

U.S. Department
of Transportation

800 Independence Ave., S.W.
Washington, D.C. 20591

**Federal Aviation
Administration**

Transmittal Letter 19-05

JANUARY 11, 2019

**PREPARED BY AERONAUTICAL INFORMATION SERVICES, AJV-A41
(AVAILABLE ON THE WEB AT [HTTP://NFDC.FAA.GOV](http://NFDC.FAA.GOV))**

**The enclosed Standard Instrument Approach Procedures, Departure
Procedures/Takeoff Minimums and Fix Actions are effective as indicated.**

**The following are corrected copies of procedures originally published in TL 19-03 on
December 14, 2018, and in TL 19-04 on December 28, 2018.**

Huntsville, AL, Huntsville Executive Tom Sharp Jr Field, RNAV (GPS) RWY 36, Amdt 1B
Lakeland, FL, Lakeland Linder Intl, VOR RWY 9, Amdt 4E
Detroit, MI, Detroit Metropolitan Wayne County, RNAV (RNP) X RWY 3R, Orig-B
Detroit, MI, Detroit Metropolitan Wayne County, RNAV (RNP) X RWY 21L, Orig-B
St Louis, MO, Spirit of St Louis, RNAV (GPS) RWY 26L, Amdt 1
St Louis, MO, Spirit of St Louis, RNAV (GPS) RWY 26R, Amdt 1
New York, NY, John F Kennedy Intl, RNAV (GPS) RWY 13R, Orig

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

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<u>AIRPORT</u> HUNTSVILLE EXECUTIVE TOM SHARP JR FIELD	<u>AIRPORT ID</u> KMDQ	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> HUNTSVILLE	<u>STATE</u> AL
<u>AIRPORT ELEVATION</u> 764	<u>TDZE</u> 764	<u>SUPERSEDED</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 09/18/2014	<u>MAG VAR</u> 4W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2015

TAA THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 19-04.

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 275/30 CW 095/30	NOPT	KUCPE	IF/IAF	3900
2. 095/30 CW 275/30	PT	KUCPE	IAF	4700

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>
KUCPE	IF/IAF	ZUPIM		TF	FB	1.00	004.93	9.97	3200
ZUPIM	FAF	OMUME/3.00 NM TO RW36		TF	FB	0.30	004.93	4.51	
OMUME/3.00 NM TO RW36		RW36	MAP	TF	FO	0.30	004.93	3.00	
RW36	MAP	964 MSL		CA			004.93		
964 MSL		EROVE		DF	FO	1.00			3400

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW36

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3400 DIRECT EROVE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S KUCPE, RT, 004.93 INBOUND, 3900 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 004.93FAF: ZUPIMDIST FAF TO MAP: 7.51DIST FAF TO THLD: 7.51

4. MIN ALT: KUCPE 3900, ZUPIM 3200, OMUME/3.00 NM TO RW36 1760*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:200 HAT: 0.49GS ANT:

6. MIN GP INCPT: 3200GP ALT AT FAF : ZUPIM 3200OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 45.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

CHART R-2104 A,B,C,D,E.
CHART VDP AT 1.55 NM TO RW36*
*LNAV ONLY
WAAS CHANNEL #53702
REFERENCE PATH ID: W36A
CHART FAS OBST: 1036 TREE 344802N/0863329W.
1679 AAO 344324N/0863217W.
HOLD N, RT, 184.93 INBOUND
LTP HAE: 204.2 M

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

ALTERNATE: NA ☐ STANDARD - CAT C 800-2 1/4, CAT D 1300-3

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	964	3/4	200	964	3/4	200	964	3/4	200	964	3/4	200			
LNAV/VNAV DA	1250	1 5/8	486	1250	1 5/8	486	1250	1 5/8	486	1250	1 5/8	486			
LNAV MDA	1300	1	536	1300	1	536	1300	1 1/2	536	1300	1 1/2	536			
CIRCLING	1300	1	536	1300	1	536	1560	2 1/4	796	2000	3	1236			



CHANGES - REASONS

1. CHART TDZE 764, DELETE THRE 763, CHANGED LPV DA ALL CATS FROM 963 TO 964, LNAV/VNAV DA ALL CATS FROM 1249 TO 1250, LNAV HAT FROM 537 TO 536 ALL CATS, CIRCLING CATS A/B HAA FROM 537 TO 536, AND CHANGED CA ALTITUDE FROM 963 TO 964 IN TERMINAL ROUTES - IAW MEMO - IMPLEMENTATION OF AFS-400 MEMORANDUM, PUBLISH TOUCHDOWN ZONE ELEVATION ON INSTRUMENT APPROACH CHARTS, DATED JANUARY 8, 2014.
2. RAISED AIRPORT ELEVATION FROM 763 TO 764 AND CHANGED CIRCLING CAT C HAA FROM 797 TO 796 AND CAT D HAA FROM 1237 TO 1236 AND CHANGED LTP HAE FROM "204.1 M" TO "204.2 M"- NEW AIRPORT DATA.
3. ADDED LEG TYPES AND RNP VALUES TO TERMINAL ROUTES - IAW 8260.19H 8-6-4.A.(6).
4. DELETED "DISTANCE TO THLD FROM 200 HATH: 0.49 NM" FROM ADDITIONAL FLIGHT DATA AND ADDED "200 HAT: 0.49" TO LINE 5 - ADDITIONAL FLIGHT DATA NOTE NO LONGER REQUIRED.
5. CHANGED 34:1 IS NOT CLEAR TO 34:1 IS CLEAR AND ADDED 20:1 IS CLEAR TO LINE 7 - IAW 8260.19H 8-6-7.G.(3).
6. ADDED "RNP APCH" TO PBN REQUIREMENTS NOTE AND DELETED "CHART NOTE: DME/DME RNP-0.3 NA" FROM NOTES SECTION - PBN REQUIREMENTS NOTE REPLACED LEGACY NOTE; IAW 8260.19H 8-6-8.B(1) AND MEMO: IMPLEMENTATION OF FAA ORDER 8260.19H CHANGE 1, FLIGHT PROCEDURES AND AIRSPACE DATED JUNE 8, 2018 ATTACHMENT 4 PARA 2.
7. MOVED BACK-UP ALTIMETER NOTE AND ASSOCIATED NOTES; DELETED "@ NA WHEN LOCAL WEATHER NOT AVAILABLE" - IAW 8260.19H 8-6-9.F.(3).
8. UPDATED AIRPORT NAME FROM "HUNTSVILLE EXECUTIVE AIRPORT/TOM SHARP JR FLD" TO "HUNTSVILLE EXECUTIVE TOM SHARP JR FIELD" - AIRPORT NAME CHANGE.
9. REMOVED HELICOPTER VISIBILITY REDUCTION NOTE - VISUAL SURFACES ARE CLEAR.
10. CHANGED CRC REMAINDER FROM "DB266316" TO "F565A994" - LTP AND FPAP LAT/LONG AND LTP/FTP ELLIPSOIDAL HEIGHT UPDATED.
11. CHANGED VDP DIST FROM 1.58 TO 1.55 - VGSi DATA; TCH CHANGED FROM 34.8 TO 40.3.
12. REMOVED FAHRENHEIT TEMPERATURES FROM THE BARO-VNAV NOTE - FAHRENHEIT VALUES ARE NO LONGER REQUIRED PER 8260.19H 8-6-9.S.

12/27/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 12/10/2018.

1. CORRECTED LPV CATS B/C VISIBILITY FROM 1 3/4 TO 3/4.

COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZME ARTCC, HSV APP CON, AL AERO, AMGR.

FLIGHT CHECKED BY
JUAN MANUEL CASTRO

Digitally signed by
DONALD H LANIER

Dec 28, 2018

OFFICE
FIOG

DATE
12/05/2018

DEVELOPED BY
DONALD H. LANIER (JACOB MAXFIELD)

Digitally signed by
DONALD H LANIER

Dec 28, 2018

OFFICE
AJV-5431

DATE
09/11/2018

APPROVED BY
PATRICK MULQUEEN

Digitally signed by
DONALD H LANIER

Dec 28, 2018

OFFICE
AJV-5430

DATE

TITLE
MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMDQ
RUNWAY	RW36
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W36A
LTP/FTP LATITUDE	345101.5300N
LTP/FTP LONGITUDE	0863327.6845W
LTP/FTP ELLIPSOIDAL HEIGHT	+02042
FPAP LATITUDE	345230.7645N
FPAP LONGITUDE	0863325.9265W
THRESHOLD CROSSING HEIGHT (TCH)	00045.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0768
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER	F565A994
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+02327
FPAP ORTHOMETRIC HEIGHT	+02327



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.23

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<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
LAKELAND LINDER INTL	KLAL	VOR RWY 9	4E	LAKELAND	FL	
<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>
142	132	VOR RWY 9	4D	07/20/2017	1E	1965
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
LAL		28 FEBRUARY 2019	ROUTINE			

TERMINAL ROUTES THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 19-03.

<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>
LLEGO/10.92 DME/RADAR	IF	AIRBS/4.92 DME/RADAR					095.65	6.00 (LAL R-276)	1400

MISSED APPROACH

MAP:

3.84 NM AFTER AIRBS/LAL 4.92 DME/RADAR OR AT HANAX/1.08 DME FIX

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1000 THEN CLIMBING LEFT TURN TO 2000 ON HEADING 294 AND ON LAL VORTAC R-330 TO PLUMY INT/PIE 33.35 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- PROFILE STARTS AT LLEGO
- FAC: 095.65 FAF: AIRBS/4.92 DME/RADAR DIST FAF TO MAP: 3.84 DIST FAF TO THLD: 3.84
- MIN ALT: LLEGO/10.92 DME/RADAR 2000, AIRBS/4.92 DME/RADAR 1400, UDATE/2.80 DME 700*
- MSA FROM: LAL VORTAC 080-310 2700, 310-080 2200

EQUIPMENT REQUIREMENTS NOTES:

RADAR REQUIRED FOR PROCEDURE ENTRY.
DME OR RADAR REQUIRED.

NOTES:

*720 WHEN USING PLANT CITY ALTIMETER SETTING.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PLANT CITY ALTIMETER SETTING AND INCREASE ALL MDA 20 FEET; INCREASE CIRCLING CAT C VISIBILITY 1/8 SM.
CHART NOTE: VDP NA WHEN USING PLANT CITY ALTIMETER SETTING.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-9 CAT C/D VISIBILITY TO 1 5/8 SM; INCREASE UDATE FIX MINIMUMS S-9 CAT C/D VISIBILITY TO 1 3/4 SM.
CHART NOTE: FOR INOPERATIVE ALS WHEN USING PLANT CITY ALTIMETER SETTING, INCREASE UDATE FIX MINIMUMS S-9 CAT C/D VISIBILITY TO 1 1/8 SM. 
CHART NOTE: CIRCLING NA TO RWYS 8 AND 26.

QUALITY
4
CHECKED

ADDITIONAL FLIGHT DATA:

CHART PIE VORTAC R-067 AT PLUMY INT/PIE 33.35 DME.
AIRBS TO RW09: 2.98/52.
CHART VDP AT 2.07 DME
DISTANCE VDP TO THLD 0.99 NM
CHART FAS OBST: 212 TREE 275928N/0820209W.
CHART 385 STACK 275917N/0820450W.
FAC CROSSES RWY C/L EXTENDED 3025 FT FROM THLD.
HOLD NE, RT, 246.70 INBOUND

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

ALTERNATE: NA ☐ STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.

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
S-09	700	1/2	568	700	1/2	568	700	1 1/4	568	700	1 1/4	568			
CIRCLING	700	1	558	700	1	558	700	1 1/2	558	700	2	558			
UPDATE FIX MINIMUMS															
S-09	500	1/2	368	500	1/2	368	500	3/4	368	500	3/4	368			
CIRCLING	600	1	458	660	1	518	660	1 1/2	518	700	2	558			

CHANGES - REASONS

1. CHANGED ALL REFERENCES FROM LAKELAND LINDER RGNL TO LAKELAND LINDER INTL. - AIRPORT NAME CHANGE.
2. REPLACED ADDITIONAL FLIGHT DATA PLANVIEW NOTE: RADAR REQUIRED WITH RADAR REQUIRED FOR PROCEDURE ENTRY IN EQUIPMENT REQUIREMENTS NOTES. - FAAO 8260.19H PARAGRAPH 8-6-8.
3. MOVED DME OR RADAR REQUIRED NOTE FROM NOTES TO EQUIPMENT REQUIREMENTS NOTES. - FAAO 8260.19H PARAGRAPH 8-6-8

12/14/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 11/14/18.
1. MALSR CHANGED TO ALS IN BACKUP ALTIMETER INOPERATIVE LIGHTING NOTE.

PDF EDITS:
1. CORRECT FLIGHT INSPECTION NOT REQUIRED STATEMENT TO NEW MEMO.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: TAMPA APP CON, LAL ATCT, ZMA, AMGR

FLIGHT CHECKED BY PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED	OFFICE DATE
DEVELOPED BY LIAM DONAHUE	OFFICE AJV-5431
APPROVED BY PATRICK MULQUEEN	OFFICE AJV-5430
DEVELOPED BY LIAM DONAHUE Dec 14, 2018	DATE 10/11/2018
APPROVED BY PATRICK MULQUEEN Dec 17, 2018	DATE

Digitally signed by

DONALD H LANIER

Dec 17, 2018

Digitally signed by

DONALD H LANIER

Dec 17, 2018

TITLE

MANAGER

QUALITY

4

CHECKED

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

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<u>AIRPORT</u> DETROIT METROPOLITAN WAYNE COUNTY	<u>AIRPORT ID</u> KDTW	<u>PROCEDURE NAME</u> RNAV (RNP) X RWY 3R	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> DETROIT	<u>STATE</u> MI
<u>AIRPORT ELEVATION</u> 645	<u>TDZE</u> 633	<u>SUPERSEDED</u> RNAV (RNP) X RWY 3R	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 06/21/2018	<u>MAG VAR</u> 7W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

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<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>
MERCA	IAF	SOLDD		TF	FB	1.00	269.70	5.79	6000
SOLDD		BBBOB		RF	FB	1.00	(2.63 NM RADIUS CW (CFDTQ))	2.06	5000
BBBOB		WILOO		RF	FB	1.00	(2.56 NM RADIUS CW (CFPLP))	3.63	5000
WILOO	IAF	LEWUK		TF	FB	1.00	035.56	4.00	5000
LEWUK		HARLA		TF	FB	1.00	035.59	1.14	5000
HARLA		LIONZ		TF	FB	1.00	035.60	2.00	5000
BRDER	IAF	JOSHY		TF	FB	1.00	299.33	5.87	5000
BRAXN	IAF	KNNNY		TF	FB	1.00	214.75	3.50	5000
KNNNY		JOSHY		RF	FB	1.00	(2.75 NM RADIUS CW (CFVCH))	4.06	5000
JOSHY		LIONZ		RF	FB	1.00	(2.75 NM RADIUS CW (CFVCH))	4.63	5000
LIONZ		WATCH		TF	FB	1.00	035.61	3.14	4000
WATCH		RIBME		TF	FB	1.00	035.63	3.14	3000
RIBME	IF	NUVUE	PFAF	TF	FB	1.00	035.66	3.14	2000
NUVUE	PFAF	RW03R	MAP	TF	FO	0.30	035.68	4.12	
RW03R	MAP	1100 MSL		CA			035.68		1100
1100 MSL		GAAGE		DF	FO	1.00			4000

QUALITY
23
CHECKED

AIRPORTDETROIT METROPOLITAN WAYNE
COUNTYAIRPORT ID

KDTW

PROCEDURE NAME

RNAV (RNP) X RWY 3R

ORIGINAL/AMENDMENT

ORIG-B

CITY

DETROIT

STATE

MI

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

<u>CATEGORY:</u>	<u>A</u>			<u>B</u>			<u>C</u>			<u>D</u>			<u>E</u>		
<u>FINAL TYPE</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>
AUTHORIZATION REQUIRED															
RNP 0.30 DA	1021	3500	388	1021	3500	388	1021	3500	388	1021	3500	388			

CHANGES - REASONS

1. CHANGED MAX SPEED AT BRAXN FROM 200 KIAS TO 210 KIAS. - ATC REQUEST.

01/02/2019: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 11/13/2018. JH

1. REMOVED FROM LINE 4. MIN ALT: MERCA 7000, BRDER 6000.

COORDINATED WITH:A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZOB ARTCC, DTW APP CON, METRO TOWER, AMGRFLIGHT CHECKED BYPROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIREDOFFICEDATEDigitally signed by
ROBERT G HAMILTON
Jan 02, 2019DEVELOPED BY

JIMMY S. HUGHES

Digitally signed by
JIMMY S HUGHES

Jan 02, 2019

OFFICE

AJV-5422

DATE

09/04/2018

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5420

DATEDigitally signed by
ROBERT G HAMILTON
Jan 02, 2019TITLE
MANAGER

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (RNP) STANDARD INSTRUMENT APPROACH PROCEDURE
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<u>AIRPORT</u> DETROIT METROPOLITAN WAYNE COUNTY	<u>AIRPORT ID</u> KDTW	<u>PROCEDURE NAME</u> RNAV (RNP) X RWY 21L	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> DETROIT	<u>STATE</u> MI
<u>AIRPORT ELEVATION</u> 645	<u>TDZE</u> 632	<u>SUPERSEDED</u> RNAV (RNP) X RWY 21L	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 06/21/2018	<u>MAG VAR</u> 7W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

TERMINAL ROUTES

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<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>
RYEDR	IAF	STRNG		TF	FB	1.00	272.01	4.34	6000
STRNG		WISIV		RF	FB	1.00	(4.75 NM RADIUS CCW (CFVGH))	2.08	5000
WISIV		COUNT		RF	FB	1.00	(3.25 NM RADIUS CCW (CFPHV))	1.75	5000
COUNT	IAF	TIGRZ		TF	FB	1.00	215.86	5.62	5000
TIGRZ		ROBBI		TF	FB	1.00	215.84	3.14	5000
COBBO	IAF	STTIK		TF	FB	1.00	253.52	7.45	5000
JEEEP	IAF	NOOVA		TF	FB	1.00	035.05	3.30	5000
NOOVA		STTIK		RF	FB	1.00	(2.85 NM RADIUS CCW (CFPGV))	7.04	5000
STTIK		ROBBI		RF	FB	1.00	(2.85 NM RADIUS CCW (CFPGV))	1.87	5000
ROBBI		BALAS		TF	FB	1.00	215.82	3.14	4000
BALAS		NESBI		TF	FB	1.00	215.80	3.14	3000
NESBI	IF	PUKLE	PFAF	TF	FB	1.00	215.78	3.14	2000
PUKLE	PFAF	RW21L	MAP	TF	FO	0.30	215.75	4.12	
RW21L	MAP	1100 MSL		CA			215.75		1100
1100 MSL		GAAGE		DF	FO	1.00			4000



AIRPORT

DETROIT METROPOLITAN WAYNE
COUNTY

AIRPORT ID

KDTW

PROCEDURE NAME

RNAV (RNP) X RWY 21L

ORIGINAL/AMENDMENT

ORIG-B

CITY

DETROIT

STATE

MI

MISSED APPROACH

MAP:

RNP: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 4000 DIRECT GAAGE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)			
2. PROFILE STARTS AT ROBBI							
3. FAC:	215.75	PFAF: PUKLE	DIST PFAF TO MAP:	DIST PFAF TO THLD:			
4. MIN ALT:	ROBBI 5000, BALAS 4000, NESBI 3000, PUKLE 2000						
5. DIST TO THLD FROM OM:	4.12	MM:	IM:	150 HAT:	430 HAT:	1.18	GS ANT:
6. MIN GP INCPT:	2000	GP ALT AT PFAF : PUKLE 2000			OM:	MM:	IM:
7. GP ANGLE:	3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH:	55.0		
8. MSA FROM: RW21L 2800							

PBN REQUIREMENTS NOTE:

RNP AR APCH.

NOTES:

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.

CHART NOTE: USE OF FD OR AP PROVIDING RNAV TRACK GUIDANCE REQUIRED DURING SIMULTANEOUS OPERATIONS.

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -19°C OR ABOVE 54°C.

CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

CHART PLANVIEW NOTE ADJACENT TO RYEDR IAF: RF REQUIRED.

CHART PLANVIEW NOTE ADJACENT TO COBBO IAF: RF REQUIRED.

CHART PLANVIEW NOTE ADJACENT TO JEEEP IAF: RF REQUIRED.

CHART SPEED ICON IN PLANVIEW AT RYEDR: MAX 200 KIAS.

CHART SPEED ICON IN PLANVIEW AT COBBO: MAX 210 KIAS.

CHART SPEED ICON IN PLANVIEW AT JEEEP: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

ROUTE TYPE: A, H

ROUTE TYPE QUALIFIER 1: F

ROUTE TYPE QUALIFIER 2: S

CHART MANDATORY 5000 AT WISIV.

CHART MANDATORY 7000 AT RYEDR.

CHART MANDATORY 6000 AT COBBO.

CHART MINIMUM 5000 AT JEEEP.

CHART AT OR BELOW 6000 AT STRNG.

CHART MINIMUM 5000 AT COUNT.

HOLD SE, RT, 303.46 INBOUND



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

ALTERNATE: NA ☐ STANDARD

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
AUTHORIZATION REQUIRED															
RNP 0.30 DA	1062	4000	430	1062	4000	430	1062	4000	430	1062	4000	430			

CHANGES - REASONS

1. CHANGED MAX SPEED AT COBBO AND JEEEP FROM 200 KIAS TO 210 KIAS. - ATC REQUESTS.

01/02/2019: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 11/13/2018. JH
1. ADDED TO LINE 4 MIN ALT: ROBBI 5000.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZOB ARTCC, DTW APP CON, METRO TOWER, AMGR

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY
JIMMY S. HUGHES

Digitally signed by
JIMMY S HUGHES
Jan 02, 2019

OFFICE

OFFICE
AJV-5422

DATE

DATE
09/04/2018

Digitally signed by
ROBERT G HAMILTON
Jan 02, 2019

APPROVED BY
JULIE MORGAN

OFFICE
AJV-5420

DATE

Digitally signed by
ROBERT G HAMILTON
Jan 02, 2019

TITLE
MANAGER



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> SPIRIT OF ST LOUIS	<u>AIRPORT ID</u> KSUS	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 26L	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> ST LOUIS	<u>STATE</u> MO
<u>AIRPORT ELEVATION</u> 463	<u>TDZE</u> 462	<u>SUPERSEDED</u> RNAV (GPS) RWY 26L	<u>ORIGINAL/AMENDMENT</u> ORIG-D	<u>DATED</u> 02/01/2018	<u>MAG VAR</u> 1W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

TERMINAL ROUTES THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 19-03.

<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>
FASHE		CSX DME		TF	FB	1.00	192.65	23.31	4000
CSX DME	IAF	CHADD	NOPT	TF	FB	1.00	214.83	3.85	4000
EMKAA	IAF	CHADD	NOPT	TF	FB	1.00	349.24	6.55	4000
CHADD	IF/IAF	FAVOG		TF	FB	1.00	259.22	6.03	2100
FAVOG	FAF	SHEGZ/3.20 NM TO RW26L		TF	FB	0.30	259.14	1.77	
SHEGZ/3.20 NM TO RW26L		RW26L	MAP	TF	FO	0.30	259.14	3.20	
RW26L	MAP	662 MSL		CA			259.14		
662 MSL		JOBK		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW26L

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT JOBRK AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2.	HOLD E CHADD, RT, 259.22 INBOUND, 4000 FT. IN LIEU OF PT (IAF), MAX 6000.				
3. FAC:	259.14	FAF: FAVOG	DIST FAF TO MAP: 4.97	DIST FAF TO THLD: 4.97	
4. MIN ALT:	CHADD 4000, FAVOG 2100, SHEGZ/3.20 NM TO RW26L 1540*				
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	200 HAT: 0.45	GS ANT:
6. MIN GP INCPT: 2100	GP ALT AT FAF : FAVOG 2100			OM:	MM: IM:
7. GP ANGLE: 3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 55.0		
8. MSA FROM:	RW26L 3100				

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C OR ABOVE 54C.
CHART NOTE: BARO-VNAV AND VDP NA WHEN USING ST LOUIS LAMBERT INTL ALTIMETER SETTING.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ST LOUIS LAMBERT INTL ALTIMETER SETTING AND INCREASE ALL DA 57 FEET, ALL MDA 60 FEET, INCREASE LNAV/VNAV VISIBILITY ALL CATS, AND LNAV CATS C/D VISIBILITY TO RVR 5500.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT FASHE ON V9 NORTHEAST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT EMKAA ON V88 SOUTHWEST BOUND AND V44 EASTBOUND.
CHART NOTE: FOR INOPERATIVE ALS WHEN USING ST LOUIS LAMBERT INTL ALTIMETER SETTING, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 3/8 SM AND LNAV CAT C/D VISIBILITY TO 1 3/8 SM.
CHART NOTE: ** RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA, NA WHEN USING ST LOUIS LAMBERT INTL ALTIMETER SETTING

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.26 NM TO RW26L*
*LNAV ONLY
WAAS CHANNEL #81914
REFERENCE PATH ID: W26B
CHART FAS OBST: 669 TREE 383945N/0903519W.
HOLD W, RT, 078.92 INBOUND
LTP HAE: 109.6 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 900-3, NA WHEN LOCAL WEATHER NOT AVAILABLE.

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**	662	2400	200	662	2400	200	662	2400	200	662	2400	200			
LNAV/VNAV DA	916	4500	454	916	4500	454	916	4500	454	916	4500	454			
LNAV MDA	920	2400	458	920	2400	458	920	4500	458	920	4500	458			
CIRCLING	1100	1	637	1120	1	657	1140	2	677	1360	3	897			



CHANGES - REASONS

- 1. CHANGED CSX VOR/DME TO CSX DME - CSX VOR DECOMMISSIONED 11/08/2018.
- 2. PFAF (NEW FIX-FAVOG) MOVED 404 FT EAST - TERMINAL ROUTE FAVOG TO SHEGZ CHANGED FROM 1.70 TO 1.77.
- 3. LNAV/VNAV DA CHANGES FROM 969/507 TO 916/ 454 - MISSED NO LONGER PENETRATED/ CRITERIA CHANGE.
- 4. INTERMEDIATE SEGMENT LENGTH CHANGES FROM 6.10 NM TO 6.03 NM - PFAF MOVED TO NEW LOCATION.
- 5. VDP MOVED FROM 1.45 NM TO 1.26 NM - LNAV MDA LOWERED TO 920.
- 6. FINAL FAF TO MAP DISTANCE CHANGED FROM 4.9 NM TO 4.97 NM - NEW PFAF LOCATION.
- 7. DISTANCE TO THRESHOLD FROM HAT CHANGED FROM 0.46 NM TO 0.45NM - NEW IPDS EVALUATION.
- 8. LNAV MDA/HAT CHANGES FROM 980/518 TO 920/ 458 - MISSED NO LONGER PENETRATED/CRITERIA CHANGE.
- 9. CHANGED CAT B CIRCLING MINIMA FROM 1100/637 TO 1120/657.- NEW CIRCLING RADII APPLIED.
- 10. CHANGED CAT C CIRCLING MINIMA FROM 1120/657 TO 1140/677.- NEW CIRCLING RADII APPLIED.
- 11. CHANGED CAT D CIRCLING MINIMA FROM 1140/677 TO 1360/897.- NEW CIRCLING RADII APPLIED.
- 12. ADDED NOTE: CHART CIRCLING ICON.- NEW CIRCLING RADII APPLIED.
- 13. ADDED PROCEDURE NA NOTE FOR ARRIVALS AT EMKAA.- TURN EXCEEDS 90 DEGREES.
- 14. CHANGED ALTERNATE MINIMUM NOTE FROM CAT D 800-2 1/4 TO 900-3.- CAT D CIRCLING INCREASE.

1/7/2019: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON: 12/10/2018:
1. CHANGED ALL REFERENCES OF LAMBERT-ST LOUIS INTL ALTIMETER SETTING TO ST LOUIS LAMBERT INTL ALTIMETER SETTING IN NOTES.



<u>AIRPORT</u> SPIRIT OF ST LOUIS	<u>AIRPORT ID</u> KSUS	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 26L	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> ST LOUIS	<u>STATE</u> MO
<u>COORDINATED WITH:</u>					
A4A ☒ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ <u>OTHER:</u> STL APP CON, SUS TOWER, AMGR					
<u>FLIGHT CHECKED BY</u>		<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
MICHAEL S MILLER		WARDELL HENNING	FICO	12/5/18	
		Jan 08, 2019			
<u>DEVELOPED BY</u>		<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
LONNIE EVERHART (KEITH CTR MCKAY)		WARDELL HENNING	AJV-5400	05/31/2018	
		Jan 08, 2019			
<u>APPROVED BY</u>	<i>Digitally signed by</i>		<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
LONNIE EVERHART	WARDELL HENNING		AJV-5400		MANAGER
	Jan 08, 2019				



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSUS
RUNWAY	RW26L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W26B
LTP/FTP LATITUDE	383942.0105N
LTP/FTP LONGITUDE	0903808.6875W
LTP/FTP ELLIPSOIDAL HEIGHT	+01096
FPAP LATITUDE	383923.5700N
FPAP LONGITUDE	0903959.9800W
THRESHOLD CROSSING HEIGHT (TCH)	00055.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0616
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	0AF5F9E8
<u>ADDITIONAL PATH POINT RECORD INFORMATION</u>	
ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+01408
FPAP ORTHOMETRIC HEIGHT	+01408



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> SPIRIT OF ST LOUIS	<u>AIRPORT ID</u> KSUS	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 26R	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> ST LOUIS	<u>STATE</u> MO
<u>AIRPORT ELEVATION</u> 463	<u>TDZE</u> 463	<u>SUPERSEDED</u> RNAV (GPS) RWY 26R	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 03/31/2016	<u>MAG VAR</u> 1W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

TERMINAL ROUTES THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 19-03.

<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>
FASHE		CSX DME		TF	FB	1.00	192.65	23.31	4000
CSX DME	IAF	KORNN	NOPT	TF	FB	1.00	225.83	4.07	4000
EMKAA	IAF	KORNN	NOPT	TF	FB	1.00	344.00	7.04	4000
KORNN	IF/IAF	PAMUW		TF	FB	1.00	259.23	6.72	2100
PAMUW	FAF	RW26R	MAP	TF	FO	0.30	259.15	4.28	
RW26R	MAP	713 MSL		CA			259.15		
713 MSL		EXESS		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW26R

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT EXESS AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD E KORNN, RT, 259.23 INBOUND, 4000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 259.16

FAF: PAMUW

DIST FAF TO MAP: 4.28

DIST FAF TO THLD: 4.28

4. MIN ALT: KORNN 4000, PAMUW 2100

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

250 HAT: 0.54

GS ANT:

6. MIN GP INCPT: 2100

GP ALT AT FAF : PAMUW 2100

OM:

MM:

IM:

7. GP ANGLE: 3.50

34:1: IS NOT CLEAR

20:1: IS CLEAR

TCH: 47.4

8. MSA FROM: RW26R 3100

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: RWY 26R HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18°C OR ABOVE 54°C.
CHART NOTE: VDP AND BARO-VNAV NA WHEN USING ST LOUIS LAMBERT INTL ALTIMETER SETTING.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ST LOUIS LAMBERT INTL ALTIMETER SETTING AND INCREASE LPV DA TO 768 FEET, LNAV/VNAV DA TO 834 FEET, AND ALL MDA 60 FEET, INCREASE LPV AND LNAV/VNAV ALL CATS VISIBILITY 1/8 SM.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT FASHE ON V9 NORTHEASTBOUND AND ARRIVALS AT EMKAA ON V9-335 SOUTHEASTBOUND.

