

U.S. Department
of Transportation

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

**Federal Aviation
Administration**

Transmittal Letter 19-02

November 30, 2018

**PREPARED BY THE AERONAUTICAL INFORMATION GROUP, AJV-54
(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 18-25 on
October 19, 2018, and in TL 18-26 on November 2, 2018, and in TL 19-01 on November 16,
2018.**

Kotzebue, AK, Ralph Wien Memorial, ILS OR LOC RWY 9, Amdt 1A
Kotzebue, AK, Ralph Wien Memorial, RNAV (GPS) RWY 9, Orig-C
Kotzebue, AK, Ralph Wien Memorial, RNAV (GPS) RWY 27, Orig-C
Kotzebue, AK, Ralph Wien Memorial, VOR RWY 9, Orig-D
Kotzebue, AK, Ralph Wien Memorial, VOR RWY 27, Orig-B
Modesto, CA, Modesto City-Co-Harry Sham Fld, ILS OR LOC RWY 28R, Amdt 14C
Idaho Falls, ID, Idaho Falls Rgnl, RNAV (RNP) Z RWY 3, Amdt 1
Idaho Falls, ID, Idaho Falls Rgnl, RNAV (RNP) Z RWY 21, Amdt 1
Idaho Falls, ID, Idaho Falls Rgnl, VOR RWY 3, Amdt 6D
Idaho Falls, ID, Idaho Falls Rgnl, VOR RWY 21, Amdt 10B
Chicago/Rockford, IL, Chicago/Rockford Intl, RNAV (GPS) RWY 19, Amdt 2B
Chicago, IL, Chicago O'Hare Intl, ILS OR LOC RWY 9L, ILS RWY 9L SA CAT I, ILS
RWY 9L CAT II, ILS RWY 9L CAT III, Amdt 4A
Chicago, IL, Chicago O'Hare Intl, ILS OR LOC RWY 27R, ILS RWY 27R SA CAT I, ILS
RWY 27R CAT II, ILS RWY 27R CAT III, Amdt 4A
Chicago, IL, Chicago O'Hare Intl, RNAV (GPS) RWY 9L, Amdt 3B
Chicago, IL, Chicago O'Hare Intl, RNAV (GPS) RWY 27R, Amdt 3B
Mount Vernon, IL, Mount Vernon, ILS OR LOC RWY 23, Amdt 12
Connersville, IN, Mettel Field, RNAV (GPS) RWY 36, Amdt 3
Tribune, KS, Tribune Muni, RNAV (GPS) RWY 17, Orig-A
Lake Charles, LA, Chennault Intl, RNAV (GPS) RWY 15, Amdt 1
Rochester, MN, Rochester Intl, COPTER ILS Y OR LOC Y RWY 31, Amdt 3
Rochester, MN, Rochester Intl, ILS Z OR LOC Z RWY 31, ILS Z RWY 31 SA CAT I, ILS Z
RWY 31 SA CAT II, Amdt 23

Poplar Bluff, MO, Poplar Bluff Muni, RNAV (GPS) RWY 36, Orig-A
St Louis, MO, St Louis Lambert Intl, ILS OR LOC RWY 6, Amdt 2
St Louis, MO, St Louis Lambert Intl, ILS OR LOC RWY 11, ILS RWY 11 CAT II, ILS RWY 11 CAT III, Amdt 1
Madison, MS, Bruce Campbell Field, RNAV (GPS) RWY 17, Amdt 2
Madison, MS, Bruce Campbell Field, RNAV (GPS) RWY 35, Amdt 1
Madison, MS, Bruce Campbell Field, VOR RWY 17, Orig-C
Pender, NE, Pender Muni, RNAV (GPS) RWY 33, Orig-B
Allentown, PA, Lehigh Valley Intl, ILS OR LOC RWY 6, ILS RWY 6 SA CAT I, ILS RWY 6 SA CAT II, Amdt 24
Eau Claire, WI, Chippewa Valley Rgnl, RNAV (GPS) RWY 22, Amdt 2
Charleston, WV, Yeager, VOR-A, Amdt 14

The following procedure, previously published in TL 18-25, on November 2, 2018, has been rescinded in its entirety.

Brookneal, VA, Brookneal/Campbell County, RNAV (GPS) RWY 24, Amdt 1B

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> RALPH WIEN MEMORIAL	<u>AIRPORT ID</u> PAOT	<u>PROCEDURE NAME</u> ILS OR LOC RWY 9	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> KOTZEBUE	<u>STATE</u> AK
<u>AIRPORT ELEVATION</u> 15	<u>TDZE</u> 13	<u>SUPERSEDED</u> ILS OR LOC RWY 9	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 12/07/2017	<u>MAG VAR</u> 11E
<u>FACILITY</u> I-OTZ	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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 18-25.**

<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>
FIWWI/OTZ 25.00 DME		HUPUG/OTZ 12.00 DME					118.90	13.00 (OTZ R-299)	3900
OTZ VOR/DME		TUBDE/I-OTZ 11.31 DME					264.69	12.00	2500
HHM NDB		TUBDE/I-OTZ 11.31 DME					264.47	11.31	2500
OMPAE/OTZ 12.00 DME CCW	IAF	HUPUG/OTZ 12.00 DME	NOPT				12.00 DME ARC		2000
HUPUG/OTZ 12.00 DME CCW	IAF	TUBDE/I-OTZ 11.31 DME	NOPT				12.00 DME ARC (OTZ LR-275)		1600
NECSI/OTZ 12.00 DME CW	IAF	TUBDE/I-OTZ 11.31 DME	NOPT				12.00 DME ARC (OTZ LR-255)		1600
TUBDE/I-OTZ 11.31 DME	IF/IAF	KAYEC/I-OTZ 5.16 DME					088.88	6.14 (I-OTZ)	1400

MISSED APPROACH

MAP:

ILS: DA
 LOC: MARKX/I-OTZ 1.37 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1700 THEN CLIMBING RIGHT TURN TO 2000 DIRECT OTZ VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 2000.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1700 THEN CLIMBING LEFT TURN TO 2500 DIRECT HHM NDB AND HOLD, CONTINUE CLIMB-IN-HOLD TO 2500.



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD W TUBDE, RT, 088.88 INBOUND, 1600 FT. IN LIEU OF PT (IAF), MAX 4500.

3. FAC: 088.88

FAF: KAYEC/I-OTZ 5.16 DME

DIST FAF TO MAP:

DIST FAF TO THLD: 4.24

4. MIN ALT: TUBDE/I-OTZ 11.31 DME 1600, KAYEC/I-OTZ 5.16 DME 1400

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT: 790

6. MIN GS INCPT: 1400

GS ALT AT FAF : KAYEC/I-OTZ 5.16 DME 1400

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1:

20:1:

TCH: 37.7

8. MSA FROM: OTZ VOR/DME 360-090 3600, 090-270 1600, 270-360 3200

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED

NOTES:

CHART NOTE: CIRCLING RWY 18, 36 NA AT NIGHT, CIRCLING RWY 27 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD. 

CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED. 

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

CHART PROFILE NOTE: USE I-OTZ DME WHEN ON THE LOCALIZER COURSE.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.

FICTITIOUS THRESHOLD POINT (CFCJG) DO NOT CHART.

CHART PLANVIEW NOTE: LOC OFFSET 1.90 DEGREES.

CHART OTZ R-330 AT OMPAE.

CHART OTZ R-299 AT HUPUG.

CHART OTZ R-191 AT NECSI.

CHART IN PLANVIEW: HHM NDB

CHART VDP AT 1.77 DME*

DISTANCE VDP TO THLD 0.84 NM

* LOC ONLY

CHART FAS OBST: 51 LIGHTING 665327N/1623630W.

FAC CROSSES RWY C/L EXTENDED 2680 FT FROM THLD.

CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE HHM NDB, RT, 298.60 INBOUND.

HOLD SE, RT, 294.60 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: 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
S-ILS 09	263	5000	250	263	5000	250	263	5000	250	263	5000	250			
S-LOC 09	320	5500	307	320	5500	307	320	5000	307	320	5000	307			
CIRCLING	520	1	505	520	1	505	720	2	705	720	2 1/4	705			QUALITY 23 CHECKED

CHANGES - REASONS

- 1. NOTES: CIRCLING RWY 18, 36 NA AT NIGHT. - 20:1 PENETRATIONS.
- 2. MISSED APPROACH: LOWERED MAP ALTITUDE FROM 2500 TO 2000. - MISSED ALTITUDE RESTORED BACK TO THE FLIGHT CK VALUE OF THE ORIG-A PROCEDURE. ALTITUDE WAS ONLY RAISED AT THE REQUEST OF ATC WHO HAVE SINCE REQUESTED THE RETURN TO 2000FT.
- 3. NOTES: ADDED RWY 9 HELICOPTER VIS REDUCTION BELOW RVR 4000 NA. - 34:1 PENETRATIONS.
- 4. MINIMUMS: RAISED VISIBILITY TO RVR 5000 FOR S-ILS-09 FOR CAT A-D - PER CRITERIA.
- 5. MINIMUMS: RAISED VISIBILITY TO RVR 5000 FOR S-LOC-09 FOR CAT C-D - PER CRITERIA

- 11 /07/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 09/28/18.
- 1. CHANGED CHART NOTE: STRAIGHT-IN RWY 9 NA AT NIGHT, CIRCLING RWY 9, 18, 36 NA AT NIGHT, CIRCLING RWY 27 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD TO CHART NOTE: CIRCLING RWY 18, 36 NA AT NIGHT, CIRCLING RWY 27 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD.
 - 2. CHANGED CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED TO CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED.



COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZAN, OTZ FSS, AMGR

FLIGHT CHECKED BY

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

DEVELOPED BY

LONNIE EVERHART (JOSHUA DUGAN)

APPROVED BY

LONNIE EVERHART

Digitally signed by

DAVID DANNER

Nov 23, 2018

Digitally signed by

DAVID DANNER

Nov 23, 2018

Digitally signed by

DAVID DANNER

Nov 23, 2018

OFFICE

OFFICE

AJV-5400

OFFICE

AJV-5400

DATE

DATE

08/20/2018

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> RALPH WIEN MEMORIAL	<u>AIRPORT ID</u> PAOT	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 9	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> KOTZEBUE	<u>STATE</u> AK
<u>AIRPORT ELEVATION</u> 15	<u>TDZE</u> 13	<u>SUPERSEDED</u> RNAV (GPS) RWY 9	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 12/07/2017	<u>MAG VAR</u> 11E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

TAA [THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-25.](#)

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 000/30 CW 150/30	NOPT	000/4 CW 150/4		3700
1. 000/4 CW 150/4		KOTEC	IF/IAF	1900
2. 150/30 CW 270/30		150/7 CW 270/7		4300
2. 150/7 CW 270/7		GIGRE	IAF	2800
3. 270/30 CW 000/30		270/11 CW 000/11		2100
3. 270/11 CW 000/11		HERDU	IAF	1900

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>
GIGRE	IAF	KOTEC	NOPT	TF	FB	1.00	150.28	5.00	1900
HERDU	IAF	KOTEC	NOPT	TF	FB	1.00	000.27	8.89	1900
KOTEC	IF/IAF	ZIKBO		TF	FB	1.00	090.34	6.99	1500
ZIKBO	PFAF	RW09	MAP	TF	FO	0.30	090.61	4.54	
RW09	MAP	500 MSL		CA			090.61		500
500 MSL		HERDU		DF	FO	1.00			2000



MISSED APPROACH

MAP:
LPV: DA
LNAV/VNAV: DA
LNAV: RW09

MISSED APPROACH INSTRUCTIONS:

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

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)					
2.	HOLD W KOTEC, RT, 090.34 INBOUND, 1900 FT. IN LIEU OF PT (IAF), MAX 6000.								
3. FAC:	090.61	FAF: ZIKBO	DIST FAF TO MAP: 4.54	DIST FAF TO THLD: 4.54					
4. MIN ALT:	KOTEC 1900, ZIKBO 1500								
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	250 HAT: 0.65	GS ANT:				
6. MIN GP INCPT: 1500	GP ALT AT FAF : ZIKBO 1500		OM:	MM:	IM:				
7. GP ANGLE: 3.00	34:1: IS NOT CLEAR	20:1: IS CLEAR	TCH: 42.2						
8. MSA FROM:									

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING RWY 18, 36 NA AT NIGHT, CIRCLING RWY 27 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD. 

CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED. 

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20C OR ABOVE 54C.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 0.95 NM TO RW09*
*LNAV ONLY
WAAS CHANNEL #57941
REFERENCE PATH ID: W09A
CHART FAS OBST: 94 TOWER 665343N/1623556W.
HOLD SW, RT, 056.44 INBOUND
LTP HAE: 6.1 M

MINIMUMS:

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

ALTERNATE: NA ☐ 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	263	5000	250	263	5000	250	263	5000	250	263	5000	250			
LNAV/VNAV DA	263	5000	250	263	5000	250	263	5000	250	263	5000	250			
LNAV MDA	360	5500	347	360	5500	347	360	5500	347	360	5500	347			
CIRCLING	520	1	505	520	1	505	720	2	705	720	2 1/4	705			

CHANGES - REASONS

1. MINUMUMS: UPDATED LPV, LNAV/VNAV DA VIS TO RVR 5000. - PER CRITERIA.
2. NOTES: ADDED RWY 9 HELICOPTER VIS REDUCTION BELOW RVR 4000 NOT AUTHORIZED. - 34:1 PENETRATIONS.
3. DELETED DME/DME RNP NOTE - CURRENT CRITERIA.
4. ADDED PBN REQUIREMENTS NOTE RNP APCH - CURRENT CRITERIA.

- 11 /07/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 09/28/18.
1. CHANGED CHART NOTE: STRAIGHT-IN RWY 9 NA AT NIGHT, CIRCLING RWY 9, 18, 36 NA AT NIGHT, CIRCLING RWY 27 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD TO CHART NOTE: CIRCLING RWY 18, 36 NA AT NIGHT, CIRCLING RWY 27 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD.
2. CHANGED CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED TO CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED.
3. LINE 7, CHANGED 20:1 IS NOT CLEAR TO 20:1 IS CLEAR.



COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZAN, AMGR, OTZ FSS

FLIGHT CHECKED BY

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

DEVELOPED BY

LONNIE EVERHART (JOSHUA DUGAN)

Digitally signed by
DAVID DANNER
Nov 23, 2018

APPROVED BY

LONNIE EVERHART

Digitally signed by
DAVID DANNER
Nov 23, 2018

OFFICE

DATE

OFFICE

DATE

OFFICE

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	PAOT
RUNWAY	RW09
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W09A
LTP/FTP LATITUDE	665321.5685N
LTP/FTP LONGITUDE	1623628.7510W
LTP/FTP ELLIPSOIDAL HEIGHT	+00061
FPAP LATITUDE	665303.3985N
FPAP LONGITUDE	1623247.6050W
THRESHOLD CROSSING HEIGHT (TCH)	00042.2
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0952
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	5B6E1E97
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	PA
LTP ORTHOMETRIC HEIGHT	+00040
FPAP ORTHOMETRIC HEIGHT	+00040



FEDERAL AVIATION ADMINISTRATION
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<u>AIRPORT</u> RALPH WIEN MEMORIAL	<u>AIRPORT ID</u> PAOT	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 27	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> KOTZEBUE	<u>STATE</u> AK
<u>AIRPORT ELEVATION</u> 15	<u>TDZE</u> 15	<u>SUPERSEDED</u> RNAV (GPS) RWY 27	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 12/07/2017	<u>MAG VAR</u> 11E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

TAA [THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-25.](#)

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 181/30 CW 001/30	NOPT	181/9 CW 001/9		4500
1. 181/9 CW 001/9		NEMDE	IF/IAF	2000
2. 001/30 CW 091/30		LIYRE	IAF	2100
3. 091/30 CW 181/30		091/10 CW 181/10		5000
3. 091/10 CW 181/10		ZIPYU	IAF	4100

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>
LIYRE	IAF	NEMDE	NOPT	TF	FB	1.00	001.20	8.00	2000
ZIPYU	IAF	NEMDE	NOPT	TF	FB	1.00	181.33	8.00	2000
NEMDE	IF/IAF	ACUDU		TF	FB	1.00	271.26	7.32	1600
ACUDU	FAF	JUTIX/2.11 NM TO RW27		TF	FB	0.30	270.99	2.28	
JUTIX/2.11 NM TO RW27		RW27	MAP	TF	FO	0.30	270.99	2.11	
RW27	MAP	415 MSL		CA			270.99		
415 MSL		NEMDE		DF	FO	1.00			2000



MISSED APPROACH

MAP:
LNAV: RW27

MISSED APPROACH INSTRUCTIONS:
CLIMBING LEFT TURN TO 2000 DIRECT NEMDE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD E NEMDE, RT, 271.26 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 14000.
3. FAC: 270.99 FAF: ACUDU DIST FAF TO MAP: 4.39 DIST FAF TO THLD: 4.39
4. MIN ALT: NEMDE 2000, ACUDU 1600, JUTIX/2.11 NM TO RW27 800
5. DIST TO THLD FROM OM: MM: IM: 150 HAT: GS ANT: MM: IM:
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 RWY 18, 36 NA AT NIGHT. 
CHART NOTE: RWY 27 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: STRAIGHT-IN RWY 27 AT NIGHT, CIRCLING RWY 27 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
ACUDU TO RW27: 3.30/46.9.
CHART FAS OBST: 152 NAVAID 665308N/1623224W.

MINIMUMS:

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

ALTERNATE: NA ☐ 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
LNAV MDA	420	1	405	420	1	405	420	1 1/8	405	420	1 1/8	405			
CIRCLING	520	1	505	520	1	505	720	2	705	720	2 1/4	705			

CHANGES - REASONS

1. DELETED DME/DME RNP NOTE - UPDATED TO CURRENT CRITERIA.
2. ADDED PBN REQUIREMENTS NOTE: RNP APCH - UPDATED TO CURRENT CRITERIA.
3. UPDATED OPERATIONAL VGSI REQUIREMENTS NOTE - UPDATED TO CURRENT CRITERIA.



COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZAN, AMGR, OTZ FSS

FLIGHT CHECKED BY

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

DEVELOPED BY

LONNIE EVERHART (JOSHUA DUGAN)

APPROVED BY

LONNIE EVERHART

Digitally signed by

DAVID DANNER

Nov 23, 2018

Digitally signed by

DAVID DANNER

Nov 23, 2018

Digitally signed by

DAVID DANNER

Nov 23, 2018

OFFICE

OFFICE

OFFICE

AJV-5400

AJV-5400

DATE

DATE

DATE

TITLE

MANAGER

11 /07/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 09/28/18.
1. CHANGED CHART NOTE: CIRCLING RWY 9, 18, 36 NA AT NIGHT TO CHART NOTE: CIRCLING RWY 18, 36 NA AT NIGHT.



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR 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> RALPH WIEN MEMORIAL	<u>AIRPORT ID</u> PAOT	<u>PROCEDURE NAME</u> VOR RWY 9	<u>ORIGINAL/AMENDMENT</u> ORIG-D	<u>CITY</u> KOTZEBUE	<u>STATE</u> AK	
<u>AIRPORT ELEVATION</u> 15	<u>TDZE</u> 13	<u>SUPERSEDED</u> VOR RWY 9	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>DATED</u> 12/07/2017	<u>MAG VAR</u> 15E	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> OTZ	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-25.

<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>
FIWWI/25.00 DME		HUPUG/12.00 DME					118.90	13.00 (OTZ R-299)	3900
HHM NDB		KEPTE/4.59 DME	IAF				255.48	3.97	2500
OTZ VOR/DME		KEPTE/4.59 DME	IAF				263.73	4.59	2500
OMPAE/12.00 DME CCW	IAF	HUPUG/12.00 DME	NOPT				12.00 DME ARC		2000
HUPUG/12.00 DME CCW	IAF	VAGUY/12.00 DME	NOPT				12.00 DME ARC (OTZ LR-274)		1600
NECSI/12.00 DME CW	IAF	VAGUY/12.00 DME	NOPT				12.00 DME ARC (OTZ LR-254)		1600
VAGUY/12.00 DME	IF	KEPTE/4.59 DME					083.73	7.41 (OTZ R-264)	1000

MISSED APPROACH

MAP:

WUXIP/1.62 DME FIX

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 2000 DIRECT OTZ VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 2000. 

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT L SIDE OF COURSE 263.73 OUTBOUND 1500 FT WITHIN 10 MILES OF KEPTE/OTZ 4.59 DME (IAF)
-
- FAC: 083.73 FAF: KEPTE/4.59 DME DIST FAF TO MAP: DIST FAF TO THLD: 2.97
- MIN ALT: KEPTE/4.59 DME 1000
- MSA FROM: OTZ VOR/DME 360-090 3700, 090-270 1600, 270-360 3300

QUALITY
23
CHECKED

AIRPORT

RALPH WIEN MEMORIAL

AIRPORT ID

PAOT

PROCEDURE NAME

VOR RWY 9

ORIGINAL/AMENDMENT

ORIG-D

CITY

KOTZEBUE

STATE

AK

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED

NOTES:

CHART NOTE: CIRCLING RWY 18, 36 NA AT NIGHT, CIRCLING RWY 27 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD. CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED. CHART PLANVIEW NOTE: ARRIVALS ON B2, B3, B27, G18, AND V506 DESCEND TO 4300 IN HHM NDB HOLDING PATTERN PRIOR TO COMMENCING APPROACH .

ADDITIONAL FLIGHT DATA:

CHART ARRIVAL HOLDING AT HHM NDB: HOLD SE, RT, 298.60 INBOUND, 4300
HOLD SE, RT, 294.60 INBOUND
CHART VDP AT 2.52 DME
DISTANCE VDP TO THLD 0.89 NM
CHART CIRCLING ICON.
KEPTE TO RW09: 3.00/42.
CHART OTZ R-330 AT OMPAE.
CHART OTZ R-299 AT HUPUG.
CHART OTZ R-191 AT NECSI.
CHART FAS OBST: 76 TOWER 665311N/1623644W.
FAC CROSSES RWY C/L EXTENDED 2994 FT FROM THLD.

MINIMUMS:

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

ALTERNATE: NA ☐ 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
S-09	340	5500	327	340	5500	327	340	5000	327	340	5000	327			
CIRCLING	520	1	505	520	1	505	720	2	705	720	2 1/4	705			

CHANGES - REASONS

1. NOTES: ADDED CHART NOTE RWY 9 HELICOPTER VIS REDUCTION NOTE - 34:1 PENETRATIONS.
2. REPLACED CHART NOTE DME REQUIRED WITH EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED - CURRENT CRITERIA.

11 /07/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 09/28/18.
1. CHANGED MISSED APPROACH INSTRUCTIONS FROM CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 2000 DIRECT KOTZEBUE VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 2000 TO CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 2000 DIRECT OTZ VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 2000.
2. CHANGED CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED TO CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED.
3. CHANGED CHART NOTE: STRAIGHT-IN RWY 9 NA AT NIGHT, CIRCLING RWY 9, 18, 36 NA AT NIGHT, CIRCLING RWY 27 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD TO CHART NOTE: CIRCLING RWY 18, 36 NA AT NIGHT, CIRCLING RWY 27 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD.

QUALITY
23
CHECKED

<u>AIRPORT</u> RALPH WIEN MEMORIAL	<u>AIRPORT ID</u> PAOT	<u>PROCEDURE NAME</u> VOR RWY 9	<u>ORIGINAL/AMENDMENT</u> ORIG-D	<u>CITY</u> KOTZEBUE	<u>STATE</u> AK
<u>COORDINATED WITH:</u> A4A ☒ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ <u>OTHER:</u> AMGR, ZAN, OTZ FSS					
<u>FLIGHT CHECKED BY</u> PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED			<u>OFFICE</u>	<u>DATE</u>	
<u>DEVELOPED BY</u> LONNIE EVERHART (JOSHUA DUGAN)			<i>Digitally signed by</i> DAVID DANNER Nov 23, 2018	<u>OFFICE</u> AJV-5400	<u>DATE</u>
<u>APPROVED BY</u> LONNIE EVERHART	<i>Digitally signed by</i> DAVID DANNER Nov 23, 2018		<u>OFFICE</u> AJV-5400	<u>DATE</u>	<u>TITLE</u> MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR 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> RALPH WIEN MEMORIAL	<u>AIRPORT ID</u> PAOT	<u>PROCEDURE NAME</u> VOR RWY 27	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> KOTZEBUE	<u>STATE</u> AK
<u>AIRPORT ELEVATION</u> 15	<u>TDZE</u> 15	<u>SUPERSEDED</u> VOR RWY 27	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 12/07/2017	<u>MAG VAR</u> 15E
<u>FACILITY</u> OTZ	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2010

TERMINAL ROUTES THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-25.

<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>
OTZ VOR/DME		LOTIC/3.50 DME	IAF				076.81	3.50	2500
JUMAS/12.00 DME CCW	IAF	ZOTOR/12.00 DME	NOPT				12.00 DME ARC (OTZ LR-087)		1600
MUNUE/12.00 DME CW	IAF	ZOTOR/12.00 DME	NOPT				12.00 DME ARC		1600
ZOTOR/12.00 DME	IF	LOTIC/3.50 DME					256.81	8.50 (OTZ R-077)	1600

MISSED APPROACH

MAP:

OTZ VOR/DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1600 THEN CLIMBING LEFT TURN TO 2000 DIRECT OTZ VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 2000.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L SIDE OF COURSE 076.81 OUTBOUND 1600 FT WITHIN 10 MILES OF LOTIC/3.50 DME (IAF)
- 2.
3. FAC: 256.81 FAF: LOTIC/3.50 DME DIST FAF TO MAP: DIST FAF TO THLD: 4.16
4. MIN ALT: LOTIC/3.50 DME 1600, INIYU/1.70 DME 920
8. MSA FROM: OTZ VOR/DME 360-090 3700, 090-270 1600, 270-360 3300

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED.

NOTES:

CHART NOTE: CIRCLING TO RWY 18, 36 NA AT NIGHT. 

CHART NOTE: RWY 27 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.

CHART NOTE: STRAIGHT IN RWY 27 AT NIGHT, CIRCLING RWY 27 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE GLIDEPATH UNTIL THRESHOLD.

QUALITY
23
CHECKED

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART OTZ R-115 AT JUMAS.
CHART OTZ R-066 AT MUNUE.
CHART FAS OBST: 175 BUSH 665354N/1622726W.
HOLD SE, RT, 294.60 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ 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
S-27	440	1	425	440	1	425	440	1 1/4	425	440	1 1/4	425			
CIRCLING	520	1	505	520	1	505	720	2	705	720	2 1/4	705			

CHANGES - REASONS

1. DELETED CHART NOTE DME REQUIRED ADDED EQUIPMENT REQUIREMENT NOTE DME REQUIRED - CURRENT CRITERIA.
2. UPDATED VGSI REQUIRED NOTE TERMINOLOGY - CURRENT CRITERIA.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZAN, OTZ FSS, AMGR

FLIGHT CHECKED BY

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

DEVELOPED BY

LONNIE EVERHART (JOSHUA DUGAN)

APPROVED BY

LONNIE EVERHART

Digitally signed by
DAVID DANNER
Nov 23, 2018

Digitally signed by OFFICE

DAVID DANNER

Nov 23, 2018

OFFICE

AJV-5400

OFFICE

AJV-5400

DATE

DATE

DATE

TITLE

MANAGER

- 11 /07/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 09/28/18.
1. CHANGED CHART NOTE: CIRCLING RWY 9, 18, 36 NA AT NIGHT TO CHART NOTE: CIRCLING RWY 18, 36 NA AT NIGHT.



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>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
MODESTO CITY-CO-HARRY SHAM FLD	KMOD	ILS OR LOC RWY 28R	14C	MODESTO	CA	
<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>
99	91	ILS OR LOC/DME RWY 28R	14B	11/10/2016	16E	1985
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
I-MOD		3 JANUARY 2019	ROUTINE			

TERMINAL ROUTES **THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 19-01.**

<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>
PXN VORTAC		HYP VOR/DME					014.96	35.25	4300
CZQ VORTAC		HYP VOR/DME					290.72	34.54	3000
WRAPS INT		MOD VOR/DME					193.90	16.11	3000
PATYY INT		MOD VOR/DME					011.39	9.25	2000
MOD VOR/DME		ZELAT/MOD VOR/DME 5.97 DME					106.56	5.97	2000
HYP VOR/DME	IAF	DLRAY INT/MOD VOR/DME 17.60 DME	NOPT				305.55	18.94 (MOD LR-109)	3000
DLRAY INT/MOD VOR/DME 17.60 DME	IF	ZELAT/MOD VOR/DME 5.97 DME					288.12	11.63 (I-MOD)	1800

MISSED APPROACH

MAP:

ILS: DA
 LOC: MOD VOR/DME 0.81 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 2000 DIRECT MOD VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 500 THEN CLIMBING RIGHT TURN TO 5000 ON LIN R-160 TO LIN VOR/DME AND HOLD.



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD E ZELAT, LT, 288.12 INBOUND, 1800 FT. IN LIEU OF PT (IAF), MAX 4500.
3. FAC: 288.12FAF: ZELAT/MOD VOR/DME 5.97 DMEDIST FAF TO MAP:DIST FAF TO THLD: 5.16
4. MIN ALT: ZELAT/MOD VOR/DME 5.97 DME 1800
5. DIST TO THLD FROM OM:MM:IM:150 HAT:GS ANT: 951
6. MIN GS INCPT: 1800GS ALT AT FAF : ZELAT/MOD VOR/DME 5.97 DME 1800OM:MM:IM:
7. GP ANGLE: 3.0034:1:20:1:TCH: 52.8
8. MSA FROM: MOD VOR/DME 350-080 3500, 080-170 2300, 170-260 5100, 260-350 2900

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED FOR LOC ONLY.

NOTES:

CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 1080.
CHART NOTE: DME FROM MOD VOR/DME. SIMULTANEOUS RECEPTION OF I-MOD AND MOD DME REQUIRED.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 28R CAT C/D VISIBILITY TO 1 SM.

ADDITIONAL FLIGHT DATA:

CHART 542 TOWER 373446N/1205054W
CHART IN PLANVIEW : ALT MA HOLDING, HOLD S LIN VOR/DME, RT, 360.00 INBOUND.
HOLD E, LT, 284.59 INBOUND
CHART IN PLANVIEW: LIN VOR/DME
CHART VDP AT 1.83 DME*
DISTANCE VDP TO THLD 1.02 NM
* LOC ONLY
CHART FAS OBST: 206 TOWER 373522N/1205331W.

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD - NA WHEN CONTROL TOWER CLOSED.; LOC: STANDARD - 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 28R	291	1/2	200	291	1/2	200	291	1/2	200	291	1/2	200			
S-LOC 28R	460	1/2	369	460	1/2	369	460	5/8	369	460	5/8	369			
CIRCLING	540	1	441	560	1	461	600	1 1/2	501	660	2	561			



CHANGES - REASONS

1. CHANGED PROCEDURE NAME FROM ILS OR LOC/DME RWY 28R TO ILS OR LOC RWY 28R. - NAME CHANGED IAW 8260.19H PARA 8-3-7B(7).
2. REMOVED PLANVIEW NOTE DME OR RADAR REQUIRED. - EQUIPMENT REQUIREMENT NOTE ADDED.
3. UPDATED NOTE "FOR INOPERATIVE MALSR, INCREASE S-LOC CAT D VISIBILITY TO 1 MILE" TO "FOR INOPERATIVE ALS, INCREASE S-LOC 28R CAT C/D VISIBILITY TO 1 SM". - LIGHTING UPDATED IAW 8260.19H CHAP 3 PARA 8-6-11O(3)D.
4. REMOVED NOTE " FOR INOPERATIVE MALSR, WHEN USING ATWATER ALTIMETER SETTING; INCREASE S-ILS 28R ALL VISIBILITIES 1/2 MILE". - ATWATER NO LONGER BACK-UP ALTIMETER SOURCE.
5. CIRCLING CAT C MDA/HAA UPDATED FROM 560/461 TO 600/501. - NEW CONTROLLING OBSTRUCTION IDENTIFIED.
6. BACK-UP ALTIMETER SOURCE UPDATED FROM ATWATER (KMER) TO STOCKTON METROPOLITAN (KSCK). - UPDATED PER AIRNAV 2.0.
7. S-LOC 28R MDA/HAT UPDATED FROM 420/329 TO 460/378. - NEW CONTROLLING OBSTRUCTION: FROM 162 FT MSL OL TRMSN TWR (KMOD0006) 373654.78N/1205550.00W TO 206 FT MSL TOWER (06-025686) 373521.91N/1205330.83W.
8. S-LOC RWY 28R CAT C VISIBILITY UPDATED FROM 1/2 TO 5/8, CAT D FROM 3/4 TO 5/8. - VISIBILITIES UPDATED IAW AFS APPROVED VISI TOOL.

11/9/2018: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 9/25/2018.

1. CORRECTED DME DISTANCE FOR DLRY FROM 17.69 TO 17.60 IN INTERMEDIATE SEGMENT.
2. CHANGED S-LOC 28R CAT D VISIBILITY FROM 3/4 TO 5/8.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZOA, NORCAL APP CON, MOD ATCT, APT MGR

FLIGHT CHECKED BY
DANIEL CHARLES FAVORITE
Digitally signed by
DONALD H LANIER
Nov 15, 2018

OFFICE
FIOG
DATE
10/28/2018

DEVELOPED BY
NICHOLAS K. JACKSON
Digitally signed by
NICHOLAS JACKSON
Nov 15, 2018

OFFICE
AJV-5431
DATE
08/01/2018

APPROVED BY
PATRICK MULQUEEN
Digitally signed by
DONALD H LANIER
Nov 15, 2018

OFFICE
AJV-5430
DATE
TITLE
MANAGER



RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, TITLE 14 CFR PART 97.33						Bearings, headings, courses, 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 in feet RVR.										
TERMINAL ROUTES											MISSED APPROACH					
FROM		TO		COURSE AND DISTANCE				ALTITUDE		RNP: DA CLIMB TO 7500 ON TRACK 026.01 TO TOCYU LEFT TURN TO UFGOD, THEN TRACK 252.59 TO TERRE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, RT, 179.98 INBOUND. DISTANCE TO THLD FROM 269 HAT: 0.68 NM. ROUTE TYPE: A, H ROUTE TYPE QUALIFIER 1: F ROUTE TYPE QUALIFIER 2: S						
LUDIC		HUDEP (TF) (FB) (RNP 2.00)		218.61 / 17.52				10500								
HUDEP (IAF)		OKVIE (TF) (FB) (RNP 1.00)		218.40 / 4.89				9300								
CHEER (IAF)		VIPUC (TF) (FB) (RNP 1.00)		015.02 / 9.35				7000								
ZELOR (IAF)		ROCCA (TF) (FB) (RNP 1.00)		055.58 / 10.24				7500								
OKVIE (IF)		JEDUX (RF) (FB) (RNP 0.70)		(6.35 NM RADIUS CW (CFDVG))/7.41				8600								
(SEE FORM 8260-10)																
THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-26.																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT UGADE _____ 3. FAC: 025.96 FAF: _____ DIST FAF TO MAP: _____ THLD: _____ 4. MIN. ALT: UGADE 6500 5. DIST TO THLD FROM OM: 5.36 MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 6500 GS ALT AT: UGADE 6500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 50.0 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW03 9000																
											MAG VAR: 12E			EPOCH YEAR: 2020		
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		STANDARD						
CATEGORY =====>		A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	
AUTHORIZATION REQUIRED																
RNP 0.11 DA	5013	7/8	269	5013	7/8	269	5013	7/8	269	5013	7/8	269				
RNP 0.30 DA	5071	1	327	5071	1	327	5071	1	327	5071	1	327				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -27C OR ABOVE 49C. CHART SPEED ICON IN PLANVIEW AT OKVIE : MAX 230 KIAS. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT LUDIC ON V330 EAST BOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CHEER ON V21 SOUTH BOUND. (CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 4744 TDZE: 4744			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP: RNAV (RNP) Z RWY 2				
IDAHO FALLS, ID		AIRPORT NAME:					RNAV (RNP) Z RWY 3, AMDT 1					AMDT: ORIG-B				
		IDAHO FALLS RGNL					3 JANUARY 2019					DATED 04/28/2016				



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION				Bearings, headings, courses, 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 in feet RVR.	
RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33					
TERMINAL ROUTES, (CONT.):					
FROM		TO	COURSE AND DISTANCE	ALTITUDE	
JEDUX		UGADE (RF) (FB) (RNP 0.70)	(4.94 NM RADIUS CW (CFDVJ))/8.70	6500	
VIPUC (IF)		UGADE (TF) (FB) (RNP 1.00)	025.90 / 6.04	6500	
ROCCA (IF)		FOXUG (TF) (FB) (RNP 1.00)	084.08 / 7.04	7000	
FOXUG		UGADE (RF) (FB) (RNP 1.00)	(6.86 NM RADIUS CCW (CFDVM))/6.99	6500	
UGADE (FAF)		RW03 (MAP) (TF) (FO) (RNP 0.30)	025.96 / 5.36		
RW03 (MAP)		TOCYU (TF) (FB) (RNP 1.00)	026.01 / 7.00		
TOCYU		UFGOD (RF) (FB) (RNP 1.00)	(5.80 NM RADIUS CCW (CFDVL)) / 13.50		
UFGOD		TERRE (TF) (FO) (RNP 1.00)	252.59 / 10.34		
NOTES, (CONT.):					
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ZELOR ON V365 SOUTHWEST BOUND.					
CHART PLANVIEW NOTE AT LUDIC: (RNP 0.70).					
PBN REQUIREMENTS NOTE: RNP AR APCH.					
PBN REQUIREMENTS NOTE: RF REQUIRED. 					
CITY AND STATE		ELEVATION: 4744 TDZE: 4744	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	
IDAHO FALLS, ID		AIRPORT NAME:	RNAV	RNAV (RNP) Z RWY 3, AMDT 1	
		IDAHO FALLS RGNL		3 JANUARY 2019	
				SUP: RNAV (RNP) Z RWY 2	
				AMDT: ORIG-B	
				DATED: 04/28/2016	

QUALITY
4
CHECKED

RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, TITLE 14 CFR PART 97.33						Bearings, headings, courses, 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 in feet RVR.											
TERMINAL ROUTES											MISSED APPROACH						
FROM		TO			COURSE AND DISTANCE			ALTITUDE		RNP: DA CLIMB TO 7500 ON TRACK 206.08 TO UGADE RIGHT TURN TO STOPS THEN ON TRACK 258.61 TO ROCCA AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 078.61 INBOUND. ROUTE TYPE: A, R ROUTE TYPE QUALIFIER 1: P ROUTE TYPE QUALIFIER 2: S DISTANCE TO THLD FROM 278 HAT: 0.71 NM							
PIINE		LUDIC (TF) (FB) (RNP 1.00)			251.98 / 8.27			12000									
LUDIC (IAF)		WOSKO (TF) (FB) (RNP 1.00)			276.43 / 8.12			9500									
SABAT (IAF)		YAGUP (TF) (FB) (RNP 1.00)			194.23 / 22.45			7600									
TERRE (IAF)		HULSA (TF) (FB) (RNP 1.00)			077.65 / 6.71			7500									
WOSKO (IF)		PUMVE (TF) (FB) (RNP 1.00)			276.31 / 5.10			8000									
(SEE FORM 8260-10)																	
THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-26.																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																	
2. PROFILE STARTS AT WOTES _____																	
3. FAC: <u>206.08</u> FAF: _____ DIST FAF TO MAP: _____ THLD: _____																	
4. MIN. ALT: WOTES 6700																	
5. DIST TO THLD FROM OM: <u>6.03</u> MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																	
6. MIN GS INCPT: <u>6700</u> GS ALT AT: WOTES 6700 OM: _____ MM: _____ IM: _____																	
7. GS ANGLE: <u>3.00</u> TCH: <u>49.1</u> 20:1 IS CLEAR 34:1 IS CLEAR																	
8. MSA FROM: RW21 9100																	
MINIMUMS																	
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT											ALTERNATE: N A		STANDARD				
CATEGORY =====>		A			B			C			D			E			
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA		
AUTHORIZATION REQUIRED																	
RNP 0.11 DA	5011	2400	276	5011	2400	276	5011	2400	276	5011	2400	276					
RNP 0.30 DA	5064	2400	329	5064	2400	329	5064	2400	329	5064	2400	329					
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -27C OR ABOVE 49C. CHART SPEED ICON IN PLANVIEW AT PUMVE : MAX 250 KIAS. CHART SPEED ICON IN PLANVIEW AT JESUG : MAX 215 KIAS. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PIINE ON V330 EASTBOUND. (CONTINUED ON PAGE 2)																	
CITY AND STATE				ELEVATION: 4744 TDZE: 4735				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP: RNAV (RNP) Z RWY 20	
IDAHO FALLS, ID				AIRPORT NAME:								RNAV (RNP) Z RWY 21, AMDT 1 3 JANUARY 2019				AMDT: ORIG-C	
				IDAHO FALLS RGNL												DATED 04/28/2016	

QUALITY
4
CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION				Bearings, headings, courses, 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 in feet RVR.	
RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33					
TERMINAL ROUTES, (CONT.):					
FROM		TO	COURSE AND DISTANCE	ALTITUDE	
PUMVE	WOTES (RF) (FB) (RNP 1.00)		(4.86 NM RADIUS CCW (CFDTR))/5.95	6700	
YAGUP (IF)	WOTES (TF) (FB) (RNP 1.00)		206.14 / 6.07	6700	
HULSA (IF)	JESUG (TF) (FB) (RNP 1.00)		077.75 / 5.10	7000	
JESUG	WOTES (RF) (FB) (RNP 1.00)		(4.95 NM RADIUS CW (CFDTV))/11.08	6700	
WOTES (FAF)	RW21 (MAP) (TF) (FO) (RNP 0.30)		206.08 / 6.03		
RW21 (MAP)	UGADE (TF) (FB) (RNP 1.00)		206.08 / 6.84		
UGADE	STOPS (RF) (FB) (RNP 1.00)		(5.03 NM RADIUS CW (CFDVC))/4.63		
STOPS	ROCCA (TF) (FO) (RNP 1.00) ←		258.61 / 9.13	7500	
NOTES, (CONT.):					
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SABAT ON V365 NORTHBOUND.					
PBN REQUIREMENTS NOTE: RNP AR APCH.					
PBN REQUIREMENTS NOTE: RF REQUIRED.					
CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.					
CHART NOTE: FOR INOPERATIVE ALS INCREASE RNP 0.11 VISIBILITY ALL CATS TO RVR 4500 INCREASE RNP 0.30 VISIBILITY ALL CATS TO RVR 5000.					
CITY AND STATE		ELEVATION: 4744 TDZE: 4735	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP: RNAV (RNP) Z RWY 20
IDAHO FALLS, ID		AIRPORT NAME:	RNAV	RNAV (RNP) Z RWY 21, AMDT 1 3 JANUARY 2019	AMDT: ORIG-C
		IDAHO FALLS RGNL			DATED: 04/28/2016



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR 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> IDAHO FALLS RGNL	<u>AIRPORT ID</u> KIDA	<u>PROCEDURE NAME</u> VOR RWY 3	<u>ORIGINAL/AMENDMENT</u> 6D	<u>CITY</u> IDAHO FALLS	<u>STATE</u> ID
<u>AIRPORT ELEVATION</u> 4744	<u>TDZE</u> 4744	<u>SUPERSEDED</u> VOR RWY 2	<u>ORIGINAL/AMENDMENT</u> 6C	<u>DATED</u> 04/28/2016	<u>MAG VAR</u> 15E
<u>FACILITY</u> IDA	<u>COORDINATES OF FACILITIES</u> 433108.42N / 1120350.10W	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1990

TERMINAL ROUTES THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-26.

<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>
ROCCA INT		IDA VOR/DME					053.00	18.76	7500
TERRE INT		IDA VOR/DME					122.00	17.63	7500

MISSED APPROACH

MAP:

IDA VOR/DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 6000 THEN CLIMBING LEFT TURN TO 7000 DIRECT IDA VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT R **SIDE OF COURSE** 208.00 **OUTBOUND** 6500 **FT WITHIN** 10 **MILES OF** IDA VOR/DME (IAF)
2.
3. **FAC:** 028.00 **FAF:** **DIST FAF TO MAP:** **DIST FAF TO THLD:**
4. **MIN ALT:**
8. **MSA FROM:** IDA VOR/DME 030-120 9200, 120-210 8800, 210-300 7800, 300-030 7100

EQUIPMENT REQUIREMENTS NOTES:

NOTES:



ADDITIONAL FLIGHT DATA:

CHART VDP AT 3.00 DME
DISTANCE VDP TO THLD 1.64 NM
CHART CIRCLING ICON.
CHART FAS OBST: 4989 POWERLINE 432742N/1121208W.
FAC CROSSES RWY C/L EXTENDED 395 FT FROM THLD.
HOLD S, LT, 019.00 INBOUND

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

ALTERNATE: NA 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
S-3	5300	1	556	5300	1	556	5300	1 5/8	556	5300	1 5/8	556			
CIRCLING	5300	1	556	5300	1	556	5400	1 3/4	656	5420	2 1/4	676			

CHANGES - REASONS

- AMENDED PROCEDURE NAME FROM VOR RWY 2 TO VOR RWY 3 - MAG VAR UPDATE
- UPDATED CIRCLING CONTROLLING OBSTS FOR ALL CATS - NEW CIRCLING CRITERIA APPLIED
- AMENDED CAT D CMDA/HAA FROM 5400/656 TO 5420/676 - NEW CONTROLLING OBST WITH NEW CIRCLING CRITERIA APPLIED.
- AMENDED CAT D CIRCLING VISIBILITY FROM 2 TO 2 ¼ - NEW CONTROLLING OBST WITH NEW CIRCLING CRITERIA APPLIED.
- ADDED NOTE: CHART CIRCLING ICON.
- DELETED CHART NOTE: WHEN VGSI INOP, CIRCLING RWY 35 NA AT NIGHT - 20:1 PENETRATOR LIGHTED.
- RAISED S-3 CATS C/D VISIBILITY FROM 1 1/2 TO 1 5/8 - NEW VISIBILITY TABLE APPLIES.
- MOVED ALTIMETER SOURCE AND BACK-UP ALTIMETER SOURCE NOTES TO THE BACK OF THE 8060-9 - NEW DOCUMENTATION CRITERIA APPLIED.

PDF EDITS
8260-5, PAGE 2 OF 2, FINAL TYPE - EDITED S-03 TO S-3.
8260-9, PAGE 5 OF 8, WX SERVICE/BACK-UP WX SERVICE - EDITED SERVICE-A FOR BOTH FROM NO TO YES.

11/9/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 11/23/18.
1. ADDED MISSING ADDITIONAL FLIGHT DATA "HOLD S, LT, 019.00 INBOUND".

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA OTHER: ZLC, IDA ATCT, AMGR, ATA

FLIGHT CHECKED BY
CHARLES DAVID CUNNINGHAM

Digitally signed by
DONALD H LANIER
Nov 19, 2018

OFFICE
FIOG

DATE
10/17/2018

DEVELOPED BY
LONNIE EVERHART (CHARLES CTR THIBODEAUX)

Digitally signed by
DONALD H LANIER
Nov 19, 2018

OFFICE
AJV-5400

DATE
04/02/2018

APPROVED BY
LONNIE EVERHART

Digitally signed by
DONALD H LANIER
Nov 19, 2018

OFFICE
AJV-5400

DATE

TITLE
MANAGER



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

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<u>AIRPORT</u> IDAHO FALLS RGNL	<u>AIRPORT ID</u> KIDA	<u>PROCEDURE NAME</u> VOR RWY 21	<u>ORIGINAL/AMENDMENT</u> 10B	<u>CITY</u> IDAHO FALLS	<u>STATE</u> ID
<u>AIRPORT ELEVATION</u> 4744	<u>TDZE</u> 4735	<u>SUPERSEDED</u> VOR RWY 20	<u>ORIGINAL/AMENDMENT</u> 10A	<u>DATED</u> 04/28/2016	<u>MAG VAR</u> 15E
<u>FACILITY</u> IDA	<u>COORDINATES OF FACILITIES</u> 433108.42N / 1120350.10W	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1990

TERMINAL ROUTES THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-26.

<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>
ROCCA INT/32.92 DME		IDA VOR/DME					053.00	18.76	7500
TERRE INT/22.06 DME		IDA VOR/DME					122.00	17.63	7500

MISSED APPROACH

MAP:

IDA VOR/DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 7000 THEN RIGHT TURN DIRECT IDA VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L **SIDE OF COURSE** 011.82 **OUTBOUND** 6900 **FT WITHIN** 10 **MILES OF** IDA VOR/DME (IAF)
2.
3. **FAC:** 191.82 **FAF:** **DIST FAF TO MAP:** **DIST FAF TO THLD:**
4. **MIN ALT:**
8. **MSA FROM:** IDA VOR/DME 030-120 9200, 120-210 8800, 210-300 7800, 300-030 7100

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: FOR INOPERATIVE ALS INCREASE S-21 CATS C/D VISIBILITY TO 1 7/8 SM.



ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 2.09 DME
DISTANCE VDP TO THLD 1.95 NM
CHART FAS OBST: 4989 TOWER 433539N/1115825W.
FAC CROSSES RWY C/L EXTENDED 3002 FT FROM THLD.
HOLD S, LT, 019.00 INBOUND

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

ALTERNATE: NA 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
S-21	5400	2400	665	5400	2400	665	5400	1 1/2	665	5400	1 1/2	665			
CIRCLING	5400	1	656	5400	1	656	5400	1 7/8	656	5420	2 1/4	676			

CHANGES - REASONS

1. AMENDED PROCEDURE NAME FROM VOR RWY 20 TO VOR RWY 21 - AIRPORT MAG VAR UPDATE
2. UPDATED CIRCLING CONTROLLING OBSTS FOR ALL CATS - NEW CIRCLING CRITERIA APPLIED
3. AMENDED CAT D CMDA FROM 5400 TO 5420 - NEW CONTROLLING OBST WITH NEW CIRCLING CRITERIA APPLIED.
4. AMENDED CAT D CIRCLING VISIBILITY FROM 2 TO 2 ¼ - NEW CONTROLLING OBST WITH NEW CIRCLING CRITERIA APPLIED.
5. DELETED NOTE: RWY 35: 20:1 PENETRATIONS 4851 ANTENNA (KIDAL031) 433016.19N-1120349.33W - PENETRATION IS LIT.
6. DELETED CHART NOTE: WHEN VGSi INOP, CIRCLING RWY 35 NA AT NIGHT - 20:1 PENETRATOR LIGHTED.
7. ADDED NOTE: CHART CIRCLING ICON - NEW CIRCLING CRITERIA APPLIED.

PDF EDITS
-FORM 8260-9 PAGE 5 OF 8, PART B: SUPPLEMENTAL DATA: EDITED BOTH SERVICE-A FROM "N" TO "Y"

11/9/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 11/23/18.
1. ADDED MISSING ADDITIONAL FLIGHT DATA "HOLD S, LT, 019.00 INBOUND".

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA OTHER: ZLA, IDA ATCT, AMGR, IDA FSS., ATA

FLIGHT CHECKED BY

CHARLES DAVID CUNNINGHAM

Digitally signed by

DONALD H LANIER

Nov 19, 2018

OFFICE

FIOG

DATE

10/17/2018

DEVELOPED BY

LONNIE EVERHART (SCOTT LINDHOLM)

Digitally signed by

DONALD H LANIER

Nov 19, 2018

OFFICE

AJV-5400

DATE

04/20/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by

DONALD H LANIER

Nov 19, 2018

OFFICE

AJV-5400

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> CHICAGO/ROCKFORD INTL	<u>AIRPORT ID</u> KRFD	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 19	<u>ORIGINAL/AMENDMENT</u> 2B	<u>CITY</u> CHICAGO/ROCKFORD	<u>STATE</u> IL
<u>AIRPORT ELEVATION</u> 742	<u>TDZE</u> 736	<u>SUPERSEDED</u> RNAV (GPS) RWY 19	<u>ORIGINAL/AMENDMENT</u> 2A	<u>DATED</u> 03/05/2015	<u>MAG VAR</u> 3W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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 19-01.

<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>
RFD VOR/DME		WAGET		TF	FO	2.00	031.66	12.71	2600
BULLZ		JORMO		TF	FB	2.00	262.95	7.23	2500
JVL VOR/DME	IAF	WAGET	NOPT	TF	FB	1.00	170.72	9.00	2500
PAPOW	IAF	WAGET	NOPT	TF	FB	1.00	109.26	11.97	2500
JORMO	IAF	WAGET	NOPT	TF	FB	1.00	258.54	6.00	2500
WAGET	IF/IAF	CAGRA		TF	FB	1.00	188.45	7.00	2500
CAGRA	FAF	JUNUP/1.60 NM TO RW19		TF	FB	0.30	188.44	3.78	
JUNUP/1.60 NM TO RW19		RW19	MAP	TF	FO	0.30	188.44	1.60	
RW19	MAP	936 MSL		CA			188.44		
936 MSL		CONAN		DF	FO	1.00			2500

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW19

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2500 DIRECT CONAN AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD N WAGET, RT, 188.45 INBOUND, 2500 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 188.44FAF: CAGRADIST FAF TO MAP: 5.38DIST FAF TO THLD: 5.38
4. MIN ALT: WAGET 2500, CAGRA 2500, JUNUP/1.60 NM TO RW19 1280*
5. DIST TO THLD FROM OM:MM:IM:150 HAT:200 HAT: 0.47GS ANT:MM:IM:
6. MIN GP INCPT: 2500GP ALT AT FAF : CAGRA 2500OM:
7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 50.0
8. MSA FROM: RW19 2600

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20C OR ABOVE 54C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON JVL VOR/DME AIRWAY RADIALS 147 CW 189.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT BULLZ ON T265 NORTHBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON RFD VOR/DME AIRWAY RADIALS 301 CW 073.

ADDITIONAL FLIGHT DATA:

CHART: ASR
CHART VDP AT 0.97 NM TO RW19*
*LNAV ONLY
WAAS CHANNEL #40435
REFERENCE PATH ID: W19A
CHART FAS OBST: 861 T-L TWR 421352N/0890459W.
HOLD S, RT, 008.41 INBOUND
LTP HAE: 191 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	936	3/4	200	936	3/4	200	936	3/4	200	936	3/4	200			
LNAV/VNAV DA	1039	1	303	1039	1	303	1039	1	303	1039	1	303			
LNAV MDA	1120	1	384	1120	1	384	1120	1 1/8	384	1120	1 1/8	384			
CIRCLING	1220	1	478	1240	1	498	1240	1 1/2	498	1320	2	578			



CHANGES - REASONS

- 1. MAG/VAR CHANGED FROM 0W/1990 TO 3W/2020 - UPDATE PROCEDURE TO MATCH CURRENT MAG/VAR.
- 2. ALL COURSES INCREASED BY 3 DEGREES - MAG/VAR UPDATE.
- 3. CIRC CATS B/C/D MDA/HAA CHANGED: CAT B FROM 1280/538 TO 1240/498; CAT C FROM 1320/578 TO 1240/498; CAT D FROM 1460/718 TO 1320/578 - NEW CIRCLING RADII MINIMUMS APPLIED AND PUBLISHED WITHOUT FLT CK EVAL OR CIRCLING ICON, LOWERED TO MATCH ALL OTHER PROCEDURES.
- 4. REMOVED FAHRENHEIT VALUES FROM BARO-VNAV SYSTEMS NOTE - NO LONGER REQUIRED.
- 5. DELETED DME/DME RNP-0.3 NA NOTE - PUBLISHED PBN REQUIREMENT NOTE.
- 6. PUBLISHED PBN REQUIREMENT NOTE - NEW REQUIREMENT.

11/21/2018: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 8/24/2018.

- 1. UPDATED VOR/DME IDENTIFIER IN PLANVIEW NOTE FROM RDF TO RFD.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZAU, RFD APP CON, AMGR

FLIGHT CHECKED BY

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, DEC 22, 2017.

DEVELOPED BY

KELLY DEAN
Digitally signed by
KELLY D DEAN
Aug 21, 2018

APPROVED BY

PATRICK MULQUEEN
Digitally signed by
DONALD H LANIER
Nov 21, 2018

OFFICE

DATE

OFFICE

DATE

OFFICE

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KRFD
RUNWAY	RW19
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W19A
LTP/FTP LATITUDE	421221.1225N
LTP/FTP LONGITUDE	0890518.7910W
LTP/FTP ELLIPSOIDAL HEIGHT	+00191
FPAP LATITUDE	421052.3885N
FPAP LONGITUDE	0890530.1320W
THRESHOLD CROSSING HEIGHT (TCH)	00050.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0248
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	BFBEE355
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02243
FPAP ORTHOMETRIC HEIGHT	+02243



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> CHICAGO O'HARE INTL	<u>AIRPORT ID</u> KORD	<u>PROCEDURE NAME</u> ILS OR LOC RWY 9L ILS RWY 9L SA CAT I, ILS RWY 9L CAT II, ILS RWY 9L CAT III	<u>ORIGINAL/AMENDMENT</u> 4A	<u>CITY</u> CHICAGO	<u>STATE</u> IL	
<u>AIRPORT ELEVATION</u> 680	<u>TDZE</u> 668	<u>SUPERSEDED</u> ILS OR LOC RWY 9L ILS RWY 9L SA CAT I, ILS RWY 9L CAT II, ILS RWY 9L CAT III	<u>ORIGINAL/AMENDMENT</u> 4	<u>DATED</u> 06/22/2017	<u>MAG VAR</u> 3W	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> I-SAJ	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-25.

<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>
GIBNS	IAF	JHONN/I-SAJ 26.04 DME/RADAR		TF	FB	1.00	079.03	20.67	9000
JHONN/I-SAJ 26.04 DME/RADAR		ESSSS/I-SAJ 22.90 DME/RADAR					092.99	3.14 (I-SAJ)	8000
ESSSS/I-SAJ 22.90 DME/RADAR		VNDER/I-SAJ 19.76 DME/RADAR					092.99	3.14 (I-SAJ)	7000
VNDER/I-SAJ 19.76 DME/RADAR		ILIUM/I-SAJ 16.62 DME/RADAR					092.99	3.14 (I-SAJ)	6000
ILIUM/I-SAJ 16.62 DME/RADAR		TRYXI INT/I-SAJ 13.49 DME/RADAR					092.99	3.13 (I-SAJ)	5000
TRYXI INT/I-SAJ 13.49 DME/RADAR	IF	DOOGY INT/I-SAJ 10.34 DME/RADAR					092.99	3.14 (I-SAJ)	4000
DOOGY INT/I-SAJ 10.34 DME/RADAR		ZENAH INT/I-SAJ 4.80 DME/RADAR					092.99	5.54 (I-SAJ)	2300

MISSED APPROACH

MAP:

ILS: DA
 LOC: 4.95 NM AFTER ZENAH INT/I-SAJ 4.80 DME/RADAR OR AT I-SAJ 0.16 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 4000 DIRECT OBK VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 4000 ON HEADING 058 FOR RADAR VECTORS. (RADAR REQUIRED)



8. MSA FROM: ARP (KORD) 3400

SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 9L: CAT A, B, C, D RA 144, RVR 1400, HAT 150, DA 818 MSL.
CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 9L: CAT A, B, C, D RA 104, RVR 1200, HAT 100, DA 768 MSL.
CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 9L: CAT III CAT A, B, C, D RVR 600
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.
SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF HUD TO DH.
CHART PROFILE NOTE: VGSi AND ILS GLIDEPATH NOT COINCIDENT (VGSi ANGLE {ANGLE}/TCH {FEET}).

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: 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
S-ILS 09L	868	1800	200	868	1800	200	868	1800	200	868	1800	200			
S-LOC 09L	1080	2400	412	1080	2400	412	1080	4000	412	1080	4000	412			



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>
CHICAGO O'HARE INTL	KORD	ILS OR LOC RWY 9L ILS RWY 9L SA CAT I, ILS RWY 9L CAT II, ILS RWY 9L CAT III	4A	CHICAGO	IL

CHANGES - REASONS

1. MSA CHANGED FROM ORD VOR/DME TO KORD - ORD VOR DECOMMISSIONING.
2. ADDED CHART NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT - VGSI ADDED TO RWY.
3. VDP CHANGED FROM 0.96 DME TO 0.91 DME, DISTANCE VDP TO THLD CHANGED FROM 1.12 NM TO 1.07 NM - IAW 8260-3D, 2-6-5B.(1).
4. DELETED CHART NOTE: DME OR RADAR REQUIRED - ADDED EQUIPMENT REQUIREMENT NOTE: RADAR OR DME REQUIRED.
5. DELETED CHART PLANVIEW NOTE: GPS OR RADAR REQUIRED - ADDED RNAV-1 GPS OR RADAR REQUIRED FOR PROCEDURE ENTRY IAW 8260-19H, 8-6-8.
6. ADDED NOTE: RWY 9L HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - 34:1 PENETRATION IDENTIFIED.

11/19/2018: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 10/12/2018.

1. REMOVED HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOTE.



<u>AIRPORT</u> CHICAGO O'HARE INTL	<u>AIRPORT ID</u> KORD	<u>PROCEDURE NAME</u> ILS OR LOC RWY 9L ILS RWY 9L SA CAT I, ILS RWY 9L CAT II, ILS RWY 9L CAT III	<u>ORIGINAL/AMENDMENT</u> 4A	<u>CITY</u> CHICAGO	<u>STATE</u> IL

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZAU, CHICAGO APP CON, ORD TOWER, AMGR

<u>FLIGHT CHECKED BY</u> JOHN D JEFFERS	<i>Digitally signed by</i> BEV L BORDY Nov 20, 2018	<u>OFFICE</u> FICO	<u>DATE</u> 10/10/18
<u>DEVELOPED BY</u> IVAN BLANCO	<i>Digitally signed by</i> IVAN BLANCO Aug 14, 2018	<u>OFFICE</u> AJV-5432	<u>DATE</u> 08/14/2018
<u>APPROVED BY</u> PATRICK MULQUEEN	<i>Digitally signed by</i> BEV L BORDY Nov 20, 2018	<u>OFFICE</u> AJV-5430	<u>TITLE</u> MANAGER



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> CHICAGO O'HARE INTL	<u>AIRPORT ID</u> KORD	<u>PROCEDURE NAME</u> ILS OR LOC RWY 27R ILS RWY 27R SA CAT I, ILS RWY 27R CAT II, ILS RWY 27R CAT III	<u>ORIGINAL/AMENDMENT</u> 4A	<u>CITY</u> CHICAGO	<u>STATE</u> IL	
<u>AIRPORT ELEVATION</u> 680	<u>TDZE</u> 664	<u>SUPERSEDED</u> ILS OR LOC RWY 27R ILS RWY 27R SA CAT I, ILS RWY 27R CAT II, ILS RWY 27R CAT III	<u>ORIGINAL/AMENDMENT</u> 4	<u>DATED</u> 06/22/2017	<u>MAG VAR</u> 3W	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> I-ABU	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-25.

<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>
VOGLR	IAF	VINYY/I-ABU 28.13 DME/RADAR		TF	FB	1.00	284.27	17.46	9000
VINYY/I-ABU 28.13 DME/RADAR		JOKKR/I-ABU 24.99 DME/RADAR					273.01	3.14 (I-ABU)	8000
JOKKR/I-ABU 24.99 DME/RADAR		IYLEK/I-ABU 21.85 DME/RADAR					273.01	3.14 (I-ABU)	7000
IYLEK/I-ABU 21.85 DME/RADAR		WELEV/I-ABU 18.71 DME/RADAR					273.01	3.14 (I-ABU)	6000
WELEV/I-ABU 18.71 DME/RADAR		HAREE INT/I-ABU 15.57 DME/RADAR					273.01	3.14 (I-ABU)	5000
HAREE INT/I-ABU 15.57 DME/RADAR	IF	BONZO INT/I-ABU 12.42 DME/RADAR					273.01	3.14 (I-ABU)	4000
BONZO INT/I-ABU 12.42 DME/RADAR		SIBLY INT/I-ABU 6.04 DME/RADAR					273.01	6.39 (I-ABU)	2200

MISSED APPROACH

MAP:

ILS: DA
 LOC: 4.65 NM AFTER SIBLY INT/I-ABU 6.04 DME/RADAR OR AT I-ABU 1.39 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1100 THEN CLIMBING RIGHT TURN TO 4000 DIRECT OBK VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1100 THEN CLIMBING RIGHT TURN TO 4000 ON DPA VOR/DME R-027 TO UMUZI INT/DPA 25.15 DME AND HOLD.



AIRPORT

CHICAGO O'HARE INTL

AIRPORT ID

KORD

PROCEDURE NAME

ILS OR LOC RWY 27R
ILS RWY 27R SA CAT I,
ILS RWY 27R CAT II,
ILS RWY 27R CAT III

ORIGINAL/AMENDMENT

4A

CITY

CHICAGO

STATE

IL

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT VINYY

3. FAC:

273.01

FAF: SIBLY INT/I-ABU 6.04 DME/RADAR

DIST FAF TO MAP: 4.65

DIST FAF TO THLD: 4.65

4. MIN ALT:

VINYY/I-ABU 28.13 DME/RADAR 9000, JOKKR/I-ABU 24.99 DME/RADAR 8000, IYLEK/I-ABU 21.85 DME/RADAR 7000, WELEV/I-ABU 18.71 DME/RADAR 6000, HAREE INT/I-ABU 15.57 DME/RADAR 5000, BONZO INT/I-ABU 12.42 DME/RADAR 4000, SIBLY INT/I-ABU 6.04 DME/RADAR 2200

5. DIST TO THLD FROM OM:

MM:

IM: 861

100 HAT: 862

150 HAT: 1816

GS ANT: 1135

6. MIN GS INCPT:

2200

GS ALT AT FAF : SIBLY INT/I-ABU 6.04 DME/RADAR 2200

OM:

MM:

IM: 764

7. GP ANGLE:

3.00

34:1:

20:1:

TCH: 54.8

8. MSA FROM: APR (KORD) 3400

EQUIPMENT REQUIREMENTS NOTES:

RNAV-1 GPS OR RADAR REQUIRED FOR PROCEDURE ENTRY.
RADAR OR DME REQUIRED.

NOTES:

SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 27R: CAT A, B, C, D RA 171, RVR 1400, HAT 150, DA 814 MSL.
CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 27R: CAT A, B, C, D RA 101, RVR 1200, HAT 100, DA 764 MSL.
CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 27R: CAT III CAT A, B, C, D RVR 600
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.
SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF HUD TO DH.
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

CHART IN PLANVIEW: UMUZI INT/DPA 25.15 DME
CHART VDP AT 2.60 DME*
DISTANCE VDP TO THLD 1.21 NM
* LOC ONLY
FAS OBST: 864 AAO 420037N/0874926W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NE UMUZI INT/DPA 25.15 DME, RT, 207.01 INBOUND.
HOLD W, RT, 092.00 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: 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
S-ILS 27R	864	1800	200	864	1800	200	864	1800	200	864	1800	200			
S-LOC 27R	1120	2400	456	1120	2400	456	1120	4500	456	1120	4500	456			

CHANGES - REASONS

1. MSA CHANGED FROM ORD VOR/DME TO KORD - ORD VOR DECOMMISSIONING.
2. ADDED CHART NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT - VGSI ADDED TO RWY.
3. VDP CHANGED FROM 2.64 DME TO 2.60 DME, DISTANCE VDP TO THLD CHANGED FROM 1.26 NM TO 1.21 NM - IAW 8260-3D, 2-6-5B.(1).
4. DELETED CHART NOTE: DME OR RADAR REQUIRED - ADDED EQUIPMENT REQUIRED NOTE: DME OR RADAR REQUIRED.
5. DELETED PLANVIEW NOTE: GPS OR RADAR REQUIRED - ADDED EQUIPMENT REQUIRED NOTE: RNAV-1 GPS OR RADAR REQUIRED FOR PROCEDURE ENTRY.
- 11/19/2018: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 10/12/2018.
1. ALL REFERENCE TO HAREE INT/I-ABU 18.57 DME CHANGED TO HAREE INT/I-ABU 15.57 DME.



