

U.S. Department
of Transportation

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

**Federal Aviation
Administration**

Transmittal Letter 18-08

February 23, 2018

**PREPARED BY THE AERONAUTICAL INFORMATION GROUP, AJV-53
(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 18-05 on
January 12, 2018, and in TL 18-07 on February 9, 2018.**

Miami, FL, Dade-Collier Training and Transition, RNAV (GPS) RWY 9, Orig-A
Decorah, IA, Decorah Muni, RNAV (GPS) RWY 29, Orig-B
Decorah, IA, Decorah Muni, VOR RWY 29, Amdt 3E
Ottumwa, IA, Ottumwa Rgnl, RNAV (GPS) RWY 13, Orig-B
Nantucket, MA, Nantucket Memorial, ILS OR LOC RWY 6, Amdt 2A
St Louis, MO, St Louis Lambert Intl, RNAV (RNP) Z RWY 12R, Orig-C
Gwinner, ND, Gwinner-Roger Melroe Field, RNAV (GPS) RWY 34, Amdt 4A
Cheyenne, WY, Cheyenne Rgnl/Jerry Olson Field, RNAV (GPS) RWY 9, Amdt 1B
Cheyenne, WY, Cheyenne Rgnl/Jerry Olson Field, RNAV (GPS) RWY 13, Amdt 1B
Cheyenne, WY, Cheyenne Rgnl/Jerry Olson Field, RNAV (GPS) RWY 31, Amdt 1B

**The following procedures, previously published in TL 18-05, on January 12, 2018, in TL
18-06, on January 26, 2018, and in TL 18-07 on February 9, 2018, have been rescinded in
their entirety.**

Buckland, AK, Buckland, Takeoff Minimums and Obstacle DP, Amdt 2
Little Rock, AR, Bill and Hillary Clinton National/Adams Field, ILS OR LOC RWY 4L, Amdt 26A
Little Rock, AR, Bill and Hillary Clinton National/Adams Field, ILS OR LOC RWY 4R, Amdt 2D
Little Rock, AR, Bill and Hillary Clinton National/Adams Field, ILS OR LOC RWY 22L, Orig-D
Little Rock, AR, Bill and Hillary Clinton National/Adams Field, RNAV (GPS) RWY 36, Orig-C
Little Rock, AR, Bill and Hillary Clinton National/Adams Field, Takeoff Minimums and
Obstacle DP, Amdt 9
Douglas, GA, Douglas Muni, RNAV (GPS) RWY 4, Amdt 2
Douglas, GA, Douglas Muni, RNAV (GPS) RWY 22, Amdt 2
Fort Hood/Killeen, TX, Robert Gray AAF, NDB RWY 15, Amdt 6A, CANCELED
Fort Hood/Killeen, TX, Robert Gray AAF, RADAR-2, Orig-A

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW09									
LOYIS (IAF)		JAXEK (NOPT) (TF) (FB) (RNP 1.00)		184.95 / 8.00		2000		CLIMB TO 1000 THEN CLIMBING LEFT TURN TO 2000 DIRECT BRBRA AND HOLD.									
ICUCI (IAF)		JAXEK (NOPT) (TF) (FB) (RNP 1.00)		004.95 / 8.00		2000											
JAXEK (IF/IAF)		OYAYA (TF) (FB) (RNP 1.00)		094.95 / 5.00		1700											
OYAYA (FAF)		IRIDE/3.00 NM TO RW09 (TF) (FB) (RNP 0.30)		094.99 / 2.13													
IRIDE/3.00 NM TO RW09		RW09 (MAP) (TF) (FO) (RNP 0.30)		094.99 / 3.00				ADDITIONAL FLIGHT DATA: HOLD NW, RT, 154.00 INBOUND. CHART FAS OBST: 99 TREE 255212N/0805538W. DISTANCE TO THLD FROM 200 HAT: 0.46 NM. WAAS CHANNEL # 58035 REFERENCE PATH ID: W09A CHART CIRCLING ICON. *LNAV ONLY LTP HAE: -20.5 M									
(SEE FORM 8260-10)																	
THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-07.																	
1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)																	
2. HOLD W JAXEK, RT, 094.95 INBOUND, 2000 FT. IN LIEU OF PT (IAF)																	
3. FAC: 094.99 FAF: OYAYA DIST FAF TO MAP: 5.13 THLD: 5.13																	
4. MIN. ALT: JAXEK 2000, OYAYA 1700, IRIDE/3.00 NM TO RW09 1020*																	
5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 100 HAT: GS ANT:																	
6. MIN GS INCPT: 1700 GS ALT AT: OYAYA 1700 OM: MM: IM:																	
7. GS ANGLE: 3.00 TCH: 55.0 20:1 IS NOT CLEAR 34:1 IS NOT CLEAR																	
8. MSA FROM:										MAG VAR: 5W EPOCH YEAR: 2005							
MINIMUMS																	
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A X							
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		
LPV DA	213	1	200	213	1	200	213	1	200	213	1	200					
LNAV/VNAV DA	280	1	267	280	1	267	280	1	267	280	1	267					
LNAV MDA	360	1	347	360	1	347	360	1	347	360	1	347					
CIRCLING	400	1	387	480	1	467	480	1 1/2	467	580	2	567					
NOTES: CHART NOTE: BARO-VNAV NA WHEN USING MIAMI EXECUTIVE ALTIMETER SETTING. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F). CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)																	
CITY AND STATE MIAMI, FL		ELEVATION: 13 TDZE: 13 AIRPORT NAME: DADE-COLLIER TRAINING AND TRANSITION		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 9, ORIG-A 29 MARCH 2018						SUP: AMDT: ORIG DATED 12/12/2013					

**RNAV - 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, (CONT.):

<u>FROM</u>	<u>TO</u>	<u>COURSE AND DISTANCE</u>	<u>ALTITUDE</u>
RW09 (MAP)	1000 MSL (CA)	094.99	1000
1000 MSL	BRBRA (DF) (FO) (RNP 1.00)		2000

NOTES, (CONT.):

CHART NOTE: PROCEDURE NA AT NIGHT.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MIAMI EXECUTIVE ALTIMETER SETTING AND INCREASE LPV DA TO 279 FEET; INCREASE LNAV/VNAV DA TO 346; AND INCREASE ALL MDA 80 FEET; INCREASE LNAV CATS C AND D VISIBILITY 1/4 SM.

TAA

	<u>FROM</u>	<u>TO</u>	<u>ALT</u>
1.	005/30 CW 185/30 (NOPT)	JAXEK (IF/IAF) (FB)	2000
2.	185/30 CW 275/30	LOYIS (IAF) (FB)	2000
3.	275/30 CW 005/30	ICUCI (IAF) (FB)	2000

QUALITY
20
CHECKED

CITY AND STATE

MIAMI, FL

ELEVATION: 13

TDZE: 13

AIRPORT NAME:

DADE-COLLIER TRAINING AND TRANSITION

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 9, ORIG-A

29 MARCH 2018

SUP:

AMDT: ORIG

DATED: 12/12/2013

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KTNT
RUNWAY	RW09
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W09A
LTP/FTP LATITUDE	255142.4935N
LTP/FTP LONGITUDE	0805446.6350W
LTP/FTP ELLIPSOIDAL HEIGHT	-00205
FPAP LATITUDE	255142.4210N
FPAP LONGITUDE	0805251.7050W
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
 <u>CRC REMAINDER</u>	 59D1E83A

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00038
FPAP ORTHOMETRIC HEIGHT	+00038

QUALITY
20
CHECKED

CITY AND STATE MIAMI, FL	ELEVATION: 13 AIRPORT NAME: DADE-COLLIER TRAINING AND TRANSITION	TDZE: 13 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 9, ORIG-A 29 MARCH 2018	SUP:
				AMDT: ORIG
				DATED: 12/12/2013

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		RNAV - 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		LNAV: RW29					
UKN VOR/DME		FAYNE (TF) (FO) (RNP 2.00)		160.15 / 5.46				2900		CLIMBING LEFT TURN TO 2900 DIRECT FAYNE AND HOLD.					
FAYNE (IF/IAF)		AVELE (TF) (FB) (RNP 1.00)		293.83 / 6.10				2900							
AVELE (FAF)		KUCCE/2.30 NM TO RW29 (TF) (FB) (RNP 0.30)		293.75 / 2.97						ADDITIONAL FLIGHT DATA: ← CHART FAS OBST: 1319 TREE 431635N/0914324W. VISUAL SEGMENT - OBSTACLES					
KUCCE/2.30 NM TO RW29		RW29 (MAP) (TF) (FO) (RNP 0.30)		293.75 / 2.30											
RW29 (MAP)		1558 MSL (CA)		293.75											
1558 MSL		FAYNE (DF) (FO) (RNP 1.00)						2900							
THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-05.															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)															
2. HOLD SE FAYNE, RT, 293.83 INBOUND, 2900 FT. IN LIEU OF PT (IAF)															
3. FAC: 293.75 FAF: AVELE DIST FAF TO MAP: 5.27 THLD: 5.27															
4. MIN. ALT: FAYNE 2900, AVELE 2900, KUCCE/2.30 NM TO RW29 1920															
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____															
6. MIN GS INCPT: _____ GS ALT AT: _____ OM: _____ MM: _____ IM: _____															
7. GS ANGLE: _____ TCH: 20:1 IS NOT CLEAR 34:1 IS NOT CLEAR															
8. MSA FROM: RW29 2800															
MAG VAR: 1E EPOCH YEAR: 1995															
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
LNAV MDA	1580	1	422	1580	1	422		NA			NA				
CIRCLING	1620	1	462	1620	1	462		NA			NA				
NOTES: CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON UKN VOR/DME AIRWAY RADIALS 084 CW 216. ← CHART NOTE: RWY 29 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: CIRCLING RWY 29 NA AT NIGHT.															
CITY AND STATE DECORAH, IA		ELEVATION: 1158 TDZE: 1158 AIRPORT NAME: DECORAH MUNI		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 29, ORIG-B 29 MARCH 2018						SUP: AMDT: ORIG-A DATED 05/07/2009			

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

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QUALITY
35
CHECKED

CITY AND STATE DECORAH, IA	ELEVATION: 1158 AIRPORT NAME: DECORAH MUNI	TDZE: 1158	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 29, ORIG-B 29 MARCH 2018	SUP:
					AMDT: ORIG-A
					DATED: 05/07/2009

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION VOR STANDARD INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.23										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		MAP: 8.57 NM AFTER UKN VOR/DME							
THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-05.												CLIMB TO 2900 THEN LEFT TURN DIRECT UKN VOR/DME AND HOLD.							
												ADDITIONAL FLIGHT DATA: HOLD E, RT, 262.00 INBOUND. CHART FAS OBST: 1319 TREE 431530N/0914330W.							
1. PT <u>L</u> SIDE OF COURSE <u>082.31</u> OUTBOUND <u>2900</u> FT WITHIN <u>10</u> MILES OF <u>UKN VOR/DME</u> (IAF)										MAG VAR: 5E EPOCH YEAR:1965									
2.																			
3. FAC <u>262.31</u> FAF <u>UKN VOR/DME</u> DIST FAF TO MAP <u>8.57</u> THLD <u>8.57</u>																			
4. MIN. ALT <u>UKN VOR/DME 2900, JUXOP/UKN VOR/DME 5.00 DME 1780</u>																			
8. MSA FROM: <u>UKN VOR/DME 2900</u>																			
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT					ALTERNATE: N A					STANDARD									
CATEGORY =====>		A			B			C			D			E					
	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA				
S-29	1780	1	622	1780	1	622		NA			NA								
CIRCLING	1780	1	622	1780	1	622		NA			NA								
JUXOP FIX MINIMUMS																			
S-29	1580	1	422	1580	1	422		NA			NA								
CIRCLING	1620	1	462	1620	1	462		NA			NA								
NOTES:←																			
CHART NOTE: RWY 29 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. ←																			
CHART NOTE: STRAIGHT-IN RWY 29 NA AT NIGHT, CIRCLING RWY 29 NA AT NIGHT. ←																			
CITY AND STATE DECORAH, IA		ELEVATION: 1158 TDZE: 1158 AIRPORT NAME: DECORAH MUNI			FACILITY IDENTIFIER: UKN		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR RWY 29, AMDT 3E 29 MARCH 2018					SUP AMDT 3D DATE 08/18/2016							



**VOR STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - - TITLE 14 CFR PART 97.23**

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QUALITY
35
CHECKED

CITY AND STATE

DECORAH, IA

ELEVATION: 1158

TDZE: 1158

AIRPORT NAME:

DECORAH MUNI

FACILITY
IDENTIFIER:

UKN

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

VOR RWY 29, AMDT 3E

29 MARCH 2018

SUP:

AMDT: 3D

DATED: 08/18/2016

RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW13 CLIMB TO 2800 DIRECT HEVPI AND ON TRACK 124.90 TO OTM VOR/DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 303.00 INBOUND. CHART FAS OBST: 898 TREE 410617N/0922720W. DISTANCE TO THLD FROM 250 HAT: 0.67 NM. WAAS CHANNEL # 86300 REFERENCE PATH ID: W13A LTP HAE: 223.5 M						
OTM VOR/DME		JODUN (TF) (FB) (RNP 2.00)		310.03 / 19.65				2800								
BUSSY (IAF)		JODUN (NOPT) (TF) (FB) (RNP 1.00)		067.36 / 10.21				2800								
NASAL (IAF)		JODUN (NOPT) (TF) (FB) (RNP 1.00)		177.44 / 13.78				2800								
JODUN (IF/IAF)		LITIY (TF) (FB) (RNP 1.00)		131.87 / 6.08				2800								
LITIY (FAF)		NIKRE/1.30 NM TO RW13 (TF) (FB) (RNP 0.30)		131.93 / 4.62												
(SEE FORM 8260-10)																
THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-05.																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NW JODUN, RT, 131.87 INBOUND, 2800 FT. IN LIEU OF PT (IAF) 3. FAC: 131.93 FAF: LITIY DIST FAF TO MAP: 5.92 THLD: 5.92 4. MIN. ALT: JODUN 2800, LITIY 2800, NIKRE/1.30 NM TO RW13 1280* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2800 GS ALT AT: LITIY OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 41.0 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW13 3000																
										MAG VAR: 3E			EPOCH YEAR: 1985			
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	
LPV DA	1094	1	250	1094	1	250	1094	1	250		NA					
LNAV/VNAV DA	1135	7/8	291	1135	7/8	291	1135	7/8	291		NA					
LNAV MDA	1160	1	316	1160	1	316	1160	7/8	316		NA					
CIRCLING	1260	1	415	1300	1	455	1300	1 1/2	455		NA					
NOTES: CHART NOTE: CIRCLING TO RWY 4 NA AT NIGHT. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 47C (117F). CHART NOTE: DME/DME RNP-0.3 NA. *LNAV ONLY																
CITY AND STATE OTTUMWA, IA		ELEVATION: 845 TDZE: 844 AIRPORT NAME: OTTUMWA RGNL		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 13, ORIG-B 29 MARCH 2018				SUP:						
										AMDT: ORIG-A						
										DATED 05/07/2009						



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV - 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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
NIKRE/1.30 NM TO RW13	RW13 (MAP) (TF) (FO) (RNP 0.30)	131.93 / 1.30	
RW13 (MAP)	1094 MSL (CA)	131.93	
1094 MSL	HEVPI (DF) (FB) (RNP 1.00)		
HEVPI	OTM VOR/DME (TF) (FO) (RNP 1.00)	124.90 / 5.68	2800

QUALITY
19
CHECKED

CITY AND STATE

OTTUMWA, IA

ELEVATION: 845

TDZE: 844

AIRPORT NAME:

OTTUMWA RGNL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 13, ORIG-B

29 MARCH 2018

SUP:

AMDT: ORIG-A

DATED: 05/07/2009

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KOTM
RUNWAY	RW13
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W13A
LTP/FTP LATITUDE	410639.4200N
LTP/FTP LONGITUDE	0922720.9550W
LTP/FTP ELLIPSOIDAL HEIGHT	+02235
FPAP LATITUDE	410536.4200N
FPAP LONGITUDE	0922557.5700W
THRESHOLD CROSSING HEIGHT (TCH)	00041.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0960
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 68D4E1D0

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+02560
FPAP ORTHOMETRIC HEIGHT	+02560

QUALITY
19
CHECKED

CITY AND STATE OTTUMWA, IA	ELEVATION: 845 AIRPORT NAME: OTTUMWA RGNL	TDZE: 844 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 13, ORIG-B 29 MARCH 2018	SUP:
				AMDT: ORIG-A
				DATED: 05/07/2009

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29									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			ILS: DA LOC: 5.07 NM AFTER CRAYG INT/I-RNE 4.85 DME/RADAR OR AT I-RNE 0.23 DME									
ACK VOR/DME			UFTAC INT/I-RNE 10.89 DME/RADAR			239.98 / 13.97			2300			CLIMB TO 1800 DIRECT ACK VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 1800. ALTERNATE MA (DO NOT CHART): CLIMB TO 1800 ON HEADING 061 AND ON MVY VOR/DME R-115 TO WAIVS/MVY 28.90 DME/RADAR AND HOLD. (RADAR OR DME REQUIRED). ADDITIONAL FLIGHT DATA: HOLD NE, RT, 241.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE WAIVS/28.90 DME/RADAR, RT, 293.61 INBOUND. FAS OBST: 125 BOAT 411322N/0700620W. CHART IN PROFILE: I-RNE DME ANTENNA. CHART VDP AT 0.70 DME* DISTANCE VDP TO THLD 0.92 NM. *LOC ONLY. CHART IN PLANVIEW: WAIVS/28.90 DME/RADAR. CHART CIRCLING ICON.									
MVY VOR/DME (IAF)			UFTAC INT/I-RNE 10.89 DME/RADAR (NOPT)			150.02 / 23.63 (ACK LR-249)			2300												
UFTAC INT/I-RNE 10.89 DME/RADAR (IF/IAF)			CRAYG INT/I-RNE 4.85 DME/RADAR			061.01 / 6.04 (I-RNE)			1700												
THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-06.																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																					
2. HOLD SW UFTAC, RT, 061.01 INBOUND, 2300 FT. IN LIEU OF PT (IAF)																					
3. FAC: 061.01 FAF: CRAYG INT/I-RNE 4.85 DME/RADAR DIST FAF TO MAP: 5.07 THLD: 5.07																					
4. MIN. ALT: UFTAC 2300, CRAYG 1700																					
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: 960																					
6. MIN GS INCPT: 1700 GS ALT AT: CRAYG 1700 OM: _____ MM: _____ IM: _____																					
7. GS ANGLE: 3.00 TCH: 56.7																					
8. MSA FROM: ACK VOR/DME 1600												MAG VAR: 16W EPOCH YEAR: 1995									
MINIMUMS																					
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT												ALTERNATE: N A		ILS: STANDARD #				LOC: 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						
S-ILS 06	238	4000	200	238	4000	200	238	4000	200	238	4000	200									
S-LOC 06	380	4000	342	380	4000	342	380	4000	342	380	4000	342									
CIRCLING	480	1	433	500	1	453	720	2	673	720	2 1/4	673									
NOTES: CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE HYANNIS ALTIMETER SETTING AND INCREASE S-ILS 6 DA TO 301 AND ALL MDA 80 FEET; INCREASE S-LOC 6 CATS, C/D VISIBILITY TO RVR 5000 AND CIRCLING CATS C/D VISIBILITY 1/4 SM. CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-ILS 6. (CONTINUED ON PAGE 2)																					
CITY AND STATE NANTUCKET, MA				ELEVATION: 47 TDZE: 38 AIRPORT NAME: NANTUCKET MEMORIAL				FACILITY IDENTIFIER: I-RNE		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 6, AMDT 2A 29 MARCH 2018						SUP: AMDT: 2 DATED 09/15/2016					

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
ILS - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29

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.

NOTES, (CONT.):

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 6 CAT D VISIBILITY TO RVR 5500.

CHART NOTE: FOR INOPERATIVE ALS WHEN USING HYANNIS ALTIMETER SETTING, INCREASE S-ILS 6 ALL CATS

VISIBILITY TO RVR 4500 AND S-LOC 6 CAT D VISIBILITY TO 1 1/4 SM.

CHART NOTE: VDP NA WHEN USING HYANNIS ALTIMETER SETTING.

QUALITY
9
CHECKED

CITY AND STATE

NANTUCKET, MA

ELEVATION: 47

TDZE: 38

AIRPORT NAME:

NANTUCKET MEMORIAL

FACILITY
IDENTIFIER:

I-RNE

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 6, AMDT 2A

29 MARCH 2018

SUP:

AMDT:

2

DATED:

09/15/2016

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.											
US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION																	
TERMINAL ROUTES											MISSED APPROACH						
FROM		TO			COURSE AND DISTANCE			ALTITUDE		RNP: DA CLIMB TO 5000 ON TRACK 123.20 TO FONTI AND HOLD, CONTINUE CLIMB-IN-HOLD TO 5000. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 309.40 INBOUND. ROUTE TYPE: A, H ROUTE TYPE QUALIFIER 1: F ROUTE TYPE QUALIFIER 2: S DISTANCE TO THLD FROM 458 HAT: 1.27 NM. #TCH 594.2 (DO NOT CHART) CHART MANDATORY 7000 AT STAAN CHART AT OR ABOVE 5000 AT RRIPP AND HRBEE CHART AT OR ABOVE 6000 AT JACSN CHART AT OR ABOVE 8000, AT OR BELOW 9000 AT VEEGE CHART PLANVIEW NOTE: RADAR REQUIRED							
STAAN (IAF)		KARRP (TF) (FB) (RNP 1.00)			083.65 / 5.53			6000									
KARRP		AARBY (TF) (FB) (RNP 1.00)			083.70 / 4.21			4000									
AARBY (IF)		FAULK (TF) (FB) (RNP 1.00)			085.27 / 6.80			3000									
JACSN (IAF)		PAULY (TF) (FB) (RNP 1.00)			122.95 / 3.14			5000									
PAULY		NAIRN (TF) (FB) (RNP 1.00)			123.00 / 5.34			3600									
(SEE FORM 8260-10)																	
THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-06.																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																	
2. PROFILE STARTS AT HOPWD _____																	
3. FAC: <u>123.15</u> FAF: _____ DIST FAF TO MAP: _____ THLD: _____																	
4. MIN. ALT: HOPWD 1700																	
5. DIST TO THLD FROM OM: <u>3.47</u> MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																	
6. MIN GS INCPT: <u>1700</u> GS ALT AT: HOPWD 1700 OM: _____ MM: _____ IM: _____																	
7. GS ANGLE: <u>3.00</u> TCH: <u>54.4</u> # <u>20:1 IS CLEAR</u> <u>34:1 IS NOT CLEAR</u>																	
8. MSA FROM: RW12R 3000																	
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 0.30 DA	998	6000	458	998	6000	458	998	6000	458	998	6000	458					
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -16C (4F) OR ABOVE 54C (130F). CHART NOTE: GPS REQUIRED. CHART SPEED ICON IN PLANVIEW AT DUZER : MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT KLISH : MAX 180 KIAS. (CONTINUED ON PAGE 2)																	
CITY AND STATE				ELEVATION: 618 TDZE: 540				FACILITY IDENTIFIER:				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:	
ST LOUIS, MO				AIRPORT NAME:				RNAV				RNAV (RNP) Z RWY 12R, ORIG-C				AMDT: ORIG-B	
				ST LOUIS LAMBERT INTL								29 MARCH 2018				DATED 08/17/2017	



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	
NAIRN		FAULK (TF) (FB) (RNP 1.00)	123.07 / 2.19	3000	
VEEGE (IAF)		YADDI (TF) (FB) (RNP 1.00)	148.06 / 10.27	5500	
YADDI		CORDL (TF) (FB) (RNP 1.00)	148.13 / 5.70	4000	
CORDL (IF)		FAULK (TF) (FB) (RNP 1.00)	149.80 / 6.35	3000	
FAULK		KLISH (TF) (FB) (RNP 1.00)	123.06 / 2.83	2300	
RRIPP (IF)		DUZER (TF) (FB) (RNP 1.00)	302.79 / 2.91	5000	
DUZER		KLISH (RF) (FB) (RNP 1.00)	(2.50 NM RADIUS CW (CFBPW))/7.87	2300	
HRBEE (IF)		BUFEE (TF) (FB) (RNP 1.00)	301.32 / 2.89	5000	
BUFEE		KLISH (RF) (FB) (RNP 1.00)	(2.91 NM RADIUS CCW (CFBPZ))/9.04	2300	
KLISH		HOPWD (TF) (FB) (RNP 1.00)	123.13 / 2.11	1700	
HOPWD (FAF)		RW12R (MAP) (TF) (FO) (RNP 0.30)	123.15 / 3.47		
RW12R (MAP)		FONTI (TF) (FO) (RNP 1.00)	123.20 / 14.68 ←	5000	
NOTES, (CONT.): CHART SPEED ICON IN PLANVIEW AT BUFEE : MAX 210 KIAS. CHART PLANVIEW NOTE ADJACENT TO RRIPP IF: RF REQUIRED. CHART PLANVIEW NOTE ADJACENT TO HRBEE IF: RF REQUIRED. CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.30 ALL CATS VISIBILITY TO 1 1/2 SM. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 11, EXCEPT FOR ARRIVALS AT RRIPP AND HRBEE. CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS. CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.					
CITY AND STATE ST LOUIS, MO		ELEVATION: 618 AIRPORT NAME: ST LOUIS LAMBERT INTL	TDZE: 540	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (RNP) Z RWY 12R, ORIG-C 29 MARCH 2018
					SUP: 33
					AMDT: ORIG-B
					DATED: 08/17/2017

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW34										
WASWK (IF/IAF)				CORWN (TF) (FB) (RNP 1.00)			339.88 / 6.00				2900		CLIMB TO 3500 DIRECT FILON AND HOLD.										
CORWN (FAF)				BUMGE/2.00 NM TO RW34 (TF) (FB) (RNP 0.30)			339.85 / 3.04																
BUMGE/2.00 NM TO RW34				RW34 (MAP) (TF) (FO) (RNP 0.30)			339.85 / 2.00																
RW34 (MAP)				1507 MSL (CA)			339.85																
1507 MSL				FILON (DF) (FO) (RNP 1.00)							3500		ADDITIONAL FLIGHT DATA: HOLD N, RT, 159.78 INBOUND. CHART FAS OBST: 1323 TREE 461054N/0973813W. DISTANCE TO THLD FROM 250 HAT: 0.67 NM. CHART VDP AT 0.94 NM TO RW34* *LNAV ONLY. WAAS CHANNEL # 99317 REFERENCE PATH ID: W34A CHART CIRCLING ICON. LTP HAE: 356.9 M										
THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-05.																							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)														MAG VAR: 4E EPOCH YEAR: 2010									
2. HOLD S WASWK, RT, 339.88 INBOUND, 3500 FT. IN LIEU OF PT (IAF)																							
3. FAC: 339.85 FAF: CORWN DIST FAF TO MAP: 5.04 THLD: 5.04																							
4. MIN. ALT: WASWK 3500, CORWN 2900, BUMGE/2.00 NM TO RW34 1920*																							
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																							
6. MIN GS INCPT: 2900 GS ALT AT: CORWN 2900 OM: _____ MM: _____ IM: _____																							
7. GS ANGLE: 3.00 TCH: 40.0 34:1 IS CLEAR																							
8. MSA FROM: _____																							
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								
LPV DA	1507	1	250	1507	1	250	1507	1	250	1507	1	250											
LNAV/VNAV DA	1507	1	250	1507	1	250	1507	1	250	1507	1	250											
LNAV MDA	1580	1	323	1580	1	323	1580	1	323	1580	1	323											
CIRCLING	1780	1	514	1780	1	514	1840	1 1/2	574	2060	2 1/2	794											
NOTES: CHART NOTE: CIRCLING NA TO RWYS 6 AND 24. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). (CONTINUED ON PAGE 2)																							
CITY AND STATE GWINNER, ND				ELEVATION: 1266 TDZE: 1257 AIRPORT NAME: GWINNER-ROGER MELROE FIELD				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 34, AMDT 4A 29 MARCH 2018					SUP: AMDT: 4 DATED 09/18/2014								

**RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33**

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NOTES, (CONT.):

*LNAV ONLY

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FARGO ALTIMETER SETTING: INCREASE ALL DA TO 1683 FEET AND ALL VISIBILITIES 1/2 SM; INCREASE ALL MDAS 180 FEET AND VISIBILITY LNAV CAT C/D 5/8 SM, AND CIRCLING CAT C 3/4 SM, AND CIRCLING CAT D 1/2 SM.

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING FARGO ALTIMETER SETTING.

TAA

	FROM	TO	ALT
1.	250/30 CW 070/30 (NOPT)	250/10 CW 070/10 (FB)	3600
2.	250/10 CW 070/10	WASWK (IF/IAF) (FB)	3500
3.	070/30 CW 250/30	WASWK (IF/IAF) (FO)	3500

QUALITY
9
CHECKED

CITY AND STATE GWINNER, ND	ELEVATION: 1266 AIRPORT NAME: GWINNER-ROGER MELROE FIELD	TDZE: 1257	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 34, AMDT 4A 29 MARCH 2018	SUP:
					AMDT: 4
					DATED: 09/18/2014

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGWR
RUNWAY	RW34
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W34A
LTP/FTP LATITUDE	461237.3060N
LTP/FTP LONGITUDE	0973821.6890W
LTP/FTP ELLIPSOIDAL HEIGHT	+03569
FPAP LATITUDE	461402.8515N
FPAP LONGITUDE	0973857.4350W
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	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 1861C02E

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03826
FPAP ORTHOMETRIC HEIGHT	+03826

QUALITY
9
CHECKED

CITY AND STATE GWINNER, ND	ELEVATION: 1266 AIRPORT NAME: GWINNER-ROGER MELROE FIELD	TDZE: 1257 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 34, AMDT 4A 29 MARCH 2018	SUP:
				AMDT: 4
				DATED: 09/18/2014

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION				RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW09 CLIMB TO 8500 DIRECT CIVOS AND ON TRACK 120.57 TO HAMER AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 300.51 INBOUND. CHART FAS OBST: 6256 ANT + APBN ON OL ATCT 410932N/1044852W, 6244 SIGN 411003N/1045014W. DISTANCE TO THLD FROM 330 HAT: 0.88 NM. WAAS CHANNEL # 73009 REFERENCE PATH ID: W09A CHART CIRCLING ICON. CHART: ASR/PAR CHART 6488 WINDMILL 411028N/1045245W CHART VDP AT 1.09 MILES TO RW09* *LNAV ONLY LTP HAE: 1856.4 M						
BARGR		TODVE (TF) (FO) (RNP 2.00)		342.45 / 17.65				10600								
CYS VORTAC		TODVE (TF) (FO) (RNP 2.00)		253.28 / 16.49				10600								
TODVE (IF/IAF)		SIGSE (TF) (FB) (RNP 1.00)		085.08 / 6.70				8600								
SIGSE		HAXUG (TF) (FB) (RNP 1.00)		085.18 / 2.67				7800								
HAXUG (FAF)		WIKAR/2.70 NM TO RW09 (TF) (FB) (RNP 0.30)		085.22 / 2.28												
(SEE FORM 8260-10)																
THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-07.																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD W TODVE, RT, 085.08 INBOUND, 10600 FT. IN LIEU OF PT (IAF) 3. FAC: 085.22 FAF: HAXUG DIST FAF TO MAP: 4.98 THLD: 4.98 4. MIN. ALT: TODVE 10600, SIGSE 8600, HAXUG 7800, WIKAR/2.70 NM TO RW09 7060* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 7800 GS ALT AT: HAXUG 7800 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 50.0 34:1 IS NOT CLEAR 8. MSA FROM: RW09 10300																
										MAG VAR: 10E			EPOCH YEAR: 2005			
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	
LPV DA	6473	1 1/4	329	6473	1 1/4	329	6473	1 1/4	329	6473	1 1/4	329				
LNAV/VNAV DA	6543	1 1/2	399	6543	1 1/2	399	6543	1 1/2	399	6543	1 1/2	399				
LNAV MDA	6540	1	396	6540	1	396	6540	1	396	6540	1 1/4	396				
CIRCLING	6640	1	480	6640	1	480	6900	2	740	6940	2 1/2	780				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -27C (-16F) OR ABOVE 36C (96F). @ CAT D 800-2 1/2 CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON CYS VORTAC AIRWAY RADIALS 179 CW 317 AND FOR ARRIVALS AT BARGR ON V4 SOUTHEAST BOUND. CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.																
CITY AND STATE		ELEVATION: 6160 TDZE: 6144				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:				
CHEYENNE, WY		AIRPORT NAME: CHEYENNE RGNL/JERRY OLSON FIELD						RNAV (GPS) RWY 9, AMDT 1B 29 MARCH 2018				AMDT: 1A				
												DATED 11/13/2014				

QUALITY
9
CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
WIKAR/2.70 NM TO RW09	RW09 (MAP) (TF) (FO) (RNP 0.30)	085.22 / 2.70	
RW09 (MAP)	6474 MSL (CA)	085.22	
6474 MSL	CIVOS (DF) (FB) (RNP 1.00)		
CIVOS	HAMER (TF) (FO) (RNP 1.00)	120.57/9.40	8500

QUALITY
9
CHECKED

CITY AND STATE
CHEYENNE, WY

ELEVATION: 6160 TDZE: 6144
AIRPORT NAME:
CHEYENNE RGNL/JERRY OLSON FIELD

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 9, AMDT 1B
29 MARCH 2018

SUP:
AMDT: 1A
DATED: 11/13/2014

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCYS
RUNWAY	RW09
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W09A
LTP/FTP LATITUDE	410923.7925N
LTP/FTP LONGITUDE	1044908.2150W
LTP/FTP ELLIPSOIDAL HEIGHT	+18564
FPAP LATITUDE	410915.5500N
FPAP LONGITUDE	1044710.7700W
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	0112
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 6E4184AF

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+18725
FPAP ORTHOMETRIC HEIGHT	+18725

QUALITY
9
CHECKED

CITY AND STATE CHEYENNE, WY	ELEVATION: 6160 AIRPORT NAME: CHEYENNE RGNL/JERRY OLSON FIELD	TDZE: 6144 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 9, AMDT 1B 29 MARCH 2018	SUP:
				AMDT: 1A
				DATED: 11/13/2014

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION				RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW13 CLIMB TO 8500 DIRECT KOREC AND ON TRACK 103.42 TO HAMER AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 300.51 INBOUND. CHART FAS OBST: 6409 TREE 411203N/1045214W. CHART FAS OBST: 6244 SIGN 411003N/1045014W. DISTANCE TO THLD FROM 327 HAT: 0.85 NM. CHART VDP AT 1.49 NM TO RW13* *LNAV ONLY. WAAS CHANNEL # 56609 REFERENCE PATH ID: W13A CHART CIRCLING ICON. 6679 AAO 411250N/1045529W CHART: ASR/PAR LTP HAE: 1859.9 M						
CYS VORTAC		EMOTY (TF) (FO) (RNP 2.00)		286.02 / 11.53			9000								
SENSE		EMOTY (TF) (FO) (RNP 2.00)		016.16 / 3.24			9200								
MILKY (IAF)		EMOTY (NOPT) (TF) (FB) (RNP 1.00)		125.68 / 9.21			9000								
EMOTY (IF/IAF)		EXUMY (TF) (FB) (RNP 1.00)		125.16 / 6.17			7900								
EXUMY (FAF)		JIMIG/3.00 NM TO RW13 (TF) (FB) (RNP 0.30)		125.23 / 2.23											
(SEE FORM 8260-10)															
THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-07.															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NW EMOTY, LT, 125.16 INBOUND, 9000 FT. IN LIEU OF PT (IAF) 3. FAC: 125.23 FAF: EXUMY DIST FAF TO MAP: 5.23 THLD: 5.23 4. MIN. ALT: EMOTY 9000, EXUMY 7900, JIMIG/3.00 NM TO RW13 7160* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 7900 GS ALT AT: EXUMY 7900 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 55.0 34:1 IS NOT CLEAR 8. MSA FROM: RW13 10200															
										MAG VAR: 10E				EPOCH YEAR: 2005	
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
LPV DA	6482	1	327	6482	1	327	6482	1	327	6482	1	327			
LNAV/VNAV DA	6540	1 1/4	385	6540	1 1/4	385	6540	1 1/4	385	6540	1 1/4	385			
LNAV MDA	6660	1	505	6660	1	505	6660	1 1/2	505	6660	1 1/2	505			
CIRCLING	6660	1	500	6660	1	500	6900	2	740	6940	2 1/2	780			
NOTES: ← CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -27C (-16F) OR ABOVE 36C (96F). @ CAT D 800-2 1/2 CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CYS VORTAC VIA AIRWAY RADIALS 196 CW 016. CHART NOTE: RWY 13 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.															
CITY AND STATE		ELEVATION: 6160 TDZE: 6155		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
CHEYENNE, WY		AIRPORT NAME: CHEYENNE RGNL/JERRY OLSON FIELD				RNAV (GPS) RWY 13, AMDT 1B 29 MARCH 2018				AMDT: 1A					
										DATED 11/13/2014					

QUALITY
9
CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
JIMIG/3.00 NM TO RW13	RW13 (MAP) (TF) (FO) (RNP 0.30)	125.23 / 3.00	
RW13 (MAP)	6482 MSL (CA)	125.23	
6482 MSL	KOREC (DF) (RNP 1.00)		
KOREC	HAMER (TF) (FO) (RNP 1.00)	103.42/13.68	8500

QUALITY
9
CHECKED

CITY AND STATE
CHEYENNE, WY

ELEVATION: 6160 TDZE: 6155
AIRPORT NAME:
CHEYENNE RGNL/JERRY OLSON FIELD

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 13, AMDT 1B
29 MARCH 2018

SUP:
AMDT: 1A
DATED: 11/13/2014

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCYS
RUNWAY	RW13
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W13A
LTP/FTP LATITUDE	410936.5350N
LTP/FTP LONGITUDE	1044928.9860W
LTP/FTP ELLIPSOIDAL HEIGHT	+18599
FPAP LATITUDE	410833.1800N
FPAP LONGITUDE	1044806.0000W
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	1032
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

F11522CC

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+18760
FPAP ORTHOMETRIC HEIGHT	+18760

QUALITY
9
CHECKED

CITY AND STATE

CHEYENNE, WY

ELEVATION: 6160

TDZE: 6155

AIRPORT NAME:

CHEYENNE RGNL/JERRY OLSON FIELD

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 13, AMDT 1B

29 MARCH 2018

SUP:

AMDT: 1A

DATED: 11/13/2014

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						RNAV - 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			LPV: DA LNAV/VNAV: DA LNAV: RW31 CLIMB TO 10300 DIRECT IVUCI AND ON TRACK 286.65 TO SENSE AND HOLD, CONTINUE CLIMB-IN-HOLD TO 10300. ADDITIONAL FLIGHT DATA: HOLD W, LT, 090.37 INBOUND. CHART FAS OBST: 6331 MCWV ANT ON TWR 410705N/1044711W CHART FAS OBST: 6221 TOWER 410907N/1044822W DISTANCE TO THLD FROM 250 HAT: 0.67 NM. CHART VDP AT 1.39 NM TO RW31* *LNAV ONLY. WAAS CHANNEL # 99609 REFERENCE PATH ID: W31A CHART CIRCLING ICON. 6399 AAO 410514N/1044533W CHART: ASR/PAR LTP HAE: 1852.1 M																	
CYS VORTAC			ZORIS (TF) (FO) (RNP 2.00)			142.09 / 13.20			8600																				
CIKNU (IAF)			ZORIS (NOPT) (TF) (FB) (RNP 1.00)			032.88 / 3.99			7800																				
HAMER (IAF)			ZORIS (NOPT) (TF) (FB) (RNP 1.00)			243.13 / 5.75			7800																				
ZORIS (IF/IAF)			LORYI (TF) (FB) (RNP 1.00)			305.40 / 6.38			7800																				
LORYI (FAF)			RW31 (MAP) (TF) (FO) (RNP 0.30)			305.34 / 5.01																							
(SEE FORM 8260-10) THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-07.																													
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SE ZORIS, RT, 305.40 INBOUND, 7800 FT. IN LIEU OF PT (IAF) 3. FAC: 305.34 FAF: LORYI DIST FAF TO MAP: 5.01 THLD: 5.01 4. MIN. ALT: ZORIS 7800, LORYI 7800 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 7800 GS ALT AT: LORYI 7800 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 55.0 34:1 IS NOT CLEAR 8. MSA FROM: RW31 10300																		MAG VAR: 10E						EPOCH YEAR: 2005					
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														
LPV DA	6397	1	250	6397	1	250	6397	1	250	6397	1	250																	
LNAV/VNAV DA	6545	1 1/2	398	6545	1 1/2	398	6545	1 1/2	398	6545	1 1/2	398																	
LNAV MDA	6600	1	453	6600	1	453	6600	1 1/4	453	6600	1 1/2	453																	
CIRCLING	6640	1	480	6640	1	480	6900	2	740	6940	2 1/2	780																	
NOTES: ← CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -27C (-16F) OR ABOVE 36C (96F). @ CAT D 800-2 1/2 CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CYS VORTAC VIA AIRWAY RADIALS 081 CW 203. CHART NOTE: RWY 31 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.																													
CITY AND STATE				ELEVATION: 6160 TDZE: 6147				FACILITY IDENTIFIER:				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:													
CHEYENNE, WY				AIRPORT NAME:				RNAV				RNAV (GPS) RWY 31, AMDT 1B				AMDT: 1A													
				CHEYENNE RGNL/JERRY OLSON FIELD								29 MARCH 2018				DATED 11/13/2014													

QUALITY
9
CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW31 (MAP)	6397 MSL (CA)	305.34	
6397 MSL	IVUCI (DF) (FB) (RNP 1.00)		
IVUCI	SENSE (TF) (FO) (RNP 1.00)	286.65 / 9.58	10300

QUALITY
9
CHECKED

CITY AND STATE
CHEYENNE, WY

ELEVATION: 6160 TDZE: 6147
AIRPORT NAME:
CHEYENNE RGNL/JERRY OLSON FIELD

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 31, AMDT 1B
29 MARCH 2018

SUP:
AMDT: 1A
DATED: 11/13/2014

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCYS
RUNWAY	RW31
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	410905.1635N
LTP/FTP LONGITUDE	1044847.8820W
LTP/FTP ELLIPSOIDAL HEIGHT	+18521
FPAP LATITUDE	411008.5200N
FPAP LONGITUDE	1045010.8900W
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	1064
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 82995C4B

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+18683
FPAP ORTHOMETRIC HEIGHT	+18683

QUALITY
9
CHECKED

CITY AND STATE CHEYENNE, WY	ELEVATION: 6160 AIRPORT NAME: CHEYENNE RGNL/JERRY OLSON FIELD	TDZE: 6147 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 31, AMDT 1B 29 MARCH 2018	SUP:
				AMDT: 1A
				DATED: 11/13/2014

[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. [31181](#); Amdt. No. [3789](#)]

**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 Procedure Standards Branch (AFS-420), Flight Technologies and Programs Divisions, Flight Standards Service, Federal Aviation Administration, Mike Monroney Aeronautical Center, 6500 South MacArthur Blvd. Oklahoma City, OK. 73169 (Mail Address: P.O. Box 25082, 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 [February 23, 2018](#)

A handwritten signature in black ink, appearing to read "John S. Duncan", with a long horizontal flourish extending to the right.

