References: AIM, Federal Aviation Regulations, Enroute Low Altitude Charts, Instrument Approach Procedures. (Applicable instrument approach procedures and enroute chart extracts are located at the end of the questions).

1. According to FAR Part 61, a pilot who has not performed and logged six instrument approaches, holds, and course intercepts under actual or simulated instrument conditions in the past six calendar months

a. may not fly in VFR conditions with a safety pilot.

b. May not fly IFR as PIC, and must, in the next 6 months regain currency or successfully complete an IPC.

c. is still current to act as PIC under IFR during the grace period but needs to fly the required flight time and approaches before the end of the 12th calendar month.

d. is restricted to enroute IFR only.

2. Prior to flight under IFR when VOR navigation will be used, the VOR receiver(s) must have been operationally checked, found to be within specifications, and an appropriate record made

a. by an FAA-approved avionics repair station within the past year.

b. within the past 10 hours of flight time.

c. within the past 30 days.

d. within the past 24 months.

3. To operate in controlled airspace under IFR, an aircraft must have

a sensitive pressure altimeter that has been calibrated within the past:

a. 12 calendar months.

b. 36 calendar months.

c. 24 calendar months.

d. 48 calendar months.

4. According to FAR Part 91, which flight instrument is not required for flight under IFR?

a. attitude indicator.

b. turn coordinator.

c. Vertical speed indicator.

d. airspeed indicator.

5. A pilot is planning an IFR flight back to Huntsville International Airport (KHSV). The weather is forecast to be 600 BKN, 1 1/2 -RA BR at the time of arrival (+ or - 1 hour). Based on the above, the pilot should determine that

a. no alternate airport must be filed since the forecast ceiling is well above the DH for the ILS at KHSV.

b. no alternate airport must be filed because the rule says 600 feet for a precision approach.

c. an alternate airport must be filed because the forecast visibility is below minimums for the ILS approach.

d. an alternate airport must be filed because the forecast visibility is less than 3 miles and ceiling is less than 2000 ft.

6. While enroute on an IFR flight in instrument conditions, the pilot notices that one of the Nav/Com receivers has failed. She/he must then

a. declare an emergency and request vectors to the nearest airport.

b. descend to visual conditions and land as soon as possible.

c. notify ATC that this equipment is no longer operational.

d. continue with the flight as no action is required for a failed receiver if another is available.

7. The difference between MOCA and MEA altitudes as published on a low-altitude enroute chart is

a. always 1000 feet.

b. The MEA provides assurance of acceptable navigation signal reception for the full route segment.

c. a safety factor for altimeter errors.

d. the minimum separation used by ATC for aircraft along that route.

8. A pilot operating in visual conditions on an IFR flight plan discovers that the VHF communication radio(s) have failed. She/he should then

a. squawk 7600, remain in visual conditions, land as soon as practical, and notify ATC.

b. squawk 7500 and continue the flight in accordance with the last clearance received from ATC.

c. return to the airport of departure.

d. squawk 7700, proceed to the nearest airport with a published IFR approach, and land.

9. What is the bold V (1.4NM) symbol on the MDQ RNAV RWY 18 profile view

(reference the approach plate)?

a. Missed approach point

b. Visual descent point

c. Decision point

d. A step down fix

10. A pilot receives the following clearance: "Cleared localizer runway 27 approach, circle to land runway 9". At what point may the pilot descend from the published circling MDA?

a. as soon as the pilot breaks out and has runway 27 in sight.

b. at midfield on downwind for runway 9.

c. upon passing the missed approach point.

d. when the runway 9 environment is clearly in sight, the aircraft is in a position to land using normal maneuvers, and a descent at a normal rate can be accomplished and required visibility is met.

11. While conducting an ILS approach at decision height without the runway in sight, a pilot

a. may continue to land.

b. may continue to within 10 feet of the touchdown zone elevation.

c. must immediately execute a missed approach; follow the missed approach procedure, and announce "missed" to ATC.

d. must call the tower and advise of weather conditions.

12. The airway marking (2800G) south of Huntsville on T429 between FEWER and JOSEP indicates (reference IFR Low Excerpt):

a. GNSS MEA.

b. Minimum Crossing Altitude.

c. Ground Clearance

d. Distance to Golf course

13. The words "RADAR REQUIRED" on an instrument approach procedure mean that

a. the aircraft must be equipped with airborne radar to fly this approach.

b. the approach requires operational ATC radar coverage.

c. this is either a PAR or ASR approach.

d. a 4096-code transponder with altitude encoding capability will be required.

14. While planning a trip from Redstone AAF to Miami, a pilot receives a weather briefing indicating low ceilings along the entire route of flight. Tops are expected to be 22,000 with possible embedded thunderstorms. Based on this information the pilot should:

a. Continue knowing ATC radar can provide radar vectors through the worst of the weather.

b. Contact FSS if conditions worsen enroute.

c. Reconsider this trip, based on the predicted weather hazards.

d. Continue knowing that the trip can easily be made with an iPad and ADS-B receiver.

15. A pilot executes the missed approach at the destination airport due to fog. The pilot must then

a. initiate the missed approach, inform ATC of intentions, i.e., alternate airport, route of flight, another approach, etc.

b. proceed to the alternate airport as previously filed.

c. request special VFR and enter a tight circling approach to landing.

d. hold at the missed approach holding point until advised by ATC of additional procedures to be followed.

16. You are flying the localizer approach to runway 18R at Huntsville (LOC-18R @ HSV) and you have the approach loaded and activated in the 650/430W/530W When must you execute the missed approach if the runway environment is not in sight (reference the approach plate)?

a. When annunciated by the GPS or 3:48 past FEKER at 90 knots

b. 2.8 NM past FEKER

c. 6.6 NM past HAGUR

d. 829' MSL

17. For all IFR departures, you should:

a. Cross the departure end of the runway (DER) at least 35 feet AGL, continue climbing to 400 feet AGL before making the initial turn, then maintain a minimum climb gradient of 200 feet per nautical mile.

b. Climb to the circling MDA appropriate for your category of aircraft.

c. Climb to the minimum safe altitude (MSA).

d. Climb unrestricted to your cruise altitude after 10 minutes.

