Cessna

MORE PEOPLE BUY AND FLY CESSNA AIRPLANES THAN ANY OTHER MAKE

1975

WORLD'S LARGEST PRODUCER OF GENERAL AVIATION AIRCRAFT SINCE 1956

MODEL 172 AND Skyhawk

OWNER'S MANUAL

FUEL QUANTITY INDICATORS.

Empty (2.0 gallons unusable each tank) . . . . . E (red line)

TACHOMETER.

Normal Operating Range:

At sea level . . . . . 2200-2500 RPM (inner green arc)
At 5000 feet . . . . . 2200-2600 RPM (middle green arc)
At 10,000 feet . . . . . 2200-2700 RPM (outer green arc)
Maximum Allowable . . . . . 2700 RPM (red line)

CARBURETOR AIR TEMPERATURE GAGE (OPT).

Icing Range . . . . . -15° to 5°C (yellow arc)

WEIGHT AND BALANCE.

The following information will enable you to operate your Cessna within the prescribed weight and center of gravity limitations. To figure weight and balance, use the Sample Loading Problem, Loading Graph, and Center of Gravity Moment Envelope as follows:

Take the licensed empty weight and moment from appropriate weight and balance records carried in your aircraft, and write them down in the column titled YOUR AIRPLANE on the Sample Loading Problem.

NOTE

The licensed empty weight and moment are recorded on the Weight and Balance and Installed Equipment Data sheet, or on revised weight and balance records, and are included in the aircraft file. In addition to the licensed empty weight and moment noted on these records, the c.g. arm (fuselage station) is also shown, but need not be used on the Sample Loading Problem. The moment which is shown must be divided by 1000 and this value used as the moment/1000 on the loading problem.

Use the Loading Graph to determine the moment/1000 for each additional item to be carried, then list these on the loading problem.

NOTE

Loading Graph information for the pilot, passengers and baggage is based on seats positioned for average occupants and baggage loaded in the center of the baggage area as shown on the Loading Arrangements diagram. For loadings which may differ from these, the Sample Loading Problem lists fuselage stations for these items to indicate their forward and aft c.g. range limitation (seat travel or baggage area limitation). Additional moment calculations, based on the actual weight and c.g. arm (fuselage station) of the item being loaded, must be made if the position of the load is different from that shown on the Loading Graph.

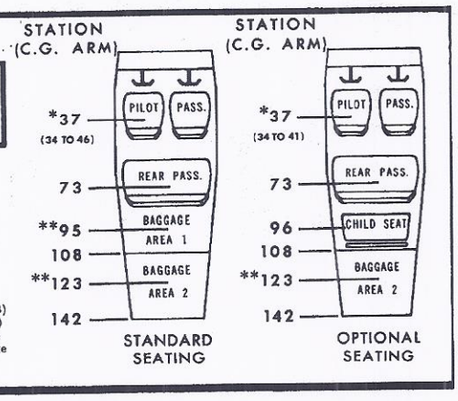
Total the weights and moments/1000 and plot these values on the Center of Gravity Moment Envelope to determine whether the point falls within the envelope, and if the loading is acceptable.

LOADING ARRANGEMENTS

* Pilot or passenger center of gravity on adjustable seats positioned for average occupant. Numbers in parentheses indicate forward and aft limits of occupant center of gravity range.

** Arm measured to the center of the areas shown.

NOTE: The rear cabin wall (approximate station 108) or aft baggage wall (approximate station 142) can be used as convenient interior reference points for determining the location of baggage area fuselage stations.