John S. Duncan
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 29 March 2018

Homer, AK, Homer, LOC RWY 4, Amdt 11
 Homer, AK, Homer, LOC BC RWY 22, Amdt 6
 Homer, AK, Homer, Takeoff Minimums and Obstacle DP, Amdt 3
 Kenai, AK, Kenai Muni, ILS OR LOC RWY 20R, Amdt 6
 Kenai, AK, Kenai Muni, RNAV (GPS) RWY 20R, Amdt 4
 Kenai, AK, Kenai Muni, VOR RWY 2L, Amdt 10
 Kenai, AK, Kenai Muni, VOR RWY 20R, Amdt 21
 Nome, AK, Nome, ILS Y OR LOC Y RWY 28, Amdt 4A
 Nome, AK, Nome, ILS Z OR LOC Z RWY 28, Amdt 5
 Gulf Shores, AL, Jack Edwards National, ILS OR LOC RWY 27, Amdt 1B
 Gulf Shores, AL, Jack Edwards National, RNAV (GPS) RWY 9, Amdt 3B
 Gulf Shores, AL, Jack Edwards National, RNAV (GPS) RWY 27, Amdt 2B
 Gulf Shores, AL, Jack Edwards National, Takeoff Minimums and Obstacle DP, Orig-A
 Blytheville, AR, Arkansas Intl, ILS OR LOC RWY 18, Amdt 2A
 Redlands, CA, Redlands Muni, RNAV (GPS)-A, Amdt 1
 Santa Monica, CA, Santa Monica Muni, RNAV (GPS) RWY 21, Amdt 1A
 Wray, CO, Wray Muni, RNAV (GPS) RWY 17, Amdt 2
 Wray, CO, Wray Muni, RNAV (GPS) RWY 35, Amdt 2
 Windsor Locks, CT, Bradley Intl, COPTER ILS OR LOC RWY 6, Amdt 2
 Windsor Locks, CT, Bradley Intl, ILS OR LOC RWY 6, ILS RWY 6 (SA CAT I), ILS RWY 6 (CAT II), ILS RWY 6 (CAT III), Amdt 38
 Windsor Locks, CT, Bradley Intl, ILS OR LOC RWY 24, ILS RWY 24 (SA CAT I), ILS RWY 24 (SA CAT II), Amdt 13
 Windsor Locks, CT, Bradley Intl, ILS OR LOC RWY 33, Amdt 10C
 Windsor Locks, CT, Bradley Intl, RNAV (GPS) RWY 15, Amdt 3
 Windsor Locks, CT, Bradley Intl, RNAV (GPS) RWY 33, Amdt 3
 Windsor Locks, CT, Bradley Intl, RNAV (GPS) Y RWY 6, Amdt 3
 Windsor Locks, CT, Bradley Intl, RNAV (GPS) Y RWY 24, Amdt 4
 Windsor Locks, CT, Bradley Intl, RNAV (RNP) Z RWY 6, Amdt 1
 Windsor Locks, CT, Bradley Intl, RNAV (RNP) Z RWY 24, Amdt 1
 Nashville, GA, Berrien Co, RNAV (GPS) RWY 28, Amdt 1
 Topeka, KS, Philip Billard Muni, ILS OR LOC RWY 13, Amdt 33A
 Topeka, KS, Philip Billard Muni, LOC BC RWY 31, Amdt 19C
 Topeka, KS, Philip Billard Muni, RNAV (GPS) RWY 13, Amdt 1B
 Topeka, KS, Philip Billard Muni, RNAV (GPS) RWY 31, Amdt 1B
 Bardstown, KY, Samuels Field, RNAV (GPS) RWY 3, Amdt 1
 Bardstown, KY, Samuels Field, RNAV (GPS) RWY 21, Amdt 1
 Bardstown, KY, Samuels Field, Takeoff Minimums and Obstacle DP, Amdt 2
 Bardstown, KY, Samuels Field, VOR RWY 3, Amdt 1

Louisville, KY, Louisville Intl-Standiford Field, ILS OR LOC RWY 17L, Amdt 4G
 Louisville, KY, Louisville Intl-Standiford Field, ILS OR LOC RWY 17R, Amdt 3G
 Louisville, KY, Louisville Intl-Standiford Field, ILS OR LOC RWY 35L, ILS RWY 35L (SA CAT I),
 ILS RWY 35L (CAT II), ILS RWY 35L (CAT III), Amdt 3F
 Louisville, KY, Louisville Intl-Standiford Field, ILS OR LOC RWY 35R, ILS RWY 35R (SA CAT I),
 ILS RWY 35R (CAT II), ILS RWY 35R (CAT III), Amdt 4E
 Louisville, KY, Louisville Intl-Standiford Field, LOC RWY 29, Orig-B
 Louisville, KY, Louisville Intl-Standiford Field, RNAV (GPS) RWY 29, Orig-C
 Louisville, KY, Louisville Intl-Standiford Field, RNAV (GPS) Y RWY 17L, Amdt 1E
 Louisville, KY, Louisville Intl-Standiford Field, RNAV (GPS) Y RWY 17R, Amdt 1E
 Louisville, KY, Louisville Intl-Standiford Field, RNAV (GPS) Y RWY 35L, Amdt 1D
 Louisville, KY, Louisville Intl-Standiford Field, RNAV (GPS) Y RWY 35R, Amdt 1E
 Louisville, KY, Louisville Intl-Standiford Field, RNAV (RNP) Z RWY 17L, Orig-D
 Louisville, KY, Louisville Intl-Standiford Field, RNAV (RNP) Z RWY 17R, Orig-C
 Louisville, KY, Louisville Intl-Standiford Field, RNAV (RNP) Z RWY 35L, Amdt 1D
 Louisville, KY, Louisville Intl-Standiford Field, RNAV (RNP) Z RWY 35R, Orig-C
 Hastings, MI, Hastings, RNAV (GPS) RWY 12, Amdt 2
 Hastings, MI, Hastings, RNAV (GPS) RWY 30, Amdt 2
 Bigfork, MN, Bigfork Muni, Takeoff Minimums and Obstacle DP, Amdt 1
 Brainerd, MN, Brainerd Lakes Rgnl, ILS OR LOC RWY 23, Amdt 7A
 Brainerd, MN, Brainerd Lakes Rgnl, ILS OR LOC/DME RWY 34, Amdt 2
 Brainerd, MN, Brainerd Lakes Rgnl, RNAV (GPS) RWY 5, Amdt 1A
 Brainerd, MN, Brainerd Lakes Rgnl, RNAV (GPS) RWY 23, Orig-A
 Brainerd, MN, Brainerd Lakes Rgnl, RNAV (GPS) RWY 34, Orig-A
 St Cloud, MN, St Cloud Rgnl, ILS OR LOC RWY 31, Amdt 3B
 St Cloud, MN, St Cloud Rgnl, RNAV (GPS) RWY 5, Orig-B
 St Cloud, MN, St Cloud Rgnl, RNAV (GPS) RWY 23, Orig-B
 St Cloud, MN, St Cloud Rgnl, RNAV (GPS) RWY 31, Amdt 1A
 Beatrice, NE, Beatrice Muni, RNAV (GPS) RWY 14, Amdt 1C
 Mount Vernon, OH, Knox County, RNAV (GPS) RWY 28, Amdt 1B
 Mount Vernon, OH, Knox County, VOR-A, Amdt 8A
 Hugo, OK, Stan Stamper Muni, RNAV (GPS) RWY 17, Amdt 1
 Hugo, OK, Stan Stamper Muni, RNAV (GPS) RWY 35, Amdt 1
 Corvallis, OR, Corvallis Muni, RNAV (GPS) RWY 17, Amdt 1A
 Murfreesboro, TN, Murfreesboro Muni, NDB RWY 18, Amdt 2
 Murfreesboro, TN, Murfreesboro Muni, RNAV (GPS) RWY 18, Amdt 2
 Murfreesboro, TN, Murfreesboro Muni, RNAV (GPS) RWY 36, Amdt 3
 Carthage, TX, Panola County-Sharpe Field, RNAV (GPS) RWY 35, Orig-A
 Seymour, TX, Seymour Muni, RNAV (GPS) RWY 17, Orig-B
 Milwaukee, WI, General Mitchell Intl, RNAV (GPS) Z RWY 7R, Amdt 1E

RESCINDED: On January 26, 2018 (83 FR 3572), the FAA published an Amendment in Docket No. 31175, Amdt No. 3783, to Part 97 of the Federal Aviation Regulations under section 97.27, 97.29, 97.31, 97.33, and 97.37. The following entries for Little Rock, AR, and Fort Hood/Killeen, TX, effective March 29, 2018, are hereby rescinded in their entirety:

Little Rock, AR, Bill and Hillary Clinton National/Adams Field, ILS OR LOC RWY 4L, Amdt 26A
Little Rock, AR, Bill and Hillary Clinton National/Adams Field, ILS OR LOC RWY 4R, Amdt 2D
Little Rock, AR, Bill and Hillary Clinton National/Adams Field, ILS OR LOC RWY 22L, Orig-D
Little Rock, AR, Bill and Hillary Clinton National/Adams Field, RNAV (GPS) RWY 36, Orig-C
Little Rock, AR, Bill and Hillary Clinton National/Adams Field, Takeoff Minimums and Obstacle DP, Amdt 9
Fort Hood/Killeen, TX, Robert Gray AAF, NDB RWY 15, Amdt 6A, CANCELED
Fort Hood/Killeen, TX, Robert Gray AAF, RADAR-2, Orig-A

RESCINDED: On February 13, 2018 (83 FR 6130), the FAA published an Amendment in Docket No. 31177, Amdt No. 3785, to Part 97 of the Federal Aviation Regulations under section 97.33. The following entries for Douglas, GA, effective March 29, 2018, are hereby rescinded in their entirety.

Douglas, GA, Douglas Muni, RNAV (GPS) RWY 4, Amdt 2
Douglas, GA, Douglas Muni, RNAV (GPS) RWY 22, Amdt 2

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

LOC STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.25

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			MAP: LOC: 1.23 DME					
HOM VOR/DME		OZKOF/7.00 DME		202.80 / 9.45			3900			CLIMB TO 500 THEN CLIMBING RIGHT TURN TO 3200 ON HEADING 230 AND ON ACE NDB BRG-217 TO ZANOV/I-HOM 17.28 DME AND HOLD.					
ACE NDB		OZKOF/7.00 DME		215.89 / 5.59			3600								
KOMNA/HOM 19.50 DME CW (IAF)		ZAPOT/HOM 19.50 DME (NOPT)		19.50 DME ARC			5000								
ZAPOT/HOM 19.50 DME CW		ZANOV/17.28 DME		19.50 DME ARC (HOM LR-205)			3900			ADDITIONAL FLIGHT DATA: HOLD SW, LT, 038.01 INBOUND. FAS OBST: 200 SHIP 593554N/1513500W. CHART VDP AT 2.29 DME DISTANCE VDP TO THLD 1.06 NM. CHART HOM R-179 AT KOMNA. CHART HOM R-203 AT ZAPOT. CHART HOM R-237 AT ELDOH. CHART ARRIVAL HOLDING AT ZANOV: HOLD SW, LT, 038.01 INBOUND, 3200. CHART IN PLANVIEW ONLY: HOM VOR/DME 9.45 DME AT OZKOF. CHART CIRCLING ICON. CHART PLANVIEW NOTE: DME REQUIRED. CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.					
ELDOH/HOM 19.50 DME CCW (IAF)		ZANOV/17.28 DME		19.50 DME ARC (HOM LR-218)			2800								
ZANOV/17.28 DME (IF/IAF)		OZKOF/7.00 DME		038.01 / 10.27 (I-HOM)			2000								
1. PT <u>R</u> SIDE OF COURSE <u>218.01</u> OUTBOUND <u>3000</u> FT WITHIN <u>10</u> MILES OF <u>OZKOF</u> (IAF)										MAG VAR: 17E EPOCH YEAR:2015					
2.															
3. FAC <u>038.01</u> FAF <u>OZKOF/7.00 DME</u> DIST FAF TO MAP <u> </u> THLD <u>5.77</u>															
4. MIN. ALT <u>OZKOF 2000</u>															
8. MSA FROM: HOM VOR/DME 030-120 7400, 120-210 6300, 210-300 3000, 300-030 4000															
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT						ALTERNATE: N A		LOC: STANDARD @							
CATEGORY =====>	A			B			C			D			E		
	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA
S-LOC 04	460	1	382	460	1	382	460	1	382	460	1	382			
CIRCLING	500	1	416	540	1	456	540	1 1/2	456	760	2 1/4	676			
NOTES:															
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO CATS A AND B. @ CAT D 800-2 1/4															
CHART NOTE: CIRCLING NA NW OF RWY 4-22.															
CHART PROFILE NOTE: USE I-HOM DME WHEN ON THE LOCALIZER COURSE.															
CHART NOTE: ADF AND DME REQUIRED.															
(CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 84 TDZE: 78		FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP		LOC/DME RWY 4			
HOMER, AK		AIRPORT NAME:		I-HOM		LOC RWY 4, AMDT 11, 3/29/2018				AMDT		10B			
		HOMER								DATE		10/12/2017			

FAA FORM 8260-5 / April 2006 (computer generated)

PAGE 1 OF 2 PAGES

QUALITY
8
CHECKED

**LOC STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - - TITLE 14 CFR PART 97.25**

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.

NOTES, (CONT.):

CHART NOTE: FOR INOPERATIVE ALS INCREASE CAT C/D VISIBILITY TO 1 1/8 SM.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT ACE NDB ON G8-R99 EASTBOUND AND ON G10 NORTHBOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON HOM VOR/DME AIRWAY RADIALS 155 CW 228.

QUALITY
8
CHECKED

CITY AND STATE

HOMER, AK

ELEVATION: 84

TDZE: 78

AIRPORT NAME:

HOMER

FACILITY
IDENTIFIER:
I-HOMPROCEDURE NO./AMDT NO./EFFECTIVE DATE:
LOC RWY 4, AMDT 11, 3/29/2018

SUP: LOC/DME RWY 4

AMDT: 10B

DATED: 10/12/2017

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION LOC STANDARD INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.25								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		MAP: LOC: NIGKI/0.48 DME FIX							
HOM VOR/DME		KECKI/12.66 DME			054.78 / 11.00			4200		CLIMB TO 2600 ON I-HOM BRG-218.03 ON COURSE 218.03 TO PLICK/16.77 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NE, RT, 218.01 INBOUND. CHART FAS OBST: 188 TREE 593908N/1512650W. 1185 AAO 594348N/1511711W. 364 AAO 594123N/1512241W. CHART HOM R-353 AT AFWAF. CHART HOM R-011 AT FOLAR. ZOXIL TO RW22: 3.15/55.2. CHART CIRCLING ICON CHART PLANVIEW NOTE: DME REQUIRED.							
KASSI		ZIBVI (TF) (FB) (RNP 2.00)			154.70 / 19.19			5300									
ZIBVI (IAF)		CEBAB (NOPT) (TF) (FB) (RNP 1.00)			150.94 / 6.09			5000									
CEBAB		KECKI/12.66 DME (TF) (FB) (RNP 1.00)			150.98 / 6.09			4000									
AFWAF/HOM 11.00 DME CW (IAF)		FOLAR/HOM 11.00 DME (NOPT)			11.00 DME ARC			3900									
FOLAR/HOM 11.00 DME CW (IAF)		KECKI/12.66 DME			11.00 DME ARC (HOM LR-044)			3600									
(SEE FORM 8260-10)																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NE KECKI, RT, 218.03 INBOUND, 3600 FT. IN LIEU OF PT (IAF) _____ 3. FAC 218.03 FAF ZOXIL/6.66 DME _____ DIST FAF TO MAP _____ THLD 6.79 4. MIN. ALT KECKI 3600, IDACU 2800, ZOXIL 2400, WIGVA/3.38 DME 1260 8. MSA FROM: HOM VOR/DME 030-120 7400, 120-210 6300, 210-300 3000, 300-030 4000														MAG VAR: 17E		EPOCH YEAR: 2015	
MINIMUMS																	
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		LOC: STANDARD @							
CATEGORY =====>	A			B			C			D			E				
	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA		
S-LOC 22	440	1	356	440	1	356	440	1	356	440	1	356					
CIRCLING	500	1	416	540	1	456	540	1 1/2	456	760	2 1/4	676					
NOTES: CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY. @ CAT D 800-2 1/4 CHART PROFILE NOTE: USE I-HOM DME WHEN ON THE LOCALIZER COURSE. CHART NOTE: RWY 22 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME REQUIRED. (CONTINUED ON PAGE 2)																	
CITY AND STATE		ELEVATION: 84 TDZE: 84		FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP LOC/DME BC RWY							
HOMER, AK		AIRPORT NAME:		HOMER		I-HOM		LOC BC RWY 22, AMDT 6, 3/29/2018				22					
												AMDT 5C					
												DATE 07/24/2014					



**LOC STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - - TITLE 14 CFR PART 97.25**

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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
KECKI/12.66 DME (IF/IAF)	IDACU/8.17 DME	218.03 / 4.49 (I-HOM)	2800
IDACU/8.17 DME	ZOXIL/6.66 DME	218.03 / 1.51 (I-HOM)	2400

NOTES, (CONT.):

CHART PLANVIEW NOTE ADJACENT TO KASSI AND ZIBVI: RNAV 1-GPS REQUIRED.

CHART NOTE: PROCEDURE NA FOR ARRIVALS AT HOM VOR/DME ON T237 WESTBOUND.

CHART NOTE: CIRCLING NA NW OF RWY 4-22.

QUALITY
8
CHECKED

CITY AND STATE

HOMER, AK

ELEVATION: 84

TDZE: 84

AIRPORT NAME:

HOMER

FACILITY
IDENTIFIER:

I-HOM

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

LOC BC RWY 22, AMDT 6, 3/29/2018

SUP: LOC/DME BC RWY
22

AMDT: 5C

DATED: 07/24/2014

**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>
HOMER, AK	HOMER	3/29/2018	3

TAKEOFF MINIMUMS:

RWY 4, STANDARD WITH MINIMUM CLIMB OF 340 FT PER NM TO 2000 OR 3800-3 FOR VCOA.
RWY 22, STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

RWY 4: CLIMB ON HEADING 038.01 TO 2000, THEN CLIMBING RIGHT TURN HEADING 240 TO INTERCEPT AND TRACK OUTBOUND ON HOM VOR/DME R-210 THENCE ...
RWY 22: CLIMBING RIGHT TURN HEADING 245 TO INTERCEPT HOM VOR/DME R-210 THENCE ...

...NORTHEAST THROUGH SOUTHWEST BOUND (020 CW 210) CLIMB TO 2600 ON HOM VOR/DME R-210 THEN RIGHT TURN DIRECT HOM VOR/DME CROSS HOM VOR/DME AT OR ABOVE 4000, THEN CLIMB ON COURSE.
...SOUTHWEST THROUGH NORTHEAST BOUND. (211 CW 019) CLIMB TO 2600 ON HOM VOR/DME R-210 OUTBOUND THEN CLIMB ON COURSE.

VISUAL CLIMB OVER AIRPORT:

RWY 4: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE: CLIMB IN VISUAL CONDITIONS TO CROSS HOMER AIRPORT AT OR ABOVE 3700 BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 04, TERRAIN 7 FT FROM DER, 421 FT RIGHT OF CENTERLINE, 91 FT MSL.
VEGETATION, LIGHTING, TERRAIN BEGINNING 9 FT FROM DER, 4 FT RIGHT OF CENTERLINE, UP TO 95 FT MSL.
LIGHTING 11 FT FROM DER, 5 FT LEFT OF CENTERLINE, 2 FT AGL/75 FT MSL.
WIND INDICATOR 223 FT FROM DER, 329 FT RIGHT OF CENTERLINE, 19 FT AGL/108 FT MSL.
POLE, NAVAID BEGINNING 224 FT FROM DER, 196 FT RIGHT OF CENTERLINE, UP TO 20 FT AGL/109 FT MSL.
TREE 1381 FT FROM DER, 527 FT RIGHT OF CENTERLINE, 128 FT MSL.
TREE 1939 FT FROM DER, 599 FT RIGHT OF CENTERLINE, 131 FT MSL.
TREES BEGINNING 1965 FT FROM DER, 347 FT RIGHT OF CENTERLINE, UP TO 136 FT MSL.
TREES BEGINNING 2170 FT FROM DER, 335 FT RIGHT OF CENTERLINE, UP TO 142 FT MSL.
TREES BEGINNING 2246 FT FROM DER, 418 FT RIGHT OF CENTERLINE, UP TO 149 FT MSL.
TREES BEGINNING 2376 FT FROM DER, 907 FT RIGHT OF CENTERLINE, UP TO 166 FT MSL.
TREES BEGINNING 2528 FT FROM DER, 767 FT RIGHT OF CENTERLINE, UP TO 188 FT MSL.

NOTE: RWY 22, FENCE, LIGHTING, SIGN BEGINNING 3 FT FROM DER, 5 FT LEFT OF CENTERLINE, UP TO 9 FT AGL/80 FT MSL.
LIGHTING 10 FT FROM DER, 5 FT RIGHT OF CENTERLINE, 2 FT AGL/72 FT MSL.
TREE 307 FT FROM DER, 532 FT LEFT OF CENTERLINE, 126 FT MSL.
NAVAID, POLE BEGINNING 522 FT FROM DER, 518 FT RIGHT OF CENTERLINE, UP TO 36 FT AGL/104 FT MSL.
TOWER 1035 FT FROM DER, 702 FT RIGHT OF CENTERLINE, 62 FT AGL/130 FT MSL.

CONTROLLING OBSTACLES:

RWY 4: 1200 FT MSL AAO 594232.61N/1512137.96W
OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: 4196 FT MSL AAO 593757.00N/1505936.00W.

RWY 22 OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: 1276 FT MSL ANTENNA 594011.92N/1513046.62W

RWY 4 (VCOA): 1598 FT MSL AAO 594227.00N/1512736.00W (VISUAL CLIMB AREA), 5597 FT MSL AAO 593403.00N/1505154.00W (CLIMB TO ALTITUDE)

REMARKS:

100 FT VEGETATION, 200 FT SHIP.

FLIGHT INSPECTED BY:

PENDING

Digitally signed by
DONALD H LANIER
Feb 16, 2018

OFFICE SYMBOL:

DATE:

DEVELOPED BY:

LIAM DONAHUE

Digitally signed by
LIAM DONAHUE
Nov 13, 2017

OFFICE SYMBOL:

AJV-5431

DATE:

11/03/2017

APPROVED BY:

PATRICK MULQUEEN

Digitally signed by
DONALD H LANIER
Feb 16, 2018

OFFICE SYMBOL:

AJV-5430

DATE:

**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>
HOMER, AK	HOMER	3/29/2018	3

REQUIRED EFFECTIVE DATE:
3/29/2018

COORDINATED WITH:

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

OTHER:
ZLA, AMGR

CHANGES - REASONS:

1. CHANGED ALL HOM R-200 REFERENCES TO HOM R-210. - HOM VOR/DME MAGNETIC VARIATION CHANGED FROM 24E TO 15E.
2. CHANGED RWY 22 DEPARTURE PROCEDURE FROM CLIMBING RIGHT TURN HEADING 265 TO CLIMBING RIGHT TURN HEADING 245. - PROVIDE ADEQUATE CLEARANCE FROM HIGH TERRAIN IDENTIFIED BY NEW MAP STUDY.
3. REPLACED "VIA" WITH "ON" IN TEXTUAL DEPARTURE PROCEDURES. - FAAO 8260.19.
4. UPDATED TAKEOFF OBSTACLE NOTES AND CONTROLLING OBSTACLES. - NEW TARGETS EVALUATION.
5. ADDED VCOA. - FAAO 8260.3C PARAGRAPH 14-1-2.



US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29		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		ILS: DA LOC: I-ENA 1.43 DME									
ENA VOR/DME		TBONE INT/I-ENA 11.76 DME		012.10 / 8.00		2000		CLIMB TO 600 THEN CLIMBING RIGHT TURN TO 2000 ON HEADING 041 AND ENA VOR/DME R-012 TO TBONE INT/I-ENA 11.76 DME AND HOLD (TACAN AIRCRAFT CLIMB TO 600 THEN CLIMBING RIGHT TURN TO 2000 ON HEADING 046 AND EDF TACAN R-212 TO TBONE INT/EDF 49.15 DME AND HOLD NE, RIGHT TURN, 212.43 INBOUND). (SEE FORM 8260-10)									
ROJAR/ENA VOR/DME 8.00 DME CCW (IAF)		TBONE INT/I-ENA 11.76 DME (NOPT)		8.00 DME ARC (ENA LR-027)		2000											
TWIGI/ENA VOR/DME 8.00 DME CW (IAF)		TBONE INT/I-ENA 11.76 DME (NOPT)		8.00 DME ARC (ENA LR-357)		2000											
TBONE INT/I-ENA 11.76 DME (IF/IAF)		FREDE/I-ENA 5.36 DME		196.06 / 6.40 (I-ENA)		1400											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N TBONE, RT, 196.06 INBOUND, 2000 FT. IN LIEU OF PT (IAF) 3. FAC: 196.06 FAF: FREDE/I-ENA 5.36 DME DIST FAF TO MAP: 3.93 THLD: 3.93 4. MIN. ALT: TBONE 2000, FREDE 1400 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: 969 6. MIN GS INCPT: 1400 GS ALT AT: FREDE 1400 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 51.0 8. MSA FROM: ENA VOR/DME 030-210 3500, 210-030 2200										ADDITIONAL FLIGHT DATA: CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD N TBONE INT/I-ENA 11.76 DME, RT, 196.06 INBOUND. CHART FAS OBST: 252 TOWER 603555N/1511240W. CHART VDP AT 2.59 DME* DISTANCE VDP TO THLD 1.16 NM. *LOC ONLY. CHART ENA R-095 AT ROJAR. CHART ENA R-266 AT TWIGI. CHART CIRCLING ICON. CHART PLANVIEW NOTE: DME REQUIRED.							
										MAG VAR: 15E EPOCH YEAR: 2020							
MINIMUMS																	
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT						ALTERNATE: N A		ILS: STANDARD #		LOC: 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	
S-ILS 20R**		298	2400	200	298	2400	200	298	2400	200	298	2400	200	298	2400	200	
S-LOC 20R		520	2400	422	520	2400	422	520	4000	422	520	4000	422	520	4000	422	
CIRCLING		560	1	460	580	1	480	580	1 1/2	480	680	2	580	760	2 1/4	660	
NOTES: CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. (NA WHEN USING SOLDOTNA ALTIMETER SETTING). # @ NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART NOTE: CIRCLING RWY 02R, 20L NA AT NIGHT. # CAT E 700-2 1/4 CHART NOTE: DME REQUIRED. @ CAT E 800-2 1/4 CHART PROFILE NOTE: USE I-ENA DME WHEN ON THE LOCALIZER COURSE. (CONTINUED ON PAGE 2)																	
CITY AND STATE KENAI, AK		ELEVATION: 100 TDZE: 98 AIRPORT NAME: KENAI MUNI		FACILITY IDENTIFIER: I-ENA		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 20R, AMDT 6, 03/29/2018						SUP: AMDT: 5 DATED 12/10/2015					

**ILS - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29**

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.

MISSED APPROACH INSTRUCTIONS, (CONT.):

ALTERNATE MA (DO NOT CHART): CLIMB TO 600 THEN CLIMBING RIGHT TURN TO 2000 ON HEADING 045 AND I-ENA NE COURSE (016) TO TBONE INT/I-ENA 11.76 DME AND HOLD.

NOTES, (CONT.):

CHART PLANVIEW NOTE: RADAR REQUIRED FOR PROCEDURE ENTRY FOR TACAN AIRCRAFT.

**WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SOLDOTNA ALTIMETER SETTING: INCREASE DA TO 320 FT;
INCREASE ALL MDA 40 FT AND S-LOC 20R CAT C-E VISIBILITY TO RVR 5000.**

QUALITY
35
CHECKED

CITY AND STATE

KENAI, AK

ELEVATION: 100**TDZE: 98**

AIRPORT NAME:

KENAI MUNI

FACILITY
IDENTIFIER:
I-ENAPROCEDURE NO./AMDT NO./EFFECTIVE DATE:
ILS OR LOC RWY 20R, AMDT 6, 03/29/2018

SUP:

AMDT: **5**DATED: **12/10/2015**

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION				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		LPV: DA LNAV/VNAV: DA LNAV: RW20R CLIMB TO 2000 DIRECT FOPTY AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, LT, 015.87 INBOUND. CHART FAS OBST: 252 TOWER 603555N/1511240W. DISTANCE TO THLD FROM 200 HAT: 0.47 NM. CHART VDP AT 1.16 NM TO RW20R* *LNAV ONLY. WAAS CHANNEL # 99504 REFERENCE PATH ID: W20A CHART CIRCLING ICON. LTP HAE: 34.9 M									
ENA VOR/DME		TBONE (TF) (FO) (RNP 2.00)		016.10 / 8.00				2000											
ZUTOR (IAF)		TBONE (NOPT) (TF) (FB) (RNP 1.00)		263.38 / 8.89				2000											
YILUS (IAF)		TBONE (NOPT) (TF) (FB) (RNP 1.00)		126.05 / 9.20				2000											
TBONE (IF/IAF)		FREDE (TF) (FB) (RNP 1.00)		196.22 / 6.40				1400											
FREDE (FAF)		RW20R (MAP) (TF) (FO) (RNP 0.30)		196.12 / 3.93															
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N TBONE, RT, 196.22 INBOUND, 2000 FT. IN LIEU OF PT (IAF) 3. FAC: 196.12 FAF: FREDE DIST FAF TO MAP: 3.93 THLD: 3.93 4. MIN. ALT: TBONE 2000, FREDE 1400 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 1400 GS ALT AT: FREDE 1400 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 51.0 34:1 IS CLEAR 8. MSA FROM: RW20R 3500																MAG VAR: 15E		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				
LPV DA**	298	2400	200	298	2400	200	298	2400	200	298	2400	200							
LNAV/VNAV DA	348	2400	250	348	2400	250	348	2400	250	348	2400	250							
LNAV MDA	520	2400	422	520	2400	422	520	4000	422	520	4000	422							
CIRCLING	560	1	460	580	1	480	580	1 1/2	480	680	2	580							
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C (0F) OR ABOVE 54C (130F). @ NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART NOTE: BARO-VNAV AND VDP NA WHEN USING SOLDOTNA ALTIMETER SETTING. CHART NOTE: CIRCLING RWY 2R, 20L NA AT NIGHT. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)																			
CITY AND STATE		ELEVATION: 100 TDZE: 98		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
KENAI, AK		AIRPORT NAME: KENAI MUNI				RNAV (GPS) RWY 20R, AMDT 4, 03/29/2018				AMDT: 3B									
										DATED 10/12/2017									

 QUALITY
5
CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW20R (MAP)	298 MSL (CA)	196.12	
298 MSL	FOPTY (DF) (FO) (RNP 1.00)		2000

NOTES, (CONT.):

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SOLDOTNA ALTIMETER SETTING AND INCREASE ALL DA 22 FEET AND ALL MDA 40 FEET, INCREASE LNAV VISIBILITY CAT C AND D TO RVR 5000.

CHART NOTE: ** RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. (NA WHEN USING SOLDOTNA ALTIMETER SETTING).

QUALITY
5
CHECKED

CITY AND STATE
KENAI, AK

ELEVATION: 100 TDZE: 98
AIRPORT NAME:
KENAI MUNI

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 20R, AMDT 4, 03/29/2018

SUP:
AMDT: 3B
DATED: 10/12/2017

**STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	PAEN
RUNWAY	RW20R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W20A
LTP/FTP LATITUDE	603453.2520N
LTP/FTP LONGITUDE	1511409.3715W
LTP/FTP ELLIPSOIDAL HEIGHT	+00349
FPAP LATITUDE	603337.1240N
FPAP LONGITUDE	1511542.4925W
THRESHOLD CROSSING HEIGHT (TCH)	00051.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0360
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

69B737F9

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	PA
LTP ORTHOMETRIC HEIGHT	+00298
FPAP ORTHOMETRIC HEIGHT	+00298

QUALITY
5
CHECKED

CITY AND STATE

KENAI, AK

ELEVATION: 100

TDZE: 98

AIRPORT NAME:

KENAI MUNI

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 20R, AMDT 4, 03/29/2018

SUP:

AMDT:

3B

DATED:

10/12/2017

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION VOR STANDARD INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.23								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		MAP: ENA 3.58 DME					
ENA VOR/DME		DIXIT/ENA 10.00 DME			192.08 / 10.00			2200		CLIMB TO 2000 DIRECT ENA VOR/DME AND ON ENA VOR/DME R-028 TO SWANS/ENA 10.00 DME AND HOLD.					
ACIGE/ENA 20.00 DME CCW (IAF)		JASGO/ENA 20.00 DME (NOPT)			20.00 DME ARC			2200							
BEYAY/ENA 24.00 DME (IAF)		JASGO/ENA 20.00 DME (NOPT)			062.00 / 3.36 (HDG) & 012.08 / 1.70 (ENA R-192)			2200		ADDITIONAL FLIGHT DATA: HOLD NE, RT, 207.87 INBOUND. CHART FAS OBST: 223 TOWER 603401N/1511631W. CHART ENA R-220 AT ACIGE. CHART CIRCLING ICON. CHART VDP AT 4.64 DME. DISTANCE VDP TO THLD 1.05 MILES. DIXT TO RW02L: 3.02/53 CHART PLANVIEW NOTE: DME REQUIRED.					
HOM VOR/DME (IAF)		EKAYU/HOM 20.00 DME			341.12 / 20.00			3500							
EKAYU/HOM 20.00 DME		JASGO/ENA 20.00 DME (NOPT)			341.12 / 17.39 (HOM R-341)			2200							
JASGO/ENA 20.00 DME (IF)		DIXIT/ENA 10.00 DME			012.08 / 10.00 (ENA R-192)			2200							
1. PT <u> R </u> SIDE OF COURSE <u> 192.08 </u> OUTBOUND <u> 2200 </u> FT WITHIN <u> 10 </u> MILES OF <u> DIXIT </u> (IAF)															
2. _____															
3. FAC <u> 012.08 </u> FAF <u> DIXIT/ENA 10.00 DME </u> DIST FAF TO MAP _____ THLD <u> 6.42 </u>															
4. MIN. ALT <u> DIXIT 2200, DOKKA/ENA 6.00 DME 900 </u>															
8. MSA FROM: <u> ENA VOR/DME 030-210 3500, 210-030 2200 </u>															
MINIMUMS										MAG VAR: 19E EPOCH YEAR: 2010					
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		STANDARD @					
CATEGORY =====>	A			B			C			D			E		
	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA
S-02L	480	1	386	480	1	386	480	1 1/8	386	480	1 1/8	386			
CIRCLING	560	1	460	580	1	480	580	1 1/2	480	680	2	580			
NOTES:															
CHART NOTE: CIRCLING RWY 02R,20L NA AT NIGHT. @ NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART NOTE: DME REQUIRED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HOM VOR/DME ON V438 SOUTHBOUND. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SOLDOTNA ALTIMETER SETTING AND INCREASE ALL (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 100 TDZE: 94		FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP VOR/DME RWY 2L					
KENAI, AK				KENAI MUNI		ENA		VOR RWY 2L, AMDT 10, 03/29/2018				AMDT 9			
												DATE 12/10/2015			



**VOR STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - - TITLE 14 CFR PART 97.23**

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.

NOTES, (CONT.):

MDA 40 FEET; INCREASE S-2L CAT C AND D VISIBILITY 1/8 MILE AND CIRCLING CAT D VISIBILITY 1/4 MILE.

CHART NOTE: VDP NA WITH SOLDOTNA ALTIMETER SETTING.

QUALITY
5
CHECKED

CITY AND STATE

KENAI, AK

ELEVATION: 100

TDZE: 94

AIRPORT NAME:

KENAI MUNI

FACILITY
IDENTIFIER:

ENA

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

VOR RWY 2L, AMDT 10, 03/29/2018

SUP: VOR/DME RWY 2L

AMDT: 9

DATED: 12/10/2015

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION VOR STANDARD INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.23										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		MAP: ENA 2.33 DME								
ENA VOR/DME			TBONE/ENA 8.00 DME			012.10 / 8.00			2000		CLIMB TO 2200 ON ENA VOR/DME R-192 TO DIXIT/ENA VOR/DME 10.00 DME AND HOLD.								
ROJAR/ENA 8.00 DME CCW (IAF)			TBONE/ENA 8.00 DME (NOPT)			8.00 DME ARC (ENA LR-027)			2000										
TWIGI/ENA 8.00 DME CW (IAF)			TBONE/ENA 8.00 DME (NOPT)			8.00 DME ARC (ENA LR-357)			2000										
TBONE/ENA 8.00 DME (IF/IAF)			FATEL/ENA 2.50 DME			192.10 / 5.50 (ENA R-012)			1300										
FATEL/ENA 2.50 DME			ENA VOR/DME			192.10 / 2.50			1000		ADDITIONAL FLIGHT DATA: HOLD S, LT, 012.08 INBOUND. CHART FAS OBST: 252 TOWER 603555N/1511240W. CHART VDP AT 1.17 DME DISTANCE VDP TO THLD 1.17 NM. CHART ENA R-095 AT ROJAR. CHART ENA R-266 AT TWIGI. CHART CIRCLING ICON. ENA VOR/DME TO RW20R: 3.44/51. CHART PLANVIEW NOTE: DME REQUIRED.								
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 19E EPOCH YEAR: 2010									
2. HOLD N TBONE, RT, 192.10 INBOUND, 2000 FT. IN LIEU OF PT (IAF)																			
3. FAC 192.06 FAF ENA VOR/DME _____ DIST FAF TO MAP _____ THLD 2.33																			
4. MIN. ALT TBONE 2000, FATEL 1300, ENA VOR/DME 1000																			
8. MSA FROM: ENA VOR/DME 030-210 3500, 210-030 2200																			
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD @							
CATEGORY =====>		A			B			C			D			E					
		MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA			
S-20R		520	2400	422	520	2400	422	520	4000	422	520	4000	422						
CIRCLING		560	1	460	580	1	480	580	1 1/2	480	680	2	580						
NOTES: CHART NOTE: CIRCLING RWY 02R, 20L NA AT NIGHT. CHART NOTE: DME REQUIRED. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART NOTE: VDP NA WHEN USING SOLDOTNA ALTIMETER SETTING. (CONTINUED ON PAGE 2)																			
CITY AND STATE KENAI, AK		ELEVATION: 100 TDZE: 98 AIRPORT NAME: KENAI MUNI			FACILITY IDENTIFIER: ENA			PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR RWY 20R, AMDT 21, 03/29/2018						SUP AMDT 20 DATE 12/10/2015					



**VOR STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - - TITLE 14 CFR PART 97.23**

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.

NOTES, (CONT.):

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SOLDOTNA ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET, INCREASE S-20R CATS C AND D VISIBILITY TO RVR 5000.

QUALITY
5
CHECKED

CITY AND STATE

KENAI, AK

ELEVATION: 100**TDZE: 98**

AIRPORT NAME:

KENAI MUNI

FACILITY
IDENTIFIER:

ENA

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

VOR RWY 20R, AMDT 21, 03/29/2018

SUP:

AMDT: 20

DATED: 12/10/2015

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29		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		ILS: DA LOC: I-OME 1.20 DME							
EMMMO/I-OME 13.01 DME (IF/IAF)		MUKDE/I-OME 6.31 DME		278.77 / 6.70 (I-OME)				1700		CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 3000 DIRECT EMMMO AND HOLD.							
										ADDITIONAL FLIGHT DATA: CHART FAS OBST: 190 TREE 643011N/1652140W. CHART VDP AT 2.36 DME* DISTANCE VDP TO THLD 1.15 NM. *LOC ONLY. CHART CIRCLING ICON. CHART: NOME CITY FIELD.							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																	
2. HOLD E EMMMO, RT, 278.77 INBOUND, 3000 FT. IN LIEU OF PT (IAF)																	
3. FAC: 278.77 FAF: MUKDE/I-OME 6.31 DME DIST FAF TO MAP: _____ THLD: 5.11																	
4. MIN. ALT: EMMMO 3000, MUKDE 1700, FOVAG/I-OME 3.50 DME 800*																	
5. DIST TO THLD FROM OM: _____ - _____ MM: _____ - _____ IM: _____ - 150 HAT: _____ - 100 HAT: _____ - GS ANT: 1092																	
6. MIN GS INCPT: 1700 GS ALT AT: MUKDE 1700 OM: _____ - _____ MM: _____ - _____ IM: _____ -																	
7. GS ANGLE: 3.00 TCH: 50.9																	
8. MSA FROM:										MAG VAR: 11E				EPOCH YEAR: 2015			
MINIMUMS																	
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		ILS: 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		
S-ILS 28	272	5000	250	272	5000	250	272	5000	250	272	5000	250					
S-LOC 28	440	5000	418	440	5000	418	440	5000	418	440	5000	418					
CIRCLING	540	1	502	540	1	502	540	1 1/2	502	700	2	662					
NOTES: CHART NOTE: CIRCLING RWY 21 NA AT NIGHT. CHART NOTE: RWY 28 HELICOPTER VISIBILITY REDUCTION BELOW RVR 5000 NOT AUTHORIZED. CHART NOTE: DME REQUIRED. CHART NOTE: GPS REQUIRED. (CONTINUED ON PAGE 2)																	
CITY AND STATE NOME, AK		ELEVATION: 38 TDZE: 22 AIRPORT NAME: NOME		FACILITY IDENTIFIER: I-OME		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS Y OR LOC Y RWY 28, AMDT 4A 29 MARCH 2018						SUP: ILS OR LOC/DME Y RWY 28 AMDT: 4 DATED 11/13/2014					



ILS - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29

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.

NOTES, (CONT.):
CHART PLANVIEW NOTE: GPS REQUIRED FOR TERMINAL ARRIVAL AREA.
CHART PROFILE NOTE: USE I-OME DME WHEN ON LOCALIZER COURSE.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 28 CATS C/D VISIBILITY TO RVR 6000.
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-ILS RWY 28 AND TO S-LOC 28 CATS A/B.
CHART NOTE: CIRCLING NA FOR CATS C AND D N OF RWY 10-28.

TAA	FROM	TO	ALT
1.	189/30 CW 250/30 (NOPT)	189/10 CW 250/10	4500
2.	189/10 CW 250/10	EMMMO (IF/IAF) (FB)	3000
3.	250/30 CW 009/30	EMMMO (IF/IAF) (FB)	3000
4.	009/30 CW 189/30	009/10 CW 189/10	5600
5.	009/10 CW 189/10	EMMMO (IF/IAF) (FO)	3400



CITY AND STATE NOME, AK	ELEVATION: 38 AIRPORT NAME: NOME	TDZE: 22	FACILITY IDENTIFIER: I-OME	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: ILS Y OR LOC Y RWY 28, AMDT 4A 29 MARCH 2018	SUP: ILS OR LOC/DME Y RWY 28
					AMDT: 4
					DATED: 11/13/2014

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29										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		ILS: DA LOC: I-OME 1.21 DME												
FDV NDB				OME VOR/DME				098.82 / 1.71				3000		CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 3000 DIRECT OME VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000. ALTERNATE MA (DO NOT CHART): CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 3000 ON 067 COURSE TO FDV NDB AND HOLD E, LT, 278.77 INBOUND, CONTINUE CLIMB-IN-HOLD TO 3000. (ADF REQUIRED). ADDITIONAL FLIGHT DATA: HOLD E, LT, 276.60 INBOUND. CHART FAS OBST: 190 TREE 643011N/1652140W. CHART VDP AT 2.36 DME* DISTANCE VDP TO THLD 1.16 NM. *LOC ONLY. CHART OME R-339 AT JESZU. CHART OME R-358 AT LILES. CHART OME R-013 AT IHIHI. CHART OME R-054 AT CETPI. CHART OME R-242 AT SUZYY. CHART OME R-177 AT JAXVI. CHART OME R-157 AT KUWOZ. CHART OME R-144 AT ANWEX. CHART CIRCLING ICON. CHART OME R-069 AT EZATY (SEE FORM 8260-10)												
JESZU/OME VOR/DME 10.00 DME				OME VOR/DME				158.65 / 10.00				4000														
LILES/OME VOR/DME 10.00 DME				OME VOR/DME				178.00 / 10.00				4000														
IHIHI/OME VOR/DME 10.00 DME				OME VOR/DME				192.75 / 10.00				4000														
JESZU/OME VOR/DME 10.00 DME CW (IAF) (SEE FORM 8260-10)				LILES/OME VOR/DME 10.00 DME				10.00 DME ARC				3500														
1. PT <u>R</u> SIDE OF COURSE <u>092.77</u> OUTBOUND <u>1900</u> FT WITHIN <u>10</u> MILES OF <u>OME VOR/DME</u> (IAF)																										
2. _____																										
3. FAC: <u>278.77</u> FAF: <u>MUKDE/I-OME LOC/DME 6.31 DME</u> DIST FAF TO MAP: _____ THLD: <u>5.11</u>																										
4. MIN. ALT: <u>MUKDE 1700, FOVAG/I-OME LOC/DME 3.50 DME 800*</u>																										
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: <u>1092</u>																										
6. MIN GS INCPT: <u>1700</u> GS ALT AT: <u>MUKDE 1700</u> OM: _____ MM: _____ IM: _____																										
7. GS ANGLE: <u>3.00</u> TCH: <u>50.9</u>																										
8. MSA FROM: <u>OME VOR/DME 070-250 2000, 250-070 4800</u>																										
MAG VAR: <u>11E</u> EPOCH YEAR: <u>2015</u>																										
MINIMUMS																										
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: <u>N A</u>			ILS: <u>STANDARD #</u>			LOC: <u>STANDARD</u>													
CATEGORY <u>=====</u>		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											
S-ILS 28	272	5000	250	272	5000	250	272	5000	250	272	5000	250														
S-LOC 28	440	5000	418	440	5000	418	440	5000	418	440	5000	418														
CIRCLING	540	1	502	540	1	502	540	1 1/2	502	700	2	662														
NOTES: CHART NOTE: DME REQUIRED. CHART PROFILE NOTE: USE I-OME DME WHEN ON THE LOCALIZER COURSE. CHART NOTE: CIRCLING RWY 21 NA AT NIGHT. CHART NOTE: CIRCLING NA FOR CATS C AND D N OF RWY 10-28. (CONTINUED ON PAGE 2)																										
CITY AND STATE <u>NOME, AK</u>				ELEVATION: <u>38</u> TDZE: <u>22</u> AIRPORT NAME: <u>NOME</u>				FACILITY IDENTIFIER: <u>I-OME</u>		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: <u>ILS Z OR LOC Z RWY 28, AMDT 5</u> <u>29 MARCH 2018</u>				SUP: <u>ILS OR LOC/DME Z RWY 28</u> AMDT: <u>4</u> DATED <u>11/13/2014</u>												

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.		
ILS - STANDARD					
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29					
TERMINAL ROUTES, (CONT.):					
FROM	TO	COURSE AND DISTANCE	ALTITUDE		
LILES/OME VOR/DME 10.00 DME CW (IAF)	IHIH/OME VOR/DME 10.00 DME	10.00 DME ARC	3100		
IHIH/OME VOR/DME 10.00 DME CW (IAF)	CETPI/OME VOR/DME 10.00 DME	10.00 DME ARC	2600		
CETPI/OME VOR/DME 10.00 DME CW	DAGCA/I-OME LOC/DME 16.05 DME (NOPT)	10.00 DME ARC (OME LR-088)	1900		
SUZY/OME VOR/DME 10.00 DME CCW (IAF)	DAGCA/I-OME LOC/DME 16.05 DME (NOPT)	10.00 DME ARC	1900		
JAXVI/OME VOR/DME 10.00 DME CCW (IAF)	DAGCA/I-OME LOC/DME 16.05 DME (NOPT)	10.00 DME ARC	1900		
KUWOZ/OME VOR/DME 10.00 DME CCW (IAF)	DAGCA/I-OME LOC/DME 16.05 DME (NOPT)	10.00 DME ARC	1900		
ANWEX/OME VOR/DME 10.00 DME CCW (IAF)	DAGCA/I-OME LOC/DME 16.05 DME (NOPT)	10.00 DME ARC (OME LR-112)	1900		
EZATY/OME VOR/DME 18.00 DME (IAF)	DAGCA/I-OME LOC/DME 16.05 DME (NOPT)	193.77 / 9.32 & 278.77 / 4.75 (I-OME)	1900		
APUYO/OME VOR/DME 15.00 DME (IAF)	DAGCA/I-OME LOC/DME 16.05 DME (NOPT)	234.00 / 2.34 & 278.77 / 3.28 (I-OME)	1900		
DAGCA/I-OME 16.05 DME (IF/IAF)	MUKDE/I-OME LOC/DME 6.31 DME	278.77 / 9.74 (I-OME)	1700		
ADDITIONAL FLIGHT DATA, (CONT.): CHART OME R-094 AT APUYO CHART NOME CITY FIELD. CHART 2400 PRIOR TO OME VOR/DME IN PROFILE VIEW. CHART: MAXIMUM ENTRY ALTITUDE 6000 IN PROFILE VIEW.					
NOTES, (CONT.): CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-ILS 28 ALL CATS AND S-LOC 28 CATS A AND B. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC-28 CATS C AND D TO RVR 6000.					
CITY AND STATE NOME, AK	ELEVATION: 38 AIRPORT NAME: NOME	TDZE: 22	FACILITY IDENTIFIER: I-OME	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: ILS Z OR LOC Z RWY 28, AMDT 5 29 MARCH 2018	SUP: ILS OR LOC/DME Z RWY 28 AMDT: 4 DATED: 11/13/2014



ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29				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		ILS: DA LOC: 4.82 NM AFTER ORAXE INT/I-JKA 6.08 DME/RADAR OR AT I-JKA 1.26 DME CLIMB TO 2000 ON HEADING 270 AND ON BFM VORTAC R-145 TO URIVY INT/BFM 16.64 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1000 ON HEADING 270 THEN CLIMBING RIGHT TURN TO 2000 DIRECT NUN VOR AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 325.40 INBOUND. CHART IN PLANVIEW: NUN VOR. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD W NUN VOR, LT, 089.36 INBOUND. CHART FAS OBST: 170 TOWER 301721N/0873818W. CHART R-2908. CHART VDP AT 2.37 DME* DISTANCE VDP TO THLD 1.11 NM. *LOC ONLY. CHART CIRCLING ICON. **620 WHEN USING PENSACOLA INTL ALTIMETER SETTING.							
LOXLY INT/SJI 29.05 DME		NUN VOR		125.00 / 29.59		3100									
PENS/CEW 30.79 DME		NUN VOR		188.49 / 19.49		3000									
NUN VOR (IAF)		WARLY INT/I-JKA 12.26 DME		206.84 / 12.29		2500									
WARLY INT/I-JKA 12.26 DME (IF)		ORAXE INT/I-JKA 6.08 DME/RADAR		269.90 / 6.18 (I-JKA)		1600									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT WARLY 3. FAC: 269.90 FAF: ORAXE INT/I-JKA 6.08 DME/RADAR DIST FAF TO MAP: 4.82 THLD: 4.82 4. MIN. ALT: WARLY 2500, ORAXE INT/I-JKA 6.08 DME/RADAR 1600, GEVBE/I-JKA 2.92 DME 540** 5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 899 6. MIN GS INCPT: 1600 GS ALT AT: ORAXE 1600 OM: - MM: - IM: - 7. GS ANGLE: 3.00 TCH: 47.4 8. MSA FROM: NUN VOR 3100								MAG VAR: 0E EPOCH YEAR: 2000							
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		ILS: STANDARD #				LOC: 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
S-ILS 27	217	1/2	200	217	1/2	200	217	1/2	200	217	1/2	200			
S-LOC 27	540	1/2	523	540	1/2	523	540	1	523	540	1	523			
CIRCLING	540	1	523	540	1	523	740	2	723	740	2 1/4	723			
GEVBE FIX MINIMUMS															
S-LOC 27	420	1/2	403	420	1/2	403	420	3/4	403	420	3/4	403			
CIRCLING	480	1	463	480	1	463	740	2	723	740	2 1/4	723			
NOTES: CHART NOTE: CIRCLING RWY 17, 35 NA AT NIGHT. CHART NOTE: VDP NA WITH PENSACOLA INTL ALTIMETER SETTING. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PENSACOLA INTL ALTIMETER SETTING AND INCREASE DA TO 295 FEET; INCREASE ALL MDAS 80 FEET; INCREASE S-LOC 27 VISIBILITY CATS C AND D 3/8 (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 17 TDZE: 17		FACILITY IDENTIFIER: I-JKA		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
GULF SHORES, AL		AIRPORT NAME:		JACK EDWARDS NATIONAL		ILS OR LOC RWY 27, AMDT 1B				AMDT: 1A					
						29 MARCH 2018				DATED 12/11/2014					



**ILS - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29**

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.

