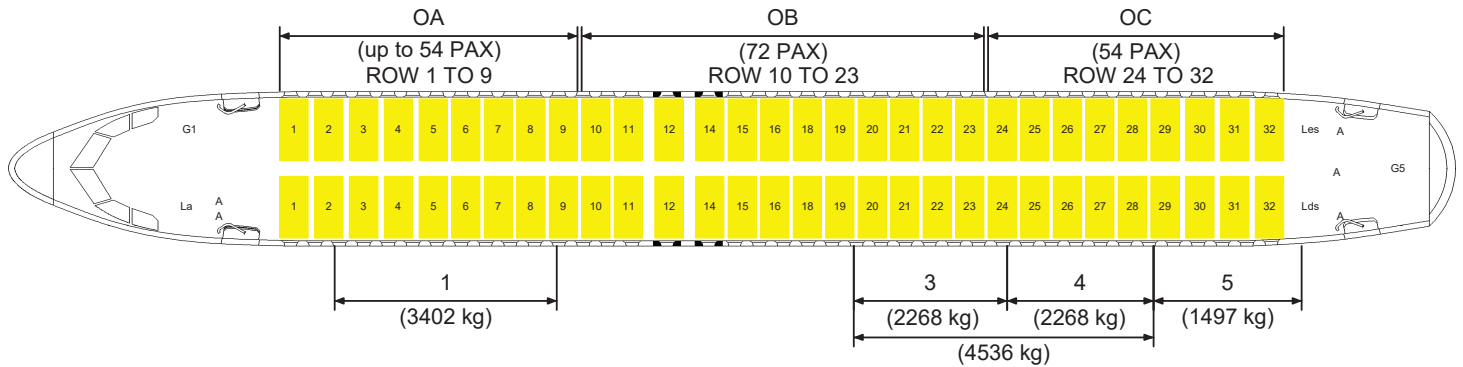


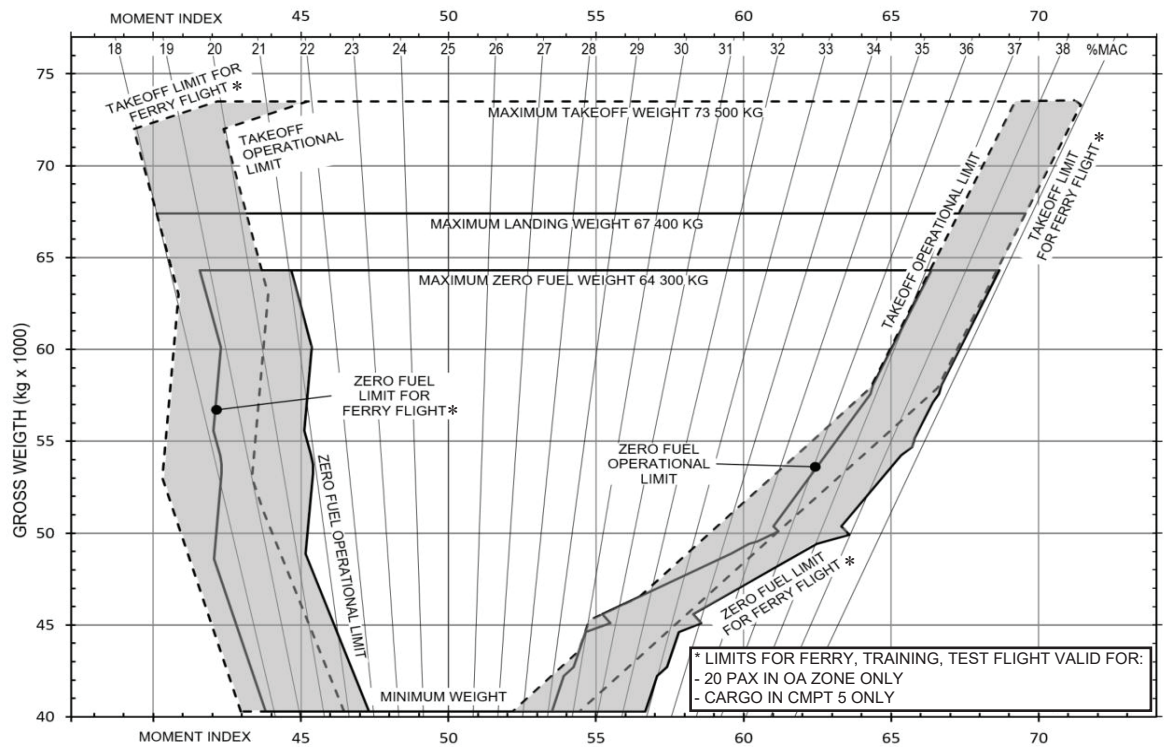


A320-272N CLS installed BALANCE CHART

FLIGHT _____
A/C _____
DATE _____



ZONES	Nbr	WEIGHT(kg)	INDEX
← DRY OPERATING			
Compt 1			500 kg
Compt 3			500 kg
Compt 4			500 kg
Compt 5			250 kg
CABIN OA			5 PAX
CABIN OB			25 PAX
CABIN OC			5 PAX
← ZERO FUEL			
← TAKE OFF FUEL			
← TAKE OFF WEIGHT			
FUEL INDEX			(- INDEX +)
SEE TABLE OVERLEAF			



