

PRACTICAL EXERCISE NO. 5IFR FLIGHT PLANNING AND NAVIGATION

Charts L-17 and L-18

PROBLEM: Plan an IFR flight from Tallahassee Municipal Airport, Florida, (TLH), panel G, to Pensacola Municipal Airport, Florida, (PNS), panel E, with Bates Field, Mobile, Alabama, (MOB), panel E, as your alternate.

AIRCRAFT: UH-1D, Serial No. 58-3456

COMMUNICATIONS EQUIPMENT: ARC-55/T-366A

NAVIGATION EQUIPMENT: ARN-59/ARN-30D/APX-44(SIF)

TAS: 73 knots

FUEL IN TANKS: 2080 pounds

FUEL CONSUMPTION RATE: 420 pounds/hour

WARMUP TAXI FUEL: 60 pounds

ETD: 1000 EST

ROUTE TO DESTINATION: Direct TLH VORTAC V-198 Harold, Dir Pensacola LOM (PNS)

ROUTE TO ALTERNATE: V-198 Brookley VOR, V-242 Mobile VOR

ALTITUDE: Plan on using 4,000 feet to destination and alternate.

WEATHER: Check appropriate entries on DD Form 175-1 (NOTE: DD Form 175-1 used in lieu of FSS weather briefing.)

APPROACHES: Plan on an ADF approach to PNS

SITUATION 1

1. Fill out a complete FAA Form 7233-1.
2. Fill out a complete flight log.
3. What is the mileage from TLH to the PNS LOM?
4. What should you list as ETE to the destination?

162.7 NM (163)

2:07 (2:05)

- 5. What is the ETE from the destination to the alternate? **50**
- 6. What is the fuel requirement for this flight? **3+ 42 hr.**
- 7. What should you list as the fuel on board? **4:50 mi**
- 8. If, in order to obtain weather for this flight, it was necessary to call the nearest USAF weather briefing facility (Robins AFB), list the area code and telephone number you should use. **IFR, S.A.P. 6410-407**
 - a. Is it necessary to use USAF weather at TLH? **no**
 - b. Why? **they have a FSS**
- 9. The following clearance is delivered for the flight: "ATC clears RC 83456 to the Harold Intersection via Direct TLH, V-198 Harold maintain 4,000. Contact TLH departure control on 317.4 after takeoff."

YOU TAKE OFF RUNWAY 36 AT 1515Z

- 10. Must you report reaching 4,000 feet? **no**
- 11. You arrive over TLH at 1525Z. Is a report required? **yes (solid ▲)**
- 12. What will your RMI No. 2 needle indicate over Quincy Intersection if you tune your VOR receiver to MGR to establish the fix? **0550**

- 13. You arrive at Quincy at 1534Z. What is the ETA for Marianna? **15:56 Z**
- 14. What is the frequency of the facility you should use to maintain V-198 inbound to Marianna? **114.0**

TLH DEPARTURE CONTROL INSTRUCTS YOU TO CONTACT JACKSONVILLE CENTER OVER MARIANNA.

- 15. You arrive over MAI at 1603Z. Write out your initial contact with Jacksonville Center. **JSC on R83956**
- 16. Is any other report required? **yes** If so, what? **MIA AT 03 4000 contact via Harold at 03**

**JSC on
R83956
MIA
AT 03
4000
contact via
at 03
Harold**

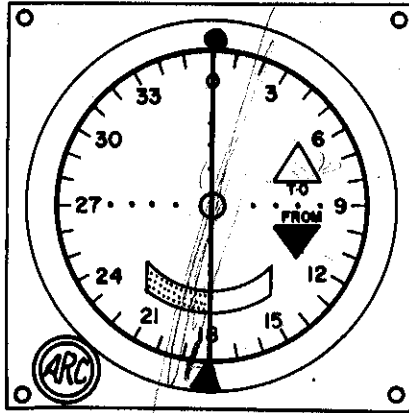
JAX CENTER "ROGERS" YOU AND INSTRUCTS YOU TO "CLIMB TO AND MAINTAIN 6000." (CONTACT JAX CENTER) ON 385.4 OVER DEFUNIAK SPRINGS INTERSECTION.

✓ 17. Write out the report you should send.

*fact cat
R83956
at 03
6000*

*fact cat
R83956
~~at 03~~
at 03
at Harold
out of 4000*

✓ 18. You tune the DHN VOR for the purpose of establishing the Chipley Intersection Based on the indications shown below, where are you in relation to Chipley?



*south
east,*

19. You were over Chipley at 1615Z and arrive over DeFuniak Springs Intersection at 1637Z. What has been your groundspeed for this leg of the flight? *74 K*

20. Write out the callup you will send to JAX Center over DeFuniak Springs Intersection.

*JAX cat R83956
clearance at
03, 6000*

✓ 21. What are the magnetic winds at 6,000 feet if your heading between Corky Intersection and the CEW VOR was 277°, groundspeed 85 knots, CAS 70 knots, and free-air temperature +15°C? *050 / 15*
028° 15 knots.

22. You reported over CEW at 1700Z. Based on the new wind computed in question 21, what will be your ETA at Harold Intersection? _____ At the PSN LOM?

23. JAX Center instructs you to contact PNS approach control on 286.0 over Baker Intersection. You call over Baker and receive the following clearance: "RC 83456 is cleared to the Pensacola LOM from over Harold Intersection direct. Maintain 6,000. Upon reaching the LOM, hold North on the localizer course; left turns Expect Approach Clearance at 17:35"
24. Upon reaching the LOM on a heading of 220°, should you turn left or right to enter the holding pattern?
25. Inbound in the holding, you find it necessary to hold a heading of 151°. What should your heading be while outbound in the holding pattern? 008
26. In the event of loss of communications while in the holding pattern, when should you begin your descent to procedure-turn altitude? 17:35
- ✓ 27. At 1730Z you are cleared for an ADF approach to runway 16, circle to land Runway 34. What are your minimums for this approach? 520' 1/2
- ✓ 28. If your groundspeed on final is 80 knots, what should be your time from the LOM to pullup?

