

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 36L	2	HUNTSVILLE	AL
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u>
629	615	RNAV (GPS) RWY 36L	1B	02/01/2018	4W
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u>
RNAV		20 JUNE 2019	ROUTINE		2020

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 275/30 CW 095/30	NOPT	275/10 CW 095/10		3700
2. 275/10 CW 095/10		BOSAC	IF/IAF	2800
3. 095/30 CW 275/30		095/10 CW 275/10		4000
4. 095/10 CW 275/10		BOSAC	IAF	2900

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>
BOSAC	IF/IAF	CECAB		TF	FB	1.00	004.95	5.88	2800
CECAB	FAF	HEREG/1.93 NM TO RW36L		TF	FB	0.30	004.95	4.77	
HEREG/1.93 NM TO RW36L		RW36L	MAP	TF	FO	0.30	004.95	1.93	
RW36L	MAP	815 MSL		CA			004.95		
815 MSL		JASEX		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW36L

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT JASEX AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2.	HOLD S BOSAC, LT, 004.95 INBOUND, 2800 FT. IN LIEU OF PT (IF/IAF), MAX 5000.				
3. FAC:	004.95	FAF: CECAB	DIST FAF TO MAP: 6.71	DIST FAF TO THLD: 6.71	
4. MIN ALT:	BOSAC 2800, CECAB 2800, HEREG/1.93 NM TO RW36L 1280*				
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	200 HAT: 0.47	GS ANT:
6. MIN GP INCPT: 2800	GP ALT AT FAF : CECAB 2800			OM:	MM: IM:
7. GP ANGLE: 3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 53.4		
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 NOTE: FOR INOPERATIVE ALS, INCREASE LPV CAT E VISIBILITY TO RVR 4000, LNAV/VNAV ALL CATS VISIBILITY TO RVR 4500, AND LNAV CATS C/D/E VISIBILITY TO RVR 5500.
CHART NOTE: CIRCLING NA FOR CATS C/D/E EAST OF RWV 18L-36R.
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 WHEELER NATL WILDLIFE REFUGE
CHART R2104A, R2104B, R2104C
CHART VDP AT 0.99 NM TO RW36L*
*LNAV ONLY
WAAS CHANNEL #82606
REFERENCE PATH ID: W36A
CHART FAS OBST: 728 TREE 343616N/0864735W.
FAS OBST: 990 AAO 343010N/0864559W.
HOLD N, RT, 184.95 INBOUND
LTP HAE: 158.2 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	815	1800	200	815	1800	200	815	1800	200	815	1800	200	815	1800	200
LNAV/VNAV DA	909	2400	294	909	2400	294	909	2400	294	909	2400	294	909	2400	294
LNAV MDA	980	2400	365	980	2400	365	980	3500	365	980	3500	365	980	3500	365
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 MASHA-BOSAC AND FEWER-BOSAC REMOVED. - FPT REQUEST
2. LNAV/VNAV DA DECREASED FROM 969/354 TO 909/294; VISIBILITY DECREASED FROM 4000 TO 2400. - NEW CONTROLLING OBSTACLE.
3. LNAV MDA INCREASED FROM 960/345 T60 980/365; CATS C/D/E VISIBILITY DECREASED FROM 5000 TO 3500. - NEW INOP VISIBILITY TABLE USED.
4. CIRCLING CAT E MDA/HAA INCREASED FROM 1240/611 TO 1260/631. - NEW CIRCLING RADII APPLIED IAW 8260.3D.
5. NA WHEN LOCAL WEATHER NOT AVAILABLE REMOVED. - ALL REFERENCES TO SECONDARY ALTIMETER HAVE BEEN REMOVED.
6. TERMINAL ROUTES: BOSAC TO CECAB: DISTANCE UPDATED FROM 6.00 NM TO 5.88 NM. - PFAF CECAB MOVED DUE TO CURRENT PFAF FORMULA FROM 8260.58A, CHG 1.
7. TERMINAL ROUTES: CECAB TO HEREG/1.70 NM TO RW36L UPDATED TO CECAB TO HEREG/1.93 NM TO RW36L. DISTANCE UPDATED FROM 4.88 NM TO 4.77 NM. - PFAF CECAB MOVED; STEPDOWN FIX MOVED TO PROVIDE CONSTANT DESCENT GRADIENT.
8. TERMINAL ROUTES: HEREG/1.70 NM TO RW36L TO RW36L UPDATED TO HEREG/1.93 NM TO RW36L TO RW36L; DISTANCE UPDATED FROM 1.70 NM TO 1.93 NM. - STEPDOWN FIX MOVED TO PROVIDE CONSTANT DESCENT GRADIENT.
9. TERMINAL ROUTES: RW36L (MAP) TO 815 MSL (CA) ALTITUDE REMOVED. - IAW 8260.19H.
