

**NRI Flying Club**

	<b>N1407U</b>		
	Updated 19-Jun-2022		
<b>General</b>		<b>Speeds</b>	<b>KIAS</b>
Year	1976	Vr- Rotate / init climb @ Flaps (Normal)	55 / 70-80 @ 0 deg
Type	C-172M	Vr- Rotate / init climb @ Flaps (Short Fld)	55 / 59 @ 0 deg
Engine	Lyc 0-320-D2J	Vr- Rotate / init climb @ Flaps (Soft Fld)	55 / 55 @ 10 deg
Propeller	75" Fixed	Normal climb speed	70 - 80
HP @ RPM	160 @ 2700	Vx - Best Angle of Climb	64 (62 @ 10,000)
Fuel Octane Grade Minimum	100	Vy - Best Rate of Climb	78 (68 @ 10,000)
Fuel Usable	38	Vcc - Best Enroute Climb	70 - 90
Fuel Unusable Gal	4	Vno - Normal Operating Speed	128
Fuel Consumption at 75% Power (GPH)	8.3	Vne - Never Exceed	160
Endurance (75% pwr, less 45' reserve)	3 hrs, 50 min	Va - Manuvering Speed	97 @ 2300 lbs
Oil (quarts) Min / Max - Preferred	5 / 7 - 6		89 @ 1950 lbs
Air Pressure PSI (Nose / Mains)	31 / 29		80 @ 1600 lbs
Positive Load:	+ 3.80g @ 2300 lbs	Vfe - Flap Extension (1-10 degree)	85
	+ 4.40g @ 2000 lbs	Vfe - Flap Extension (11-max deg)	85
Negative Load	- 1.52g @ 2300 lbs	Vlo / Vle - Max landing gear op/extend	n/a
	- 1.76g @ 2000 lbs	Vs - Stall Speed (Clean - 0 deg flaps)	47
<b>Weights (Lbs)</b>		Vso - Stall Speed (Dirty - max flaps)	41
Basic Empty Weight	1491.1	Normal Approach Downwind	80
Useful Load	808.9	Normal Approach Base	60 - 70
Full Fuel Weight	228.00	Normal Approach Final (Full Flaps)	55 - 65
Cabin Load w/ Full Fuel and Oil/ No bags	580.9	Short Field Approach (Full Flaps)	60
Max Baggage:	120.00	Best Glide Speed / Engine Out	65
Max Gross Weight:	2300.00		
CG (empty)	38.06		
Empty moment	56,755	Max Crosswind	15
Gear retraction moment change	n/a	Maximum Open Speed	160 (window)
Date of last Weight and Balance	7-Sep-2018	White Arc (full flap operating range)	41 - 85
		Green Arc (normal operating range)	47 - 128
		Yellow Arc (caution, only in smooth air)	128 - 160
		Red Line (max speed all operations)	160

These are estimates only. Always check the POH to be sure.