18. When conducting a circling approach to an airport without an operating tower, pilots should remember (ref Advisory Circular 90-66C):

a. They have priority over other VFR traffic.

b. Circling isn't permitted at non-towered airports.

c. Turn direction is at the pilot's discretion.

d. Circling approaches require left-hand turns unless the approach procedure specifies otherwise.

19. The airway marking (open-headed arrow) west of the VUZ VOR on V278 near the FIBER waypoint indicates (reference IFR Low Excerpt):

a. the published MEA applies only for southeast bound traffic.

b. a minimum crossing altitude.

c. a DME fix.

d. an MEA, MAA and/or MOCA change point.

20. Why is the KJFX ILS charted on the low enroute chart (reference IFR Low Excerpt)?

a. To assist with intercepting the final approach course

b. It can be used to identify the SIPSY intersection

c. For situational awareness

d. Defines the boundary of the airport traffic area (ATA)

21. Regarding obstruction clearance when departing Redstone under IFR,

a. the “T” within the triangle on the approach plate indicates existence of nonstandard takeoff minima and/or Obstacle Departure Procedure.

b. Huntsville ATC will provide obstruction clearance at any altitude.

c. Huntsville ATC expects the instrument pilot to adhere to published takeoff procedures.

d. both a. and c.

22. The number west of Birmingham on the L18 Low Altitude Chart that reads '38' is

a. ATC minimum vectoring altitude.

b. the area MOCA.

c. minimum area radio reception altitude.

d. Off route obstruction clearance altitude (OROCA).

23. You are planning to fly the RNAV 27 into JFX. You are over the FOLSO waypoint (18NM NE of SIPSY), proceeding direct to SIPSY when Birmingham clears you for the approach. What is the minimum altitude you can descend to at your current position (reference JFX RNAV 27 approach plate)?

a. 3100 via the TAA unless directed otherwise by ATC

b. 2800 via the TAA unless directed otherwise by ATC

c. 3800 via the OROCA

d. None of the above

24. You are conducting the RNAV 17 to HUA when the tower is closed, restricted area A and C are inactive (cold) and the ceiling is 800 feet. After passing IPUDE inbound, the 650/430W/530W annunciates LNAV/VNAV instead of the expected LPV. How should you proceed?

a. Disregard the annunciation and continue the approach to LPV mins

b. Continue the approach to LNAV/VNAV minimums

c. Continue the approach to LNAV minimums

d. Either b or c

25. The waypoint marking at JOSEP, south of Huntsville on T429

indicates a (reference IFR Low Excerpt):

a. compulsory reporting point

b. VOR changeover point

c. minimum crossing altitude

d. minimum reception altitude

26. When either R-2104A or R-2104C is active, Huntsville Approach will not clear you for a published instrument approach into KHUA under IFR, without prior coordination with and permission from Redstone Tower. If R-2104A only is active, and you arrive in daytime under marginal VFR conditions, with Redstone Tower open, what are your options to get into Redstone?

a. Fly an approach into KHSV and land or if conditions allow fly VFR to Redstone.

b. Request a visual or contact approach to KHUA.

c. There is no way.

d. Declare an emergency and request a PAR/GCA approach into KHUA.

27. When flying an aircraft equipped with G5s and the GFC-500 autopilot, the PFD has an AFCS status box at the top (ref G5 PDF illustration). What is the significance of the white ALTS?

a. The autopilot is inoperative

b. Altitude select is active

c. Altitude select is armed

d. Roll mode is active

28. An RNAV STAR procedure is identified on the chart as an RNAV 1 procedure. Under what conditions can you fly that procedure?

a. The procedure must be retrievable by name from the database

b. Your aircraft must be equipped with an IFR-Certified GPS

c. Your aircraft must be equipped with GLS (GNSS Landing System)

d. a and b

29. If during a circling maneuver, visual reference to the runway is lost, what should the pilot do?

a. Continue downwind and climb to a safe altitude.

b. Fly the approach to the opposite runway backwards until above MDA.

c. Establish yourself on the published missed approach course by initiating a climbing turn towards the landing runway.

d. Circle back to the missed approach point and hold at MDA, make a new plan, inform ATC.

30. Unless alternate minimums are published, which of the following are legal weather requirements for an alternate airport?

a. With a precision approach - 600/2

b. With a non-precision approach - 800/2

c. Without a published approach, VFR descent from the MEA, approach and landing under basic VFR

d. All of the above

31. You are on the ILS approach to RWY 18L at KHSV. Upon reaching DA, you have the required flight visibility and the localizer and glideslope needles are centered. You look down and can see and identify the approach lights and the Runway End Identifier Lights (REIL), but you cannot yet see the runway or any other lights or markings associated with it. Can you descend below the DA down to 100 ft HAT based on seeing only the approach lights? *(See IAP chart and approach lighting chart at end)*

a. Yes b. No

32. You are filing for an alternate airport because your destination airport does not meet the minimum weather requirements ('123' rule). You are flying a 650/430W/530W equipped airplane. The weather at your selected alternate is 800/2 but it only has an RNAV approach. Is this a legal alternate?

