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NOTE:

The empty weight, center of gravity and equipment list for the airplane as delivered from Mooney Airplane Company, Inc. is contained in this section. The use of this section is valid for use with the airplane identified below when approved by Mooney Airplane Company, Inc.

MOONEY - M20TN

AIRCRAFT SERIAL NO. 31-0071

AIRCRAFT REGISTRATION NO. N991A

Mooney Airplane Company, Inc. - Approved Signature and Date



PROBLEM FORM

STEP	ITEM	SAMPLE PROBLEM		YOUR PROBLEM	
		WEIGHT (Kg) Lbs	MOMENT (Kg-cm /1000) lb-in /1000	WEIGHT (Kg) Lbs	MOMENT (Kg-cm /1000) lb-in /1000
1	A/C Basic Empty Wt. (W.) (from page 6-5) (Includes Full Oil) 8 Qts (7.57 Li) @ 1.875 Lbs/Qt (.80 Kg/Li) (Sta. -20.19) (-51.3 cm) (Oil sump assumed FULL for all flights)	(1009) 2225	(114.6) 99.46		
2	Pilot Seat (#1) *	(77.1) 170	(7.64) (aft pos) 6.63		
	Co-Pilot Seat (#2) *	(77.1) 170	(7.25) (2nd. pos) 6.29		
3	Left Rear Seat (#3) or Cargo Area	(77.1) 170	(14.3) 12.41		
	Right Rear Seat (#4) or Cargo Area	(77.1) 170	(14.3) 12.41		
4	Fuel (Max. Usable - 102.0 Gal/593.6 Lbs.) (386.1 Li/266.4 Kg) @ Sta 49.23 (125 cm)	(164.7) 363	(20.59) 17.87		
5	Baggage (Max. 120 Lbs (54.4 Kg) @ Sta. 101.5 (257.8 cm)	(45.4) 100	(11.70) 10.15		
	Hat Rack (Max. 10 Lbs (4.54 Kg) @ Sta. 126.0 (320 CM)				
* Obtain the moment/1000 value for each seat position (FWD, MID or AFT) from loading computation graph.					
CONTINUE PROBLEM FORM ON NEXT PAGE					



PROBLEM FORM (CONT)

STEP	ITEM	SAMPLE PROBLEM		YOUR PROBLEM	
		WEIGHT (Kg) Lbs	MOMENT (Kg-cm /1000) lb-in /1000	WEIGHT (Kg) Lbs	MOMENT (Kg-cm /1000) lb-in /1000
6	Loaded A/C Weight (Takeoff at Max. Weight) A/C will have to burn off 168 Lbs fuel before normal landing is accomplished	(1528) 3368	(190.2) 165.0		
7	Required Fuel Burn-Off 32 Gals (121Li) @ 5.82 Lbs/Gal	(84.3) 186	(-9.53) -8.27		
8	MAXIMUM LANDING WEIGHT of A/C	(1452) 3200	(180.6) 156.7		
9	Refer to Center of Gravity Moment Envelope, to determine whether your A/C loading is acceptable. CAUTION - DO NOT LAND A/C WHEN OVER 3200 LBS. EXCEPT IN AN EMERGENCY SITUATION.				

-CAUTION-

Pilot is responsible for cargo loaded in rear seat area, with seat backs folded down. Cargo Center of Gravity location varies with total weight loaded. Compute CG value when cargo is loaded.

LOADING COMPUTATION FORM