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.15 NM TO RW26R*
*LNAV ONLY
WAAS CHANNEL #97414
REFERENCE PATH ID: W26A
FAS OBST: 685 AAO 384113N/0903423W.
HOLD W, RT, 078.93 INBOUND
LTP HAE: 109.9 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.

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	713	3/4	250	713	3/4	250		NA			NA				
LNAV/VNAV DA	780	7/8	317	780	7/8	317		NA			NA				
LNAV MDA	940	1	477	940	1	477		NA			NA				
CIRCLING	1100	1	637	1120	1	657		NA			NA				



CHANGES - REASONS

- 1. CHANGED CSX VOR/DME TO CSX DME - CSX VOR DECOMMISHIONED 11/08/2018.
- 2. NEW PFAF (PAMUW) MOVED 416 FT EAST OF DBLEE - IPDS EVALUATION IAW 8260.5H 2-13.
- 3. INTERMEDIATE SEGMENT DISTANCE CHANGED FROM 6.08 NMTO 6.72 NM - THE PFAF MOVED TO NEW LOCATION.
- 4. FINAL CRS/ DISTANCE CHANGED FROM 259.15/4.92 NM TO 259.15/4.28 NM - THE PFAF MOVES TO NEW LOCATION.
- 5. FINAL LPV DA/HAT CHANGED FROM 803/340 TO 713/250 - CONTROLLING OBSTACLE CHANGED FROM TO 552 MSL TREE TO 533 MSL TREE.
- 6. FINAL LNAV/VNAV DA/HAT CHANGED FROM 953/490 TO 780/317 - CONTROLLING OBSTACLE CHANGED FROM 628 MSL TREE TO 581 MSL CONTROL TOWER.
- 7. FINAL LNAV MDA/HAT CHANGED FROM 1000/537 TO 940/477 - CONTROLLING OBSTACLE CHANGED FROM 709 MSL TREE TO 685 MSL AAO.
- 8. CHANGED BACKUP ALTIMETER LPV FROM 860 TO 768, LNAV/VNAV FROM 1010 TO 834 AND LPV, LNAV/VNAV VISIBILITY FOR 1/4 MILE TO 1/8 MILE - CRITERIA CHANGE.
- 9. CHANGED GP ANGLE FROM 3.00 TO 3.50.- MATCHING VGSI SLOPE.
- 10. CHANGED VDP FROM 1.32 NM TO 1.15 NM.- LNAV MDA LOWERED.
- 11. CHANGED CHART FAS OBSTACLE NOTE TO FAS OBSTACLE NOTE: 685 AAO 384113N/0903423W.- NEW LNAV CONTROLLING OBSTACLE.
- 12. CHANGED DISTANCE FAF TO MAP AND FAF TO THLD FROM 4.99 NM TO 4.28 NM. - PFAF MOVED, ANGLE CHANGED.
- 13. CHANGED CAT B CIRCLING MINIMUMS FROM 637/1100 TO 657/1120.- NEW CIRCLING RADII AND NEW CONTROLLING OBSTACLE.
- 14.BARO VNAV LOW TEMP CHANGED FROM -15 TO -18.- NEW 5 YEAR AVERAGE.
- 15. CHARTED CIRCLING ICON.-UPDATED CIRCLING TO NEW RADII.
- 16. FAS DATA: CRC REMAINDER CHANGED FROM E5CCA246 TO F5138BAC.-ANGLE CHANGED FROM 3.00 TO 3.50.

10/25/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 5/31/18

- 1. UPDATED PROCEDURE CODING.
- 2. ADDED IMPER FIX TO PROJECT FOR VORMON UPDATES.

1/7/2019: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON: 12/10/2018:

- 1. CHANGED ALL REFERENCES OF LAMBERT-ST LOUIS INTL ALTIMETER SETTING TO ST LOUIS LAMBERT INTL ALTIMETER SETTING IN NOTES.

COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** STL APP CON, SUS TOWER, AMGR

FLIGHT CHECKED BY

MICHAEL S MILLER

Digitally signed by **OFFICE**

WARDELL HENNING FIOG

DATE

12/5/2018

Jan 08, 2019

DEVELOPED BY

LONNIE EVERHART (KEITH CTR MCKAY)

Digitally signed by

WARDELL HENNING

OFFICE

AJV-5400

DATE

APPROVED BY

Digitally signed by

WARDELL HENNING

Jan 08, 2019

OFFICE

AJV-5400

DATE

TITLE

MANAGER

Jan 08, 2019



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSUS
RUNWAY	RW26R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W26A
LTP/FTP LATITUDE	384001.1100N
LTP/FTP LONGITUDE	0903904.1425W
LTP/FTP ELLIPSOIDAL HEIGHT	+01099
FPAP LATITUDE	383942.6900N
FPAP LONGITUDE	0904055.4400W
THRESHOLD CROSSING HEIGHT (TCH)	00047.4
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.50
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	F5138BAC
<u>ADDITIONAL PATH POINT RECORD INFORMATION</u>	
ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+01412
FPAP ORTHOMETRIC HEIGHT	+01412



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> JOHN F KENNEDY INTL	<u>AIRPORT ID</u> KJFK	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 13R	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> NEW YORK	<u>STATE</u> NY	
<u>AIRPORT ELEVATION</u> 13	<u>TDZE</u> 13	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u> 13W	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> 08/16/2018	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 19-03.

<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>
VERAZ	IAF	PORRT		TF	FB	1.00	054.99	6.19	2000
PORRT	IF	FVONE	PFAF	TF	FB	1.00	116.07	3.28	1200
FVONE	FAF	RW13R	MAP	TF	FO	0.30	131.07	3.56	
RW13R	MAP	500 MSL		CA			131.07		500
500 MSL		ZACHS		DF	FO	1.00			2000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW13R

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 500 THEN CLIMBING RIGHT TURN TO 2000 DIRECT ZACHS AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. PROFILE STARTS AT PORRT
3. FAC: 131.07 PFAF: FVONE DIST PFAF TO MAP: 3.56 DIST PFAF TO THLD: 3.56
4. MIN ALT: PORRT 2000, FVONE 1200
5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 250 HAT: 0.61 GS ANT:
6. MIN GP INCPT: 1200 GP ALT AT PFAF : FVONE 1200 OM: MM: IM:
7. GP ANGLE: 3.00 34:1: IS CLEAR 20:1: IS CLEAR TCH: 55.0
8. MSA FROM: RW13R 2900



PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -12C OR ABOVE 44C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

CHART FAS OBSTACLE: 230 ANTENNA 404022N/0735158W.
360 AAO 404134N/0735235W.
CHART CIRCLING ICON.
CHART PLANVIEW NOTE: FINAL APPROACH COURSE OFFSET 2.63 DEGREES.
CHART VDP AT 1.22 NM TO RW13R*
*LNAV ONLY
WAAS CHANNEL #72642
REFERENCE PATH ID: W13A
HOLD NW, RT, 134.16 INBOUND
LTP HAE: -28.1 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

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	263	4000	250	263	4000	250	263	4000	250	263	4000	250			
LNAV/VNAV DA	309	4500	296	309	4500	296	309	4500	296	309	4500	296			
LNAV MDA	480	5500	467	480	5500	467	480	1 3/8	467	480	1 3/8	467			
CIRCLING	640	1	627	640	1	627	640	1 3/4	627	660	2	647			



CHANGES - REASONS

1. ORIGINAL - PER ATC/FPT

12/28/2018: THIS IS A CORRECTED COPY OF THE FORMS APPROVED ON 11/28/2018.

1. CHANGED FPAP FROM 403740.781N/734618.413W TO 403801.760N/0734654.161W

2. CHANGED CRC REMAINDER FROM 05602829 TO 35BAF147

3. CHANGED COURSE WIDTH AT THRESHHOLD FROM 107.50 TO 106.75

COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:**

FLIGHT CHECKED BY

PENDING

Digitally signed by

DAVID DANNER

Jan 08, 2019

Digitally signed by

ROSE BOONE

Dec 28, 2018

DEVELOPED BY

ROSE BOONE

APPROVED BY

JULIE MORGAN

Digitally signed by

DAVID DANNER

Jan 08, 2019

OFFICE

DATE

OFFICE

AJV-5421

DATE

03/27/2018

OFFICE

AJV-5420

DATE

TITLE
MANAGER



FAS DATA BLOCK INFORMATION**DATA FIELD****DATA**

OPERATION TYPE

0

SBAS SERVICE PROVIDER IDENTIFIER

0

AIRPORT IDENTIFIER

KJFK

RUNWAY

RW13R

APPROACH PERFORMANCE DESIGNATOR

0

ROUTE INDICATOR

REFERENCE PATH DATA SELECTOR

0

REFERENCE PATH IDENTIFIER (APPROACH ID)

W13A

LTP/FTP LATITUDE

403843.7810N

LTP/FTP LONGITUDE

0734837.3880W

LTP/FTP ELLIPSOIDAL HEIGHT

-00281

FPAP LATITUDE

403801.7600N

FPAP LONGITUDE

0734654.1610W

THRESHOLD CROSSING HEIGHT (TCH)

00055.0

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)

50.0

CRC REMAINDER

35BAF147

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE

K6

LTP ORTHOMETRIC HEIGHT

+00038

FPAP ORTHOMETRIC HEIGHT

+00038



[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. [31233](#); Amdt. No. [3835](#)]

**Standard Instrument Approach Procedures, and Takeoff Minimums
and Obstacle Departure Procedures; Miscellaneous Amendments**

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This rule establishes, amends, suspends, or removes Standard Instrument Approach Procedures (SIAPs) and associated Takeoff Minimums and Obstacle Departure Procedures (ODPs) for operations at certain airports. These regulatory actions are needed because of the adoption of new or revised criteria, or because of changes occurring in the National Airspace System, such as the commissioning of new navigational facilities, adding new obstacles, or changing air traffic requirements. These changes are designed to provide safe and efficient use of the navigable airspace and to promote safe flight operations under instrument flight rules at the affected airports.

DATES: This rule is effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]. The compliance date for each SIAP, associated Takeoff Minimums, and ODP is specified in the amendatory provisions.

The incorporation by reference of certain publications

listed in the regulations is approved by the Director of the Federal Register as of [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Availability of matters incorporated by reference in the amendment is as follows:

For Examination

1. U.S. Department of Transportation, Docket Ops-M30, 1200 New Jersey Avenue SE, West Bldg., Ground Floor, Washington, D.C., 20590-0001.

2. The FAA Air Traffic Organization Service Area in which the affected airport is located;

3. The office of Aeronautical Navigation Products, 6500 South MacArthur Blvd., Oklahoma City, OK 73169 or,

4. The National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:
http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Availability

All SIAPs and Takeoff Minimums and ODPs are available online free of charge. Visit the National Flight Data Center at nfdc.faa.gov to register. Additionally, individual SIAP and Takeoff Minimums and ODP copies may be obtained from the FAA Air Traffic Organization Service Area in which the affected airport is located.

FOR FURTHER INFORMATION CONTACT: Thomas J. Nichols, Flight Procedures and Airspace Group, Flight Technologies and Procedures Division, Flight Standards Service, Federal Aviation Administration. Mailing Address: FAA Mike Monroney Aeronautical Center, Flight Procedures and Airspace Group, 6500 South MacArthur Blvd, Registry Bldg 29 Room 104, Oklahoma City, OK 73125. Telephone: (405) 954-4164.

SUPPLEMENTARY INFORMATION: This rule amends Title 14 of the Code of Federal Regulations, Part 97 (14 CFR part 97), by establishing, amending, suspending, or removes SIAPS, Takeoff Minimums and/or ODPS. The complete regulatory description of each SIAP and its associated Takeoff Minimums or ODP for an identified airport is listed on FAA form documents which are incorporated by reference in this amendment under 5 U.S.C. 552(a), 1 CFR part 51, and 14 CFR part 97.20. The applicable FAA forms are FAA Forms 8260-3, 8260-4, 8260-5, 8260-15A, and 8260-15B when required by an entry on 8260-15A.

The large number of SIAPs, Takeoff Minimums and ODPs, their complex nature, and the need for a special format make publication in the **Federal Register** expensive and impractical. Further, airmen do not use the regulatory text of the SIAPs, Takeoff Minimums or ODPs, but instead refer to their graphic depiction on charts printed by publishers of aeronautical materials. Thus, the advantages of incorporation by reference are realized and publication of the complete description of each

SIAP, Takeoff Minimums and ODP listed on FAA form documents is unnecessary. This amendment provides the affected CFR sections and specifies the types of SIAPs, Takeoff Minimums and ODPs with their applicable effective dates. This amendment also identifies the airport and its location, the procedure, and the amendment number.

Availability and Summary of Material Incorporated by Reference

The material incorporated by reference is publicly available as listed in the ADDRESSES section.

The material incorporated by reference describes SIAPS, Takeoff Minimums and/or ODPS as identified in the amendatory language for part 97 of this final rule.

The Rule

This amendment to 14 CFR part 97 is effective upon publication of each separate SIAP, Takeoff Minimums and ODP as Amended in the transmittal. Some SIAP and Takeoff Minimums and textual ODP amendments may have been issued previously by the FAA in a Flight Data Center (FDC) Notice to Airmen (NOTAM) as an emergency action of immediate flight safety relating directly to published aeronautical charts.

The circumstances that created the need for some SIAP and Takeoff Minimums and ODP amendments may require making them effective in less than 30 days. For the remaining SIAPs and Takeoff Minimums and ODPs, an effective date at least 30 days after publication is provided.

Further, the SIAPs and Takeoff Minimums and ODPs contained in this amendment are based on the criteria contained in the U.S. Standard for Terminal Instrument Procedures (TERPS). In developing these SIAPs and Takeoff Minimums and ODPs, the TERPS criteria were applied to the conditions existing or anticipated at the affected airports. Because of the close and immediate relationship between these SIAPs, Takeoff Minimums and ODPs, and safety in air commerce, I find that notice and public procedure under 5 U.S.C. 553(b) are impracticable and contrary to the public interest and, where applicable, under 5 U.S.C 553(d), good cause exists for making some SIAPs effective in less than 30 days.

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore--(1) is not a "significant regulatory action" under Executive Order 12866;(2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26,1979) ; and (3)does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. For the same reason, the FAA certifies that this amendment will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR part 97:

Air Traffic Control, Airports, Incorporation by reference, Navigation (Air).

Issued in Washington, DC on **JANUARY 11, 2019.**

Rick Domingo
Executive Director, Flight Standards Service

ADOPTION OF THE AMENDMENT

Accordingly, pursuant to the authority delegated to me, Title 14, Code of Federal Regulations, Part 97 (14 CFR part 97) is amended by establishing, amending, suspending, or removing Standard Instrument Approach Procedures and/or Takeoff Minimums and Obstacle Departure Procedures effective at 0901 UTC on the dates specified, as follows:

Part 97—Standard Instrument Approach Procedures

1. The authority citation for part 97 continues to read as follows:

AUTHORITY: 49 U.S.C. 106(f), 106(g), 40103, 40106, 40113, 40114, 40120, 44502, 44514, 44701, 44719, 44721-44722.

2. Part 97 is amended to read as follows:

Effective 28 February 2019

Napa, CA, Napa County, ILS OR LOC Z RWY 36L, Orig-D
Napa, CA, Napa County, LOC Y RWY 36L, Orig
Napa, CA, Napa County, NAPAA THREE Graphic DP
Napa, CA, Napa County, RNAV (GPS) X RWY 36L, Orig
Leadville, CO, Lake County, DAVVY TWO Graphic DP
Leadville, CO, Lake County, LOZUL FOUR Graphic DP
Leadville, CO, Lake County, RNAV (GPS) RWY 16, Amdt 1
Leadville, CO, Lake County, Takeoff Minimums and Obstacle DP, Amdt 2A
Crestview, FL, Bob Sikes, ILS OR LOC RWY 17, Amdt 1
Crestview, FL, Bob Sikes, RNAV (GPS) RWY 17, Orig-B
Crestview, FL, Bob Sikes, RNAV (GPS) RWY 35, Amdt 1C
Crestview, FL, Bob Sikes, VOR-A, Amdt 12B
Maurice, IA, Sioux County Rgnl, RNAV (GPS) RWY 17, Orig
Maurice, IA, Sioux County Rgnl, RNAV (GPS) RWY 35, Orig
Maurice, IA, Sioux County Rgnl, Takeoff Minimums and Obstacle DP, Orig
Shelbyville, IL, Shelby County, NDB-A, Amdt 3
Shelbyville, IL, Shelby County, RNAV (GPS) RWY 36, Orig-C
Fairmont, MN, Fairmont Muni, COPTER ILS RWY 31, Orig-B, CANCELED
Fairmont, MN, Fairmont Muni, ILS OR LOC RWY 31, Amdt 1
Fairmont, MN, Fairmont Muni, RNAV (GPS) RWY 13, Orig-A
Fairmont, MN, Fairmont Muni, VOR/DME RWY 13, Amdt 1B, CANCELED
Wellsboro, PA, Wellsboro Johnston, RNAV (GPS) RWY 10, Amdt 1
Wellsboro, PA, Wellsboro Johnston, RNAV (GPS) RWY 28, Amdt 1
Laurens, SC, Laurens County, RNAV (GPS) RWY 8, Amdt 1
Laurens, SC, Laurens County, RNAV (GPS) RWY 26, Amdt 1
Spartanburg, SC, Spartanburg Downtown Memorial/Simpson Field, RNAV (GPS) RWY 23, Amdt 1
Spartanburg, SC, Spartanburg Downtown Memorial/Simpson Field, Takeoff Minimums and Obstacle DP, Amdt 2

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
ILS STANDARD INSTRUMENT APPROACH PROCEDURE

TITLE 14 CFR PART 97.29

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> NAPA COUNTY	<u>AIRPORT ID</u> KAPC	<u>PROCEDURE NAME</u> ILS OR LOC Z RWY 36L	<u>ORIGINAL/AMENDMENT</u> ORIG-D	<u>CITY</u> NAPA	<u>STATE</u> CA
<u>AIRPORT ELEVATION</u> 36	<u>TDZE</u> 24	<u>SUPERSEDED</u> ILS OR LOC RWY 36L	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>DATED</u> 09/13/2018	<u>MAG VAR</u> 15E
<u>FACILITY</u> I-APC	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> 02/28/2019	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2005

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>
SGD VORTAC		FESAV INT/I-APC 12.53 DME					162.31	9.00	2600
REBAS/SAU 8.35 DME	IAF	FESAV INT/I-APC 12.53 DME	NOPT				321.00 & 005.74	1.85 (HDG) & 3.86 (I-APC)	2600
FESAV INT/I-APC 12.53 DME	IF/IAF	CIKPI INT/I-APC 6.52 DME					005.74	6.01 (I-APC)	1800

MISSED APPROACH

MAP:

ILS: DA

LOC: 5.45 NM AFTER CIKPI OR AT I-APC 1.07 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 500 THEN CLIMBING LEFT TURN TO 3200 DIRECT SGD VORTAC THEN ON SGD R-230 TO BURDE INT/SGD 11.31 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 500 THEN CLIMBING LEFT TURN TO 3000 ON SAU VORTAC R-003 TO DYKEE/13.00 DME AND HOLD.

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- HOLD S FESAV, RT, 005.74 INBOUND, 2600 FT. IN LIEU OF PT (IAF), MAX 4500.
- FAC:** 005.74 **FAF:** CIKPI INT/I-APC 6.52 DME **DIST FAF TO MAP:** 5.45 **DIST FAF TO THLD:** 5.45
- MIN ALT:** FESAV INT/I-APC 12.53 DME 2600, CIKPI INT/I-APC 6.52 DME 1800, ROOSE INT/I-APC 3.10 DME 680
- DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **GS ANT:** 983
- MIN GS INCPT:** 1800 **GS ALT AT FAF:** CIKPI INT/I-APC 6.52 DME 1800 **OM:** **MM:** **IM:**
- GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 50.0
- MSA FROM:** SGD VORTAC 090-180 5100, 180-270 3800, 270-090 4300

EQUIPMENT REQUIREMENTS NOTES:



NOTES:

CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 530.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 36L CATS C/D VISIBILITY TO 1 7/8 SM AND ROOSE FIX MINIMUMS S-LOC 36L CATS C/D VISIBILITY TO 1 3/8 SM.

ADDITIONAL FLIGHT DATA:

CHART IN PLANVIEW: CCR VOR/DME R-250 AT FESAV.
CHART IN PLANVIEW: DYKEE INT/SAU 13.00 DME
CHART VDP AT 2.31 DME*
DISTANCE VDP TO THLD 1.24 NM
* LOC ONLY
CHART FAS OBST: 65 GRD 381207N/1221721W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD S DYKEE INT/SAU 13.00 DME, RT, 003.00 INBOUND.
HOLD NE, RT, 230.00 INBOUND

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

ALTERNATE: NA ☐ ILS: STANDARD - NA WHEN CONTROL TOWER CLOSED.; LOC: STANDARD - CAT C 900-2 3/4, CAT D 1200-3, NA WHEN CONTROL TOWER CLOSED.

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
S-ILS 36L	224	3/4	200	224	3/4	200	224	3/4	200	224	3/4	200			
S-LOC 36L	680	3/4	656	680	3/4	656	680	1 3/4	656	680	1 3/4	656			
CIRCLING	700	1	664	820	1	784	920	2 3/4	884	1180	3	1144			
ROOSE FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)															
S-LOC 36L	460	3/4	436	460	3/4	436	460	1	436	460	1	436			
CIRCLING	700	1	664	820	1	784	920	2 3/4	884	1180	3	1144			

CHANGES - REASONS

1. UPDATED PROCEDURE NAME FROM ILS OR LOC RWY 36L TO ILS OR LOC Z RWY 36L; A TEMP PROCEDURE, LOC Y RWY 36L DEVELOPED TO ACCOMMODATE RWY CONSTRUCTION THE ILS LOC Z RWY 36L WILL BE NA DURING THE CONSTRUCTION PERIOD - NAMED IAW .3D 1-6-2D.
2. REMOVED CNF FIX FROM INITIAL REBAS - FESAV DR SEGMENT - NO LONGER REQUIRED TO BE CHARTED.
3. UPDATED S-ILS 36L DA FROM 217 TO 224 - TDZE CHANGED.
4. MOVED BACK-UP ALTIMETER ADJUSTMENTS AND NOTES TO FAA FORM 8260-9 - FOR CONTINGENCY USE, ASOS ON WMSCR.
5. AMENDED S-LOC 36L HAT FROM 663 TO 656 AND ROOSE FIX MINIMUMS S-LOC 36L HAT FROM 443 TO 436 - COMPUTED USING AMENDED TDZE.
6. UPDATED INOPERATIVE MALS NOTE - FORMATTED IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-11O(3)(D).
7. INCORPORATED CHANGES FROM ORIG-A, ORIG-B, AND ORIG-C - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-3-4C(2).

PDF EDITS:
1. TERMINAL ROUTES REBAS - FESAV ADDED (HGD).



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZOA, NORCAL TRACON, APC ATCT, APT MGR

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

Digitally signed by

ROBERT G HAMILTON

Jan 03, 2019

DEVELOPED BY

HEIDI SNIDER

Digitally signed by

HEIDI SNIDER

Dec 17, 2018

OFFICE

AJV-5422

DATE

11/08/2018

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5420

DATE

Digitally signed by

ROBERT G HAMILTON

Jan 03, 2019

TITLE

MANAGER

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
LOC STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.25

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> NAPA COUNTY	<u>AIRPORT ID</u> KAPC	<u>PROCEDURE NAME</u> LOC Y RWY 36L	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> NAPA	<u>STATE</u> CA	
<u>AIRPORT ELEVATION</u> 36	<u>TDZE</u> 24	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u> NONE	<u>DATED</u>	<u>MAG VAR</u> 15E	<u>EPOCH YEAR</u> 2005
<u>FACILITY</u> I-APC	<u>COORDINATES OF FACILITIES</u> 381328.16N / 1221638.44W	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> 02/28/2019	<u>CANCEL/SUSPEND</u>		

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>
SGD VORTAC		FESAV INT/I-APC 12.53 DME					162.31	9.00	2600
REBAS INT/SAU 8.35 DME	IAF	FESAV INT/I-APC 12.53 DME	NOPT				321.00 & 005.74	1.85 (HDG) & 3.86 (I-APC)	2600
FESAV INT/I-APC 12.53 DME	IF/IAF	CIKPI INT/I-APC 6.52 DME					005.74	6.01 (I-APC)	1800

MISSED APPROACH

MAP:

LOC: 5.45 NM AFTER CIKPI INT/I-APC 6.52 DME OR AT ZAPGO/1.07 DME FIX

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 500 THEN CLIMBING LEFT TURN TO 3200 DIRECT SGD VORTAC THEN ON SGD VORTAC R-230 TO BURDE/SGD 11.31 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 500 THEN CLIMBING LEFT TURN TO 3000 ON SAU VOR/DME R-003 TO DYKEE/SAU 13.00 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000.

PROFILE:

- 1. PT** **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
- 2.** HOLD S FESAV, RT, 005.74 INBOUND, 2600 FT. IN LIEU OF PT (IAF), MAX 4500.
- 3. FAF:** 005.74 **FAF:** CIKPI INT/I-APC 6.52 DME **DIST FAF TO MAP:** 5.45 **DIST FAF TO THLD:** 5.75
- 4. MIN ALT:** FESAV INT/I-APC 12.53 DME 2600, CIKPI INT/I-APC 6.52 DME 1800, ROOSE INT/I-APC 3.10 DME 800
- 8. MSA FROM:** SGD VORTAC 090-180 5000, 180-270 3800, 270-090 4300

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: CIRCLING NA NORTHEAST OF RWY 18L AND NORTHWEST OF RWY 24.
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY.



ADDITIONAL FLIGHT DATA:

CHART IN PLANVIEW: DYKEE/SAU 13.00 DME.
CHART IN PLANVIEW: CCR VOR/DME R-250 AT FESAV.
CHART CIRCLING ICON.
ROOSE TO RW36L: 2.98/50.
CHART VDP AT 1.90 DME
DISTANCE VDP TO THLD 1.12 NM
CHART FAS OBST: 104 TREE 381153N/1221711W.
HOLD NE, RT, 230.00 INBOUND

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

ALTERNATE: NA ☐ LOC: STANDARD - CAT C 1200-3, CAT D 1800-3, NA WHEN CONTROL TOWER CLOSED.

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
S-LOC 36L	800	1	776	800	1 1/4	776	800	2 1/2	776	800	2 1/2	776			
CIRCLING	800	1	764	800	1 1/4	764	1180	3	1144	1800	3	1764			
ROOSE FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)															
S-LOC 36L	420	1	396	420	1	396	420	1 1/8	396	420	1 1/8	396			
CIRCLING	600	1	564	680	1	644	1180	3	1144	1800	3	1764			

CHANGES - REASONS

ORIGINAL - FPT REQUEST.

PDF EDITS:
1. TERMINAL ROUTES REBAS - FESAV; ADDED (HGD).

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZOA, NORCAL APP CON, APC ATCT, AMGR

FLIGHT CHECKED BY

PENDING

Digitally signed by
ROBERT G HAMILTON
Jan 03, 2019

DEVELOPED BY
HEIDI SNIDER

Digitally signed by
HEIDI SNIDER
Dec 18, 2018

APPROVED BY
JULIE MORGAN

Digitally signed by
ROBERT G HAMILTON
Jan 03, 2019

OFFICE
AJV-5422

OFFICE
AJV-5420

DATE
10/15/2018

DATE
TITLE
MANAGER



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
GRAPHIC DEPARTURE PROCEDURES (DP)**

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NAPAA	THREE	NAPAA3.NAPAA	TWO	05/31/2012	28 FEBRUARY 2019

<u>TYPE:</u>	<u>OBSTACLE</u>	<u>COPTER</u>	<u>SID</u>	<u>SPECIAL</u>	<u>RNAV</u>
	☒	☐	☐	☐	☐

DP ROUTE DESCRIPTION:

TAKEOFF RWY 6: CLIMB HEADING 061.74 TO 700, THEN TURN RIGHT DIRECT SGD VORTAC, THENCE...

TAKEOFF RWY 18R, 19L: TURN RIGHT DIRECT SGD VORTAC, THENCE...

TAKEOFF RWY 1R, 24, 36L: TURN LEFT DIRECT SGD VORTAC, THENCE...

VCOA: RWY 1R, 6, 36L: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS NAPA COUNTY AIRPORT AT OR ABOVE 2300, THEN DIRECT SGD VORTAC, THENCE...

...AIRCRAFT DEPARTING SGD VORTAC ON R-165 CLIMB ON COURSE. ALL OTHER AIRCRAFT CONTINUE CLIMB ON SGD VORTAC R-165 TO 3000. THEN TURN RIGHT DIRECT SGD VORTAC BEFORE PROCEEDING ON COURSE.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

<u>TRANSITION NAME</u>	<u>TRANSITION COMPUTER CODE</u>	<u>FROM FIX/NAVAID</u>	<u>TO FIX/NAVAID</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>MEA</u>	<u>MOCA</u>	<u>CROSSING ALTITUDE/FIXES</u>
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PROCEDURAL DATA NOTES:

TAKEOFF MINIMUMS:

RWY 18R, 19L, STANDARD.

RWY 1R, STANDARD WITH MINIMUM CLIMB OF 360 FT PER NM TO 700 OR 2400-3 FOR VCOA.

RWY 6, STANDARD WITH MINIMUM CLIMB OF 440 FT PER NM TO 1500 OR 2400-3 FOR VCOA.

RWY 24, 200-1 1/8 OR STANDARD WITH MINIMUM CLIMB OR 255 FT PER NM TO 300, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 2100 FT PRIOR TO DER.

RWY 36L, STANDARD WITH MINIMUM CLIMB OF 310 FT PER NM TO 900 OR 2400-3 FOR VCOA.

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 1R, LIGHTING 43 FT FROM DER, 493 FT RIGHT OF CENTERLINE, 1 FT AGL/25 FT MSL.

SIGN 51 FT FROM DER, 420 FT LEFT OF CENTERLINE, 2 FT AGL/23 FT MSL.

POLE AND VEHICLES ON ROAD BEGINNING 262 FT FROM DER, 63 FT RIGHT OF CENTERLINE, UP TO 36 FT AGL/59 FT MSL.

VEHICLES ON ROAD 639 FT FROM DER, 436 FT LEFT OF CENTERLINE, 38 FT MSL.

VEHICLES ON ROAD BEGINNING 640 FT FROM DER, 95 FT LEFT OF CENTERLINE, UP TO 39 FT MSL.

TREE 812 FT FROM DER, 673 FT RIGHT OF CENTERLINE, 70 FT MSL.

TREE 1870 FT FROM DER, 470 FT RIGHT OF CENTERLINE, 71 FT MSL.

TREE 1.2 NM FROM DER, 2507 FT RIGHT OF CENTERLINE, 240 FT MSL.

TREE 1.2 NM FROM DER, 2314 FT RIGHT OF CENTERLINE, 243 FT MSL.

TREES BEGINNING 1.2 NM FROM DER, 2143 FT RIGHT OF CENTERLINE, UP TO 286 FT MSL.

TREE, FENCE, AND TERRAIN BEGINNING 1.3 NM FROM DER, 2073 FT RIGHT OF CENTERLINE, UP TO 309 FT MSL.

TREE 1.3 NM FROM DER, 2552 FT RIGHT OF CENTERLINE, 322 FT MSL.

TERRAIN AND TREES BEGINNING 1.3 NM FROM DER, 1204 FT RIGHT OF CENTERLINE, UP TO 368 FT MSL.

TERRAIN, FENCE, AND TREES BEGINNING 1.4 NM FROM DER, 1286 FT RIGHT OF CENTERLINE, UP TO 391 FT MSL.