NOTES, (CONT.):

SM; INCREASE S-LOC 27 GEVBE FIX MINIMUMS VISIBILITY CATS C AND D 1/4 SM; INCREASE ALL CIRCLING VISIBILITY CAT C AND D 1/4 SM.

CHART NOTE: GEVBE FIX MINIMUMS: FOR INOPERATIVE ALS, INCREASE S-LOC 27 VISIBILITY CATS C AND D TO 1 1/8 SM.

CHART NOTE: PENSACOLA INTL ALTIMETER SETTING MINIMUMS: FOR INOPERATIVE ALS, INCREASE S-ILS 27 VISIBILITY ALL CATS TO 7/8, INCREASE S-LOC 27 VISIBILITY CATS C AND D TO 1 3/4 SM; INCREASE GEVBE FIX MINIMUMS S-LOC 27 VISIBILITY CATS C AND D TO 1 3/8 SM.

QUALITY
24
CHECKED

CITY AND STATE

GULF SHORES, AL

ELEVATION: 17**TDZE: 17**

AIRPORT NAME:

JACK EDWARDS NATIONAL

FACILITY
IDENTIFIER:

I-JKA

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 27, AMDT 1B

29 MARCH 2018

SUP:

AMDT: **1A**DATED: **12/11/2014**

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						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		LPV: DA LNAV/VNAV: DA LNAV: RW09 CLIMB TO 2500 DIRECT WARLY AND HOLD. ADDITIONAL FLIGHT DATA: HOLD E, LT, 270.01 INBOUND. CHART FAS OBST: 103 TREE 301722N/0874113W. CHART R-2908. DISTANCE TO THLD FROM 268 HAT: 0.69 NM. CHART VDP AT 0.92 NM TO RW09* *LNAV ONLY. WAAS CHANNEL # 86503 REFERENCE PATH ID: W09A CHART CIRCLING ICON. LTP HAE: -22.8 M											
BFM VORTAC				COPOV (TF) (FB) (RNP 2.00)				156.28 / 15.11				3000													
COPOV (IAF)				VUSRY (NOPT) (TF) (FB) (RNP 1.00)				156.34 / 6.00				2500													
VUSRY (IF/IAF)				OFEVY (TF) (FB) (RNP 1.00)				089.78 / 6.26				1600													
OFEVY (FAF)				HUXUP/1.80 NM TO RW09 (TF) (RNP 0.30)				089.84 / 3.02																	
HUXUP/1.80 NM TO RW09				RW09 (MAP) (TF) (FO) (RNP 0.30)				089.84 / 1.80																	
(SEE FORM 8260-10)																									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD W VUSRY, LT, 089.78 INBOUND, 2500 FT. IN LIEU OF PT (IAF) 3. FAC: 089.84 FAF: OFEVY DIST FAF TO MAP: 4.82 THLD: 4.82 4. MIN. ALT: VUSRY 2500, OFEVY 1600, HUXUP/1.80 NM TO RW09 620* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 1600 GS ALT AT: OFEVY 1600 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 50.0 34:1 IS NOT CLEAR 8. MSA FROM: RW09 3100																MAG VAR: 0E EPOCH YEAR: 2000									
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										
LPV DA	310	1	294	310	1	294	310	1	294	310	1	294													
LNAV/VNAV DA	284	7/8	268	284	7/8	268	284	7/8	268	284	7/8	268													
LNAV MDA	360	1	344	360	1	344	360	1	344	360	1	344													
CIRCLING	480	1	463	480	1	463	740	2	723	740	2 1/4	723													
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F). CHART NOTE: BARO-VNAV AND VDP NA WHEN USING PENSACOLA INTL ALTIMETER SETTING. CHART NOTE: CIRCLING RWY 17, 35 NA AT NIGHT. CHART NOTE: RWY 09 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. (CONTINUED ON PAGE 2)																									
CITY AND STATE				ELEVATION: 17 TDZE: 16				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
GULF SHORES, AL				AIRPORT NAME:				RNAV (GPS) RWY 9, AMDT 3B				29 MARCH 2018				AMDT: 3A									
				JACK EDWARDS NATIONAL												DATED 12/11/2014									



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW09 (MAP)	284 MSL (CA)	089.84	
284 MSL	WARLY (DF) (FO) (RNP 1.00)		2500

NOTES, (CONT.):

CHART NOTE: DME/DME RNP-0.3 NA.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON BFM VORTAC AIRWAY RADIAL 242.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PENSACOLA INTL ALTIMETER SETTING AND INCREASE LPV DA TO 388 FEET, LNAV/VNAV DA TO 362 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE ALL MDAS 80 FEET AND VISIBILITY CATS C AND D 1/4 SM.

QUALITY
24
CHECKED

CITY AND STATE
GULF SHORES, AL

ELEVATION: 17 TDZE: 16
AIRPORT NAME:
JACK EDWARDS NATIONAL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 9, AMDT 3B
29 MARCH 2018

SUP:
AMDT: 3A
DATED: 12/11/2014

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KJKA
RUNWAY	RW09
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W09A
LTP/FTP LATITUDE	301725.0290N
LTP/FTP LONGITUDE	0874043.6060W
LTP/FTP ELLIPSOIDAL HEIGHT	-00228
FPAP LATITUDE	301725.1900N
FPAP LONGITUDE	0873900.7000W
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	0768
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

86279917

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00047
FPAP ORTHOMETRIC HEIGHT	+00047

QUALITY
24
CHECKED

CITY AND STATE

GULF SHORES, AL

ELEVATION: 17

TDZE: 16

AIRPORT NAME:

JACK EDWARDS NATIONAL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 9, AMDT 3B

29 MARCH 2018

SUP:

AMDT: 3A

DATED: 12/11/2014

RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW27 CLIMB TO 2500 DIRECT VUSRY AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, LT, 089.78 INBOUND. CHART FAS OBST: 170 TOWER 301721N/0873818W. CHART R-2908. DISTANCE TO THLD FROM 200 HAT: 0.48 NM. CHART VDP AT 1.11 NM TO RW27* *LNAV ONLY. WAAS CHANNEL # 99503 REFERENCE PATH ID: W27A CHART CIRCLING ICON. LTP HAE: -22.8 M					
BRATT		MRITA (TF) (FB) (RNP 2.00)			145.28 / 25.71			3000							
PENSI		MRITA (TF) (FB) (RNP 2.00)			195.40 / 23.42			3000							
MRITA (IAF)		WARLY (NOPT) (TF) (FB) (RNP 1.00)			200.05 / 8.00			2500							
WARLY (IF/IAF)		ORAXE (TF) (FB) (RNP 1.00)			270.01 / 6.18			1600							
ORAXE (FAF)		JUDEP/2.40 NM TO RW27 (TF) (FB) (RNP 0.30)			269.95 / 2.42										
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD E WARLY, LT, 270.01 INBOUND, 2500 FT. IN LIEU OF PT (IAF) 3. FAC: 269.95 FAF: ORAXE DIST FAF TO MAP: 4.82 THLD: 4.82 4. MIN. ALT: WARLY 2500, ORAXE 1600, JUDEP/2.40 NM TO RW27 820* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 1600 GS ALT AT: ORAXE 1600 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 47.4 34:1 IS CLEAR 8. MSA FROM: RW27 3100															
										MAG VAR: 0E			EPOCH YEAR: 2000		
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
LPV DA	217	1/2	200	217	1/2	200	217	1/2	200	217	1/2	200			
LNAV/VNAV DA	481	1 1/8	464	481	1 1/8	464	481	1 1/8	464	481	1 1/8	464			
LNAV MDA	420	1/2	403	420	1/2	403	420	3/4	403	420	3/4	403			
CIRCLING	480	1	463	480	1	463	740	2	723	740	2 1/4	723			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F). CHART NOTE: BARO-VNAV AND VDP NA WHEN USING PENSACOLA INTL ALTIMETER SETTING. CHART NOTE: CIRCLING RWY 17, 35 NA AT NIGHT. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)															
CITY AND STATE GULF SHORES, AL			ELEVATION: 17 TDZE: 17 AIRPORT NAME: JACK EDWARDS NATIONAL			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 27, AMDT 2B 29 MARCH 2018					SUP:		
													AMDT: 2A		
													DATED 12/11/2014		

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
JUDEP/2.40 NM TO RW27	RW27 (MAP) (TF) (FO) (RNP 0.30)	269.95 / 2.40	
RW27 (MAP)	217 MSL (CA)	269.95	
217 MSL	VUSRY (DF) (FO) (RNP 1.00)		2500

NOTES, (CONT.):

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PENSACOLA INTL ALTIMETER SETTING AND INCREASE LPV DA TO 295 FEET; INCREASE LNAV/VNAV DA TO 559 FEET AND ALL VISIBILITIES 1/4 SM; INCREASE ALL MDAS 80 FEET AND VISIBILITY CATS C AND D 1/4 SM.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV CAT C/D VISIBILITY TO 1 1/8 SM.

CHART NOTE: FOR INOPERATIVE ALS, WHEN USING PENSACOLA INTL ALTIMETER SETTING MINIMUMS, INCREASE LPV ALL CATS VISIBILITY TO 7/8 SM, INCREASE LNAV CATS C/D VISIBILITY TO 1 3/8 SM.

QUALITY
24
CHECKED

CITY AND STATE GULF SHORES, AL	ELEVATION: 17 AIRPORT NAME: JACK EDWARDS NATIONAL	TDZE: 17	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 27, AMDT 2B 29 MARCH 2018	SUP:
					AMDT: 2A
					DATED: 12/11/2014

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KJKA
RUNWAY	RW27
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W27A
LTP/FTP LATITUDE	301725.1535N
LTP/FTP LONGITUDE	0873929.4680W
LTP/FTP ELLIPSOIDAL HEIGHT	-00228
FPAP LATITUDE	301724.9800N
FPAP LONGITUDE	0874112.3800W
THRESHOLD CROSSING HEIGHT (TCH)	00047.4
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0632
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

C7FF274E

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00049
FPAP ORTHOMETRIC HEIGHT	+00049

QUALITY
24
CHECKED

CITY AND STATE GULF SHORES, AL	ELEVATION: 17 AIRPORT NAME: JACK EDWARDS NATIONAL	TDZE: 17	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 27, AMDT 2B 29 MARCH 2018	SUP:
					AMDT: 2A
					DATED: 12/11/2014

**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>
GULF SHORES, AL	JACK EDWARDS NATIONAL	29 MARCH 2018	ORIG-A

TAKEOFF MINIMUMS:

RWY 9, 17, 27, 35: STANDARD

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 17, POLES BEGINNING 553 FT FROM DER, 197 FT RIGHT OF CENTERLINE, UP TO 26 FT AGL/46 FT MSL.
BUILDING AND POLES BEGINNING 573 FT FROM DER, 202 FT RIGHT OF CENTERLINE, UP TO 38 FT AGL/56 FT MSL.

NOTE: RWY 27, TREE 829 FT FROM DER, 453 FT RIGHT OF CENTERLINE, 51 FT MSL.
TREE, POLE BEGINNING 830 FT FROM DER, 14 FT RIGHT OF CENTERLINE, UP TO 67 FT MSL.
POLE 1404 FT FROM DER, 138 FT LEFT OF CENTERLINE, 38 FT AGL/51 FT MSL.
TREE 1592 FT FROM DER, 439 FT RIGHT OF CENTERLINE, 74 FT MSL.
TREE 1637 FT FROM DER, 394 FT LEFT OF CENTERLINE, 70 FT MSL.
TREE 1767 FT FROM DER, 309 FT RIGHT OF CENTERLINE, 80 FT MSL.
TREE 1832 FT FROM DER, 120 FT LEFT OF CENTERLINE, 89 FT MSL.
TREES BEGINNING 1949 FT FROM DER, 66 FT LEFT OF CENTERLINE, UP TO 98 FT MSL.
TREE 2091 FT FROM DER, 327 FT LEFT OF CENTERLINE, 103 FT MSL.
TREES BEGINNING 2110 FT FROM DER, 175 FT RIGHT OF CENTERLINE, UP TO 103 FT MSL.

NOTE: RWY 35, TREE 211 FT FROM DER, 356 FT LEFT OF CENTERLINE, 50 FT AGL/69 FT MSL.
BUILDING 570 FT FROM DER, 414 FT RIGHT OF CENTERLINE, 30 FT AGL/53 FT MSL.
TREE 1217 FT FROM DER, 82 FT RIGHT OF CENTERLINE, 50 FT AGL/70 FT MSL.

CONTROLLING OBSTACLES:



**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>
GULF SHORES, AL	JACK EDWARDS NATIONAL	29 MARCH 2018	ORIG-A

REMARKS:

FLIGHT INSPECTED BY:	<i>Digitally signed by</i> ALLAN WILL Feb 12, 2018	OFFICE SYMBOL: FICO	DATE: 2/6/18
KEVIN RIESE			

DEVELOPED BY:	<i>Digitally signed by</i> ROBERT G ABBOTT Dec 01, 2017	OFFICE SYMBOL: AJV-5421	DATE: 12/01/2017
ROBERT ABBOTT			

APPROVED BY:	<i>Digitally signed by</i> ALLAN WILL Feb 12, 2018	OFFICE SYMBOL: AJV-5420	DATE:
GEORGE DAVIS			

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

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

OTHER:
P31 TRACON, ZJX, ZHU, AMGR

CHANGES - REASONS:

1. CHANGE RWY 17 OBSTACLES FROM: MULTIPLE TREES BEGINNING 1300 FT FROM DER, ON CENTERLINE, UP TO 55 FT AGL/67 FT MSL TO: POLES BEGINNING 553 FT FROM DER, 197 FT RIGHT OF CENTERLINE, UP TO 26 FT AGL/46 FT MSL; BLDG AND POLES BEGINNING 573 FT FROM DER, 202 FT RIGHT OF CENTERLINE, UP TO 38 FT AGL/56 FT MSL - 4/26/2006 THIRD PARTY SURVEY.
2. CHANGE RWY 27 OBSTACLES FROM: MULTIPLE TREES BEGINNING 837 FT FROM DER, 66 FT LEFT OF CENTERLINE, UP TO 99 FT AGL/103 FT MSL; MULTIPLE TREES BEGINNING 829 FT FROM DER, 175 FT RIGHT OF CENTERLINE, UP TO 99 FT AGL/103 FT MSL; MULTIPLE LIGHT POLES BEGINNING 1243 FT FROM DER, 14 FT RIGHT OF CENTERLINE, UP TO 46 FT AGL/50 FT MSL; LIGHT POLE BEGINNING 1403 FT FROM DER, 137 FT LEFT OF CENTERLINE, UP TO 47 FT AGL/51 FT MSL TO: TREE, POLE BEGINNING 830 FT FROM DER, 14 FT RIGHT OF CENTERLINE, UP TO 67 FT MSL; POLE 1404 FT FROM DER, 138 FT LEFT OF CENTERLINE, 38 FT AGL/51 FT MSL; TREE 1592 FT FROM DER, 439 FT RIGHT OF CENTERLINE, 74 FT MSL; TREE 1637 FT FROM DER, 394 FT LEFT OF CENTERLINE, 70 FT MSL; TREE 1767 FT FROM DER, 309 FT RIGHT OF CENTERLINE, 80 FT MSL; TREE 1832 FT FROM DER, 120 FT LEFT OF CENTERLINE, 89 FT MSL; TREES BEGINNING 1949 FT FROM DER, 66 FT LEFT OF CENTERLINE, UP TO 98 FT MSL; TREE 2091 FT FROM DER, 327 FT LEFT OF CENTERLINE, 103 FT MSL; TREES BEGINNING 2110 FT FROM DER, 175 FT RIGHT OF CENTERLINE, UP TO 103 FT MSL - 4/26/2006 THIRD PARTY SURVEY.
3. CHANGE RWY 35 OBSTACLES FROM MULTIPLE TREES BEGINNING 1650 FT FROM DER, ON CENTERLINE, UP TO 50 FT AGL/67 FT MSL TO: TREE 211 FT FROM DER, 356 FT LEFT OF CENTERLINE, 50 FT AGL/69 FT MSL; BUILDING 570 FT FROM DER, 414 FT RIGHT OF CENTERLINE, 30 FT AGL/53 FT MSL; TREE 1217 FT FROM DER, 82 FT RIGHT OF CENTERLINE, 50 FT AGL/70 FT MSL - CHART STUDY.
4. CHANGE AIRPORT NAME FROM JACK EDWARDS TO JACK EDWARDS NATIONAL - AIRPORT REQUEST.

QUALITY
24
CHECKED

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29										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		ILS: DA LOC: I-BYH 2.20 DME									
DYR VORTAC				GURLY INT/DYR VORTAC 30.62 DME				272.87 / 30.62				2000		CLIMB TO 2000 THEN LEFT TURN ON HEADING 320 TO INTERCEPT MAW VORTAC R-180 TO GURLY INT AND HOLD.									
MAW VORTAC (IAF)				OLVEE INT/I-BYH LOC/DME 15.00 DME (NOPT)				181.17 / 21.70				2000											
OLVEE INT/I-BYH LOC/DME 15.00 DME (IF)				GURLY INT/I-BYH LOC/DME 7.53 DME				181.00 / 7.47 (I-BYH)				2000											
														ADDITIONAL FLIGHT DATA: CHART FAS OBST: 337 TREE 355922N/0895653W. CHART CIRCLING ICON CHART MISSED APP HOLDING WITH MAW R-180, I-BYH R-001, DYR R-273. CHART IN PLANVIEW: DYR 30.62 DME AT GURLY.									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)														MAG VAR: 1W EPOCH YEAR: 2015									
2. HOLD N GURLY, RT, 181.00 INBOUND, 2000 FT. IN LIEU OF PT (IAF)																							
3. FAC: 181.00 FAF: GURLY INT/I-BYH LOC/DME 7.53 DME DIST FAF TO MAP: _____ THLD: 5.32																							
4. MIN. ALT: GURLY 2000, HUFVE/I-BYH LOC/DME 3.60 DME 740*																							
5. DIST TO THLD FROM OM: _____ - MM: _____ - IM: _____ 150 HAT: _____ - 100 HAT: _____ - GS ANT: 1050																							
6. MIN GS INCPT: 2000 GS ALT AT: GURLY 2000 OM: _____ - MM: _____ - IM: _____																							
7. GS ANGLE: 3.00 TCH: 54.0																							
8. MSA FROM: ARP KBYH 2000																							
MINIMUMS																							
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A X																
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								
S-ILS 18	450	3/4	200	450	3/4	200	450	3/4	200	450	3/4	200											
S-LOC 18	600	1	350	600	1	350	600	1	350	600	1	350											
CIRCLING	700	1	446	720	1	466	800	1 1/2	546	820	2	566											
NOTES: CHART NOTE: CIRCLING NA E OF RWYS 18 AND 36. CHART NOTE: DME REQUIRED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON MAW VORTAC AIRWAY RADIALS 198 CW 239. *LOC ONLY (CONTINUED ON PAGE 2)																							
CITY AND STATE BLYTHEVILLE, AR				ELEVATION: 254 TDZE: 250 AIRPORT NAME: ARKANSAS INTL				FACILITY IDENTIFIER: I-BYH		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 18, AMDT 2A 29 MARCH 2018					SUP: ILS OR LOC/DME RWY 18 AMDT: 2 DATED 12/11/2014								



ILS - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29

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.

NOTES, (CONT.):
CHART PLANVIEW NOTE "DME REQUIRED FOR DYR VORTAC TO GURLY TRANSITION" AT TERMINAL ROUTE DYR VORTAC TO GURLY.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT DYR VORTAC ON V47 NORTHEAST BOUND.



CITY AND STATE BLYTHEVILLE, AR	ELEVATION: 254 TDZE: 250 AIRPORT NAME: ARKANSAS INTL	FACILITY IDENTIFIER: I-BYH	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 18, AMDT 2A 29 MARCH 2018	SUP: ILS OR LOC/DME RWY 18
				AMDT: 2
				DATED: 12/11/2014

RNAV - 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		LUHLU (DO NOT EXCEED 230 KIAS UNTIL WEEDD) CLIMBING LEFT TURN TO 7000 DIRECT WEEDD AND HOLD, CONTINUE CLIMB-IN-HOLD TO 7000. ADDITIONAL FLIGHT DATA: HOLD S, RT, 346.00 INBOUND. CHART FAS OBST: 2489 AAO 340049N/1170819W. FAC CROSSES MIDPOINT OF RWY 8-26. CHART CIRCLING ICON. CHART SAN BERNARDINO INTERNATIONAL CHART SAN BERNARDINO AWOS-3					
PDZ VORTAC		WEEDD (TF) (FO) (RNP 2.00)		078.71 / 19.18				6000							
HDF VOR (IAF)		WEEDD (NOPT) (TF) (FB) (RNP 1.00)		000.42 / 7.81				6000							
WEEDD (IF/IAF)		ERGOH (TF) (FB) (RNP 1.00)		346.00 / 5.94				4500							
ERGOH (FAF)		LUHLU (MAP) (TF) (FO) (RNP 0.30)		345.99 / 4.99				4500							
LUHLU (MAP)		1974 MSL (CA)		345.99				7000							
1974 MSL		WEEDD (DF) (FO) (RNP 1.00)													
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S WEEDD, RT, 346.00 INBOUND, 6000 FT. IN LIEU OF PT (IAF) 3. FAC: 345.99 FAF: ERGOH DIST FAF TO MAP: 4.99 THLD: _____ 4. MIN. ALT: WEEDD 6000, ERGOH 4500 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: _____ GS ALT AT: _____ OM: _____ MM: _____ IM: _____ 7. GS ANGLE: _____ TCH: _____ 8. MSA FROM: LUHLU 12800															
										MAG VAR: 14E EPOCH YEAR: 1995					
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A X					
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
CIRCLING	2740	1 1/4	1166	2740	1 1/2	1166	3820	3	2246		NA				
NOTES: CHART NOTE: CIRCLING RWY 26 NA AT NIGHT. CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: USE SAN BERNARDINO ALTIMETER SETTING; WHEN NOT RECEIVED, USE ONTARIO ALTIMETER SETTING AND INCREASE ALL MDA 160 FEET.															
CITY AND STATE		ELEVATION: 1574 TDZE:		FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:		GPS-A			
REDLANDS, CA		AIRPORT NAME:		RNAV		RNAV (GPS)-A, AMDT 1				AMDT:		ORIG-A			
		REDLANDS MUNI				29 MARCH 2018				DATED		05/29/2014			



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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.

QUALITY
4
CHECKED

CITY AND STATE REDLANDS, CA	ELEVATION: 1574	TDZE:	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS)-A, AMDT 1 29 MARCH 2018	SUP: GPS-A
	AIRPORT NAME: REDLANDS MUNI				AMDT: ORIG-A
					DATED: 05/29/2014

RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW21 CLIMB TO 600 THEN CLIMBING RIGHT TURN TO 5000 DIRECT CAPOB AND ON TRACK 282.54 TO SADDE AND HOLD, CONTINUE CLIMB-IN-HOLD TO 5000. ADDITIONAL FLIGHT DATA: HOLD NW, LT, 148.00 INBOUND. CHART FAS OBST: 866 BLDG 340332N/1182447W. DISTANCE TO THLD FROM 270 HAT: 0.58 NM. CHART VDP AT 2.42 NM TO RW21* *LNAV ONLY. WAAS CHANNEL # 90339 REFERENCE PATH ID: W21A CHART PLANVIEW NOTE: RADAR REQUIRED. LTP HAE: 16.1 M								
DARTS (IF)		MOVVE (TF) (FB) (RNP 1.00)			219.46 / 4.61			3000										
MOVVE (FAF)		MIPTE/3.30 NM TO RW21 (TF) (FB) (RNP 0.30)			212.64 / 4.17													
MIPTE/3.30 NM TO RW21		RW21 (MAP) (TF) (FO) (RNP 0.30)			212.64 / 3.30													
RW21 (MAP)		600 MSL (CA)			212.64			600										
600 MSL		CAPOB (DF) (FB) (RNP 1.00)																
CAPOB		SADDE (TF) (FO) (RNP 1.00)			282.54 / 9.51			5000										
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT DARTS _____ 3. FAC: 212.64 FAF: MOVVE _____ DIST FAF TO MAP: 7.47 THLD: 7.47 4. MIN. ALT: DARTS 4200, MOVVE 3000, MIPTE/3.30 NM TO RW21 1440* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 3000 GS ALT AT: MOVVE 3000 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.50 TCH: 53.0 20:1 IS CLEAR 34:1 IS NOT CLEAR 8. MSA FROM: RW21 7800											MAG VAR: 12E		EPOCH YEAR: 2020					
MINIMUMS																		
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT											ALTERNATE: N A						@	
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			
LPV DA	440	1	270	440	1	270	440	1	270	440	1	270						
LNAV/VNAV DA	685	1 1/2	515	685	1 1/2	515	685	1 1/2	515	685	1 1/2	515						
LNAV MDA	1120	1 1/4	950	1120	1 1/4	950	1120	1 1/4	950	1120	1 1/4	950						
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 5C (41F) OR ABOVE 14C (58F). @ CAT A, B, C, D 1000-2 CHART NOTE: RWY 21 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DARTS ON V186-597 EASTBOUND, V459-597 NORTHWEST BOUND AND ON V459 SOUTHEAST BOUND. (CONTINUED ON PAGE 2)																		
CITY AND STATE			ELEVATION: 170 TDZE: 170			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
SANTA MONICA, CA			AIRPORT NAME:						RNAV (GPS) RWY 21, AMDT 1A				AMDT: 1					
			SANTA MONICA MUNI						29 MARCH 2018				DATED 02/01/2018					



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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.

NOTES, (CONT.):

CHART PROFILE NOTE: VGSi AND RNAV GLIDE PATH NOT COINCIDENT (VGSi ANGLE {ANGLE}/TCH {FEET}).

PBN REQUIREMENT NOTE: RNP APCH

QUALITY
19
CHECKED

CITY AND STATE SANTA MONICA, CA	ELEVATION: 170 TDZE: 170 AIRPORT NAME: SANTA MONICA MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 21, AMDT 1A 29 MARCH 2018	SUP:
				AMDT: 1
				DATED: 02/01/2018

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSMO
RUNWAY	RW21
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W21A
LTP/FTP LATITUDE	340109.2935N
LTP/FTP LONGITUDE	1182650.1145W
LTP/FTP ELLIPSOIDAL HEIGHT	+00161
FPAP LATITUDE	340005.7100N
FPAP LONGITUDE	1182805.3365W
THRESHOLD CROSSING HEIGHT (TCH)	00053.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.50
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1688
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

C8BB63D2

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+00518
FPAP ORTHOMETRIC HEIGHT	+00518

QUALITY
19
CHECKED

CITY AND STATE SANTA MONICA, CA	ELEVATION: 170 AIRPORT NAME: SANTA MONICA MUNI	TDZE: 170 TDZE: 170	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 21, AMDT 1A 29 MARCH 2018	SUP:
					AMDT: 1
					DATED: 02/01/2018

RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW17 CLIMB TO 6600 DIRECT GUDSE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT, 351.83 INBOUND. CHART FAS OBST: 3784 WATER TOWER 400613N/1021355W. CHART 4056 VEGETATION 400845N/1021507W 4373 AAO 401007N/10213144W DISTANCE TO THLD FROM 200 HAT: 0.49 NM. CHART VDP AT 1.00 NM TO RW17* *LNAV ONLY. WAAS CHANNEL # 70641 REFERENCE PATH ID: W17A CHART CIRCLING ICON. LTP HAE: 1098.8 M							
BLEDS (IAF)		COLOD (NOPT) (TF) (FB) (RNP 1.00)			261.96 / 10.00			6200									
LUCII (IAF)		COLOD (NOPT) (TF) (FB) (RNP 1.00)			081.68 / 10.00			6200									
COLOD (IF/IAF)		TECOB (TF) (FB) (RNP 1.00)			171.82 / 8.00			5000									
TECOB (FAF)		STARP/2.00 NM TO RW17 (TF) (FB) (RNP 0.30)			171.82 / 2.01												
STARP/2.00 NM TO RW17		RW17 (MAP) (TF) (FO) (RNP 0.30)			171.82 / 2.00												
(SEE FORM 8260-10)																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N COLOD, RT, 171.82 INBOUND, 6200 FT. IN LIEU OF PT (IAF) 3. FAC: 171.82 FAF: TECOB DIST FAF TO MAP: 4.01 THLD: 4.01 4. MIN. ALT: COLOD 6200, TECOB 5000, STARP/2.00 NM TO RW17 4340* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 5000 GS ALT AT: TECOB 5000 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 44.6 34:1 IS CLEAR 8. MSA FROM: _____																	
											MAG VAR: 8E					EPOCH YEAR: 2005	
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		
LPV DA	3877	1	200	3877	1	200	3877	1	200	3877	1	200					
LNAV/VNAV DA	3945	1	268	3945	1	268	3945	1	268	3945	1	268					
LNAV MDA	4040	1	363	4040	1	363	4040	1	363	4040	1	363					
CIRCLING	4100	1	423	4140	1	463	4540	2 1/2	863	4540	2 3/4	863					
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -22C (-7F) OR ABOVE 53C (127F). @ NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART NOTE: BARO-VNAV AND VDP NA WHEN USING IMPERIAL ALTIMETER SETTING. @ CAT C 900-2 1/2, CAT D 900-2 3/4 CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: WHEN LOCAL ALTIMETER SETTING IS NOT RECEIVED USE IMPERIAL ALTIMETER SETTING: (CONTINUED ON PAGE 2)																	
CITY AND STATE			ELEVATION: 3677 TDZE: 3677			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:				
WRAY, CO			AIRPORT NAME:			WRAY MUNI			RNAV (GPS) RWY 17, AMDT 2				AMDT: 1B				
									29 MARCH 2018				DATED 08/17/2017				



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW17 (MAP)	3877 MSL (CA)	171.82	
3877 MSL	GUDSE (DF) (FO) (RNP 1.00)		6600

NOTES, (CONT.):

INCREASE LPV DA TO 4020, AND LNAV/VNAV DA TO 4088 AND VISIBILITY ALL CATS 3/8 SM, INCREASE ALL MDA 160 FT AND LNAV CAT C/D VISIBILITY 5/8 SM AND CIRCLING CAT C 1/2 SM, CAT D 1/4 SM.

TAA

	FROM	TO	ALT
1.	082/30 CW 262/30 (NOPT)	COLOD (IF/IAF) (FO)	6200
2.	262/30 CW 352/30	BLEDS (IAF) (FB)	6600
3.	352/30 CW 082/30	LUCII (IAF) (FB)	6600

QUALITY
16
CHECKED

CITY AND STATE WRAY, CO	ELEVATION: 3677	TDZE: 3677	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 17, AMDT 2 29 MARCH 2018	SUP:
	AIRPORT NAME:				AMDT: 1B
	WRAY MUNI				DATED: 08/17/2017

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	2V5
RUNWAY	RW17
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W17A
LTP/FTP LATITUDE	400628.0950N
LTP/FTP LONGITUDE	1021428.3255W
LTP/FTP ELLIPSOIDAL HEIGHT	+10988
FPAP LATITUDE	400458.9290N
FPAP LONGITUDE	1021427.9690W
THRESHOLD CROSSING HEIGHT (TCH)	00044.6
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1104
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
 <u>CRC REMAINDER</u>	 448220A3

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+11208
FPAP ORTHOMETRIC HEIGHT	+11208

QUALITY
16
CHECKED

CITY AND STATE WRAY, CO	ELEVATION: 3677 AIRPORT NAME: WRAY MUNI	TDZE: 3677 WRAY MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 17, AMDT 2 29 MARCH 2018	SUP:
					AMDT: 1B
					DATED: 08/17/2017

RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW35 CLIMB TO 6200 DIRECT COLOD AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, RT, 171.82 INBOUND. CHART FAS OBSTACLE: 4167 TOWER 400226N/1021444W DISTANCE TO THLD FROM 250 HAT: 0.67 NM. CHART VDP AT 2.30 NM TO RW35* *LNAV ONLY. WAAS CHANNEL # 87041 REFERENCE PATH ID: W35A CHART CIRCLING ICON. LTP HAE: 1086.6 M					
CAREE (IAF)		GUDSE (NOPT) (TF) (FB) (RNP 1.00)			081.69 / 10.00			6600							
DLFRD (IAF)		GUDSE (NOPT) (TF) (FB) (RNP 1.00)			261.97 / 10.00			6600							
GUDSE (IF/IAF)		HAGLA (TF) (FB) (RNP 1.00)			351.83 / 8.00			5400							
HAGLA (FAF)		RW35 (MAP) (TF) (FO) (RNP 0.30)			351.82 / 5.37										
RW35 (MAP)		3903 MSL (CA)			351.82										
3903 MSL		COLOD (DF) (FO) (RNP 1.00)						6200							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S GUDSE, RT, 351.83 INBOUND, 6600 FT. IN LIEU OF PT (IAF) 3. FAC: 351.82 FAF: _____ DIST FAF TO MAP: 5.37 THLD: 5.37 4. MIN. ALT: GUDSE 6600, HAGLA 5400 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 5400 GS ALT AT: HAGLA 5400 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 52.0 20:1 IS CLEAR 34:1 IS NOT CLEAR 8. MSA FROM: _____											MAG VAR: 8E		EPOCH YEAR: 2005		
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
LPV DA	3903	1	250	3903	1	250	3903	1	250	3903	1	250			
LNAV/VNAV DA	3945	1	292	3945	1	292	3945	1	292	3945	1	292			
LNAV MDA	4420	1	767	4420	1 1/4	767	4420	2 1/2	767	4420	2 1/2	767			
CIRCLING	4420	1	743	4420	1 1/4	743	4540	2 1/2	863	4540	2 3/4	863			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -22C (-7F) OR ABOVE 53C (127F). CHART NOTE: BARO-VNAV AND VDP NA WHEN USING IMPERIAL ALTIMETER SETTING. CHART NOTE: RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)															
CITY AND STATE			ELEVATION: 3677 TDZE: 3653			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:		
WRAY, CO			AIRPORT NAME:			WRAY MUNI			RNAV (GPS) RWY 35, AMDT 2				AMDT: 1A		
									29 MARCH 2018				DATED 06/25/2015		



**RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33**

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NOTES, (CONT.):

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

CHART NOTE: WHEN LOCAL ALTIMETER SETTING IS NOT RECEIVED USE IMPERIAL ALTIMETER SETTING: INCREASE LPV DA TO 4047 AND VISIBILITY TO 1 1/8 SM FT AND LNAV/VNAV DA TO 4088 AND VISIBILITY TO 1 1/4 SM; INCREASE ALL MDAS 140 FT AND VISIBILITY CATS A, D 1/4 SM, CAT C 1/2 SM.

TAA

	<u>FROM</u>	<u>TO</u>	<u>ALT</u>
1.	262/30 CW 082/30 (NOPT)	GUDSE (IF/IAF) (FB)	6600
2.	082/30 CW 172/30	CAREE (IAF) (FB)	6600
3.	172/30 CW 262/30	DLFRD (IAF) (FB)	6600

QUALITY
16
CHECKED

CITY AND STATE

WRAY, CO

ELEVATION: 3677

TDZE: 3653

AIRPORT NAME:

WRAY MUNI

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 35, AMDT 2

29 MARCH 2018

SUP:

AMDT: 1A

DATED: 06/25/2015

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	2V5
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	400534.7560N
LTP/FTP LONGITUDE	1021428.1125W
LTP/FTP ELLIPSOIDAL HEIGHT	+10866
FPAP LATITUDE	400703.9225N
FPAP LONGITUDE	1021428.4790W
THRESHOLD CROSSING HEIGHT (TCH)	00052.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1104
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

9FB01081

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+11086
FPAP ORTHOMETRIC HEIGHT	+11086

QUALITY
16
CHECKED

CITY AND STATE

WRAY, CO

ELEVATION: 3677

TDZE: 3653

AIRPORT NAME:

WRAY MUNI

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 35, AMDT 2

29 MARCH 2018

SUP:

AMDT:

1A

DATED:

06/25/2015

COPTER ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29				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		ILS: DA LOC: 4.94 NM AFTER HUNEE INT/I-BDL 6.88 DME OR AT I-BDL 1.94 DME CLIMB TO 4000 THEN LEFT TURN DIRECT BAF VORTAC AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 4000 THEN RIGHT TURN DIRECT HFD VOR/DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD E, LT, 274.75 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE HFD VOR/DME, RT, 334.12 INBOUND. CHART FAS OBST: 307 BUILDING 415515N/0724307W. 949 AAO 415129N/0724653W. 429 AAO 415331N/0724503W. CHART VDP AT 2.93 DME* DISTANCE VDP TO THLD 0.99 NM. *LOC ONLY. CHART IN PLANVIEW: HFD VOR/DME. CHART PLANVIEW NOTE: RADAR REQUIRED.							
PENNA INT/I-BDL 12.83 DME (IF)		JANID INT/I-BDL 9.86 DME		058.38 / 2.97 (I-BDL)				2400									
JANID INT/I-BDL 9.86 DME		HUNEE INT/I-BDL 6.88 DME		058.38 / 2.97 (I-BDL)				1800									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT PENNA INT/I-BDL 12.83 DME 3. FAC: <u>058.38</u> FAF: <u>HUNEE INT/I-BDL 6.88 DME</u> DIST FAF TO MAP: <u>4.94</u> THLD: <u>4.94</u> 4. MIN. ALT: <u>PENNA 3000, JANID 2400, HUNEE 1800, JETIX/I-BDL 4.87 DME 1160*</u> 5. DIST TO THLD FROM OM: _____ - _____ MM: _____ - _____ IM: <u>861</u> 150 HAT: _____ - _____ 100 HAT: <u>881</u> GS ANT: <u>1052</u> 6. MIN GS INCPT: <u>1800</u> GS ALT AT: <u>HUNEE 1800</u> OM: _____ - _____ MM: _____ - _____ IM: <u>272</u> 7. GS ANGLE: <u>3.00</u> TCH: <u>53.8</u> 8. MSA FROM: <u>BAF VORTAC 010-190 3100, 190-010 3600</u>										MAG VAR: 14W		EPOCH YEAR: 1980					
MINIMUMS																	
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A ☒ X									
CATEGORY =====>		COPTER															
	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		
H-ILS 6	273	1200	100														
H-LOC 6	1160	2400	987														
JETIX FIX MINIMUMS (DME REQUIRED)																	
H-LOC 6	560	2400	387														
NOTES: COPTER ILS CAT II - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; RA 101. CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART NOTE: FOR INOPERATIVE ALS, INCREASE H-ILS 6 VISIBILITY TO RVR 2400 AND H-LOC 6 VISIBILITY TO RVR 4000.																	
CITY AND STATE WINDSOR LOCKS, CT		ELEVATION: 173 TDZE: 173 AIRPORT NAME: BRADLEY INTL		FACILITY IDENTIFIER: I-BDL		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: COPTER ILS OR LOC RWY 6, AMDT 2 29 MARCH 2018						SUP:					
												AMDT: 1A					
												DATED 09/18/2014					

QUALITY
9
CHECKED

ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29				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		ILS: DA LOC: 4.94 NM AFTER HUNEE INT/I-BDL 6.88 DME OR AT I-BDL 1.94 DME CLIMB TO 4000 THEN LEFT TURN DIRECT BAF VORTAC AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 4000 THEN RIGHT TURN DIRECT HFD VOR/DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD E, LT, 274.75 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE HFD VOR/DME, RT, 334.12 INBOUND. CHART FAS OBST: 307 BUILDING 415515N/0724307W. 949 AAO 415129N/0724653W. 429 AAO 415331N/0724503W. CHART VDP AT 2.93 DME* DISTANCE VDP TO THLD 0.99 NM. *LOC ONLY. CHART IN PLANVIEW: HFD VOR/DME. CHART CIRCLING ICON. CHART PLANVIEW NOTE: RADAR REQUIRED.							
PENNA INT/I-BDL 12.83 DME (IF/IAF)		JANID INT/I-BDL 9.86 DME		058.38 / 2.97 (I-BDL)		2400									
JANID INT/I-BDL 9.86 DME		HUNEE INT/I-BDL 6.88 DME		058.38 / 2.97 (I-BDL)		1800									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SW PENNA, LT, 058.38 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 058.38 FAF: HUNEE INT/I-BDL 6.88 DME DIST FAF TO MAP: 4.94 THLD: 4.94 4. MIN. ALT: PENNA 3000, JANID 2400, HUNEE 1800, JETIX/I-BDL 4.87 DME 1160* 5. DIST TO THLD FROM OM: - MM: - IM: 861 150 HAT: 1835 100 HAT: 881 GS ANT: 1052 6. MIN GS INCPT: 1800 GS ALT AT: HUNEE 1800 OM: - MM: - IM: 272 7. GS ANGLE: 3.00 TCH: 53.8 8. MSA FROM: BAF VORTAC 010-190 3100, 190-010 3600								MAG VAR: 14W EPOCH YEAR: 1980							
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		ILS: #		LOC: @			
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
S-ILS 06	373	1800	200	373	1800	200	373	1800	200	373	1800	200			
S-LOC 06	1160	4000	987	1160	5500	987	1160	2 1/2	987	1160	2 1/2	987			
CIRCLING	1160	1 1/4	987	1160	1 1/2	987	1160	3	987	1220	3	1047			
JETIX FIX MINIMUMS (DME REQUIRED)															
S-LOC 06	560	2400	387	560	2400	387	560	3500	387	560	3500	387			
CIRCLING	700	1	527	700	1	527	1120	2 3/4	947	1220	3	1047			
NOTES: SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 6: CAT A, B, C, D, RA 151, RVR 1400, HAT 150, DA 323 MSL. CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 6: CAT A, B, C, D, RA 101, RVR 1200, HAT 100, DA 273 MSL. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 173 TDZE: 173		FACILITY IDENTIFIER: I-BDL		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
WINDSOR LOCKS, CT		AIRPORT NAME: BRADLEY INTL				ILS OR LOC RWY 6, AMDT 38; ILS RWY 6 (SA CAT I), ILS RWY 6 (CAT II), ILS RWY 6 (CAT III)				AMDT: 37A					
						29 MARCH 2018				DATED 09/18/2014					



ILS - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29

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.

NOTES, (CONT.):
CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 6: CAT III CAT A, B, C, D, RVR 600.
CHART NOTE: CIRCLING RWY 19 NA AT NIGHT.
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.
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).



