

WINGWEIGH SERVICES

WEIGHING REPORT & CofG SCHEDULE

FORM WingWeigh - WB (IMPERIAL)

Date: April 2023

Aircraft Type Cessna FR172J Serial No. 12345 Reg G-ABCD

Datum Firewall - Front Face Levelling Reference Port side rear level screws/Upper door sill

CofG: Fwd Limit 35.00 inches Aft Limit: 47.30 inches. * ~~Fwd~~ Aft of Datum
(Delete as required)

MTOW 2550 lbs

Cockpit Placards regarding load limitations Combined weight of baggage not to exceed 200lbs or 91Kg

Most Forward CofG Limit (35") is up to 1950lbs MAUW, then straight line to 40.5inches at 2550 lbs then 47.2"

EMPTY WEIGHT CALCULATIONS

ITEM	SCALE READING (lbs)	CORRECTIONS (lbs)	NET WEIGHT (lbs)	ARM (inches)	MOMENT (lbs.inches)
Main WHEEL Port	558	0	558	58	32364
Main WHEEL Stbd	564	0	564	58	32712
NOSE WHEEL	541	0	541	-7	-3787
UNUSABLE FUEL	0	36	36	46	1656
		EMPTY WEIGHT	1699	TOTAL MOMENT	62945

EMPTY CofG = $\frac{\text{TOTAL MOMENT}}{\text{EMPTY WEIGHT}}$ = $\frac{62945}{1699}$ = 37.05 inches * ~~Fwd~~ Aft of Datum
(Delete as required)

BALLAST AND OPTIONAL EQUIPMENT INSTALLED AT TIME OF WEIGHING

(For example Fixed ballast, Ballistic Parachute, Fire Extinguisher, First Aid Kit, Sandwiches etc.)

ITEM	TYPE	WEIGHT	ARM	MOMENT

Aircraft Weighed By: WingWeigh - J.Luck Scales Calibrated On: 04/10/2023

Supervising Engineer: _____ Signature: _____
Or Licenced Engineer

Licenced Engineer _____ Date Of Weighing: 05/01/2024
Or CAA Approval No.

Next Weighing Due: 05/01/2034

IT IS RECOMMENDED THAT GROUP "A" AIRCRAFT ARE RE-WEIGHED AT INTERVALS NOT EXCEEDING 10 YEARS. AIRCRAFT MUST BE RE-WEIGHED AND A NEW WEIGHT AND BALANCE SHEET SHOULD BE CREATED AFTER SIGNIFICANT MODIFICATION OR AFTER RECOVERING OR PAINTING AND AT INTERVALS, TO MONITOR WEIGHT GROWTH.

VARIABLE LOAD ITEMS

ITEM	QTY	WEIGHT (lbs)	ARM (inches)	MOMENT (lbs.inches)
PILOT	1	189	37	6993
PASSENGER (Front)	1	121	37	4477
PASSENGER (Rear)	1	121	73	8833
MAXIMUM FUEL - MAIN TANK	48	U.S Galls	298	46
MAXIMUM FUEL - AUX. TANK(S)	0	U.S Galls	0	0
MAXIMUM ALLOWED BAGGAGE	1		200	95
MAXIMUM ALLOWED BAGGAGE REAR	1		50	123

WEIGHT AND BALANCE CHANGES IN SERVICE	WEIGHT (lbs)	CG/ARM (inches)	MOMENT (lb.inches)
DATA FROM LAST WEIGHING =	1699	37.05	62945
CHANGE DUE TO:	+ - wt change	item CG position X	=
CHANGE DUE TO:	+ - wt change	X	=
CHANGE DUE TO:	+ - wt change	X	=
REVISED EMPTY WEIGHT =		REVISED TOTAL MOMENT =	

REVISED EMPTY CofG = $\frac{\text{TOTAL MOMENT}}{\text{EMPTY WEIGHT}}$ = _____ = _____ inches * Fwd- Aft of Datum (Delete as required)

LOADING EXAMPLES

NOTE: For loading examples to show compliance with CS-VLA or BCAR Section S a pilot weight of between 121lbs and 189lbs, and a passenger weight of 0 to 189lbs must be able to be accommodated with a minimum of 1 hours fuel. See Guidance on Weight and Balance and example sheets.

MOST FORWARD CofG LOADING			
ITEM	WEIGHT (lbs)	ARM (inches)	MOMENT (lb.inches)
A/C EMPTY WEIGHT	1699	37.05	62945
PILOT + P2	121	37	4477
PASSENGERS	0	73	0
BAGGAGE FRONT	0	95	0
BAGGAGE REAR	0	123	0
OTHER	0	0	0
ZERO FUEL TOTALS	1820	37.05	67422
ZERO FUEL CG =	$\frac{\text{MOMENT}}{\text{WEIGHT}} =$		37.05 inches
FUEL (TO GROSS WEIGHT MAX)	298	46	13689.6
TOTALS	2117.6	38.30	81111.6
LOADED CofG =	$\frac{\text{MOMENT}}{\text{WEIGHT}} =$		38.30

MOST REARWARD CofG LOADING			
WEIGHT (lbs)	ARM (inches)	MOMENT (lb.inches)	
1699	37.05	62945	
378	37	13986	
121	73	8833	
40	95	3800	
50	123	6150	
0	0	0	
2288	41.83	95714	
MOMENT	$\frac{\text{WEIGHT}}{\text{WEIGHT}} =$		41.83 inches
298	46	13689.6	
2585.6	42.31	109403.6	
MOMENT	$\frac{\text{WEIGHT}}{\text{WEIGHT}} =$		42.31

SIGNATURE:
DATE: 26/02/2024