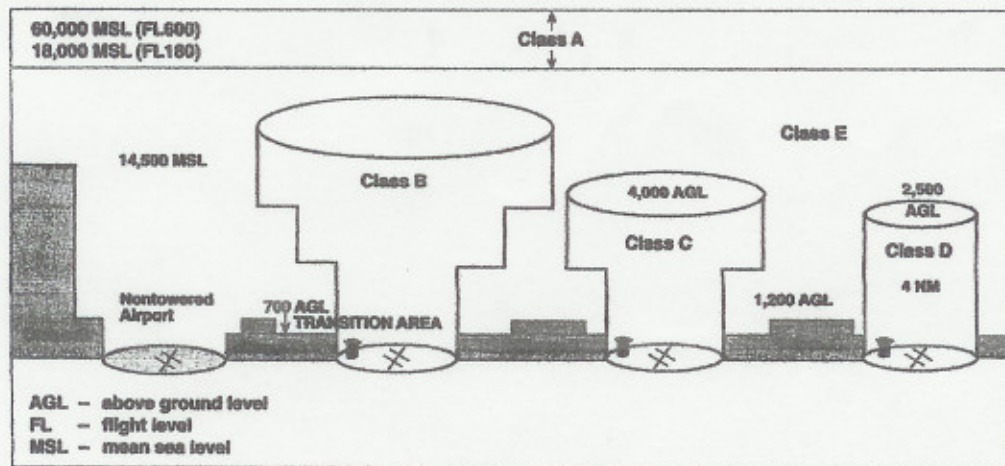


Airspace



Airspace Class
Figure 1

MICHIGAN

ADRIAN

LENAAWEE CO (ADG) 3 SW UTC-5(-4DT) N41°52.17' W84°04.49'

DETROIT
L-23C
IAP

798 B S4 FUEL 100LL JET A

RWY 05-23: H3994X75 (ASPH) S-20 MIRL

RWY 05: REIL VASI(V4L)—GA 3.0 TCH 40'. Road.

RWY 23: PAPI(P4R)—GA 3.2° TCH 30'. Trees.

RWY 11-29: 2400X270 (TURF)

RWY 11: Trees.

RWY 29: Tree.

AIRPORT REMARKS: Attended 1300Z±-dusk. Arpt unattended major holidays except by prior arrangement; call arpt manager 517-263-0045. Rwy 11-29 CLOSED Dec-Apr and when snow covered. Snow removal Rwy 05-23 only. Extensive glider ops weekends. Rgt tlc Rwy 05 for glider ops. Perimeters twy marked with reflectors. Taxi on hard surfaces only during spring thaw and wet conditions. Rwy 11-29 marked with 3' yellow cones. MIRL Rwy 05-23 preset low inst; to increase ints and ACTIVATE REIL Rwy 05; VASI Rwy 05 and PAPI Rwy 23—CTAF.

WEATHER DATA SOURCES: ASOS 118.375 (517) 265-9089.

COMMUNICATIONS: CTAF/UNICOM 122.8

LANSING FSS (LAN) TF 1-800-WX-BRIEF. NOTAM FILE ADG.

Ⓡ TOLEDO APP/DEP CON 126.1

RADIO AIDS TO NAVIGATION: NOTAM FILE JXN.

JACKSON (L) VOR/DME 109.6 JXN Chan 33 N42°15.55' W84°27.52' 149° 29 NM to fld. 1000/5W.

ADRIAN HDB (DBRW) 278 ADG N41°52.20' W84°04.51' at fld. NOTAM FILE LAN. Unmonitored.

JACKSON CO-REYNOLDS FLD (JXN) 2 W UTC-5(-4DT) N42°15.59' W84°27.56'

DETROIT
H-3H, L-23C
IAP

1001 B S4 FUEL 100LL JET A TPA—1801(800)

RWY 06-24: H5344X150 (ASPH - GRVD) S-44, D-60, DT-90 MIRL

RWY 06: VASI(V4L)—GA 3.0° TCH 27'. Thld dsplcd 438'. Railroad.

RWY 24: MALSR. Tree.

RWY 14-32: H3501X100 (ASPH) S-30, D-30 MIRL 0.4% down NW

RWY 14: PAPI(P4L). Tree.

RWY 32: REIL VASI (V4L)—GA 3.75° TCH 45'. Thld dsplcd 315'. Road.

AIRPORT REMARKS: Attended 1200-0200Z±. CAUTION: Deer and birds on and invof arpt. Low altitude acft ops prohibited invof prison 4 mi NE. When twr closed ACTIVATE MIRL Rwy 06-24 and MIRL Rwy 14-32; VASIs Rwy 06 and Rwy 32; REIL Rwy 32; MALSR Rwy 24—CTAF. NOTE: See Land and Hold Short Operations Section.

COMMUNICATIONS: CTAF 120.7 ATIS 127.95 (1200-0200Z±) UNICOM 122.95

LANSING FSS (LAN) TF 1-800-WX-BRIEF. NOTAM FILE JXN.

RCB 122.2 (LANSING FSS)

Ⓡ LANSING APP/DEP CON 127.3

TOWER 120.7 (1200-0200Z±) GND CON 121.9 CLNC DEL 121.9

AIRSPACE: CLASS B svc 1200-0200Z± other times CLASS E.

RADIO AIDS TO NAVIGATION: NOTAM FILE JXN.