SITUATION II

Use the instrument approach chart for the front-course ILS approach to Herndon Field, Orlando, Florida, to answer the remaining questions.

1. How many UHF tower frequencies are available at Herndon? 234.0
2. What are your lowest straight-in landing minimums for an ILS approach to Runway 7? 309' 1/4
3. Assume you are holding southwest of the LOM on the localizer course and are cleared for an ILS approach to Runway 7. May you let the holding pattern serve as your procedure turn for the approach? Explain your answer.
4. Which runways at Herndon have high-intensity approach lights? RW7
5. What are your takeoff minimums if you are departing on Runway 7? 100' 1/4

FLIGHT WEATHER BRIEFING				AIRCRAFT NO.	BRIEFING NO.	DATE
				58-3956	1	1-1-69
I. TAKEOFF DATA						
RUNWAY TEMP.	PRESSURE ALT.	TEMP DEVIATION	VAPOR PRESSURE	SPECIFIC HUMIDITY	DENSITY ALTITUDE	
+6°C	80'					
REMARKS						
SAMPLE						
II. ENROUTE DATA						
FLIGHT LEVEL	TEMPERATURE	WINDS				
9000	+2°C	4-0315				
CLOUDS AT FLIGHT LEVEL				VISIBILITY AT FLIGHT LEVEL		
<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IN AND OUT				<input type="checkbox"/> HAZE <input type="checkbox"/> DUST <input type="checkbox"/> SMOKE <input type="checkbox"/> PRECIPITATION		
MINIMUM CEILING ENROUTE	MAXIMUM CLOUD TOPS		MINIMUM FREEZING LEVEL			
200'	16000		6000			
THUNDERSTORMS		TURBULENCE		PRECIPITATION		ICING
<input checked="" type="checkbox"/> NONE		NONE		NONE		NONE
<input type="checkbox"/> FEW		CAT		<input checked="" type="checkbox"/> RAIN		DRZL
<input type="checkbox"/> SCATTERED		TSTM		SHOWERS		SNOW
<input type="checkbox"/> NUMEROUS				FREEZING		<input checked="" type="checkbox"/> RIME
<input type="checkbox"/> HAIL						<input type="checkbox"/> MIXED
						<input checked="" type="checkbox"/> IN CLOUDS
						AT OR ABOVE 6000
III. TERMINAL DATA						
DESTINATION (Mandatory)						
FORECAST						
PNS 4 @ 1R 1610/998 (1700 Z To 1900 Z)						
ALTERNATE (Mandatory)						
FORECAST						
MOB 25 @ 4 HK 1710/982 (1730 Z To 2000 Z)						
IV. COMMENTS/REMARKS						
NOTAM: PNS - OAXET						
VOID TIME		EXTENDED TO		FORECASTER		
1600				W.A.H.		
V. TELEVISION/TELEPHONE BRIEFING RECORD						
WEATHER FACILITY						
TAPE NO.		START		STOP		PHONE CHARGE

DD FORM 175-1
1 NOV 54

NOTE: See page 141 for ILS RWY 7.

PRACTICAL EXERCISE NO. 6IFR FLIGHT PLANNING AND NAVIGATION

Charts L-17 and L-18

PROBLEM: Plan an IFR flight from Cairns AAF, Fort Rucker, Alabama, (OZR), panel F, to Key Field, Meridian, Mississippi, (MEI), panel E, with Bates Field, Mobile, Alabama, (MOB), panel E, as your alternate.

AIRCRAFT:	UH-1D, Serial No. 61-1238
COMMUNICATIONS EQUIPMENT:	ARC-55/T-366A
NAVIGATION EQUIPMENT:	ARN-59/ARN-30D/APX-44(SIF)
TAS:	80 knots
FUEL IN TANKS:	2,380 pounds
FUEL CONSUMPTION RATE:	420 pounds/hour
WARMUP AND TAXI FUEL:	60 pounds
ETD:	2,000 C
ROUTE TO DESTINATION:	Banks No. 2 departure from Cairns, V-7 to Montgomery VOR, V-56 Meridian VOR
ROUTE TO ALTERNATE:	V-154 Kewanee VOR, V-209 Mobile VOR
ALTITUDE:	Select the most desirable altitude, con- sidering winds aloft, direction of flight, and MEA's
WEATHER:	Check appropriate entries on DD Form 175-1

Part I: PREFLIGHT PHASE

For classroom purposes, assume wind and TAS for climb-out to be the same as for the cruising altitude.

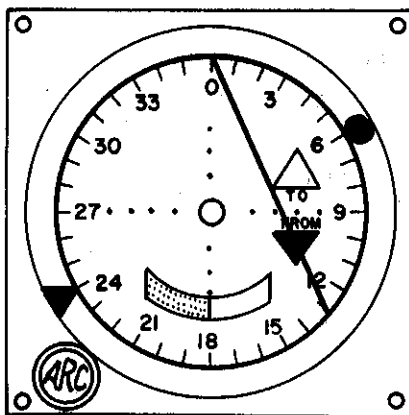
1. Fill out a complete DD Form 175.
2. Fill out a complete flight log.
3. Over what point will you make your transition from SID to V-7?

4. What is the total fuel requirement for this flight (warmup, destination, alternate, and 45-minute reserve)?
5. Name the ARTC Centers responsible for handling this flight to the destination. To the alternate.
6. Which FSS frequencies will you expect Maxwell (MXF) in the Montgomery area to have?