a. Yes

b. No

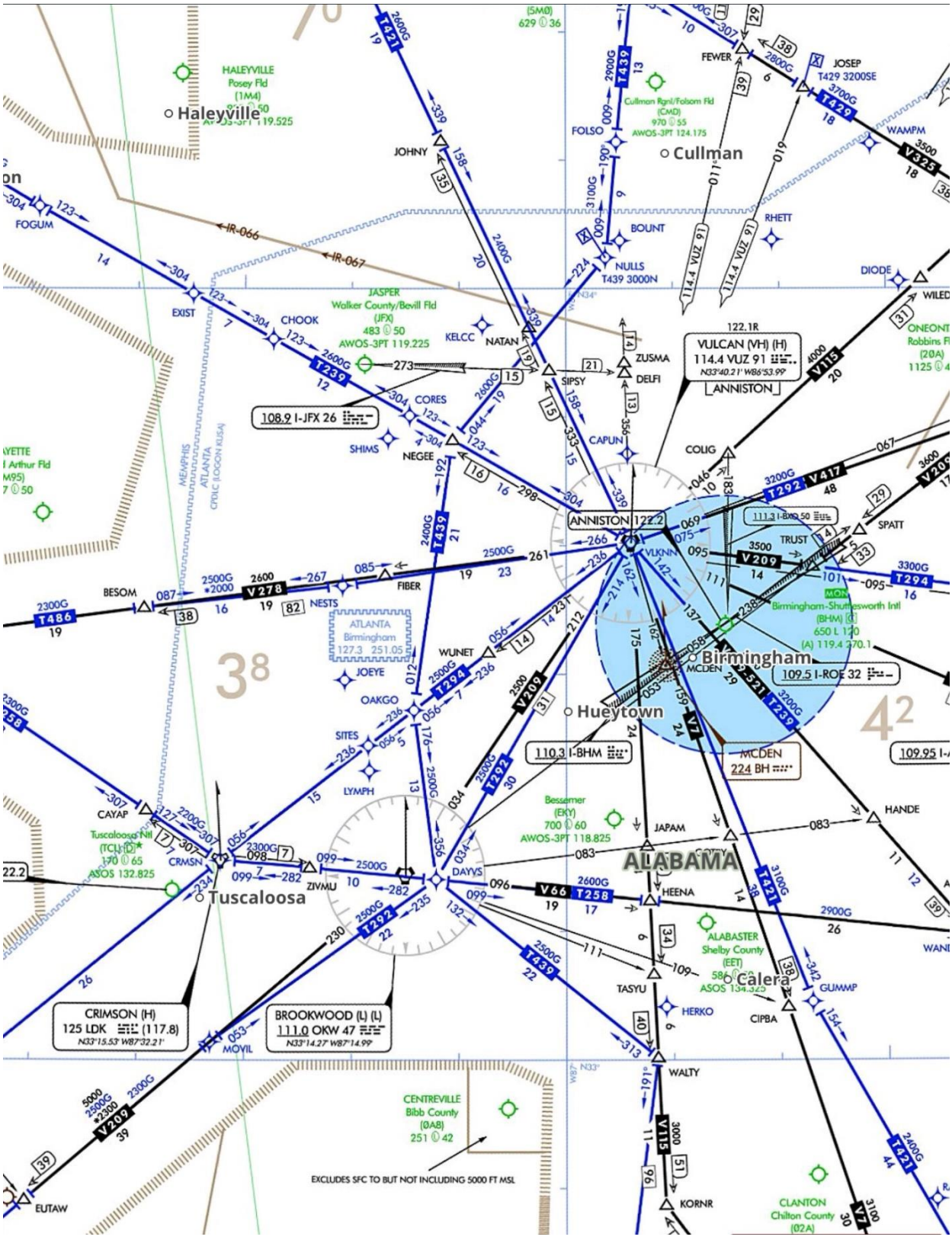
33. You are over RQZ proceeding direct to IPUDE (318 degree heading) for a turn in holding followed by the RNAV 17 HUA. What holding entry should you execute upon reaching IPUDE (reference HUA RNAV 17 approach plate)?

