

Generic Air Charter Weight & Balance Program (WBP) Proposal
Certificate Number: ABCD1234Z

1. Standard Average Passenger Weights

Generic Air Charter utilizes business aircraft ranging in size from Learjet to Gulfstream. The primary FAR 135 charter demographics is business travelers. However, there is a significant number of charters that include families with persons aged from infant to adult.

Generic Air Charter computes weight and balance based on specific passenger (Adult Male, Adult Female, Child, etc.) in an actual seat. Random / Zone Seating is not used.

Standard Average passenger type will be reviewed on a per flight basis. For flights that contain primarily adult business travelers, the standard passenger weights from Tables 1A and 1B will be used (page 3).

Infants, children, or ages 13 to 19 carried will be added on a per passenger basis using standard passenger weights from Tables 2A/2B, 3A/3B, and 4A/4B (page 3). Infants or children carried as a lap child will be added to the adult weight in that seat. The average weight of infant or child will be used regardless of gender.

2. Standard Average Crew Weight

The flight crew (PIC) will perform the weight and balance calculation. Actual crew weight will be used.

3. Survey Count Reduction Request

Generic Air Charter requests a reduction in the minimum baggage survey count to 750 items (approximately 1/3 of expected baggage) based on the below information:

- Forecast to conduct 625 flights within the next 12 months.
- The average number of passengers carried is 4.
- The average number of seats available per flight is 12.
- Typical type of clientele are business and family.
- The average number of bags forecast to be carried in the next 12 months is 900 checked, 1400 personal items, unknown number of heavy bags, and zero carry-on.
- Based on the forecast number of bags over the next 12 months, expecting that it will not be possible to weigh each bag (due to time constraints), attaining a survey count 1,400 per baggage type in a reasonably acceptable time frame is improbable.

It is understood that, once the approved minimum baggage count per type is met, if the acceptable tolerable error of 2% is not met, a larger count may be required or more frequent surveys.

4. Proposed Initial Baggage Weights

Generic Air Charter proposes to determine an initial baggage weight for personal item and checked baggage. As many items as possible will be weighed until May 31, 2021. The average weight, accounting for 95% confidence interval will be used during the period of the approved survey to validate or determine appropriate baggage weights to be used. Generic Air Charter will submit the results on June 1, 2021 to the Principal Inspector for review and approval.

5. Survey Design

- Survey Locations. Generic Air Charter is approved to operate within the entire contiguous and non-contiguous United States of America. A plan to conduct a survey at the second airport of departure for that day will be conducted. If there is no planned second airport departure for that day, a survey, time permitting, will be conducted on the first flight of the day.
- As many bags as possible of all types will be surveyed.
- Scales used will be platform and “meat hook” type scales that will be calibrated regularly in a manner that meets the requirements of the FAA.

THIS DOCUMENT IS FOR SAMPLE PURPOSES ONLY. ALL DATA PROVIDED IS THEORETICAL. ACTUAL DATA FOR YOUR OPERATION IS REQUIRED.

TABLE - 1A

ADULT MALE					
Age	Number of examined persons	Mean (lbs)	Standard error of the mean	Standard deviation	Mean (lbs)
20 and over	5085	199.8	1.39	99.1	199.8

TABLE - 1B

ADULT FEMALE					
Age	Number of examined persons	Mean (lbs)	Standard error of the mean	Standard deviation	Mean (lbs)
20 and over	5386	170.8	1.4	102.7	170.8

AVERAGE ADULT (20 & UP)
185.0

TABLE - 2A

INFANT MALE					
Age	Number of examined persons	Mean (lbs)	Standard error of the mean	Standard deviation	Mean (lbs)
Birth-2 months	72	11.4	0.22	1.9	18.8
2-5 months	95	16.2	0.25	2.4	
6-8 months	81	19.5	0.24	2.2	
9-11 months	85	21.4	0.30	2.8	
1 year	268	25.3	0.24	3.9	

TABLE - 2B

INFANT FEMALE					
Age	Number of examined persons	Mean (lbs)	Standard error of the mean	Standard deviation	Mean (lbs)
Birth-2 months	71	11.0	0.25	2.1	17.5
2-5 months	99	14.8	0.26	2.6	
6-8 months	82	17.7	0.36	3.3	
9-11 months	87	19.9	0.24	2.2	
1 year	230	24.1	0.28	4.2	

AVERAGE INFANT
18.0

TABLE - 3A

CHILD MALE					
Age	Number of examined persons	Mean (lbs)	Standard error of the mean	Standard deviation	Mean (lbs)
2 years	242	30.9	0.35	5.4	65.2
3 years	184	36.5	0.78	10.6	
4 years	178	41.0	0.48	6.4	
5 years	181	46.6	0.98	13.2	
6 years	169	52.6	0.89	11.6	
7 years	193	61.0	1.43	19.9	
8 years	218	69.8	1.38	20.4	
9 years	195	78.1	2.31	32.3	
10 years	185	89.8	2.13	29.0	
11 years	173	102.6	3.45	45.4	
12 years	157	107.8	3.16	39.6	

TABLE - 3B

CHILD FEMALE					
Age	Number of examined persons	Mean (lbs)	Standard error of the mean	Standard deviation	Mean (lbs)
2 years	249	29.1	0.45	7.1	65.6
3 years	155	34.0	0.63	7.8	
4 years	188	40.0	0.98	13.4	
5 years	190	46.2	0.96	13.2	
6 years	180	52.3	1.19	16.0	
7 years	190	60.2	1.97	27.2	
8 years	186	69.1	1.78	24.3	
9 years	216	76.9	2.26	33.2	
10 years	186	90.6	3.00	40.9	
11 years	205	106.1	2.30	32.9	
12 years	154	116.9	3.72	46.2	

AVERAGE CHILD
65.0

TABLE - 4A

MALES AGED 13 THROUGH 19					
Age	Number of examined persons	Mean (lbs)	Standard error of the mean	Standard deviation	Mean (lbs)
13 years	163	133.2	3.33	42.5	158.2
14 years	166	143.6	3.88	50.0	
15 years	165	160.2	4.25	54.6	
16 years	152	157.2	3.37	41.5	
17 years	156	170.0	4.16	52.0	
18 years	129	166.7	4.34	49.3	
19 years	132	176.2	3.59	41.2	

TABLE - 4B

FEMALES AGED 13 THROUGH 19					
Age	Number of examined persons	Mean (lbs)	Standard error of the mean	Standard deviation	Mean (lbs)
13 years	138	125.8	3.33	39.1	143.3
14 years	169	137.0	3.88	50.4	
15 years	129	137.5	4.25	48.3	
16 years	170	144.9	3.37	43.9	
17 years	146	149.7	4.16	50.3	
18 years	141	151.6	4.34	51.5	
19 years	114	156.5	3.59	38.3	

AVERAGE AGED 13-19
151.0

* Data from the CDC Anthropometric Reference Data for Children and Adults: United States, 2015-2018