

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
HUNTSVILLE INTL-CARL T JONES FIELD	KHSV	RNAV (GPS) RWY 18L	2	HUNTSVILLE	AL	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
629	609	RNAV (GPS) RWY 18L	1B	02/01/2018	4W	2020
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
RNAV		20 JUNE 2019	ROUTINE			

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 095/30 CW 275/30	NOPT	095/10 CW 275/10		4100
2. 095/10 CW 275/10		BISBE	IF/IAF	3000
3. 275/30 CW 095/30		275/10 CW 095/10		4000
4. 275/10 CW 095/10		BISBE	IAF	3000

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
BISBE	IF/IAF	COTIN		TF	FB	1.00	184.95	4.81	2500
COTIN		DEBAY		TF	FB	1.00	184.95	2.44	2100
DEBAY	FAF	FEKSO/1.75 NM TO RW18L		TF	FB	0.30	184.95	2.76	
FEKSO		RW18L	MAP	TF	FO	0.30	184.95	1.75	
RW18L	MAP	809 MSL		CA			184.95		
809 MSL		ENIKY		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW18L

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT ENIKY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)				
2.	HOLD N BISBE, LT, 184.95 INBOUND, 3000 FT. IN LIEU OF PT (IF/IAF), MAX 5000.							
3. FAC:	184.95	FAF: DEBAY	DIST FAF TO MAP: 4.51	DIST FAF TO THLD: 4.51				
4. MIN ALT:	BISBE 3000, COTIN 2500, DEBAY 2100, FEKSO/1.75 NM TO RW18L 1220*							
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	200 HAT: 0.46	GS ANT:			
6. MIN GP INCPT:	2100	GP ALT AT FAF : DEBAY 2100	OM:		MM:		IM:	
7. GP ANGLE:	3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 54.7				
8. MSA FROM:								

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -10°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: CIRCLING NA FOR CATS C/D/E EAST OF RWY 18L- 36R.
CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV CAT E VISIBILITY TO RVR 4000, LNAV/VNAV CAT E VISIBILITY TO 1 1/4 SM, AND LNAV CAT E VISIBILITY TO RVR 6000.
CHART PLANVIEW NOTE: CAUTION NUMEROUS MIGRATORY BIRD FLOCKS IN AREA. WILDLIFE REFUGE AREA SOUTH OF AIRPORT.
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.
CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.
CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.

ADDITIONAL FLIGHT DATA:

CHART NOTE: ASR
CHART CIRCLING ICON.
CHART R2104A, R2104B, R2104C
CHART WHEELER NATIONAL WILDLIFE REFUGE
CHART VDP AT 0.99 NM TO RW18L*
*LNAV ONLY
WAAS CHANNEL #72906
REFERENCE PATH ID: W18A
CHART FAS OBST: 739 TREE 344009N/0864525W.
FAS OBST: 960 AAO 344342N/0864530W.
HOLD S, RT, 004.95 INBOUND
LTP HAE: 157.5 M



MINIMUMS:
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT

ALTERNATE: NA ☐ STANDARD - CAT E 800-2 1/4

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA**	809	2400	200	809	2400	200	809	2400	200	809	2400	200	809	2400	200
LNAV/VNAV DA	1039	4000	430	1039	4000	430	1039	4000	430	1039	4000	430	1039	4000	430
LNAV MDA	1000	2400	391	1000	2400	391	1000	3500	391	1000	3500	391	1000	3500	391
CIRCLING	1160	1	531	1160	1	531	1160	1 1/2	531	1240	2	611	1260	2 1/4	631



