

Weight & Balance Calculator

last rev. Jan 20, 2021 DAH

Musketeer – N2378Z

user data in yellow fields >>

		Weight	Arm	Moment
		(lbs.)	(in.)	(lb.-in.)
Empty weight		1354	109.51	148260
Oil (8 qt. Max., 7 lb./gal.)	qt: 7	12	50.00	613
Fuel (59 gallons useable)	gal: 40	240	117.00	28080
Pilot		300	110.00	33000
Co-pilot		120	110.00	13200
Rear seat #1		140	142.00	19880
Rear Seat #2		80	142.00	11360
Baggage (120 lb. max.)		50	167.00	8350
Gross Weight (2300 lb. max.)		2296		262743
Loaded Center of Gravity			114.43	
Maneuvering speed, Va (mph):	115	<< (decr. with decr. wt.)		

Chart Data –

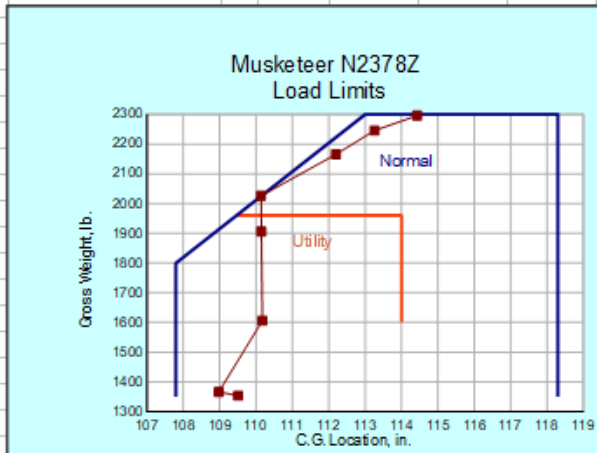
Cum CG	Cum Wt	Cum Prod
109.5	1353.9	148260
109.0	1366.1	148873
110.2	1606.1	176952.6
110.1	1906.1	209952.6
110.1	2026.1	223153
112.2	2166.1	243033
113.3	2246.1	254393
114.4	2296.1	262743

Limits Envelope Data –

CG-Norm	Normal
107.8	1350
107.8	1800
113	2300
118.3	2300
118.3	1350
CG-Utility	Utility
109.50	1960
114	1960
114	1600

Conditional formatting data -

max. gross	2300	lb.
aft CG	118	in.
max. bag.	120	lb.
max. fuel	60	gal.
min. fuel	10	gal.
max. oil	8	qt.
min. oil	4	qt.
Va	115	mph.



Empty weight and C.G. data comes from your AC current weight & balance records.

Station arms, load limits, and airspeed limits come from:
the Airplane Flight Manual (before 03-01-79)
or Pilot's Operating Handbook (POH) (after 03-01-79).