Part II: IN-FLIGHT PHASE

Initial ATC clearance reads: "ATC clears RC-11238 to the Kewanee VOR via the Banks 2 departure; thence via flight plan route. Maintain 4,000 feet in controlled airspace. Contact Jacksonville Center on 353.5 megacycles over Skipperville Intersection. "

1. You are cleared for takeoff and, when airborne, your clock reads 2005 C. What time were you off (Zulu)?
2. You arrive over Skipperville Intersection at 0218Z. Write out the report.
3. You are instructed to contact Atlanta Center on 351.9 megacycles over Banks Intersection. You tune in Eufaula omni and observe the following indications:



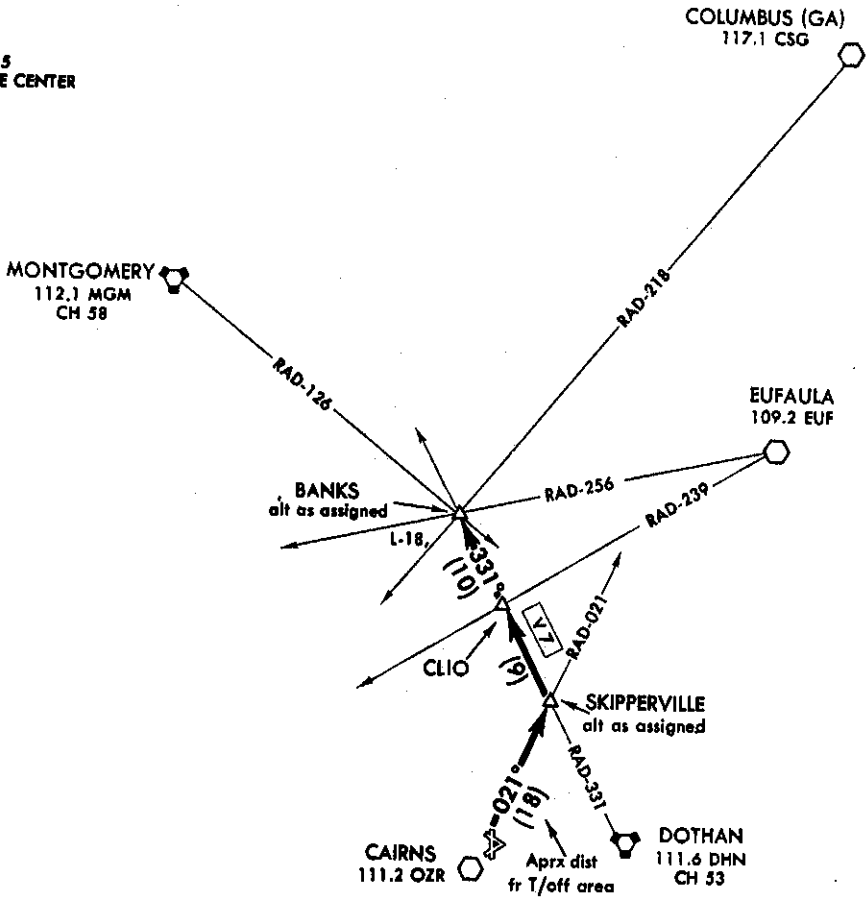
What is your position in relation to Banks?

4. You arrive over Montgomery omni at _____ Z. Write out your position report to Atlanta Center after establishing radio contact.
5. You arrive over Selma VOR at 0334Z. What has been your average groundspeed (in knots)?
6. What are your magnetic winds at 4000 if your heading between Montgomery VOR and Selma VOR was 263° , groundspeed _____ knots, TAS airspeed _____ knots, and free-air temperature 13°C ?
_____ $^\circ$ / _____ knots.
7. Will it be necessary to change your Kewanee VOR estimate? If yes, what is the new ETA? _____ Z.
8. At 0440Z, you smell smoke in the cockpit. On checking, you find it to be coming from an electrical fire. You immediately determine that your ADF and marker beacon circuit breakers have popped and will not stay in when reset. Must you report this to anyone?
9. The situation deteriorates. At 0445Z, you lose your generator and secure all unnecessary electrical equipment. You advise Atlanta Center of your difficulty. The center directs you to contact Meridian Approach Control on 354.0 megacycles for a radar vector to Meridian NAAS. Does Meridian NAAS also have approach radar? If yes, what are the minimums?
10. What is the correct call when contacting Meridian NAAS tower?
11. What UHF ground control frequency will you use?

BANKS FOUR DEPARTURE

CAIRNS AAF
FT. RUCKER, ALABAMA

GND CON
248.2 121.9
CLNC DEL
370.3 133.75
TOWER
241.0 126.2
DEP CON
237.5 133.45
JACKSONVILLE CENTER
353.5 134.3
ATIS
111.2



DEPARTURE ROUTE DESCRIPTION

Take-off Rwy 6 or 18: After take-off, climbing LEFT turn to heading 360°.

Take-off Rwy 24: After take-off, climbing RIGHT turn to heading 050°.

Take-off Rwy 36: After take-off, climb on heading 360°.

Intercept CAIRNS VOR 021 radial and proceed to SKIPPERVILLE INTXN.
Continue to BANKS INTXN via the DOTHAN VORTAC 331 radial.

Cross SKIPPERVILLE at _____ (as assigned).

Cross BANKS at _____ (as assigned).

BANKS FOUR DEPARTURE

PRACTICAL EXERCISE NO. 7IFR FLIGHT PLANNING AND NAVIGATION

Charts L-17 and L-18

PROBLEM: Plan an IFR flight from Lawson AAF, Columbus, Georgia, (LSF), panel F, to New Orleans, Moisant International Airport (MSY), panel D, with Mobile (Bates Field) (MOB), panel E, as your alternate.

