

GENERAL SPECIFICATIONS

PERFORMANCE

Published figures are for Standard PA-31P airplanes flown at gross weight under standard conditions at sea level unless otherwise stated. Performance for a specific airplane may vary from published figures depending upon the equipment installed, the condition of engines, airplane and equipment, atmospheric conditions and piloting technique.

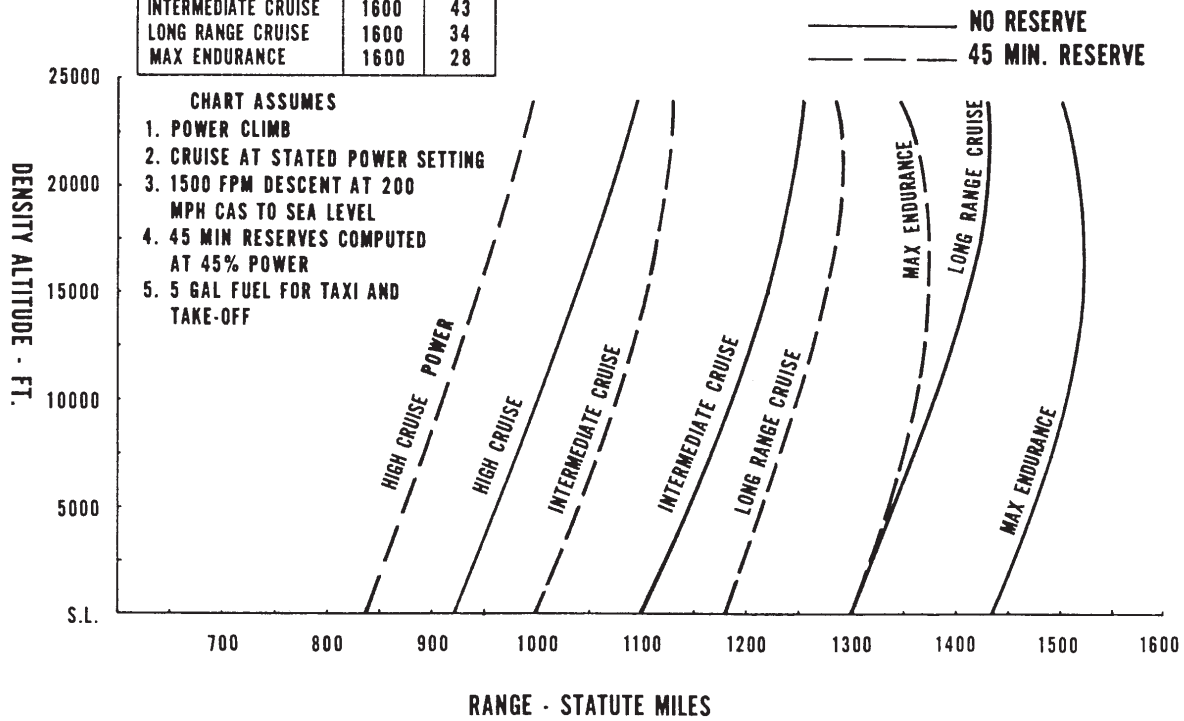
Short Field Takeoff Run (ft)	1440
Short Field Takeoff Distance Over 50-ft. Barrier (ft)	2200
Accelerate Stop Distance	2830
Minimum Controllable Single Engine Speed	95 MPH (83 KT)
Best Rate of Climb Speed	126 MPH (110 KT)
Best Rate of Climb (ft per min)	1740
Best Angle of Climb Speed (15° flap)	110 MPH (96 KT)
Best Single Engine Rate of Climb Speed	133 MPH (116 KT)
Best Single Engine Rate of Climb (ft per min)	240
Best Single Engine Angle of Climb Speed	130 MPH (113 KT)
Service Ceiling (ft)	29000+
Absolute Ceiling (ft)	29000+
Single Engine Service Ceiling (ft)	12100
Single Engine Absolute Ceiling (ft)	15300
Stalling Speed (25° flaps) (power off)	86 MPH (75 KT)
Stalling Speed (gear and flaps up) (power off)	92 MPH (80 KT)
Top Speed at 18,000 ft	280 MPH (243 KT)
Cruising Speed (High Cruise power at 24,000 ft)	266 MPH (231 KT)
Cruising Speed (Intermediate Cruise power at 24,000 ft)	244 MPH (212 KT)
Cruising Speed (Long Range Cruise power at 24,000 ft)	222 MPH (193 KT)
Cruising Speed (Max. Endurance power at 24,000 ft)	190 MPH (165 KT)
Fuel Consumption High Cruise (1800 rpm both engines) (gph)	54.0
Fuel Consumption Intermediate Cruise (1600 rpm both engines) (gph)	43.0
Fuel Consumption Long Range Cruise (1600 rpm both engines) (gph)	34.0
Fuel Consumption Max. Endurance (1600 rpm both engines) (gph)	28.0
Statute Miles/Nautical Miles	
Cruising Range High Cruise (1800 rpm at 24,000 ft) (no reserves)	1195/1040
Cruising Range Intermediate Cruise (1600 rpm at 24,000 ft) (no reserves)	1255/1090
Cruising Range Long Range Cruise (1600 rpm at 24,000 ft) (no reserves)	1425/1240
Cruising Range Max. Endurance (1600 rpm at 24,000 ft) (no reserves)	1500/1305

