Midwest Aviation Services, Inc.
Aircraft Weight & Balance Report

Aircraft: N472AC Type: 7GCAA S/N: 411-98
Model: 7GCAA

Prior Empty Weight:	1,191.0	As Of:	11/24/1998	Prior Useful Load:	559.0
Prior Longitudinal Moment:	14,646.0000	Arm:	12.3000		

Items Installed:

Date	Description	Weight	Longitudinal Arm	Longitudinal Moment
7/13/2000	Airwolf Remote Oil Filter Kit.	4.00	-24.5000	-98.0000
	Total of Items Installed:	4.00		-98.0000

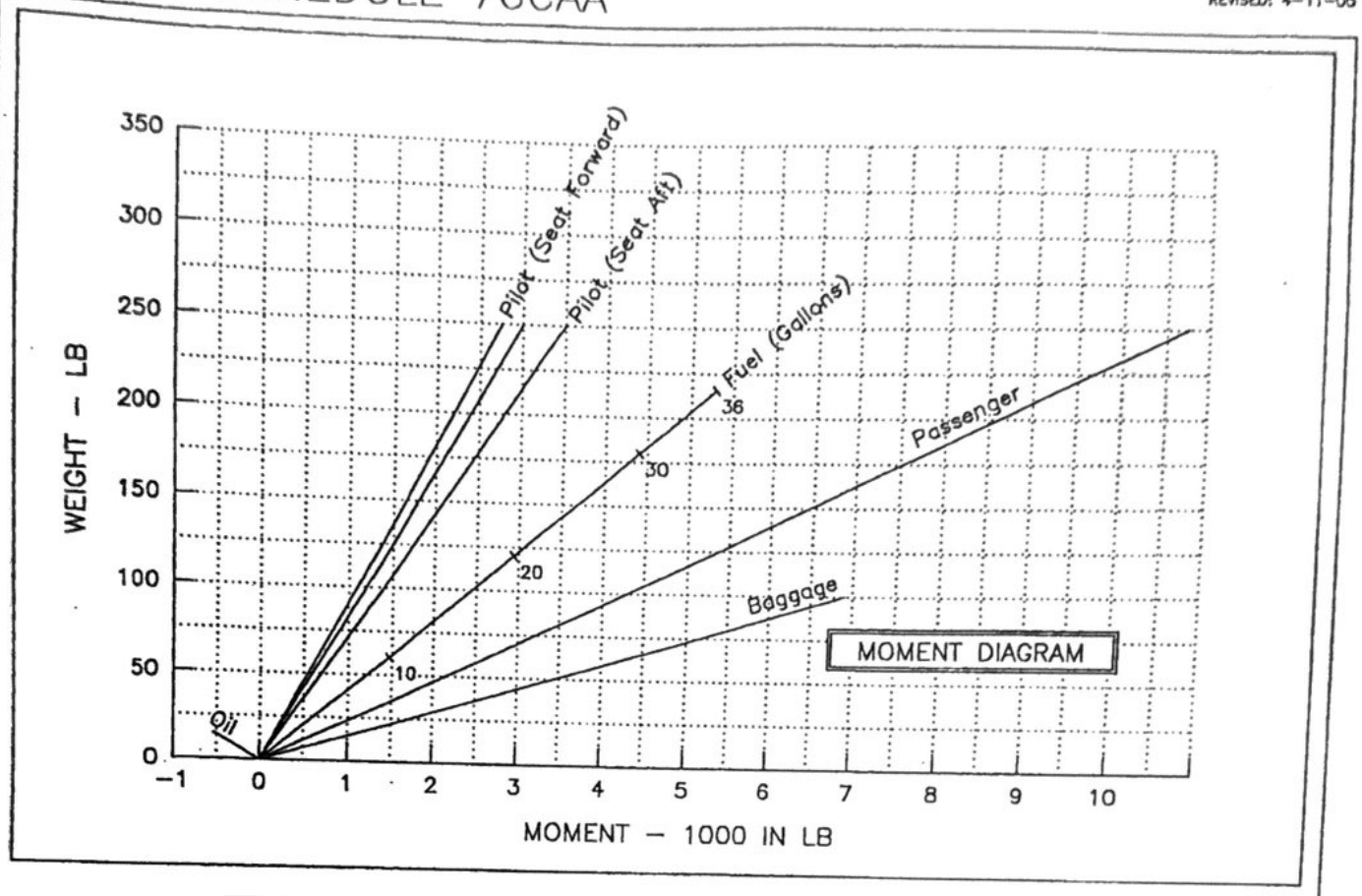
New Final Figures:

Weight:	**1,195.00**	**Useful Load:**	**555.00**
Longitudinal Moment:	**14,548.0000**	**Arm:**	**12.1741**

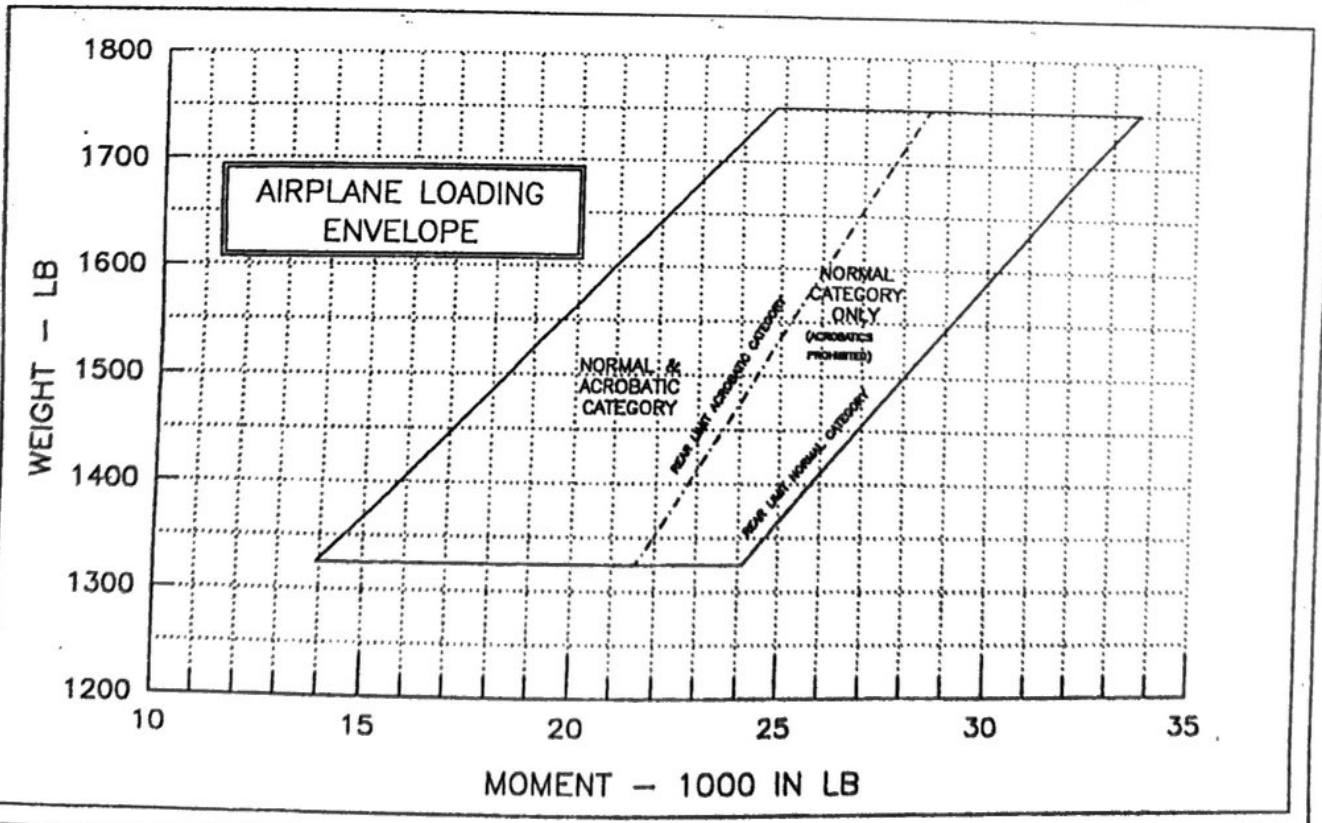
Max Gross Weight 1,750.00

LOADING SCHEDULE 7GCAA

REVISED: 4-11-08



Add weights and moments of items in MOMENT DIAGRAM to airplane empty weight and moment. (negative oil moment) Locate intersection of total weight and moment on AIRPLANE LOADING ENVELOPE. Any point falling within the envelope meets all balance requirements.