CITY AND STATE WINDSOR LOCKS, CT	ELEVATION: 173 TDZE: 173 AIRPORT NAME: BRADLEY INTL	FACILITY IDENTIFIER: I-BDL	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 6, AMDT 38; ILS RWY 6 (SA CAT I), ILS RWY 6 (CAT II), ILS RWY 6 (CAT III) 29 MARCH 2018	SUP:
				AMDT: 37A
				DATED: 09/18/2014

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29		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		ILS: DA LOC: 5.92 NM AFTER MOTEL INT/I-MYQ 5.54 DME						
KIBBE INT/I-MYQ 12.54 DME (IF/IAF)		SURLE INT/I-MYQ 10.21 DME		238.39 / 2.33 (I-MYQ)				2700		CLIMB TO 4000 THEN LEFT TURN DIRECT HFD VOR/DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 3000 THEN CLIMBING RIGHT TURN TO 4000 DIRECT BAF VORTAC AND HOLD.						
SURLE INT/I-MYQ 10.21 DME		MOTEL INT/I-MYQ 5.54 DME		238.39 / 4.67 (I-MYQ)				2100								
										ADDITIONAL FLIGHT DATA: HOLD SE, RT, 334.12 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD E BAF VORTAC, LT, 274.75 INBOUND. CHART FAS OBST: 267 TREE 415746N/0723945W. 419 AAO 420110N/0723412W. CHART IN PLANVIEW: BAF VORTAC. CHART CIRCLING ICON.						
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																
2. HOLD NE KIBBE, LT, 238.39 INBOUND, 3000 FT. IN LIEU OF PT (IAF)																
3. FAC: 238.39 FAF: MOTEL INT/I-MYQ 5.54 DME DIST FAF TO MAP: 5.92 THLD: 5.92																
4. MIN. ALT: KIBBE 3000, SURLE 2700, MOTEL 2100, FARIL INT/I-MYQ 0.95 DME 640*																
5. DIST TO THLD FROM OM: - MM: - IM: 1371 150 HAT: 1979 100 HAT: 1025 GS ANT: 971																
6. MIN GS INCPT: 2100 GS ALT AT: MOTEL 2100 OM: - MM: - IM: 288																
7. GS ANGLE: 3.00 TCH: 55.4																
8. MSA FROM: BAF VORTAC 010-190 3100, 190-010 3600																
MAG VAR: 14W EPOCH YEAR: 1980																
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		ILS: STANDARD		LOC: 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	
S-ILS 24	370	1800	200	370	1800	200	370	1800	200	370	1800	200				
S-LOC 24	640	2400	470	640	2400	470	640	5000	470	640	5000	470				
CIRCLING	700	1	527	700	1	527	1120	2 3/4	947	1220	3	1047				
FARIL FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)																
S-LOC 24	520	2400	350	520	2400	350	520	3000	350	520	3000	350				
CIRCLING	700	1	527	700	1	527	1120	2 3/4	947	1220	3	1047				
NOTES: SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 24: CAT A, B, C, D, RA 163, @ CAT C 1000-2 3/4, CAT D 1100-3 RVR 1400, HAT 150, DA 320 MSL. SA CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 24: CAT A, B, C, D, RA 113, RVR 1200, HAT 100, DA 270 MSL. (CONTINUED ON PAGE 2)																
CITY AND STATE WINDSOR LOCKS, CT		ELEVATION: 173 TDZE: 170 AIRPORT NAME: BRADLEY INTL		FACILITY IDENTIFIER: I-MYQ		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 24, AMDT 13; ILS RWY 24 (SA CAT I), ILS RWY 24 (SA CAT II) 29 MARCH 2018						SUP: AMDT: 12B DATED 09/18/2014				



**ILS - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29**

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.

NOTES, (CONT.):**CHART NOTE: CIRCLING RWY 19 NA AT NIGHT.****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 PLANVIEW NOTE: NOPT FOR ARRIVAL AT KIBBE ON V146-405 NORTHWEST BOUND.****CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).*****LOC ONLY****CHART PROFILE NOTE: I-MYQ DME UNUSABLE INSIDE 0.4 DME.****CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 24 CAT C/D VISIBILITY TO 1 3/8 SM. FARIL FIX****MINIMUMS: FOR INOPERATIVE ALS, INCREASE S-LOC 24 CAT C/D VISIBILITY TO RVR 5500.**

QUALITY
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CHECKED

CITY AND STATE

WINDSOR LOCKS, CT**ELEVATION: 173****TDZE: 170**

AIRPORT NAME:

BRADLEY INTLFACILITY
IDENTIFIER:**I-MYQ**

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

**ILS OR LOC RWY 24, AMDT 13; ILS RWY 24 (SA CAT I),
ILS RWY 24 (SA CAT II)**

29 MARCH 2018

SUP:

AMDT: **12B**DATED: **09/18/2014**

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29		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		ILS: DA LOC: 4.44 NM AFTER HOMEY INT/I-KX 6.23 DME OR AT IDOCO/I-KX 1.79 DME FIX						
ORW VOR/DME (IAF)		HADUX INT/I-KX 12.16 DME (NOPT)		317.29 / 26.99				2500		CLIMB TO 4000 THEN RIGHT TURN DIRECT BAF VORTAC AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 4000 THEN RIGHT TURN DIRECT CEF VORTAC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD E, LT, 274.75 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NE CEF VORTAC, RT, 240.00 INBOUND. FAS OBST: 323 AAO 415215N/0723539W. 340 AAO 415209N/0723412W. CHART VDP AT 2.36 DME* DISTANCE VDP TO THLD 1.06 NM. *LOC ONLY. CHART IN PLANVIEW: CEF VORTAC. CHART CIRCLING ICON.						
HFD VOR/DME (IAF)		HADUX INT/I-KX 12.16 DME (NOPT)		024.86 / 9.88				2500								
HADUX INT/I-KX 12.16 DME (IF/IAF)		HOMEY INT/I-KX 6.23 DME		328.38 / 5.93 (I-KX)				1800								
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SE HADUX, RT, 328.38 INBOUND, 2500 FT. IN LIEU OF PT (IAF) 3. FAC: 328.38 FAF: HOMEY INT/I-KX 6.23 DME DIST FAF TO MAP: 4.44 THLD: 4.94 4. MIN. ALT: HADUX 2500, HOMEY 1800 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: 1081 6. MIN GS INCPT: 1800 GS ALT AT: HOMEY 1800 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 58.6 8. MSA FROM: BAF VORTAC 010-190 3100, 190-010 3600										MAG VAR: 14W EPOCH YEAR: 1980						
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT				ALTERNATE: N A		ILS: STANDARD		LOC: 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
S-ILS 33		371	4000	200	371	4000	200	371	4000	200	371	4000	200			
S-LOC 33		580	4000	409	580	4000	409	580	5000	409	580	5000	409			
CIRCLING		700	1	527	700	1	527	1120	2 3/4	947	1220	3	1047			
NOTES: CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-ILS 33 ALL CATS. CHART NOTE: CIRCLING RWY 19 NA AT NIGHT. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HFD VOR/DME ON AIRWAY RADIAL 053. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON ORW VOR/DME AIRWAY RADIALS 259 CW 011. (CONTINUED ON PAGE 2)																
CITY AND STATE WINDSOR LOCKS, CT		ELEVATION: 173 TDZE: 171 AIRPORT NAME: BRADLEY INTL		FACILITY IDENTIFIER: I-KX		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 33, AMDT 10C 29 MARCH 2018						SUP: AMDT: 10B DATED 05/26/2016				



ILS - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29

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.

NOTES, (CONT.):
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 33 CAT C/D VISIBILITY TO RVR 6000.



CITY AND STATE WINDSOR LOCKS, CT	ELEVATION: 173 TDZE: 171 AIRPORT NAME: BRADLEY INTL	FACILITY IDENTIFIER: I-KX	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 33, AMDT 10C 29 MARCH 2018	SUP:
				AMDT: 10B
				DATED: 05/26/2016

RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW15 CLIMB TO 3000 DIRECT HADUX AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 328.49 INBOUND. FAS OBST: 838 AAO 415942N/0724632W. DISTANCE TO THLD FROM 309 HAT: 0.79 NM. CHART VDP AT 2.33 NM TO RW15* *LNAV ONLY. WAAS CHANNEL # 60928 REFERENCE PATH ID: W15A CHART CIRCLING ICON. LTP HAE: 22.4 M						
CTR VOR/DME (IAF)		DOCEB (NOPT) (TF) (FB) (RNP 1.00)			178.74 / 13.77			3500								
SASHA (IAF)		DOCEB (NOPT) (TF) (FB) (RNP 1.00)			120.73 / 13.09			3500								
DOCEB (IF/IAF)		BREEN (TF) (FB) (RNP 1.00)			148.25 / 5.00			2500								
BREEN (FAF)		RW15 (MAP) (TF) (FO) (RNP 0.30)			148.30 / 5.94											
RW15 (MAP)		480 MSL (CA)			148.30					MAG VAR: 14W EPOCH YEAR: 1980						
480 MSL		HADUX (DF) (FO) (RNP 1.00)														
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NW DOCEB, RT, 148.25 INBOUND, 3500 FT. IN LIEU OF PT (IAF) 3. FAC: 148.30 FAF: BREEN DIST FAF TO MAP: 5.94 THLD: 5.94 4. MIN. ALT: DOCEB 3500, BREEN 2500 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2500 GS ALT AT: BREEN 2500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.60 TCH: 60.0 34:1 IS NOT CLEAR 8. MSA FROM: RW15 3300																
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		@						
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	
LPV DA	480	7/8	309	480	7/8	309	480	7/8	309		NA					
LNAV/VNAV DA	1100	3	929	1100	3	929	1100	3	929		NA					
LNAV MDA	1100	1 1/4	929	1100	1 1/4	929	1100	2 1/2	929		NA					
CIRCLING	1100	1 1/4	927	1100	1 1/4	927	1120	2 3/4	947		NA					
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C (0F) OR ABOVE 46C (115F). @ CAT A, B 1000-2, CAT C 1000-2 3/4 CHART NOTE: CIRCLING RWY 19 NA AT NIGHT. CHART NOTE: RWY 15 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)																
CITY AND STATE WINDSOR LOCKS, CT		ELEVATION: 173 TDZE: 171 AIRPORT NAME: BRADLEY INTL			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 15, AMDT 3 29 MARCH 2018					SUP: AMDT: 2A DATED 05/29/2014				



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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.

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SASHA ON V292 WESTBOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON CTR VOR/DME AIRWAY RADIALS 104 CW 140.

QUALITY
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CHECKED

CITY AND STATE

WINDSOR LOCKS, CT

ELEVATION: 173

TDZE: 171

AIRPORT NAME:

BRADLEY INTL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 15, AMDT 3

29 MARCH 2018

SUP:

AMDT: 2A

DATED: 05/29/2014

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KBDL
RUNWAY	RW15
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W15A
LTP/FTP LATITUDE	415632.6250N
LTP/FTP LONGITUDE	0724135.7100W
LTP/FTP ELLIPSOIDAL HEIGHT	+00224
FPAP LATITUDE	415530.2875N
FPAP LONGITUDE	0724010.3805W
THRESHOLD CROSSING HEIGHT (TCH)	00060.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.60
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0664
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 FA0B1DF7

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+00515
FPAP ORTHOMETRIC HEIGHT	+00515

QUALITY
9
CHECKED

CITY AND STATE WINDSOR LOCKS, CT	ELEVATION: 173 AIRPORT NAME: BRADLEY INTL	TDZE: 171	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 15, AMDT 3 29 MARCH 2018	SUP:
					AMDT: 2A
					DATED: 05/29/2014

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							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		LPV: DA LNAV/VNAV: DA LNAV: RW33 CLIMB TO 3500 DIRECT DOCEB AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3500. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 148.25 INBOUND. FAS OBST: 304 AAO 415303N/0723757W. 323 AAO 415215N/0723539W. DISTANCE TO THLD FROM 200 HAT: 0.45 NM. CHART VDP AT 1.00 NM TO RW33* *LNAV ONLY. WAAS CHANNEL # 65628 REFERENCE PATH ID: W33A CHART CIRCLING ICON. LTP HAE: 22.3 M												
ORW VOR/DME (IAF)				HADUX (NOPT) (TF) (FB) (RNP 1.00)				317.29 / 26.99				2500														
HFD VOR/DME (IAF)				HADUX (NOPT) (TF) (FB) (RNP 1.00)				025.86 / 9.88				2500														
HADUX (IF/IAF)				HOMEY (TF) (FB) (RNP 1.00)				328.49 / 5.93				1800														
HOMEY (FAF)				RW33 (MAP) (TF) (FO) (RNP 0.30)				328.43 / 4.94																		
RW33 (MAP)				371 MSL (CA)				328.43				3500		ADDITIONAL FLIGHT DATA: HOLD NW, RT, 148.25 INBOUND. FAS OBST: 304 AAO 415303N/0723757W. 323 AAO 415215N/0723539W. DISTANCE TO THLD FROM 200 HAT: 0.45 NM. CHART VDP AT 1.00 NM TO RW33* *LNAV ONLY. WAAS CHANNEL # 65628 REFERENCE PATH ID: W33A CHART CIRCLING ICON. LTP HAE: 22.3 M												
371 MSL				DOCEB (DF) (FO) (RNP 1.00)																						
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SE HADUX, RT, 328.49 INBOUND, 2500 FT. IN LIEU OF PT (IAF) 3. FAC: 328.43 FAF: HOMEY DIST FAF TO MAP: 4.94 THLD: 4.94 4. MIN. ALT: HADUX 2500, HOMEY 1800 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 1800 GS ALT AT: HOMEY 1800 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 58.6 34:1 IS CLEAR 8. MSA FROM: RW33 3200																	MAG VAR: 14W					EPOCH YEAR: 1980				
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											
LPV DA	371	4000	200	371	4000	200	371	4000	200	371	4000	200														
LNAV/VNAV DA	463	4000	292	463	4000	292	463	4000	292	463	4000	292														
LNAV MDA	560	4000	389	560	4000	389	560	4500	389	560	4500	389														
CIRCLING	700	1	527	700	1	527	1120	2 3/4	947	1220	3	1047														
NOTES: CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO LPV ALL CATS. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F). CHART NOTE: CIRCLING RWY 19 NA AT NIGHT. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)																										
CITY AND STATE WINDSOR LOCKS, CT				ELEVATION: 173 TDZE: 171 AIRPORT NAME: BRADLEY INTL				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 33, AMDT 3 29 MARCH 2018				SUP:										
																AMDT: 2C										
																DATED 05/26/2016										

QUALITY
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 CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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.

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON ORW VOR/DME AIRWAY RADIALS 238 CW 011.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON HFD VOR/DME AIRWAY RADIALS 053 CW 097.

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.



CITY AND STATE

WINDSOR LOCKS, CT

ELEVATION: 173

TDZE: 171

AIRPORT NAME:

BRADLEY INTL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 33, AMDT 3

29 MARCH 2018

SUP:

AMDT: 2C

DATED: 05/26/2016

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KBDL
RUNWAY	RW33
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W33A
LTP/FTP LATITUDE	415545.3235N
LTP/FTP LONGITUDE	0724030.9555W
LTP/FTP ELLIPSOIDAL HEIGHT	+00223
FPAP LATITUDE	415647.6570N
FPAP LONGITUDE	0724156.2965W
THRESHOLD CROSSING HEIGHT (TCH)	00058.6
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0664
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
 <u>CRC REMAINDER</u>	 6D66B942

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+00514
FPAP ORTHOMETRIC HEIGHT	+00514

QUALITY
9
CHECKED

CITY AND STATE WINDSOR LOCKS, CT	ELEVATION: 173 AIRPORT NAME: BRADLEY INTL	TDZE: 171	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 33, AMDT 3 29 MARCH 2018	SUP:
					AMDT: 2C
					DATED: 05/26/2016

RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW06 CLIMB TO 3000 DIRECT KIBBE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NE, LT, 238.53 INBOUND. CHART FAS OBST: 379 TREE 415542N/0724314W. DISTANCE TO THLD FROM 200 HAT: 0.46 NM. CHART VDP AT 1.24 NM TO RW06* *LNAV ONLY. WAAS CHANNEL # 70328 REFERENCE PATH ID: W06A CHART CIRCLING ICON. LTP HAE: 23.7 M					
HFD VOR/DME		PENNA (TF) (FO) (RNP 2.00)		318.09 / 17.28				3000							
PENNA (IF/IAF)		JANID (TF) (FB) (RNP 1.00)		058.26 / 2.97				2400							
JANID		HUNEE (TF) (FB) (RNP 1.00)		058.29 / 2.97				1800							
HUNEE (FAF)		JETIX/2.93 NM TO RW06 (TF) (FB) (RNP 0.30)		058.32 / 2.01											
JETIX/2.93 NM TO RW06		RW06 (MAP) (TF) (FO) (RNP 0.30)		058.32 / 2.93											
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SW PENNA, LT, 058.26 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 058.32 FAF: HUNEE DIST FAF TO MAP: 4.94 THLD: 4.94 4. MIN. ALT: PENNA 3000, JANID 2400, HUNEE 1800, JETIX/2.93 NM TO RW06 1160* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 1800 GS ALT AT: HUNEE 1800 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 53.8 34:1 IS CLEAR 8. MSA FROM: RW06 3300															
										MAG VAR: 14W EPOCH YEAR: 1980					
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
LPV DA	373	1800	200	373	1800	200	373	1800	200	373	1800	200			
LNAV/VNAV DA	640	6000	467	640	6000	467	640	6000	467	640	6000	467			
LNAV MDA	640	2400	467	640	2400	467	640	5000	467	640	5000	467			
CIRCLING	700	1	527	700	1	527	1120	2 3/4	947	1220	3	1047			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C (0F) OR ABOVE 54C (130F). @ CAT C 1000-2 3/4, CAT D 1100-3 CHART NOTE: CIRCLING RWY 19 NA AT NIGHT. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON HFD VOR/DME AIRWAY RADIALS 235 CW 282. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 173 TDZE: 173		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
WINDSOR LOCKS, CT		AIRPORT NAME: BRADLEY INTL				RNAV (GPS) Y RWY 6, AMDT 3				AMDT: 2B					
						29 MARCH 2018				DATED 10/12/2017					



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW06 (MAP)	373 MSL (CA)	58.32	
373 MSL	KIBBE (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

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 1 1/2 SM AND LNAV CAT C/D VISIBILITY TO 1 3/8 SM.

QUALITY
9
CHECKED

CITY AND STATE
WINDSOR LOCKS, CT

ELEVATION: 173 TDZE: 173
AIRPORT NAME:
BRADLEY INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) Y RWY 6, AMDT 3
29 MARCH 2018

SUP:
AMDT: 2B
DATED: 10/12/2017

RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KBDL
RUNWAY	RW06
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W06A
LTP/FTP LATITUDE	415555.2500N
LTP/FTP LONGITUDE	0724147.6885W
LTP/FTP ELLIPSOIDAL HEIGHT	+00237
FPAP LATITUDE	415702.3950N
FPAP LONGITUDE	0724019.6695W
THRESHOLD CROSSING HEIGHT (TCH)	00053.8
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
 <u>CRC REMAINDER</u>	 24628895

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+00527
FPAP ORTHOMETRIC HEIGHT	+00527

QUALITY
9
CHECKED

CITY AND STATE WINDSOR LOCKS, CT	ELEVATION: 173 AIRPORT NAME: BRADLEY INTL	TDZE: 173	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 6, AMDT 3 29 MARCH 2018	SUP:
					AMDT: 2B
					DATED: 10/12/2017

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						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			LPV: DA LNAV/VNAV: DA LNAV: RW24 CLIMB TO 3000 DIRECT PENNA AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SW, LT, 058.26 INBOUND. CHART FAS OBST: 309 TREE 415800N/0724009W. 419 AAO 420110N/0723412W. DISTANCE TO THLD FROM 200 HAT: 0.48 NM. WAAS CHANNEL # 97310 REFERENCE PATH ID: W24A CHART CIRCLING ICON. LTP HAE: 20 M									
KIBBE (IF/IAF)			MOTEL (TF) (FB) (RNP 1.00)			238.53 / 7.00			2100												
MOTEL (FAF)			FARIL/1.33 NM TO RW24 (TF) (FB) (RNP 0.30)			238.45 / 4.58															
FARIL/1.33 NM TO RW24			RW24 (MAP) (TF) (FO) (RNP 0.30)			238.45 / 1.33															
RW24 (MAP)			370 MSL (CA)			238.45			3000												
370 MSL			PENNA (DF) (FO) (RNP 1.00)																		
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NE KIBBE, LT, 238.53 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 238.45 FAF: MOTEL DIST FAF TO MAP: 5.92 THLD: 5.92 4. MIN. ALT: KIBBE 3000, MOTEL 2100, FARIL/1.33 NM TO RW24 640* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2100 GS ALT AT: MOTEL 2100 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 55.4 34:1 IS CLEAR 8. MSA FROM: RW24 3300																		MAG VAR: 14W		EPOCH YEAR: 1980	
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						
LPV DA	370	1800	200	370	1800	200	370	1800	200	370	1800	200									
LNAV/VNAV DA	560	4500	390	560	4500	390	560	4500	390	560	4500	390									
LNAV MDA	560	2400	390	560	2400	390	560	3500	390	560	3500	390									
CIRCLING	700	1	527	700	1	527	1120	2 3/4	947	1220	3	1047									
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C (0F) OR ABOVE 54C (130F). @ CAT C 1000-2 3/4, CAT D 1100-3 CHART NOTE: CIRCLING RWY 19 NA AT NIGHT. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: NOPT FOR ARRIVAL AT KIBBE ON V146-405 NORTHEAST BOUND. (CONTINUED ON PAGE 2)																					
CITY AND STATE				ELEVATION: 173 TDZE: 170				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
WINDSOR LOCKS, CT				AIRPORT NAME:								RNAV (GPS) Y RWY 24, AMDT 4				AMDT: 3C					
				BRADLEY INTL								29 MARCH 2018				DATED 10/12/2017					

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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.

NOTES, (CONT.):

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

*LNAV ONLY

CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 1/4 SM.

QUALITY
9
CHECKED

CITY AND STATE

WINDSOR LOCKS, CT

ELEVATION: 173

TDZE: 170

AIRPORT NAME:

BRADLEY INTL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) Y RWY 24, AMDT 4

29 MARCH 2018

SUP:

AMDT: 3C

DATED: 10/12/2017

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KBDL
RUNWAY	RW24
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W24A
LTP/FTP LATITUDE	415702.3950N
LTP/FTP LONGITUDE	0724019.6695W
LTP/FTP ELLIPSOIDAL HEIGHT	+00200
FPAP LATITUDE	415555.2480N
FPAP LONGITUDE	0724147.6855W
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

77D387CB

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+00490
FPAP ORTHOMETRIC HEIGHT	+00490

QUALITY
9
CHECKED

CITY AND STATE

WINDSOR LOCKS, CT

ELEVATION: 173

TDZE: 170

AIRPORT NAME:

BRADLEY INTL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) Y RWY 24, AMDT 4

29 MARCH 2018

SUP:

AMDT:

3C

DATED:

10/12/2017

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					
DILLN (IF)		YELOW (TF) (FB) (RNP 1.00)		224.90 / 3.15				4000		CLIMB TO 3000 ON TRACK 058.36 TO KIBBE AND HOLD.					
YELOW		CABAG (RF) (FB) (RNP 1.00)		(2.50 NM RADIUS CCW (CFFRC))/3.20				3000							
MIICH (IF)		CABAG (TF) (FB) (RNP 1.00)		151.48 / 6.30				3000		ADDITIONAL FLIGHT DATA: HOLD NE, LT, 238.53 INBOUND. DISTANCE TO THLD FROM 372 HAT: 1.00 NM. ROUTE TYPE QUALIFIER 1: F ROUTE TYPE QUALIFIER 2: S ROUTE TYPE: A, H CHART MANDATORY 5000 AT DILLN, MIICH, ERICH, DWOLF. CHART MINIMUM 3000 AT BRISS.					
CABAG		HUNEE (RF) (FB) (RNP 1.00)		(2.50 NM RADIUS CCW (CFFRC))/4.07				1800							
BRISS (IAF) (SEE FORM 8260-10)		PENNA (TF) (FB) (RNP 1.00)		062.49 / 9.02				3000							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 14W EPOCH YEAR: 1980					
2. PROFILE STARTS AT HUNEE															
3. FAC: 058.32 FAF: _____ DIST FAF TO MAP: _____ THLD: _____															
4. MIN. ALT: HUNEE 1800															
5. DIST TO THLD FROM OM: 4.94 MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____															
6. MIN GS INCPT: 1800 GS ALT AT: HUNEE 1800 OM: _____ MM: _____ IM: _____															
7. GS ANGLE: 3.00 TCH: 53.8 34:1 IS NOT CLEAR															
8. MSA FROM: RW06 3300															
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		DH/MDA VIS HAT/HAA			
AUTHORIZATION REQUIRED															
RNP 0.11 DA		545 4000 372		545 4000 372		545 4000 372		545 4000 372		545 4000 372					
RNP 0.30 DA		672 5000 499		672 5000 499		672 5000 499		672 5000 499		672 5000 499					
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -18C (0F) OR ABOVE 54C (130F). CHART NOTE: GPS REQUIRED. CHART SPEED ICON IN PLANVIEW AT DILLN : MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT DWOLF : MAX 210 KIAS. (CONTINUED ON PAGE 2)															
CITY AND STATE WINDSOR LOCKS, CT		ELEVATION: 173 TDZE: 173 AIRPORT NAME: BRADLEY INTL				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (RNP) Z RWY 6, AMDT 1 29 MARCH 2018				SUP: AMDT: ORIG-A DATED 09/18/2014			



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	
PENNA (IF)	JANID (TF) (FB) (RNP 1.00)		058.26 / 2.97	2400	
JANID	HUNEE (TF) (FB) (RNP 1.00)		058.29 / 2.97	1800	
ERICH (IF)	WHISL (TF) (FB) (RNP 1.00)		011.68 / 8.19	2400	
DWOLF (IF)	RABPO (TF) (FB) (RNP 1.00)		254.03 / 3.16	4000	
RABPO	WHISL (RF) (FB) (RNP 1.00)		(2.50 NM RADIUS CW (CFFRB))/5.14	2400	
WHISL	HUNEE (RF) (FB) (RNP 1.00)		(2.50 NM RADIUS CW (CFFRB))/2.03	1800	
HUNEE (FAF)	RW06 (MAP) (TF) (FO) (RNP 0.30)		058.32 / 4.94		
RW06 (MAP)	KIBBE (TF) (FO) (RNP 1.00)		058.36 / 14.48	3000	
NOTES, (CONT.): CHART SPEED ICON IN PLANVIEW AT ERICH : MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT MIICH : MAX 210 KIAS. CHART PLANVIEW NOTE ADJACENT TO DILLN: RF REQUIRED. CHART PLANVIEW NOTE ADJACENT TO MIICH: RF REQUIRED. CHART PLANVIEW NOTE ADJACENT TO ERICH: RF REQUIRED. CHART PLANVIEW NOTE ADJACENT TO DWOLF: RF REQUIRED. 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 INOPERATIVE ALS, INCREASE RNP 0.11 ALL CATS VISIBILITY TO RVR 5500 AND RNP 0.30 ALL CATS VISIBILITY TO 1 3/8 SM.					
CITY AND STATE WINDSOR LOCKS, CT		ELEVATION: 173 AIRPORT NAME: BRADLEY INTL	TDZE: 173	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (RNP) Z RWY 6, AMDT 1 29 MARCH 2018
				SUP: AMDT: ORIG-A DATED: 09/18/2014	



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.

QUALITY
25
CHECKED

CITY AND STATE
WINDSOR LOCKS, CT

ELEVATION: 173 TDZE: 173
AIRPORT NAME:
BRADLEY INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (RNP) Z RWY 6, AMDT 1
29 MARCH 2018

SUP:
AMDT: ORIG-A
DATED: 09/18/2014

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 3000 ON TRACK 238.40 TO PENNA AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SW, LT, 058.26 INBOUND. DISTANCE TO THLD FROM 452 HAT: 1.27 NM. ROUTE TYPE QUALIFIER 1: F ROUTE TYPE QUALIFIER 2: S ROUTE TYPE: A, H CHART MANDATORY 5000 AT BRYCE AND NEEDY. CHART MINIMUM 4000 AT KAGZI. CHART MINIMUM 3000 AT KIBBE. #TCH 216.2 MSL (DO NOT CHART)					
KIBBE (IAF)		DENNO (TF) (FB) (RNP 1.00)		238.53 / 4.57				2600							
DENNO (IF)		PAGNE (TF) (FB) (RNP 1.00)		238.48 / 4.00				1600							
BRYCE (IF)		ELILE (TF) (FB) (RNP 1.00)		075.31 / 3.78				3800							
ELILE		ONTEW (RF) (FB) (RNP 1.00)		(2.50 NM RADIUS CW (CFFRD))/4.52				2400							
KAGZI (IF)		ONTEW (TF) (FB) (RNP 1.00)		178.90 / 5.03				2400							
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)															
2. PROFILE STARTS AT PAGNE															
3. FAC: <u>238.44</u> FAF: _____ DIST FAF TO MAP: _____ THLD: _____															
4. MIN. ALT: PAGNE 1600															
5. DIST TO THLD FROM OM: <u>4.35</u> MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____															
6. MIN GS INCPT: <u>1600</u> GS ALT AT: PAGNE 1600 OM: _____ MM: _____ IM: _____															
7. GS ANGLE: <u>3.00</u> TCH: <u>54.9</u> # <u>34:1</u> IS CLEAR															
8. MSA FROM: RW24 3300															
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 0.30 DA	622	6000	452	622	6000	452	622	6000	452	622	6000	452			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -18C (0F) OR ABOVE 54C (130F). CHART NOTE: GPS REQUIRED. CHART SPEED ICON IN PLANVIEW AT BRYCE : MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT KIBBE : MAX 210 KIAS. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 173 TDZE: 170				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:			
WINDSOR LOCKS, CT		AIRPORT NAME: BRADLEY INTL						RNAV (RNP) Z RWY 24, AMDT 1 29 MARCH 2018				AMDT: ORIG-B			
												DATED 09/18/2014			

QUALITY
19
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	
ONTEW		PAGNE (RF) (FB) (RNP 1.00)	(2.50 NM RADIUS CW (CFFRD))/2.60	1600	
NEEDY (IF)		HADGO (TF) (FB) (RNP 1.00)	025.97 / 4.40	3600	
HADGO		PAGNE (RF) (FB) (RNP 1.00)	(2.50 NM RADIUS CCW (CFFRF))/6.44	1600	
PAGNE (FAF)		RW24 (MAP) (TF) (FO) (RNP 0.30)	238.44 / 4.35		
RW24 (MAP)		PENNA (TF) (FO) (RNP 1.00)	238.40 / 12.45	3000	
NOTES, (CONT.):					
CHART SPEED ICON IN PLANVIEW AT KAGZI : MAX 210 KIAS.					
CHART SPEED ICON IN PLANVIEW AT NEEDY : MAX 210 KIAS.					
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT KIBBE ON V146-405 SOUTHEAST BOUND.					
CHART PLANVIEW NOTE ADJACENT TO BRYCE: RF REQUIRED.					
CHART PLANVIEW NOTE ADJACENT TO KAGZI: RF REQUIRED.					
CHART PLANVIEW NOTE ADJACENT TO NEEDY: RF REQUIRED.					
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 INOPERATIVE ALS, INCREASE ALL CATS VISIBILITY TO 1 1/2 SM.					
QUALITY 19 CHECKED					
CITY AND STATE	ELEVATION: 173 TDZE: 170		FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
WINDSOR LOCKS, CT	AIRPORT NAME:		RNAV	RNAV (RNP) Z RWY 24, AMDT 1	AMDT: ORIG-B
	BRADLEY INTL			29 MARCH 2018	DATED: 09/18/2014

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.



CITY AND STATE
WINDSOR LOCKS, CT

ELEVATION: 173 TDZE: 170
AIRPORT NAME:
BRADLEY INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (RNP) Z RWY 24, AMDT 1
29 MARCH 2018

SUP:
AMDT: **ORIG-B**
DATED: **09/18/2014**

RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW28 CLIMB TO 2200 DIRECT WALPI AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, LT, 096.13 INBOUND. FAS OBST: 440 AAO 311306N/0830848W. CHART HAWG NORTH MOA. CHART MOODY 2 NORTH MOA. CHART R3008A-D. CHART SABRE MOA. DISTANCE TO THLD FROM 301 HAT: 0.77 NM. WAAS CHANNEL # 72838 REFERENCE PATH ID: W28A CHART CIRCLING ICON. CHART MOODY AFB ATIS. LTP HAE: 43.8 M							
JUTSU (IF/IAF)		SKIMS (TF) (FB) (RNP 1.00)		276.31 / 5.00				1700									
SKIMS (FAF)		RW28 (MAP) (TF) (FO) (RNP 0.30)		276.27 / 4.42													
RW28 (MAP)		537 MSL (CA)		276.27													
537 MSL		WALPI (DF) (FO) (RNP 1.00)						2200									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD E JUTSU, RT, 276.31 INBOUND, 2000 FT. IN LIEU OF PT (IAF) 3. FAC: 276.27 FAF: SKIMS DIST FAF TO MAP: 4.42 THLD: 4.42 4. MIN. ALT: JUTSU 2000, SKIMS 1700 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 1700 GS ALT AT: SKIMS 1700 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 60.0 20:1 IS NOT CLEAR 34:1 IS NOT CLEAR 8. MSA FROM: _____										MAG VAR: 3W		EPOCH YEAR: 1995					
MINIMUMS																	
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		X					
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		
LPV DA	578	1	342	578	1	342	578	1	342		NA						
LNAV/VNAV DA	537	1	301	537	1	301	537	1	301		NA						
LNAV MDA	740	1	504	740	1	504	740	1 3/8	504		NA						
CIRCLING	740	1	500	800	1	560	980	2	740		NA						
NOTES: CHART NOTE: BARO-VNAV NA. CHART NOTE: RWY 28 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). (CONTINUED ON PAGE 2)																	
CITY AND STATE		ELEVATION: 240 TDZE: 236				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
NASHVILLE, GA		AIRPORT NAME: BERRIEN CO						RNAV (GPS) RWY 28, AMDT 1 29 MARCH 2018				AMDT: ORIG-A					
												DATED 05/26/2016					

QUALITY
10
CHECKED

RNAV - 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.

NOTES, (CONT.):
CHART NOTE: STRAIGHT-IN RWY 28 NA AT NIGHT, CIRCLING RWY 28 NA AT NIGHT.
CHART NOTE: USE MOODY AFB ALTIMETER SETTING. WHEN NOT RECEIVED, USE DOUGLAS ALTIMETER SETTING AND INCREASE ALL LPV DA TO 602 FEET, LNAV/VNAV DA TO 561 FEET, AND ALL MDA 40 FEET. INCREASE LNAV AND CIRCLING CAT C VISIBILITY 1/4 SM.

TAA	FROM	TO	ALT
1.	186/30 CW 006/30 (NOPT)	186/21 CW 006/21	2300
	186/21 CW 006/21	JUTSU (IF/IAF) (FB)	2000
2.	006/30 CW 186/30	006/15 CW 186/15	2200
	006/15 CW 186/15	JUTSU (IF/IAF) (FO)	2000

CITY AND STATE NASHVILLE, GA	ELEVATION: 240 AIRPORT NAME: BERRIEN CO	TDZE: 236	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 28, AMDT 1 29 MARCH 2018	SUP:
					AMDT: ORIG-A
					DATED: 05/26/2016



**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	4J2
RUNWAY	RW28
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W28A
LTP/FTP LATITUDE	311243.7715N
LTP/FTP LONGITUDE	0831302.1680W
LTP/FTP ELLIPSOIDAL HEIGHT	+00438
FPAP LATITUDE	311248.7770N
FPAP LONGITUDE	0831445.9050W
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	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 7DEB1665

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00710
FPAP ORTHOMETRIC HEIGHT	+00710

CITY AND STATE
NASHVILLE, GA

ELEVATION: 240 TDZE: 236
AIRPORT NAME:
BERRIEN CO

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 28, AMDT 1
29 MARCH 2018

SUP:
AMDT: ORIG-A
DATED: 05/26/2016

QUALITY
10
CHECKED

ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29				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		ILS: DA LOC: 3.92 NM AFTER BILOY LOM/INT CLIMB TO 1600 THEN CLIMBING LEFT TURN TO 2800 DIRECT TOP VORTAC AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1600 THEN CLIMBING LEFT TURN TO 2800 DIRECT BILOY LOM/INT AND HOLD (ADF REQUIRED). ADDITIONAL FLIGHT DATA: HOLD NE, LT, 205.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NW BILOY LOM/INT, LT, 129.33 INBOUND. CHART FAS OBST: 1069 TREE 390558N/0953903W. 1220 AAO 390800N/0954109W. CHART TOP R-072 AT ROVVO. CHART CIRCLING ICON. CHART MAXIMUM 6000 AT BILOY LOM/INT. CHART IN PLANVIEW: BILOY LOM/INT.									
DIETS INT/TOP 26.43 DME		BILOY LOM/INT		043.21 / 20.72				3600											
TOP VORTAC		BILOY LOM/INT		256.21 / 6.52				2800											
ROVVO/TOP 12.00 DME CCW (IAF)		BECME INT (NOPT)		12.00 DME ARC (TOP LR-294)				2800											
BECME INT (IF)		BILOY LOM/INT		129.33 / 6.90 (I-TOP)				2300											
1. PT <u>R</u> SIDE OF COURSE <u>309.33</u> OUTBOUND <u>2800</u> FT WITHIN <u>10</u> MILES OF <u>BILOY LOM/INT</u> (IAF) 2. _____ 3. FAC: <u>129.33</u> FAF: <u>BILOY LOM/INT</u> DIST FAF TO MAP: <u>3.92</u> THLD: <u>3.92</u> 4. MIN. ALT: <u>BILOY LOM 2300, OGASY INT 1400*</u> 5. DIST TO THLD FROM OM: <u>3.92</u> MM: <u>0.50</u> IM: <u>-</u> 150 HAT: <u>-</u> 100 HAT: <u>-</u> GS ANT: <u>745</u> 6. MIN GS INCPT: <u>2300</u> GS ALT AT: _____ OM: <u>2180</u> MM: <u>1079</u> IM: <u>-</u> 7. GS ANGLE: <u>3.00</u> TCH: <u>38.5</u> 8. MSA FROM: <u>TO LOM 120-300 3600, 300-120 3100</u>																MAG VAR: 5E		EPOCH YEAR: 2000	
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		ILS: STANDARD #		LOC: 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				
S-ILS 13	1091	1/2	210	1091	1/2	210	1091	1/2	210		NA								
S-LOC 13	1400	1/2	519	1400	1/2	519	1400	1	519		NA								
CIRCLING	1400	1	519	1440	1	559	1600	2	719		NA								
OGASY FIX MINIMUMS																			
S-LOC 13	1340	1/2	459	1340	1/2	459	1340	7/8	459		NA								
CIRCLING	1360	1	479	1440	1	559	1600	2	719		NA								
NOTES: *LOC ONLY CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 13 CAT C VISIBILITY TO 1 3/8 SM.																			
#@ NA WHEN CONTROL TOWER CLOSED. # CAT C 800-2																			
CITY AND STATE		ELEVATION: 881 TDZE: 881		FACILITY IDENTIFIER: I-TOP		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
TOPEKA, KS		AIRPORT NAME:		PHILIP BILLARD MUNI		ILS OR LOC RWY 13, AMDT 33A				AMDT: 33									
						29 MARCH 2018				DATED 02/11/2010									



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
ILS - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29

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
TOPEKA, KS

ELEVATION: 881 TDZE: 881
AIRPORT NAME:
PHILIP BILLARD MUNI

FACILITY
IDENTIFIER:
I-TOP

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
ILS OR LOC RWY 13, AMDT 33A
29 MARCH 2018

SUP:
AMDT: 33
DATED: 02/11/2010



U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION LOC STANDARD INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.25										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		MAP: 3.34 NM AFTER POACH INT OR AT (CFTXL)																		
ILEMY INT/RADAR (IAF)			UJASA/RADAR			309.33 / 9.16 (I-TOP)			4000		CLIMBING RIGHT TURN TO 2800 DIRECT TOP VORTAC AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 2800 DIRECT BILOY LOM/INT AND HOLD (ADF REQUIRED).																		
CEBAP/TOP 13.00 DME CW (IAF)			UJASA/RADAR			13.00 DME ARC (TOP LR-143)			4000																				
UJASA/RADAR (IF)			POACH INT			309.33 / 7.06 (I-TOP)			2200																				
										ADDITIONAL FLIGHT DATA: HOLD NE, LT, 205.00 INBOUND. CHART FAS OBST: 1149 POWER LINE 390145N/0953431W. CHART 2048 TOWER 385346N/0951030W. CHART 1949 TOWER 385015N/0952952W. CHART TOP R-074 AT CEBAP. CHART CIRCLING ICON. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NW, LT, 129.33 INBOUND. CHART IN PLANVIEW: BILOY LOM/INT. CHART PLANVIEW NOTE: RADAR REQUIRED. CHART (CFTXL) AT (390326.19N/0953614.80W)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 5E EPOCH YEAR: 2000																			
2. PROFILE STARTS AT UJASA																													
3. FAC 309.33 FAF POACH INT DIST FAF TO MAP 3.34 THLD 4.00																													
4. MIN. ALT UJASA 4000, POACH 2200																													
8. MSA FROM: TOP VORTAC 060-220 3100, 220-310 3600, 310-060 2700																													
MINIMUMS																													
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD																	
CATEGORY =====>		A			B			C			D			E															
	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA														
S-31	1400	1	520	1400	1	520	1400	1 1/2	520		NA																		
CIRCLING	1400	1	519	1440	1	559	1600	2	719		NA																		
NOTES: CHART NOTE: RADAR REQUIRED. CHART PROFILE NOTE: DISREGARD GS INDICATIONS.																													
QUALITY 9 CHECKED																													
																CITY AND STATE TOPEKA, KS			ELEVATION: 881 TDZE: 880 AIRPORT NAME: PHILIP BILLARD MUNI			FACILITY IDENTIFIER: I-TOP		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: LOC BC RWY 31, AMDT 19C 29 MARCH 2018				SUP AMDT 19B DATE 10/16/2014	

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						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		LPV: DA LNAV/VNAV: DA LNAV: RW13 CLIMB TO 3600 DIRECT YAVUP AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 309.45 INBOUND. CHART FAS OBST: 1047 TREE 390550N/0953819W. CHART 1050 TOWER 390543N/0954002W. DISTANCE TO THLD FROM 210 HAT: 0.54 NM. CHART VDP AT 1.19 NM TO RW13* *LNAV ONLY. WAAS CHANNEL # 57928 REFERENCE PATH ID: W13A CHART CIRCLING ICON. LTP HAE: 236.8 M											
KENEC (IF/IAF)				CENIB (TF) (FB) (RNP 1.00)				129.20 / 8.99				2300													
CENIB (FAF)				ZOBOS/2.20 NM TO RW13 (TF) (FB) (RNP 0.30)				129.29 / 2.14																	
ZOBOS/2.20 NM TO RW13				RW13 (MAP) (TF) (FO) (RNP 0.30)				129.29 / 2.20																	
RW13 (MAP)				1091 MSL (CA)				129.29				3600													
1091 MSL				YAVUP (DF) (FO) (RNP 1.00)																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NW KENEC, RT, 129.20 INBOUND, 3600 FT. IN LIEU OF PT (IAF) 3. FAC: 129.29 FAF: CENIB DIST FAF TO MAP: 4.34 THLD: 4.34 4. MIN. ALT: KENEC 3600, CENIB 2300, ZOBOS/2.20 NM TO RW13 1600* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2300 GS ALT AT: CENIB 2300 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 38.5 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW13 3600																MAG VAR: 5E					EPOCH YEAR: 2000				
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										
LPV DA	1091	1/2	210	1091	1/2	210	1091	1/2	210		NA														
LNAV/VNAV DA	1135	1/2	254	1135	1/2	254	1135	1/2	254		NA														
LNAV MDA	1300	1/2	419	1300	1/2	419	1300	3/4	419		NA														
CIRCLING	1360	1	479	1440	1	559	1600	2	719		NA														
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C (0F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: NOPT FOR ARRIVAL AT KENEC ON V508 EASTBOUND. CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 3/4 SM AND LNAV CAT C VISIBILITY TO 1 1/8 SM.																									
CITY AND STATE				ELEVATION: 881 TDZE: 881				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
TOPEKA, KS				AIRPORT NAME:								RNAV (GPS) RWY 13, AMDT 1B				AMDT: 1A									
				PHILIP BILLARD MUNI								29 MARCH 2018				DATED 10/16/2014									

QUALITY
 10
 CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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
TOPEKA, KS

ELEVATION: 881 TDZE: 881
AIRPORT NAME:
PHILIP BILLARD MUNI

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 13, AMDT 1B
29 MARCH 2018

SUP:
AMDT: 1A
DATED: 10/16/2014

QUALITY
10
CHECKED

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KTOP
RUNWAY	RW13
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W13A
LTP/FTP LATITUDE	390429.2350N
LTP/FTP LONGITUDE	0953737.3650W
LTP/FTP ELLIPSOIDAL HEIGHT	+02368
FPAP LATITUDE	390326.9100N
FPAP LONGITUDE	0953615.5300W
THRESHOLD CROSSING HEIGHT (TCH)	00038.5
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1200
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
 <u>CRC REMAINDER</u>	 C3C643A8

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+02681
FPAP ORTHOMETRIC HEIGHT	+02681

CITY AND STATE
TOPEKA, KS

ELEVATION: 881 TDZE: 881
AIRPORT NAME:
PHILIP BILLARD MUNI

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 13, AMDT 1B
29 MARCH 2018

SUP:
AMDT: 1A
DATED: 10/16/2014

QUALITY
10
CHECKED

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						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		LP: RW31 LNAV: RW31 CLIMB TO 3600 DIRECT KENEC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 129.20 INBOUND. CHART FAS OBST: 1059 TREE 390205N/0953459W. CHART VDP AT 1.22 NM TO RW31. WAAS CHANNEL # 69627 REFERENCE PATH ID: W31A CHART CIRCLING ICON. ROGGO TO RW31:3.00/55 LTP HAE: 235.5 M											
TOP VORTAC				YAVUP (TF) (FO) (RNP 2.00)				152.85 / 13.10				3600													
RUGBB (IAF)				YAVUP (NOPT) (TF) (FB) (RNP 1.00)				248.38 / 15.04				3600													
JHAWK (IAF)				YAVUP (NOPT) (TF) (FB) (RNP 1.00)				347.18 / 7.82				3600													
YAVUP (IF/IAF)				ROGGO (TF) (FB) (RNP 1.00)				309.45 / 5.92				2600													
ROGGO (FAF)				LOCER/2.30 NM TO RW31 (TF) (FB) (RNP 0.30)				309.39 / 2.94																	
(SEE FORM 8260-10)																									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SE YAVUP, RT, 309.45 INBOUND, 3600 FT. IN LIEU OF PT (IAF) 3. FAC: 309.39 FAF: ROGGO DIST FAF TO MAP: 5.24 THLD: 5.24 4. MIN. ALT: YAVUP 3600, ROGGO 2600, LOCER/2.30 NM TO RW31 1660 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: _____ GS ALT AT: _____ OM: _____ MM: _____ IM: _____ 7. GS ANGLE: _____ TCH: 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW31 3600																MAG VAR: 5E				EPOCH YEAR: 2000					
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										
LP MDA	1320	1	440	1320	1	440	1320	1 3/8	440		NA														
LNAV MDA	1340	1	460	1340	1	460	1340	1 3/8	460		NA														
CIRCLING	1360	1	479	1440	1	559	1600	2	719		NA														
NOTES: CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON TOP VORTAC AIRWAY RADIALS 072 CW 231.																									
CITY AND STATE				ELEVATION: 881 TDZE: 880				FACILITY IDENTIFIER:				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
TOPEKA, KS				AIRPORT NAME:				RNAV				RNAV (GPS) RWY 31, AMDT 1B				AMDT: 1A									
				PHILIP BILLARD MUNI								29 MARCH 2018				DATED 10/16/2014									