(L) VOR/DME 109.6 JXN Chan 33 N42°15.55' W84°27.52' at fld. 1000/5W.

VOR portion unusable 250°-310° byd 20 NM. DME portion unusable 075°-225° byd 10 NM bto 3000'.

JAKSO HDB (LOM) 212 JX N42°19.07' W84°21.93' 235° 5.4 NM to fld.

ILS 109.1 I-JXN Rwy 24 LOM JAKSO NDB. ILS and LOM unmonitored when twr clsd.

TECUMSEH

AL MEYERS (3TE) 2 N UTC-5(-4DT) N42°01.50' W83°56.35'

DETROIT
L-23C
IAP

815 S3 FUEL 100LL

RWY 18-36: H2660X75 (ASPH) S-6 LIRL 0.6% up N

RWY 18: Thld dsplcd 300'. Trees.

RWY 36: Thld dsplcd 500'. Trees. Rgt tlc.

RWY 09-27: 1800X100 (TURF)

RWY 09: Thld dsplcd 600'. Building.

RWY 27: Post.

AIRPORT REMARKS: Attended 1300-2300Z±. Fuel avbl Mon-Sat 1300-2230Z±. Parachute Jumping. Rwy 09-27 not plowed after winter storms. Maintenance for Meyers acft only. Rwy 09-27 marked with tires; Rwy 09 dsplcd thld marked with three tires each side. Rwy 18 marked with drums. ACTIVATE LIRL Rwy 18-36—CTAF.

COMMUNICATIONS: CTAF 122.9

LANSING FSS (LAN) TF 1-800-WX-BRIEF. NOTAM FILE LAN.

CARLETON RCO 122.1R 115.7T (LANSING FSS)

Ⓡ DETROIT APP/DEP CON 118.95

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

CARLETON (H) VORTAC 115.7 CRL Chan 104 N42°02.89' W83°27.46' 270° 21.6 NM to fld. 630/3W.

UNWAS.

Figure 2 – Airport/Facility Directory Excerpt

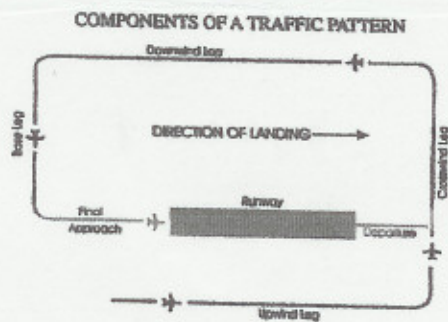
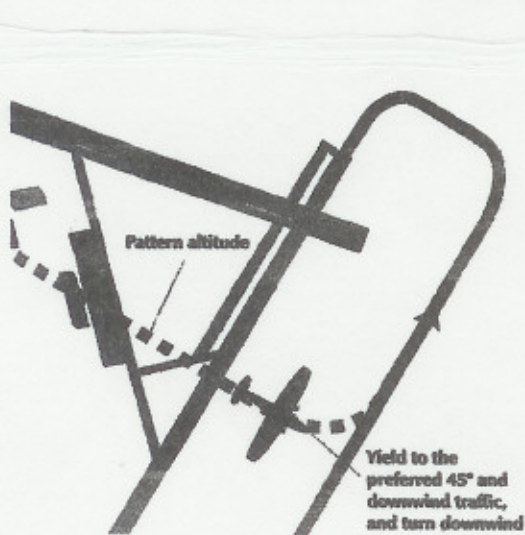
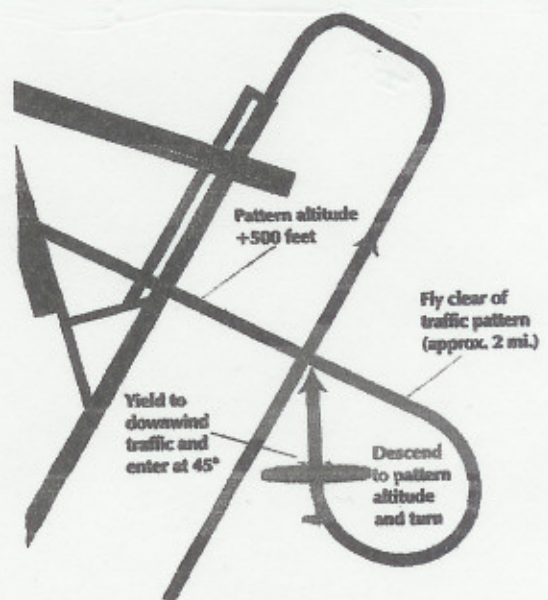