AIRPORT

CHICAGO O'HARE INTL

AIRPORT ID

KORD

PROCEDURE NAME

ILS OR LOC RWY 27R
ILS RWY 27R SA CAT I,
ILS RWY 27R CAT II,
ILS RWY 27R CAT III

ORIGINAL/AMENDMENT

4A

CITY

CHICAGO

STATE

IL

COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZAU, CHICAGO APP CON, ORD ATCT, AMGR

Digitally signed by

FLIGHT CHECKED BY

BEV L BORDY

OFFICE

FICO

DATE

10/10/18

JOHN D JEFFERS

Nov 20, 2018

DEVELOPED BY

Digitally signed by

IVAN BLANCO

OFFICE

AJV-5432

DATE

08/14/2018

IVAN BLANCO

Aug 14, 2018

APPROVED BY

Digitally signed by

BEV L BORDY

OFFICE

AJV-5430

DATE

TITLE

MANAGER

PATRICK MULQUEEN

Nov 20, 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> CHICAGO O'HARE INTL	<u>AIRPORT ID</u> KORD	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 9L	<u>ORIGINAL/AMENDMENT</u> 3B	<u>CITY</u> CHICAGO	<u>STATE</u> IL
<u>AIRPORT ELEVATION</u> 680	<u>TDZE</u> 668	<u>SUPERSEDED</u> RNAV (GPS) RWY 9L	<u>ORIGINAL/AMENDMENT</u> 3A	<u>DATED</u> 10/12/2017	<u>MAG VAR</u> 3W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2010

TERMINAL ROUTES THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-25.

<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>
GIBNS	IAF	JHONN		TF	FB	1.00	079.03	20.67	9000
JHONN		ESSSS		TF	FB	1.00	092.60	3.14	8000
ESSSS		VNDER		TF	FB	1.00	092.65	3.14	7000
VNDER		ILIUM		TF	FB	1.00	092.69	3.14	6000
ILIUM		TRYXI		TF	FB	1.00	092.68	3.13	5000
TRYXI	IF	DOOGY		TF	FB	1.00	092.80	3.14	4000
DOOGY		ZENAH		TF	FB	1.00	092.84	5.54	2300
ZENAH	FAF	OGSIE/3.30 NM TO RW09L		TF	FB	0.30	092.93	1.65	
OGSIE/3.30 NM TO RW09L		RW09L	MAP	TF	FO	0.30	092.93	3.30	
RW09L	MAP	1100 MSL		CA			092.93		1100
1100 MSL		DEERE		DF	FO	1.00			4000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW09L

MISSED APPROACH INSTRUCTIONS:

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

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT JHONN

3. FAC:

092.93

FAF: ZENAH

DIST FAF TO MAP: 4.95

DIST FAF TO THLD: 4.95

4. MIN ALT: JHONN 9000, ESSSS 8000, VNDR 7000, ILIUM 6000, TRYXI 5000, DOOGY 4000, ZENAH 2300, OGSIE/3.30 NM TO RW09L 1760*

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

200 HAT: 0.45

GS ANT:

6. MIN GP INCPT:

2300

GP ALT AT FAF : ZENAH 2300

OM:

MM:

IM:

7. GP ANGLE:

3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 55.0

8. MSA FROM: RW09L 3400

PBN REQUIREMENTS NOTE:

PBN APCH.
EQUIPMENTS REQUIREMENTS NOTE:
RADAR REQUIRED FOR PROCEDURE ENTRY.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -19C OR ABOVE 54C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.
CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.
CHART NOTE: USE OF FD OR AP PROVIDING RNAV TRACK GUIDANCE REQUIRED DURING SIMULTANEOUS OPERATIONS.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 5000 AND LNAV CATS C/D VISIBILITY TO RVR 6000

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.07 NM TO RW09L*
*LNAV ONLY
WAAS CHANNEL #99508
REFERENCE PATH ID: W09B
CHART FAS OBST: 830 TANK 415950N/0875838W.
CHART 1468 TOWER 420042N/0880207W.
919 AAO 420017N/0880023W.
HOLD NE, RT, 219.06 INBOUND
LTP HAE: 170 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	868	1800	200	868	1800	200	868	1800	200	868	1800	200			
LNAV/VNAV DA	989	3000	321	989	3000	321	989	3000	321	989	3000	321			
LNAV MDA	1080	2400	412	1080	2400	412	1080	4000	412	1080	4000	412			

QUALITY
13
CHECKED

CHANGES - REASONS

- 1. ADDED PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT - VGSI ADDED TO RWY.
- 2. DELETED CHART NOTE DME/DME RNP-0.3 NA - ADDED PBN REQUIREMENTS NOTE: RNP APCH.
- 3. ADDED 20:1 IS CLEAR TO PROFILE LINE 7 - IAW 8260.19H, 8-6-7G WHEN NO 20:1 PENETRATIONS.
- 4. ADDED LEG TYPES AND RNP VALUES TO TERMINAL ROUTES - IAW CURRENT DOCUMENTATION CRITERIA.
- 5. CHANGED VDP FROM 1.12 NM TO RW9L TO 1.07 NM TO RW9L - IAW 8260-3D, 2-6-5B.(1).
- 6. REMOVED FAHRENHEIT TEMPERATURE FROM BARO-VNAV NOTE - IAW 8260.19H, 8-6-9S.
- 7. DELETED PLANVIEW NOTE: RADAR REQUIRED - ADDED EQUIPMENT REQUIREMENTS NOTE: RADAR REQUIRED FOR PROCEDURE ENTRY.
- 8. ADDED CHART NOTE: RWY 9L HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - 34:1 PENETRATION IDENTIFIED.

11/19/2018: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 10/3/2018.

- 1. REMOVED HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA NOTE.
- 2. CHANGED 34:1 FROM IS NOT CLEAR TO IS CLEAR ON LINE 7.



COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZAU, CHICAGO APP CON, ORD TOWER, AMGR

FLIGHT CHECKED BY

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, DEC 22, 2017.

Digitally signed by **OFFICE** **DATE**
BEV L BORDY
Nov 20, 2018

DEVELOPED BY

IVAN BLANCO

Digitally signed by **OFFICE**
IVAN BLANCO AJV-5432
Aug 14, 2018 **OFFICE**

DATE
08/14/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by **OFFICE**
BEV L BORDY AJV-5430
Nov 20, 2018

DATE **TITLE**
MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KORD
RUNWAY	RW09L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W09B
LTP/FTP LATITUDE	420010.1950N
LTP/FTP LONGITUDE	0875536.0335W
LTP/FTP ELLIPSOIDAL HEIGHT	+01700
FPAP LATITUDE	420010.1780N
FPAP LONGITUDE	0875336.5275W
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	0464
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	ABBF9E31

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02036
FPAP ORTHOMETRIC HEIGHT	+02036



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> CHICAGO O'HARE INTL	<u>AIRPORT ID</u> KORD	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 27R	<u>ORIGINAL/AMENDMENT</u> 3B	<u>CITY</u> CHICAGO	<u>STATE</u> IL
<u>AIRPORT ELEVATION</u> 680	<u>TDZE</u> 664	<u>SUPERSEDED</u> RNAV (GPS) RWY 27R	<u>ORIGINAL/AMENDMENT</u> 3A	<u>DATED</u> 08/17/2017	<u>MAG VAR</u> 3W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2010

TERMINAL ROUTES

THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-25.

<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>
VOGLR	IAF	VINYY		TF	FB	1.00	284.27	17.46	9000
VINYY		JOKKR		TF	FB	1.00	273.40	3.14	8000
JOKKR		IYLEK		TF	FB	1.00	273.35	3.14	7000
IYLEK		WELEV		TF	FB	1.00	273.31	3.14	6000
WELEV		HAREE		TF	FB	1.00	273.25	3.14	5000
HAREE	IF	BONZO		TF	FB	1.00	273.15	3.14	4000
BONZO		SIBLY		TF	FB	1.00	273.19	6.39	2200
SIBLY	FAF	RW27R	MAP	TF	FO	0.30	273.09	4.65	
RW27R	MAP	1100 MSL		CA			273.09		1100
1100 MSL		UMUZI		DF	FO	1.00			4000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW27R

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1100 THEN CLIMBING RIGHT TURN TO 4000 DIRECT UMUZI AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT VINYY

3. FAC: 273.09

FAF: SIBLY

DIST FAF TO MAP: 4.65

DIST FAF TO THLD: 4.65

4. MIN ALT: VINYY 9000, JOKKR 8000, IYLEK 7000, WELEV 6000, HAREE 5000, BONZO 4000, SIBLY 2200

5. DIST TO THLD FROM OM:MM:IM:150 HAT:200 HAT: 0.46GS ANT:

6. MIN GP INCPT: 2200GP ALT AT FAF : SIBLY 2200OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 54.8

8. MSA FROM: RW27R 3400

PBN REQUIREMENTS NOTE:

RNP APCH.

EQUIPMENT REQUIREMENTS NOTE:

RADAR REQUIRED FOR PROCEDURE ENTRY.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -19C OR ABOVE 54C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.
CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.
CHART NOTE: USE OF FD OR AP PROVIDING RNAV TRACK GUIDANCE REQUIRED DURING SIMULTANEOUS OPERATIONS.

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.21 NM TO RW27R*
*LNAV ONLY
WAAS CHANNEL #69508
REFERENCE PATH ID: W27B
FAS OBST: 864 AAO 420037N/0874926W.
HOLD N, RT, 176.22 INBOUND
LTP HAE: 168.6 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	864	1800	200	864	1800	200	864	1800	200	864	1800	200			
LNAV/VNAV DA	961	2400	297	961	2400	297	961	2400	297	961	2400	297			
LNAV MDA	1120	2400	456	1120	2400	456	1120	4500	456	1120	4500	456			



CHANGES - REASONS

- 1. ADDED PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT - VGSI ADDED TO RWY.
- 2. DELETED CHART NOTE DME/DME RNP-0.3 NA - ADDED PBN REQUIREMENTS NOTE: RNP APCH.
- 3. ADDED 20:1 IS CLEAR TO PROFILE LINE 7 - IAW 8260.19H, 8-6-7G WHEN NO 20:1 PENETRATIONS.
- 4. ADDED RNP VALUES AND LEG TYPES TO TERMINAL ROUTES - IAW CURRENT DOCUMENTATION CRITERIA.
- 5. CHANGED VDP FROM 1.26 NM TO RW27R TO 1.21 NM TO RW27R - IAW 8260-3D, 2-6-5B.(1).
- 6. REMOVED FAHRENHEIT TEMPERATURE FROM BARO-VNAV NOTE - IAW 8260.19H, 8-6-9S.
- 7. DELETED PLANVIEW NOTE: RADAR REQUIRED - ADDED EQUIPMENT REQUIREMENTS NOTE: RADAR REQUIRED FOR PROCEDURE ENTRY.

11/19/2018: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 10/3/2018.

- 1. ADDED BONZO 4000 TO MIN ALT ON LINE 4.



COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZAU, CHICAGO APP CON, ORD TOWER, AMGR

FLIGHT CHECKED BY

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, DEC 22, 2017.

Digitally signed by **OFFICE** **DATE**
BEV L BORDY
Nov 20, 2018

DEVELOPED BY

IVAN BLANCO
Digitally signed by
IVAN BLANCO
Aug 14, 2018

OFFICE **DATE**
AJV-5432 08/14/2018

APPROVED BY

PATRICK MULQUEEN
Digitally signed by
BEV L BORDY
Nov 20, 2018

OFFICE **DATE** **TITLE**
AJV-5430 MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KORD
RUNWAY	RW27R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W27B
LTP/FTP LATITUDE	420010.1905N
LTP/FTP LONGITUDE	0875356.6995W
LTP/FTP ELLIPSOIDAL HEIGHT	+01686
FPAP LATITUDE	420010.2045N
FPAP LONGITUDE	0875556.2060W
THRESHOLD CROSSING HEIGHT (TCH)	00054.8
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0464
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	EFCD8BF
<u>ADDITIONAL PATH POINT RECORD INFORMATION</u>	
ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02023
FPAP ORTHOMETRIC HEIGHT	+02023



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> MOUNT VERNON	<u>AIRPORT ID</u> KMVN	<u>PROCEDURE NAME</u> ILS OR LOC RWY 23	<u>ORIGINAL/AMENDMENT</u> 12	<u>CITY</u> MOUNT VERNON	<u>STATE</u> IL	
<u>AIRPORT ELEVATION</u> 480	<u>TDZE</u> 471	<u>SUPERSEDED</u> ILS OR LOC RWY 23	<u>ORIGINAL/AMENDMENT</u> 11C	<u>DATED</u> 05/28/2015	<u>MAG VAR</u> 1W	<u>EPOCH YEAR</u> 2000
<u>FACILITY</u> I-MVN	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES **THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-26.**

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
ENL VORTAC		FAMTA INT/VNN 3.13 DME					090.81	19.20	2400
BIB VORTAC	IAF	OFEND INT	NOPT				188.65	25.86	2400
SAM VOR/DME	IAF	OFEND INT	NOPT				268.97	23.89	2400
OFEND INT	IF	FAMTA INT/VNN 3.13 DME					231.07	9.87 (I-MVN)	2400

MISSED APPROACH

MAP:

ILS: DA
LOC: 5.90 NM AFTER FAMTA INT/VNN 3.13 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2300 THEN CLIMBING LEFT TURN TO 2400 ON HEADING 060 AND ON BIB VORTAC R-189 TO OFEND AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT R **SIDE OF COURSE** 051.07 **OUTBOUND** 2400 **FT WITHIN** 10 **MILES OF** FAMTA INT (IAF)

2.

3. **FAC:** 231.07 **FAF:** FAMTA INT/VNN 3.13 DME **DIST FAF TO MAP:** 5.90 **DIST FAF TO THLD:** 5.90

4. **MIN ALT:** FAMTA INT/VNN 3.13 DME 2400

5. **DIST TO THLD FROM PFAF:** 5.90 **MM:** **IM:** **150 HAT:** **GS ANT:** 949

6. **MIN GS INCPT:** 2400 **GS ALT AT FAF :** FAMTA INT/VNN 3.13 DME 2400 **OM:** **MM:** **IM:**

7. **GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 52.1

8. **MSA FROM:** KMVN 2600

EQUIPMENT REQUIREMENTS NOTES:



NOTES:

CHART NOTE: CIRCLING RWY 15, 33 NA AT NIGHT.
CHART NOTE: VDP NA WHEN USING CENTRALIA ALTIMETER SETTING.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CENTRALIA ALTIMETER SETTING AND INCREASE ALL DA 45 FEET AND ALL MDA 60 FEET AND INCREASE S-LOC 23 CAT C/D AND CIRCLING CAT C VISIBILITY 1/4 SM.
CHART NOTE: FOR INOPERATIVE ALS, WHEN USING CENTRALIA ALTIMETER SETTING, INCREASE S-LOC 23 CAT C/D VISIBILITY TO 1 3/4 SM.

ADDITIONAL FLIGHT DATA:

CHART BIB VORTAC 25.9 DME AT OFEND.
CHART SAM VOR/DME 23.9 DME AT OFEND.
CHART ENL VORTAC 19.2 DME AT FAMTA IN PLANVIEW ONLY.
CHART VDP AT 1.24 DME*
DISTANCE VDP TO THLD 1.56 NM
CHART VNN DME IN PROFILE VIEW
CHART CIRCLING ICON.
FAS OBST: 769 AAO 382348N/0884505W.
HOLD N, RT, 188.65 INBOUND
* LOC ONLY

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.; LOC: 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
S-ILS 23	671	1/2	200	671	1/2	200	671	1/2	200	671	1/2	200			
S-LOC 23	1020	1/2	549	1020	1/2	549	1020	1 1/8	549	1020	1 1/8	549			
CIRCLING	1020	1	540	1020	1	540	1140	1 3/4	660	1380	3	900			

CHANGES - REASONS

1. REMOVED HOLD AT VNN DME AND ADDED HOLD AT OFEND ON BIB R-189 TO MISSED APPROACH SEGMENT - VOR PORTION BEING DECOMMISSIONED.
2. CHANGED ALL REFERENCES FROM VNN VOR/DME TO VNN DME - VNN VOR DECOMISSIONING.
3. CHANGED MISSED APP INSTRUCTIONS FROM: CLIMB TO 2400 THEN LEFT TURN DIRECT VNN VOR/DME AND HOLD TO CLIMB TO 2300 THEN CLIMBING LEFT TURN TO 2400 ON HEADING 060 AND BIB VORTAC R-189 TO OFEND AND HOLD - VOR PORTION BEING DECOMMISSIONED.
4. ADDED VDP NA WHEN USING CENTRALIA ALTIMETER SETTING - IAW 8260.19H 8-6-9 E (9).
5. ADDED FOR INOPERATIVE ALS, WHEN USING CENTRALIA ALTIMETER SETTING, INCREASE S-LOC 23 CAT C/D VISIBILITY TO 1 3/4 SM - PER UPDATED VISCHECK.
6. CHANGED MSA FROM VNN VOR/DME TO KMVN - VNN VOR DECOMMISSIONED.
7. CHANGED DME FROM ENL TO FAMTA FROM 19.1 TO 19.2 DME - FAMTA MOVED 916 FT NE.
8. ADDED VDP - VNN DME NOW ASSOCIATED WITH MVN LOC.
9. TCH CHANGED FROM 52.0 TO 52.1 - GS DATA UPDATED.
10. DISTANCE FROM OFEND TO FAMTA CHANGED FROM 10.02 TO 9.87 - FAMTA MOVED 916 FT NE.
11. LINE 3: DIST FAF TO MAP/THLD CHANGED FROM 5.75 TO 5.90 - FAMTA MOVED 916 FT NE.
12. ILS DA CHANGED FROM 688 TO 671 - CHANGED FROM THLD ELEV 468 TO TDZE 471.
13. CHANGED LOC HAT FROM 552 TO 549 - CHANGED FROM THLD ELEV 468 TO TDZE 471.

10/3/2018: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON: 07/12/2018:
1. ADDED "NOPT" TO INITIAL SEGMENTS: BIB VORTAC TO OFEND INT AND SAM VOR/DME TO OFEND INT.

11/6/2018: THIS IS AN CORRECTED COPY OF THE FORM APPROVED ON: 10/05/2018:
1. ADDED *LOC ONLY TO ADDITIONAL FLIGHT DATA.



COORDINATED WITH:

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

FLIGHT CHECKED BY

GREGORY WIEBE

DEVELOPED BY

LONNIE EVERHART (MICHAEL NOLAN)

APPROVED BY

LONNIE EVERHART

Digitally signed by
WARDELL HENNING
Nov 13, 2018

Digitally signed by
WARDELL HENNING
Nov 13, 2018

OFFICE

FIOG

OFFICE

AJV-5400

OFFICE

AJV-5400

DATE

9/29/2018

DATE

07/12/2018

DATE

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> METTEL FIELD	<u>AIRPORT ID</u> KCEV	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> 3	<u>CITY</u> CONNERSVILLE	<u>STATE</u> IN
<u>AIRPORT ELEVATION</u> 866	<u>TDZE</u> 862	<u>SUPERSEDED</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> 2A	<u>DATED</u> 08/21/2014	<u>MAG VAR</u> 4W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1995

TAA **THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-25.**

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 275/30 CW 095/30	NOPT	275/10 CW 095/10		3000
275/10 CW 095/10		WALAG	IF/IAF	2800
2. 095/30 CW 275/30		095/10 CW 275/10		3000
095/10 CW 275/10		WALAG	IF/IAF	2800

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>
WALAG	IF/IAF	YOSKU		TF	FB	1.00	004.53	6.01	2600
YOSKU	FAF	JULKO/2.50 NM TO RW36		TF	FB	0.30	004.53	2.82	
JULKO/2.50 NM TO RW36		RW36	MAP	TF	FO	0.30	004.53	2.50	
RW36	MAP	1132 MSL		CA			004.53		
1132 MSL		RULSE		DF	FO	1.00			2800

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW36

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2800 DIRECT RULSE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S WALAG, RT, 004.53 INBOUND, 2800 FT. IN LIEU OF PT (IF/IAF), MAX 6000.

3. FAC: 004.53

FAF: YOSKU

DIST FAF TO MAP: 5.32

DIST FAF TO THLD: 5.32

4. MIN ALT: WALAG 2800, YOSKU 2600, JULKO/2.50 NM TO RW36 1700*

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

270 HAT: 0.71

GS ANT:

6. MIN GP INCPT: 2600

GP ALT AT FAF : YOSKU 2600

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1: IS NOT CLEAR

20:1: IS CLEAR

TCH: 45.0

8. MSA FROM: 

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 54C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: VDP AND BARO VNAV NA WHEN USING JAMES M. COX DAYTON INTL ALTIMETER SETTING.
CHART NOTE: RWY 36 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: CIRCLING RWY 4, 22 NA AT NIGHT.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE JAMES M COX DAYTON INTL ALTIMETER SETTING AND INCREASE LPV DA TO 1253 FEET AND VISIBILITY ALL CATS TO 1 1/8 SM, LNAV/VNAV DA TO 1472 FEET AND VISIBILITY ALL CATS TO 1 3/4 SM, INCREASE ALL MDA 140 FEET AND LNAV CATS C/D VISIBILITY TO 1 7/8 SM, CIRCLING CAT B TO 1 1/4 SM, CAT C TO 2 3/4 SM, AND CAT D TO 3 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.58 NM TO RW36*
*LNAV ONLY
WAAS CHANNEL #93929
REFERENCE PATH ID: W36A
CHART FAS OBST: 1265 TOWER 393915N/0850851W.
HOLD N, RT, 184.53 INBOUND
LTP HAE: 228.8 M

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
LPV DA	1132	7/8	270	1132	7/8	270	1132	7/8	270	1132	7/8	270			
LNAV/VNAV DA	1351	1 3/8	489	1351	1 3/8	489	1351	1 3/8	489	1351	1 3/8	489			
LNAV MDA	1400	1	538	1400	1	538	1400	1 1/2	538	1400	1 1/2	538			
CIRCLING	1440	1	574	1540	1	674	1620	2 1/4	754	1620	2 1/2	754			QUALITY 27 CHECKED

CHANGES - REASONS

- 1. REPLACED TERMINAL ROUTE IAF ZESOD AND IAF BATHY WITH MODIFIED STRAIGHT-IN TAA - PER ATC OPERATIONAL REQUEST.
- 2. ADDED HOLDING IN-LIEU AT IF WALAG - PER ATC OPERATIONAL REQUEST.
- 3. VDP MOVED FROM 1.59 MILES TO RW 36 TO 1.58 NM TO RW 36 - NEW EVALUATION RESULT.
- 4. REMOVED "DME/DME RNP-0.3 NA." AND ADDED PBN REQUIREMENTS NOTE "RNP APCH".
- 5. UPDATED PROFILE LINE 7 TO SHOW 20:1 IS CLEAR. - IAW 8260.19H, 8-6-7G.
- 6. UPDATED RNP VALUE FOR INTERMEDIATE SEGMENT FROM 0.5 TO 1.00 - IAW WITH CURRENT CRITERIA.
- 7. AMENDED CHART NOTE FROM: FOR UNCOMPENSATED BARQ-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 38C (100F) TO: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 54C.
- 8. REMOVED CHART PLANVIEW NOTES: PROCEDURE NA FOR ARRIVALS AT BATHY ON V517 SOUTHBOUND AND PROCEDURE NA FOR ARRIVALS AT ZESOD ON T213 SOUTHWEST BOUND - BOTH IAFS REMOVED.
- 9. AMENDED CHART NOTE FROM: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE JAMES M COX DAYTON INTL ALTIMETER SETTING AND INCREASE LPV DA TO 1253 FEET AND VISIBILITY ALL CATS TO 1 1/4 MILE, LNAV/VNAV DA TO 1472 FEET AND VISIBILITY ALL CATS TO 2 1/4 MILES, INCREASE ALL MDA 140 FEET AND LNAV CATS C/D VISIBILITY TO 1 7/8 MILE, INCREASE CIRCLING CAT C VISIBILITY TO 2 MILES AND CAT D VISIBILITY TO 3 MILES TO: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE JAMES M COX DAYTON INTL ALTIMETER SETTING AND INCREASE LPV DA TO 1253 FEET AND VISIBILITY ALL CATS TO 1 1/8 SM, LNAV/VNAV DA TO 1472 FEET AND VISIBILITY ALL CATS TO 1 3/4 SM, INCREASE ALL MDA 140 FEET AND LNAV CATS C/D VISIBILITY TO 1 7/8 SM - RESULTS OF NEW EVALUATION.
- 10. FAS DATA CHANGED: FPAP FROM 394251.6600N/0850750.1900W TO 394251.6635N/0850750.1860W, CRC REMAINDER FROM BC63FD89 TO 17A16626 - RESULT OF PROCEDURE DATA CHANGES.

11/9/2018: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 9/26/2018. DELETED MSA DATA FROM PROFILE LINE 8



COORDINATED WITH:

A4A☐ALPA☒AOPA☒APA☐HAI☐NBAA☒OTHER: AMGR, ZID, CMH APP CON

FLIGHT CHECKED BY

SCOTT WIEBE

DEVELOPED BY

IVAN BLANCO

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

BEV L BORDY

Nov 14, 2018

Digitally signed by

IVAN BLANCO

Jul 19, 2018

Digitally signed by

BEV L BORDY

Nov 14, 2018

OFFICE

FIOG

OFFICE

AJV-5432

OFFICE

AJV-5430

DATE

09/162018

DATE

07/18/2018

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCEV
RUNWAY	RW36
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W36A
LTP/FTP LATITUDE	394122.4945N
LTP/FTP LONGITUDE	0850751.2555W
LTP/FTP ELLIPSOIDAL HEIGHT	+02288
FPAP LATITUDE	394251.6635N
FPAP LONGITUDE	0850750.1860W
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)	50.0
CRC REMAINDER	17A16626

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02627
FPAP ORTHOMETRIC HEIGHT	+02627



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> TRIBUNE MUNI	<u>AIRPORT ID</u> K5K2	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> TRIBUNE	<u>STATE</u> KS
<u>AIRPORT ELEVATION</u> 3610	<u>TDZE</u> 3606	<u>SUPERSEDED</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 08/20/2015	<u>MAG VAR</u> 7E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1985

TAA **THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-25.**

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 083/30 CW 263/30	NOPT	ELOSE	IF/IAF	6000
2. 263/30 CW 083/30		ELOSE	IF/IAF	6000

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>
ELOSE	IF/IAF	DAPKE		TF	FB	1.00	172.82	5.00	5200
DAPKE	FAF	RW17	MAP	TF	FO	0.30	172.82	4.89	
RW17	MAP	4010 MSL		CA			172.82		
4010 MSL		CESTO		DF	FO	1.00			6000

MISSED APPROACH

MAP:

LNAV: RW17

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 6000 DIRECT CESTO AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N ELOSE, RT, 172.82 INBOUND, 6000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 172.82

FAF: DAPKE

DIST FAF TO MAP: 4.89

DIST FAF TO THLD: 4.89

4. MIN ALT: ELOSE 6000, DAPKE 5200

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: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SYRACUSE ALTIMETER SETTING AND INCREASE ALL MDA 120 FEET, INCREASE LNAV CAT B VISIBILITY 1/4 SM, CAT C 5/8 SM, INCREASE CIRCLING CAT B VISIBILITY 1/4 SM, CAT C 1/2 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART FAS OBST: 3991 TWR 382837N/1014455W.
HOLD S, RT, 352.82 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
LNAV MDA	4260	1	654	4260	1	654	4260	1 7/8	654		NA				
CIRCLING	4300	1	690	4300	1	690	4300	2	690		NA				

CHANGES - REASONS

1. DELETED CHART NOTE: DME/DME RNP-0.3 NA AND ADDED PBN REQUIREMENTS NOTE: RNP APCH - 8260.19H NEW DOCUMENTATION CRITERIA.
2. LINE 7: ADDED 20:1 IS NOT CLEAR - 20:1 PENETRATIONS EXIST.
3. ADDITIONAL FLIGHT DATA: DELETED DAPKE TO RW17: 3.00/40 AND ADDED CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES - PER FLIGHT INSPECTION NOTAM (8/5772).
4. TERMINAL ROUTES: CHANGED ELOSE TO DAPKE RNP FROM 0.50 TO 1.00 - NEW CODING REQUIREMENTS.
5. NOTES: CHANGED HELICOPTER NOTE FROM HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED TO RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED - 8260.19H, PARA 8-6-11 K(3).
6. CHANGED "MILE" TO "SM" IN BACKUP ALTIMETER NOTE - PER 8260.19H, PARA 8-6-9F.

11/14/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 9/21/18:
1. MISSED APPROACH: ADDED RNP 1.00 TO DF LEG - TO CORRECT AN ADMINISTRATIVE ERROR.



COORDINATED WITH:

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

FLIGHT CHECKED BY

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, DEC 22, 2017.

DEVELOPED BY

JAMES ROGERS

Digitally signed by
JAMES ROGERS
Nov 14, 2018

APPROVED BY

JULIE MORGAN

Digitally signed by
ROBERT G HAMILTON
Nov 15, 2018

Digitally signed by
DAVID DANNER
Sep 21, 2018

OFFICE

OFFICE

AJV-5421

OFFICE

AJV-5420

DATE

DATE

08/28/2018

DATE

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> CHENNAULT INTL	<u>AIRPORT ID</u> KCWF	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 15	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> LAKE CHARLES	<u>STATE</u> LA
<u>AIRPORT ELEVATION</u> 17	<u>TDZE</u> 16	<u>SUPERSEDED</u> RNAV (GPS) RWY 15	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 02/10/2011	<u>MAG VAR</u> 4E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1990

TERMINAL ROUTES **THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 19-01.**

<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>
HATHA		EPOYO		TF	FB	2.00	286.21	23.95	2600
LCH VORTAC		CEVKU		TF	FO	2.00	330.51	17.11 	2000
STRUT		DUREC		TF	FB	2.00	026.41	13.88	2000
EPOYO	IAF	CEVKU	NOPT	TF	FB	1.00	238.82	6.50	2000
DUREC	IAF	CEVKU	NOPT	TF	FB	1.00	061.98	6.50	2000
CEVKU	IF/IAF	DAYAG		TF	FB	1.00	150.39	5.91	1900
DAYAG	FAF	RW15	MAP	TF	FO	0.30	150.40	5.75	
RW15	MAP	216 MSL		CA			150.40		
216 MSL		FERDU		DF	FO	1.00			2000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW15

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 DIRECT FERDU AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
23
CHECKED

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)					
2.	HOLD NW CEVKU, RT, 150.39 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 6000.								
3. FAC:	150.40	FAF: DAYAG	DIST FAF TO MAP: 5.75	DIST FAF TO THLD: 5.75					
4. MIN ALT:	CEVKU 2000, DAYAG 1900								
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	200 HAT: 0.45	GS ANT:				
6. MIN GP INCPT: 1900	GP ALT AT FAF : DAYAG 1900			OM:		MM:		IM:	
7. GP ANGLE: 3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 55.4						
8. MSA FROM:	RW15 2600								

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING LAKE CHARLES RGNL ALTIMETER SETTING.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -15°C OR ABOVE 43°C.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LAKE CHARLES RGNL ALTIMETER SETTING AND INCREASE ALL DA 16 FT AND ALL MDAS DA 20 FEET, INCREASE LNAV CATS C/D VISIBILITY 1/8 SM.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 3/8 SM.
CHART NOTE: FOR INOPERATIVE ALS WHEN USING LAKE CHARLES RGNL ALTIMETER SETTING INCREASE LNAV/VNAV VISIBILITY ALL CATS TO 1 3/8 SM.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON LCH VORTAC AIRWAY RADIALS 240 CW 277.

ADDITIONAL FLIGHT DATA:

CHART 302 TOWER 301839.80N/931156.70W
CHART ASR
CHART FAS OBST: 190 TOWER 301411N/0931002W
CHART CIRCLING ICON.
CHART VDP AT 1.17 NM TO RW15*
*LNAV ONLY
WAAS CHANNEL #45502
REFERENCE PATH ID: W15A
HOLD SE, RT, 330.49 INBOUND
LTP HAE: -23.1 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	216	1/2	200	216	1/2	200	216	1/2	200	216	1/2	200			
LNAV/VNAV DA	507	1	491	507	1	491	507	1	491	507	1	491			
LNAV MDA	440	1/2	424	440	1/2	424	440	3/4	424	440	3/4	424			
CIRCLING	640	1	623	640	1	623	640	1 3/4	623	740	2 1/4	723			

CHANGES - REASONS

1. MOVED IA/IAF CEVKU TO 6.1NM - PER FTP REQUEST.
2. MOVED IAF EPOYO FROM 6 TO 6.5 NM - PER FPT REQUEST.
3. MOVED IAF DUREC FROM 6 TO 6.5 NM - PER FPT REQUEST.
4. DIST FAF TO MAP/THLD CHANGED FROM 5.65 TO 5.75 - PFAF MOVED.
5. CHANGED CHART VDP TO RW15 FROM 1.35 NM TO 1.17 NM.
6. UPDATED MINIMUMS LPV DA/HAA ALL CATS FROM 290/274 TO 216/200 - NO LONGER PENETRATIONS TO FINAL SEGMENT.
7. UPDATED LNAV/VNAV DA/HAA ALL CATS FROM 540/524 TO 507/491 - NEW SURVEY CHANGED ELEV MSL OF CONTROLLER FROM 189 TO 190 AND AC FROM 5D TO 2C.
8. UPDATED LNAV MDA/HAA ALL CATS FROM 500/484 TO 440/424 - NEW SURVEY CHANGED ELEV MSL OF CONTROLLER FROM 189 TO 190 AND AC FROM 5D TO 2C.
9. UPDATED CIRCLING CAT A/B/C/D MDA/HAA FROM 580/563 TO CAT A/B/C 640/623 CAT D 740/723 - NEW CIRCLING CRITERIA.
10. REMOVED DME/DME RNP -0.3 NA - 8260.19H CHAPTER.
11. REMOVED NOTE "VISIBILITY REDUCTION BY HELICOPTER NA" - CURRENT RNAV CRITERIA
12. ADDED RNP APCH TO PBN REQUIRED NOTES - 8260.19H CHAPTER 8
13. PFAF MOVED 588 FT NORTHWEST.
14. CHANGED PFAF COURSE FROM 150.41 TO 150.40 - CALCULATION.
15. UPDATED LPV ALL CATS AND LNAV CAT A/B/C VIS FROM 3/4 TO 1/2 CAT D FROM 1 1/4 TO 1/2. - PER VISCHECK TOOL
16. CHANGED LENGTH OFFSET FROM "0120" TO "0" - CALCULATION.
17. FPAP LAT/LONG CHANGED FROM 301150.3400N-0930809.1525W TO 301150.3360N-0930809.1620W AND LPT LAT/LONG CHANGED FROM 301325.9000N-0930901.8000W TO 301325.8890N-0930901.8055W.
18. CHANGED CRC REMAINDER FROM 8FD4DADO TO AAE3C0D9.

11/12/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 10/15/18:

1. LINE 6: GP INCPT 1900 ADDED TO "GP ALT AT FAF DAYAG 1900."
2. DISTANCE ON SEGMENT LCH VORTAC TO CEVKU CHANGED FROM "17.30" TO "17.11".



COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZHU, LCH APCH, AMGR, ST AV DIR

FLIGHT CHECKED BY

ANTHONY DOMINIC VALLERA

OFFICE

FIOG

DATE

10/30/2018

Digitally signed by

ALLAN WILL

Nov 16, 2018

DEVELOPED BY

LONNIE EVERHART (ANA VEGA)

OFFICE

AJV-5400

DATE

08/09/2018

Digitally signed by

ALLAN WILL

Nov 16, 2018

APPROVED BY

LONNIE EVERHART

OFFICE

AJV-5400

DATE

Digitally signed by

ALLAN WILL

Nov 16, 2018

TITLE

MANAGER

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCWF
RUNWAY	RW15
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W15A
LTP/FTP LATITUDE	301325.8890N
LTP/FTP LONGITUDE	0930901.8055W
LTP/FTP ELLIPSOIDAL HEIGHT	-00231
FPAP LATITUDE	301150.3360N
FPAP LONGITUDE	0930809.1620W
THRESHOLD CROSSING HEIGHT (TCH)	00055.4
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	AAE3C0D9

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+00044
FPAP ORTHOMETRIC HEIGHT	+00044



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> ROCHESTER INTL	<u>HELIPORT ID</u> KRST	<u>PROCEDURE NAME</u> COPTER ILS Y OR LOC Y RWY 31	<u>ORIGINAL/AMENDMENT</u> 3	<u>CITY</u> ROCHESTER	<u>STATE</u> MN
<u>SURFACE ELEVATION</u> 1317	<u>TDZE</u> 1304	<u>SUPERSEDED</u> COPTER ILS OR LOC RWY 31	<u>ORIGINAL/AMENDMENT</u> 2	<u>DATED</u> 01/15/2009	<u>MAG VAR</u> 1E
<u>FACILITY</u> I-RST	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> 01/03/2019	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2005

TERMINAL ROUTES **THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-25.**

<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>
RST VOR/DME		MINGO INT					057.64	9.16	2900
EMORE INT	IF/IAF	MINGO INT	NOPT				311.14	13.14 (I-RST)	2800

MISSED APPROACH

MAP:

ILS: DA
LOC: 4.52 NM AFTER MINGO INT

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 THEN CLIMBING LEFT TURN TO 3000 DIRECT RST VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 2000 THEN CLIMBING RIGHT TURN TO 4800 ON HEADING 050 AND ODI VORTAC R-282 TO EYATE INT/UKN 55.46 DME AND HOLD (DME REQUIRED).

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- HOLD SE MINGO INT, RT, 311.14 INBOUND, 2800 FT. IN LIEU OF PT (IAF), MAX 5000.
- FAC: 311.14 PFAF: MINGO INT DIST PFAF TO MAP: DIST PFAF TO THLD: 4.52
- MIN ALT: MINGO INT 2800
- DIST TO THLD FROM OM: MM: IM: 150 HAT: GS ANT: 1129
- MIN GS INCPT: 2800 GS ALT AT PFAF : MINGO INT 2800 OM: MM: IM:
- GP ANGLE: 3.00 34:1: 20:1: TCH: 56.1
- MSA FROM: RST VOR/DME 090-270 3900, 270-090 3300

EQUIPMENT REQUIREMENTS NOTES:



NOTES:

CHART NOTE: FOR INOPERATIVE ALS, INCREASE VISIBILITY TO 1 MILE.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT RST VOR/DME ON V82-170 WESTBOUND AND .

ADDITIONAL FLIGHT DATA:

CHART: ASR.
CHART IN PLANVIEW: EYATE INT/UKN 55.46 DME
CHART FAS OBST: 1365 TREE 435356N/0922904W.
1510 AAO 435113N/0922325W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE EYATE INT/UKN 55.46 DME, RT, 320.35 INBOUND.
HOLD SW, RT, 025.14 INBOUND

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

ALTERNATE: NA ☐ ILS: STANDARD - NA WHEN CONTROL TOWER CLOSED.; LOC: STANDARD - NA WHEN CONTROL TOWER CLOSED.

CATEGORY:	COPTER														
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
H-ILS 31	1504	1200	200		NA			NA			NA				
H-LOC 31	1620	1200	316		NA			NA			NA				

CHANGES - REASONS

FEEDER SEGMENT FROM RST VOR/DME TO MINGO INT COURSE/DISTANCE CHANGED FROM 057.41/9.15 TO 057.64/9.16 - UPDATED COURSE/DISTANCE FORMULA CALCULATIONS.
INTERMEDIATE SEGMENT FROM EMORE INT TO MINGO INT DISTANCE CHANGED FROM 13.19 TO 13.14 - MINGO INT MOVED 224 FT.
H-ILS 31 VISIBILITY CHANGED FROM 1600 TO 1200 - IAW 8260.3D 12-3-3 B. (1)
H-LOC 31 VISIBILITY CHANGED FROM 1600 TO 1200 - 8260.3D 12-3-3 A. (1)
H-LOC 31 MDA/HAT CHANGED FROM 1660/356 TO 1620/316 - LOWER CONTROLLING OBSTACLE IN FINAL APPROACH SEGMENT.
FINAL SEGMENT MINGO INT TO RWY 31 THLD DISTANCE CHANGED FROM 4.48 TO 4.52 - MINGO INT MOVED 224 FT.
RST TCH CHANGED FROM 50.1 TO 56.068 - TO MATCH AIRNAV DATA.
CHART NOTE CHANGED FROM FOR INOPERATIVE MALSR, INCREASE VISIBILITY TO RVR 2400 TO CHART NOTE: FOR INOPERATIVE ALS, INCREASE VISIBILITY TO RVR 2400 - IAW 8260.19H 8-6-11 O. (3) (D).
PROCEDURE NAME CHANGED FROM COPTER ILS OR LOC RWY 31 TO COPTER ILS Y OR LOC Y RWY 31 - IAW 8260.3D 1-6-2 D.

11-2-18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 10-5-18.
1. CHANGED MINGO INT/RST 9.16 DME TO MINGO INT.
2. ADDED 2800 MINGO INT TO LINE 4 8260-3.



COORDINATED WITH:

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

FLIGHT CHECKED BY
GREGORY SCOTT WIEBE

Digitally signed by
DONALD H LANIER
Nov 21, 2018

OFFICE
FIOG

DATE
11/01/2018

DEVELOPED BY
ROBERT GRIM

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Nov 20, 2018

OFFICE
AJV-5431

DATE
09/04/2018

APPROVED BY
PATRICK MULQUEEN

Digitally signed by
DONALD H LANIER
Nov 21, 2018

OFFICE
AJV-5430

DATE

TITLE
MANAGER



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> ROCHESTER INTL	<u>AIRPORT ID</u> KRST	<u>PROCEDURE NAME</u> ILS Z OR LOC Z RWY 31 ILS Z RWY 31 SA CAT I, ILS Z RWY 31 SA CAT II	<u>ORIGINAL/AMENDMENT</u> 23	<u>CITY</u> ROCHESTER	<u>STATE</u> MN
<u>AIRPORT ELEVATION</u> 1317	<u>TDZE</u> 1304	<u>SUPERSEDED</u> ILS OR LOC RWY 31	<u>ORIGINAL/AMENDMENT</u> 22A	<u>DATED</u> 03/10/2011	<u>MAG VAR</u> 1E
<u>FACILITY</u> I-RST	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> 01/03/2019	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2005

TERMINAL ROUTES THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-25.

<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>
RST VOR/DME		MINGO INT					057.64	9.16	2900
YESUR/RST 13.00 DME CCW	IAF	EGACE/RST 13.00 DME	NOPT				13.00 DME ARC		3700
EGACE/RST 13.00 DME CCW		TECUY INT					13.00 DME ARC (RST LR-095)		2900
EMORE INT	IAF	TECUY INT	NOPT				311.14	6.59 (I-RST)	2900
TECUY INT	IF	MINGO INT					311.14	6.55 (I-RST)	2800

MISSED APPROACH

MAP:

ILS: DA
 LOC: 4.52 NM AFTER MINGO INT

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 THEN CLIMBING LEFT TURN TO 3000 DIRECT RST VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 2000 THEN CLIMBING RIGHT TURN TO 4800 ON HEADING 050 AND ODI R-282 TO EYATE INT/UKN 55.46 DME AND HOLD (DME REQUIRED).



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SE MINGO INT, RT, 311.14 INBOUND, 2800 FT. IN LIEU OF PT (IAF), MAX 5000.

3. FAC: 311.14

FAF: MINGO INT

DIST FAF TO MAP: 4.52

DIST FAF TO THLD: 4.52

4. MIN ALT: MINGO INT 2800

5. DIST TO THLD FROM OM: 1032.00

MM:

IM:

100 HAT: 836

150 HAT: 1792

GS ANT: 1129

6. MIN GS INCPT: 2800

GS ALT AT FAF : MINGO INT 2800

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1:

20:1:

TCH: 56.1

8. MSA FROM: RST VOR/DME 090-270 3900, 270-090 3300

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 31: CAT A, B, C, D RA 204, RVR 1400, HAT 150, DA 1454 MSL.
SA CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 31: CAT A, B, C, D RA 104, RVR 1200, HAT 100, DA 1404 MSL.
SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF HUD TO DH.
SA CAT II CHART NOTE: REDUCED LIGHTING: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF AUTOLAND OR HUD TO TOUCHDOWN.
SA CAT I/II CHART NOTE: PROCEDURE NA WHEN TOWER CLOSED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT RST VOR/DME ON V82-170 WESTBOUND.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 31CAT C/D VISIBILITY TO RVR 5500.

ADDITIONAL FLIGHT DATA:

CHART RST R-086 AT TECUY.
CHART: ASR.
CHART CIRCLING ICON.
CHART RST R-168 AT YESUR.
CHART RST R-125 AT EGACE.
CHART IN PLANVIEW: EYATE INT/UKN 55.46 DME
CHART FAS OBST: 1365 TREE 435356N/0922904W.
1510 AAO 435113N/0922325W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE EYATE INT/UKN 55.46 DME, RT, 320.35 INBOUND.
HOLD SW, RT, 025.14 INBOUND

MINIMUMS:

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

ALTERNATE: NA ILS: STANDARD - NA WHEN CONTROL TOWER CLOSED.; LOC: STANDARD - 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 31	1504	1800	200	1504	1800	200	1504	1800	200	1504	1800	200			
S-LOC 31	1620	2400	316	1620	2400	316	1620	2400	316	1620	2400	316			
CIRCLING	1720	1	403	1780	1	463	1900	1 1/2	583	1900	2	583			

QUALITY
4
CHECKED

CHANGES - REASONS

ADDED SA CAT I AND SA CAT II ILS LINES OF MINIMA AND ASSOCIATE NOTES TO PROCEDURE - IAW FPT/ATC REQUEST. AIRPORT HAS REQUIRED EQUIPMENT IAW 8400.13.
FEEDER SEGMENT FROM RST VOR/DME TO MINGO INT COURSE/DISTANCE CHANGED FROM 057.41/9.15 TO 057.64/9.16 - UPDATED COURSE/DISTANCE FORMULA CALCULATIONS.
INITIAL SEGMENT FROM EMORE INT TO TECUY INT COURSE/DISTANCE CHANGED FROM 311.11/6.60 TO 311.14/6.59 - UPDATED COURSE/DISTANCE FORMULA CALCULATIONS.
INTERMEDIATE SEGMENT FROM TECUY INT TO MINGO INT DISTANCE CHANGED FROM 6.59 TO 6.55 - MINGO INT MOVED 224 FT.
FINAL SEGMENT MINGO INT TO RWY 31 THLD DISTANCE CHANGED FROM 4.48 TO 4.52 - MINGO INT MOVED 224 FT.
RST TCH CHANGED FROM 50.1 TO 56.068 - TO MATCH AIRNAV DATA.
ADDED CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 31 CAT C/D VISIBILITY TO RVR 5500 - IAW 8260.19H 8-6-11 O. (3)(D)
ADDED CHART NOTE: CHART CIRCLING ICON - NEW CIRCLING AREA RADIUS APPLIED TO PROCEDURE.
FAS OBSTACLE CHANGED FROM 1389 TREE TO 1365 TREE - IAW CURRENT IAPA PROCEDURE BUILD RESULTS.
S-LOC 31 MDA/HAT CHANGED FROM 1660/356 TO 1620/316 - LOWER CONTROLLING OBSTACLE IN FINAL APPROACH SEGMENT.
CIRCLING MDA/HAA CAT C AND CAT D CHANGED FROM 1780/463 CAT C TO 1900/583 AND 1880/563 CAT D TO 1900/583 - NEW CONTROLLING OBSTACLES.
7:1 OBSTACLE IN ADDITIONAL FLIGHT DATA CHANGED FROM 1519 AAO TO 1510 AAO - PER IAPA BUILD.
PROCEDURE NAME CHANGED FROM ILS OR LOC RWY 31 TO ILS Z OR LOC Z RWY 31 - IAW 8260.3D 1-6-2 D.

11-2-18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 10-5-18.

1. ADDED FAF TO MAP DISTANCE OF 4.52 ON LINE 3, 8260-3.
2. DELETED DME FROM MINGO INT.
3. CHANGED SA CAT II ILS VISIBILITY FROM 1600 RVR TO 1200 RVR.

COORDINATED WITH:

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

OTHER: ZMP, RST ATCT, RST APP CON, STATE AERO, APT MGR

Digitally signed by

FLIGHT CHECKED BY

GREGORY SCOTT WIEBE

DONALD H LANIER

Nov 21, 2018

OFFICE

FIOG

DATE

11/01/2018

DEVELOPED BY

ROBERT GRIM

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Nov 20, 2018

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AJV-5431

DATE

08/23/2018

APPROVED BY

PATRICK MULQUEEN

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DONALD H LANIER

Nov 21, 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

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> POPLAR BLUFF MUNI	<u>AIRPORT ID</u> KPOF	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> POPLAR BLUFF	<u>STATE</u> MO	
<u>AIRPORT ELEVATION</u> 331	<u>TDZE</u> 331	<u>SUPERSEDED</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 08/30/2007	<u>MAG VAR</u> 0W	<u>EPOCH YEAR</u> 2005
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-25.

<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>
MAW VORTAC		MADZU		TF	FB	2.00	272.56	15.30	2300
UMWIX	IAF	EKRUF	NOPT	TF	FB	1.00	061.74	28.36	2300
MADZU	IAF	EKRUF	NOPT	TF	FB	1.00	271.46	5.00	2300
EKRUF	IF/IAF	ZEDIP		TF	FB	1.00	001.40	6.01	2300
ZEDIP	FAF	RW36	MAP	TF	FO	0.30	001.40	5.96	
RW36	MAP	669 MSL		CA			001.40		
669 MSL		ETBUW		DF	FO	1.00			2300

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW36

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2300 DIRECT ETBUW AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD S EKRUF, RT, 001.40 INBOUND, 2300 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 001.40FAF: ZEDIPDIST FAF TO MAP: 5.96DIST FAF TO THLD: 5.96
4. MIN ALT: EKRUF 2300, ZEDIP 2300
5. DIST TO THLD FROM OM:MM:IM:150 HAT:338 HAT: 0.93GS ANT:
6. MIN GP INCPT: 2300GP ALT AT FAF : ZEDIP 2300OM:MM:IM:
7. GP ANGLE: 3.0534:1: IS NOT CLEAR 20:1: IS CLEARTCH: 40.0
8. MSA FROM: RW36 2200

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 36 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -23°C OR ABOVE 54°C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT UMWIX ON V69 SOUTHBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON MAW VORTAC AIRWAY RADIALS 198 CW 344.

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.29 NM TO RW36*
*LNAV ONLY
WAAS CHANNEL #56399
REFERENCE PATH ID: W36A
FAS OBST: 525 AAO 364242N/0902010W.
HOLD N, RT, 181.40 INBOUND
LTP HAE: 71 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	669	1 1/4	338	669	1 1/4	338	669	1 1/4	338	669	1 1/4	338			
LNAV/VNAV DA	773	1 1/2	442	773	1 1/2	442	773	1 1/2	442	773	1 1/2	442			
LNAV MDA	780	1	449	780	1	449	780	1 3/8	449	780	1 1/2	449			
CIRCLING	840	1	509	920	1	589	920	1 1/2	589	980	2	649			



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KPOF
RUNWAY	RW36
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W36A
LTP/FTP LATITUDE	364604.3765N
LTP/FTP LONGITUDE	0901930.1385W
LTP/FTP ELLIPSOIDAL HEIGHT	+00710
FPAP LATITUDE	364733.5700N
FPAP LONGITUDE	0901927.4300W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.05
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1312
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	216AF5E2

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+01000
FPAP ORTHOMETRIC HEIGHT	+01000



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> ST LOUIS LAMBERT INTL	<u>AIRPORT ID</u> KSTL	<u>PROCEDURE NAME</u> ILS OR LOC RWY 6	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> ST LOUIS	<u>STATE</u> MO
<u>AIRPORT ELEVATION</u> 618	<u>TDZE</u> 551	<u>SUPERSEDED</u> ILS OR LOC RWY 6	<u>ORIGINAL/AMENDMENT</u> 1G	<u>DATED</u> 11/09/2017	<u>MAG VAR</u> 1W <u>EPOCH YEAR</u> 2020
<u>FACILITY</u> I-JAK	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	

TERMINAL ROUTES THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-26.

<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>
FTZ VORTAC	IAF	ENCOE/I-JAK 12.93 DME/RADAR					095.00	16.34	5000
ENCOE/I-JAK 12.93 DME/RADAR	IF	WOODE/I-JAK 8.47 DME/RADAR					063.81	4.46 (I-JAK)	3400
WOODE/I-JAK 8.47 DME/RADAR		ZUDKA/I-JAK 5.49 DME/RADAR					063.81	2.98 (I-JAK)	2400

MISSED APPROACH

MAP:

ILS: DA

LOC: 5.29 NM AFTER ZUDKA/I-JAK 5.49 DME/RADAR OR AT UYIDI/0.22 DME FIX ←

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT ZUMAY LOM AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1040 THEN CLIMBING RIGHT TURN TO 3000 DIRECT TOY VORTAC AND HOLD.

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- PROFILE STARTS AT ENCOE
- FAC: 063.81 FAF: ZUDKA/I-JAK 5.49 DME/RADAR DIST FAF TO MAP: 5.29 DIST FAF TO THLD: 5.65
- MIN ALT: ENCOE/I-JAK 12.93 DME/RADAR 5000, WOODE/I-JAK 8.47 DME/RADAR 3400, ZUDKA/I-JAK 5.49 DME/RADAR 2400
- DIST TO THLD FROM OM: MM: IM: 150 HAT: GS ANT: 1184
- MIN GS INCPT: 2400 GS ALT AT FAF : ZUDKA/I-JAK 5.49 DME/RADAR 2400 OM: MM: IM:
- GP ANGLE: 3.00 34:1: 20:1: TCH: 49.9
- MSA FROM: FZ LOM 090-270 3100, 270-090 2300



EQUIPMENT REQUIREMENTS NOTES:

ADF REQUIRED.
DME OR RADAR REQUIRED.
DME OR RADAR REQUIRED FOR PROCEDURE ENTRY.

NOTES:

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON FTZ VORTAC AIRWAY RADIALS 082 CW 095.
FOR INOPERATIVE ALS, INCREASE S-ILS 6 CAT E VISIBILITY TO RVR 4000 AND S-LOC 6 CAT C/D/E VISIBILITY TO 1 3/8 SM.

ADDITIONAL FLIGHT DATA:

CHART PROFILE NOTE: LOC UNUSABLE 0.2 DME INBOUND.
CHART IN PLANVIEW: TOY VORTAC
CHART VDP AT 1.16 DME*
DISTANCE VDP TO THLD 1.31 NM
* LOC ONLY
CHART FAS OBST: 755 TOWER 384256N/0902819W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD E TOY VORTAC, RT, 270.00 INBOUND.
HOLD NE, LT, 241.00 INBOUND

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: 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
S-ILS 06	751	2400	200	751	2400	200	751	2400	200	751	2400	200	751	2400	200
S-LOC 06	1020	2400	469	1020	2400	469	1020	5000	469	1020	5000	469	1020	5000	469

CHANGES - REASONS

1. ALTERNATE MISSED HOLDING POINT AND INSTRUCTIONS CHANGED FROM "CLIMB TO 1000 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 351 AND STL VORTAC R-031 TO FASHE INT AND HOLD" TO "CLIMB TO 1040 THEN CLIMBING RIGHT TURN TO 3000 DIRECT TOY VORTAC AND HOLD" - STL VORTAC TO BE DECOMMISSIONED IN 2025; FPT REQUEST.
2. UPDATED ADDITIONAL FLIGHT DATA FROM "CHART IN PLANVIEW: FASHE" TO "CHART IN PLAN VIEW: TOY VORTAC" - STL VORTAC TO BE DECOMMISSIONED IN 2025; FPT REQUEST.
3. ENCOE, WOODE, TONII FIXES ARE NO LONGER INTERSECTION FIXES - STL VORTAC TO BE DECOMMISSIONED IN 2025; FPT REQUEST.
4. UPDATED CHART PLANVIEW NOTE FROM "RADAR REQUIRED" TO "RADAR OR DME REQUIRED" - INTERSECTION FIXES REMOVED.
5. CHANGED MSA CENTERPOINT FROM STL VORTAC TO FZU LOM - STL VORTAC TO BE DECOMMISSIONED IN 2025; FPT REQUEST.
6. CHANGED PFAF/FAF FROM TONII TO ZUDKA - ALIGNED WITH RNAV PROCEDURE.
7. ADDED VDP TO PROCEDURE - FINAL FAC HAS DME.
8. DISTANCE FAF TO MAP CHANGED FROM 5.04 TO 5.29, FAF TO THLD CHANGED FROM 5.40 TO 5.65 - FAF CHANGED FROM TONII TO ZUDKA.
9. S-LOC CAT E VISIBILTY CHANGED FROM RVR 6000 TO RVR 5000 - CRITERIA CHANGE.

-PDF EDITS
- FORM 8260-9, PAGE 3 OF 9, FINAL:LOC, TO - ADDED "I-JAK" TO UYIDI FIX
- FORM 8260-9, PAGE 3 OF 9, FINAL:LOC, MAP - ADDED "I-JAK" TO UYIDI FIX

11/21/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 10/17/18.
1. CORRECTED MISSED APPROACH FROM "LOC: 5.49 NM AFTER..." TO "LOC: 5.29 NM AFTER..."



COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZKC, STL APP CON, APT MGR, ATA

FLIGHT CHECKED BY

BRIAN DAVID HARRELSON

Digitally signed by

DONALD H LANIER

Nov 26, 2018

OFFICE

FIOG

DATE

10/11/2018

DEVELOPED BY

LONNIE EVERHART (SCOTT LINDHOLM)

Digitally signed by

DONALD H LANIER

Nov 26, 2018

OFFICE

AJV-5400

DATE

07/02/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by

DONALD H LANIER

Nov 26, 2018

OFFICE

AJV-5400

DATE

TITLE

MANAGER



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> ST LOUIS LAMBERT INTL	<u>AIRPORT ID</u> KSTL	<u>PROCEDURE NAME</u> ILS OR LOC RWY 11 ILS RWY 11 CAT II, ILS RWY 11 CAT III	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> ST LOUIS	<u>STATE</u> MO
<u>AIRPORT ELEVATION</u> 618	<u>TDZE</u> 618	<u>SUPERSEDED</u> ILS OR LOC RWY 11 ILS RWY 11 CAT II, ILS RWY 11 CAT III	<u>ORIGINAL/AMENDMENT</u> ORIG-D	<u>DATED</u> 08/17/2017	<u>MAG VAR</u> 1W
<u>FACILITY</u> I-OGZ	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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 18-26.

<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>
SISDE INT/I-OGZ 17.78 DME/RADAR	IAF	ZOVUN/I-OGZ 14.88 DME/RADAR					123.17	2.90 (I-OGZ)	5000
ZOVUN/I-OGZ 14.88 DME/RADAR	IF	HIXOB/I-OGZ 10.44 DME/RADAR					123.17	4.44 (I-OGZ)	3500
HIXOB/I-OGZ 10.44 DME/RADAR		JEXAR/I-OGZ 7.42 DME/RADAR					123.17	3.02 (I-OGZ)	2500

MISSED APPROACH

MAP:

ILS: DA
LOC: 5.64 NM AFTER JEXAR/I-OGZ 7.42 DME/RADAR OR AT I-OGZ 1.78 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1060 THEN CLIMBING RIGHT TURN TO 3000 ON HEADING 130 AND FTZ R-095 TO MOODS INT/FTZ 44.70 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1060 THEN CLIMBING RIGHT TURN TO 3000 ON HEADING 130 AND ENL R-277 TO MOODS INT/ENL 42.16 DME AND HOLD.

PROFILE:

1. PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
2. PROFILE STARTS AT SISDE
3. **FAC:** 123.17 **FAF:** JEXAR/I-OGZ 7.42 DME/RADAR **DIST FAF TO MAP:** 5.64 **DIST FAF TO THLD:** 5.64
4. **MIN ALT:** SISDE INT/I-OGZ 17.78 DME/RADAR 5000, ZOVUN/I-OGZ 14.88 DME/RADAR 5000, HIXOB/I-OGZ 10.44 DME/RADAR 3500, JEXAR/I-OGZ 7.42 DME/RADAR 2500
5. **DIST TO THLD FROM OM:** 5.64 **MM:**  **IM:** 860 **100 HAT:** 1128 **150 HAT:** **GS ANT:** 1209
6. **MIN GS INCPT:** 2500 **GS ALT AT FAF :** JEXAR/I-OGZ 7.42 DME/RADAR 2500 **OM:** **MM:** **IM:** 719
7. **GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 55.4
8. **MSA FROM:** FZ LOM 090-270 3100, 270-090 2300



EQUIPMENT REQUIREMENTS NOTES:

RADAR REQUIRED FOR PROCEDURE ENTRY.
DME OR RADAR REQUIRED.

NOTES:

CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 11: CAT A, B, C, D RA 187, RVR 1200, HAT 100, DA 718 MSL.
CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 11: CAT A, B, C, D RVR 600
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 12R/L.
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: DISREGARD OM SIGNAL ASSOCIATED WITH ILS TO RWY 12R.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS CAT E VISIBILITY TO RVR 4000, AND S-LOC CAT C/D/E VISIBILITY TO RVR 5500.

ADDITIONAL FLIGHT DATA:

CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD W MOODS INT/ENL 42.16 DME, RT, 097.00 INBOUND (DO NOT CHART)
CHART VDP AT 2.73 DME*
DISTANCE VDP TO THLD 0.95 NM
* LOC ONLY
CHART FAS OBST: 675 TOWER 384819N/0902920W.
HOLD E, RT, 275.34 INBOUND

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: 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
S-ILS 11	818	1800	200	818	1800	200	818	1800	200	818	1800	200	818	1800	200
S-LOC 11	980	2400	362	980	2400	362	980	3500	362	980	3500	362	980	3500	362

CHANGES - REASONS

1. PRIMARY MISSED APPROACH INSTRUCTIONS CHANGED FROM "...STL VORTAC R-170 TO IMPER INT/STL 24.8 DME..." TO "...FTZ VORTAC R-095 TO MOODS INT/42.20 DME..." - CSX VORTAC DECOMMISSIONED.
2. ALTERNATE MISSED APPROACH INSTRUCTIONS CHANGED FROM "...4500 ON HEADING 179 AND CSX VOR/DME R-185 TO IMPER INT/CSX 18.09 DME..." TO "...3000 ON HEADING 130 AND ON ENL VORTAC R-277 TO MOODS INT/42.20 DME AND HOLD W, RT, 097.00 INBOUND..." - CSX VORTAC DECOMMISSIONED.
3. ZOVUN, HIXOB, JEXAR FIXES ARE NO LONGER INTERSECTION FIXES - STL VORTAC TO BE DECOMMISSIONED IN 2025; FPT REQUEST.
4. UPDATED CHART PLANVIEW NOTE FROM "DME REQUIRED" TO "RADAR OR DME REQUIRED" - INTERSECTION FIXES REMOVED.
5. CHANGED MSA CENTERPOINT FROM STL VORTAC TO FZU LOM - STL VORTAC TO BE DECOMMISSIONED IN 2025; FPT REQUEST.
6. S-ILS 11 CAT E VISIBILITY CHANGED FROM RVR 2400 TO RVR 1800 - CRITERIA CHANGE
7. S-LOC 11 CAT C VISIBILITY CHANGED FROM RVR 2400 TO RVR 3500, CATS D/E CHANGED FROM RVR 4000 TO RVR 3500 - CRITERIA CHANGE.
8. S-LOC 11 INOP VALUE CHANGED FROM RVR 6000 TO RVR 5500 FOR CATS C/D/E - CRITERIA CHANGE.

11/21/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 10/17/18.
1. REMOVED MM INFORMATION FROM PROFILE SECTION - MM DECOMISSIONED.
2. CORRECTED NOTES SECTION TO SEPERATE ALTERNATE AND MISSED APPROACH CHART IN PLANVIEW INSTRUCTIONS.
3. REMOVED NOTE TO CHART IN PLANVIEW: MOODS INT/ENL 42.16 DME.

PDF EDIT:
FORM 8260-3, PAGE 2 OF 3, ADDITIONAL FLIGHT DATA - ADDED "(DO NOT CHART)"



AIRPORT

ST LOUIS LAMBERT INTL

AIRPORT ID

KSTL

PROCEDURE NAME

ILS OR LOC RWY 11
ILS RWY 11 CAT II,
ILS RWY 11 CAT III

ORIGINAL/AMENDMENT

1

CITY

ST LOUIS

STATE

MO

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZKC, STL ATCT, STL APP CON

FLIGHT CHECKED BY

BRIAN DAVID HARRELSON

Digitally signed by
DONALD H LANIER
Nov 26, 2018

OFFICE

FIOG

DATE

10/11/2018

DEVELOPED BY

LONNIE EVERHART (SCOTT LINDHOLM)

Digitally signed by
DONALD H LANIER
Nov 26, 2018

OFFICE

AJV-5400

DATE

06/19/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by
DONALD H LANIER
Nov 26, 2018

OFFICE

AJV-5400

DATE

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> BRUCE CAMPBELL FIELD	<u>AIRPORT ID</u> KMBO	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> MADISON	<u>STATE</u> MS
<u>AIRPORT ELEVATION</u> 325	<u>TDZE</u> 325	<u>SUPERSEDED</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> 1C	<u>DATED</u> 12/07/2017	<u>MAG VAR</u> 1E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

TAA **THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 19-01.**

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 084/30 CW 264/30	NOPT	DUHAB	IF/IAF	2400
2. 264/30 CW 084/30		264/15 CW 084/15		3500
3. 264/15 CW 084/15		DUHAB	IF/IAF	2400

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>
DUHAB	IF/IAF	AKALY		TF	FB	1.00	174.32	6.36	2000
AKALY	FAF	RW17	MAP	TF	FO	0.30	174.33	5.14	
RW17	MAP	1200 MSL		CA			174.33		1200
1200 MSL		DUHAB		DF	FO	1.00			2400

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW17

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1200 THEN CLIMBING LEFT TURN TO 2400 DIRECT DUHAB AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N DUHAB, LT, 174.32 INBOUND, 2400 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 174.33FAF: AKALYDIST FAF TO MAP: 5.14DIST FAF TO THLD: 5.14

4. MIN ALT: DUHAB 2400, AKALY 2000

5. DIST TO THLD FROM OM:MM:IM:150 HAT:275 HAT: 0.74GS ANT:

6. MIN GP INCPT: 2000GP ALT AT FAF : AKALY 2000OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 40.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING JACKSON-MEGDAR WILEY EVERS INTL ALTIMETER SETTING.

CHART NOTE: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15°C OR ABOVE 54°C.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE JACKSON-MEGDAR WILEY EVERS INTL ALTIMETER SETTING AND INCREASE ALL DA 21 FEET AND ALL MDA 40 FEET, AND INCREASE LNAV/VNAV VISIBILITY 1/8 SM, AND CIRCLING CATS C/D VISIBILITY 1/4 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.

CHART VDP AT 1.37 NM TO RW17*

*LNAV ONLY

WAAS CHANNEL #69231

REFERENCE PATH ID: W17A

CHART FAS OBST: 534 TANK 322758N/0900640W.