AIRCRAFT:	UH-1D, Serial No. 62-7733
COMMUNICATIONS EQUIPMENT:	ARC-55/T-366A
NAVIGATION EQUIPMENT:	ARN-59/ARN-30D/APX-44(SIF)
TAS:	85 knots
FUEL IN TANKS:	3,380 pounds
FUEL CONSUMPTION RATE:	450 pounds/hour
WARMUP AND TAXI FUEL:	60 pounds
ETD:	1300 E
ROUTE TO DESTINATION:	Direct Eufaula VOR, V-241 Crestview VOR, V-22 Brookley VOR, V-242 Mobile VOR, V-20 New Orleans VOR, direct New Orleans LOM
ROUTE TO ALTERNATE:	V-20 Mobile VOR
ALTITUDE:	Select the most desirable altitude, considering winds aloft, direction of flight, and MEA's
WEATHER:	Check appropriate entries on DD Form 175-1
APPROACH:	Plan for an ILS approach at New Orleans International Airport

Part I: PREFLIGHT PHASE

1. Fill out a complete DD Form 175.
2. Fill out a complete flight log.

3. Decode NOTAMS for BIX and NUN.

4. What is the total distance for this flight (destination and alternate in nautical miles)?

5. How much fuel reserve must you allow (in pounds)?

6. Is a fuel stop necessary? (Yes - no)

7. What is the total fuel requirement for this flight (warmup, destination, alternate, and 45-minute reserve)?

Part II: IN-FLIGHT PHASE

Initial ATC clearance reads: "ATC clears RC-2-7733 to the New Orleans International Airport via direct Eufaula VOR; thence, via flight plan route. Maintain 6,000 feet while in control areas; contact Jacksonville Center on 317.6 megacycles over Eufaula VOR."

1. Through what remote facility would you be calling Jacksonville Center on 317.6 megacycles?

2. You check your position over Eufaula VOR at 1816Z. You later check your position over Abbeville Intersection at 1830Z. What groundspeed have you made good (in knots)?

3. Using your new groundspeed, what time do you estimate Dothan VOR (Zulu)?

4. If you use Albany VOR (ABY) to fix Abbeville Intersection, what course-selector setting would you use to get a TO indication?

Before reaching Abbeville, the needle should be deflected to the _____.

5. If you arrive over Dothan VOR at 1845Z, and between Eufaula and Dothan have held a magnetic heading of 215° and TAS 85 knots, what is the magnetic wind direction and velocity? _____° / _____ knots

6. What two omni stations would you use to check Harold Intersection (between CEW and NUN)?

7. What are your weather minimums for a GCA approach at Moisant International Airport?

8. What are the New Orleans UHF approach control frequencies for the approach to the international airport?

FLIGHT WEATHER BRIEFING			AIRCRAFT NO. 62-7733	BRIEFING NO. 1	DATE 1-1-69
I. TAKEOFF DATA					
RUNWAY TEMP. 22°C	PRESSURE ALT. 230'	TEMP DEVIATION	VAPOR PRESSURE	SPECIFIC HUMIDITY	DENSITY ALTITUDE
CLIMB WINDS					
REMARKS FORECAST WINDS SAMPLE					
2-2216/18° 4-3018/14° 6-3520/10°					
II. ENROUTE DATA					
FLIGHT LEVEL	TEMPERATURE	WINDS SEE FORECAST			
CLOUDS AT FLIGHT LEVEL <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IN AND OUT			VISIBILITY AT FLIGHT LEVEL 2 <input type="checkbox"/> HAZE <input type="checkbox"/> DUST <input type="checkbox"/> SMOKE <input checked="" type="checkbox"/> PRECIPITATION		
MINIMUM CEILING ENROUTE 900	MAXIMUM CLOUD TOPS 15M	MINIMUM FREEZING LEVEL 11M			
THUNDERSTORMS		TURBULENCE		PRECIPITATION	
NONE		NONE		NONE	
FEW		CAT		RAIN	
<input checked="" type="checkbox"/> SCATTERED		LGT		<input checked="" type="checkbox"/> DRZL	
NUMEROUS		MOD		<input checked="" type="checkbox"/> SHOWERS	
HAIL		<input checked="" type="checkbox"/> SVR		SNOW	
				FREEZING	
				MIXED	
				<input checked="" type="checkbox"/> IN CLOUDS	
		IN THSTMS.		IN THSTMS.	
III. TERMINAL DATA					
DESTINATION (Destination)					
FORECAST MSV 602R 2212/990 (1900 Z To 2400 Z)					
ALTERNATE (Alternate)					
FORECAST MOB 2005 2210/985 (2000 Z To 0200 Z)					
IV. COMMENTS/REMARKS					
NOTAMS: BIX: QOMUH NUN: QOREN JPA CONTAMINATED UFN					
VOID TIME 1900	EXTENDED TO			FORECASTER W.B.H.	
V. TELEVISION/TELEPHONE BRIEFING RECORD					
WEATHER FACILITY					
TAPE NO.	START	STOP	PHONE CHARGE		

FEDERAL AVIATION AGENCY
FLIGHT PLAN

Form Approved.
Budget Bureau No. 04-R072.3

				1. TYPE OF FLIGHT PLAN		2. AIRCRAFT IDENTIFICATION		
				FVFR				VFR
				IFR				DVFR
3. AIRCRAFT TYPE/SPECIAL EQUIPMENT <u>1/</u>		4. TRUE AIRSPEED KNOTS	5. POINT OF DEPARTURE	6. DEPARTURE TIME		7. INITIAL CRUISING ALTITUDE		
				PROPOSED (Z)	ACTUAL (Z)			
8. ROUTE OF FLIGHT								
9. DESTINATION (Name of airport and city)				10. REMARKS				
11. ESTIMATED TIME EN ROUTE		12. FUEL ON BOARD		13. ALTERNATE AIRPORT(S)		14. PILOT'S NAME		
HOURS	MINUTES	HOURS	MINUTES					
15. PILOT'S ADDRESS AND TELEPHONE NO. OR AIRCRAFT HOME BASE				16. NO. OF PERSONS ABOARD	17. COLOR OF AIRCRAFT	18. FLIGHT WATCH STATIONS		
CLOSE FLIGHT PLAN UPON ARRIVAL				1/ SPECIAL EQUIPMENT SUFFIX		L — DME & transponder—no code		
				A — DME & 4096 Code transponder		T — 64 Code transponder		
		B — DME & 64 Code transponder		U — 4096 Code transponder		X — Transponder—no code		
		D — DME						