Figure 3 – Standard Traffic Pattern



Acceptable

Figure 4



Preferable

Figure 5

Cross Airport Pattern Entries

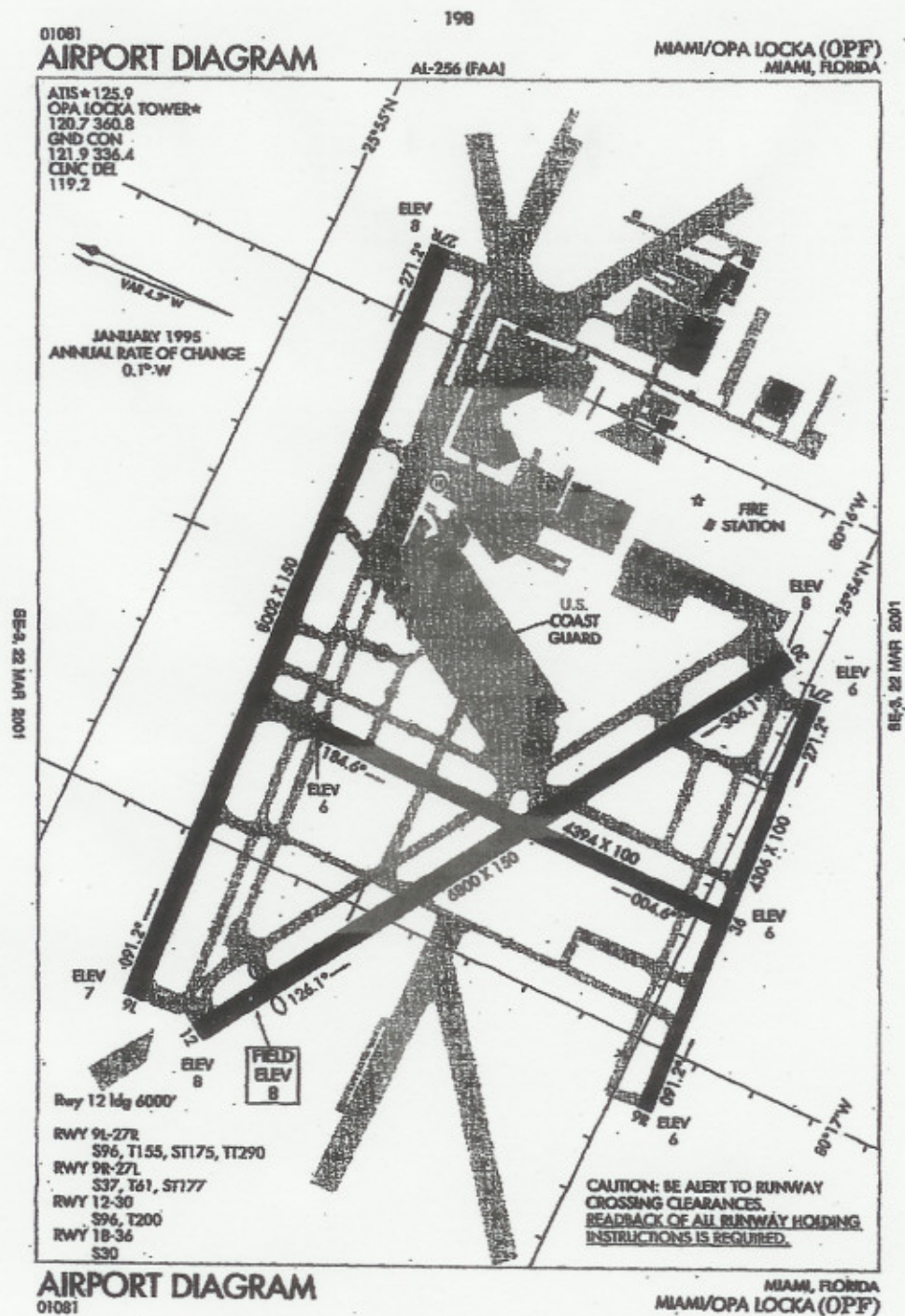


Figure 6 – Terminal Procedures Airport Diagram

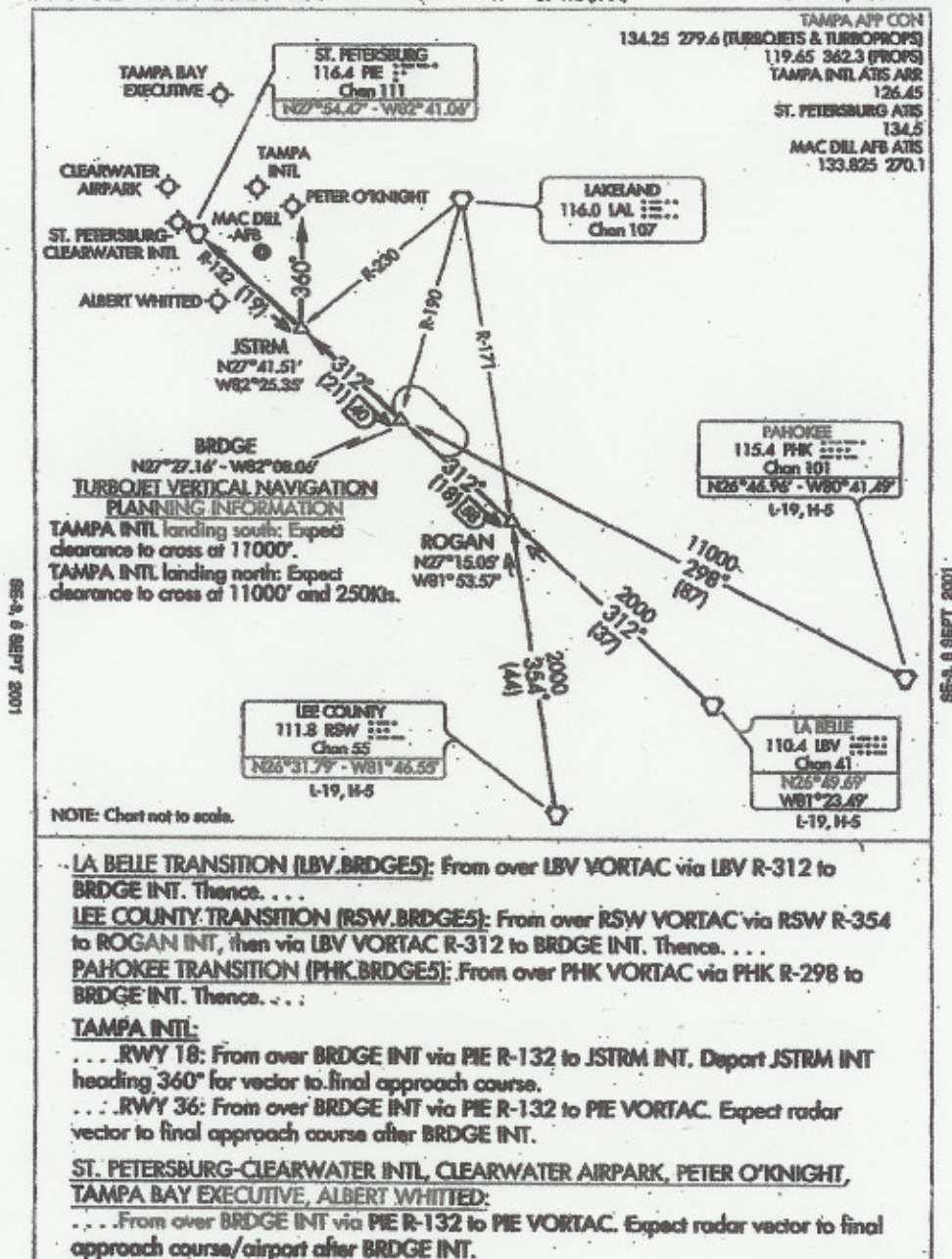


Figure 8. - Terminal Procedures STAR

FT. LAUDERDALE NINE DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 8, 13, 31: Climb on assigned heading. Thence

TAKE-OFF RUNWAY 26: Climb on assigned heading. If assigned left turn climb to 600 before left turn. Thence

....Maintain 2000 or assigned higher altitude and expect radar vectors to appropriate transition. Expect further clearance to filed altitude ten minutes after departure.

ARKES TRANSITION (FL9.ARKES): Intercept the VKZ VOR/DME R-348 to ARKES INT. Thence as filed.