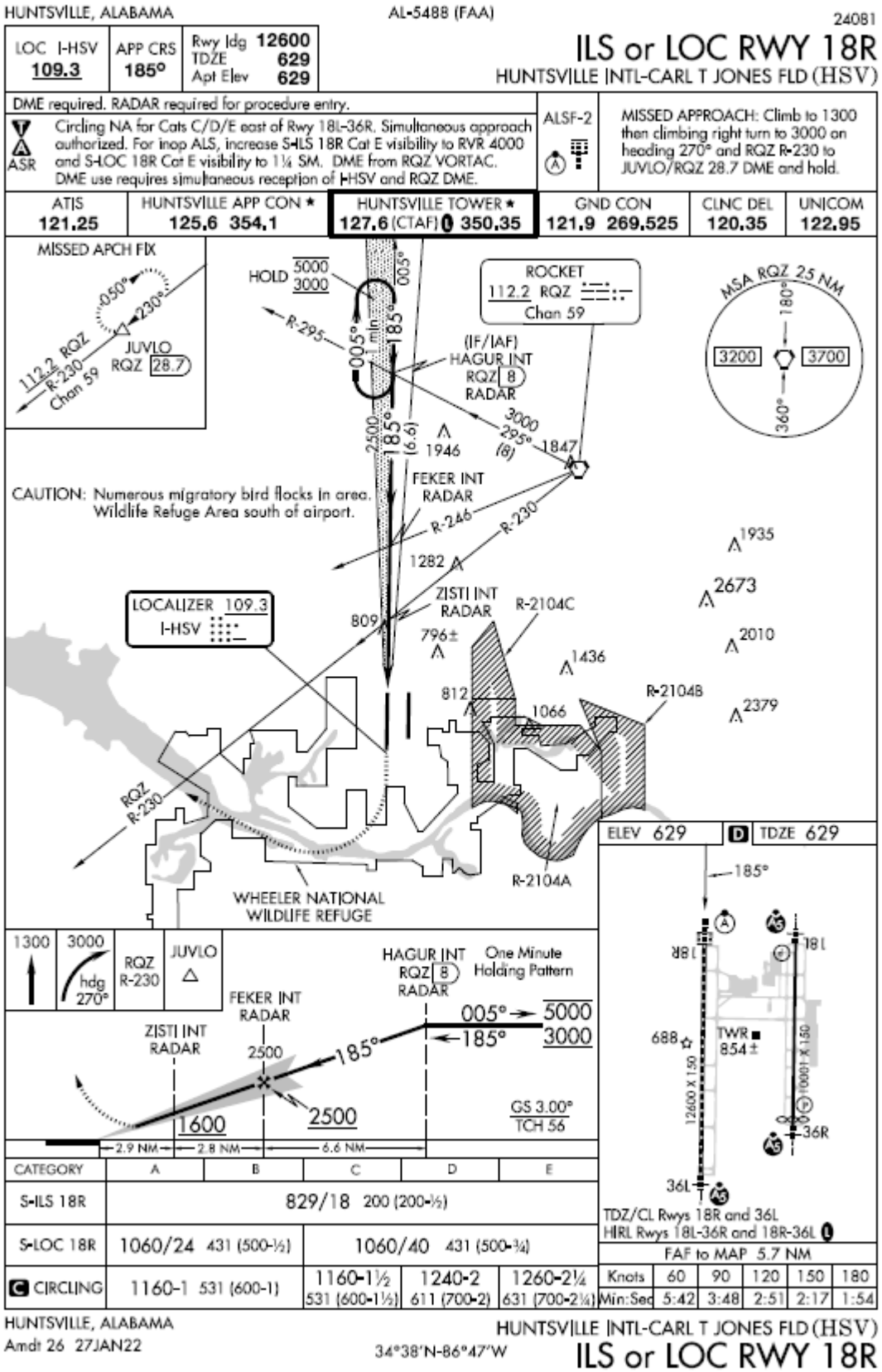
a. Direct

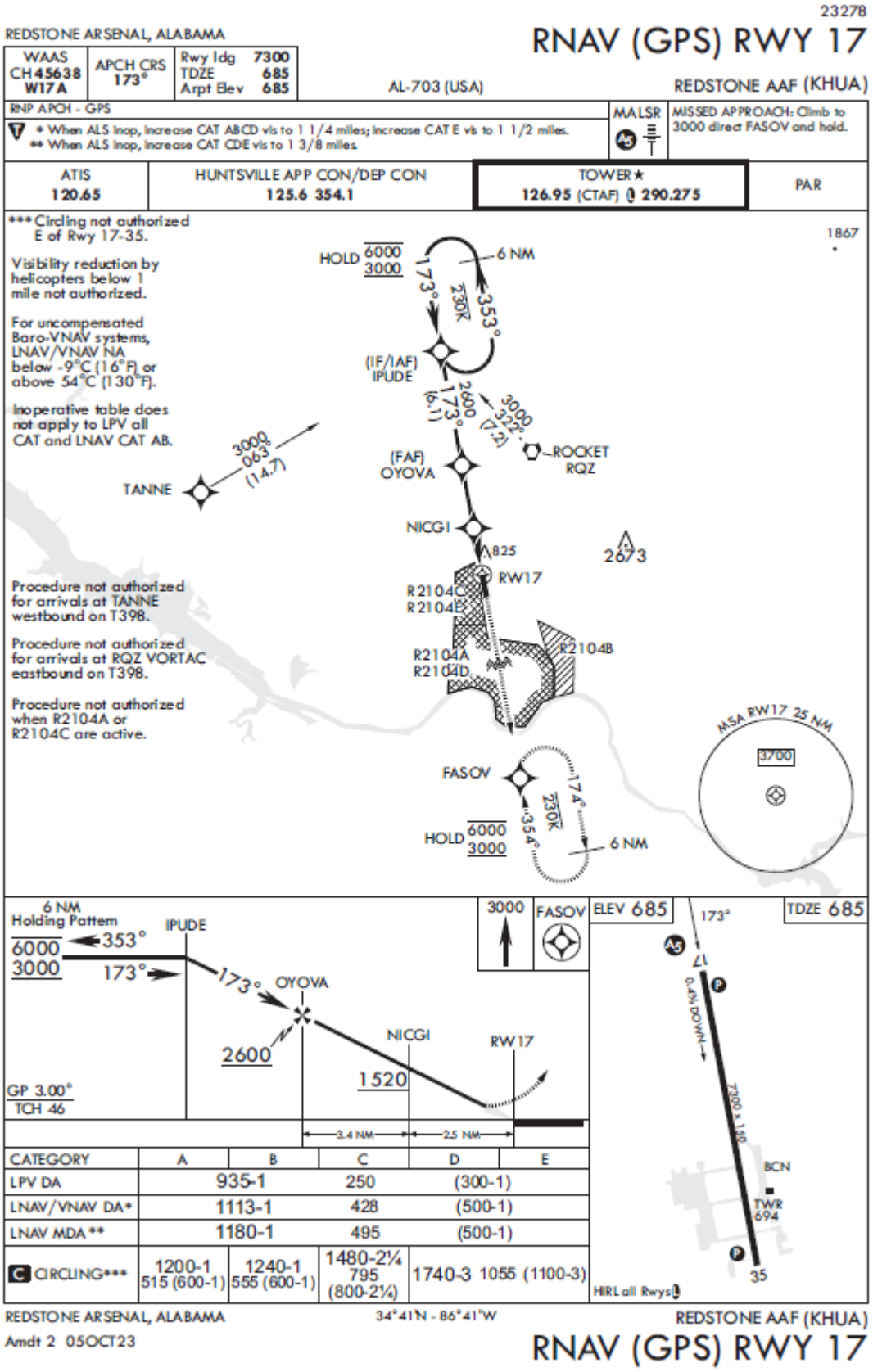
b. Teardrop

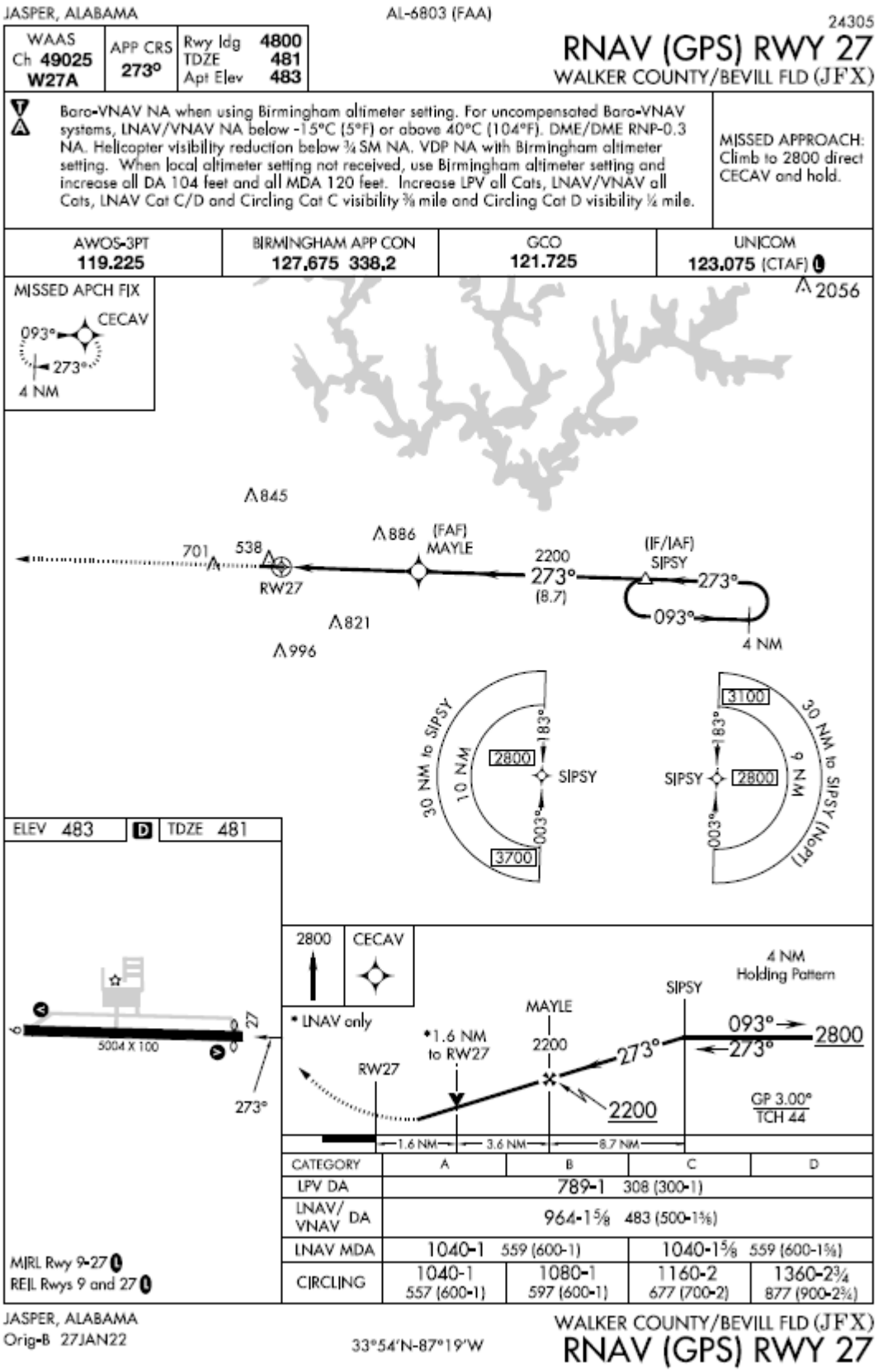
c. Parallel


GPS
HDG
AP
PIT
ALTS
350
360
010
5060
120
110
100
90
80
KT
GS
10
10
10
10
5200
5100
5060
5000
10
5
5
10
29.99


Haleyville
HALEYVILLE
Posey Fld
(1M4)
Cullman
Cullman Rgnl/Folsom Fld
(CMD)
970 55
AWOS-3PT 124.175
JOSEP
T429 3200SE
FEWER
JOHNY
FOLSO
BOUNT
NULLS
T439 3000N
RHETT
WAMPM
DIODE
FOGUM
IR-066
IR-067
EXIST
CHOOK
JASPER
Walker County/Bevill Fld
(JFX)
483 50
AWOS-3PT 119.225
KELCC
NATAN
SIPSY
ZUSMA
DELFI
VULCAN (VH) (H)
114.4 VUZ 91
N33°40.21' W86°53.99'
ANNISTON
122.1R
108.9 I-JFX 26
CORES
SHIMS
NEGEE
CAPUN
COLIG
ANNISTON 122.2
