

OPERATIONS AUTHORIZED

Your Cessna with standard equipment, exceeds the requirements of airworthiness as set forth by the United States Government, and is certified under FAA Type Certificate No. 3A10.

With standard equipment, the aircraft is approved for day and night operation under VFR. Additional optional equipment is available to increase its utility and to make it authorized for use under IFR day and night operation. Your Cessna Dealer will be happy to assist you in selecting equipment best suited to your needs.

MANEUVERS-NORMAL CATEGORY

The aircraft exceeds the requirements of the Federal Aviation Regulations, set forth by the United States Government for airworthiness. Spins and aerobatic maneuvers are not permitted in normal category aircraft in compliance with these regulations. In connection with the foregoing, the following gross weight and flight load factors apply:

Maximum Takeoff Weight	5300 lbs.
Maximum Landing Weight	5300 lbs.
*Flight Load Factor (at design gross weight)	
Flaps UP	+3.8G
	-1.52G
Flaps DOWN	+2.0G

*The design load factors are 150% of the above and in all cases the structure exceeds design loads.

Your aircraft must be operated in accordance with all FAA approved markings, placards, and checklists in the aircraft. If there is any information in this Owner's Manual that contradicts the FAA approved markings, placards, and checklists, it is to be disregarded.

AIRSPEED LIMITATIONS (CAS)

Maximum Structural Cruising Speed	
Level Flight or Climb	183 KCAS
Maximum Speed	
Flaps Extended 15°	160 KCAS
Flaps Extended 15° - 35°	140 KCAS
Gear Extended	140 KCAS
Never Exceed Speed (glide or dive, smooth air)	224 KCAS
*Maneuvering Speed	148 KCAS

*The maximum speed at which you can use abrupt control travel.

AIRSPEED INDICATOR INSTRUMENT MARKINGS

The following is a list of the calibrated airspeed limitations for the aircraft.

Never Exceed (glide or dive, smooth air)	224 KCAS (red line)
Caution Range	183-224 KCAS (yellow arc)
Normal Operating Range	74-183 KCAS (green arc)
Flap Operating Range	64-140 KCAS (white arc)
Minimum Control Speed	75 KCAS (red radial line)
Best Single-Engine Rate of Climb	102 KCAS (blue radial line)

ENGINE OPERATION LIMITATIONS

Maximum Power and Speed	260 BHP at 2625 RPM
(for all operations)	

ENGINE INSTRUMENT MARKINGS

OIL TEMPERATURE

Normal Operating Range	75° to 240°F (green arc)
Maximum Temperature	240°F (red line)

OIL PRESSURE

Idling Pressure	10 PSI (red line)
Normal Operating Range	30 to 60 PSI (green arc)
Maximum Pressure	100 PSI (red line)

CYLINDER HEAD TEMPERATURE

Normal Operating Range 200° to 460°F (green arc)
Maximum Temperature 460°F (red line)

MANIFOLD PRESSURE

Normal Operating Range 15 to 24 inches Hg (green arc)

TACHOMETER

Normal Operating Range 2100 to 2450 RPM (green arc)
Maximum Engine Rated Speed 2625 RPM (red line)

FUEL FLOW

Normal Operating Range 0 to 138 Lbs/Hr (green arc)
Minimum and Maximum Fuel Flows 0 and 138 Lbs/Hr (red line)
3.8 and 20.10 PSI (red line)

BAGGAGE COMPARTMENTS

Your aircraft has been designed for passenger carrying capability. As a result, no provisions have been made for the transportation of cargo. There are four baggage locations: two in the aft cabin area and one location in the aft portion of each engine nacelle.

These baggage areas are intended primarily for low density items such as luggage and brief cases. The floors of these areas are primary structure; therefore, care should be exercised during loading and unloading to prevent damage. When loading high density objects, insure that adequate protection is available to prevent damage to any aircraft primary structure. If baggage is carried, it is necessary to properly locate and secure this load before flight.