SAMPLE

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FEDERAL AVIATION AGENCY
FLIGHT PLAN

Form Approved.
Budget Bureau No. 04-R072.3

1. TYPE OF FLIGHT PLAN

FVFR

VFR

IFR

DVFR

2. AIRCRAFT IDENTIFICATION

3. AIRCRAFT TYPE/SPECIAL EQUIPMENT ^{1/}

4. TRUE AIRSPEED

KNOTS

5. POINT OF DEPARTURE

6. DEPARTURE TIME

PROPOSED (Z)

ACTUAL (Z)

7. INITIAL CRUISING ALTITUDE

8. ROUTE OF FLIGHT

9. DESTINATION (Name of airport and city)

10. REMARKS

SAMPLE

11. ESTIMATED TIME EN ROUTE

12. FUEL ON BOARD

HOURS

MINUTES

HOURS

MINUTES

13. ALTERNATE AIRPORT(S)

14. PILOT'S NAME

15. PILOT'S ADDRESS AND TELEPHONE NO. OR AIRCRAFT HOME BASE

16. NO. OF PERSONS ABOARD

17. COLOR OF AIRCRAFT

18. FLIGHT WATCH STATIONS

CLOSE FLIGHT PLAN UPON ARRIVAL

^{1/} SPECIAL EQUIPMENT SUFFIX

A — DME & 4096 Code transponder

B — DME & 64 Code transponder

D — DME

L — DME & transponder—no code

T — 64 Code transponder

U — 4096 Code transponder

X — Transponder—no code

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FEDERAL AVIATION AGENCY
FLIGHT PLAN

Form Approved.
Budget Bureau No. 04-R072.3

				1. TYPE OF FLIGHT PLAN		2. AIRCRAFT IDENTIFICATION		
				FVFR				VFR
				IFR				DVFR
3. AIRCRAFT TYPE/SPECIAL EQUIPMENT <input checked="" type="checkbox"/>		4. TRUE AIRSPEED	5. POINT OF DEPARTURE		6. DEPARTURE TIME		7. INITIAL CRUISING ALTITUDE	
		KNOTS			PROPOSED (Z)	ACTUAL (Z)		
8. ROUTE OF FLIGHT								
9. DESTINATION (Name of airport and city)				10. REMARKS				
11. ESTIMATED TIME EN ROUTE		12. FUEL ON BOARD		13. ALTERNATE AIRPORT(S)		14. PILOT'S NAME		
HOURS	MINUTES	HOURS	MINUTES					
15. PILOT'S ADDRESS AND TELEPHONE NO. OR AIRCRAFT HOME BASE				16. NO. OF PERSONS ABOARD	17. COLOR OF AIRCRAFT		18. FLIGHT WATCH STATIONS	
CLOSE FLIGHT PLAN UPON ARRIVAL				<input checked="" type="checkbox"/> SPECIAL EQUIPMENT SUFFIX A — DME & 4096 Code transponder B — DME & 64 Code transponder D — DME		I — DME & transponder—no code T — 64 Code transponder U — 4096 Code transponder X — Transponder—no code		

SAMPLE

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MILITARY FLIGHT PLAN			AIRCRAFT UNIT OF ASSIGNMENT/HOME STATION			AIRCRAFT SERIAL NO.	
TYPE OF FLIGHT PLAN <input type="checkbox"/> IFR <input type="checkbox"/> DVFR <input type="checkbox"/> VFR <input type="checkbox"/> FVFR		RADIO CALL	AIRCRAFT DESIGNATION/ TD CODE	ESTIMATED TRUE AIRSPEED		DEPARTURE TIME (Z)	
INITIAL CRUISING ALTITUDE		POINT OF DEPARTURE	STANDARD INSTRUMENT DEPARTURE				
			NAME AND NUMBER		TO		
IFR	VFR	ROUTE OF FLIGHT			TO	ETE	
REMARKS							
<div style="font-size: 4em; opacity: 0.5; transform: rotate(-45deg); pointer-events: none;">SAMPLE</div>							
RANK/HONOR CODE		PSGR/CARGO CODE					
HOURS FUEL ON BOARD	DIST TO DESTN	ALTERNATE AIR FIELD	ETE TO ALTN	NOTAMS	DD FORM 385F (Wt. and Bal.)	WEATHER	REQUEST CLEARANCE AFTER
INST RATING	SIGNATURE OF PILOT IN COMMAND		SIGNATURE OF APPROVING AUTHORITY			DATE	
CREW/PASSENGER LIST - <input type="checkbox"/> Attached <input type="checkbox"/> See Passenger Manifest							
DUTY	NAME AND INITIALS		GRADE	SERVICE NO.	ORGANIZATION AND LOCATION		
PILOT IN COMMAND							

FEDERAL AVIATION AGENCY
FLIGHT PLAN

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				1. TYPE OF FLIGHT PLAN		2. AIRCRAFT IDENTIFICATION	
				FVFR	VFR		
				IFR	DVFR		
3. AIRCRAFT TYPE/SPECIAL EQUIPMENT <input checked="" type="checkbox"/>		4. TRUE AIRSPEED	5. POINT OF DEPARTURE		6. DEPARTURE TIME		7. INITIAL CRUISING ALTITUDE
		KNOTS			PROPOSED (Z)	ACTUAL (Z)	
8. ROUTE OF FLIGHT							
9. DESTINATION (Name of airport and city)				10. REMARKS			
11. ESTIMATED TIME EN ROUTE		12. FUEL ON BOARD		13. ALTERNATE AIRPORT(S)		14. PILOT'S NAME	
HOURS	MINUTES	HOURS	MINUTES				
15. PILOT'S ADDRESS AND TELEPHONE NO. OR AIRCRAFT HOME BASE				16. NO. OF PERSONS ABOARD	17. COLOR OF AIRCRAFT		18. FLIGHT WATCH STATIONS
CLOSE FLIGHT PLAN UPON ARRIVAL				<input checked="" type="checkbox"/> SPECIAL EQUIPMENT SUFFIX A — DME & 4096 Code transponder B — DME & 64 Code transponder D — DME		L — DME & transponder—no code T — 64 Code transponder U — 4096 Code transponder X — Transponder—no code	