LTP HAE: 72.5 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	600	7/8	275	600	7/8	275	600	7/8	275	600	7/8	275			
LNAV/VNAV DA	832	1 3/8	507	832	1 3/8	507	832	1 3/8	507	832	1 3/8	507			
LNAV MDA	800	1	475	800	1	475	800	1 3/8	475	800	1 3/8	475			
CIRCLING	820	1	495	840	1	515	1040	2	715	1040	2 1/4	715			



CHANGES - REASONS

1. ADDED LPV LINE OF MINIMA - FPT REQUEST
2. ADDED LNAV/VNAV LINE OF MINIMA - FPT REQUEST
3. REMOVED LP LINE OF MINIMA - FPT REQUEST
4. UPDATED OBSTACLE DATA FOR ALL SEGMENTS - NEW SURVEY
5. UPDATED CIRCLING CATS C/D MDA 1040/HAA 715 VISIBILITY CAT C 2, D 2 1/4. - INCORPORATED FDC NOTAM 8/1791.
6. ADDED CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE JACKSON-MEGDAR WILEY EVERS INTL ALTIMETER SETTING AND INCREASE ALL DA 21 FEET AND ALL MDA 40 FEET, AND INCREASE LNAV/VNAV VISIBILITY 1/8 SM, AND CIRCLING CATS C/D VISIBILITY 1/4 SM. " - INCORPORATED FDC NOTAM, 8/1791.
7. FAS DATA CRC REMAINDER CHANGED FROM A0CF9D80 TO BD3BB8DE - ADDED PRECISION LINES OF MINIMA.
8. FAS DATA COURSE WIDTH AT THRESHOLD AND VERTICAL ALERT LIMIT (VAL) UPDATED TO 106.75 AND 50.0 - 8260.19H APP K PARA 4.
9. REMOVED CHART NOTE "HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA - INCORPORATED P-NOTAM 7/8620.
10. REMOVED NOTE " WHEN VGSI INOP PROCEDURE NA AT NIGHT - INCORPORATED P-NOTAM 7/8620.
11. DELETED CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES - INCORPORATED P-NOTAM 7/8620.
12. ADDED CHART NOTE: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA - INCORPORATED P-NOTAM 7/8620.
13. DELETED DME/DME RNP-0.3 NA NOTE AND ADDED RNP REQUIREMENTS NOTE: RNP APCH.
14. ADDED CHART NOTE: BARO VNAV AND VDP NA WHEN USING JACKSON-EVERS INTL ALTIMETER SETTING - UNABLE BARO-VNAV OR VDP WITH REMOTE ALTIMETER 8260.19H, 8-6-9, E, (8) & (9).
15. ADDED ALTERNATE MINIMUMS - STANDARD - CAT D 800-2 1/4, NA WHEN LOCAL WEATHER NOT AVAILABLE.

11/20/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 11/7/18.

1. CHART NOTE CHANGED FROM "BARO-VNAV AND VDP NA WHEN USING JACKSON-EVERS INTL ALTIMETER SETTING" TO "BARO-VNAV AND VDP NA WHEN USING JACKSON-MEGDAR WILEY EVERS INTL ALTIMETER SETTING".

2. CHART NOTE CHANGED FROM "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE JACKSON- EVERS INTL ALTIMETER SETTING AND INCREASE ALL DA 21 FEET AND ALL MDA 40 FEET, AND INCREASE LNAV/VNAV VISIBILITY 1/8 SM, AND CIRCLING CATS C/D VISIBILITY 1/4 MILE" WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE JACKSON-MEGDAR WILEY EVERS INTL ALTIMETER SETTING AND INCREASE ALL DA 21 FEET AND ALL MDA 40 FEET, AND INCREASE LNAV/VNAV VISIBILITY 1/8 SM, AND CIRCLING CATS C/D VISIBILITY 1/4 SM".

3. CHANGED LINE 6 FROM "GP ALT AT FAF: AKALY" TO "GP ALT AT FAF: AKALY 2000".

4. CHANGED ALTERNATE MINIMUMS LINE FROM "STANDARD - CAT D 800-2 1/4" TO "STANDARD - CAT D 800-2 1/4, NA WHEN LOCAL WEATHER NOT AVAILABLE."

COORDINATED WITH:

A4A ☐

ALPA ☒

AOPA ☒

APA ☐

HAI ☐

NBAA ☒

OTHER: ZME ARTCC, JAN APP CON, AMGR

<u>FLIGHT CHECKED BY</u> JEFFREY ALAN ECKMAN	<i>Digitally signed by</i> ROBERT G HAMILTON Nov 26, 2018		<u>OFFICE</u> FIOG	<u>DATE</u> 10/31/2018	
	<i>Digitally signed by</i> ROBERT G HAMILTON Nov 26, 2018				
<u>DEVELOPED BY</u> LONNIE EVERHART (TYLER MITCHELL)	ROBERT G HAMILTON Nov 26, 2018		<u>OFFICE</u> AJV-5400	<u>DATE</u> 06/13/2018	
<u>APPROVED BY</u> LONNIE EVERHART	<i>Digitally signed by</i> ROBERT G HAMILTON Nov 26, 2018		<u>OFFICE</u> AJV-5400	<u>DATE</u>	<u>TITLE</u>
					MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMBO
RUNWAY	RW17
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W17A
LTP/FTP LATITUDE	322641.1005N
LTP/FTP LONGITUDE	0900613.2575W
LTP/FTP ELLIPSOIDAL HEIGHT	+00725
FPAP LATITUDE	322512.1160N
FPAP LONGITUDE	0900604.6865W
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	1392
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	9E00FE61

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00991
FPAP ORTHOMETRIC HEIGHT	+00991

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> BRUCE CAMPBELL FIELD	<u>AIRPORT ID</u> KMBO	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> MADISON	<u>STATE</u> MS
<u>AIRPORT ELEVATION</u> 325	<u>TDZE</u> 324	<u>SUPERSEDED</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>DATED</u> 12/07/2017	<u>MAG VAR</u> 1E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

TAA **THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 19-01.**

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 264/30 CW 084/30	NOPT	WOSAL	IF/IAF	3500
2. 084/30 CW 264/30		WOSAL	IF/IAF	3500

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>
WOSAL	IF/IAF	HAPAN		TF	FB	1.00	354.34	8.17	2100
HAPAN	FAF	RW35	MAP	TF	FO	0.30	354.33	4.96	
RW35	MAP	643 MSL		CA			354.33		
643 MSL		DUHAB		DF	FO	1.00			2400

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW35

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2400 DIRECT DUHAB AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S WOSAL, RT, 354.34 INBOUND, 3500 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 354.33FAF: HAPANDIST FAF TO MAP: 4.96DIST FAF TO THLD: 4.96

4. MIN ALT: WOSAL 3500, HAPAN 2100

5. DIST TO THLD FROM OM:MM:IM:150 HAT:319 HAT: 0.80GS ANT:

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

7. GP ANGLE: 3.3034:1: IS NOT CLEAR20:1: IS CLEARTCH: 48.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING JACKSON-MEGDAR WILEY EVERS INTL 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 -15°C OR ABOVE 54°C.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE JACKSON-MEGDAR WILEY EVERS INTL ALTIMETER SETTING AND INCREASE ALL DA 21 FEET AND VISIBILITY 1/8 SM, INCREASE ALL MDAS 40 FT AND CIRCLING CAT C/D VISIBILITY 1/4SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 0.97 NM TO RW35*
*LNAV ONLY
WAAS CHANNEL #72631
REFERENCE PATH ID: W35A
CHART FAS OBST: 520 TANK 322508N/0900637W.
HOLD N, LT, 174.32 INBOUND
LTP HAE: 69.1 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	643	7/8	319	643	7/8	319	643	7/8	319	643	7/8	319			
LNAV/VNAV DA	750	1 1/4	426	750	1 1/4	426	750	1 1/4	426	750	1 1/4	426			
LNAV MDA	780	1	456	780	1	456	780	1 3/8	456	780	1 3/8	456			
CIRCLING	820	1	495	840	1	515	1040	2	715	1040	2 1/4	715			



CHANGES - REASONS

- 1.ADDED LPV LINE OF MINIMA - FPT REQUEST
2. ADDED LNAV/VNAV LINE OF MINIMA - FPT REQUEST
3. REMOVED LP LINE OF MINIMA - FPT REQUEST
4. UPDATED OBSTACLE DATA FOR ALL SEGMENTS - NEW SURVEY
5. UPDATED CIRCLING CATS C/D MDA 1040/HAA 715 VISIBILITY CAT C 2, D 2 1/4. - INCORPORATED FDC NOTAM 8/1791.
6. ADDED CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE JACKSON-MEGDAR WILEY EVERS INTL ALTIMETER SETTING AND INCREASE ALL DA 21 FEET AND VISIBILITY 1/8 SM, INCREASE ALL MDAS 40 FT AND CIRCLING CAT C/D VISIBILITY 1/4SM.
- INCORPORATED FDC NOTAM, 8/1791.
7. FAS DATA CRC REMAINDER CHANGED FROM 0706EE75 TO 64B6CA9A - ADDED PRECISION LINE OF MINIMA.
8. REMOVED CHART NOTE "HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA - INCORPORATED P-NOTAM 7/8620.
9. REMOVED NOTE " WHEN VGSI INOP PROCEDURE NA AT NIGHT - INCORPORATED P-NOTAM 7/8620.
10. DELETED CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES - INCORPORATED P-NOTAM 7/8620.
11. ADDED CHART NOTE: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA - INCORPORATED P-NOTAM 7/8620.
12. DELETED NOTE DME/DME RNP-0.3 NA AND ADDED PBN REQUIREMENTS NOTE: RNP APCH.
13. ADDED ALTERNATE MINIMUMS - STANDARD - CAT D 800-2 1/4.

11/20/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 11/7/18.

1. CHART NOTE CHANGED FROM "BARO-VNAV AND VDP NA WHEN USING JACKSON-EVERS INTL ALTIMETER SETTING" TO "BARO-VNAV AND VDP NA WHEN USING JACKSON-MEGDAR WILEY EVERS INTL ALTIMETER SETTING".

2. CHART NOTE CHANGED FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C OR ABOVE 29C" TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C OR ABOVE 54C".

3. CHART NOTE CHANGED FROM "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE JACKSON- EVERS INTL ALTIMETER SETTING AND INCREASE ALL DA 21 FEET AND VISIBILITY 1/8 SM, INCREASE ALL MDAS 40 FT AND CIRCLING CAT C/D VISIBILITY 1/4SM" TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE JACKSON-MEGDAR WILEY EVERS INTL ALTIMETER SETTING AND INCREASE ALL DA 21 FEET AND VISIBILITY 1/8 SM, INCREASE ALL MDAS 40 FT AND CIRCLING CAT C/D VISIBILITY 1/4 SM".

4. CHANGED ALTERNATE WEATHER MINIMUMS FROM "STANDARD - CAT D 800-2 1/4." TO "STANDARD - CAT D 800-2 1/4, NA WHEN LOCAL WEATHER NOT AVAILABLE."

COORDINATED WITH:

A4A-☐

ALPA-☒

AOPA-☒

APA-☐

HAI-☐

NBAA-☒

OTHER: ZME ARTCC, JAN APP CON, AMGR

FLIGHT CHECKED BY

JEFFREY ALAN ECKMAN

Digitally signed by

ROBERT G HAMILTON

Nov 26, 2018

DEVELOPED BY

LONNIE EVERHART (TYLER MITCHELL)

Digitally signed by

ROBERT G HAMILTON

Nov 26, 2018

APPROVED BY

LONNIE EVERHART

Digitally signed by

ROBERT G HAMILTON

Nov 26, 2018

OFFICE

FIOG

DATE

10/31/2018

OFFICE

AJV-5400

DATE

07/25/2018

OFFICE

AJV-5400

DATE

TITLE

MANAGER

FAA Form 8260-3 (11/16) Supersedes Previous Edition

Electronic Version

Page 3 of 4

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMBO
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	322557.2790N
LTP/FTP LONGITUDE	0900609.0390W
LTP/FTP ELLIPSOIDAL HEIGHT	+00691
FPAP LATITUDE	322726.2635N
FPAP LONGITUDE	0900617.6135W
THRESHOLD CROSSING HEIGHT (TCH)	00048.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.30
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1392
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	64B6CA9A

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00957
FPAP ORTHOMETRIC HEIGHT	+00957



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR 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> BRUCE CAMPBELL FIELD	<u>AIRPORT ID</u> KMBO	<u>PROCEDURE NAME</u> VOR RWY 17	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> MADISON	<u>STATE</u> MS	
<u>AIRPORT ELEVATION</u> 325	<u>TDZE</u> 325	<u>SUPERSEDED</u> VOR/DME RWY 17	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 06/26/2014	<u>MAG VAR</u> 1W	<u>EPOCH YEAR</u> 2015
<u>FACILITY</u> MHZ	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES **THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 19-01.**

<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>
MHZ VORTAC		ZESMO/MHZ 6.00 DME		TF			346.75	6.00	2300
FANEN INT/MHZ 12.00 DME CCW	IAF	HUVUM/MHZ 12.00 DME	NOPT	TF			12.00 DME ARC		2300
BOOSI INT/MHZ 25.00 DME	IAF	HUVUM/MHZ 12.00 DME	NOPT	TF			211.75 & 166.75	3.71 (HDG) & 10.24 (MHZ R-347)	2300
HUVUM/MHZ 12.00 DME	IF	ZESMO/MHZ 6.00 DME		TF			166.75	6.00 (MHZ R-347)	2300

MISSED APPROACH

MAP:

ZUBNU/MHZ 0.67 DME

MISSED APPROACH INSTRUCTIONS:

CLIMBING LEFT TURN TO 3000 ON MHZ VORTAC R-134 TO RAKIN INT/MHZ 16.54 DME.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT R **SIDE OF COURSE** 346.75 **OUTBOUND** 2300 **FT WITHIN** 10 **MILES OF** ZESMO/MHZ 6.00 DME (IAF)
- 2.
3. **FAC:** 166.75 **FAF:** ZESMO/MHZ 6.00 DME **DIST FAF TO MAP:** **DIST FAF TO THLD:** 5.33
4. **MIN ALT:** ZESMO/MHZ 6.00 DME 2300
8. **MSA FROM:** MHZ VORTAC 3500

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED

NOTES:

CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE JACKSON-MEGDAR WILEY



EVERS INTL ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET, AND CIRCLING CATS C/D 1/4 SM. 

CHART NOTE: STRAIGHT-IN RWY 17 NA AT NIGHT, CIRCLING RWY 17 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

ZESMO TO RW17: 3.42/38
CHART CIRCLING ICON.
CHART MHZ R-094 AT FANEN.
CHART FAS OBST: 534 TANK 322758N/0900640W.
HOLD SE, RT, 314.22 INBOUND

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
S-17	800	1	475	800	1	475	800	1 3/8	475	800	1 3/8	475			
CIRCLING	820	1	495	840	1	515	1040	2	715	1040	2 1/4	715			

CHANGES - REASONS

1. UPDATED OBSTACLE DATA FOR FINAL - NEW SURVEY DATA.
2. UPDATED CAT-C CIRCLING OBSTACLE - NEW SURVEY DATA.
3. UPDATED CAT-D CIRCLING OBSTACLE - NEW SURVEY DATA.
4. UPDATED 20:1 AND 34:1 PENETRATIONS - NEW SURVEY DATA.
5. REMOVED DME FROM IAP NAME AND ADDED "DME REQUIRED" EQUIPMENT NOTE IAW CURRENT CRITERIA.
6. AMENDED CIRCLING CATS C/D MDA 1040/HAA 715, VIS CAT C 2SM, VIS CAT D 2 1/4 - INCORPORATING FDC NOTAM 8/1797.
7. CHANGED THRE 325 TO TDZE 325 AND ADDED NOPT TO TERMINAL ROUTE FANEN TO HUVUM AND TERMINAL ROUTE BOOSI TO HUVUM - INCORPORATING P-NOTAM 4/2363.
8. CHANGED TERMINAL ROUTE FANEN INT/MHZ 12DME CW (IAF) TO HUVUM/MHZ 12 DME TO READ FANEN INTMHZ 12 DME CCW (IAF TO HUVUM 12 DME AND DELETED HUVUM FROM PROFILE VIEW - INCORPORATING P-NOTAM 3/5363.
9. LOWERED CIRCLING CAT A CMDA FROM 840 TO 820 . CAT B CMDA FROM 860 TO 840 - UPDATED TO RNAV (GPS) RWY 17 FLT CK VALUES.
10. CHANGED BACK UP ALTIMETER NOTE TO READ "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE JACKSON-EVERS INTL ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET, AND CIRCLING CATS C/D 1/4 SM."
11. ADDED ALTERNATE MINIMUMS - STANDARD - CAT D 800-2 1/4, NA WHEN LOCAL WEATHER NOT AVAILABLE.

- 11/20/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 11/7/18.
1. CHART NOTE CHANGED FROM "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE JACKSON-EVERS INTL ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET, AND CIRCLING CATS C/D 1/4 SM." TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE JACKSON-MEGDAR WILEY EVERS INTL ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET, AND CIRCLING CATS C/D 1/4 SM."
 2. CHANGED ALTERNATE MINIMUMS FROM "STANDARD - CAT D 800-2 1/4" TO "STANDARD - CAT D 800-2 1/4, NA WHEN LOCAL WEATHER NOT AVAILABLE."



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZME ARTCC, MHZ APP CON, AMGR

<u>FLIGHT CHECKED BY</u> JEFFREY ALAN ECKMAN	<i>Digitally signed by</i> ROBERT G HAMILTON Nov 26, 2018	<u>OFFICE</u> FIOG	<u>DATE</u> 10/31/2018	
<u>DEVELOPED BY</u> LONNIE EVERHART (TYLER MITCHELL)	<i>Digitally signed by</i> ROBERT G HAMILTON Nov 26, 2018	<u>OFFICE</u> AJV-5400	<u>DATE</u> 07/19/2018	
<u>APPROVED BY</u> LONNIE EVERHART	<i>Digitally signed by</i> ROBERT G HAMILTON Nov 26, 2018	<u>OFFICE</u> AJV-5400	<u>DATE</u>	<u>TITLE</u> 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> PENDER MUNI	<u>AIRPORT ID</u> K0C4	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 33	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> PENDER	<u>STATE</u> NE
<u>AIRPORT ELEVATION</u> 1345	<u>TDZE</u> 1343	<u>SUPERSEDED</u> RNAV (GPS) RWY 33	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 02/05/2015	<u>MAG VAR</u> 4E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2010

TERMINAL ROUTES

THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-26.

<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>
SUX VORTAC		WIRPI		TF	FO	2.00	205.62	27.32	3100
DECKA	IAF	WIRPI	NOPT	TF	FB	1.00	268.66	16.09	3100
IBHEN	IAF	WIRPI	NOPT	TF	FB	1.00	003.63	19.25	3100
WIRPI	IF/IAF	ZOVKU		TF	FB	1.00	331.20	5.20	3100
ZOVKU	FAF	GUGPE/2.20 NM TO RW33		TF	FB	0.30	331.18	3.23	
GUGPE/2.20 NM TO RW33		RW33	MAP	TF	FO	0.30	331.18	2.20	
RW33	MAP	1626 MSL		CA			331.18		
1626 MSL		HUKEG		DF	FO	1.00			3100

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW33

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3100 DIRECT HUKEG AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
41
CHECKED

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SE WIRPI, RT, 331.20 INBOUND, 3100 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 331.18 FAF: ZOVKU DIST FAF TO MAP: 5.43 DIST FAF TO THLD: 5.43

4. MIN ALT: WIRPI 3100, ZOVKU 3100, GUGPE/2.20 NM TO RW33 2060*

5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 294 HAT: 0.80 GS ANT:

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

7. GP ANGLE: 3.00 34:1: IS CLEAR 20:1: IS CLEAR TCH: 40.0

8. MSA FROM: RW33 3800

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: BARO-VNAV NA.
*LNAV ONLY
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON SUX VORTAC AIRWAY RADIALS R150 CW R266.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT IBHEN ON V181 SOUTHEASTBOUND.
CHART NOTE: USE WAYNE ALTIMETER SETTING; WHEN NOT RECEIVED, USE SIOUX CITY ALTIMETER SETTING: INCREASE ALL DAS 44 FEET AND ALL MDAS 60 FEET.

ADDITIONAL FLIGHT DATA:

CHART WAYNE AWOS-3
CHART FAS OBST: 1549 TREE 420524N/0964332W.
CHART CIRCLING ICON.
WAAS CHANNEL #72627
REFERENCE PATH ID: W33A
HOLD NW, RT, 151.08 INBOUND
LTP HAE: 380.7 M

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
LPV DA	1637	1	294	1637	1	294		NA			NA				
LNAV/VNAV DA	1928	2	585	1928	2	585		NA			NA				
LNAV MDA	1860	1	517	1860	1	517		NA			NA				
CIRCLING	1940	1	595	1940	1	595		NA			NA				



CHANGES - REASONS

1. TERMINAL ROUTES, GUGPE TO RW33, UPDATED COURSE FROM 331.15 TO 331.18 - SAME AS FINAL COURSE.
2. TERMINAL ROUTES, CHANGED MISSED APPROACH CA LEG COURSE FROM 331.15 TO 331.18 - FINAL COURSE.
3. PROFILE SECTION, LINE 4, ADDED MAXIMUM HOLDING ALTITUDE 6000 - CURRENT DOCUMENTATION POLICY.
4. PROFILE SECTION, LINE 3, CORRECTED FAC FROM 331.17 TO 331.18 - RECALCULATION.
5. PROFILE SECTION, LINE 7, ADDED "20:1 IS CLEAR" - CURRENT DOCUMENTATION POLICY.
6. REPLACED DME/DME NOTE WITH RNP APCH NOTE - CURRENT DOCUMENTATION POLICY.
7. REWORDED BACKUP ALTIMETER NOTE, REMOVED VISIBILITY INCREASE - RECALCULATION USING CURRENT CRITERIA.
8. ADDED CIRCLING ICON - CURRENT CIRCLING AREAS EVALUATED (MDAS AND CONTROLLING OBSTACLES DID NOT CHANGE).

11 /27/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 10/26/18.

1. CHANGED LPV DA FROM 1626 TO 1637.
2. CHANGED LNAV/VNAV DA FROM 1917 TO 1928.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: OLU FSS, ZMP, SUX APP CON, AIRPORT MANAGER

FLIGHT CHECKED BY
ZACK SMYER

Digitally signed by
DAVID DANNER
Oct 26, 2018

OFFICE
FICO

DATE
10/19/2018

DEVELOPED BY
RUSS ROSLEWSKI

Digitally signed by
RUSSELL ROSLEWSKI
Jul 19, 2018

OFFICE
AJV-5421

DATE
07/19/2018

APPROVED BY
JULIE MORGAN

Digitally signed by
DAVID DANNER
Oct 26, 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	0C4
RUNWAY	RW33
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W33A
LTP/FTP LATITUDE	420632.1725N
LTP/FTP LONGITUDE	0964330.0885W
LTP/FTP ELLIPSOIDAL HEIGHT	+03807
FPAP LATITUDE	420753.0400N
FPAP LONGITUDE	0964420.4300W
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)	50.0
CRC REMAINDER	36550EA7

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+00406
FPAP ORTHOMETRIC HEIGHT	+00406



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.
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<u>AIRPORT</u> LEHIGH VALLEY INTL	<u>AIRPORT ID</u> KABE	<u>PROCEDURE NAME</u> ILS OR LOC RWY 6 ILS RWY 6 SA CAT I, ILS RWY 6 SA CAT II	<u>ORIGINAL/AMENDMENT</u> 24	<u>CITY</u> ALLENTOWN	<u>STATE</u> PA	
<u>AIRPORT ELEVATION</u> 394	<u>TDZE</u> 394	<u>SUPERSEDED</u> ILS OR LOC RWY 6	<u>ORIGINAL/AMENDMENT</u> 23B	<u>DATED</u> 05/24/2018	<u>MAG VAR</u> 12W	<u>EPOCH YEAR</u> 2005
<u>FACILITY</u> I-ABE	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> 01/04/2018	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 19-01.

<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>
ETX VOR/DME		JISTO INT/RADAR					179.28	4.13	3000
JISTO INT/RADAR	IF/IAF	SHAGY INT/RADAR					063.26	6.68 (I-ABE)	2400

MISSED APPROACH

MAP:

ILS: DA
 LOC: 6.12 NM AFTER SHAGY INT/RADAR

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 ON HEADING 063.26 AND STW R-243 TO MUDRE INT/STW 20.53 DME/RADAR AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 900 THEN CLIMBING LEFT TURN TO 3000 DIRECT FJC VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000.

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. HOLD SW JISTO, RT, 063.26 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 4800.
3. FAC: 063.26 FAF: SHAGY INT/RADAR DIST FAF TO MAP: 6.12 DIST FAF TO THLD: 6.12
4. MIN ALT: JISTO INT/RADAR 3000, SHAGY INT/RADAR 2400
5. DIST TO THLD FROM OM: MM: IM: 100 HAT: 830 150 HAT: 1784 GS ANT: 1221
6. MIN GS INCPT: 2400 GS ALT AT FAF : SHAGY INT/RADAR 2400 OM: MM: IM:
7. GP ANGLE: 3.00 34:1: 20:1: TCH: 56.5
8. MSA FROM: ETX VOR/DME 080-260 2600, 260-080 3600

EQUIPMENT REQUIREMENTS NOTES:



NOTES:

SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 6: CAT A, B, C, D, RA 154, RVR 1400, HAT 150, DA 544 MSL.
SA CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 6: CAT A, B, C, D, RA 114, RVR 1200, HAT 100, DA 494 MSL. 
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC OR LOA APPROVAL AND USE OF HUD TO DH.
SA CAT II CHART NOTE: REDUCED LIGHTING: REQUIRES SPECIFIC OPSPEC, MSPEC OR LOA APPROVAL AND USE OF AUTOLAND OR HUD TO TOUCHDOWN.
CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.

ADDITIONAL FLIGHT DATA:

FAS OBST: 650 AAO 403515N/0753259W.
CHART CIRCLING ICON.
CHART IN PLANVIEW: FJC VORTAC
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD W FJC VORTAC, RT, 104.00 INBOUND.
HOLD NE, RT, 243.06 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: 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
S-ILS 06**	594	2400	200	594	2400	200	594	2400	200	594	2400	200			
S-LOC 06	920	2400	526	920	2400	526	920	5500	526	920	5500	526			
CIRCLING	920	1	526	920	1	526	1180	2 1/4	786	1600	3	1206			

CHANGES - REASONS

1. CHANGED THRE 394 TO TDZE 394 - PREVIOUSLY CHARTED CHANGE FROM P-NOTAM AMENDMENT 23A.
2. PROFILE LINE 2: ADDED "MAX 4800" - IAW 8260.19H DOCUMENTATION CRITERIA.
3. PROFILE LINE 5: ADDED "100 HAT: 830" AND "150 HAT: 1784". CHANGED GS ANT FROM 1219 TO 1221 - ADDED SA CAT I AND SA CAT II PER AIRPORT REQUEST.
4. ADDED SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 06: CAT A, B, C, D, RA 154, RVR 1400, HAT 150, DA 544 MSL. - SA CAT I REQUESTED BY AIRPORT.
5. ADDED SA CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 06: CAT A, B, C, D, RA 114, RVR 1200, HAT 100, DA 494 MSL - SA CAT II REQUESTED BY AIRPORT.
6. ADDED SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC OR LOA APPROVAL AND USE OF HUD TO DH - NOTE REQUIRED FOR SA CAT I MINIMUMS.
7. ADDED SA CAT II CHART NOTE: REDUCED LIGHTING: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF AUTOLAND OR HUD TO TOUCHDOWN - NOTE REQUIRED, RWY DOES NOT HAVE TOUCHDOWN ZONE LIGHTS FOR SA CAT II MINIMUMS.
8. ADDED "CHART CIRLING ICON" TO ADDITIONAL FLIGHT DATA - PREVIOUSLY CHARTED CHANGE FROM P-NOTAM AMENDMENT 23B.
9. FAS OBST MSL ELEVATION CHANGED FROM 659 TO 650 IN ADDITIONAL FLIGHT DATA - UPDATED FROCEDURE EVALUATION.
10. CIRCLING CAT C MDA / HAA / VIS CHANGED FROM 920 / 526 / 1 1/2 TO 1180 / 786 / 2 1/4 - PREVIOUSLY CHARTED CHANGE FROM P-NOTAM AMENDMENT 23B.
11. CIRCLING CAT D MDA / HAA / VIS CHANGED FROM 980 / 586 / 2 TO 1600 / 1206 / 3 - PREVIOUSLY CHARTED CHANGE FROM P-NOTAM AMENDMENT 23B.
12. ALTERNATE MINIMUMS CHANGED FROM LOC: STANDARD TO LOC: STANDARD - CAT C 800-2 1/4, CAT D 1300-3 - PREVIOUSLY CHARTED CHANGE FROM P-NOTAM AMENDMENT 23B.

PDF EDIT: ADDED LINE 5 100 HAT: 830

11/27/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 10/30/18.

1. ADD CATS B,C,D TO THE "SA CAT I/II ILS NOTES"



COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ABE APP CON, AMGR, ZNY

<u>FLIGHT CHECKED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>
DURLEY J FELDER	ROBERT G HAMILTON	FICO	10/25/18
	Oct 30, 2018		

<u>DEVELOPED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>
JULIE A. MORGAN (JAY BAGGETT)	ROBERT G HAMILTON	AJV-5420	09/05/2018
	Oct 30, 2018		

<u>APPROVED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
JULIE MORGAN	ROBERT G HAMILTON	AJV-5420		MANAGER
	Oct 30, 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> CHIPPEWA VALLEY RGNL	<u>AIRPORT ID</u> KEAU	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 22	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> EAU CLAIRE	<u>STATE</u> WI
<u>AIRPORT ELEVATION</u> 913	<u>TDZE</u> 913	<u>SUPERSEDED</u> RNAV (GPS) RWY 22	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 12/07/2017	<u>MAG VAR</u> 1E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1995

TERMINAL ROUTES THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 19-01.

<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>
EAU VORTAC		IROKE		TF	FO	2.00	050.04	11.37	3500
DRDAN	IAF	IROKE	NOPT	TF	FB	1.00	134.06	6.50	3500
MENRD	IAF	IROKE	NOPT	TF	FB	1.00	314.22	6.50	3500
IROKE	IF/IAF	HILPO		TF	FB	1.00	224.14	5.95	2900
HILPO	FAF	CAVUX/1.90 NM TO RW22		TF	FB	0.30	224.05	4.18	
CAVUX/1.90 NM TO RW22		RW22	MAP	TF	FO	0.30	224.05	1.90	
RW22	MAP	1320 MSL		CA			224.05		1320
1320 MSL		IROKE		DF	FO	1.00			3500

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW22

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1320 THEN CLIMBING RIGHT TURN TO 3500 DIRECT IROKE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD NE IROKE, RT, 224.13 INBOUND, 3500 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 224.05 FAF: HILPO DIST FAF TO MAP: 6.08 DIST FAF TO THLD: 6.08

4. MIN ALT: IROKE 3500, HILPO 2900, CAVUX/1.90 NM TO RW22 1560* ←

5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 200 HAT: 0.47 GS ANT: MM: IM:

6. MIN GP INCPT: 2900 GP ALT AT FAF : HILPO 2900 OM: MM: IM:

7. GP ANGLE: 3.00 34:1: IS CLEAR 20:1: IS CLEAR TCH: 50.1

8. MSA FROM: RW22 4100

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING RICE LAKE ALTIMETER SETTING.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20C OR ABOVE 54C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON EAU VORTAC AIRWAY RADIALS 322 CW 130.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE RICE LAKE ALTIMETER SETTING AND INCREASE LPV DA TO 1223, LNAV/VNAV DA TO 1285, AND INCREASE LNAV/VNAV VISIBILITY ALL CATS 1/4 SM; INCREASE ALL MDA 120 FEET AND LNAV CATS C/D VISIBILITY 3/8 SM AND CIRCLING CAT C VISIBILITY 1/4 SM.
CHART NOTE: FOR INOPERATIVE ALS INCREASE LNAV/VNAV VISIBILITY ALL CATS TO 7/8 SM AND LNAV CATS C/D VISIBILITY TO 1 SM.
CHART NOTE: FOR INOPERATIVE ALS WHEN USING RICE LAKE ALTIMETER SETTING INCREASE LPV VISIBILITY ALL CATS TO 1 SM AND LNAV CATS C/D VISIBILITY TO 1 3/8 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 0.93 NM TO RW22*
*LNAV ONLY
WAAS CHANNEL #87006
REFERENCE PATH ID: W22A
CHART FAS OBST: 994 TREE 445242N/0912848W.
LTP HAE: 247.4 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 800-2 1/4, CAT D 1300-3, 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	1113	1/2	200	1113	1/2	200	1113	1/2	200	1113	1/2	200			
LNAV/VNAV DA	1175	1/2	262	1175	1/2	262	1175	1/2	262	1175	1/2	262			
LNAV MDA	1260	1/2	347	1260	1/2	347	1260	5/8	347	1260	5/8	347			
CIRCLING	1480	1	567	1540	1	627	1660	2 1/4	747	2200	3	1287			



CHANGES - REASONS

1. ADDED INITIAL SEGMENTS FROM FIXES DRDAN & MENRD. - PER AIR TRAFFIC/IFP REQUEST
2. CHANGED FEEDER AND MISSED ALTITUDE FROM 3000FT TO 3500FT. - PER AIR TRAFFIC/IFP REQUEST

8/16/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 06/07/2018.

1. CHANGED MISSED APPROACH ALTITUDE IN TERMINAL ROUTES FROM 3000 TO 3500 TO MATCH MISSED APPROACH DIRECTIONS.

11/21/2018: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 11/8/2018.

1. LINE 4, MIN ALT: CHANGED "IROKE 3000" TO "IROKE 3500".

COORDINATED WITH:

A4A ☐

ALPA ☒

AOPA ☒

APA ☒

HAI ☐

NBAA ☒

OTHER: ZMP, AMGR, EAU ATCT, ATA

FLIGHT CHECKED BY

GREGORY SCOTT WIEBE

Digitally signed by

DAVID DANNER

Nov 23, 2018

OFFICE

FIOG

DATE

10/31/2018

DEVELOPED BY

LONNIE EVERHART (ANA VEGA)

Digitally signed by

DAVID DANNER

Nov 23, 2018

OFFICE

AJV-5400

DATE

06/07/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by

DAVID DANNER

Nov 23, 2018

OFFICE

AJV-5400

DATE

TITLE



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KEAU
RUNWAY	RW22
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W22A
LTP/FTP LATITUDE	445230.0140N
LTP/FTP LONGITUDE	0912814.2840W
LTP/FTP ELLIPSOIDAL HEIGHT	+02474
FPAP LATITUDE	445126.9870N
FPAP LONGITUDE	0912942.8280W
THRESHOLD CROSSING HEIGHT (TCH)	00050.1
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0280
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	41CB8BAD
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02783
FPAP ORTHOMETRIC HEIGHT	+02783



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR 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> YEAGER	<u>AIRPORT ID</u> KCRW	<u>PROCEDURE NAME</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> 14	<u>CITY</u> CHARLESTON	<u>STATE</u> WV
<u>AIRPORT ELEVATION</u> 947	<u>TDZE</u>	<u>SUPERSEDED</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> 13	<u>DATED</u> 04/08/2010	<u>MAG VAR</u> 3W
<u>FACILITY</u> HVQ	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> 01/03/2019	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1965

TERMINAL ROUTES

THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 19-01.

<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>
STEPH/10.00 DME CW	IAF	CUDGI/10.00 DME	NOPT				10.00 DME ARC		3600
EEERS/10.00 DME CCW	IAF	CUDGI/10.00 DME	NOPT				10.00 DME ARC		3600
CUDGI/10.00 DME	IF	HVQ VOR/DME					083.53	10.00	3000

MISSED APPROACH

MAP:

MACSA/8.02 DME FIX

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1800 THEN CLIMBING LEFT TURN TO 3500 DIRECT HVQ VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. HOLD W CHARLESTON VOR/DME, RT, 083.53 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 10000.
3. FAC: 083.73 FAF: HVQ VOR/DME DIST FAF TO MAP: 8.02 DIST FAF TO THLD:
4. MIN ALT: HVQ VOR/DME 3000, FOGAG/6.00 DME 1720
8. MSA FROM: HVQ VOR/DME 090-180 4000, 180-090 3600

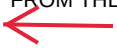
EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED.

NOTES:

QUALITY
41
CHECKED

ADDITIONAL FLIGHT DATA:

FAC CROSSES RWY 5 946 FEET FROM THLD.
HOLD W, RT, 083.53 INBOUND. 
CHART CIRCLING ICON.
CHART HVQ R-192 AT STEPH.
CHART HVQ R-019 AT EEERS.
CHART FAS OBST: 1297 ANTENNA 382125N/0813620W.
CHART: 1427 TOWER 382151N/0814604W, 1350 ANTENNA 382233N/0813926W.

MINIMUMS:

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

ALTERNATE: NA ☐ CAT C 900-2 1/2, CAT D 1000-3

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
CIRCLING	1720	1	773	1720	1	773	1760	2 1/2	813	1880	3	933			
FOGAG FIX MINIMUMS															
CIRCLING	1600	1	653	1600	1	653	1760	2 1/2	813	1880	3	933			

CHANGES - REASONS

- AIRPORT ELEVATION CHANGED FROM 981 TO 947 - AIRNAV DATA.
- CIRCLING CAT A/B HAA CHANGED FROM 739 TO 773 - AIRPORT ELEVATION CHANGED FROM 981 TO 947.
- INCREASED CAT C CIRCLING MDA/HAA FROM 1720/739 TO 1760/813 - APPLICATION OF CURRENT CIRCLING CRITERIA, IDENTIFIED NEW CONTROLLING OBSTACLE.
- INCREASED CAT D CIRCLING MDA/HAA FROM 1720/739 TO 1880/933 - APPLICATION OF CURRENT CIRCLING CRITERIA, IDENTIFIED NEW CONTROLLING OBSTACLE.
- FOGAG CIRCLING CAT A/B HAA CHANGED FROM 619 TO 653 - AIRPORT ELEVATION CHANGED FROM 981 TO 947.
- INCREASED FOGAG CIRCLING CAT C MDA/HAA FROM 1600/619 TO 1760/813 - APPLICATION OF CURRENT CIRCLING CRITERIA, IDENTIFIED NEW CONTROLLING OBSTACLE.
- INCREASED FOGAG CIRCLING CAT D VIS FROM 2 SM TO 2 1/2 SM - 8260.3D TABLE 3-3-7.
- CHANGED MISSED APPROACH FROM CLIMBING LEFT TURN TO 3000 VIA HEADING 055 AND HVQ R-069 TO CAMMA INT/21 DME AND HOLD TO CLIMB TO 1800 THEN CLIMBING LEFT TURN TO 3500 DIRECT HVQ VOR/DME AND HOLD - ARMY REQUESTED THAT THE MISSED MIMIC ILS OR LOC RWY 5 MISSED APPROACH.
- CHANGED ALL REFERENCES OF HVQ VORTAC TO HVQ VOR/DME - TACR PROJECT.
- CHANGED MAP FROM MACSA/8.03 DME FIX TO MACSA/8.02 DME FIX - HVQ LOCATION UPDATED WITH NEW SURVEY DATA AND RWY 5 THLD EXTENDED SW.
- CHANGED FAC RWY 5 CROSSING FROM 1033 FEET TO 946 FEET FROM THLD - HVQ, R05, AND R23 UPDATED WITH NEW SURVEY DATA.
- ADDED CHART CIRCLING ICON TO ADDITIONAL FLIGHT DATA - NEW CIRCLING CRITERIA APPLIED.
- CIRCLING VISIBILITY CAT C CHANGED FROM 2 SM TO 2 1/2 SM, CAT D FROM 2 1/4 SM TO 3 SM - NEW VISIBILITY TABLE.
- FOGAG CIRCLING VISIBILITY CAT C CHANGED FROM 1 3/4 TO 2 1/2 SM, CAT D FROM 2 SM TO 3 SM - NEW VISIBILITY TABLE.
- CHANGED HOLDING IN ADDITIONAL FLIGHT DATA FROM HOLD E, RT, 249.17 INBOUND TO HOLD W, RT, 081.00 INBOUND - MISSED HOLDING CHANGED FROM CAMMA TO HQV VOR/DME.

PDF EDIT:
ADDED PENDING TO FLIGHT CHECKED BY BLOCK.

- 11/27/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 11/1/18.
- CHANGED HOLDING INBOUND COURSE UNDER ADDITIONAL FLIGHT DATA FROM 081.00 TO 083.53.

QUALITY
41
CHECKED

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZID, CRW APP CON, CRW TWR, AMGR

FLIGHT CHECKED BY

Digitally signed by

DAVID DANNER

Nov 01, 2018

OFFICE

DATE

PENDING

DEVELOPED BY

Digitally signed by

DAVID DANNER

LONNIE EVERHART (DALE SICKELS)

OFFICE

DATE

AJV-5400

08/13/2018

APPROVED BY

Digitally signed by

Nov 01, 2018

LONNIE EVERHART

DAVID DANNER

OFFICE

DATE

TITLE

AJV-5400

MANAGER

Nov 01, 2018

QUALITY
41
CHECKED

[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. [31226](#); Amdt. No. [3829](#)]

**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 **NOVEMBER 30, 2018**.



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 3 January 2019

La Verne, CA, Brackett Field, ILS RWY 26L, Amdt 4
 La Verne, CA, Brackett Field, LOC RWY 26L, Amdt 1
 La Verne, CA, Brackett Field, RNAV (GPS) RWY 26L, Amdt 1
 La Verne, CA, Brackett Field, Takeoff Minimums and Obstacle DP, Amdt 6
 Washington, DC, Manassas Rgnl/Harry P Davis Field, RNAV (GPS) RWY 34R, Amdt 3
 Shenandoah, IA, Shenandoah Muni, Takeoff Minimums and Obstacle DP, Amdt 2
 Chicago, IL, Chicago O'Hare Intl, ILS OR LOC RWY 27L, ILS RWY 27L SA CAT I, ILS RWY 27L CAT II, ILS RWY 27L CAT III, Amdt 31A
 Chicago, IL, Chicago O'Hare Intl, ILS OR LOC RWY 28C, ILS RWY 28C SA CAT I, ILS RWY 28C CAT II, ILS RWY 28C CAT III, Amdt 2A
 Chicago, IL, Chicago O'Hare Intl, ILS OR LOC RWY 28L, ILS RWY 28L SA CAT I, ILS RWY 28L CAT II, ILS RWY 28L CAT III, Orig-B
 Chicago, IL, Chicago O'Hare Intl, ILS OR LOC RWY 28R, ILS RWY 28R SA CAT I, ILS RWY 28R CAT II, ILS RWY 28R CAT III, Amdt 18A
 Chicago, IL, Chicago O'Hare Intl, ILS PRM RWY 28C (CLOSE PARALLEL), ILS PRM RWY 28C (CLOSE PARALLEL) SA CAT I, ILS PRM RWY 28C (CLOSE PARALLEL) CAT II, ILS PRM RWY 28C (CLOSE PARALLEL) CAT III, Amdt 1A
 Chicago, IL, Chicago O'Hare Intl, Takeoff Minimums and Obstacle DP, Amdt 21
 North Adams, MA, Harriman-And-West, RNAV (GPS)-B, Orig
 Cheboygan, MI, Cheboygan County, RNAV (GPS) RWY 10, Amdt 3B
 Detroit, MI, Detroit Metropolitan Wayne County, RNAV (GPS) Z RWY 4L, Orig
 Detroit, MI, Detroit Metropolitan Wayne County, RNAV (GPS) Z RWY 22R, Orig
 Lambertville, MI, Toledo Suburban, RNAV (GPS)-A, Orig-A
 Grand Marais, MN, Grand Marais/Cook County, NDB RWY 28, Amdt 1A
 Crystal Springs, MS, Copiah County, RNAV (GPS) RWY 18, Orig
 Crystal Springs, MS, Copiah County, RNAV (GPS) RWY 36, Orig
 Crystal Springs, MS, Copiah County, Takeoff Minimums and Obstacle DP, Orig
 Fairmont, NE, Fairmont State Airfield, NDB RWY 17, Amdt 2
 Fairmont, NE, Fairmont State Airfield, NDB RWY 35, Amdt 3
 Fairmont, NE, Fairmont State Airfield, RNAV (GPS) RWY 17, Amdt 1A
 Fairmont, NE, Fairmont State Airfield, RNAV (GPS) RWY 35, Amdt 1A
 Fairmont, NE, Fairmont State Airfield, Takeoff Minimums and Obstacle DP, Amdt 1
 Wayne, NE, Wayne Muni/ Stan Morris Fld, RNAV (GPS) RWY 36, Amdt 2B
 Wayne, NE, Wayne Muni/ Stan Morris Fld, Takeoff Minimums and Obstacle DP, Amdt 5
 Reno, NV, Reno/Tahoe Intl, TACAN-F, Orig
 Montgomery, NY, Orange County, ILS OR LOC RWY 3, Amdt 3D, CANCELED
 Montgomery, NY, Orange County, ILS OR LOC RWY 4, Orig
 Montgomery, NY, Orange County, RNAV (GPS) RWY 3, Amdt 1A, CANCELED
 Montgomery, NY, Orange County, RNAV (GPS) RWY 4, Orig
 Montgomery, NY, Orange County, RNAV (GPS) 8, Amdt 1B
 Montgomery, NY, Orange County, RNAV (GPS) RWY 21, Amdt 1A, CANCELED

Montgomery, NY, Orange County, RNAV (GPS) RWY 22, Orig
 Montgomery, NY, Orange County, RNAV (GPS) RWY 26, Amdt 1C
 Montgomery, NY, Orange County, VOR RWY 8, Amdt 9A
 Stigler, OK, Stigler Rgnl, RNAV (GPS) RWY 35, Amdt 1B
 Wagoner, OK, Hefner-Easley, Takeoff Minimums and Obstacle DP, Amdt 1
 Columbia, SC, Jim Hamilton L B Owens, RNAV (GPS) RWY 31, Amdt 1
 Moab, UT, Canyonlands Field, RNAV (GPS) RWY 3, Amdt 1
 Moab, UT, Canyonlands Field, Takeoff Minimums and Obstacle DP, Amdt 4
 Moab, UT, Canyonlands Field, VOR-A, Amdt 11
 Spanish Fork, UT, Spanish Fork Arpt Springville-Woodhouse Field, RNAV GPS-A, Orig
 Spanish Fork, UT, Spanish Fork Arpt Springville-Woodhouse Field, RNAV (GPS) Y RWY 12, Orig
 Spanish Fork, UT, Spanish Fork Arpt Springville-Woodhouse Field, RNAV (GPS) Z RWY 12, Orig
 Spanish Fork, UT, Spanish Fork Arpt Springville-Woodhouse Field, SPANISH FORK ONE,
 Graphic DP
 Spanish Fork, UT, Spanish Fork Arpt Springville-Woodhouse Field, Takeoff Minimums and Obstacle
 DP, Orig
 Spokane, WA, Spokane Intl, ILS OR LOC RWY 3, ILS RWY 3 SA CAT I, ILS RWY 3 CAT II, ILS
 RWY 3 CAT III, Amdt 7
 Spokane, WA, Spokane Intl, ILS OR LOC RWY 21, ILS RWY 21 SA CAT I, ILS RWY 21 CAT II,
 ILS RWY 21 CAT III, Amdt 24
 Spokane, WA, Spokane Intl, RNAV (GPS) Y RWY 3, Amdt 2D
 Spokane, WA, Spokane Intl, RNAV (GPS) Y RWY 8, Amdt 2B
 Spokane, WA, Spokane Intl, RNAV (GPS) Y RWY 21, Amdt 2C
 Spokane, WA, Spokane Intl, RNAV (GPS) Y RWY 26, Amdt 4B
 Spokane, WA, Spokane Intl, RNAV (RNP) Z RWY 3, Amdt 1
 Spokane, WA, Spokane Intl, RNAV (RNP) Z RWY 8, Amdt 1
 Spokane, WA, Spokane Intl, RNAV (RNP) Z RWY 21, Amdt 1B
 Spokane, WA, Spokane Intl, RNAV (RNP) Z RWY 26, Amdt 1B
 Spokane, WA, Spokane Intl, Takeoff Minimums and Obstacle DP, Amdt 7
 Spokane, WA, Spokane Intl, VOR RWY 3, Amdt 14

RESCINDED: On November 8, 2018 (83 FR 55821), the FAA published an Amendment in Docket No. 31220, Amdt No. 3823, to Part 97 of the Federal Aviation Regulations under section 97.33. The following entry for Brookneal, VA, effective January 3, 2019, is hereby rescinded in its entirety:

Brookneal, VA, Brookneal/Campbell County, RNAV (GPS) RWY 24, Amdt 1B

RESCINDED: On November 20, 2018 (83 FR 58475), the FAA published an Amendment in Docket No. 31222, Amdt No. 3825, to Part 97 of the Federal Aviation Regulations under section 97.33. The following entry for Pittsfield, IL, effective January 3, 2019, is hereby rescinded in its entirety:

Pittsfield, IL, Pittsfield Penstone Muni, RNAV (GPS) RWY 31, Orig-A

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> BRACKETT FIELD	<u>AIRPORT ID</u> KPOC	<u>PROCEDURE NAME</u> ILS RWY 26L	<u>ORIGINAL/AMENDMENT</u> 4	<u>CITY</u> LA VERNE	<u>STATE</u> CA
<u>AIRPORT ELEVATION</u> 1014	<u>TDZE</u> 1005	<u>SUPERSEDED</u> ILS RWY 26L	<u>ORIGINAL/AMENDMENT</u> 3A	<u>DATED</u> 05/29/2014	<u>MAG VAR</u> 14E
<u>FACILITY</u> I-POC	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> 01/03/2019	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1980

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>
POM VORTAC		LIZZE INT/POM 13.35 DME/RADAR					074.81	13.35	6000
PDZ VORTAC	IAF	LIZZE INT/PDZ 9.63 DME/RADAR	NOPT				348.19	9.63	4000
LIZZE INT/PDZ 9.63 DME/RADAR	IF/IAF	STAGY INT/RADAR					259.20	7.63 (I-POC)	3200

MISSED APPROACH

MAP:

ILS: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2100 THEN CLIMBING LEFT TURN TO 4000 ON POM VORTAC R-164 TO PRADO INT/POM 9.30 DME.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 2100 THEN CLIMBING LEFT TURN TO 4000 DIRECT PDZ VORTAC AND HOLD.

PROFILE:

1. PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
2. HOLD E LIZZE, LT, 259.20 INBOUND, 4000 FT. IN LIEU OF PT (IAF), MAX 6000.
3. **FAC:** 259.20 **FAF:** STAGY INT/RADAR **DIST FAF TO MAP:** **DIST FAF TO THLD:**
4. **MIN ALT:** LIZZE INT/PDZ 9.63 DME/RADAR 4000, STAGY INT/RADAR 3200
5. **DIST TO THLD FROM OM:** 5.23 **MM:** **IM:** **150 HAT:** **GS ANT:** 320
6. **MIN GS INCPT:** 3200 **GS ALT AT FAF :** STAGY INT/RADAR 3200 **OM:** **MM:** **IM:**
7. **GP ANGLE:** 3.92 **34:1:** **20:1:** **TCH:** 19.5*
8. **MSA FROM:** POM VORTAC 075-190 6900, 190-280 7700, 280-075 11300

EQUIPMENT REQUIREMENTS NOTES:

NOTES:



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: SOCAL APCH, ATCT, ARPT MGR

FLIGHT CHECKED BY

PENDING

DEVELOPED BY

LONNIE EVERHART (STEVEN SCHUTRUM)

APPROVED BY

LONNIE EVERHART

	Digitally signed by	OFFICE	DATE	
	WARDELL HENNING			
	Nov 19, 2018			
	Digitally signed by	OFFICE	DATE	
	WARDELL HENNING	AJV-5400	08/29/2018	
	Nov 19, 2018			
	Digitally signed by	OFFICE	DATE	TITLE
	WARDELL HENNING	AJV-5400		MANAGER
	Nov 19, 2018			



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> BRACKETT FIELD	<u>AIRPORT ID</u> KPOC	<u>PROCEDURE NAME</u> LOC RWY 26L	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> LA VERNE	<u>STATE</u> CA
<u>AIRPORT ELEVATION</u> 1014	<u>TDZE</u> 1005	<u>SUPERSEDED</u> LOC RWY 26L	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 05/29/2014	<u>MAG VAR</u> 14E
<u>FACILITY</u> I-POC	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> 01/03/2019	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1980

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>
POM VORTAC		LIZZE INT/POM 13.35 DME/RADAR					074.81	13.35	6000
PDZ VORTAC	IAF	LIZZE INT/PDZ 9.63 DME/RADAR	NOPT				348.19	9.63	4000
LIZZE INT/PDZ 9.63 DME/RADAR	IF/IAF	HAWNN INT/RADAR					259.20	7.46 (I-POC)	3200

MISSED APPROACH

MAP:

LOC: 5.39 NM AFTER HAWNN INT/RADAR

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2100 THEN CLIMBING LEFT TURN TO 4000 ON POM VORTAC R-164 TO PRADO INT/POM 9.30 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 2100 THEN CLIMBING LEFT TURN TO 4000 DIRECT PDZ VORTAC AND HOLD.

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. HOLD E LIZZE, LT, 259.20 INBOUND, 4000 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 259.20 FAF: HAWNN INT/RADAR DIST FAF TO MAP: 5.39 DIST FAF TO THLD: 5.39
4. MIN ALT: LIZZE INT/PDZ 9.63 DME/RADAR 4000, HAWNN INT/RADAR 3200, ZEREK INT 1700*
8. MSA FROM: POM VORTAC 075-190 6900, 190-280 7700, 280-075 11300

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: CIRCLING TO RWY 08L NA AT NIGHT.
CHART NOTE: CIRCLING NA FOR CAT C N OF RWY 08L-26R.
CHART NOTE: WHEN CIRCLING TO RWY 8R AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD.
CHART NOTE: RWY 26L HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).



CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ONTARIO INTL ALTIMETER SETTING AND INCREASE ALL MDA'S 40 FEET.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PDZ VORTAC ON AIRWAY RADIALS 292 CW 030.
* 1740 WHEN USING ONTARIO INTL ALTIMETER SETTING.

ADDITIONAL FLIGHT DATA:

HAWNN TO RWY 26L: 3.77/40
CHART CIRCLING ICON.
CHART IN PLANVIEW: PDZ VORTAC
CHART FAS OBST: 1206 TOWER 340534N/1174416W.
FAS OBST: 1440 AAO 340548N/1174042W.
CHART: 1320 POLE 340551N/1174239W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD E PDZ VORTAC, RT, 258.00 INBOUND.
HOLD N, RT, 164.00 INBOUND (DO NOT CHART)

MINIMUMS:

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

ALTERNATE: NA ☐ LOC: STANDARD - CAT C 800-2 1/4 - NA WHEN LOCAL WEATHER NOT AVAILABLE, NA WHEN 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 26L	1700	1	695	1700	1	695	1700	2	695		NA				
CIRCLING	1700	1	686	1700	1	686	1760	2 1/4	746		NA				
ZEREK MINIMUMS (DUAL VOR RECEIVERS REQUIRED)															
S-LOC 26L	1460	1	455	1460	1	455	1460	1 3/8	455		NA				
CIRCLING	1680	1	666	1680	1	666	1760	2 1/4	746		NA				

CHANGES - REASONS

1. RAISED S-LOC 26L FROM MDA 1600/HAT 595 TO MDA 1700/HAT 695 - BASED ON APPLICATION OF AAO IN FINAL NOT PREVIOUSLY USED.
2. ADDED STEPDOWN FIX ZEREK - TO ALLOW FOR LOWER MINIMUMS AFTER APPLICATION OF AAO ON FINAL.
3. ADDED NEW LINE OF MINIMA "ZEREK MINIMUMS (DUAL VOR RECEIVERS REQUIRED)" - ALLOW FOR LOWER MINIMUMS
4. CHANGED FAS OBST FROM 1349 TREE TO 1206 TOWER - UPDATED EVALUATION WITH STEPDOWN FIX.
5. CHANGED CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED TO CHART NOTE: RWY 26L HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - IAW 8260.19H PARA 8-6-11.K.(3).
6. ADDED CHART NOTE: CIRCLING TO RWY 08L NA AT NIGHT - 20:1 PENETRATIONS/P-NOTAM 4/0973
7. ADDED CHART NOTE: WHEN CIRCLING TO RWY 8R AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD - 20:1 PENETRATIONS/P-NOTAM 4/0973
8. ADDED CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}) - P-NOTAM 4/0973
9. ADDED CAT C MINIMUMS -OPERATIONAL REQUIREMENT EXISTS AND IS WITHIN CRITERIA.
10. ADDED CHART NOTE: CHART CIRCLING ICON - IAW 8260.19H PARA 8-6-10
11. ADDED CHART NOTE: CIRCLING NA FOR CAT C N OF RWY 08L-26R - RISING TERRAIN TO THE NORTH.
12. LOWERED MSA SECTOR 075-190 FROM 7000 TO 6900 - NEW CTL OBST.
13. DELETED NOTE NIGHT LANDING : RWY 8L NA. - REPLACED WITH CIRCLING NOTE NA AT NIGHT TO RWY 8L.



<u>AIRPORT</u> BRACKETT FIELD	<u>AIRPORT ID</u> KPOC	<u>PROCEDURE NAME</u> LOC RWY 26L	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> LA VERNE	<u>STATE</u> CA
<u>COORDINATED WITH:</u>					
A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ <u>OTHER:</u> SOCAL APCH, ATCT, ARPT MGR					
Digitally signed by					
BEV L BORDY <u>OFFICE</u> <u>DATE</u>					
Nov 19, 2018					
Digitally signed by					
BEV L BORDY <u>OFFICE</u> <u>DATE</u>					
Nov 19, 2018 AJV-5400 09/04/2018					
Digitally signed by <u>OFFICE</u> <u>DATE</u> <u>TITLE</u>					
BEV L BORDY AJV-5400 MANAGER					
Nov 19, 2018					

FLIGHT CHECKED BY

PENDING

DEVELOPED BY

LONNIE EVERHART (STEVEN SCHUTRUM)

APPROVED BY

LONNIE EVERHART



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> BRACKETT FIELD	<u>AIRPORT ID</u> KPOC	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 26L	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> LA VERNE	<u>STATE</u> CA	
<u>AIRPORT ELEVATION</u> 1014	<u>TDZE</u> 1005	<u>SUPERSEDED</u> RNAV (GPS) RWY 26L	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 05/29/2014	<u>MAG VAR</u> 14E	<u>EPOCH YEAR</u> 1980
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> 01/03/2019	<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>
PDZ VORTAC	IAF	LIZZE	NOPT	TF	FB	1.00	349.19	9.63	4000
LIZZE	IF/IAF	WUDUS		TF	FB	1.00	259.34	7.20	3200
WUDUS	FAF	ZEREK/2.10 NM TO RW26L		TF	FB	0.30	259.27	3.55	
ZEREK/2.10 NM TO RW26L		RW26L	MAP	TF	FO	0.30	259.27	2.10	
RW26L	MAP	2100 MSL		CA					2100
2100 MSL		PRADO		DF	FO	1.00			4000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW26L

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2100 THEN CLIMBING LEFT TURN TO 4000 DIRECT PRADO AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2.	HOLD E LIZZE, LT, 259.34 INBOUND, 4000 FT. IN LIEU OF PT (IAF), MAX 6000.				
3. FAC:	259.27	FAF: WUDUS	DIST FAF TO MAP: 5.65	DIST FAF TO THLD: 5.65	
4. MIN ALT:	LIZZE 4000, WUDUS 3200, ZEREK/2.10 NM TO RW26L 1840*				
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	300 HAT: 0.64	GS ANT:
6. MIN GP INCPT:	3200	GP ALT AT FAF : WUDUS 3200	OM:	MM:	IM:
7. GP ANGLE:	3.56	34:1: IS NOT CLEAR	20:1: IS CLEAR	TCH: 58.0	
8. MSA FROM:	RW26L 11300				

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING ONTARIO ALTIMETER SETTING.
CHART NOTE: RWY 26L HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°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 ON PDZ VORTAC AIRWAY RADIALS 278 CW 078.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ONTARIO INTL ALTIMETER SETTING AND INCREASE ALL DA 32 FEET AND ALL MDA 40 FEET, INCREASE LPV AND LNAV/VNAV ALL CATS VISIBILITY 1/8 SM.
CHART NOTE: CIRCLING NA FOR CAT C N OF RWY 8L-26R.
CHART NOTE: CIRCLING RWY 8L NA AT NIGHT.
CHART NOTE: WHEN CIRCLING TO RWY 8R AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.19 NM TO RW26L*
*LNAV ONLY
WAAS CHANNEL #70624
REFERENCE PATH ID: W26A
CHART FAS OBST: 1212 TREE 340456N/1174660W.
HOLD E, RT, 256.38 INBOUND
LTP HAE: 272.6 M



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

ALTERNATE: NA ☐ STANDARD - CAT C 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	1305	7/8	300	1305	7/8	300	1305	7/8	300		NA				
LNAV/VNAV DA	1444	1 1/4	439	1444	1 1/4	439	1444	1 1/4	439		NA				
LNAV MDA	1500	1	495	1500	1	495	1500	1 3/8	495		NA				
CIRCLING	1680	1	666	1680	1	666	1760	2 1/4	746		NA				

CHANGES - REASONS

1. ADDED CAT C MINIMUMS - OPERATIONAL REQUIREMENT EXISTS AND IS WITHIN CRITERIA.
2. CHANGE LPV DA/HAT FOR CATS A/B FROM 1315/310 TO CATS A/B/C 1305/300 (MINIMUM HAT FOR LPV CAT C IS 300 DUE TO GLIDEPATH ANGLE) - 8260-3D, TABLE 3-2-2 MINIMUM HAT FOR PA AND APV APPROACH PROCEDURES.
3. CHANGE LNAV/VNAV DA/HAT FOR CATS A/B FROM 1409/404 TO CATS A/B/C 1444/439 - NEW SURVEYS COMPLETED, NO OE'S REQUIRING ARTIFICIALLY INCREASED MDA'S.
4. CHANGE LNAV MDA FOR CATS A/B FROM 1620/615 TO CATS A/B/C 1500/495 ALL CATS - NEW SURVEYS COMPLETED, NO OE'S REQUIRING ARTIFICIALLY INCREASED MDA'S.
5. CHANGE GLIDEPATH ANGLE FROM 3.57 TO 3.56 - IPDS CALCULATION.
6. CHANGED NIGHT LANDING NOTE: RWY 8L NA TO CIRCLING RWY 8L NA AT NIGHT - PER 8260-19H, PARA 8-6-11, O(2)(G) AND 20:1 PENETRATIONS.
7. CHANGED CHART NOTE: FROM RWY 8R OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD TO WHEN CIRCLING TO RWY 8R AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD - AS PER 8260-9H, PARA 8-6-11 O(2)(H).
8. UPDATED EQUIPMENT REQUIREMENTS NOTE: REPLACED DME/DME RNP-0.3 WITH RNP APCH-PER 8260-19H, PARA 8-6-8, A6 B(1).
9. ADDED CHART NOTE: CIRCLING CAT C NA N OF RWY 8L-26R - DUE TO RAISING TERRAIN TO THE NORTH.
10. ADDED CIRCLING ICON - UPDATED CIRCLING RADII.
11. ADDED ALTERNATE MINIMUMS CAT C 800-2 1/4 - PER 8260-19H, 8-6-11, B(4).
12. CHANGED CHART NOTE: FROM WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ONTARIO INTL ALTIMETER SETTING AND INCREASE ALL DA 31 FEET AND ALL MDA 40 FEET, INCREASE LPV AND LNAV/VNAV ALL CATS VISIBILITY 1/8 MILE TO WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ONTARIO INTL ALTIMETER SETTING AND INCREASE ALL DA 32 FEET AND ALL MDA 40 FEET, INCREASE LPV AND LNAV/VNAV ALL CATS VISIBILITY 1/8 SM.
13. CRC REMAINDER CHANGED FROM 15185715 TO 9AECC39 - FAS DATA BLOCK CHANGES: LTP LAT/LONG, FPAP LAT/LONG, TCH, AND GPA.
14. LTP LAT/LONG CHANGED FROM 340527.8720N/1174638.5240W TO 340527.8820N/1174636.5430W - NEW SURVEY.
15. FPAP LAT/LONG CHANGED FROM 340532.8400N/1174823.6400W TO 340532.8555N/1174823.6605W - RUNWAY COORDINATES CHANGED.
16. TCH CHANGED FROM 55.0 TO 58.0 - TO MITIGATE MAJORITY OF PENETRATIONS.
17. CHANGED VDP FROM 1.45 MILES TO RW26L TO 1.19 MILES TO RW26L - LNAV MDA CHANGED FROM 1620 TO 1500.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** SOCAL APP CON, ATCT, ARPT AMGR.

FLIGHT CHECKED BY

PENDING

Digitally signed by

WARDELL HENNING

Nov 19, 2018

OFFICE

AJV-5400

DATE

09/06/2018

DEVELOPED BY

LONNIE EVERHART (ANDRE MARSH)

Digitally signed by

WARDELL HENNING

Nov 19, 2018

OFFICE

AJV-5400

DATE

09/06/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by

WARDELL HENNING

Nov 19, 2018

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KPOC
RUNWAY	RW26L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W26A
LTP/FTP LATITUDE	340527.8820N
LTP/FTP LONGITUDE	1174636.5430W
LTP/FTP ELLIPSOIDAL HEIGHT	+02726
FPAP LATITUDE	340532.8555N
FPAP LONGITUDE	1174823.6605W
THRESHOLD CROSSING HEIGHT (TCH)	00058.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.56
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1488
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER	9AECC39

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+03062
FPAP ORTHOMETRIC HEIGHT	+03062



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

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CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
LA VERNE, CA	BRACKETT FIELD	01/03/2019	6

TAKEOFF MINIMUMS:

RWY 8L, 8R, STANDARD.

RWY 26L, 300-1 OR STANDARD WITH MINIMUM CLIMB OF 713 FT PER NM TO 1400.

RWY 26R, 300-1 OR STANDARD WITH MINIMUM CLIMB OF 676 FT PER NM TO 1400.

TEXTUAL DEPARTURE PROCEDURES:

RWY 8L, 8R - CLIMB HEADING 079.20 TO 1500 THEN CLIMBING RIGHT TURN ON HEADING 215 AND POM R-164 TO PRADO INT THENCE...

RWY 26L, 26R - CLIMB HEADING 259.20 TO 1400 THEN CLIMBING LEFT TURN ON HEADING 130 AND POM R-164 TO PRADO INT THENCE...

... CONTINUE CLIMB IN PRADO HOLDING PATTERN (HOLD S, RT, 343.99 INBOUND) TO CROSS PRADO INT AT OR ABOVE MEA FOR ROUTE OF FLIGHT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 08L, SIGN 24 FT FROM DER, 98 FT LEFT OF CENTERLINE, 1015 FT MSL.

VEHICLES ON ROAD BEGINNING 46 FT FROM DER, 479 FT LEFT OF CENTERLINE, UP TO 1030 FT MSL.

VEHICLES ON ROAD 161 FT FROM DER, 477 FT LEFT OF CENTERLINE, 1031 FT MSL.

VEHICLES ON ROAD, SIGN BEGINNING 187 FT FROM DER, 462 FT LEFT OF CENTERLINE, UP TO 1032 FT MSL.

VEHICLES ON ROAD BEGINNING 327 FT FROM DER, 449 FT LEFT OF CENTERLINE, UP TO 1037 FT MSL.

BUILDING, VEHICLES ON ROAD BEGINNING 394 FT FROM DER, 418 FT LEFT OF CENTERLINE, UP TO 1061 FT MSL.

BUILDING, TREE BEGINNING 561 FT FROM DER, 397 FT LEFT OF CENTERLINE, UP TO 1062 FT MSL.

VEHICLES ON ROAD 602 FT FROM DER, 6 FT RIGHT OF CENTERLINE, 1029 FT MSL.

BUILDING, VEHICLES ON ROAD, POLE BEGINNING 683 FT FROM DER, 187 FT LEFT OF CENTERLINE, UP TO 1069 FT MSL.

POLE 1210 FT FROM DER, 518 FT RIGHT OF CENTERLINE, 1047 FT MSL.

TRANSMISSION LINE 1299 FT FROM DER, 673 FT RIGHT OF CENTERLINE, 55 FT AGL/1057 FT MSL.

POLE BEGINNING 1401 FT FROM DER, 164 FT RIGHT OF CENTERLINE, UP TO 1064 FT MSL.

POLE 1566 FT FROM DER, 294 FT RIGHT OF CENTERLINE, 1065 FT MSL.

POLE BEGINNING 1719 FT FROM DER, 24 FT RIGHT OF CENTERLINE, UP TO 54 FT AGL/1067 FT MSL.

POLE BEGINNING 1803 FT FROM DER, 148 FT LEFT OF CENTERLINE, UP TO 72 FT AGL/1094 FT MSL.

TREE, POLE BEGINNING 1806 FT FROM DER, 24 FT RIGHT OF CENTERLINE, UP TO 1090 FT MSL.

