SPF	Laboratory Animals
SWP	Sporting weapons
VAL	Valuable cargo
VUN	Vulnerable Cargo
Ch. 9.2.1	Dangerous Goods

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10.2 MEAL CODES

CODE	MEANING
ALML	Allergen Meal
AVML	Asian Vegetarian Meal
BBML	Baby Meal
BLML	Bland Meal
CHML	Children Meal
CLML	Celebration Cake
DBML	Diabetic Meal
FPML	Fruit Platter Meal
GFML	Gluten Free Meal
HFML	High Fibre Meal
HNML	Hindu Non Vegetarian Meal-without beef
KSML	Kosher Meal
LCML	Low Calorie Meal
LFML	Low fat Meal
LPML	Low Protein Meal
LSML	Low Sodium/ Low Salt Meal
MOML	Muslim Meal
NLML	Non-Lactose Meal
ORML	Oriental Meal
PFML	Peanut free Meal
PRML	Low Purin Meal
RVML	Raw Vegetarian Meal
SFML	Seafood Meal
SPML	Special Meal
VGML	Vegan Meal
VJML	Vegetarian Jain Meal
VLML	Vegetarian Lacto-ovo Meal
VOML	Vegetarian Oriental Meal

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10.3 DELAY CODES

Standard IATA Delay Codes (AHM730 and AHM731)

	OTHERS
00-05	AIRLINE INTERNAL CODES
06 (OA)	NO GATE/STAND AVAILABILITY DUE TO OWN AIRLINE ACTIVITY
09 (SG)	SCHEDULED GROUND TIME LESS THAN DECLARED MINIMUM GROUND TIME
	PASSENGER AND BAGGAGE
11 (PD)	LATE CHECK-IN, acceptance after deadline
12 (PL)	LATE CHECK-IN, congestions in check-in area
13 (PE)	CHECK-IN ERROR, passenger and baggage
14 (PO)	OVERSALES, booking errors
15 (PH)	BOARDING, discrepancies and paging, missing checked-in passenger
16 (PS)	COMMERCIAL PUBLICITY/PASSENGER CONVENIENCE, VIP, press, ground meals and missing personal items
17 (PC)	CATERING ORDER, late or incorrect order given to supplier
18 (PB)	BAGGAGE PROCESSING, sorting etc.
19 (PW)	REDUCED MOBILITY, boarding / deboarding of passengers with reduced mobility.
	CARGO AND MAIL
21 (CD)	DOCUMENTATION, errors etc.
22 (CP)	LATE POSITIONING
23 (CC)	LATE ACCEPTANCE
24 (CI)	INADEQUATE PACKING
25 (CO)	OVERSALES, booking errors
26 (CU)	LATE PREPARATION IN WAREHOUSE
27 (CE)	DOCUMENTATION, PACKING etc (Mail Only)
28 (CL)	LATE POSITIONING (Mail Only)
29 (CA)	LATE ACCEPTANCE (Mail Only)

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AIRCRAFT AND RAMP HANDLING

31 (GD)	AIRCRAFT DOCUMENTATION LATE/INACCURATE, weight and balance, general declaration, PIL, etc.
32 (GL)	LOADING/ UNLOADING, bulky, special load, cabin load, lack of loading staff
33 (GE)	LOADING EQUIPMENT, lack of or breakdown, e.g. container pallet loader, lack of staff
34 (GS)	SERVICING EQUIPMENT, lack of or breakdown, lack of staff, e.g. steps
35 (GC)	AIRCRAFT CLEANING
36 (GF)	FUELLING/DEFUELLING, fuel supplier
37 (GB)	CATERING, late delivery or loading
38 (GU)	ULD, lack of or serviceability
39 (GT)	TECHNICAL EQUIPMENT, lack of or breakdown, lack of staff, e.g. pushback

TECHNICAL AND AIRCRAFT EQUIPMENT

41 (TD)	AIRCRAFT DEFECTS.
42 (TM)	SCHEDULED MAINTENANCE, late release.
43 (TN)	NON-SCHEDULED MAINTENANCE, special checks and/or additional works beyond normal maintenance schedule.
44 (TS)	SPARES AND MAINTENANCE EQUIPMENT, lack of or breakdown.
45 (TA)	AOG SPARES, to be carried to another station.
46 (TC)	AIRCRAFT CHANGE, for technical reasons.
47 (TL)	STAND-BY AIRCRAFT, lack of planned stand-by aircraft for technical reasons.
48 (TV)	SCHEDULED CABIN CONFIGURATION/VERSION ADJUSTMENTS.

DAMAGE TO AIRCRAFT & EDP/AUTOMATED EQUIPMENT FAILURE

51 (DF)	DAMAGE DURING FLIGHT OPERATIONS, bird or lightning strike, turbulence, heavy or overweight landing, collision during taxiing
52 (DG)	DAMAGE DURING GROUND OPERATIONS, collisions (other than during taxiing), loading/off-loading damage, contamination, towing, extreme weather conditions
55 (ED)	DEPARTURE CONTROL
56 (EC)	CARGO PREPARATION/DOCUMENTATION
57 (EF)	FLIGHT PLANS
58 (EO)	OTHER AUTOMATED SYSTEM

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FLIGHT OPERATIONS AND CREWING

61 (FP) FLIGHT PLAN, late completion or change of, flight documentation

62 (FF) OPERATIONAL REQUIREMENTS, fuel, load alteration

63 (FT) LATE CREW BOARDING OR DEPARTURE PROCEDURES, other than connection and standby (flight deck or entire crew)

64 (FS) FLIGHT DECK CREW SHORTAGE, sickness, awaiting standby, flight time limitations, crew meals, valid visa, health documents, etc.