BEECH TRANSITION (FL9.BEECH): From over FLL VOR/DME via FLL R-098 to BEECH INT. Thence as filed.

MINATE TRANSITION (FL9.MINATE): From over DHP VORTAC via DHP R-195 to MINATE DME. Thence as filed.

PRED A TRANSITION (FL9.PRED A): From over DHP VORTAC via DHP R-057 to PRED A INT. Thence as filed. If filed via BR70V, expect radar vector to filed route after PRED A. If radio contact is not established by PRED A, turn right to heading 120° and join filed route.

THNDR TRANSITION (FL9.THNDR): From over DHP VORTAC via DHP R-335 to THNDR INT. Thence as filed.

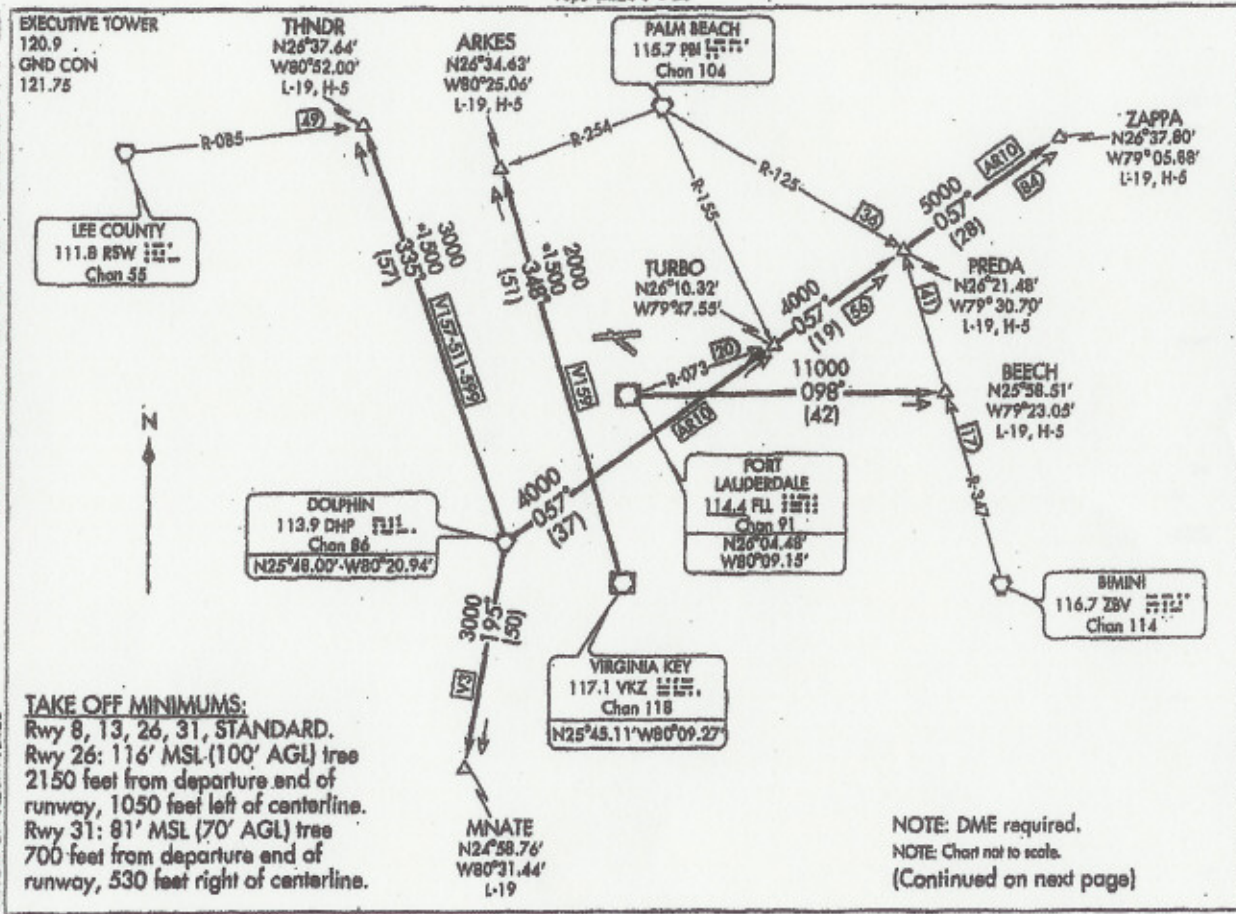
ZAPPA TRANSITION (FL9.ZAPPA): Intercept the DHP VORTAC R-057 to ZAPPA DME. Thence as filed.