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TREES BEGINNING 1.4 NM FROM DER, 1312 FT RIGHT OF CENTERLINE, UP TO 400 FT MSL.
TERRAIN, BUILDING, FENCES, AND TREES BEGINNING 1.4 NM FROM DER, 2008 FT RIGHT OF CENTERLINE, UP TO 417 FT MSL.
TERRAIN, ELECTRICAL SYSTEMS, AND FENCES BEGINNING 2.1 NM FROM DER, 2329 FT RIGHT OF CENTERLINE, UP TO 129 FT AGL/446 FT MSL.
TRANSMISSION LINE 2.2 NM FROM DER, 3214 FT RIGHT OF CENTERLINE, 123 FT AGL/542 FT MSL.
TERRAIN, ELECTRICAL SYSTEM, POLE, FENCES, AND TREES BEGINNING 2.2 NM FROM DER, 1515 FT RIGHT OF CENTERLINE, UP TO 116 FT AGL/544 FT MSL.
TERRAIN AND FENCE BEGINNING 2.3 NM FROM DER, 2076 FT RIGHT OF CENTERLINE, UP TO 551 FT MSL.
TERRAIN, FENCE, BUILDING, AND TREES BEGINNING 2.3 NM FROM DER, 1494 FT RIGHT OF CENTERLINE, UP TO 561 FT MSL.
TERRAIN AND TREE BEGINNING 2.4 NM FROM DER, 1626 FT RIGHT OF CENTERLINE, UP TO 581 FT MSL.
TERRAIN AND TREE BEGINNING 2.4 NM FROM DER, 2067 FT RIGHT OF CENTERLINE, UP TO 612 FT MSL.
TERRAIN AND TREES BEGINNING 2.4 NM FROM DER, 2564 FT RIGHT OF CENTERLINE, UP TO 643 FT MSL.
TREE 2.4 NM FROM DER, 3917 FT RIGHT OF CENTERLINE, 671 FT MSL.
TREES BEGINNING 2.5 NM FROM DER, 1954 FT RIGHT OF CENTERLINE, UP TO 687 FT MSL.

NOTE: RWY 6, POLE 1 FT FROM DER, 59 FT LEFT OF CENTERLINE, 3 FT AGL/37 FT MSL.
POLE 2 FT FROM DER, 60 FT RIGHT OF CENTERLINE, 2 FT AGL/36 FT MSL.
POLE 98 FT FROM DER, 480 FT LEFT OF CENTERLINE, 34 FT AGL/67 FT MSL.
POLE 333 FT FROM DER, 476 FT LEFT OF CENTERLINE, 34 FT AGL/68 FT MSL.
VEHICLES ON ROAD AND POLE BEGINNING 573 FT FROM DER, ON CENTERLINE, UP TO 33 FT AGL/69 FT MSL.
BUILDING 773 FT FROM DER, 660 FT RIGHT OF CENTERLINE, 29 FT AGL/70 FT MSL.
POLE AND BUILDINGS BEGINNING 1104 FT FROM DER, 472 FT RIGHT OF CENTERLINE, UP TO 37 FT AGL/80 FT MSL.
TREES BEGINNING 1288 FT FROM DER, 516 FT LEFT OF CENTERLINE, UP TO 98 FT MSL.
TREES BEGINNING 2082 FT FROM DER, 98 FT RIGHT OF CENTERLINE, UP TO 113 FT MSL.
TREES BEGINNING 2306 FT FROM DER, 53 FT RIGHT OF CENTERLINE, UP TO 130 FT MSL.
TREE 4681 FT FROM DER, 1103 FT LEFT OF CENTERLINE, 180 FT MSL.
TREES BEGINNING 4859 FT FROM DER, 1063 FT LEFT OF CENTERLINE, UP TO 187 FT MSL.
TERRAIN 5855 FT FROM DER, 2050 FT RIGHT OF CENTERLINE, 195 FT MSL.
FENCE AND TREES BEGINNING 5865 FT FROM DER, 1761 FT LEFT OF CENTERLINE, UP TO 211 FT MSL.
TERRAIN, FENCE, AND TREES BEGINNING 6068 FT FROM DER, 1419 FT RIGHT OF CENTERLINE, UP TO 281 FT MSL.
TREE 1 NM FROM DER, 2035 FT LEFT OF CENTERLINE, 212 FT MSL.
TREES BEGINNING 1 NM FROM DER, 1796 FT LEFT OF CENTERLINE, UP TO 224 FT MSL.
TREE 2 NM FROM DER, 2933 FT LEFT OF CENTERLINE, 340 FT MSL.
TREE 2 NM FROM DER, 2803 FT LEFT OF CENTERLINE, 359 FT MSL.
TREES BEGINNING 2.1 NM FROM DER, 3827 FT RIGHT OF CENTERLINE, UP TO 386 FT MSL.
TERRAIN 2.2 NM FROM DER, 3202 FT RIGHT OF CENTERLINE, 405 FT MSL.
TERRAIN BEGINNING 2.3 NM FROM DER, 911 FT RIGHT OF CENTERLINE, UP TO 464 FT MSL.
TERRAIN AND FENCE BEGINNING 2.4 NM FROM DER, 3273 FT LEFT OF CENTERLINE, UP TO 4 FT AGL/452 FT MSL.
TERRAIN 2.4 NM FROM DER, 3353 FT LEFT OF CENTERLINE, 457 FT MSL.
TERRAIN AND TREES BEGINNING 2.4 NM FROM DER, 61 FT LEFT OF CENTERLINE, UP TO 525 FT MSL.
FENCES BEGINNING 2.5 NM FROM DER, 100 FT RIGHT OF CENTERLINE, UP TO 6 FT AGL/519 FT MSL.

NOTE: RWY 18R, VEHICLES ON ROAD BEGINNING 26 FT FROM DER, 236 FT RIGHT OF CENTERLINE, UP TO 24 FT MSL.
VEHICLES ON ROAD BEGINNING 339 FT FROM DER, 235 FT RIGHT OF CENTERLINE, UP TO 25 FT MSL.

NOTE: RWY 19L, TERRAIN AND SIGN BEGINNING 14 FT FROM DER, 125 FT LEFT OF CENTERLINE, UP TO 2 FT AGL/14 FT MSL.
LIGHTING 15 FT FROM DER, 429 FT RIGHT OF CENTERLINE, 1 FT AGL/14 FT MSL.
TERRAIN 49 FT FROM DER, 483 FT LEFT OF CENTERLINE, 17 FT MSL.
NAVAID 1278 FT FROM DER, 816 FT LEFT OF CENTERLINE, 35 FT AGL/52 FT MSL.
TREE 3852 FT FROM DER, 1304 FT LEFT OF CENTERLINE, 111 FT MSL.



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NOTE: RWY 24, GENERAL UTILITY AND VEHICLES ON ROAD BEGINNING 56 FT FROM DER, 125 FT RIGHT OF CENTERLINE, UP TO 21 FT MSL.

GENERAL UTILITY 59 FT FROM DER, 122 FT LEFT OF CENTERLINE, 4 FT AGL/17 FT MSL.

VEHICLES ON ROAD BEGINNING 60 FT FROM DER, 18 FT LEFT OF CENTERLINE, UP TO 25 FT MSL.

VEHICLES ON ROAD BEGINNING 167 FT FROM DER, 9 FT RIGHT OF CENTERLINE, UP TO 22 FT MSL.

VEHICLES ON ROAD BEGINNING 354 FT FROM DER, 259 FT RIGHT OF CENTERLINE, UP TO 26 FT MSL.

TREES BEGINNING 1455 FT FROM DER, 776 FT LEFT OF CENTERLINE, UP TO 76 FT MSL.

TREES BEGINNING 2324 FT FROM DER, 540 FT LEFT OF CENTERLINE, UP TO 90 FT MSL.

TREE 2650 FT FROM DER, 527 FT LEFT OF CENTERLINE, 93 FT MSL.

TREE 4552 FT FROM DER, 554 FT LEFT OF CENTERLINE, 135 FT MSL.

VEHICLES ON ROAD AND BRIDGE BEGINNING 4943 FT FROM DER, 1631 FT RIGHT OF CENTERLINE, UP TO 165 FT AGL/170 FT MSL.

NOTE: RWY 36L, TERRAIN BEGINNING 7 FT FROM DER, 340 FT LEFT OF CENTERLINE, UP TO 37 FT MSL.

LIGHTING 10 FT FROM DER, 51 FT RIGHT OF CENTERLINE, 1 FT AGL/30 FT MSL.

VEHICLES ON ROAD BEGINNING 105 FT FROM DER, 317 FT RIGHT OF CENTERLINE, UP TO 41 FT MSL.

TERRAIN AND VEHICLES ON ROAD BEGINNING 105 FT FROM DER, 298 FT LEFT OF CENTERLINE, UP TO 43 FT MSL.

VEHICLES ON ROAD 203 FT FROM DER, 300 FT LEFT OF CENTERLINE, 44 FT MSL.

VEHICLES ON ROAD BEGINNING 363 FT FROM DER, 302 FT LEFT OF CENTERLINE, UP TO 45 FT MSL.

VEHICLES ON ROAD BEGINNING 559 FT FROM DER, 517 FT RIGHT OF CENTERLINE, UP TO 44 FT MSL.

TREES BEGINNING 3205 FT FROM DER, 791 FT RIGHT OF CENTERLINE, UP TO 124 FT MSL.

TREES BEGINNING 4610 FT FROM DER, 306 FT RIGHT OF CENTERLINE, UP TO 168 FT MSL.

TREE 1.1 NM FROM DER, 2026 FT RIGHT OF CENTERLINE, 226 FT MSL.

TREES BEGINNING 1.1 NM FROM DER, 1675 FT RIGHT OF CENTERLINE, UP TO 249 FT MSL.

TREE 1.1 NM FROM DER, 1840 FT RIGHT OF CENTERLINE, 253 FT MSL.

TERRAIN AND TREES BEGINNING 1.1 NM FROM DER, 1648 FT RIGHT OF CENTERLINE, UP TO 282 FT MSL.

TERRAIN, FENCES, AND TREES BEGINNING 1.1 NM FROM DER, 1635 FT RIGHT OF CENTERLINE, UP TO 298 FT MSL.

FENCE AND TREE BEGINNING 1.7 NM FROM DER, 3270 FT RIGHT OF CENTERLINE, UP TO 345 FT MSL.

TERRAIN, ELECTRICAL SYSTEM, FENCES, AND TREES BEGINNING 1.8 NM FROM DER, 607 FT RIGHT OF CENTERLINE, UP TO 129 FT AGL/446 FT MSL.

TOWER 1.9 NM FROM DER, 405 FT LEFT OF CENTERLINE, 128 FT AGL/326 FT MSL.

TERRAIN AND TREES BEGINNING 2 NM FROM DER, 543 FT RIGHT OF CENTERLINE, UP TO 526 FT MSL.

TERRAIN, FENCE, AND TREE BEGINNING 2 NM FROM DER, 1091 FT RIGHT OF CENTERLINE, UP TO 528 FT MSL.

TERRAIN, BUILDING, FENCE, AND TREES BEGINNING 2.1 NM FROM DER, 2008 FT RIGHT OF CENTERLINE, UP TO 5 FT AGL/554 FT MSL.

TERRAIN AND TREES BEGINNING 2.1 NM FROM DER, 2140 FT RIGHT OF CENTERLINE, UP TO 581 FT MSL.

TREE 2.2 NM FROM DER, 3915 FT RIGHT OF CENTERLINE, 585 FT MSL.

TERRAIN, FENCE, AND TREES BEGINNING 2.2 NM FROM DER, 2015 FT RIGHT OF CENTERLINE, UP TO 587 FT MSL.

TERRAIN AND TREES BEGINNING 2.3 NM FROM DER, 2568 FT RIGHT OF CENTERLINE, UP TO 599 FT MSL.

CONTROLLING OBSTACLES:

RWY 1R: 417 FT MSL TREE 381419.61N/1221530.43W (CLIMB GRADIENT), 1464 FT MSL AAO 381919.71N/1222254.52W (CLIMB-TO ALTITUDE).

RWY 6: 966 FT MSL TREE 381121.74N/1221332.94W (CLIMB GRADIENT), 1108 FT MSL AAO 381043.00N/1221252.00W (CLIMB-TO ALTITUDE).

RWY 24: 170 FT MSL VEHICLE ON ROAD 381232 32N/1221823.54W (CLIMB GRADIENT/CLIMB-TO ALTITUDE/CEILING). 170 FT MSL VEHICLE ON ROAD 381233.17N/1221826.34W (VISIBILITY).

RWY 36L: 298 FT MSL TREE 381422.35N/1221547.86W (CLIMB GRADIENT) , 1540 FT MSL AAO 381931.43N/1222321.52W (CLIMB-TO ALTITUDE).

VCOA: 1670 FT MSL AAO 381442.00N/1221224.00W (VCA). 2458 FT MSL AAO 381821.00N/1221015.00W (DIVERSE).

OBSTACLE MANDATING ODP ROUTE DEVELOPMENT:

RWY 1R, 36L: 1840 FT MSL AAO 381554.00N/1221251.00W.

RWY 6, 18R, 19L, 24: 2458 FT MSL AAO 381821.00N/1221015.00W.



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NAPAA	THREE	NAPAA3.NAPAA	TWO	05/31/2012	28 FEBRUARY 2019

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

REFERENCE MAG VAR: KAPC 15E EPOCH YEAR: 2005.

AIRPORTS SERVED:

<u>AIRPORT NAME</u>	<u>CITY</u>	<u>STATE</u>
NAPA COUNTY (KAPC)	NAPA	CA

COMMUNICATIONS:

ATIS, GND, CLEARANCE DELIVERY, KAPC TOWER (CTAF), ZOA

FIXES AND/OR NAVAIDS:

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED IN VISUAL CLIMB AREA, NO ADJUSTMENTS REQUIRED.



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NAPAA	THREE	NAPAA3.NAPAA	TWO	05/31/2012	28 FEBRUARY 2019

FLIGHT INSPECTED BY:

PENDING

Digitally signed by
ROBERT G HAMILTON
Dec 21, 2018

OFFICE SYMBOL:

DATE:

DEVELOPED BY:

HEIDI SNIDER

Digitally signed by
HEIDI SNIDER
Dec 18, 2018

OFFICE SYMBOL:

AJV-5422

DATE:

12/11/2018

APPROVED BY:

JULIE MORGAN

Digitally signed by
ROBERT G HAMILTON
Dec 21, 2018

OFFICE SYMBOL:

AJV-5420

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

<u>A4A</u>	<u>ALPA</u>	<u>AOPA</u>	<u>APA</u>	<u>HAI</u>	<u>NBAA</u>
☐	☒	☒	☐	☐	☒

OTHER:

ZOA, APC ATCT, AMGR

CHANGES - REASONS:

1. UPDATED ALL INSTANCES OF RWY 18L/36R TO 19L/1R - RENUMBERING OF RUNWAYS
2. UPDATED TAKEOFF OBSTACLE NOTES - NEW OBSTACLE STUDY. FORMATTED IN ACCORDANCE WITH OBSTACLE GROUPE SOP (1.0).
3. UPDATED TAKEOFF MINIMUMS RWY 36L FROM STANDARD WITH MINIMUM CLIMB OF 300 FT PER NM TO 900 TO STANDARD WITH MINIMUM CLIMB OF 310 FT PER NM TO 900 - OBSTACLE EVALUATION.
4. UPDATED TAKEOFF MINIMUMS RWY 1R FROM STANDARD WITH MINIMUM CLIMB OF 340 FT PER NM TO 700 TO STANDARD WITH MINIMUM CLIMB OF 360 FT PER NM TO 700 - OBSTACLE EVALUATION.
5. UPDATED TAKEOFF MINIMUMS RWY 24 FROM 300-1 OR STANDARD WITH MINIMUM CLIMB OR 250 FT PER NM TO 300 OR ALTERNATIVELY WITH STANDARD TAKEOFF MINIMUMS AND NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 2000 FT PRIOR TO DER TO RWY 24, 200-1 1/8 OR STANDARD WITH MINIMUM CLIMB OR 255 FT PER NM TO 300 OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 2100 FT PRIOR TO DER.
6. UPDATED TAKEOFF MINIMUMS RWY 6 FROM STANDARD WITH A MINIMUM CLIMB OF 430 FT PER NM TO 1500 TO STANDARD WITH A MINIMUM CLIMB OF 440 FT PER NM TO 1500 - OBSTACLE EVALUATION.
7. UPDATED DP ROUTE DESCRIPTION TAKEOFF RWY 6 FROM TURN RIGHT DIRECT SGD VORTAC, THENCE... TO CLIMB HEADING 061.74 TO 700 THEN TURN RIGHT DIRECT SGD VORTAC, THENCE... - OBSTACLE EVALUATION.
8. UPDATED CONTROLLING OBSTACLES FOR RWY 36L/1R/24/06 - UPDATED SURVEY DATA/TERRAIN EVALUATION.
9. ADDED VCOA TO DP ROUTE DESCRIPTION/ TAKEOFF PROCEDURES AND CONTROLLING INSTRUCTIONS FOR RWY 1R, 6, 36L - VCOA REQUIRED IAW.46F TABLE 2-1-1

QUALITY
3
CHECKED

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

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<u>AIRPORT</u> NAPA COUNTY	<u>AIRPORT ID</u> KAPC	<u>PROCEDURE NAME</u> RNAV (GPS) X RWY 36L	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> NAPA	<u>STATE</u> CA	
<u>AIRPORT ELEVATION</u> 36	<u>TDZE</u> 24	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u> NONE	<u>DATED</u>	<u>MAG VAR</u> 15E	<u>EPOCH YEAR</u> 2005
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> 02/28/2019	<u>CANCEL/SUSPEND</u>		

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>
HABAP		PEBGE		TF	FB	1.00	140.21	9.53	4000
PEBGE		FESAV		TF	FO	1.00	140.26	8.00	2600
SABLO		FESAV		TF	FO	1.00	270.88	8.41	2900
MICRA	IAF	ZIRUP	NOPT	TF	FB	1.00	056.54	6.63	4100
ZIRUP		FESAV		TF	FB	1.00	056.58	7.00	2600
SAU VOR/DME	IAF	WEGNA	NOPT	TF	FB	1.00	019.65	6.67	2600
WEGNA		FESAV		TF	FB	1.00	019.68	6.00	2600
FESAV	IF/IAF	CIKPI		TF	FB	1.00	005.69	6.01	1800
CIKPI	FAF	ZAPGO	MAP	TF	FO	0.30	005.71	5.45	
ZAPGO	MAP	436 MSL		CA			005.71		
436 MSL		CIVDA		DF	FB	1.00			
CIVDA		POPES		TF	FO	1.00	326.19	13.45	5000

MISSED APPROACH

MAP:

LNAV: ZAPGO

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 5000 DIRECT CIVDA AND ON TRACK 326.19 TO POPES AND HOLD, CONTINUE CLIMB-IN-HOLD TO 5000.

**MISSED APPROACH REQUIRES MINIMUM CLIMB OF 410 FEET PER NM TO 2000.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S FESAV, RT, 005.69 INBOUND, 2600 FT. IN LIEU OF PT (IAF), MAX 5000.

3. FAC: 005.71

FAF: CIKPI

DIST FAF TO MAP: 5.45

DIST FAF TO THLD: 5.75

4. MIN ALT: FESAV 2600, CIKPI 1800

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:

6. MIN GP INCPT:

GP ALT AT FAF :

OM:

MM:

IM:

7. GP ANGLE:

34:1: IS NOT CLEAR

20:1: IS CLEAR

TCH:

8. MSA FROM: ZAPGO 5000

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: CIRCLING NA NORTHEAST OF RWY 18R AND NORTHWEST OF RWY 24.
CHART NOTE: RWY 36L HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HABAP ON V108 NORTHWEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SABLO ON V195 SOUTHBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MICRA ON V107-301 NORTHWEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SAU VOR/DME ON V150 SOUTHWEST BOUND.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CIKPI TO RW36L: 2.85/50.
CHART VDP AT 1.32 NM TO ZAPGO
CHART FAS OBST: 314 TRANSMISSION_LINE 380916N/1221752W.
HOLD SE, RT, 330.39 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ CAT A, B 1300-2, CAT C 1300-3, CAT D 1800-3

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
LNAV MDA**	580	1	556	580	1	556	580	1 5/8	556	580	1 5/8	556			
LNAV MDA	1280	1 1/4	1256	1280	1 1/2	1256	1280	3	1256	1280	3	1256			
CIRCLING	1280	1 1/4	1244	1280	1 1/2	1244	1280	3	1244	1800	3	1764			

CHANGES - REASONS

ORIGINAL - FPT REQUEST.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZOA, NORCAL APP CON, APC ATCT, AMGR,

FLIGHT CHECKED BY

PENDING

Digitally signed by
ROBERT G HAMILTON

OFFICE

DATE

DEVELOPED BY

HEIDI SNIDER

Digitally signed by
HEIDI SNIDER
Dec 18, 2018

OFFICE
AJV-5422

DATE
10/10/2018

APPROVED BY

JULIE MORGAN

Digitally signed by
ROBERT G HAMILTON
Jan 03, 2019

OFFICE
AJV-5420

DATE

TITLE
MANAGER



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
GRAPHIC DEPARTURE PROCEDURES (DP)**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
DAVVY	TWO	DAVVY2.DAVVY	ONE	04/10/2008	28 FEBRUARY 2019

<u>TYPE:</u>	<u>OBSTACLE</u>	<u>COPTER</u>	<u>SID</u>	<u>SPECIAL</u>	<u>RNAV</u>
	☒	☐	☐	☐	☒

DP ROUTE DESCRIPTION:

TAKEOFF RWY 34: CLIMB DIRECT OLOWI, THEN ON TRACK 345.54 TO DAVVY, THEN ON ASSIGNED ROUTE, MAINTAIN 16000.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

<u>TRANSITION NAME</u>	<u>TRANSITION COMPUTER CODE</u>	<u>FROM FIX/NAVAID</u>	<u>TO FIX/NAVAID</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>MEA</u>	<u>MOCA</u>	<u>CROSSING ALTITUDE/FIXES</u>
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PROCEDURAL DATA NOTES:

NOTE: GPS REQUIRED.

NOTE: RNAV 1.

NOTE: RADAR REQUIRED.

TAKEOFF MINIMUMS:

RWY 16: NA, ATC.

RWY 34: STANDARD WITH MINIMUM CLIMB OF 337 FT PER NM TO 13200.

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 34: POLE 10 FT FROM DER, 26 FT LEFT OF CENTERLINE, 2 FT AGL/9932 FT MSL. TREES BEGINNING 18 FT FROM DER, 462 FT RIGHT OF CENTERLINE, UP TO 9949 FT MSL.

CONTROLLING OBSTACLES:

RWY 34: 12475 FT MSL AAO 392245.00N/1062333.00W

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

REFERENCE MAG VAR: KLXV 9E EPOCH YR: 2020

DME/DME ASSESSMENT NOT CONDUCTED

AIRPORTS SERVED:

<u>AIRPORT NAME</u>	<u>CITY</u>	<u>STATE</u>
LAKE COUNTY (KLXV)	LEADVILLE	CO

COMMUNICATIONS:

ASOS, UNICOM, CTAF, ATIS

FIXES AND/OR NAVAIDS:

REMARKS:

QUALITY
3
CHECKED

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
GRAPHIC DEPARTURE PROCEDURES (DP)**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
DAVVY	TWO	DAVVY2.DAVVY	ONE	04/10/2008	28 FEBRUARY 2019

FLIGHT INSPECTED BY: *Digitally signed by*
THOMAS E MOLOKIE **DAVID DANNER**
Dec 21, 2018

OFFICE SYMBOL: FICO
DATE: 12/18/18

DEVELOPED BY: *Digitally signed by*
LONNIE EVERHART (RALPH MILLER) **DAVID DANNER**
Dec 21, 2018

OFFICE SYMBOL: AJV-5400
DATE: 07/30/2018

APPROVED BY: *Digitally signed by*
LONNIE EVERHART **DAVID DANNER**
Dec 21, 2018

OFFICE SYMBOL: AJV-5400
DATE:

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

A4A	ALPA	AOPA	APA	HAI	NBAA
☐	☒	☒	☐	☐	☒

OTHER:
ZDV, CO AERO, APT MGR

CHANGES - REASONS:

1. UPDATED MAGVAR FROM 11E TO 9 E - PER FPT REQUEST
2. MOVED OLOWI FROM POSITION 391539.63N/1061932.22W TO 391609.25N/1061938.27W - ALIGN WITH TRUE RWY BEARING/MEET CURRENT BUILD CRITERIA.
3. REWORDED DP ROUTE DESCRIPTION TO MEET CURRENT CRITERIA - 8260.46F.

QUALITY
3
CHECKED

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
DEPARTURE (DATA RECORD)**

<u>DP NAME</u>		<u>NUMBER</u>		<u>DP COMPUTER CODE</u>		<u>SUPERSEDED NUMBER</u>		<u>DATED</u>	<u>EFFECTIVE DATE</u>
DAVVY		TWO		DAVVY2.DAVVY		ONE		04/10/2008	28 FEBRUARY 2019
<u>FIX/NAVAID</u>	<u>LAT/LONG</u>	<u>C</u>	<u>FO/FB</u>	<u>LEG TYPE</u>	<u>TC</u>	<u>DIST (NM)</u>	<u>ALTITUDE</u>	<u>SPEED</u>	<u>REMARKS</u>
RW34 (AER)	391238.91N/1061852.32W	N	-	-	-				
LOWI	391609.25N/1061938.27W	Y	FB	DF	-	3.55			CG 337 FT/NM TO 13200
DAVVY	393220.97N/1062138.14W	Y	FB	TF	354.54	16.26			

QUALITY
3
CHECKED

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
GRAPHIC DEPARTURE PROCEDURES (DP)**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
LOZUL	FOUR	LOZUL4.LOZUL	THREE	07/21/2016	28 FEBRUARY 2019

<u>TYPE:</u>	<u>OBSTACLE</u>	<u>COPTER</u>	<u>SID</u>	<u>SPECIAL</u>	<u>RNAV</u>
	☒	☐	☐	☐	☒

DP ROUTE DESCRIPTION:

TAKEOFF RWY 16: CLIMB DIRECT VUNOW, THEN ON TRACK 147.54 TO LOZUL, THEN ON ASSIGNED ROUTE, MAINTAIN 16000.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

<u>TRANSITION NAME</u>	<u>TRANSITION COMPUTER CODE</u>	<u>FROM FIX/NAVAID</u>	<u>TO FIX/NAVAID</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>MEA</u>	<u>MOCA</u>	<u>CROSSING ALTITUDE/FIXES</u>
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PROCEDURAL DATA NOTES:

NOTE: GPS REQUIRED.

NOTE: RNAV 1.

NOTE: RADAR REQUIRED.

TAKEOFF MINIMUMS:

RWY 34: NA, ATC

RWY 16: STANDARD WITH MINIMUM CLIMB OF 396 FT PER NM TO 13000.

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 16, POLES, SIGNS BEGINNING 9 FT FROM DER, 17 FT LEFT OF CENTERLINE, UP TO 2 FT AGL/9926 FT MSL. POLE 10 FT FROM DER, 17 FT RIGHT OF CENTERLINE, 2 FT AGL/9926 FT MSL.

TREES BEGINNING 180 FT FROM DER, 516 FT LEFT OF CENTERLINE, UP TO 9948 FT MSL. TRANSMISSION LINE, POLES BEGINNING 499 FT FROM DER, 632 FT LEFT OF CENTERLINE, UP TO 101 FT AGL/9989 FT MSL.

CONTROLLING OBSTACLES:

RWY 16: 12261 FT MSL AAO 390624.00N/1061303.00W

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

REFERENCE MAG VAR: KLXV 9E EPOCH YR: 2020

DME/DME ASSESSMENT NOT CONDUCTED

AIRPORTS SERVED:

<u>AIRPORT NAME</u>	<u>CITY</u>	<u>STATE</u>
LAKE COUNTY (KLXV)	LEADVILLE	CO

COMMUNICATIONS:

ASOS, UNICOM, CTAF, ATIS

FIXES AND/OR NAVAIDS:

QUALITY
3
CHECKED

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
GRAPHIC DEPARTURE PROCEDURES (DP)**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
LOZUL	FOUR	LOZUL4.LOZUL	THREE	07/21/2016	28 FEBRUARY 2019

REMARKS:

FLIGHT INSPECTED BY: *Digitally signed by*
GARY J VEER **DAVID DANNER**
Dec 21, 2018

OFFICE SYMBOL: **DATE:**
FICO 12/1/18

DEVELOPED BY: *Digitally signed by*
LONNIE EVERHART (RALPH MILLER) **DAVID DANNER**
Dec 21, 2018

OFFICE SYMBOL: **DATE:**
AJV-5400 07/31/2018

Digitally signed by
APPROVED BY: **DAVID DANNER**
LONNIE EVERHART Dec 21, 2018

OFFICE SYMBOL: **DATE:**
AJV-5400

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

<u>A4A</u>	<u>ALPA</u>	<u>AOPA</u>	<u>APA</u>	<u>HAI</u>	<u>NBAA</u>
☐	☒	☒	☐	☐	☒

OTHER:
ZDV, CO AERO, APT MGR

CHANGES - REASONS:
1. UPDATED MAGVAR FROM 11E TO 9 E - PER FPT REQUEST
2. MOVED VUNOW FROM 391040.53N/1061826.21W TO 391004.97N/1061818.73W - ALIGN WITH TRUE RWY BEARING/MEET CURRENT BUILD CRITERIA.
3. REWORDED DP ROUTE TO MEET CURRENT CRITIERA - 8260.46F.
4. CONVERTED WP VUNOW TO FLY OVER FIX TO MEET CONSTRUCTION CRITERIA - 8260.58A.

QUALITY
3
CHECKED

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
DEPARTURE (DATA RECORD)**

<u>DP NAME</u>							<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
LOZUL							FOUR	LOZUL4.LOZUL	THREE	07/21/2016	28 FEBRUARY 2019
<u>FIX/NAVAID</u>	<u>LAT/LONG</u>	<u>C</u>	<u>FO/FB</u>	<u>LEG TYPE</u>	<u>TC</u>	<u>DIST (NM)</u>	<u>ALTITUDE</u>	<u>SPEED</u>	<u>REMARKS</u>		
RW16 (AER)	391341.24N/1061905.93W	N	FB	-	-	-					
VUNOW	391004.97N/1061818.73W	Y	FO	DF	-	3.65			CG 396 FT/NM TO 13000		
LOZUL	384819.52N/1060614.98W	Y	FB	TF	156.54	23.68					

QUALITY
3
CHECKED

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> LAKE COUNTY	<u>AIRPORT ID</u> KLXV	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 16	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> LEADVILLE	<u>STATE</u> CO	
<u>AIRPORT ELEVATION</u> 9934	<u>TDZE</u> 9934	<u>SUPERSEDED</u> GPS RWY 16	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 08/20/2015	<u>MAG VAR</u> 9E	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

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>
DAVVY	IF/IAF	SKKID		TF	FB	1.00	168.56	9.45	13000
SKKID	FAF	INGRR/7.72 NM TO RW16		TF	FB	0.30	161.34	1.62	
INGRR/7.72 NM TO RW16		TALUE/4.58 NM TO RW16		TF	FB	0.30	161.34	3.14	
TALUE/4.58 NM TO RW16		RW16	MAP	TF	FO	0.30	161.34	4.58	
RW16	MAP	10184 MSL		CA			161.34		
10184 MSL		MORYU		DF	FB	1.00			
MORYU		LOZUL		TF	FO	1.00	141.50	16.64	16000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW16

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 16000 DIRECT MORYU AND ON TRACK 141.50 TO LOZUL AND HOLD, CONTINUE CLIMB-IN-HOLD TO 16000.

**MISSED APPROACH REQUIRES MINIMUM CLIMB OF 240 FEET PER NM TO 12500.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N DAVVY, RT, 168.56 INBOUND, 16000 FT. IN LIEU OF PT (IAF), MAX 17500.