VLKNN
TRUST
SPATT
Birmingham-Shuttlesworth Intl
(BHM)
650 L 120
(A) 119.4 270.1
Birmingham
MCDEN
109.5 I-ROE 32
BESOM
NESTS
FIBER
ATLANTA
Birmingham
127.3 251.05
WUNET
JOEYE
OAKGO
Hueytown
SITES
LYMPH
110.3 I-BHM
MCDEN
224 BH
Bessemer
(EKY)
700 60
AWOS-3PT 118.825
JAPAM
HANDE
ALABAMA
CAYAP
Tuscaloosa Ntl
(TCL)
170 65
ASOS 132.825
CRMSN
ZIVMU
DAYYS
Tuscaloosa
HEENA
ALABASTER
Shelby County
(EET)
ASOS 134.325
Calera
GUMMP
TASYU
HERKO
CIPBA
WALTY
CRIMSON (H)
125 LDK (117.8)
N33°15.53' W87°32.21'
BROOKWOOD (L) (L)
111.0 OKW 47
N33°14.27' W87°14.99'
MOVIL
CENTREVILLE
Bibb County
(0A8)
251 42
EXCLUDES SFC TO BUT NOT INCLUDING 5000 FT MSL
KORNR
CLANTON
Chilton County
(02A)
EUTAW
38
42