RANGE VS. DENSITY ALTITUDE

CRUISE FUEL CONSUMPTION

RATED POWER	RPM	GPH TOTAL
HIGH CRUISE	1800	54
INTERMEDIATE CRUISE	1600	43
LONG RANGE CRUISE	1600	34
MAX ENDURANCE	1600	28

WEIGHT - 7800 LBS.
236 GAL. USABLE FUEL
242 GAL. TOTAL FUEL



PRESSURIZED NAVAJO Power Setting Table-Avo Lycoming Model TIGO-541-EIA, 425 HP Engine

PRESS. ALT FEET	STD ALT TEMP °F °C	HIGH CRUISE		INTERMEDIATE CRUISE		LONG RANGE CRUISE		MAX. ENDURANCE		PRESS. ALT FEET
		PROP	RPM	PROP	RPM	PROP	RPM	PROP	RPM	
		58 GPH		45 GPH		35 GPH		29 GPH		28 GPH
		2000	1800	1800	1600	1800	1600	1800	1600	
SL	59 15	34.0	36.7	33.0	36.7	29.4	32.3	25.6	27.8	SL
2,000	52 11	33.8	36.7	32.9	36.5	29.1	32.0	25.3	27.5	2,000
5,000	41 5	33.7	36.4	32.6	36.3	28.8	31.6	24.8	27.0	5,000
8,000	31 -1	33.6	36.3	32.5	36.1	28.6	31.4	24.4	26.4	8,000
12,000	16 -9	33.7	36.4	32.5	36.1	28.4	31.0	24.0	26.0	12,000
15,000	+6 -15	33.9	36.9	32.6	36.4	28.3	30.0	23.8	25.6	15,000
18,000	-5 -21	34.5	37.7	32.9	36.9	28.3	31.0	23.7	25.2	18,000
21,000	-16 -27	35.4	39.1**	33.7	37.6	28.5	31.2	23.7	25.1	21,000
24,000	-27 -33	*36.7	*40.5**	34.9	*38.6	28.8	31.6	23.8	25.0	24,000
27,000	-37 -38	-	-	*36.4	-	29.5	*32.0	24.0	25.0	27,000
29,000	-44 -42	-	-	-	-	*29.8	-	*24.2	*25.0	29,000

*If attainable **27 GPH per engine is minimum allowable this RPM/MAP/Altitude combination

1. Rated Power 2133 RPM 45" Hg MAP.
2. Climb Power 2000 RPM 40" Hg MAP. (Permissible to lean to 1500° EGT but not less than 40 GPH thru 5000 feet and 1550° EGT above 5000 feet, provided cylinder head temperature (450°) and oil temperature (245°) remain within limits.)
3. To maintain constant power, correct manifold pressure approximately 0.25" Hg for each 10°F variation in outside air temperature from standard altitude temperature. Add manifold pressure for air temperatures above standard; subtract for temperatures below standard.
4. Power settings less than long range cruise are not recommended for cruise above 24,000 feet.

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