

FLIGHT PLANNING EXAMPLE

The flight planning data presented on the following pages provides complete information from brake release to final stop. Descriptive text explains the use of each chart. The data presented is for normal operation and when combined with the "FAA Approved" information will provide the necessary background for flight planning. Most flight planning information is based on flight tests and is consistent with the operating procedures and limitations set forth in the "FAA Approved" information.

The flight planning example presents procedures which utilize takeoff, climb, cruise and landing performance charts. The sample flight log on page 7 will aid in following each step of the procedure.

The flight planning example represents a typical IFR flight from Chicago's Meigs Field to the Detroit City Airport with the Toledo Express Airport designated as the alternate. The routes and distances were determined by selecting the most probable routing currently portrayed by the low altitude enroute structure. Other routings, of course, are conceivable, but the techniques discussed in the following example would be applicable.

Runway Data at (CGX)									
Outside Air Temperature	.	.	.	.	.	.	.	.	13°C
Available Runway Length	.	.	.	.	.	.	.	.	3948 FT
Field Pressure Altitude	.	.	.	.	.	.	.	.	1000 FT
Reported Wind	.	.	.	.	.	.	.	.	150°/17 KTS (20 MPH)
Runway Direction	.	.	.	.	.	.	.	.	170°
Airplane Ramp Weight	.	.	.	.	.	.	.	.	6625 LBS
Cruise Data									
Outside Air Temperature	.	.	.	.	.	.	.	.	-3°C
Cruise Pressure Altitude	.	.	.	.	.	.	.	.	9000 FT
Reported Winds Aloft	.	.	.	.	.	.	.	.	210° (MAG)/30 MPH
*Magnetic Course	.	.	.	.	.	.	.	.	082°
Distance	.	.	.	.	.	.	.	.	253 Statute Miles
Runway Data at (DET)									
Outside Air Temperature	.	.	.	.	.	.	.	.	18°C
Available Runway Length	.	.	.	.	.	.	.	.	5091 FT
Field Pressure Altitude	.	.	.	.	.	.	.	.	1000 FT
Reported Surface Wind	.	.	.	.	.	.	.	.	150°/13 KTS (15 MPH)
Runway Direction	.	.	.	.	.	.	.	.	150°
Assume Fuel Required for Start, Taxi, Runup and Takeoff at 25 lbs., therefore; Airplane Takeoff Weight									
	.	.	.	.	.	.	.	.	6600 LBS
Takeoff									
Takeoff Performance can be determined as follows:									
From Figure 3. using 20 MPH wind 20° left of the runway -									
headwind component	.	.	.	.	.	.	.	.	19 MPH
From Figure 4-4 determine total takeoff distance to 50 Ft.	.	.	.	.	.	.	.	.	1325 FT

* Due to the slight course changes encountered during a trip using the airway system, this value represents an average.

CRUISE POWER SETTING CHART

INTERNATIONAL STANDARD ATMOSPHERE

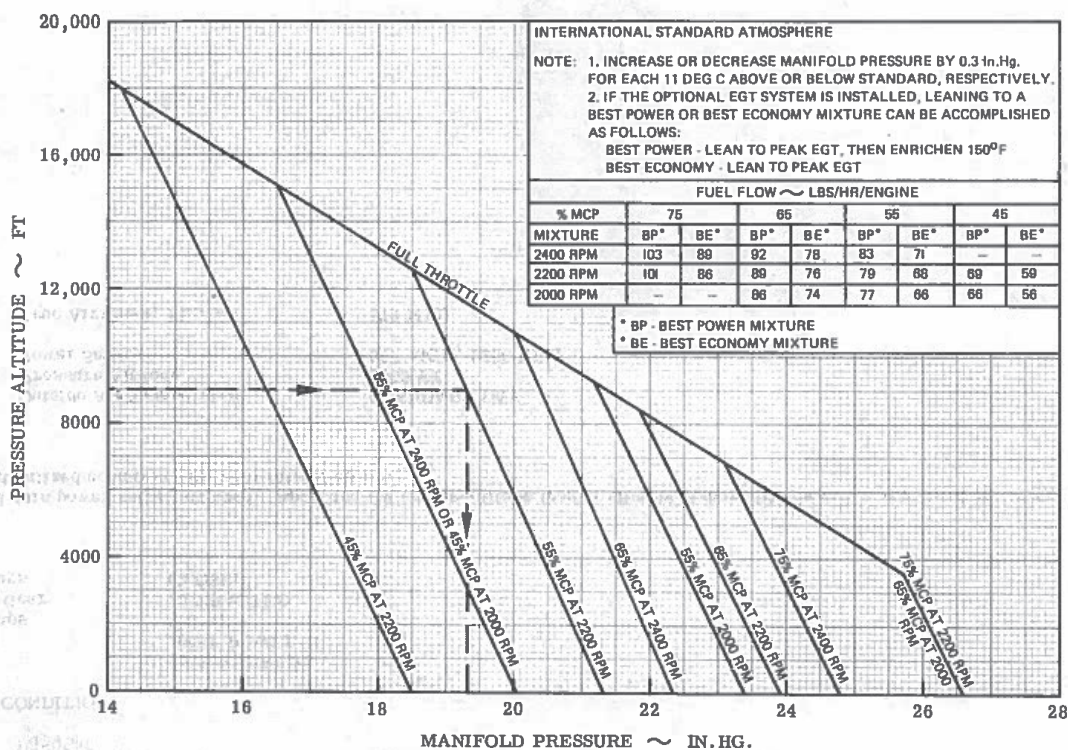


Figure 6.