HUNTSVILLE, ALABAMA
AL-5488 (FAA)
24081
ILS or LOC RWY 18R
HUNTSVILLE INTL-CARL T JONES FLD (HSV)
LOC I-HSV 109.3
APP CRS 185°
Rwy Idg 12600
TDZE 629
Apt Elev 629
DME required. RADAR required for procedure entry.
Circling NA for Cats C/D/E east of Rwy 18L-36R. Simultaneous approach authorized. For inop ALS, increase S-ILS 18R Cat E visibility to RVR 4000 and S-LOC 18R Cat E visibility to 1¼ SM. DME from RQZ VORTAC. DME use requires simultaneous reception of HSV and RQZ DME.
ASR
ALSF-2
MISSED APPROACH: Climb to 1300 then climbing right turn to 3000 on heading 270° and RQZ R-230 to JUVLO/RQZ 28.7 DME and hold.
ATIS 121.25
HUNTSVILLE APP CON 125.6 354.1
HUNTSVILLE TOWER 127.6 (CTAF) 350.35
GND CON 121.9 269.525
CLNC DEL 120.35
UNICOM 122.95
MISSED APCH FIX
050°
230°
112.2 RQZ R-230 Chan 59
JUVLO RQZ 28.7
HOLD 5000 3000
R-295
005°
1 min
185°
005°
ROCKET 112.2 RQZ Chan 59
(IF/IAF) HAGUR INT RQZ 8 RADAR
MSA RQZ 25 NM
180°
3200
3700
360°
2500
185° (6.6)
1946
3000
295° (8)
1847
FEKER INT RADAR
R-246
R-230
CAUTION: Numerous migratory bird flocks in area. Wildlife Refuge Area south of airport.
1282
1935
2673
2010
LOCALIZER 109.3 I-HSV
ZISTI INT RADAR
R-2104C
809
796±
1436
812
1066
R-2104B
2379
RQZ R-230
R-2104A
WHEELER NATIONAL WILDLIFE REFUGE
ELEV 629
D
TDZE 629
185°
18R
18L
688
TWR 854±
12600 X 150
10001 X 150
36R
36L
TDZ/CL Rwys 18R and 36L
HIRL Rwys 18L-36R and 18R-36L
1300
3000
hdg 270°
RQZ R-230
JUVLO
HAGUR INT RQZ 8 RADAR
One Minute Holding Pattern
FEKER INT RADAR
ZISTI INT RADAR
005°
5000
185°
3000
2500
185°
2500
1600
GS 3.00°
TCH 56
2.9 NM
2.8 NM
6.6 NM
FAF to MAP 5.7 NM
CATEGORY A B C D E
S-ILS 18R 829/18 200 (200-½)
S-LOC 18R 1060/24 431 (500-½) 1060/40 431 (500-¾)
C CIRCLING 1160-1 531 (600-1) 1160-1½ 531 (600-1½) 1240-2 611 (700-2) 1260-2¼ 631 (700-2¼)
Knots 60 90 120 150 180
Min:Sec 5:42 3:48 2:51 2:17 1:54
HUNTSVILLE, ALABAMA
Amdt 26 27JAN22
34°38'N-86°47'W
HUNTSVILLE INTL-CARL T JONES FLD (HSV)
ILS or LOC RWY 18R
SE-4, 20 FEB 2025 to 20 MAR 2025
SE-4, 20 FEB 2025 to 20 MAR 2025


23278
REDSTONE ARSENAL, ALABAMA
RNAV (GPS) RWY 17
WAAS CH 45638 W17A
APCH CRS 173°
Rwy Idg 7300
TDZE 685
Arpt Elev 685
AL-703 (USA)
REDSTONE AAF (KHUA)
RNP APCH - GPS
* When ALS inop, increase CAT ABCD vis to 1 1/4 miles; increase CAT E vis to 1 1/2 miles.
** When ALS inop, increase CAT CDE vis to 1 3/8 miles.
MALSR
MISSED APPROACH: Climb to 3000 direct FASOV and hold.
ATIS 120.65
HUNTSVILLE APP CON/DEP CON 125.6 354.1
TOWER★ 126.95 (CTAF) 290.275
PAR
***Circling not authorized E of Rwy 17-35.
Visibility reduction by helicopters below 1 mile not authorized.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -9°C (16°F) or above 54°C (130°F).
Inoperative table does not apply to LPV all CAT and LNAV CAT AB.
1867
HOLD 6000 3000
6 NM
173°
230K
353°
(IF/IAF) IPUDE
2600
173° (6.1)
3000
322° (7.2)
ROCKET RQZ
3000
063° (14.7)
TANNE
(FAF) OYOVA
NICGI
825
2673
RW17
R2104C
R2104E
R2104A
R2104D
R2104B
Procedure not authorized for arrivals at TANNE westbound on T398.
Procedure not authorized for arrivals at RQZ VORTAC eastbound on T398.
Procedure not authorized when R2104A or R2104C are active.
MSA RW17 25 NM
3700
FASOV
174°
354°
230K
HOLD 6000 3000
6 NM
SE-4, 20 FEB 2025 to 20 MAR 2025
SE-4, 20 FEB 2025 to 20 MAR 2025
6 NM Holding Pattern
6000 3000
353°
173°
IPUDE
173°
OYOVA
2600
NICGI
RW17
1520
GP 3.00°
TCH 46
3.4 NM
2.5 NM
3000
FASOV
ELEV 685
TDZE 685
173°
17
0.4% DOWN
7300 x 150
BCN
TWR 694
35
HIRL all Rwys
CATEGORY A B C D E
LPV DA 935-1 250 (300-1)
LNAV/VNAV DA* 1113-1 428 (500-1)
LNAV MDA** 1180-1 495 (500-1)
C CIRCLING*** 1200-1 515 (600-1) 1240-1 555 (600-1) 1480-2¼ 795 (800-2¼) 1740-3 1055 (1100-3)
REDSTONE ARSENAL, ALABAMA
34°41'N - 86°41'W
REDSTONE AAF (KHUA)
Amdt 2 05OCT23
RNAV (GPS) RWY 17



