STERLING AVIONICS

FAA CRS WQ3R954L

WEIGHT AND BALANCE
AND EQUIPMENT LIST SUPPLEMENT SHEET

Customer Name: FM Aviation
Aircraft Type: CESSNA
Model: 150J
Serial #: 15069850

Date: 5-Aug-20
Registration #: N51225
Work Order #: 38454

Note: This weight & balance calculation is a result of the weight of the aircraft with installed equipment less unuseable fuel & oil & the distances between nose wheel, datum & main gear.
These new values supersede all previous values.

		WEIGHT	ARM	MOMENT
Data from weight & balance report 6/7/2000		1075.40	33.05	35543.90
ITEMS REMOVED:	**S/N**			
Narco AT 150 transponder		(2.50)	13	32.50
				0.00
				0.00
				0.00
Total Removed		(2.50)		32.5
ITEMS INSTALLED:	**S/N**			
Appareo Stratus ESG transponder and tray	82859	3.30	13.00	42.90
RAMI GPS antenna P/N AV-801	200167	0.50	30.00	15.00
				0.00
				0.00
Total Installed		3.80	43.00	57.90
CHANGE IN DATA:		1.30		25.40

AIRCRAFT NEW EMPTY WEIGHT	1076.70
AIRCRAFT NEW CENTER OF GRAVITY	33.04
AIRCRAFT NEW MOMENT	35569.30
AIRCRAFT NEW USEFUL LOAD	523.30
GROSS AIRCRAFT WEIGHT	1600.00

SIGNED: _____
M Bruno

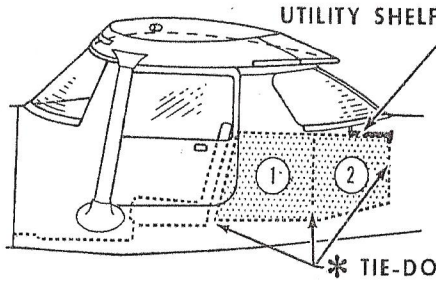
carried. Total the weights and moments/1000 and use the Center of Gravity Moment Envelope to determine whether the point falls within the envelope, and if the loading is acceptable.

NOTE

The Weight and Balance Data sheet noted above is included in the aircraft file. The Loading Graph and Center of Gravity Moment Envelope shown in this section are also on the sheet titled Loading/Center of Gravity Charts and Weighing Procedure which is provided in the aircraft file.

SAMPLE LOADING PROBLEM	SAMPLE AIRPLANE		YOUR AIRPLANE	
	Weight (lbs.)	Moment (lb.-ins. /1000)	Weight (lbs.)	Moment (lb.-ins. /1000)
1. Licensed Empty Weight (Sample Airplane)	1038	34.1		
2. Oil (6 qts. - Full oil may be assumed for all flights)	11	-0.1	11	-0.1
3. Fuel (Standard - 22.5 gal at 6 lbs./gallon)	135	5.7		
Fuel (Long Range - 35 gal. at 6 lbs./gallon)				
4. Pilot and Passenger	340	13.3		
5. Baggage - Area 1 (or children on child's seat)	76	4.9		
6. Baggage - Area 2	0	0.0		
7. TOTAL WEIGHT AND MOMENT	1600	57.9		
8. Locate this point (1600 at 57.9) on the center of gravity moment envelope, and since this point falls within the envelope, the loading is acceptable.				

