

MOONEY AIRCRAFT INC.  
Kerrville, Texas

Model M-18C 55  
Weight & Balance  
Date

CAA Identification No. \_\_\_\_\_ Airplane Serial No. \_\_\_\_\_ Date \_\_\_\_\_

1. **WEIGHT LIMITS:**

Maximum weight is 850 lbs.

It is the responsibility of the airplane owner and the pilot to insure that the airplane is properly loaded. The empty weight, empty weight C.G. and useful load are noted below for this airplane, as delivered from the factory, If the airplane is altered, refer to the latest Alteration & Repair Form (ACA-337) approved for this information.

2. **C. G. LIMITS**

Approved C. G. operating limits are noted in the CAA Approved Airplane Flight Manual. See back side for Allowable Loading,

3. **EMPTY WEIGHT & EMPTY WEIGHT C. G. LOCATION:**

Actual weight empty, as weighed, Includes residual oil and unusable fuel 1.5 lbs. at (58.7)

Item			
Left Main Wheel			
Right Main Wheel			
Nose Wheel			
Weight Empty as weighed			

Horizontal datum is front face of vertical tubes above nose gear mounting 25.19" Fwd. of wing L.E. outboard of fillet; MAC is 43.9" L. E. MAC 25.3"

aft datum. **COMPUTATION:** C. G. Forward of Main Wheels \_\_\_\_\_ x \_\_\_\_\_ / \_\_\_\_\_ = \_\_\_\_\_ C.G. aft datum = \_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_;

As weighed C.G. ( \_\_\_\_\_ - 25.3) / 43.9 = \_\_\_\_\_ %MAC

Item	Weight	Arm	Moment
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As weighed

Ballast (fixed)

Empty weight & C. G,

4. **USEFUL Load**

Maximum Useful load is 850 - \_\_\_\_\_ = \_\_\_\_\_ Lbs. Useful load items are:

Oil, 4 qts., 7.5 lbs, (-4.5); Usable fuel 13.5 Gal., 81,0 lbs, (58.7); Pilot, (37.0); Baggage, 40 lbs. (51.0), & 35 lbs, (70.0) Std, Airplane 40 lbs, (51.0) with battery.

5. **EQUIPMENT LIST:**

The Following equipment was installed as delivered from the factory and is included in the weight empty.

No.	Item (Check if applicable)	Lbs.	Arm
<input type="checkbox"/>	Propeller, _____ (Alternate)	_____	(-23.1)
<input type="checkbox"/>	Propeller, Flottorp 65A66 (Std,)	8.5	(-23.1)
<input type="checkbox"/>	Main Wh.-- brake Assemblies, 4.00x4, Mooney	10.5	( 47.7)
<input type="checkbox"/>	Main Wh. 6 ply tires, 4.00x4 Industrial, reg. tubes	10.5	( 47.7)
<input type="checkbox"/>	Main Who 4 ply tires 4.00x4 Industrial, reg. tubes	8.0	( 47.7)
<input type="checkbox"/>	Nose Wheel Assembly, 4.00x4, Mooney W-2	2.7	(- 1.0)
<input type="checkbox"/>	Nose Wheel 6 ply tire 4.00x4 Industrial, reg, tubes	5.3	(- 1.0)
<input type="checkbox"/>	Cabin Heater & Valve	.8	(- 6.0)
<input type="checkbox"/>	Cabin Ventilator & Valve	.5	( 3.0)

	Lbs.	Arm
Upholstering	4.0	( 25.0)
Air Filter	.8	(-14.5)
Landing Gear Warning Signal	.6	(11.10)
CAA Approved Flight Manual, dated <u>4-11-55</u>		
Tail Cone 66-2	2.0	( 164.0)
Starter & Elec, Power Supply Install. Mooney 983	55.0	( 35.6)
Position & Instrument Lt. Install Mooney 983	1.8	( 39.3)
Landing Light Install Mooney 983	1.0	(-18.5)
Stall Warning Install Mooney 854	.3	( 16.0)
Fixed Ballast	_____	( 155.0)
Radio Installation	_____	_____
_____	_____	_____
_____	_____	_____
Main Gear Doors, Mooney E.O. 208	<u>3.5</u>	<u>( 47.7)</u>
Aux. Gas Tank Dwg, 1049	<u>10</u>	<u>( 51.0)</u>
_____	_____	_____

**NORMAL CATEGORY OPERATING LIMITS RANGE 31.1 TO 34.4**

6.	<b>MINIMUM WEIGHT LOADED:</b>			
	Item	Weight	Arm	Moment
	Weight Empty as Weighed	_____	_____	_____
	Pilot	170	37.0	6290
	Oil	7.5	-4.5	-34
	Fuel (5 1/2 Gallons) (Main)	33	58.7	1937
	<b>WEIGHT &amp; C. G.</b>			
7.	<b>GROSS WEIGHT FORWARD LOADING:</b>			
	Weight Empty as Weighed	_____	_____	_____
	Pilot	170	37.0	6290
	Oil	7.5	-4.5	-34
	Fuel ( _____ Gallons) (Main)	_____	_____	_____
	_____	_____	_____	_____
	Baggage Front Compt.	_____	51.0	_____
	Baggage Aft Compt.	_____	70.0	_____
	<b>WEIGHT &amp; C. G.</b>			
	<b>GROSS WEIGHT MOST REARWARD LOADING:</b>			
	Weight Empty as Weighed	_____	_____	_____
	Pilot	170	37.0	6290
	Oil	7.5	-4.5	-34
	Fuel ( _____ Gallons) (Main)	_____	_____	_____
	_____	_____	_____	_____
	Baggage Front Compt.	_____	51.0	_____
	Baggage Aft Compt.	_____	70.0	_____
	<b>WEIGHT &amp; C. G.</b>			
	<b>NOTE: IF USEFUL LOAD IS LESS THAN 231.5 LBS.</b>			
	<b>Loading Placard</b>			
	<b>LOADING SCHEDULE</b>			
	The following loadings may be made with this airplane without exceeding weight or C.G. Limits.			
	170 Lb. Pilot _____ Gal. Usable	140 Lb. Pilot _____ Gal. Usable		
	160 Lb. Pilot _____ Gal. Usable	130 Lb. Pilot _____ Gal. Usable		
	150 Lb. Pilot _____ Gal. Usable			
	Fuel may be replaced by baggage down to 5 1/2 Gallons			