NOTE: RWY 08R, SIGN 43 FT FROM DER, 239 FT RIGHT OF CENTERLINE, 1016 FT MSL.

VEHICLES ON ROAD 118 FT FROM DER, 463 FT RIGHT OF CENTERLINE, 1017 FT MSL.

VEHICLES ON ROAD 346 FT FROM DER, 7 FT RIGHT OF CENTERLINE, 1021 FT MSL.

VEHICLES ON ROAD 527 FT FROM DER, 294 FT LEFT OF CENTERLINE, 1029 FT MSL.

VEHICLES ON ROAD 715 FT FROM DER, 641 FT LEFT OF CENTERLINE, 1034 FT MSL.

POLE 900 FT FROM DER, 515 FT LEFT OF CENTERLINE, 32 FT AGL/1049 FT MSL.

POLE BEGINNING 1048 FT FROM DER, 217 FT RIGHT OF CENTERLINE, UP TO 56 FT AGL/1052 FT MSL.

TRANSMISSION LINE 1223 FT FROM DER, 372 FT RIGHT OF CENTERLINE, 55 FT AGL/1057 FT MSL.

POLE BEGINNING 1326 FT FROM DER, 131 FT LEFT OF CENTERLINE, UP TO 1064 FT MSL.

POLE BEGINNING 1347 FT FROM DER, 74 FT RIGHT OF CENTERLINE, UP TO 1062 FT MSL.

POLE 1490 FT FROM DER, 5 FT LEFT OF CENTERLINE, 1065 FT MSL.

POLE BEGINNING 1517 FT FROM DER, 275 FT LEFT OF CENTERLINE, UP TO 51 FT AGL/1067 FT MSL.

POLE, TREE BEGINNING 1727 FT FROM DER, 24 FT LEFT OF CENTERLINE, UP TO 72 FT AGL/1094 FT MSL.

TREES BEGINNING 1730 FT FROM DER, 669 FT RIGHT OF CENTERLINE, UP TO 1090 FT MSL.

POLE, TRANSMISSION LINE BEGINNING 3447 FT FROM DER, 982 FT LEFT OF CENTERLINE, UP TO 1100 FT MSL.

TREE 3586 FT FROM DER, 14 FT LEFT OF CENTERLINE, 1101 FT MSL.

TREE 4027 FT FROM DER, 403 FT LEFT OF CENTERLINE, 1114 FT MSL.

NOTE: RWY 26L, SIGN 46 FT FROM DER, 199 FT LEFT OF CENTERLINE, 967 FT MSL.

TREE 159 FT FROM DER, 477 FT LEFT OF CENTERLINE, 989 FT MSL.

TREE 191 FT FROM DER, 482 FT LEFT OF CENTERLINE, 1003 FT MSL.

VEGETATION 359 FT FROM DER, 498 FT LEFT OF CENTERLINE, 1010 FT MSL.

VEGETATION, TERRAIN, TREE, BUILDING BEGINNING 359 FT FROM DER, 225 FT LEFT OF CENTERLINE, UP TO 1028 FT MSL.

TREES BEGINNING 561 FT FROM DER, 231 FT LEFT OF CENTERLINE, UP TO 1037 FT MSL.

TREE 814 FT FROM DER, 96 FT RIGHT OF CENTERLINE, 990 FT MSL.

TREES BEGINNING 824 FT FROM DER, 217 FT RIGHT OF CENTERLINE, UP TO 1017 FT MSL.

TREE 851 FT FROM DER, 271 FT RIGHT OF CENTERLINE, 1018 FT MSL.

TREES BEGINNING 889 FT FROM DER, 66 FT RIGHT OF CENTERLINE, UP TO 1021 FT MSL.

TREES BEGINNING 998 FT FROM DER, 85 FT LEFT OF CENTERLINE, UP TO 1041 FT MSL.

TREES BEGINNING 1027 FT FROM DER, 114 FT RIGHT OF CENTERLINE, UP TO 1022 FT MSL.

TREE 1100 FT FROM DER, 330 FT RIGHT OF CENTERLINE, 1023 FT MSL.

TREES BEGINNING 1158 FT FROM DER, 0 FT RIGHT OF CENTERLINE, UP TO 1026 FT MSL.

TREES BEGINNING 1428 FT FROM DER, 20 FT LEFT OF CENTERLINE, UP TO 1042 FT MSL.

QUALITY
35
CHECKED

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

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LA VERNE, CA	BRACKETT FIELD	01/03/2019	6

TREES BEGINNING 1495 FT FROM DER, 51 FT RIGHT OF CENTERLINE, UP TO 1028 FT MSL.
TREE, BUILDING BEGINNING 1767 FT FROM DER, 697 FT RIGHT OF CENTERLINE, UP TO 1033 FT MSL.
BUILDING, TERRAIN BEGINNING 2358 FT FROM DER, 897 FT RIGHT OF CENTERLINE, UP TO 1131 FT MSL.
ANTENNA, TREE, VEHICLES ON ROAD, BUILDING, TERRAIN, VEGETATION BEGINNING 2404 FT FROM DER, 482 FT RIGHT OF CENTERLINE, UP TO 1156 FT MSL.
TREE 2760 FT FROM DER, 1102 FT RIGHT OF CENTERLINE, 1197 FT MSL.
TREE, VEHICLES ON ROAD, TERRAIN, BUILDING BEGINNING 2768 FT FROM DER, 483 FT RIGHT OF CENTERLINE, UP TO 1212 FT MSL.
TREE, VEHICLES ON ROAD, TERRAIN, BUILDING BEGINNING 3147 FT FROM DER, 228 FT RIGHT OF CENTERLINE, UP TO 1224 FT MSL.
TANK, VEHICLES ON ROAD, POLE, TREE, BUILDING, VEGETATION BEGINNING 3429 FT FROM DER, 323 FT RIGHT OF CENTERLINE, UP TO 50 FT AGL/1233 FT MSL.
TREE 3470 FT FROM DER, 10 FT LEFT OF CENTERLINE, 1065 FT MSL.

NOTE: RWY 26R, BUILDING BEGINNING 7 FT FROM DER, 356 FT RIGHT OF CENTERLINE, UP TO 1003 FT MSL.
BUILDING 72 FT FROM DER, 488 FT RIGHT OF CENTERLINE, 1004 FT MSL.
BUILDING, SIGN BEGINNING 72 FT FROM DER, 210 FT RIGHT OF CENTERLINE, UP TO 1005 FT MSL.
TREES BEGINNING 1405 FT FROM DER, 523 FT RIGHT OF CENTERLINE, UP TO 1034 FT MSL.
VEGETATION, TERRAIN BEGINNING 1463 FT FROM DER, 807 FT LEFT OF CENTERLINE, UP TO 1028 FT MSL.
TREES BEGINNING 1526 FT FROM DER, 541 FT RIGHT OF CENTERLINE, UP TO 1067 FT MSL.
TREES BEGINNING 1664 FT FROM DER, 699 FT LEFT OF CENTERLINE, UP TO 1037 FT MSL.
TREE, VEHICLES ON ROAD BEGINNING 1887 FT FROM DER, 942 FT RIGHT OF CENTERLINE, UP TO 1068 FT MSL.
TREES BEGINNING 2102 FT FROM DER, 716 FT LEFT OF CENTERLINE, UP TO 1041 FT MSL.
TREES BEGINNING 2233 FT FROM DER, 723 FT RIGHT OF CENTERLINE, UP TO 1100 FT MSL.
TREES BEGINNING 2485 FT FROM DER, 987 FT RIGHT OF CENTERLINE, UP TO 1109 FT MSL.
TREE, VEHICLES ON ROAD BEGINNING 2974 FT FROM DER, 791 FT RIGHT OF CENTERLINE, UP TO 1125 FT MSL.
TREE, VEHICLES ON ROAD BEGINNING 3005 FT FROM DER, 796 FT RIGHT OF CENTERLINE, UP TO 1133 FT MSL.
TREE, VEHICLES ON ROAD BEGINNING 3256 FT FROM DER, 919 FT RIGHT OF CENTERLINE, UP TO 1251 FT MSL.
TREE, VEHICLES ON ROAD, BUILDING, ANTENNA, TERRAIN, TANK, POLE, VEGETATION BEGINNING 3300 FT FROM DER, 22 FT RIGHT OF CENTERLINE, UP TO 1258 FT MSL.

CONTROLLING OBSTACLES:

RWY 26L: 1220 FEET MSL TREE 340539.80N/1174808.69W (VIS) 1212 FEET MSL TREE 340542.27N/1174757.98W (CG) 1233 FEET MSL TANK 340540.00N/1174806.00W (CGTA/CIG).

RWY 26R: 1258 FEET MSL TREE 340547.08N/1174750.85W (CIG/CG/CGTA), 1220 FEET MSL TREE 340539.80N/1174808.69W (VIS).

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT:

RWY 8L, 8R, 26L, 26R -10246 FEET MSL AAO 341712.00N/1173918.00W.

REMARKS:

FLIGHT INSPECTED BY:	<i>Digitally signed by</i> ROBERT G HAMILTON	OFFICE SYMBOL:	DATE:
PENDING	Nov 21, 2018		
DEVELOPED BY:	<i>Digitally signed by</i> HEIDI SNIDER	OFFICE SYMBOL:	DATE:
HEIDI SNIDER	Nov 20, 2018	AJV-5423	07/25/2018
APPROVED BY:	<i>Digitally signed by</i> ROBERT G HAMILTON	OFFICE SYMBOL:	DATE:
JULIE MORGAN	Nov 21, 2018	AJV-5420	

REQUIRED EFFECTIVE DATE:

01/03/2019

COORDINATED WITH:

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

OTHER:

ZLA, SOCAL APP, ARPT MGR



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

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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
LA VERNE, CA	BRACKETT FIELD	01/03/2019	6

CHANGES - REASONS:

1. UPDATED RWY 26L, 26R TAKEOFF MINIMUMS FROM 300-1 TO RWY 26L, 300-1 OR STANDARD WITH MINIMUM CLIMB OF 713 FT PER NM TO 1400. RWY 26R, 300-1 OR STANDARD WITH MINIMUM CLIMB OF 676 FT PER NM TO 1400. - OBSTACLE EVALUATION.
2. UPDATED DEPARTURE PROCEDURE:
RWY 8L, 8R, **FROM** CLIMB VIA HEADING 079 TO 1500, THEN CLIMBING RIGHT TURN VIA HEADING 195 AND POM R-164 TO PRADO INT. **TO** CLIMB HEADING 079.20 TO 1500 THEN CLIMBING RIGHT TURN ON HEADING 215 AND POM R-164 TO PRADO INT THENCE..
RWY 26L, 26R **FROM** CLIMB VIA HEADING 259 TO 1400, THEN CLIMBING LEFT TURN VIA HEADING 130 AND POM R-164 TO PRADO INT. **TO** CLIMB HEADING 259.20 TO 1400 THEN CLIMBING LEFT TURN ON HEADING 130 AND POM R-164 TO PRADO INT THENCE...
FROM ...AIRCRAFT DEPARTING PRADO INT HEADING 141 CW 290 CLIMB ON COURSE. ALL OTHERS CLIMB IN PRADO INT HOLDING PATTERN (HOLD N, RT, 164 INBOUND) TO DEPART PRADO INT AT OR ABOVE: 291 CW 340, 4500; 341 CW 050, 6800; 051 CW 090, 5200; 091 CW 140, 4200.
TO ...CONTINUE CLIMB IN PRADO HOLDING PATTERN (HOLD S, RT, 343.99 INBOUND) TO CROSS PRADO INT AT OR ABOVE MEA FOR ROUTE OF FLIGHT. - UPDATED ROUTE TO JOIN ENROUTE STRUCTURE AT MEA, REMOVED SECTORS TO LESSEN CG/ALT RESTRICTIONS.
3. UPDATED TAKEOFF OBSTACLE NOTES - OBSTACLE EVALUATION TRANSCRIBED USING OBSTACLE GROUPER.
4. ADDED CONTROLLING OBSTACLES - DOCUMENTED IAW 8260.46F.
5. VCOA NOT ESTABLISHED AT ATC REQUEST DUE TO DEPARTURE DELAYS AND CONGESTION.

11/20/2018: THIS IS AN UPDATED COPY IF THE FORM DEVELOPED ON 07/25/2018.

1. TAKEOFF OBSTACLE NOTES CHANGED ALL WORDING OF TRAVERSE WAY TO VEHICLES ON ROAD - ACCURATELY IDENTIFY OBSTACLES.
2. CHANGED REQUIRED EFFECTIVE DATE FROM ROUTINE TO 01/03/2019. - PROCESSED AS HARD DATE.



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> MANASSAS RGNL/HARRY P DAVIS FIELD	<u>AIRPORT ID</u> KHEF	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 34R	<u>ORIGINAL/AMENDMENT</u> 3	<u>CITY</u> WASHINGTON	<u>STATE</u> DC
<u>AIRPORT ELEVATION</u> 192	<u>TDZE</u> 178	<u>SUPERSEDED</u> RNAV (GPS) RWY 34R	<u>ORIGINAL/AMENDMENT</u> 2A	<u>DATED</u> 05/28/2015	<u>MAG VAR</u> 10W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

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>
BRV VORTAC	IAF	HANOK		TF	FB	1.00	009.79	14.42	3000
HANOK	IF	PEZSY		TF	FB	1.00	329.56	5.31	2000
PEZSY	FAF	CEPTO/2.80 NM TO OKILE		TF	FB	0.30	326.05	2.32	
CEPTO/2.80 NM TO OKILE		OKILE	MAP	TF	FO	0.30	326.05	2.80	
OKILE	MAP	592 MSL		CA			326.05		
592 MSL		CSN VORTAC		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LP: OKILE
 LNAV: OKILE

MISSED APPROACH INSTRUCTIONS:

CLIMBING LEFT TURN TO 3000 DIRECT CSN VORTAC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT HANOK

3. FAC:

326.05

FAF: PEZSY

DIST FAF TO MAP: 5.12

DIST FAF TO THLD: 5.60

4. MIN ALT: HANOK 3000, PEZSY 2000, CEPTO/2.80 NM TO OKILE 1260

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: OKILE 3400

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BRV VORTAC ON V286 SOUTHEAST BOUND.
CHART NOTE: RWY 34R HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WASHINGTON DULLES INTL ALTIMETER SETTING AND INCREASE ALL MDA 60FT, INCREASE LP AND LNAV AND CIRCLING CATS C/D VISIBILITY 1/4 SM.
CHART NOTE: FOR INOPERATIVE ALS WHEN USING WASHINGTON DULLES INTL, INCREASE LP AND LNAV ALL CATS 1/4 SM.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LP AND LNAV CATS C/D VISIBILITY TO 1 3/8 SM.
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY.

ADDITIONAL FLIGHT DATA:

519 AAO 384000N/07728206W
CHART OBST: 872 TOWER 383925N/0772600W
CHART CIRCLING ICON.
CHART VDP AT 0.96 NM TO OKILE
CHART FAS OBST 369 TREE 384039N/0772845W, 445 TREE 384039N/0772817W.
CHART: 445 TREE 383956N/0772817W.
FICTITIOUS THRESHOLD POINT (CFDWK) DO NOT CHART
CHART PLANVIEW NOTE: FINAL APPROACH COURSE OFFSET 14.61 DEGREES.
PEZSY TO RW34R: 3.00/40.
CHART R6608A, B, & C
WAAS CHANNEL #63130
REFERENCE PATH ID: W34A
FAC CROSSES RWY C/L EXTENDED 3000 FT FROM THLD.
HOLD SW, LT, 027.00 INBOUND
FTP HAE: 22.1 M

MINIMUMS:

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

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



<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>
LP MDA	620	1	442	620	1	442	620	1	442	620	1	442			
LNAV MDA	640	1	462	640	1	462	640	1 1/8	462	640	1 1/8	462			
CIRCLING	700	1	508	740	1	548	840	1 3/4	648	920	2 1/4	728			

CHANGES - REASONS

- 1. AMENDED LP CAT C/D VISIBILITY FROM 1 3/8 SM TO 1 SM - REDUCTION REFLECTS INSTALLATION OF MALSF.
- 2. AMENDED LNAV CAT C/D MINIMUMS FROM 1 3/8 SM TO 1 1/8 SM - REDUCTION REFLECTS INSTALLATION OF MALSF.
- 3. CHANGED THRE 178 TO TDZE 178 - INCORPERATING P-NOTAM 5/8232.
- 4. REMOVED CHART NOTE DME/DME RNP-0.3 NA - NO LONGER REQUIRED PER 8260.19H CH 8.
- 5. ADDED RNP APCH TO PBN REQUIREMENTS NOTES - 8260.19H, CH 8.
- 6. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WASHINGTON DULLES INTL ALTIMETER SETTING AND INCREASE ALL MDA 60FT, INCREASE LP AND LNAV AND CIRCLING CATS C/D VISIBILITY 1/4 SM - VIS CHECK RESULTS.
- 7. CHART NOTE: FOR INOPERATIVE ALS WHEN USING WASHINGTON DULLES INTL ALTIMETER SETTING, INCREASE LP AND LNAV ALL CATS 1/4 SM.
- 8. CHART NOTE: FOR INOPERATIVE ALS, INCREASE LP AND LNAV CATS C/D TO 1 3/8SM - VIS CHECK RESULTS.
- 9. ADDED 529 AAO 384004N/0772802W TO ADDITIONAL FLIGHT DATA - UPDATED OBSTACLE.
- 10. AMENDED ARINC FAS DATA LTP 384241.1800N/0773036.1440W TO FTP (CFDWK) AT 384241.12N/0773036.07W - CORRECTING CRC REMAINDER.
- 11. ADDED CNF (CFDWK) TO UPDATED FTP COORDINATES - UPDATING TO CURRENT CRITERIA.
- 12. AMENDED LP HAT/HAA FROM 452 TO 442 - UPDATED CONTROLLING OBSTACLE INFORMATION.
- 13. AMENDED CAT A CIRCLING MDA/HAA FROM 720/528 TO 700/508 - UPDATED CONTROLLING OBSTACLE INFORMATION.



COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZDC, IAD APP CON, HEF ATCT, HEF AMGR, VA DEPT OF AVIATION

<u>FLIGHT CHECKED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
BRENT BOOKER	ROBERT G HAMILTON	FICO	11/11/18	
	Nov 15, 2018			
<u>DEVELOPED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
LONNIE EVERHART (KELLY CARLSON)	ROBERT G HAMILTON	AJV-5400	05/31/2018	
	Nov 15, 2018			
<u>APPROVED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
LONNIE EVERHART	ROBERT G HAMILTON	AJV-5400		MANAGER
	Nov 15, 2018			



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KHEF
RUNWAY	RW34R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W34A
LTP/FTP LATITUDE	384241.1200N
LTP/FTP LONGITUDE	0773036.0700W
LTP/FTP ELLIPSOIDAL HEIGHT	+00221
FPAP LATITUDE	384345.3240N
FPAP LONGITUDE	0773155.2440W
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	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0

CRC REMAINDER	F72AD05F

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+00540
FPAP ORTHOMETRIC HEIGHT	+00540



**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.
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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
SHENANDOAH, IA	SHENANDOAH MUNI	3 JANUARY 2019	2

TAKEOFF MINIMUMS:

RWY 22, STANDARD.

RWY 4, 500-3 OR STANDARD WITH MINIMUM CLIMB OF 260 FEET PER NM TO 1700.

RWY 12, 500-2 3/4 OR STANDARD WITH MINIMUM CLIMB OF 285 FEET PER NM TO 1600.

RWY 30, 300-1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 255 FEET PER NM TO 1300.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 04, BUILDING 70 FT FROM DER, 398 FT RIGHT OF CENTERLINE, 10 FT AGL/984 FT MSL.

TREE 73 FT FROM DER, 192 FT LEFT OF CENTERLINE, 978 FT MSL.

TREE 175 FT FROM DER, 391 FT LEFT OF CENTERLINE, 979 FT MSL.

TREE 281 FT FROM DER, 403 FT LEFT OF CENTERLINE, 981 FT MSL.

POLE 412 FT FROM DER, 330 FT RIGHT OF CENTERLINE, 1007 FT MSL.

TREE, POLE BEGINNING 551 FT FROM DER, 263 FT LEFT OF CENTERLINE, UP TO 992 FT MSL.

POLE 620 FT FROM DER, 470 FT RIGHT OF CENTERLINE, 1010 FT MSL.

TREE 822 FT FROM DER, 646 FT RIGHT OF CENTERLINE, 1022 FT MSL.

TREE 1612 FT FROM DER, 508 FT RIGHT OF CENTERLINE, 1034 FT MSL.

VEGETATION BEGINNING 4706 FT FROM DER, 1686 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/1104 FT MSL.

TOWER 2.5 NM FROM DER, 3152 FT RIGHT OF CENTERLINE, 491 FT AGL/1463 FT MSL.

NOTE: RWY 12, VEGETATION 27 FT FROM DER, 233 FT LEFT OF CENTERLINE, 974 FT MSL.

VEGETATION 71 FT FROM DER, 336 FT LEFT OF CENTERLINE, 976 FT MSL.

POLE, TREE BEGINNING 74 FT FROM DER, 124 FT LEFT OF CENTERLINE, UP TO 28 FT AGL/998 FT MSL.

TREE 75 FT FROM DER, 91 FT RIGHT OF CENTERLINE, 984 FT MSL.

TREE 96 FT FROM DER, 522 FT RIGHT OF CENTERLINE, 986 FT MSL.

TREES BEGINNING 106 FT FROM DER, 390 FT RIGHT OF CENTERLINE, UP TO 18 FT AGL/990 FT MSL.

OTHER, TREE BEGINNING 3998 FT FROM DER, 62 FT RIGHT OF CENTERLINE, UP TO 1100 FT MSL.

OTHER 5011 FT FROM DER, 68 FT LEFT OF CENTERLINE, 1115 FT MSL.

OTHER 5490 FT FROM DER, 691 FT RIGHT OF CENTERLINE, 1110 FT MSL.

TOWER 2.1 NM FROM DER, 2334 FT LEFT OF CENTERLINE, 311 FT AGL/1430 FT MSL.

NOTE: RWY 22, VEGETATION 101 FT FROM DER, 170 FT RIGHT OF CENTERLINE, 972 FT MSL.

FENCE 200 FT FROM DER, 392 FT LEFT OF CENTERLINE, 7 FT AGL/967 FT MSL.

CATENARY, POLE BEGINNING 965 FT FROM DER, 253 FT LEFT OF CENTERLINE, UP TO 999 FT MSL.

TREE 2023 FT FROM DER, 507 FT LEFT OF CENTERLINE, 1030 FT MSL.

NOTE: RWY 30, VEGETATION 73 FT FROM DER, 305 FT RIGHT OF CENTERLINE, 959 FT MSL.

TREES BEGINNING 117 FT FROM DER, 318 FT RIGHT OF CENTERLINE, UP TO 31 FT AGL/981 FT MSL.

TREES BEGINNING 305 FT FROM DER, 217 FT LEFT OF CENTERLINE, UP TO 970 FT MSL.

TREE 600 FT FROM DER, 118 FT LEFT OF CENTERLINE, 972 FT MSL.

TREE 790 FT FROM DER, 192 FT LEFT OF CENTERLINE, 977 FT MSL.

TREE 876 FT FROM DER, 136 FT RIGHT OF CENTERLINE, 983 FT MSL.

TREES BEGINNING 1007 FT FROM DER, 273 FT RIGHT OF CENTERLINE, UP TO 984 FT MSL.

TREE 1398 FT FROM DER, 332 FT LEFT OF CENTERLINE, 996 FT MSL.

TREE 1533 FT FROM DER, 432 FT LEFT OF CENTERLINE, 1015 FT MSL.

TREES BEGINNING 1557 FT FROM DER, 432 FT LEFT OF CENTERLINE, UP TO 1044 FT MSL.

TREE 2076 FT FROM DER, 693 FT LEFT OF CENTERLINE, 1049 FT MSL.

TREE 5404 FT FROM DER, 1808 FT RIGHT OF CENTERLINE, 1118 FT MSL.



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

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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
SHENANDOAH, IA	SHENANDOAH MUNI	3 JANUARY 2019	2

TREES BEGINNING 5502 FT FROM DER, 1411 FT RIGHT OF CENTERLINE, UP TO 1124 FT MSL.
TREES BEGINNING 5767 FT FROM DER, 1299 FT RIGHT OF CENTERLINE, UP TO 1125 FT MSL.
TREES BEGINNING 5825 FT FROM DER, 1508 FT RIGHT OF CENTERLINE, UP TO 1129 FT MSL.
TREES BEGINNING 5887 FT FROM DER, 1320 FT RIGHT OF CENTERLINE, UP TO 1130 FT MSL.
TREE, TRANSMISSION LINE BEGINNING 6054 FT FROM DER, 1374 FT RIGHT OF CENTERLINE, UP TO 1144 FT MSL.
TREE, TRANSMISSION LINE BEGINNING 1.1 NM FROM DER, 1993 FT RIGHT OF CENTERLINE, UP TO 1146 FT MSL.

CONTROLLING OBSTACLES:

RWY 4: 1463 FT MSL TOWER 404648.00N/0952136.00W (CLIMB GRADIENT, CLIMB GRADIENT TERMINATION ALTITUDE, CEILING, VISIBILITY).

RWY 12: 1430 FT MSL TOWER 404406.64N/0952201.67W (CLIMB GRADIENT, CLIMB GRADIENT TERMINATION ALTITUDE, CEILING, VISIBILITY).

RWY 30: 1144 FT MSL TREE 404608.79N/0952606.90W (CLIMB GRADIENT, CLIMB GRADIENT TERMINATION ALTITUDE).
1146 FT MSL TREE 404621.23N/0952612.45W (CEILING, VISIBILITY).

REMARKS:

FLIGHT INSPECTED BY:

ZACK SMYER

Digitally signed by
DAVID TEFFETELLER
Nov 15, 2018

OFFICE SYMBOL:

FICO

DATE:

10/18/18

DEVELOPED BY:

FRANK MOORE

FRANCIS HUDSON MOORE Digitally signed by FRANCIS HUDSON MOORE
Date: 2018.07.19 17:21:40 -04'00'

OFFICE SYMBOL:

AJV-5433

DATE:

07/19/2018

APPROVED BY:

PAT MULQUEEN

Digitally signed by
DAVID TEFFETELLER
Nov 15, 2018

OFFICE SYMBOL:

AJV-5430

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:

ZMP, OMAHA APCH CON, ARPT MNGR

CHANGES - REASONS:

1. CHANGED RWY 12 CLIMB GRADIENT FROM 280 TO 285 - NEW TARGETS EVALUATION, CONTROLLING OBSTACLE.
2. ADDED RWY 30 TAKEOFF MINIMUMS - NEW CONTROLLING OBSTACLES.
3. UPDATED TAKEOFF OBSTACLE NOTES - NEW TARGETS EVALUATION

11/15/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 10/20/18.

1. AIRPORT NAME CHANGED FROM "SHENANDOAD" TO "SHENANDOAH".



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

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<u>AIRPORT</u> CHICAGO O'HARE INTL	<u>AIRPORT ID</u> KORD	<u>PROCEDURE NAME</u> ILS OR LOC RWY 27L ILS RWY 27L SA CAT I, ILS RWY 27L CAT II, ILS RWY 27L CAT III	<u>ORIGINAL/AMENDMENT</u> 31A	<u>CITY</u> CHICAGO	<u>STATE</u> IL	
<u>AIRPORT ELEVATION</u> 680	<u>TDZE</u> 654	<u>SUPERSEDED</u> ILS OR LOC RWY 27L ILS RWY 27L SA CAT I, ILS RWY 27L CAT II, ILS RWY 27L CAT III	<u>ORIGINAL/AMENDMENT</u> 31	<u>DATED</u> 06/22/2017	<u>MAG VAR</u> 3W	<u>EPOCH YEAR</u> 2005
<u>FACILITY</u> I-IAC	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
VOGLR	IAF	NRMAH		TF	FB	1.00	280.58	17.29	9000
NRMAH/26.15 DME/RADAR		JOEBO/23.02 DME/RADAR					273.00	3.14 (I-IAC)	8000
JOEBO/23.02 DME/RADAR		GRABL/19.88 DME/RADAR					273.00	3.14 (I-IAC)	7000
GRABL/19.88 DME/RADAR		RIPPR/16.74 DME/RADAR					273.00	3.14 (I-IAC)	6000
RIPPR/16.74 DME/RADAR		BASHH/13.60 DME/RADAR					273.00	3.14 (I-IAC)	5000
BASHH/13.60 DME/RADAR	IF	EBENS/10.46 DME/RADAR					273.00	3.14 (I-IAC)	4000
EBENS/10.46 DME/RADAR		TAFFS INT/4.57 DME/RADAR					273.00	5.89 (I-IAC)	2200

MISSED APPROACH

MAP:

ILS: DA
 LOC: 4.69 NM AFTER TAFFS INT/I-IAC 4.57 DME/RADAR OR AT 0.14 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 4000 ON HEADING 295 AND ON CGT VORTAC R-322 TO UKUNE INT/CGT 48.00 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 4000 ON HEADING 265 FOR RADAR VECTORS (RADAR REQUIRED)



8. MSA FROM: KORD 3400

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: 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
S-ILS 27L	854	1800	200	854	1800	200	854	1800	200	854	1800	200			
S-LOC 27L	1160	2400	506	1160	2400	506	1160	5500	506	1160	5500	506			
ZOSRO FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)															
S-LOC 27L	1080	2400	426	1080	2400	426	1080	4000	426	1080	4000	426			QUALITY

QUALITY
13
CHECKED

AIRPORT
CHICAGO O'HARE INTL

AIRPORT ID
KORD

PROCEDURE NAME
ILS OR LOC RWY 27L
ILS RWY 27L SA CAT I,
ILS RWY 27L CAT II,
ILS RWY 27L CAT III

ORIGINAL/AMENDMENT
31A

CITY
CHICAGO

STATE
IL

CHANGES - REASONS

1. CHANGED MSA CENTER POINT FROM ORD TO KORD - ORD BEING DECOMMISSIONED
2. EQUIPMENT NOTES UPDATED FROM CHART NOTE: DME OR RADAR REQUIRED AND CHART PLANVIEW NOTE: GPS OR RADAR REQUIRED TO - FROM VOGLR: RNAV 1-GPS REQUIRED. AIRCRAFT NOT GPS EQUIPPED - RADAR REQUIRED FOR PROCEDURE ENTRY. DME OR RADAR REQUIRED AND MOVED TO THE EQUIPMENT REQUIREMENT NOTES SECTION - IAW 8260.19H PARA 8-6-8 A (6) (B) (C).

PDF EDIT:

1. DELETED "26.15 DME/RADAR" FROM VOGLR TO NRMAH INITIAL SEGMENT IN TERMINAL ROUTES.

COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZAU, CHICAGO APP CON, ORD TOWER, AMGR

FLIGHT CHECKED BY

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, DEC 22, 2017.

Digitally signed by

WARDELL HENNING

OFFICE

DATE

DEVELOPED BY

LONNIE EVERHART (STEVEN SCHUTRUM)

Digitally signed by

Nov 16, 2018

WARDELL HENNING

OFFICE

DATE

AJV-5400

08/01/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by

WARDELL HENNING

Nov 16, 2018

OFFICE

DATE

AJV-5400

TITLE

MANAGER

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

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<u>AIRPORT</u> CHICAGO O'HARE INTL	<u>AIRPORT ID</u> KORD	<u>PROCEDURE NAME</u> ILS OR LOC RWY 28C ILS RWY 28C SA CAT I, ILS RWY 28C CAT II, ILS RWY 28C CAT III	<u>ORIGINAL/AMENDMENT</u> 2A	<u>CITY</u> CHICAGO	<u>STATE</u> IL	
<u>AIRPORT ELEVATION</u> 680	<u>TDZE</u> 651	<u>SUPERSEDED</u> ILS OR LOC RWY 28C ILS RWY 28C SA CAT I, ILS RWY 28C CAT II, ILS RWY 28C CAT III	<u>ORIGINAL/AMENDMENT</u> 2	<u>DATED</u> 06/22/2017	<u>MAG VAR</u> 3W	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> I-VZE	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
VOGLR	IAF	LNDUH		TF	FB	1.00	277.15	17.19	9000
LNDUH/28.39 DME/RADAR		SNTOE/25.25 DME/RADAR					272.89	3.14 (I-VZE)	8000
SNTOE/25.25 DME/RADAR		KOENN/22.11 DME/RADAR					272.89	3.14 (I-VZE)	7000
KOENN/22.11 DME/RADAR		MEMAW/18.97 DME/RADAR					272.89	3.14 (I-VZE)	6000
MEMAW/18.97 DME/RADAR		RZUKO/15.83 DME/RADAR					272.89	3.14 (I-VZE)	5000
RZUKO/15.83 DME/RADAR	IF	HAZIL/12.69 DME/RADAR					272.89	3.14 (I-VZE)	4000
HAZIL/12.69 DME/RADAR		SEIKA INT/6.98 DME/RADAR					272.89	5.71 (I-VZE)	2300

MISSED APPROACH

MAP:

ILS: DA
 LOC: 5.01 NM AFTER SEIKA INT/I-VZE 6.98 DME/RADAR OR AT 1.97 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 4000 ON HEADING 215 AND DPA VOR/DME R-082 TO DPA VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 4000 ON HEADING 265 FOR RADAR VECTORS (RADAR REQUIRED).



8. MSA FROM: KORD 3400

AIRCRAFT NOT GPS EQUIPPED - RADAR REQUIRED FOR PROCEDURE ENTRY. DME OR RADAR REQUIRED.

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

HOLD W, RT, 068.00 INBOUND

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: 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
S-ILS 28C	851	1800	200	851	1800	200	851	1800	200	851	1800	200			
S-LOC 28C	1200	2400	549	1200	2400	549	1200	6000	549	1200	6000	549			
ZUPTI FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)															
S-LOC 28C	1040	2400	389	1040	2400	389	1040	3500	389	1040	3500	389			QUALITY



AIRPORT
CHICAGO O'HARE INTL

AIRPORT ID
KORD

PROCEDURE NAME
ILS OR LOC RWY 28C
ILS RWY 28C SA CAT I,
ILS RWY 28C CAT II,
ILS RWY 28C CAT III

ORIGINAL/AMENDMENT
2A

CITY
CHICAGO

STATE
IL

CHANGES - REASONS

1. CHANGED MSA CENTER POINT FROM ORD TO KORD - ORD BEING DECOMMISSIONED.
2. EQUIPMENT NOTES UPDATED FROM CHART NOTE: DME OR RADAR REQUIRED AND CHART PLANVIEW NOTE: GPS OR RADAR REQUIRED TO - FROM VOGLR: RNAV 1-GPS REQUIRED. AIRCRAFT NOT GPS EQUIPPED - RADAR REQUIRED FOR PROCEDURE ENTRY. DME OR RADAR REQUIRED AND MOVED TO THE EQUIPMENT REQUIREMENT NOTES SECTION - IAW 8260.19H PARA 8-6-8 A (6) (B) (C).

PDF EDIT:

1. DELETED "28.39 DME/RADAR" FROM VOGLR TO LNDUH INITIAL SEGMENT IN TERMINAL ROUTES.

COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZAU, CHICAGO APP CON, ORD ATCT, AMGR.

FLIGHT CHECKED BY

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, DEC 22, 2017.

OFFICE

DATE

Digitally signed by

WARDELL HENNING

DEVELOPED BY

LONNIE EVERHART (STEVEN SCHUTRUM)

Digitally signed by

Nov 16, 2018

WARDELL HENNING

OFFICE

DATE

AJV-5400

07/30/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by

WARDELL HENNING

Nov 16, 2018

OFFICE

DATE

AJV-5400

TITLE

MANAGER

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> CHICAGO O'HARE INTL	<u>AIRPORT ID</u> KORD	<u>PROCEDURE NAME</u> ILS OR LOC RWY 28L ILS RWY 28L SA CAT I, ILS RWY 28L CAT II, ILS RWY 28L CAT III	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> CHICAGO	<u>STATE</u> IL	
<u>AIRPORT ELEVATION</u> 680	<u>TDZE</u> 667	<u>SUPERSEDED</u> ILS OR LOC RWY 28L ILS RWY 28L SA CAT I, ILS RWY 28L CAT II, ILS RWY 28L CAT III	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 03/29/2018	<u>MAG VAR</u> 4W	<u>EPOCH YEAR</u> 2015
<u>FACILITY</u> I-VQX	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
VOGLR	IAF	LYSIN		TF	FB	1.00	275.46	17.17	9000
LYSIN/26.46 DME/RADAR		KEGNE/23.32 DME/RADAR					273.88	3.14 (I-VQX)	8000
KEGNE/23.32 DME/RADAR		JAVON/20.18 DME/RADAR					273.88	3.14 (I-VQX)	7000
JAVON/20.18 DME/RADAR		HANSO/17.05 DME/RADAR					273.88	3.14 (I-VQX)	6000
HANSO/17.05 DME/RADAR		FITAR/13.91 DME/RADAR					273.88	3.14 (I-VQX)	5000
FITAR/13.91 DME/RADAR	IF	CAKOS/10.77 DME/RADAR					273.88	3.14 (I-VQX)	4000
CAKOS/10.77 DME/RADAR		PONCC INT/4.34 DME/RADAR					273.88	6.43 (I-VQX)	2200

MISSED APPROACH

MAP:

ILS: DA
 LOC: 4.67 NM AFTER PONCC INT/I-VQX 4.34 DME/RADAR OR AT I-VQX 0.34 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1200 THEN CLIMBING LEFT TURN TO 4000 DIRECT CGT VORTAC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1200 THEN CLIMBING LEFT TURN TO 4000 DIRECT JOT VOR/DME AND HOLD.



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>
CHICAGO O'HARE INTL	KORD	ILS OR LOC RWY 28L ILS RWY 28L SA CAT I, ILS RWY 28L CAT II, ILS RWY 28L CAT III	ORIG-B	CHICAGO	IL
<u>PROFILE:</u>					
1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)	
2. PROFILE STARTS AT LYSIN					
3. FAC:	273.88	FAF: PONCC INT/4.34 DME/RADAR	DIST FAF TO MAP: 4.67	DIST FAF TO THLD: 4.67	
4. MIN ALT:	LYSIN 9000, KEGNE 8000, JAVON 7000, HANSO 6000, FITAR 5000, CAKOS 4000, PONCC 2200, ALKYL INT/1.47 DME 1240*				
5. DIST TO THLD FROM OM:	MM:	IM: 1026	100 HAT: 1031.00	150 HAT: 1985.00	GS ANT: 994
6. MIN GS INCPT: 2200	GS ALT AT FAF : PONCC INT/4.34 DME/RADAR 2200			OM:	MM: IM: 767
7. GP ANGLE: 3.00	34:1:	20:1:	TCH: 55.0		
8. MSA FROM: KORD 3400					

EQUIPMENT REQUIREMENTS NOTES:

FROM VOGLR: RNAV 1-GPS REQUIRED.
AIRCRAFT NOT GPS EQUIPPED - RADAR REQUIRED FOR PROCEDURE ENTRY. DME OR RADAR REQUIRED.

NOTES:

SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 28L: CAT A, B, C, D RA 157, RVR 1400, HAT 150, DA 817 MSL.
CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 28L: CAT A, B, C, D RA 106, RVR 1200, HAT 100, DA 767 MSL.
CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 28L: CAT A, B, C, D RVR 600
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.
CAT I CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 28L CAT C/D VISIBILITY TO 1 5/8 SM.

SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF HUD TO DH.
CAT II RVR 1000 CHART NOTE: RVR 1000 AUTHORIZED WITH SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF AUTOLAND OR HUD TO TOUCHDOWN.

ADDITIONAL FLIGHT DATA:

CHART IN PROFILE VIEW: I-VQX DME ANTENNA.
CHART IN PLANVIEW: JOT VOR/DME
CHART VDP AT 0.76 DME*
DISTANCE VDP TO THLD 1.09 NM
* LOC ONLY
CHART FAS OBST: 807 TOWER 415719N/0875153W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SW JOT VOR/DME, RT, 066.00 INBOUND.
HOLD SE, RT, 336.00 INBOUND



AIRPORT
CHICAGO O'HARE INTL

AIRPORT ID
KORD

PROCEDURE NAME
ILS OR LOC RWY 28L
ILS RWY 28L SA CAT I,
ILS RWY 28L CAT II,
ILS RWY 28L CAT III

ORIGINAL/AMENDMENT
ORIG-B

CITY
CHICAGO

STATE
IL

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD

<u>CATEGORY:</u>	A			B			C			D			E		
<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>
S-ILS 28L	867	1800	200	867	1800	200	867	1800	200	867	1800	200			
S-LOC 28L	1240	2400	573	1240	2400	573	1240	1 1/4	573	1240	1 1/4	573			
ALKYL FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)															
S-LOC 28L	1060	2400	393	1060	2400	393	1060	3500	393	1060	3500	393			

CHANGES - REASONS

1. CHANGED MSA CENTER POINT FROM ORD TO KORD - ORD BEING DECOMMISSIONED.
2. EQUIPMENT NOTES UPDATED FROM CHART NOTE: DME OR RADAR REQUIRED AND CHART PLANVIEW NOTE: GPS OR RADAR REQUIRED TO FROM VOGLR: RNAV 1-GPS REQUIRED. AIRCRAFT NOT GPS EQUIPPED - RADAR REQUIRED FOR PROCEDURE ENTRY, DME OR RADAR REQUIRED AND MOVED TO THE EQUIPMENT REQUIREMENT NOTES SECTION - IAW 8260.19H PARA 8-6-8A6(C).
3. DELETED NOTE: FOR INOPERATIVE ALSF-2, INCREASE S-LOC 28L CAT C AND D VISIBILITY TO 1 5/8 MILE.
4. ADDED CAT I NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 28L CAT C/D VISIBILITY TO 1 5/8 SM.
5. INCORPORATED CHANGES FROM ORIG-A - IAW FAAO 8260.19H, PARA 8-3-4C(2)

PDF EDIT:

1. DELETED "26.5 DME/RADAR" FROM VOGLR TO LYSIN INITIAL SEGMENT IN TERMINAL ROUTES.

COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZAU, CHICAGO APP CON, ORD ATCT, AMGR.

FLIGHT CHECKED BY

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, DEC 22, 2017.

OFFICE
Digitally signed by
WARDELL HENNING

DATE

DEVELOPED BY

LONNIE EVERHART (STEVEN SCHUTRUM)

Digitally signed by Nov 16, 2018
WARDELL HENNING
AJV-5400

DATE

08/23/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by
WARDELL HENNING
Nov 16, 2018

OFFICE

AJV-5400

DATE

TITLE

MANAGER



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> CHICAGO O'HARE INTL	<u>AIRPORT ID</u> KORD	<u>PROCEDURE NAME</u> ILS OR LOC RWY 28R ILS RWY 28R SA CAT I, ILS RWY 28R CAT II, ILS RWY 28R CAT III	<u>ORIGINAL/AMENDMENT</u> 18A	<u>CITY</u> CHICAGO	<u>STATE</u> IL	
<u>AIRPORT ELEVATION</u> 680	<u>TDZE</u> 651	<u>SUPERSEDED</u> ILS OR LOC RWY 28R ILS RWY 28R SA CAT I, ILS RWY 28R CAT II, ILS RWY 28R CAT III	<u>ORIGINAL/AMENDMENT</u> 18	<u>DATED</u> 06/22/2017	<u>MAG VAR</u> 3W	<u>EPOCH YEAR</u> 2005
<u>FACILITY</u> I-TSL	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
VOGLR	IAF	MOTTT		TF	FB	1.00	277.80	17.20	9000
MOTTT/25.81 DME/RADAR		RICKV/22.67 DME/RADAR					272.90	3.14 (I-TSL)	8000
RICKV/22.67 DME/RADAR		BLUTO/19.53 DME/RADAR					272.90	3.14 (I-TSL)	7000
BLUTO/19.53 DME/RADAR		ROCSE/16.39 DME/RADAR					272.90	3.14 (I-TSL)	6000
ROCSE/16.39 DME/RADAR		WAVIE/13.25 DME/RADAR					272.90	3.14 (I-TSL)	5000
WAVIE/13.25 DME/RADAR	IF	ADAME/10.11 DME/RADAR					272.90	3.14 (I-TSL)	4000
ADAME/10.11 DME/RADAR		WILLT INT/4.45 DME/RADAR					272.90	5.66 (I-TSL)	2200

MISSED APPROACH

MAP:

ILS: DA
 LOC: 4.69 NM AFTER WILLT INT/I-TSL 4.45 DME/RADAR OR AT 0.25 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 4000 ON HEADING 215 AND DPA VOR/DME R-082 TO DPA VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 4000 ON HEADING 265 FOR RADAR VECTORS (RADAR REQUIRED).



8. MSA FROM: KORD 3400

AIRCRAFT NOT GPS EQUIPPED - RADAR REQUIRED FOR PROCEDURE ENTRY. DME OR RADAR REQUIRED

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

HOLD W, RT, 068.00 INBOUND

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: 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
S-ILS 28R	851	1800	200	851	1800	200	851	1800	200	851	1800	200			
S-LOC 28R	1120	2400	469	1120	2400	469	1120	5000	469	1120	5000	469			



CHANGES - REASONS

1. CHANGED MSA CENTER POINT FROM ORD TO KORD - ORD BEING DECOMMISSIONED
2. EQUIPMENT NOTES UPDATED FROM CHART NOTE: DME OR RADAR REQUIRED AND CHART PLANVIEW NOTE: GPS OR RADAR REQUIRED TO - FROM VOGLR: RNAV 1-GPS REQUIRED.
AIRCRAFT NOT GPS EQUIPPED - RADAR REQUIRED FOR PROCEDURE ENTRY. DME OR RADRA REQUIRED AND MOVED TO THE EQUIPMENT REQUIREMENT NOTES SECTION - IAW 8260.19H PARA 8-6-8 A (6) (B) (C).

PDF EDIT:
1. DELETED "25.81 DME/RADAR" FROM VOGLR TO MOTTT INITIAL SEGMENT IN TERMINAL ROUTES.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZAU, CHICAGO APP CON, ORD ATCT, AMGR

FLIGHT CHECKED BY

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, DEC 22, 2017.

OFFICE

DATE

Digitally signed by
WARDELL HENNING

DEVELOPED BY

LONNIE EVERHART (STEVEN SCHUTRUM)

OFFICE

DATE

Nov 16, 2018

Digitally signed by
WARDELL HENNING

APPROVED BY

LONNIE EVERHART

Digitally signed by
WARDELL HENNING

Nov 16, 2018

OFFICE

DATE

TITLE

AJV-5400

08/01/2018

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
ILS PRM 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.
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<u>AIRPORT</u> CHICAGO O'HARE INTL	<u>AIRPORT ID</u> KORD	<u>PROCEDURE NAME</u> ILS PRM RWY 28C (CLOSE PARALLEL) ILS PRM RWY 28C (CLOSE PARALLEL) SA CAT I, ILS PRM RWY 28C (CLOSE PARALLEL) CAT II, ILS PRM RWY 28C (CLOSE PARALLEL) CAT III	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> CHICAGO	<u>STATE</u> IL
<u>AIRPORT ELEVATION</u> 680	<u>TDZE</u> 651	<u>SUPERSEDED</u> ILS PRM RWY 28C (CLOSE PARALLEL) ILS PRM RWY 28C (CLOSE PARALLEL) SA CAT I, ILS PRM RWY 28C (CLOSE PARALLEL) CAT II, ILS PRM RWY 28C (CLOSE PARALLEL) CAT III	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 06/22/2017	<u>MAG VAR</u> 3W <u>EPOCH YEAR</u> 2010
<u>FACILITY</u> I-VZE	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
VOGLR	IAF	LNDUH		TF	FB	1.00	277.15	17.19	9000
LNDUH/28.39 DME/RADAR		SNTOE/25.25 DME/RADAR					272.89	3.14 (I-VZE)	8000
SNTOE/25.25 DME/RADAR		KOENN/22.11 DME/RADAR					272.89	3.14 (I-VZE)	7000
KOENN/22.11 DME/RADAR		MEMAW/18.97 DME/RADAR					272.89	3.14 (I-VZE)	6000
MEMAW/18.97 DME/RADAR		RZUKO/15.83 DME/RADAR					272.89	3.14 (I-VZE)	5000
RZUKO/15.83 DME/RADAR	IF	HAZIL/12.69 DME/RADAR					272.89	3.14 (I-VZE)	4000
HAZIL/12.69 DME/RADAR		SEIKA INT/6.98 DME/RADAR					272.89	5.71 (I-VZE)	2300

MISSED APPROACH

MAP:

ILS: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 4000 ON HEADING 215 AND DPA VOR/DME R-082 TO DPA VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 4000 ON HEADING 265 FOR RADAR VECTORS (RADAR REQUIRED).

QUALITY
13
CHECKED

8. MSA FROM: KORD 3400

ALTERNATE: NA ☐ ILS: 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
S-ILS 28C	851	1800	200	851	1800	200	851	1800	200	851	1800	200			



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>
CHICAGO O'HARE INTL	KORD	ILS PRM RWY 28C (CLOSE PARALLEL) ILS PRM RWY 28C (CLOSE PARALLEL) SA CAT I, ILS PRM RWY 28C (CLOSE PARALLEL) CAT II, ILS PRM RWY 28C (CLOSE PARALLEL) CAT III	1A	CHICAGO	IL

CHANGES - REASONS

1. CHANGED MSA CENTER POINT FROM ORD TO KORD - ORD BEING DECOMMISSIONED.
2. CHANGED CHART NOTE FROM "SIMULTANEOUS APPROACH AUTHORIZED. PROCEDURE NOT AUTHORIZED WHEN GLIDE SLOPE NOT AVAILABLE. DUAL VHF COMM REQUIRED. SEE ADDITIONAL REQUIREMENTS ON AAUP." TO "SIMULTANEOUS APPROACH AUTHORIZED. USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS. DUAL VHF COMM REQUIRED. SEE ADDITIONAL REQUIREMENTS ON AAUP." - IAW 8260.19H PARA 8-6-9P.
3. EQUIPMENT NOTES UPDATED FROM CHART NOTE: DME OR RADAR REQUIRED AND CHART PLANVIEW NOTE: GPS OR RADAR REQUIRED TO - FROM VOGLR: RNAV 1-GPS REQUIRED. AIRCRAFT NOT GPS EQUIPPED - RADAR REQUIRED FOR PROCEDURE ENTRY. DME OR RADAR REQUIRED AND MOVED TO THE EQUIPMENT REQUIREMENT NOTES SECTION - IAW 8260.19H PARA 8-6-8 A (6) (B) (C).
4. CHANGED PROCEDURE NAME FROM ILS PRM RWY 28C TO ILS PRM RWY 28C (CLOSE PARALLEL) - IAW 8260.19H PARA 8-6-2 (C).

PDF EDIT:

1. DELETED "28.39 DME/RADAR" FROM VOGLR TO LNDUH INITIAL SEGMENT IN TERMINAL ROUTES.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZAU, CHICAGO APP CON, ORD ATCT, AMGR

FLIGHT CHECKED BY

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, DEC 22, 2017.

OFFICE

DATE

Digitally signed by

WARDELL HENNING

DEVELOPED BY

LONNIE EVERHART (STEVEN SCHUTRUM)

Digitally signed by

WARDELL HENNING

Nov 16, 2018

Nov 16, 2018

OFFICE

AJV-5400

DATE

07/30/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by

WARDELL HENNING

Nov 16, 2018

OFFICE

AJV-5400

DATE

TITLE

MANAGER



**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.

CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
CHICAGO, IL	CHICAGO O'HARE INTL	3 JANUARY 2019	21

TAKEOFF MINIMUMS:

RWY 4L, 4R, 9L, 9R, 10C, 10L, 10R, 22L, 22R: STANDARD.

RWY 27L: STANDARD WITH MINIMUM CLIMB OF 205 FT PER NM TO 1700.

RWY 27R: STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 1700.

RWY 28C: STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 1700.

RWY 28L: STANDARD WITH MINIMUM CLIMB OF 210 FT PER NM TO 900, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1900 FEET PRIOR TO DER.

RWY 28R: STANDARD WITH MINIMUM CLIMB OF 225 FT PER NM TO 1700.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:



TAKEOFF OBSTACLE NOTES:

NOTE: RWY 04L: POLE 587 FT FROM DER, 614 FT RIGHT OF CENTERLINE, 663 FT MSL. BUILDING 3275 FT FROM DER, 1320 FT RIGHT OF CENTERLINE, 93 FT AGL/734 FT MSL. TOWER ON BUILDING, VEHICLE ON ROAD BEGINNING 3301 FT FROM DER, 1206 FT RIGHT OF CENTERLINE, UP TO 109 FT AGL/750 FT MSL.

NOTE: RWY 04R: AIRCRAFT ON TAXIWAY 152 FT FROM DER, 329 FT LEFT OF CENTERLINE, 80 FT AGL/735 FT MSL. TREE 809 FT FROM DER, 610 FT RIGHT OF CENTERLINE, 675 FT MSL. TREES BEGINNING 1108 FT FROM DER, 689 FT RIGHT OF CENTERLINE, UP TO 698 FT MSL. TREE 1311 FT FROM DER, 824 FT RIGHT OF CENTERLINE, 710 FT MSL.

NOTE: RWY 09L: BUILDING 2771 FT FROM DER, 1233 FT RIGHT OF CENTERLINE, 94 FT AGL/745 FT MSL.

NOTE: RWY 09R: CONSTRUCTION EQUIPMENT 151 FT FROM DER, 203 FT RIGHT OF CENTERLINE, 10 FT AGL/655 FT MSL. CONSTRUCTION EQUIPMENT 201 FT FROM DER, 467 FT RIGHT OF CENTERLINE, 25 FT AGL/663 FT MSL. POLE 877 FT FROM DER, 688 FT RIGHT OF CENTERLINE, 29 FT AGL/673 FT MSL.

NOTE: RWY 10C: TOWER 1169 FT FROM DER, 778 FT LEFT OF CENTERLINE, 41 FT AGL/694 FT MSL.

NOTE: RWY 10L: AIRCRAFT ON TAXIWAY BEGINNING 32 FT FROM DER, 439 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/735 FT MSL. SIGN AND TOWER ON BUILDING BEGINNING 2517 FT FROM DER, 729 FT RIGHT OF CENTERLINE, UP TO 88 FT AGL/732 FT MSL. TOWER 3958 FT FROM DER, 1287 FT RIGHT OF CENTERLINE, 127 FT AGL/771 FT MSL. POLE 4388 FT FROM DER, 1585 FT LEFT OF CENTERLINE, 124 FT AGL/762 FT MSL. ANTENNA 4390 FT FROM DER, 1585 FT LEFT OF CENTERLINE, 124 FT AGL/763 FT MSL.

NOTE: RWY 10R: TREE 2218 FT FROM DER, 1016 FT RIGHT OF CENTERLINE, 714 FT MSL. TREE 2248 FT FROM DER, 777 FT RIGHT OF CENTERLINE, 716 FT MSL. TREE 2358 FT FROM DER, 821 FT RIGHT OF CENTERLINE, 717 FT MSL. TREES BEGINNING 2365 FT FROM DER, 586 FT RIGHT OF CENTERLINE, UP TO 720 FT MSL. TREES BEGINNING 2415 FT FROM DER, 586 FT RIGHT OF CENTERLINE, UP TO 71 FT AGL/724 FT MSL.

NOTE: RWY 22L: POLE 1301 FT FROM DER, 737 FT RIGHT OF CENTERLINE, 39 FT AGL/694 FT MSL.

NOTE: RWY 22R: AIRCRAFT ON TAXIWAY 34 FT FROM DER, 429 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/736 FT MSL. CONSTRUCTION EQUIPMENT 1282 FT FROM DER, 626 FT RIGHT OF CENTERLINE, 45 FT AGL/703 FT MSL. ANTENNA BEGINNING 2743 FT FROM DER, 93 FT RIGHT OF CENTERLINE, UP TO 75 FT AGL/736 FT MSL. BATCH PLANT TOWER MISCELLANEOUS EQUIPMENT 3600 FT FROM DER, 608 FT RIGHT OF CENTERLINE, 90 FT AGL/752 FT MSL.

NOTE: RWY 27L: AIRCRAFT ON TAXIWAY 70 FT FROM DER, 407 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/740 FT MSL. CONSTRUCTION EQUIPMENT 1707 FT FROM DER, 685 FT RIGHT OF CENTERLINE, 45 FT AGL/705 FT MSL. CONSTRUCTION EQUIPMENT 3746 FT FROM DER, 1335 FT LEFT OF CENTERLINE, 100 FT AGL/762 FT MSL. VEHICLE ON ROAD 5551 FT FROM DER, 1830 FT LEFT OF CENTERLINE, 141 FT AGL/804 FT MSL. POLE 5553 FT FROM DER, 1831 FT LEFT OF CENTERLINE, 143 FT AGL/805 FT MSL.

NOTE: RWY 27R: POLE BEGINNING 1051 FT FROM DER, 736 FT LEFT OF CENTERLINE, UP TO 707 FT MSL. VEHICLE ON ROAD 1071 FT FROM DER, 560 FT RIGHT OF CENTERLINE, 698 FT MSL. TREE 1243 FT FROM DER, 816 FT RIGHT OF CENTERLINE, 708 FT MSL. TREE 1407 FT FROM DER, 234 FT RIGHT OF CENTERLINE, 43 FT AGL/710 FT MSL. TANK 1509 FT FROM DER, 886 FT LEFT OF CENTERLINE, 56 FT AGL/726 FT MSL. VEHICLE ON ROAD, ELEVATOR BEGINNING 2777 FT FROM DER, 1019 FT LEFT OF CENTERLINE, UP TO 111 FT AGL/777 FT MSL.

NOTE: RWY 28C: TREE, VEHICLE ON ROAD BEGINNING 2373 FT FROM DER, 1099 FT LEFT OF CENTERLINE, UP TO 737 FT MSL. TREE 2559 FT

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

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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
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FROM DER, 257 FT RIGHT OF CENTERLINE, 737 FT MSL. TREE, VEHICLE ON ROAD BEGINNING 2719 FT FROM DER, 1194 FT LEFT OF CENTERLINE, UP TO 750 FT MSL. TREE 3526 FT FROM DER, 695 FT LEFT OF CENTERLINE, 768 FT MSL. VEHICLE ON ROAD 3538 FT FROM DER, 702 FT LEFT OF CENTERLINE 15 FT AGL/771 FT MSL.

NOTE: RWY 28L: VEHICLE ON ROAD BEGINNING 590 FT FROM DER, 617 FT LEFT OF CENTERLINE, UP TO 700 FT MSL. VEHICLE ON ROAD, POLE BEGINNING 1070 FT FROM DER, 697 FT LEFT OF CENTERLINE, UP TO 707 FT MSL. TREE 1583 FT FROM DER, 803 FT LEFT OF CENTERLINE, 724 FT MSL. TREE 1608 FT FROM DER, 777 FT LEFT OF CENTERLINE, 727 FT MSL. TREES BEGINNING 1675 FT FROM DER, 759 FT LEFT OF CENTERLINE, UP TO 728 FT MSL. TREES BEGINNING 1748 FT FROM DER, 724 FT LEFT OF CENTERLINE, UP TO 732 FT MSL. TREE 1877 FT FROM DER, 825 FT LEFT OF CENTERLINE, 740 FT MSL. TREES BEGINNING 1911 FT FROM DER, 788 FT LEFT OF CENTERLINE, UP TO 79 FT AGL/751 FT MSL. TREE, VEHICLE ON ROAD BEGINNING 2552 FT FROM DER, 717 FT LEFT OF CENTERLINE, UP TO 758 FT MSL. TANK 5893 FT FROM DER, 740 FT RIGHT OF CENTERLINE, 167 FT AGL/834 FT MSL.

NOTE: RWY 28R: TREE 2559 FT FROM DER, 942 FT LEFT OF CENTERLINE, 737 FT MSL.

CONTROLLING OBSTACLES:

RWY 27L: 1413 FT MSL TOWER 415926.00N/0880139.00W.

RWY 27R: 1413 FT MSL TOWER 415926.00N/0880139.00W.

RWY 28C: 1413 FT MSL TOWER 415926.00N/0880139.00W.

RWY 28L: 834 FT MSL TANK 415733.10N/0875658.33W.

RWY 28R: 1413 FT MSL TOWER 415926.00N/0880139.00W.

REMARKS:

- DEPARTURE ROUTES THAT WOULD AUTHORIZE STANDARD TAKEOFF MINIMUMS WITH A 200 FT PER NM CLIMB GRADIENT AND MEET ATC FLOW REQUIREMENTS CAN NOT BE CONSTRUCTED FOR RWY 27L, 27R, 28C, 28L AND 28R. NON-STANDARD CLIMB GRADIENTS PUBLISHED TO MITIGATE 40:1 PENETRATIONS PER ATC REQUEST.
- ATC REQUESTS TO OPT OUT OF VCOA REQUIREMENT DUE TO TRAFFIC VOLUME AND COMPLEXITY.
- AIRBUS 380 (80 FT AGL) USED AS WORST CASE FOR AIRCRAFT ON TAXIWAYS.

FLIGHT INSPECTED BY:

Digitally signed by
WARDELL HENNING
Nov 16, 2018

OFFICE SYMBOL:

DATE:

DEVELOPED BY:

Digitally signed by
WARDELL HENNING
Nov 16, 2018

OFFICE SYMBOL:
AJV-5400

DATE:
09/20/2018

LONNIE EVERHART (TODD BOWLING)

APPROVED BY:

Digitally signed by
WARDELL HENNING
Nov 16, 2018

OFFICE SYMBOL:
AJV-5400

DATE:

LONNIE EVERHART

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:

ZAU, ORD APP CON, ORD ATCT, AMGR

CHANGES - REASONS:

- UPDATED TAKEOFF MINIMUMS FOR RWY'S: **27L** FROM STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 900, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1500 FEET PRIOR TO DER TO STANDARD WITH MINIMUM CLIMB OF 205 FT PER NM TO 1700, **27R** FROM STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 1800 TO STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 1700, **28L** FROM STANDARD WITH MINIMUM CLIMB OF 235 FT PER NM TO 1000, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1900 FEET PRIOR TO DER TO STANDARD WITH MINIMUM CLIMB OF 210 FT PER NM TO 900, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1900 FEET PRIOR TO DER - PER VOR MON

QUALITY
3
CHECKED

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

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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
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INITIATIVE (ORD VOR/DME) DECOMMISSIONING, RECOMPUTED USING TARGETS SOFTWARE, TO REMOVE NOTAM FDC 8/5027.
2. UPDATED TAKEOFF OBSTACLE NOTES FOR RWY'S: 4L, 4R, 9R, 10L, 10R, 22R, 27L, 27R, 28C, 28L - KORD CONSTRUCTION IAW FPT.
3. UPDATED CONTROLLING OBSTACLES FOR RWY'S: 27L, 27R, 28L - RECOMPUTED USING TARGETS SOFTWARE.



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> HARRIMAN-AND-WEST	<u>AIRPORT ID</u> KAQW	<u>PROCEDURE NAME</u> RNAV (GPS)-B	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> NORTH ADAMS	<u>STATE</u> MA	
<u>AIRPORT ELEVATION</u> 654	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u> 14W	<u>EPOCH YEAR</u> 1985
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
YOGUV	IAF	WUDIE		TF	FB	1.00	028.66	8.40	3700
AZOTH	IAF	WUDIE		TF	FB	1.00	208.73	8.40	3700
WUDIE	IF/IAF	LOUSY		TF	FB	1.00	298.70	6.06	3600
LOUSY	FAF	MANYS	MAP	TF	FO	0.30	298.61	7.56	
MANYS	MAP	1054 MSL		CA			298.61		
1054 MSL		SWOBS		DF	FO	1.00			4800

MISSED APPROACH

MAP:

LNAV: MANYS

MISSED APPROACH INSTRUCTIONS:

CLIMBING LEFT TURN TO 4800 DIRECT SWOBS AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SE WUDIE, RT, 298.70 INBOUND, 3700 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 298.61FAF: LOUSYDIST FAF TO MAP: 7.56DIST FAF TO THLD:

4. MIN ALT: WUDIE 3700, LOUSY 3600

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: MANYS 5200

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA S OF RWY 11-29.
CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: RWY 29 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART PLANVIEW NOTE: FINAL APPROACH OFFSET 7.92 DEGREES.
FAS OBST: 2795 AAO 424035N/0730403W.
FAC CROSSES RWY C/L EXTENDED 1500 FT FROM THLD.
HOLD SW, RT, 065.63 INBOUND

MINIMUMS:

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

ALTERNATE: NA☐CAT A, B 2700-2, CAT C 2700-3

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
CIRCLING	3280	1 1/4	2626	3280	1 1/2	2626	3280	3	2626		NA				

CHANGES - REASONS

ORIGINAL PROCEDURE

- 11/15/18 : THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 07/31/18.
1. REMOVED VDA FROM ADDITIONAL FLIGHT DATA.
 2. ADDED 'CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.' TO ADDITIONAL FLIGHT DATA.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZBW, ALB APP CON, AMGR

FLIGHT CHECKED BY

BRIAN ROBERT HANSEN

Digitally signed by

ROBERT G HAMILTON

Nov 16, 2018

Digitally signed by

ROBERT G HAMILTON

Nov 16, 2018

OFFICE

FIOG

DATE

11/09/2018

DEVELOPED BY

ROBERT G HAMILTON (AUSTIN GOTCHER)

OFFICE

AJV-5422

DATE

07/31/2018

APPROVED BY

JULIE MORGAN

Digitally signed by

ROBERT G HAMILTON

Nov 16, 2018

OFFICE

AJV-5420

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> CHEBOYGAN COUNTY	<u>AIRPORT ID</u> KSLH	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 10	<u>ORIGINAL/AMENDMENT</u> 3B	<u>CITY</u> CHEBOYGAN	<u>STATE</u> MI
<u>AIRPORT ELEVATION</u> 640	<u>TDZE</u> 640	<u>SUPERSEDED</u> RNAV (GPS) RWY 10	<u>ORIGINAL/AMENDMENT</u> 3A	<u>DATED</u> 03/05/2015	<u>MAG VAR</u> 7W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<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>
PLN VORTAC		JATRA		TF	FO	2.00	295.66	5.95	2600
PINES		JATRA		TF	FO	2.00	217.69	25.66	2600
JATRA	IF/IAF	CATAP		TF	FB	1.00	101.70	6.01	2400
CATAP	FAF	FELNO/2.90 NM TO RW10		TF	FB	0.30	096.82	2.50	
FELNO/2.90 NM TO RW10		RW10	MAP	TF	FO	0.30	096.82	2.90	
RW10	MAP	1040 MSL		CA			096.82		
1040 MSL		FIKAM		DF	FO	1.00			2600

MISSED APPROACH

MAP:

LP: RW10
 LNAV: RW10

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2600 DIRECT FIKAM AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD W JATRA, RT, 101.70 INBOUND, 2600 FT. IN LIEU OF PT (IAF), MAX 14000.

3. FAC: 096.82FAF: CATAPDIST FAF TO MAP: 5.40DIST FAF TO THLD: 5.40

4. MIN ALT: JATRA 2600, CATAP 2400, FELNO/2.90 NM TO RW10 1620

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

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: RW10 3000

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON PLN VORTAC AIRWAY RADIALS 219 CW 023.
CHART NOTE: STRAIGHT-IN RWY 10 NA AT NIGHT, CIRCLING RWY 10, 17, 35 NA AT NIGHT.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PELLSTON ALTIMETER SETIING AND INCREASE ALL MDA 60 FEET, INCREASE LP AND LNAV CAT C VISIBILITY 1/8 MILE.