65 (FR) FLIGHT DECK CREW SPECIAL REQUEST, not within operational requirements

66 (FL) LATE CABIN CREW BOARDING OR DEPARTURE PROCEDURES, other than connection and standby

67 (FC) CABIN CREW SHORTAGE, sickness, awaiting standby, flight time limitations, crew meals, valid visa, health documents, etc.

68 (FA) CABIN CREW ERROR OR SPECIAL REQUEST, not within operational requirements

69 (FB) CAPTAIN REQUEST FOR SECURITY CHECK, extraordinary

WEATHER

71 (WO) DEPARTURE STATION

72 (WT) DESTINATION STATION

73 (WR) EN ROUTE OR ALTERNATE

75 (WI) DE-ICING OF AIRCRAFT, removal of ice and/or snow, frost prevention excluding unserviceability of equipment

76 (WS) REMOVAL OF SNOW, ICE, WATER AND SAND FROM AIRPORT

77 (WG) GROUND HANDLING IMPAIRED BY ADVERSE WEATHER CONDITIONS

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ATFM + AIRPORT + GOVERNMENTAL AUTHORITIES

AIR TRAFFIC FLOW MANAGEMENT RESTRICTIONS

81 (AT)	ATFM due to ATC EN-ROUTE DEMAND/CAPACITY, standard demand/capacity problems
82 (AX)	ATFM due to ATC STAFF/EQUIPMENT EN-ROUTE, reduced capacity caused by industrial action or staff shortage, equipment failure, military exercise or extraordinary demand due to capacity reduction in neighbouring area
83 (AE)	ATFM due to RESTRICTION AT DESTINATION AIRPORT, airport and/or runway closed due to obstruction, industrial action, staff shortage, political unrest, noise abatement, night curfew, special flights
84 (AW)	ATFM due to WEATHER AT DESTINATION

AIRPORT AND GOVERNMENTAL AUTHORITIES

85 (AS)	MANDATORY SECURITY
86 (AG)	IMMIGRATION, CUSTOMS, HEALTH
87 (AF)	AIRPORT FACILITIES, parking stands, ramp congestion, lighting, buildings, gate limitations, etc.
88 (AD)	RESTRICTIONS AT AIRPORT OF DESTINATION, airport and/or runway closed due to obstruction, industrial action, staff shortage, political unrest, noise abatement, night curfew, special flights
89 (AM)	RESTRICTIONS AT AIRPORT OF DEPARTURE WITH OR WITHOUT ATFM RESTRICTIONS, including Air Traffic Services, start-up and pushback, airport and/or runway closed due to obstruction or weather1, industrial action, staff shortage, political unrest, noise abatement, night curfew, special flights

REACTIONARY

91 (RL)	LOAD CONNECTION, awaiting load from another flight
92 (RT)	THROUGH CHECK-IN ERROR, passenger and baggage
93 (RA)	AIRCRAFT ROTATION, late arrival of aircraft from another flight or previous sector
94 (RS)	CABIN CREW ROTATION, awaiting cabin crew from another flight
95 (RC)	CREW ROTATION, awaiting crew from another flight (flight deck or entire crew)
96 (RO)	OPERATIONS CONTROL, re-routing, diversion, consolidation, aircraft change for reasons other than technical

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MISCELLANEOUS

97 (MI)	INDUSTRIAL ACTION WITH OWN AIRLINE
98 (MO)	INDUSTRIAL ACTION OUTSIDE OWN AIRLINE, excluding ATS
99 (MX)	OTHER REASON, not matching any code above

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11 SUPPORT DEPARTMENTS AND CONTACTS

If the ERP should be triggered, call the OCC's mobile number. In case of aircraft that is part of Congo operation, call OCC in Equaflight. For all other aircraft, call OCC in Amelia.

ENTITY	OFFICE PHONE	MOBILE PHONE	E-MAIL
Operations Control Centre – European Operation (Except all cargo operation)	+33 (0)1 74 37 71 12		occ@flyamelia.com
Operations Control Centre – Cargo Operation	+386 64 190 972		ops@si-ops.com
Operations Control Centre – African Operation	Day: +242 (0)6 611 02 02 Night: +242 (0)6 667 05 55		cco@equaflight.com
Ground Operations Department	+386 (0)5 032 920	+386 (0)40 186 083	ground@aeh.flyamelia.com
Cargo Operations Department	+386 (0)5 032 920	+386 593 66 880	cargo.ops@aeh.flyamelia.com
Dangerous Goods Department	+386 (0)5 032 920	+386 (0)40 186 083	dangerousgoods@aeh.flyamelia.com
Safety Department	/	/	safety@aeh.flyamelia.com
Security Department	+386 (0)5 032 920	+386 (0)40 889 883	mmencinger@flyamelia.com

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