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.

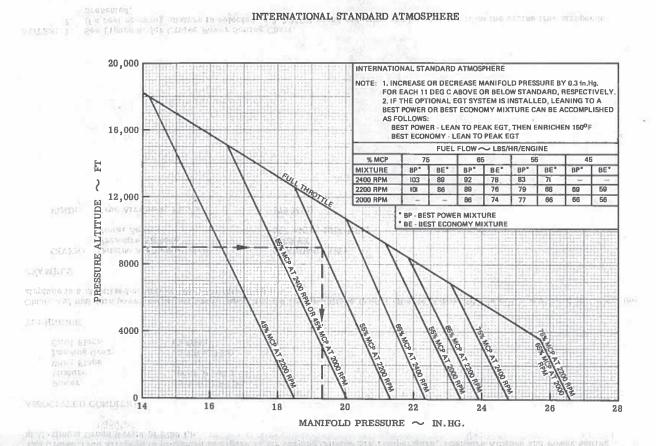
The flight planning example presents procedures which utilize takeoff, climb, cruise and landing performance charts. The sample flight log on page 7 will aid in following each step of the procedure.

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.

Outside Air Temperature	Runway Data at (CGX)												
Field Pressure Altitude	Outside Air Temperature	*11					•0				3.0		13°C
Reported Wind 1500/17 KTS (20 MPH) Runway Direction 1700 6625 LBS	Available Runway Length												3948 FT
Runway Direction	Field Pressure Altitude												1000 FT
Runway Direction	Reported Wind												150°/17 KTS (20 MPH)
Airplane Ramp Weight Cruise Data Outside Air Temperature Cruise Pressure Altitude Outside Air Temperature Cruise Pressure Altitude Outside Pressure Altitude Outside Air Temperature Available Runway Length Field Pressure Altitude Outside Air Temperature Available Runway Length Field Pressure Altitude Outside Air Temperature Outside Air Temperature Available Runway Length Field Pressure Altitude Outside Air Temperature Outside Air Tempe	Runway Direction .	*0										•00	
Cruise Data Outside Air Temperature	Airplane Ramp Weight												6625 LBS
Cruise Pressure Altitude	Cruise Data												
Reported Winds Aloft	Outside Air Temperature	40											-3°C
Reported Winds Aloft *Magnetic Course Distance Distance Runway Data at (DET) Outside Air Temperature Available Runway Length Field Pressure Altitude Reported Surface Wind Runway Direction Assume Fuel Required for Start, Taxi, Runup and Takeoff at 25 lbs., therefore; Airplane Takeoff Weight Takeoff Takeoff Performance can be determined as follows: From Figure 3. using 20 MPH wind 200 left of the runway headwind component 180C 5091 FT 5090 FT 1800 FT 1500/13 KTS (15 MPH) 1500 6600 LBS 6600 LBS	Cruise Pressure Altitude			•									9000 FT
Distance	Reported Winds Aloft												2100 (MAG)/30 MPH
Distance			533	53.05	93	12	23						
Runway Data at (DET) Outside Air Temperature	Tot -4	200		0.000									253 Statute Miles
Outside Air Temperature	Runway Data at (DET)												
Available Runway Length													18°C
Field Pressure Altitude													5091 FT
Reported Surface Wind				0.00			50. 4 10				14		1000 FT
Runway Direction	Reported Surface Wind							•					150°/13 KTS (15 MPH)
therefore; Airplane Takeoff Weight	Runway Direction												
therefore; Airplane Takeoff Weight	Assume Fuel Required for Start	. Ta	xi,	Runur	and	Tal	ceoff	at 2	5 lbs	u.			
Takeoff Takeoff Performance can be determined as follows: From Figure 3. using 20 MPH wind 20° left of the runway - headwind component													6600 LBS
From Figure 3. using 20 MPH wind 20 ⁰ left of the runway - headwind component			Ü										
headwind component 19 MPH	Takeoff Performance can be d	letei	'min	ed as	follo	ows:							
headwind component	From Figure 3. using 20 I	MPH	wir	ıd 20 ⁰	left	of t	he rı	ınwa	у -				
From Figure 4-4 determine total takeoff distance to 50 Ft 1325 FT	headwind component												19 MPH
	From Figure 4-4 determin	ne to	tal 1	akeoi	if dis	stanc	e to	50 F	t.				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



CRUISE TRUE MIRSPEEDS