SE-3, 8 SEPT 2001

SE-3, 8 SEPT 2001

Figure 9a - Terminal Procedures SID

FT. LAUDERDALE NINE DEPARTURE
 (PILOT NAV) (FLY FL) 01249
 61



FT. LAUDERDALE NINE DEPARTURE
 (PILOT NAV) (FLY FL) 01249
 SL-5942 (FAM)
 FORT LAUDERDALE EXECUTIVE (FXXE)
 FORT LAUDERDALE, FLORIDA

Figure 9b - Terminal Procedures SID

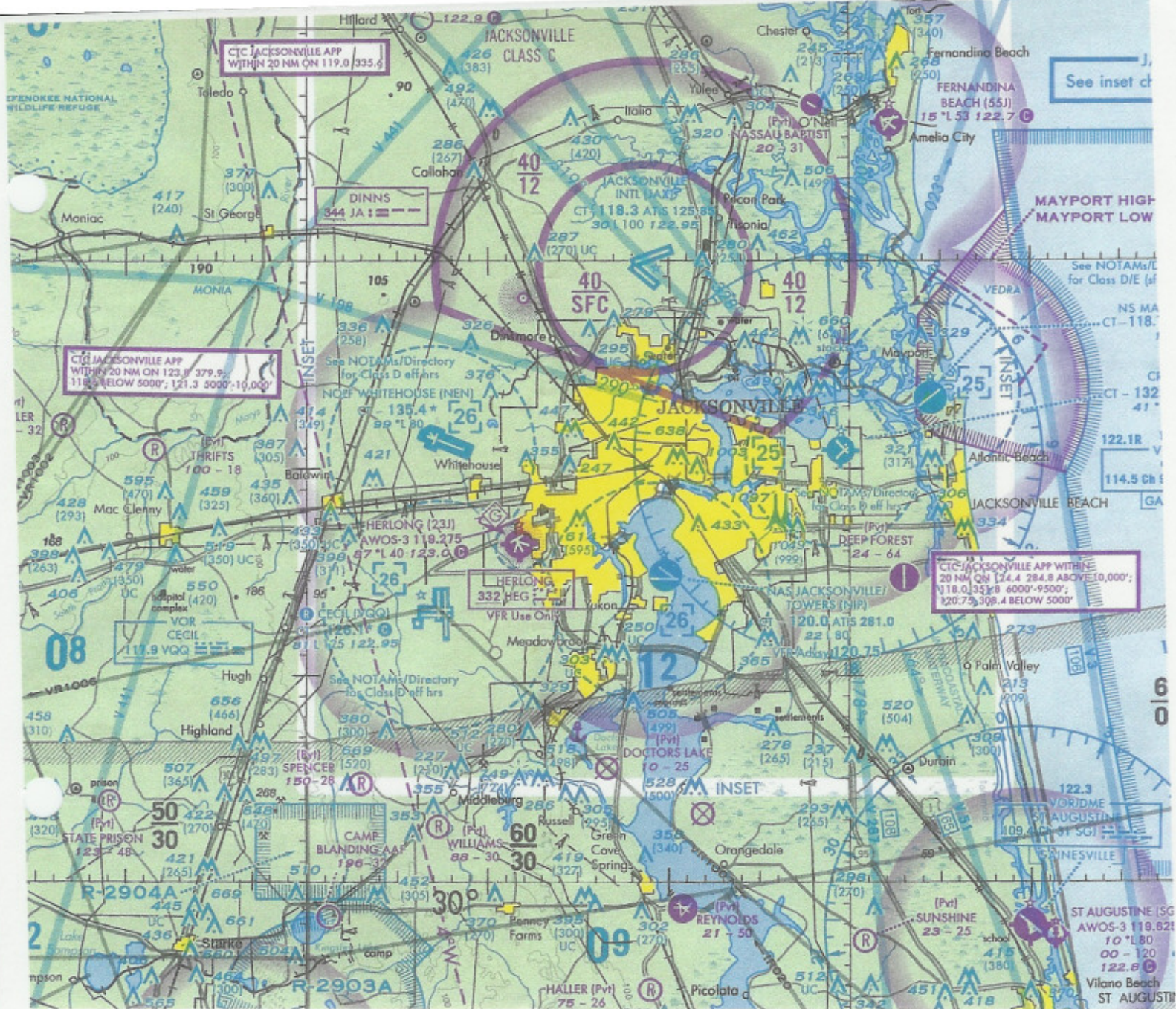


Figure 11 – VFR Sectional Chart Excerpt

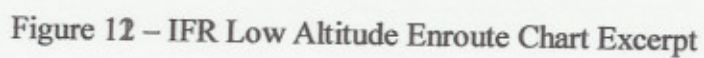


Figure 12 – IFR Low Altitude Enroute Chart Excerpt

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION			(FAA USE ONLY) ☐ PILOT BRIEFING ☐ VNR		TIME STARTED		SPECIALIST INITIALS	
FLIGHT PLAN			☐ STOPOVER					
1. TYPE ☒ VFR ☐ IFR ☐ DVFR	2. AIRCRAFT IDENTIFICATION N1836H	3. AIRCRAFT TYPE/SPECIAL EQUIPMENT 210/I	4. TRUE AIRSPEED 150 KTS	5. DEPARTURE POINT OCF	6. DEPARTURE TIME PROPOSED (1) 1300 ACTUAL (2)		7. CRUISING ALTITUDE 4500	
8. ROUTE OF FLIGHT A LAL A Arcadia A								
9. DESTINATION (Name of airport and city) FMY			10. EST. TIME ENROUTE HOURS 1 MINUTES 0		11. REMARKS			
12. FUEL ON BOARD HOURS 4 MINUTES 0		13. ALTERNATE AIRPORT(S)		14. PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE John Doe 352 123 4567 OCF			15. NUMBER ABOARD 1	
16. COLOR OF AIRCRAFT white/green			17. DESTINATION CONTACT/TELEPHONE (OPTIONAL)					
CIVIL AIRCRAFT PILOTS. FAR Part 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed \$1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans.								

FAA Form 7233-1 (8-82)

CLOSE VFR FLIGHT PLAN WITH _____ FSS ON ARRIVAL

Figure 13a – Flight Planning

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION			(FAA USE ONLY) ☐ PILOT BRIEFING ☐ VNR		TIME STARTED		SPECIALIST INITIALS	
FLIGHT PLAN			☐ STOPOVER					
1. TYPE ☒ VFR ☐ IFR ☐ DVFR	2. AIRCRAFT IDENTIFICATION N1888F	3. AIRCRAFT TYPE/SPECIAL EQUIPMENT C210/I	4. TRUE AIRSPEED 150 KTS	5. DEPARTURE POINT 17 FL	6. DEPARTURE TIME PROPOSED (1) 1730 ACTUAL (2)		7. CRUISING ALTITUDE 10000	
8. ROUTE OF FLIGHT A OCF V 157 LAL V 7 LEE A								
9. DESTINATION (Name of airport and city) FMY			10. EST. TIME ENROUTE HOURS 1 MINUTES 30		11. REMARKS			
12. FUEL ON BOARD HOURS 6 MINUTES 0		13. ALTERNATE AIRPORT(S) TPA		14. PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE John Doe 352 123 4567 17FL			15. NUMBER ABOARD 2	
16. COLOR OF AIRCRAFT beige/Brown			17. DESTINATION CONTACT/TELEPHONE (OPTIONAL)					
CIVIL AIRCRAFT PILOTS. FAR Part 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed \$1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans.								

FAA Form 7233-1 (8-82)