3. FAC:

161.34

FAF: SKKID

DIST FAF TO MAP: 9.34

DIST FAF TO THLD: 9.34

4. MIN ALT: DAVVY 16000, SKKID 13000, INGRR/7.72 NM TO RW16 12460*, TALUE/4.58 NM TO RW16 11440*

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

250 HAT: 0.63

GS ANT:

6. MIN GP INCPT: 13000

GP ALT AT FAF : SKKID 13000

OM:

MM:

IM:

7. GP ANGLE: 3.04

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 51.0

8. MSA FROM: RW16 15600

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -26°C OR ABOVE 54°C.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, PROCEDURE NA.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: NOPT FOR ARRIVAL AT DAVVY ON V134 WESTBOUND.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 2.38 NM TO RW16*
*LNAV ONLY
WAAS CHANNEL #63142
REFERENCE PATH ID: W16A
FAS OBST: 10640 AAO 391708N/1061844W.
12200 AAO 392234N/1062050W, 11104 AAO 392128N/1062037W.
HOLD NW, LT, 141.50 INBOUND
LTP HAE: 3013.7 M

MINIMUMS:

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

ALTERNATE: NA ☐ CAT A 900-2, CAT B 1200-2, CAT C 2100-3

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**	10184	1	250	10184	1	250	10184	1	250		NA				
LPV DA	10546	1 3/4	612	10546	1 3/4	612	10546	1 3/4	612		NA				
LNAV/VNAV DA	10542	1 3/4	608	10542	1 3/4	608	10542	1 3/4	608		NA				
LNAV MDA	10740	1	806	10740	1 1/4	806	10740	2 1/2	806		NA				
CIRCLING	10740	1	806	11040	1 1/2	1106	12020	3	2086		NA				



CHANGES - REASONS

THE PUBLISHED GPS RWY 16 APPROACH CONVERTED TO RNAV (GPS) RWY 16 APPROACH. ALL SEGMENTS MODIFIED TO COMPLY WITH CURRENT CRITERIA AND PROCEDURE MAGVAR UPDATED FROM 11E TO 9E - WESTERN FPT REQUEST.

PDF EDITS:
SUPERSEDED PROCEDURE: GPS RWY 16.
ADDED CAT A AND B ALTERNATE MINS.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZDV, AMGR, CO AERO

FLIGHT CHECKED BY

Digitally signed by
DAVID DANNER
Dec 21, 2018

OFFICE

FICO

DATE

12/13/18

DEVELOPED BY

JULIE A. MORGAN (TARA MARTINELLI)

Digitally signed by
DAVID DANNER

OFFICE

AJV-5420

DATE

09/18/2018

APPROVED BY

JULIE MORGAN

Digitally signed by
DAVID DANNER
Dec 21, 2018

OFFICE

AJV-5420

DATE

TITLE
MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KLXV
RUNWAY	RW16
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W16A
LTP/FTP LATITUDE	391341.2400N
LTP/FTP LONGITUDE	1061905.9325W
LTP/FTP ELLIPSOIDAL HEIGHT	+30137
FPAP LATITUDE	391213.3190N
FPAP LONGITUDE	1061846.7385W
THRESHOLD CROSSING HEIGHT (TCH)	00051.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.04
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0800
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	16E78759

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+30269
FPAP ORTHOMETRIC HEIGHT	+30269



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP)
TITLE 14 CFR PART 97.37**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
LEADVILLE, CO	LAKE COUNTY	28 FEBRUARY 2019	2A

TAKEOFF MINIMUMS:

TEXTUAL DEPARTURE PROCEDURES:

RWY 16 - USE LOZUL (RNAV) DEPARTURE

RWY 34 - USE DAVVY (RNAV) DEPARTURE

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 16 - POLES, SIGNS BEGINNING 9 FT FROM DER, 17 FT LEFT OF CENTERLINE, UP TO 2 FT AGL/9926 FT MSL. POLE 10 FT FROM DER, 17 FT RIGHT OF CENTERLINE, 2 FT AGL/9926 FT MSL. TREES BEGINNING 180 FT FROM DER, 516 FT LEFT OF CENTERLINE, UP TO 9948 FT MSL. TRANSMISSION LINE, POLES BEGINNING 499 FT FROM DER, 632 FT LEFT OF CENTERLINE, UP TO 101 FT AGL/9989 FT MSL.

NOTE: RWY 34 - POLE 10 FT FROM DER, 26 FT LEFT OF CENTERLINE, 2 FT AGL/9932 FT MSL. TREES BEGINNING 18 FT FROM DER, 462 FT RIGHT OF CENTERLINE, UP TO 9949 FT MSL.

CONTROLLING OBSTACLES:

REMARKS:

FLIGHT INSPECTED BY: *Digitally signed by*
THOMAS E MOLOKIE **DAVID DANNER**
Dec 21, 2018

OFFICE SYMBOL: **DATE:**
FICO 12/18/18

DEVELOPED BY: *Digitally signed by*
LONNIE EVERHART (RALPH MILLER) **DAVID DANNER**
Dec 21, 2018

OFFICE SYMBOL: **DATE:**
AJV-5400 09/11/2018

APPROVED BY: *Digitally signed by*
LONNIE EVERHART **DAVID DANNER**
Dec 21, 2018

OFFICE SYMBOL: **DATE:**
AJV-5400

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

<u>A4A</u>	<u>ALPA</u>	<u>AOPA</u>	<u>APA</u>	<u>HAI</u>	<u>NBAA</u>
☐	☒	☒	☐	☐	☒

OTHER:
ZDV, DENVER FSS, CO AERO, APT MGR

CHANGES - REASONS:

ADDED TAKEOFF OBSTACLE NOTES - PER CRITERIA MEMO-12/27/2017-IMPLEMENTATION OF AFS WAIVER FOR FAA ORDER 8260.46F.

QUALITY
3
CHECKED

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
ILS STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.29

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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> BOB SIKES	<u>AIRPORT ID</u> KCEW	<u>PROCEDURE NAME</u> ILS OR LOC RWY 17	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> CRESTVIEW	<u>STATE</u> FL
<u>AIRPORT ELEVATION</u> 214	<u>TDZE</u> 213	<u>SUPERSEDED</u> ILS OR LOC RWY 17	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>DATED</u> 07/25/2013	<u>MAG VAR</u> 4W
<u>FACILITY</u> CEW	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

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>
CEW VORTAC		KOBRA LOM					081.72	7.53	2000
ROMEK INT/CEW 21.53 DME		KOBRA LOM					164.68	21.11	2000

MISSED APPROACH

MAP:

ILS: DA

LOC: 3.84 NM AFTER KOBRA LOM

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1000 THEN CLIMBING RIGHT TURN TO 2000 DIRECT KOBRA LOM AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT R SIDE OF COURSE 354.99 OUTBOUND 2000 FT WITHIN 10 MILES OF KOBRA LOM (IAF)
- 2.
3. FAC: 174.99 FAF: KOBRA LOM DIST FAF TO MAP: 3.84 DIST FAF TO THLD: 3.84
4. MIN ALT: KOBRA LOM 1600
5. DIST TO THLD FROM OM: 3.84 MM: IM: 150 HAT: GS ANT: 1329
6. MIN GS INCPT: 1600 GS ALT AT FAF : OM: 1498 MM: IM:
7. GP ANGLE: 3.00 34:1: 20:1: TCH: 49.9
8. MSA FROM: CE LOM 090-270 1800, 270-090 2300

EQUIPMENT REQUIREMENTS NOTES:

ADF REQUIRED.



NOTES:

CHART NOTE: CIRCLING NA FOR CAT D W OF RWY 17-35.

CHART NOTE: AUTOPILOT COUPLED APPROACH NA.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE EGLIN AFB ALTIMETER SETTING AND INCREASE S-ILS 17 DA TO 472 AND ALL MDA 60 FEET, INCREASE S-LOC 17 CAT C/D AND CIRCLING CAT D VISIBILITY 1/4 SM.

ADDITIONAL FLIGHT DATA:

CHART KVPS, KEGI IN PLANVIEW

CHART CIRCLING ICON.

CHART R-2915A, R-2914A, R-2918

CHART FAS OBST: 367 POLE 305004N/0863208W.

474 AAO 305109N/0863142W.

HOLD N, LT, 174.99 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☒

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
S-ILS 17	413	3/4	200	413	3/4	200	413	3/4	200	413	3/4	200			
S-LOC 17	620	1	407	620	1	407	620	1 1/8	407	620	1 1/8	407			
CIRCLING	700	1	486	700	1	486	820	1 3/4	606	840	2	626			

CHANGES - REASONS

1. UPDATED CIRCLING CONTROLLING OBS FOR ALL CATS - NEW CIRCLING RADII APPLIED.
2. UPDATED INBOUND COURSE FROM 171.00 TO 174.99 - AIRPORT MAGVAR UPDATE.
3. UPDATED HOLDING COURSE FROM 171.00 TO 174.99 - AIRPORT MAGVAR UPDATE.
4. RAISED CAT C CMDA/HAA FROM 700/487 TO 820/607 - NEW CIRCLING RADII OBS TOWER (12-004043) 520 MSL (2C).
5. RAISED CAT D CMDA/HAA FROM 820/607 TO 840/627 - NEW CIRCLING RADII OBS TOWER (12-004639) 478 MSL (5D).
6. RESTRICTED CAT D CIRCLING WEST OF RWY 17/35 - OBS TOWER (12-000273) 673 MSL (5D) WOULD RAISE MDA TO 1040.

COORDINATED WITH:**A4A** ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZJX, ELGIN APP CON, (USAF), AMGR**FLIGHT CHECKED BY**

MARC J HINCH

Digitally signed by **OFFICE****WARDELL HENNING** FICO

Dec 27, 2018

DATE

12/19/18

DEVELOPED BY

WARDELL HENNING (CHARLES CTR THIBODEAUX)

Digitally signed by

WARDELL HENNING

Dec 27, 2018

OFFICE

AJV-5430

DATE

10/11/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

WARDELL HENNING

Dec 27, 2018

OFFICE

AJV-5430

DATE**TITLE**
MANAGERQUALITY
25
CHECKED

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

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 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> BOB SIKES	<u>AIRPORT ID</u> KCEW	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> CRESTVIEW	<u>STATE</u> FL
<u>AIRPORT ELEVATION</u> 214	<u>TDZE</u> 213	<u>SUPERSEDED</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 06/25/2015	<u>MAG VAR</u> 4W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

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>
CEW VORTAC		WEDOM		TF	FO	1.00	044.55	9.93	2000
ROMEK	IAF	WEDOM	NOPT	TF	FB	1.00	160.48	15.24	2000
WEDOM	IF/IAF	GIYAT		TF	FB	1.00	174.99	6.02	1500
GIYAT	FAF	RW17	MAP	TF	FO	0.30	174.99	3.84	
RW17	MAP	470 MSL		CA			174.99		
470 MSL		HEKLU		DF	FO	1.00			2000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW17

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 DIRECT HEKLU AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N WEDOM, RT, 174.99 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 174.99FAF: GIYATDIST FAF TO MAP: 3.84DIST FAF TO THLD: 3.84

4. MIN ALT: WEDOM 2000, GIYAT 1500

5. DIST TO THLD FROM OM:MM:IM:150 HAT:257 HAT: 0.64GS ANT:

6. MIN GP INCPT: 1500GP ALT AT FAF : GIYAT 1500OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 51.0

8. MSA FROM: RW17 2300

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA FOR CAT D W OF RWY 17-35.
CHART NOTE: BARO-VNAV AND VDP NA WHEN USING EGLIN AFB ALTIMETER SETTING.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON CEW VORTAC AIRWAY RADIALS 073 CW 088.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE EGLIN AFB ALTIMETER SETTING AND INCREASE LPV DA TO 529, LNAV/VNAV DA TO 699 AND ALL MDA 60 FEET.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -5°C OR ABOVE 54°C.

ADDITIONAL FLIGHT DATA:

CHART KVPS, KEGI IN PLANVIEW
CHART CIRCLING ICON.
CHART R-2915A, R-2914A, R-2918
CHART VDP AT 1.24 NM TO RW17*
*LNAV ONLY
WAAS CHANNEL #56206
REFERENCE PATH ID: W17A
CHART FAS OBST: 367 POLE 305004N/0863208W.
HOLD S, LT, 355.02 INBOUND
LTP HAE: 37.8 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD: NA WHEN LOCAL WEATHER NOT AVAILABLE.



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	470	1	257	470	1	257	470	1	257	470	1	257			
LNAV/VNAV DA	640	1 1/2	427	640	1 1/2	427	640	1 1/2	427	640	1 1/2	427			
LNAV MDA	660	1	447	660	1	447	660	1 1/4	447	660	1 1/2	447			
CIRCLING	700	1	486	700	1	486	820	1 3/4	606	840	2	626			

CHANGES - REASONS

1. UPDATED CIRCLING CONTROLLING OBS FOR ALL CATS - NEW CIRCLING RADII APPLIED.
2. UPDATED INBOUND COURSE FROM 170.99 TO 174.99 - AIRPORT MAGVAR UPDATE.
3. UPDATED HOLDING COURSE FROM 351.02 TO 355.01 - AIRPORT MAGVAR UPDATE.
4. CHANGED LNAV/VNAV CONTROLLING OBS NUMBER FROM 10-1772 TO 12-001772 - NEW SURVEY DATA.
5. CHANGED LNAV CONTROLLING OBS FROM 100' TREE TO POLE (12-098924) - NEW SURVEY DATA, NO CHANGE IN MDA.
6. RAISED CAT C CMDA/HAA FROM 700/487 TO 820/607 - NEW CIRCLING RADII OBS TOWER (12-004043) 520 MSL (2C).
7. RAISED CAT D CMDA/HAA FROM 820/607 TO 840/627 - NEW CIRCLING RADII OBS TOWER (12-004639) 478 MSL (5D).
8. RESTRICTED CAT D CIRCLING WEST OF RWY 17/35 - OBS TOWER (12-000273) 673 MSL (5D) WOULD RAISE MDA TO 1040.
9. REMOVED CHART NOTE: DME/DME RNP-0.3 NA - 8260.58A CHG 1, TABLE 1-2-1.
10. ADDED PBN REQUIREMENTS NOTE: RNP APCH - 8260.58A CHG 1, TABLE 1-2-1.
11. CRC REMAINDER CHANGED FROM 313D91E4 TO C49D5676 - LTP/FTP ELLIPSOIDAL HEIGHT CHANGED.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZJX, EGLIN APP CON, AMGR

FLIGHT CHECKED BY

MARC J HINCK

Digitally signed by

WARDELL HENNING

Dec 27, 2018

OFFICE

FICO

DATE

12/19/18

DEVELOPED BY

WARDELL HENNING (CHARLES CTR THIBODEAUX)

Digitally signed by

WARDELL HENNING

Dec 27, 2018

OFFICE

AJV-5430

DATE

10/17/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

WARDELL HENNING

Dec 27, 2018

OFFICE

AJV-5430

DATE

TITLE
MANAGER

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCEW
RUNWAY	RW17
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W17A
LTP/FTP LATITUDE	304722.9070N
LTP/FTP LONGITUDE	0863126.7890W
LTP/FTP ELLIPSOIDAL HEIGHT	+00378
FPAP LATITUDE	304554.7020N
FPAP LONGITUDE	0863110.6110W
THRESHOLD CROSSING HEIGHT (TCH)	00051.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0312
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	C49D5676

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00650
FPAP ORTHOMETRIC HEIGHT	+00650



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

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<u>AIRPORT</u> BOB SIKES	<u>AIRPORT ID</u> KCEW	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> 1C	<u>CITY</u> CRESTVIEW	<u>STATE</u> FL
<u>AIRPORT ELEVATION</u> 214	<u>TDZE</u> 163	<u>SUPERSEDED</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 06/25/2015	<u>MAG VAR</u> 4W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

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>
CEW VORTAC		HEKLU		TF	FO	1.00	148.23	16.85	2000**
HEKLU	IF/IAF	GEBKE		TF	FB	1.00	355.02	6.00	1600
GEBKE	FAF	RW35	MAP	TF	FO	0.30	355.00	4.33	
RW35	MAP	450 MSL		CA			355.00		
450 MSL		WEDOM		DF	FO	1.00			2000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW35

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 DIRECT WEDOM AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)					
2.	HOLD S HEKLU, LT, 355.02 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 6000.								
3. FAC:	355.00	FAF: GEBKE	DIST FAF TO MAP: 4.33	DIST FAF TO THLD: 4.33					
4. MIN ALT:	HEKLU 2000, GEBKE 1600								
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	287 HAT: 0.77	GS ANT:				
6. MIN GP INCPT: 1600	GP ALT AT FAF : GEBKE 1600			OM:		MM:		IM:	
7. GP ANGLE: 3.00	34:1:	IS NOT CLEAR	20:1:	IS CLEAR	TCH: 52.0				
8. MSA FROM:	RW35 2300								

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA FOR CAT D W OF RWY 17-35.
CHART NOTE: BARO-VNAV AND VDP NA WHEN USING EGLIN AFB ALTIMETER SETTING.
CHART NOTE: RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -5°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CEW VORTAC ON V198 WESTBOUND.
CHART PLANVIEW NOTE: **ATC APPROVAL REQUIRED FROM CEW VORTAC TO HEKLU.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE EGLIN AFB ALTIMETER SETTING AND INCREASE LPV DA TO 509, LNAV/VNAV DA TO 550, AND ALL MDA 60 FEET, INCREASE LNAV CAT C/D VISIBILITY 1/8 SM, AND INCREASE CIRCLING CAT D VISIBILITY 1/4 SM.

ADDITIONAL FLIGHT DATA:

CHART KVPS, KEGI IN PLANVIEW
CHART CIRCLING ICON.
CHART R-2915A, R-2914A, R-2918
CHART VDP AT 1.33 NM TO RW35*
*LNAV ONLY
WAAS CHANNEL #40208
REFERENCE PATH ID: W35A
FAS OBST: 380 AAO 304251N/0863015W.
HOLD N, RT, 174.99 INBOUND
LTP HAE: 19.5 M



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

ALTERNATE: NA ☐ STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.

<u>CATEGORY:</u>	<u>A</u>			<u>B</u>			<u>C</u>			<u>D</u>			<u>E</u>		
<u>FINAL TYPE</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>
LPV DA	450	1	287	450	1	287	450	1	287	450	1	287			
LNAV/VNAV DA	491	1 1/4	328	491	1 1/4	328	491	1 1/4	328	491	1 1/4	328			
LNAV MDA	640	1	477	640	1	477	640	1 3/8	477	640	1 3/8	477			
CIRCLING	700	1	486	700	1	486	820	1 3/4	606	840	2	626			

CHANGES - REASONS

1. FAS DATA CRC CHANGED FROM 2624CC97 TO 83B83BBD FPAP COORDINATES UPDATED.
2. UPDATED INBOUND COURSE FROM 351.00 TO 355.00 - AIRPORT MAGVAR UPDATE.
3. UPDATED MISSED HOLDING COURSE FROM 170.99 TO 174.99 - AIRPORT MAGVAR UPDATE.
4. ADDED VDP AT 1.33 NM FROM RWY 35 - NEW EVALUATION CLEARS VISUAL SURFACE.
5. RAISED LNAV MDA/HAT FROM 580/417 TO 640/477 - CONTROLLING CHANGED FROM 319 TREE TO 518 MSL (2C) TOWER (12-004644).
6. RAISED CAT C CMDA/HAA FROM 700/487 TO 820/607 - NEW CIRCLING RADII OBS TOWER (12-004043) 520 MSL (2C). NEW CIRCLING RADII APPLIED.
7. RAISED CAT D CMDA/HAA FROM 820/607 TO 840/627 - NEW CIRCLING RADII OBS TOWER (12-004639) 478 MSL (5D). NEW CIRCLING RADII APPLIED.
8. RESTRICTED CAT D CIRCLING WEST OF RWY 17/35 - OBS TOWER (12-000273) 673 MSL (5D) WOULD RAISE MDA TO 1040.
9. REMOVED CHART NOTE: DME/DME RNP-0.3 NA - 8260.58A CHG 1, TABLE 1-2-1.
10. ADDED PBN REQUIREMENTS NOTE: RNP APCH - 8260.58A CHG 1, TABLE 1-2-1

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZJX, EGLIN APP CON, AMGR

FLIGHT CHECKED BY

MARC J HINCK

Digitally signed by **OFFICE**
WARDELL HENNING FICO

DATE
12/19/18

DEVELOPED BY

WARDELL HENNING (CHARLES CTR THIBODEAUX)

Digitally signed by Dec 27, 2018 **OFFICE**
WARDELL HENNING AJV-5430

DATE
10/23/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
WARDELL HENNING
Dec 27, 2018

OFFICE
AJV-5430

DATE

TITLE
MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCEW
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	304604.6640N
LTP/FTP LONGITUDE	0863112.4240W
LTP/FTP ELLIPSOIDAL HEIGHT	+00195
FPAP LATITUDE	304732.8655N
FPAP LONGITUDE	0863128.6245W
THRESHOLD CROSSING HEIGHT (TCH)	00052.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0312
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	83B83BBD

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00468
FPAP ORTHOMETRIC HEIGHT	+00468



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.23

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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> BOB SIKES	<u>AIRPORT ID</u> KCEW	<u>PROCEDURE NAME</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> 12B	<u>CITY</u> CRESTVIEW	<u>STATE</u> FL	
<u>AIRPORT ELEVATION</u> 214	<u>TDZE</u>	<u>SUPERSEDED</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> 12A	<u>DATED</u> 07/25/2013	<u>MAG VAR</u> 3E	<u>EPOCH YEAR</u> 1965
<u>FACILITY</u> CEW	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

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>

MISSED APPROACH

MAP:

8.28 NM AFTER CEW VORTAC OR AT MADEW/8.28 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1200 THEN CLIMBING LEFT TURN TO 2200 DIRECT CEW VORTAC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
2. HOLD W CEW VORTAC, LT, 106.22 INBOUND, 2200 FT. IN LIEU OF PT (IAF), MAX 6000.
3. **FAC:** 106.14 **FAF:** CEW VORTAC **DIST FAF TO MAP:** 8.28 **DIST FAF TO THLD:** 8.28
4. **MIN ALT:** CEW VORTAC 2200, NOTME/CEW 7.28 DME 900*
8. **MSA FROM:** CEW VORTAC 030-270 1800, 270-030 2300

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: CIRCLING NA FOR CAT D W OF RWY 17-35.

CHART PLANVIEW NOTE: NOPT FOR ARRIVAL ON CEW VORTAC AIRWAY RADIALS 263 CW 358.

*960 WHEN USING EGLIN AFB ALTIMETER SETTING.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE EGLIN AFB ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET AND INCREASE CIRCLING CAT C/D VISIBILITY 1/4 SM.



AIRPORT
BOB SIKES

AIRPORT ID
KCEW

PROCEDURE NAME
VOR-A

ORIGINAL/AMENDMENT
12B

CITY
CRESTVIEW

STATE
FL

ADDITIONAL FLIGHT DATA:

FAC CROSSES MIDPOINT OF RWY 17-35.
CHART CIRCLING ICON.
CHART FAS OBST: 520 TOWER 304624N/0863349W.
CHART R-2915A, R-2914A, R-2918
CHART KVPS, KEGI IN PLANVIEW

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD, CAT D 800 - 2 1/4, NA WHEN LOCAL WEATHER NOT AVAILABLE

<u>CATEGORY:</u>	<u>A</u>			<u>B</u>			<u>C</u>			<u>D</u>			<u>E</u>		
<u>FINAL TYPE</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>
CIRCLING	900	1	686	900	1	686	900	2	686	900	2 1/4	686			
NOTME FIX MINIMUMS (ADF OR DME REQUIRED)															
CIRCLING	700	1	486	700	1	486	820	1 3/4	606	840	2	626			

CHANGES - REASONS

1. UPDATED AIRPORT MAGVAR FROM 0E/1985 TO 4W/2020 - NO PROCEDURAL EFFECT.
2. APPLIED NEW CIRCLING RADII - 8260.3D MANDATED.
3. RAISED CAT C NOTME FIX MINIMUMS CMDA/HAA FROM 700/487 TO 820/607 - NEW CIRCLING RADII OBS TOWER (12-004043) 520 MSL (2C).
4. RAISED CAT D NOTME FIX MINIMUMS CMDA/HAA FROM 820/607 TO 840/627 - NEW CIRCLING RADII OBS TOWER (12-004639) 478 MSL (5D).
5. RESTRICTED CAT D CIRCLING WEST OF RWY 17/35 - OBS TOWER (12-000273) 673 MSL (5D) WOULD RAISE MDA TO 1040.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZJX, EGLIN APP CON, AMGR

FLIGHT CHECKED BY

MARC J HINCK

Digitally signed by
WARDELL HENNING
Dec 27, 2018

OFFICE
FICO
DATE
12/19/18

DEVELOPED BY

WARDELL HENNING (CHARLES CTR THIBODEAUX)

Digitally signed by
WARDELL HENNING
Dec 27, 2018

OFFICE
AJV-5430
DATE
10/09/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
WARDELL HENNING
Dec 27, 2018

OFFICE
AJV-5430

DATE

TITLE
MANAGER

QUALITY
4
CHECKED

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.
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<u>AIRPORT</u> SIOUX COUNTY RGNL	<u>AIRPORT ID</u> KSXK	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> MAURICE	<u>STATE</u> IA	
<u>AIRPORT ELEVATION</u> 1409	<u>TDZE</u> 1409	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u> NONE	<u>DATED</u>	<u>MAG VAR</u> 2E	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> CONCURRENT WITH AIRSPACE DOCKET #18-ACE-03	<u>CANCEL/SUSPEND</u>		

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 082/30 CW 262/30	NOPT	HALGA	IF/IAF	4500
2. 262/30 CW 082/30	PT	HALGA	IF/IAF	4500

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>
HALGA	IF/IAF	HADKU		TF	FB	1.00	172.49	8.00	3300
HADKU	FAF	HAMUP/2.36 NM TO RW17		TF	FB	0.30	172.51	3.45	
HAMUP/2.36 NM TO RW17		RW17	MAP	TF	FO	0.30	172.51	2.36	
RW17	MAP	1609 MSL		CA			172.51		
1609 MSL		SKYLE		DF	FO	1.00			4500

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW17

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4500 DIRECT SKYLE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N HALGA, RT, 172.49 INBOUND, 4500 FT. IN LIEU OF PT (IAF), MAX 8000.

3. FAC: 172.51FAF: HADKUDIST FAF TO MAP: 5.81DIST FAF TO THLD: 5.81

4. MIN ALT: HALGA 4500, HADKU 3300, HAMUP/2.36 NM TO RW17 2200, HAMUP/2.36 NM TO RW17 2200*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:200 HAT: 0.50GS ANT:

6. MIN GP INCPT: 3300GP ALT AT FAF : HADKU 3300OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 40.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING LE MARS ALTIMETER SETTING.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 34°C.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED; USE LE MARS ALTIMETER SETTING: INCREASE DA 59 FEET AND ALL MDA 60 FEET. INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 7/8 SM AND LNAV CAT C/ D VISIBILITIES TO 7/8 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 0.91 NM TO RW17*
*LNAV ONLY
WAAS CHANNEL #82242
REFERENCE PATH ID: W17A
CHART FAS OBST: 1474 TREE 425936N/0960926W.
CHART: 1941 TOWER 430534N/0960925W.
HOLD S, RT, 352.53 INBOUND
LTP HAE: 403 M

MINIMUMS:

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

ALTERNATE: NA☐ NA WHEN LOCAL WEATHER NOT AVAILABLE.; STANDARD - CAT D 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	1609	3/4	200	1609	3/4	200	1609	3/4	200	1609	3/4	200			
LNAV/VNAV DA	1659	3/4	250	1659	3/4	250	1659	3/4	250	1659	3/4	250			
LNAV MDA	1740	1	331	1740	1	331	1740	1	331	1740	1	331			
CIRCLING	1820	1	411	2080	1	671	2080	2	671	2080	2 1/4	671			

CHANGES - REASONS

12/20/2018: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON: 06/01/2018:
1. CHANGED PROCEDURE FROM ROUTINE TO CONCURRENT WITH AIRSPACE DOCKET #18-ACE-03.



COORDINATED WITH:

A4A ☐ **ALPA** ☐ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZMP, SUX APP CON, ARPT MGR

FLIGHT CHECKED BY

GREGORY SCOTT WIEBE

Digitally signed by

WARDELL HENNING

Dec 26, 2018

OFFICE

FIOG

DATE

12/09/2018

DEVELOPED BY

LONNIE EVERHART (ANDRE MARSH)

Digitally signed by

WARDELL HENNING

Dec 26, 2018

OFFICE

AJV-5400

DATE

06/01/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by

WARDELL HENNING

Dec 26, 2018

OFFICE

AJV-5400

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSXK
RUNWAY	RW17
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W17A
LTP/FTP LATITUDE	425936.0150N
LTP/FTP LONGITUDE	0960944.5770W
LTP/FTP ELLIPSOIDAL HEIGHT	+04030
FPAP LATITUDE	425807.3010N
FPAP LONGITUDE	0960932.9770W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1080
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	86B0888C
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04294
FPAP ORTHOMETRIC HEIGHT	+04294



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

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<u>AIRPORT</u> SIOUX COUNTY RGNL	<u>AIRPORT ID</u> KSXK	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> MAURICE	<u>STATE</u> IA
<u>AIRPORT ELEVATION</u> 1409	<u>TDZE</u> 1409	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u> NONE	<u>DATED</u>	<u>MAG VAR</u> 2E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> CONCURRENT WITH AIRSPACE DOCKET #18-ACE-03	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 262/30 CW 082/30	NOPT	SKYLE	IF/IAF	4500
2. 082/30 CW 262/30	PT	SKYLE	IF/IAF	4500

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>
SKYLE	IF/IAF	SIPEE		TF	FB	1.00	352.53	7.00	3300
SIPEE	FAF	SNARK/2.04 NM TO RW35		TF	FB	0.30	352.52	3.77	
SNARK/2.04 NM TO RW35		RW35	MAP	TF	FO	0.30	352.52	2.04	
RW35	MAP	1609 MSL		CA			352.52		
1609 MSL		HALGA		DF	FO	1.00			4500

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW35

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4500 DIRECT HALGA AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S SKYLE, RT, 352.53 INBOUND, 4500 FT. IN LIEU OF PT (IAF), MAX 8000.

3. FAC: 352.52FAF: SIPEEDIST FAF TO MAP: 5.81DIST FAF TO THLD: 5.81

4. MIN ALT: SKYLE 4500, SIPEE 3300, SNARK/2.04 NM TO RW35 2100*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:200 HAT: 0.50GS ANT:

6. MIN GP INCPT: 3300GP ALT AT FAF : SIPEE 3300OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 40.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING LE MARS ALTIMETER SETTING.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED; USE LE MARS ALTIMETER SETTING: INCREASE DA 59 FEET AND ALL MDA 60 FEET, INCREASE LNAV VISIBILITY CAT C/D TO 5/8 SM.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 3/4 SM, AND LNAV CAT C/D VISIBILITY TO 7/8 SM.
CHART NOTE: FOR INOPERATIVE ALS WHEN USING LE MARS ALTIMETER SETTING INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 7/8 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 0.85 NM TO RW35*
*LNAV ONLY
WAAS CHANNEL #93742
REFERENCE PATH ID: W35A
CHART FAS OBST: 1461 TREE 425856N/0960923W.
HOLD N, RT, 172.49 INBOUND
LTP HAE: 403 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/4, NA WHEN LOCAL WEATHER NOT AVAILABLE.