SE-4, 20 FEB 2025 to 20 MAR 2025

SE-4, 20 FEB 2025 to 20 MAR 2025

HUNTSVILLE, ALABAMA AL-5924 (FAA) 22195

RNAV (GPS) RWY 18

HUNTSVILLE EXEC TOM SHARP JR FLD (MDQ)

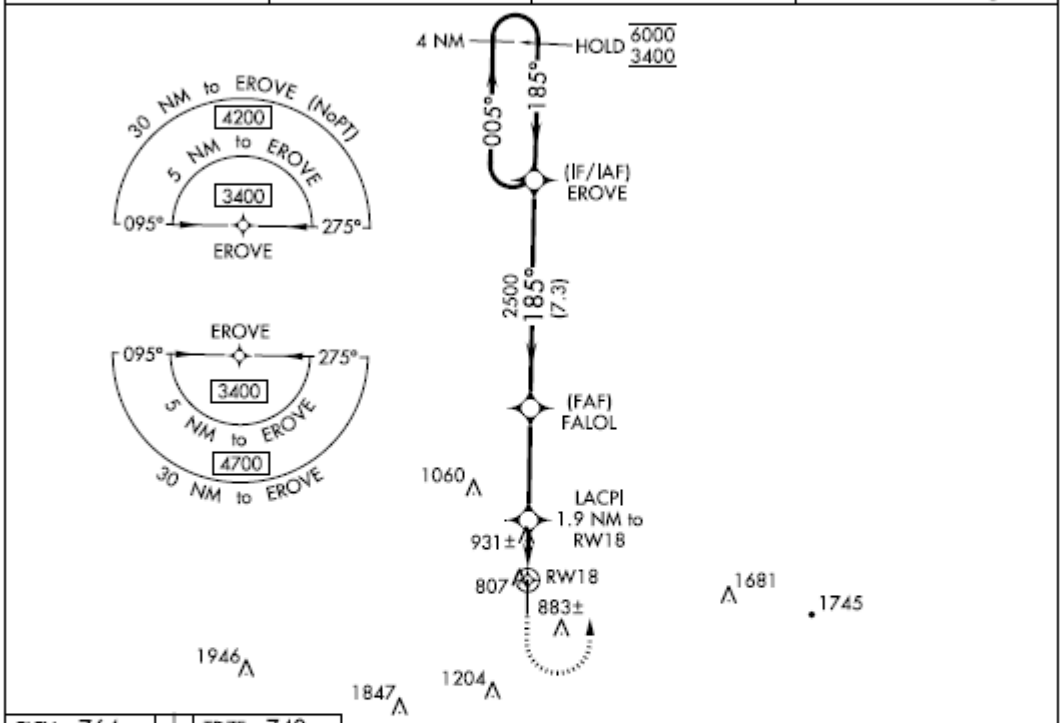
WAAS CH 86501 W18A	APP CRS 185°	Rwy ldg 6500 TDZE 740 Apt Elev 764

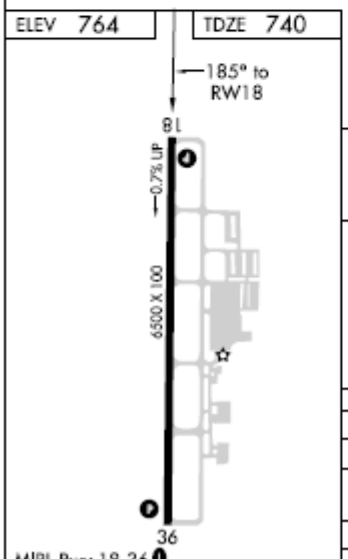
RNP APCH.

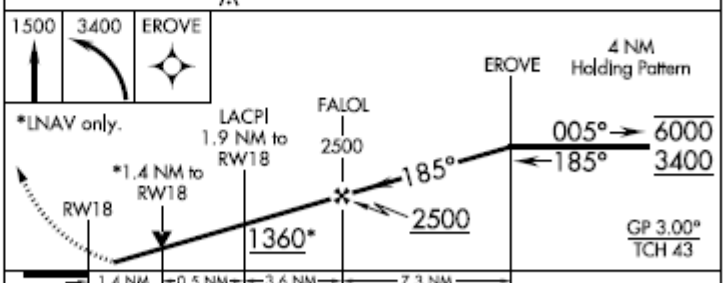
Rwy 18 helicopter visibility reduction below ¾ SM NA.
For uncompensated Baro-VNAV systems, procedure NA below -16°C or above 54°C.

MISSED APPROACH: Climb to 1500 then climbing left turn to 3400 direct EROVE and hold.