BAGGAGE LOADING AND TIE-DOWN

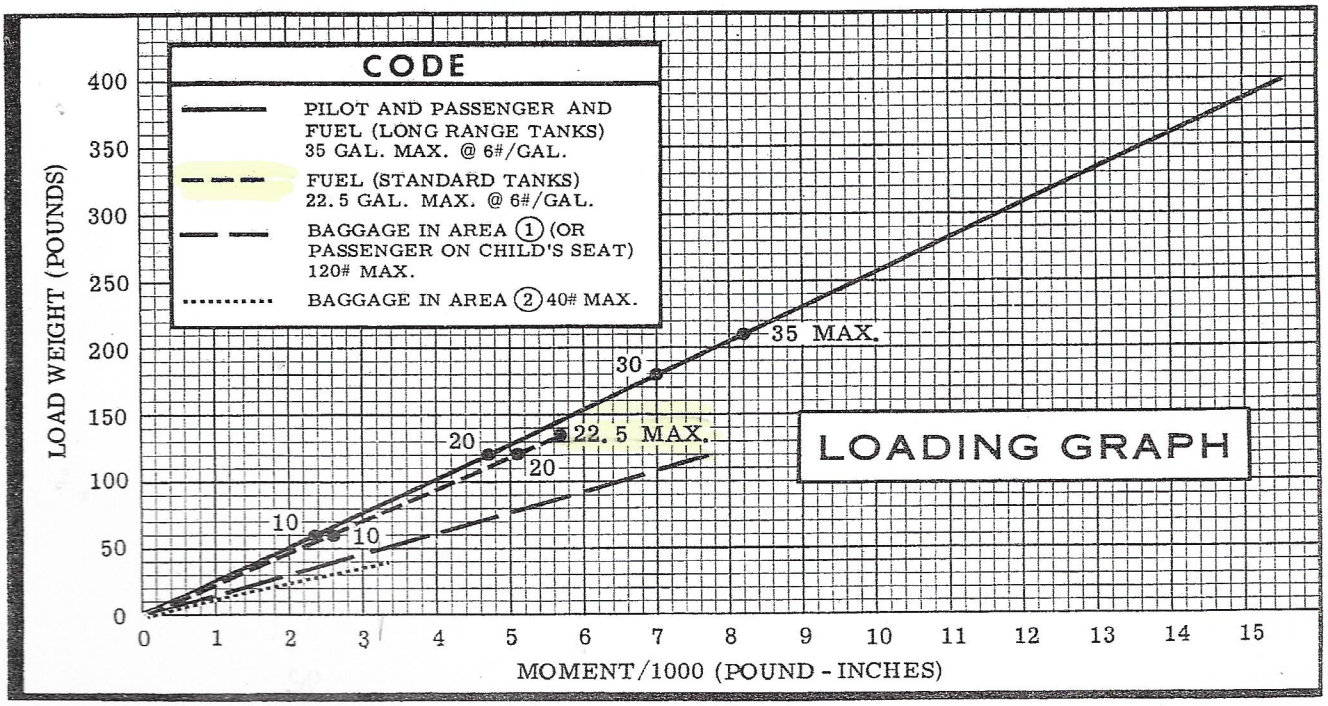


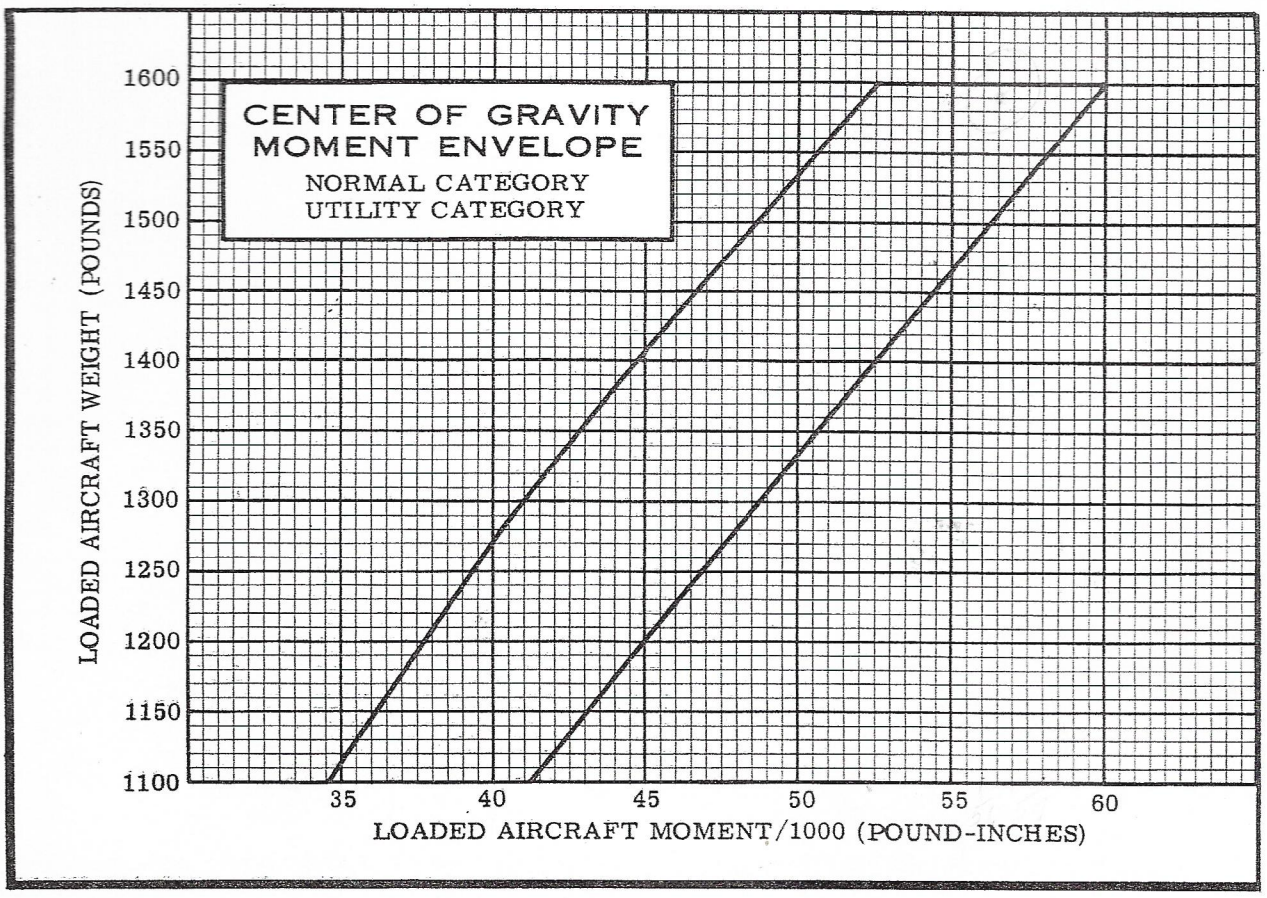
BAGGAGE AREA MAXIMUM ALLOWABLE LOADS

AREA (1) = 120 POUNDS
AREA (2) = 40 POUNDS
AREAS (1) + (2) = 120 POUNDS

* A cargo tie-down net is provided to secure baggage in the baggage area. The net attaches to six tie-down rings. Two rings are located on the floor just aft of the seat backs and one ring is located two inches above the floor on each cabin wall at the aft end of area (1). Two additional rings are located at the top, aft end of area (2). At least four rings should be used to restrain the maximum baggage load of 120#.

If the airplane is equipped with an optional utility shelf, it should be removed prior to loading and tying down large baggage items. (Slide the tab of the locking clips on each end of the shelf to disengage the shelf from the aircraft structure.) After baggage is loaded and secured, either stow the shelf or, if space permits, install it for storing small articles.