CLOSE VFR FLIGHT PLAN WITH _____ FSS ON ARRIVAL

Figure 13b – Flight Planning

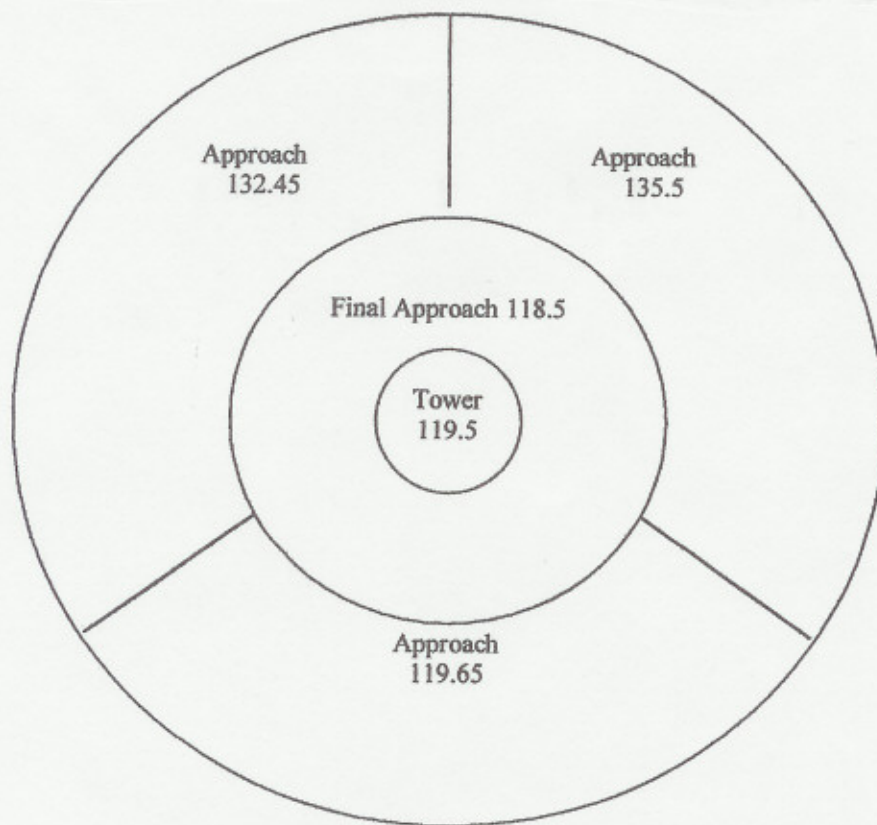


Figure 14 – Air Traffic Control Sectors – Typical Class B

	Morse Code	Telephony		Morse Code	Telephony
A	· _	Alpha	1	· _ _ _ _	One
B	_ . . .	Bravo	2	· . _ _ _	Two
C	_ . . ·	Charlie	3	· . . _ _	Three
D	_ . .	Delta	4	· . . . _	Four
E	·	Echo	5	·	Five
F	· . _ .	Foxtrot	6	_	Six
G	_ _ .	Golf	7	_ _ . . .	Seven
H	· . . .	Hotel	8	_ _ _ . .	Eight
I	· .	India	9	_ _ _ _ .	Niner
J	· _ _ _	Juliet	0	_ _ _ _ _	Zero
K	_ . _	Kilo			
L	· _ . .	Lima			
M	_ _	Mike			
N	_ .	November			
O	_ _ _	Oscar			
P	· _ _ .	Papa			
Q	_ _ . _	Quebec			
R	· _ .	Romeo			
S	· . .	Sierra			
T	_	Tango			
U	· . _	Uniform			
V	· . . _	Victor			
W	· _ _	Whiskey			
X	_ . . _	Xray			
Y	_ . _ _	Yankee			
Z	_ _ . .	Zulu			

Figure 15 – Phonetic Alphabet

Common Traffic Advisory Frequencies (CTAF)

122.7
122.725
122.8
122.975
123.0

Multicom

122.9

Helicopter

123.050
123.075

Air to Air

Airplane
122.75
122.85

Helicopter
123.025

Aviation Instruction, Glider and Hot air Balloons

122.3
123.5

Flight Service – Common Frequencies – Maybe either VOR's or RCO's

122.1	122.45	122.6	122.3
122.2	122.5	122.65	122.0
122.35	122.5	123.6	
122.4	122.55	123.65	