AWOS-3PT	HUNTSVILLE APP CON ★	GCO	UNICOM
120.0	125.6 354.1	121.725	123.0 (CTAF)







CATEGORY	A	B	C	D
LPV DA	940-¾		200 (200-¾)	
LNAV/VNAV DA	1250-1¾		510 (500-1¾)	
LNAV MDA	1200-1	460 (500-1)	1200-1⅜	460 (500-1⅜)
C CIRCLING	1260-1	496 (500-1)	1560-2¼ 796 (800-2¼)	2000-3 1236 (1300-3)

HUNTSVILLE, ALABAMA
Amdt 2B 28FEB19

34°52'N-86°33'W

HUNTSVILLE EXEC TOM SHARP JR FLD (MDQ)

RNAV (GPS) RWY 18

SE-4, 20 FEB 2025 to 20 MAR 2025

SE-4, 20 FEB 2025 to 20 MAR 2025

F1

LEGEND 24361

INSTRUMENT APPROACH PROCEDURES (CHARTS)

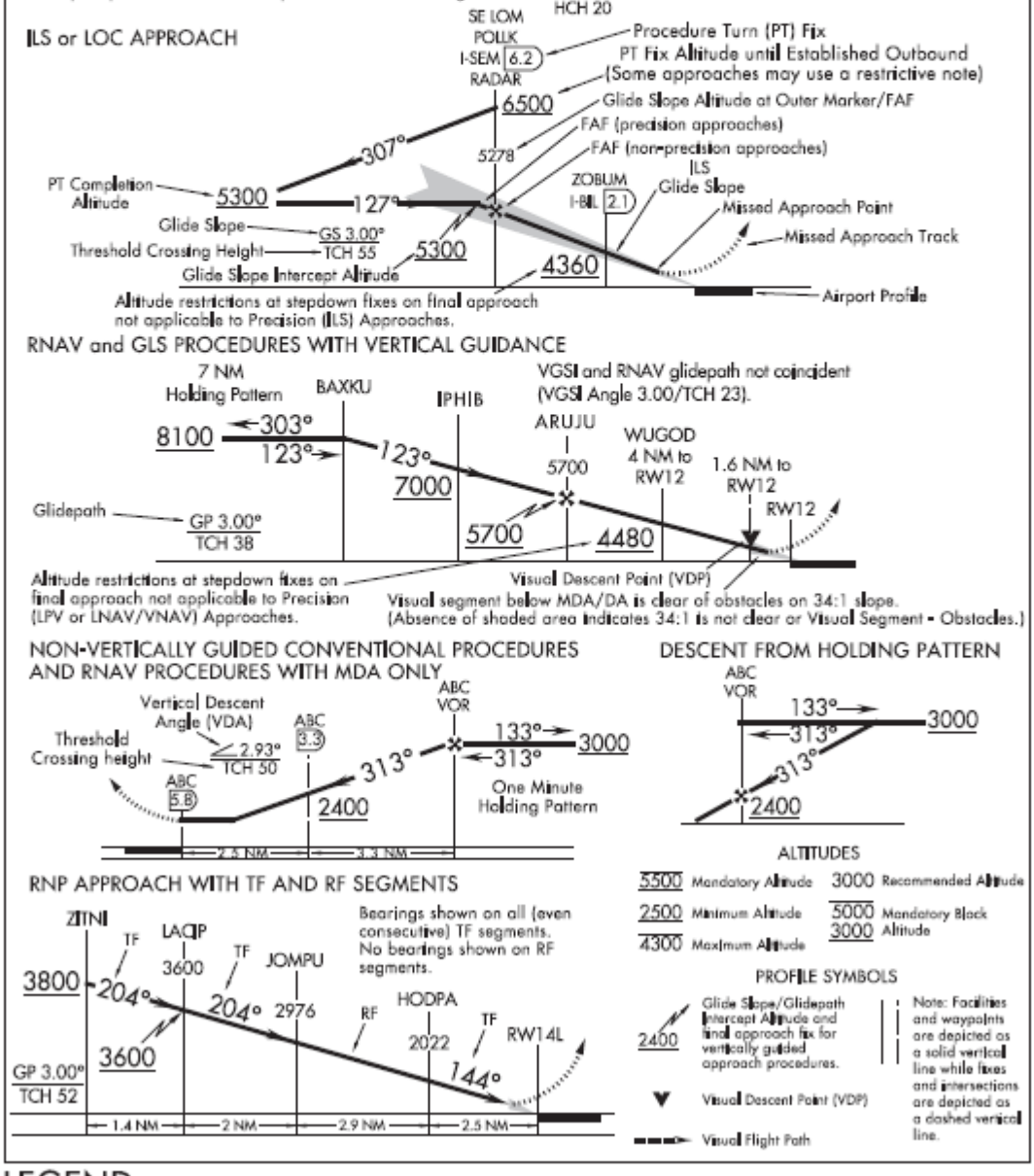
PROFILE VIEW

Three different methods are used to depict either electronic or vertical guidance: "GS", "GP", or "VDA".

1. "GS" indicates that an Instrument Landing System (ILS) electronic glide slope (a ground antenna) provides vertical guidance. The profile section of ILS procedures depict a GS angle and TCH in the following format: GS 3.00° / TCH 55.

2. "GP" on GLS and RNAV procedures indicates that either electronic vertical guidance (via Wide Area Augmentation System - WAAS or Ground Based Augmentation System - GBAS) or barometric vertical guidance is provided. GLS and RNAV procedures with a published decision altitude (DA/H) depict a GP angle and TCH in the following format: GP 3.00° / TCH 50.

3. An advisory vertical descent angle (VDA) is provided on non-vertically guided conventional procedures and RNAV procedures with only a minimum descent altitude (MDA) to assist in preventing controlled flight into terrain. On Civil (FAA) procedures, this information is placed above or below the procedure track following the fix it is based on. Absence of a VDA or a note that the VDA is not authorized indicates that the prescribed obstacle clearance surface is not clear and the VDA must not be used below MDA. VDA is depicted in the following format: 3.00° / TCH 55. On Copter procedures this is depicted in the following format: 7.30° / HCH 20.



SE-4, 20 FEB 2025 to 17 APR 2025

SE-4, 20 FEB 2025 to 17 APR 2025

LEGEND 24361