

Aircraft Weight and Balance Revision

Make **Mooney** Date of Revised Weight and Balance

9/26/2013

Model **M20J**

Serial # **24-3281**

TCDS **Maximum Weight**

2900

CG Range FWD:

CG Range AFT:

Old Useful Load

969.2

Old EW

1930.8

Old EWCG

47.51

Old Moment

91728.62

Notes:

Added or Removed Equipment

JPI 830

Wiring Harness and Probes

USB and LEMO-plug

Weight

Arm

Moment

1.9

17

32.3

5.662

5.5

31.141

0.05

17

0.85

0

0

0

0

0

0

0

0

Sub Totals

7.612

39.5

64.291

New Moment

91951.426

New EW

1938.412

New Useful Load

961.588

New EWCG

47

Date:

4/24/18

Signature:

[Signature]

A&P:

[Signature] TA

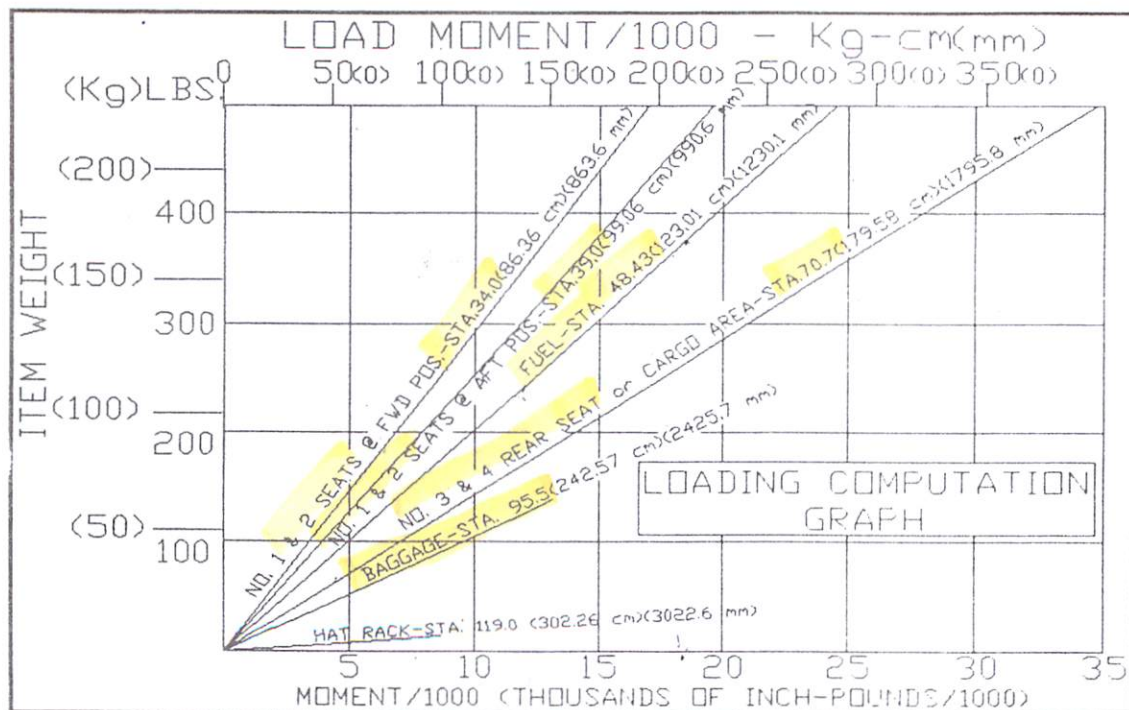
PROBLEM FORM

STEP	ITEM	Sample Problem		Your Problem	
		WEIGHT Lbs. (Kg.)	MOMENT Lb in/1000 (Kg.cm/1000)	WEIGHT Lbs. (Kg.)	MOMENT Lb.in/1000 (Kg.cm/1000)
1	A/C Basic Empty Wt.(W _T) (From page 6-5) (Includes Full Oil) 8 Qts.(7.6 Li) @ Sta.11.5 (29.2 cm)(Oil sump assumed FULL for all flights)	1750 (793.79)	77.02 (887.38)		
2	Pilot Seat (#1) *	170 (77.11)	6.0/2nd pos (6.85)		
	Co-Pilot Seat (#2) *	170 (77.11)	5.78/Fwd (6.66)		
3	Left Rear Seat (#3) or Cargo Area	170 (77.11)	12.02 (13.85)		
	Right Rear Seat (#4) or Cargo Area				
4	Fuel (Max. Usable 64 Gal.(242.3 Li), 384 Lbs.(174.2 Kg) @ Sta. 48.43 (123.0 cm)	312.0 (141.5)	15.11 (17.41)		
5	Baggage (Max. 120 Lbs.)(54.43 Kg) @ Sta. 95.5 (242.57 cm)	110 (49.9)	10.51 (12.10)		
	Hat Rack (Max. 10 Lbs.)(4.54 Kg) @ Sta. 119.0 (302.26 cm)	3.0 (1.36)	.36 (.41)		
6	Loaded Aircraft Weight	2685 (1218)			
	Total Moment/1000		127 (1463.7)		
7	Refer to Center of Gravity Moment Envelope to determine whether your A/C loading is acceptable.				
*	Obtain the moment/1000 value for each seat position(FWD, MID or AFT) from loading computation graph below.				

J-LD-PRB

CAUTION

Cargo loaded in rear seat area, with seat backs folded down, should have center of gravity over fuselage station 70.7.



Accident Wt & CG					Accident Wt & CG				
Based on Fuel Burn Calcs					Mains based on Fuel Est'd obs				
Item	Station	Weight	Max Wt	Moment	Item	Station	Weight	Max Wt	Moment
EW	47	1938.412		91105.364	EW	47	1938.412		91105.364
Ft seat Pilot	36.5	235		8577.5	Ft seat Pilot	36.5	235		8577.5
Ft Seat Pax	36.5	15		547.5	Ft Seat Pax	36.5	15		547.5
Rear seat 1	70.7	140		9898	Rear seat 1	70.7	140		9898
Rear seat 2	70.7	185		13079.5	Rear seat 2	70.7	185		13079.5
Aft Baggage (B)	95.5	30	120	2865	Aft Baggage (B)	95.5	30	120	2865
Wing Main Fuel	48.43	78	13g	3777.54	Wing Main Fuel	48.43	150	25g	7264.5
TOTAL	49.53	2621.412	2900	129850.404	TOTAL	49.51	2693.412	2900	133337.364

WPR18FA251
Wt & Bal Envelope

MOONEY
M20J

SECTION VI
WEIGHT AND BALANCE

M20J - CENTER OF GRAVITY LIMITS ENEVELOPE