ADDITIONAL FLIGHT DATA:

CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
WAAS CHANNEL #50224
REFERENCE PATH ID: W10A
CHART FAS OBST: 839 TREE 453854N/0843427W.
HOLD E, RT, 277.10 INBOUND
LTP HAE: 159.1 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
LP MDA	1060	1	420	1060	1	420	1060	1 1/4	420		NA				
LNAV MDA	1100	1	460	1100	1	460	1100	1 3/8	460		NA				
CIRCLING	1140	1	500	1140	1	500	1140	1 1/2	500		NA				



CHANGES - REASONS

- 1. REMOVED CHART PLANVIEW NOTE: NOPT FOR ARRIVALS AT JATRA VIA V78 SOUTHEAST BOUND - THIS PORTION OF V78 IS BEING DECOMMISSIONED.
- 2. AMENDED CHART NOTE: NIGHT LANDING RWY 17, 35 NA TO CHART NOTE: CIRCLING RWY 17, 35 NA AT NIGHT - 8260.19H, 8-6-11, O(2)(G) AND INCORPORATING P-NOTAM 4/2645.
- 3. ADDED CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED - INCORPORATING P-NOTAM 4/2645.
- 4. ADDED 20:1 IS NOT CLEAR TO LINE 7 OF 8260-3 - INCORPORATING P-NOTAM 4/2645.
- 5. ADDED RNP APCH TO PBN EQUIPMENT REQUIREMENT NOTES - 8260.19H, 8-6-8, B(1).
- 6. REMOVED CHART NOTE: DME/DME-0.3 NA - 8260.19H, 8-6-9, N.
- 7. ADDED CHART NOTE: STRAIGHT-IN RWY 10 NA AT NIGHT, CIRCLING RWY 10 NA AT NIGHT.
- 8. DELETED VDA AND ADDED CHART NOTE: V ISUAL SEGEMENT - OBSTACLES.
- 9. DELETED DME/DME NOTE - ADDED PBN REQUIREMENTS NOTE: RNP APCH.
- 10. DELETED VGSI NOT COINCIDENT NOTE - VDA REMOVED PER FLT CHECK.
- 11. FAS DATA: REMOVED DESCENT ANGLE AND TCH; CHANGED CRC REMAINDER FROM 15EF2F78 TO 252FC7EC.

COORDINATED WITH:

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

FLIGHT CHECKED BY

GLEN B FREEMAN

Digitally signed by

ROBERT G HAMILTON

Nov 16, 2018

OFFICE

FICO

DATE

11/15/18

DEVELOPED BY

DAVID DANNER (KELLY CARLSON)

Digitally signed by

ROBERT G HAMILTON

Nov 16, 2018

OFFICE

AJV-5420

DATE

07/31/2018

APPROVED BY

JULIE MORGAN

Digitally signed by

ROBERT G HAMILTON

Nov 16, 2018

OFFICE

AJV-5420

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSLH
RUNWAY	RW10
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W10A
LTP/FTP LATITUDE	453915.0900N
LTP/FTP LONGITUDE	0843138.1040W
LTP/FTP ELLIPSOIDAL HEIGHT	+01591
FPAP LATITUDE	453915.2100N
FPAP LONGITUDE	0842931.0800W
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	1528
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	252FC7EC
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01949
FPAP ORTHOMETRIC HEIGHT	+01949



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
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<u>AIRPORT</u> DETROIT METROPOLITAN WAYNE COUNTY	<u>AIRPORT ID</u> KDTW	<u>PROCEDURE NAME</u> RNAV (GPS) Z RWY 4L	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> DETROIT	<u>STATE</u> MI	
<u>AIRPORT ELEVATION</u> 645	<u>TDZE</u> 645	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u> 7W	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
SYKOE	IAF	HURRT		TF	FB	1.00	123.05	6.20	4000
HURRT		ACIRA		TF	FB	1.00	065.43	5.00	4000
GRBAC	IAF	MMOTT		TF	FB	1.00	140.94	6.38	3000
MMOTT		ASLLI		TF	FB	1.00	067.53	4.75	3000
NBSTN	IAF	ACIRA		TF	FB	1.00	035.54	2.09	4000
ACIRA		ASLLI		TF	FB	1.00	035.55	3.14	3000
ASLLI		NATYI		TF	FB	1.00	035.58	4.20	3000
NATYI		REGGE		TF	FB	1.00	035.61	3.14	3000
REGGE	IF	PAYED		TF	FB	1.00	035.63	3.14	2000
PAYED	FAF	HIPKA/1.80 NM TO RW04L		TF	FB	0.30	035.65	2.28	
HIPKA/1.80 NM TO RW04L		RW04L	MAP	TF	FO	0.30	035.65	1.80	
RW04L	MAP	1100 MSL		CA			035.65		1100
1100 MSL		DOHNT		DF	FO	1.00			4000



MISSED APPROACH

MAP:
LPV: DA
LNAV/VNAV: DA
LNAV: RW04L

MISSED APPROACH INSTRUCTIONS:

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

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)					
2. PROFILE STARTS AT ASLLI										
3. FAC: 035.65		FAF: PAYED		DIST FAF TO MAP: 4.08		DIST FAF TO THLD: 4.08				
4. MIN ALT: ASLLI 3000, NATIY 3000, REGGE 3000, PAYED 2000, HIPKA/1.80 NM TO RW04L 1260*										
5. DIST TO THLD FROM OM:		MM:	IM:	150 HAT:	200 HAT: 0.45	GS ANT:				
6. MIN GP INCPT: 2000		GP ALT AT FAF : PAYED 2000				OM:		MM:		IM:
7. GP ANGLE: 3.00		34:1: IS CLEAR	20:1: IS CLEAR	TCH: 55.0						
8. MSA FROM: RW04L 2800										

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.
CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.
CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 6000.
CHART SPEED ICON IN PLANVIEW AT SYKOE: MAX 210 KIAS.
CHART SPEED ICON IN PLANVIEW AT GRBAC: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

CHART MANDATORY 5000 AT GRBAC.
CHART MANDATORY 4000 AT HURRT.
CHART MANDATORY 3000 AT MMOTT.
CHART MANDATORY 6000 AT SYKOE.
CHART CIRCLING ICON.
CHART VDP AT 1.01 NM TO RW04L*
*LNAV ONLY
WAAS CHANNEL #82241
REFERENCE PATH ID: W04A
CHART FAS OBST: 779 TOWER 421051N/0832322W.
HOLD NW, RT, 117.62 INBOUND
LTP HAE: 162.1 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	845	1800	200	845	1800	200	845	1800	200	845	1800	200			
LNAV/VNAV DA	1046	4000	401	1046	4000	401	1046	4000	401	1046	4000	401			
LNAV MDA	1040	2400	395	1040	2400	395	1040	3500	395	1040	3500	395			
CIRCLING	1180	1	535	1180	1	535	1180	1 1/2	535	1240	2	595			

CHANGES - REASONS

ORIG.



COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** DTW ATCT, ZOB, AMGR, DTW APP CON, ATA

FLIGHT CHECKED BY SHAWN D MAXWELL	<i>Digitally signed by</i> ROBERT G HAMILTON Nov 14, 2018	OFFICE FICO	DATE 11/11/18

DEVELOPED BY ROBERT G HAMILTON (AUSTIN GOTCHER)	<i>Digitally signed by</i> ROBERT G HAMILTON Nov 14, 2018	OFFICE AJV-5422	DATE 07/17/2018

APPROVED BY JULIE MORGAN	<i>Digitally signed by</i> ROBERT G HAMILTON Nov 14, 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	KDTW
RUNWAY	RW04L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Z
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W04A
LTP/FTP LATITUDE	421207.8215N
LTP/FTP LONGITUDE	0832302.4000W
LTP/FTP ELLIPSOIDAL HEIGHT	+01621
FPAP LATITUDE	421334.4520N
FPAP LONGITUDE	0832158.6115W
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)	35.0
CRC REMAINDER	D8102072

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01967
FPAP ORTHOMETRIC HEIGHT	+01967



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> DETROIT METROPOLITAN WAYNE COUNTY	<u>AIRPORT ID</u> KDTW	<u>PROCEDURE NAME</u> RNAV (GPS) Z RWY 22R	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> DETROIT	<u>STATE</u> MI	
<u>AIRPORT ELEVATION</u> 645	<u>TDZE</u> 642	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u> 7W	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
HRRON	IAF	PRYDE		TF	FB	1.00	112.61	6.91	4000
PRYDE		FUDDJ		TF	FB	1.00	189.52	5.71	4000
VALLI	IAF	KLIER		TF	FB	1.00	097.09	7.56	4000
KLIER		FUDDJ		TF	FB	1.00	172.97	3.96	4000
INKSR	IAF	FUDDJ		TF	FB	1.00	215.85	1.39	4000
FUDDJ		TARAH		TF	FB	1.00	215.83	2.14	4000
TARAH		GUYVE		TF	FB	1.00	215.81	3.14	4000
GUYVE		JOYDD		TF	FB	1.00	215.79	3.14	3000
JOYDD		NUJNT		TF	FB	1.00	215.76	3.14	3000
NUJNT	IF	GEETR		TF	FB	1.00	215.74	3.14	2000
GEETR	FAF	RW22R	MAP	TF	FO	0.30	215.72	4.09	
RW22R	MAP	1100 MSL		CA			215.72		1100
1100 MSL		DOHNT		DF	FO	1.00			4000



MISSED APPROACH

MAP:
LPV: DA
LNAV/VNAV: DA
LNAV: RW22R

MISSED APPROACH INSTRUCTIONS:
CLIMB TO 1100 THEN CLIMBING RIGHT TURN 4000 DIRECT DOHNT AND HOLD, CONTINUE CLIMB IN HOLD TO 4000.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)				
2. PROFILE STARTS AT FUDDJ									
3. FAC:	215.72	FAF: GEETR	DIST FAF TO MAP: 4.09			DIST FAF TO THLD: 4.09			
4. MIN ALT: FUDDJ 4000, TARAH 4000, GUYVE 4000, JOYDD 3000, NUJNT 3000, GEETR 2000									
5. DIST TO THLD FROM OM:		MM:	IM:	150 HAT:	200 HAT: 0.45	GS ANT:			
6. MIN GP INCPT: 2000		GP ALT AT FAF : GEETR 2000			OM:		MM:	IM:	
7. GP ANGLE:	3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 55.0					
8. MSA FROM: RW22R 2800									

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.
CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.
CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 4500.
CHART SPEED ICON IN PLANVIEW AT HRRON: MAX 210 KIAS.
CHART SPEED ICON IN PLANVIEW AT VALLI: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

CHART MANDATORY 6000 AT HRRON.
CHART MANDATORY 4000 AT PRYDE.
CHART MANDATORY 6000 AT VALLI.
CHART MANDATORY 4000 AT KLIER.
CHART CIRCLING ICON.
CHART VDP AT 1.02 NM TO RW22R*
*LNAV ONLY
WAAS CHANNEL #70642
REFERENCE PATH ID: W22A
CHART FAS OBST: 771 ANTENNA 421611N/0832045W.
HOLD NW, RT, 117.62 INBOUND
LTP HAE: 161.2 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	842	1800	200	842	1800	200	842	1800	200	842	1800	200			
LNAV/VNAV DA	948	2400	306	948	2400	306	948	2400	306	948	2400	306			
LNAV MDA	1040	2400	398	1040	2400	398	1040	3500	398	1040	3500	398			
CIRCLING	1180	1	535	1180	1	535	1180	1 1/2	535	1240	2	595			

CHANGES - REASONS

ORIG.



COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: DTW ATCT, ZOB, AMGR, DTW APP CON, ATA

<u>FLIGHT CHECKED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
SHAWN D MAXWELL	ROBERT G HAMILTON	FICO	11/11/18	
	Nov 14, 2018			
<u>DEVELOPED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
ROBERT G HAMILTON (AUSTIN GOTCHER)	ROBERT G HAMILTON	AJV-5422	07/17/2018	
	Nov 14, 2018			
<u>APPROVED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
JULIE MORGAN	ROBERT G HAMILTON	AJV-5420		MANAGER
	Nov 14, 2018			



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KDTW
RUNWAY	RW22R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Z
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W22A
LTP/FTP LATITUDE	421334.4820N
LTP/FTP LONGITUDE	0832158.6115W
LTP/FTP ELLIPSOIDAL HEIGHT	+01612
FPAP LATITUDE	421207.8215N
FPAP LONGITUDE	0832302.4000W
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)	35.0
CRC REMAINDER	38A28A88

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01957
FPAP ORTHOMETRIC HEIGHT	+01957



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> TOLEDO SUBURBAN	<u>AIRPORT ID</u> KDUH	<u>PROCEDURE NAME</u> RNAV (GPS)-A	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> LAMBERTVILLE	<u>STATE</u> MI	
<u>AIRPORT ELEVATION</u> 671	<u>TDZE</u>	<u>SUPERSEDED</u> RNAV (GPS)-A	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 05/24/2018	<u>MAG VAR</u> 7W	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
WTRVL	IF/IAF	TAINT		TF	FB	1.00	004.43	12.00	2500
TAINT	FAF	MAKAF	MAP	TF	FB	0.30	004.42	5.07	
MAKAF	MAP	1071 MSL		CA			004.42		
1071 MSL		WTRVL		DF	FO	1.00			2500

MISSED APPROACH

MAP:

MAKAF

MISSED APPROACH INSTRUCTIONS:

CLIMBING LEFT TURN TO 2500 DIRECT WTRVL AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- HOLD S WTRVL, RT, 004.43 INBOUND, 2500 FT. IN LIEU OF PT (IAF), MAX 6000.
- FAC: 004.42 FAF: TAINT DIST FAF TO MAP: 5.07 DIST FAF TO THLD:
- MIN ALT: WTRVL 2500, TAINT 2500
- DIST TO THLD FROM OM: MM: IM: 150 HAT: GS ANT: OM: MM: IM:
- MIN GP INCPT: GP ALT AT FAF :
- GP ANGLE: 34:1: IS NOT CLEAR 20:1: IS NOT CLEAR TCH:
- MSA FROM: MAKAF 3100

PBN REQUIREMENTS NOTE:

RNP APCH



NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART 848 TOWER 413917N/0834000W.
FAC CROSSES MIDPOINT OF RWY 9-27.
CHART CIRCLING ICON.
CHART FAS OBST: 819 TOWER 414223N/0833949W.

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
CIRCLING	1180	1	509	1180	1	509	1180	1 1/2	509		NA				

- CHANGES - REASONS
1. REPLACED ALL REFERENCE OF WATERVILLE VOR/DME WITH WTRVL - WATERVILLE VOR/DME BEING DECOMMISSIONED AS PART OF VOR-MON NATIONAL INITIATIVES.

2. REMOVED EQUIPMENT REQUIRMENTS NOTE: RADAR REQUIRED FOR PROCEDURE ENTRY - NOT REQUIRED FOR RNAV PROCEDURES.



COORDINATED WITH:

A4A

☐

ALPA

☒

AOPA

☒

APA

☐

HAI

☐

NBAA

☒

OTHER:

ZOB, TOL ATCT, TOL APP CTRL, AMGR

FLIGHT CHECKED BY

GLEN B FREEMAN

Digitally signed by

ROBERT G HAMILTON

Nov 14, 2018

DEVELOPED BY

LONNIE EVERHART (KELLY CARLSON)

Digitally signed by

ROBERT G HAMILTON

Nov 14, 2018

APPROVED BY

LONNIE EVERHART

Digitally signed by

ROBERT G HAMILTON

Nov 14, 2018

OFFICE

FICO

OFFICE

AJV-5400

OFFICE

AJV-5400

DATE

11/13/18

DATE

08/23/2018

DATE

TITLE

MANAGER



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

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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>	
GRAND MARAIS/COOK COUNTY	KKCC	NDB RWY 28	1A	GRAND MARAIS	MN	
<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>
1803	1797	NDB RWY 28	1	03/02/2017	1W	1995
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
CKC		3 JANUARY 2019	ROUTINE			

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>
YQT VOR/DME		CKC NDB					241.30	45.53	4000

MISSED APPROACH

MAP:

CKC NDB

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 THEN CLIMBING LEFT TURN TO 3500 DIRECT CKC NDB AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT R **SIDE OF COURSE** 105.00 **OUTBOUND** 3500 **FT WITHIN** 10 **MILES OF** CKC NDB (IAF)

2.

3. **FAC:** 285.00 **FAF:** **DIST FAF TO MAP:** **DIST FAF TO THLD:**

4. **MIN ALT:**

8. **MSA FROM:** CKC NDB 3600

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: RWY 28 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON YQT VORTAC AIRWAY RADIALS 237 CW 282.
CHART NOTE: PROCEDURE NA AT NIGHT.



ADDITIONAL FLIGHT DATA:

CHART PRINCETON RADIO
CHART CIRCLING ICON.
CHART P-204
CHART P-206
CHART R-4305
FAS OBST: 2060 AAO 475004N/0901619W.
FAC CROSSES RWY C/L EXTENDED 683 FT FROM THLD.
HOLD E, LT, 285.00 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
S-28	2420	1	623	2420	1	623	2420	1 3/4	623	2420	1 3/4	623			
CIRCLING	2420	1	617	2420	1	617	2420	1 3/4	617	2640	2 3/4	837			

CHANGES - REASONS

1. UPDATED FEEDER COURSE FROM 238.30 TO 241.30 - YQT VOR/DME MAGVAR UPDATED FROM 1W/1980 TO 4W/2020.

COORDINATED WITH:

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

FLIGHT CHECKED BY

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

DEVELOPED BY Digitally signed by
VICTOR BOONE VICTOR C BOONE

APPROVED BY Nov 23, 2018 Digitally signed by
LONNIE EVERHART MARK D ADAMS
Nov 23, 2018

OFFICE Digitally signed by
MARK D ADAMS
Nov 23, 2018

OFFICE
AJV-5412

OFFICE DATE TITLE
AJV-5410



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> COPIAH COUNTY	<u>AIRPORT ID</u> KM11	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 18	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> CRYSTAL SPRINGS	<u>STATE</u> MS	
<u>AIRPORT ELEVATION</u> 435	<u>TDZE</u> 435	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u> 1W	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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. 086/30 CW 266/30	NOPT	PANTX	IF/IAF	3500
2. 266/30 CW 086/30		PANTX	IF/IAF	3500

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>
PANTX	IF/IAF	BIOGS		TF	FB	1.00	176.30	7.12	2600
BIOGS	FAF	KOULA/1.41 NM TO RW18		TF	FB	0.30	176.31	3.57	
KOULA/1.41 NM TO RW18		RW18	MAP	TF	FO	0.30	176.31	1.41	
RW18	MAP	835 MSL		CA			176.31		
835 MSL		PANTX		DF	FO	1.00			3500

MISSED APPROACH

MAP:

LNAV: RW18

MISSED APPROACH INSTRUCTIONS:

CLIMBING LEFT TURN TO 3500 DIRECT PANTX AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3500.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N PANTX, RT, 176.30 INBOUND, 3500 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 176.31

FAF: BIOGS

DIST FAF TO MAP: 4.98

DIST FAF TO THLD: 4.98

4. MIN ALT: PANTX 3500, BIOGS 2600, KOULA/1.41 NM TO RW18 1080

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: RWY 18 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: USE BROOKHAVEN ALTIMETER SETTING, WHEN NOT RECEIVED, USE HAWKINS FIELD ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET.
CHART NOTE: STRAIGHT-IN RWY 18 NA AT NIGHT, CIRCLING RWY 18 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

BIOGS TO RW18: 4.00/47.7
CHART BROOKHAVEN-LINCOLN COUNTY AWOS
CHART CIRCLING ICON.
CHART FAS OBST: 553 TREE 315522N/0902206W.
CHART: 770 TOWER 315856N/0902143W, 567 TREE 315602N/0902210W.

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	860	1	425	860	1	425		NA			NA				
CIRCLING	940	1	505	1140	1	705		NA			NA				

CHANGES - REASONS

ORIGINAL PROCEDURE.



<u>AIRPORT</u> COPIAH COUNTY	<u>AIRPORT ID</u> KM11	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 18	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> CRYSTAL SPRINGS	<u>STATE</u> MS
<u>COORDINATED WITH:</u>					
A4A ☐ ALPA ☐ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZME, ARPT MGR					
<u>FLIGHT CHECKED BY</u> JAMES L REINEBOLD JR		Digitally signed by ADOLFO D URRUTIA Sep 27, 2018	<u>OFFICE</u> FICO	<u>DATE</u> 9/22/18	
<u>DEVELOPED BY</u> LONNIE EVERHART (THERON CYRUS)		Digitally signed by ADOLFO D URRUTIA Sep 27, 2018	<u>OFFICE</u> AJV-5400	<u>DATE</u> 06/11/2018	
<u>APPROVED BY</u> LONNIE EVERHART		Digitally signed by ADOLFO D URRUTIA Sep 27, 2018	<u>OFFICE</u> AJV-5400	<u>DATE</u>	<u>TITLE</u> 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> COPIAH COUNTY	<u>AIRPORT ID</u> KM11	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> CRYSTAL SPRINGS	<u>STATE</u> MS
<u>AIRPORT ELEVATION</u> 435	<u>TDZE</u> 430	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u> 1W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<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. 266/30 CW 086/30	NOPT	SALOE	IF/IAF	3000
2. 086/30 CW 266/30		086/15 CW 266/15		3500
3. 086/15 CW 266/15		SALOE	IF/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>
SALOE	IF/IAF	MALMY		TF	FB	1.00	356.32	7.00	2100
MALMY	FAF	CALAL/2.70 NM TO RW36		TF	FB	0.30	356.32	2.51	
CALAL/2.70 NM TO RW36		RW36	MAP	TF	FO	0.30	356.32	2.70	
RW36	MAP	730 MSL		CA			356.32		
730 MSL		PANTX		DF	FO	1.00			3500

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW36

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3500 DIRECT PANTX AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3500.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S SALOE, RT, 356.32 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 356.32FAF: MALMYDIST FAF TO MAP: 5.21DIST FAF TO THLD: 5.21

4. MIN ALT: SALOE 3000, MALMY 2100, CALAL/2.70 NM TO RW36 1300*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:300 HAT: 0.91GS ANT:

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

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 43.8

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING RWY 18 NA AT NIGHT.
CHART NOTE: RWY 36 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: BARO-VNAV NA.
CHART NOTE: USE BROOKHAVEN ALTIMETER SETTING, WHEN NOT RECEIVED, USE HAWKINS FIELD ALTIMETER SETTING AND INCREASE LPV DA TO 766, LNAV/VNAV DA TO 806 AND ALL MDA 40 FEET, AND INCREASE CIRCLING CAT C/D VISIBILITY 1/4 SM.

ADDITIONAL FLIGHT DATA:

*LNAV ONLY
MALMY TO RW36: 3.00/44
CHART BROOKHAVEN-LINCOLN COUNTY AWOS
CHART CIRCLING ICON.
WAAS CHANNEL #53542
REFERENCE PATH ID: W36A
CHART FAS OBST: 571 TREE 315206N/0902138W.
650 AAO 314847N/0902235W.
HOLD N, RT, 176.30 INBOUND
LTP HAE: 94.5 M

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
LPV DA	730	1	300	730	1	300	730	1	300	730	1	300			
LNAV/VNAV DA	782	1	352	782	1	352	782	1	352	782	1	352			
LNAV MDA	880	1	450	880	1	450	880	1 3/8	450	880	1 3/8	450			
CIRCLING	940	1	505	1140	1	705	1280	2 1/2	845	1280	2 3/4	845			

CHANGES - REASONS

ORIGINAL PROCEDURE.



COORDINATED WITH:

A4A ☐ ALPA ☐ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZME, ARPT MGR

FLIGHT CHECKED BY

JAMES L REINEBOLD JR

Digitally signed by
ADOLFO D URRUTIA
Sep 27, 2018

OFFICE

FICO

DATE

9/22/18

DEVELOPED BY

LONNIE EVERHART (THERON CYRUS)

Digitally signed by
ADOLFO D URRUTIA

Sep 27, 2018

OFFICE

AJV-5400

DATE

06/06/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by
ADOLFO D URRUTIA
Sep 27, 2018

OFFICE

AJV-5400

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	M11
RUNWAY	RW36
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W36A
LTP/FTP LATITUDE	315349.0865N
LTP/FTP LONGITUDE	0902158.3945W
LTP/FTP ELLIPSOIDAL HEIGHT	+00945
FPAP LATITUDE	315518.0765N
FPAP LONGITUDE	0902206.9525W
THRESHOLD CROSSING HEIGHT (TCH)	00043.8
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1528
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	7F443F18

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+01206
FPAP ORTHOMETRIC HEIGHT	+01206



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

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CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
CRYSTAL SPRINGS, MS	COPIAH COUNTY	3 JANUARY 2019	ORIG

TAKEOFF MINIMUMS:
RWY 18, 36: STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 18, TREE 57 FT FROM DER, 506 FT LEFT OF CENTERLINE, 407 FT MSL.

TREE 569 FT FROM DER, 491 FT LEFT OF CENTERLINE, 425 FT MSL.

TREES BEGINNING 645 FT FROM DER, 588 FT LEFT OF CENTERLINE, UP TO 433 FT MSL.

TREES BEGINNING 1020 FT FROM DER, 191 FT LEFT OF CENTERLINE, UP TO 443 FT MSL.

TREES BEGINNING 1474 FT FROM DER, 209 FT LEFT OF CENTERLINE, UP TO 92 FT AGL/446 FT MSL.

TREES BEGINNING 1524 FT FROM DER, 156 FT LEFT OF CENTERLINE, UP TO 453 FT MSL.

TREE 1861 FT FROM DER, 839 FT RIGHT OF CENTERLINE, 446 FT MSL.

TREES BEGINNING 1909 FT FROM DER, 169 FT LEFT OF CENTERLINE, UP TO 101 FT AGL/456 FT MSL.

TREES BEGINNING 1936 FT FROM DER, 183 FT LEFT OF CENTERLINE, UP TO 107 FT AGL/461 FT MSL.

TREE 2148 FT FROM DER, 542 FT RIGHT OF CENTERLINE, 450 FT MSL.

TREE 2197 FT FROM DER, 411 FT RIGHT OF CENTERLINE, 458 FT MSL.

TREE 2705 FT FROM DER, 1057 FT LEFT OF CENTERLINE, 470 FT MSL.

TREE 2993 FT FROM DER, 71 FT LEFT OF CENTERLINE, 95 FT AGL/471 FT MSL.

NOTE: RWY 36, TREES BEGINNING 58 FT FROM DER, 499 FT RIGHT OF CENTERLINE, UP TO 77 FT AGL/480 FT MSL.

TREES BEGINNING 350 FT FROM DER, 492 FT RIGHT OF CENTERLINE, UP TO 487 FT MSL.

POLE 350 FT FROM DER, 587 FT LEFT OF CENTERLINE, 462 FT MSL.

TREES BEGINNING 516 FT FROM DER, 508 FT RIGHT OF CENTERLINE, UP TO 492 FT MSL.

TREES BEGINNING 730 FT FROM DER, 539 FT RIGHT OF CENTERLINE, UP TO 495 FT MSL.

POLE, VEHICLES ON TRAVERSE WAY BEGINNING 779 FT FROM DER, 517 FT LEFT OF CENTERLINE, UP TO 474 FT MSL.

TREES BEGINNING 845 FT FROM DER, 481 FT RIGHT OF CENTERLINE, UP TO 510 FT MSL.

TREE 1014 FT FROM DER, 567 FT RIGHT OF CENTERLINE, 511 FT MSL.

TREES BEGINNING 1070 FT FROM DER, 474 FT RIGHT OF CENTERLINE, UP TO 512 FT MSL.

TREE 1133 FT FROM DER, 555 FT RIGHT OF CENTERLINE, 516 FT MSL.

TREES BEGINNING 1180 FT FROM DER, 440 FT RIGHT OF CENTERLINE, UP TO 521 FT MSL.

TREE 1247 FT FROM DER, 717 FT LEFT OF CENTERLINE, 509 FT MSL.

TREES BEGINNING 1325 FT FROM DER, 9 FT RIGHT OF CENTERLINE, UP TO 527 FT MSL.

TREES BEGINNING 1341 FT FROM DER, 5 FT LEFT OF CENTERLINE, UP TO 527 FT MSL.

TREE 1473 FT FROM DER, 294 FT RIGHT OF CENTERLINE, 90 FT AGL/528 FT MSL.

TREES BEGINNING 1481 FT FROM DER, 14 FT RIGHT OF CENTERLINE, UP TO 89 FT AGL/529 FT MSL.

TREES BEGINNING 1528 FT FROM DER, 1 FT RIGHT OF CENTERLINE, UP TO 87 FT AGL/530 FT MSL.

TREES BEGINNING 1554 FT FROM DER, ON CENTERLINE, UP TO 88 FT AGL/532 FT MSL.

TREES BEGINNING 1579 FT FROM DER, 1 FT LEFT OF CENTERLINE, UP TO 535 FT MSL.

TREES BEGINNING 1935 FT FROM DER, 25 FT LEFT OF CENTERLINE, UP TO 538 FT MSL.

TREES BEGINNING 1960 FT FROM DER, 4 FT LEFT OF CENTERLINE, UP TO 541 FT MSL.

TREES BEGINNING 2326 FT FROM DER, 9 FT RIGHT OF CENTERLINE, UP TO 533 FT MSL.

TREES BEGINNING 2409 FT FROM DER, 116 FT RIGHT OF CENTERLINE, UP TO 535 FT MSL.

TREES BEGINNING 2530 FT FROM DER, 44 FT RIGHT OF CENTERLINE, UP TO 538 FT MSL.

TREES BEGINNING 3960 FT FROM DER, 60 FT RIGHT OF CENTERLINE, UP TO 95 FT AGL/541 FT MSL.

TREES BEGINNING 4262 FT FROM DER, 49 FT LEFT OF CENTERLINE, UP TO 95 FT AGL/543 FT MSL.

TREES BEGINNING 4357 FT FROM DER, 33 FT LEFT OF CENTERLINE, UP TO 95 FT AGL/551 FT MSL.



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

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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
CRYSTAL SPRINGS, MS	COPIAH COUNTY	3 JANUARY 2019	ORIG

CONTROLLING OBSTACLES:

REMARKS:

<u>FLIGHT INSPECTED BY:</u>	<i>Digitally signed by</i> ADOLFO D URRUTIA Sep 27, 2018	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
JAMES L REINEBOLD JR		FICO	9/22/18
<u>DEVELOPED BY:</u>	<i>Digitally signed by</i> ADOLFO D URRUTIA Sep 27, 2018	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
LONNIE EVERHART (THERON CYRUS)		AJV-5400	6/5/2018
<u>APPROVED BY:</u>	<i>Digitally signed by</i> ADOLFO D URRUTIA Sep 27, 2018	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
LONNIE EVERHART		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:
ZME, ARPT MGR

CHANGES - REASONS:
ORIGINAL PROCEDURE.

QUALITY
9
CHECKED

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

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<u>AIRPORT</u> FAIRMONT STATE AIRFIELD	<u>AIRPORT ID</u> KFMZ	<u>PROCEDURE NAME</u> NDB RWY 17	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> FAIRMONT	<u>STATE</u> NE
<u>AIRPORT ELEVATION</u> 1636	<u>TDZE</u> 1636	<u>SUPERSEDED</u> NDB RWY 17	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 04/07/2011	<u>MAG VAR</u> 7E
<u>FACILITY</u> FMZ	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1990

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>
LNK VORTAC		FMZ NDB					233.28	42.65	4100
HSI VOR/DME		FMZ NDB					083.99	39.39	4000

MISSED APPROACH

MAP:

FMZ NDB

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3200 THEN LEFT TURN DIRECT FMZ NDB AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L SIDE OF COURSE 342.00 OUTBOUND 3200 FT WITHIN 10 MILES OF FMZ NDB (IAF)

2.

3. FAC: 162.00 FAF: DIST FAF TO MAP: DIST FAF TO THLD:

4. MIN ALT:

8. MSA FROM: FMZ NDB 090-270 3300, 270-090 4100

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: CIRCLING RWY 12, 30 NA AT NIGHT.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON LNK VORTAC AIRWAY RADIALS 190 CW 258.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON HSI VOR/DME AIRWAY RADIALS 037 CW 096.
CHART NOTE: USE YORK ALTIMETER SETTING, WHEN NOT RECEIVED USE HEBRON ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET.

ADDITIONAL FLIGHT DATA:



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

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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 STATE AIRFIELD	<u>AIRPORT ID</u> KFMZ	<u>PROCEDURE NAME</u> NDB RWY 35	<u>ORIGINAL/AMENDMENT</u> 3	<u>CITY</u> FAIRMONT	<u>STATE</u> NE
<u>AIRPORT ELEVATION</u> 1636	<u>TDZE</u> 1636	<u>SUPERSEDED</u> NDB RWY 35	<u>ORIGINAL/AMENDMENT</u> 2A	<u>DATED</u> 07/06/2006	<u>MAG VAR</u> 7E
<u>FACILITY</u> FMZ	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1990

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>
LNK VORTAC		FMZ NDB					233.28	42.65	4100
HSI VOR/DME		FMZ NDB					083.99	39.39	4000

MISSED APPROACH

MAP:

FMZ NDB

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3200 THEN RIGHT TURN DIRECT FMZ NDB AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L **SIDE OF COURSE** 181.00 **OUTBOUND** 3200 **FT WITHIN** 10 **MILES OF** FMZ NDB (IAF)
- 2.
3. **FAC:** 001.00 **FAF:** **DIST FAF TO MAP:** **DIST FAF TO THLD:**
4. **MIN ALT:**
8. **MSA FROM:** FMZ NDB 090-270 3300, 270-090 4100

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: CIRCLING RWY 12, 30 NA AT NIGHT.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON LNK VORTAC AIRWAY RADIALS 190 CW 258.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON HSI VOR/DME AIRWAY RADIALS 037 CW 096.
CHART NOTE: USE YORK ALTIMETER SETTING, WHEN NOT RECEIVED USE HEBRON ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET AND CIRCLING CAT A VISIBILITY 1/4 SM.

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
S-35	2420	1	784	2420	1 1/4	784		NA			NA				
CIRCLING	2420	1	784	2420	1 1/4	784		NA			NA				

- CHANGES - REASONS**
- ADDED CHART NOTE "CIRCLING RWY 12, 30 NA AT NIGHT" - NO SURVEY FOR RUNWAYS.
 - CHANGED CHART NOTE FROM "USE YORK ALTIMETER SETTING" TO "USE YORK ALTIMETER SETTING, WHEN NOT RECEIVED USE HEBRON ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET AND CIRCLING CAT A VISIBILITY 1/4 SM" - BACKUP ALTIMETER ADDED TO AIRPORT SINCE PRIOR PROCEDURE AMENDMENT.
 - ADDED CHART CIRCLING ICON TO ADDITIONAL FLIGHT DATA - CURRENT 8260.3 CIRCLING RADII APPLIED.
 - INCREASED FAC CROSSES RWY C/L EXTENDED FROM 3264 FT TO 3273 FT - RECALCULATED OLD FIGURES.
 - CHANGED FAS OBSTACLE FROM "2065 TOWER 402803/0973531" TO "1983 TOWER 403120N/0973626W" - NEW FINAL CONTROLLING OBSTACLE AND SURVEY SINCE PRIOR PROCEDURE AMENDMENT.
 - ADDITIONAL FLIGHT DATA: CHANGED "CHART KJYR AWOS 124.175 FREQUENCY" TO "CHART YORK AWOS" - IAW CURRENT 8260.19 DOCUMENTATION CRITERIA.

COORDINATED WITH:

A4A ☐

ALPA ☒

AOPA ☒

APA ☐

HAI ☐

NBAA ☒

OTHER: AMGR, ZMP

FLIGHT CHECKED BY

BROC STARRETT

Digitally signed by

ROBERT G HAMILTON

Nov 26, 2018

OFFICE

FICO

DATE

11/19/18

DEVELOPED BY

DUSTIN DAVIDSON

Digitally signed by

ROBERT G HAMILTON

Nov 26, 2018

OFFICE

AJV-5422

DATE

08/14/2018

APPROVED BY

JULIE MORGAN

Digitally signed by

ROBERT G HAMILTON

Nov 26, 2018

OFFICE

AJV-5420

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> FAIRMONT STATE AIRFIELD	<u>AIRPORT ID</u> KFMZ	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> FAIRMONT	<u>STATE</u> NE
<u>AIRPORT ELEVATION</u> 1636	<u>TDZE</u> 1636	<u>SUPERSEDED</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 08/27/2009	<u>MAG VAR</u> 7E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1990

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 083/30 CW 263/30	NOPT	083/10 CW 263/10		4100
1. 083/10 CW 263/10	NOPT	CELTA	IF/IAF	4000
2. 263/30 CW 353/30		CEVER	IAF	4100
3. 353/30 CW 083/30		FATSA	IAF	4100

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>
FATSA	IAF	CELTA	NOPT	TF	FB	1.00	082.76	5.00	4000
CEVER	IAF	CELTA	NOPT	TF	FB	1.00	262.90	5.00	4000
CELTA	IF/IAF	BOLPE		TF	FB	1.00	172.83	6.10	3200
BOLPE	FAF	RW17	MAP	TF	FO	0.30	172.83	4.73	
RW17	MAP	1934 MSL		CA			172.83		
1934 MSL		UNITE		DF	FO	1.00			4000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW17

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4000 DIRECT UNITE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N CELTA, RT, 172.83 INBOUND, 4000 FT. IN LIEU OF PT (IAF), MAX 10000.

3. FAC: 172.83

FAF: BOLPE

DIST FAF TO MAP: 4.73

DIST FAF TO THLD: 4.73

4. MIN ALT: CELTA 4000, BOLPE 3200

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

298 HAT: 0.80

GS ANT:

6. MIN GP INCPT: 3200

GP ALT AT FAF : BOLPE

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 40.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING TO RWY 12, 30 NA AT NIGHT.
CHART NOTE: BARO-VNAV NA.
CHART NOTE: USE YORK ALTIMETER SETTING, WHEN NOT RECEIVED USE HEBRON ALTIMETER SETTING AND INCREASE ALL DA 31 FEET AND ALL MDA 40 FEET.

ADDITIONAL FLIGHT DATA:

CHART YORK AWOS
CHART CIRCLING ICON.
WAAS CHANNEL #69414
REFERENCE PATH ID: W17A
FAS OBST: 1840 AAO 403903N/0973421W.
HOLD S, RT, 352.83 INBOUND
LTP HAE: 471.8 M

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
LPV DA	1934	1	298	1934	1	298		NA			NA				
LNAV/VNAV DA	2043	1 1/2	407	2043	1 1/2	407		NA			NA				
LNAV MDA	2240	1	604	2240	1	604		NA			NA				
CIRCLING	2240	1	604	2240	1	604		NA			NA				



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>
FAIRMONT STATE AIRFIELD	KFMZ	RNAV (GPS) RWY 17	1A	FAIRMONT	NE

CHANGES - REASONS

- 1. CHANGE DISTANCE TO THLD FROM 298 HAT DISTANCE FROM 0.81 NM TO 0.80 NM - CURRENT 8260.58 CALCULATION.
- 2. REMOVED "CHART FAS OBST: 1725 ROD ON HANGER 403553N/0973401W" FROM ADDITIONAL FLIGHT DATA - CURRENT 8260.19 DOES NOT REQUIRE TO CHART FAS OBST FOR LNAV/VNAV.
- 3. CHANGED ADDITIONAL FLIGHT DATA NOTE FROM "CHART FAS OBST: 1875 GR. ELEVATOR 403817N/0973501W" TO "FAS OBST: 1840 AAO 403903N/0973421W" - NEW CONTROLLING OBSTACLE FOR LNAV SEGMENT.
- 4. REMOVED CHART NOTE "DME/DME RNP-0.3 NA" - NOT REQUIRED IAW CURRENT 8260.19 CRITERIA.
- 5. ADDED PBN REQUIREMENTS NOTE "RNP APCH" - PBN REQUIRED CHART NOTE IAW CURRENT 8260.19 CRITERIA.
- 6. ADDED "CHART CIRCLING ICON" TO ADDITIONAL FLIGHT DATA - UPDATED CIRCLING RADII IAW WITH CURRENT 8260.3 CRITERIA.
- 7. ADDED CHART NOTE "CIRCLING TO RWY 12, 30 NA AT NIGHT" - NO SURVEY TO RWY 12 OR RWY 30.
- 8. CHANGED CHART NOTE FROM "USE YORK ALTIMETER SETTING, WHEN NOT RECEIVED USE HEBRON ALTIMETER SETTING AND INCREASE ALL DA 36 FEET, ALL MDA 40 FEET. INCREASE LPV ALL CATS VISIBLTY 1/4 MILE" TO "USE YORK ALTIMETER SETTING, WHEN NOT RECEIVED USE HEBRON ALTIMETER SETTING AND INCREASE ALL DA 31 FEET AND ALL MDA 40 FEET" - UPDATED TO CURRENT 8260.3 VISIBLITY CRITERIA.
- 9. UPDATED FPAP LAT/LONG FROM "403411.1300N/0973415.7100W" TO "403411.1310N/0973415.7120W" - CURRENT FIGURES IAW 8260.58.
- 10. UPDATED CRC REMAINDER FROM "AAE89289" TO "2459650C" - SIAP GENERATED FIGURE.
- 11. ADDED "CHART YORK AWOS" TO ADDITIONAL FLIGHT DATA: - IAW CURRENT 8260.19 DOCUMENTATION CRITERIA.
- 12. ADDED "20:1 IS CLEAR" ON LINE 7 - 8260.19 CRITERIA STATES TO DOCUMENT WHETHER 20:1 IS CLEAR OR NOT ON RNAV PROCEDURES.



<u>AIRPORT</u> FAIRMONT STATE AIRFIELD	<u>AIRPORT ID</u> KFMZ	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> FAIRMONT	<u>STATE</u> NE
<u>COORDINATED WITH:</u> A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ <u>OTHER:</u> AMGR, ZMP					
<u>FLIGHT CHECKED BY</u> BROC STARRETT	<i>Digitally signed by</i> ROBERT G HAMILTON Nov 26, 2018		<u>OFFICE</u> FICO	<u>DATE</u> 11/19/18	
<u>DEVELOPED BY</u> DUSTIN DAVIDSON		<i>Digitally signed by</i> DUSTIN DAVIDSON Aug 08, 2018	<u>OFFICE</u> AJV-5422	<u>DATE</u> 08/03/2018	
<u>APPROVED BY</u> JULIE MORGAN	<i>Digitally signed by</i> ROBERT G HAMILTON Nov 26, 2018		<u>OFFICE</u> AJV-5420	<u>DATE</u>	<u>TITLE</u> MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KFMZ
RUNWAY	RW17
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W17A
LTP/FTP LATITUDE	403540.2895N
LTP/FTP LONGITUDE	0973416.0600W
LTP/FTP ELLIPSOIDAL HEIGHT	+04718
FPAP LATITUDE	403411.1310N
FPAP LONGITUDE	0973415.7120W
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	1432
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	2459650C
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04984
FPAP ORTHOMETRIC HEIGHT	+04984



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> FAIRMONT STATE AIRFIELD	<u>AIRPORT ID</u> KFMZ	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> FAIRMONT	<u>STATE</u> NE
<u>AIRPORT ELEVATION</u> 1636	<u>TDZE</u> 1636	<u>SUPERSEDED</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 08/27/2009	<u>MAG VAR</u> 7E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1990

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 263/30 CW 083/30	NOPT	UNITE	IF/IAF	4000
2. 083/30 CW 173/30		IPIVY	IAF	4100
3. 173/30 CW 263/30		VALUU	IAF	4100

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>
IPIVY	IAF	UNITE	NOPT	TF	FB	1.00	082.76	5.00	4000
VALUU	IAF	UNITE	NOPT	TF	FB	1.00	262.90	5.00	4000
UNITE	IF/IAF	LYYON		TF	FB	1.00	352.83	6.10	3200
LYYON	FAF	ATOYO/1.60 NM TO RW35		TF	FB	0.30	352.83	3.13	
ATOYO/1.60 NM TO RW35		RW35	MAP	TF	FO	0.30	352.83	1.60	
RW35	MAP	1934 MSL		CA			352.83		
1934 MSL		CELTA		DF	FO	1.00			4000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW35

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4000 DIRECT CELTA AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S UNITE, RT, 352.83 INBOUND, 4000 FT. IN LIEU OF PT (IAF), MAX 10000.

3. FAC: 352.83

FAF: LYYON

DIST FAF TO MAP: 4.73

DIST FAF TO THLD: 4.73

4. MIN ALT: UNITE 4000, LYYON 3200, ATOYO/1.60 NM TO RW35 2180*

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

298 HAT: 0.80

GS ANT:

6. MIN GP INCPT: 3200

GP ALT AT FAF : LYYON

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 40.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING TO RWY 12, 30 NA AT NIGHT.
CHART NOTE: BARO-VNAV NA.
*LNAV ONLY
CHART NOTE: USE YORK ALTIMETER SETTING, WHEN NOT RECEIVED USE HEBRON ALTIMETER SETTING AND INCREASE ALL DA 31 FEET AND ALL MDA 40 FEET.

ADDITIONAL FLIGHT DATA:

CHART YORK AWOS
CHART CIRCLING ICON.
WAAS CHANNEL #93614
REFERENCE PATH ID: W35A
CHART FAS OBST: 1749 TREE 403418N/0973333W.
HOLD N, RT, 172.83 INBOUND
LTP HAE: 471.4 M

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
LPV DA	1934	1	298	1934	1	298		NA			NA				
LNAV/VNAV DA	2094	1 3/4	458	2094	1 3/4	458		NA			NA				
LNAV MDA	2060	1	424	2060	1	424		NA			NA				
CIRCLING	2120	1	484	2120	1	484		NA			NA				



CHANGES - REASONS

- 1. CHANGE DISTANCE TO THLD FROM 298 HAT DISTANCE FROM 0.82 NM TO 0.80 NM - CURRENT 8260.58 CALCULATION.
- 2. CHANGED "34:1 IS NOT CLEAR" TO "34:1 IS CLEAR" AND ADDED "20:1 IS CLEAR" ON LINE 7 - PRIOR 34:1 PENETRATION DOES NOT EXIST AND 8260.19 CRITERIA STATES TO DOCUMENT WHETHER 20:1 IS CLEAR OR NOT ON RNAV PROCEDURES.
- 3. REMOVED CHART NOTE "DME/DME RNP-0.3 NA" - NOT REQUIRED IAW CURRENT 8260.19 CRITERIA.
- 4. ADDED PBN REQUIREMENTS NOTE "RNP APCH" - PBN REQUIRED CHART NOTE IAW CURRENT 8260.19 CRITERIA.
- 5. ADDED "CHART CIRCLING ICON" TO ADDITIONAL FLIGHT DATA - UPDATED CIRCLING RADII IAW WITH CURRENT 8260.3 CRITERIA.
- 6. ADDED CHART NOTE "CIRCLING TO RWY 12, 30 NA AT NIGHT" - NO SURVEY TO RWY 12 OR RWY 30.
- 7. CHANGED CHART NOTE FROM "USE YORK ALTIMETER SETTING, WHEN NOT RECEIVED USE HEBRON ALTIMETER SETTING AND INCREASE ALL DA 36 FEET, ALL MDA 40 FEET. INCREASE LPV ALL CATS VISIBLTY 1/4 MILE" TO "USE YORK ALTIMETER SETTING, WHEN NOT RECEIVED USE HEBRON ALTIMETER SETTING AND INCREASE ALL DA 31 FEET AND ALL MDA 40 FEET" - UPDATED TO CURRENT 8260.3 VISIBILITY CRITERIA.
- 8. UPDATED FPAP LONGITUDE FROM "0973416.2400W" TO "0973416.2315W" - CURRENT FIGURES IAW 8260.58.
- 9. UPDATED CRC REMAINDER FROM "BEB093F5" TO "F7333008" - SIAP GENERATED FIGURE.
- 10. ADDED "CHART YORK AWOS" TO ADDITIONAL FLIGHT DATA: - IAW CURRENT 8260.19 DOCUMENTATION CRITERIA.



AIRPORT

FAIRMONT STATE AIRFIELD

AIRPORT ID

KFMZ

PROCEDURE NAME

RNAV (GPS) RWY 35

ORIGINAL/AMENDMENT

1A

CITY

FAIRMONT

STATE

NE

COORDINATED WITH:

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

FLIGHT CHECKED BY

BROC STARRETT

Digitally signed by

ROBERT G HAMILTON

Nov 26, 2018

OFFICE

FICO

DATE

11/19/18

DEVELOPED BY

DUSTIN DAVIDSON

Digitally signed by

DUSTIN DAVIDSON

Sep 08, 2018

OFFICE

AJV-5422

DATE

08/03/2018

APPROVED BY

JULIE MORGAN

Digitally signed by

ROBERT G HAMILTON

Nov 26, 2018

OFFICE

AJV-5420

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KFMZ
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	403457.6315N
LTP/FTP LONGITUDE	0973415.8865W
LTP/FTP ELLIPSOIDAL HEIGHT	+04714
FPAP LATITUDE	403626.7900N
FPAP LONGITUDE	0973416.2315W
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	1432
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	F7333008
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04980
FPAP ORTHOMETRIC HEIGHT	+04980



**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.

CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
FAIRMONT, NE	FAIRMONT STATE AIRFIELD	3 JANUARY 2019	1

TAKEOFF MINIMUMS:

RWY 12, 17, 30, 35: STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

RWY 30: CLIMB HEADING 307.82 TO 2300 BEFORE TURNING RIGHT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 30: TREES BEGINNING 2683 FT FROM DER, 143 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/1739 FT MSL.

CONTROLLING OBSTACLES:

OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 30: 2139 FT MSL WINDMILL (31-040356) 403801.55N/0973649.24W.

REMARKS:

<u>FLIGHT INSPECTED BY:</u>	<i>Digitally signed by</i> ROBERT G HAMILTON BROC STARRETT Nov 26, 2018	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
		FICO	11/19/18

<u>DEVELOPED BY:</u>	<i>Digitally signed by</i> DUSTIN DAVIDSON DUSTIN DAVIDSON Sep 07, 2018	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
		AJV-5422	08/08/2018

<u>APPROVED BY:</u>	<i>Digitally signed by</i> ROBERT G HAMILTON JULIE MORGAN Nov 26, 2018	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
		AJV-5420	

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

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

OTHER:

ZMP, AMGR

CHANGES - REASONS:

1. ADDED TEXTUAL DEPARTURE PROCEDURES "RWY 30: CLIMB HEADING 307.82 TO 2300 BEFORE TURNING RIGHT" - NEW SURVEYED OBSTACLE SINCE PROCEDURE WAS LAST EVALUATED.
2. ADDED TAKEOFF OBSTACLE NOTES FOR RWY 30 - IAW CURRENT 8260.46 CRITERIA.
3. ADDED OBSTACLE MANDATING ODP ROUTE DEVELOPMENT FOR RWY 30 - IAW CURRENT 8260.46 CRITERIA.

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> WAYNE MUNI/ STAN MORRIS FLD	<u>AIRPORT ID</u> KLCG	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> 2B	<u>CITY</u> WAYNE	<u>STATE</u> NE	
<u>AIRPORT ELEVATION</u> 1432	<u>TDZE</u> 1432	<u>SUPERSEDED</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> 2A	<u>DATED</u> 05/29/2014	<u>MAG VAR</u> 6E	<u>EPOCH YEAR</u> 1990
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
DECKA		VEPOW		TF	FB	2.00	278.33	27.07	3500
OFK VOR/DME		SERWU		TF	FB	2.00	068.65	14.53	3500
VEPOW	IAF	ERHOS	NOPT	TF	FB	1.00	265.56	6.00	3500
SERWU	IAF	ERHOS	NOPT	TF	FB	1.00	085.38	6.00	3500
ERHOS	IF/IAF	BILEH		TF	FB	1.00	355.47	4.93	3500
BILEH	FAF	ACAYO/2.20 NM TO RW36		TF	FB	0.30	355.47	4.17	
ACAYO/2.20 NM TO RW36		RW36	MAP	TF	FO	0.30	355.47	2.20	
RW36	MAP	1682 MSL		CA			355.47		
1682 MSL		ACKEG		DF	FO	1.00			3500

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW36

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3500 DIRECT ACKEG AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S ERHOS, RT, 355.47 INBOUND, 3500 FT. IN LIEU OF PT (IAF), MAX 10000.

3. FAC: 355.47FAF: BILEHDIST FAF TO MAP: 6.37DIST FAF TO THLD: 6.37

4. MIN ALT: ERHOS 3500, BILEH 3500, ACAYO/2.20 NM TO RW36 2160*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.66GS ANT:

6. MIN GP INCPT: 3500GP ALT AT FAF : BILEH 3500OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 40.9

8. MSA FROM: RW36 3800

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C OR ABOVE 54C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT OFK VOR/DME ON AIRWAY RADIALS 354 CW 114.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DECKA ON V307 SOUTHBOUND.
CHART NOTE: RWY 36 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.52 NM TO RW36*
*LNAV ONLY
WAAS CHANNEL #69622
REFERENCE PATH ID: W36A
CHART FAS OBST: 1851 TOWER 421211N/0965957W.
HOLD N, RT, 175.47 INBOUND
LTP HAE: 411.4 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	1682	1	250	1682	1	250		NA			NA				
LNAV/VNAV DA	1791	1 1/4	359	1791	1 1/4	359		NA			NA				
LNAV MDA	1980	1	548	1980	1	548		NA			NA				
CIRCLING	2000	1	568	2000	1	568		NA			NA				



AIRPORT	AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	CITY	STATE
WAYNE MUNI/ STAN MORRIS FLD	KLCG	RNAV (GPS) RWY 36	2B	WAYNE	NE

CHANGES - REASONS

- 1. AMENDED LNAV MDA/HAT FROM 1880/448 TO 1980/548 - TO CLEAR FDC 8/7282.
- 2. CHANGED ADDITIONAL FLIGHT DATA: FROM CHART FAS OBST 1629 TREE 421336N/0965816W TO CHART FAS OBST: 1851 TOWER 421211N/0965957W AND CHART VDP AT 1.28 MILES TO RW36 TO CHART VDP AT 1.52 NM TO RW36 - NEW LNAV FINAL CONTROLLING OBSTACLE AND AMENDED LNAV MDA.
- 3. DELETED CHART NOTE DME/DME RNP-0.3 NA - ADDED PBN REQUIREMENTS NOTE: RNP APCH.
- 4. ADDED 20:1 IS CLEAR TO PROFILE LINE 7 AND ADDED CHART NOTE RWY 36 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - INCORPORTED P-NOTAM 4/8484.
- 5. DELETED CHART NOTE: WHEN VGSI INOP CIRCLING RWY 5/23 NA AT NIGHT - NO 20:1 PENETRATIONS IDENTIFIED.
- 6. MOVED BACK-UP ALTIMETER NOTES TO CONTINGENCY STATUS AND DELETED ALTERNATE MINIMUMS NOTE @ NA WHEN LOCAL WEATHER NOT AVAILABLE - KLCG ON WMSCR NETWORK AND FULL-TIME ASOS AVAILABLE AS BACK-UP.
- 7. FAS DATA CHANGED: FPAP FROM 421543.9900N/0985&C8.7300W TO 421543.9890N/0965846.7370W, CRC REMAINDER FROM 26553402 TO A36BBED6 - PROCEDURE DATA CHANGES.
- 8. REMOVED FAHRENHEIT VALUES FROM UNCOMPENSATED BARO-VNAV NOTE - NO LONGER REQUIRED.



COORDINATED WITH:

A4A

☐

ALPA

☒

AOPA

☒

APA

☐

HAI

☐

NBAA

☒

OTHER:

ZMP, SUX APP CON, AMGR

FLIGHT CHECKED BY

DONALD MCGOUGH

Digitally signed by

GEORGE E DAVIS

Nov 02, 2018

OFFICE

FICO

DATE

10/30/18

DEVELOPED BY

IVAN BLANCO

Digitally signed by

IVAN BLANCO

Jul 03, 2018

OFFICE

AJV-5432

DATE

07/03/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

GEORGE E DAVIS

Nov 01, 2018

OFFICE

AJV-5430

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KLCG
RUNWAY	RW36
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W36A
LTP/FTP LATITUDE	421414.8850N
LTP/FTP LONGITUDE	0965849.8145W
LTP/FTP ELLIPSOIDAL HEIGHT	+04114
FPAP LATITUDE	421543.9890N
FPAP LONGITUDE	0965846.7370W
THRESHOLD CROSSING HEIGHT (TCH)	00040.9
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1472
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	A36BBED6
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04364
FPAP ORTHOMETRIC HEIGHT	+04364



**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.
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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
WAYNE, NE	WAYNE MUNI/ STAN MORRIS FLD	3 JANUARY 2019	5

TAKEOFF MINIMUMS:

RWY 13, 31: NA - ENVIRONMENTAL.

RWY 36: STANDARD.

RWY 18: STANDARD WITH MINIMUM CLIMB OF 260 FT PER NM TO 2000 OR 900-3 FOR VCOA.

RWY 23: STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 2000 OR 900-3 FOR VCOA.

RWY 5: 300-1 1/2 OR STANDARD WITH A MINIMUM CLIMB OF 330 FT PER NM TO 1700.

TEXTUAL DEPARTURE PROCEDURES:

RWY 18: CLIMB HEADING 175.47 TO 2000 BEFORE TURNING RIGHT.

RWY 23: CLIMB HEADING 228.05 TO 2000 BEFORE TURNING RIGHT.

VISUAL CLIMB OVER AIRPORT:

RWY 18, 23: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS WAYNE MUNI/ STAN MORRIS FIELD AT OR ABOVE 2200 BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 05, FENCE 39 FT FROM DER, 347 FT RIGHT OF CENTERLINE, 7 FT AGL/1429 FT MSL.

TERRAIN 1961 FT FROM DER, 438 FT RIGHT OF CENTERLINE, 1494 FT MSL.

TREE, POLE BEGINNING 2799 FT FROM DER, 441 FT LEFT OF CENTERLINE, UP TO 1507 FT MSL.

TREE, POLE, TREE, BUILDING BEGINNING 4658 FT FROM DER, 170 FT RIGHT OF CENTERLINE, UP TO 50 FT AGL/1619 FT MSL.

TREE 1.1 NM FROM DER, 2068 FT RIGHT OF CENTERLINE, 50 FT AGL/1612 FT MSL.

NOTE: RWY 18, TREE, TERRAIN BEGINNING 37 FT FROM DER, 274 FT LEFT OF CENTERLINE, UP TO 1446 FT MSL.

VEHICLES ON ROAD 663 FT FROM DER, CROSSING CENTERLINE, UP TO 1455 FT MSL.

TREE BEGINNING 5105 FT FROM DER, 1848 FT LEFT OF CENTERLINE, UP TO 50 FT AGL/1592 FT MSL.

NOTE: RWY 23, TOWER, TREE, BUILDING, POLE BEGINNING 113 FT FROM DER, 255 FT LEFT OF CENTERLINE, UP TO 57 FT AGL/1489 FT MSL.

TREE, POLE, GENERAL UTILITY BEGINNING 225 FT FROM DER, 271 FT RIGHT OF CENTERLINE, UP TO 1478 FT MSL.

TREE, POLE, BUILDING BEGINNING 788 FT FROM DER, 76 FT RIGHT OF CENTERLINE, UP TO 1503 FT MSL.

TREES BEGINNING 945 FT FROM DER, 433 FT LEFT OF CENTERLINE, UP TO 1492 FT MSL.

NOTE: RWY 36, TREE 92 FT FROM DER, 293 FT LEFT OF CENTERLINE, 1438 FT MSL.

POLE 385 FT FROM DER, 540 FT LEFT OF CENTERLINE, 31 FT AGL/1453 FT MSL.

POLE 421 FT FROM DER, 436 FT RIGHT OF CENTERLINE, 33 FT AGL/1453 FT MSL.

CONTROLLING OBSTACLES:

RWY 5: 1569 FT MSL TREE 421448.00/0965736.00W (CG/CGTA/CEILING), 1562 MSL TREE 421500.00N/0965706.00W (VISIBILITY).

RWY 18: 1851 FT MSL TOWER 421210.62N/0965956.85W.

RWY 23: 1805 FT MSL TOWER 421359.46N/0970204.89W.

RWY 18, 23: (VCOA) 1875 FT MSL TOWER 421217.00/0970251.00W.

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT:

RWY 18: 1851 FT MSL TOWER 421210.62N/0965956.85W.

RWY 23: 1805 FT MSL TOWER 421359.46N/0970204.89W.

REMARKS:

QUALITY
10
CHECKED

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

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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
WAYNE, NE	WAYNE MUNI/ STAN MORRIS FLD	3 JANUARY 2019	5

FLIGHT INSPECTED BY:	<i>Digitally signed by</i> GEORGE E DAVIS	OFFICE SYMBOL:	DATE:
DONALD MCGOUGH	Nov 02, 2018	FICO	10/30/18

DEVELOPED BY:	<i>Digitally signed by</i> IVAN BLANCO	OFFICE SYMBOL:	DATE:
IVAN BLANCO	Jul 03, 2018	AJV-5432	06/29/2018

APPROVED BY:	<i>Digitally signed by</i> GEORGE E DAVIS	OFFICE SYMBOL:	DATE:
PATRICK MULQUEEN	Nov 01, 2018	AJV-5430	

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:
ZMP, SUX APP CON, AMGR, NE STATE AERO

CHANGES - REASONS:

1. ADDED TAKEOFF MINIMUMS AND DEPARTURE PROCEDURES TO RWYS 18, 23 - TO CLEAR FDC 7/9823.
2. AMENDED RWY 5 TAKEOFF MINIMUMS FROM: 300-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 260 FT PER NM TO 1700 TO: 300-1 1/2 OR STANDARD WITH A MINIMUM CLIMB OF 330 FT PER NM TO 1700 - NEW EVALUATION RESULT.
3. ADDED VCOA TO RWYS 18, 23 - IDENTIFIED 40:1 PENETRATIONS OUTSIDE SEE AND AVOID AREA.
4. UPDATED TAKEOFF OBSTACLE NOTES FOR ALL APPLICABLE RWYS - OBSTACLE DATA CHANGES.
5. UPDATED CONTROLLING OBSTACLES - NEW EVALUATION RESULTS:
RWY 5 FROM: 1603 MSL TREE, 421500.88N/0965735.24W. TO: 1569 FT MSL TREE 421448.00/0965736.00W (CG/CGTA/CEILING), 1562 MSL TREE 421500.00N/0965706.00W (VISIBILITY).
RWY 18 FROM: 1818 MSL TOWER 421200.00N/0970016.00W TO: 1851 FT MSL TOWER 421210.62N/0965956.85W.
RWY 23 FROM: 1804 MSL TOWER 421359.46N/0970204.89W TO: 1805 FT MSL TOWER 421359.46N/0970204.89W.
6. ADDED VCOA CONTROLLING OBSTACLES FOR RWY 18, 23 - VCOA ADDED.
7. UPDATED OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 18 FROM 1818 MSL TOWER 421200.00N/0970016.00W TO: 1851 FT MSL TOWER 421210.62N/0965956.85W, RWY 23 FROM: 1804 MSL TOWER 421359.46N/0970204.89W TO: 1805 FT MSL TOWER 421359.46N/0970204.89W.
8. UPDATED AIRPORT NAME FROM: WAYNE MUNI TO: WAYNE MUNI/STAN MORRIS FIELD - NAME CHANGED 10/20/2011.

QUALITY
10
CHECKED

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

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<u>AIRPORT</u> RENO/TAHOE INTL	<u>AIRPORT ID</u> KRNO	<u>PROCEDURE NAME</u> TACAN-F	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> RENO	<u>STATE</u> NV
<u>AIRPORT ELEVATION</u> 4415	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u> 16E <u>EPOCH YEAR</u> 1985
<u>FACILITY</u> FMG VORTAC	<u>COORDINATES OF FACILITIES</u> 393152.60N / 1193921.87W	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
HZN VORTAC		WAKLO/FMG 19.00 DME					278.42	13.48	13000
NFL TACAN		WAKLO/FMG 19.00 DME					281.65	28.32	13000
WAKLO/19.00 DME	IF/IAF	OKUGE/13.00 DME					239.00	6.00	10000
OKUGE/13.00 DME	IF	MITAE/9.00 DME					239.00	4.00	9000
MITAE/9.00 DME		PUVUE/7.00 DME					239.00	2.00	8600
PUVUE/7.00 DME		FMG VORTAC					239.00	7.00	7800

MISSED APPROACH

MAP:

5.00 NM AFTER FMG VORTAC OR AT JINTU/5.00 DME

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 13000 ON HEADING 090 AND FMG R-059 TO OKUGE/13.00 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 13000.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
2. HOLD NE OKUGE/FMG 13.00 DME, LT, 239.00 INBOUND, 10000 FT. IN LIEU OF PT (IF/IAF), MAX 13000.
3. **FAC:** 239.00 **FAF:** FMG VORTAC **DIST FAF TO MAP:** 5.00 **DIST FAF TO THLD:**
4. **MIN ALT:** OKUGE/13.00 DME 10000, MITAE/9.00 DME 9000, PUVUE/7.00 DME 8600, FMG VORTAC 7800
8. **MSA FROM:** FMG VORTAC 130-250 12000, 250-350 10000, 350-130 9600

EQUIPMENT REQUIREMENTS NOTES:



NOTES:

CHART NOTE: CIRCLING NA FOR CAT E S OF RWY 7 AND W OF 34L.
CHART NOTE: CIRCLING RWY 7 NA AT NIGHT.
CHART NOTE: APPROACHES RADAR MONITORED BY NORCAL APP CON. ARRIVALS FROM EAST AND AIRCRAFT ON MISSED APPROACH MAY BE VECTORED TO FINAL.
CHART NOTE: CIRCLING NA FOR CAT E TO RWYS 7 AND 25.

ADDITIONAL FLIGHT DATA:

FAC 2427 FT SOUTH OF RWY 16L THESHOLD.
6140 AAO 393153N/1193923W
CHART CIRCLING ICON.
CHART FAS OBST: 5628 TREE 393016N/1194136W.

MINIMUMS:

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

ALTERNATE: NA ☐ CAT A, B 1600-2, CAT C, D 2000-3, CAT E 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
CIRCLING	5960	1 1/4	1545	5960	1 1/2	1545	6360	3	1945	6360	3	1945	6440	3	2025

CHANGES - REASONS

COORDINATED WITH:

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

FLIGHT CHECKED BY CHARLES D. CUNNINGHAM	<i>Digitally signed by</i> ROBERT G HAMILTON Nov 20, 2018	OFFICE FICO	DATE
DEVELOPED BY LONNIE EVERHART (MARSHALL SCOTT)	<i>Digitally signed by</i> ROBERT G HAMILTON Nov 20, 2018	OFFICE AJV-5400	DATE 07/05/2018
APPROVED BY LONNIE EVERHART	<i>Digitally signed by</i> ROBERT G HAMILTON Nov 20, 2018	OFFICE AJV-5400	DATE
			TITLE MANAGER



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

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<u>AIRPORT</u> ORANGE COUNTY	<u>AIRPORT ID</u> KMGJ	<u>PROCEDURE NAME</u> ILS OR LOC RWY 3	<u>ORIGINAL/AMENDMENT</u> 3D	<u>CITY</u> MONTGOMERY	<u>STATE</u> NY	
<u>AIRPORT ELEVATION</u> 364	<u>TDZE</u> 353	<u>SUPERSEDED</u> ILS OR LOC RWY 3	<u>ORIGINAL/AMENDMENT</u> 3C	<u>DATED</u> 03/08/2012	<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> 01/03/2019	<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 3 JANUARY 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: ZBW, NY TRACON, APT MANAGER, ATA

FLIGHT CHECKED BY

DEVELOPED BY
DUSTIN DAVIDSON

APPROVED BY
MARLON ROBINSON

Digitally signed by
DUSTIN DAVIDSON
Nov 05, 2018

Digitally signed by
JACOB POWERS
Nov 14, 2018

OFFICE
AJV-5442

OFFICE
AJV-5440

DATE
10/25/2018

DATE

TITLE
MANAGER



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

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<u>AIRPORT</u> ORANGE COUNTY	<u>AIRPORT ID</u> KMGJ	<u>PROCEDURE NAME</u> ILS OR LOC RWY 4	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> MONTGOMERY	<u>STATE</u> NY
<u>AIRPORT ELEVATION</u> 370	<u>TDZE</u> 355	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u> 14W <u>EPOCH YEAR</u> 2000
<u>FACILITY</u> I-MGJ	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> 01/03/2019	<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>
IGN VOR/DME		SEDL E INT					243.77	30.65	3600
SAX VORTAC	IAF	SEDL E INT	NOPT				037.22	18.75	3000
HUO VOR/DME	IAF	SEDL E INT	NOPT				120.06	11.31	3000
SEDL E INT	IF	STUFF INT					036.23	6.00	1800

MISSED APPROACH

MAP:

ILS: DA
LOC: 4.37 NM AFTER STUFF INT

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 4000 DIRECT HUO VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 5300 ON HEADING 345 AND ON SAX VORTAC R-029 TO HELON INT AND HOLD NE, CONTINUE CLIMB IN HOLD TO 5300.