SAMPLE

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FEDERAL AVIATION AGENCY
FLIGHT PLAN

Form Approved.
Budget Bureau No. 04-R072.3

				1. TYPE OF FLIGHT PLAN		2. AIRCRAFT IDENTIFICATION	
				FVFR	VFR		
				IFR	DVFR		
3. AIRCRAFT TYPE/SPECIAL EQUIPMENT <u>1/</u>		4. TRUE AIRSPEED	5. POINT OF DEPARTURE		6. DEPARTURE TIME		7. INITIAL CRUISING ALTITUDE
		KNOTS			PROPOSED (Z)	ACTUAL (Z)	
8. ROUTE OF FLIGHT							
9. DESTINATION (Name of airport and city)				10. REMARKS			
11. ESTIMATED TIME EN ROUTE		12. FUEL ON BOARD		13. ALTERNATE AIRPORT(S)		14. PILOT'S NAME	
HOURS	MINUTES	HOURS	MINUTES				
15. PILOT'S ADDRESS AND TELEPHONE NO. OR AIRCRAFT HOME BASE				16. NO. OF PERSONS ABOARD	17. COLOR OF AIRCRAFT		18. FLIGHT WATCH STATIONS
CLOSE FLIGHT PLAN UPON ARRIVAL				1/ SPECIAL EQUIPMENT SUFFIX		L — DME & transponder—no code	
				A — DME & 4096 Code transponder		T — 64 Code transponder	
		B — DME & 64 Code transponder		U — 4096 Code transponder		X — Transponder—no code	
		D — DME					

SAMPLE

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FEDERAL AVIATION AGENCY
FLIGHT PLAN

Form Approved.
Budget Bureau No. 04-R072.3

				1. TYPE OF FLIGHT PLAN		2. AIRCRAFT IDENTIFICATION			
				FVFR				VFR	
				IFR				DVFR	
3. AIRCRAFT TYPE/SPECIAL EQUIPMENT <u>1/</u>		4. TRUE AIRSPEED KNOTS	5. POINT OF DEPARTURE	6. DEPARTURE TIME		7. INITIAL CRUISING ALTITUDE			
				PROPOSED (Z)	ACTUAL (Z)				
8. ROUTE OF FLIGHT									
9. DESTINATION (Name of airport and city)				10. REMARKS					
11. ESTIMATED TIME EN ROUTE		12. FUEL ON BOARD		13. ALTERNATE AIRPORT(S)		14. PILOT'S NAME			
HOURS	MINUTES	HOURS	MINUTES						
15. PILOT'S ADDRESS AND TELEPHONE NO. OR AIRCRAFT HOME BASE			16. NO. OF PERSONS ABOARD	17. COLOR OF AIRCRAFT		18. FLIGHT WATCH STATIONS			
CLOSE FLIGHT PLAN UPON ARRIVAL				1/ SPECIAL EQUIPMENT SUFFIX		L — DME & transponder—no code			
				A — DME & 4096 Code transponder		T — 64 Code transponder			
		B — DME & 64 Code transponder		U — 4096 Code transponder		X — Transponder—no code			
		D — DME							

SAMPLE

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FEDERAL AVIATION AGENCY
FLIGHT PLAN

Form Approved.
Budget Bureau No. 04-R072.3

				1. TYPE OF FLIGHT PLAN		2. AIRCRAFT IDENTIFICATION		
				FVFR				VFR
				IFR				DVFR
3. AIRCRAFT TYPE/SPECIAL EQUIPMENT <input checked="" type="checkbox"/>		4. TRUE AIRSPEED KNOTS	5. POINT OF DEPARTURE		6. DEPARTURE TIME		7. INITIAL CRUISING ALTITUDE	
					PROPOSED (Z)	ACTUAL (Z)		
8. ROUTE OF FLIGHT								
9. DESTINATION (Name of airport and city)				10. REMARKS				
11. ESTIMATED TIME EN ROUTE		12. FUEL ON BOARD		13. ALTERNATE AIRPORT(S)		14. PILOT'S NAME		
HOURS	MINUTES	HOURS	MINUTES					
15. PILOT'S ADDRESS AND TELEPHONE NO. OR AIRCRAFT HOME BASE				16. NO. OF PERSONS ABOARD	17. COLOR OF AIRCRAFT		18. FLIGHT WATCH STATIONS	
CLOSE FLIGHT PLAN UPON ARRIVAL				<input checked="" type="checkbox"/> SPECIAL EQUIPMENT SUFFIX A — DME & 4096 Code transponder B — DME & 64 Code transponder D — DME		L — DME & transponder—no code T — 64 Code transponder U — 4096 Code transponder X — Transponder—no code		

SAMPLE

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FLIGHT LOG								
DEPARTURE POINT	VOR		RADIAL		DISTANCE		TIME	GROUND SPEED
	IDENT.	TO FROM	LEG		PT-TO-PT CUMULATIVE	TAKEOFF	ETA	
	FREQ.		REMAINING					
CHECK POINT							ETA	
							ATA	
DESTINATION								
							TOTAL	

SAMPLE

POSITION REPORT: FVFR report hourly, IFR as required by ATC

ACFT. IDENT.	POSITION	TIME	ALT.	IFR/VFR	EST. NEXT FIX	NAME OF SUCCEEDING FIX	PIREPS
REPORT CONDITIONS ALOFT— CLOUD TOPS, BASES, LAYERS, VISIBILITY, TURBULENCE, HAZE, ICE, THUNDERSTORMS							