CHANGES - REASONS

1. TAA ADDED. INITIALS ELKED-BOLAY AND HATAS-BOLAY REMOVED. - FPT REQUEST.
2. LNAV/VNAV DA INCREASED FROM 1017/408 TO 1039/430; VISIBILITY DECREASED FROM 5000 TO 4000. - NEW CONTROLLING OBSTACLE.
3. LNAV MDA DECREASED FROM 1040/431 TO 1000/391; CAT C VISIBILITY DECREASED FROM 4000 TO 3500, CATS D/E VISIBILITY DECREASED FROM 5000 TO 3500. - NEW CONTROLLING OBSTACLE.
4. CIRCLING CAT D MDA/HAA INCREASED FROM 1240/611 TO 1260/631. - NEW CIRCLING RADII APPLIED IAW 8260.3D.
5. MISSED APPROACH UPDATED FROM "CLIMB TO 3000 DIRECT CANPA AND HOLD" TO "CLIMB TO 3000 DIRECT ENIKY AND HOLD." - FPT REQUEST.
6. NA WHEN LOCAL WEATHER NOT AVAILABLE REMOVED. - ALL REFERENCES TO SECONDARY ALTIMETER HAVE BEEN REMOVED
7. TERMINAL ROUTES: BOLAY TO COTIN UPDATED TO BISBE TO COTIN; DISTANCE UPDATED FROM 3.50 NM TO 4.81 NM. - INTERMEDIATE LEG EXTENDED IAW 8260.58A, CHG 1 5-6-2 D.
8. TERMINAL ROUTES: COTIN TO DEBAY DISTANCE UPDATED FROM 2.50 NM TO 2.44 NM. - PFAF MOVED DUE TO CURRENT PFAF FORMULA FROM 8260.58A, CHG 1.
9. TERMINAL ROUTES: DEBAY TO FEKSO/1.70 NM TO RW18L UPDATED TO DEBAY TO FEKSO/1.75 NM TO RW18L; DISTANCE UPDATED FROM 2.75 NM TO 2.76 NM. - STEPDOWN FIX MOVED TO PROVIDE CONSTANT DESCENT GRADIENT.
10. TERMINAL ROUTES: FEKSO TO RW18L DISTANCE UPDATED FROM 1.70 NM TO 1.75 NM. - STEPDOWN FIX MOVED TO PROVIDE CONSTANT DESCENT GRADIENT.
11. LINE 2: UPDATED FROM PROFILE STARTS AT BOLAY TO HOLD N BISBE, RT, 184.95 INBOUND, 3000 FT IN LIEU OF PT (IF/IAF), MAX 5000. - HOLD-IN-LIEU ADDED.
12. LINE 3: DIST. FAF TO MAP UPDATED FROM 4.45 NM TO 4.51 NM. - PFAF MOVED DUE TO CURRENT PFAF FORMULA FROM 8260.58A, CHG 1.
13. LINE 4: UPDATED FROM BOLAY 3000 TO BISBE 3000; FEKSO/1.70 NM TO RW 18L 1200* TO FEKSO/1.75NM TO RW 18L 1220*. - INTERMEDIATE LEG EXTENDED IAW 8260.58A, CHG 1 5-6-2 D; STEPDOWN FIX MOVED TO PROVIDE CONSTANT DESCENT GRADIENT.
14. LINE 7 20:1 IS CLEAR ADDED. - NO 20:1 PENETRATIONS EXIST.
15. LINE 8 MSA FROM: RW18L 3700 REMOVED. - TAA ADDED.
16. ADDITIONAL FLIGHT DATA: CHART: ASR UPDATED TO CHART NOTE: ASR. - IAW 8260.19H 8-6-9 G(1).
17. ADDITIONAL FLIGHT DATA: CHART CIRCLING ICON ADDED. - NEW CIRCLING RADII APPLIED IAW 8260.3D.
18. ADDITIONAL FLIGHT DATA: CHART FAS OBST: 767 OL TK 343931N/0864623W UPDATED TO 739 TREE 344008N/0864525W. - NEW LNAV STEPDOWN CONTROLLING OBSTACLE.
19. ADDITIONAL FLIGHT DATA: CHART 1219 TREE 344354N/0864337W REMOVED. - NO LONGER LNAV CONTROLLING OBSTACLE.
20. ADDITIONAL FLIGHT DATA: CHART VDP UPDATED FROM 1.12 NM TO RW18L* TO 0.99 NM TO RW18L*. - LNAV MDA LOWERED.
21. ADDITIONAL FLIGHT DATA: 960 AAO 344342N/0864530W ADDED. - 8260.3 CHAPTER 2 APPLIED.