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- HOLD SW SEDLE, RT, 036.23 INBOUND, 3000 FT. IN LIEU OF PT (IF/IAF), MAX 6000.
- FAC: 036.23 FAF: STUFF INT DIST FAF TO MAP: 4.37 DIST FAF TO THLD: 4.37
- MIN ALT: SEDLE INT 3000, STUFF INT 1800
- DIST TO THLD FROM OM: MM: IM: 150 HAT: GS ANT: 991
- MIN GS INCPT: 1800 GS ALT AT FAF : STUFF INT 1800 OM: MM: IM:
- GP ANGLE: 3.00 34:1: 20:1: TCH: 51.9
- MSA FROM: HUO VOR/DME 045-315 3500, 315-045 3900



EQUIPMENT REQUIREMENTS NOTES:**NOTES:**

CHART NOTE: CIRCLING RWY 8, 22, 26 NA AT NIGHT.

CHART NOTE: PROCEDURE NA AT NIGHT.

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

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT IGN VOR/DME ON V58-93-167 AND T216 EASTBOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON SAX VORTAC AIRWAY RADIALS 029 CW 093.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HUO VOR/DME ON V273 NORTHWEST BOUND.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.

CHART IN PLANVIEW: HELON INT

CHART FAS OBST: 496 TREE 412949N/0741642W.

720 AAO 412548N/0741746W.

CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NE HELON INT, RT, 208.86 INBOUND.

HOLD W, RT, 092.82 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☒

<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>
S-ILS 04	682	1	327	682	1	327	682	1	327	682	1	327			
S-LOC 04	960	1	605	960	1	605	960	1 3/4	605	960	1 3/4	605			
CIRCLING	1180	1	810	1180	1	810	1180	2 1/4	810	1220	2 3/4	850			

CHANGES - REASONS**COORDINATED WITH:****A4A** ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZBW, NYC APP CON, AMGR**FLIGHT CHECKED BY**

PENDING

*Digitally signed by
JACOB POWERS
Nov 15, 2018***OFFICE****DATE****DEVELOPED BY**

DUSTIN DAVIDSON

*Digitally signed by
DUSTIN DAVIDSON
Nov 13, 2018***OFFICE**

AJV-5442

DATE

11/03/2018

APPROVED BY

MARLON ROBINSON

*Digitally signed by
JACOB POWERS
Nov 14, 2018***OFFICE**

AJV-5440

DATE**TITLE**
MANAGERQUALITY
10
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> ORANGE COUNTY	<u>AIRPORT ID</u> KMGJ	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 3	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> MONTGOMERY	<u>STATE</u> NY
<u>AIRPORT ELEVATION</u> 364	<u>TDZE</u> 353	<u>SUPERSEDED</u> RNAV (GPS) RWY 3	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 04/08/2010	<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> 01/03/2019	<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 3 JANUARY 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 GP INCPT: GP ALT AT FAF : OM: MM: IM:
7. GP ANGLE: 34:1: 20:1: TCH:
8. MSA FROM:

PBN REQUIREMENTS NOTE:

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: ZNY, ZBW, NY APCH, APT MGR, ATA

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY

DUSTIN DAVIDSON

Digitally signed by
DUSTIN DAVIDSON
Nov 05, 2018

OFFICE

AJV-5442

DATE

10/25/2018

APPROVED BY

MARLON ROBINSON

Digitally signed by
JACOB POWERS
Nov 14, 2018

OFFICE

AJV-5440

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> ORANGE COUNTY	<u>AIRPORT ID</u> KMGJ	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 4	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> MONTGOMERY	<u>STATE</u> NY
<u>AIRPORT ELEVATION</u> 370	<u>TDZE</u> 355	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u> 14W <u>EPOCH YEAR</u> 2000
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> 01/03/2019	<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>
HAAYS	IAF	SEDL	NOPT	TF	FB	1.00	085.72	5.34	3000
SAX VORTAC	IAF	SEDL	NOPT	TF	FB	1.00	040.22	18.75	3000
SEDL	IF/IAF	STUFF		TF	FB	1.00	036.18	6.00	1800
STUFF	FAF	RW04	MAP	TF	FO	0.30	036.21	4.37	
RW04	MAP	770 MSL		CA			036.21		
770 MSL		WERKA		DF	FB	1.00			
WERKA		HELON		TF	FO	1.00	347.67	5.50	5300

MISSED APPROACH

MAP:

LNAV: RW04

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 5300 DIRECT WERKA AND ON TRACK 347.67 TO HELON AND HOLD, CONTINUE CLIMB IN HOLD TO 5300.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SW SEDLE, RT, 036.18 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 036.21

FAF: STUFF

DIST FAF TO MAP: 4.37

DIST FAF TO THLD: 4.37

4. MIN ALT: SEDLE 3000, STUFF 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: RW04 3500

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING RWY 8, 22, 26 NA AT NIGHT.
CHART NOTE: RWY 4 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HAAYS ON V273 NORTHWEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON SAX VORTAC AIRWAY RADIALS 311 CW 093.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 2.04 NM TO RW04
FAS OBST: 620 AAO 412717N/0741736W.
700 AAO 412560N/0741738W.
HOLD NE, RT, 208.86 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ CAT A, B 900-2, CAT C 900-2 1/4, CAT D 900-2 3/4

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
LNAV MDA	1060	1	705	1060	1	705	1060	2	705	1060	2	705			
CIRCLING	1180	1	810	1180	1	810	1180	2 1/4	810	1220	2 3/4	850			

CHANGES - REASONS



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZNY, ZBW, NYC APP CON, AMGR

FLIGHT CHECKED BY

PENDING

Digitally signed by
JACOB POWERS
Nov 15, 2018

OFFICE

DATE

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DATE

11/02/2018

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Nov 14, 2018

OFFICE

AJV-5440

DATE

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
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<u>AIRPORT</u> ORANGE COUNTY	<u>AIRPORT ID</u> KMGJ	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 8	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> MONTGOMERY	<u>STATE</u> NY
<u>AIRPORT ELEVATION</u> 370	<u>TDZE</u> 359	<u>SUPERSEDED</u> RNAV (GPS) RWY 8	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 08/18/2016	<u>MAG VAR</u> 14W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> 1/3/2019	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

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>
HUO VOR/DME	IAF	OSSEK		TF	FB	1.00	087.59	4.65	2900
OSSEK	IF	WEJTI		TF	FB	1.00	080.08	6.10	2000
WEJTI	FAF	RW08	MAP	TF	FO	0.30	080.16	4.98	
RW08	MAP	770 MSL		CA			080.16		
770 MSL		YORNO		DF	FO	1.00			
YORNO		HELON		TF	FO	1.00	340.21	9.21	5300

MISSED APPROACH

MAP:

LPV: DA
 LNAV: RW08

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 5300 DIRECT YORNO AND LEFT TURN ON TRACK 340.21 TO HELON AND HOLD, CONTINUE CLIMB-IN-HOLD TO 5300.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT OSSEK

3. FAC: 080.16

FAF: WEJTI

DIST FAF TO MAP: 4.98

DIST FAF TO THLD: 4.98

4. MIN ALT: OSSEK 2900, WEJTI 2000

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

700 HAT: 2.09

GS ANT:

6. MIN GP INCPT: 2000

GP ALT AT FAF : WEJTI

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1: IS NOT CLEAR

20:1: IS NOT CLEAR

TCH: 40.0

8. MSA FROM: RW08 5000

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 8 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON HUO VOR/DME AIRWAY RADIALS 019 CW 145.
CHART NOTE: STRAIGHT-IN RWY 8 NA AT NIGHT, CIRCLING RWY 8, 22, 26 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
WAAS CHANNEL #50216
REFERENCE PATH ID: W08A
CHART FAS OBST: 959 TREE 412921N/0742134W.
HOLD NE, RT, 208.86 INBOUND
LTP HAE: 30.5 M

MINIMUMS:

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

ALTERNATE: NA ☐ CAT A, B 800-2 1/2, CAT C 900-2 1/2, CAT D 900-2 3/4

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	1059	2 1/2	700	1059	2 1/2	700	1059	2 1/2	700	1059	2 1/2	700			
LNAV MDA	1220	1	861	1220	1 1/4	861	1220	2 1/2	861	1220	2 3/4	861			
CIRCLING	1220	1 1/4	850	1220	1 1/4	850	1220	2 1/2	850	1220	2 3/4	850			



CHANGES - REASONS

- 1. INCREASED MISSED APPROACH CLIMB TO ALTITUDE FROM 4900 TO 5300 - SAME CONTROLLING OBSTACLE AAO LOCATION BUT INCORRECT ALTITUDE PREVIOUSLY IDENTIFIED. NEW PRECIPITOUS TERRAIN VALUES IAW 8260.3D APPLY ADDITIONAL 200 FEET OF ROC.
- 2. ADDED 20:1 IS NOT CLEAR TO LINE 7 - IAW 8260.19, 20:1 IS TO BE STATED WHETHER CLEAR OR NOT.
- 3. REPLACED CHART NOTE "DME/DME RNP-0.3 NA" WITH "RNP APCH" PBN REQUIREMENT NOTE- UPDATED TO CURRENT PBN REQUIREMENT CHART NOTES.
- 4. CHANGED CHART NOTE FROM "NIGHT LANDING: RWY 21, 26 NA" TO "STRAIGHT-IN RWY 8 NA AT NIGHT, CIRCLING RWY 8, 22, 26 NA AT NIGHT." - OBSTACLES PENETRATE 20:1 SURFACE.
- 5. CHANGED CHART NOTE FROM "HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA" TO "RWY 8 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" - 20:1 SURFACE PENETRATED.
- 6. ADDED CHART CIRCLING ICON - NEW CIRCLING RADII BEING APPLIED WITH NEW RUNWAY CONSTRUCTION PROJECT.
- 7. INCREASED CIRCLING CAT A VISIBILITY FROM 1 TO 1 1/4 - IAW 8260.3D TABLE 3-3-7.
- 8. DECREASED CIRCLING ALL CATS HAA FROM 856 TO 850 - NEW AIRPORT SURVEY SINCE PRIOR PROCEDURE AMENDMENT.
- 9. MOVED BACKUP ALTIMETER NOTES TO GENERAL SECTION OF 8260-9 - PRIMARY AND SECONDARY ALTIMETER ON WMSCR.
- 10. LTP LAT/LONG CHANGED FROM 413022.5105N/0741605.0120W TO 413022.5065N/0741605.0130W - NEW AIRPORT SURVEY SINCE PRIOR PROCEDURE AMENDMENT.
- 11. LTP ELLIPSOIDAL HEIGHT CHANGED FROM 750 TO 305 - NEW AIRPORT SURVEY SINCE PRIOR PROCEDURE AMENDMENT.
- 12. CRC REMAINDER CHANGED FROM 40B4A263 TO CBA984AF - NEW ALPHA NUMERIC GENERATED NUMBER DUE TO CHANGES IN FAS DATA.
- 13. LTP/FPAF ORTHOMETRIC HEIGHT CHANGED FROM 1070 TO 1073 - NEW AIRPORT SURVEY SINCE PRIOR PROCEDURE AMENDMENT.
- 14. CHANGED PROCEDURE ENTRY RESTRICTION NOTE FOR ARRIVALS AT HUO VOR/DME FROM "V273 NORTHWEST BOUND" TO "AIRWAY RADIALS 019 CW 145" - TURNS EXCEED 90 DEGREES.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZNY, ZBW, NY APCH, APT MGR, ATA

FLIGHT CHECKED BY

PENDING

Digitally signed by
JACOB POWERS
Nov 15, 2018

OFFICE

DATE

DEVELOPED BY

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DUSTIN DAVIDSON
Nov 09, 2018

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AJV-5442

DATE

11/01/2018

APPROVED BY

MARLON ROBINSON

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JACOB POWERS
Nov 14, 2018

OFFICE

AJV-5440

DATE

TITLE
MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMGJ
RUNWAY	RW08
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W08A
LTP/FTP LATITUDE	413022.5065N
LTP/FTP LONGITUDE	0741605.0130W
LTP/FTP ELLIPSOIDAL HEIGHT	+00305
FPAP LATITUDE	413058.4300N
FPAP LONGITUDE	0741416.4600W
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	1632
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	CBA984AF

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+01073
FPAP ORTHOMETRIC HEIGHT	+01073



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<u>AIRPORT</u> ORANGE COUNTY	<u>AIRPORT ID</u> KMGJ	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 21	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> MONTGOMERY	<u>STATE</u> NY
<u>AIRPORT ELEVATION</u> 364	<u>TDZE</u> 353	<u>SUPERSEDED</u> RNAV (GPS) RWY 21	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 04/08/2010	<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> 01/03/2019	<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 3 JANUARY 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: 351 HAT: GS ANT:
6. MIN GP INCPT: GP ALT AT FAF : OM: MM: IM:
7. GP ANGLE: 34:1: 20:1: TCH:
8. MSA FROM:

PBN REQUIREMENTS NOTE:

NOTES:

QUALITY
10
CHECKED

ADDITIONAL FLIGHT DATA:

MINIMUMS:

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

ALTERNATE: NA ☐

<u>CATEGORY:</u>	A			B			C			D			E		
<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>

CHANGES - REASONS

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZNY, ZBW, NY APP CON, AIRPORT MANAGER, ATA

FLIGHT CHECKED BY

PENDING

OFFICE

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DEVELOPED BY

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<u>AIRPORT</u> ORANGE COUNTY	<u>AIRPORT ID</u> KMGJ	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 22	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> MONTGOMERY	<u>STATE</u> NY	
<u>AIRPORT ELEVATION</u> 370	<u>TDZE</u> 370	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u> 14W	<u>EPOCH YEAR</u> 2000
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> 01/03/2019	<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>
PRNCE	IAF	NUDUE		TF	FB	1.00	150.17	10.37	5300
NUDUE		ZUMRI		TF	FB	1.00	150.27	10.37	3500
TRESA	IAF	ZUMRI		TF	FB	1.00	251.85	17.61	3500
ZUMRI	IF	DATRR		TF	FB	1.00	216.31	6.00	2800
DATRR	FAF	RW22	MAP	TF	FO	0.30	216.28	7.15	
RW22	MAP	1500 MSL		CA			216.28		1500
1500 MSL		HELON		DF	FO	1.00			5300

MISSED APPROACH

MAP:

LNAV: RW22

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 5300 DIRECT HELON AND HOLD, CONTINUE CLIMB IN HOLD TO 5300.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT ZUMRI

3. FAC: 216.28

FAF: DATRR

DIST FAF TO MAP: 7.15

DIST FAF TO THLD: 7.15

4. MIN ALT: ZUMRI 3500, DATRR 2800

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: RW22 5300

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 22 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PRNCE ON V34-249-483 NORTHWEST BOUND AND T295 WESTBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT TRESA ON V123 NORTHBOUND, V433 SOUTHEAST BOUND, V157 NORTHBOUND, AND T212 EASTBOUND.
CHART NOTE: STRAIGHT-IN RWY 22 NA AT NIGHT, CIRCLING RWY 8, 22, 26 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
DATRR TO RW22: 3.00/52.10.
CHART FAS OBST: 871 TREE 413213N/0741604W.
HOLD NE, RT, 208.86 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ CAT A, B 900-2, CAT C 900-2 1/2, CAT D 900-2 3/4

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
LNAV MDA	1140	1	770	1140	1 1/4	770	1140	2 1/2	770	1140	2 1/2	770			
CIRCLING	1180	1	810	1180	1 1/4	810	1180	2 1/2	810	1220	2 3/4	850			

CHANGES - REASONS



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZNY, ZBW, NYC APP CON, AMGR

FLIGHT CHECKED BY

PENDING

Digitally signed by
JACOB POWERS
Nov 15, 2018

OFFICE

DATE

DEVELOPED BY

DUSTIN R. DAVIDSON

Digitally signed by
DUSTIN DAVIDSON
Nov 09, 2018

OFFICE

AJV-5442

DATE

11/02/2018

APPROVED BY

MARLON ROBINSON

Digitally signed by
JACOB POWERS
Nov 14, 2018

OFFICE

AJV-5440

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> ORANGE COUNTY	<u>AIRPORT ID</u> KMGJ	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 26	<u>ORIGINAL/AMENDMENT</u> 1C	<u>CITY</u> MONTGOMERY	<u>STATE</u> NY
<u>AIRPORT ELEVATION</u> 370	<u>TDZE</u> 361	<u>SUPERSEDED</u> RNAV (GPS) RWY 26	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 08/18/2016	<u>MAG VAR</u> 14W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> 01/03/2019	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

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>
BASYE		GETRE		TF	FB	2.00	330.18	13.25	4000
GETRE	IAF	BUNRE	NOPT	TF	FB	1.00	350.41	5.00	3000
SPECL	IAF	BUNRE	NOPT	TF	FB	1.00	167.77	5.85	3000
BUNRE	IF/IAF	EXEBE		TF	FB	1.00	260.38	4.01	2000
EXEBE		ORNGE		TF	FB	1.00	260.38	2.00	1800
ORNGE	FAF	RW26	MAP	TF	FO	0.30	260.30	4.34	
RW26	MAP	770 MSL		CA			260.30		
770 MSL		WEJTI		DF	FB				
WEJTI		UTULE		TF	FB	1.00	350.16	8.00	
UTULE		HELON		TF	FO	1.00	072.83	8.44	4000

MISSED APPROACH

MAP:

LNAV: RW26

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4000 DIRECT WEJTI AND RIGHT TURN ON TRACK 350.16 TO UTULE AND ON TRACK 072.83 TO HELON AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD E BUNRE, RT, 260.38 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 260.30

FAF: ORNGE

DIST FAF TO MAP: 4.34

DIST FAF TO THLD: 4.34

4. MIN ALT: BUNRE 3000, EXEBE 2000, ORNGE 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 NOT CLEAR

TCH:

8. MSA FROM: RW26 5000

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 26 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BAYSE ON V157 SOUTHEAST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SPECL ON V58-93-167, T216 WESTBOUND.
CHART NOTE: STRAIGHT-IN RWY 26 NA AT NIGHT, CIRCLING RWY 8, 22, 26 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART FAS OBST: 610 TREE 413145N/0741146W.
HOLD NE, RT, 208.86 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ CAT A, B 900-2, CAT C 900-2 1/2, CAT D 900-2 3/4

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
LNAV MDA	920	1	559	920	1	559	920	1 5/8	559	920	1 3/4	559			
CIRCLING	1200	1 1/4	830	1200	1 1/4	830	1200	2 1/2	830	1220	2 3/4	850			



TITLE
MANAGER



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> ORANGE COUNTY	<u>AIRPORT ID</u> KMGJ	<u>PROCEDURE NAME</u> VOR RWY 8	<u>ORIGINAL/AMENDMENT</u> 9A	<u>CITY</u> MONTGOMERY	<u>STATE</u> NY	
<u>AIRPORT ELEVATION</u> 370	<u>TDZE</u> 359	<u>SUPERSEDED</u> VOR RWY 8	<u>ORIGINAL/AMENDMENT</u> 9	<u>DATED</u> 02/16/2006	<u>MAG VAR</u> 11W	<u>EPOCH YEAR</u> 1970
<u>FACILITY</u> HUO	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> 01/03/2019	<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>
HUO VOR/DME	IF	ORGEN INT/9.00 DME					080.00	9.00	2800

MISSED APPROACH

MAP:

6.70 NM AFTER ORGEN INT/HUO 9.00 DME OR AT ZEXAT/15.70 DME FIX

MISSED APPROACH INSTRUCTIONS:

CLIMBING LEFT TURN TO 4000 DIRECT HUO VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- 1. PT** **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
- 2.** HOLD W HUO VOR/DME, RT, 080.00 INBOUND, 4000 FT. IN LIEU OF PT (IAF), MAX 6000.
- 3. FAC:** 080.00 **FAF:** ORGEN INT/9.00 DME **DIST FAF TO MAP:** 6.70 **DIST FAF TO THLD:** 6.70
- 4. MIN ALT:** HUO VOR/DME 4000, ORGEN INT/9.00 DME 2800, ZOGUL/13.00 DME 1220
- 8. MSA FROM:** HUO VOR/DME 045-315 3500, 315-045 3900

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: RWY 8 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: NOPT FOR ARRIVAL ON HUO VOR/DME AIRWAY RADIALS R-207, R-235, AND R-314.
CHART NOTE: STRAIGHT-IN RWY 8 NA AT NIGHT, CIRCLING RWY 8, 22, 26 NA AT NIGHT.



ADDITIONAL FLIGHT DATA:

FAC IS A FLIGHT CHECK VALUE
CHART CIRCLING ICON.
ORGEN TO RW08: 3.39/40.
CHART FAS OBST: 833 TREE 413033N/0741914W.

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

ALTERNATE: NA ☐ CAT A, B 900-2, CAT C 900-2 1/2, CAT D 900-2 3/4

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
S-08	1220	1	861	1220	1 1/4	861	1220	2 1/2	861	1220	2 3/4	861			
CIRCLING	1220	1 1/4	850	1220	1 1/4	850	1220	2 1/2	850	1220	2 3/4	850			
ZOGUL MINIMUMS															
S-08	1160	1	801	1160	1 1/4	801	1160	2 1/2	801	1160	2 3/4	801			
CIRCLING	1200	1 1/4	830	1200	1 1/4	830	1200	2 1/2	830	1220	2 3/4	850			

CHANGES - REASONS

1. UPDATED COMMUNICATION INFORMATION FROM NY APP CON TO NY APP CON, ZBW, ZNY, NYC FPO, AMGR.- UPDATED TO ALIGN WITH OTHER PROCEDURES AT KMGJ.
2. NAMED HUO 13.00 DME FIX ZOGUL - IAW 8260.19H PARA 2-10-5.
3. NAMED HUO 15.70 DME FIX ZEXAT - IAW 8260.19H PARA 2-10-5.
4. ADDED CHART NOTE: STRAIGHT-IN RWY 8 NA AT NIGHT, CIRCLING RWY 8, 22, 26 NA AT NIGHT.- 20:1 PENETRATIONS.
5. ADDED CHART NOTE: RWY 8 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. - 20:1 OBSTACLES IDENTIFIED.
6. ADDED CHART NOTE: VGSI AND DESCENT ANGLE NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). - IAW 8260.19H PARA 8-6-9.
7. ADDED ALTERNATE MINIMUMS: CAT A/B 900-2, CAT C 900-2 1/2, CAT D 2 3/4. - IAW 8260.3D 3-4-1
8. CHANGED CHART PLANVIEW NOTE FROM "NOPT FOR ARRIVAL ON HUO VOR/DME AIRWAY RADIALS 207 CW 314" TO "NOPT FOR ARRIVAL ON HUO VOR/DME AIRWAY RADIALS R-207, R-235, AND R-314" - IAW 8260.19H 8-2-5 G.
9. ADDED CHART CIRCLING ICON - NEW CONTROLLING OBSTACLES WITH NEW CIRCLING RADII.
10. INCREASED S-08 ALL CATS HAT FROM 860 TO 861 - NEW AIRPORT SURVEY SINCE PRIOR PROCEDURE AMENDMENT.
11. INCREASED S-08 ZOGUL FIX MINIMUMS FROM 800 TO 801 - NEW AIRPORT SURVEY SINCE PRIOR PROCEDURE AMENDMENT.
12. DECREASED CIRCLING ALL CATS HAA FROM 855 TO 850 - NEW AIRPORT SURVEY SINCE PRIOR PROCEDURE AMENDMENT.
13. DECREASED ZOGUL CIRCLING CATS A,B,C HAA FROM 835 TO 830 - NEW AIRPORT SURVEY SINCE PRIOR PROCEDURE AMENDMENT.
14. INCREASED CIRCLING CAT D CMDA/HAA FROM 1200/835 TO 1220/850 - NEW CONTROLLING OBSTACLE WITH UPDATED CIRCLING RADIUS.
15. INCREASED CIRCLING CAT A VISIBILITY FROM 1 SM TO 1 1/4 SM - IAW 8260.3D TABLE 3-3-7.
16. INCREASED S-08 ZOGUL MINIMUMS CAT A VISIBILITY FROM 1 SM TO 1 1/4 SM AND CAT C VISIBILITY FROM 2 1/4 SM TO 2 1/2 SM - IAW 8260.3D TABLE 3-3-1.
17. MOVED BACKUP ALTIMETER NOTES TO GENERAL SECTION OF 8260-9 - PRIMARY AND SECONDARY ALTIMETER ON WMSCR.
18. CHANGED MSA AT HUO VOR/DME FROM "045-315 3400, 315-045 4200" TO "045-315 3500, 315-045 3900" - ALIGN WITH ILS OR LOC RWY 4, ORIG.



QUALITY
10
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> STIGLER RGNL	<u>AIRPORT ID</u> KGZL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> STIGLER	<u>STATE</u> OK
<u>AIRPORT ELEVATION</u> 600	<u>TDZE</u> 600	<u>SUPERSEDED</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 07/24/2014	<u>MAG VAR</u> 3E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
FSM VORTAC		JUPEB		TF	FB	2.00	236.18	38.46	3900
MLC VORTAC	IAF	ELKVI	NOPT	TF	FB	2.00	063.10	37.01	3900
JUPEB	IAF	ELKVI	NOPT	TF	FB	1.00	284.77	7.91	3200
ELKVI	IF/IAF	ANIWU		TF	FB	1.00	357.37	5.52	2400
ANIWU	FAF	ZUGEL/2.40 NM TO RW35		TF	FB	0.30	357.21	3.13	
ZUGEL/2.40 NM TO RW35		RW35	MAP	TF	FO	0.30	357.21	2.40	
RW35	MAP	850 MSL		CA			357.21		
850 MSL		HANIG		DF	FO	1.00			3900

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW35

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3900 DIRECT HANIG AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S ELKVI, RT, 357.37 INBOUND, 3900 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 357.21FAF: ANIWUDIST FAF TO MAP: 5.53DIST FAF TO THLD: 5.53

4. MIN ALT: ELKVI 3900, ANIWU 2400, ZUGEL/2.40 NM TO RW35 1400*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.66GS ANT:

6. MIN GP INCPT: 2400GP ALT AT FAF : ANIWU 2400OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 40.0

8. MSA FROM: RW35 3700

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: CIRCLING RWY 17 NA AT NIGHT.
CHART NOTE: RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -21°C OR ABOVE 54°C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON FSM VORTAC AIRWAY RADIALS 168 CW 297.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON MLC VORTAC AIRWAY RADIALS 347 CW 058.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.70 NM TO RW35*
*LNAV ONLY
WAAS CHANNEL #82522
REFERENCE PATH ID: W35A
CHART FAS OBST: 913 TOWER 351458N/0950608W.
HOLD N, RT, 177.30 INBOUND
LTP HAE: 152.2 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	850	1	250	850	1	250		NA			NA				
LNAV/VNAV DA	867	1	267	867	1	267		NA			NA				
LNAV MDA	1180	1	580	1180	1	580		NA			NA				
CIRCLING	1180	1	580	1180	1	580		NA			NA				



CHANGES - REASONS

1. CHANGED LNAV/VNAV DA/HAT FROM " 850/250" TO "867/267" - CHANGE TO CONTROLLING OBSTACLE RAISED DA/HAT.
2. CRC REMAINDER CHANGED FROM "1DD1B1EB" TO "11BC0B95" - CHANGED IN LTP LAT/LONG COORDINATES REVISED CRC REMAINDER.
3. DELETED/COMBINED CHART NOTES INTO CONTINGENCY NOTE: BARO-VNAV NA WHEN USING SALLISAW ALTIMETER SETTING/ VDP NA WHEN USING SALLISAW ALTIMETER SETTING INTO ONE CHART NOTE "BARO-VNAV AND VDP NA WHEN USING SALLISAW ALTIMETER SETTING" - MADE INTO CONTINGENCY NOTE ON BACK OF -9 AND COMBINED.
4. DELETED CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SALLISAW ALTIMETER SETTING AND INCREASE ALL DA 49 FEET, ALL MDA 60 FEET. INCREASE LPV AND LNAV/VNAV ALL CATS VISIBILITY 1/8 MILE - CHANGED TO CONTINGENCY NOTE ON BACK OF -9.
5. CHANGED CHART NOTE FROM "HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA" TO "RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED" - UPDATED CHART NOTE SHOWS DESIGNATED RWY.
6. DELETED CHART NOTE: DME/DME RNP-0.3 NA. - 8260.19H, PARA 1-1-5F(14), REMOVED THE REQUIREMENT FOR THIS NOTE.
7. ADDED EQUIPMENT NOTE "PBN EQUIPMENT REQUIREMENT NOTE: RNP APCH" - EQUIPMENT REQUIREMENTS NOTE APPLIED PER 8260.58A, CHANGE 1.
8. DELETED CHART NOTE "VGSI AND RNAV GLIDEPATH NOT COINCIDENT" - VGSI DATA UNAVAILABLE.
9. REMOVED FAHRENHEIT TEMPERATURES FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -21C (-5F) OR ABOVE 54C (130F). - UPDATED NOTE REFLECTS CHANGES INCORPORATED IN 8260.19H, PARA 8-6-9S.
10. CHANGED MISSED APPROACH "CA" LEG ALTITUDE FROM "849" TO "850" - NEW ALTITUDE REFLECTS LOWEST OF DA/MDA/OR RWY TDZ ELEV + 400 FEET WHICHEVER IS LOWER.
11. ADDED MAX ALTITUDE "6000" TO HOLD-IN-LIEU FIX ELKVI - NEW FORMS NOW SHOW MAXIMUM HOLDING ALTITUDES AT HOLD-IN-LIEU FIXES.
12. CRC REMAINDER CHANGED FROM "1DD181EB" TO "11BC0B95" - DUE TO CHANGE IN LTP/FTP LAT/LONG.

INCORPORATED NOTAM 4/7555 INTO THIS AMENDMENT.

11/1/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 06/29/2018.
1. ADDED TDZE 600 TO 8260-3 PAGE 1

COORDINATED WITH:

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

FLIGHT CHECKED BY

ANTHONY DOMINIC VALLERA

Digitally signed by
DAVID TEFFETELLER
Nov 09, 2018

OFFICE
FIOG

DATE
09/28/2018

DEVELOPED BY

JAMES LAFFERTY

Digitally signed by
DAVID TEFFETELLER
Nov 09, 2018

OFFICE
AJV-5433

DATE
06/29/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
DAVID TEFFETELLER
Nov 09, 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	KGZL
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	351656.1310N
LTP/FTP LONGITUDE	0950538.1125W
LTP/FTP ELLIPSOIDAL HEIGHT	+01522
FPAP LATITUDE	351825.3900N
FPAP LONGITUDE	0950537.7100W
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	1440
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	11BC0B95

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+01828
FPAP ORTHOMETRIC HEIGHT	+01828



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

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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>
WAGONER, OK	HEFNER-EASLEY	3 JANUARY 2019	1

TAKEOFF MINIMUMS:
STANDARD

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 18: TREE, TERRAIN BEGINNING 25 FT FROM DER, 131 FT RIGHT OF CENTERLINE, UP TO 622 FT MSL. TREE, VEHICLES ON ROAD, BEGINNING 39 FT FROM DER, 186 FT LEFT OF CENTERLINE, UP TO 44 FT AGL/641 FT MSL. POLE, TERRAIN BEGINNING 108 FT FROM DER, 146 FT RIGHT OF CENTERLINE, UP TO 627 FT MSL. TREE 187 FT FROM DER, 544 FT RIGHT OF CENTERLINE, 62 FT AGL/657 FT MSL. TREE, WIND INDICATOR, POLE, TERRAIN, VEHICLES ON ROAD, BUILDING BEGINNING 260 FT FROM DER, 150 FT RIGHT OF CENTERLINE, UP TO 60 FT AGL/659 FT MSL. TREE, POLE BEGINNING 545 FT FROM DER, 232 FT RIGHT OF CENTERLINE, UP TO 661 FT MSL. POLE, TREE BEGINNING 691 FT FROM DER, 11 FT LEFT OF CENTERLINE, UP TO 647 FT MSL. TREE, BUILDING BEGINNING 874 FT FROM DER, 272 FT LEFT OF CENTERLINE, UP TO 651 FT MSL. TREES BEGINNING 922 FT FROM DER, 365 FT RIGHT OF CENTERLINE, UP TO 79 FT AGL/672 FT MSL. TREE, POLE BEGINNING 949 FT FROM DER, ON CENTERLINE, UP TO 80 FT AGL/674 FT MSL. TREES BEGINNING 953 FT FROM DER, 2 FT LEFT OF CENTERLINE, UP TO 652 FT MSL. TREES BEGINNING 1315 FT FROM DER, 1 FT LEFT OF CENTERLINE, UP TO 653 FT MSL. TREES BEGINNING 2193 FT FROM DER, 139 FT LEFT OF CENTERLINE, UP TO 83 FT AGL/680 FT MSL.

NOTE: RWY 36: TREES BEGINNING 28 FT FROM DER, 248 FT RIGHT OF CENTERLINE, UP TO 620 FT MSL. TREES BEGINNING 63 FT FROM DER, 363 FT LEFT OF CENTERLINE, UP TO 599 FT MSL. TREES BEGINNING 69 FT FROM DER, 221 FT RIGHT OF CENTERLINE, UP TO 36 FT AGL/630 FT MSL. TREES BEGINNING 284 FT FROM DER, 1 FT RIGHT OF CENTERLINE, UP TO 634 FT MSL. TREES BEGINNING 288 FT FROM DER, 260 FT LEFT OF CENTERLINE, UP TO 602 FT MSL. TREES BEGINNING 449 FT FROM DER, 230 FT LEFT OF CENTERLINE, UP TO 603 FT MSL.

CONTROLLING OBSTACLES:

REMARKS:

<u>FLIGHT INSPECTED BY:</u>	<i>Digitally signed by</i> ROBERT G HAMILTON	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
GARY BELL	Nov 14, 2018	FICO	11/10/18

<u>DEVELOPED BY:</u>	<i>Digitally signed by</i> DAVID A DOWLING	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
DAVID DOWLING	Sep 24, 2018	AJV-5422	08/23/2018

<u>APPROVED BY:</u>	<i>Digitally signed by</i> ROBERT G HAMILTON	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
JULIE MORGAN	Nov 14, 2018	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:
AMGR, ZFW, ZKC, ZME, TULSA APP CON

QUALITY
3
CHECKED

**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>
WAGONER, OK	HEFNER-EASLEY	3 JANUARY 2019	1

CHANGES - REASONS:

1. ADDED RWY 18 TAKEOFF OBSTACLE NOTES - NEW OBSTACLE EVALUATION CONFIRMING PERIODIC REVIEW FINDINGS.
2. UPDATED RWY 36 TAKEOFF OBSTACLE NOTES - NEW OBSTACLE EVALUATION CONFIRMING PERIODIC REVIEW FINDINGS.



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> JIM HAMILTON L B OWENS	<u>AIRPORT ID</u> KCUB	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> COLUMBIA	<u>STATE</u> SC	
<u>AIRPORT ELEVATION</u> 193	<u>TDZE</u> 186	<u>SUPERSEDED</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 09/13/2018	<u>MAG VAR</u> 6W	<u>EPOCH YEAR</u> 1995
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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. 222/30 CW 042/30	NOPT	SKITR	IF/IAF	2700
2. 042/30 CW 132/30		TTROY	IAF	2700
3. 132/30 CW 222/30		DDATA	IAF	3100

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>
DDATA	IAF	SKITR	NOPT	TF	FB	1.00	221.59	8.00	2700
TTROY	IAF	SKITR	NOPT	TF	FB	1.00	041.49	8.00	2700
SKITR	IF/IAF	HIDEE		TF	FB	1.00	311.54	8.00	1800
HIDEE	FAF	ZIXIG/2.00 NM TO RW31		TF	FB	0.30	311.47	2.94	
ZIXIG/2.00 NM TO RW31		RW31	MAP	TF	FO	0.30	311.47	2.00	
RW31	MAP	436 MSL		CA			311.47		
436 MSL		JSSTN		DF	FO	1.00			2700

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW31

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2700 DIRECT JSSTN AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SE SKITR, RT, 311.54 INBOUND, 2700 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 311.47FAF: HIDEEDIST FAF TO MAP: 4.94DIST FAF TO THLD: 4.94

4. MIN ALT: SKITR 2700, HIDEE 1800, ZIXIG/2.00 NM TO RW31 860*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.66GS ANT:

6. MIN GP INCPT: 1800GP ALT AT FAF : HIDEE 1800OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 40.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 31 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -6C OR ABOVE 54C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

CHART: MCENTIRE JNGB, SC
CHART VDP AT 1.23 NM TO RW31*
*LNAV ONLY
WAAS CHANNEL #42742
REFERENCE PATH ID: W31A
CHART FAS OBST: 337 TOWER 335709N/0805745W.
HOLD NW, RT, 131.31 INBOUND
LTP HAE: 25.4 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	436	3/4	250	436	3/4	250	436	3/4	250	436	3/4	250			
LNAV/VNAV DA	494	7/8	308	494	7/8	308	494	7/8	308	494	7/8	308			
LNAV MDA	600	1	414	600	1	414	600	1 1/8	414	600	1 1/8	414			

CHANGES - REASONS

1. CORRECTED SKITR TO HIDEE ALTITUDE FROM 2700 TO 1800; LINE 4 MIN ALT FOR HIDEE FROM 2700 TO 1800 AND LINE 6 GP ALT AT FAF FROM 2700 TO 1800 - 2700 WAS ENTERED IN ERROR WHEN THE ORIGINAL PROCEDURE WAS DEVELOPED.
2. RAISED LPV DA/HAT FROM 411/225 TO 436/250, UPDATED LINE 6 DIST TO THLD FROM "225 HAT: 0.58" TO "250 HAT: 0.66" AND UPDATED CA ALTITUDE FROM 411 MSL TO 436 MSL IN TERMINAL ROUTES - PENETRATION IN THE LPV FINAL.
3. CHANGED VAL FROM 35 TO 50 CRC REMAINDER FROM "57D3A81E" TO "A82C8533" - LPV HAT OF 250 OR GREATER REQUIRES A VAL OF 50



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZJX, CAE APCH CON, ARPT MNGR

FLIGHT CHECKED BY

JAMES HAWLEY

Digitally signed by
DONALD H LANIER

Nov 26, 2018

OFFICE

FICO

DATE

11/20/2018

DEVELOPED BY

DONALD H. LANIER (JACOB MAXFIELD)

Digitally signed by
DONALD H LANIER

Nov 26, 2018

OFFICE

AJV-5431

DATE

08/23/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
DONALD H LANIER

Nov 26, 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	KCUB
RUNWAY	RW31
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	335801.5490N
LTP/FTP LONGITUDE	0805922.4620W
LTP/FTP ELLIPSOIDAL HEIGHT	+00254
FPAP LATITUDE	335853.2770N
FPAP LONGITUDE	0810049.7730W
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	1344
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	A82C8533
<u>ADDITIONAL PATH POINT RECORD INFORMATION</u>	
ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00566
FPAP ORTHOMETRIC HEIGHT	+00566



FEDERAL AVIATION ADMINISTRATION
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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> CANYONLANDS FIELD	<u>AIRPORT ID</u> KCNV	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 3	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> MOAB	<u>STATE</u> UT
<u>AIRPORT ELEVATION</u> 4590	<u>TDZE</u> 4558	<u>SUPERSEDED</u> RNAV (GPS) RWY 3	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 03/31/2016	<u>MAG VAR</u> 10E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
ARCHH		HANOG		TF	FO	2.00	231.00	21.98	8100
PIGSE	IAF	HANOG	NOPT	TF	FB	1.00	347.79	10.49	8100
KIDNE	IAF	HANOG	NOPT	TF	FB	1.00	071.83	8.41	8100
HANOG	IF/IAF	NERRI		TF	FB	1.00	045.72	6.01	7200
NERRI	FAF	FELTA/3.60 NM TO FOGUG		TF	FB	0.30	044.33	2.89	
FELTA/3.60 NM TO FOGUG		FATPU/2.30 NM TO FOGUG		TF	FB	0.30	044.33	1.30	
FATPU/2.30 NM TO FOGUG		FOGUG	MAP	TF	FO	0.30	044.33	2.30	
FOGUG	MAP	4990 MSL		CA			044.33		
4990 MSL		HANOG		DF	FO				8100

MISSED APPROACH

MAP:

LP: FOGUG
 LNAV: FOGUG

MISSED APPROACH INSTRUCTIONS:

CLIMBING LEFT TURN TO 8100 DIRECT HANOG AND HOLD, CONTINUE CLIMB-IN-HOLD TO 8100.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SW HANOG, RT, 045.72 INBOUND, 8100 FT. IN LIEU OF PT (IAF), MAX 12000.

3. FAC:

044.33

FAF: NERRI

DIST FAF TO MAP: 6.49

DIST FAF TO THLD: 7.10

4. MIN ALT: HANOG 8100, NERRI 7200, FELTA/3.60 NM TO FOGUG 6120, FATPU/2.30 NM TO FOGUG 5660

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: FOGUG 13500

PBN REQUIREMENTS NOTES:

RNP APCH

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 15 AND 33.
CHART NOTE: RWY 3 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: PROCEDURE NOT AUTHORIZED WHEN R-6413 IN OPERATION.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PIGSE ON V244 EASTBOUND.
CHART PLANVIEW NOTE: FINAL APPROACH COURSE OFFSET 14.53 DEGREES.

ADDITIONAL FLIGHT DATA:

FINAL SEGMENT (TF)
CHART CIRCLING ICON.
NERRI TO RW03: 3.46/40.
FICTITIOUS THRESHOLD POINT (CFDVS) DO NOT CHART.
CHART R-6413
CHART VDP AT 1.70 NM TO FOGUG
WAAS CHANNEL #93642
REFERENCE PATH ID: W03A
CHART FAS OBST: 5090 BUSH 384338N/1094819W.
5529 AAO 384245N/1095011W.
FAC CROSSES RWY C/L EXTENDED 3800 FT FROM THLD.
FTP HAE: 1367.5 M

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
LP MDA	5340	1	782	5340	1 1/4	782	5340	2 1/2	782	5340	2 1/2	782			
LNAV MDA	5340	1	782	5340	1 1/4	782	5340	2 1/2	782	5340	2 1/2	782			
CIRCLING	5660	1	1070	5660	1 1/4	1070	5720	3	1130	6220	3	1630			



AIRPORT	AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	CITY	STATE
CANYONLANDS FIELD	KCNY	RNAV (GPS) RWY 3	1	MOAB	UT

CHANGES - REASONS

- MAG/VAR CHANGED FROM E15/1975 TO E10/2020 - BRING WITHIN STANDARDS.
- TERMINAL ROUTES ARCHI, PIGSE, AND KIDNE TO HANOG COURSES INCREASED 5 DEGREES - MAG/VAR UPDATE.
- TERMINAL ROUTES ARCHI, PIGSE, AND KIDNE TO HANOG ALTITUDES INCREASED FROM 7700 TO 8100 - RAISED TO MIN ALT FOR IF.
- MIN ALT AT HANOG RAISED FROM 7700 TO 8100 - FPT REQUEST.
- INTERMEDIATE TERMINAL ROUTE (HANOG TO NERRI) AND HOLDING AT HANOG COURSE CHANGED FROM 039.35 TO 045.72 - FPT REQUEST TO FACILITATE ALIGNMENT FOLLOWING NEW RWY CONSTRUCTION.
- FINAL COURSE ALIGNMENT FROM FAF TO MAP CHANGED FROM 039.41 TO 044.33; NERRI, FELTA, AND FATPU MOVED - FPT REQUEST TO FACILITATE NEW RWY CONSTRUCTION.
- MIN ALT'S CHANGED: FELTA FROM 6180 TO 6120; FATPU FROM 5780 TO 5660 - CORRESPOND WITH FINAL COURSE CHANGE AND VDA CHANGING.
- MAP CHANGED FROM RW03 TO FOGUG, FAC OFFSET 14.53 DEGREES - FPT REQUEST TO FACILITATE NEW RWY CONSTRUCTION.
- MISSED APPROACH ALTITUDE INCREASED FROM 7700 TO 8100, CLIMB IN HOLD ADDED TO INSTRUCTIONS - FPT REQUEST.
- VDA CHANGED FROM 3.74 TO 3.46 - CORRESPOND WITH FINAL COURSE CHANGE, MIN ALTITUDES CHANGING, AND RWY THRESHOLD CHANGE.
- DIST FAF TO MAP/THLD CHANGED FROM 7.02/7.02 TO 6.49/7.10 - MAP CHANGED AND RWY THRESHOLD CHANGED.
- MSA CHANGED FROM THLD/13600 TO FOGUG/13500 - MAP CHANGED AND CONTROLLING OBSTACLE.
- LNAV MDA/HAT CHANGED FROM 5380/829 TO 5340/782 - CONTROLLING OBSTACLE AND THRE CHANGED.
- LNAV CAT D VISIBILITY CHANGED FROM 2 3/4 TO 2 1/2 - CORRESPOND WITH LOWERING MDA.
- ADDED LP MINMIUMS - FPT REQUEST.
- CIRCLING MDA/HAA CHANGED: CAT A/B FROM 5380/825 TO 5660/1070; CAT C FROM 5380/825 TO 5720/1130; CAT D FROM 5440/885 TO 6220/1630 - CONTROLLING OBSTACLES, STRAIGHT IN ADJUSTMENTS, APT ELEV CHANGED, AND APPLIED NEW CIRCLING CRITERIA.
- APT ELEV/TDZE CHANGED FROM 4557/4557 TO 4590/4558 - NEW APT SURVEY.
- REPLACED DME/DME RNP-0.3 NA NOTE WITH RNP APCH NOTE - PBN REQUIREMNTS.
- ADDED CIRCLING NA TO RWY 15/33 NOTE - UNSUITABLE SURFACE FOR CIRCLING PER FPT.
- UPDATED HELICOPTER VISIBILITY REDUCTION NOTE - NEW REQUIRED FORMAT.
- ADDED PROCEDURE ENTRY NA FOR ARRIVALS AT PIGSE NOTE IN PLANVIEW - EXCESSIVE TURN.
- ADDED FAC OFFSET PLANVIEW NOTE - INFORMATIONAL REQUIREMENT NOTE FOR PILOTS.
- CHARTED CIRCLING ICON - NEW CIRCLING DIMENSIONS APPLIED.



<u>AIRPORT</u> CANYONLANDS FIELD	<u>AIRPORT ID</u> KCNY	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 3	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> MOAB	<u>STATE</u> UT
<u>COORDINATED WITH:</u>					
A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZDV, ARPT MGR					
<u>FLIGHT CHECKED BY</u> GREG BAUR Aug 03, 2018		<u>OFFICE</u> FICO		<u>DATE</u> 7/13/18	
<u>DEVELOPED BY</u> KELLY DEAN Jun 13, 2018		<u>OFFICE</u> AJV-5431		<u>DATE</u> 05/01/2018	
<u>APPROVED BY</u> PATRICK MULQUEEN Aug 03, 2018		<u>OFFICE</u> AJV-5430		<u>TITLE</u> MANAGER	



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCNY
RUNWAY	RW03
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W03A
LTP/FTP LATITUDE	384447.3620N
LTP/FTP LONGITUDE	1094534.8160W
LTP/FTP ELLIPSOIDAL HEIGHT	+13675
FPAP LATITUDE	384539.2555N
FPAP LONGITUDE	1094402.1830W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.46
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	60BA7118
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+13882
FPAP ORTHOMETRIC HEIGHT	+13882



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

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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
MOAB, UT	CANYONLANDS FIELD	3 JANUARY 2019	4

TAKEOFF MINIMUMS:

RWY 15, 33: NA - RUNWAY SURFACE

RWY 3: STANDARD WITH MINIMUM CLIMB OF 405 FEET PER NM TO 6100 OR 5000-3 FOR VCOA.

RWY 21: STANDARD WITH MINIMUM CLIMB OF 456 FEET PER NM TO 6100 OR 5000-3 FOR VCOA.

TEXTUAL DEPARTURE PROCEDURES:

RWY 3: CLIMBING LEFT TURN TO 6700 ON OAB R-298, THENCE...

RWY 21: CLIMBING RIGHT TURN TO 6700 ON OAB R-298, THENCE...

...CLIMBING RIGHT TURN TO 10,000 DIRECT OAB VOR/DME. CONTINUE CLIMB IN HOLDING TO 10,000 AT OAB VOR/DME (NW, LT, 118 INBOUND) BEFORE PROCEEDING ON COURSE.

VISUAL CLIMB OVER AIRPORT:

RWY 3, 21: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS CANYONLANDS FIELD AT OR ABOVE 9400 BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 03, TERRAIN 46 FT FROM DER, 484 FT RIGHT OF CENTERLINE, 4559 FT MSL. TREE 63 FT FROM DER, 481 FT LEFT OF CENTERLINE, 4564 FT MSL. TREE 86 FT FROM DER, 509 FT LEFT OF CENTERLINE, 4565 FT MSL. ELECTRICAL SYSTEM 135 FT FROM DER, 529 FT RIGHT OF CENTERLINE, 34 FT AGL/4595 FT MSL. TRANSMISSION LINE 1108 FT FROM DER, 589 FT RIGHT OF CENTERLINE, 51 FT AGL/4596 FT MSL.

TRANSMISSION LINE 1786 FT FROM DER, 606 FT LEFT OF CENTERLINE, 50 FT AGL/4603 FT MSL. TERRAIN 1.5 NM FROM DER, 1600 FT RIGHT OF CENTERLINE, 4827 FT MSL. TERRAIN 2.5 NM FROM DER, 1185 FT LEFT OF CENTERLINE, 4990 FT MSL.

NOTE: RWY 21, BUSH BEGINNING 60 FT FROM DER, 79 FT LEFT OF CENTERLINE, UP TO 10 FT AGL/4581 FT MSL. BUSH BEGINNING 132 FT FROM DER, 65 FT RIGHT OF CENTERLINE, UP TO 10 FT AGL/4597 FT MSL. POLE 1658 FT FROM DER, 128 FT LEFT OF CENTERLINE, 85 FT AGL/4625 FT MSL. POLE 1710 FT FROM DER, 319 FT RIGHT OF CENTERLINE, 4602 FT MSL. POLE 1827 FT FROM DER, 831 FT RIGHT OF CENTERLINE, 4623 FT MSL. BUSH 1.5 NM FROM DER, 2256 FT LEFT OF CENTERLINE, 10 FT AGL/4797 FT MSL. BUSH BEGINNING 1.9 NM FROM DER, 3289 FT RIGHT OF CENTERLINE, UP TO 4868 FT MSL. TERRAIN 1.9 NM FROM DER, 2742 FT RIGHT OF CENTERLINE, 4899 FT MSL. TRAVERSE WAY BEGINNING 2 NM FROM DER, 39 FT LEFT OF CENTERLINE, UP TO 10 FT AGL/4984 FT MSL. TRAVERSE WAY BEGINNING 2.1 NM FROM DER, 297 FT LEFT OF CENTERLINE, UP TO 10 FT AGL/4994 FT MSL. TREES BEGINNING 2.1 NM FROM DER, 91 FT LEFT OF CENTERLINE, UP TO 10 FT AGL/5014 FT MSL.

CONTROLLING OBSTACLES:

RWY 3: 5410 FEET MSL AAO 384927.00N/1094403.00W

RWY 21: 5590 FEET MSL AAO 384318.00N/1094936.00W

RWY 3, 21 (VCOA): 12838 FEET MSL AAO 382748.00N/1091403.00W

OBSTACLE MANDATING ROUTE DEVELOPMENT: RWY 3, 21 - 12838 FEET MSL AAO 382748.00N/1091403.00W

REMARKS:

RWY 3 ICA OCS HEIGHT: 4861.61 RWY 21 ICA OCS HEIGHT: 4856.61

6700 - 4861.61 = 1838.39 x 0.76 = 1397.18 (40:1 SFC) + 4861.61 (RWY 3 OIS) = 6258.79 (WORST CASE 40:1 SFC AT OAB)

230K HOLDING PATTERN (9) CONTROLLING OBSTACLE: 6086 AAO 385833.00N/1095136.00W PR ADJ = 120 (OIS IS CLEAR FROM CLIMB TO 6700)

310K HOLDING PATTERN (15) CONTROLLING OBSTACLE: 7425 AAO 390321.00N/1095051.00W PR ADJ = 250

OAB VOR/DME TO CIH OBST IS 18.54 NM - 1 NM (FIX ERROR AT OAB) = 17.54 / 40 = 2664.38 (40:1 OIS) + 6258.79 (OIS AT OAB) = 8923.17 (40:1 SFC FROM OAB VOR/DME IS CLEAR)

FLIGHT INSPECTED BY:

Digitally signed by
DAVID TEFFETELLER

JAMES KRENEK

Nov 13, 2018

OFFICE SYMBOL:

FICO

DATE:

7/27/18

DEVELOPED BY:

KELLY DEAN

KELLY D DEAN *Digitally signed by KELLY D DEAN
Date: 2018.05.03 07:27:15 -05'00'*

OFFICE SYMBOL:

AJV-5431

DATE:

05/03/2018

APPROVED BY:

PATRICK MULQUEEN

Digitally signed by
DAVID TEFFETELLER

Nov 13, 2018

OFFICE SYMBOL:

AJV-5430

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE



**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.

CITY, STATE

MOAB, UT

AIRPORT

CANYONLANDS FIELD

EFFECTIVE DATE

3 JANUARY 2019

AMDT NO

4

COORDINATED WITH:

A4A

ALPA

AOPA

APA

HAI

NBAA

☐☒☒☒☐☒

OTHER:

ZDV, ARPT MGR

CHANGES - REASONS:

1. ADDED RWY 15/33 NA - PER FPT RWY SURFACES DO NOT PERMIT IFR DEPARTURES.
2. CHANGED RWY 3 TAKEOFF MINIMUMS FROM "STD WITH MIN CLIMB OF 320 TO 5800" TO "STD WITH MIN CLIMB OF 430 TO 6100 OR 5000-3 FOR VCOA" - OBSTACLE EVAL AND VCOA REQUIRED BY CRITERIA.
3. CHANGED RWY 21 TAKEOFF MINIMUMS FROM "STD WITH MIN CLIMB OF 330 TO 5400" TO "STD WITH MIN CLIMB OF 456 TO 6100 OR 5000-3 FOR VCOA" - OBSTACLE EVAL AND VCOA REQUIRED BY CRITERIA.
4. DEPARTURE PROCEDURE OAB R-293 CHANGED TO R-298 - MAG/VAR UPDATE.
5. ADDED CLIMBING TO 10,000 IN ROUTING OF DEPARTURE PROCEDURE VERBIAGE - PREVENT UNINTENDED LEVEL OFF AT 6700 PRIOR TO OAB VOR/DME.
6. ADDED VCOA TO PROCEDURE - CEILING AND VIS NOT PUBLISHED IN TAKEOFF MINIMUMS.
7. UPDATED TAKEOFF NOTES - CONTROLLING OBSTACLES EVALUATED BY AUTOMATION.



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR 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.
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<u>AIRPORT</u> CANYONLANDS FIELD	<u>AIRPORT ID</u> KCNV	<u>PROCEDURE NAME</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> 11	<u>CITY</u> MOAB	<u>STATE</u> UT
<u>AIRPORT ELEVATION</u> 4590	<u>TDZE</u>	<u>SUPERSEDED</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> 10B	<u>DATED</u> 03/31/2016	<u>MAG VAR</u> 10E
<u>FACILITY</u> OAB	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
EDLES/HVE VORTAC 39.00 DME		OAB VOR/DME					052.43	10.15	8100
ARCHH/JNC VOR/DME 40.00 DME		OAB VOR/DME					241.90	8.38	8000
ANIUM INT/HVE VORTAC 43.60 DME		OAB VOR/DME					354.00	18.17	8600

MISSED APPROACH

MAP:

OAB VOR/DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 6500 THEN CLIMBING LEFT TURN TO 8600 DIRECT OAB VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 8600.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L **SIDE OF COURSE** 298.00 **OUTBOUND** 7000 **FT WITHIN** 10 **MILES OF** OAB VOR/DME (IAF)
- 2.
3. **FAC:** 118.00 **FAF:** HOMIG/OAB 4.00 DME **DIST FAF TO MAP:** 4.00 **DIST FAF TO THLD:**
4. **MIN ALT:** HOMIG/OAB 4.00 DME 5900
8. **MSA FROM:** OAB VOR/DME 055-145 13600, 145-235 7600, 235-325 8600, 325-055 10800

EQUIPMENT REQUIREMENTS NOTES:

EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED..

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 15 AND 33.

CHART NOTE: PROCEDURE NOT AUTHORIZED WHEN R-6413 IN OPERATION.

ADDITIONAL FLIGHT DATA:



AIRPORT

CANYONLANDS FIELD

AIRPORT ID

KCNY

PROCEDURE NAME

VOR-A

ORIGINAL/AMENDMENT

11

CITY

MOAB

STATE

UT

CHART 7100 PRIOR TO OAB VOR/DME IN PROFILE.
CHART CIRCLING ICON.
CHART R-6413
FAS OBST: 4839 AAO 384838N/1094801W.
HOLD NW, LT, 118.00 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	5160	1	570	5200	1	610	5720	3	1130	6220	3	1630			

CHANGES - REASONS

1. MAG/VAR CHANGED FROM E15 EPOCH 1975 TO E10 EPOCH 2020 - MAG/VAR ALIGNMENT.
2. EDLES FEEDER COURSE CHANGED FROM 47 TO 52 - MAG/VAR CHANGE.
3. ARCHH FEEDER COURSE CHANGED FROM 237TO 242 - MAG/VAR CHANGE.
4. ANIUM FEEDER COURSE CHANGED FROM 349 TO 354 - MAG/VAR CHANGE.
5. PT OUTBOUND COURSE CHANGED FROM 293 TO 298 - MAG/VAR CHANGE.
6. FAC CHANGED FROM 113 TO 118 - MAG/VAR CHANGE.
7. CHANGED PROCEDURE FROM VOR NO-FAF TO VOR FAF TYPE PROCEDURE - ADDED FAF (HOMIG/4.00 DME) AT 5900 FT PER FPT REQUEST.
8. MSA RADIALS FROM OAB VOR/DME ALL INCREASED BY 5 DEGREES - MAG/VAR UPDATED.
9. MDA/HAA'S CHANGED: CAT A FROM 550/945 TO 5160/570; CAT B FROM 5500/945 TO 5200/610; CAT C FROM 5500/945 TO 5720/1130; AND CAT D FROM 5500/945 TO 6220/1630 - VEGETATION HEIGHT CHANGED FROM 50 TO 10 FT AND APPLIED NEW CIRCLING CRITERIA.
10. VISIBILITIES CHANGED: CATS A/B FROM 1 1/4 TO 1, AND CAT C FROM 2 3/4 TO 3 - CORRESPOND WITH MDA CHANGE.
11. ADDED DME EQUIPMENT NOTE - DME REQUIRED FOR FAF.
12. MISSED APPROACH CHANGED: CLIMB ALTITUDE CHANGED FROM 6100 TO 6500, TURN CHANGED FROM RIGHT TURN TO LEFT TURN, CLIMB TO AND HOLDING ALTITUDE FROM 7100 TO 8600 - CLEAR PENETRATION, FPT REQUEST, AND CIH OBSTACLE.
13. CHARTED CIRCLING ICON - APPLIED NEW CIRCLING CRITERIA.
14. ADDED BACKUP ALTIMETER SOURCE - CAPABILITY TO PROVIDE MINIMUMS BY NOTAM.
15. ADDED CIRCLING NA TO RWYS 15/33 NOTE - NEW DIRT RUNWAYS NA PER FPT.
16. UPDATED 7100 MIN ALTITUDE FOR PT ENTRY NOTE - APPLIED NEW STANDARD NOTE FORMAT PER 8260.19H 8-6-7A2.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZDV, APT MGR

FLIGHT CHECKED BY

THOMAS E MOLOKIE

DEVELOPED BY

KELLY DEAN

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

DONALD H LANIER

Aug 20, 2018

Digitally signed by

KELLY D DEAN

Jun 12, 2018

Digitally signed by

DONALD H LANIER

Aug 20, 2018

OFFICE

FICO

AJV-5431

AJV-5430

DATE

11/8/18

04/30/2018

TITLE

MANAGER

FAA Form 8260-5 (11/16) Supersedes Previous Edition

Electronic Version

Page 2 of 2

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> SPANISH FORK ARPT SPRINGVILLE- WOODHOUSE FIELD	<u>AIRPORT ID</u> KSPK	<u>PROCEDURE NAME</u> RNAV (GPS)-A	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> SPANISH FORK	<u>STATE</u> UT
<u>AIRPORT ELEVATION</u> 4530	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u> 11E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
VERNE	IAF	UKROY	NOPT	TF	FB	1.00	083.22	19.32	9600
FRNZY	IAF	UKROY	NOPT	TF	FB	1.00	013.21	12.68	9600
UKROY	IF/IAF	ZAMUX		TF	FB	1.00	083.49	5.49	7800
ZAMUX		NEVME		TF	FB	1.00	083.55	4.29	6800
NEVME	FAF	OGXIB	MAP	TF	FO	0.30	083.62	5.00	
OGXIB	MAP	4930 MSL		CA			083.62		
4930 MSL		VERNE		DF	FO	1.00			11500

MISSED APPROACH

MAP:

OGXIB

MISSED APPROACH INSTRUCTIONS:

(DO NOT EXCEED 185 KIAS UNTIL TURN COMPLETION) CLIMBING RIGHT TURN TO 11500 DIRECT VERNE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD W UKROY, RT, 083.49 INBOUND, 9600 FT. IN LIEU OF PT (IF/IAF), MAX 17500.

3. FAC: 083.62

FAF: NEVME

DIST FAF TO MAP: 5.00

DIST FAF TO THLD:

4. MIN ALT: UKROY 9600, ZAMUX 7800, NEVME 6800

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:

20:1:

TCH:

8. MSA FROM: OGXIB 13200

PBN REQUIREMENTS NOTES:

RNP APCH.

NOTES:

CHART NOTE: USE PROVO ALTIMETER SETTING. WHEN NOT RECEIVED USE NEPHI ALTIMETER SETTING: INCREASE ALL MDAS 120 FT.
CHART R6412.
CHART SEVIER MOA.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT VERNE ON V57 SOUTHBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT FRNZY ON V21-235 SOUTHBOUND.

ADDITIONAL FLIGHT DATA:

FAC CROSSES MIDPOINT OF RWY 12/30.
CHART PROVO MUNI AWOS-3.
CHART CIRCLING ICON.
FAS OBST: 4699 AAO 400830N/1114500W.
HOLD S, RT, 342.02 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	6360	1 1/4	1830	6360	1 1/2	1830	6360	3	1830		NA				

CHANGES - REASONS



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ARPT MGR, ZLC, SLC APP CON

FLIGHT CHECKED BY

DANIEL C FAVORITE

DEVELOPED BY

CARLOS J. ESCALANTE

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
CARLOS J ESCALANTE
May 10, 2018

Digitally signed by
DAVID TEFFETELLER
Nov 06, 2018

OFFICE

FICO

OFFICE

AJV-5433

OFFICE

AJV-5430

Digitally signed by
DAVID TEFFETELLER
Nov 06, 2018

DATE

10/28/18

DATE

03/07/2018

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> SPANISH FORK ARPT SPRINGVILLE- WOODHOUSE FIELD	<u>AIRPORT ID</u> KSPK	<u>PROCEDURE NAME</u> RNAV (GPS) Y RWY 12	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> SPANISH FORK	<u>STATE</u> UT
<u>AIRPORT ELEVATION</u> 4530	<u>TDZE</u> 4527	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u> 11E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
VERNE		JUKOM		TF	FB	2.00	046.42	21.69	12400
JUKOM	IAF	OCACE		TF	FB	1.00	079.07	5.49	9500
JAURN	IAF	OCACE		TF	FB	1.00	148.18	6.29	9500
OCACE	IF	YALVU		TF	FB	1.00	137.40	11.25	6600
YALVU	FAF	RW12	MAP	TF	FO	0.30	121.29	6.34	
RW12	MAP	4930 MSL		CA			121.29		
4930 MSL		VERNE		DF	FO	1.00			11500

MISSED APPROACH

MAP:

LP: RW12
 LNAV: RW12

MISSED APPROACH INSTRUCTIONS:

(DO NOT EXCEED 185 KIAS UNTIL TURN COMPLETION) CLIMBING RIGHT TURN TO 11500 DIRECT VERNE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. PROFILE STARTS AT OCACE
3. FAC:

121.29

FAF: YALVU

DIST FAF TO MAP: 6.34

DIST FAF TO THLD: 6.34
4. MIN ALT: OCACE 9500, YALVU 6600
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: RW12 13200

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 12 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: USE PROVO ALTIMETER SETTING; WHEN NOT RECEIVED USE NEPHI ALTIMETER SETTING: INCREASE ALL MDAS 120 FT.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT VERNE ON V257 SOUTHBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT JAURN ON V21 NORTHBOUND.

