Example:
Departure airport pressure altitude: 1500 ft.
Departure airport temperature: 27°C
Cruise pressure altitude: 5000 ft.
Cruise OAT: 18°C
Time to climb (12 min minus 3 min): 9 min.
Distance to climb (18 miles minus 4 miles): 12 nautical miles
Fuel to climb (3 gal minus 1 gal): 2 gal.
PA-28-161
BEST POWER CRUISE PERFORMANCE

ASSOCIATED CONDITIONS:
MID CRUISE WEIGHT 2300 LBS.
WHEEL FAIRINGS INSTALLED
BEST POWER MIXTURE PER
LEANING INSTRUCTIONS
IN SECTION 4

Example:
Cruise pressure altitude: 5000 ft.
Cruise OAT: 16°C
Cruise power: 75% best power mixture
Cruise speed: 122.5 KTS TAS

Fuel Consumption:
75% = 10.6 GPH
65% = 8.9 GPH
55% = 7.8 GPH

Outside Air Temperature (°C)
True Airspeed (KTS)

NOTE: SUBTRACT 7 KTS if wheel fairings are not installed.
BEST ECONOMY CRUISE PERFORMANCE

Figure 5-23

REPORT: VB-1180
5-22

ISSUED: AUGUST 13, 1982
REVISED: JULY 15, 1988
BEST ECONOMY MIXTURE RANGE

Figure 5-27
PA-28-161

ENDURANCE

ASSOCIATED CONDITIONS:
BEST ECONOMY MIXTURE PER LEANING PROCEDURE IN SECTION 4
48 GALLONS USEABLE FUEL

Example:
Cruise pressure altitude: 5000 ft.
Cruise power: 75% best economy mixture
Endurance w/45 min. reserve @ 55% power: 4.66 hrs.
Endurance w/no reserve: 5.45 hrs.

ENDURANCE - HOURS
(INCLUDES TIME TO CLimb & DESCEND)

PRESSURE ALTITUDE - FT.

75% 65% 55%

45 MIN. RESERVE
AT 55% POWER

NO RESERVE