QUALITY
 10
 CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV - 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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
LOCER/2.30 NM TO RW31	RW31 (MAP) (TF) (FO) (RNP 0.30)	309.39 / 2.30	
RW31 (MAP)	1281 MSL (CA)	309.39	
1281 MSL	KENEC (DF) (FO) (RNP 1.00)		3600

CITY AND STATE
TOPEKA, KS

ELEVATION: 881 TDZE: 880
AIRPORT NAME:
PHILIP BILLARD MUNI

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 31, AMDT 1B
29 MARCH 2018

SUP:
AMDT: 1A
DATED: 10/16/2014

QUALITY
10
CHECKED

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KTOP
RUNWAY	RW31
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	390354.0140N
LTP/FTP LONGITUDE	0953651.1230W
LTP/FTP ELLIPSOIDAL HEIGHT	+02355
FPAP LATITUDE	390456.3400N
FPAP LONGITUDE	0953812.9500W
THRESHOLD CROSSING HEIGHT (TCH)	00054.7
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1200
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
 <u>CRC REMAINDER</u>	 5D661F2E

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+02669
FPAP ORTHOMETRIC HEIGHT	+02669

CITY AND STATE
TOPEKA, KS

ELEVATION: 881 TDZE: 880
AIRPORT NAME:
PHILIP BILLARD MUNI

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 31, AMDT 1B
29 MARCH 2018

SUP: **QUALITY
10
CHECKED**
AMDT: 1A
DATED: 10/16/2014

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						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		LNAV: RW03 CLIMB TO 3000 DIRECT OXVOR AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NE, RT, 206.57 INBOUND. CHART FAS OBST: 734 TREE 374805N/0853021W. CHART 796 TREE 374549N/0853051W. 980 AAO 374410N/0853105W. CHART CIRCLING ICON. MAARK TO RW03: 3.50/40.5.											
MAASH (IAF)				MAKRZ (NOPT) (TF) (FB) (RNP 1.00)				116.39 / 5.50				3100													
DSTIL (IAF)				MAKRZ (NOPT) (TF) (FB) (RNP 1.00)				296.52 / 5.50				3100													
MAKRZ (IF/IAF)				MAARK (TF) (FB) (RNP 1.00)				026.45 / 6.70				2300													
MAARK (FAF)				BARRL/2.40 NM TO RW03 (TF) (FB) (RNP 0.30)				026.49 / 1.97																	
BARRL/2.40 NM TO RW03				RW03 (MAP) (TF) (FO) (RNP 0.30)				026.49 / 2.40																	
(SEE FORM 8260-10)																									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SW MAKRZ, RT, 026.45 INBOUND, 3100 FT. IN LIEU OF PT (IAF) 3. FAC: 026.49 FAF: MAARK DIST FAF TO MAP: 4.37 THLD: 4.37 4. MIN. ALT: MAKRZ 3100, MAARK 2300, BARRL/2.40 NM TO RW03 1560 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: _____ GS ALT AT: _____ OM: _____ MM: _____ IM: _____ 7. GS ANGLE: _____ TCH: 34:1 IS NOT CLEAR 8. MSA FROM: _____																									
																MAG VAR: 5W 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										
LNAV MDA	1000	1	345	1000	1	345	1000	1	345	1000	1	345													
CIRCLING	1200	1	531	1260	1	591	1360	2	691	1480	2 3/4	811													
NOTES: CHART NOTE: RWY 3 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART SPEED ICON IN PLANVIEW AT MAKRZ : MAX 180 KIAS. CHART NOTE: STRAIGHT-IN AND CIRCLING RWY 3 NA AT NIGHT.																									
CITY AND STATE BARDSTOWN, KY				ELEVATION: 669 TDZE: 655 AIRPORT NAME: SAMUELS FIELD				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 3, AMDT 1 29 MARCH 2018				SUP: RNAV (GPS) RWY 2									
																AMDT: ORIG-A									
																DATED 11/12/2015									



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW03 (MAP)	1000 MSL (CA)		
1000 MSL	OXVOR (DF) (FO) (RNP 1.00)		3000

TAA

	FROM	TO	ALT
1.	296/30 CW 116/30 (NOPT)	MAKRZ (IF/IAF) (FB)	3100
2.	116/30 CW 206/30	MAASH (IAF) (FB)	3100
3.	206/30 CW 296/30	DSTIL (IAF) (FB)	3100

QUALITY
25
CHECKED

CITY AND STATE
BARDSTOWN, KY

ELEVATION: 669 TDZE: 655
AIRPORT NAME:
SAMUELS FIELD

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 3, AMDT 1
29 MARCH 2018

SUP: RNAV (GPS) RWY 2
AMDT: ORIG-A
DATED: 11/12/2015

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						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		LPV: DA LNAV/VNAV: DA LNAV: RW21 CLIMB TO 3100 DIRECT MAKRZ AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SW, RT, 026.45 INBOUND. FAS OBST: 930 AAO 375223N/0852807W. DISTANCE TO THLD FROM 250 HAT: 0.66 NM. CHART VDP AT 1.51 NM TO RW21* *LNAV ONLY. WAAS CHANNEL # 77816 REFERENCE PATH ID: W21A CHART CIRCLING ICON. LTP HAE: 170.2 M											
FAMRU (IAF)				OXVOR (NOPT) (TF) (FB) (RNP 1.00)				116.50 / 5.50				3000													
ESSEV (IAF)				OXVOR (NOPT) (TF) (FB) (RNP 1.00)				296.63 / 5.50				3000													
OXVOR (IF/IAF)				UNDOZ (TF) (FB) (RNP 1.00)				206.57 / 6.00				2500													
UNDOZ (FAF)				RW21 (MAP) (TF) (FO) (RNP 0.30)				206.54 / 5.62																	
RW21 (MAP)				919 MSL (CA)								3100													
919 MSL				MAKRZ (DF) (FO) (RNP 1.00)																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NE OXVOR, RT, 206.57 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 206.54 FAF: UNDOZ _____ DIST FAF TO MAP: 5.62 THLD: 5.62 4. MIN. ALT: OXVOR 3000, UNDOZ 2500 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2500 GS ALT AT: UNDOZ 2500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 34:1 IS NOT CLEAR 8. MSA FROM: _____																MAG VAR: 5W					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										
LPV DA	919	3/4	250	919	3/4	250	919	3/4	250	919	3/4	250													
LNAV/VNAV DA	1051	1 1/8	382	1051	1 1/8	382	1051	1 1/8	382	1051	1 1/8	382													
LNAV MDA	1180	1	511	1180	1	511	1180	1 3/8	511	1180	1 3/8	511													
CIRCLING	1200	1	531	1260	1	591	1360	2	691	1480	2 3/4	811													
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). @ CAT D 900-2 3/4 CHART NOTE: CIRCLING RWY 3 NA AT NIGHT. CHART NOTE: RWY 21 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)																									
CITY AND STATE				ELEVATION: 669 TDZE: 669				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP: RNAV (GPS) RWY 20									
BARDSTOWN, KY				AIRPORT NAME:								RNAV (GPS) RWY 21, AMDT 1				AMDT: ORIG-A									
				SAMUELS FIELD								29 MARCH 2018				DATED 11/12/2015									

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV - STANDARD

INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

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NOTES, (CONT.):

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

CHART SPEED ICON IN PLANVIEW AT OXVOR: MAX 180 KIAS.

TAA	FROM	TO	ALT
1.	117/30 CW 157/30 (NOPT)	OXVOR (IF/IAF)	3000
	157/20 CW 207/20	OXVOR (IF/IAF)	3000
	207/30 CW 297/30 (NOPT)	OXVOR (IF/IAF)	3000
2.	157/30 CW 207/30 (NOPT)	157/20 CW 207/20	3600
3.	297/30 CW 027/30	ESSEV (IAF)	3100
4.	027/30 CW 117/30	FAMRU (IAF)	3000



CITY AND STATE BARDSTOWN, KY	ELEVATION: 669 AIRPORT NAME: SAMUELS FIELD	TDZE: 669	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 21, AMDT 1 29 MARCH 2018	SUP: RNAV (GPS) RWY 20
					AMDT: ORIG-A
					DATED: 11/12/2015

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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 BARDSTOWN, KY	ELEVATION: 669 TDZE: 669 AIRPORT NAME: SAMUELS FIELD	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 21, AMDT 1 29 MARCH 2018	SUP: RNAV (GPS) RWY 20
				AMDT: ORIG-A
				DATED: 11/12/2015

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KBRY
RUNWAY	RW21
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W21A
LTP/FTP LATITUDE	374914.5665N
LTP/FTP LONGITUDE	0852947.2740W
LTP/FTP ELLIPSOIDAL HEIGHT	+01702
FPAP LATITUDE	374751.5755N
FPAP LONGITUDE	0853028.4930W
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	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

F229291E

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02038
FPAP ORTHOMETRIC HEIGHT	+02038

QUALITY
25
CHECKED

CITY AND STATE

BARDSTOWN, KY

ELEVATION: 669

TDZE: 669

AIRPORT NAME:

SAMUELS FIELD

 FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 21, AMDT 1

29 MARCH 2018

SUP: RNAV (GPS) RWY 20

AMDT: ORIG-A

DATED: 11/12/2015

**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>
BARDSTOWN, KY	SAMUELS FIELD	29 MARCH 2018	2

TAKEOFF MINIMUMS:

RWY 3, 21: STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 03: TRAVERSE WAY, FENCE BEGINNING 3 FT FROM DER, 250 FT LEFT OF CENTERLINE, UP TO 674 FT MSL.

TREE 332 FT FROM DER, 561 FT LEFT OF CENTERLINE, 66 FT AGL/694 FT MSL.

TREES BEGINNING 332 FT FROM DER, 394 FT LEFT OF CENTERLINE, UP TO 64 FT AGL/695 FT MSL.

TREES BEGINNING 362 FT FROM DER, 364 FT LEFT OF CENTERLINE, UP TO 63 FT AGL/706 FT MSL.

TREES BEGINNING 385 FT FROM DER, 367 FT LEFT OF CENTERLINE, UP TO 84 FT AGL/709 FT MSL.

TREES BEGINNING 387 FT FROM DER, 372 FT LEFT OF CENTERLINE, UP TO 86 FT AGL/718 FT MSL.

TREE 437 FT FROM DER, 574 FT RIGHT OF CENTERLINE, 72 FT AGL/702 FT MSL.

TREES BEGINNING 446 FT FROM DER, 319 FT LEFT OF CENTERLINE, UP TO 86 FT AGL/728 FT MSL.

TREES BEGINNING 470 FT FROM DER, 429 FT RIGHT OF CENTERLINE, UP TO 85 FT AGL/711 FT MSL.

TREES BEGINNING 556 FT FROM DER, 417 FT RIGHT OF CENTERLINE, UP TO 84 FT AGL/713 FT MSL.

TREES BEGINNING 569 FT FROM DER, 365 FT RIGHT OF CENTERLINE, UP TO 103 FT AGL/720 FT MSL.

TREES BEGINNING 722 FT FROM DER, 417 FT RIGHT OF CENTERLINE, UP TO 94 FT AGL/724 FT MSL.

TREES BEGINNING 749 FT FROM DER, 405 FT RIGHT OF CENTERLINE, UP TO 95 FT AGL/729 FT MSL.

TREE 2340 FT FROM DER, 372 FT LEFT OF CENTERLINE, 74 FT AGL/733 FT MSL.

TREE 2359 FT FROM DER, 319 FT LEFT OF CENTERLINE, 78 FT AGL/737 FT MSL.

TREES BEGINNING 3127 FT FROM DER, 799 FT LEFT OF CENTERLINE, UP TO 92 FT AGL/752 FT MSL.

TREES BEGINNING 3373 FT FROM DER, 615 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/758 FT MSL.

NOTE: RWY 21: CATENARY 4 FT FROM DER, 422 FT LEFT OF CENTERLINE, 28 FT AGL/650 FT MSL.

TERRAIN 42 FT FROM DER, 228 FT RIGHT OF CENTERLINE, 639 FT MSL.

FENCE 90 FT FROM DER, 247 FT RIGHT OF CENTERLINE, 6 FT AGL/642 FT MSL.

FENCE 107 FT FROM DER, 246 FT RIGHT OF CENTERLINE, 8 FT AGL/643 FT MSL.

CATENARY, TRANSMISSION_LINE, TREE BEGINNING 122 FT FROM DER, 214 FT LEFT OF CENTERLINE, UP TO 35 FT AGL/657 FT MSL.

TREES BEGINNING 338 FT FROM DER, 347 FT RIGHT OF CENTERLINE, UP TO 71 FT AGL/689 FT MSL.

TREES BEGINNING 421 FT FROM DER, 67 FT LEFT OF CENTERLINE, UP TO 61 FT AGL/660 FT MSL.

TREES BEGINNING 463 FT FROM DER, 30 FT RIGHT OF CENTERLINE, UP TO 85 FT AGL/695 FT MSL.

TREES BEGINNING 575 FT FROM DER, 127 FT LEFT OF CENTERLINE, UP TO 78 FT AGL/674 FT MSL.

TREES BEGINNING 1025 FT FROM DER, 4 FT LEFT OF CENTERLINE, UP TO 73 FT AGL/684 FT MSL.

TREE, POLE BEGINNING 1355 FT FROM DER, 36 FT LEFT OF CENTERLINE, UP TO 60 FT AGL/688 FT MSL.

TREE 1604 FT FROM DER, 87 FT RIGHT OF CENTERLINE, 79 FT AGL/698 FT MSL.

TREES BEGINNING 1621 FT FROM DER, 71 FT RIGHT OF CENTERLINE, UP TO 76 FT AGL/700 FT MSL.

TREES BEGINNING 1651 FT FROM DER, 59 FT RIGHT OF CENTERLINE, UP TO 82 FT AGL/712 FT MSL.

TREE 1725 FT FROM DER, 391 FT LEFT OF CENTERLINE, 73 FT AGL/700 FT MSL.

TREES BEGINNING 1805 FT FROM DER, 93 FT LEFT OF CENTERLINE, UP TO 91 FT AGL/715 FT MSL.

TREES BEGINNING 2555 FT FROM DER, 94 FT LEFT OF CENTERLINE, UP TO 101 FT AGL/734 FT MSL.

TREES BEGINNING 2742 FT FROM DER, 65 FT RIGHT OF CENTERLINE, UP TO 88 FT AGL/722 FT MSL.



**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>
BARDSTOWN, KY	SAMUELS FIELD	29 MARCH 2018	2

CONTROLLING OBSTACLES:

REMARKS:

FLIGHT INSPECTED BY:

MARC J HINCK

Digitally signed by
ADOLFO D URRUTIA
Feb 16, 2018

OFFICE SYMBOL:
FICO

DATE:
2/15/18

DEVELOPED BY:

IVAN BLANCO

Digitally signed by
IVAN BLANCO
Oct 11, 2017

OFFICE SYMBOL:
AJV-5432

DATE:
10/11/2017

APPROVED BY:

PATRICK MULQUEEN

Digitally signed by
ADOLFO D URRUTIA
Feb 16, 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:

ZID ARTCC, SDF APP CON, AMGR.

CHANGES - REASONS:

1. CHANGED RWY NUMBERS FROM 2/20 TO 3/21 - MAG VAR ROTATION FROM 3W/1995 TO 5W/2020
2. ADDED LOW CLOSE-IN OBSTACLES TO RWY 3/21 - NEW SURVEY (08/15/2012).
3. REMOVED RWY 2 (NOW RWY 3) IFR DEPARTURE PROCEDURE - NO LONGER REQUIRED BASED ON NEW SURVEY.



U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION VOR/DME STANDARD INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.23										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		MAP: EWO VOR/DME 13.39 DME								
EWO VOR/DME (IF/IAF)			MARNY/EWO 8.48 DME			036.92 / 8.48			2500		CLIMBING LEFT TURN TO 2500 DIRECT EWO VOR/DME AND HOLD.								
										ADDITIONAL FLIGHT DATA: FAS OBST: 940 AAO 374622N/0853344W. CHART CIRCLING ICON. MARNY TO RW03: 3.50/41. FAC 848 FEET L OF RWY C/L EXTENDED 3000 FEET FROM THLD.									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																			
2. HOLD SW EWO VOR/DME, RT, 036.92 INBOUND, 2500 FT. IN LIEU OF PT (IAF)																			
3. FAC 036.92 FAF MARNY/EWO 8.48 DME _____ DIST FAF TO MAP _____ THLD 4.91																			
4. MIN. ALT EWO VOR/DME 2500, MARNY 2500																			
8. MSA FROM: EWO VOR/DME 3100										MAG VAR: 1E EPOCH YEAR: 1965									
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD @							
CATEGORY =====>		A			B			C			D			E					
		MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA			
S-03		1200	1	545	1200	1	545	1200	1 5/8	545	1200	1 5/8	545						
CIRCLING		1200	1	531	1260	1	591	1360	2	691	1480	2 3/4	811						
NOTES: CHART NOTE: STRAIGHT-IN AND CIRCLING MINIMUMS NA AT NIGHT. @ CAT D 900-2 3/4 CHART NOTE: RWY 3 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: DME REQUIRED. CHART PLANVIEW NOTE: NOPT FOR ARRIVAL ON EWO VOR/DME AIRWAY RADIALS R-164, R-220, AND R-258.																			
CITY AND STATE BARDSTOWN, KY				ELEVATION: 669 TDZE: 655 AIRPORT NAME: SAMUELS FIELD				FACILITY IDENTIFIER: EWO		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR RWY 3, AMDT 1 29 MARCH 2018						SUP VOR/DME-A AMDT ORIG-A DATE 01/17/2008			

ILS - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29										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		ILS: DA LOC: 6.11 NM AFTER SLGRR/I-PKI 7.55 DME/RADAR OR AT I-PKI 1.44 DME CLIMB TO 1600 THEN CLIMBING LEFT TURN TO 4000 ON HEADING 030 AND BQM VOR/DME R-071 TO TORAC/BQM 14.81 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1400 THEN CLIMBING LEFT TURN TO 4000 ON IIU VORTAC R-279 TO IIU (SEE FORM 8260-10) ADDITIONAL FLIGHT DATA: HOLD W, LT, 071.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE LAZYT INT/IIU 10.00 DME, RT, 292.99 INBOUND. CHART FAS OBST: 683 TOWER 381325N/0854458W CHART VDP AT 2.66 DME* DISTANCE VDP TO THLD 1.22 NM. *LOC ONLY. CHART IN PLANVIEW: LAZYT INT/IIU 10.00 DME. CHART CIRCLING ICON. CHART PLANVIEW NOTE: RADAR REQUIRED.									
THUND/I-PKI 16.85 DME/RADAR (IF) RACRR/I-PKI 13.31 DME/RADAR				RACRR/I-PKI 13.31 DME/RADAR SLGRR/I-PKI 7.55 DME/RADAR				169.91 / 3.53 (I-PKI) 169.91 / 5.77 (I-PKI)						4000 2500											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT THUND 3. FAC: <u>169.91</u> FAF: <u>SLGRR/I-PKI 7.55 DME/RADAR</u> DIST FAF TO MAP: <u>6.11</u> THLD: <u>6.11</u> 4. MIN. ALT: THUND 5000, RACRR 4000, SLGRR 2500, KELEI/I-PKI 3.94 DME/RADAR 1320* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: 1142 6. MIN GS INCPT: <u>2500</u> GS ALT AT: <u>SLGRR 2500</u> OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>55.2</u> 8. MSA FROM: <u>IIU VORTAC 3600</u>																MAG VAR: 5W					EPOCH YEAR: 2020				
MINIMUMS																									
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		ILS: STANDARD				LOC: @											
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										
S-ILS 17L	699	1800	200	699	1800	200	699	1800	200	699	1800	200													
S-LOC 17L	1320	2400	821	1320	4000	821	1320	1 7/8	821	1320	1 7/8	821													
CIRCLING	1320	1 1/4	819	1320	1 1/4	819	1320	2 1/2	819	1400	3	899													
KELEI FIX MINIMUMS (DME OR RADAR REQUIRED)																									
S-LOC 17L	1000	2400	501	1000	2400	501	1000	5500	501	1000	5500	501													
CIRCLING	1040	1	539	1140	1	639	1160	1 3/4	659	1400	3	899													
NOTES: CHART NOTE: CIRCLING RWY 11 NA AT NIGHT. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: DME OR RADAR REQUIRED. CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).																@ CAT A, B 900-2, CAT C 900-2 1/2, CAT D 900-3					QUALITY 25 CHECKED				
CITY AND STATE LOUISVILLE, KY				ELEVATION: 501 TDZE: 499 AIRPORT NAME: LOUISVILLE INTL-STANDIFORD FIELD				FACILITY IDENTIFIER: I-PKI		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 17L, AMDT 4G 29 MARCH 2018						SUP: AMDT: 4F DATED 04/28/2016									

ILS - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29

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.

MISSED APPROACH INSTRUCTIONS, (CONT.):
VORTAC THEN RIGHT TURN ON IIU VORTAC R-113 TO LAZYT INT/IIU 10.00 DME AND HOLD.



CITY AND STATE LOUISVILLE, KY	ELEVATION: 501 TDZE: 499 AIRPORT NAME: LOUISVILLE INTL-STANDIFORD FIELD	FACILITY IDENTIFIER: I-PKI	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 17L, AMDT 4G 29 MARCH 2018	SUP:
				AMDT: 4F
				DATED: 04/28/2016

ILS - STANDARD US DEPARTMENT OF TRANSPORTATION INSTRUMENT APPROACH PROCEDURE FEDERAL AVIATION ADMINISTRATION TITLE 14 CFR PART 97.29							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		ILS: DA LOC: 6.17 NM AFTER CHRCL/I-SNU 8.08 DME/RADAR OR AT I-SNU 1.91 DME CLIMB TO 1600 THEN CLIMBING RIGHT TURN TO 3000 ON IIU VORTAC R-264 TO NADDI INT/IIU 24.65 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1400 THEN CLIMBING RIGHT TURN TO 4000 ON HEADING 330 AND BQM VOR/DME R-264 TO DAMEN INT/BQM 20.26 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, LT, 083.89 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD E DAMEN INT/BQM 20.26 DME, LT, 264.45 INBOUND. CHART FAS OBST: 640 BLDG 381217N/0854533W. CHART 735 TOWER 381402N/0854600W. CHART VDP AT 2.97 DME* DISTANCE VDP TO THLD 1.07 NM. *LOC ONLY. CHART IN PLANVIEW: DAMEN INT/BQM 20.26 DME. CHART CIRCLING ICON. CHART PLANVIEW NOTE: RADAR REQUIRED.					
SPYRS/I-SNU 13.85 DME/RADAR (IF)		BLGRS/I-SNU 10.36 DME/RADAR			170.40 / 3.49 (I-SNU)			3000							
BLGRS/I-SNU 10.36 DME/RADAR		CHRCL/I-SNU 8.08 DME/RADAR			170.40 / 2.28 (I-SNU)			2500							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT SPYRS/I-SNU 13.85 DME/RADAR 3. FAC: 170.40 FAF: CHRCL/I-SNU 8.08 DME/RADAR DIST FAF TO MAP: 6.17 THLD: 6.17 4. MIN. ALT: SPYRS 4000, BLGRS 3000, CHRCL 2500, VOYUK/I-SNU 4.51 DME/RADAR 1300* 5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 1040 6. MIN GS INCPT: 2500 GS ALT AT: CHRCL 2500 OM: - MM: - IM: - 7. GS ANGLE: 3.00 TCH: 49.7 8. MSA FROM: IIU VORTAC 3600										MAG VAR: 5W		EPOCH YEAR: 2020			
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		ILS: STANDARD			LOC: @			
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
S-ILS 17R	685	1800	200	685	1800	200	685	1800	200	685	1800	200			
S-LOC 17R	1300	2400	815	1300	4000	815	1300	1 7/8	815	1300	1 7/8	815			
CIRCLING	1300	1	799	1300	1 1/4	799	1300	2 1/2	799	1400	3	899			
VOYUK FIX MINIMUMS (DME OR RADAR REQUIRED)															
S-LOC 17R	900	2400	415	900	2400	415	900	4000	415	900	4000	415			
CIRCLING	1040	1	539	1140	1	639	1160	1 3/4	659	1400	3	899			
NOTES: CHART NOTE: CIRCLING RWY 11 NA AT NIGHT. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: DME OR RADAR REQUIRED. CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 501 TDZE: 485			FACILITY IDENTIFIER: I-SNU		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:			
LOUISVILLE, KY		AIRPORT NAME:			LOUISVILLE INTL-STANDIFORD FIELD		ILS OR LOC RWY 17R, AMDT 3G					AMDT: 3F			
							29 MARCH 2018					DATED 02/04/2016			

QUALITY
 25
 CHECKED

ILS - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29

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.

NOTES, (CONT.):
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 17R CATS C/D VISIBILITY TO 2 1/2 SM AND VOYUK FIX
MINIMUMS S-LOC 17R CATS C/D VISIBILITY TO RVR 6000.



CITY AND STATE LOUISVILLE, KY	ELEVATION: 501 AIRPORT NAME: LOUISVILLE INTL-STANDIFORD FIELD	TDZE: 485	FACILITY IDENTIFIER: I-SNU	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 17R, AMDT 3G 29 MARCH 2018	SUP:
					AMDT: 3F
					DATED: 02/04/2016

ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29				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		ILS: DA LOC: 5.90 NM AFTER CRDNL INT/I-RLI 7.75 DME/RADAR OR AT I-RLI 1.84 DME CLIMB TO 1600 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 230 AND IIU VORTAC R-279 TO DAMEN INT/IIU 24.48 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1600 THEN CLIMBING LEFT TURN TO 4000 ON HEADING 230 AND BQM VOR/DME R-264 TO DAMEN INT/BQM 20.26 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 099.01 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD E DAMEN INT/BQM 20.26 DME, LT, 264.45 INBOUND. CHART ARRIVAL HOLDING AT BRBON: HOLD S, RT, 008.43 INBOUND, 5000. CHART FAS OBST: 839 TREE 380651N/0854345W. CHART R3704 A AND B. CHART VDP AT 3.61 DME* DISTANCE VDP TO THLD 1.77 NM. *LOC ONLY. CHART CIRCLING ICON. CHART IN PLANVIEW: DAMEN INT/BQM 20.26 DME.					
BRBON INT/I-RLI 21.79 DME/RADAR (IAF)		RDBRD INT/I-RLI 17.37 DME/RADAR		350.40 / 4.41 (I-RLI)				5000							
RDBRD INT/I-RLI 17.37 DME/RADAR (IF)		AWLEE INT/I-RLI 13.84 DME/RADAR		350.40 / 3.53 (I-RLI)				4000							
AWLEE INT/I-RLI 13.84 DME/RADAR		CRDNL INT/I-RLI 7.75 DME/RADAR		350.40 / 6.10 (I-RLI)				2400							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT RDBRD INT/I-RLI 17.37 DME/RADAR 3. FAC: 350.40 FAF: CRDNL INT/I-RLI 7.75 DME/RADAR DIST FAF TO MAP: 5.90 THLD: 5.90 4. MIN. ALT: RDBRD 5000, AWLEE 4000, CRDNL 2400, BARRR INT/I-RLI 4.54 DME 1380* 5. DIST TO THLD FROM OM: - MM: - IM: 716 150 HAT: 1727 100 HAT: 773 GS ANT: 1119 6. MIN GS INCPT: 2400 GS ALT AT: CRDNL 2400 OM: - MM: - IM: 619 7. GS ANGLE: 3.00 TCH: 59.1 8. MSA FROM: IIU VORTAC 3600										MAG VAR: 5W		EPOCH YEAR: 2020			
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		ILS: STANDARD				LOC: @	
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
S-ILS 35L	664	1800	200	664	1800	200	664	1800	200	664	1800	200			
S-LOC 35L	1380	4000	916	1380	4000	916	1380	2	916	1380	2	916			
CIRCLING	1380	1 1/4	879	1380	1 1/4	879	1380	2 1/2	879	1400	3	899			
BARRR FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)															
S-LOC 35L	1100	2400	636	1100	2400	636	1100	1 3/8	636	1100	1 3/8	636			
CIRCLING	1100	1	599	1140	1	639	1160	1 3/4	659	1400	3	899			
NOTES: SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 35L: CAT A, B, C, D, RA 154, RVR 1400, HAT 150, DA 614 MSL. CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 35L: CAT A, B, C, D, RA 99, RVR 1200, HAT 100, DA 564 MSL. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 501 TDZE: 464		FACILITY IDENTIFIER: I-RLI		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:						SUP:			
LOUISVILLE, KY		AIRPORT NAME:		LOUISVILLE INTL-STANDIFORD FIELD		ILS OR LOC RWY 35L, AMDT 3F; ILS RWY 35L (SA CAT I), ILS RWY 35L (CAT II), ILS RWY 35L (CAT III)						AMDT: 3E			
						29 MARCH 2018						DATED 02/04/2016			



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION ILS - STANDARD INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29			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.		
NOTES, (CONT.): CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 35L: CAT III CAT A, B, C, D, RVR 600. CHART NOTE: CIRCLING RWY 11 NA AT NIGHT. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. 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. CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 35L BARRR FIX MINIMUMS CATS C/D VISIBILITY TO 1 3/4 SM. CHART PLANVIEW NOTE: ARRIVAL HOLDING NOT REQUIRED AT BRBON ON V5-513 NORTHBOUND.					
CITY AND STATE LOUISVILLE, KY	ELEVATION: 501	TDZE: 464	FACILITY IDENTIFIER: I-RLI	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 35L, AMDT 3F; ILS RWY 35L (SA CAT I) , ILS RWY 35L (CAT II) , ILS RWY 35L (CAT III) 29 MARCH 2018	SUP:
	AIRPORT NAME: LOUISVILLE INTL-STANDIFORD FIELD				AMDT: 3E
					DATED: 02/04/2016



ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29				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		ILS: DA LOC: 5.87 NM AFTER PARCL INT/I-JJM 7.30 DME/RADAR OR AT I-JJM 1.43 DME CLIMB TO 1600 THEN CLIMBING RIGHT TURN TO 4000 ON HEADING 090 AND BQM VOR/DME R-071 TO TORAC/BQM 14.81 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1600 THEN CLIMBING RIGHT TURN TO 4000 ON HEADING 150 AND IJU VORTAC R-113 TO LAZYT INT/IIU 10.00 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, LT, 071.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE LAZYT INT/IIU 10.00 DME, RT, 292.99 INBOUND. CHART FAS OBST: 565 TREE 380945N/0854311W. CHART R-3704 A & B. CHART VDP AT 2.30 DME* DISTANCE VDP TO THLD 0.87 NM. *LOC ONLY. CHART IN PLANVIEW: LAZYT INT/IIU 10.00 DME. CHART CIRCLING ICON. CHART ARRIVAL HOLDING AT BRBON: HOLD S, RT, 008.43 INBOUND, 4000.					
BRBON INT/IIU 16.24 DME/RADAR (IAF)		PGSUS INT/I-JJM 13.39 DME/RADAR		034.92 (HDG)/ 1.39 & 349.91 / 7.25 (I-JJM)				4000							
PGSUS INT/I-JJM 13.39 DME/RADAR (IF)		UPSCO INT/I-JJM 9.90 DME/RADAR		349.91 / 3.49 (I-JJM)				3000							
UPSCO INT/I-JJM 9.90 DME/RADAR		PARCL INT/I-JJM 7.30 DME/RADAR		349.91 / 2.60 (I-JJM)				2400							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT PGSUS INT/I-JJM 13.39 DME/RADAR 3. FAC: <u>349.91</u> FAF: <u>PARCL INT/I-JJM 7.30 DME/RADAR</u> DIST FAF TO MAP: <u>5.87</u> THLD: <u>5.87</u> 4. MIN. ALT: <u>PGSUS 4000, UPSCO 3000, PARCL 2400, HOSTO INT/I-JJM 4.13 DME/RADAR 1380*</u> 5. DIST TO THLD FROM OM: _____ - _____ MM: _____ - _____ IM: <u>570</u> 150 HAT: <u>1718</u> 100 HAT: <u>764</u> GS ANT: <u>1101</u> 6. MIN GS INCPT: <u>2400</u> GS ALT AT: <u>PARCL 2400</u> OM: _____ - _____ MM: _____ - _____ IM: <u>609</u> 7. GS ANGLE: <u>3.00</u> TCH: <u>60.4</u> 8. MSA FROM: <u>IIU VORTAC 3600</u>										MAG VAR: 5W		EPOCH YEAR: 2020			
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		ILS: STANDARD		LOC: @			
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
S-ILS 35R	680	1800	200	680	1800	200	680	1800	200	680	1800	200			
S-LOC 35R	1380	4000	900	1380	4000	900	1380	2	900	1380	2	900			
CIRCLING	1380	1 1/4	879	1380	1 1/4	879	1380	2 1/2	879	1400	3	899			
HOSTO MINIMUMS (DUAL VOR RECEIVERS OR DME OR RADAR REQUIRED)															
S-LOC 35R	820	2400	340	820	2400	340	820	2600	340	820	2600	340			
CIRCLING	1040	1	539	1140	1	639	1160	1 3/4	659	1400	3	899			
NOTES: SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 35R: CAT A, B, C, D, RA 162, RVR 1400, HAT 150, DA 630 MSL. CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 35R: CAT A, B, C, D, RA 100, RVR 1200, HAT 100, DA 580 MSL. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 501 TDZE: 480		FACILITY IDENTIFIER: I-JJM		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:						SUP:			
LOUISVILLE, KY		AIRPORT NAME:		LOUISVILLE INTL-STANDIFORD FIELD		ILS OR LOC RWY 35R, AMDT 4E; ILS RWY 35R (SA CAT I), ILS RWY 35R (CAT II), ILS RWY 35R (CAT III)						AMDT: 4D			
						29 MARCH 2018						DATED 10/15/2015			



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION ILS - STANDARD INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29			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.		
NOTES, (CONT.): CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 35R: CAT III CAT A, B, C, D, RVR 600. CHART NOTE: CIRCLING RWY 11 NA AT NIGHT. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: DME OR RADAR REQUIRED. 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. CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 35R HOSTO FIX MINIMUMS CATS C/D VISIBILITY TO RVR 5000. CHART PLANVIEW NOTE: ARRIVAL HOLDING NOT REQUIRED AT BRBON ON V5-513 NORTHBOUND.					
CITY AND STATE LOUISVILLE, KY	ELEVATION: 501 AIRPORT NAME: LOUISVILLE INTL-STANDIFORD FIELD	TDZE: 480	FACILITY IDENTIFIER: I-JJM	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 35R, AMDT 4E; ILS RWY 35R (SA CAT I) , ILS RWY 35R (CAT II) , ILS RWY 35R (CAT III) 29 MARCH 2018	SUP: AMDT: 4D DATED: 10/15/2015



U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION LOC STANDARD INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.25							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		MAP: 4.11 NM AFTER LAANG LOM OR AT (CFCCG)					
BETHY		LAANG LOM			078.91 / 15.66			2400		CLIMB TO 1600 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 270 AND ON IJU VORTAC R-279 TO DAMEN INT/IJU 24.48 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 099.01 INBOUND. FAS OBST: 800 AAO 380832N/0853846W. 860 AAO 380824N/0853809W. CHART CIRCLING ICON. LAANG LOM TO RWY29: 3.00/56. CHART (CFCCG) AT MAP. FAC 205 FT R OF RWY C/L EXTENDED 3000 FT FROM THLD. CHART PLANVIEW NOTE: LOC OFFSET 1.04 DEGREES.					
LAZYT INT/IJU 10.00 DME (IAF)		GONKE/IJU 3.43 DME (NOPT)			327.00 / 3.18 (HDG) & 297.17 / 4.04 (I-LKS)			2300							
GONKE/IJU 3.43 DME (IF)		LAANG LOM			297.17 / 6.56 (I-LKS)			2000							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 5W EPOCH YEAR: 2020					
2. HOLD SE LAANG LOM, RT, 297.17 INBOUND, 2300 FT. IN LIEU OF PT (IAF)															
3. FAC 297.17 FAF LAANG LOM _____ DIST FAF TO MAP 4.11 THLD 4.61															
4. MIN. ALT LAANG LOM 2000															
8. MSA FROM: LK LOM 3600															
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		STANDARD @						
CATEGORY =====>	A			B			C			D			E		
	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA
S-29	1060	4000	580	1060	1 1/4	580	1060	1 1/4	580	1060	1 1/4	580			
CIRCLING	1060	1	559	1140	1	639	1160	1 3/4	659	1400	3	899			
NOTES:															
CHART NOTE: CIRCLING RWY 11 NA AT NIGHT. @ CAT D 900-3															
CHART NOTE: RWY 29 HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED.															
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BETHY ON V4 WESTBOUND.															
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT LAZYT ON V171 EASTBOUND.															
(CONTINUED ON PAGE 2)															
CITY AND STATE LOUISVILLE, KY		ELEVATION: 501 TDZE: 480 AIRPORT NAME: LOUISVILLE INTL-STANDIFORD FIELD		FACILITY IDENTIFIER: I-LKS		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: LOC RWY 29, ORIG-B 29 MARCH 2018				SUP AMDT ORIG-A DATE 11/10/2016					

**LOC STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - - TITLE 14 CFR PART 97.25**

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.

NOTES, (CONT.):

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-29 CATS A/B VISIBILITY TO RVR 5500 AND S-29 CATS C/D VISIBILITY TO 1 5/8 SM.

CHART PLANVIEW NOTE: ADF OR DME REQUIRED.

QUALITY
25
CHECKED

CITY AND STATE

LOUISVILLE, KY

ELEVATION: 501**TDZE: 480**

AIRPORT NAME:

LOUISVILLE INTL-STANDIFORD FIELD

FACILITY
IDENTIFIER:

I-LKS

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

LOC RWY 29, ORIG-B

29 MARCH 2018

SUP:

AMDT: **ORIG-A**DATED: **11/10/2016**

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW29								
MIXKO (IAF)		CITMO (NOPT) (TF) (FB) (RNP 1.00)		015.89 / 8.70		3000		CLIMB TO 3000 DIRECT ZUSAB AND ON TRACK 268.78 TO DAMEN AND HOLD.								
FINCH (IAF)		CITMO (NOPT) (TF) (FB) (RNP 1.00)		264.63 / 14.53		3000										
CITMO (IF/IAF)		CUCAK (TF) (FB) (RNP 1.00)		296.27 / 6.00		2200										
CUCAK (FAF)		RW29 (MAP) (TF) (FO) (RNP 0.30)		296.19 / 5.15												
RW29 (MAP)		773 MSL (CA)		296.19				ADDITIONAL FLIGHT DATA: HOLD W, RT, 099.00 INBOUND. CHART FAS OBST: 736 TOWER 380816N/0853921W CHART: 789 TREE 380836N/0853657W DISTANCE TO THLD FROM 293 HAT: 0.75 NM. CHART VDP AT 1.59 NM TO RW29* *LNAV ONLY. WAAS CHANNEL # 81801 REFERENCE PATH ID: W29A CHART CIRCLING ICON. LTP HAE: 113 M								
(SEE FORM 8260-10)																
1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)										MAG VAR: 5W EPOCH YEAR: 2020						
2. HOLD SE CITMO, RT, 296.27 INBOUND, 3000 FT. IN LIEU OF PT (IAF)																
3. FAC: 296.19 FAF: CUCAK DIST FAF TO MAP: 5.15 THLD: 5.15																
4. MIN. ALT: CITMO 3000, CUCAK 2200																
5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 100 HAT: GS ANT:																
6. MIN GS INCPT: 2200 GS ALT AT: CUCAK 2200 OM: MM: IM:																
7. GS ANGLE: 3.00 TCH: 55.0 20:1 IS CLEAR 34:1 IS NOT CLEAR																
8. MSA FROM: RW29 3600																
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
LPV DA		773	4000	293	773	4000	293	773	4000	293	773	4000	293			
LNAV/VNAV DA		943	5000	463	943	5000	463	943	5000	463	943	5000	463			
LNAV MDA		1040	4000	560	1040	4000	560	1040	5000	560	1040	6000	560			
CIRCLING		1040	1	539	1140	1	639	1160	1 3/4	659	1400	3	899			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). @ CAT D 900-3 CHART NOTE: CIRCLING RWY 11 NA AT NIGHT. CHART NOTE: RWY 29 HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)																
CITY AND STATE LOUISVILLE, KY		ELEVATION: 501 TDZE: 480 AIRPORT NAME: LOUISVILLE INTL-STANDIFORD FIELD		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 29, ORIG-C 29 MARCH 2018				SUP: AMDT: ORIG-B DATED 10/15/2015						



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
773 MSL	ZUSAB (DF) (FB) (RNP 1.00)		
ZUSAB	DAMEN (TF) (FO) (RNP 1.00)	268.78 / 13.40	3000

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MIXKO ON V51 SOUTHBOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT FINCH ON V512 EASTBOUND.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV ALL CATS VISIBILITY AND LNAV CATS A/B VISIBILITY TO RVR 5000.

QUALITY
25
CHECKED

CITY AND STATE
LOUISVILLE, KY

ELEVATION: 501 TDZE: 480
AIRPORT NAME:
LOUISVILLE INTL-STANDIFORD FIELD

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 29, ORIG-C
29 MARCH 2018

SUP:
AMDT: ORIG-B
DATED: 10/15/2015

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSDF
RUNWAY	RW29
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W29A
LTP/FTP LATITUDE	381022.9895N
LTP/FTP LONGITUDE	0854325.7655W
LTP/FTP ELLIPSOIDAL HEIGHT	+01130
FPAP LATITUDE	381055.1300N
FPAP LONGITUDE	0854511.1710W
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	0544
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 F153A3EB

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01463
FPAP ORTHOMETRIC HEIGHT	+01463

QUALITY
25
CHECKED

CITY AND STATE LOUISVILLE, KY	ELEVATION: 501 AIRPORT NAME: LOUISVILLE INTL-STANDIFORD FIELD	TDZE: 480	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 29, ORIG-C 29 MARCH 2018	SUP:
					AMDT: ORIG-B
					DATED: 10/15/2015

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION INSTRUMENT APPROACH PROCEDURE FEDERAL AVIATION ADMINISTRATION 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		LPV: DA LNAV/VNAV: DA LNAV: RW17L CLIMB TO 1000 THEN CLIMBING LEFT TURN TO 3000 DIRECT IIL VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 300.00 INBOUND. CHART FAS OBST: 657 TOWER 381151N/0854442W CHART: 683 TOWER 371325N/0854458W DISTANCE TO THLD FROM 200 HAT: 0.45 NM. CHART VDP AT 0.99 NM TO RW17L* *LNAV ONLY. WAAS CHANNEL # 90101 REFERENCE PATH ID: W17B CHART CIRCLING ICON. LTP HAE: 118.9 M						
HONOS (IAF)		THUND (TF) (FB) (RNP 1.00)			123.86 / 17.01			5000								
THUND (IF)		RACRR (TF) (FB) (RNP 1.00)			169.86 / 3.53			4000								
RACRR		SLGRR (TF) (FB) (RNP 1.00)			169.87 / 5.77			2500								
SLGRR (FAF)		KELEI/2.50 NM TO RW17L (TF) (FB) (RNP 0.30)			169.89 / 3.61											
KELEI/2.50 NM TO RW17L		RW17L (MAP) (TF) (FO) (RNP 0.30)			169.89 / 2.50											
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT THUND 3. FAC: 169.89 FAF: SLGRR DIST FAF TO MAP: 6.11 THLD: 6.11 4. MIN. ALT: THUND 5000, RACRR 4000, SLGRR 2500, KELEI/2.50 NM TO RW17L 1320* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2500 GS ALT AT: SLGRR 2500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 55.2 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW17L 3600																
										MAG VAR: 5W			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	
LPV DA	699	1800	200	699	1800	200	699	1800	200	699	1800	200				
LNAV/VNAV DA	818	2400	319	818	2400	319	818	2400	319	818	2400	319				
LNAV MDA	920	2400	421	920	2400	421	920	4000	421	920	4000	421				
CIRCLING	1040	1	539	1140	1	639	1160	1 3/4	659	1400	3	899				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -14C (7F) OR ABOVE 54C (130F). @ CAT D 900-3 CHART NOTE: CIRCLING RWY 11 NA AT NIGHT. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 501 TDZE: 499			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:			
LOUISVILLE, KY		AIRPORT NAME:			LOUISVILLE INTL-STANDIFORD FIELD			RNAV (GPS) Y RWY 17L, AMDT 1E					AMDT: 1D			
								29 MARCH 2018					DATED 08/17/2017			



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW17L (MAP)	1000 MSL (CA)	169.89	1000
1000 MSL	IIU VORTAC (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HONOS ON V171 NORTHWEST BOUND.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.
CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.