CLOSE FLIGHT PLAN UPON ARRIVAL

FLIGHT LOG

DEPARTURE POINT	VOR		RADIAL		DISTANCE		TIME		GROUND SPEED
	IDENT.	FREQ.	TO	FROM	LEG		TAKEOFF	ETA	
					REMAINING				
CHECK POINT									
DESTINATION									
					TOTAL				

SAMPLE

POSITION REPORT: FVFR report hourly, IFR as required by ATC

ACFT. IDENT.	POSITION	TIME	ALT.	IFR/VFR	EST. NEXT FIX	NAME OF SUCCEEDING FIX	PIREPS
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REPORT CONDITIONS ALOFT—
 CLOUD TOPS, BASES, LAYERS, VISIBILITY, TURBULENCE, HAZE, ICE, THUNDERSTORMS

CLOSE FLIGHT PLAN UPON ARRIVAL

FLIGHT LOG

DEPARTURE POINT	VOR	RADIAL	DISTANCE	TIME		GROUND SPEED
	IDENT.	TO /	LEG	PT-TO-PT /	TAKEOFF	
	FREQ.		FROM			
CHECK POINT					ETA	
					ATA	
DESTINATION						
			TOTAL			

SAMPLE

POSITION REPORT: FVFR report hourly, IFR as required by ATC

ACFT. IDENT.	POSITION	TIME	ALT.	IFR/VFR	EST. NEXT FIX	NAME OF SUCCEEDING FIX	PIREPS
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REPORT CONDITIONS ALOFT—
CLOUD TOPS, BASES, LAYERS, VISIBILITY, TURBULENCE, HAZE, ICE, THUNDERSTORMS

CLOSE FLIGHT PLAN UPON ARRIVAL

FLIGHT LOG

DEPARTURE POINT	VOR	RADIAL	DISTANCE	TIME		GROUND SPEED
	IDENT.	TO /	LEG	PT-TO-PT /	TAKEOFF	
	FREQ.		FROM			
CHECK POINT					ETA	
					ATA	
DESTINATION						
			TOTAL			

SAMPLE

POSITION REPORT: FVFR report hourly, IFR as required by ATC

ACFT. IDENT.	POSITION	TIME	ALT.	IFR/VFR	EST. NEXT FIX	NAME OF SUCCEEDING FIX	PIREPS
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REPORT CONDITIONS ALOFT—
 CLOUD TOPS, BASES, LAYERS, VISIBILITY, TURBULENCE, MAZE, ICE, THUNDERSTORMS