CHART SPEED ICON IN PLANVIEW AT VERNE: MAX 210 KIAS.
CHART SPEED ICON IN PLANVIEW AT OCACE: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

CHART FAS OBST: 4612 TREE 400845N/1114051W
CHART PROVO MUNI AWOS-3.
CHART R-6412 A/B/C/D.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART CIRCLING ICON.
WAAS CHANNEL #78042
REFERENCE PATH ID: W12A
CHART FAS OBST: 4584 TREE 400931N/1114119W.
HOLD S, RT, 342.02 INBOUND
LTP HAE: 1361.4 M

MINIMUMS:

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

ALTERNATE: NA

X

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	6040	1 1/4	1513	6040	1 1/2	1513	6040	3	1513	6040	3	1513			
LNAV MDA	6140	1 1/4	1613	6140	1 1/2	1613	6140	3	1613	6140	3	1613			
CIRCLING	6180	1 1/4	1650	6180	1 1/2	1650	6180	3	1650		NA				

QUALITY
4
CHECKED

CHANGES - REASONS

10/30/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 03/27/18.
1. VDA ANGLE AND TCH REMOVED PER FLIGHT CHECK, PROFILE NOTE ADDED, VISUAL SEGMENT - OBSTACLES.
2. CRC CHANGED FROM 7AE78255 TO 5F39408E.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZLC, SLC APP CON, APT MGR

FLIGHT CHECKED BY

BRIAN ROBERT HANSEN

<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>
DAVID TEFFETELLER	FIOG	08/25/2018
Nov 01, 2018		

DEVELOPED BY

CARLOS J. ESCALANTE

<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>
DAVID TEFFETELLER	AJV-5433	03/27/2018
Nov 01, 2018		

APPROVED BY

PATRICK MULQUEEN

<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
DAVID TEFFETELLER	AJV-5430		MANAGER
Nov 01, 2018			



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSPK
RUNWAY	RW12
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W12A
LTP/FTP LATITUDE	400903.7305N
LTP/FTP LONGITUDE	1114034.6020W
LTP/FTP ELLIPSOIDAL HEIGHT	+13614
FPAP LATITUDE	400803.6450N
FPAP LONGITUDE	1113908.7580W
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	0768
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	5F39408E
<u>ADDITIONAL PATH POINT RECORD INFORMATION</u>	
ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+13789
FPAP ORTHOMETRIC HEIGHT	+13789



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> SPANISH FORK ARPT SPRINGVILLE- WOODHOUSE FIELD	<u>AIRPORT ID</u> KSPK	<u>PROCEDURE NAME</u> RNAV (GPS) Z RWY 12	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> SPANISH FORK	<u>STATE</u> UT
<u>AIRPORT ELEVATION</u> 4530	<u>TDZE</u> 4527	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u> 11E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
VERNE		JUKOM		TF	FB	2.00	046.42	21.69	12400
JUKOM	IAF	OCACE		TF	FB	1.00	079.07	5.49	9500
JAURN	IAF	OCACE		TF	FB	1.00	148.18	6.29	9500
OCACE	IF	YALVU		TF	FB	1.00	137.40	11.25	6600
YALVU	FAF	RW12	MAP	TF	FO	0.30	121.29	6.34	
RW12	MAP	5000 MSL		CA			121.29		5000
5000 MSL		VERNE		DF	FO	1.00			11500

MISSED APPROACH

MAP:

LP: RW12
 LNAV: RW12

MISSED APPROACH INSTRUCTIONS:

(DO NOT EXCEED 185 KIAS UNTIL TURN COMPLETION) CLIMB TO 5000, THEN CLIMBING RIGHT TURN TO 11500 DIRECT VERNE AND HOLD. *MISSED APPROACH REQUIRES MINIMUM CLIMB OF 380 FEET PER NM TO 7700; IF UNABLE TO MEET CLIMB GRADIENT, SEE RNAV (GPS) Y RWY 12.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. PROFILE STARTS AT OCACE
3. FAC:

121.29

FAF: YALVU

DIST FAF TO MAP: 6.34

DIST FAF TO THLD: 6.34
4. MIN ALT: OCACE 9500, YALVU 6600
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: RW12 13200

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: USE PROVO ALTIMETER SETTING; WHEN NOT RECEIVED USE NEPHI ALTIMETER SETTING: INCREASE ALL MDAS 120 FT.
CHART PLANVIEW NOTE AT RW12: MAX 185 KIAS.
CHART NOTE: RWY 12 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT VERNE ON V257 SOUTHBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT JAURN ON V21 NORTHBOUND.
CHART SPEED ICON IN PLANVIEW AT OCACE: MAX 210 KIAS.
CHART SPEED ICON IN PLANVIEW AT VERNE: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

CHART 4676 AAO 401248N/1114803W.
CHART PROVO MUNI AWOS-3.
CHART R-6412 A/B/C/D.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
WAAS CHANNEL #82342
REFERENCE PATH ID: W12B
CHART FAS OBST: 4584 TREE 400931N/1114119W, 4612 TREE 400845N/1114051W.
HOLD S, RT, 342.02 INBOUND
LTP HAE: 1361.4 M

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
LP MDA	4880	1	353	4880	1	353	4880	1	353	4880	1	353			
LNAV MDA*	4900	1	373	4900	1	373	4900	1	373	4900	1	373			

CHANGES - REASONS

- 10/30/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 03/30/18.
- VDA ANGLE AND TCH REMOVED PER FLIGHT CHECK, PROFILE NOTE ADDED, VISUAL SEGMENT - OBSTACLES.
 - CRC CHANGED FROM 22D73E12 TO 0709FCC9



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZLC, SLC APP CON, ARPT MGR

FLIGHT CHECKED BY

BRIAN ROBERT HANSEN

Digitally signed by
DAVID TEFFETELLER
Nov 01, 2018

OFFICE

FIOG

DATE

08/25/2018

DEVELOPED BY

CARLOS J. ESCALANTE

Digitally signed by
DAVID TEFFETELLER
Nov 01, 2018

OFFICE

AJV-5433

DATE

03/30/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
DAVID TEFFETELLER
Nov 01, 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	KSPK
RUNWAY	RW12
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Z
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W12B
LTP/FTP LATITUDE	400903.7305N
LTP/FTP LONGITUDE	1114034.6020W
LTP/FTP ELLIPSOIDAL HEIGHT	+13614
FPAP LATITUDE	400803.6450N
FPAP LONGITUDE	1113908.7580W
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	0768
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	0709FCC9

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+13789
FPAP ORTHOMETRIC HEIGHT	+13789



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

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<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
SPANISH FORK	ONE	SPK1.FFU		NONE	3 JANUARY 2019

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

DP ROUTE DESCRIPTION:

TAKEOFF RWY 12: CLIMBING RIGHT TURN TO 11500 ON HEADING 320.00 AND PVU VOR/DME R-230 TO CALUB INT/PVU 10.51 DME, DO NOT EXCEED 240 KIAS UNTIL CALUB INT/PVU 10.51 DME, THENCE...

TAKEOFF RWY 30: CLIMBING LEFT TURN TO 11500 TO INTERCEPT PVU VOR/DME R-230 TO CALUB INT/PVU 10.51 DME, THENCE...

...CLIMBING RIGHT TURN ON FFU R-160 TO FFU VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO CROSS FFU VORTAC AT MCA/MEA FOR ROUTE OF FLIGHT.

VCOA RWY 12, 30: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS SPANISH FORK ARPT SPRINGVILLE-WOODHOUSE FIELD AT OR ABOVE 11200 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>

PROCEDURAL DATA NOTES:

TAKEOFF MINIMUMS:

RWY 12: STANDARD WITH A MINIMUM CLIMB OF 455 FEET PER NM TO 7100, OR 6800-5 FOR CLIMB IN VISUAL CONDITIONS.

RWY 30: STANDARD WITH A MINIMUM CLIMB OF 298 FEET PER NM TO 9000, OR 6800-5 FOR CLIMB IN VISUAL CONDITIONS.

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 12, LIGHTING 10 FT FROM DER, 29 FT LEFT OF CENTERLINE, 2 FT AGL/4530 FT MSL.

FENCE 60 FT FROM DER, 481 FT RIGHT OF CENTERLINE, 4535 FT MSL.

BUILDING 198 FT FROM DER, 449 FT RIGHT OF CENTERLINE, 12 FT AGL/4541 FT MSL.

SIGN, BUILDING BEGINNING 297 FT FROM DER, 461 FT RIGHT OF CENTERLINE, UP TO 4552 FT MSL.

BUILDING 1023 FT FROM DER, 600 FT RIGHT OF CENTERLINE, 4555 FT MSL.

TREE 1031 FT FROM DER, 651 FT LEFT OF CENTERLINE, 4563 FT MSL.

TREE, BUILDING BEGINNING 1140 FT FROM DER, 503 FT LEFT OF CENTERLINE, UP TO 4565 FT MSL.

BUILDING 1173 FT FROM DER, 560 FT RIGHT OF CENTERLINE, 4559 FT MSL.

BUILDING 1434 FT FROM DER, 855 FT RIGHT OF CENTERLINE, 4572 FT MSL.

TREE 1514 FT FROM DER, 742 FT LEFT OF CENTERLINE, 4568 FT MSL.

POLE 1818 FT FROM DER, 352 FT RIGHT OF CENTERLINE, 4576 FT MSL.

POLE BEGINNING 3232 FT FROM DER, 1134 FT RIGHT OF CENTERLINE, UP TO 4621 FT MSL.

POLE, SIGN BEGINNING 3499 FT FROM DER, 801 FT LEFT OF CENTERLINE, UP TO 106 FT AGL/4673 FT MSL.

ELECTRICAL SYSTEM 3922 FT FROM DER, 628 FT RIGHT OF CENTERLINE, 4637 FT MSL.

POLE 4450 FT FROM DER, 893 FT RIGHT OF CENTERLINE, 4649 FT MSL.

POLE 4709 FT FROM DER, 1365 FT RIGHT OF CENTERLINE, 4662 FT MSL.



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

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<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
SPANISH FORK	ONE	SPK1.FFU		NONE	3 JANUARY 2019

POLE 5162 FT FROM DER, 1194 FT RIGHT OF CENTERLINE, 4664 FT MSL.

POLE 2 NM FROM DER, 3639 FT LEFT OF CENTERLINE, 4853 FT MSL.

NOTE: RWY 30, LIGHTING 9 FT FROM DER, 29 FT RIGHT OF CENTERLINE, 2 FT AGL/4525 FT MSL.

VEGETATION 36 FT FROM DER, 145 FT RIGHT OF CENTERLINE, 9 FT AGL/4527 FT MSL.

TREE 750 FT FROM DER, 557 FT LEFT OF CENTERLINE, 4546 FT MSL.

POLE 1182 FT FROM DER, 595 FT LEFT OF CENTERLINE, 50 FT AGL/4570 FT MSL.

POLE BEGINNING 1479 FT FROM DER, 268 FT LEFT OF CENTERLINE, UP TO 60 FT AGL/4579 FT MSL.

TREE 1505 FT FROM DER, 550 FT RIGHT OF CENTERLINE, 49 FT AGL/4565 FT MSL.

CONTROLLING OBSTACLES:

RWY 12: 6280 FT MSL AAO 400332.49N/1113710.79W (CG); 7013 FT MSL AAO 400520.93N/1114919.32W (CGTA).

RWY 30: 7785 FT MSL AAO 401505.12N/1115531.71W (CG); 7898 FT MSL AAO 401628.78N/1115625.96W (CGTA).

RWY 12, 30 (VCOA): 8280 FT MSL AAO 401150.45N/1113526.38W (VCA); 11268 FT MSL AAO 401439.28N/1113324.79W (CLIMB-TO ALTITUDE).

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 12, 12128 FT MSL AAO 394911.70N/1114534.43W; RWY 30, 11949 FT MSL AAO 402346.30N/1113842.66W.

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

CHART HOLDING AT FFU VORTAC HOLD S, RT, 340.00 INBOUND.

CHART R-6412 A, B, C, D.

AIRPORTS SERVED:

<u>AIRPORT NAME</u>	<u>CITY</u>	<u>STATE</u>
SPANISH FORK ARPT SPRINGVILLE-WOODHOUSE FIELD	SPANISH FORK	UT

COMMUNICATIONS:

CTAF, SLC DEP CON

FIXES AND/OR NAVAIDS:

REMARKS:

QUALITY
42
CHECKED

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

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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>
SPANISH FORK	ONE	SPK1.FFU		NONE	3 JANUARY 2019
<u>FLIGHT INSPECTED BY:</u>					
DANIEL C FAVORITE		<i>Digitally signed by</i> DAVID TEFFETELLER Nov 06, 2018	<u>OFFICE SYMBOL:</u> FICO	<u>DATE:</u> 10/28/18	
<u>DEVELOPED BY:</u>					
CARLOS ESCALANTE		CARLOS J ESCALANTE Digitally signed by CARLOS J ESCALANTE Date: 2018.04.12 08:10:24 -04'00'	<u>OFFICE SYMBOL:</u> AJV-5433	<u>DATE:</u> 04/06/2018	
<u>APPROVED BY:</u>					
PATRICK MULQUEEN		<i>Digitally signed by</i> DAVID TEFFETELLER Nov 06, 2018	<u>OFFICE SYMBOL:</u> AJV-5430	<u>DATE:</u>	
<u>REQUIRED EFFECTIVE DATE:</u>					
ROUTINE					
<u>COORDINATED WITH:</u>					
<u>A4A</u>	<u>ALPA</u>	<u>AOPA</u>	<u>APA</u>	<u>HAI</u>	<u>NBAA</u>
☐	☒	☒	☐	☐	☒
<u>OTHER:</u>					
ZLC, SLC APP CON, SLC TOWER, APRT MGR					
<u>CHANGES - REASONS:</u>					
ORIGINAL					



**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>
SPANISH FORK, UT	SPANISH FORK ARPT SPRINGVILLE-WOODHOUSE FIELD	3 JANUARY 2019	ORIG

TAKEOFF MINIMUMS:

TEXTUAL DEPARTURE PROCEDURES:
USE SPANISH FORK DEPARTURE.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 12, LIGHTING 10 FT FROM DER, 29 FT LEFT OF CENTERLINE, 2 FT AGL/4530 FT MSL.
FENCE 60 FT FROM DER, 481 FT RIGHT OF CENTERLINE, 4535 FT MSL.
BUILDING 198 FT FROM DER, 449 FT RIGHT OF CENTERLINE, 12 FT AGL/4541 FT MSL.
SIGN, BUILDING BEGINNING 297 FT FROM DER, 461 FT RIGHT OF CENTERLINE, UP TO 4552 FT MSL.
BUILDING 1023 FT FROM DER, 600 FT RIGHT OF CENTERLINE, 4555 FT MSL.
TREE 1031 FT FROM DER, 651 FT LEFT OF CENTERLINE, 4563 FT MSL.
TREE, BUILDING BEGINNING 1140 FT FROM DER, 503 FT LEFT OF CENTERLINE, UP TO 4565 FT MSL.
BUILDING 1173 FT FROM DER, 560 FT RIGHT OF CENTERLINE, 4559 FT MSL.
BUILDING 1434 FT FROM DER, 855 FT RIGHT OF CENTERLINE, 4572 FT MSL.
TREE 1514 FT FROM DER, 742 FT LEFT OF CENTERLINE, 4568 FT MSL.
POLE 1818 FT FROM DER, 352 FT RIGHT OF CENTERLINE, 4576 FT MSL.
POLE BEGINNING 3232 FT FROM DER, 1134 FT RIGHT OF CENTERLINE, UP TO 4621 FT MSL.
POLE, SIGN BEGINNING 3499 FT FROM DER, 801 FT LEFT OF CENTERLINE, UP TO 106 FT AGL/4673 FT MSL.
ELECTRICAL SYSTEM 3922 FT FROM DER, 628 FT RIGHT OF CENTERLINE, 4637 FT MSL.
POLE 4450 FT FROM DER, 893 FT RIGHT OF CENTERLINE, 4649 FT MSL.
POLE 4709 FT FROM DER, 1365 FT RIGHT OF CENTERLINE, 4662 FT MSL.
POLE 5162 FT FROM DER, 1194 FT RIGHT OF CENTERLINE, 4664 FT MSL.
POLE 2 NM FROM DER, 3639 FT LEFT OF CENTERLINE, 4853 FT MSL.

NOTE: RWY 30, LIGHTING 9 FT FROM DER, 29 FT RIGHT OF CENTERLINE, 2 FT AGL/4525 FT MSL.
VEGETATION 36 FT FROM DER, 145 FT RIGHT OF CENTERLINE, 9 FT AGL/4527 FT MSL.
TREE 750 FT FROM DER, 557 FT LEFT OF CENTERLINE, 4546 FT MSL.
POLE 1182 FT FROM DER, 595 FT LEFT OF CENTERLINE, 50 FT AGL/4570 FT MSL.
POLE BEGINNING 1479 FT FROM DER, 268 FT LEFT OF CENTERLINE, UP TO 60 FT AGL/4579 FT MSL.
TREE 1505 FT FROM DER, 550 FT RIGHT OF CENTERLINE, 49 FT AGL/4565 FT MSL.

CONTROLLING OBSTACLES:

REMARKS:

FLIGHT INSPECTED BY:

DANIEL C FAVORITE

Digitally signed by
DONALD H LANIER
Nov 16, 2018

OFFICE SYMBOL:
FICO

DATE:
10/29/18

DEVELOPED BY:

CARLOS ESCALANTE

CARLOS J ESCALANTE
Digitally signed by CARLOS J ESCALANTE
Date: 2018.04.12 07:21:20 -04'00'

OFFICE SYMBOL:
AJV-5433

DATE:
04/11/2018

APPROVED BY:

PATRICK MULQUEEN

Digitally signed by
DONALD H LANIER
Nov 16, 2018

OFFICE SYMBOL:
AJV-5430

DATE:

QUALITY
34
CHECKED

**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>
SPANISH FORK, UT	SPANISH FORK ARPT SPRINGVILLE-WOODHOUSE FIELD	3 JANUARY 2019	ORIG

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:
ZLC, SLC APP CON, SLC TOWER, ARPT MGR

CHANGES - REASONS:
ORIGINAL

11/16/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 10/29/18.
1. ADDED STATE IDENTIFER AFTER CITY NAME.



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> SPOKANE INTL	<u>AIRPORT ID</u> KGEG	<u>PROCEDURE NAME</u> ILS OR LOC RWY 3 ILS RWY 3 SA CAT I, ILS RWY 3 CAT II, ILS RWY 3 CAT III	<u>ORIGINAL/AMENDMENT</u> 7	<u>CITY</u> SPOKANE	<u>STATE</u> WA	
<u>AIRPORT ELEVATION</u> 2385	<u>TDZE</u> 2385	<u>SUPERSEDED</u> ILS OR LOC RWY 3 ILS RWY 3 CAT II, ILS RWY 3 CAT III	<u>ORIGINAL/AMENDMENT</u> 6B	<u>DATED</u> 07/24/2014	<u>MAG VAR</u> 14E	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> I-OLJ	<u>COORDINATES OF FACILITIES</u> 473759.68N / 1173054.77W	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
YICUB/GEG 20.00 DME	IAF	JEGDU/I-OLJ 13.96 DME					113.00 (HDG) & 031.49	9.78 (GEG LR-211) & 6.21 (I-OLJ) (GEG LR-211)	4400
JEGDU/I-OLJ 13.96 DME	IF	CARUT/ILS 4.42 DME					031.49	9.54 (I-OLJ)	3900

MISSED APPROACH

MAP:

ILS: DA
LOC: 0.18 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2900 THEN CLIMBING LEFT TURN TO 4200 DIRECT GEG VORTAC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 3000 THEN CLIMBING RIGHT TURN TO 6500 ON HEADING 057 AND ON COE VOR/DME R-240 TO COE VOR/DME AND HOLD.

PROFILE:

1. PT L SIDE OF COURSE 211.49 OUTBOUND 4400 FT WITHIN 10 MILES OF GEG VORTAC (IAF)
- 2.
3. FAC: 031.49 FAF: CARUT/ILS 4.42 DME DIST FAF TO MAP: DIST FAF TO THLD: 4.58
4. MIN ALT: CARUT/ILS 4.42 DME 3900, ZONOM/ILS 2.91 DME 3420*
5. DIST TO THLD FROM OM: MM: IM: 100 HAT: 859.00 150 HAT: 1813.00 GS ANT: 1211
6. MIN GS INCPT: 3900 GS ALT AT FAF : CARUT/ILS 4.42 DME 3900 OM: MM: IM:
7. GP ANGLE: 3.00 34:1: 20:1: TCH: 54.9
8. MSA FROM: GEG VORTAC 360-090 6500, 090-180 5200, 180-270 4300, 270-360 5300

EQUIPMENT REQUIREMENTS NOTES:



DME REQUIRED FOR LOCALIZER ONLY.

NOTES:

SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 3: CAT A, B, C, D RA 154, RVR 1400, HAT 150, DA 2535 MSL.
CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 3: CAT A, B, C, D RA 104, RVR 1200, HAT 100, DA 2485 MSL.
CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 3: CAT A, B, C, D RVR 300
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 3 CAT C/D VISIBILITY TO RVR 5500.

SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF HUD TO DH.

CAT II CHART NOTE: RVR 1000 AUTHORIZED WITH SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF AUTOLAND OR HUD TO TOUCHDOWN.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART IN PLANVIEW: COE VOR/DME
CHART VDP AT 0.77 DME*
DISTANCE VDP TO THLD 0.94 NM
* LOC ONLY
CHART FAS OBST: 2486 POLE 473514N/1173507W.
CHART: 2606 BUILDING 473418N/1173603W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SW COE VOR/DME, LT, 051.00 INBOUND.
HOLD SW, RT, 028.00 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD - CAT C 1000-2 3/4, CAT D 1100-3

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
S-ILS 03	2585	1800	200	2585	1800	200	2585	1800	200	2585	1800	200			
S-LOC 03	2740	2400	355	2740	2400	355	2740	3000	355	2740	3000	355			
CIRCLING	2960	1	575	2980	1	595	3300	2 3/4	915	3400	3	1015			



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>
SPOKANE INTL	KGEG	ILS OR LOC RWY 3 ILS RWY 3 SA CAT I, ILS RWY 3 CAT II, ILS RWY 3 CAT III	7	SPOKANE	WA

CHANGES - REASONS

1. INCORPORATED CHANGES 6A AND 6B. - FAAO 8260.19H PARAGRAPH 8-3-4. C.
2. ADDED 2 DEGREES TO ALL COURSES AND HEADINGS CONNECTED TO THE OLJ LOCALIZER. - AIRPORT AND LOCALIZER MAGNETIC VARIATION UPDATED FROM 18 E/2010 TO 14 E/2020.
3. CHANGED VDP LOCATION FROM 1.21 DME/1.38 TO THLD TO 0.77 DME/0.94 TO THLD. - NEW LOC MDA.
4. DELETED FROM ADDITIONAL FLIGHT DATA CHART (ZUKAK) AT INTERSECTION OF YICUB DR LEG AND INTERMEDIATE COURSE. - NO LONGER REQUIRED.
5. ADDED CHART CIRCLING ICON TO ADDITIONAL FLIGHT DATA. - FAAO 8260.3C CHAPTER 2 NEW CIRCLING CRITERIA.
6. REMOVED LOC MINIMUMS WITHOUT FIX ZONOM. - SINCE DME IS REQUIRED FOR LOC, STEPDOWN FIX IS ALWAYS RECEIVED.
7. LOWERED LOC MDA FROM 2880 TO 2740. AND CATS C/D VISIBILITY FROM RVR 5000 TO RVR 4000. - ATC ADVISES 144 XP ADJUSTMENT NO LONGER REQUIRED AND FAAO 8260.3C CHAPTER 3 VISIBILITY CHART.
8. CHANGED CIRCLING CATS B, C, AND D MINIMUMS FROM 2960/575 - 1, 2960/575 - 1 1/2, AND 2980/595 - 2 TO 2980/595 - 1, 3300/915 - 2 3/4, AND 3400/1015 - 3. NEW 8260.3C CHAPTER 2 CIRCLING CRITERIA.
9. CAT III LINE OF MINIMA DELETED "RVR 700" - REQUIREMENT TO CHART ONLY THE LOWEST ALLOWED BASED ON THE ILS EQUIPMENT CLASSIFICATION.
10. CAT III LINE OF MINIMA RVR 600 CHANGED TO RVR 300. - FAAO 8400.13D, CHAPTER 7, PARAGRAPH 4A.
11. LOWERED MSA SECTOR 360-090 FROM 7100 TO 6500 AND 090-180 FROM 5300 TO 5200. - INVALID ALTITUDE ADJUSTMENT AND NEW CONTROLLING OBSTACLE.
12. ALL REFERENCE TO IM REMOVED. - ATC REQUEST.
13. CHANGED ALTERNATE MISSED APPROACH CLIMB TO ALTITUDE FROM 2800 TO 3000. - AVOID MISSED APPROACH PENETRATION FROM CONTROL TOWER.
14. CHANGED DIST FAF TO MAP/THLD FROM 4.53 TO 4.58. - LOC FAF MOVED TO COLLOCATE WITH ILS PFAF (GS INTCPT).
15. RAISED STEPDOWN ALT FROM 3220 TO 3420 AND MOVED STEP FIX ZONOM OUT 0.58 NM. - STEPDOWN ALTITUDE MUST BE ABOVE CAT D CIRCLING ALT OF 3400.
16. CHANGED DR COURSES AND DISTANCES FROM YICUB TO JEGDU FROM 109.00/9.76 AND 029.49/9.60 TO 113.00/9.78 AND 31.49/6.21. - NEW MAGNETIC VARIATION AND NEW IAPA DR CALCULATIONS.

PDF EDITS:

1. ADD (HDG) TO DR LEG IN TERMINAL ROUTES.

08/08/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 05/21/18.

1. LEAD RADIAL OF 211 FROM GEG VORTAC WAS ADDED TO INITIAL SEGMENT FROM YICUB.
2. LOC MISSED APPROACH WAS CHANGED FROM 4.58 NM AFTER CARUT/I-OLJ 4.42 DME OR AT I-GEG 0.18 DME TO I-OLJ 0.18 DME.
3. 4.58 DISTANCE FAF TO MAP WAS DELETED FROM LINE 3, PROFILE VIEW.
4. REMOVED PDF EDIT NOTE: ADD RVR VALUES TO SA CAT I AND CAT II MINIMUMS.



AIRPORT
SPOKANE INTL

AIRPORT ID
KGEK

PROCEDURE NAME
ILS OR LOC RWY 3
ILS RWY 3 SA CAT I,
ILS RWY 3 CAT II,
ILS RWY 3 CAT III

ORIGINAL/AMENDMENT
7

CITY
SPOKANE

STATE
WA

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZSE, WESTERN FPO, GEG APP CON, GEG ATCT, GEG AMGR, ATA

FLIGHT CHECKED BY

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Nov 15, 2018

OFFICE

FIOG

DATE

08/01/2018

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DATE

05/21/2018

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Nov 15, 2018

OFFICE

AJV-5430

DATE

TITLE

MANAGER

QUALITY
41
CHECKED

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> SPOKANE INTL	<u>AIRPORT ID</u> KGEK	<u>PROCEDURE NAME</u> ILS OR LOC RWY 21 ILS RWY 21 SA CAT I, ILS RWY 21 CAT II, ILS RWY 21 CAT III	<u>ORIGINAL/AMENDMENT</u> 24	<u>CITY</u> SPOKANE	<u>STATE</u> WA
<u>AIRPORT ELEVATION</u> 2385	<u>TDZE</u> 2346	<u>SUPERSEDED</u> ILS OR LOC/DME RWY 21	<u>ORIGINAL/AMENDMENT</u> 23B	<u>DATED</u> 07/24/2014	<u>MAG VAR</u> 14E
<u>FACILITY</u> I-GEG	<u>COORDINATES OF FACILITIES</u> 473629.20N / 1173310.95W	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
GEG VORTAC		LUCEV/I-GEG 13.08 DME					025.31	17.04	5500
LUCEV/I-GEG 13.08 DME	IF/IAF	SIGYO/I-GEG 6.76 DME					211.51	6.32 (I-GEG)	3900

MISSED APPROACH

MAP:

ILS: DA
LOC: I-GEG 1.98 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4200 ON GEG VORTAC R-027 TO GEG VORTAC AND HOLD

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 2800 THEN CLIMBING RIGHT TURN TO 6500 ON HEADING 048 TO INTERCEPT COE VOR/DME R-245 TO COE VOR/DME AND HOLD.

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. HOLD NE LUCEV, LT, 211.51 INBOUND, 5500 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 211.51 FAF: SIGYO/I-GEG 6.76 DME DIST FAF TO MAP: DIST FAF TO THLD: 4.78
4. MIN ALT: LUCEV/I-GEG 13.08 DME 5500, SIGYO/I-GEG 6.76 DME 3900
5. DIST TO THLD FROM OM: MM: IM: 100 HAT: 861 100 HAT: 861 150 HAT: 1815.00 GS ANT: 912
6. MIN GS INCPT: 3900 GS ALT AT FAF : SIGYO/I-GEG 6.76 DME 3900 OM: MM: IM:
7. GP ANGLE: 3.00 34:1: 20:1: TCH: 55.0
8. MSA FROM: GEG VORTAC 360-090 6500, 090-180 5200, 180-270 4300, 270-360 5300

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED.

NOTES:



SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 21: CAT A, B, C, D RA 197, RVR 1400, HAT 126, DA 2472 MSL.
CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 21: CAT A, B, C, D RA 147, RVR 1200, HAT 76, DA 2422 MSL.
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 21: CAT III CAT A, B, C, D, RVR 300.

SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF HUD TO DH.

CAT II CHART NOTE: RVR 1000 AUTHORIZED WITH SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF AUTOLAND OR HUD TO TOUCHDOWN.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART IN PLANVIEW: COE VOR/DME
CHART VDP AT 2.87 DME*
DISTANCE VDP TO THLD 0.89 NM
* LOC ONLY
CHART FAS OBST: 2398 TREE 473821N/1173012W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SW COE VOR/DME, LT, 051.00 INBOUND.
HOLD SW, RT, 028.00 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD - CAT C 1000-2 3/4, CAT D 1100-3

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
S-ILS 21	2546	1800	200	2546	1800	200	2546	1800	200	2546	1800	200			
S-LOC 21	2680	2400	334	2680	2400	334	2680	2600	334	2680	2600	334			
CIRCLING	2960	1	575	2980	1	595	3300	2 3/4	915	3400	3	1015			

CHANGES - REASONS

1. INCORPORATED CHANGES 23A AND 23B. - FAAO 8260.19H PARAGRAPH 8-3-4. C.
2. ADDED 2 DEGREES TO ALL COURSES AND HEADINGS CONNECTED TO THE GEG LOCALIZER. - LOCALIZER MAGNETIC VARIATION UPDATED FROM 16 E/2010 TO 14 E/2020.
3. ADDED CHART CIRCLING ICON TO ADDITIONAL FLIGHT DATA. - FAAO 8260.3C CHAPTER 2 NEW CIRCLING CRITERIA.
4. CHANGED CIRCLING CATS B, C, AND D MINIMUMS FROM 2960/575 - 1, 2960/575 - 1 1/2, AND 2980/595 - 2 TO 2980/595 - 1, 3300/915 - 2 3/4, AND 3400/1015 - 3. NEW 8260.3C CHAPTER 2 CIRCLING CRITERIA.
5. CAT III LINE OF MINIMA DELETED "RVR 700" - REQUIREMENT TO CHART ONLY THE LOWEST ALLOWED BASED ON THE ILS EQUIPMENT CLASSIFICATION.
6. CAT III LINE OF MINIMA RVR 600 CHANGED TO RVR 300. - FAAO 8400.13D, CHAPTER 7, PARAGRAPH 4A.
7. LOWERED MSA SECTOR 360-090 FROM 7100 TO 6500 AND 090-180 FROM 5300 TO 5200. - NEW CONTROLLING OBACLE.
8. CHANGED ALTERNATE MISSED APPROACH CLIMB TO ALTITUDE FROM 2900 TO 2800. - AVOID MISSED APPROACH PENETRATION FROM CONTROL TOWER.
9. LOWERED LOC CATS C/D VISIBILITY FROM RVR 3000 TO RVR 2600. - FAAO 8260.3C CHAPTER 3 AND AJV VISIBILITY CALCULATOR.

PDF EDITS:

1. ADD RVR VALUES TO SA CAT I AND CAT II MINIMUMS.



AIRPORT
SPOKANE INTL

AIRPORT ID
KGEK

PROCEDURE NAME
ILS OR LOC RWY 21
ILS RWY 21 SA CAT I,
ILS RWY 21 CAT II,
ILS RWY 21 CAT III

ORIGINAL/AMENDMENT
24

CITY
SPOKANE

STATE
WA

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZSE, SEA FPO, GEG APP CON, GEG ATCT, GEG AMGR, ATA

FLIGHT CHECKED BY
DANIEL C. FAVORITE

Digitally signed by
DONALD H LANIER
Nov 15, 2018

OFFICE
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DATE
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DATE

TITLE
MANAGER

QUALITY
41
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> SPOKANE INTL	<u>AIRPORT ID</u> KGEK	<u>PROCEDURE NAME</u> RNAV (GPS) Y RWY 3	<u>ORIGINAL/AMENDMENT</u> 2D	<u>CITY</u> SPOKANE	<u>STATE</u> WA
<u>AIRPORT ELEVATION</u> 2385	<u>TDZE</u> 2385	<u>SUPERSEDED</u> RNAV (GPS) Y RWY 3	<u>ORIGINAL/AMENDMENT</u> 2C	<u>DATED</u> 08/17/2017	<u>MAG VAR</u> 14E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
HILIE		ATOXE		TF	FB	2.00	238.38	35.62	9000
ZOOMR		IPANE		TF	FB	2.00	042.51	19.38	6000
ATOXE	IAF	HUNUN	NOPT	TF	FB	1.00	301.50	12.57	4600
IPANE	IAF	HUNUN	NOPT	TF	FB	1.00	121.21	10.00	4600
HUNUN	IF/IAF	CARUT		TF	FB	1.00	031.34	6.15	3900
CARUT	FAF	ZORIL/3.30 NM TO RW03		TF	FB	0.30	031.43	1.29	
ZORIL/3.30 NM TO RW03		RW03	MAP	TF	FO	0.30	031.43	3.30	
RW03	MAP	2585 MSL		CA			031.43		
2585 MSL		LUCEV		DF	FO	1.00			8200

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW03

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 8200 DIRECT LUCEV AND HOLD, CONTINUE CLIMB-IN-HOLD TO 8200.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SW HUNUN, RT, 031.34 INBOUND, 4600 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC:

031.43

FAF: CARUT

DIST FAF TO MAP: 4.58

DIST FAF TO THLD: 4.58

4. MIN ALT: HUNUN 4600, CARUT 3900, ZORIL/3.30 NM TO RW03 3480*

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

200 HAT: 0.46

GS ANT:

6. MIN GP INCPT:

3900

GP ALT AT FAF : CARUT 3900

OM:

MM:

IM:

7. GP ANGLE:

3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 55.0

8. MSA FROM: RW03 7100

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C OR ABOVE 53C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ZOOMR ON V2-448 SOUTHWEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HILIE ON V2 EASTBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ATOXE ON V253 SOUTHEAST BOUND.
CHART NOTE: FOR INOPERATIVE ALS INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 5/8 SM AND INCREASE LNAV CATS C AND D VISIBILITY TO 1 3/4 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.77 NM TO RW03*
*LNAV ONLY
WAAS CHANNEL #81920
REFERENCE PATH ID: W03A
CHART FAS OBST: 2535 TREE 473625N/1173432W.
CHART: 2606 BLDG 473418N/1173603W.
2910 AAO 473348N/1173736W.
HOLD NE, LT, 211.51 INBOUND
LTP HAE: 708.6 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	2585	1800	200	2585	1800	200	2585	1800	200	2585	1800	200			
LNAV/VNAV DA	2962	1 1/2	577	2962	1 1/2	577	2962	1 1/2	577	2962	1 1/2	577			
LNAV MDA	3020	2400	635	3020	2400	635	3020	6000	635	3020	1 1/2	635			
CIRCLING	3020	1	635	3020	1	635	3300	2 3/4	915	3400	3	1015			

QUALITY
10
CHECKED

CHANGES - REASONS

- 1. INCREASED ALL TERMINAL ROUTE COURSES AND HOLDING BY 4 DEGREES - AIRPORT MAG VAR CHANGED FROM 18E/2000 TO 14E/2020.
- 2. SHORTENED INTERMEDIATE FROM 6.2 TO 6.15 - PFAF CARUT MOVED 343 FT FROM 473325.85N/1173746.32W TO 473323.48N/1173749.89W TO MATCH ILS PROCEDURE FIX LOCATION.
- 3. LENGTHENED FINAL SEGMENT (CARUT-ZORIL) FROM 1.23 TO 1.29 - PFAF CARUT MOVED 343 FT FROM 473325.85N/1173746.32W TO 473323.48N/1173749.89W TO MATCH ILS PROCEDURE FIX LOCATION.
- 4. RAISED CIRCLING CAT C MDA/HAA FROM 3020/635 TO 3300/915 AND CIRCLING CAT D MDA/HAA FROM 3020/635 TO 3400/1015 - APPLIED NEW CIRCLING CRITERIA.
- 5. RAISED CIRCLING CAT C VISIBILITY FROM 1 1/2 TO 2 3/4 AND CIRCLING CAT D VISIBILITY FROM 2 TO 3 - CIRCLING MDA INCREASED.
- 6. ADDED ALTERNATE MINIMUMS @ CAT C 1000-2 3/4, CAT D 1100-3 - REDUNDANT WEATHER SOURCE, CAT C CIRCLING VISIBILITY WAS INCREASED TO 2 3/4 AND CAT D VISIBILITY WAS INCREASED TO 3.
- 7. CHANGED "FAC: 027.43" TO "FAC: 031.43" ON 8260-3 LINE 3 - UPDATED AIRPORT MAG VAR.
- 8. ADDED "20:1 IS CLEAR" TO 8260-3 LINE 7 - VERIFIED NO VISUAL SFC PENETRATIONS AND IAW 8260.19H, PARA 8-6-7G(3).
- 9. FAS OBSTACLE CHANGED FROM "CHART FAS OBSTACLE: 2799 AAO 473336N/1173519W" TO "CHART FAS OBSTACLE: 2535 TREE 473625.13N/1173432.18W" IN ADDITIONAL FLIGHT DATA - UPDATED EVALUATION.
- 10. CHANGED 7:1 OBSTACLE FROM "3059 AAO 473256N/1173519W" TO "3022 AAO 473257N/1173639W" IN ADDITIONAL FLIGHT DATA - UPDATED EVALUATION.
- 11. CHANGED "CHART VDP AT 1.82 NM TO RW03*" TO "CHART VDP AT 1.77 NM TO RW03*" IN ADDITIONAL FLIGHT DATA - UPDATED EVALUATION.
- 12. ADDED "CHART CIRCLING ICON" IN ADDITIONAL FLIGHT DATA - APPLIED NEW CIRCLING CRITERIA.
- 13. UPDATED "CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -19C (-2F) OR ABOVE 44C (111F)" TO "CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C OR ABOVE 53C" - USED 5 YEAR TEMPERATURE DATA, AFS HIGH/LOW CALCULATOR AND IAW 8260.19H, PARA 8-6-9S.
- 14. DELETED "CHART NOTE: DME/DME RNP-0.3" - IAW 8260.19H, PARA 4-6-10E AND MEMO 257 DATED 9/12/2017.
- 15. ADDED "RNP APCH" TO PBN REQUIREMENTS NOTES - IAW 8260.19H PARA 8-6-8B(1) AND MEMO 257 DATED 9/12/2017.
- 16. UPDATED "CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE 3.00/TCH 69)" TO "CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH{FEET})" - IAW 8260.19H, PARA 8-6-9M.
- 17. ADDED "CHART NOTE: FOR INOPERATIVE ALS INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 5/8 SM AND INCREASE LNAV CATS C AND D VISIBILITY TO 1 3/4 SM" - VISCHECK INOPERATIVE TABLE NOTES.
- 18. CHANGED DISTANCE FAF TO MAP FROM 4.53 TO 4.58 ON 8260-3 LINE 3 - PFAF CARUT MOVED 343 FT FROM 473325.85N/1173746.32W TO 473323.48N/1173749.89W.
- 19. INCORPORATED CHANGES FROM P-NOTAM 7/7391 WHICH CHANGED LPV VISIBILITY FROM RVR 2400 TO RVR 1800 ALL CATS - IAW 8260.19H, PARA 8-3-4C(3).
- 20. INCORPORATED CHANGES FROM P-NOTAM 4/7030 WHICH CHANGED THRE TO TDZE - IAW 8260.19H, PARA 8-3-4C(3).

PDF EDITED:

- 1. ADDED PAT 2 TO MISSED APPROACH: LPV, LNAV/VNAV AND LNAV.
- 2. ADDED ORDER 8260.3 CHAPTER 2 APPLIED TO 2606 BLDG 473418N/1173603W AND 2910 AAO 473348N/1173736W TO PART C: GENERAL REMARKS.



COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZSE, SPOKANE APP CON, AMGR, ATA

FLIGHT CHECKED BY

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DATE

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Nov 15, 2018

OFFICE

AJV-5430

DATE

TITLE



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGEK
RUNWAY	RW03
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W03A
LTP/FTP LATITUDE	473636.2905N
LTP/FTP LONGITUDE	1173300.2875W
LTP/FTP ELLIPSOIDAL HEIGHT	+07086
FPAP LATITUDE	473752.3800N
FPAP LONGITUDE	1173105.7600W
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)	35.0

CRC REMAINDER	A6C66970

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+07269
FPAP ORTHOMETRIC HEIGHT	+07269



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> SPOKANE INTL	<u>AIRPORT ID</u> KGEF	<u>PROCEDURE NAME</u> RNAV (GPS) Y RWY 8	<u>ORIGINAL/AMENDMENT</u> 2B	<u>CITY</u> SPOKANE	<u>STATE</u> WA
<u>AIRPORT ELEVATION</u> 2385	<u>TDZE</u> 2376	<u>SUPERSEDED</u> RNAV (GPS) Y RWY 7	<u>ORIGINAL/AMENDMENT</u> 2A	<u>DATED</u> 03/31/2016	<u>MAG VAR</u> 14E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
GEG VORTAC		WOLDA		TF	FO	2.00	277.44	8.78	7000
ZOOMR		JOMIS		TF	FB	2.00	058.96	20.43	5200
JOMIS	IAF	WOLDA	NOPT	TF	FB	1.00	346.29	5.64	5000
WOLDA	IF/IAF	JIVKA		TF	FB	1.00	076.29	6.01	4100
JIVKA	FAF	HUREV/3.00 NM TO RW08		TF	FB	0.30	076.40	2.15	
HUREV/3.00 NM TO RW08		RW08	MAP	TF	FO	0.30	076.40	3.00	
RW08	MAP	2900 MSL		CA			076.40		2900
2900 MSL		ATOXE		DF	FO	1.00			6000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2900, THEN CLIMBING RIGHT TURN TO 6000 DIRECT ATOXE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD W WOLDA, RT, 076.29 INBOUND, 5000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 076.40FAF: JIVKADIST FAF TO MAP: 5.15DIST FAF TO THLD: 5.15

4. MIN ALT: WOLDA 5000, JIVKA 4100, HUREV/3.00 NM TO RW08 3400*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:200 HAT: 0.44GS ANT:

6. MIN GP INCPT: 4100GP ALT AT FAF : JIVKA 4100OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 60.0

8. MSA FROM: RW08 7100

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C OR ABOVE 52C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON GEG VORTAC AIRWAY RADIALS 200 CW 241.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.19 NM TO RW08*
*LNAV ONLY
WAAS CHANNEL #48801
REFERENCE PATH ID: W08A
CHART FAS OBST: 2535 TREE 473625N/1173432W.
CHART: 2532 TREE 473733N/1173733W.
HOLD SE, RT, 324.67 INBOUND
LTP HAE: 705.9 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 1000-2 3/4, CAT D 1100-3

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	2576	3/4	200	2576	3/4	200	2576	3/4	200	2576	3/4	200			
LNAV/VNAV DA	2834	1 1/2	458	2834	1 1/2	458	2834	1 1/2	458	2834	1 1/2	458			
LNAV MDA	2800	1	424	2800	1	424	2800	1 1/4	424	2800	1 1/4	424			
CIRCLING	2960	1	575	2980	1	595	3300	2 3/4	915	3400	3	1015			



CHANGES - REASONS

1. PROCEDURE NAME CHANGED FROM RNAV (GPS) Y RWY 7 TO RNAV (GPS) Y RWY 8 - RWY 7-25 RUNWAY NUMBERS HAVE CHANGED TO RWY 8-26, AIRPORT MAG VAR UPDATE.
2. INCREASED ALL TERMINAL ROUTE COURSES AND HOLDING BY 4 DEGREES - AIRPORT MAG VAR CHANGED FROM 18E/2000 TO 14E/2020.
3. RAISED CIRCLING CAT B MDA/HAA FROM 2960/575 TO 2980/595, CIRCLING CAT C MDA/HAA FROM 2960/575 TO 3300/915 AND CIRCLING CAT D MDA/HAA FROM 2980/595 TO 3400/1015 - APPLIED NEW CIRCLING CRITERIA.
4. RAISED CIRCLING CAT C VISIBILITY FROM 1 1/2 TO 2 3/4 AND CIRCLING CAT D VISIBILITY FROM 2 TO 3 - CIRCLING MDA INCREASED.
5. ADDED ALTERNATE MINIMUMS @ CAT C 1000-2 3/4, CAT D 1100-3 - REDUNDANT WEATHER SOURCE, CAT C CIRCLING VISIBILITY WAS INCREASED TO 2 3/4 AND CAT D CIRCLING VISIBILITY WAS INCREASED TO 3.
6. CHANGED "FAC: 072.40" TO "FAC: 076.40" ON 8260.3 LINE 3 - UPDATED AIRPORT MAG VAR.
7. CHANGED "HUREV/3.00 NM TO RW07 3400*" TO "HUREV/3.00 NM TO RW08 3400*" - RUNWAY NUMBER CHANGED FROM 07 TO 08.
8. ADDED "20:1 IS CLEAR" TO 8260.3 LINE 7 - VERIFIED NO VISUAL SFC PENETRATIONS AND IAW 8260.19H, PARA 8-6-7G(3).
9. CHANGED MISSED APPROACH INSTRUCTION FROM "CLIMB TO 6000 DIRECT RUKUE AND RIGHT TURN ON TRACK 176.92 TO ATOXE AND HOLD" TO "CLIMB TO 2900, THEN CLIMBING RIGHT TURN TO 6000 DIRECT ATOXE AND HOLD" - ATC REQUEST.
10. ADDED 7:1 OBSTACLE "2532 TREE 473733N/1173733W IN ADDITIONAL FLIGHT DATA - UPDATED EVALUATION.
11. CHANGED VDP FROM "1.12 NM TO RW07" TO "1.19 NM TO RW08" IN ADDITIONAL FLIGHT DATA - NEW CALCULATION/RUNWAY RENUMBERING.
12. CHANGED "REFERENCE PATH ID: W07A" TO "REFERENCE PATH ID: W08A" IN ADDITIONAL FLIGHT DATA - CHANGED RUNWAY NUMBER FROM 07 TO 08.
13. ADDED "CHART CIRCLING ICON" IN ADDITIONAL FLIGHT DATA - NEW CIRCLING CRITERIA APPLIED.
14. CHANGED "CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -19C (-2F) OR ABOVE 44C (111F)" TO "CHART NOTE: FOR UNCOMPENSATED BARO-VNAV STSTEMS, LNAV/VNAV NA BELOW -18C OR ABOVE 52C" - USED 5 YEAR TEMPERATURE DATA AND AFS HIGH/LOW TEMPERATURE CALCULATOR AND IAW 8260.19H, PARA 8-6-9S.
15. DELETED "CHART NOTE: DME/DME RNP-0.3 NA" - IAW 8260.19H, PARA 4-6-10E AND MEMO 257 DATED 9/12/2017.
16. ADDED "RNP APCH" TO PBN REQUIREMENTS NOTES - IAW 8260.19H, PARA 8-6-8B(1) AND MEMO 257 DATED 9/12/2017.
17. CRC REMAINDER CHANGED FROM 467EBB41 TO 3A74CEBD - UPDATED EVALUATION.
18. UPDATED MSA CENTER FROM RWY 07 THLD TO RWY 08 THLD - CHANGED RUNWAY NUMBER FROM RWY 07 TO RWY 08.
19. CHANGED PROCEDURE ENTRY RESTRICTION RADIALS FOR ARRIVALS AT GEG VORTAC FROM "185 CW 241" TO "200 CW 241" - 185 RADIAL IS ONLY AN 87.6 DEGREE TURN.

PDF EDITED:

1. ADDED PAT 1 TO MISSED APPROACH: LPV, LNAV/VNAV AND LNAV.



<u>AIRPORT</u> SPOKANE INTL	<u>AIRPORT ID</u> KGEK	<u>PROCEDURE NAME</u> RNAV (GPS) Y RWY 8	<u>ORIGINAL/AMENDMENT</u> 2B	<u>CITY</u> SPOKANE	<u>STATE</u> WA
<u>COORDINATED WITH:</u>					
A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZSE, AMGR, GEG APP CON, GEG ATCT, ATA					
<u>FLIGHT CHECKED BY</u> THOMAS E MOLOKIE		Digitally signed by DAVID TEFFETELLER Nov 15, 2018	<u>OFFICE</u> FICO	<u>DATE</u> 11/4/18	
<u>DEVELOPED BY</u> DIANE S LAIR	Digitally signed by DIANE S LAIR Jun 20, 2018		<u>OFFICE</u> AJV-5433	<u>DATE</u>	
<u>APPROVED BY</u> PATRICK MULQUEEN		Digitally signed by DAVID TEFFETELLER Nov 15, 2018	<u>OFFICE</u> AJV-5430	<u>DATE</u>	<u>TITLE</u>



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGEK
RUNWAY	RW08
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W08A
LTP/FTP LATITUDE	473701.0685N
LTP/FTP LONGITUDE	1173311.7635W
LTP/FTP ELLIPSOIDAL HEIGHT	+07059
FPAP LATITUDE	473700.2900N
FPAP LONGITUDE	1173100.0600W
THRESHOLD CROSSING HEIGHT (TCH)	00060.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0256
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	3A74CEBD
<u>ADDITIONAL PATH POINT RECORD INFORMATION</u>	
ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+07243
FPAP ORTHOMETRIC HEIGHT	+07243



FEDERAL AVIATION ADMINISTRATION
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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> SPOKANE INTL	<u>AIRPORT ID</u> KGEg	<u>PROCEDURE NAME</u> RNAV (GPS) Y RWY 21	<u>ORIGINAL/AMENDMENT</u> 2C	<u>CITY</u> SPOKANE	<u>STATE</u> WA
<u>AIRPORT ELEVATION</u> 2385	<u>TDZE</u> 2346	<u>SUPERSEDED</u> RNAV (GPS) Y RWY 21	<u>ORIGINAL/AMENDMENT</u> 2B	<u>DATED</u> 08/17/2017	<u>MAG VAR</u> 14E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
HILIE		EPENE		TF	FB	2.00	281.26	20.46	9000
ZOOMR		WATRU		TF	FB	2.00	031.08	38.10	6000
WATRU		CEMOM		TF	FB	2.00	073.92	10.00	6000
CEMOM	IAF	CEBUS		TF	FB	1.00	136.12	7.27	5000
EPENE	IAF	CEBUS		TF	FB	1.00	301.79	9.21	5000
CEBUS	IF	SIGYO		TF	FB	1.00	211.67	7.34	3900
SIGYO	FAF	RW21	MAP	TF	FO	0.30	211.57	4.78	
RW21	MAP	2546 MSL		CA			211.57		
2546 MSL		IRUHO		DF	FB	1.00			
IRUHO		GANGS		TF	FO	1.00	252.07	9.77	5000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW21

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 5000 DIRECT IRUHO AND ON TRACK 252.07 TO GANGS AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT CEBUS

3. FAC: 211.57

FAF: SIGYO

DIST FAF TO MAP: 4.78

DIST FAF TO THLD: 4.78

4. MIN ALT: CEBUS 5000, SIGYO 3900

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

200 HAT: 0.53

GS ANT:

6. MIN GP INCPT: 3900

GP ALT AT FAF : SIGYO 3900

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 55.0

8. MSA FROM: RW21 7200

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18°C OR ABOVE 53°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CEMOM ON V112 NORTHBOUND AND AT HILIE ON V2 EASTBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ZOOMR ON V2-448 SOUTHWEST BOUND.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.27 NM TO RW21*
*LNAV ONLY
WAAS CHANNEL #82619
REFERENCE PATH ID: W21A
CHART FAS OBST: 2500 BLDG 473735N/1173012W.
HOLD SW, RT, 056.48 INBOUND
LTP HAE: 689.5 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 1000-2 3/4, CAT D 1100-3

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	2546	1800	200	2546	1800	200	2546	1800	200	2546	1800	200			
LNAV/VNAV DA	2720	4500	374	2720	4500	374	2720	4500	374	2720	4500	374			
LNAV MDA	2800	2400	454	2800	2400	454	2800	4500	454	2800	4500	454			
CIRCLING	2960	1	575	2980	1	595	3300	2 3/4	915	3400	3	1015			



CHANGES - REASONS

1. INCREASED ALL TERMINAL ROUTE COURSES, MA TRACK AND HOLDING BY 4 DEGREES - AIRPORT MAG VAR CHANGED FROM 18E/2000 TO 14E/2020.
2. RAISED CIRCLING CAT B MDA/HAA FROM 2960/575 TO 2980/595, CAT C MDA/HAA FROM 2960/575 TO 3300/915, CAT D MDA/HAA FROM 2980/595 TO 3400/1015 - APPLIED NEW CIRCLING CRITERIA, RWY 8 WILL BE FLIGHT CHECKED.
3. RAISED CIRCLING CAT C VISIBILITY FROM 1 1/2 TO 2 3/4 AND CIRCLING CAT D VISIBILITY FROM 2 TO 3 - CIRCLING MDA INCREASED.
4. ADDED ALTERNATE MINIMUMS @ CAT C 1000-2 3/4, CAT D 1100-3 - CAT C CIRCLING VISIBILITY WAS INCREASED TO 2 3/4 AND CAT D CIRCLING VISIBILITY WAS INCREASED TO 3.
5. MISSED APPROACH INSTRUCTION CHANGED FROM "CLIMB TO 5000 ON TRACK 207.57 TO IRUHO AND ON TRACK 248.07 TO GANGS AND HOLD" TO "CLIMB TO 5000 DIRECT IRUHO AND ON TRACK 252.07 TO GANGS AND HOLD" - UPDATED MAG VAR.
6. CHANGED "FAC: 207.57" TO "FAC: 211.57" ON 8260-3 LINE 3 - UPDATED AIRPORT MAG VAR.
7. ADDED "20:1 IS CLEAR" TO 8260-3 LINE 7 - VERIFIED NO VISUAL SFC PENETRATIONS AND IAW 8260.19H, PARA 8-6-7G(3).
8. FAS OBSTACLE CHANGED FROM "CHART FAS OBSTACLE: 2500 RAIL BLDG 473735N/1173012W" TO "CHART FAS OBSTACLE: 2500 BLDG 473735N/1173012W" IN ADDITIONAL FLIGHT DATA - UPDATED EVALUATION.
9. ADDED "CHART CIRCLING ICON" IN ADDITIONAL FLIGHT DATA - RWY 8 WILL BE FLIGHT CHECKED USING NEW CIRCLING CRITERIA.
10. UPDATED "CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -19C (-2F) OR ABOVE 29C (84F)" TO "CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C OR ABOVE 53C" - USED 5 YEAR TEMPERATURE DATA, AFS HIGH/LOW CALCULATOR AND IAW 8260.19H, PARA 8-6-9S .
11. DELETED "CHART NOTE: DME/DME RNP-0.3" - IAW 8260.19H, PARA 4-6-10E AND MEMO 257 DATED 9/12/2017.
12. ADDED "RNP APCH" TO PBN REQUIREMENTS NOTES - IAW 8260.19H, PARA 8-6-8B(1) AND MEMO 257 DATED 9/12/2017.
13. UPDATED "CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE 3.00/TCH 73)" TO "CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET})" - IAW 8260.19H, PARA 8-6-9M.
14. CRC REMAINDER CHANGED FROM 1AA1FB79 TO C9DEB1A0 -P-NOTAM 4/7081 APPLIED CHANGING THRE TO TDZE.
15. RAISED LNAV CAT C/D VISIBILITY FROM RVR 2400 TO RVR 4500 - PER 8260.3 VISIBILITY TABLES.
16. CHANGED DISTANCE TO THLD FROM "200 HATH: 0.45 NM" TO "200 HAT: 0.53 NM" - PER VISCHECK TOOL.
17. CHANGED VDP FROM 1.33 NM TO 1.27 NM - PER 8260.3C FORMULA 2-6-5.
18. INCORPORATED CHANGES FROM P-NOTAM 4/7081 WHICH CHANGED FROM THRE TO TDZE - IAW 8260.19H, PARA 8-3-4C(3).
19. INCORPORATED CHANGES FROM P-NOTAM 7/7390 WHICH CHANGED LPV VISIBILITY FROM RVR 2400 TO RVR 1800 ALL CATS - IAW 8260.19H, PARA 8-3-4C(3).

PDF EDITED:

1. ADDED PAT 1 TO MISSED APPROACH: LPV, LNAV/VNAV AND LNAV.



COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZSE, GEG ATC, AMGR, ATA

FLIGHT CHECKED BY

OFFICE

DATE

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-333) MEMO, DEC 22, 2017.

Digitally signed by

DEVELOPED BY

Digitally signed by

DONALD H LANIER

OFFICE

DATE

DIANE S LAIR

DIANE S LAIR

Nov 16, 2018

AJV-5433

05/25/2018

APPROVED BY

Jun 19, 2018

OFFICE

DATE

TITLE

PATRICK MULQUEEN

Digitally signed by

DONALD H LANIER

Nov 16, 2018

AJV-5430

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGEG
RUNWAY	RW21
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W21A
LTP/FTP LATITUDE	473752.3810N
LTP/FTP LONGITUDE	1173105.7570W
LTP/FTP ELLIPSOIDAL HEIGHT	+06895
FPAP LATITUDE	473636.2905N
FPAP LONGITUDE	1173300.2875W
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)	35.0
CRC REMAINDER	C9DEB1A0
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+07079
FPAP ORTHOMETRIC HEIGHT	+07079



FEDERAL AVIATION ADMINISTRATION
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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> SPOKANE INTL	<u>AIRPORT ID</u> KGEK	<u>PROCEDURE NAME</u> RNAV (GPS) Y RWY 26	<u>ORIGINAL/AMENDMENT</u> 4B	<u>CITY</u> SPOKANE	<u>STATE</u> WA
<u>AIRPORT ELEVATION</u> 2385	<u>TDZE</u> 2372	<u>SUPERSEDED</u> RNAV (GPS) Y RWY 25	<u>ORIGINAL/AMENDMENT</u> 4A	<u>DATED</u> 04/28/2016	<u>MAG VAR</u> 14E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
ZOOMR		FISKI		TF	FB	2.00	075.90	52.89	8000
HILIE	IAF	OZOLA		TF	FB	1.00	279.85	14.07	6700
FISKI	IAF	OZOLA		TF	FB	1.00	346.89	11.57	6700
CESNO	IAF	OZOLA		TF	FB	1.00	166.90	11.57	6700
OZOLA	IF	CUGEV		TF	FB	1.00	256.89	6.70	6700
CUGEV		NAXAF		TF	FB	1.00	256.78	5.40	5200
NAXAF	FAF	WIVUP/3.50 NM TO RW26		TF	FB	0.30	256.68	5.23	
WIVUP/3.50 NM TO RW26		RW26	MAP	TF	FO	0.30	256.68	3.50	
RW26	MAP	2688 MSL		CA			256.68		
2688 MSL		CUVES		DF	FB	1.00			
CUVES		GANGS		TF	FO	1.00	227.88	14.51	5000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW26

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 5000 DIRECT CUVES AND ON TRACK 227.88 TO GANGS AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT OZOLA

3. FAC:

256.68

FAF: NAXAF

DIST FAF TO MAP: 8.73

DIST FAF TO THLD: 8.73

4. MIN ALT: OZOLA 6700, CUGEV 6700, NAXAF 5200, WIVUP/3.50 NM TO RW26 3520*

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

316 HAT: 0.84

GS ANT:

6. MIN GP INCPT:

5200

GP ALT AT FAF : NAXAF 5200

OM:

MM:

IM:

7. GP ANGLE:

3.00

34:1: IS NOT CLEAR

20:1: IS CLEAR

TCH: 47.6

8. MSA FROM: RW26 7200

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 26 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C OR ABOVE 54C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HILIE ON V2 EASTBOUND AND FOR ARRIVALS AT ZOOMR ON V2-448 SOUTHWEST BOUND.

ADDITIONAL FLIGHT DATA:

CHART 4548 TOWER 473541N/1171757W
CHART CIRCLING ICON.
CHART VDP AT 1.57 NM TO RW26*
*LNAV ONLY
WAAS CHANNEL #93501
REFERENCE PATH ID: W26A
CHART FAS OBST: 2651 ATCT 473649N/1173138W.
HOLD SW, RT, 056.48 INBOUND
LTP HAE: 704.5 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 1000-2 3/4, CAT D 1100-3

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	2688	1	316	2688	1	316	2688	1	316	2688	1	316			
LNAV/VNAV DA	2911	1 1/2	539	2911	1 1/2	539	2911	1 1/2	539	2911	1 1/2	539			
LNAV MDA	2920	1	548	2920	1	548	2920	1 5/8	548	2920	1 5/8	548			
CIRCLING	2960	1	575	2980	1	595	3300	2 3/4	915	3400	3	1015			



CHANGES - REASONS

1. PROCEDURE NAME CHANGED FROM RNAV (GPS) Y RWY 25 TO RNAV (GPS) Y RWY 26 - RWY 7-25 RUNWAY NUMBERS HAVE CHANGED TO RWY 8-26, AIRPORT MAG VAR UPDATE.
2. INCREASED ALL TERMINAL ROUTE COURSES, MA TRACK AND HOLDING BY 4 DEGREES - AIRPORT MAG VAR CHANGED FROM 18E/2000 TO 14E/2020.
3. APPLIED P-NOTAM FDC 8/9891 RAISING CIRCLING CAT C MDA/HAA TO 3300/915 - UPDATED OBSTACLE DATA AND TO CLEAR NOTAM.
4. RAISED CIRCLING CAT C VISIBILITY FROM 2 1/4 TO 2 3/4 - UPDATED OBSTACLE DATA AND TO CLEAR P-NOTAM 8/9891.
5. CHANGED "FAC: 252.68" TO "FAC: 256.68" ON 8260-3 LINE 3 - UPDATED AIRPORT MAG VAR.
6. CHANGED "WIVUP/3.50 NM TO RW25 3520*" TO "WIVUP/3.50 NM TO RW26 3520*" ON 8260-3 LINE 4 - CHANGED RUNWAY NUMBER FROM RWY 25 TO RWY 26.
7. ADDED "20:1 IS CLEAR" TO 8260-3 LINE 7 - IAW 8260.19H, PARA 8-6-7G(3).
8. CHANGED "DISTANCE TO THLD FROM 316 HATH: 0.84 NM" TO "DISTANCE TO THLD FROM 316 HAT: 0.84 NM" IN ADDITIONAL FLIGHT DATA - DUE TO CHANGING FROM THRE TO TDZE.
9. CHANGED "CHART VDP AT 1.57 NM TO RW25*" TO "CHART VDP AT 1.57 NM TO RW26*" IN ADDITIONAL FLIGHT DATA - RWY 25 RENUMBERED TO RWY 26.
10. CHANGED "REFERENCE PATH ID: W25A" TO "REFERENCE PATH ID: W26A" IN ADDITIONAL FLIGHT DATA - CHANGED RUNWAY NUMBER FROM RWY 25 TO RWY 26.
11. ADDED "CHART CIRCLING ICON" IN ADDITIONAL FLIGHT DATA - RWY 8 WILL BE FLIGHT CHECKED USING NEW CIRCLING CRITERIA.
12. MISSED APPROACH INSTRUCTION CHANGED FROM "CLIMB TO 5000 DIRECT CUVES AND ON TRACK 223.88 TO GANGS AND HOLD" TO "CLIMB TO 5000 DIRECT CUVES AND ON TRACK 227.88 TO GANGS AND HOLD" - UPDATED MAG VAR.
13. CHANGED "CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED" TO "CHART NOTE: RWY 26 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED" - IAW 8260.19H, PARA 8-6-11K(3).
14. CHANGED "CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F)" TO "CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C OR ABOVE 54C" - USED 5 YEAR TEMPERATURE DATA AND AFS HIGH/LOW TEMPERATURE CALCULATOR AND IAW 8260.19H, PARA 8-6-9S.
15. DELETED "CHART NOTE: DME/DME RNP-0.3 NA" - IAW 8260.19H, PARA 4-6-10E AND MEMO 257 DATED 9/12/2017.
16. ADDED "RNP APCH" TO PBN REQUIREMENTS NOTES - IAW 8260.19H, PARA 8-6-8B(1) AND MEMO 257 DATED 9/12/2017.
17. ALTERNATE MINIMUMS CHANGED FROM STANDARD @ CAT C 800-2 1/4, CAT D 1100-3 TO STANDARD @ CAT C 1000-2 3/4, CAT D 1100-3. - CIRCLING MDA CHANGE.
18. CRC REMAINDER CHANGED FROM 0835E4B2 TO 8FD93DFD - P-NOTAM 5/9996 APPLIED CHANGING THRE TO TDZE.
19. UPDATED MSA CENTER FROM RWY 25 THLD TO RWY 26 THLD - CHANGED RUNWAY NUMBER FROM RWY 25 TO RWY 26.
20. INCORPORATED CHANGES FROM P-NOTAM 5/9996 WHICH CHANGED FROM THRE TO TDZE - IAW 8260.19H, PARA 8-3-4C(3).
21. INCORPORATED CHANGES FROM P-NOTAM 8/9891 WHICH CHANGED CIRCLING CAT C MDA/HAA AND VISIBILITY - IAW 8260.19H, PARA 8-3-4C(3).

PDF EDITED:

1. ADDED PAT 1 TO MISSED APPROACH: LPV, LNAV/VNAV AND LNAV.



COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZSE, AMGR, WA AERO, GEG ATCT, ATA

FLIGHT CHECKED BY

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS
GROUP (AJW-333) MEMO, DEC 22, 2017.

DEVELOPED BY

DIANE S LAIR

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

DIANE S LAIR

Jun 19, 2018

Digitally signed by

DONALD H LANIER

Nov 16, 2018

Digitally signed by

DONALD H LANIER

Nov 16, 2018

OFFICE

OFFICE

AJV-5433

OFFICE

AJV-5430

DATE

DATE

05/18/2018

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGEK
RUNWAY	RW26
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W26A
LTP/FTP LATITUDE	473700.3640N
LTP/FTP LONGITUDE	1173112.1045W
LTP/FTP ELLIPSOIDAL HEIGHT	+07045
FPAP LATITUDE	473701.1510N
FPAP LONGITUDE	1173323.8000W
THRESHOLD CROSSING HEIGHT (TCH)	00047.6
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0256
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	8FD93DFD
<u>ADDITIONAL PATH POINT RECORD INFORMATION</u>	
ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+07228
FPAP ORTHOMETRIC HEIGHT	+07228



RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, TITLE 14 CFR PART 97.33						Bearings, headings, courses, 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 in feet RVR.													
TERMINAL ROUTES											MISSED APPROACH								
FROM		TO		COURSE AND DISTANCE			ALTITUDE		RNP: DA										
ROPES (IAF)		CUMOG (TF) (FB) (RNP 1.00)		243.84 / 13.85			6500		CLIMB TO 7000 ON TRACK 031.49 TO HUPRA AND ON TRACK 357.71 TO JOMRU AND HOLD.										
CUMOG (IF)		WIPRO (TF) (FB) (RNP 1.00)		243.58 / 4.82			5200												
WIPRO		WEJPE (RF) (FB) (RNP 1.00)		(2.60 NM RADIUS CW (CFDWC))/3.32			4500		ADDITIONAL FLIGHT DATA: HOLD N, RT, 192.60 INBOUND. CHART OBST: 2507 TREE 473605N/1173423W DISTANCE TO THLD FROM 331 HAT: 0.87 NM. #TCH 2440 MSL (DO NOT CHART)										
ATOXE (IAF)		IRLUC (TF) (FB) (RNP 1.00)		316.84 / 9.52			4500												
IRLUC (IF)		WEJPE (TF) (FB) (RNP 1.00)		316.71 / 1.53			4500												
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT ZORIL 3. FAC: 031.45 FAF: ZORIL DIST FAF TO MAP: _____ THLD: _____ 4. MIN. ALT: ZORIL 3500 5. DIST TO THLD FROM OM: 3.33 MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 3500 GS ALT AT: ZORIL 3500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 55.0 # 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW03 7100																MAG VAR: 14E		EPOCH YEAR: 2020	
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		STANDARD									
CATEGORY ==>		A		B		C		D		E									
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA				
AUTHORIZATION REQUIRED																			
RNP 0.11 DA	2716	2600	331	2716	2600	331	2716	2600	331	2716	2600	331							
RNP 0.30 DA	2842	4500	457	2842	4500	457	2842	4500	457	2842	4500	457							
NOTES: CHART PLANVIEW NOTE AT WIPRO : MAX 210 KIAS UNTIL OTEPE. CHART PLANVIEW NOTE AT WEJPE : MAX 210 KIAS UNTIL OTEPE. CHART PLANVIEW NOTE AT JEVPI : MAX 210 KIAS UNTIL OTEPE. CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS. (CONTINUED ON PAGE 2)																			
CITY AND STATE SPOKANE, WA		ELEVATION: 2385 TDZE: 2385 AIRPORT NAME: SPOKANE INTL		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (RNP) Z RWY 3, AMDT 1 3 JANUARY 2019						SUP:							
												AMDT: ORIG							
												DATED 03/10/2011							

QUALITY
42
CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION			Bearings, headings, courses, 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 in feet RVR.	
RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33				
TERMINAL ROUTES, (CONT.):				
FROM	TO	COURSE AND DISTANCE	ALTITUDE	
WEJPE	OTEPE (RF) (FB) (RNP 1.00)	(2.60 NM RADIUS CW (CFDWC))/3.39	3500	
JOMRU (IAF)	HODIX (TF) (FB) (RNP 1.00)	204.08 / 24.46	4600	
HODIX (IF)	JEVPI (TF) (FB) (RNP 1.00)	203.80 / 1.90	4100	
JEVPI	OTEPE (RF) (FB) (RNP 1.00)	(2.60 NM RADIUS CCW (CFDWL))/7.82	4100	
ZOOMR (IAF)	GANGS (TF) (FB) (RNP 1.00)	058.97 / 16.00	4400	
GANGS (IF)	ZIBOB (TF) (FB) (RNP 1.00)	068.21 / 10.58	4400	
HUNUN (IAF)	ZIBOB (TF) (FB) (RNP 1.00)	031.34 / 3.58	4400	
ZIBOB (IF)	OTEPE (TF) (FB) (RNP 1.00)	031.40 / 1.85	4100	
OTEPE	ZORIL (TF) (FB) (RNP 0.30)	031.42 / 1.97	3500	
ZORIL (FAF)	RW03 (MAP) (TF) (FO) (RNP 0.30)	031.45 / 3.33		
RW03 (MAP)	HUPRA (TF) (FB) (RNP 1.00)	031.49 / 7.60		
HUPRA	JOMRU (TF) (FO) (RNP 1.00)	357.71 / 15.52	7000	
NOTES, (CONT.): CHART PLANVIEW NOTE AT ZOOMR, JOMRU, ROPES, HUNUN AND ATOXE: (RNP 0.30). CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ZOOMR ON V2-448 SOUTHWEST BOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT JOMRU ON V112 NORTHBOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ATOXE ON V253 SOUTHEAST BOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ROPES ON V2 EASTBOUND. CHART PLANVIEW NOTE ADJACENT TO JOMRU, ATOXE, ROPES, IAF: RF REQUIRED. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -18C OR ABOVE 53C. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). PBN REQUIREMENTS NOTE: RNP AR APCH.				
CITY AND STATE	ELEVATION: 2385 TDZE: 2385	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
SPOKANE, WA	AIRPORT NAME:	RNAV	RNAV (RNP) Z RWY 3, AMDT 1	AMDT: ORIG
	SPOKANE INTL		3 JANUARY 2019	DATED: 03/10/2011



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
**RNAV (RNP) - STANDARD,
INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33**

Bearings, headings, courses, 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 in feet RVR.