QUALITY
25
CHECKED

CITY AND STATE
LOUISVILLE, KY

ELEVATION: 501 TDZE: 499
AIRPORT NAME:
LOUISVILLE INTL-STANDIFORD FIELD

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) Y RWY 17L, AMDT 1E
29 MARCH 2018

SUP:
AMDT: 1D
DATED: 08/17/2017

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSDF
RUNWAY	RW17L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W17B
LTP/FTP LATITUDE	381111.1445N
LTP/FTP LONGITUDE	0854351.7595W
LTP/FTP ELLIPSOIDAL HEIGHT	+01189
FPAP LATITUDE	380945.0200N
FPAP LONGITUDE	0854322.3500W
THRESHOLD CROSSING HEIGHT (TCH)	00055.2
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0232
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

B265BFF7

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01522
FPAP ORTHOMETRIC HEIGHT	+01522

QUALITY
25
CHECKED

CITY AND STATE

LOUISVILLE, KY

ELEVATION: 501

TDZE: 499

AIRPORT NAME:

LOUISVILLE INTL-STANDIFORD FIELD

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) Y RWY 17L, AMDT 1E

29 MARCH 2018

SUP:

AMDT:

1D

DATED:

08/17/2017

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							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		LPV: DA LNAV/VNAV: DA LNAV: RW17R CLIMB TO 1000 THEN CLIMBING RIGHT TURN TO 3000 DIRECT NADDI AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, LT, 083.89 INBOUND. CHART FAS OBST: 683 TOWER 381325N/0854458W. DISTANCE TO THLD FROM 200 HAT: 0.47 NM. CHART VDP AT 1.38 NM TO RW17R* *LNAV ONLY. WAAS CHANNEL # 57909 REFERENCE PATH ID: W17A CHART CIRCLING ICON. LTP HAE: 114.7 M												
HONOS (IAF)				SPYRS (TF) (FB) (RNP 1.00)				132.57 / 19.07				4000														
SPYRS (IF)				BLGRS (TF) (FB) (RNP 1.00)				170.37 / 3.49				3000														
BLGRS				CHRCL (TF) (FB) (RNP 1.00)				170.38 / 2.28				2500														
CHRCL (FAF)				VOYUK/2.60 NM TO RW17R (TF) (FB) (RNP 0.30)				170.39 / 3.57																		
VOYUK/2.60 NM TO RW17R				RW17R (MAP) (TF) (FO) (RNP 0.30)				170.39 / 2.60																		
(SEE FORM 8260-10)																										
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT SPYRS 3. FAC: 170.39 FAF: CHRCL DIST FAF TO MAP: 6.17 THLD: 6.17 4. MIN. ALT: SPYRS 4000, BLGRS 3000, CHRCL 2500, VOYUK/2.60 NM TO RW17R 1340* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2500 GS ALT AT: CHRCL 2500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 49.7 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW17R 3600																	MAG VAR: 5W					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											
LPV DA	685	1800	200	685	1800	200	685	1800	200	685	1800	200														
LNAV/VNAV DA	932	5500	447	932	5500	447	932	5500	447	932	5500	447														
LNAV MDA	1000	2400	515	1000	2400	515	1000	5500	515	1000	5500	515														
CIRCLING	1040	1	539	1140	1	639	1160	1 3/4	659	1400	3	899														
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -14C (7F) OR ABOVE 54C (130F). @ CAT D 900-3 CHART NOTE: CIRCLING RWY 11 NA AT NIGHT. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)																										
CITY AND STATE LOUISVILLE, KY				ELEVATION: 501 TDZE: 485 AIRPORT NAME: LOUISVILLE INTL-STANDIFORD FIELD				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 17R, AMDT 1E 29 MARCH 2018					SUP: AMDT: 1D DATED 08/17/2017											

 QUALITY
 25
 CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW17R (MAP)	1000 MSL (CA)	170.39	1000
1000 MSL	NADDI (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HONOS ON V171 NORTHWEST BOUND.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.
CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV CATS C/D VISIBILITY TO 1 3/8 SM.

QUALITY
25
CHECKED

CITY AND STATE
LOUISVILLE, KY

ELEVATION: 501 TDZE: 485
AIRPORT NAME:
LOUISVILLE INTL-STANDIFORD FIELD

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) Y RWY 17R, AMDT 1E
29 MARCH 2018

SUP:
AMDT: 1D
DATED: 08/17/2017

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSDF
RUNWAY	RW17R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W17A
LTP/FTP LATITUDE	381105.0595N
LTP/FTP LONGITUDE	0854452.9335W
LTP/FTP ELLIPSOIDAL HEIGHT	+01147
FPAP LATITUDE	380919.4500N
FPAP LONGITUDE	0854418.1200W
THRESHOLD CROSSING HEIGHT (TCH)	00049.7
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

<u>CRC REMAINDER</u>	F3B648AA
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01479
FPAP ORTHOMETRIC HEIGHT	+01479

QUALITY
25
CHECKED

CITY AND STATE LOUISVILLE, KY	ELEVATION: 501 AIRPORT NAME: LOUISVILLE INTL-STANDIFORD FIELD	TDZE: 485 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 17R, AMDT 1E 29 MARCH 2018	SUP:
				AMDT: 1D
				DATED: 08/17/2017

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION				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		LPV: DA LNAV/VNAV: DA LNAV: RW35L CLIMB TO 1000 THEN CLIMBING LEFT TURN TO 3000 DIRECT DAMEN AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 099.00 INBOUND. CHART FAS OBST: 740 ATCT 380933N/0854348W. CHART 1249 TOWER 380349N/0854352W. CHART 899 TREE 380644N/0854241W. CHART R-3704 A AND B. DISTANCE TO THLD FROM 200 HAT: 0.45 NM. CHART VDP AT 1.46 NM TO RW35L* *LNAV ONLY. WAAS CHANNEL # 86203 REFERENCE PATH ID: W35A CHART CIRCLING ICON. CHART ARRIVAL HOLDING AT BRBON: HOLD S, RT, 008.43 INBOUND, 5000. LTP HAE: 107.4 M					
BRBON (IAF)		RDBRD (TF) (FB) (RNP 1.00)		350.45 / 4.41				5000							
RDBRD (IF)		AWLEE (TF) (FB) (RNP 1.00)		350.44 / 3.53				4000							
AWLEE		CRDNL (TF) (FB) (RNP 1.00)		350.43 / 6.10				2400							
CRDNL (FAF)		BARRR/2.70 NM TO RW35L (TF) (FB) (RNP 0.30)		350.41 / 3.20											
BARRR/2.70 NM TO RW35L		RW35L (MAP) (TF) (FO) (RNP 0.30)		350.41 / 2.70											
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT RDBRD 3. FAC: 350.41 FAF: CRDNL DIST FAF TO MAP: 5.90 THLD: 5.90 4. MIN. ALT: RDBRD 5000, AWLEE 4000, CRDNL 2400, BARRR/2.70 NM TO RW35L 1380* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2400 GS ALT AT: CRDNL 2400 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 59.1 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW35L 3600										MAG VAR: 5W 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
LPV DA	664	1800	200	664	1800	200	664	1800	200	664	1800	200			
LNAV/VNAV DA	904	5000	440	904	5000	440	904	5000	440	904	5000	440			
LNAV MDA	1000	2400	536	1000	2400	536	1000	5500	536	1000	5500	536			
CIRCLING	1040	1	539	1140	1	639	1160	1 3/4	659	1400	3	899			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -14C (7F) OR ABOVE 54C (130F). @ CAT D 900-3 CHART NOTE: CIRCLING RWY 11 NA AT NIGHT. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 501 TDZE: 464		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
LOUISVILLE, KY		AIRPORT NAME:		LOUISVILLE INTL-STANDIFORD FIELD		RNAV (GPS) Y RWY 35L, AMDT 1D				AMDT: 1C					
						29 MARCH 2018				DATED 08/17/2017					



**RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33**

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TERMINAL ROUTES, (CONT.):

<u>FROM</u>	<u>TO</u>	<u>COURSE AND DISTANCE</u>	<u>ALTITUDE</u>
RW35L (MAP)	1000 MSL (CA)	350.41	1000
1000 MSL	DAMEN (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

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

CHART PLANVIEW NOTE: ARRIVAL HOLDING NOT REQUIRED AT BRBON ON V5-513 NORTHBOUND.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV CATS C/D VISIBILITY TO 1 1/2 SM.

CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.

CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.

QUALITY
25
CHECKED

CITY AND STATE

LOUISVILLE, KY

ELEVATION: 501**TDZE: 464**

AIRPORT NAME:

LOUISVILLE INTL-STANDIFORD FIELD

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) Y RWY 35L, AMDT 1D

29 MARCH 2018

SUP:

AMDT: **1C**DATED: **08/17/2017**

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSDF
RUNWAY	RW35L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	380929.3990N
LTP/FTP LONGITUDE	0854421.3700W
LTP/FTP ELLIPSOIDAL HEIGHT	+01074
FPAP LATITUDE	381113.1900N
FPAP LONGITUDE	0854455.6500W
THRESHOLD CROSSING HEIGHT (TCH)	00059.1
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
 <u>CRC REMAINDER</u>	 354A53B0

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01407
FPAP ORTHOMETRIC HEIGHT	+01407

QUALITY
25
CHECKED

CITY AND STATE LOUISVILLE, KY	ELEVATION: 501 AIRPORT NAME: LOUISVILLE INTL-STANDIFORD FIELD	TDZE: 464 RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 35L, AMDT 1D 29 MARCH 2018	SUP:
				AMDT: 1C
				DATED: 08/17/2017

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION				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		LPV: DA LNAV/VNAV: DA LNAV: RW35R CLIMB TO 1600 THEN CLIMBING RIGHT TURN TO 4000 DIRECT TORAC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, LT, 071.00 INBOUND. CHART FAS OBST: 740 ATCT 380933N/0854348W. CHART R-3704 A & B. DISTANCE TO THLD FROM 200 HAT: 0.44 NM. CHART VDP AT 1.43 NM TO RW35R* *LNAV ONLY. WAAS CHANNEL # 70709 REFERENCE PATH ID: W35D CHART CIRCLING ICON. CHART ARRIVAL HOLDING AT BRBON: HOLD S, RT, 008.43 INBOUND, 4000. LTP HAE: 110.4 M									
BRBON (IAF)		PGSUS (TF) (FB) (RNP 1.00)		356.79 / 8.29				4000											
PGSUS (IF)		UPSCO (TF) (FB) (RNP 1.00)		349.96 / 3.49				3000											
UPSCO		PARCL (TF) (FB) (RNP 1.00)		349.95 / 2.60				2400											
PARCL (FAF)		HOSTO/2.70 NM TO RW35R (TF) (FB) (RNP 0.30)		349.94 / 3.17															
HOSTO/2.70 NM TO RW35R		RW35R (MAP) (TF) (FO) (RNP 0.30)		349.94 / 2.70															
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT PGSUS 3. FAC: 349.94 FAF: PARCL DIST FAF TO MAP: 5.87 THLD: 5.87 4. MIN. ALT: PGSUS 4000, UPSCO 3000, PARCL 2400, HOSTO/2.70 NM TO RW35R 1360* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2400 GS ALT AT: PARCL 2400 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 60.4 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW35R 3600																MAG VAR: 5W		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				
LPV DA	680	1800	200	680	1800	200	680	1800	200	680	1800	200							
LNAV/VNAV DA	909	5000	429	909	5000	429	909	5000	429	909	5000	429							
LNAV MDA	1000	2400	520	1000	2400	520	1000	5500	520	1000	5500	520							
CIRCLING	1040	1	539	1140	1	639	1160	1 3/4	659	1400	3	899							
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -14C (7F) OR ABOVE 54C (130F). @ CAT D 900-3 CHART NOTE: CIRCLING RWY 11 NA AT NIGHT. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)																			
CITY AND STATE		ELEVATION: 501 TDZE: 480		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
LOUISVILLE, KY		AIRPORT NAME:		LOUISVILLE INTL-STANDIFORD FIELD		RNAV (GPS) Y RWY 35R, AMDT 1E				AMDT: 1D									
						29 MARCH 2018				DATED 10/12/2017									



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW35R (MAP)	1600 MSL (CA)	349.94	1600
1600 MSL	TORAC (DF) (FO) (RNP 1.00)		4000

NOTES, (CONT.):

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

CHART PLANVIEW NOTE: ARRIVAL HOLDING NOT REQUIRED AT BRBON ON V5-513 NORTHBOUND.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 3/8 SM.

CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.

CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.

QUALITY
9
CHECKED

CITY AND STATE
LOUISVILLE, KY

ELEVATION: 501 TDZE: 480
AIRPORT NAME:
LOUISVILLE INTL-STANDIFORD FIELD

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) Y RWY 35R, AMDT 1E
29 MARCH 2018

SUP:
AMDT: 1D
DATED: 10/12/2017

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSDF
RUNWAY	RW35R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35D
LTP/FTP LATITUDE	380956.6900N
LTP/FTP LONGITUDE	0854326.3320W
LTP/FTP ELLIPSOIDAL HEIGHT	+01104
FPAP LATITUDE	381122.8200N
FPAP LONGITUDE	0854355.7400W
THRESHOLD CROSSING HEIGHT (TCH)	00060.4
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0272
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

<u>CRC REMAINDER</u>	E830916E
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01437
FPAP ORTHOMETRIC HEIGHT	+01437

QUALITY
9
CHECKED

CITY AND STATE LOUISVILLE, KY	ELEVATION: 501 AIRPORT NAME: LOUISVILLE INTL-STANDIFORD FIELD	TDZE: 480 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 35R, AMDT 1E 29 MARCH 2018	SUP:
				AMDT: 1D
				DATED: 10/12/2017

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 HATH, 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						
THUND (IF)		RACRR (TF) (FB) (RNP 0.50)		169.86 / 3.53				4000		CLIMB TO 1000 THEN CLIMBING LEFT TURN TO 3000 DIRECT IIL VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000.						
RACRR		SLGRR (TF) (FB) (RNP 0.50)		169.87 / 5.77				2500								
KAEDN (IF)		STYKR (TF) (FB) (RNP 1.00)		349.34 / 3.01				5000								
STYKR		JUMIP (RF) (FB) (RNP 1.00)		(2.80 NM RADIUS CCW (CFBFD))/4.32				3600								
CHUWE (IF)		JUMIP (TF) (FB) (RNP 1.00)		261.06 / 6.00				3600		ADDITIONAL FLIGHT DATA: HOLD SE, RT, 300.00 INBOUND. ROUTE TYPE: A, H ROUTE TYPE QUALIFIER 1: F ROUTE TYPE QUALIFIER 2: S DISTANCE TO THLD FROM 426 HAT: 1.16 NM. CHART MINIMUM 5000 AT THUND. CHART MANDATORY 5000 AT STYKR. CHART MINIMUM 5000 AT KAEDN. CHART MANDATORY 5000 AT CHUWE. CHART MINIMUM 4000 AT ALANB. CHART MINIMUM 4000 AT COBLR. #TCH 554.6 MSL (DO NOT CHART).						
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																
2. PROFILE STARTS AT SLGRR																
3. FAC: 169.89 FAF: _____ DIST FAF TO MAP: _____ THLD: _____																
4. MIN. ALT: SLGRR 2500																
5. DIST TO THLD FROM OM: 6.11 MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																
6. MIN GS INCPT: 2500 GS ALT AT: SLGRR 2500 OM: _____ MM: _____ IM: _____																
7. GS ANGLE: 3.00 TCH: 55.2# 20:1 IS CLEAR 34:1 IS CLEAR																
8. MSA FROM: RW17L 3600										MAG VAR: 5W		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	HATH/HAA	DH/MDA	VIS	HATH/HAA	DH/MDA	VIS	HATH/HAA	DH/MDA	VIS	HATH/HAA	DH/MDA	VIS	HATH/HAA
AUTHORIZATION REQUIRED																
RNP 0.30 DA		925	5000	426	925	5000	426	925	5000	426	925	5000	426			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -14C (7F) OR ABOVE 54C (130F). CHART NOTE: GPS REQUIRED. CHART PLANVIEW NOTE ADJACENT TO KAEDN: RF REQUIRED. CHART PLANVIEW NOTE ADJACENT TO CHUWE: RF REQUIRED. (CONTINUED ON PAGE 2)																
CITY AND STATE LOUISVILLE, KY		ELEVATION: 501 TDZE: 499 AIRPORT NAME: LOUISVILLE INTL-STANDIFORD FIELD				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (RNP) Z RWY 17L, ORIG-D 29 MARCH 2018				SUP: AMDT: ORIG-C DATED 01/08/2015				



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HATh , 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		
JUMIP	SLGRR (RF) (FB) (RNP 1.00)	(2.25 NM RADIUS CCW (CFBFF))/3.57	2500			
ALANB (IF)	CIKCA (TF) (FB) (RNP 1.00)	080.34 / 4.00	3600			
COBLR (IF)	YUNDV (TF) (FB) (RNP 1.00)	350.52 / 3.01	4000			
YUNDV	CIKCA (RF) (FB) (RNP 1.00)	(2.78 NM RADIUS CW (CFBCB))/4.36	3600			
CIKCA	WOTED (TF) (FB) (RNP 1.00)	080.39 / 0.56	3500			
WOTED	SLGRR (RF) (FB) (RNP 1.00)	(2.44 NM RADIUS CW (CFBCJ))/3.80	2500			
SLGRR (FAF)	RW17L (MAP) (TF) (FO) (RNP 0.30)	169.89 / 6.11				
RW17L (MAP)	1000 MSL (CA)	169.89	1000			
1000 MSL	IIU VORTAC (DF) (FO) (RNP 1.00)		3000			
NOTES, (CONT.): CHART PLANVIEW NOTE ADJACENT TO ALANB: RF REQUIRED. CHART PLANVIEW NOTE ADJACENT TO COBLR: RF REQUIRED. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART PLANVIEW NOTE AT THUND: (RNP 0.50). CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.30 ALL CATS VISIBILITY TO 1 3/8 SM. CHART PLANVIEW NOTE AT YUNDV: MAX 220 KIAS. CHART PLANVIEW NOTE AT STYKR: MAX 220 KIAS. CHART PLANVIEW NOTE AT WOTED: MAX 210 KIAS CHART PLANVIEW NOTE AT JUMIP: MAX 200 KIAS. CHART PLANVIEW NOTE ADJACENT TO ALANB AND CHUWE: RADAR REQUIRED. CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED, EXCEPT FOR ARRIVALS AT CHUWE, KAEDN, ALANB, AND COBLR. CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.						
CITY AND STATE LOUISVILLE, KY		ELEVATION: 501 AIRPORT NAME: LOUISVILLE INTL-STANDIFORD FIELD	TDZE: 499	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (RNP) Z RWY 17L, ORIG-D 29 MARCH 2018	SUP: AMDT: ORIG-C DATED: 01/08/2015



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 3000 ON TRACK 170.40 TO TEYUD RIGHT TURN TO JIPAD AND ON TRACK 292.31 TO NADDI AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, LT, 083.89 INBOUND. ROUTE TYPE: A,H ROUTE TYPE QUALIFIER 1: F ROUTE TYPE QUALIFIER 2: S DISTANCE TO THLD FROM 486 HAT: 1.37 NM. CHART MANDATORY 5000 AT STYKR. CHART MANDATORY 4000 AT YUNDV. CHART MINIMUM 4000 AT COBLR. CHART MINIMUM 5000 AT KAEDN. CHART MINIMUM 4000 AT ALANB. #TCH 535.1 MSL (DO NOT CHART)									
SPYRS (IF)		BLGRS (TF) (FB) (RNP 0.50)		170.37 / 3.49				3000											
BLGRS		CHRCL (TF) (FB) (RNP 0.50)		170.38 / 2.28				2500											
KAEDN (IF)		STYKR (TF) (FB) (RNP 1.00)		349.34 / 3.01				5000											
STYKR		WONEM (RF) (FB) (RNP 1.00)		(2.81 NM RADIUS CCW (CFBCC))/3.78				3900											
WONEM		ANEZO (TF) (FB) (RNP 1.00)		272.18 / 0.84				3700											
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT CHRCL 3. FAC: 170.39 FAF: _____ DIST FAF TO MAP: _____ THLD: _____ 4. MIN. ALT: CHRCL 2500 5. DIST TO THLD FROM OM: 6.17 MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2500 GS ALT AT: CHRCL 2500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 49.7# 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW17R 3600																MAG VAR: 5W		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 0.30 DA	971	5500	486	971	5500	486	971	5500	486	971	5500	486							
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -14C (7F) OR ABOVE 54C (130F). CHART NOTE: RF REQUIRED. CHART NOTE: GPS REQUIRED. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). (CONTINUED ON PAGE 2)																			
CITY AND STATE		ELEVATION: 501 TDZE: 485				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:							
LOUISVILLE, KY		AIRPORT NAME:						RNAV (RNP) Z RWY 17R, ORIG-C				AMDT: ORIG-B							
		LOUISVILLE INTL-STANDIFORD FIELD						29 MARCH 2018				DATED 11/13/2014							

QUALITY
25
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	
ANEZO		CHRCL (RF) (FB) (RNP 1.00)	(2.27 NM RADIUS CCW (CFBCF))/4.03	2500	
ALANB (IF)		CIKCA (TF) (FB) (RNP 1.00)	080.34 / 4.00	3600	
COBLR (IF)		YUNDV (TF) (FB) (RNP 1.00)	350.52 / 3.01	4000	
YUNDV		CIKCA (RF) (FB) (RNP 1.00)	(2.78 NM RADIUS CW (CFBCB))/4.36	3600	
CIKCA		CHRCL (RF) (FB) (RNP 1.00)	(2.25 NM RADIUS CW (CFBCD))/3.53	2500	
CHRCL (FAF)		RW17R (MAP) (TF) (FO) (RNP 0.30)	170.39 / 6.17		
RW17R (MAP)		TEYUD (TF) (FB) (RNP 1.00)	170.40 / 6.03		
TEYUD		JIPAD (RF) (FB) (RNP 1.00)	(4.30 NM RADIUS CW (CFBCG)) / 9.15		
JIPAD		NADDI (TF) (FO) (RNP 1.00)	292.31 / 13.14	3000	
NOTES, (CONT.):					
CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.30 ALL CATS VISIBILITY TO 1 3/8 SM.					
CHART PLANVIEW NOTE AT YUNDV: MAX 220 KIAS.					
CHART PLANVIEW NOTE AT STYKR: MAX 220 KIAS.					
CHART PLANVIEW NOTE AT ANEZO: MAX 200 KIAS.					
CHART PLANVIEW NOTE AT CIKCA: MAX 200 KIAS.					
CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.					
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED, EXCEPT FOR ARRIVALS AT KAEDN, ALANB, AND COBLR.					
CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.					
CHART PLANVIEW NOTE AT SPYRS: (RNP 0.50).					
CITY AND STATE		ELEVATION: 501	TDZE: 485	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:
LOUISVILLE, KY		AIRPORT NAME:		RNAV	RNAV (RNP) Z RWY 17R, ORIG-C
		LOUISVILLE INTL-STANDIFORD FIELD			29 MARCH 2018
					SUP:
					AMDT: ORIG-B
					DATED: 11/13/2014



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							
BRBON (IAF)		RDBRD (TF) (FB) (RNP 1.00)		350.45 / 4.41				5000		CLIMB TO 1000 THEN CLIMBING LEFT TURN TO 3000 DIRECT DAMEN AND HOLD.							
STUGZ (IF)		BNETT (TF) (FB) (RNP 1.00)		173.16 / 2.88				5000									
TUPAY (IF)		GETTA (TF) (FB) (RNP 1.00)		170.00 / 3.00				4000									
DIGRR (IF)		CATEK (TF) (FB) (RNP 1.00)		109.36 / 4.30				3900									
RDBRD (IF)		AWLEE (TF) (FB) (RNP 1.00)		350.44 / 3.53				4000		ADDITIONAL FLIGHT DATA: HOLD W, RT, 099.00 INBOUND. CHART R3704 A. CHART R3704 B. DISTANCE TO THLD FROM 410 HAT: 1.11 NM. ROUTE TYPE: A, H ROUTE TYPE QUALIFIER 1: F ROUTE TYPE QUALIFIER 2: S CHART MANDATORY 5000 AT BNETT. CHART MANDATORY 4000 AT GETTA. CHART MINIMUM 4000 AT TUPAY. CHART MINIMUM 5000 AT STUGZ, DIGRR, AND BRBON. # TCH 520.5 MSL (DO NOT CHART)							
(SEE FORM 8260-10)																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)												MAG VAR: 5W EPOCH YEAR: 2020					
2. PROFILE STARTS AT CRDNL																	
3. FAC: 350.41 FAF: _____ DIST FAF TO MAP: _____ THLD: _____																	
4. MIN. ALT: CRDNL 2400																	
5. DIST TO THLD FROM OM: 5.90 MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																	
6. MIN GS INCPT: 2400 GS ALT AT: CRDNL 2400 OM: _____ MM: _____ IM: _____																	
7. GS ANGLE: 3.00 TCH: 59.1# 20:1 IS CLEAR 34:1 IS CLEAR																	
8. MSA FROM: RW35L 3600																	
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 0.12 DA		874	4500	410	874	4500	410	874	4500	410	874	4500	410				
RNP 0.30 DA		914	5000	450	914	5000	450	914	5000	450	914	5000	450				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -14C (7F) OR ABOVE 54C (130F). CHART NOTE: GPS REQUIRED. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS. (CONTINUED ON PAGE 2)																	
CITY AND STATE LOUISVILLE, KY		ELEVATION: 501 TDZE: 464 AIRPORT NAME: LOUISVILLE INTL-STANDIFORD FIELD				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (RNP) Z RWY 35L, AMDT 1D 29 MARCH 2018						SUP: AMDT: 1C DATED 10/13/2016			

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	
BNETT		CATEK (RF) (FB) (RNP 1.00)	(2.76 NM RADIUS CCW (CFBFM))/3.07	3900	
GETTA		HALVO (RF) (FB) (RNP 1.00)	(2.52 NM RADIUS CW (CFBGM))/3.96	3200	
CATEK		DICAP (RF) (FB) (RNP 1.00)	(2.76 NM RADIUS CCW (CFBFM))/2.02	3300	
HALVO		IFTAG (TF) (FB) (RNP 1.00)	259.99 / 1.17	3000	
AWLEE		CRDNL (TF) (FB) (RNP 1.00)	350.43 / 6.10	2400	
DICAP		CRDNL (RF) (FB) (RNP 1.00)	(2.27 NM RADIUS CCW (CFBFL))/3.05	2400	
IFTAG		CRDNL (RF) (FB) (RNP 1.00)	(2.22 NM RADIUS CW (CFBGN))/3.50	2400	
CRDNL (FAF)		RW35L (MAP) (TF) (FO) (RNP 0.30)	350.41 / 5.90		
RW35L (MAP)		1000 MSL (CA)	350.41	1000	
1000 MSL		DAMEN (DF) (FO) (RNP 1.00)		3000	
NOTES, (CONT.): CHART PLANVIEW NOTE ADJACENT TO TUPAY IF: RF REQUIRED. CHART PLANVIEW NOTE ADJACENT TO STUGZ IF: RF REQUIRED. CHART PLANVIEW NOTE ADJACENT TO DIGRR IF: RF REQUIRED. CHART PLANVIEW NOTE AT GETTA, DICAP: MAX 205 KIAS. CHART PLANVIEW NOTE AT DIGRR, TUPAY, STUGZ: MAX 210 KIAS. CHART PLANVIEW NOTE AT IFTAG: MAX 200 KIAS. CHART PLANVIEW NOTE ADJACENT TO DIGRR IAF: RADAR REQUIRED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BRBON ON V5-513 SOUTHBOUND. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED, EXCEPT FOR ARRIVALS AT STUGZ, DIGRR, AND TUPAY. CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.					
CITY AND STATE LOUISVILLE, KY		ELEVATION: 501 AIRPORT NAME: LOUISVILLE INTL-STANDIFORD FIELD	TDZE: 464	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (RNP) Z RWY 35L, AMDT 1D 29 MARCH 2018
				SUP:	
				AMDT:	1C
				DATED:	10/13/2016



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.												
TERMINAL ROUTES										MISSED APPROACH						
FROM		TO		COURSE AND DISTANCE				ALTITUDE		RNP: DA						
BRBON (IAF)		PGSUS (TF) (FB) (RNP 1.00)		356.79 / 8.29				4000		CLIMB TO 1600 THEN CLIMBING RIGHT TURN TO 4000 DIRECT TORAC AND HOLD.						
PGSUS (IF)		UPSCO (TF) (FB) (RNP 1.00)		349.96 / 3.49				3000								
STUGZ (IF)		BNETT (TF) (FB) (RNP 1.00)		173.16 / 2.88				5000								
TUPAY (IF)		GETTA (TF) (FB) (RNP 1.00)		170.00 / 3.00				4000								
DIGRR (IF)		CATEK (TF) (FB) (RNP 1.00)		109.36 / 4.30				3900		ADDITIONAL FLIGHT DATA: HOLD W, LT, 071.00 INBOUND. CHART R3704 A. CHART R3704 B. DISTANCE TO THLD FROM 315 HAT: 0.80 NM. ROUTE TYPE: A, H ROUTE TYPE QUALIFIER 1: F ROUTE TYPE QUALIFIER 2: S CHART MINIMUM 5000 AT STUGZ AND DIGRR. CHART MANDATORY 5000 AT BNETT. CHART MINIMUM 4000 AT TUPAY AND BRBON. CHART MANDATORY 4000 AT GETTA. #TCH 531.9 MSL (DO NOT CHART).						
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 5W EPOCH YEAR: 2020						
2. PROFILE STARTS AT PARCL _____																
3. FAC: 349.94 FAF: _____ DIST FAF TO MAP: _____ THLD: _____																
4. MIN. ALT: PARCL 2400																
5. DIST TO THLD FROM OM: 5.87 MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																
6. MIN GS INCPT: 2400 GS ALT AT: PARCL 2400 OM: _____ MM: _____ IM: _____																
7. GS ANGLE: 3.00 TCH: 60.4# 20:1 IS CLEAR 34:1 IS CLEAR																
8. MSA FROM: RW35R 3600																
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 0.12 DA		795	2600	315	795	2600	315	795	2600	315	795	2600	315			
RNP 0.30 DA		951	5500	471	951	5500	471	951	5500	471	951	5500	471			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -14C (7F) OR ABOVE 54C (130F). CHART NOTE: GPS REQUIRED. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).																
(CONTINUED ON PAGE 2)																
CITY AND STATE LOUISVILLE, KY		ELEVATION: 501 TDZE: 480 AIRPORT NAME: LOUISVILLE INTL-STANDIFORD FIELD			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (RNP) Z RWY 35R, ORIG-C 29 MARCH 2018					SUP: AMDT: ORIG-B DATED 12/11/2014				

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	
BNETT	CATEK (RF) (FB) (RNP 1.00)	(2.76 NM RADIUS CCW (CFBFM))/3.07	3900	
CATEK	DICAP (RF) (FB) (RNP 1.00)	(2.76 NM RADIUS CCW (CFBFM))/2.02	3300	
GETTA	HALVO (RF) (FB) (RNP 1.00)	(2.52 NM RADIUS CW (CFBGM))/3.96	3200	
DICAP	ECITO (TF) (FB) (RNP 1.00)	067.41 / 0.81	3100	
UPSCO	PARCL (TF) (FB) (RNP 1.00)	349.95 / 2.60	2400	
ECITO	PARCL (RF) (FB) (RNP 1.00)	(2.36 NM RADIUS CCW (CFBFN))/3.20	2400	
HALVO	PARCL (RF) (FB) (RNP 1.00)	(2.52 NM RADIUS CW (CFBFP))/3.96	2400	
PARCL (FAF)	RW35R (MAP) (TF) (FO) (RNP 0.30)	349.94 / 5.87		
RW35R (MAP)	1600 MSL (CA)	349.94	1600	
1600 MSL	TORAC (DF) (FO) (RNP 1.00)		4000	
NOTES, (CONT.):				
CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.				
CHART PLANVIEW NOTE ADJACENT TO TUPAY IF: RF REQUIRED.				
CHART PLANVIEW NOTE ADJACENT TO STUGZ IF: RF REQUIRED.				
CHART PLANVIEW NOTE ADJACENT TO DIGRR IF: RF REQUIRED.				
CHART PLANVIEW NOTE AT GETTA: MAX 205 KIAS.				
CHART PLANVIEW NOTE AT DIGRR: MAX 210 KIAS.				
CHART PLANVIEW NOTE AT STUGZ: MAX 210 KIAS.				
CHART PLANVIEW NOTE AT TUPAY: MAX 210 KIAS.				
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BRBON ON V5-513 SOUTHBOUND.				
CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.12 ALL CATS VISIBILITY TO RVR 5000 AND RNP 0.30 ALL CATS VISIBILITY TO 1 1/4 SM.				
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED, EXCEPT FOR ARRIVALS AT DIGRR, TUPAY, AND STUGZ.				
CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.				
CITY AND STATE	ELEVATION: 501	TDZE: 480	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
LOUISVILLE, KY	AIRPORT NAME:		RNAV	RNAV (RNP) Z RWY 35R, ORIG-C
	LOUISVILLE INTL-STANDIFORD FIELD			29 MARCH 2018
			SUP:	
			AMDT:	ORIG-B
			DATED:	12/11/2014



RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW12 CLIMB TO 3000 DIRECT DERRE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 308.85 INBOUND. CHART FAS OBST: 936 TREE 423917N/0852113W. 1189 AAO 424333N/0852548W CHART: 1166 TOWER 424300N/0852618W DISTANCE TO THLD FROM 287 HAT: 0.78 NM. WAAS CHANNEL # 53326 REFERENCE PATH ID: W12A CHART CIRCLING ICON. CHART GRAND RAPIDS ASOS. CHART PLANVIEW NOTE: RADAR REQUIRED. LTP HAE: 209.4 M						
BOHRR		BLBBY (TF) (FO) (RNP 2.00)		339.71 / 11.46				3000								
UNSUN		BLBBY (TF) (FO) (RNP 2.00)		277.46 / 20.75				3000								
JAKES (IAF)		BLBBY (NOPT) (TF) (FB) (RNP 1.00)		118.93 / 13.11				3000								
BLBBY (IF/IAF)		AGEYU (TF) (FB) (RNP 1.00)		128.54 / 5.81				2300								
AGEYU (FAF)		EDOG1.90 NM TO RW12 (TF) (FB) (RNP 0.30)		128.62 / 2.69												
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NW BLBBY, RT, 128.54 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 128.62 FAF: AGEYU DIST FAF TO MAP: 4.59 THLD: 4.59 4. MIN. ALT: BLBBY 3000, AGEYU 2300, EDOGE1.90 NM TO RW12 1440* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2300 GS ALT AT: AGEYU 2300 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 34:1 IS CLEAR 8. MSA FROM: RW12 3000																
										MAG VAR: 6W EPOCH YEAR: 2015						
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A X								
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	
LPV DA	1087	1	287	1087	1	287	1087	1	287		NA					
LNAV/VNAV DA	1245	1 1/8	445	1245	1 1/8	445	1245	1 1/8	445		NA					
LNAV MDA	1240	1	440	1240	1	440	1240	1 1/4	440		NA					
CIRCLING	1380	1	580	1420	1	620	1440	1 3/4	640		NA					
NOTES: CHART NOTE: CIRCLING NA TO RWYS 9,18,27 AND 36. CHART NOTE: BARO-VNAV NA. CHART NOTE: DME/DME RNP-0.3 NA. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). (CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 800 TDZE: 800				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:				
HASTINGS, MI		AIRPORT NAME: HASTINGS						RNAV (GPS) RWY 12, AMDT 2, 03/29/2018				AMDT: 1A				
												DATED 02/05/2015				

QUALITY
6
CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
EDOG/1.90 NM TO RW12	RW12 (MAP) (TF) (FO) (RNP 0.30)	128.62 / 1.90	
RW12 (MAP)	1087 MSL (CA)	128.62	
1087 MSL	DERRE (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

*LNAV ONLY

CHART NOTE: USE GRAND RAPIDS ALTIMETER SETTING; WHEN NOT RECEIVED, USE IONIA ALTIMETER SETTING:
 INCREASE LPV DA TO 1102 FEET; INCREASE LNAV/VNAV DA TO 1260 FEET AND ALL VISIBILITIES 1/8 SM;
 INCREASE ALL MDA 20 FEET AND LNAV VISIBILITY CAT C 1/8 SM.

QUALITY
6
CHECKED

CITY AND STATE HASTINGS, MI	ELEVATION: 800 AIRPORT NAME: HASTINGS	TDZE: 800	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 12, AMDT 2, 03/29/2018	SUP:
					AMDT: 1A
					DATED: 02/05/2015

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	9D9
RUNWAY	RW12
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W12A
LTP/FTP LATITUDE	423956.6295N
LTP/FTP LONGITUDE	0852106.5295W
LTP/FTP ELLIPSOIDAL HEIGHT	+02094
FPAP LATITUDE	423908.5000N
FPAP LONGITUDE	0851924.8950W
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	1296
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

C65034DA

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02431
FPAP ORTHOMETRIC HEIGHT	+02431

QUALITY
6
CHECKED

CITY AND STATE

HASTINGS, MI

ELEVATION: 800

TDZE: 800

AIRPORT NAME:

HASTINGS

 FACILITY
IDENTIFIER:

RNAV

 PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 12, AMDT 2, 03/29/2018

SUP:

AMDT: 1A

DATED: 02/05/2015

RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW30 CLIMB TO 1400 THEN CLIMBING RIGHT TURN TO 3000 DIRECT UNSUN AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 100.00 INBOUND. CHART FAS OBST: 1004 TREE 423820N/0851903W. CHART 1068 TREE 423754N/0851800W. DISTANCE TO THLD FROM 308 HAT: 0.85 NM. WAAS CHANNEL # 86326 REFERENCE PATH ID: W30A CHART CIRCLING ICON. CHART GRAND RAPIDS ASOS. CHART PLANVIEW NOTE: RADAR REQUIRED. LTP HAE: 209.2 M						
BOHRR		DERRE (TF) (FO) (RNP 2.00)		104.33 / 14.38				3000								
POSIE (IAF)		DERRE (NOPT) (TF) (FB) (RNP 1.00)		297.37 / 18.47				3000								
DERRE (IF/IAF)		CADIM (TF) (FB) (RNP 1.00)		308.85 / 7.18				2300								
CADIM (FAF)		ECAVU/2.10 NM TO RW30 (TF) (FB) (RNP 0.30)		308.74 / 2.49												
ECAVU/2.10 NM TO RW30		RW30 (MAP) (TF) (FO) (RNP 0.30)		308.74 / 2.10												
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SE DERRE, RT, 308.85 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 308.74 FAF: CADIM DIST FAF TO MAP: 4.59 THLD: 4.59 4. MIN. ALT: DERRE 3000, CADIM 2300, ECAVU/2.10 NM TO RW30 1500* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2300 GS ALT AT: CADIM 2300 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 34:1 IS CLEAR 8. MSA FROM: RW30 3000																
										MAG VAR: 6W			EPOCH YEAR: 2015			
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		X						
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	
LPV DA	1108	1	308	1108	1	308	1108	1	308		NA					
LNAV/VNAV DA	1362	1 5/8	562	1362	1 5/8	562	1362	1 5/8	562		NA					
LNAV MDA	1300	1	500	1300	1	500	1300	1 3/8	500		NA					
CIRCLING	1380	1	580	1420	1	620	1440	1 3/4	640		NA					
NOTES: CHART NOTE: CIRCLING NA TO RWYS 9, 18, 27 AND 36. CHART NOTE: BARO-VNAV NA. CHART NOTE: DME/DME RNP-0.3 NA. *LNAV ONLY (CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 800 TDZE: 800				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:				
HASTINGS, MI		AIRPORT NAME: HASTINGS						RNAV (GPS) RWY 30, AMDT 2, 03/29/2018				AMDT: 1A				
												DATED 02/05/2015				



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW30 (MAP)	1400 MSL (CA)	308.74	1400
1400 MSL	UNSUB (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

CHART NOTE: USE GRAND RAPIDS ALTIMETER SETTING; WHEN NOT RECEIVED, USE IONIA ALTIMETER SETTING: INCREASE LPV DA TO 1123 FEET; INCREASE LNAV/VNAV DA TO 1377 FEET; INCREASE ALL MDA 20 FEET.

QUALITY
6
CHECKED

CITY AND STATE
HASTINGS, MI

ELEVATION: 800 TDZE: 800
AIRPORT NAME:
HASTINGS

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 30, AMDT 2, 03/29/2018

SUP:
AMDT: 1A
DATED: 02/05/2015

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	9D9
RUNWAY	RW30
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W30A
LTP/FTP LATITUDE	423932.5665N
LTP/FTP LONGITUDE	0852015.7035W
LTP/FTP ELLIPSOIDAL HEIGHT	+02092
FPAP LATITUDE	424020.6790N
FPAP LONGITUDE	0852157.3640W
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	1304
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 1C0DF50F

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02429
FPAP ORTHOMETRIC HEIGHT	+02429

QUALITY
6
CHECKED

CITY AND STATE HASTINGS, MI	ELEVATION: 800 AIRPORT NAME: HASTINGS	TDZE: 800 HASTINGS	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 30, AMDT 2, 03/29/2018	SUP:
					AMDT: 1A
					DATED: 02/05/2015

**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
BIGFORK, MN	BIGFORK MUNI	29 MARCH 2018	1

TAKEOFF MINIMUMS:
RWY 15, 33: STANDARD.

TEXTUAL DEPARTURE PROCEDURES:
RWY 15: CLIMB ON HEADING 148.69 TO 1800 BEFORE TURNING RIGHT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 15, SIGN 20 FT FROM DER, 115 FT LEFT OF CENTERLINE, 3 FT AGL/1348 FT MSL.
TREE 29 FT FROM DER, 326 FT RIGHT OF CENTERLINE, 1354 FT MSL.
TREES BEGINNING 63 FT FROM DER, 168 FT RIGHT OF CENTERLINE, UP TO 1370 FT MSL.
TRAVERSE WAY 67 FT FROM DER, 432 FT LEFT OF CENTERLINE, 1363 FT MSL.
TREES BEGINNING 154 FT FROM DER, 393 FT LEFT OF CENTERLINE, UP TO 1378 FT MSL.
TREES BEGINNING 189 FT FROM DER, 348 FT RIGHT OF CENTERLINE, UP TO 1371 FT MSL.
TREES BEGINNING 261 FT FROM DER, 413 FT LEFT OF CENTERLINE, UP TO 1379 FT MSL.
TREE 274 FT FROM DER, 292 FT RIGHT OF CENTERLINE, 1374 FT MSL.
TREE 392 FT FROM DER, 556 FT LEFT OF CENTERLINE, 1387 FT MSL.
TREES BEGINNING 393 FT FROM DER, 344 FT RIGHT OF CENTERLINE, UP TO 1375 FT MSL.
TREES BEGINNING 493 FT FROM DER, 177 FT RIGHT OF CENTERLINE, UP TO 1396 FT MSL.
TREE 513 FT FROM DER, 604 FT LEFT OF CENTERLINE, 1417 FT MSL.
TREES BEGINNING 556 FT FROM DER, 185 FT LEFT OF CENTERLINE, UP TO 1420 FT MSL.
TREES BEGINNING 580 FT FROM DER, 272 FT RIGHT OF CENTERLINE, UP TO 1403 FT MSL.
TREE 957 FT FROM DER, 679 FT RIGHT OF CENTERLINE, 1407 FT MSL.
TREES BEGINNING 996 FT FROM DER, 123 FT RIGHT OF CENTERLINE, UP TO 1414 FT MSL.
TREES BEGINNING 2109 FT FROM DER, 539 FT RIGHT OF CENTERLINE, UP TO 1423 FT MSL.
TREES BEGINNING 2698 FT FROM DER, 448 FT RIGHT OF CENTERLINE, UP TO 1434 FT MSL.
TREES BEGINNING 2800 FT FROM DER, 93 FT RIGHT OF CENTERLINE, UP TO 1442 FT MSL.
TREES BEGINNING 3374 FT FROM DER, 519 FT RIGHT OF CENTERLINE, UP TO 1444 FT MSL.

NOTE: RWY 33, TREE 56 FT FROM DER, 374 FT RIGHT OF CENTERLINE, 1375 FT MSL.
TREES BEGINNING 81 FT FROM DER, 257 FT LEFT OF CENTERLINE, UP TO 1378 FT MSL.
TREES BEGINNING 82 FT FROM DER, 245 FT RIGHT OF CENTERLINE, UP TO 1376 FT MSL.
TREES BEGINNING 178 FT FROM DER, 287 FT LEFT OF CENTERLINE, UP TO 1413 FT MSL.
TREES BEGINNING 503 FT FROM DER, 300 FT RIGHT OF CENTERLINE, UP TO 1381 FT MSL.
TREES BEGINNING 543 FT FROM DER, 390 FT LEFT OF CENTERLINE, UP TO 1414 FT MSL.
TREES BEGINNING 720 FT FROM DER, 329 FT RIGHT OF CENTERLINE, UP TO 1384 FT MSL.
TREES BEGINNING 757 FT FROM DER, 1 FT LEFT OF CENTERLINE, UP TO 1424 FT MSL.
TREES BEGINNING 1207 FT FROM DER, 73 FT RIGHT OF CENTERLINE, UP TO 1396 FT MSL.
TREE 1231 FT FROM DER, 63 FT RIGHT OF CENTERLINE, 1399 FT MSL.
TREE 1246 FT FROM DER, 142 FT RIGHT OF CENTERLINE, 1401 FT MSL.
TREES BEGINNING 1249 FT FROM DER, 42 FT RIGHT OF CENTERLINE, UP TO 1403 FT MSL.
TREE 1354 FT FROM DER, 184 FT RIGHT OF CENTERLINE, 1405 FT MSL.
TREE 1378 FT FROM DER, 167 FT RIGHT OF CENTERLINE, 1406 FT MSL.
TREES BEGINNING 1397 FT FROM DER, 149 FT RIGHT OF CENTERLINE, UP TO 1410 FT MSL.
TREES BEGINNING 1609 FT FROM DER, 254 FT RIGHT OF CENTERLINE, UP TO 1418 FT MSL.
TREES BEGINNING 1746 FT FROM DER, 1 FT RIGHT OF CENTERLINE, UP TO 1426 FT MSL.
TREES BEGINNING 2435 FT FROM DER, 8 FT RIGHT OF CENTERLINE, UP TO 1429 FT MSL.
TREES BEGINNING 2566 FT FROM DER, 7 FT RIGHT OF CENTERLINE, UP TO 1430 FT MSL.
TREE 2777 FT FROM DER, 596 FT LEFT OF CENTERLINE, 1425 FT MSL.