BAGGAGE TIE-DOWN

Two hundred pounds of baggage is allowed at Station 96 behind the standard 310 seats without the use of tie-downs. Any baggage stored at Station 96, with the individual seats in the Model 310, require tie-downs. Tie-downs for Station 96 are directly forward and directly aft of the Station 96 area. In all seating arrangements, standard or optional, baggage at Station 124 is limited to 160 pounds and must be secured by tie-downs. These tie-downs are directly

aft of the Station 96 baggage area and directly aft of the Station 124 baggage area. It is not recommended that any of the baggage tie-downs extend from the aft side of Station 124 to the forward side of Station 96.

WEIGHT AND BALANCE

The following information will enable you to operate your Cessna within the prescribed weight and center of gravity limitations. To figure the weight and balance for your particular aircraft, use Figures 4-1, 4-2 and 4-3 as follows:

Take the licensed Empty Weight and Moment/1000 from the Weight and Balance Data sheet, plus any changes noted on forms FAA-337, carried in your aircraft, and write them down in the proper columns of Figure 4-1. Using Figure 4-2, determine the moment/1000 of each item to be carried. Total the weights and moments/1000 and use Figure 4-3 to determine whether the point falls within the envelope and if the loading is acceptable.

LOADING CHART

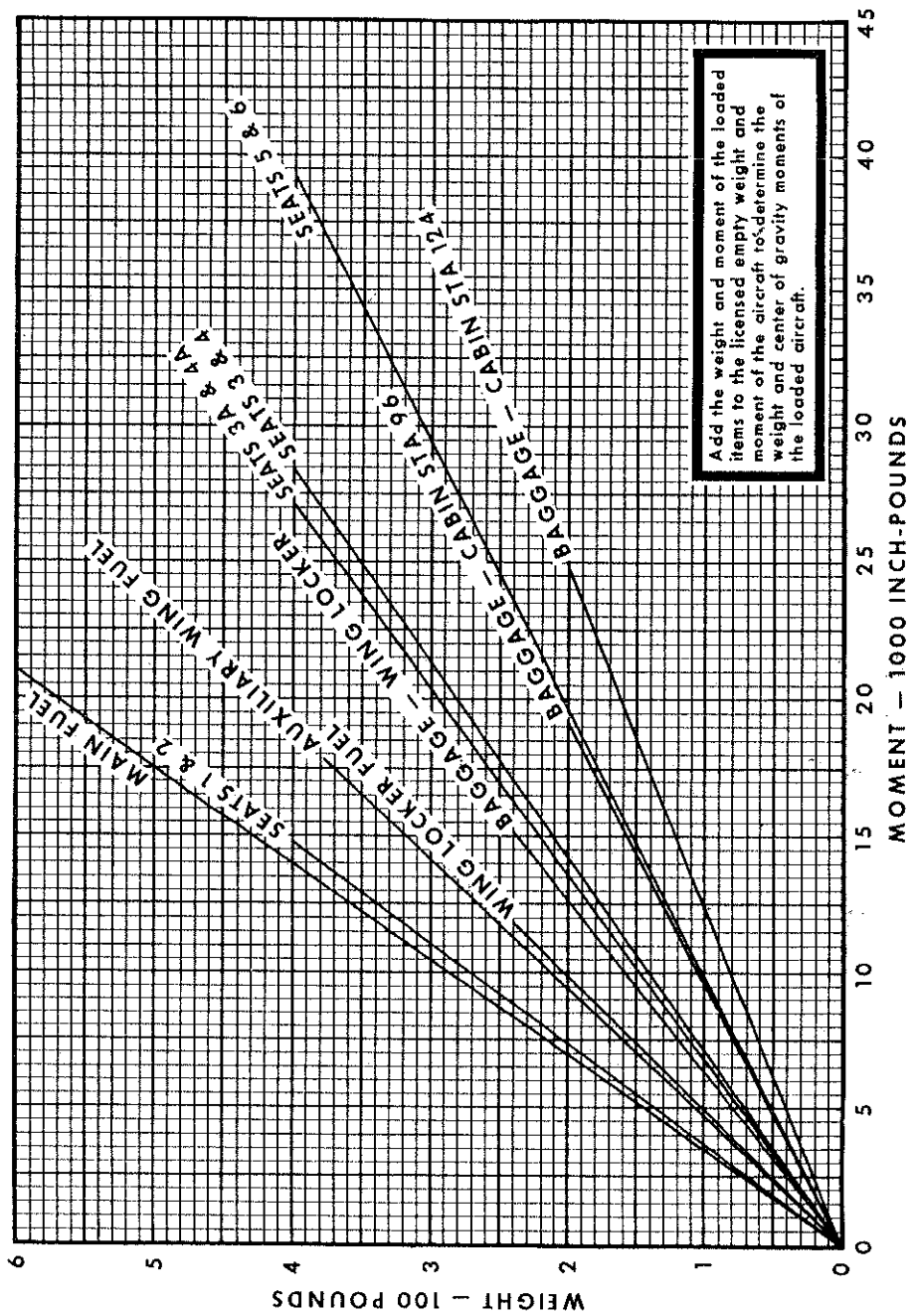
The loading chart, see Figure 4-2, is provided as a convenient method of determining the moment in inch-pounds of items to be loaded in the aircraft. This chart applies only when the CG of the occupant is at the location specified under Moment Arms in Figure 4-2. If the seat is in any other position, the moment must be computed by multiplying occupant weight times the arm in inches. A point midway between the fore and aft seat rollers can be assumed to be the occupant and seat CG.