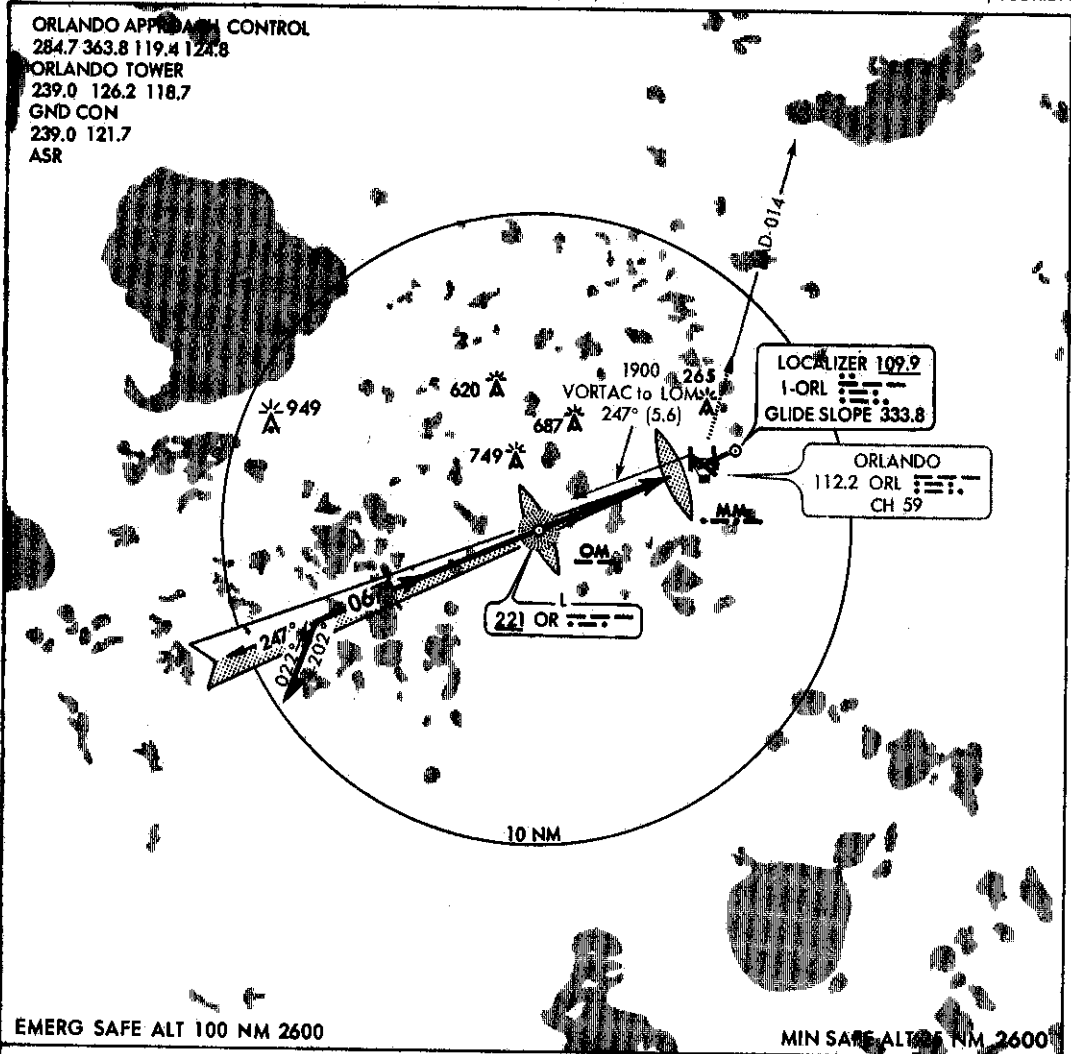
CLOSE FLIGHT PLAN UPON ARRIVAL

ILS RWY 7

88
AL-305 (FAA)

HERNDON
ORLANDO, FLORIDA

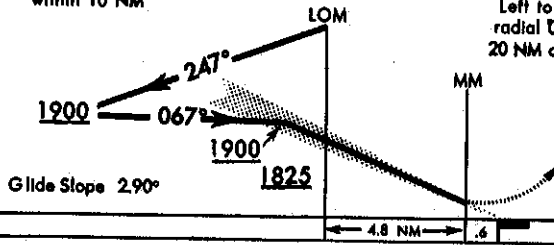
ORLANDO APPROACH CONTROL
284.7 363.8 119.4 124.8
ORLANDO TOWER
239.0 126.2 118.7
GND CON
239.0 121.7
ASR



EMERG SAFE ALT 100 NM 2600

MIN SAFE ALT OF NM 2600

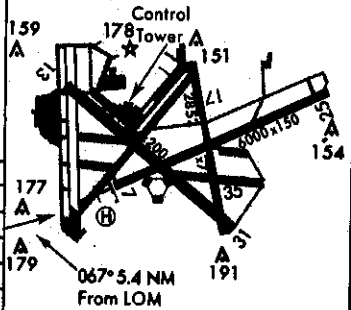
Left within 10 NM



MISSED APPROACH
Left to 2000 out radial D14 within 20 NM of VORTAC

FIELD ELEV 113

Rwy 13 ldg 5003'
Rwy 31 ldg 5187'



LANDING MINIMA

Straight-in	413 MSL	300-1/4
Circling	613 MSL	500-1
Circling below 65 Kt	513 MSL	400-1
W/O G/S	613 MSL	500-1

LOM to Localizer Missed Approach 5.4 NM

Knots	75	90	105	120	130	160
Min: Sec	4:19	3:36	3:05	2:42	2:30	2:02

ILS RWY 7

28° 33' N - 81° 20' W

ORLANDO, FLORIDA

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HERNDON

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ANSWERS TO PRACTICAL EXERCISE NO. 1

RADIO NAVIGATION

1. The flight procedure from an airway fix or feeder fix to the selected approach fix. This phase of the Terminal Procedure (TERP) precedes the actual approach procedure. Its information includes MEA, Magnetic Course, and Distance to one-tenth of a nautical mile.
2. Initial, Intermediate, and Final.
3. The final approach fix is the fix where descent to MDA (DH) begins.
4. Right-hand standard rate turns, 1 minute inbound.
5. EAC or EFC.
6. To positively identify the "blip" of an aircraft on the controller's radar scope.
7. The blue sector is always on the right for the direction of flight.
8. See pages 21 and 22 of this book.
9. IFR-S. In the entry for the pertinent airport under the subheading, COMMUNICATIONS.
10. Section II.
11. Air - ± 6 degrees.
Ground - ± 4 degrees.
12. a. 0, FROM; 180, TO.
b. Anywhere on the airport.
c. Within two dots left or right.
13. Radio station.
Position relative to the station.
East.

ANSWERS TO PRACTICAL EXERCISE NO. 2

RADIO NAVIGATION (RMI)

Page No.

- | | | | |
|-------|-----------------------|-----|-----------|
| 38. | 240, 125. | 62. | 350, 170. |
| 39. | 070, 346, 010. | 63. | 150. |
| 40. ✓ | 45°, right, 330. | 64. | 030, 360. |
| 41. | 215, 090. | | |
| 42. | Right, right, north. | | |
| 43. | East, 090. | | |
| 44. | East, 090. | | |
| 45. ✓ | 165, southwest. | | |
| 46. | East, 240. | | |
| 47. | South, west, C. | | |
| 48. | Inbound, over. | | |
| 49. | 280, northeast. | | |
| 50. | Over, over, over. | | |
| 51. | East, 020, left. | | |
| 52. | 105. | | |
| 53. | 025, right, 075. | | |
| 54. ✓ | Left, 105. | | |
| 55. | 045, 020, over. | | |
| 56. | Left, 225. | | |
| 57. | 027, right, 015, 330. | | |
| 58. | 090. | | |
| 59. ✓ | 085. | | |
| 60. | C, A, D, B. | | |
| 61. | C, D, A, B. | | |

ANSWERS TO PRACTICAL EXERCISE NO. 3RADIO NAVIGATION

Page No.

65. 090, 210.
66. 010, C.
67. 320.
68. 270, MRYRA.
69. 4500.
70. 110.
71. B.
72. South.
73. Right.
74. 155, FROM, right, has not.
75. A, C, B.
76. Short, Passed, Passed.
77. Would not.
78. West.
79. Opposite.
80. 080, left.
81. More than.
82. 090, Yes.
83. Left.
84. 080, 120, 070, 070.

NOTES

purpose and need of ATC clearances

format and information of ATC clearances

SIO is given in the first part of special instr.

known terms

Aviator's responsibilities of ATC clearances
radio navigation

on course or before/after station
determine position with own
track 30° to needle.

10 453 - course selector
intercepts.

RMI tells which way to turn

WOR checked every 10 hours and 10 days. (VOT - freq. 11)

Transponder - reacts to radar pulse

now how to work a ADX 44

Engage transponder codes and press 0200 or mode 3
set on emergency, but switch.

start inst rate 100/114 white mist at dest. 800/1 or
publ. alt. ifr regis.

fuel requirements and planned power
setting

Reports and contacts
what are compulsory reporting points