CITY AND STATE
SPOKANE, WA

ELEVATION: 2385 TDZE: 2385
AIRPORT NAME:
SPOKANE INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (RNP) Z RWY 3, AMDT 1
3 JANUARY 2019

SUP:
AMDT: ORIG
DATED: 03/10/2011

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION				RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, TITLE 14 CFR PART 97.33				Bearings, headings, courses, 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 in feet RVR.							
TERMINAL ROUTES										MISSED APPROACH					
FROM		TO		COURSE AND DISTANCE			ALTITUDE		RNP: DA CLIMB TO 7000 ON TRACK 076.49 TO JERPU, LEFT TURN TO OZALO, AND ON TRACK 337.70 TO JOMRU AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, RT, 192.60 INBOUND. DISTANCE TO THLD FROM 289 HAT: 0.72 NM. # TCH 2436 MSL (DO NOT CHART)						
ROPES (IAF)		HUBSI (TF) (FB) (RNP 1.00)		254.92 / 13.95			6500								
HUBSI		JILEB (TF) (FB) (RNP 1.00)		254.67 / 6.00			5000								
JILEB		JUKDO (RF) (FB) (RNP 1.00)		(2.50 NM RADIUS CW (CFDTL))/2.84			4300								
ATOXE (IAF)		ZOTAV (TF) (FB) (RNP 1.00)		319.72 / 12.86			4300								
ZOTAV (IF)		JUKDO (TF) (FB) (RNP 1.00)		319.62 / 2.00			4300								
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)															
2. PROFILE STARTS AT HUREV															
3. FAC: 076.43 FAF: HUREV DIST FAF TO MAP: _____ THLD: _____															
4. MIN. ALT: _____															
5. DIST TO THLD FROM OM: 3.03 MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____															
6. MIN GS INCPT: 3400 GS ALT AT: HUREV 3400 OM: _____ MM: _____ IM: _____															
7. GS ANGLE: 3.00 TCH: 60.0 # 20:1 IS CLEAR 34:1 IS CLEAR															
8. MSA FROM: RW08 7100										MAG VAR: 14E				EPOCH YEAR: 2020	
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		STANDARD					
CATEGORY ==>		A		B		C		D		E					
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
AUTHORIZATION REQUIRED															
RNP 0.11 DA	2665	7/8	289	2665	7/8	289	2665	7/8	289	2665	7/8	289			
RNP 0.30 DA	2869	1 3/8	493	2869	1 3/8	493	2869	1 3/8	493	2869	1 3/8	493			
NOTES: CHART PLANVIEW NOTE AT JILEB : MAX 210 KIAS UNTIL HUREV. CHART PLANVIEW NOTE AT JUKDO : MAX 210 KIAS UNTIL HUREV. CHART PLANVIEW NOTE AT ZINAG : MAX 210 KIAS UNTIL HUREV. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ZOOMR ON V2-448 SOUTHWEST BOUND. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 2385 TDZE: 2376				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP: RNAV (RNP) Z RWY 7			
SPOKANE, WA		AIRPORT NAME: SPOKANE INTL						RNAV (RNP) Z RWY 8, AMDT 1 3 JANUARY 2019				AMDT: ORIG-A			
												DATED 04/28/2016			



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION				Bearings, headings, courses, 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 in feet RVR.	
RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33					
TERMINAL ROUTES, (CONT.):					
FROM		TO	COURSE AND DISTANCE	ALTITUDE	
JUKDO	WESKU (RF) (FB) (RNP 1.00)	(2.50 NM RADIUS CW (CFDTL))/2.56	4100		
WESKU	HUREV (RF) (FB) (RNP 1.00)	(2.50 NM RADIUS CW (CFDTL))/2.53	3400		
JOMRU (IAF)	WONEV (TF) (FB) (RNP 1.00)	206.54 / 18.96	4600		
WONEV (IF)	ZINAG (TF) (FB) (RNP 1.00)	206.31 / 2.00	4000		
ZINAG	OMPIZ (RF) (FB) (RNP 1.00)	(2.50 NM RADIUS CCW (CFDVB))/2.86	4000		
OMPIZ	HUREV (RF) (FB) (RNP 1.00)	(2.50 NM RADIUS CCW (CFDVB))/2.81	3400		
ZOOMR	GANGS (TF) (FB) (RNP 2.00)	058.97 / 16.00	5200		
GANGS (IAF)	ZANAT (TF) (FB) (RNP 1.00)	036.58 / 10.88	4400		
WOLDA (IAF)	ZANAT (TF) (FB) (RNP 1.00)	076.30 / 4.14	4400		
ZANAT (IF)	HUREV (TF) (FB) (RNP 1.00)	076.36 / 4.00	3400		
HUREV (FAF)	RW08 (MAP) (TF) (FO) (RNP 0.30)	076.43 / 3.03			
RW08 (MAP)	JERPU (TF) (FB) (RNP 1.00)	076.49 / 6.07			
JERPU	OZALO (RF) (FB) (RNP 1.00)	(4.80 NM RADIUS CCW (CFDXX)) / 8.29			
OZALO	JOMRU (TF) (FO) (RNP 1.00)	337.70 / 14.82	7000		
NOTES, (CONT.): CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT JOMRU ON V112 NORTHBOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ATOXE ON V253 SOUTHEAST BOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ROPES ON V2 EASTBOUND.					
CITY AND STATE SPOKANE, WA	ELEVATION: 2385 AIRPORT NAME: SPOKANE INTL	TDZE: 2376	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (RNP) Z RWY 8, AMDT 1 3 JANUARY 2019	SUP: RNAV (RNP) Z RWY 7 AMDT: ORIG-A DATED: 04/28/2016



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV (RNP) - STANDARD,
INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33

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CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -18C OR ABOVE 53C.
PBN REQUIREMENTS NOTE: RF REQUIRED.

CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -18C OR ABOVE 53C.
PBN REQUIREMENTS NOTE: RNP AR APCH.
PBN REQUIREMENTS NOTE: RF REQUIRED.

CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -18C OR ABOVE 53C.
PBN REQUIREMENTS NOTE: RNP AR APCH.
PBN REQUIREMENTS NOTE: RF REQUIRED.

CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -18C OR ABOVE 53C.
PBN REQUIREMENTS NOTE: RNP AR APCH.
PBN REQUIREMENTS NOTE: RF REQUIRED.

CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -18C OR ABOVE 53C.
PBN REQUIREMENTS NOTE: RNP AR APCH.
PBN REQUIREMENTS NOTE: RF REQUIRED.

CITY AND STATE
SPOKANE, WA

ELEVATION: 2385	TDZE: 2376
AIRPORT NAME:	
	SPOKANE INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:
RNAV (RNP) Z RWY 8, AMDT 1
 3 JANUARY 2019

SUP:	RNAV (RNP) Z RWY 7
AMDT:	ORIG-A
DATED:	04/28/2016

QUALITY
42
CHECKED

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION				RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, TITLE 14 CFR PART 97.33				Bearings, headings, courses, 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 in feet RVR.							
TERMINAL ROUTES										MISSED APPROACH					
FROM		TO		COURSE AND DISTANCE				ALTITUDE		RNP: DA CLIMB TO 5000 ON TRACK 211.51 TO IRUHO AND TRACK 252.07 TO GANGS AND HOLD. * MISSED APPROACH REQUIRES MINIMUM CLIMB OF 310 FEET PER NM TO 3000 ADDITIONAL FLIGHT DATA: HOLD SW, RT, 056.48 INBOUND. CHART: 2362 POLE 473834N/1173003W DISTANCE TO THLD FROM 250 HAT: 0.69 NM. ROUTE TYPE: A, R ROUTE TYPE QUALIFIER 1: F ROUTE TYPE QUALIFIER 2: S					
ZOOMR (IAF)		WEGNE (TF) (FB) (RNP 1.00)		044.86 / 29.41				4500							
WEGNE (IF)		JIVBO (TF) (FB) (RNP 1.00)		045.27 / 7.02				4000							
JIVBO		OXOJO (RF) (FB) (RNP 1.00)		(2.60 NM RADIUS CW (CFDVZ))/4.19				3500							
OXOJO		WAVIX (RF) (FB) (RNP 1.00)		(2.60 NM RADIUS CW (CFDVZ))/3.35				3400							
JOMRU (IAF)		CEBUS (TF) (FB) (RNP 1.00)		158.80 / 10.85				5000							
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT WAVIX 3. FAC: <u>211.55</u> FAF: _____ DIST FAF TO MAP: _____ THLD: _____ 4. MIN. ALT: _____ 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: <u>3400</u> GS ALT AT: <u>WAVIX</u> OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>54.9</u> 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW21 7200															
										MAG VAR: 14E			EPOCH YEAR: 2020		
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		STANDARD					
CATEGORY =====>		A		B		C		D		E					
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
AUTHORIZATION REQUIRED															
RNP 0.11 DA*	2596	2400	250	2596	2400	250	2596	2400	250	2596	2400	250			
RNP 0.15 DA	2699	3000	353	2699	3000	353	2699	3000	353	2699	3000	353			
RNP 0.30 DA	2752	4500	406	2752	4500	406	2752	4500	406	2752	4500	406			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -19°C OR ABOVE 43°C. CHART SPEED ICON IN PLANVIEW AT JIVBO : MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT ZUDSI : MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT OPTIY : MAX 210 KIAS. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 2385 TDZE: 2346				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:			
SPOKANE, WA		AIRPORT NAME: SPOKANE INTL						RNAV (RNP) Z RWY 21, AMDT 1B				AMDT: 1A			
								3 JANUARY 2019				DATED 07/24/2014			



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION				Bearings, headings, courses, 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 in feet RVR.	
RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33					
TERMINAL ROUTES, (CONT.):					
FROM	TO	COURSE AND DISTANCE	ALTITUDE		
CEBUS (IF)	JIXEG (TF) (FB) (RNP 1.00)	211.67 / 6.83	3700		
JIXEG	WAVIX (TF) (FB) (RNP 1.00)	211.58 / 2.08	3400		
ROPES (IAF)	CUFYE (TF) (FB) (RNP 1.00)	213.72 / 5.06	6700		
CUFYE	CUMUR (TF) (FB) (RNP 1.00)	294.65 / 2.00	5900		
CUMUR (IF)	INVUW (TF) (FB) (RNP 1.00)	294.62 / 2.00	5600		
INVUW	OPTIY (TF) (FB) (RNP 1.00)	294.59 / 3.46	4500		
ATOXE (IAF)	CAHLA (TF) (FB) (RNP 1.00)	004.84 / 12.41	4600		
CAHLA (IF)	ZUDSI (TF) (FB) (RNP 1.00)	012.14 / 5.86	4600		
ZUDSI	OPTIY (RF) (FB) (RNP 1.00)	(2.60 NM RADIUS CCW (CFDWW))/3.52	4500		
OPTIY	WAVIX (RF) (FB) (RNP 1.00)	(2.60 NM RADIUS CCW (CFDWW))/3.76	3400		
WAVIX (FAF)	RW21 (MAP) (TF) (FO) (RNP 0.30)	211.55 / 3.21			
RW21 (MAP)	IRUHO (TF) (RNP 1.00)	211.51 / 10.00			
IRUHO	GANGS (TF) (FO) (RNP 1.00)	252.07 / 9.77	5000		
NOTES, (CONT.):					
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ZOOMR ON V2-448 SOUTHWEST BOUND.					
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT JOMRU ON V112 NORTHBOUND.					
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ROPES ON V2 EASTBOUND.					
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ATOXE ON V253 SOUTHEAST BOUND.					
CHART PLANVIEW NOTE ADJACENT TO ZOOMR IAF: RF REQUIRED.					
CHART PLANVIEW NOTE ADJACENT TO ATOXE IAF: RF REQUIRED.					
CHART PLANVIEW NOTE ADJACENT TO ROPES: RF REQUIRED.					
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).					
CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.					
CITY AND STATE	ELEVATION: 2385	TDZE: 2346	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
SPOKANE, WA	AIRPORT NAME:		RNAV	RNAV (RNP) Z RWY 21, AMDT 1B	AMDT: 1A
	SPOKANE INTL			3 JANUARY 2019	DATED: 07/24/2014



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33			Bearings, headings, courses, 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 in feet RVR.	
CHART NOTE: FOR INOPERATIVE ALS INCREASE RNP 0.11 VISIBILITY ALL CATS TO 3/4, RNP 0.15 VISIBILITY ALL CATS TO 1 1/8 AND RNP 0.30 VISIBILITY ALL CATS TO 1 3/8. CHART PBN REQUIREMENTS NOTE: RNP AR APCH				
QUALITY 24 CHECKED				
CITY AND STATE SPOKANE, WA	ELEVATION: 2385 AIRPORT NAME: SPOKANE INTL	TDZE: 2346 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (RNP) Z RWY 21, AMDT 1B 3 JANUARY 2019	SUP: AMDT: 1A DATED: 07/24/2014

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION				RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, TITLE 14 CFR PART 97.33				Bearings, headings, courses, 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 in feet RVR.							
TERMINAL ROUTES										MISSED APPROACH					
FROM		TO		COURSE AND DISTANCE				ALTITUDE		RNP: DA CLIMB TO 5000 ON TRACK 256.52 TO TEFXY AND ON TRACK 219.50 TO GANGS AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SW, RT, 056.48 INBOUND. DISTANCE TO THLD FROM 373 HAT: 1.02 NM. ROUTE TYPE: A, H ROUTE TYPE QUALIFIER 1: F #TCH 2419.1 MSL (DO NOT CHART) ROUTE TYPE QUALIFIER 2: S					
HIPRR		ROPES (TF) (FB) (RNP 2.00)		260.46 / 12.08				7500							
ROPES (IAF)		HITVI (TF) (FB) (RNP 0.50)		299.85 / 6.36				5400							
ATOXE (IAF)		UNIYA (TF) (FB) (RNP 1.00)		008.22 / 8.34				4100							
GANGS (IAF)		WOSAX (TF) (FB) (RNP 1.00)		074.60 / 14.01				4300							
JOMRU (IAF)		IQITO (TF) (FB) (RNP 1.00)		171.80 / 12.99				4100							
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)															
2. PROFILE STARTS AT WARKI															
3. FAC: <u>256.58</u> FAF: _____ DIST FAF TO MAP: _____ THLD: _____															
4. MIN. ALT: WARKI 3400															
5. DIST TO THLD FROM OM: <u>3.08</u> MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____															
6. MIN GS INCPT: <u>3400</u> GS ALT AT: WARKI 3400 OM: _____ MM: _____ IM: _____															
7. GS ANGLE: <u>3.00</u> TCH: <u>47.6</u> 20:1 IS CLEAR 34:1 IS NOT CLEAR															
8. MSA FROM: RW26 7200										MAG VAR: 14E EPOCH YEAR: 2020					
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		STANDARD					
CATEGORY =====>		A		B		C		D		E					
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
AUTHORIZATION REQUIRED															
RNP 0.11 DA	2745	1 1/4	373	2745	1 1/4	373	2745	1 1/4	373	2745	1 1/4	373			
RNP 0.30 DA	2795	1 3/8	423	2795	1 3/8	423	2795	1 3/8	423	2795	1 3/8	423			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -17C OR ABOVE 54C. CHART SPEED ICON IN PLANVIEW AT ZARFE : MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT HUKIG : MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT YOCUG : MAX 210 KIAS. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 2385 TDZE: 2372		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP: RNAV (RNP) Z RWY					
SPOKANE, WA		AIRPORT NAME: SPOKANE INTL				RNAV (RNP) Z RWY 26, AMDT 1B				25					
						3 JANUARY 2019				AMDT: 1A					
										DATED 04/28/2016					



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION			Bearings, headings, courses, 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 in feet RVR.	
RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33				
TERMINAL ROUTES, (CONT.):				
FROM	TO	COURSE AND DISTANCE	ALTITUDE	
HITVI (IF)	KAXYU (TF) (FB) (RNP 0.30)	256.72 / 5.26	4000	
UNIYA (IF)	ZARFE (TF) (FB) (RNP 0.30)	018.27 / 5.00	3700	
WOSAX (IF)	HUKIG (TF) (FB) (RNP 1.00)	074.84 / 5.96	4100	
IQITO (IF)	YOCUG (TF) (FB) (RNP 0.30)	163.90 / 4.01	3400	
KAXYU	WARKI (TF) (FB) (RNP 0.30)	256.63 / 2.66	3400	
HUKIG	ZARFE (RF) (FB) (RNP 0.30)	(3.15 NM RADIUS CCW (CFBWG))/3.12	3700	
ZARFE	WARKI (RF) (FB) (RNP 0.30)	(3.20 NM RADIUS CCW (CFBWH))/6.80	3400	
YOCUG	WARKI (RF) (FB) (RNP 0.30)	(3.10 NM RADIUS CW (CFBWJ))/5.02	3400	
WARKI (FAF)	RW26 (MAP) (TF) (FO) (RNP 0.30)	256.58 / 3.08		
RW26 (MAP)	TEFXY (TF) (FB) (RNP 1.00)	256.52 / 7.50		
TEFXY	GANGS (TF) (FO) (RNP 1.00)	219.50 / 11.56	5000	
NOTES, (CONT.):				
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HIPPR ON V2 EASTBOUND.				
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ROPES ON V2 EASTBOUND.				
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ATOXE ON V253 SOUTHEAST BOUND.				
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT GANGS ON V2-448 SOUTHWEST BOUND.				
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT JOMRU ON V112 NORTHBOUND.				
CHART PLANVIEW NOTE ADJACENT TO ATOXE IAF: RF REQUIRED.				
CHART PLANVIEW NOTE ADJACENT TO GANGS IAF: RF REQUIRED.				
CHART PLANVIEW NOTE ADJACENT TO JOMRU IAF: RF REQUIRED.				
CHART PLANVIEW NOTE AT HIPRR: (RNP 0.30).				
CHART PLANVIEW NOTE AT ROPES: (RNP 0.30).				
CHART PLANVIEW NOTE AT ATOXE: (RNP 0.30).				
CITY AND STATE	ELEVATION: 2385 TDZE: 2372	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP: RNAV (RNP) Z RWY 25
SPOKANE, WA	AIRPORT NAME:	RNAV	RNAV (RNP) Z RWY 26, AMDT 1B	AMDT: 1A
	SPOKANE INTL		3 JANUARY 2019	DATED: 04/28/2016



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33			Bearings, headings, courses, 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 in feet RVR.	
CHART PLANVIEW NOTE AT GANGS: (RNP 0.30). CHART PLANVIEW NOTE AT JOMRU: (RNP 0.30). CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS. CHART PBN REQUIREMENTS NOTE: RNP AR APCH				
QUALITY 24 CHECKED				
CITY AND STATE SPOKANE, WA	ELEVATION: 2385 AIRPORT NAME: SPOKANE INTL	TDZE: 2372 FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (RNP) Z RWY 26, AMDT 1B 3 JANUARY 2019	SUP: RNAV (RNP) Z RWY 25 AMDT: 1A DATED: 04/28/2016

**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>
SPOKANE, WA	SPOKANE INTL	3 JANUARY 2019	7

TAKEOFF MINIMUMS:

RWY 3, 7, 21, 26: STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

RWY 3, CLIMBING LEFT TURN DIRECT GEG VORTAC, THENCE...

RWY 8, CLIMBING RIGHT TURN DIRECT GEG VORTAC, THENCE...

RWY 21, CLIMB ON GEG VORTAC R-028 TO GEG VORTAC, THENCE...

RWY 26, CLIMBING LEFT TURN DIRECT GEG VORTAC, THENCE...

...CONTINUE CLIMB IN GEG VORTAC HOLDING PATTERN (HOLD SW, RIGHT TURNS, 028.00 INBOUND) TO CROSS GEG VORTAC AT OR ABOVE MEA/
MCA FOR ROUTE OF FLIGHT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 03: TREE 1089 FT FROM DER, 789 FT LEFT OF CENTERLINE, 2367 FT MSL.

TREES BEGINNING 1315 FT FROM DER, 667 FT LEFT OF CENTERLINE, UP TO 2370 FT MSL.

NOTE: RWY 21: TREE 2152 FT FROM DER, 1000 FT RIGHT OF CENTERLINE, 2439 FT MSL.

CONTROLLING OBSTACLES:

OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: 4552 FT MSL TOWER 473541.00N/1171757.00W.

REMARKS:

OBSTACLES 53-035602 AND 53-032532 (REILS) ARE PERMISSIBLE AND SO NOT INCLUDED IN RWY 21 TAKEOFF OBSTACLE NOTES.

FLIGHT INSPECTED BY:

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, DEC 22, 17,
SUBJECT: FLIGHT INSPECTION NOT REQUIRED.

Digitally signed by
DONALD H LANIER
Nov 15, 2018

OFFICE SYMBOL:

DATE:

DEVELOPED BY:

Digitally signed by

IVAN BLANCO

DONALD H LANIER

Nov 15, 2018

OFFICE SYMBOL:

AJV-5432

DATE:

04/13/2018

APPROVED BY:

Digitally signed by

DONALD H LANIER

PATRICK MULQUEEN

Nov 15, 2018

OFFICE SYMBOL:

AJV-5430

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:

ZSE, SPOKANE APP CON, AMGR

CHANGES - REASONS:

1. CHANGED RWY 3 TEXTUAL DEPARTURE PROCEDURE FROM: CLIMBING LEFT TURN HEADING 190.00 AND GEG R-010 TO GEG VORTAC, THENCE... TO: CLIMBING LEFT TURN DIRECT GEG VORTAC, THENCE... - TO SIMPLIFY IAW 8260.46F, 2-1-1, G(2).
2. CHANGED RWY 7 TEXTUAL DEPARTURE PROCEDURE FROM: CLIMBING RIGHT TURN HEADING 255.00 AND GEG R-075 TO GEG VORTAC, THENCE... TO: RWY 8, CLIMBING RIGHT TURN DIRECT GEG VORTAC, THENCE... - TO SIMPLIFY IAW 8260.46F, 2-1-1, G(2).
3. CHANGED RWY 21 TEXTUAL DEPARTURE PROCEDURE FROM CLIMBING RIGHT TURN HEADING 208.00 AND GEG R-0028 TO GEG VORTAC, THENCE TO: CLIMB ON GEG VORTAC R-028 TO GEG VORTAC, THENCE... - TO CORRECT AND SIMPLIFY DEPARTURE INSTRUCTION.
4. CHANGED RWY 25 TEXTUAL DEPARTURE PROCEDURE FROM: CLIMBING LEFT TURN HEADING 176.00 AND GEG R-356 TO GEG VORTAC, THENCE TO: RWY 26, CLIMBING LEFT TURN DIRECT GEG VORTAC, THENCE. - IAW 8260.46F, 2-1-1, G(2).
5. UPDATED OBSTACLE MANDATING ODP ROUTE DEVELOPMENT FROM 4548 TO 4552 MSL TOWER. - CHANGE TO OBSTACLE DATA.
6. UPDATED TAKEOFF OBSTACLE NOTES. - NEW EVALUATION RESULT.

QUALITY
3
CHECKED

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR 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> SPOKANE INTL	<u>AIRPORT ID</u> KGEG	<u>PROCEDURE NAME</u> VOR RWY 3	<u>ORIGINAL/AMENDMENT</u> 14	<u>CITY</u> SPOKANE	<u>STATE</u> WA	
<u>AIRPORT ELEVATION</u> 2385	<u>TDZE</u> 2385	<u>SUPERSEDED</u> VOR RWY 3	<u>ORIGINAL/AMENDMENT</u> 13	<u>DATED</u> 11/18/2010	<u>MAG VAR</u> 21E	<u>EPOCH YEAR</u> 1975
<u>FACILITY</u> GEG	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 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>
HUNIB/10.00 DME CW	IAF	ZEGRO/10.00 DME	NOPT				10.00 DME ARC		5000
EPAFY/10.00 DME CCW	IAF	ZEGRO/10.00 DME	NOPT				10.00 DME ARC		5000
ZEGRO/10.00 DME	IF	GEG VORTAC					028.00	10.00	3800

MISSED APPROACH

MAP:

4.13 NM AFTER GEG VORTAC

MISSED APPROACH INSTRUCTIONS:

CLIMBING LEFT TURN TO 4200 DIRECT GEG VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4200.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L **SIDE OF COURSE** 207.99 **OUTBOUND** 4200 **FT WITHIN** 15 **MILES OF** GEG VORTAC (IAF)
- 2.
3. **FAC:** 027.99 **FAF:** GEG VORTAC **DIST FAF TO MAP:** 4.13 **DIST FAF TO THLD:** 4.13
4. **MIN ALT:** GEG VORTAC 3800
8. **MSA FROM:** GEG VORTAC 360-090 6500, 090-180 5200, 180-270 4300, 270-360 5300

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: CIRCLING NA FOR CATEGORY E SOUTHEAST OF RWY 3-21.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-03 CAT C/D/E VISIBILITY TO 1 5/8 SM.



ADDITIONAL FLIGHT DATA:

GEG VORTAC TO RW03: 3.10/55
CHART CIRCLING ICON.
CHART GEG R-142 AT HUNIB.
CHART GEG R-241 AT EPAFY.
CHART VDP AT 2.51 DME
DISTANCE VDP TO THLD 1.63 NM
CHART FAS OBST: 2699 TREE 473426N/1173415W.
2940 AAO 473355N/1173736W.
HOLD SW, RT, 028.00 INBOUND

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

ALTERNATE: NA ☐ STANDARD - CAT C 1000-2 3/4, CAT D, E 1100-3

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
S-03	2960	2400	575	2960	2400	575	2960	1 1/4	575	2960	1 1/4	575	2960	1 1/4	575
CIRCLING	2960	1	575	2980	1	595	3300	2 3/4	915	3400	3	1015	3400	3	1015

CHANGES - REASONS

1. CHANGED MAXIMUM LENGTH OF PROCEDURE TURN FROM 10 NM TO 15 NM. - ALLOW FOR CAT E TO USE PT.
2. DELETED CHART PROFILE NOTE: PROCEDURE TURN NOT AUTHORIZED CATEGORY E. - PROCEDURE TURN NOW EXTENDS UP TO 15NM.
3. LOWERED FAF ALTITUDE FROM 3900 TO 3800. - ATC REQUEST.
4. LOWERED MSA SECTOR 360-090 FROM 7100 TO 6500 AND 090-180 FROM 5300 TO 5200. - INVALID ADJUSTMENT AND NEW CONTROLLING OBTACLE.
5. CHANGED FAS OBS COORDINATES FROM 473427N/1173412W TO 473426N/1173415W IN ADDITIONAL FLIGHT DATA. - NEW MAP STUDY.
6. CHANGED 7:1 OBS FROM 2959 AAO AT 473355N/1173734W TO 2940 AAO AT 473355N/1173736W. - NEW MAP STUDY.
7. ADDED CIRCLING ICON AND RAISED CATS B, C, D AND E MDA/HAA FROM 2960/575, 2960/575, 2980/595 AND 3260/875 TO 2980/595, 3300/915, 3400/1015 AND 3400/1015. - FAAO 8260.3C, CHAPTER 2 NEW CIRCLING CRITERIA.
8. RAISED CIRCLING CATS C/D VISIBILITY FROM 1 5/8 AND 2 TO 2 3/4 AND 3. - NEW HIGHER MDAS AND FAAO 8260.3C CHAPTER 3.
9. CHANGED VDP DME VALUE FROM 2.50 TO 2.51. - NEW VDP CALCULATION.
10. CHANGED GEG VORTAC TO RW03: 3.33/55 TO 3.10/55. - LOWERED FAF ALTITUDE.
11. ADDED CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-03 CAT C/D/E VISIBILITY TO 1 5/8 SM. - FAAO 8260.3C CHAPTER 3 AND VISI CALCULATOR.
12. LOWERED S-03 CATS A/B VISIBILITY FROM RVR 4000 TO RVR 2400. - FAAO 8260.3C CHAPTER 3 AND VISI CALCULATOR.
13. CHANGED OUTBOUND PT COURSE ON LINE 1 OF PROFILE VIEW FROM 208.00 TO 207.99. - RECIPROCAL OF FAC IS 207.99.

11/13/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 05/17/18.
1. ADDED NOPT TO INITIAL DME ARC SEGMENTS FROM HUNIB AND EPAFY TO ZEGRO.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: GEG ATCT, GEG GADO, SEA ARTCC, SEA FSDO, ATA

FLIGHT CHECKED BY

THOMAS EDWARD MOLOKIE

Digitally signed by

DONALD H LANIER

Nov 15, 2018

OFFICE

FIOG

DATE

11/04/2018

DEVELOPED BY

LIAM DONAHUE

Digitally signed by

LIAM DONAHUE

Nov 13, 2018

OFFICE

AJV-5431

DATE

05/17/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

DONALD H LANIER

Nov 15, 2018

OFFICE

AJV-5430

DATE

TITLE

MANAGER



[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. [31227](#); Amdt. No. [3830](#)

**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 **NOVEMBER 30, 2018**.



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
3-Jan-19	MO	Fulton	Elton Hensley Memorial	8/2539	11/7/18	This NOTAM, published in TL 19-01, is hereby rescinded in its entirety.
3-Jan-19	MN	Hallock	Hallock Muni	8/8364	11/7/18	This NOTAM, published in TL 19-01, is hereby rescinded in its entirety.
AIRAC DATE	STATE	CITY	AIRPORT	FDC NUMBER	FDC DATE	SUBJECT
3-Jan-19	MO	Kirksville	Kirksville Rgnl	8/0394	11/20/18	VOR-A, Amdt 15
3-Jan-19	MO	Kirksville	Kirksville Rgnl	8/0441	11/15/18	ILS OR LOC/DME RWY 36, Amdt 1
3-Jan-19	MO	Kirksville	Kirksville Rgnl	8/0479	11/15/18	RNAV (GPS) RWY 36, Amdt 2
3-Jan-19	MO	Kirksville	Kirksville Rgnl	8/0482	11/20/18	RNAV (GPS) RWY 18, Amdt 2
3-Jan-19	KS	Chanute	Chanute Martin Johnson	8/0534	11/15/18	VOR-A, Amdt 10
3-Jan-19	NC	Rockingham	Richmond County	8/1535	11/26/18	RNAV (GPS) RWY 32, Orig-B
3-Jan-19	MO	Fulton	Elton Hensley Memorial	8/1555	11/27/18	RNAV (GPS) RWY 24, Amdt 1A
3-Jan-19	AK	Noatak	Noatak	8/2273	11/15/18	RNAV (GPS) RWY 1, Orig
3-Jan-19	AK	Noatak	Noatak	8/2274	11/15/18	RNAV (GPS) RWY 19, Orig
3-Jan-19	CO	Grand Junction	Grand Junction Regional	8/3575	11/16/18	RNAV (GPS) Y RWY 11, Amdt 1C
3-Jan-19	CO	Grand Junction	Grand Junction Regional	8/3577	11/16/18	RNAV (GPS) RWY 29, Amdt 1B
3-Jan-19	CO	Grand Junction	Grand Junction Regional	8/3579	11/16/18	LDA/DME RWY 29, Orig-C
3-Jan-19	CO	Grand Junction	Grand Junction Regional	8/3581	11/16/18	ILS OR LOC RWY 11, Amdt 16C
3-Jan-19	GA	Vidalia	Vidalia Rgnl	8/3626	11/15/18	ILS OR LOC RWY 25, Amdt 2
3-Jan-19	CA	Colusa	Colusa County	8/5707	11/15/18	RNAV (GPS) RWY 31, Amdt 1
3-Jan-19	CA	Colusa	Colusa County	8/5714	11/15/18	RNAV (GPS)-B, Orig
3-Jan-19	CA	Colusa	Colusa County	8/5722	11/15/18	VOR-A, Amdt 5
3-Jan-19	KY	Greenville	Muhlenberg County	8/7653	11/20/18	RNAV (GPS) RWY 6, Orig-A
3-Jan-19	KY	Greenville	Muhlenberg County	8/7654	11/20/18	RNAV (GPS) RWY 24, Amdt 1C

3-Jan-19	KY	Greenville	Muhlenberg County	8/7656	11/20/18	VOR/DME-A, Amdt 5B
3-Jan-19	AR	Osceola	Osceola Muni	8/7726	11/15/18	RNAV (GPS) RWY 19, Orig
3-Jan-19	IN	Elkhart	Elkhart Muni	8/7752	11/15/18	RNAV (GPS) RWY 27, Orig-A
3-Jan-19	IN	Elkhart	Elkhart Muni	8/7753	11/15/18	RNAV (GPS) RWY 18, Orig-A
3-Jan-19	IN	Elkhart	Elkhart Muni	8/7754	11/15/18	RNAV (GPS) RWY 9, Orig
3-Jan-19	IN	Elkhart	Elkhart Muni	8/7757	11/15/18	RNAV (GPS) RWY 36, Orig-A
3-Jan-19	IN	Elkhart	Elkhart Muni	8/7775	11/15/18	ILS OR LOC RWY 27, Amdt 2B
3-Jan-19	MN	Grand Rapids	Grand Rapids/Itasca Co-Gordon Newstrom Fld	8/8447	11/20/18	RNAV (GPS) RWY 16, Orig
3-Jan-19	MN	Grand Rapids	Grand Rapids/Itasca Co-Gordon Newstrom Fld	8/8449	11/20/18	VOR RWY 34, Amdt 11
3-Jan-19	NJ	Pedricktown	Spitfire Aerodrome	8/8450	11/20/18	RNAV (GPS) RWY 25, Amdt 1
3-Jan-19	CA	San Francisco	San Francisco Intl	8/8877	11/21/18	ILS OR LOC RWY 28R, ILS RWY 28R (SA CAT I), ILS RWY 28R (CAT II and III), Amdt 15
3-Jan-19	CA	San Francisco	San Francisco Intl	8/8880	11/21/18	ILS OR LOC RWY 28L, ILS RWY 28L (SA CAT II), Amdt 27
3-Jan-19	CO	Denver	Denver Intl	8/9094	11/21/18	RNAV (GPS) Y RWY 16R, Amdt 1C
3-Jan-19	CO	Denver	Denver Intl	8/9096	11/21/18	RNAV (GPS) Y RWY 7, Amdt 1B
3-Jan-19	CO	Denver	Denver Intl	8/9100	11/21/18	RNAV (GPS) Y RWY 26, Amdt 1B
3-Jan-19	IN	Elkhart	Elkhart Muni	8/9467	11/23/18	VOR RWY 9, Amdt 6
3-Jan-19	MN	Hallock	Hallock Muni	8/9927	11/26/18	VOR/DME RWY 31, Amdt 7

AIRAC Date: 3 JANUARY 2019

FDC **8/0394** IRK IAP KIRKSVILLE RGNL, Kirksville, MO. VOR-A, AMDT 15... CHART NOTE: CIRCLING NA TO RWYS 9 AND 27. DELETE ALTERNATE MINIMUMS: STANDARD EXCEPT NA WHEN LOCAL WEATHER NOT AVAILABLE. ALTERNATE MINIMUMS: STANDARD. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OTTUMWA RGNL ALTIMETER SETTING AND INCREASE ALL MDA 160 FEET, INCREASE CATS C AND D VISIBILITY 1/4 MILE. THIS IS VOR-A, AMDT 15A. 1809281417-PERM

FDC **8/0441** IRK IAP KIRKSVILLE RGNL, Kirksville, MO. ILS OR LOC/DME RWY 36, AMDT 1... S-LOC 36 MDA 1300/HAT 335 ALL CATS. CHART NOTE: CIRCLING NA TO RWYS 9 AND 27. DELETE ALTERNATE MINIMUMS: STANDARD EXCEPT NA WHEN LOCAL WEATHER NOT AVAILABLE. ALTERNATE MINIMUMS: STANDARD. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OTTUMWA RGNL ALTIMETER SETTING AND INCREASE ALL DA 158 FEET, AND ALL MDA 160 FEET; INCREASE S-ILS 36 ALL CATS, S-LOC 36 CATS C AND D AND CIRCLING CATS C AND D VISIBILITY 1/4 MILE. DELETE NOTE: VDP NA WHEN USING OTTUMWA RGNL ALTIMETER SETTING. DELETE NOTE: FOR INOPERATIVE MALSR WHEN USING OTTUMWA RGNL ALTIMETER SETTING, INCREASE S-ILS 36 ALL CATS VISIBILITY 1/4 MILE, AND S-LOC 36 CAT D VISIBILITY TO 1 1/2. DELETE NOTE: DME REQUIRED. DELETE PLANVIEW NOTE: DME REQUIRED. EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED. DELETE NOTE: FOR INOPERATIVE MALSR, INCREASE S-LOC 36 CAT D VISIBILITY 1/4 MILE. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 36 CAT D VISIBILITY 1/4 SM. DELETE FAS OBST: 1021 TREE 400425N/0923236W. CHART FAS OBST: 1034 TREE 400424N/0923231W. THIS IS ILS OR LOC/DME RWY 36, AMDT 1A. 1809281421-PERM

FDC **8/0479** IRK IAP KIRKSVILLE RGNL, Kirksville, MO. RNAV (GPS) RWY 36, AMDT 2... CHART NOTE: CIRCLING NA TO RWYS 9 AND 27. DELETE
ALTERNATE MINIMUMS: STANDARD EXCEPT NA WHEN LOCAL WEATHER NOT AVAILABLE. ALTERNATE MINIMUMS: STANDARD. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: BARO-VNAV NA WHEN USING OTTUMWA RGNL ALTIMETER SETTING. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 46C (114F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 46C. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OTTUMWA RGNL ALTIMETER SETTING AND INCREASE ALL DA 158 FEET, AND ALL MDA 160 FEET; INCREASE LPV ALL CATS; LNAV CAT D, AND CIRCLING CAT C AND D VISIBILITY 1/4 MILE, LNAV/VNAV ALL CATS VISIBILITY 3/4 MILE, LNAV CAT C VISIBILITY 1/2 MILE. DELETE NOTE: VDP NA WHEN USING OTTUMWA RGNL ALTIMETER SETTING. DELETE NOTE: FOR INOPERATIVE MALS, WHEN USING OTTUMWA RGNL ALTIMETER SETTING INCREASE LPV ALL CATS VISIBILITY TO 1 1/4, AND LNAV CAT D VISIBILITY TO 1 3/4. THIS IS RNAV (GPS) RWY 36, AMDT 2A. 1809281424-PERM

FDC **8/0482** IRK IAP KIRKSVILLE RGNL, Kirksville, MO. RNAV (GPS) RWY 18, AMDT 2... CHART NOTE: CIRCLING NA TO RWYS 9 AND 27. DELETE
ALTERNATE MINIMUMS: STANDARD EXCEPT NA WHEN LOCAL WEATHER NOT AVAILABLE. ALTERNATE MINIMUMS: STANDARD. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. CHART NOTE: RWY 18 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: VDP NA WHEN USING OTTUMWA RGNL ALTIMETER SETTING. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OTTUMWA RGNL ALTIMETER SETTING AND INCREASE ALL MDA 160 FEET; INCREASE LNAV CATS C AND D VISIBILITY 1/2 MILE, AND CIRCLING CATS C AND D VISIBILITY 1/4 MILE. THIS IS RNAV (GPS) RWY 18, AMDT 2A. 1809281426-PERM

FDC **8/0534** CNU IAP CHANUTE MARTIN JOHNSON, Chanute, KS. VOR-A, AMDT 10... CIRCLING CATS A/B HAA 477. CHART APT ELEV 1003, DELETE APT ELEV 1002. CHART NOTE: CIRCLING RWY 36 NA AT NIGHT. MSA FROM CNU VOR/DME 2800. THIS IS VOR-A, AMDT 10A. 1810241409-PERM

FDC **8/1535** RCZ CHART RICHMOND COUNTY, Rockingham, NC. RNAV (GPS) RWY 32, ORIG-B... LPV DA 633/HAT 277 ALL CATS. LNAV CAT C VIS 1-1/8. DELETE NOTE: NIGHT LANDING RWY 32 NA. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. CHART NOTE: RWY 32 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: BARO-VNAV NA WHEN USING MACKALL AAF ALTIMETER SETTING. CHART NOTE: BARO-VNAV AND VDP NA WHEN USING MACKALL AAF ALTIMETER SETTING. CHART NOTE: CIRCLING RWY 14 NA AT NIGHT. CHART NOTE: CIRCLING NA TO RWYS 4 AND 22. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MACKALL AAF ALTIMETER SETTING AND INCREASE ALL DA 39 FEET AND ALL MDA 40 FEET AND INCREASE LNAV/VNAV ALL CATS AND LNAV CAT C VISIBILITY 1/4 MILE. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MACKALL AAF ALTIMETER SETTING AND INCREASE ALL DA 39 FEET AND ALL MDA 40 FEET AND INCREASE LNAV CAT C VISIBILITY 3/8 SM. CHART VDP AT 1.08 NM TO RW32*. THIS IS RNAV (GPS) RWY 32, ORIG-C. 1811271608-PERM

FDC **8/1555** FTT IAP ELTON HENSLEY MEMORIAL, Fulton, MO. RNAV (GPS) RWY 24, AMDT 1A... CHART NOTE: RWY 24 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART CIRCLING ICON. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: NIGHT LANDING: RWY 6, 24 NA. DELETE NOTE: DME/DME RNP -0.3 NA. CIRCLING CAT A MDA 1380/HAA 493, CAT B MDA 1480/HAA 593, CAT C MDA 1560/HAA 673. VISIBILITY CAT C 2 SM. CHART APT ELEV 887. DELETE APT ELEV 886. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. CHART NOTE: STRAIGHT-IN RWY 24 NA AT NIGHT, CIRCLING RWY 18, 24 NA AT NIGHT. THIS IS RNAV (GPS) RWY 24, AMDT 1B. 1811271610-PERM

FDC **8/2273** WTK IAP NOATAK, Noatak, AK. RNAV (GPS) RWY 1, ORIG ... LPV AND LNAV/VNAV GLIDE PATH INTERCEPT ALTITUDE 1800 MSL. THIS IS RNAV (GPS) RWY 1, ORIG-A. 1811080900-PERM

FDC **8/2274** WTK IAP NOATAK, Noatak, AK. RNAV (GPS) RWY 19, ORIG ... LNAV CAT D VISIBILITY 1 3/8 SM. THIS IS RNAV (GPS) RWY 19, ORIG-A 1811080903-PERM

FDC **8/3575** GJT IAP GRAND JUNCTION REGIONAL, Grand Junction, CO. RNAV (GPS) Y RWY 11, AMDT 1C... CIRCLING CAT B MDA 5420/HAA 562. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) Y RWY 11, AMDT 1D. 1810022058-PERM

FDC **8/3577** GJT IAP GRAND JUNCTION REGIONAL, Grand Junction, CO. RNAV (GPS) RWY 29, AMDT 1B... CIRCLING CAT B MDA 5420/HAA 562. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. CHART PLANVIEW NOTE: FINAL APPROACH COURSE OFFSET 5.00 DEGREES. ALTERNATE MINIMUMS: STANDARD EXCEPT CAT D 800-2 1/2. THIS IS RNAV (GPS) RWY 29, AMDT 1C. 1810022101-PERM

FDC **8/3579** GJT IAP GRAND JUNCTION REGIONAL, Grand Junction, CO. LDA/DME RWY 29, ORIG-C... CIRCLING CAT B MDA 5420/HAA 562. ALTERNATE MINIMUMS: NA WHEN CONTROL TOWER CLOSED. CHART PLANVIEW NOTE: LOC OFFSET 20.01 DEGREE. DELETE NOTE: AUTO-COUPLED APPROACH NOT AUTHORIZED INSIDE 2.0 DME. CHART NOTE: AUTOPILOT COUPLED APPROACH NOT AUTHORIZED INSIDE 2.0 DME. THIS IS LDA/DME RWY 29, ORIG-D. 1810022102-PERM

FDC **8/3581** GJT IAP GRAND JUNCTION REGIONAL, Grand Junction, CO. ILS OR LOC RWY 11, AMDT 16C... CIRCLING CAT B MDA 5420/HAA 562. ALTERNATE MINIMUMS: ILS: STANDARD, LOC: STANDARD EXCEPT CAT D 800-2 1/4, ILS AND LOC: NA WHEN CONTROL TOWER CLOSED. THIS IS ILS OR LOC RWY 11, AMDT 16D. 1810022103-PERM

FDC **8/3626** VDI IAP VIDALIA RGNL, Vidalia, GA. ILS OR LOC RWY 25, AMDT 2... CHANGE PLANVIEW ALTERNATE MISSED APPROACH COURSE INBOUND FROM 152.00 TO 155.00. THIS IS ILS OR LOC RWY 25, AMDT 2A. 1811082210-PERM

FDC **8/5707** O08 IAP COLUSA COUNTY, Colusa, CA. RNAV (GPS) RWY 31, AMDT 1... TDZE 49, APT ELEV 49. 20:1 IS NOT CLEAR. LPV DA 299/HAT 250, VIS 1 SM ALL CATS. LNAV/VNAV DA 469/HAT 420, VIS 1 1/8 SM ALL CATS. LNAV MDA 500/HAT 451 ALL CATS. CIRCLING CAT A-B MDA 600/HAA 551, CIRCLING CAT C MDA 620/HAA 571. DELETE VDP AT 1.29 NM TO RWY31*. DELETE *LNAV ONLY. DELETE NOTE: RWY 31 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: RWY 31 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: BARO-VNAV AND VDP NA WITH SACRAMENTO ALTIMETER SETTING. CHART NOTE: BARO-VNAV NA WITH SACRAMENTO INTL ALTIMETER SETTING. DELETE NOTE: OBTAIN LOCAL ALTIMETER SETTING ON CTAF; WHEN NOT RECEIVED, USE SACRAMENTO ALTIMETER SETTING: INCREASE ALL DA TO 383 AND ALL CATS VISIBILITY 1/4 SM, INCREASE ALL MDAS 100 FEET AND LNAV CAT C VISIBILITY 1/4 SM AND CIRCLING CAT C VISIBILITY 1/2 SM. CHART NOTE: OBTAIN LOCAL ALTIMETER SETTING ON CTAF; WHEN NOT RECEIVED, USE SACRAMENTO INTL ALTIMETER SETTING: INCREASE LPV DA TO 382 FEET, INCREASE LNAV/VNAV DA TO 550 FEET AND ALL VISIBILITIES 1/4 SM; INCREASE ALL MDAS 100 FEET AND LNAV CAT C VISIBILITY 1/4 SM, CIRCLING CAT C VISIBILITY 1/2 SM. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART NOTE: STRAIGHT-IN RWY 31 NA AT NIGHT, CIRCLING RWY 31 NA AT NIGHT. THIS IS RNAV (GPS) RWY 31, AMDT 1A. 1807161819-PERM

FDC **8/5714** O08 IAP COLUSA COUNTY, Colusa, CA. RNAV (GPS)-B, ORIG... APT ELEV 49. CIRCLING CAT A-B MDA 600/HAA 551, CIRCLING CAT C MDA 620/HAA 571. CHART NOTE: CIRCLING RWY 31 NA AT NIGHT. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: OBTAIN LOCAL ALTIMETER SETTING ON CTAF; WHEN NOT RECEIVED, USE SACRAMENTO ALTIMETER SETTING AND INCREASE ALL MDAS 100 FEET AND CAT C VISIBILITY 1/4 SM. CHART NOTE: OBTAIN LOCAL ALTIMETER SETTING ON CTAF; WHEN NOT RECEIVED, USE SACRAMENTO INTL ALTIMETER SETTING AND INCREASE ALL MDAS 100 FEET AND CAT C VISIBILITY 1/2 SM. THIS IS RNAV (GPS)-B, ORIG-A. 1807161823-PERM

FDC **8/5722** O08 IAP COLUSA COUNTY, Colusa, CA. VOR-A, AMDT 5... APT ELEV 49. CIRCLING CAT A-B MDA 600/HAA 551, CIRCLING CAT C MDA 620/HAA 571. SACRAMENTO INTL ALTIMETER SETTING MINS: CIRCLING CAT A-B MDA 700/HAA 651, CIRCLING CAT C MDA 720/HAA 671, CIRCLING CAT C VIS 2 SM. CHART NOTE: CIRCLING RWY 31 NA AT NIGHT. THIS IS VOR-A, AMDT 5A. 1807161827-PERM

FDC **8/7653** M21 IAP MUHLENBERG COUNTY, Greenville, KY. RNAV (GPS) RWY 6, ORIG-A... CIRCLING CAT C MDA 1180/HAA 752, CAT D MDA 1200/HAA 772. VIS CAT C 2 1/4, CAT D 2 1/2. DELETE NOTE: NIGHT LANDING: RWY 24 NA. CHART NOTE: PROCEDURE NA AT NIGHT. DELETE NOTE: DME/DME RNP 0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA. CHART NOTE: RWY 6, HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART CIRCLING ICON. THIS IS RNAV (GPS) RWY 6, ORIG-B. 1811152114-PERM

FDC **8/7654** M21 IAP MUHLENBERG COUNTY, Greenville, KY. RNAV (GPS) RWY 24, AMDT 1C... CIRCLING CAT B MDA 1080/HAA 652, CAT C MDA 1180/HAA 752, CAT D MDA 1200/HAA 772. VIS CAT C 2 1/4, CAT D 2 1/2. DELETE NOTE: STRAIGHT-IN RWY 24 NA AT NIGHT. DELETE NOTE: RWY 24 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. CHART NOTE: PROCEDURE NA AT NIGHT. CHART NOTE: RWY 24, HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. PBN REQUIREMENTS NOTE: RNP APCH. CHART CIRCLING ICON. THIS IS RNAV (GPS) RWY 24, AMDT 1D. 1811152114-PERM

FDC **8/7656** M21 IAP MUHLENBERG COUNTY, Greenville, KY. VOR/DME-A, AMDT 5B... DELETE NOTE: NIGHT LANDING: RWY 24 NA. CHART NOTE: PROCEDURE NA AT NIGHT. CHART CIRCLING ICON. CIRCLING CAT B MDA 1080/652, CAT C MDA 1180/HAA 752, CAT D MDA 1200/HAA 772. VIS CAT C 2 1/4, CAT D 2 1/2. THIS IS VOR/DME-A, AMDT 5C. 1811152114-PERM

FDC **8/7726** 7M4 IAP OSCEOLA MUNI, Osceola, AR. RNAV (GPS) RWY 19, ORIG... PBN REQUIREMENTS NOTE: RNP APCH. 34:1 IS NOT CLEAR. CHART NOTE: PROCEDURE NA AT NIGHT. CHART NOTE: RWY 19 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART: TDZE AND APT ELEV 235. CHART: BLYTHEVILLE MUNI ASOS. DELETE NOTE: DME/DME RNP-0.3 NA. CHART FAS OBST: 444 TERRAIN 354443N/0895932W. DELETE NOTE: USE BLYTHEVILLE MUNI ALTIMETER SETTING; WHEN NOT RECEIVED USE COVINGTON MUNI ALTIMETER SETTING AND INCREASE ALL MDAS 20 FEET. LNAV CATS A/B/C MDA 740/HAT 505, VISIBILITY CAT C 1-3/8. CIRCLING CAT A MDA 740/HAA 505, CAT B/C HAA 825. THIS IS RNAV (GPS) RWY 19, ORIG-A. 1806040024-PERM

FDC **8/7752** EKM IAP ELKHART MUNI, Elkhart, IN. RNAV (GPS) RWY 27, ORIG-A... LPV DA 1071, LPV VIS RVR 4000. LNAV/VNAV DA 1221. LNAV HAT 482 ALL CATS. LNAV CAT A/B RVR 4000, CAT C RVR 5000. CIRCLING CAT C MDA 1380/HAA 602, VIS 1 3/4, CAT D MDA 1580/HAA 802, VIS 2 1/2. CHART CIRCLING ICON. CHART NOTE: CIRCLING RWY 36 NA AT NIGHT. CHART NOTE: CIRCLING NA TO RWYS 8 AND 26. CHART NOTE: RWY 27 HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 54C. DELETE NOTE: BARO-VNAV NA BELOW -16C (4F). PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: DME/DME RNP-0.3 NA. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SOUTH BEND ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET. DELETE NOTE: IF LOCAL ALTIMETER NOT RECEIVED, USE SOUTH BEND ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET. CHART TDZE 778. THIS IS RNAV (GPS) RWY 27, ORIG-B. 1809251130-PERM

FDC **8/7753** EKM IAP ELKHART MUNI, Elkhart, IN. RNAV (GPS) RWY 18, ORIG-A... LNAV HAT 503 ALL CATS. CIRCLING CAT C MDA 1380/HAA 602, VIS 1 3/4, CAT D MDA 1580/HAA 802, VIS 2 1/2. CHART CIRCLING ICON. CHART NOTE: CIRCLING RWY 36 NA AT NIGHT. CHART NOTE: CIRCLING NA TO RWYS 8 AND 26. RWY 18 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE DME/DME RNP-0.3 NA. CHART TDZE 777. CHART NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE 3.00/TCH 38 FEET). CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SOUTH BEND ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET. DELETE NOTE: IF LOCAL ALTIMETER NOT RECEIVED, USE SOUTH BEND ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET. THIS IS RNAV (GPS) RWY 18, ORIG-B. 1809251132-PERM

FDC **8/7754** EKM IAP ELKHART MUNI, Elkhart, IN. RNAV (GPS) RWY 9, ORIG... LNAV HAT 563 ALL CATS. CIRCLING CAT C MDA 1380/HAA 602, VIS 1 3/4, CAT D MDA 1580/HAA 802, VIS 2 1/2. CHART CIRCLING ICON. CHART NOTE: CIRCLING RWY 36 NA AT NIGHT. CHART NOTE: CIRCLING NA TO RWYS 8 AND 26. CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE DME/DME RNP-0.3 NA. CHART NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE 3.00/TCH 38 FEET). CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SOUTH BEND ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET. DELETE NOTE: IF LOCAL ALTIMETER NOT RECEIVED, USE SOUTH BEND ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET. CHART TDZE 777. THIS IS RNAV (GPS) RWY 9, ORIG-A. 1809251132-PERM

FDC **8/7757** EKM IAP ELKHART MUNI, Elkhart, IN. RNAV (GPS) RWY 36, ORIG-A... LNAV HAT 444 ALL CATS. CIRCLING CAT A MDA 1240/HAA 462, CAT C MDA 1380/HAA 602, VIS 1 3/4, CAT D MDA 1580/HAA 802, VIS 2 1/2. CHART CIRCLING ICON. CHART TDZE 776. CHART NOTE: STRAIGHT-IN AND CIRCLING RWY 36 NA AT NIGHT. RWY 36 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: CIRCLING NA TO RWYS 8 AND 26. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE DME/DME RNP-0.3 NA. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SOUTH BEND ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET. DELETE NOTE: IF LOCAL ALTIMETER NOT RECEIVED, USE SOUTH BEND ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET. THIS IS RNAV (GPS) RWY 36, ORIG-B. 1809251132-PERM

FDC **8/7775** EKM IAP ELKHART MUNI, Elkhart, IN. ILS OR LOC RWY 27, AMDT 2B... S-ILS 27 DA 1066/HAT 288, VIS RVR 4000. S-LOC 27 MDA 1220/HAT 442 ALL CATS, VIS CAT A/B RVR 4000, CAT C/D RVR 4500. CIRCLING MDA CAT A 1240/HAA 462, CIRCLING CAT C MDA 1380/HAA 602, VIS 1 3/4, CIRCLING CAT D MDA 1580/HAA 802, VIS 2 1/2. CHART CIRCLING ICON. CHART TDZE 778. DELETE NOTE: *RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD. CHART NOTE: CIRCLING RWY 36 NA AT NIGHT. CHART NOTE: CIRCLING NA TO RWYS 8 AND 26. CHART NOTE: RWY 27 HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SOUTH BEND ALTIMETER SETTING AND INCREASE ALL DA/MDA 40 FEET, AND INCREASE S-LOC 27 CAT C/D VISIBILITY TO RVR 5000. DELETE NOTE: IF LOCAL ALTIMETER SETTING NOT RECEIVED, USE SOUTH BEND ALTIMETER SETTING AND INCREASE ALL DA/MDA 40 FEET. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 27 ALL CATS VISIBILITY TO RVR 4500 AND S-LOC 27 CAT A/B VISIBILITY TO RVR 5500. CHART NOTE: FOR INOPERATIVE ALS WHEN USING SOUTH BEND ALTIMETER SETTING, INCREASE S-LOC 27 CAT A/B VISIBILITY TO RVR 5500 AND CAT C/D VISIBILITY TO 1 3/8 SM. THIS IS ILS OR LOC RWY 27, AMDT 2C. 1809251141-PERM

FDC **8/8447** GPZ IAP GRAND RAPIDS/ITASCA CO-GORDON NEWSTROM FLD, Grand Rapids, MN. RNAV (GPS) RWY 16, ORIG... LNAV HAT 433 ALL CATS. CIRCLING CATS A/B/C HAA 544, CAT D MDA 2000/HAA 644. CHART APT ELEV 1356, DELETE APT ELEV 1355. CHART TDZE 1327, DELETE TDZE 1332. CHART CIRCLING ICON. CHART NOTE: CIRCLING RWY 5 NA AT NIGHT. CHART NOTE: CIRCLING NA TO RWYS 10 AND 28. CHART NOTE: CIRCLING NA FOR CAT D E OF RWY 16-34. PBN REQUIREMENTS NOTE: RNP APCH. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE HIBBING ALTIMETER SETTING AND INCREASE ALL MDAS 80 FEET, INCREASE LNAV CAT C VISIBILITY 1/8 SM AND CIRCLING CATS C/D VISIBILITY 1/4 SM. DELETE NOTE: CIRCLING TO RWY 10-28 AND 5-23 NA AT NIGHT. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. DELETE NOTE: DME/DME RNP-0.3 NA. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE HIBBINGS ALTIMETER SETTING AND INCREASE ALL MDA 80 FEET AND INCREASE LNAV AND CIRCLING CAT C VISIBILITY 1/4 MILE. THIS IS RNAV (GPS) RWY 16, ORIG-A. 1811161724-PERM

FDC **8/8449** GPZ IAP GRAND RAPIDS/ITASCA CO-GORDON NEWSTROM FLD, Grand Rapids, MN. VOR RWY 34, AMDT 11... CHART APT ELEV 1356. DELETE APT ELEV 1355. CHART TDZE 1356. DELETE TDZE 1355. S-34 HAT 444 ALL CATS, VISIBILITY CAT C 7/8. CIRCLING CATS A/B/C HAA 544, CAT D MDA 2000/HAA 644. CHART NOTE: CIRCLING RWY 5 NA AT NIGHT. CHART NOTE: CIRCLING NA TO RWYS 10 AND 28. MISSED APPROACH: CLIMB TO 3100 THEN RIGHT TURN DIRECT GPZ VOR/DME AND HOLD. CHART 3100 PRIOR TO GPZ VOR/DME IN PROFILE. CHART CIRCLING ICON. CHART NOTE: CIRCLING NA FOR CAT D E OF RWY 16-34. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE HIBBING ALTIMETER SETTING AND INCREASE ALL MDAS 80 FEET, INCREASE S-34 CAT C VISIBILITY 1/8 SM AND CIRCLING CATS C/D VISIBILITY 1/4 SM. DELETE NOTE: CIRCLING TO RWY 10-28 AND 5-23 NA AT NIGHT. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE HIBBINGS ALTIMETER SETTING AND INCREASE ALL MDA 80 FEET, INCREASE S-34 CAT C AND D VISIBILITY 1/4 MILE AND CIRCLING CAT C VISIBILITY 1/4 MILE. THIS IS VOR RWY 34, AMDT 11A. 1811161726-PERM

FDC **8/8450** 7N7 IAP SPITFIRE AERODROME, Pedricktown, NJ. RNAV (GPS) RWY 25, AMDT 1... 34:1 IS NOT CLEAR. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: DME/DME RNP-0.3 NA. DELETE PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE 4.00/TCH 20). CHART NOTE: PROCEDURE NA AT NIGHT. CHART NOTE: RWY 25 HELICOPTER VISIBILITY BELOW 1 SM NOT AUTHORIZED. DELETE: DESCENT ANGLE 3.03/TCH 30. CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES. THIS IS RNAV (GPS) RWY 25, AMDT 1A. 1811161726-PERM

FDC **8/8877** SFO IAP SAN FRANCISCO INTL, San Francisco, CA. ILS OR LOC RWY 28R, AMDT 15... ILS RWY 28R (SA CAT I), AMDT 15... ILS RWY 28R (CAT II AND III), AMDT 15... EQUIPMENT REQUIREMENTS NOTE: RNAV 1-GPS OR RADAR REQUIRED FOR PROCEDURE ENTRY. DELETE NOTE: SIMULTANEOUS APPROACH AUTHORIZED. SIMULTANEOUS OPERATIONS REQUIRE USE OF VERTICAL GUIDANCE; MAINTAIN LAST ASSIGNED ALTITUDE UNTIL ESTABLISHED ON GLIDESLOPE. CAT 1 CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. SIMULTANEOUS OPERATIONS REQUIRE USE OF VERTICAL GUIDANCE; MAINTAIN LAST ASSIGNED ALTITUDE UNTIL ESTABLISHED ON GLIDESLOPE. THIS IS ILS OR LOC RWY 28R, AMDT 15A; ILS RWY 28R (SA CAT I), AMDT 15A; ILS RWY 28R (CAT II AND III), AMDT 15A. 1811191256-PERM

FDC **8/8880** SFO IAP SAN FRANCISCO INTL, San Francisco, CA. ILS OR LOC RWY 28L, AMDT 27... ILS RWY 28L (SA CAT II), AMDT 27... DELETE NOTE: SIMULTANEOUS APPROACH AUTHORIZED. SIMULTANEOUS OPERATIONS REQUIRE USE OF VERTICAL GUIDANCE; MAINTAIN LAST ASSIGNED ALTITUDE UNTIL ESTABLISHED ON GLIDESLOPE. CAT I CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. SIMULTANEOUS OPERATIONS REQUIRE USE OF VERTICAL GUIDANCE; MAINTAIN LAST ASSIGNED ALTITUDE UNTIL ESTABLISHED ON GLIDESLOPE. CHANGE SA (CAT II) SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED NOTE TO READ: SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED: S-ILS 28L+ CAT A, B, C, D, RA 106, RVR 2200, HAT 100, DA 113 MSL. THIS IS ILS OR LOC RWY 28L, AMDT 27A; ILS RWY 28L (SA CAT II), AMDT 27A. 1811191259-PERM

FDC **8/9094** DEN IAP DENVER INTL, Denver, CO. RNAV (GPS) Y RWY 16R, AMDT 1C... LNAV MDA 5660/HAT 334 ALL CATS, VISIBILITY CAT C/D RVR 2600. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: DME/DME RNP-0.3 NA. EQUIPMENT REQUIREMENTS NOTE: RADAR REQUIRED. DELETE PLANVIEW NOTE: RADAR REQUIRED. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -25C OR ABOVE 46C. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -25C (-13F) OR ABOVE 46C (116F). CHART FAS OBST: 5391 MSL TOWER 395339N/1044117W. THIS IS RNAV (GPS) Y RWY 16R, AMDT 1D. 1811192132-PERM

FDC **8/9096** DEN IAP DENVER INTL, Denver, CO. RNAV (GPS) Y RWY 7, AMDT 1B... LNAV/VNAV DA 5626/HAT 274 ALL CATS. LNAV MDA 5720/HAT 368 ALL CATS. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: DME/DME RNP-0.3 NA. EQUIPMENT REQUIREMENTS NOTE: RADAR REQUIRED. DELETE PLANVIEW NOTE: RADAR REQUIRED. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -25C OR ABOVE 46C. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -25C (-13F) OR ABOVE 46C (116F). CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 4500 AND LNAV CAT C/D VISIBILITY TO RVR 5500. DELETE NOTE: FOR INOPERATIVE MALSR INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 4000, AND LNAV CAT C/D VISIBILITY TO RVR 5000 CHART FAS OBST: 5463 POLE 395007N/1044436W. THIS IS RNAV (GPS) Y RWY 7, AMDT 1C. 1811192133-PERM AND LNAV CAT C/D VISIBILITY TO RVR 5500. DELETE NOTE: FOR INOPERATIVE MALSR INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 4000, AND LNAV CAT C/D VISIBILITY TO RVR 5000 CHART FAS OBST: 5463 POLE 395007N/1044436W. THIS IS RNAV (GPS) Y RWY 7, AMDT 1C. 1811192133-PERM

FDC **8/9100** DEN IAP DENVER INTL, Denver, CO. RNAV (GPS) Y RWY 26, AMDT 1B... LNAV MDA 5660/HAT 351, VISIBILITY CAT C/D RVR 3000. CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 4000 AND LNAV CAT C/D VISIBILITY TO RVR 5500. DELETE NOTE: FOR INOPERATIVE MALSR, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 4000 AND LNAV CAT C/D VISIBILITY TO RVR 4500. VDP AT 1.0 NM TO RW26*. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: DME/DME RNP-0.3 NA. EQUIPMENT REQUIREMENTS NOTE: RADAR REQUIRED. DELETE PLANVIEW NOTE: RADAR REQUIRED. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -25C OR ABOVE 46C. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -25C (-13F) OR ABOVE 46C (116F) CHART FAS OBST: 5398 MSL POLE 395213N/1043630W. THIS IS RNAV (GPS) Y RWY 26, AMDT 1C. 1811192135-PERM

FDC **8/9467** EKM IAP ELKHART MUNI, Elkhart, IN. VOR RWY 9, AMDT 6... S-9 HAT 563 ALL CATS. CIRCLING CAT C MDA 1380/HAA 602, VIS 1 3/4, CAT D MDA 1580/HAA 802, VIS 2 1/2. CHART TDZE 777. CHART CIRCLING ICON. CHART NOTE: CIRCLING RWY 36 NA AT NIGHT. CHART NOTE: CIRCLING NA TO RWYS 8 AND 26. CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SOUTH BEND ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET. CHART NOTE: VDP NA WHEN USING SOUTH BEND ALTIMETER SETTING. DELETE NOTE: VDP NA WITH SOUTH BEND ALTIMETER SETTING. DELETE NOTE: IF LOCAL ALTIMETER NOT RECEIVED, USE SOUTH BEND ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET. THIS IS VOR RWY 9, AMDT 6A. 1811211502-PERM

FDC **8/9927** HCO IAP HALLOCK MUNI, Hallock, MN. VOR/DME RWY 31, AMDT 7...
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI
ANGLE 3.00/TCH 42.3). DELETE VDP AT 11.32 DME; DISTANCE VDP TO THLD
1.17 NM. CHART VDP AT 11.27 DME; DISTANCE VDP TO THLD 1.12 NM. THIS IS
VOR/DME RWY 31, AMDT 7A. 1811231903-PERM