

2.17 FLIGHT MANEUVERING LOAD FACTORS

- | | |
|------------------------------------|---------------------------------|
| (a) Positive Load Factor (Maximum) | |
| (1) Flaps Up | 3.8 G |
| (2) Flaps Down | 2.0 G |
| (b) Negative Load Factor (Maximum) | No inverted maneuvers approved. |

2.19 TYPES OF OPERATION

The airplane is approved for the following operations when equipped in accordance with FAR 91 or FAR 135.

- (a) Day V.F.R.
- (b) Night V.F.R.
- (c) Day I.F.R.
- (d) Night I.F.R.
- (e) Non Icing

2.21 FUEL LIMITATIONS

- | | |
|---|---------------|
| (a) Total Capacity | 110 U.S. GAL. |
| (b) Unusable Fuel | 2 U.S. GAL. |
| The unusable fuel for this airplane has been determined as 1.0 gallon in each nacelle in critical flight attitudes. | |
| (c) Usable Fuel | 108 U.S. GAL. |
| The usable fuel in this airplane has been determined as 54 gallons in each nacelle or a total of 108 gallons. | |

2.23 NOISE LEVEL

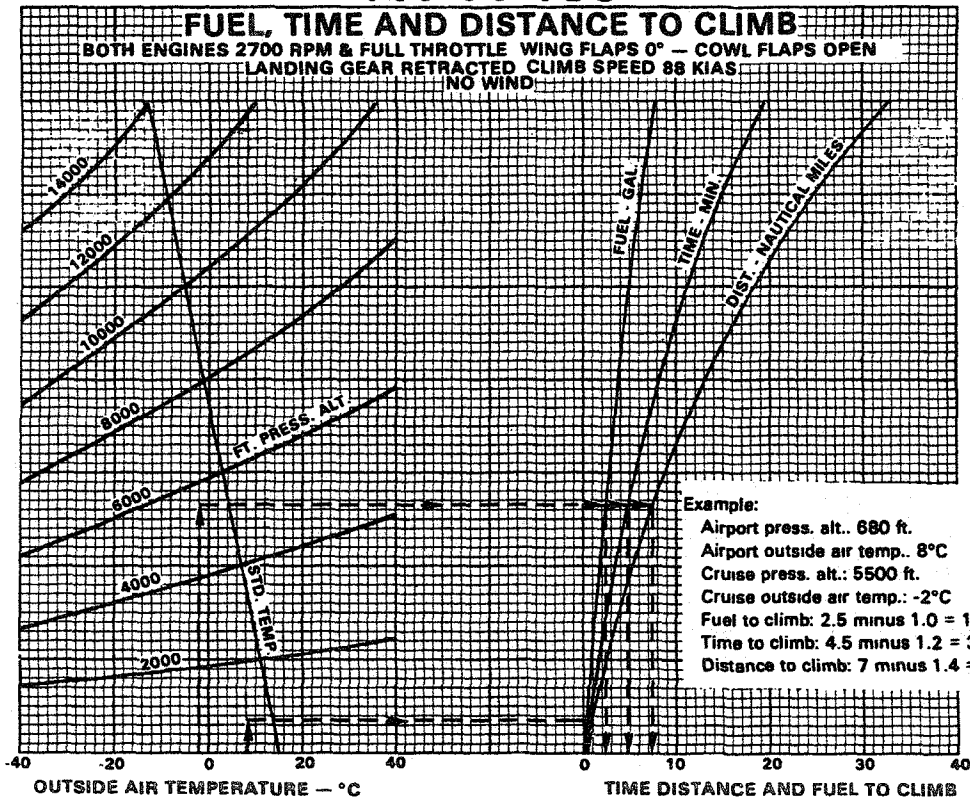
The corrected noise level of this aircraft is 74.7 d B(A) with the two blade propeller and 75.6 d B(A) with the three blade propeller.

No determination has been made by the Federal Aviation Administration that the noise levels of this airplane are or should be acceptable or unacceptable for operation at, into, or out of, any airport.

PA-44-180

FUEL, TIME AND DISTANCE TO CLIMB

BOTH ENGINES 2700 RPM & FULL THROTTLE WING FLAPS 0° — COWL FLAPS OPEN
LANDING GEAR RETRACTED CLIMB SPEED 88 KIAS
NO WIND



FUEL, TIME AND DISTANCE TO CLIMB

Figure 5-27

FUEL AND POWER CHART - LYCOMING (L) O-360-E SERIES (PER ENGINE)