Flight Watch – 122.0

Figure 16 – Radio Frequencies

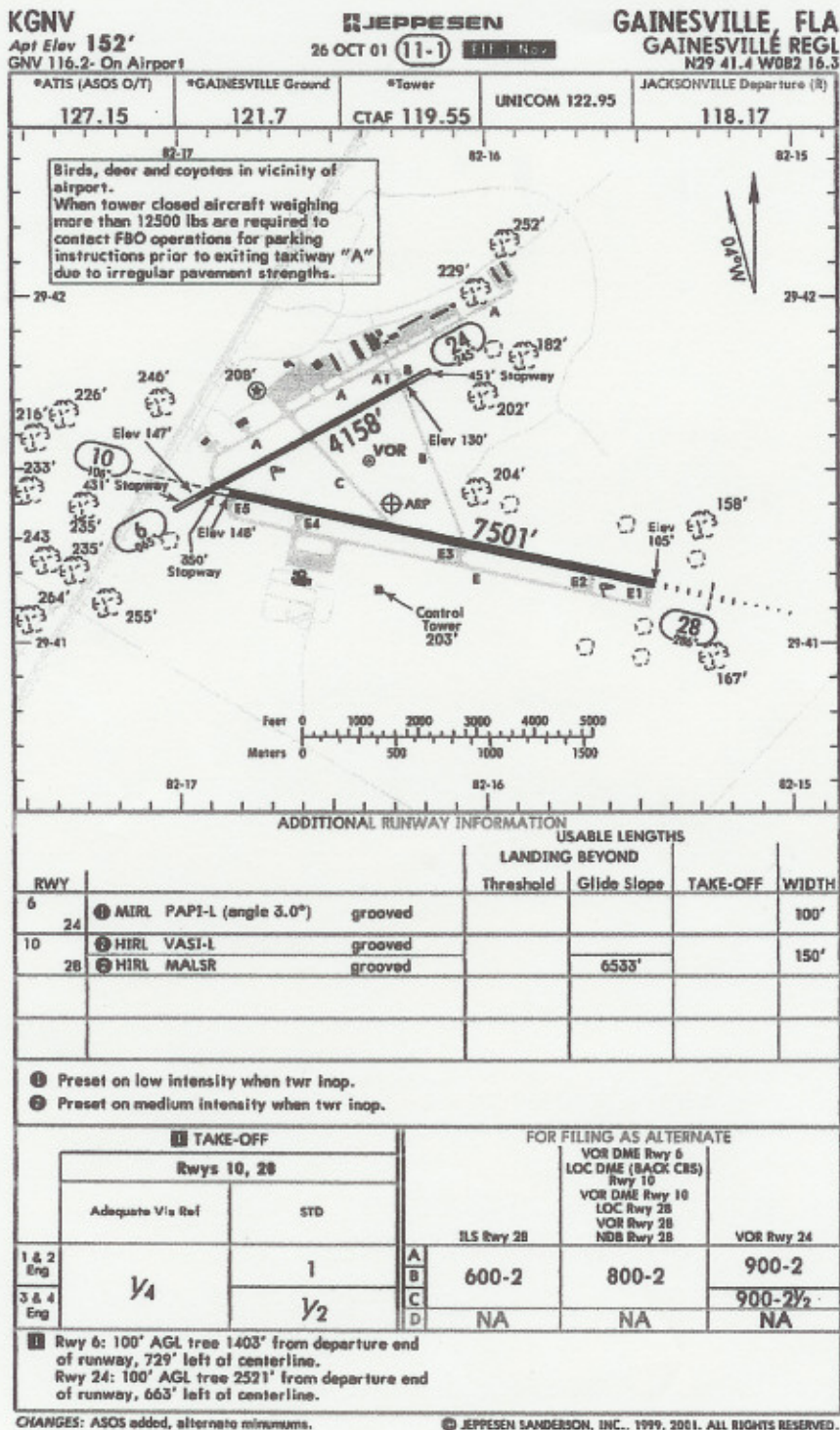


Figure 17 – Terminal Procedures GNV

ATIS Broadcast:

"Gainesville regional airport ATIS information victor, time one three zero zero zulu, weather measured ceiling five thousand overcast, visibility better than ten, temperature two niner, dew point one seven, winds two seven zero at eight with gusts to twelve, altimeter two niner niner seven, ILS runway two eight approach in use, landing and departing runways two four and two eight, notices to airmen, taxiway alpha one closed, unlit tower two point five miles northeast of the airport, elevation five hundred twenty feet AGL, Advise on initial call-up you have ATIS information victor."

Figure 18 – ATIS

Clearance Delivery:

"Cessna niner three four papa charlie, cleared to Tampa via the Fort Lauderdale nine departure, thunder transition, as filed, on departure fly heading three four zero, maintain two thousand, expect six thousand in ten minutes, departure frequency will be one one niner point seven, squawk four one four zero."

Your notes:

Ft L 9
thunder
AF
340
2K
6K 10
119.7
4140

Read Back:

"Fort Lauderdale nine, thunder, as filed, three four zero, two thousand, six thousand in ten, one one niner point seven, squawk four one four zero."

Figure 19 – Clearance Delivery

$\text{DISTANCE} = \text{SPEED} / 60 * \text{TIME ENROUTE}$

$\text{TIME ENROUT} = \text{DISTANCE} * 60 / \text{SPEED}$

$\text{SPEED} = \text{DISTANCE} * 60 / \text{TIME (minutes)}$

$\text{FUEL BURN} = \text{TIME} / 60 * \text{GPH}$

Compass Logic

ANDS = Accelerate North – Decelerate South