10. LINE 2 UPDATED FROM PROFILE START AT BOSAC TO HOLD S BOSAC, LT, 004.95 INBOUND, 2800 FT IN LIEU OF PT (IF/IAF), MAX 5000. - HOLD-IN-LIEU ADDED.
11. LINE 2 DIST FAF TO MAP UPDATED FROM 6.58 NM TO 6.71 NM. - PFAF CECAB MOVED DUE TO CURRENT PFAF FORMULA FROM 8260.58A, CHG 1.
12. LINE 4 UPDATED: HEREG/1.70 NM TO RW36L 1200* TO HEREG/1.93 NM TO RW36L 1280*. - STEPDOWN ALTITUDE INCREASED; WAYPOINT HEREG MOVED.
13. LINE 7 20:1 IS CLEAR ADDED. - NO 20:1 PENETRATIONS EXIST.
14. LINE 8 MSA FROM: RW36L 3700 REMOVED. - MSA REMOVED.
15. ADDITIONAL FLIGHT DATA: CHART CIRCLING ICON ADDED. - NEW CIRCLING RADII APPLIED IAW 8260.3D.
16. ADDITIONAL FLIGHT DATA: CHART FAS OBST: 709 TREE 343533N/0864717W UPDATED TO 728 TREE 343616N/0864735W. - NEW LNAV STEPDOWN CONTROLLING OBSTACLE.
17. ADDITIONAL FLIGHT DATA: CHART VDP AT 0.93 NM TO RW36L* UPDATED TO CHART VDP AT 0.99 NM TO RW36L. - LNAV MDA INCREASED.
18. ADDITIONAL FLIGHT DATA: CHART 929 TREE 343023N/0864830W REMOVED. - CIRCLING RADII AND CONTROLLING OBSTACLES UPDATED IAW 8260.3D.
19. ADDITIONAL FLIGHT DATA: CHART: ASR UPDATED TO CHART NOTE: ASR. - IAW 8260.19H 8-6-9 G(1).
20. CHART NOTE: DME/DME RNP-0.3 NA REMOVED. PBN REQUIREMENTS NOTE: RNP APCH ADDED. - IAW 8260.19H
21. 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; NEW 5-YEAR WEATHER STUDY COMPLETED.
22. CHART NOTE: MOVED ALTERNATE ALTIMETER NOTE TO 8260-9 PART C - REMARKS. - IAW 8260.19H 8-6-9 F.
23. CHART NOTE: BARO-VNAV AND VDP NA WHEN USING DECATUR ALTIMETER SETTING MOVED TO 8260-9 PART-C REMARKS. - IAW 8260.19H 8-6-9 F.2(3)E.
24. CHART NOTE: FOR INOPERATIVE ALS, UPDATED "LNAV/VNAV CAT E VISIBILITY TO RVR 6000" TO "LNAV/VNAV ALL CATS VISIBILITY TO RVR 4500"; UPDATED "INCREASE LNAV CAT D AND E VISIBILITY TO RVR 6000" TO "INCREASE LNAV CATS C/D/E VISIBILITY TO RVR 5500"; UPDATED. - NEW INOP VISIBILITY TABLE USED.
25. 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. - EXPANDED CIRCLING RADII FOR CATS C AND D NOW OVERLAP RESTRICTED AREA 2104.
26. 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.
27. FAS DATA: FPAP LATITUDE/LONGITUDE UPDATED FROM 343910.0270N/0864655.5620W TO 343910.0300N/0864655.5440W. - NEW FPAP LOCATION.
28. FAS DATA: COURSE WIDTH AT THRESHOLD UPDATED FROM 108.50 TO 106.75. - 8260.58A
29. FAS DATA: CRC REMAINDER UPDATED FROM 9D37C1FB4 TO 8C4211FE. - FPAP LATITUDE/LONGITUDE UPDATED.



AIRPORT

HUNTSVILLE INTL-CARL T JONES FIELD

AIRPORT ID

KHSV

PROCEDURE NAME

RNAV (GPS) RWY 36L

ORIGINAL/AMENDMENT

2

CITY

HUNTSVILLE

STATE

AL

COORDINATED WITH:

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

FLIGHT CHECKED BY

ANTHONY D VALLERA

Digitally signed by

WARDELL HENNING

May 10, 2019

OFFICE

FICO

DATE

3/13/19

DEVELOPED BY

WARDELL HENNING (BARBARA GORMAN)

Digitally signed by

WARDELL HENNING

May 10, 2019

OFFICE

AJV-A432

DATE

10/01/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

WARDELL HENNING

May 10, 2019

OFFICE

AJV-A43

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KHSV
RUNWAY	RW36L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W36A
LTP/FTP LATITUDE	343705.4170N
LTP/FTP LONGITUDE	0864658.0470W
LTP/FTP ELLIPSOIDAL HEIGHT	+01582
FPAP LATITUDE	343910.0300N
FPAP LONGITUDE	0864655.5440W
THRESHOLD CROSSING HEIGHT (TCH)	00053.4
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	8C4211FE

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+01863
FPAP ORTHOMETRIC HEIGHT	+01863