CONTROLLING OBSTACLES:
OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 15: 1722 FT MSL TOWER 474512.82N/0933852.05W

REMARKS:



**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>
BIGFORK, MN	BIGFORK MUNI	29 MARCH 2018	1

FLIGHT INSPECTED BY: *Digitally signed by*
BEV L BORDY
PAUL R ARMSTRONG Feb 13, 2018

OFFICE SYMBOL: **DATE:**
FICO 2/7/18

DEVELOPED BY: *Digitally signed by*
BEV L BORDY
VICTOR NASO
(TODD BOWLING) Feb 13, 2018

OFFICE SYMBOL: **DATE:**
AJV-5413 11/30/2017

APPROVED BY: *Digitally signed by*
BEV L BORDY
GEORGE DAVIS Feb 13, 2018

OFFICE SYMBOL: **DATE:**
AJV-5410

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:
ARPT MGR, ZMP

CHANGES - REASONS:

1. UPDATED TAKEOFF OBSTACLE NOTES - NEW SURVEY.
2. REMOVED RWY 15 TAKEOFF MINS RESTRICTIONS - ICA CLEAR OF SEE AND AVOID OBSTACLES, UPDATED RWY 15 CONTROLLING OBSTACLE.
3. ADDED RWY 15 DEPARTURE PROCEDURE INSTRUCTIONS - CONTROLLING OBSTACLE REQUIRES ROUTE TO AVOID.



US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29										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		ILS: DA LOC: 5.27 NM AFTER LAREW LOM									
HUUTA				LAREW LOM (TF) (FB) (RNP 2.00)				138.72 / 19.64				3000		CLIMB TO 2100 THEN CLIMBING RIGHT TURN TO 3000 DIRECT LAREW LOM AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 2100 THEN CLIMBING LEFT TURN TO 3100 DIRECT BRNRD AND HOLD (RNAV 1-GPS REQUIRED). ADDITIONAL FLIGHT DATA: CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NW BRNRD, RT, 118.00 INBOUND. CHART FAS OBST: 1429 TOWER 462556N/0940331W CHART R-4301 CHART CIRCLING ICON CHART PLANVIEW NOTE: ADF REQUIRED. CHART IN PLANVIEW: (CFCJD) AT 462949.01N/0935644.13W									
BRNRD				LAREW LOM (TF) (FB) (RNP 2.00)				357.95 / 6.55				3000											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)														MAG VAR: 3E EPOCH YEAR: 1995									
2. HOLD NE LAREW LOM, RT, 230.54 INBOUND, 3000 FT. IN LIEU OF PT (IAF)																							
3. FAC: 230.54 FAF: LAREW LOM DIST FAF TO MAP: 5.27 THLD: 5.27																							
4. MIN. ALT: LAREW LOM 3000																							
5. DIST TO THLD FROM OM: 5.27 MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 946																							
6. MIN GS INCPT: 3000 GS ALT AT: - OM: 2976 MM: - IM: -																							
7. GS ANGLE: 3.00 TCH: 50.1																							
8. MSA FROM: BR LOM 3100																							
MINIMUMS																							
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A			ILS: STANDARD #			LOC: 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								
S-ILS 23	1424	1/2	200	1424	1/2	200	1424	1/2	200	1424	1/2	200											
S-LOC 23	1680	1/2	456	1680	1/2	456	1680	7/8	456	1680	1	456											
CIRCLING	1760	1	528	1760	1	528	1760	1 1/2	528	1860	2	628											
NOTES: CHART NOTE: ADF REQUIRED. CHART PLANVIEW NOTE ADJACENT TO BRNRD: RNAV 1-GPS REQUIRED. CHART PLANVIEW NOTE ADJACENT TO HUUTA: RNAV 1-GPS REQUIRED. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE AITKIN ALTIMETER SETTING AND INCREASE ALL (CONTINUED ON PAGE 2)																							
CITY AND STATE BRAINERD, MN				ELEVATION: 1232 TDZE: 1224 AIRPORT NAME: BRAINERD LAKES RGNL				FACILITY IDENTIFIER: I-BRD		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 23, AMDT 7A 29 MARCH 2018					SUP: AMDT: 7 DATED 07/05/2007								



ILS - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29

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.

NOTES, (CONT.):
DAS 52 FEET AND ALL MDAS 60 FEET. INCREASE S-LOC CAT C VISIBILITY TO 1 SM AND CIRCLING CAT D VISIBILITY TO 2 1/4 SM.



CITY AND STATE BRAINERD, MN	ELEVATION: 1232 TDZE: 1224 AIRPORT NAME: BRAINERD LAKES RGNL	FACILITY IDENTIFIER: I-BRD	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 23, AMDT 7A 29 MARCH 2018	SUP:
				AMDT: 7
				DATED: 07/05/2007

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION				ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HATH, 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		ILS: DA LOC: I-LER 1.33 DME						
BR LOM		IRIYA INT/14.98 DME			184.09 / 16.50			4000		CLIMB TO 1700 THEN CLIMBING RIGHT TURN TO 4000 DIRECT BR LOM, CONTINUE CLIMB-IN-HOLD TO 4000. ALTERNATE MA (DO NOT CHART): ALTERNATE MA: CLIMB TO 1700 THEN CLIMBING RIGHT TURN TO 3000 DIRECT BRNRD AND HOLD. (RNAV 1-GPS REQUIRED). ADDITIONAL FLIGHT DATA: HOLD NE, RT, 231.25 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NW BRNRD, RT, 118.00 INBOUND. CHART FAS OBST: 1364 TREE 462158N/0940622W CHART 1399 TREE 462154N/0940627W. CHART R-4301. CHART IN PLANVIEW: BRNRD. CHART CIRCLING ICON CHART VDP AT 2.40 DME* DISTANCE VDP TO THLD 1.07NM *LOC ONLY CHART PLANVIEW NOTE: ADF, DME OR RADAR REQUIRED						
GOLLF (IAF)		IRIYA (TF) (FB) (RNP 1.00)			334.82 / 29.18			4000								
JIPKO/20.54DME (IAF)		IRIYA INT/14.98 DME (NOPT)			339.65 / 5.55 (I-LER)			4000								
IRIYA INT/14.98 DME (IF/IAF)		ZIBEG/I-LER 6.74 DME			339.65 / 8.24 (I-LER)			3000								
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 3E EPOCH YEAR: 1995						
2. HOLD S IRIYA, RT, 339.65 INBOUND, 4000 FT. IN LIEU OF PT (IAF)																
3. FAC: 339.65 FAF: ZIBEG/I-LER 6.74 DME DIST FAF TO MAP: _____ THLD: 5.41																
4. MIN. ALT: IRIYA 4000, ZIBEG 3000, UXOWO/I-LER 3.03 DME 1820*																
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: 1026																
6. MIN GS INCPT: 3000 GS ALT AT: ZIBEG 3000 OM: _____ MM: _____ IM: _____																
7. GS ANGLE: 3.00 TCH: 46.4																
8. MSA FROM: BR LOM 3100																
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A X									
CATEGORY =====>		A			B			C			D			E		
	DH/MDA	VIS	HATH/HAA	DH/MDA	VIS	HATH/HAA	DH/MDA	VIS	HATH/HAA	DH/MDA	VIS	HATH/HAA	DH/MDA	VIS	HATH/HAA	
S-ILS 34	1432	1/2	200	1432	1/2	200	1432	1/2	200	1432	1/2	200				
S-LOC 34	1620	1/2	388	1620	1/2	388	1620	5/8	388	1620	5/8	388				
CIRCLING	1760	1	528	1760	1	528	1760	1 1/2	528	1860	2	628				
NOTES: CHART NOTE: DME AND ADF REQUIRED. CHART NOTE: VDP NA WITH AITKIN ALTIMETER SETTING. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE AITKIN ALTIMETER SETTING AND INCREASE DA 53 FEET AND ALL MDAS 60 FEET, INCREASE S-LOC 34 CATS C AND D VISIBLITY 7/8 SM AND CIRCLING CAT D (CONTINUED ON PAGE 2)																
CITY AND STATE BRAINERD, MN		ELEVATION: 1232 TDZE: 1232 AIRPORT NAME: BRAINERD LAKES RGNL			FACILITY IDENTIFIER: I-LER		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC/DME RWY 34, AMDT 2 29 MARCH 2018					SUP: AMDT: 1A DATED 12/11/2014				



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
ILS - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29

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.

NOTES, (CONT.):
VISIBILITY 2 1/2 SM.
CHART NOTE ADJACENT TO GOLLF: RNAV 1-GPS REQUIRED.

QUALITY
16
CHECKED

CITY AND STATE BRAINERD, MN	ELEVATION: 1232 TDZE: 1232 AIRPORT NAME: BRAINERD LAKES RGNL	FACILITY IDENTIFIER: I-LER	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: ILS OR LOC/DME RWY 34, AMDT 2 29 MARCH 2018	SUP:
				AMDT: 1A
				DATED: 12/11/2014

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						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		LPV: DA LNAV/VNAV: DA LNAV: RW05 CLIMB TO 3000 DIRECT EYUPO AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NE, RT, 230.71 INBOUND. CHART FAS OBST: 1396 TREE 462325N/0941031W. CHART R-4301. DISTANCE TO THLD FROM 200 HAT: 0.49 NM. CHART VDP AT 1.36 NM TO RW05* *LNAV ONLY. WAAS CHANNEL # 82018 REFERENCE PATH ID: W05A CHART CIRCLING ICON LTP HAE: 344.5 M											
BRNRD				ONUNY (TF) (FB) (RNP 2.00)				231.65 / 11.79				3000													
WATAM				PIVME (TF) (FB) (RNP 2.00)				090.92 / 30.10				3100													
ONUNY (IAF)				UHAVE (TF) (FB) (RNP 1.00)				320.45 / 5.00				3000													
PIVME (IAF)				UHAVE (TF) (FB) (RNP 1.00)				140.33 / 7.00				3000													
UHAVE (IF)				JIBYA (TF) (FB) (RNP 1.00)				050.40 / 6.20				2300													
(SEE FORM 8260-10)																									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT UHAVE _____ 3. FAC: 050.49 FAF: JIBYA _____ DIST FAF TO MAP: 3.22 THLD: 3.22 4. MIN. ALT: UHAVE 3000, JIBYA 2300 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2300 GS ALT AT: JIBYA 2300 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 46.0 34:1 IS CLEAR 8. MSA FROM: RW05 3100																MAG VAR: 3E EPOCH YEAR: 1995									
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										
LPV DA	1424	3/4	200	1424	3/4	200	1424	3/4	200	1424	3/4	200													
LNAV/VNAV DA	1777	2	553	1777	2	553	1777	2	553	1777	2	553													
LNAV MDA	1700	1	476	1700	1	476	1700	1 1/4	476	1700	1 1/2	476													
CIRCLING	1760	1	528	1760	1	528	1760	1 1/2	528	1860	2	628													
NOTES: CHART NOTE: BARO-VNAV NA WHEN USING AITKIN ALTIMETER SETTING. @ NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: PROCEDURE NA WHEN R-4301 IS ACTIVE. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F) (CONTINUED ON PAGE 2)																									
CITY AND STATE				ELEVATION: 1232 TDZE: 1224				FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:											
BRAINERD, MN				AIRPORT NAME:				RNAV		RNAV (GPS) RWY 5, AMDT 1A				AMDT: 1											
				BRAINERD LAKES RGNL						29 MARCH 2018				DATED 07/29/2010											

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

**RNAV - 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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
JIBYA (FAF)	RW05 (MAP) (TF) (FO) (RNP 0.30)	050.49 / 3.22	
RW05 (MAP)	1424 MSL (CA)		
1424 MSL	EYUPO (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE AITKIN ALTIMETER SETTING AND INCREASE ALL DA 52 FT AND ALL MDA 60 FEET, INCREASE LPV AND LNAV/VNAV VISIBILITY 1/4 MILE ALL CATS, AND LNAV CATS C AND D VISIBILITY 1/4 MILE.

CHART NOTE: VDP NA WITH AITKIN ALTIMETER SETTING.

QUALITY
31

CHECKED

CITY AND STATE

BRainerd, MN

ELEVATION: 1232

TDZE: 1224

AIRPORT NAME:

BRainerd LAKES RGNL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 5, AMDT 1A

29 MARCH 2018

SUP:

AMDT:

DATED:

1

07/29/2010

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KBRD
RUNWAY	RW05
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W05A
LTP/FTP LATITUDE	462340.6670N
LTP/FTP LONGITUDE	0940846.7615W
LTP/FTP ELLIPSOIDAL HEIGHT	+03445
FPAP LATITUDE	462433.6000N
FPAP LONGITUDE	0940703.2100W
THRESHOLD CROSSING HEIGHT (TCH)	00046.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0768
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
 <u>CRC REMAINDER</u>	 5DCCB5BE

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03719
FPAP ORTHOMETRIC HEIGHT	+03719

CITY AND STATE

BRAINERD, MN

ELEVATION: 1232

TDZE: 1224

AIRPORT NAME:

BRAINERD LAKES RGNL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 5, AMDT 1A

29 MARCH 2018

SUP:

AMDT: 1

DATED: 07/29/2010

 QUALITY
31
CHECKED

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						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			LPV: DA LNAV/VNAV: DA LNAV: RW23 CLIMB TO 3300 DIRECT TEYU AND ON TRACK 320.58 TO CUCAC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 124.75 INBOUND. CHART FAS OBST: 1429 TOWER 462556N/0940331W. DISTANCE TO THLD FROM 277 HAT: 0.72 NM. CHART VDP AT 1.53 NM TO RW23* *LNAV ONLY. WAAS CHANNEL # 82502 REFERENCE PATH ID: W23A CHART FIELD ELEVATION: 1232 CHART CIRCLING ICON LTP HAE: 345.2 M									
HUUTA			GUPKE (TF) (FB) (RNP 2.00)			115.26 / 16.10			3000												
BRNRD			JIKRO (TF) (FB) (RNP 2.00)			049.46 / 10.16			3000												
GUPKE (IAF)			EYUPO (TF) (FB) (RNP 1.00)			140.66 / 5.00			3000												
JIKRO (IAF)			EYUPO (NOPT) (TF) (FB) (RNP 1.00)			320.76 / 5.00			3000												
EYUPO (IF/IAF)			CUXUR (TF) (FB) (RNP 1.00)			230.71 / 6.12			3000												
(SEE FORM 8260-10)																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NE EYUPO, RT, 230.71 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 230.62 FAF: CUXUR DIST FAF TO MAP: 5.34 THLD: 5.34 4. MIN. ALT: EYUPO 3000, CUXUR 3000 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 3000 GS ALT AT: CUXUR OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 49.8 34:1 IS CLEAR 8. MSA FROM: RW23 3100																		MAG VAR: 3E		EPOCH YEAR: 1995	
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						
LPV DA	1501	1/2	277	1501	1/2	277	1501	1/2	277	1501	1/2	277									
LNAV/VNAV DA	1573	3/4	349	1573	3/4	349	1573	3/4	349	1573	3/4	349									
LNAV MDA	1760	1/2	536	1760	1/2	536	1760	1	536	1760	1 1/4	536									
CIRCLING	1760	1	528	1760	1	528	1760	1 1/2	528	1860	2	628									
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F). @ NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTES: VDP AND BARO-VNAV NA WHEN USING AITKIN ALTIMETER SETTING. WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE AITKIN ALTIMETER SETTING AND INCREASE ALL DAS 52 FEET AND ALL MDAS 60 FEET.																					
CITY AND STATE				ELEVATION: 1232 TDZE: 1224				FACILITY IDENTIFIER:				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
BRAINERD, MN				AIRPORT NAME:				RNAV				RNAV (GPS) RWY 23, ORIG-A				AMDT: ORIG					
				BRAINERD LAKES RGNL								29 MARCH 2018				DATED 07/05/2007					



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
CUXUR (FAF)	RW23 (MAP) (TF) (FO) (RNP 0.30)	230.62 / 5.34	
RW23 (MAP)	1501 MSL (CA)	230.62	
1501 MSL	TEYYU (DF) (FB) (RNP 1.00)		
TEYYU	CUCAC (TF) (FO) (RNP 1.00)	320.58 / 15.10	3300

QUALITY
4
CHECKED

CITY AND STATE
BRainerd, MN

ELEVATION: 1232 TDZE: 1224
AIRPORT NAME:
BRainerd LAKES RGNL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 23, ORIG-A
29 MARCH 2018

SUP:
AMDT: ORIG
DATED: 07/05/2007

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KBRD
RUNWAY	RW23
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W23A
LTP/FTP LATITUDE	462418.8695N
LTP/FTP LONGITUDE	0940732.0350W
LTP/FTP ELLIPSOIDAL HEIGHT	+03452
FPAP LATITUDE	462325.9300N
FPAP LONGITUDE	0940915.5700W
THRESHOLD CROSSING HEIGHT (TCH)	00049.8
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

1D4B0B21

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03726
FPAP ORTHOMETRIC HEIGHT	+03726

QUALITY
4
CHECKED

CITY AND STATE BRAINERD, MN	ELEVATION: 1232 AIRPORT NAME: BRAINERD LAKES RGNL	TDZE: 1224 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 23, ORIG-A 29 MARCH 2018	SUP:
				AMDT: ORIG
				DATED: 07/05/2007

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						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			LPV: DA LNAV/VNAV: DA LNAV: RW34 CLIMB TO 3300 DIRECT KRINK AND ON TRACK 293.54 TO CUCAC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 124.75 INBOUND. CHART FAS OBST: 1314 TREE 462339N/0940721W CHART FAS OBST: 1339 POWERLINE 462201N/0940717W DISTANCE TO THLD FROM 200 HAT: 0.48 NM. CHART VDP AT 1.01 NM TO RW34* *LNAV ONLY. WAAS CHANNEL # 70711 REFERENCE PATH ID: W34A CHART: R-4301. CHART CIRCLING ICON LTP HAE: 348.2 M									
LINDR			DRAWG (TF) (FB) (RNP 2.00)			279.97 / 21.39			3000												
COMIN (IAF)			AFUNI (NOPT) (TF) (FB) (RNP 1.00)			069.64 / 5.00			3000												
DRAWG (IAF)			AFUNI (NOPT) (TF) (FB) (RNP 1.00)			249.80 / 5.00			3000												
AFUNI (IF/IAF)			NUYBI (TF) (FB) (RNP 1.00)			339.72 / 6.17			3000												
NUYBI (FAF)			RW34 (MAP) (TF) (FO) (RNP 0.30)			339.69 / 5.33															
(SEE FORM 8260-10)																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S AFUNI, RT, 339.72 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 339.69 FAF: NUYBI DIST FAF TO MAP: 5.33 THLD: 5.33 4. MIN. ALT: AFUNI 3000, NUYBI 3000 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 3000 GS ALT AT: NUYBI OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 46.4 34:1 IS CLEAR 8. MSA FROM: RW34 3100																		MAG VAR: 3E		EPOCH YEAR: 1995	
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						
LPV DA	1432	1/2	200	1432	1/2	200	1432	1/2	200	1432	1/2	200									
LNAV/VNAV DA	1584	3/4	352	1584	3/4	352	1584	3/4	352	1584	3/4	352									
LNAV MDA	1600	1/2	368	1600	1/2	368	1600	1/2	368	1600	1	368									
CIRCLING	1760	1	528	1760	1	528	1760	1 1/2	528	1860	2	628									
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F). @ NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART NOTE: BARO-VNAV AND VDP NA WHEN USING AITKIN ALTIMETER SETTING. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT LINDR ON V55 SOUTHEAST BOUND, AND V218 SOUTHBOUND. (CONTINUED ON PAGE 2)																					
CITY AND STATE			ELEVATION: 1232 TDZE: 1232			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:			SUP:									
BRAINERD, MN			AIRPORT NAME:						RNAV (GPS) RWY 34, ORIG-A			AMDT: ORIG									
			BRAINERD LAKES RGNL						29 MARCH 2018			DATED 05/07/2009									



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW34 (MAP)	1432 MSL (CA)	339.69	
1432 MSL	KRINK (DF) (FB) (RNP 1.00)		
KRINK	CUCAC (TF) (FO) (RNP 1.00)	293.54 / 12.46	3300

NOTES, (CONT.):

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE AITKIN ALTIMETER SETTING AND INCREASE ALL DA 52 FEET AND ALL MDA 60 FEET, INCREASE LNAV/VNAV ALL CATS AND LNAV CAT C AND D VISIBILITY 1/4 MILE.

CHART NOTE: FOR INOPERATIVE MALSR WHEN USING AITKIN ALTIMETER SETTING, INCREASE LNAV CAT D VISIBILITY TO 1 1/2 MILE.

QUALITY
9
CHECKED

CITY AND STATE
BRAINERD, MN

ELEVATION: 1232 TDZE: 1232
AIRPORT NAME:
BRAINERD LAKES RGNL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 34, ORIG-A
29 MARCH 2018

SUP:
AMDT: ORIG
DATED: 05/07/2009

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KBRD
RUNWAY	RW34
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W34A
LTP/FTP LATITUDE	462355.9115N
LTP/FTP LONGITUDE	0940739.4970W
LTP/FTP ELLIPSOIDAL HEIGHT	+03482
FPAP LATITUDE	462520.9300N
FPAP LONGITUDE	0940817.8835W
THRESHOLD CROSSING HEIGHT (TCH)	00046.4
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0584
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

9186300E

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03756
FPAP ORTHOMETRIC HEIGHT	+03756

QUALITY
9
CHECKED

CITY AND STATE

BRAINERD, MN

ELEVATION: 1232

TDZE: 1232

AIRPORT NAME:

BRAINERD LAKES RGNL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 34, ORIG-A

29 MARCH 2018

SUP:

AMDT:

ORIG

DATED:

05/07/2009

ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29						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		ILS: DA LOC: 5.04 NM AFTER HUSSK LOM/STC 5.69 DME OR AT STC VOR/DME 0.65 DME CLIMB TO 3000 THEN LEFT TURN DIRECT HUSSK LOM AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, LT, 313.01 INBOUND. FAS OBST: 1219 AAO 452939N/0935807W. CHART VDP AT 1.94 DME* DISTANCE VDP TO THLD 1.30 NM. *LOC ONLY.						
STC VOR/DME			HUSSK LOM/STC 5.69 DME			135.15 / 5.69			3000								
GEP VORTAC (IAF)			SANLY INT/STC 14.14 DME (NOPT)			300.00 / 23.81			3500								
SANLY INT/STC 14.14 DME (IF)			HUSSK LOM/STC 5.69 DME			313.01 / 8.45 (I-STC)			2800								
1. PT <u>R</u> SIDE OF COURSE <u>133.01</u> OUTBOUND <u>3000</u> FT WITHIN <u>10</u> MILES OF <u>HUSSK LOM</u> (IAF) 2. _____ 3. FAC: <u>313.01</u> FAF: <u>HUSSK LOM/STC 5.69 DME</u> DIST FAF TO MAP: <u>5.04</u> THLD: <u>5.04</u> 4. MIN. ALT: <u>HUSSK LOM 2800</u> 5. DIST TO THLD FROM OM: <u>5.04</u> MM: <u>0.46</u> IM: <u>-</u> 150 HAT: <u>-</u> 100 HAT: <u>-</u> GS ANT: <u>955</u> 6. MIN GS INCPT: <u>2800</u> GS ALT AT: _____ OM: <u>2694</u> MM: <u>1214</u> IM: <u>-</u> 7. GS ANGLE: <u>3.00</u> TCH: <u>59.8</u> 8. MSA FROM: <u>ST LOM 3500</u>																	
											MAG VAR: 3E			EPOCH YEAR: 1995			
MINIMUMS																	
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT											ALTERNATE: N A ☒ X						
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		
S-ILS 31	1220	1/2	200	1220	1/2	200	1220	1/2	200	1220	1/2	200					
S-LOC 31	1480	1/2	460	1480	1/2	460	1480	7/8	460	1480	7/8	460					
CIRCLING	1500	1	469	1500	1	469	1500	1 1/2	469	1620	2	589					
NOTES: CHART NOTE: ADF REQUIRED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON GEP VORTAC AIRWAY RADIALS 260 CW 352. CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART NOTE: VDP NA WHEN USING LITTLE FALLS ALTIMETER SETTING. (CONTINUED ON PAGE 2)																	
CITY AND STATE ST CLOUD, MN				ELEVATION: 1031 TDZE: 1020 AIRPORT NAME: ST CLOUD RGNL				FACILITY IDENTIFIER: I-STC				PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 31, AMDT 3B 29 MARCH 2018				SUP:	
																AMDT: 3A	
																DATED 07/02/2009	

QUALITY
 25
 CHECKED

ILS - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29

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.

NOTES, (CONT.):
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LITTLE FALLS ALTIMETER SETTING AND INCREASE ALL DA 76 FEET AND ALL MDA 80 FT AND INCREASE S-LOC 31 CAT C/D VISIBILITY 1/8 SM.



CITY AND STATE ST CLOUD, MN	ELEVATION: 1031 TDZE: 1020 AIRPORT NAME: ST CLOUD RGNL	FACILITY IDENTIFIER: I-STC	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 31, AMDT 3B 29 MARCH 2018	SUP:
				AMDT: 3A
				DATED: 07/02/2009

RNAV - 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		LNAV: RW05 CLIMB TO 3000 DIRECT JALTI AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NE, RT, 236.44 INBOUND. FAS OBST: 1230 AAO 453032N/0940908W. 1270 AAO 453025N/0941020W. CHART VDP AT 1.34 NM TO RW05. ILUDE TO RW05: 3.09/40.					
DWN VORTAC		JAPNU (TF) (FB) (RNP 2.00)		025.57 / 19.82				3000							
OKOMY		KABEY (TF) (FB) (RNP 2.00)		129.63 / 15.63				3300							
JAPNU (IAF)		HUBOX (NOPT) (TF) (FB) (RNP 1.00)		327.04 / 5.00				3000							
KABEY (IAF)		HUBOX (NOPT) (TF) (FB) (RNP 1.00)		145.96 / 5.00				3000							
HUBOX (IF/IAF)		ILUDE (TF) (FB) (RNP 1.00)		056.11 / 6.00				2700							
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SW HUBOX, RT, 056.11 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 056.20 FAF: ILUDE DIST FAF TO MAP: 5.00 THLD: 5.00 4. MIN. ALT: HUBOX 3000, ILUDE 2700 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: _____ GS ALT AT: _____ OM: _____ MM: _____ IM: _____ 7. GS ANGLE: _____ TCH: 34:1 IS NOT CLEAR 8. MSA FROM: RW05 3500															
										MAG VAR: 3E			EPOCH YEAR: 1995		
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
LNAV MDA	1480	1	458	1480	1	458	1480	1 3/8	458		NA				
CIRCLING	1500	1	469	1500	1	469	1500	1 1/2	469		NA				
NOTES: CHART NOTE: RWY 5 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. @ NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON DWN VORTAC AIRWAY RADIALS 321 CW 078. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT OKOMY ON V2 NORTHWEST BOUND. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 1031 TDZE: 1022				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:			
ST CLOUD, MN		AIRPORT NAME:						RNAV (GPS) RWY 5, ORIG-B				AMDT: ORIG-A			
		ST CLOUD RGNL						29 MARCH 2018				DATED 07/02/2009			



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
ILUDE (FAF)	RW05 (MAP) (TF) (FO) (RNP 0.30)	056.20 / 5.00	
RW05 (MAP)	1431 MSL (CA)	056.20	
1431 MSL	JALTI (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

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

CHART NOTE: VDP NA WHEN USING LITTLE FALLS ALTIMETER SETTING.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LITTLE FALLS ALTIMETER SETTING AND INCREASE ALL MDA 80 FEET AND LNAV CAT C VISIBILITY 1/8 SM.

QUALITY
25
CHECKED

CITY AND STATE
ST CLOUD, MN

ELEVATION: 1031 TDZE: 1022
AIRPORT NAME:
ST CLOUD RGNL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 5, ORIG-B
29 MARCH 2018

SUP:
AMDT: ORIG-A
DATED: 07/02/2009

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						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		LNAV: RW23 CLIMB TO 3000 DIRECT HUBOX AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SW, RT, 056.11 INBOUND. CHART FAS OBST: 1290 AAO 453439N/0935911W. 1310 AAO 453535N/0935703W. CHART VDP AT 1.53 NM TO RW23. AGOKY TO RW23: 3.09/40.											
OLLEE				CEMPU (TF) (FB) (RNP 2.00)				281.40 / 8.19				3000													
TLBAT				GACEL (TF) (FB) (RNP 2.00)				063.31 / 20.71				3000													
CEMPU (IAF)				JALTI (NOPT) (TF) (FB) (RNP 1.00)				326.32 / 5.00				3000													
GACEL (IAF)				JALTI (NOPT) (TF) (FB) (RNP 1.00)				146.96 / 5.00				3000													
JALTI (IF/IAF)				AGOKY (TF) (FB) (RNP 1.00)				236.44 / 6.00				2700													
(SEE FORM 8260-10)																									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NE JALTI, RT, 236.44 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 236.35 FAF: AGOKY DIST FAF TO MAP: 5.00 THLD: 5.00 4. MIN. ALT: JALTI 3000, AGOKY 2700 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: _____ GS ALT AT: _____ OM: _____ MM: _____ IM: _____ 7. GS ANGLE: _____ TCH: 34:1 IS NOT CLEAR 8. MSA FROM: RW23 3500																MAG VAR: 3E				EPOCH YEAR: 1995					
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										
LNAV MDA	1540	1	518	1540	1	518	1540	1 3/8	518		NA														
CIRCLING	1540	1	509	1540	1	509	1540	1 1/2	509		NA														
NOTES: CHART NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT OLEE ON T383 SOUTHBOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT TLBAT ON V2 NORTHWEST BOUND. (CONTINUED ON PAGE 2)																@ NA WHEN LOCAL WEATHER NOT AVAILABLE.				QUALITY 25 CHECKED					
CITY AND STATE				ELEVATION: 1031 TDZE: 1022				FACILITY IDENTIFIER:				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
ST CLOUD, MN				AIRPORT NAME:				RNAV				RNAV (GPS) RWY 23, ORIG-B				AMDT: ORIG-A									
				ST CLOUD RGNL								29 MARCH 2018				DATED 07/02/2009									

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
AGOKY (FAF)	RW23 (MAP) (TF) (FO) (RNP 0.30)	236.35 / 5.00	
RW23 (MAP)	1431 MSL (CA)	236.35	
1431 MSL	HUBOX (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

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

CHART NOTE: VDP NA WHEN USING LITTLE FALLS ALTIMETER SETTING.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LITTLE FALLS ALTIMETER SETTING AND INCREASE ALL MDA 80 FEET AND INCREASE LNAV CAT C VISIBILITY 3/8 SM AND CIRCLING CAT C VISIBILITY 1/4 SM.

QUALITY
25
CHECKED

CITY AND STATE
ST CLOUD, MN

ELEVATION: 1031 TDZE: 1022
 AIRPORT NAME:
 ST CLOUD RGNL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
 RNAV (GPS) RWY 23, ORIG-B
 29 MARCH 2018

SUP:
 AMDT: ORIG-A
 DATED: 07/02/2009

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW31										
DWN VORTAC				LOVVI (TF) (FB) (RNP 2.00)			050.27 / 26.41				3000		CLIMB TO 3000 DIRECT WELOK AND HOLD.										
PLUGS				ROCOK (TF) (FB) (RNP 2.00)			269.64 / 10.31				3000												
TLBAT				LOVVI (TF) (FB) (RNP 2.00)			126.51 / 21.24				3000												
DAYLE				ROCOK (TF) (FB) (RNP 2.00)			144.60 / 11.25				4000												
LOVVI (IAF)				ZUXAL (NOPT) (TF) (FB) (RNP 1.00)			043.77 / 5.00				3000		ADDITIONAL FLIGHT DATA: HOLD NW, RT, 132.86 INBOUND. FAS OBST: 1200 AAO 452944N/0935808W. DISTANCE TO THLD FROM 200 HAT: 0.45 NM. CHART VDP AT 1.23 NM TO RW31* *LNAV ONLY. WAAS CHANNEL # 61213 REFERENCE PATH ID: W31A LTP HAE: 282.6 M										
(SEE FORM 8260-10)																							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)														MAG VAR: 3E EPOCH YEAR: 1995									
2. HOLD SE ZUXAL, LT, 321.00 INBOUND, 3000 FT. IN LIEU OF PT (IAF)																							
3. FAC: 313.07 FAF: POGOY DIST FAF TO MAP: 5.03 THLD: 5.03																							
4. MIN. ALT: ZUXAL 3000, POGOY 2700																							
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																							
6. MIN GS INCPT: 2700 GS ALT AT: POGOY 2700 OM: _____ MM: _____ IM: _____																							
7. GS ANGLE: 3.00 TCH: 59.9 34:1 IS CLEAR																							
8. MSA FROM: RW31 3500																							
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								
LPV DA	1220	1/2	200	1220	1/2	200	1220	1/2	200	1220	1/2	200											
LNAV/VNAV DA	1379	3/4	359	1379	3/4	359	1379	3/4	359	1379	3/4	359											
LNAV MDA	1460	1/2	440	1460	1/2	440	1460	3/4	440	1460	3/4	440											
CIRCLING	1500	1	469	1500	1	469	1500	1 1/2	469	1620	2	589											
NOTES: CHART NOTE: DME/DME RNP-0.3 NA. @ NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT TLBAT ON V2 NORTHWEST BOUND AND ARRIVALS AT DAYLE ON V510 AND T330 NORTHWEST BOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON DWN VORTAC AIRWAY RADIALS 078 CW 109. (CONTINUED ON PAGE 2)																							
CITY AND STATE ST CLOUD, MN				ELEVATION: 1031 TDZE: 1020 AIRPORT NAME: ST CLOUD RGNL				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 31, AMDT 1A 29 MARCH 2018					SUP: AMDT: 1 DATED 08/27/2009								



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

**RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33**

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
ROCOK (IAF)	ZUXAL (NOPT) (TF) (FB) (RNP 1.00)	222.25 / 5.00	3000
ZUXAL (IF/IAF)	POGOY (TF) (FB) (RNP 1.00)	313.14 / 6.10	2700
POGOY (FAF)	RW31 (MAP) (TF) (FO) (RNP 0.30)	313.07 / 5.03	
RW31 (MAP)	1220 MSL (CA)	313.07	
1220 MSL	WELOK (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

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

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LITTLE FALLS ALTIMETER SETTING AND INCREASE ALL DA 76 FT, AND ALL MDA 80 FEET; INCREASE LNAV/VNAV ALL CATS VISIBILITY 1/4 SM AND LNAV CAT C/D VISIBILITY 1/4 SM.

CHART NOTE: FOR INOPERATIVE ALS WHEN USING LITTLE FALLS ALTIMETER SETTING, INCREASE LPV INCREASE ALL CATS VISIBILITY TO 7/8 SM AND LNAV CAT C/D VISIBILITY TO 1 3/8 SM.

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 46C (114F).

CHART NOTE: BARO-VNAV AND VDP N/A WHEN USING LITTLE FALLS ALTIMETER SETTING.

QUALITY
25
CHECKED

CITY AND STATE

ST CLOUD, MN

ELEVATION: 1031

TDZE: 1020

AIRPORT NAME:

ST CLOUD RGNL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 31, AMDT 1A

29 MARCH 2018

SUP:

AMDT: 1

DATED: 08/27/2009

**STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSTC
RUNWAY	RW31
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	453224.4685N
LTP/FTP LONGITUDE	0940301.2880W
LTP/FTP ELLIPSOIDAL HEIGHT	+02826
FPAP LATITUDE	453328.5505N
FPAP LONGITUDE	0940429.3580W
THRESHOLD CROSSING HEIGHT (TCH)	00059.9
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0616
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

0A24B1C6

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03099
FPAP ORTHOMETRIC HEIGHT	+03099

QUALITY
25
CHECKED

CITY AND STATE

ST CLOUD, MN

ELEVATION: 1031

TDZE: 1020

AIRPORT NAME:

ST CLOUD RGNL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 31, AMDT 1A

29 MARCH 2018

SUP:

AMDT: 1

DATED: 08/27/2009

RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW14 CLIMB TO 3600 DIRECT SHIRS AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 319.31 INBOUND. CHART FAS OBST: 1424 TREE 401951N/0964648W. DISTANCE TO THLD FROM 250 HATH: 0.64 NM. CHART VDP AT 1.24 NM TO RW14* *LNAV ONLY. WAAS CHANNEL # 69620 REFERENCE PATH ID: W14A CHART CIRCLING ICON. LTP HAE: 375.1 M						
PANNY		DADAC (TF) (FB) (RNP 2.00)			245.35 / 15.43			4000								
DADAC (IAF)		MIDIE (NOPT) (TF) (FB) (RNP 1.00)			229.17 / 7.00			3600								
GADWY (IAF)		MIDIE (NOPT) (TF) (FB) (RNP 1.00)			059.94 / 12.45			3600								
MIDIE (IF/IAF)		TADGE (TF) (FB) (RNP 1.00)			139.09 / 7.36			3000								
TADGE (FAF)		WUBIL/1.90 NM TO RW14 (TF) (FB) (RNP 0.30)			139.16 / 3.24											
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NW MIDIE, RT, 139.09 INBOUND, 3600 FT. IN LIEU OF PT (IAF) 3. FAC: 139.16 FAF: TADGE DIST FAF TO MAP: 5.14 THLD: 5.14 4. MIN. ALT: MIDIE 3600, TADGE 3000, WUBIL/1.90 NM TO RW14 1960* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 3000 GS ALT AT: TADGE 3000 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 45.0 34:1 IS CLEAR 8. MSA FROM: RW14 3300																
											MAG VAR: 4E			EPOCH YEAR: 2010		
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	
LPV DA	1569	1	250	1569	1	250	1569	1	250	1569	1	250				
LNAV/VNAV DA	1569	1	250	1569	1	250	1569	1	250	1569	1	250				
LNAV MDA	1760	1	441	1760	1	441	1760	1 3/8	441	1760	1 3/8	441				
CIRCLING	1820	1	496	1820	1	496	2000	2	676	2100	2 1/2	776				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 35C (95F). @ CAT D 800-2 1/2 CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PANNY ON V71 SOUTHEAST BOUND AND ARRIVALS AT GADWY ON V50 WEST BOUND.																
CITY AND STATE		ELEVATION: 1324 TDZE: 1319			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:				
BEATRICE, NE		AIRPORT NAME:					RNAV (GPS) RWY 14, AMDT 1C					AMDT: 1B				
		BEATRICE MUNI					29 MARCH 2018					DATED 10/15/2015				

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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, (CONT.):

<u>FROM</u>	<u>TO</u>	<u>COURSE AND DISTANCE</u>	<u>ALTITUDE</u>
WUBIL/1.90 NM TO RW14	RW14 (MAP) (TF) (FO) (RNP 0.30)	139.16 / 1.90	
RW14 (MAP)	1569 MSL (CA)	139.16	
1569 MSL	SHIRS (DF) (FO) (RNP 1.00)		3600

CITY AND STATE
BEATRICE, NE

ELEVATION: 1324 **TDZE: 1319**
 AIRPORT NAME:
BEATRICE MUNI

FACILITY
 IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 14, AMDT 1C
 29 MARCH 2018

SUP: **10**
 AMDT: **1B**
 DATED: **10/15/2015**

QUALITY
 10
 CHECKED

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KBIE
RUNWAY	RW14
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W14A
LTP/FTP LATITUDE	401818.1725N
LTP/FTP LONGITUDE	0964534.3005W
LTP/FTP ELLIPSOIDAL HEIGHT	+03751
FPAP LATITUDE	401706.7700N
FPAP LONGITUDE	0964424.5600W
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	1408
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 742247E2

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04021
FPAP ORTHOMETRIC HEIGHT	+04021

CITY AND STATE

BEATRICE, NE

ELEVATION: 1324

TDZE: 1319

AIRPORT NAME:

BEATRICE MUNI

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 14, AMDT 1C

29 MARCH 2018

SUP:

AMDT:

DATED:

 QUALITY
10

CHECKED

1B

10/15/2015

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						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			LPV: DA LNAV/VNAV: DA LNAV: RW28 CLIMB TO 3000 DIRECT BONIF AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 103.50 INBOUND. CHART FAS OBST: 1273 TREE 401954N/0823119W. DISTANCE TO THLD FROM 200 HATH: 0.50 NM. CHART VDP AT 0.99 NM TO RW28* *LNAV ONLY. WAAS CHANNEL # 69423 REFERENCE PATH ID: W28A LTP HAE: 327 M									
APE VORTAC			TUCUG (TF) (FB) (RNP 2.00)			098.75 / 13.45			3000												
ROSCO (IAF)			PATIE (NOPT) (TF) (FB) (RNP 1.00)			304.59 / 13.64			2800												
TUCUG (IAF)			PATIE (NOPT) (TF) (FB) (RNP 1.00)			013.85 / 9.80			2800												
PATIE (IF/IAF)			WEBUB (TF) (FB) (RNP 1.00)			283.87 / 6.90			2700												
WEBUB (FAF)			SLAPT/1.70 NM TO RW28 (TF) (FB) (RNP 0.30)			283.77 / 2.94															
(SEE FORM 8260-10)																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD E PATIE, RT, 283.87 INBOUND, 2800 FT. IN LIEU OF PT (IAF) 3. FAC: 283.77 FAF: WEBUB DIST FAF TO MAP: 4.64 THLD: 4.64 4. MIN. ALT: PATIE 2800, WEBUB 2700, SLAPT/1.70 NM TO RW28 1760* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2700 GS ALT AT: WEBUB 2700 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW28 3100																		MAG VAR: 6W		EPOCH YEAR: 1990	
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						
LPV DA	1389	1	200	1389	1	200	1389	1	200	1389	1	200									
LNAV/VNAV DA	1439	1	250	1439	1	250	1439	1	250	1439	1	250									
LNAV MDA	1540	1	351	1540	1	351	1540	1	351	1540	1	351									
CIRCLING	1660	1	469	1660	1	469	1660	1 1/2	469	1780	2	589									
NOTES: CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON APE VORTAC AIRWAY RADIALS 055 CW 168. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 36C (96F). PBN REQUIREMENTS NOTE: RNP APCH.																					
CITY AND STATE			ELEVATION: 1191 TDZE: 1189			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:						SUP:						
MOUNT VERNON, OH			AIRPORT NAME:						RNAV (GPS) RWY 28, AMDT 1B						AMDT: 1A						
			KNOX COUNTY						29 MARCH 2018						DATED 04/02/2015						

QUALITY
 10
 CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
SLAPT/1.70 NM TO RW28	RW28 (MAP) (TF) (FO) (RNP 0.30)	283.77 / 1.70	
RW28 (MAP)	1389 MSL (CA)	283.77	
1389 MSL	BONIF (DF) (FO) (RNP 1.00)		3000

CITY AND STATE
MOUNT VERNON, OH

ELEVATION: 1191 TDZE: 1189
AIRPORT NAME:
KNOX COUNTY

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 28, AMDT 1B
29 MARCH 2018

SUP: **QUALITY
10
CHECKED**
AMDT: 1A
DATED: 04/02/2015

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	413
RUNWAY	RW28
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W28A
LTP/FTP LATITUDE	401940.4485N
LTP/FTP LONGITUDE	0823058.6955W
LTP/FTP ELLIPSOIDAL HEIGHT	+03270
FPAP LATITUDE	401952.3800N
FPAP LONGITUDE	0823254.1600W
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	1072
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

<u>CRC REMAINDER</u>	<u>DATA</u>
	2ABE41F4

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+03608
FPAP ORTHOMETRIC HEIGHT	+03608

CITY AND STATE

MOUNT VERNON, OH

ELEVATION: 1191

TDZE: 1189

AIRPORT NAME:

KNOX COUNTY

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 28, AMDT 1B

29 MARCH 2018

SUP:

AMDT:

DATED:

 QUALITY
10
CHECKED

1A

04/02/2015

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION VOR STANDARD INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.23										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		MAP: 2.31 NM AFTER PALLA/APE 8.66 DME OR AT MATBD/10.97 DME FIX							
APE VORTAC (IF/IAF)			PALLA/8.66 DME			022.00 / 8.66				2300		CLIMB TO 3000 THEN LEFT TURN DIRECT APE VORTAC AND HOLD.							
										ADDITIONAL FLIGHT DATA: CHART FAS OBST: 1302 TREE 401955N/0823258W. FAC CROSSES INTERSECTION OF RWYS 10 AND 28.									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																			
2. HOLD S APE VORTAC, RT, 022.00 INBOUND, 3000 FT. IN LIEU OF PT (IAF)																			
3. FAC 022.00 FAF PALLA/8.66 DME										DIST FAF TO MAP 2.31 THLD									
4. MIN. ALT APE VORTAC 3000, PALLA 2300																			
8. MSA FROM: APE VORTAC 3100										MAG VAR: 6W EPOCH YEAR:1990									
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD							
CATEGORY =====>		A			B			C			D			E					
		MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA			
CIRCLING		1660	1	469	1660	1	469	1660	1 1/2	469	1780	2	589						
NOTES: CHART PLANVIEW NOTE: NOPT FOR ARRIVAL ON APE VORTAC AIRWAY RADIALS 090 CW 318. EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED.																			
CITY AND STATE MOUNT VERNON, OH				ELEVATION: 1191 TDZE: AIRPORT NAME: KNOX COUNTY				FACILITY IDENTIFIER: APE		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR-A, AMDT 8A 29 MARCH 2018						SUP AMDT 8 DATE 05/02/2013			



RNAV - 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.											
US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION															
TERMINAL ROUTES										MISSED APPROACH					
FROM		TO			COURSE AND DISTANCE			ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW17 CLIMB TO 2500 DIRECT ZERAL AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT, 357.87 INBOUND. CHART FAS OBST: 689 TREE 340236N/0953242W. DISTANCE TO THLD FROM 250 HAT: 0.66 NM. CHART VDP AT 1.03 NM TO RW17* *LNAV ONLY. WAAS CHANNEL # 50437 REFERENCE PATH ID: W17A CHART CIRCLING ICON. LTP HAE: 143.7 M					
MLC VORTAC		WUNIN (TF) (FB) (RNP 2.00)			157.32 / 33.70			4000							
PRX VOR/DME		JASGU (TF) (FO) (RNP 2.00)			351.43 / 41.01			4000							
WUNIN (IAF)		JASGU (NOPT) (TF) (FB) (RNP 1.00)			177.87 / 6.00			4000							
JASGU (IF/IAF)		AGISM (TF) (FB) (RNP 1.00)			177.87 / 6.00			2200							
AGISM (FAF)		HUKIT/2.80 NM TO RW17 (TF) (FB) (RNP 0.30)			177.87 / 2.19										
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N JASGU, RT, 177.87 INBOUND, 4000 FT. IN LIEU OF PT (IAF) 3. FAC: 177.87 FAF: AGISM DIST FAF TO MAP: 4.99 THLD: 4.99 4. MIN. ALT: JASGU 4000, AGISM 2200, HUKIT/2.80 NM TO RW17 1500* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2200 GS ALT AT: AGISM 2200 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 43.8 20:1 IS CLEAR 34:1 IS NOT CLEAR 8. MSA FROM: RW17 2700															
										MAG VAR: 2E			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
LPV DA	820	1	250	820	1	250	820	1	250	820	1	250			
LNAV/VNAV DA	870	1	300	870	1	300	870	1	300	870	1	300			
LNAV MDA	940	1	370	940	1	370	940	1	370	940	1	370			
CIRCLING	1220	1	648	1220	1	648	1340	2 1/4	768	1340	2 1/2	768			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). @ CAT C 800-2 1/4, CAT D 800-2 1/2 CHART NOTE: CIRCLING RWY 35 NA AT NIGHT. CHART NOTE: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 572 TDZE: 570			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:			
HUGO, OK		AIRPORT NAME:			STAN STAMPER MUNI		RNAV (GPS) RWY 17, AMDT 1					AMDT: ORIG			
							29 MARCH 2018					DATED 11/10/2016			



**RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33**

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
HUKIT/2.80 NM TO RW17	RW17 (MAP) (TF) (FO) (RNP 0.30)	177.87 / 2.80	
RW17 (MAP)	820 MSL (CA)	177.87	
820 MSL	ZERAL (DF) (FO) (RNP 1.00)		2500

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON MLC VORTAC AIRWAY RADIALS 160 CW 201.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON PRX VOR/DME AIRWAY RADIALS 263 CW 057.