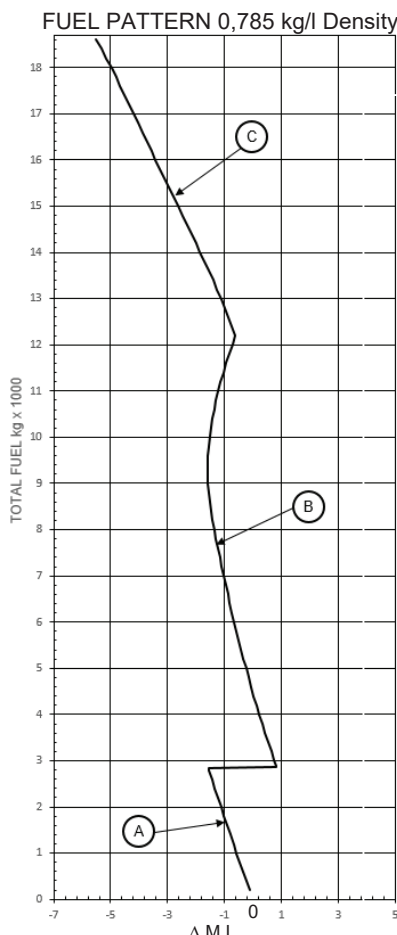
ZFW CDU INPUT	
WEIGHT (kg x 1000)	AIRCRAFT CG % MAC

TAKEOFF	
CG % MAC	

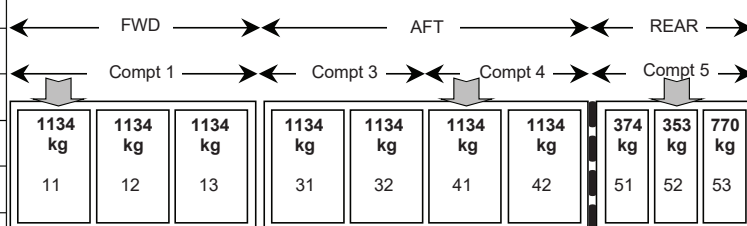
T.O. %MAC	15	17	19	21	23	25	27	29	31	33	35	37	39
PITCH TRIM	Constant	3	2	1	0	-1	-2						
	Nose Up						Nose Down						

USE OF BALANCECHART. For explanation of use of the Balance Chart, see FCOM PER-LOD-WBA-LTS. Refer to Crew Alert Notice or **Mass and Balance Data Sheet** to check for any updated values.

FUEL - Δ M.I. TABLE			
FUEL ON BOARD (kg)	FUEL DENSITY (kg/l)		
	0.770	0.785	0.810
500	0	0	0
1000	-1	-1	-1
1500	-1	-1	-1
2000	-1	-1	-1
2500	-1	-1	-1
2800	-2	-2	-2
2850	+1	-2	-2
2900	+1	+1	+1
3000	+1	+1	+1
3500	0	0	+1
4000	0	0	0
4500	0	0	0
5000	0	0	0
5500	0	0	0
6000	-1	-1	-1
6500	-1	-1	-1
7000	-1	-1	-1
7500	-1	-1	-1
8000	-1	-1	-1
8500	-2	-1	-1
9000	-2	-2	-2
9500	-2	-2	-2
10000	-1	-2	-2
10500	-1	-1	-2
11000	-1	-1	-1
11500	-1	-1	-1
12000	-1	-1	-1
12500	-1	-1	-1
13000	-1	-1	-1
13500	-2	-1	-1
14000	-2	-2	-2
14500	-2	-2	-2
15000	-3	-3	-2
15500	-3	-3	-3
16000	-4	-3	-3
16500	-4	-4	-4
17000	-4	-4	-4
17500	-5	-5	-4
18000	-5	-5	-5
18267	-5	-5	-5
18500		-5	-5
18623		-6	-5
19000			-6
19216			-6



WEIGHT LIMITATIONS		WV 051
MAXIMUM TAXI WEIGHT		73900kg
MAXIMUM TAKEOFF WEIGHT		73500kg
MAXIMUM LANDING WEIGHT		67400kg
MAXIMUM ZERO FUEL WEIGHT		64300kg
MINIMUM WEIGHT		40300kg
MAXIMUM STRUCTURAL LOAD		
Compt 1	3402 kg	
Compt 3	2268 kg	
Compt 4	2268 kg	
Compt 5	1497 kg	
MAXIMUM CUMULATIVE LOAD		
FWD (Compt 1)	3402 kg	
AFT (Compt 3 + Compt 4)	4536 kg	
REAR (Compt 5)	1497 kg	



CLS configuration with ULD base plate 60,4"x61,5"

A – INNER TANKS (OUTER TANKS EMPTY)

B – INNER TANKS (OUTER TANKS FULL)

C – CENTER TANK

LOAD LIMITATION CHECK

- 1) According to the number of passenger, for each Passenger Cabin (**OB not involved because considered in analysis**) enter the Weight/Bending Index columns reporting the respective values.
- 2) For each Bay of Cargo Compartment, enter the table with the relevant weight and report the Weight and the corresponding Bending Index in the proper columns.
- 3) According to the **A/C ZFWCG**, compute the total values and compare the total Weight/Bending Index for both FWD and AFT LIMITS with the structural ones.
- 4) The structural limits must always be EQUAL to or GREATER than the total ones found in 3).