CODE
PILOT AND PASSENGER AND FUEL (LONG RANGE TANKS) 35 GAL. MAX. @ 6#/GAL.
FUEL (STANDARD TANKS) 22.5 GAL. MAX. @ 6#/GAL.
BAGGAGE IN AREA (1) (OR PASSENGER ON CHILD'S SEAT) 120# MAX.
BAGGAGE IN AREA (2) 40# MAX.
LOAD WEIGHT (POUNDS)
400
350
300
250
200
150
100
50
0
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
MOMENT/1000 (POUND - INCHES)
35 MAX.
30
22.5 MAX.
20
20
10
10
LOADING GRAPH


CENTER OF GRAVITY MOMENT ENVELOPE
NORMAL CATEGORY
UTILITY CATEGORY
LOADED AIRCRAFT WEIGHT (POUNDS)
1600
1550
1500
1450
1400
1350
1300
1250
1200
1150
1100
35 40 45 50 55 60
LOADED AIRCRAFT MOMENT/1000 (POUND-INCHES)

N51225
Cessna 150

WEIGHT and BALANCE FORM

ITEM	WEIGHT (pounds)	ARM (inches)	MOMENT (pound-inches)
1 Basic Empty Weight			
2 Fuel (@ 6 lbs. per gal)		42.2	
3 Front Seat Passengers		39.12	
4 Baggage		64.5	
5 OIL (6QTS)	11	-0.009	-0.1
6			
7			
8			
9			
10			
TOTAL			

C.G. = _____ INCHES

6150