SECTION V

WEIGHT AND BALANCE

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GENERAL

It is the pilot's responsibility to insure that the aircraft is loaded properly and within the weight and balance limitations. All flight performance, procedures and characteristics are based on this prerequisite.

If the aircraft is to be used for aerobatic flight, it must be loaded within the approved flight envelope. The rear center of gravity limit is considered critical. In addition, no baggage is allowed.

Although the gross weight limit is not affected by aerobatic flight, the importance of this limit cannot be overemphasized. Subjecting the aircraft to the maximum approved load factor limits in an overgross condition may result in damage or complete structural failure of the airframe.

The actual licensed empty weight and center of gravity (C.G.) of a specific aircraft can be found on the Weight and Balance Form and the Operating Limitations Card, both of which are a permanent part of the aircraft's file. All additional changes to the aircraft's empty weight and C.G. after the time of manufacture must also be attached to or indicated on both forms. From this information and the following instructions, the pilot can easily determine the "Useful Load" and proper loading distribution for the aircraft.

NOTE

The rear center of gravity limits vary with each model Citabria. A flight envelope is provided for each model.

LOADING PROCEDURES

1. Determine from the Weight and Balance Sheet, in the aircraft file, the "Licensed Empty Weight and Moment" (in-lbs). Enter these figures under "Your Airplane" of the Sample Loading Problem, Figure 5-1.

2. Full oil capacity can be assumed for all flights. For ease of future loading computations, the new "Empty Weight and Moment with Oil" should be determined and entered in the Sample Loading Problem under "Your Airplane".

3. Using the Loading Graph, Figure 5-2, determine the weight and the moment of the following items and enter these figures on the Sample Loading Problem.

   a) Pilot
   b) Rear Passenger
   c) Wing Fuel - 35 Gals. Maximum Usable @ 6 Lbs./Gal.
   d) Baggage - 100 Lbs. Maximum (Normal Category Only)

4. Add the "Aircraft Empty Weight and Moment with Oil" and all the items in Step 3 to determine the "Gross Take-Off Weight and Moment".

5. Using the Flight Envelope, Figures 5-3, 5-4, 5-5 for the model Citabria used, determine that the gross take-off weight and moment are within limits.

WARNING

If the aircraft is not within the approved flight envelope limits, it must be reloaded. Under no circumstances should the aircraft be flown with an out of limits condition, particularly if aerobatic flight is contemplated.

SAMPLE LOADING PROBLEM					
ITEM	ARM (in)	SAMPLE AIRPLANE		YOUR AIRPLANE	
		WEIGHT (lbs)	MOMENT (in-lbs)	WEIGHT (lbs)	MOMENT (in-lbs)
1) Licensed Empty Weight	12.2	1153	14067		
Oil-8 qts @ 7.5 lbs/gals *7ECA--6 qts	-36.0	+15 (+11*)	-540 (-396*)	+15 (+11*)	-540 (-396*)
2) Licensed Empty Weight & Moment With Oil		1168	13527		
3) Pilot	11.5	190	2185		
Rear Passenger	42.0	190	7980		
Wing Fuel - 35 Gals Max @ 6 lbs/gal	24.5	102	2499		
Baggage-100 lbs Max (Normal Category Only)	69.0	-0-	-0-		
4) Gross Take-Off Weight & Moment		1650	26191		

NOTE: 1) * 7ECA only - 6 qts oil.
2) To determine Take-Off Center of Gravity (inches aft of datum), divide the Gross Take-Off Moment by the Gross Take-Off Weight. Center of Gravity Limits are listed in Section I.
3) The above sample problem is loaded for aerobatic flight conditions and assumes a 170 pound pilot and passenger with parachutes.

FIGURE 5-1 SAMPLE LOADING PROBLEM