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	1609	1/2	200	1609	1/2	200	1609	1/2	200	1609	1/2	200			
LNAV/VNAV DA	1659	1/2	250	1659	1/2	250	1659	1/2	250	1659	1/2	250			
LNAV MDA	1720	1/2	311	1720	1/2	311	1720	1/2	311	1720	1/2	311			
CIRCLING	1820	1	411	2080	1	671	2080	2	671	2080	2 1/4	671			



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSXK
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	425841.9425N
LTP/FTP LONGITUDE	0960937.5050W
LTP/FTP ELLIPSOIDAL HEIGHT	+04030
FPAP LATITUDE	430010.6560N
FPAP LONGITUDE	0960949.1095W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1080
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER	1A8600CC
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04294
FPAP ORTHOMETRIC HEIGHT	+04294



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP)
TITLE 14 CFR PART 97.37**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
MAURICE, IA	SIOUX COUNTY RGNL	28 FEBRUARY 2019	ORIG

TAKEOFF MINIMUMS:
RWY 17, 35: STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:
NOTE: RWY 35: TERRIAN 36 FT FROM DER, 163 FT RIGHT OF CENTERLINE, 1412 FT MSL.
TERRIAN 172 FT FROM DER, 143 FT RIGHT OF CENTERLINE, 1414 FT MSL.
TERRIAN 187 FT FROM DER, 11 FT LEFT OF CENTERLINE, 1414 FT MSL.

CONTROLLING OBSTACLES:

REMARKS:

<u>FLIGHT INSPECTED BY:</u>	<i>Digitally signed by</i> WARDELL HENNING Dec 26, 2018	<u>OFFICE SYMBOL:</u> FICO	<u>DATE:</u> 12/9/2018
SCOTT WIEBE			

<u>DEVELOPED BY:</u>	<i>Digitally signed by</i> WARDELL HENNING Dec 26, 2018	<u>OFFICE SYMBOL:</u> AJV-5400	<u>DATE:</u> 05/24/2018
LONNIE EVERHART (ANDRE L. MARSH)			

<u>APPROVED BY:</u>	<i>Digitally signed by</i> WARDELL HENNING Dec 26, 2018	<u>OFFICE SYMBOL:</u> AJV-5400	<u>DATE:</u>
LONNIE EVERHART			

REQUIRED EFFECTIVE DATE:
CONCURRENT WITH AIRSPACE DOCKET #18-ACE-03.

COORDINATED WITH:

A4A	ALPA	AOPA	APA	HAI	NBAA
☐	☐	☒	☒	☐	☒

OTHER:
ZMP, SUX APP CON, ARPT MGR

CHANGES - REASONS:
ORIGINAL PROCEDURE

12/20/2018: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON: 06/01/2018:
1. CHANGED PROCEDURE FROM ROUTINE TO CONCURRENT WITH AIRSPACE.



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
NDB STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.27**

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> SHELBY COUNTY	<u>AIRPORT ID</u> K2H0	<u>PROCEDURE NAME</u> NDB-A	<u>ORIGINAL/AMENDMENT</u> 3	<u>CITY</u> SHELBYVILLE	<u>STATE</u> IL	
<u>AIRPORT ELEVATION</u> 619	<u>TDZE</u>	<u>SUPERSEDED</u> NDB-A	<u>ORIGINAL/AMENDMENT</u> 2B	<u>DATED</u> 03/29/2018	<u>MAG VAR</u> 2W	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> SYZ	<u>COORDINATES OF FACILITIES</u> 392423.48N / 0885036.80W	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

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>
AXC VORTAC		SYZ NDB					175.27	19.85	2400
BIB VORTAC		SYZ NDB					327.03	33.68	2400
VLA VORTAC		SYZ NDB					034.29	23.92	2400

MISSED APPROACH

MAP:

SYZ NDB

MISSED APPROACH INSTRUCTIONS:

CLIMBING LEFT TURN TO 2400 IN SYZ NDB HOLDING PATTERN.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT R SIDE OF COURSE 190.00 OUTBOUND 2400 FT WITHIN 10 MILES OF SYZ NDB (IAF)

2.

3. FAC: 010.00 FAF: DIST FAF TO MAP: DIST FAF TO THLD:

4. MIN ALT:

8. MSA FROM: SYZ NDB 2400

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 4-22 AND 14-32.

CHART NOTE: CIRCLING RWY 36 NA AT NIGHT.

CHART NOTE: USE DECATUR ALTIMETER SETTING, WHEN NOT RECEIVED USE MATTOON/CHARLESTON ALTIMETER SETTING AND INCREASE ALL MDAS 20 FEET AND CAT C VISIBILITY 1/4 SM.

ADDITIONAL FLIGHT DATA:



CHART AIRPORT ELEVATION: 619.
CHART DECATUR ASOS.
FAC CROSSES MIDPOINT OF RWY 14-32.
CHART CIRCLING ICON.
FAS OBST: 853 AAO 392054N/0885342W.
HOLD S, LT, 010.00 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☒

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
CIRCLING	1280	1	661	1280	1	661	1340	2	721		NA				

CHANGES - REASONS

1. REMOVED FEEDER SEGMENT FROM (MTO) MATOON VOR TO SYZ NDB AND ADDED FEEDER FROM (BIB) BIBLE GROVE V/TAC TO SYZ NDB - PER FPT REQUEST.
2. ADDED CHART NOTE: CIRCLING NA TO RWY'S 4-22 AND 14-32 - PER DIRECTIVE SOP 1.2 "UNPAVED RUNWAYS", PARA 4(2).
3. UPDATED FEEDER SEGMENT DISTANCE (VLA) VANDALIA V/TAC TO SYZ NDB FROM 23.93 TO 23.92 - 8260.3C, PARA 2-9-1.
4. CHANGED AIRPORT ELEVATION FROM 618 TO 619 - PER AIRNAV DATA.
5. CHANGED CIRCLING CAT A/B MDA/HAA FROM 1300/682 TO 1280/661, AND INCREASED CAT C MDA/HAA FROM 1300/682 TO 1340/721 - ADDED NEW CIRCLING CRITERIA PER FPT REQUEST, BASED ON NEW HAT/HAA.
6. CHANGED CHART NOTE FROM: USE DECATUR ALTIMETER SETTING, WHEN NOT RECEIVED USE MATTOON/CCHARLESTON ALTIMETER SETTING AND INCREASE ALL MDA 20 FEET, TO: USE DECATUR ALTIMETER SETTING, WHEN NOT RECEIVED USE MATTOON/CCHARLESTON ALTIMETER SETTING AND INCREASE ALL MDA 20 FEET, AND INCREASE CAT C VISIBILITY BY 1/4 SM - PER 8260.3C, TABLE 3-3-7, BASED ON NEW HAT/HAA.
7. CHARTED CIRCLING ICON.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ **OTHER:** ZAU, SLT FSS, ARPT MGR

FLIGHT CHECKED BY	<i>Digitally signed by</i>	OFFICE	DATE	
GRANT WEBBER	WARDELL HENNING	FICO	12/12/18	
	Dec 19, 2018			
DEVELOPED BY	<i>Digitally signed by</i>	OFFICE	DATE	
LONNIE EVERHART (TODD BOWLING)	WARDELL HENNING	AJV-5400	05/30/2018	
	Dec 19, 2018			
APPROVED BY	<i>Digitally signed by</i>	OFFICE	DATE	TITLE
LONNIE EVERHART	WARDELL HENNING	AJV-5400		MANAGER
	Dec 19, 2018			



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> SHELBY COUNTY	<u>AIRPORT ID</u> K2H0	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> SHELBYVILLE	<u>STATE</u> IL
<u>AIRPORT ELEVATION</u> 619	<u>TDZE</u> 619	<u>SUPERSEDED</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 03/29/2018	<u>MAG VAR</u> 2W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2010

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>
AXC VORTAC		EROXY		TF	FO	2.00	181.12	31.31	2400
VLA VORTAC		HEDKO		TF	FB	2.00	055.29	12.17	2400
CITIG	IAF	EROXY		TF	FB	2.00	271.74	5.00	2400
HEDKO	IAF	EROXY	NOPT	TF	FB	1.00	091.60	5.00	2400
EROXY	IF/IAF	AZBIX		TF	FB	1.00	001.67	6.10	2400
AZBIX	FAF	CIVAM/1.60 NM TO RW36		TF	FB	0.30	001.67	3.79	
CIVAM/1.60 NM TO RW36		RW36	MAP	TF	FO	0.30	001.67	1.60	
RW36	MAP	1019 MSL		CA			001.67		
1019 MSL		EROXY		DF	FO	1.00			2400

MISSED APPROACH

MAP:

LNAV: RW36

MISSED APPROACH INSTRUCTIONS:

CLIMBING LEFT TURN TO 2400 DIRECT EROXY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S EROXY, LT, 001.67 INBOUND, 2400 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 001.67FAF: AZBIXDIST FAF TO MAP: 5.39DIST FAF TO THLD: 5.39

4. MIN ALT: EROXY 2400, AZBIX 2400, CIVAM/1.60 NM TO RW36 1160

5. DIST TO THLD FROM OM:MM:IM:150 HAT:GS ANT:

6. MIN GP INCPT:GP ALT AT FAF :OM:MM:IM:

7. GP ANGLE:34:1: IS NOT CLEAR20:1: IS NOT CLEARTCH:

8. MSA FROM: RW36 2400

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 4-22 AND 14-32.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: USE DECATUR ALTIMETER SETTING, WHEN NOT RECEIVED USE MATTOON/CHARLESTON ALTIMETER SETTING AND INCREASE ALL MDA 20 FEET, AND CIRCLING CAT C VISIBILITY 1/4 SM.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT VLA VORTAC ON V14 WESTBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON AXC VORTAC AIRWAY RADIALS 187 CW 217.
CHART NOTE: RWY 36 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: STRAIGHT-IN RWY 36 NA AT NIGHT, CIRCLING RWY 36 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

AZBIX TO RW36: 3.04/40
CHART AIRPORT ELEVATION: 619.
CHART CIRCLING ICON.
CHART DECATUR ASOS.
CHART FAS OBST: 749 TREE 392431N/0885131W.

MINIMUMS:

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

ALTERNATE: NA☒

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
LNAV MDA	1080	1	461	1080	1	461	1080	1 3/8	461		NA				
CIRCLING	1280	1	661	1280	1	661	1340	2	721		NA				



CHANGES - REASONS

- 1. REMOVED FEEDER ROUTE FROM MTO VOR, VOR MON INITIATIVE.
- 2. ADDED CHART NOTE: CIRCLING NA TO RWY'S 4/22 AND 14/32 - "UNPAVED RUNWAYS".
- 3. CHANGED AIRPORT ELEVATION FROM 618 TO 619 - PER AIRNAV DATA.
- 4. CHANGED CIRCLING CAT A/B MDA/HAA FROM 1200/582 TO 1280/661, AND INCREASED CAT C MDA/HAA FROM 1220/602 TO 1340/721 - ADDED NEW CIRCLING CRITERIA/RADII.
- 5. CHANGED CHART NOTE FROM: USE DECATUR ALTIMETER SETTING, WHEN NOT RECEIVED USE MATTOON/CCHARLESTON ALTIMETER SETTING AND INCREASE ALL MDA 20 FEET, TO: USE DECATUR ALTIMETER SETTING, WHEN NOT RECEIVED USE MATTOON/CCHARLESTON ALTIMETER SETTING AND INCREASE ALL MDA 20 FEET, AND INCREASE CAT C VISIBILITY BY 1/4 SM - PER 8260.3C, TABLE 3-3-7, BASED ON NEW HAT/HAA.
- 6. REMOVED CHART NOTE: "DME/DME RNP-0.3 NA" AND REPLACED WITH "RNP APCH" IN PBM REQ NOTES - 8260.19H PARA 8-6-8B.
- 7. CHART CIRCLING ICON - NEW EXPANDED CIRCLING AREAS TO MATCH OTHER AIRPORT CIRCLING PROCEDURES.

11/19/2018: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON: 08/14/2018:

- 1. CHANGED #4: CHANGES - REASONS FROM: CHANGED CIRCLING CAT B MDA/HAA FROM 1200/582 TO 1220/601, AND INCREASED CAT C MDA/HAA FROM 1220/602 TO 1340/721 - ADDED NEW CIRCLING CRITERIA PER FPT REQUEST, AND TO MIRROR OTHER PROCEDURES AT K2H0 TO: RAISED CIRCLING CAT A/B MDA/HAA FROM 1200/582 TO 1280/661, AND CAT C MDA/HAA FROM 1220/602 TO 1340/721 - ADDED NEW CIRCLING CRITERIA/RADII/.



<u>AIRPORT</u> SHELBY COUNTY	<u>AIRPORT ID</u> K2H0	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> SHELBYVILLE	<u>STATE</u> IL
<u>COORDINATED WITH:</u>					
A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: AMGR, ZAU					
<u>FLIGHT CHECKED BY</u>		Digitally signed by	<u>OFFICE</u>	<u>DATE</u>	
SHAWN D MAXWELL		WARDELL HENNING	FICO	12/11/18	
		Dec 19, 2018			
<u>DEVELOPED BY</u>		Digitally signed by	<u>OFFICE</u>	<u>DATE</u>	
LONNIE EVERHART (TODD BOWLING)		WARDELL HENNING	AJV-5400	08/14/2018	
		Dec 19, 2018			
<u>APPROVED BY</u>	Digitally signed by	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>	
LONNIE EVERHART	WARDELL HENNING	AJV-5400		MANAGER	
	Dec 19, 2018				



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
COPTER ILS STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.35

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>HELIPORT</u> FAIRMONT MUNI	<u>HELIPORT ID</u> KFRM	<u>PROCEDURE NAME</u> COPTER ILS RWY 31	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> FAIRMONT	<u>STATE</u> MN	
<u>SURFACE ELEVATION</u> 1162	<u>TDZE</u> 1162	<u>SUPERSEDED</u> COPTER ILS RWY 31	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 03/15/2007	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u> CANCEL		

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>

PROCEDURE CANCELLED EFFECTIVE 28 FEBRUARY 2019

MISSED APPROACH

MAP:

MISSED APPROACH INSTRUCTIONS:

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- | | | | | | |
|--------------------------|-----------------|------------------|-------------------|----------------|-----|
| 1. PT | SIDE OF COURSE | OUTBOUND | FT WITHIN | MILES OF (IAF) | |
| 2. | | | | | |
| 3. FAC: | FAF: | DIST FAF TO MAP: | DIST FAF TO THLD: | | |
| 4. MIN ALT: | | | | | |
| 5. DIST TO THLD FROM OM: | MM: | IM: | 150 HAT: | GS ANT: | |
| 6. MIN GS INCPT: | GS ALT AT FAF : | | OM: | MM: | IM: |
| 7. GP ANGLE: | 34:1: | 20:1: | TCH: | | |
| 8. MSA FROM: | | | | | |

EQUIPMENT REQUIREMENTS NOTES:

NOTES:



ADDITIONAL FLIGHT DATA:

MINIMUMS:

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

ALTERNATE: NA ☐

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

CHANGES - REASONS

COORDINATED WITH:

A4A ☐ ALPA ☐ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZMP, AMGR

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY

HERMAN C. ROGERS

Digitally signed by
HERMAN C ROGERS
Oct 19, 2018

OFFICE

AJV-5432

DATE

10/19/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
WARDELL HENNING
Nov 26, 2018

OFFICE

AJV-5430

DATE

TITLE



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
ILS STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.29

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<u>AIRPORT</u> FAIRMONT MUNI	<u>AIRPORT ID</u> KFRM	<u>PROCEDURE NAME</u> ILS OR LOC RWY 31	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> FAIRMONT	<u>STATE</u> MN
<u>AIRPORT ELEVATION</u> 1162	<u>TDZE</u> 1162	<u>SUPERSEDED</u> ILS OR LOC RWY 31	<u>ORIGINAL/AMENDMENT</u> ORIG-E	<u>DATED</u> 04/28/2016	<u>MAG VAR</u> 4E
<u>FACILITY</u> I-FQJ	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1995

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 220/30 CW 040/30	NOPT	NUHZU	IF/IAF	3100
2. 040/30 CW 130/30		HOPUD	IAF	3200
3. 130/30 CW 220/30		ZILUD	IAF	3200

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>
HOPUD	IAF	NUHZU	NOPT	TF	FB	1.00	040.10	8.00	3100
ZILUD	IAF	NUHZU	NOPT	TF	FB	1.00	220.11	8.00	3100
NUHZU/FRM 13.29 DME	IF/IAF	MONTZ LOM/FRM 6.29 DME					310.11	7.00 (I-FQJ)	3100

MISSED APPROACH

MAP:

ILS: DA
 LOC: 5.61 NM AFTER MONTZ LOM/FRM 6.29 DME OR AT FRM 0.69 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1800 THEN CLIMBING RIGHT TURN TO 3200 DIRECT NUHZU AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD SE NUHZU, LT, 310.11 INBOUND, 3100 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 310.11 FAF: MONTZ LOM/FRM 6.29 DME DIST FAF TO MAP: 5.61 DIST FAF TO THLD: 5.61
4. MIN ALT: NUHZU/FRM 13.29 DME 3100, MONTZ LOM/FRM 6.29 DME 3100
5. DIST TO THLD FROM OM: 5.61 MM: 0.47 IM: 150 HAT: GS ANT: 841
6. MIN GS INCPT: 3100 GS ALT AT FAF : OM: 3016 MM: 1355 IM:
7. GP ANGLE: 3.00 34:1: 20:1: TCH: 58.7
8. MSA FROM:

EQUIPMENT REQUIREMENTS NOTES:
ADF OR DME REQUIRED, LOC ONLY

PBN REQUIREMENTS NOTES:
RNAV 1-GPS REQUIRED

NOTES:

CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 1480 MSL.
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS-31 ALL CATS VISIBILITY TO 7/8 SM.
CHART NOTE: DME FROM FRM DME.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 2.00 DME*
DISTANCE VDP TO THLD 1.31 NM
* LOC ONLY
FAS OBST: 1370 AAO 433506N/0942106W.

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD - CAT C 900-2 1/4, CAT D 900-2 1/2

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
S-ILS 31	1480	1/2	318	1480	1/2	318	1480	1/2	318	1480	1/2	318			
S-LOC 31	1620	1/2	458	1620	1/2	458	1620	7/8	458	1620	7/8	458			
CIRCLING	1640	1	478	1660	1	498	1980	2 1/4	818	1980	2 1/2	818			

QUALITY
16
CHECKED

CHANGES - REASONS

1. REMOVED DME ARCS, FRM FEEDER, AND PT FROM PROCEDURE - FRM VOR/DME VOR PORTION DECOMMISSIONED
2. INCREASED INT LENGTH FROM 5.71 TO 7.00 NM AND ADDED INITIALS, TAA, HIL, AND RNAV MISSED APPROACH - REQUIRED FOR PROCEDURE ENTRY
3. DELETED NOTE, S-LOC-31: FOR INOPERATIVE MALSR INCREASE CATS A, B, AND C VISIBILITY TO 1, CAT D VISIBILITY TO 1-1/4 AND ADDED NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS-31 ALL CATS VISIBILITY TO 7/8 SM - PER VIS CHECK CALC
4. REMOVED MSA - TAA ADDED
5. REMOVED PLANVIEW NOTE ADF OR DME REQUIRED - MOVED TO EQUIPMENT REQUIREMENT NOTES
6. ADDED THE BACK-UP ALTIMETER NOTE TO THE 8260-9 PART C GENERAL REMARKS - IAW 8-6-9.F.(3)
7. CHANGED FINAL, INTERMEDIATE, AND HOLDING INBOUND COURSE FROM 310.12 TP 310.11 - NEW SURVEY DATA
8. INCREASED S-LOC 31 MDA FROM 1540 TO 1620 - ADDED AAO TO FINAL
9. LOWERED S-ILS 31 ALL CATS AND S-LOC 31 CATS A/B VISIBILITY FROM 3/4 TO 1/2, INCREASED S-LOC 31 CATS C/D FROM 3/4 TO 7/8 - PER VISCHECK
10. ADDED CHART CIRCLING ICON TO ADDITIONAL FLIGHT DATA - USED NEW CIRCLING CRITERIA
11. INCREASED CIRCLING CAT B MDA FROM 1640 TO 1660, CAT C FROM 1640 TO 1980, CAT D FROM 1720 TO 1980 - LARGER CIRCLING RADII AND NEW OBST DATA
12. CHANGED CIRCLING CAT C VIS FROM 1 1/2 TO 2 1/4, CAT D FROM 2 TO 2 1/2 - PER VISCHECK
13. ADDED "RNAV 1-GPS REQUIRED" TO PBN EQUIPMENT REQUIREMENTS NOTES - NEEDED FOR ENTRY AND RNAV MISSED APPROACH
14. APPROVED ALTERNATE MINS - REQUIRED
15. CHANGED MISSED APPROACH FROM "CLIMB TO 2500 THEN CLIMBING RIGHT TURN TO 3100 DIRECT MONTZ LOM" TO "CLIMB TO 1800 THEN CLIMBING RIGHT TURN TO 3100 DIRECT NUHZU" - CHANGED MISSED APPROACH FROM CONVENTIONAL TO RNAV REQUIRED WHEN USING TAA ON LOC APPROACHES PER .19H PAGE 4-56
16. ADDED VDP - VDP MEETS CURRENT CRITERIA
17. ADDED TAA WITH INITIALS - REQUIRED FOR PROCEDURE ENTRY SINCE FRM VOR IS BEING REMOVED

COORDINATED WITH:

A4A☐

ALPA☒

AOPA☒

APA☐

HAI☐

NBAA☒

OTHER: ZMP, AMGR

FLIGHT CHECKED BY

SCOTT WIEBE

Digitally signed by

WARDELL HENNING

Dec 13, 2018

OFFICE

FICO

DATE

12/9/18

DEVELOPED BY

HERMAN C. ROGERS

Digitally signed by

HERMAN C ROGERS

Nov 09, 2018

OFFICE

AJV-5432

DATE

10/10/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

WARDELL HENNING

Dec 13, 2018

OFFICE

AJV-5430

DATE

TITLE

MANAGER



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

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 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> FAIRMONT MUNI	<u>AIRPORT ID</u> KFRM	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 13	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> FAIRMONT	<u>STATE</u> MN
<u>AIRPORT ELEVATION</u> 1162	<u>TDZE</u> 1162	<u>SUPERSEDED</u> RNAV (GPS) RWY 13	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 05/07/2009	<u>MAG VAR</u> 4E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1995

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>
ISLER		HOVUD		TF	FB	1.00	073.89	22.91	3100
WAGIK	IAF	UCEVA	NOPT	TF	FB	1.00	196.54	15.09	3100
HOVUD	IAF	UCEVA	NOPT	TF	FB	1.00	039.91	5.00	3100
UCEVA	IF/IAF	ZEROB		TF	FB	1.00	129.96	6.02	3100
ZEROB	FAF	PEYDI/1.70 NM TO RW13		TF	FB	0.30	130.03	4.15	
PEYDI/1.70 NM TO RW13		RW13	MAP	TF	FO	0.30	130.03	1.70	
RW13	MAP	1460 MSL		CA			130.03		
1460 MSL		SIKTE		DF	FO	1.00			3100

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW13

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3100 DIRECT SIKTE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD NW UCEVA, RT, 129.96 INBOUND, 3100 FT. IN LIEU OF PT (IAF), MAX 8000.

3. FAC: 130.03FAF: ZEROBDIST FAF TO MAP: 5.85DIST FAF TO THLD: 5.85

4. MIN ALT: UCEVA 3100, ZEROB 3100, PEYDI/1.70 NM TO RW13 1740*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:298 HAT: 0.80GS ANT:

6. MIN GP INCPT: 3100GP ALT AT FAF : ZEROB 3100OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 48.2

8. MSA FROM: RW13 3200

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -17°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
*LNAV ONLY
CHART NOTE: RWY 13 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT ISLER ON V 170 EASTBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT WAGIK ON V 250 NORTHEAST BOUND.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.11 NM TO RW13*
*LNAV ONLY
WAAS CHANNEL #45812
REFERENCE PATH ID: W13A
CHART FAS OBST: 1309 TREE 433912N/0942631W.
HOLD SE, RT, 310.24 INBOUND
LTP HAE: 324.9 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 900-2 1/4, CAT D 900-2 1/2

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	1460	1	298	1460	1	298	1460	1	298	1460	1	298			
LNAV/VNAV DA	1695	2	533	1695	2	533	1695	2	533	1695	2	533			
LNAV MDA	1560	1	398	1560	1	398	1560	1	398	1560	1 1/4	398			
CIRCLING	1640	1	478	1660	1	498	1980	2 1/4	818	1980	2 1/2	818			



CHANGES - REASONS

- 1. REMOVED COZFO TO HOVUD FEEDER - PER ATC AND FPT REQUEST
- 2. DELETED NOTE, VISIBILITY REDUCTION BY HELICOPTERS NA AND ADDED NOTE, RWY 13 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - 34:1 VISUAL SURFACE PENETRATED, UPDATED PER 19H FORMAT
- 3. CHANGED NOTE FROM "FOR UNCOMPENSATED BARO.VNAV SYSTEMS, LNAVNAV NA BELOW ·17C (2F) OR ABOVE 48C (114F)" TO "FOR UNCOMPENSATED BARO.VNAV SYSTEMS, LNAVNAV NA BELOW ·17C OR ABOVE 48C" - UPDATED PER 19H FORMAT
- 4. DELETED CHART NOTE: DME/DME RNP-0.3 NA -NO LONGER REQUIRED
- 5. ADDED PBN REQUIREMENTS NOTE, RNP APCH - PER 8260.58A REQUIREMENT
- 6. MARKED 20:1 AS CLEAR - NO 20:1 PENETRATIONS EXIST
- 7. ADDED "CHART CIRCLING ICON" TO ADDITIONAL FLIGHT DATA - NEW CIRCLING CRITERIA APPLIED FLIGHT CHECKED WITH ILS OR LOC RWY 31
- 8. CHANGED CIRCLING CAT B MDA/HAA FROM 1640/478 TO 1640/498, CAT C FROM 1640/478 TO 1980/818, AND CAT D FROM 1720/558 TO 1980/818 - NEW CIRCLING CRITERIA APPLIED
- 9. CHANGED CIRCLING CAT C VISIBILITY FROM 1 1/2 TO 2 1/4, CAT D FROM 2 TO 2 1/2 - PER VIS CHECK CALC
- 10. IN FAS DATA, CRC REMAINDER CHANGED FROM 8E2450C1 TO 48890F12 - NEW SURVEY DATA
- 11. MOVED BACK-UP ALTIMETER SETTING NOTES TO GENERAL REMARKS ON THE 8260-9 - AWOS IS ON WMSCR
- 12. ADDED VGSI NOT COINCIDENT NOTE - PROCEDURE TCH EXCEEDS VGSI TCH BY 5.2 FEET
- 13. ADDED PROCEDURE NA NOTES - TURNS EXCEED AMOUNT OF TURN LIMITS
- 14. UPDATED BARO-VNAV TEMPERATURE ABOVE FROM 46C TO 54C - PER TOOLBOX AFS CALCULATOR

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZMP, AMGR

FLIGHT CHECKED BY

SCOTT WIEBE

Digitally signed by
WARDELL HENNING

<u>OFFICE</u>	<u>DATE</u>
FICO	12/9/18

DEVELOPED BY

HERMAN C. ROGERS

Digitally signed by
HERMAN C ROGERS
Nov 15, 2018

<u>OFFICE</u>	<u>DATE</u>
AJV-5432	10/11/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
WARDELL HENNING
Dec 13, 2018

<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
AJV-5430		MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KFRM
RUNWAY	RW13
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W13A
LTP/FTP LATITUDE	433857.5405N
LTP/FTP LONGITUDE	0942530.4160W
LTP/FTP ELLIPSOIDAL HEIGHT	+03249
FPAP LATITUDE	433755.5200N
FPAP LONGITUDE	0942402.3200W
THRESHOLD CROSSING HEIGHT (TCH)	00048.2
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1072
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER	48890F12
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03530
FPAP ORTHOMETRIC HEIGHT	+03530



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR/DME STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.23

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> FAIRMONT MUNI	<u>AIRPORT ID</u> KFRM	<u>PROCEDURE NAME</u> VOR/DME RWY 13	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> FAIRMONT	<u>STATE</u> MN	
<u>AIRPORT ELEVATION</u> 1162	<u>TDZE</u> 1162	<u>SUPERSEDED</u> VOR/DME RWY 13	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 03/12/1987	<u>MAG VAR</u> 7E	<u>EPOCH YEAR</u> 1965
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u> CANCEL		

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE

PROCEDURE CANCELLED EFFECTIVE 28 FEBRUARY 2019

MISSED APPROACH

MAP:

MISSED APPROACH INSTRUCTIONS:

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- | | | | | |
|--------------|----------------|------------------|-------------------|----------------|
| 1. PT | SIDE OF COURSE | OUTBOUND | FT WITHIN | MILES OF (IAF) |
| 2. | | | | |
| 3. FAC: | FAF: | DIST FAF TO MAP: | DIST FAF TO THLD: | |
| 4. MIN ALT: | | | | |
| 8. MSA FROM: | | | | |

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

MINIMUMS:

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



ALTERNATE: NA ☐

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

CHANGES - REASONS

COORDINATED WITH:

A4A ☐ ALPA ☐ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZMP, AMGR

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY

HERMAN C. ROGERS

Digitally signed by
HERMAN C ROGERS
Oct 19, 2018

OFFICE

AJV-5432

DATE

10/18/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
WARDELL HENNING
Nov 26, 2018

OFFICE

AJV-5430

DATE

TITLE



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> WELLSBORO JOHNSTON	<u>AIRPORT ID</u> KN38	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 10	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> WELLSBORO	<u>STATE</u> PA
<u>AIRPORT ELEVATION</u> 1892	<u>TDZE</u> 1892	<u>SUPERSEDED</u> RNAV (GPS) RWY 10	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 01/08/2015	<u>MAG VAR</u> 11W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 009/30 CW 189/30	NOPT	ODPOJ	IF/IAF	4900
2. 189/30 CW 009/30		ODPOJ	IF/IAF	4900

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>
ODPOJ	IF/IAF	ZEGOK		TF	FB	1.00	098.72	5.00	3400
ZEGOK	FAF	RW10	MAP	TF	FO	0.30	098.80	4.93	
RW10	MAP	2292 MSL		CA			098.80		
2292 MSL		ITEHO		DF	FB				
ITEHO		WUDUL		TF	FO	1.00	020.77	9.24	4500

MISSED APPROACH

MAP:

LP: RW10
 LNAV: RW10

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4500 DIRECT ITEHO AND ON TRACK 020.77 TO WUDUL AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD W ODPOJ, RT, 098.72 INBOUND, 4900 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC:

098.80

FAF: ZEGOK

DIST FAF TO MAP: 4.93

DIST FAF TO THLD: 4.93

4. MIN ALT: ODPOJ 4900, ZEGOK 3400

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:

6. MIN GP INCPT:

GP ALT AT FAF :

OM:

MM:

IM:

7. GP ANGLE:

34:1:

IS NOT CLEAR

20:1:

IS NOT CLEAR

TCH:

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 11 AND 29.
CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: RWY 10 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
ZEGOK TO RW10: 3.00/40.
CHART DUKE MOA
WAAS CHANNEL #58130
REFERENCE PATH ID: W10A
HOLD SW, RT, 047.37 INBOUND
LTP HAE: 543.6 M

MINIMUMS:

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

ALTERNATE: NA ☐ CAT A, B 900-2, CAT C 900-2 1/2

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
LP MDA	2760	1	868	2760	1 1/4	868	2760	2 1/2	868		NA				
LNAV MDA	2760	1	868	2760	1 1/4	868	2760	2 1/2	868		NA				
CIRCLING	2760	1 1/4	868	2760	1 1/4	868	2760	2 1/2	868		NA				