The forward face of the cabin doorway structure is Station 20.00.

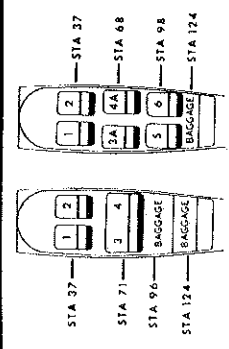
<i>SAMPLE PROBLEM</i>	Sample Aircraft		Your Aircraft	
	Weight (lbs)	Moment (lb-ins.)	Weight (lbs)	Moment (lb-ins.)
1. Licensed Empty Weight (Sample Problem) . . .	3411.0	121.9		
2. Oil *(24 Qts x 1.875 lb/qt) . . .	45.0	-0.2	45.0	-0.2
3. Pilot and Passengers Seats 1 and 2	340.0	12.6		
Seats 3 and 4				
Seats 3A and 4A	340.0	23.1		
Seats 5 and 6	340.0	33.3		
4. *Fuel (gals. x 6 lbs/gal) Main Tanks (100 gals)	600.0	21.0		
Auxiliary Tanks (40 gals)	124.0	5.8		
Auxiliary Tanks (63 gals)				
Wing Locker Tanks (40 gals)				
5. Baggage (Sta. 96.0)				
(124.0)				
(Wing Lockers)	100.0	6.3		
6. Total Aircraft Weight (Loaded)	5300.0	223.8		
7. Locate this point (5300 at 223.8) on Figure 4-3 and since this point falls within the envelope, the loading is acceptable.				
*Note: Normally full oil may be assumed for all flights.				

Figure 4-1

LOADING CHART



Add the weight and moment of the loaded items to the licensed empty weight and moment of the aircraft to determine the weight and center of gravity moments of the loaded aircraft.