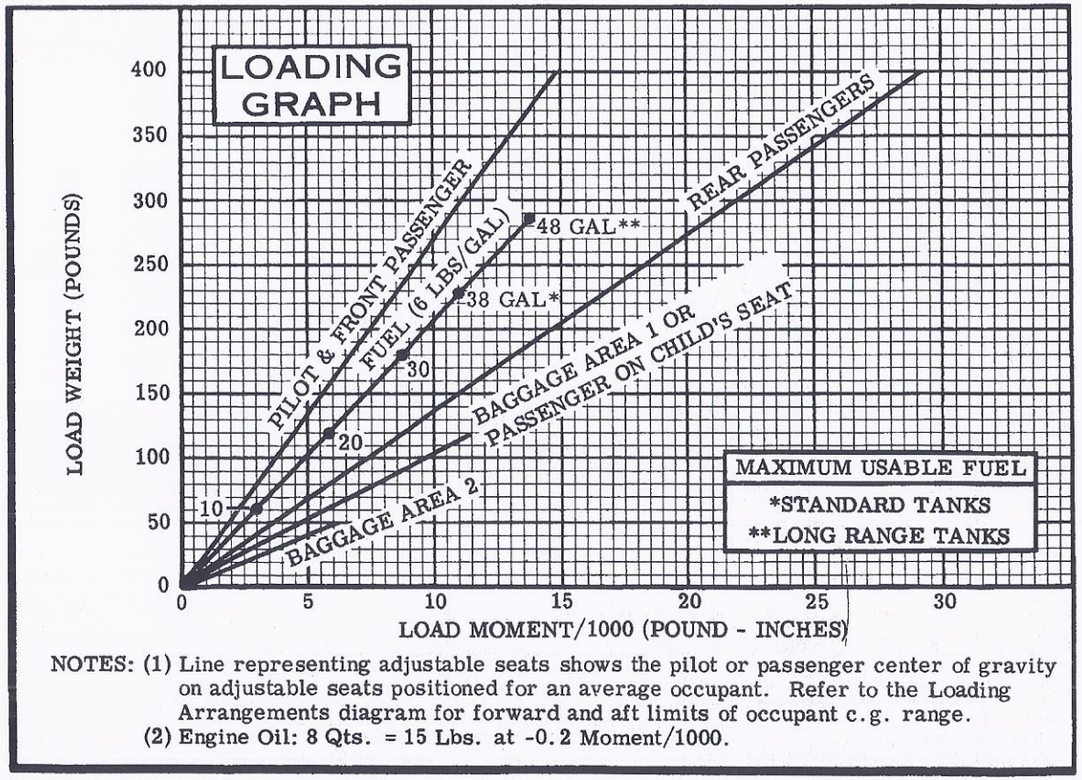


SAMPLE LOADING PROBLEM	SAMPLE AIRPLANE		YOUR AIRPLANE	
	Weight (lbs.)	Moment (lb.-ins. /1000)	Weight (lbs.)	Moment (lb.-ins. /1000)
1. Licensed Empty Weight (Use the data pertaining to your airplane as it is presently equipped. Includes unusable fuel.)	1366	53.8		
2. Oil (8 Qts. - The weight of full oil may be used for all calculations. 8 Qts. = 15 Lbs. at -0.2 Moment/1000).	15	-0.2	15	-0.2
3. Usable Fuel (At 6 Lbs./Gal.)				
Standard Tanks (38 Gal. Maximum)	228	10.9		
Long Range Tanks (48 Gal. Maximum)				
4. Pilot and Front Passenger (Station 34 to 46)	340	12.6		
5. Rear Passengers	340	24.8		
6.* Baggage Area 1 or Passenger on Child's Seat (Station 82 to 108) 120 Lbs. Max.	11	1.0		
7.* Baggage Area 2 (Station 108 to 142) 50 Lbs. Max.				
8. TOTAL WEIGHT AND MOMENT	2300	102.9		

9. Locate this point (2300 at 102.9) on the Center of Gravity Moment Envelope, and since this point falls within the envelope, the loading is acceptable.

NOTE

* The maximum allowable combined weight capacity for baggage areas 1 and 2 is 120 lbs.



NOTES: (1) Line representing adjustable seats shows the pilot or passenger center of gravity on adjustable seats positioned for an average occupant. Refer to the Loading Arrangements diagram for forward and aft limits of occupant c.g. range.

(2) Engine Oil: 8 Qts. = 15 Lbs. at -0.2 Moment/1000.

CENTER OF GRAVITY
MOMENT ENVELOPE
LANDPLANE
NORMAL
CATEGORY
UTILITY
CATEGORY
LOADED AIRCRAFT WEIGHT (POUNDS)
2300
2200
2100
2000
1900
1800
1700
1600
1500
45
50
55
60
65
70
75
80
85
90
95
100
105
110
LOADED AIRCRAFT MOMENT/1000 (POUND-INCHES)