CHANGES - REASONS

1. UPDATED H-I-L FROM HOLD W ODPOJ, RT, 098.73 INBOUND, 4400 FT. IN LIEU OF PT (IAF) TO HOLD W ODPOJ, RT, 098.72 INBOUND, 4900 FT. IN LIEU OF PT (IAF), MAX 6000-UPDATED DOCUMENTATION CRITERIA IAW 8-6-7 B2(B).
2. UPDATED LP ALL CATS MDA/HAT FROM 2940/1048 TO 2760/868; UPDATED LP CAT A VIS FROM 1 1/4 TO 1SM, LP CAT B VIS FROM 1 1/2SM TO 1 1/4SM AND LP CAT C VIS FROM 3SM TO 2 1/2SM - AIRPORT NOW HAS ITS OWN PRIMARY ALTIMETER, NEW SURVEY INFORMATION.
3. UPDATED LNAV ALL CATS MDA/HAT FROM 3000/1108 TO 2760/868; UPDATED LNAV CAT A VIS FROM 1 1/4 TO 1SM, LNAV CAT B VIS FROM 1 1/2SM TO 1 1/4SM AND LNAV CAT C VIS FROM 3SM TO 2 1/2SM -AIRPORT NOW HAS ITS OWN PRIMARY ALTIMETER, NEW SURVEY INFORMATION.
4. UPDATED CIRCLING ALL CATS MDA/HAA FROM 3000/1108 TO 2760/868; UPDATED CIRCLING CAT A VIS FROM 1 1/4 TO 1SM, CIRCLING CAT B VIS FROM 1 1/2SM TO 1 1/4SM AND CIRCLING CAT C VIS FROM 3SM TO 2 1/2SM -AIRPORT NOW HAS ITS OWN PRIMARY ALTIMETER, NEW SURVEY INFORMATION.
5. DELETED CHART NOTE: WHEN VGSI INOP, PROCEDURE NA AT NIGHT ADDED CHART NOTE: PROCEDURE NA AT NIGHT-20:1 NOT CLEAR-IAW 8260-19H 8-6-11 O(2)(A) AND 8-6-11.O(14).
6. ADDED 20:1 NOT CLEAR TO LINE 7-IWA 8260.19H 8-6-7 G(3).
7. ADDED PBN EQUIPMENT REQUIREMENT NOTE RNP APCH-NEW CRITERIA NOTE IAW 8260.19H H8-6-8 B (1).
8. DELETED CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA AND ADDED CHART NOTE: RWY 10 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED--20:1 NOT CLEAR IAW 8260.19H 8-6-11 K(3).
9. ADDED CHART NOTE: CIRCLING NA TO RWYS 11 AND 29-TURF RUNWAYS IAW 8260-19H 8-6-11 O(5)(E).
10. MOVED CONTINGENCY ALTIMETER NOTE TO BACK OF -9-AIRPORT NOW HAS ITS OWN PRIMARY ALTIMETER- IAW 8260-19H 8-6-9 F(3).
11. DELETED NOTE: DME/DME RNP-0.3 NA-NO LONGER NEEDED IAW 8260.19H 1-1-5 F (14).
12. UPDATED RNP ON INTERMEDIATE ROUTE FROM 0.5 TO 1.0-NEW CRITERIA IAW 8260-19H 4-6-10 F.
13. UPDATED FAS DATA LTP LATITUDE /LONGITUDE FROM 414349.7080W TO 414339.7070N TO 0772411.1420W TO 0772411.1400W; FPAP LATITUDE/LONGITUDE FROM 414343.0100N/0772212.2300W TO 414343.0015N/0772212.2255W; CRC REMAINDER FROM E728B1C6 TO 7CB909DE-UPDATED SURVEY INFORMATION.
- 14.CHART CIRCLING ICON-UPDATED CIRCLING CRITERIA.
15. RAISED TAA ALTITUDES FROM 4400 TO 4900 - PRECIPITOUS TERRAIN ELIMINATES MOUNTAINOUS ROC REDUCTION

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ELM APP CON, ZNY, ZOB

FLIGHT CHECKED BY DURLEY J FELDER	Digitally signed by DAVID DANNER Jan 07, 2019	OFFICE FICO	DATE 12/18/18	
DEVELOPED BY JOHN HAZELTON	Digitally signed by JOHN HAZELTON Oct 31, 2018	OFFICE AJV-5421	DATE 09/25/2018	
APPROVED BY JULIE MORGAN	Digitally signed by DAVID DANNER Jan 07, 2019	OFFICE AJV-5420	DATE	TITLE MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	N38
RUNWAY	RW10
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W10A
LTP/FTP LATITUDE	414339.7070N
LTP/FTP LONGITUDE	0772411.1400W
LTP/FTP ELLIPSOIDAL HEIGHT	+05436
FPAP LATITUDE	414343.0015N
FPAP LONGITUDE	0772212.2255W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1656
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0

CRC REMAINDER	7CB909DE
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+05759
FPAP ORTHOMETRIC HEIGHT	+05759



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

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<u>AIRPORT</u> WELLSBORO JOHNSTON		<u>AIRPORT ID</u> N38	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 28	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> WELLSBORO	<u>STATE</u> PA
<u>AIRPORT ELEVATION</u> 1892	<u>TDZE</u> 1892	<u>SUPERSEDED</u> RNAV (GPS) RWY 28	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 01/08/2015	<u>MAG VAR</u> 11W	<u>EPOCH YEAR</u> 2000
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 189/30 CW 009/30	NOPT	NOZVY	IF/IAF	4900
2. 009/30 CW 189/30		NOZVY	IF/IAF	4900

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>
NOZVY	IF/IAF	COVOJ		TF	FB	1.00	279.03	5.04	3500
COVOJ	FAF	RW28	MAP	TF	FO	0.30	278.95	4.96	
RW28	MAP	2292 MSL		CA			278.95		
2292 MSL		WUDUL		DF	FO	1.00			4500

MISSED APPROACH

MAP:

LP: RW28
LNAV: RW28

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 4500 DIRECT WUDUL AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)

2. HOLD E NOZVY, RT, 279.03 INBOUND, 4900 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 278.95 FAF: COVOJ DIST FAF TO MAP: 4.96 DIST FAF TO THLD: 4.96

4. MIN ALT: NOZVY 4900, COVOJ 3500

5. DIST TO THLD FROM OM: MM: IM: 150 HAT: GS ANT: MM: IM:

6. MIN GP INCPT: GP ALT AT FAF :

7. GP ANGLE: 34:1: IS NOT CLEAR 20:1: IS NOT CLEAR TCH:

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 11 AND 29.
CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: RWY 28 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART DUKE MOA
WAAS CHANNEL #99530
REFERENCE PATH ID: W28A
HOLD SW, RT, 047.37 INBOUND
LTP HAE: 541.1 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 900-2 1/2

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
LP MDA	2300	1	408	2300	1	408	2300	1 1/8	408		NA				
LNAV MDA	2420	1	528	2420	1	528	2420	1 1/2	528		NA				
CIRCLING	2680	1	788	2680	1	788	2740	2 1/2	848		NA				



CHANGES - REASONS

1. UPDATED TAA 1 FROM 189/30 CW 009/30 NOPT TO 189/8 CW 009/8 TO; FROM 189/30 CW 009/30 NOPT TO NOZVY -UPDATED SURVEY INFORMATION.
2. DELETED TAA 2 (TAA STEPDOWN)-UPDATED SURVEY INFORMATION.
3. UPDATED TAA 3 TO TAA 2 AND UPDATED FROM 009-30 CW 189/30 TO 009/8 CW 189/8 TO; 009/30 CW 189/30 TO NOZVY -UPDATED SURVEY INFORMATION.
4. DELETED TAA 4 (TAA STEPDOWN)-UPDATED SURVEY INFORMATION.
5. UPDATED H-I-L FROM HOLD E NOZVV, RT, 279.03 INBOUND, 4200 FT. IN LIEU OF PT (LAF) TO; HOLD E NOZVY, RT, 279.03 INBOUND, 4900 FT. IN LIEU OF PT (IAF), MAX 6000-UPDATED SURVEY INFORMATION AND UPDATED DOCUMENTATION CRITERIA IAW 8-6-7 B2(B).
6. UPDATED LP ALL CATS MDA/HAT FROM 2520/628 TO 2300/408 AND UPDATED LP CAT C VIS FROM 1 3/4SM TO 1 1/8SM-AIRPORT NOW HAS ITS OWN PRIMARY ALTIMETER, NEW SURVEY INFORMATION.
7. UPDATED LNAV ALL CATS MDA/HAT FROM 2740/848 TO 2420/528 AND UPDATED LNAV CAT B VIS FROM 1 1/4SM TO 1SM AND LNAV CAT C VIS FROM 2 1/2 TO 1 1/2-AIRPORT NOW HAS ITS OWN PRIMARY ALTIMETER, NEW SURVEY INFORMATION.
8. UPDATED CIRCLING CAT A/B MDA/HAA FROM 2940/1048 TO 2680/788, CIRCLING CAT C MDA/HAA FROM 2940/1048 TO 2740/8488 AND UPDATED CIRCLING CAT A VIS FROM 1 1/4 SM TO 1SM, CIRCLING CAT B VIS FROM 1 1/2SM TO 1 SM AND CIRCLING CAT C VIS FROM 3SM TO 2 1/2SM-AIRPORT NOW HAS ITS OWN PRIMARY ALTIMETER, NEW SURVEY INFORMATION.
9. DELETED CHART NOTE: WHEN VGSI INOP, PROCEDURE NA AT NIGHT ADDED CHART NOTE: PROCEDURE NA AT NIGHT-20:1 NOT CLEAR-IAW 8260-19H 8-6-11 O(2)(A) AND 8-6-11O(14).
10. ADDED 20:1 NOT CLEAR TO LINE 7-IAW 8260.19H 8-6-7 G(3).
11. ADDED PBN EQUIPMENT REQUIREMENT NOTE RNP APCH-NEW CRITERIA NOTE IAW 8260.19H8-6-8 B (1).
12. DELETED CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA AND ADDED CHART NOTE: RWY 28 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED-20:1 NOT CLEAR IAW 8260.19H 8-6-11 K(3).
13. ADDED CHART NOTE: CIRCLING NA TO RWYS 11 AND 29-TURF RUNWAYS IAW 8260-19H 8-6-11 O(5)(E).
14. MOVED CONTINGENCY ALTIMETER NOTE TO BACK OF -9-AIRPORT NOW HAS ITS OWN PRIMARY ALTIMETER, RETAINED CURRENT MINIMUMS MINOR AMENDMENT ONLY IAW 8260-19H 8-6-9 F (3).
15. DELETED NOTE: DME/DME RNP-0.3 NA-NO LONGER NEEDED IAW 8260.19H 1-1-5 F (14).
16. UPDATED RNP ON INTERMEDIATE ROUTE FROM 0.5 TO 1.0-IAW 8260-19H 4-6-10 F.
17. ADDED RNP 1.0 ON MISSED APPROACH SEGMENT.
18. UPDATED MISSED APPROACH INSTRUCTIONS FROM CLIMB TO 3000 THEN CLIMBING RIGHT TURN TO 4500 DIRECT WUDUL AND HOLD TO CLIMBING RIGHT TURN TO 4500 DIRECT WUDUL AND HOLD-UPDATED SURVEY INFORMATION.
19. UPDATED FAS DATA LTP LATITUDE/LONGITUDE FROM 414341.0250N/0772323.7.435W TO 414341.0245N/0772323.7440W, FPAP LALTITUDE/LONGITUDE FROM 414337.7200N/0772522.6500W TO 414337.7095N/0772522.6565WAND CRC REMAINDER FROM 2E2F48F3 TO 58F0B170-UPDATED SURVEY INFORMATION.
20. CHARTED CIRCLING ICON-UPDATED CIRCLING CRITERIA.
21. UPDATED MIN ALT: NOZVY 4200 TO MIN ALT: NOZVY 4900-PRECIPITOUS TERRAIN ELIMINATES MOUNTAINOUS ROC REDUCTION.

12/26/2018: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 9/28/2018.

1. ADDED PROFILE NOTE: VISUAL SEGMENT - OBSTACLES - FLIGHT CHECK REQUEST.

2. REMOVED VDA - FLIGHT CHECK REQUEST.

3. CRC REMAINDER CHANGED FROM 58F0B170 TO 683059E4 - REMOVAL OF FAS GPA AND TCH.

COORDINATED WITH:

A4A

☐

ALPA

☒

AOPA

☒

APA

☐

HAI

☐

NBAA

☒

OTHER:

ELM APP CON, ZNY, ZOB

FLIGHT CHECKED BY GARY J VEER	Digitally signed by DAVID DANNER Dec 27, 2018	OFFICE FICO	DATE 1/3/19	
DEVELOPED BY JOHN HAZELTON	Digitally signed by DAVID DANNER Dec 27, 2018	OFFICE AJV-5421	DATE 09/26/2018	
APPROVED BY JOULIE MORGAN	Digitally signed by DAVID DANNER Dec 27, 2018	OFFICE AJV-5420	DATE	TITLE MANAGER



FAS DATA BLOCK INFORMATION**DATA FIELD****DATA**

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	N38
RUNWAY	RW28
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W28A
LTP/FTP LATITUDE	414341.0245N
LTP/FTP LONGITUDE	0772323.7440W
LTP/FTP ELLIPSOIDAL HEIGHT	+05411
FPAP LATITUDE	414337.7095N
FPAP LONGITUDE	0772522.6565W
THRESHOLD CROSSING HEIGHT (TCH)	00000.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	00.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1664
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	683059E4

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+05734
FPAP ORTHOMETRIC HEIGHT	+05734



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

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 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> LAURENS COUNTY	<u>AIRPORT ID</u> KLUX	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 8	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> LAURENS	<u>STATE</u> SC
<u>AIRPORT ELEVATION</u> 698	<u>TDZE</u> 698	<u>SUPERSEDED</u> RNAV (GPS) RWY 8	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 05/25/2017	<u>MAG VAR</u> 7W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2015

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 349/30 CW 119/30	NOPT	REINR	IF/IAF	3000
2. 119/30 CW 169/30	NOPT	119/25 CW 169/25		4600
3. 119/25 CW 169/25		REINR	IF/IAF	3000
4. 169/30 CW 259/30		169/19 CW 259/19		4600
5. 169/19 CW 259/19		SPIIN	IAF	3000
6. 259/30 CW 349/30		SRCLE	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>
SPIIN	IAF	REINR	NOPT	TF	FB	1.00	169.23	8.00	3000
SRCLE	IAF	REINR	NOPT	TF	FB	1.00	349.28	8.00	3000
REINR	IF/IAF	AMFAB		TF	FB	1.00	079.25	8.00	2200
AMFAB	FAF	WIBOM/1.50 NM TO RW08		TF	FB	0.30	079.34	3.05	
WIBOM/1.50 NM TO RW08		RW08	MAP	TF	FO	0.30	079.34	1.50	
RW08	MAP	948 MSL		CA			079.34		
948 MSL		JOEEM		DF	FO	1.00			3000



MISSED APPROACH

MAP:
LPV: DA
LNAV/VNAV: DA
LNAV: RW08

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT JOEEM AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)					
2.	HOLD W REINR, RT, 079.25 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.								
3. FAC:	079.34	FAF: AMFAB	DIST FAF TO MAP: 4.55	DIST FAF TO THLD: 4.55					
4. MIN ALT:	REINR 3000, AMFAB 2200, WIBOM/1.50 NM TO RW08 1220*								
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	250 HAT: 0.62	GS ANT:				
6. MIN GP INCPT: 2200	GP ALT AT FAF : AMFAB 2200		OM:	MM:	IM:				
7. GP ANGLE: 3.00	34:1: IS NOT CLEAR	20:1: IS CLEAR	TCH: 54.0						
8. MSA FROM:									

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: RWY 8 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
*LNAV ONLY

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
WAAS CHANNEL #72635
REFERENCE PATH ID: W08A
CHART FAS OBST: 822 TREE 343036N/0815727W.
912 AAO 342939N/0820306W.
HOLD E, RT, 259.54 INBOUND
LTP HAE: 182.1 M



MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

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	948	3/4	250	948	3/4	250		NA			NA				
LNAV/VNAV DA	957	3/4	259	957	3/4	259		NA			NA				
LNAV MDA	1080	1	382	1080	1	382		NA			NA				
CIRCLING	1200	1	502	1200	1	502		NA			NA				

CHANGES - REASONS

- CHANGED CHART NOTE FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F)" TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 54C" - NEW NOTES FORMAT ELIMINATES THE REQUIREMENT FOR FAHRENHEIT VALUES.
- DELETED CHART NOTE: DME/DME RNP-0.3 NA - IAW 8260.19H 8-6-8 (B(1)) PBN NAVSPEC.
- ADDED PBN REQUIREMENTS NOTE: RNP APCH - IAW 8260.19H 8-6-8 (B(1)) PBN NAVSPEC.
- DELETED CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED; USE GREENWOOD ALTIMETER SETTING AND INCREASE ALL DA 53 FEET AND ALL MDA 60 FEET; INCREASE LPV AND LNAV/VNAV ALL CATS VISIBILITY 1/4 MILE - NOTE REMOVED AND PLACED ON BACK OF -9 FORM AS CONTINGENCY REMOTE ALTIMETER NOTE.
- LNAV/VNAV DA/HAT CHANGED FROM "958/260" TO "957/259" - NEW CONTROLLING OBSTACLE AND UPDATE TO TDZ ELEVATION.
- IF/IAF NAME CHANGED FROM "WUKRI" TO "REINR" AND DISTANCE FROM PFAF CHANGED FROM "5.10NM" TO "8.00NM" - ATC REQUESTED NAME CHANGE AND UPDATED DISTANCES TO MEET CURRENT STRAIGHT-IN CRITERIA.
- IAF NAME CHANGED FROM "ZUGIP" TO "SPIIN" AND DISTANCE FROM IF/IAF CHANGED FROM "7.00NM" TO "8.00NM" - ATC REQUESTED NAME CHANGE AND UPDATED DISTANCES TO MEET CURRENT TURNING CRITERIA (90 DEGREES).
- IAF NAME CHANGED FROM "JOPEB" TO "SRCLE" AND DISTANCE FROM IF/IAF CHANGED FROM "7.00NM" TO "8.00NM" - ATC REQUESTED NAME CHANGE AND UPDATED DISTANCES TO MEET CURRENT TURNING CRITERIA (90 DEGREES).
- CHANGED FAS OBST FROM "815 TREE 343040N/0815729W" TO "822 TREE 343036N/0815727W" - NEW CONTROLLING OBSTACLE ON FINAL.
- ADDED "20:1 IS CLEAR" TO LINE 7 OF -3 FORM - IAW 8260.19H 8-6-7 (G(3)) FOR DOCUMENTING CLEAR SLOPES FOR RNAV PROCEDURE.
- ADDED MAXIMUM ALTITUDE "6000" TO IF/IAF (REINR) - NEW REPORTS FORMAT NOW INCLUDES MAXIMUM HOLDING AT HOLD-IN-LIEU FIXES.
- CRC REMAINDER CHANGED FROM "5174E289" TO "FDCFF98E" - CHANGE TO LTP/FTP AND PFAF LAT. AND LONG. COORDINATES AND SLIGHT CHANGE TO LTP/FRAP ORTHOMETRIC HEIGHTS.
- ADDED ADDITIONAL FLIGHT DATA NOTE: CHART CIRCLING ICON - NOTE IS REQUIRED TO SHOW NEW CIRCLING CRITERIA DIMENSIONS.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZTL, GSP APP CONTROL, AIRPORT MANAGER

FLIGHT CHECKED BY

KEVIN RIESE

Digitally signed by
DAVID TEFFETELLER
Dec 27, 2018

OFFICE
FICO
DATE
12/18/18

DEVELOPED BY

JAMES LAFFERTY

Digitally signed by
JAMES LAFFERTY

OFFICE
AJV-5433
DATE
10/04/2018

APPROVED BY

PATRICK MULQUEEN

Oct 26, 2018

Digitally signed by
DAVID TEFFETELLER
Dec 27, 2018

OFFICE
AJV-5430
DATE
TITLE
MANAGER



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

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<u>AIRPORT</u> LAURENS COUNTY	<u>AIRPORT ID</u> KLUX	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 26	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> LAURENS	<u>STATE</u> SC
<u>AIRPORT ELEVATION</u> 698	<u>TDZE</u> 696	<u>SUPERSEDED</u> RNAV (GPS) RWY 26	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 05/25/2017	<u>MAG VAR</u> 7W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2015

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 170/30 CW 350/30	NOPT	JOEEM	IF/IAF	3000
2. 350/30 CW 080/30		EECEE	IAF	3000
3. 080/30 CW 170/30		080/24 CW 170/24		3900
3. 080/24 CW 170/24		TEEAR	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>
EECEE	IAF	JOEEM	NOPT	TF	FB	1.00	349.56	8.00	3000
TEEAR	IAF	JOEEM	NOPT	TF	FB	1.00	169.51	8.00	3000
JOEEM	IF/IAF	EGADE		TF	FB	1.00	259.54	8.00	2200
EGADE	PFAF	RW26	MAP	TF	FO	0.30	259.45	4.61	
RW26	MAP	1098 MSL		CA			259.45		
1098 MSL		REINR		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LP: RW26
 LNAV: RW26

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT REINR AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD E JOEEM, RT, 259.54 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 259.45FAF: EGADEDIST FAF TO MAP: 4.61DIST FAF TO THLD: 4.61

4. MIN ALT: JOEEM 3000, EGADE 2200

5. DIST TO THLD FROM OM:MM:IM:150 HAT:GS ANT:

6. MIN GP INCPT:GP ALT AT FAF :OM:MM:IM:

7. GP ANGLE:34:1: IS NOT CLEAR20:1: IS CLEARTCH:

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: RWY 26 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
EGADE TO RW26: 3.00/39.40.
CHART VDP AT 1.28 NM TO RW26
WAAS CHANNEL #81935
REFERENCE PATH ID: W26A
CHART FAS OBST: 906 TOWER 343137N/0815350W.
CHART: 1073 TOWER 343058N/0815116W.
HOLD W, RT, 079.25 INBOUND
LTP HAE: 180.8 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

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
LP MDA	1160	1	464	1160	1	464		NA			NA				
LNAV MDA	1160	1	464	1160	1	464		NA			NA				
CIRCLING	1200	1	502	1200	1	502		NA			NA				



CHANGES - REASONS

1. DELETED CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GREENWOOD ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET - NOTE REMOVED AND MOVED TO BACK OF -9 FORM AS CONTINGENCY REMOTE ALTIMETER NOTE.
2. DELETED CHART NOTE: DME/DME RNP-0.3 NA - IAW 8260.19H 8-6-8 (B(1)) PBN NAVSPEC.
3. DELETED SDF (ARGEE) - COULD NOT PROVIDE AT LEAST A 60 FOOT DECREASE IN MDA WITH SDF FOR BOTH PROCEDURES. ONLY A 20 FOOT DECREASE COULD BE ACHIEVED FOR THE LNAV PORTION.
4. CHANGED MISSED APPROACH INSTRUCTIONS FROM "CLIMB TO 3000 DIRECT WUKRI AND HOLD" TO "CLIMB TO 3000 DIRECT REINR AND HOLD" - MISSED APPROACH HOLDING FIX NAME CHANGED AT ATC REQUEST.
5. DELETED PROFILE NOTE: VISUAL SEGMENT - OBSTACLES - VG SURVEY ACCOMPLISHED FOR AIRFIELD, NO 20:1 PENETRATIONS FOUND.
6. ADDED PBN REQUIREMENTS NOTE: RNP APCH - IAW 8260.19H 8-6-8 (B(1)) PBN NAVSPEC.
7. CHANGED LP MDA/HAT FROM "1060/364" TO "1160/464" - SDF WAS REMOVED DUE TO INABILITY TO ACHIEVE AT LEAST A 60 FOOT DIFFERENCE IN MDA FOR THE LNAV PORTION OF THE PROCEDURE.
8. CHANGED LNAV MDA/HAT FROM "1140/444" TO "1160/464" - SDF REMOVED DUE TO INABILITY TO ACHIEVE AT LEAST A 60 FOOT DIFFERENCE IN MDA.
9. ADDED "20:1 IS CLEAR" TO LINE 7 OF -3 FORM - IAW 8260.19H 8-6-7 (G(3)) FOR DOCUMENTING CLEAR SLOPES FOR RNAV PROCEDURE.
10. ADDED MAXIMUM ALTITUDE "6000" TO IF/IAF JOEEM - NEW REPORTS FORMAT NOW SHOWS MAXIMUM ALTITUDES AT HOLD-IN-LIEU FIXES.
11. ADDED ADDITIONAL FLIGHT DATA NOTE: CHART CIRCLING ICON - NOTE IS REQUIRED TO SHOW NEW CIRCLING CRITERIA DIMENSIONS.
12. ADDED ADDITIONAL FLIGHT DATA NOTE: EGADE TO RW26: 3.00/TCH 39.40 - VDA ANGLE AND TCH.
13. MOVED IF/IAF (JOEEM) FROM "5.10NM" TO "8.00NM" - MOVE TO MEET CRITERIA FOR TURNING AT A FB FIX.
14. MOVED IAF (EECEE) FROM "7.00NM" TO "8.00NM" - MOVE TO MEET CRITERIA DEALING WITH TURNS OF 90 DEGREES.
15. MOVED IAF (TEEAR) FROM "7.00NM" TO "8.00NM" - MOVE TO MEET CRITERIA DEALING WITH TURNS OF 90 DEGREES.
16. CHANGED INTERMEDIATE RNP FROM "0.50" TO "1.00" - UPDATED TO 8260.58A CHANGE 1 TABLE 1-2-1.
17. CRC REMAINDER CHANGED FROM "C46D0E02" TO "9BA5954B" - CHANGES TO LTP/FTP LAT./LONG, FRAP LAT./LONG AND LENGTH OFFSET.
18. ADDED VDP TO PROCEDURE - NO 20:1 PENETRATIONS FOUND FROM UPDATED SURVEY.
19. CHANGED FAS OBST FROM "809 TREE 343036N/0815521W, 886 TOWER 343131N/0815116W" TO "906 TOWER 343137N/0815350W" - NEW CONTROLLING OBSTACLE ON FINAL.

COORDINATED WITH:

A4A ☐ALPA ☒AOPA ☒APA ☐HAI ☐NBAA ☒OTHER: ZTL, GSP APP CONTROL, AIRPORT MANAGER

FLIGHT CHECKED BY

Digitally signed by

DAVID TEFFETELLER

Dec 27, 2018

OFFICE

FICO

DATE

12/26/2018

JEFFREY ECKMAN

DEVELOPED BY

Digitally signed by

JAMES LAFFERTY

Oct 23, 2018

OFFICE

AJV-5433

DATE

10/04/2018

JAMES LAFFERTY

APPROVED BY

Digitally signed by

DAVID TEFFETELLER

Dec 27, 2018

OFFICE

AJV-5430

DATE

TITLE

MANAGER

PATRICK MULQUEEN



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KLUX
RUNWAY	RW26
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W26A
LTP/FTP LATITUDE	343031.6575N
LTP/FTP LONGITUDE	0815625.9470W
LTP/FTP ELLIPSOIDAL HEIGHT	+01808
FPAP LATITUDE	343004.6585N
FPAP LONGITUDE	0815808.7070W
THRESHOLD CROSSING HEIGHT (TCH)	00039.4
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1512
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	9BA5954B
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+02113
FPAP ORTHOMETRIC HEIGHT	+02113



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
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TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> SPARTANBURG DOWNTOWN MEMORIAL/SIMPSON FIELD	<u>AIRPORT ID</u> KSPA	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 23	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> SPARTANBURG	<u>STATE</u> SC
<u>AIRPORT ELEVATION</u> 802	<u>TDZE</u> 801	<u>SUPERSEDED</u> RNAV (GPS) RWY 23	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 05/25/2017	<u>MAG VAR</u> 5W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 FEBRUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1995

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 157/30 CW 297/30	NOPT	157/6 CW 297/6		5100
2. 157/6 CW 297/6		MUCEE	IF/IAF	2800
3. 297/30 CW 047/30		GIFTT	IAF	2800
4. 047/30 CW 157/30		HITNI	IAF	6600

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>
GIFTT	IAF	MUCEE	NOPT	TF	FB	1.00	296.63	6.50	2800
HITNI	IAF	MUCEE	NOPT	TF	FB	1.00	156.67	8.65	2800
MUCEE	IF/IAF	LEORR		TF	FB	1.00	226.67	6.70	2100
LEORR	FAF	RW23	MAP	TF	FO	0.30	226.62	3.98	
RW23	MAP	1001 MSL		CA			226.59		
1001 MSL		FREST		DF	FO	1.00			2500

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW23

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2500 DIRECT FREST AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD NE MUCEE, RT, 226.67 INBOUND, 2800 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 226.62FAF: LEORRDIST FAF TO MAP: 3.98DIST FAF TO THLD: 3.98

4. MIN ALT: MUCEE 2800, LEORR 2100

5. DIST TO THLD FROM OM:MM:IM:150 HAT:200 HAT: 0.49GS ANT:

6. MIN GP INCPT: 2100GP ALT AT FAF : LEORR 2100OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 45.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 54°C.