PASSENGER CABIN				PASSENGER CABIN				Cargo compartment - CLS installed										STRUCTURAL LIMITATIONS				STRUCTURAL LIMITATIONS						
PSG	WEIGHT	BENDING INDEX (B.I.)		PSG	WEIGHT	BENDING INDEX (B.I.)		WEIGHT (kg)	BENDING INDEX (B.I.)										ZFWCG (%MAC)	FWD		AFT		ZFWCG (%MAC)	FWD		AFT	
n.	(kg)	FWD - OA	AFT - OC	n.	(kg)	FWD - OA	AFT - OC		CMPT 1	CMPT 3	CMPT 4	CMPT 5	CMPT 51-52-53	WEIGHT (kg)	BENDING INDEX (B.I.)	WEIGHT (kg)	BENDING INDEX (B.I.)	WEIGHT (kg)		BENDING INDEX (B.I.)	WEIGHT (kg)	BENDING INDEX (B.I.)						
1	84	6	10	31	2604	138	261		100	5	4	2	3	5	7	8	11	17		8418	323	6198	359		31	6457	251	8169
2	168	12	19	32	2688	140	268	200	10	7	4	7	10	13	16	21	18	8278	318	6339	376	32	6317	246	8309	622		
3	252	17	29	33	2772	143	274	300	16	11	6	10	15	20	24	32	19	8138	313	6480	394	33	6177	241	8450	639		
4	336	23	39	34	2856	146	281	400	21	15	8	14	20	26	32	43	20	7998	308	6620	412	34	6037	235	8591	657		
5	420	29	48	35	2940	148	288	500	26	18	10	17	25	33	41	53	21	7858	303	6761	429	35	5897	230	8732	675		
6	504	35	58	36	3024	151	295	600	31	22	12	20	30	39	49	64	22	7718	298	6902	447	36	5757	225	8872	692		
7	588	40	67	37	3108	153	301	700	36	25	14	24	35	46	57	75	23	7578	292	7043	464	37	5617	220	9013	710		
8	672	45	76	38	3192	155	307	800	42	29	16	27	40	52	65	86	24	7438	287	7183	482	38	5477	215	9154	727		
9	756	50	85	39	3276	157	313	900	47	33	19	31	45	59	73	96	25	7298	282	7324	499	39	5337	209	9295	745		
10	840	55	95	40	3360	159	319	1000	52	36	21	34	50	65	81	107	26	7158	277	7465	517	40	5197	204	9435	762		
11	924	60	104	41	3444	161	325	1100	57	40	23	37	55	72	89	118	27	7018	272	7606	534	41	5057	199	9576	780		
12	1008	66	113	42	3528	163	331	1134	59	41	23	38	56	74	92		28	6878	266	7746	552	42	4917	194	9717	797		
13	1092	70	121	43	3612	164	336	1200								128	29	6738	261	7887	569							
14	1176	75	130	44	3696	166	342	1300								139	30	6597	256	8028	587							
15	1260	79	138	45	3780	167	347	1400								150												
16	1344	84	147	46	3864	169	353	1497								160												
17	1428	88	155	47	3948	170	358																					
18	1512	93	164	48	4032	172	364																					
19	1596	96	171	49	4116	172	369																					
20	1680	100	179	50	4200	173	374																					
21	1764	104	187	51	4284	174	379																					
22	1848	108	195	52	4368	175	383																					
23	1932	112	203	53	4452	176	388																					
24	2016	116	211	54	4536	177	393																					
25	2100	119	218																									
26	2184	122	225																									
27	2268	125	233																									
28	2352	129	240																									
29	2436	132	247																									
30	2520	135	254																									

FWD LIMITS

WEIGHT
Kg

BENDING
INDEX

OA

BAY 11

BAY 12

BAY 13

TOTAL
WEIGHT/BENDING INDEX

A/C ZFW CG
(%MAC)

AFT LIMITS

WEIGHT
Kg

BENDING
INDEX

OC

BAY 31

BAY 32

BAY 41

BAY 42

CMPT 5

LOAD LIMITATION FORM			
A/C ZFW CG (%MAC)		AFT LIMITS	
FWD LIMITS		WEIGHT	BENDING INDEX
WEIGHT Kg	BENDING INDEX	OC	
		BAY 31	
		BAY 32	
		BAY 41	
		BAY 42	
		CMPT 5	
TOTAL WEIGHT/BENDING INDEX			