Press. Alt. Feet	Std. Alt. Temp. °C	99 BHP - 55% Rated Power				117 BHP - 65% Rated Power				135 BHP - 75% Rated Power			Press. Alt. Feet
		Approx. Fuel Flow-9.3 Gal/ Hr.*				Approx. Fuel Flow-10.3 Gal/ Hr.*				Approx. Fuel Flow-11.2 Gal/ Hr.*			
		RPM AND MAN. PRESS.				RPM AND MAN. PRESS.				RPM AND MAN. PRESS.			
		2100	2200	2300	2400	2100	2200	2300	2400	2200	2300	2400	
SL	15	22.2	21.7	21.2	20.7	24.5	24.0	23.4	22.9	26.4	25.8	25.2	SL
1000	13	21.9	21.4	21.0	20.4	24.2	23.7	23.1	22.6	26.1	25.5	24.9	1000
2000	11	21.6	21.1	20.7	20.2	23.9	23.4	22.9	22.3	25.8	25.2	24.6	2000
3000	9	21.3	20.8	20.4	19.9	23.6	23.1	22.6	22.1	25.4	24.9	24.4	3000
4000	7	21.0	20.6	20.1	19.7	23.2	22.7	22.3	21.8	FT	24.7	24.1	4000
5000	5	20.8	20.3	19.9	19.4	22.9	22.4	22.0	21.5	—	FT	23.8	5000
6000	3	20.5	20.2	19.6	19.2	22.6	22.1	21.7	21.3	—	—	FT	6000
7000	1	20.2	19.7	19.3	18.9	FT	21.8	21.5	21.0				7000
8000	-1	19.9	19.5	19.1	18.6		FT	21.2	20.7				8000
9000	-3	19.6	19.2	18.8	18.4	—	—	FT	20.5				9000
10,000	-5	19.3	18.9	18.5	18.1	—	—	—	FT				10,000
11,000	-7	FT	18.6	18.3	17.9								11,000
12,000	-9	—	FT	18.0	17.6								12,000
13,000	-11	—	—	FT	17.4								13,000
14,000	-13	—	—	—	FT								14,000

NOTE: To maintain constant power, add approximately 1% manifold pressure for each 6°C above standard, subtract approximately 1% for each 6°C below standard.

*Best Power

POWER SETTING TABLE

Figure 5-29

ISSUED: MARCH 23, 1978
REVISED: SEPTEMBER 14, 1979

REPORT: VB-860
5-25

PA-44-180

SPEED POWER

MID CRUISE WEIGHT 3483 LBS.
COWL FLAPS CLOSED, WING FLAPS UP
LANDING GEAR RETRACTED

APPROX. FUEL FLOW		% PWR.
PERF. CRUISE	ECON. CRUISE	
18.6 GPH	14.8 GPH	55
20.5 GPH	17.0 GPH	65
22.4 GPH	19.3 GPH	75

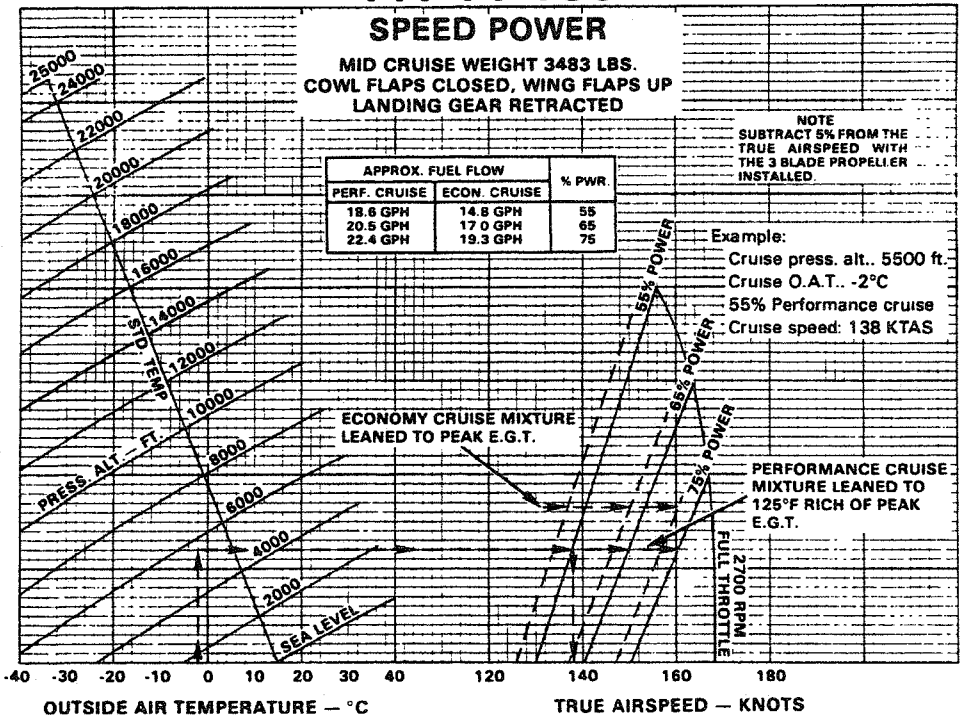
NOTE
SUBTRACT 5% FROM THE
TRUE AIRSPEED WITH
THE 3 BLADE PROPELLER
INSTALLED.

Example:

Cruise press. alt.. 5500 ft.
Cruise O.A.T.. -2°C
55% Performance cruise
Cruise speed: 138 KTAS

ECONOMY CRUISE MIXTURE
LEANED TO PEAK E.G.T.

PERFORMANCE CRUISE
MIXTURE LEANED TO
125°F RICH OF PEAK
E.G.T.



SPEED POWER
Figure 5-31