22. CHART NOTE: CIRCLING NA FOR CAT E EAST FOR RWY 18L-36R UPDATED TO CIRCLING NA FOR CATS C/D/E EAST OF RWY 18L-36R. - NEW CIRCLING RADII EXTENDS INTO RESTRICTED AREAS.
23. CHART NOTES: DME/DME RNP-0.3 NA REMOVED. PBN REQUIREMENTS NOTE: RNP APCH ADDED. - IAW 8260.19H 8-6-8 B(1).
24. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 48C (118F) UPDATED TO -10C TO 54C. - FAHRENHEIT REMOVED IAW 8260.19H 8-6-9 S; NEW 5-YEAR WEATHER STUDY COMPLETED.
25. CHART NOTE: MOVED ALTERNATE ALTIMETER NOTE TO 8260-9 PART C - REMARKS. - IAW 8260.19H 8-6-9 F(3).
26. CHART NOTE: BARO-VNAV AND VDP NA WHEN USING DECATUR ALTIMETER SETTING MOVED TO 8260-9 PART-C REMARKS. - IFP POLICY - 2/14/2017 - WMSCR BACKUP ALTIMETER SOURCE.
27. CHART NOTE: FOR INOPERATIVE ALS WHEN USING DECATUR ALTIMETER SETTING MOVED TO 8260-9 PART-C REMARKS.- IFP POLICY - 2/14/2017 - WMSCR BACKUP ALTIMETER SOURCE.
28. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH UPDATED TO CURRENT FORMAT. - IAW 8260.19H 8-6-9 M(1).
29. CHART NOTE: UPDATED "FOR INOPERATIVE ALS" FROM LNAV/VNAV CAT E VISIBILITY FROM 1 1/2 SM TO 1 1/4 SM, AND LNAV CAT E VISIBILITY FROM 1 1/2 SM TO RVR 6000. - NEW INOP VISIBILITY TABLE USED.
30. CHART NOTE: USE OF FD OR AP PROVIDING RNAV TRACK GUIDANCE REQUIRED DURING SIMULTANEOUS OPERATIONS UPDATED TO USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS. - IAW 8260.19H 8-6-9 P.
31. FAS DATA: LTP/FTP LATITUDE AND LONGITUDE UPDATED FROM 343911.1600N/0864555.6700W TO 343911.1557N/0864555.6732W. - NEW AIRNAV DATA INCORPORATED.
32. FAS DATA: FPAP LATITUDE/LONGITUDE UPDATED FROM 343732.2000N/0864557.6600W TO 343732.1971N/0864557.6580W. - NEW FPAP LOCATION.
33. FAS DATA: CRC REMAINDER UPDATED FROM E69875F9 TO 0D21A1A3. - LTP/FTP AND FPAP LATITUDE/LONGITUDE UPDATED.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZME, HSV APCH, ST AERO, ATA

FLIGHT CHECKED BY

ANTHONY D VALLERA

Digitally signed by

WARDELL HENNING

OFFICE

FICO

DATE

3/13/19

May 10, 2019

DEVELOPED BY

WARDELL HENNING (BARBARA GORMAN)

Digitally signed by
WARDELL HENNING

WARDELL HENNING

OFFICE

AJV-A432

DATE

10/25/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

WARDELL HENNING

OFFICE

AJV-A43

DATE _____

TITLE
MANAGER

MANAGER

May 10, 2019

QUALITY
22
CHECKED

22

CHECKED

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KHSV
RUNWAY	RW18L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W18A
LTP/FTP LATITUDE	343911.1555N
LTP/FTP LONGITUDE	0864555.6730W
LTP/FTP ELLIPSOIDAL HEIGHT	+01575
FPAP LATITUDE	343732.1970N
FPAP LONGITUDE	0864557.6580W
THRESHOLD CROSSING HEIGHT (TCH)	00054.7
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER	0D21A1A3
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+01857
FPAP ORTHOMETRIC HEIGHT	+01857