ADDITIONAL FLIGHT DATA:

CHART 1115 TOWER 345847N/0815447W
CHART CIRCLING ICON.
CHART VDP AT 1.59 NM TO RW23*
*LNAV ONLY
WAAS CHANNEL #65926
REFERENCE PATH ID: W23A
CHART FAS OBST: 1075 BUILDING 345660N/0815542W.
HOLD SW, RT, 046.51 INBOUND
LTP HAE: 208.4 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

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	1001	3/4	200	1001	3/4	200	1001	3/4	200	1001	3/4	200			
LNAV/VNAV DA	1090	7/8	289	1090	7/8	289	1090	7/8	289	1090	7/8	289			
LNAV MDA	1340	1	539	1340	1	539	1340	1 1/2	539	1340	1 1/2	539			
CIRCLING	1340	1	538	1340	1	538	1380	1 1/2	578	1420	2	618			



CHANGES - REASONS

- 1. CHANGED AIRPORT ELEVATION: 801 AND THRE: 789 TO AIRPORT ELEVATION: 802 AND TDZE: 801 - NEW SURVEY DATA AND RWY 23 EXTENSION OF 650 FT.
- 2. CHANGED IAF NAME/LOCATION FROM LAIRY 350008.07N/0813832.22W TO GIFTT 350056.198N/0814057.964W - AIRPORT/FPT REQUEST TO DECONFLICT FROM ADJACENT AIRSPACE.
- 3. CHANGED TAA SECTOR ALTITUDE 047/30 CW 157/30 TO HITNI FROM 6700 TO 6600 - NEW OBSTACLE ASSESSMENT.
- 4. CHANGED TERMINAL ROUTE FROM LAIRY TO MUCEE COURSE AND DISTANCE 296.76/8.65 TO GIFTT TO MUCEE COURSE AND DISTANCE 296.63/6.50 - AIRPORT/FPT REQUEST TO DECONFLICT FROM ADJACENT AIRSPACE.
- 5. CHANGED TERMINAL ROUTES FROM HITNI TO MUCEE COURSE FROM 156.62 TO 156.67 - PROCEDURE RE-BUILT AND UPDATED.
- 6. CHANGED TERMINAL ROUTES FROM MUCEE TO LEORR DISTANCE FROM 6.85 TO 6.70 - LEORR FIX MOVED 0.15 NM NE.
- 7. CHANGED TERMINAL ROUTES FROM LEORR TO RW23 MAP DISTANCE FROM 3.94 TO 3.98 - LEORR FIX MOVED 0.15 NM NE.
- 8. CHANGED TERMINAL ROUTES CA ALTITUDE FROM 989 TO 1001 AND RWY23 TO CA ALTITUDE COURSE FROM 226.62 TO 226.59 - NEW OBSTACLE ASSESSMENT AND NEW SURVEY.
- 9. CHANGED DIST FAF TO MAP: FROM 3.94 TO 3.98 AND THLD: FROM 3.94 TO 3.98 - NEW SURVEY/RUNWAY EXTENSION.
- 10. CHANGED LINE 5 DIST FROM DIST TO THLD FROM 200 HATH: 0.45 TO DIST TO THLD FROM 200 HAT: 0.49 - NEW SURVEY/RUNWAY EXTENSION.
- 11. CHANGED TCH FROM 57.0 TO 45.0 - NEW SURVEY DATA/VGSI TCH.
- 12. ADDED 20:1 IS CLEAR - PER .19H REQUIRING IDENTIFICATION OF ASSESSMENT SLOPES.
- 13. DELETED ADDITIONAL FLIGHT DATA NOTE "CHART FAS OBST: 903 ANT 345516N/0815614W - NEW OBSTACLE ASSESSMENT AND PROCEDURE EVALUATION.
- 14. CHANGED ADDITIONAL FLIGHT DATA NOTE FROM "CHART FAS OBST: 1075 ANT ON BLDG 345700N/0815542W" TO "CHART FAS OBST: 1075 BUILDING 345660N/0815542W" - NEW OBSTACLE ASSESSMENT AND PROCEDURE EVALUATION.
- 15. CHANGED ADDITIONAL FLIGHT DATA NOTE FROM "CHART VDP AT 1.55 MILES TO RW23*" TO CHART VDP AT 1.59 NM TO RW23*" - NEW SURVEY/RUNWAY EXTENSION AND PROICEDURE EVALUATION.
- 16. CHANGED ADDITIONAL FLIGHT DATA NOTE FROM "LTP HAE: 209.2 M" TO "LTP HAE: 208.4 M" - NEW SURVEY DATA AND PROCEDURE ASSESSMENT.
- 17. CHANGED MINIMUMS LPV DA FROM 989 TO 1001 - CHANGED FROM PRVIOUS NOTAM ACTION DUE TO CHANGE FROM THRE TO TDZE IAW AFS-400 MEMO DTD JAN 8, 2014.
- 18. CHANGED MINIMUMS LNAV/VNAV DA/HAT FROM 1084/295 TO 1090/289 - NEW OBSTACLE ASSESSMENT AND PROCEDURE EVALUATED FROM TDZE IAW AFS-400 MEMO DTD JAN 8, 2014.
- 19. CHANGED MINIMUMS LNAV HAT ALL CATS FROM 551 TO 539 AND CHANGED VISIBILITY CATS C/D FROM 1 5/8 TO 1 1/2 - NEW OBSTACLE ASSESSMENT AND PROCEDURE EVALUATION.
- 20. CHANGED MINIMUMS CIRCLING: HAA CATS A/B FROM 551 TO 538; CAT C FROM 1340 MDA, 1 5/8 SM VISIBILITY, 539 HAA TO 1380 MDA, 1 1/2 SM VISIBILITY, HAA 578; CAT D FROM 1380 MDA 579 HAA TO 1420 MDA 618 HAA - NEW OBSTACLE ASSESSMENT AND PROCEDURE EVALUATION.
- 21. ADDED ADDITIONAL FLIGHT DATA NOTE: "CHART CIRCLING ICON" - NEW CIRCLING CRITERIA APPLIED.
- 22. CHANGED CHART NOTE: "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16 (4F) OR ABOVE 38C (100F)" TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16 OR ABOVE 54C" - IAW .19H DOCUMENTATION OF CRITICAL TEMPERATURES.
- 23. DELETED CHART NOTE "DME/DME RNP-0.3" AND REPLACED WITH "RNP APCH" - IAW .19H DOCUMENTATION OF EQUIPMENT NOTES.
- 24. REMOVED BACK UP ALTIMETER NOTES: "CHART NOTE: VDP AND BARO-VNAV NA WHEN USING GREER ALTIMETER SETTING" ; "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GREER ALTIMETER SETTING AND INCREASE ALL DA 53 FEET AND ALL MDA 60 FEET; INCREASE LNAV/VNAV ALL CATS VISIBILITY 1/4 MILE AND LNAV CAT C AND D AND CIRCLING CAT C VISIBILITY 1/8 MILE" - PER .19H 8-6-9 F(3) NOT REQUIRED WHEN ASOS NON-FED TRANSMITS TO WMSCR. DATA PLACED ON BACK OF -9 FOR NOTAM CONTINGENCY.
- 25. CHANGED FAS DATA LTP/FTP LATITUDE FROM 345515.8800N TO 345520.7030N AND LTP/FTP LONGITUDE FROM 0815702.6485W TO 0815657.4510W - RWY 23 SURFACE LENGTH EXTENDED 650 FEET.
- 26. CHANGED FAS DATA ELLIPSOIDAL HEIGHT FROM +02092 TO +02084 - NEW SURVEY DATA.
- 27. CHANGED FAS DATA FPAP LATITUDE FROM 345409.1300N TO 345413.9495N AND FPAP LONGITUDE FROM 0815814.5600W TO 0815809.3595W - NEW SURVEY DATA.
- 28. CHANGED FAS DATA TCH FROM 00057.0 TO 00045.0 - NEW VGSI TCH.
- 29. CHANGED FAS DATA LENGTH OFFSET FROM 1168 TO 0968 - NEW SURVEY DATA.
- 30. CHANGED FAS DATA CRC REMAINDER FROM 49E16512 TO 8CD1F920 - NEW SURVEY DATA.
- 31. CHANGED FAS DATA LTP/FPAP ORTHOMETRIC HEIGHTS FROM +02405 TO +02398 - NEW SURVEY DATA.

12/21/2018: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 7/3/2018:
1. AIRPORT NAME CHANGED FROM SPARTANBURG DOWNTOWN MEMORIAL TO SPARTANBURG DOWNTOWN MEMORIAL/SIMPSON FIELD.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZTL, AMRG, GSP APP CON

FLIGHT CHECKED BY KEVIN JOHN RIESE	Digitally signed by DAVID DANNER Dec 21, 2018	OFFICE FIOG	DATE 12/18/2018
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DEVELOPED BY DEZ SILAGYI (DARREN HOOPER)	Digitally signed by DAVID DANNER Dec 21, 2018	OFFICE AJV-5421	DATE 07/03/2018
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APPROVED BY JULIE MORGAN	Digitally signed by DAVID DANNER Dec 21, 2018	OFFICE AJV-5420	DATE	TITLE MANAGER
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FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSPA
RUNWAY	RW23
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W23A
LTP/FTP LATITUDE	345520.7030N
LTP/FTP LONGITUDE	0815657.4510W
LTP/FTP ELLIPSOIDAL HEIGHT	+02084
FPAP LATITUDE	345413.9495N
FPAP LONGITUDE	0815809.3595W
THRESHOLD CROSSING HEIGHT (TCH)	00045.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0968
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER	8CD1F920
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+02398
FPAP ORTHOMETRIC HEIGHT	+02398



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP)
TITLE 14 CFR PART 97.37**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
SPARTANBURG, SC	SPARTANBURG DOWNTOWN MEMORIAL/ SIMPSON FIELD	28 FEBRUARY 2019	2

TAKEOFF MINIMUMS:
RWY 5, 23: STANDARD

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:
NOTE: RWY 5: TREES BEGINNING 622 FT FROM DER, 608 FT LEFT OF CENTERLINE, UP TO 830 FT MSL.
TREE 2352 FT FROM DER, 996 FT LEFT OF CENTERLINE, 856 FT MSL.

NOTE: RWY 23: TREES BEGINNING 122 FT FROM DER, 444 FT LEFT OF CENTERLINE, UP TO 825 FT MSL.
TREE 3391 FT FROM DER, 1033 FT RIGHT OF CENTERLINE, 897 FT MSL.
TREE 3478 FT FROM DER, 208 FT LEFT OF CENTERLINE, 884 FT MSL.
TREES BEGINNING 3504 FT FROM DER, 360 FT RIGHT OF CENTERLINE, UP TO 901 FT MSL.

CONTROLLING OBSTACLES:

REMARKS:

FLIGHT INSPECTED BY: *Digitally signed by*
JAMES HERRINGTON **DAVID DANNER**
Dec 21, 2018

OFFICE SYMBOL: **DATE:**
FICO 8/14/18

DEVELOPED BY: *Digitally signed by*
DEZ SILAGYI (DARREN HOOPER) **DAVID DANNER**
Dec 21, 2018

OFFICE SYMBOL: **DATE:**
AJV-5421 06/26/2018

APPROVED BY: *Digitally signed by*
JULIE MORGAN **DAVID DANNER**
Dec 21, 2018

OFFICE SYMBOL: **DATE:**
AJV-5420

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

<u>A4A</u>	<u>ALPA</u>	<u>AOPA</u>	<u>APA</u>	<u>HAI</u>	<u>NBAA</u>
☐	☒	☒	☐	☐	☒

OTHER:
ZTL, GSP APP CON, AMGR

CHANGES - REASONS:
AMENDED RWY 5 AND 23 TAKEOFF OBSTACLE NOTES - RUNWAY EXTENSION REQUIRED NEW OBSTACLE ASSESSMENT.

12/21/2018: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 6/26/2018:
1. AIRPORT NAME CHANGED FROM SPARTANBURG DOWNTOWN MEMORIAL TO SPARTANBURG DOWNTOWN MEMORIAL/SIMPSON FIELD.

[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. [31234](#); Amdt. No. [3836](#)

**Standard Instrument Approach Procedures, and Takeoff Minimums
and Obstacle Departure Procedures; Miscellaneous Amendments**

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This rule amends, suspends, or removes Standard Instrument Approach Procedures (SIAPs) and associated Takeoff Minimums and Obstacle Departure Procedures for operations at certain airports. These regulatory actions are needed because of the adoption of new or revised criteria, or because of changes occurring in the National Airspace System, such as the commissioning of new navigational facilities, adding new obstacles, or changing air traffic requirements. These changes are designed to provide for the safe and efficient use of the navigable airspace and to promote safe flight operations under instrument flight rules at the affected airports.

DATES: This rule is effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]. The compliance date for each SIAP, associated Takeoff Minimums, and ODP is specified in the amendatory provisions.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Availability of matter incorporated by reference in the amendment is as follows:

For Examination

1. U.S. Department of Transportation, Docket Ops-M30, 1200 New Jersey Avenue SE, West Bldg., Ground Floor, Washington, D.C., 20590-0001;

2. The FAA Air Traffic Organization Service Area in which the affected airport is located;

3. The office of Aeronautical Navigation Products, 6500 South MacArthur Blvd., Oklahoma City, OK 73169 or,

4. The National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Availability

All SIAPs and Takeoff Minimums and ODPs are available online free of charge. Visit the National Flight Data Center online at nfdc.faa.gov to register. Additionally, individual SIAP and Takeoff Minimums and ODP copies may be obtained from the FAA Air Traffic Organization Service Area in which the affected airport is located.

FOR FURTHER INFORMATION CONTACT: Thomas J. Nichols, Flight Procedures and Airspace Group, Flight Technologies and Procedures Division, Flight Standards Service, Federal Aviation Administration. Mailing Address: FAA Mike Monroney Aeronautical Center, Flight Procedures and Airspace Group, 6500 South MacArthur Blvd, Registry Bldg 29 Room 104, Oklahoma City, OK 73125. Telephone: (405) 954-4164.

SUPPLEMENTARY INFORMATION:

This rule amends Title 14, Code of Federal Regulations, Part 97 (14 CFR part 97) by amending the referenced SIAPs. The complete regulatory description of each SIAP is listed on the appropriate FAA Form 8260, as modified by the National Flight Data Center (NFDC)/Permanent Notice to Airmen (P-NOTAM), and is incorporated by reference under 5 U.S.C. 552(a), 1 CFR part 51, and 14 CFR §97.20. The large number of SIAPs, their complex nature, and the need for a special format make their verbatim publication in the **Federal Register** expensive and impractical. Further, airmen do not use the regulatory text of the SIAPs, but refer to their graphic depiction on charts printed by publishers of aeronautical materials. Thus, the advantages of incorporation by reference are realized and publication of the complete description of each SIAP contained on FAA form documents is unnecessary.

This amendment provides the affected CFR sections, and specifies the SIAPs and Takeoff Minimums and ODPs with their applicable effective dates. This amendment also identifies the airport and its location, the procedure and the amendment number.

Availability and Summary of Material Incorporated by Reference

The material incorporated by reference is publicly available as listed in the ADDRESSES section.

The material incorporated by reference describes SIAPs, Takeoff Minimums and ODPs as identified in the amendatory language for part 97 of this final rule.

The Rule

This amendment to 14 CFR part 97 is effective upon publication of each separate SIAP and Takeoff Minimums and ODP as amended in the transmittal. For safety and timeliness of change considerations, this amendment incorporates only specific changes contained for each SIAP and Takeoff Minimums and ODP as modified by FDC permanent NOTAMs.

The SIAPs and Takeoff Minimums and ODPs, as modified by FDC permanent NOTAM, and contained in this amendment are based on the criteria contained in the U.S. Standard for Terminal Instrument Procedures (TERPS). In developing these changes to SIAPs and Takeoff Minimums and ODPs, the TERPS criteria were applied only to specific conditions existing at the affected

airports. All SIAP amendments in this rule have been previously issued by the FAA in a FDC NOTAM as an emergency action of immediate flight safety relating directly to published aeronautical charts.

The circumstances that created the need for these SIAP and Takeoff Minimums and ODP amendments require making them effective in less than 30 days.

Because of the close and immediate relationship between these SIAPs, Takeoff Minimums and ODPs, and safety in air commerce, I find that notice and public procedure under 5 U.S.C. 553(b) are impracticable and contrary to the public interest and, where applicable, under 5 U.S.C. 553(d), good cause exists for making these SIAPs effective in less than 30 days.

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore-- (1) is not a "significant regulatory action" under Executive Order 12866;(2) is not a "significant rule" under DOT regulatory Policies and Procedures (44 FR 11034; February 26, 1979) ; and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. For the same reason, the FAA certifies that this amendment will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR part 97

Air Traffic Control, Airports, Incorporation by reference, Navigation (Air).

Issued in Washington, DC on **JANUARY 11, 2019.**

Rick Domingo
Executive Director, Flight Standards Service

ADOPTION OF THE AMENDMENT

Accordingly, pursuant to the authority delegated to me, Title 14, Code of Federal regulations, Part 97, (14 CFR part 97), is amended by amending Standard Instrument Approach Procedures and Takeoff Minimums and ODPs, effective at 0901 UTC on the dates specified, as follows:

PART 97 – STANDARD INSTRUMENT APPROACH PROCEDURES

1. The authority citation for part 97 continues to read as follows:

AUTHORITY: 49 U.S.C. 106(f), 106(g), 40103, 40106, 40113, 40114, 40120, 44502, 44514, 44701, 44719, 44721-44722.

2. Part 97 is amended to read as follows:

By amending: §97.23 VOR, VOR/DME, VOR or TACAN, and VOR/DME or TACAN; §97.25 LOC, LOC/DME, LDA, LDA/DME, SDF, SDF/DME; §97.27 NDB, NDB/DME; §97.29 ILS, ILS/DME, MLS, MLS/DME, MLS/RNAV; §97.31 RADAR SIAPs; §97.33 RNAV SIAPs; and §97.35 COPTER SIAPs, Identified as follows:

.....EFFECTIVE UPON PUBLICATION

AIRAC DATE	STATE	CITY	AIRPORT	FDC NUMBER	FDC DATE	SUBJECT
28-Feb-19	IA	Ames	Ames Muni	8/0236	1/8/19	RNAV (GPS) RWY 13, Amdt 1
28-Feb-19	IA	Ames	Ames Muni	8/0248	1/8/19	RNAV (GPS) RWY 1, Amdt 2
28-Feb-19	IA	Ames	Ames Muni	8/0250	1/8/19	RNAV (GPS) RWY 31, Amdt 1
28-Feb-19	WI	Sheboygan	Sheboygan County Memorial	8/0455	1/8/19	ILS OR LOC/DME RWY 22, Amdt 5A
28-Feb-19	WI	Sheboygan	Sheboygan County Memorial	8/0460	1/8/19	RNAV (GPS) RWY 4, Amdt 3A
28-Feb-19	WI	Sheboygan	Sheboygan County Memorial	8/0462	1/8/19	RNAV (GPS) RWY 22, Amdt 3A
28-Feb-19	WI	Sheboygan	Sheboygan County Memorial	8/0463	1/8/19	RNAV (GPS) RWY 31, Orig-A
28-Feb-19	IN	Goshen	Goshen Muni	8/0748	1/8/19	ILS OR LOC RWY 27, Amdt 1
28-Feb-19	MI	Mason	Mason Jewett Field	8/0979	1/8/19	RNAV (GPS) RWY 10, Orig-C
28-Feb-19	MI	Mason	Mason Jewett Field	8/0981	1/8/19	RNAV (GPS) RWY 28, Orig-C
28-Feb-19	IL	Alton/St Louis	St Louis Rgnl	8/1280	1/8/19	RNAV (GPS) RWY 35, Amdt 1A
28-Feb-19	FL	Palatka	Palatka Muni - Lt Kay Larkin Field	8/1650	1/8/19	RNAV (GPS) RWY 27, Orig-A
28-Feb-19	FL	Palatka	Palatka Muni - Lt Kay Larkin Field	8/1653	1/8/19	RNAV (GPS) RWY 9 , Orig-B
28-Feb-19	VA	Fredericksburg	Shannon	8/1909	1/8/19	RNAV (GPS) RWY 24, Orig-A
28-Feb-19	PA	Chambersburg	Franklin County Rgnl	8/2099	1/8/19	RNAV (GPS) RWY 24, Orig-A
28-Feb-19	NE	Valentine	Miller Field	8/2262	1/8/19	NDB RWY 32, Amdt 8
28-Feb-19	NE	Valentine	Miller Field	8/2265	1/8/19	RNAV (GPS) RWY 32, Amdt 1
28-Feb-19	TN	Cleveland	Cleveland Rgnl Jetport	8/2647	1/8/19	RNAV (GPS) RWY 3, Amdt 2
28-Feb-19	NY	Weedsport	Whitfords	8/2807	1/8/19	Takeoff Minimums and Obstacle DP, Orig
28-Feb-19	GA	Jekyll Island	Jekyll Island	8/2891	1/8/19	RNAV (GPS) RWY 18, Orig-A
28-Feb-19	VA	Charlottesville	Charlottesville-Albemarle	8/3070	1/8/19	RNAV (GPS) Z RWY 21, Amdt 1A
28-Feb-19	MS	Tunica	Tunica Muni	8/3448	1/8/19	RNAV (GPS) RWY 17, Amdt 3
28-Feb-19	NC	Goldsboro	Wayne Executive Jetport	8/3790	1/8/19	ILS OR LOC RWY 23, Amdt 2A

28-Feb-19	NC	Goldsboro	Wayne Executive Jetport	8/3791	1/8/19	RNAV (GPS) RWY 23, Amdt 1A
28-Feb-19	KY	Louisville	Bowman Field	8/4188	1/8/19	NDB RWY 33, Amdt 16A
28-Feb-19	KY	Louisville	Bowman Field	8/4190	1/8/19	RNAV (GPS) RWY 24, Amdt 3
28-Feb-19	TX	Corsicana	C David Campbell Field-Corsicana Muni	8/4230	1/8/19	NDB RWY 14, Amdt 4B
28-Feb-19	TX	Corsicana	C David Campbell Field-Corsicana Muni	8/4236	1/8/19	NDB RWY 32, Amdt 3B
28-Feb-19	TX	Corsicana	C David Campbell Field-Corsicana Muni	8/4239	1/8/19	VOR/DME-A, Amdt 1B
28-Feb-19	TX	Corsicana	C David Campbell Field-Corsicana Muni	8/4246	1/8/19	RNAV (GPS) RWY 32, Orig-B
28-Feb-19	WV	Ravenswood	Jackson County	8/4456	1/8/19	RNAV (GPS) RWY 22, Orig-A
28-Feb-19	VA	New Market	New Market	8/4507	1/8/19	RNAV (GPS)-B, Orig
28-Feb-19	NM	Albuquerque	Albuquerque Intl Sunport	8/4554	1/8/19	ILS OR LOC RWY 8, Amdt 6
28-Feb-19	NY	Rome	Griffiss Intl	8/5183	1/8/19	ILS OR LOC RWY 33, Amdt 2
28-Feb-19	FL	Daytona Beach	Daytona Beach Intl	8/6099	1/8/19	ILS OR LOC RWY 7L, Amdt 32
28-Feb-19	OR	Redmond	Roberts Field	8/6153	1/8/19	RNAV (GPS) Y RWY 29, Amdt 2A
28-Feb-19	PR	San Juan	Fernando Luis Ribas Dominicci	8/7172	1/8/19	RNAV (GPS) RWY 9, Orig
28-Feb-19	AL	Vernon	Lamar County	8/7374	1/8/19	RNAV (GPS) RWY 35, Orig
28-Feb-19	NC	Pinehurst/Southern Pines	Moore County	8/7378	1/8/19	RNAV (GPS) RWY 23, Amdt 2A
28-Feb-19	TN	Cleveland	Cleveland Rgnl Jetport	8/7395	1/8/19	RNAV (GPS) RWY 21, Amdt 2
28-Feb-19	ME	Augusta	Augusta State	8/7919	1/8/19	RNAV (GPS)-B, Orig-B
28-Feb-19	ME	Augusta	Augusta State	8/7920	1/8/19	RNAV (GPS) RWY 35, Orig-A
28-Feb-19	FL	Williston	Williston Muni	8/8015	1/8/19	VOR RWY 23, Amdt 1A
28-Feb-19	FL	Williston	Williston Muni	8/8062	1/8/19	RNAV (GPS) RWY 5, Orig-A
28-Feb-19	FL	Williston	Williston Muni	8/8063	1/8/19	RNAV (GPS) RWY 23, Orig-A
28-Feb-19	PA	Pottstown	Heritage Field	8/8126	1/8/19	VOR/DME-A, Amdt 4
28-Feb-19	ME	Lincoln	Lincoln Rgnl	8/8127	1/8/19	RNAV (GPS) RWY 17, Orig-A
28-Feb-19	PA	Collegeville	Perkiomen Valley	8/8333	1/8/19	RNAV (GPS)-C, Orig
28-Feb-19	PA	Collegeville	Perkiomen Valley	8/8334	1/8/19	RNAV (GPS)-B, Orig
28-Feb-19	NY	Olean	Cattaraugus County-Olean	8/8420	1/8/19	Takeoff Minimums and Obstacle DP, Amdt 3
28-Feb-19	PA	Philadelphia	Philadelphia Intl	8/8689	1/8/19	ILS OR LOC RWY 26, Amdt 4C

28-Feb-19	MA	Pittsfield	Pittsfield Muni	8/8690	1/8/19	Takeoff Minimums and Obstacle DP, Amdt 2
28-Feb-19	SC	Georgetown	Georgetown County	8/8983	1/8/19	RNAV (GPS) RWY 23, Amdt 2A
28-Feb-19	SC	Georgetown	Georgetown County	8/9737	1/8/19	RNAV (GPS) RWY 5, Orig-A
28-Feb-19	IN	Rensselaer	Jasper County	8/9844	1/8/19	RNAV (GPS) RWY 18, Orig-B
28-Feb-19	IN	Rensselaer	Jasper County	8/9845	1/8/19	RNAV (GPS) RWY 36, Orig-B

AIRAC Date: 28 FEBRUARY 2019

FDC **8/0236** AMW IAP AMES MUNI, Ames, IA. RNAV (GPS) RWY 13, AMDT 1...
CHART NOTE: CIRCLING RWY 31 NA AT NIGHT. CHART VDP AT 1.40 NM TO RWY13*. *LNAV ONLY. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. CHART NOTE: RWY 13 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ANKENY ALTIMETER SETTING AND INCREASE ALL DA 49 FEET AND LPV AND LNAV/VNAV ALL CATS VISIBILITY 1/4 MILE, INCREASE ALL MDA 60 FEET AND LNAV CAT C VISIBILITY 1/4 MILE. DELETE NOTE: BARO-VNAV NA WHEN USING ANKENY ALTIMETER SETTING. ALTERNATE MINIMUMS: DELETE NA WHEN LOCAL WEATHER NOT AVAILABLE. DELETED NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 13, AMDT 1A. 1811062021-PERM

FDC **8/0248** AMW IAP AMES MUNI, Ames, IA. RNAV (GPS) RWY 1, AMDT 2...
CHART NOTE: CIRCLING RWY 31 NA AT NIGHT. 34:1 IS CLEAR. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ANKENY ALTIMETER SETTING AND INCREASE ALL DA 49 FEET, INCREASE ALL MDA 60 FEET AND LNAV CAT C VISIBILITY 1/4 MILE. DELETE NOTE: BARO-VNAV AND VDP NA WHEN USING ANKENY ALTIMETER SETTING. DELETE NOTE: FOR INOPERATIVE MALSR, WHEN USING ANKENY ALTIMETER SETTING INCREASE LPV ALL CATS VISIBILITY TO 1 1/4 MILE AND LNAV CATS A, B VISIBILITY TO 1 MILE. ALTERNATE MINIMUMS: DELETE NA WHEN LOCAL WEATHER NOT AVAILABLE. DELETED NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 1, AMDT 2A. 1811062030-PERM

FDC **8/0250** AMW IAP AMES MUNI, Ames, IA. RNAV (GPS) RWY 31, AMDT 1...
CHART NOTE: CIRCLING RWY 31 NA AT NIGHT. CHART VDP AT 1.14 NM TO RWY31*. *LNAV ONLY. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. CHART NOTE: RWY 31 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ANKENY ALTIMETER SETTING AND INCREASE ALL DA 49 FEET AND LPV AND LNAV/VNAV ALL CATS VISIBILITY 1/4 MILE, INCREASE ALL MDA 60 FEET AND LNAV CAT C VISIBILITY 1/4 MILE. DELETE NOTE: BARO-VNAV NA WHEN USING ANKENY ALTIMETER SETTING. ALTERNATE MINIMUMS: DELETE NA WHEN LOCAL WEATHER NOT AVAILABLE. DELETED NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 54C. THIS IS RNAV (GPS) RWY 31, AMDT 1A. 1811062038-PERM

FDC **8/0455** SBM IAP SHEBOYGAN COUNTY MEMORIAL, Sheboygan, WI. ILS OR LOC/DME RWY 22, AMDT 5A... DELETE NOTE: WHEN VGSI INOP, CIRCLING RWY 13/31 NA AT NIGHT. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MANITOWOC ALTIMETER SETTING AND INCREASE ALL DA 67 FEET AND ALL MDA 80 FEET, INCREASE S-ILS 22 ALL CATS VISIBILITY 1/8 MILE AND S-LOC 22 CATS C/D VISIBILITY 1/4 MILE. DELETE NOTE: FOR INOPERATIVE MALSR WHEN USING MANITOWOC ALTIMETER SETTING, INCREASE S-ILS 22 ALL CATS VISIBILITY TO 1 MILE. DELETE NOTE: VDP NA WHEN USING MANITOWOC ALTIMETER SETTING. THIS IS ILS OR LOC/DME RWY 22, AMDT 5B. 1811261255-PERM

FDC **8/0460** SBM IAP SHEBOYGAN COUNTY MEMORIAL, Sheboygan, WI. RNAV (GPS) RWY 4, AMDT 3A... CHART VDP AT 1.14 NM TO RW04*. *LNAV ONLY. DELETE NOTE: WHEN VGSI INOP, CIRCLING RWY 13/31 NA AT NIGHT. DELETE NOTE: BARO-VNAV NA WHEN USING MANITOWOC ALTIMETER SETTING. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MANITOWOC ALTIMETER SETTING AND INCREASE ALL DA 67 FEET AND ALL MDA 80 FEET, INCREASE LNAV/VNAV ALL CATS AND LNAV CATS C/D VISIBILITY 1/4 MILE. ALTERNATE MINIMUMS: DELETE NA WHEN LOCAL WEATHER NOT AVAILABLE. DELETE NOTE: WHEN VGSI INOP, STRAIGHT-IN/CIRCLING RWY 04 PROCEDURE NA AT NIGHT. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. CHART NOTE: RWY 4 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -23C (-9F) OR ABOVE 54C (130F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -23C OR ABOVE 54C. THIS IS RNAV (GPS) RWY 4, AMDT 3B. 1811261257-PERM

FDC **8/0462** SBM IAP SHEBOYGAN COUNTY MEMORIAL, Sheboygan, WI. RNAV (GPS) RWY 22, AMDT 3A... DELETE NOTE: WHEN VGSI INOP, CIRCLING RWY 13/31 NA AT NIGHT. DELETE NOTE: BARO-VNAV NA WHEN USING MANITOWOC ALTIMETER SETTING. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MANITOWOC ALTIMETER SETTING AND INCREASE ALL DA 67 FEET AND ALL MDA 80 FEET INCREASE LNAV/VNAV ALL CATS AND LNAV CATS C/D VISIBILITY 1/4 MILE. DELETE NOTE: FOR INOP MALSR WHEN USING MANITOWOC ALTIMETER SETTING, INCREASE LPV ALL CATS VISIBILITY TO 7/8 MILE. ALTERNATE MINIMUMS: DELETE NA WHEN LOCAL WEATHER NOT AVAILABLE. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -23C (-9F) OR ABOVE 54C (130F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -23C OR ABOVE 54C. THIS IS RNAV (GPS) RWY 22, AMDT 3B. 1811261258-PERM

FDC **8/0463** SBM IAP SHEBOYGAN COUNTY MEMORIAL, Sheboygan, WI. RNAV (GPS) RWY 31, ORIG-A... DELETE NOTE: WHEN VGSI INOP, STRAIGHT-IN/CIRCLING RWY13-31 PROCEDURE NA AT NIGHT. CHART VDP AT 1.38 NM TO RW31. DELETE NOTE: HELICOPTERS VISIBILITY REDUCTION BELOW 1 SM NA. CHART NOTE: RWY 31 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: IF LOCAL ALTIMETER SETTING NOT RECEIVED, USE MANITOWOC COUNTY ALTIMETER SETTING AND INCREASE ALL MDAS 80 FEET. ALTERNATE MINIMUMS: DELETE NA WHEN LOCAL WEATHER NOT AVAILABLE. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 31, ORIG-B. 1811261259-PERM

FDC **8/0748** GSH IAP GOSHEN MUNI, Goshen, IN. ILS OR LOC RWY 27, AMDT 1... DELETE NOTE: DME OR RADAR REQUIRED. DELETE PROFILE NOTE: DME OR RADAR REQUIRED. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. CHART NOTE: CIRCLING NA TO RWYS 5 AND 25. EQUIPMENT REQUIREMENTS NOTE: DME OR RADAR REQUIRED. THIS IS ILS OR LOC RWY 27, AMDT 1A. 1811261614-PERM

FDC **8/0979** TEW IAP MASON JEWETT FIELD, Mason, MI. RNAV (GPS) RWY 10, ORIG-C... DELETE NOTE: DME/DME RNP-0.3 NA. DELETE NOTE: WHEN VGSI INOP, PROCEDURE NA AT NIGHT. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LANSING ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. CHART NOTE: RWY 10 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. CHART NOTE: STRAIGHT IN RWY 10 NA AT NIGHT, CIRCLING RWY 10 NA AT NIGHT. PBN EQUIPMENT REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 10, ORIG-D. 1810111344-PERM