Magnetic Variation – East is least - West is best

Lag North – Lead South = 10° per 30°

Weight & Balance

$\text{Moment} = \text{Weight} * \text{Arm}$

$\text{CG} = \text{Total moment} / \text{Total weight}$

Standard Day

15°C (59°F) 29.92 – Temperature lapse rate = 2°C per

1000 ft / 3.5°F per 1000 ft. Pressure decreases 1 in per

1000 ft. Moist / Hot air = Lighter air (less pressure)

Figure 20 – General Information

Basic VFR Weather Minimums

Airspace	Flight Visibility	Distance from Clouds
Class A	Not Applicable	Not Applicable
Class B	3 Statute Miles	Clear of Clouds
Class C	3 Statute Miles	500 Feet Below 1000 Feet Above 2000 Feet Horizontal
Class D	3 Statute Miles	500 Feet Below 1000 Feet Above 2000 Feet Horizontal
Class E Less than 10,000 Feet MSL	3 Statute Miles	500 Feet Below 1000 Feet Above 2000 Feet Horizontal
Class E At or above 10,000 Feet MSL	5 Statute Miles	1,000 Feet Above 1,000 Feet Below 1 Statute Mile Horizontal
Class G 1,200 Feet or less above the surface (Regardless of MSL Alt)	Day (See FAR 91.155 (b))	Clear of Clouds
	1 Statute Mile	
	Night (See FAR 91.155 (b))	500 Feet Below 1000 Feet Above 2000 Feet Horizontal
More than 1,200 feet AGL, but less than 10,000 Feet MSL	Day	500 Feet Below 1000 Feet Above 2000 Feet Horizontal
	1 Statute Mile	500 Feet Below 1000 Feet Above 2000 Feet Horizontal
	Night	500 Feet Below 1000 Feet Above 2000 Feet Horizontal
More than 1,200 feet AGL, and at or above 10,000 feet MSL	3 Statute Miles	500 Feet Below 1000 Feet Above 2000 Feet Horizontal
	Day or Night	1,000 Feet Above 1,000 Feet Below 1 Statute Mile Horizontal
	5 Statute Miles	1 Statute Mile Horizontal

Figure 21 - VFR Minimums