MOMENT ARMS

Item	#	Station-Inches
Oil	.	-3.5
Main Fuel	.	35.0
Auxiliary Wing Fuel	.	47.0
Wing Locker Fuel	.	49.0
Wing Locker Baggage	.	63.0

Figure 4-2

CENTER OF GRAVITY MOMENT ENVELOPE

SAMPLE PROBLEM
POINT
5300.0, 223.8

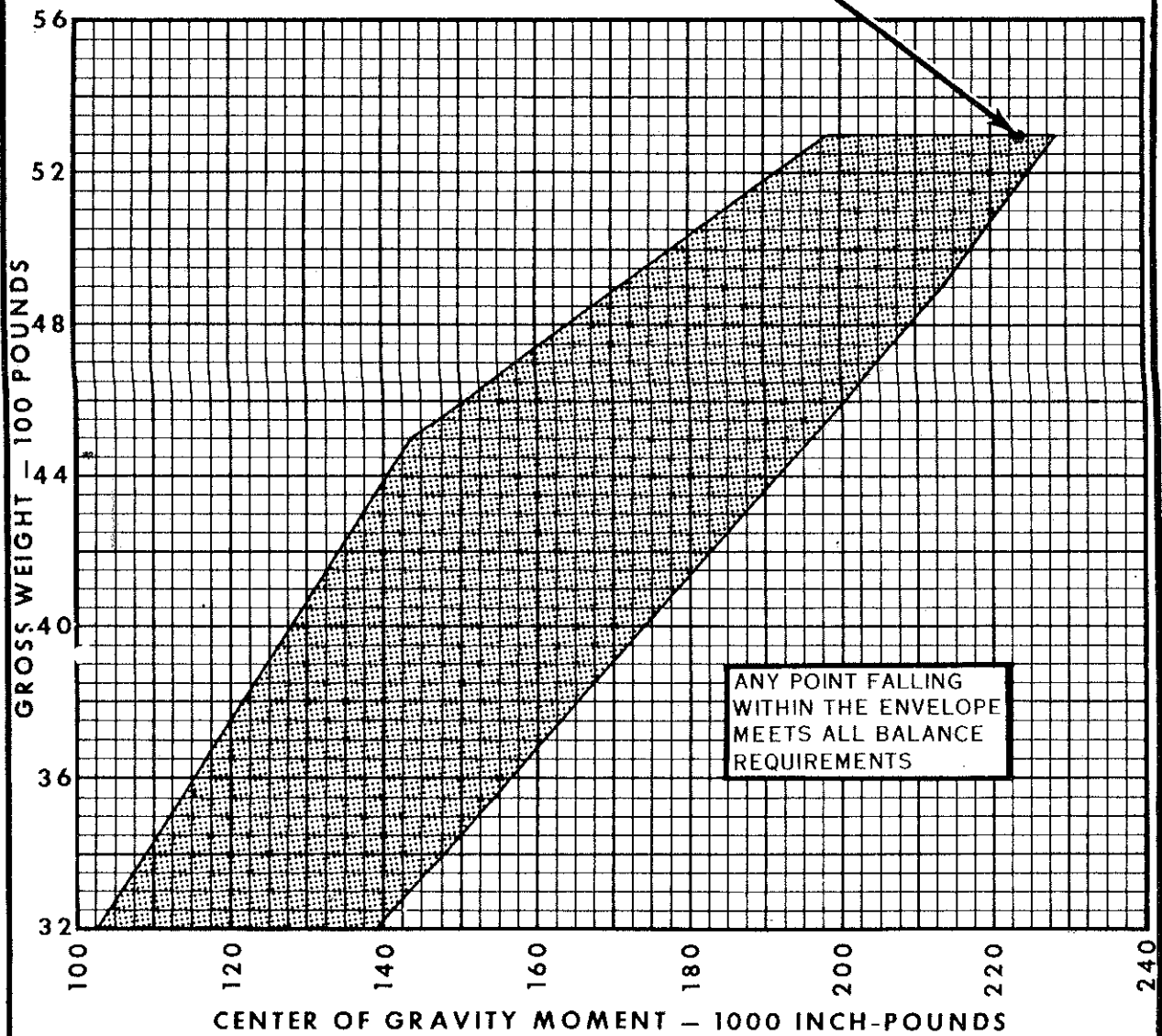


Figure 4-3