FDC **8/0981** TEW IAP MASON JEWETT FIELD, Mason, MI. RNAV (GPS) RWY 28, ORIG-C... DELETE NOTE: DME/DME RNP-0.3 NA. DELETE NOTE: WHEN VGSI INOP, PROCEDURE NA AT NIGHT. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LANSING ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. CHART NOTE: CHART NOTE: RWY 28 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA. CHART NOTE: CIRCLING RWY 10 NA AT NIGHT. PBN EQUIPMENT REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 28, ORIG-D. 1810111345-PERM

FDC **8/1280** ALN IAP ST LOUIS RGNL, Alton/St Louis, IL. RNAV (GPS) RWY 35, AMDT 1A... DELETE DESCENT ANGLE 3.00/TCH 43. CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES. DELETE NOTE: DME/DME RNP-0.3 NA. EQUIPMENT REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 35, AMDT 1B. 1810111607-PERM

FDC **8/1650** 28J IAP PALATKA MUNI - LT KAY LARKIN FIELD, Palatka, FL. RNAV (GPS) RWY 27, ORIG-A... DELETE NOTE: DME/DME RNP-0.3. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. DELETE NOTE: PROCEDURE NA AT NIGHT. PBN REQUIREMENTS NOTE: RNP APCH. CHART NOTE: RWY 27 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: CIRCLING RWY 17, 35 NA AT NIGHT. THIS IS RNAV (GPS) RWY 27, ORIG-B. 1810011457-PERM

FDC **8/1653** 28J IAP PALATKA MUNI - LT KAY LARKIN FIELD, Palatka, FL. RNAV (GPS) RWY 9, ORIG-B... DELETE NOTE: DME/DME RNP-0.3 NA. DELETE NOTE: PROCEDURE NA AT NIGHT. DELETE NOTE: RWY 9, 27 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. PBN REQUIREMENTS NOTE: RNP APCH. CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: CIRCLING RWY 17, 35 NA AT NIGHT. THIS IS RNAV (GPS) RWY 9, ORIG-C. 1810011457-PERM

FDC **8/1909** EZF IAP SHANNON, Fredericksburg, VA. RNAV (GPS) RWY 24, ORIG-A... CHART PROFILE NOTE: VISUAL SEGMENT -OBSTACLES. CHART PBN REQUIREMENTS NOTE:RNP APCH. DELETE CHART NOTE: DME/DME RNP-0.3 NA. DELETE ADDITIONAL FLIGHT DATA NOTE: ZADMN TO RW24: 3.00/40. DELETE CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT. THIS IS RNAV (GPS) RWY 24, ORIG-B. 1810251412-PERM

FDC **8/2099** N68 IAP FRANKLIN COUNTY RGNL, Chambersburg, PA. RNAV (GPS) RWY 24, ORIG-A... MISSED APPROACH: CLIMB TO 4000 DIRECT AVOYO AND ON TRACK 281.60 TO THS VORTAC AND HOLD. DELETE NOTE: AZOFE TO RW24: 3.00/40.0. CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES. DELETE NOTE: STRAIGHT-IN/CIRCLING RWY 24 NA AT NIGHT. CHART NOTE: STRAIGHT-IN RWY 24 NA AT NIGHT, CIRCLING RWY 24 NA AT NIGHT. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: RWY 24 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 24, ORIG-B. 1810020459-PERM

FDC **8/2262** VTN IAP MILLER FIELD, Valentine, NE. NDB RWY 32, AMDT 8... DELETE APT ELEV: 2591. CHART APT ELEV: 2595. DELETE TDZE: 2588, CHART TDZE: 2589. S-32 CAT A, B HAT 811. CIRCLING CAT A HAA 805, CAT B MDA 3560/HAA 965, VISIBILITY CAT B 1 1/2. CHART CIRCLING ICON. ALTERNATE MINIMUMS CAT B 1000-2. THIS IS NDB RWY 32, AMDT 8A. 1808071357-PERM

FDC **8/2265** VTN IAP MILLER FIELD, Valentine, NE. RNAV (GPS) RWY 32, AMDT 1... DELETE APT ELEV: 2591. CHART APT ELEV: 2595. DELETE TDZE: 2588. CHART TDZE: 2589. CIRCLING CAT A HAA 585, CAT B MDA 3560/HAA 965. VISIBILITY CAT B 1 1/2. LPV DA CAT A, B 2841. LNAV/VNAV DA CAT A, B 2961. LNAV CAT A, B HAT 591. CHART CIRCLING ICON. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. ALTERNATE MINIMUMS: CAT B 1000-2. THIS IS RNAV (GPS) RWY 32, AMDT 1A. 1808071400-PERM

FDC **8/2647** RZR IAP CLEVELAND RGNL JETPORT, Cleveland, TN. RNAV (GPS) RWY 3, AMDT 2 ... CHART AIRPORT ELEVATION 866. CIRCLING CATS A/B HAA 594, CIRCLING CAT C HAA 714, CIRCLING CAT D HAA 914. THIS IS RNAV (GPS) RWY 3, AMDT 2A. 1811081319-PERM

FDC **8/2807** B16 ODP WHITFORDS, Weedsport, NY. TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES ORIG... TAKEOFF MINIMUMS: DELETE ALL REFERENCES TO RWYS 1, 19. ALL OTHER DATA REMAINS AS PUBLISHED. THIS IS TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, ORIG-A. 1810261309-PERM

FDC **8/2891** 09J IAP JEKYLL ISLAND, Jekyll Island, GA. RNAV (GPS) RWY 18, ORIG-A... LPV CAT A/B DA 224/HAT 213. LNAV/VNAV CAT A/B DA 277/HAT 266, VIS 7/8. LNAV CAT A/B MDA 400/HAT 389. CIRCLING CAT A/B MDA 540/HAA 529. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: DME/DME RNP-0.3 NA. CHART NOTE: CIRCLING RWY 36 NA AT NIGHT. DELETE NOTE: WHEN VGSI INOP, CIRCLING RWY 36 NA AT NIGHT. CHART MCKINNON ST SIMMONS ISLAND ASOS. CHART NOTE: BARO-VNAV NA. DELETE NOTE: BARO-VNAV NA WHEN USING JACKSONVILLE INTL ALTIMETER SETTING. CHANGE BRUNSWICK ALTIMETER SETTING NOTE TO READ: USE MCKINNON ST SIMMONS ISLAND ALTIMETER SETTING, WHEN NOT RECEIVED, USE JACKSONVILLE INTL ALTIMETER SETTING: INCREASE LPV DA TO 324 FEET AND LNAV/VNAV DA TO 377 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE ALL MDAS 100 FEET. THIS IS RNAV (GPS) RWY 18, ORIG-B. 1810261420-PERM

FDC **8/3070** CHO IAP CHARLOTTESVILLE-ALBEMARLE, Charlottesville, VA. RNAV (GPS) Z RWY 21, AMDT 1A... PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: DME/DME RNP-0.3 NA. LNAV/VNAV DA 1588/ HAT 962. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -16C (3F) OR ABOVE 54C (130F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -16C OR ABOVE 54C. THIS IS RNAV (GPS) Z RWY 21, AMDT 1B. 1811282006-PERM

FDC **8/3448** UTA IAP TUNICA MUNI, Tunica, MS. RNAV (GPS) RWY 17, AMDT 3... LPV VIS 3/4 ALL CATS. LNAV VIS CATS C/D 1 1/8. CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV VIS ALL CATS TO 7/8 SM, AND LNAV CATS C, D VIS TO 1 3/8 SM. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MEMPHIS ALTIMETER SETTING AND INCREASE LPV DA TO 480, LNAV/VNAV DA TO 557, AND ALL MDA 100 FEET, INCREASE LNAV/VNAV VIS ALL CATS TO 1 SM AND CIRCLING CAT C VIS TO 1 3/4 SM. CHART NOTE: FOR INOPERATIVE ALS WHEN USING MEMPHIS ALTIMETER SETTING, INCREASE LPV ALL CATS VISIBILITY TO 7/8 SM, LNAV/VNAV ALL CATS VISIBILITY TO 1 SM, LNAV CATS C/D VISIBILITY TO 1 5/8 SM. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: DME/DME RNP-0.3 NA. DELETE NOTE: FOR INOP ODALS, INCREASE LPV ALL CATS VISIBILITY TO 3/4 MILE, LNAV/VNAV ALL CATS TO 7/8 MILE, AND LNAV CAT D VISIBILITY TO 1 3/8 MILE. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MEMPHIS ALTIMETER SETTING AND INCREASE LPV DA TO 480, LNAV/VNAV DA TO 557, AND ALL MDA 100 FEET; INCREASE LPV ALL CATS VISIBILITY 1/8 MILE, INCREASE LNAV/VNAV ALL CATS VISIBILITY 3/8 MILE, INCREASE LNAV CATS C AND D AND CIRCLING CAT C VISIBILITY 1/4 MILE. DELETE NOTE: FOR INOP MALSR WHEN USING MEMPHIS ALTIMETER SETTING, INCREASE LPV ALL CATS VISIBILITY TO 7/8 MILE, LNAV/VNAV ALL CATS VISIBILITY TO 1 1/4 MILE, LNAV CAT D VISIBILITY TO 2 MILE. THIS IS RNAV (GPS) RWY 17, AMDT 3A. 1812192150-PERM

FDC **8/3790** GWW IAP WAYNE EXECUTIVE JETPORT, Goldsboro, NC. ILS OR LOC RWY 23, AMDT 2A... S-ILS 23 VIS 3/4 SM. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SMITHFIELD ALTIMETER SETTING AND INCREASE DA TO 387 FEET AND ALL MDA 60 FEET, INCREASE S-LOC 23 CAT C AND D VISIBILITY TO 1 1/8 SM, CIRCLING CAT C TO 1 3/4 AND CAT D TO 2 1/2. CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-ILS 23. DELETE NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-LOC 23 CAT C. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SMITHFIELD ALTIMETER SETTING AND INCREASE DA TO 387 FEET AND ALL MDA 60 FEET, INCREASE S-LOC 23 CAT C AND D VISIBILITY TO 1 1/8 MILE. THIS IS ILS OR LOC RWY 23, AMDT 2B. 1812202211-PERM

FDC **8/3791** GWW IAP WAYNE EXECUTIVE JETPORT, Goldsboro, NC. RNAV (GPS) RWY 23, AMDT 1A... LPV VIS 3/4 SM ALL CATS. PBN REQUIREMENTS NOTE: RNP APCH. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SMITHFIELD ALTIMETER SETTING AND INCREASE LPV DA TO 387 FT, LNAV/VNAV DA TO 499 FT AND ALL MDA 60 FEET; INCREASE LNAV/VNAV VIS ALL CATS TO 1 SM AND LNAV VIS CATS C/D TO 1 1/8. CHART NOTE: FOR INOPERATIVE ALS WHEN USING SMITHFIELD ALTIMETER SETTING, INCREASE LNAV/VNAV VIS ALL CATS TO 1 SM, LNAV VIS CATS A/B TO 1 SM AND CATS C/D TO 1 3/8 SM. DELETE NOTE DME/DME RNP-0.3 NA. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SMITHFIELD ALTIMETER SETTING AND INCREASE LPV DA TO 387 FT, LNAV/VNAV DA TO 499 FT AND ALL MDA 60 FEET; INCREASE LNAV/VNAV ALL CATS AND LNAV CATS C AND D D TO 1 1/8 MILE. DELETE NOTE: FOR INOPERATIVE ODALS, INCREASE LNAV/VNAV CAT A/B/C VISIBILITY TO 1 MILE, LNAV CAT C TO 1 1/8 MILE. THIS IS RNAV (GPS) RWY 23, AMDT 1B. 1812202211-PERM

FDC **8/4188** LOU IAP BOWMAN FIELD, Louisville, KY. NDB RWY 33, AMDT 16A... DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. CHART NOTE: RWY 33 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: WHEN VGSI INOP, CIRCLING TO RWY 6 NA AT NIGHT. CHART CIRCLING ICON. CHART NOTE: CIRCLING RWY 6, 15 NA AT NIGHT. THIS IS NDB RWY 33, AMDT 16B. 1810291801-PERM

FDC **8/4190** LOU IAP BOWMAN FIELD, Louisville, KY. RNAV (GPS) RWY 24, AMDT 3... DELETE NOTE: DME/DME RNP-0.3 NA. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA. CHART NOTE: RWY 24 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: CIRCLING RWY 6, 15, 33 NA AT NIGHT. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: NIGHT LANDING: RWY 6, 15, 33 NA. THIS IS RNAV (GPS) RWY 24, AMDT 3A. 1810291806-PERM

FDC **8/4230** CRS IAP C DAVID CAMPBELL FIELD-CORSICANA MUNI, Corsicana, TX. NDB RWY 14, AMDT 4B... CHART NOTE: CIRCLING NA TO RWYS 2 AND 20. CHART NOTE: RWY 14 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. THIS IS NDB RWY 14, AMDT 4C. 1811301410-PERM

FDC **8/4236** CRS IAP C DAVID CAMPBELL FIELD-CORSICANA MUNI, Corsicana, TX. NDB RWY 32, AMDT 3B... CHART NOTE: CIRCLING NA TO RWYS 2 AND 20. CHART NOTE: RWY 32 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. THIS IS NDB RWY 32, AMDT 3C. 1811301419-PERM

FDC **8/4239** CRS IAP C DAVID CAMPBELL FIELD-CORSICANA MUNI, Corsicana, TX. VOR/DME-A, AMDT 1B... CHART NOTE: CIRCLING NA TO RWYS 2 AND 20. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. THIS IS VOR/DME-A, AMDT 1C. 1811301423-PERM

FDC **8/4246** CRS IAP C DAVID CAMPBELL FIELD-CORSICANA MUNI, Corsicana, TX. RNAV (GPS) RWY 32, ORIG-B... CHART NOTE: CIRCLING NA TO RWYS 2 AND 20. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: RWY 32 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 32, ORIG-C. 1811301427-PERM

FDC **8/4456** I18 IAP JACKSON COUNTY, Ravenswood, WV. RNAV (GPS) RWY 22, ORIG-A... CHART NOTE: CIRCLING RWY 4 NA AT NIGHT. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. DELETE NOTE: NIGHT LANDING: RWY 22 NA. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE THRE 758. CHART TDZE 758. CHART NOTE: RUNWAY 22 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA. THIS IS RNAV (GPS) RWY 22, ORIG-B. 1811302018-PERM

FDC **8/4507** 8W2 IAP NEW MARKET, New Market, VA. RNAV (GPS)-B, ORIG... DELETE NOTE: DME/DME RNP-0.3 NA. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. PBN REQUIREMENTS NOTE: RNP APCH. CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES. DELETE: DESCENT ANGLE 3.77/TCH 40. THIS IS RNAV (GPS)-B, ORIG-A. 1810292356-PERM

FDC **8/4554** ABQ IAP ALBUQUERQUE INTL SUNPORT, Albuquerque, NM. ILS OR LOC RWY 8, AMDT 6... DELETE ALL REFERENCE TO OM. DELETE NOTE: FOR INOPERATIVE MALSR, INCREASE S-LOC 8 CAT C AND D VISIBILITY TO RVR 6000. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 8 CAT C AND D VISIBILITY TO RVR 6000. DELETE NOTE: DME REQUIRED. EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED. DELETE PLANVIEW NOTE: GPS OR RADAR REQUIRED. EQUIPMENT REQUIREMENTS NOTE: RNAV 1-GPS OR RADAR REQUIRED FOR PROCEDURE ENTRY. THIS IS ILS OR LOC RWY 8, AMDT 6A. 1811302205-PERM

FDC **8/5183** RME IAP GRIFFISS INTL, Rome, NY. ILS OR LOC RWY 33, AMDT 2... S-ILS 33 DA 788/HAT 290, VIS 3/4 ALL CATS. S-LOC 33 CAT A/B VIS 3/4. CHART TDZE 498, DELETE THRE 498. CHART NOTE: RWY 33 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CIRCLING CAT B MDA 1260/HAA 756, CAT C MDA 1400/HAA 896, CAT D MDA 1640/HAA 1136, VIS CAT C 2 3/4, CAT D 3. JERDA FIX MINIMUMS: S-LOC 33 CAT A/B VIS 3/4. CIRCLING CAT B MDA 1260/HAA 756, CAT C MDA 1400/HAA 896, CAT D MDA 1640/HAA 1136. VIS CAT C 2 3/4, CAT D 3. CHART CIRCLING ICON. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SYRACUSE ALTIMETER SETTING: INCREASE S-ILS 33 DA TO 873; INCREASE ALL MDAS 100 FEET AND S-LOC 33 CAT C/D VISIBILITY 1/4 SM, CIRCLING CAT B/C 1/4 SM AND JERDA FIX MINIMUMS S-LOC 33 CAT C/D 1/4 SM, CIRCLING CAT B/C 1/4 SM. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 33 ALL CATS VISIBILITY TO 7/8 SM, S-LOC 33 CAT A/B TO 1 SM, AND CAT C/D TO 1 3/4 SM AND JERDA FIX MINIMUMS S-LOC 33 CAT A/B TO 1 SM. CHART NOTE: FOR INOPERATIVE ALS WHEN USING SYRACUSE ALTIMETER SETTING, INCREASE S-LOC 33 CAT A/B VISIBILITY TO 1 SM, AND CAT C/D TO 2 SM AND JERDA FIX MINIMUMS S-LOC 33 CAT A/B TO 1 SM. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SYRACUSE ALTIMETER SETTING AND INCREASE ALL DA 85 FEET AND ALL MDA 100 FEET; INCREASE S-LOC 33 CATS C/D AND JERDA FIX MINIMUMS S-LOC 33 CATS C/D VISIBILITY 1/4 MILE; INCREASE CIRCLING CATS C/D AND JERDA FIX MINIMUMS CIRCLING CATS C/D VISIBILITY 1/2 MILE. DELETE NOTE: FOR INOPERATIVE MALSR, INCREASE S-LOC 33 CATS C/D VISIBILITY TO 1 3/4 MILE. DELETE NOTE: FOR INOPERATIVE MALSR WHEN USING JERDA FIX MINIMUMS, INCREASE S-LOC 33 CATS C/D VISIBILITY TO 1 5/8 MILE. DELETE NOTE: FOR INOPERATIVE MALSR WHEN USING SYRACUSE ALTIMETER SETTING, INCREASE S-ILS 33 ALL CATS VISIBILITY TO 7/8 MILE; INCREASE S-LOC 33 CATS C/D VISIBILITY TO 2 MILES. DELETE NOTE: FOR INOPERATIVE MALSR WHEN USING SYRACUSE ALTIMETER SETTING, INCREASE JERDA FIX MINIMUMS S-LOC 33 CATS C/D VISIBILITY TO 1 7/8 MILE. CHANGE JERDA FIX MINIMUMS TO READ: JERDA FIX MINIMUMS (DME REQUIRED). ALTERNATE MINIMUMS: ILS STANDARD, LOC CAT C 900-2 3/4, CAT D 1200-3. ILS AND LOC NA WHEN CONTROL TOWER CLOSED. CHART NOTE: CIRCLING NA SOUTHWEST OF RWY 15-33. DELETE NOTE: CIRCLING NA WEST OF RWY 15-33. EQUIPMENT REQUIREMENTS NOTE: DME OR RADAR REQUIRED FOR LOC ONLY. THIS IS ILS OR LOC RWY 33, AMDT 2A. 1811131701-PERM

FDC **8/6099** DAB IAP DAYTONA BEACH INTL, Daytona Beach, FL. ILS OR LOC RWY 7L, AMDT 32... CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 535. THIS IS ILS OR LOC RWY 7L, AMDT 32A. 1810041820-PERM

FDC **8/6153** RDM IAP ROBERTS FIELD, Redmond, OR. RNAV (GPS) Y RWY 29, AMDT 2A... CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {3.0}/TCH {51.3}). DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) Y RWY 29, AMDT 2B. 1812051605-PERM

FDC **8/7172** SIG IAP FERNANDO LUIS RIBAS DOMINICCI, San Juan, PR. RNAV (GPS) RWY 9, ORIG... CHART NOTE: CIRCLING RWY 27 NA AT NIGHT. CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: DME/DME RNP-0.3 NA. DELETE NOTE: GPS OR RNP-0.3 REQUIRED. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 9, ORIG-A. 1811011748-PERM

FDC **8/7374** M55 IAP LAMAR COUNTY, Vernon, AL. RNAV (GPS) RWY 35, ORIG... CHART NOTE: PROCEDURE NA AT NIGHT. CHART NOTE: RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. PBN REQUIREMENTS NOTE: RNP APCH. DELETE: HOTOW TO RW35: 3.04/40. DELETE NOTE: DME/DME RNP-0.3 NA. DELETE PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. THIS IS RNAV (GPS) RWY 35, ORIG-A. 1810201549-PERM

FDC **8/7378** SOP IAP MOORE COUNTY, Pinehurst/Southern Pines, NC. RNAV (GPS) RWY 23, AMDT 2A... DELETE NOTE: PROCEDURE NA AT NIGHT. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C OR ABOVE 54C. DELETE NOTE: DME/DME RNP-0.3 NA. THIS IS RNAV (GPS) RWY 23, AMDT 2B. 1812071509-PERM

FDC **8/7395** RZR IAP CLEVELAND RGNL JETPORT, Cleveland, TN. RNAV (GPS) RWY 21, AMDT 2 ... CHART AIRPORT ELEVATION 866. CIRCLING CATS A/B HAA 594, CIRCING CAT C HAA 714, CIRCLING CAT D HAA 914. THIS IS RNAV (GPS) RWY 21, AMDT 2A. 1812071548-PERM

FDC **8/7919** AUG IAP AUGUSTA STATE, Augusta, ME. RNAV (GPS)-B, ORIG-B... CHART NOTE: CIRCLING RWY 26 NA AT NIGHT. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WATERVILLE ALTIMETER SETTING: INCREASE ALL MDAS 40 FEET. PBN REQUIREMENTS NOTE: RNP APCH. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT YOSTT ON V3 NORTHEAST BOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT RAZZR ON V93 SOUTHWEST BOUND. DELETE PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT RAZZR VIA V93 SOUTHWEST BOUND. DELETE PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT YOSTT VIA V3 NORTHEAST BOUND. DELETE NOTE: DME/DME RNP-0.3 NA. DELETE NOTE: IF LOCAL ALTIMETER SETTING NOT RECEIVED, USE AUBURN/LEWISTON MUNI ALTIMETER SETTING AND INCREASE ALL MDAS 80 FEET. THIS IS RNAV (GPS)-B, ORIG-C. 1810221226-PERM

FDC **8/7920** AUG IAP AUGUSTA STATE, Augusta, ME. RNAV (GPS) RWY 35, ORIG-A... CHART NOTE: CIRCLING RWY 26 NA AT NIGHT. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WATERVILLE ALTIMETER SETTING: INCREASE LPV DA TO 645, INCREASE LNAV/VNAV DA TO 885; INCREASE ALL MDAS 40 FEET AND LNAV CAT C VISIBILITY 1/4 SM. PBN REQUIREMENTS NOTE: RNP APCH. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C. DELETE NOTE: BARO-VNAV NA BELOW -16C (4F). DELETE NOTE: DME/DME RNP-0.3 NA. DELETE NOTE: IF LOCAL ALTIMETER SETTING NOT RECEIVED, USE AUBURN/LEWISTON MUNI ALTIMETER SETTING AND INCREASE ALL DAS 71 FEET AND ALL MDAS 80 FEET. THIS IS RNAV (GPS) RWY 35, ORIG-B. 1810221226-PERM

FDC **8/8015** X60 IAP WILLISTON MUNI, Williston, FL. VOR RWY 23, AMDT 1A... DELETE TDZE 71. CHART TDZE 76. S-23 CATS A/B/C HAT 704. DELETE NOTE: NIGHT LANDING: RWY 5, 14, 23 NA. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. CHART NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: CIRCLING RWY 14, 32 NA AT NIGHT. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OCALA ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET, INCREASE S-23 CAT C AND CIRCLING CAT C VISIBILITY 1/4 MILE. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OCALA ALTIMETER SETTING AND INCREASE ALL MDAS 60 FEET AND VISIBILITY CAT C 1/2 SM. THIS IS VOR RWY 23, AMDT 1B. 1810221440-PERM

FDC **8/8062** X60 IAP WILLISTON MUNI, Williston, FL. RNAV (GPS) RWY 5, ORIG-A... DELETE NOTE: NIGHT LANDING: RWY 5, 14, 23 NA. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. CHART NOTE: CIRCLING RWY 14, 32 NA AT NIGHT. CHART NOTE: RWY 5 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. CHART VDP AT 1.16 NM TO RW05. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OCALA ALTIMETER SETTING AND INCREASE ALL MDAS 60 FEET AND VISIBILITY LNAV CAT C 1/8 SM. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OCALA ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET. THIS IS RNAV (GPS) RWY 5, ORIG-B. 1810221443-PERM

FDC **8/8063** X60 IAP WILLISTON MUNI, Williston, FL. RNAV (GPS) RWY 23, ORIG-A... DELETE TDZE 71. CHART TDZE 76. LNAV CATS A/B/C HAT 404. DELETE NOTE: NIGHT LANDING: RWY 5, 14, 23 NA. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. CHART NOTE: CIRCLING RWY 14, 32 NA AT NIGHT. CHART NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OCALA ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OCALA ALTIMETER SETTING AND INCREASE ALL MDAS 60 FEET AND VISIBILITY LNAV CAT C 1/8 SM. THIS IS RNAV (GPS) RWY 23, ORIG-B. 1810221445-PERM

FDC **8/8126** PTW IAP HERITAGE FIELD, Pottstown, PA. VOR/DME-A, AMDT 4... CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES. THIS IS VOR/DME-A, AMDT 4A. 1811022006-PERM

FDC **8/8127** LRG IAP LINCOLN RGNL, Lincoln, ME. RNAV (GPS) RWY 17, ORIG-A... PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: DME/DME RNP-0.3 NA. CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES DELETE PROFILE NOTE: DESCENT ANGLE 3.04/TCH 40. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. CHART NOTE: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. THIS IS RNAV (GPS) RWY 17, ORIG-B. 1811022011-PERM

FDC **8/8333** N10 IAP PERKIOMEN VALLEY, Collegeville, PA. RNAV (GPS)-C, ORIG... CHART NOTE: RWY 27 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE: DESCENT ANGLE 3.04/40 TCH. CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES. DELETE NOTE: DME/DME RNP -0.3NA. PBN REQUIREMENT NOTE: RNP APCH. DELETE NOTE: USE HERITAGE FIELD ALTIMETER SETTING; WHEN NOT RECEIVED USE PHILADELPHIA INTL ALTIMETER SETTING AND INCREASE MDA 80 FEET. CHART NOTE: USE HERITAGE FIELD ALTIMETER SETTING. THIS IS RNAV (GPS)-C, ORIG-A. 1810091837-PERM

FDC **8/8334** N10 IAP PERKIOMEN VALLEY, Collegeville, PA. RNAV (GPS)-B, ORIG... CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE: DESCENT ANGLE 3.04/40 TCH. CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES. DELETE NOTE: DME/DME RNP -0.3NA. PBN REQUIREMENT NOTE: RNP APCH. DELETE NOTE: USE HERITAGE FIELD ALTIMETER SETTING; WHEN NOT RECEIVED USE PHILADELPHIA INTL ALTIMETER SETTING AND INCREASE MDA 80 FEET. CHART NOTE: USE HERITAGE FIELD ALTIMETER SETTING. THIS IS RNAV (GPS)-B, ORIG-A. 1810091840-PERM

FDC **8/8420** OLE ODP CATTARAUGUS COUNTY-OLEAN, Olean, NY. TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 3... TAKEOFF MINIMUMS: RWY 16, 34: NA-ENVIRONMENTAL. TAKEOFF OBSTACLE NOTES: DELETE TAKEOFF OBSTACLE NOTES: RWY 16, 34. NOTE: RWY 04, TREES BEGINNING 10 FT FROM DER, 348 FT LEFT OF CENTERLINE, UP TO 49 FT AGL/2150 FT MSL. TREES BEGINNING 41 FT FROM DER, 328 FT RIGHT OF CENTERLINE, UP TO 2130 FT MSL. TREE 981 FT FROM DER, 577 FT LEFT OF CENTERLINE, 69 FT AGL/2154 FT MSL. TREE 1262 FT FROM DER, 764 FT LEFT OF CENTERLINE, 2156 FT MSL. TREE 1754 FT FROM DER, 905 FT LEFT OF CENTERLINE, 2184 FT MSL. TREES BEGINNING 1902 FT FROM DER, 906 FT LEFT OF CENTERLINE, UP TO 2189 FT MSL. NOTE: RWY 22, TREES BEGINNING 26 FT FROM DER, 65 FT LEFT OF CENTERLINE, UP TO 2188 FT MSL.. THIS IS TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 3A. 1811161700-PERM

FDC **8/8689** PHL IAP PHILADELPHIA INTL, Philadelphia, PA. ILS OR LOC RWY 26, AMDT 4C... DELETE NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 27L. DELETE NOTE: DME OR RADAR REQUIRED. EQUIPMENT REQUIREMENTS NOTE: DME OR RADAR REQUIRED. CHART CIRCLING ICON. THIS IS ILS OR LOC RWY 26, AMDT 4D. 1811051226-PERM

FDC **8/8690** PSF ODP PITTSFIELD MUNI, Pittsfield, MA. TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 2... TAKEOFF OBSTACLE NOTES: RWY 08, POLE 75 FT FROM DER, 35 FT RIGHT OF CENTERLINE, 17 FT AGL/1136 FT MSL. POLE 164 FT FROM DER, 107 FT RIGHT OF CENTERLINE, 30 FT AGL/1146 FT MSL. TREES BEGINNING 310 FT FROM DER, 457 FT RIGHT OF CENTERLINE, UP TO 64 FT AGL/1185 FT MSL. ALL OTHER DATA REMAINS AS PUBLISHED. THIS IS TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 2A. 1811051240-PERM

FDC **8/8983** GGE IAP GEORGETOWN COUNTY, Georgetown, SC. RNAV (GPS) RWY 23, AMDT 2A... DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: CIRCLING RWY 29 NA AT NIGHT. CHART NOTE: CIRCLING RWY 11, 29 NA AT NIGHT. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C OR ABOVE 54C. THIS IS RNAV (GPS) RWY 23, AMDT 2B. 1811191539-PERM

FDC **8/9737** GGE IAP GEORGETOWN COUNTY, Georgetown, SC. RNAV (GPS) RWY 5, ORIG-A... DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: CIRCLING RWY 29 NA AT NIGHT. CHART NOTE: CIRCLING RWY 11, 29 NA AT NIGHT. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C OR ABOVE 54C. LPV VIS 3/4 ALL CATS. THIS IS RNAV (GPS) RWY 5, ORIG-B. 1812121513-PERM

FDC **8/9844** RZL IAP JASPER COUNTY, Rensselaer, IN. RNAV (GPS) RWY 18, ORIG-B... DELETE NOTE: PROCEDURE NA AT NIGHT. DELETE NOTE: DME/DME RNP-0.3 NA. PBN EQUIPMENT REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. CHART NOTE: RWY 18 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS LNAV/VNAV NA BELOW -22C (-7F) OR ABOVE 54C (130F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS LNAV/VNAV NA BELOW -22C OR ABOVE 54C. THIS IS RNAV (GPS) RWY 18, ORIG-C. 1809272036-PERM

FDC **8/9845** RZL IAP JASPER COUNTY, Rensselaer, IN. RNAV (GPS) RWY 36, ORIG-B... DELETE NOTE: DME/DME RNP-0.3 NA. DELETE NOTE: PROCEDURE NA AT NIGHT. PBN EQUIPMENT REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS LNAV/VNAV NA BELOW -22C (-7F) OR ABOVE 54C (130F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS LNAV/VNAV NA BELOW -22C OR ABOVE 54C. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. CHART NOTE: RWY 36 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. THIS IS RNAV (GPS) RWY 36, ORIG-C. 1809272036-PERM