QUALITY
24
CHECKED

CITY AND STATE

HUGO, OK

ELEVATION: 572

TDZE: 570

AIRPORT NAME:

STAN STAMPER MUNI

 FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 17, AMDT 1

29 MARCH 2018

SUP:

AMDT: ORIG

DATED: 11/10/2016

RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KHHW
RUNWAY	RW17
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W17A
LTP/FTP LATITUDE	340220.9320N
LTP/FTP LONGITUDE	0953231.4760W
LTP/FTP ELLIPSOIDAL HEIGHT	+01437
FPAP LATITUDE	340051.6745N
FPAP LONGITUDE	0953231.2270W
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
<u>CRC REMAINDER</u>	B8113E3F

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+01729
FPAP ORTHOMETRIC HEIGHT	+01729

QUALITY
24
CHECKED

CITY AND STATE HUGO, OK	ELEVATION: 572 AIRPORT NAME: STAN STAMPER MUNI	TDZE: 570	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 17, AMDT 1 29 MARCH 2018	SUP:
					AMDT: ORIG
					DATED: 11/10/2016

RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW35 CLIMB TO 4000 DIRECT JASGU AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000. ADDITIONAL FLIGHT DATA: HOLD N, RT, 177.87 INBOUND. CHART FAS OBST: 910 TOWER 340040N/0953328W. DISTANCE TO THLD FROM 250 HAT: 0.65 NM. WAAS CHANNEL # 86639 REFERENCE PATH ID: W35A CHART CIRCLING ICON. LTP HAE: 145.3 M							
PRX VOR/DME		ROTAE (TF) (FB) (RNP 2.00)			340.34 / 15.34			2500									
ROTAE (IAF)		ZERAL (NOPT) (TF) (FB) (RNP 1.00)			357.87 / 6.00			2500									
ZERAL (IF/IAF)		CABSO (TF) (FB) (RNP 1.00)			357.87 / 3.50			2200									
CABSO (FAF)		RW35 (MAP) (TF) (FO) (RNP 0.30)			357.87 / 4.98												
RW35 (MAP)		822 MSL (CA)			357.87												
822 MSL		JASGU (DF) (FO) (RNP 1.00)						4000									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S ZERAL, RT, 357.87 INBOUND, 2500 FT. IN LIEU OF PT (IAF) 3. FAC: 357.87 FAF: CABSO DIST FAF TO MAP: 4.98 THLD: 4.98 4. MIN. ALT: ZERAL 2500, CABSO 2200 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2200 GS ALT AT: CABSO 2200 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 42.9 20:1 IS NOT CLEAR 34:1 IS NOT CLEAR 8. MSA FROM: RW35 2600																	
											MAG VAR: 2E					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		
LPV DA	822	1	250	822	1	250	822	1	250	822	1	250					
LNAV/VNAV DA	1071	1 3/8	499	1071	1 3/8	499	1071	1 3/8	499	1071	1 3/8	499					
LNAV MDA	1020	1	448	1020	1	448	1020	1 3/8	448	1020	1 3/8	448					
CIRCLING	1220	1	648	1220	1	648	1340	2 1/4	768	1340	2 1/2	768					
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). @ CAT C 800-2 1/4, CAT D 800-2 1/2 CHART NOTE: RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON PRX VOR/DME AIRWAY RADIALS 263 CW 057. CHART NOTE: STRAIGHT-IN RWY 35 AND CIRCLING RWY 35 NA AT NIGHT.																	
CITY AND STATE		ELEVATION: 572 TDZE: 572			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:				
HUGO, OK		AIRPORT NAME:			STAN STAMPER MUNI			RNAV (GPS) RWY 35, AMDT 1 29 MARCH 2018					AMDT: ORIG				
													DATED 11/10/2016				



**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KHHW
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	340141.2910N
LTP/FTP LONGITUDE	0953231.3650W
LTP/FTP ELLIPSOIDAL HEIGHT	+01453
FPAP LATITUDE	340310.5490N
FPAP LONGITUDE	0953231.6145W
THRESHOLD CROSSING HEIGHT (TCH)	00042.9
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

04B1987C

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+01744
FPAP ORTHOMETRIC HEIGHT	+01744

QUALITY
24
CHECKED

CITY AND STATE HUGO, OK	ELEVATION: 572 AIRPORT NAME: STAN STAMPER MUNI	TDZE: 572 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 35, AMDT 1 29 MARCH 2018	SUP:
				AMDT: ORIG
				DATED: 11/10/2016

RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW27 CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 3700 DIRECT INNOP AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3700. ADDITIONAL FLIGHT DATA: CHART FAS OBST: 607 TREE 443233N/1231731W. DISTANCE TO THLD FROM 200 HAT: 0.48 NM. CHART VDP AT 1.77 NM TO RW17* *LNAV ONLY. WAAS CHANNEL # 78311 REFERENCE PATH ID: W17A CHART CIRCLING ICON. 1700 AAO 443717N/1231848W LTP HAE: 51.8 M						
MAGOT		INNOP (TF) (FO) (RNP 2.00)			267.27 / 10.64			3700								
CVO VOR/DME		INNOP (TF) (FO) (RNP 2.00)			352.34 / 12.79			3800								
ADLOW (IAF)		INNOP (NOPT) (TF) (FB) (RNP 1.00)			205.73 / 3.68			3700								
CRAAF (IAF)		INNOP (NOPT) (TF) (FB) (RNP 1.00)			110.67 / 5.07			3700								
INNOP (IF/IAF) (SEE FORM 8260-10)		EGBEW (TF) (FB) (RNP 1.00)			172.00 / 3.94			2900								
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N INNOP, LT, 172.00 INBOUND, 3700 FT. IN LIEU OF PT (IAF) 3. FAC: 171.98 FAF: ACVOL _____ DIST FAF TO MAP: 6.63 THLD: 6.63 4. MIN. ALT: INNOP 3700, EGBEW 2900, ACVOL 2400, CAYJU/2.51 NM TO RW17 1080* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2400 GS ALT AT: ACVOL 2400 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 44.7 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW17 5300										MAG VAR: 15E		EPOCH YEAR: 2020				
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A ☒ X									
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	
LPV DA	448	1/2	200	448	1/2	200	448	1/2	200	448	1/2	200				
LNAV/VNAV DA	571	5/8	323	571	5/8	323	571	5/8	323	571	5/8	323				
LNAV MDA	860	1/2	612	860	1/2	612	860	1 3/8	612	860	1 3/8	612				
CIRCLING	860	1	610	860	1	610	920	1 3/4	670	1080	2 3/4	830				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MAGOT ON V23 NORTHBOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ADLOW ON V495 NORTHBOUND. (CONTINUED ON PAGE 2)																
CITY AND STATE CORVALLIS, OR		ELEVATION: 250 TDZE: 248 AIRPORT NAME: CORVALLIS MUNI			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 17, AMDT 1A 29 MARCH 2018					SUP: AMDT: 1 DATED 11/10/2016				



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
EGBEW	ACVOL (TF) (FB) (RNP 1.00)	171.99 / 1.98	2400
ACVOL (FAF)	CAYJU/2.51 NM TO RW17 (TF) (FB) (RNP 0.30)	171.98 / 4.12	
CAYJU/2.51 NM TO RW17	RW27 (MAP) (TF) (FO) (RNP 0.30)	171.98 / 2.51	
RW27 (MAP)	1100 MSL (CA)	171.98	1100
1100 MSL	INNOP (DF) (FO) (RNP 1.00)		3700

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CRAFT ON V287 NORTHEAST BOUND.

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 1 SM AND INCREASE LNAV CAT C/D VISIBILITY TO 1 3/4 SM.

QUALITY
26
CHECKED

CITY AND STATE CORVALLIS, OR	ELEVATION: 250 TDZE: 248 AIRPORT NAME: CORVALLIS MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 17, AMDT 1A 29 MARCH 2018	SUP:
				AMDT: 1
				DATED: 11/10/2016

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCVO
RUNWAY	RW17
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W17A
LTP/FTP LATITUDE	443012.4245N
LTP/FTP LONGITUDE	1231727.8530W
LTP/FTP ELLIPSOIDAL HEIGHT	+00518
FPAP LATITUDE	442843.9845N
FPAP LONGITUDE	1231742.9550W
THRESHOLD CROSSING HEIGHT (TCH)	00044.7
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)	35.0

CRC REMAINDER

B7CE5FA1

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+00745
FPAP ORTHOMETRIC HEIGHT	+00745

QUALITY
26
CHECKED

CITY AND STATE

CORVALLIS, OR

ELEVATION: 250

TDZE: 248

AIRPORT NAME:

CORVALLIS MUNI

 FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 17, AMDT 1A

29 MARCH 2018

SUP:

AMDT: 1

DATED: 11/10/2016

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION NDB STANDARD INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.27										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		MAP: 4.57 NM AFTER FQW NDB OR AT SYI 19.60 DME					
LENON		FQW NDB			205.35 / 20.98			2700		CLIMB TO 1500 THEN CLIMBING LEFT TURN TO 2700 DIRECT FQW NDB AND HOLD.					
BNA VORTAC		FQW NDB			126.50 / 18.55			2700							
SYI VOR/DME		FQW NDB			008.90 / 24.15			3000							
										ADDITIONAL FLIGHT DATA: HOLD N, LT, 185.72 INBOUND. CHART FAS OBST: 728 TWR 355434N/0862258W. CHART CIRCLING ICON. BUYRO TO RW18: 3.19/50.					
1. PT <u>R</u> SIDE OF COURSE <u>005.76</u> OUTBOUND <u>2700</u> FT WITHIN <u>10</u> MILES OF <u>FQW NDB</u> (IAF)										MAG VAR: 2W EPOCH YEAR: 2000					
2.															
3. FAC <u>185.76</u> FAF <u>FQW NDB</u> DIST FAF TO MAP <u>4.57</u> THLD <u>4.57</u>															
4. MIN. ALT <u>FQW NDB 2200, BUYRO/SYI 21.39 DME 1260</u>															
8. MSA FROM: <u>FQW NDB 3400</u>															
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		STANDARD						
CATEGORY =====>	A			B			C			D			E		
	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA
S-18	1260	1	651	1260	1	651	1260	1 7/8	651		NA				
CIRCLING	1260	1	646	1260	1	646	1280	1 7/8	666		NA				
BUYRO FIX MINIMUMS (DME REQUIRED)															
S-18	1040	1	431	1040	1	431	1040	1 1/4	431		NA				
CIRCLING	1080	1	466	1080	1	466	1280	1 3/4	666		NA				
NOTES:															
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).															
CITY AND STATE MURFREESBORO, TN		ELEVATION: 614 TDZE: 609 AIRPORT NAME: MURFREESBORO MUNI			FACILITY IDENTIFIER: FQW		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: NDB RWY 18, AMDT 2, 03/29/2018				SUP AMDT 1C DATE 08/18/2016				



RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION INSTRUMENT APPROACH PROCEDURE FEDERAL AVIATION ADMINISTRATION 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		LPV: DA LNAV/VNAV: DA LNAV: RW18 CLIMB TO 3000 DIRECT URACE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT, 004.44 INBOUND. CHART FAS OBST: 821 TREE 355549N/0862157W. 1010 AAO 355900N/0862110W. DISTANCE TO THLD FROM 250 HAT: 0.69 NM. CHART VDP AT 1.44 NM TO RW18* *LNAV ONLY. WAAS CHANNEL # 48812 REFERENCE PATH ID: W18A CHART CIRCLING ICON. LTP HAE: 153.9 M										
ITZEB (IAF)		UZFUR (NOPT) (TF) (FB) (RNP 1.00)		274.54 / 7.00			3000												
LOXTY (IAF)		UZFUR (NOPT) (TF) (FB) (RNP 1.00)		094.37 / 7.00			3000												
UZFUR (IF/IAF)		ESKOC (TF) (FB) (RNP 1.00)		184.46 / 5.87			2500												
ESKOC (FAF)		AHINO/3.10 NM TO RW18 (TF) (FB) (RNP 0.30)		184.45 / 2.74															
AHINO/3.10 NM TO RW18		RW18 (MAP) (TF) (FO) (RNP 0.30)		184.45 / 3.10															
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N UZFUR, RT, 184.46 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 184.45 FAF: ESKOC DIST FAF TO MAP: 5.84 THLD: 5.84 4. MIN. ALT: UZFUR 3000, ESKOC 2500, AHINO/3.10 NM TO RW18 1620* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2500 GS ALT AT: ESKOC 2500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: _____																MAG VAR: 2W		EPOCH YEAR: 2000	
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				
LPV DA	859	3/4	250	859	3/4	250	859	3/4	250		NA								
LNAV/VNAV DA	898	7/8	289	898	7/8	289	898	7/8	289		NA								
LNAV MDA	1080	1	471	1080	1	471	1080	1 3/8	471		NA								
CIRCLING	1080	1	466	1080	1	466	1280	1 3/4	666		NA								
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).																			
CITY AND STATE		ELEVATION: 614 TDZE: 609		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
MURFREESBORO, TN		AIRPORT NAME:		MURFREESBORO MUNI		RNAV (GPS) RWY 18, AMDT 2, 03/29/2018				AMDT: 1C									
										DATED 04/02/2015									



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW18 (MAP)	859 MSL (CA)	184.45	

859 MSL	URACE (DF) (FO) (RNP 1.00)	3000
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TAA

	FROM	TO	ALT
1.	094/30 CW 275/30 (NOPT)	094/6 CW 275/6	3500
2.	094/6 CW 275/6	UZFUR (IF/IAF) (FB)	3000
3.	275/30 CW 004/30	275/10 CW 004/10	4200
4.	275/10 CW 004/10	ITZEB (IAF) (FB)	3000
5.	004/30 CW 094/30	LOXTY (IAF) (FB)	3100

QUALITY
24
CHECKED

CITY AND STATE MURFREESBORO, TN	ELEVATION: 614	TDZE: 609	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 18, AMDT 2, 03/29/2018	SUP:
	AIRPORT NAME:				AMDT: 1C
	MURFREESBORO MUNI				DATED: 04/02/2015

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMBT
RUNWAY	RW18
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W18A
LTP/FTP LATITUDE	355306.6500N
LTP/FTP LONGITUDE	0862237.6600W
LTP/FTP ELLIPSOIDAL HEIGHT	+01539
FPAP LATITUDE	355137.5005N
FPAP LONGITUDE	0862242.3475W
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	1304
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

06DD6D56

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+01829
FPAP ORTHOMETRIC HEIGHT	+01829

QUALITY
24
CHECKED

CITY AND STATE

MURFREESBORO, TN

ELEVATION: 614

TDZE: 609

AIRPORT NAME:

MURFREESBORO MUNI

 FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 18, AMDT 2, 03/29/2018

SUP:

AMDT: 1C

DATED: 04/02/2015

RNAV - 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		LPV: DA LNAV/VNAV: DA LNAV: RW36 CLIMB TO 3000 DIRECT UZFUR AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, RT, 184.46 INBOUND. CHART FAS OBST: 917 TWR 355024N/0862325W. DISTANCE TO THLD FROM 300 HAT: 0.65 NM. CHART VDP AT 1.36 NM TO RW36* *LNAV ONLY. WAAS CHANNEL # 61332 REFERENCE PATH ID: W36A CHART CIRCLING ICON. LTP HAE: 158.3 M						
URACE (IF/IAF)		ESSUN (TF) (FB) (RNP 1.00)			004.44 / 7.16			2500								
ESSUN (FAF)		RW36 (MAP) (TF) (FO) (RNP 0.30)			004.45 / 4.64											
RW36 (MAP)		914 MSL (CA)			004.45											
914 MSL		UZFUR (DF) (FO) (RNP 1.00)						3000								
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S URACE, RT, 004.44 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 004.45 FAF: ESSUN DIST FAF TO MAP: 4.64 THLD: 4.64 4. MIN. ALT: URACE 3000, ESSUN 2500 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2500 GS ALT AT: ESSUN 2500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.75 TCH: 40.0 20:1 IS CLEAR 34:1 IS NOT CLEAR 8. MSA FROM: _____											MAG VAR: 2W		EPOCH YEAR: 2000			
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	
LPV DA	914	7/8	300	914	7/8	300	914	7/8	300		NA					
LNAV/VNAV DA	1030	1 1/8	416	1030	1 1/8	416	1030	1 1/8	416		NA					
LNAV MDA	1180	1	566	1180	1	566	1180	1 5/8	566		NA					
CIRCLING	1180	1	566	1180	1	566	1280	1 3/4	666		NA					
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -16C (4F) OR ABOVE 54C (130F). CHART NOTE: RWY 36 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).																
CITY AND STATE MURFREESBORO, TN		ELEVATION: 614 TDZE: 614 AIRPORT NAME: MURFREESBORO MUNI			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 36, AMDT 3, 03/29/2018				SUP:					
											AMDT: 2B					
											DATED 04/02/2015					



**RNAV - 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.

TAA

	<u>FROM</u>	<u>TO</u>	<u>ALT</u>
1.	274/30 CW 094/30 (NOPT)	274/10 CW 094/10	4400
2.	274/10 CW 094/10	URACE (IF/IAF) (FB)	3000
3.	094/30 CW 274/30	094/10 CW 274/10	4400
4.	094/10 CW 274/10	URACE (IF/IAF) (FO)	3000

QUALITY
24
CHECKED

CITY AND STATE

MURFREESBORO, TN

ELEVATION: 614

TDZE: 614

AIRPORT NAME:

MURFREESBORO MUNI

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 36, AMDT 3, 03/29/2018

SUP:

AMDT: **2B**DATED: **04/02/2015**

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMBT
RUNWAY	RW36
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W36A
LTP/FTP LATITUDE	355219.6900N
LTP/FTP LONGITUDE	0862240.1300W
LTP/FTP ELLIPSOIDAL HEIGHT	+01583
FPAP LATITUDE	355348.8390N
FPAP LONGITUDE	0862235.4400W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.75
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1304
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 B7276331

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+01870
FPAP ORTHOMETRIC HEIGHT	+01870

QUALITY
24
CHECKED

CITY AND STATE MURFREESBORO, TN	ELEVATION: 614 TDZE: 614 AIRPORT NAME: MURFREESBORO MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 36, AMDT 3, 03/29/2018	SUP:
				AMDT: 2B
				DATED: 04/02/2015

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		RNAV - 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		LNAV: RW35						
GGG VORTAC		WENED (TF) (FB) (RNP 2.00)		143.32 / 34.77				3800		CLIMB TO 2000 DIRECT TUYPO AND HOLD.						
WENED (IAF)		JIPRI (NOPT) (TF) (FB) (RNP 1.00)		083.74 / 5.00				3800								
EXITE (IAF)		JIPRI (NOPT) (TF) (FB) (RNP 1.00)		250.42 / 17.84				3800								
JIPRI (IF/IAF)		PUCIN (TF) (FB) (RNP 1.00)		353.79 / 9.01				2000								
PUCIN (FAF)		RW35 (MAP) (TF) (FO) (RNP 0.30)		353.78 / 5.30						ADDITIONAL FLIGHT DATA: HOLD N, RT, 173.77 INBOUND. FAS OBST: 509 AAO 320602N/0941842W. CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.						
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																
2. HOLD S JIPRI, RT, 353.79 INBOUND, 3800 FT. IN LIEU OF PT (IAF)																
3. FAC: 353.78 FAF: PUCIN DIST FAF TO MAP: 5.30 THLD: 5.30																
4. MIN. ALT: JIPRI 3800, PUCIN 2000																
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																
6. MIN GS INCPT: _____ GS ALT AT: _____ OM: _____ MM: _____ IM: _____																
7. GS ANGLE: _____ TCH: 34:1 IS NOT CLEAR																
8. MSA FROM: RW35 2200																
MAG VAR: 4E EPOCH YEAR: 1995																
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		X				
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	
LNAV MDA	840	1	592	840	1	592	840	1 1/2	592		NA					
CIRCLING	920	1	672	920	1	672	920	2	672		NA					
NOTES: CHART NOTE: CIRCLING RWY 17 NA AT NIGHT. CHART NOTE: RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: NOPT FOR ARRIVALS AT JIPRI ON V13 NORTHEAST BOUND. (CONTINUED ON PAGE 2)																
CITY AND STATE CARTHAGE, TX		ELEVATION: 248 TDZE: 248 AIRPORT NAME: PANOLA COUNTY-SHARPE FIELD		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 35, ORIG-A 29 MARCH 2018						SUP: AMDT: ORIG DATED 11/20/2008				



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW35 (MAP)	648 MSL (CA)	353.78	
648 MSL	TUYPO (DF) (FO) (RNP 1.00)		2000

NOTES, (CONT.):

CHART NOTE: USE SHREVEPORT REGIONAL ALTIMETER SETTING; WHEN NOT RECEIVED USE EAST TEXAS REGIONAL ALTIMETER SETTING.

QUALITY
18
CHECKED

CITY AND STATE
CARTHAGE, TX

ELEVATION: 248 TDZE: 248
AIRPORT NAME:
PANOLA COUNTY-SHARPE FIELD

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 35, ORIG-A
29 MARCH 2018

SUP:
AMDT: ORIG
DATED: 11/20/2008

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR 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.

QUALITY
18
CHECKED

CITY AND STATE

CARTHAGE, TX

ELEVATION: 248

TDZE: 248

AIRPORT NAME:

PANOLA COUNTY-SHARPE FIELD

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 35, ORIG-A

29 MARCH 2018

SUP:

AMDT: **ORIG**DATED: **11/20/2008**

RNAV - 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		LNAV: RW17 CLIMB TO 3000 DIRECT ELLEN AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT, 353.00 INBOUND. CHART FAS OBST: 1449 TREES 333937N/0991612W. TOKEN TO RW17: 2.86/40										
SNEED (IAF)	ALNUT (TF) (FB) (RNP 1.00)			138.73 / 5.87			3000												
ELECT (IAF)	ALNUT (TF) (FB) (RNP 1.00)			226.63 / 11.07			3000												
ALNUT (IF)	TOKEN (TF) (FB) (RNP 1.00)			173.00 / 5.00			2900												
TOKEN (FAF)	RW17 (MAP) (TF) (FO) (RNP 0.30)			173.00 / 5.00															
RW17 (MAP)	1700 MSL (CA)			173.00															
1700 MSL	ELLEN (DF) (FO) (RNP 1.00)						3000												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT ALNUT 3. FAC: <u>173.00</u> FAF: <u>TOKEN</u> DIST FAF TO MAP: <u>5.00</u> THLD: <u>5.00</u> 4. MIN. ALT: ALNUT 3000, TOKEN 2900 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: _____ GS ALT AT: _____ OM: _____ MM: _____ IM: _____ 7. GS ANGLE: _____ TCH: <u>20:1 IS CLEAR 34:1 IS CLEAR</u> 8. MSA FROM: RW17 3100																MAG VAR: 7E		EPOCH YEAR: 1995	
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT											ALTERNATE: N A ☒ X								
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				
LNAV MDA	1700	1	356	1700	1	356	1700	1	356		NA								
CIRCLING	1780	1	436	1800	1	456	1800	1 1/2	456		NA								
NOTES:																			
CHART NOTE: OBTAIN LOCAL ALTIMETER SETTING ON CTAF; WHEN NOT RECEIVED, USE SHEPPARD AFB/WICHITA FALLS MUNI ALTIMETER SETTING AND INCREASE ALL MDAS 160 FEET, AND INCREASE LNAV CAT C VISIBILITY TO 1 1/2 SM AND CIRCLING CAT C VISIBILITY TO 1 3/4 SM. (CONTINUED ON PAGE 2)																			
CITY AND STATE			ELEVATION: 1344 TDZE: 1344			FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:			GPS RWY 17				
SEYMOUR, TX			AIRPORT NAME:			RNAV		RNAV (GPS) RWY 17, ORIG-B				AMDT:			ORIG-A				
			SEYMOUR MUNI					29 MARCH 2018				DATED			04/28/2016				



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - 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.

NOTES, (CONT.):
CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
PBN REQUIREMENTS NOTE: RNP APCH.

QUALITY
16
CHECKED

CITY AND STATE SEYMOUR, TX	ELEVATION: 1344 TDZE: 1344 AIRPORT NAME: SEYMOUR MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 17, ORIG-B 29 MARCH 2018	SUP: GPS RWY 17
				AMDT: ORIG-A
				DATED: 04/28/2016

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						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			LPV: DA LNAV/VNAV: DA LNAV: RW07R CLIMB TO 2900 THEN CLIMBING LEFT TURN TO 3000 DIRECT BAE VOR/DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 090.00 INBOUND. CHART FAS OBST: 921 TANK 425525N/0875654W. DISTANCE TO THLD FROM 200 HAT: 0.47 NM. CHART VDP AT 1.22 NM TO RW07R* *LNAV ONLY. WAAS CHANNEL # 69226 REFERENCE PATH ID: W07A LTP HAE: 187.1 M									
EMEWO (IF)			FIDNO (TF) (FB) (RNP 1.00)			075.44 / 6.90			2700												
FIDNO (FAF)			HULOX/1.80 NM TO RW07R (TF) (FB) (RNP 0.30)			075.56 / 4.23															
HULOX/1.80 NM TO RW07R			RW07R (MAP) (TF) (FO) (RNP 0.30)			075.56 / 1.80															
RW07R (MAP)			2900 MSL (CA)			075.56			2900												
2900 MSL			BAE VOR/DME (DF) (FO) (RNP 1.00)						3000												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT EMEWO 3. FAC: 075.56 FAF: FIDNO DIST FAF TO MAP: 6.03 THLD: 6.03 4. MIN. ALT: EMEWO 2900, FIDNO 2700, HULOX/1.80 NM TO RW07R 1340* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2700 GS ALT AT: FIDNO 2700 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 49.9 34:1 IS CLEAR 8. MSA FROM: RW07R 2900												MAG VAR: 4W		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						
LPV DA **	929	2400	200	929	2400	200	929	2400	200	929	2400	200									
LNAV/VNAV DA	1232	1 1/4	503	1232	1 1/4	503	1232	1 1/4	503	1232	1 1/4	503									
LNAV MDA	1180	2400	451	1180	2400	451	1180	4500	451	1180	4500	451									
CIRCLING																					
	1240	1	511	1240	1	511	1240	1 1/2	511	1280	2	551									
NOTES:																					
CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.																					
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20C (-4F) OR ABOVE 54C (130F).																					
CHART NOTE: DME/DME RNP-0.3 NA.																					
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).																					
CITY AND STATE				ELEVATION: 729 TDZE: 729				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
MILWAUKEE, WI				AIRPORT NAME:								RNAV (GPS) Z RWY 7R, AMDT 1E				AMDT: 1D					
				GENERAL MITCHELL INTL								29 MARCH 2018				DATED 02/01/2018					



**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR PART 97.33**

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMKE
RUNWAY	RW07R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Z
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W07A
LTP/FTP LATITUDE	425620.6655N
LTP/FTP LONGITUDE	0875503.9115W
LTP/FTP ELLIPSOIDAL HEIGHT	+01871
FPAP LATITUDE	425648.7000N
FPAP LONGITUDE	0875308.7800W
THRESHOLD CROSSING HEIGHT (TCH)	00049.9
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

35DFAC73

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02220
FPAP ORTHOMETRIC HEIGHT	+02220

QUALITY
22
CHECKED

CITY AND STATE MILWAUKEE, WI	ELEVATION: 729 AIRPORT NAME: GENERAL MITCHELL INTL	TDZE: 729 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Z RWY 7R, AMDT 1E 29 MARCH 2018	SUP:
				AMDT: 1D
				DATED: 02/01/2018

[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. [31182](#); Amdt. No. [3790](#)

**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 Procedure Standards Branch (AFS-420) Flight Technologies and Procedures Division, Flight Standards Service, Federal Aviation Administration, Mike Monroney Aeronautical Center, 6500 South MacArthur Blvd., Oklahoma City, OK. 73169 (Mail Address: P.O. Box 25082 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 [February 23, 2018](#)

A handwritten signature in black ink, appearing to read "John S. Duncan", with a long horizontal flourish extending to the right.

John S. Duncan
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
29-Mar-18	AL	Evergreen	Middleton Field	7/0916	2/12/18	RNAV (GPS) RWY 10, Amdt 1B
29-Mar-18	AL	Evergreen	Middleton Field	7/0917	2/12/18	RNAV (GPS) RWY 28, Amdt 1B
29-Mar-18	AL	Evergreen	Middleton Field	7/0918	2/12/18	VOR/DME RWY 10, Amdt 3A
29-Mar-18	AL	Evergreen	Middleton Field	7/0925	2/12/18	RNAV (GPS) RWY 19, Amdt 1B
29-Mar-18	UT	Brigham City	Brigham City	7/0939	1/25/18	RNAV (GPS) RWY 35, Amdt 2B
29-Mar-18	UT	Brigham City	Brigham City	7/0942	1/25/18	Takeoff Minimums and Obstacle DP, Amdt 6A
29-Mar-18	CA	Grass Valley	Nevada County Air Park	7/0951	2/13/18	VOR OR GPS-A, Amdt 1A
29-Mar-18	CA	Grass Valley	Nevada County Air Park	7/0956	2/13/18	RNAV (GPS) RWY 7, Orig
29-Mar-18	CA	Grass Valley	Nevada County Air Park	7/0958	2/13/18	Takeoff Minimums and Obstacle DP, Amdt 1
29-Mar-18	SD	Wagner	Wagner Muni	7/4352	2/12/18	RNAV (GPS) RWY 27, Orig-A
29-Mar-18	SD	Wagner	Wagner Muni	7/4353	2/12/18	RNAV (GPS) RWY 9, Orig-A
29-Mar-18	TX	Brownsville	Brownsville/South Padre Island Intl	7/4362	2/13/18	RNAV (GPS) RWY 13, Orig-A
29-Mar-18	TX	Brownsville	Brownsville/South Padre Island Intl	7/4400	2/13/18	ILS OR LOC RWY 13, Orig
29-Mar-18	PA	Pottsville	Schuylkill County/Joe Zerbey	7/5164	2/12/18	RNAV (GPS) RWY 11, Amdt 2
29-Mar-18	PA	Pottsville	Schuylkill County/Joe Zerbey	7/5165	2/12/18	RNAV (GPS) RWY 29, Amdt 2
29-Mar-18	NE	Beatrice	Beatrice Muni	7/6218	2/16/2018	RNAV (GPS) RWY 18, Amdt 2A
29-Mar-18	NE	Beatrice	Beatrice Muni	7/6219	2/16/2018	RNAV (GPS) RWY 32, Amdt 1B
29-Mar-18	NE	Beatrice	Beatrice Muni	7/6224	2/16/2018	RNAV (GPS) RWY 36, Amdt 2A
29-Mar-18	CA	Oroville	Oroville Muni	7/8296	2/12/18	RNAV (GPS) RWY 2, Amdt 1
29-Mar-18	AK	Cold Bay	Cold Bay	7/9842	1/9/18	RNAV (GPS) RWY 26, Amdt 3
29-Mar-18	OK	Duncan	Halliburton Field	8/2954	2/13/18	RNAV (GPS) RWY 35, Amdt 2
29-Mar-18	IA	Sioux City	Sioux Gateway/Col Bud Day Field	8/3737	2/13/18	ILS OR LOC RWY 31, Amdt 25D

29-Mar-18	CO	Fort Collins/Loveland	Fort Collins-Loveland Muni	8/4541	2/12/18	ILS OR LOC RWY 33, Amdt 6B
29-Mar-18	CO	Fort Collins/Loveland	Fort Collins-Loveland Muni	8/4542	2/12/18	RNAV (GPS) RWY 15, Orig
29-Mar-18	CO	Fort Collins/Loveland	Fort Collins-Loveland Muni	8/4543	2/12/18	RNAV (GPS) RWY 33, Amdt 1A
29-Mar-18	CO	Fort Collins/Loveland	Fort Collins-Loveland Muni	8/4545	2/12/18	VOR/DME-A, Amdt 7
29-Mar-18	TX	Beaumont/Port Arthur	Jack Brooks Rgnl	8/4872	2/12/18	RNAV (GPS) RWY 12, Orig-A
29-Mar-18	IA	Des Moines	Des Moines Intl	8/5986	2/13/18	RNAV (GPS) RWY 13, Amdt 2
29-Mar-18	NM	Roswell	Roswell Intl Air Center	8/6296	2/12/18	RADAR-1, Orig-A
29-Mar-18	MO	St Louis	Spirit of St Louis	8/7173	2/13/18	ILS OR LOC RWY 8R, Amdt 14A
29-Mar-18	MO	St Louis	Spirit of St Louis	8/7174	2/13/18	ILS OR LOC RWY 26L, Orig-C
29-Mar-18	CT	Willimantic	Windham	8/7701	2/12/18	RNAV (GPS) RWY 9, Amdt 1A
29-Mar-18	FL	Miami	Miami-Opa Locka Executive	8/7849	2/12/18	Takeoff Minimums and Obstacle DP, Amdt 9
29-Mar-18	HI	Kailua/Kona	Ellison Onizuka Kona Intl At Keahole	8/9475	2/13/18	Takeoff Minimums and Obstacle DP, Amdt 5

AIRAC Date: 29 MARCH 2018

FDC **7/0916** GZH IAP MIDDLETON FIELD, Evergreen, AL. RNAV (GPS) RWY 10, AMDT 1B... CHANGE AIRPORT NAME FROM MIDDLETON FIELD TO EVERGREEN RGNL/MIDDLETON FIELD. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI {3.00}/TCH {51}). CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ANDALUSIA/OPP ALTIMETER SETTING AND INCREASE ALL MDAS 100 FEET, AND VISIBILITY LP CAT C/D 3/8 SM, LNAV CAT C/D 1/4 SM, CIRCLING CAT C 3/8 SM AND CIRCLING CAT D 1/2 SM. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SOUTH ALABAMA RGNL ALTIMETER SETTING AND INCREASE ALL MDAS 100 FEET, INCREASE LP CAT C/D VISIBILITY 3/8 MILE AND LNAV CAT C/D VISIBILITY 1/4 MILE AND CIRCLING CAT C VISIBILITY 3/8, CAT D 1/12 MILE. CHART NOTE: RWY 10 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: STRAIGHT-IN RWY 10 NA AT NIGHT, CIRCLING RWY 10, 19 NA AT NIGHT. DELETE NOTE: NIGHT LANDING: RWY 10, 19 NA. THIS IS RNAV (GPS) RWY 10, AMDT 1C. 1712071445-PERM

FDC **7/0917** GZH IAP MIDDLETON FIELD, Evergreen, AL. RNAV (GPS) RWY 28, AMDT 1B... CHANGE AIRPORT NAME FROM MIDDLETON FIELD TO EVERGREEN RGNL/MIDDLETON FIELD. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ANDALUSIA/OPP ALTIMETER SETTING AND INCREASE ALL MDAS 100 FEET, AND VISIBILITY LNAV CAT C/D 1/4 SM, CIRCLING CAT C 3/8 SM, CIRCLING CAT D 1/2 SM. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SOUTH ALABAMA RGNL ALTIMETER SETTING AND INCREASE ALL MDAS 100 FEET, INCREASE LNAV C/D VISIBILITY 1/4 MILE AND CIRCLING CAT C VISIBILITY 3/8 MILE, CAT D VISIBILITY 1/2 MILE. CHART VDP AT 1.60 NM TO RWY 28. CHART NOTE: RWY 28 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: CIRCLING RWY 10, 19 NA AT NIGHT. DELETE NOTE: NIGHT LANDING: RWY 10, 19 NA. THIS IS RNAV (GPS) RWY 28, AMDT 1C. 1712071448-PERM

FDC **7/0918** GZH IAP MIDDLETON FIELD, Evergreen, AL. VOR/DME RWY 10, AMDT 3A... CHANGE AIRPORT NAME FROM MIDDLETON FIELD TO EVERGREEN RGNL/MIDDLETON FIELD. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ANDALUSIA/OPP ALTIMETER SETTING AND INCREASE ALL MDAS 100 FEET, AND VISIBILITY S-10 CAT C/D 1/4 SM, CIRCLING CAT C 3/8 SM AND CIRCLING CAT D 1/2 SM. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SOUTH ALABAMA RGNL ALTIMETER SETTING AND INCREASE ALL MDAS 100 FEET, INCREASE S-10 CAT C/D VISIBILITY 1/4 MILE AND CIRCLING CAT C VISIBILITY 3/8, CAT D 1/2 MILE. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI {3.00}/TCH {51}). CHART NOTE: DME REQUIRED. CHART NOTE: RWY 10 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: STRAIGHT-IN RWY 10 NA AT NIGHT, CIRCLING RWY 10, 19 NA AT NIGHT. DELETE NOTE: NIGHT LANDING: RWY 10, 19 NA AT NIGHT. THIS IS VOR/DME RWY 10, AMDT 3B. 1712071450-PERM

FDC **7/0925** GZH IAP MIDDLETON FIELD, Evergreen, AL. RNAV (GPS) RWY 19, AMDT 1B... CHANGE AIRPORT NAME FROM MIDDLETON FIELD TO EVERGREEN RGNL/MIDDLETON FIELD. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ANDALUSIA/OPP ALTIMETER SETTING AND INCREASE ALL MDAS 100 FEET, AND VISIBILITY LP AND LNAV CAT C/D 1/4 SM, CIRCLING CAT C/D 1/2 SM. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SOUTH ALABAMA RGNL ALTIMETER SETTING AND INCREASE ALL MDAS 100 FEET, INCREASE LP AND LNAV C/D VISIBILITY 1/4 MILE AND CIRCLING CAT C/D VISIBILITY 1/2 MILE. CHART NOTE: RWY 19 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: STRAIGHT-IN RWY 19 NA AT NIGHT, CIRCLING RWY 10, 19 NA AT NIGHT. DELETE NOTE: NIGHT LANDING: RWY 10, 19 NA. THIS IS RNAV (GPS) RWY 19, AMDT 1C. 1712071500-PERM

FDC **7/0939** BMC IAP BRIGHAM CITY, Brigham City, UT. RNAV (GPS) RWY 35, AMDT 2B... CHANGE AIRPORT NAME FROM BRIGHAM CITY TO BRIGHAM CITY RGNL. CHART NOTE: RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. THIS IS RNAV (GPS) RWY 35, AMDT 2C. 1712071510-PERM

FDC **7/0942** BMC ODP BRIGHAM CITY, Brigham City, UT. TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 6A... DEPARTURE PROCEDURE. CHANGE AIRPORT NAME FROM BRIGHAM CITY TO BRIGHAM CITY RGNL. ALL OTHER DATA REMAINS THE SAME. THIS IS TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 6B. 1712071510-PERM

FDC **7/0951** GOO IAP NEVADA COUNTY AIR PARK, Grass Valley, CA. VOR OR GPS-A, AMDT 1A... CHART APT ELEV 3158, DELETE APT ELEV 3152. CIRCLING CAT A/B/C HAA 1122. CHANGED MISSED APPROACH INSTRUCTIONS TO READ: CLIMBING RIGHT TURN TO 5100 ON MYV R-058 TO BINNT INT/MYV 13.00 DME AND HOLD. MSA FROM MYV VOR/DME 28 NM: 330-140 5600, 140-330 3400. CHART NOTE: PROCEDURE NA AT NIGHT. CHANGE AIRPORT NAME FROM NEVADA COUNTY AIR PARK TO NEVADA COUNTY. THIS IS VOR OR GPS-A, AMDT 1B. 1712071529-PERM

FDC **7/0956** GOO IAP NEVADA COUNTY AIR PARK, Grass Valley, CA. RNAV (GPS) RWY 7, ORIG... CHART APT ELEV 3158, DELETE APT ELEV 3154. CIRCLING HAA 702 ALL CATS. CHANGE AIRPORT NAME FROM NEVADA COUNTY AIR PARK TO NEVADA COUNTY. DELETE NOTE: RWY 25 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. THIS IS RNAV (GPS) RWY 7, ORIG-A. 1712071532-PERM

FDC **7/0958** GOO ODP NEVADA COUNTY AIR PARK, Grass Valley, CA. TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 1... CHANGE AIRPORT NAME FROM NEVADA COUNTY AIR PARK TO NEVADA COUNTY. NOTE: RWY 25: MULTIPLE TREES AND BUSHES BEGINNING 40 FT FROM DER, 78 FT RIGHT OF CENTERLINE, UP TO 3087 FT MSL. TREES BEGINNING 68 FT FROM DER, 312 FT LEFT OF CENTERLINE, UP TO 3137 FT MSL. TREES BEGINNING 593 FT FROM DER, 149 FT RIGHT OF CENTERLINE, UP TO 3088 FT MSL. TREE 648 FT FROM DER, 176 FT RIGHT OF CENTERLINE, 3093 FT MSL. TREES BEGINNING 698 FT FROM DER, 175 FT RIGHT OF CENTERLINE, UP TO 3094 FT MSL. TREE 748 FT FROM DER, 138 FT RIGHT OF CENTERLINE, 3096 FT MSL. TREE 773 FT FROM DER, 167 FT RIGHT OF CENTERLINE, 3102 FT MSL. THIS IS TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 1A. 1712071535-PERM

FDC **7/4352** AGZ IAP WAGNER MUNI, Wagner, SD. RNAV (GPS) RWY 27, ORIG-A... CHART NOTE: CIRCLING NA TO RUNWAYS 14 AND 32. CHART NOTE: RWY 27 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: RWY 27 STRAIGHT-IN AND CIRCLING MINIMUMS NA AT NIGHT. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. THIS IS RNAV (GPS) RWY 27, ORIG-B. 1711291618-PERM

FDC **7/4353** AGZ IAP WAGNER MUNI, Wagner, SD. RNAV (GPS) RWY 9, ORIG-A... DELETE NOTE: CIRCLING TO RWY 27 NA AT NIGHT. CHART NOTE: CIRCLING NA TO RWYS 14 AND 32. THIS IS RNAV (GPS) RWY 9, ORIG-B. 1711291618-PERM

FDC **7/4362** BRO IAP BROWNSVILLE/SOUTH PADRE ISLAND INTL, Brownsville, TX. RNAV (GPS) RWY 13, ORIG--A... DELETE NOTE: ASTERISK, ASTERISK RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHART NOTE: ASTERISK, ASTERISK RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA, NA WHEN USING PORT ISABEL ALTIMETER SETTING. THIS IS RNAV (GPS) RWY 13, ORIG-B. 1710131540-PERM

FDC **7/4400** BRO IAP BROWNSVILLE/SOUTH PADRE ISLAND INTL, Brownsville, TX. ILS OR LOC RWY 13, ORIG... DELETE NOTE: ASTERISK, ASTERISK RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHART NOTE: ASTERISK, ASTERISK RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA, NA WHEN USING PORT ISABEL ALTIMETER SETTING. THIS IS ILS OR LOC RWY 13, ORIG-A. 1710131627-PERM

FDC **7/5164** ZER IAP SCHUYLKILL COUNTY /JOE ZERBEY, Pottsville, PA. RNAV (GPS) RWY 11, AMDT 2... CHART NOTE: CIRCLING NA TO RWYS 4 AND 22. THIS IS RNAV (GPS) RWY 11, AMDT 2A. 1706201748-PERM

FDC **7/5165** ZER IAP SCHUYLKILL COUNTY /JOE ZERBEY, Pottsville, PA. RNAV (GPS) RWY 29, AMDT 2... CHART NOTE: CIRCLING NA TO RWYS 4 AND 22. THIS IS RNAV (GPS) RWY 29, AMDT 2A. 1706201748-PERM

FDC **7/6218** BIE IAP BEATRICE MUNI, Beatrice, NE. RNAV (GPS) RWY 18, AMDT 2A... CIRCLING CAT C MDA 2000/HAA 676 VISIBILITY 2, CAT D MDA 2100/HAA 776 VISIBILITY 2 1/2. CHART CIRCLING ICON. CHART NOTE: RWY 18 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA. DELETE NOTE: BARO-VNAV NA WHEN USING LINCOLN ALTIMETER SETTING. DELETE NOTE: VDP NA WITH LINCOLN ALTIMETER SETTING. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LINCOLN ALTIMETER SETTING AND INCREASE ALL DA 91 FEET AND ALL MDA 100 FEET. INCREASE LPV AND LNAV/VNAV ALL CATS VISIBILITY 3/8 MILE, LNAV CAT C/D VISIBILITY 1/4 MILE, AND CIRCLING CAT D VISIBILITY 1/2 MILE. THIS IS RNAV (GPS) RWY 18, AMDT 2B. 1712151617-PERM

FDC **7/6219** BIE IAP BEATRICE MUNI, Beatrice, NE. RNAV (GPS) RWY 32, AMDT 1B... CIRCLING CAT C MDA 2000/HAA 676 VISIBILITY 2, CAT D MDA 2100/HAA 776 VISIBILITY 2 1/2. CHART CIRCLING ICON. CHART NOTE: RWY 32 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: BARO-VNAV NA WHEN USING LINCOLN ALTIMETER SETTING. DELETE NOTE: VDP NA WITH LINCOLN ALTIMETER SETTING. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LINCOLN ALTIMETER SETTING: INCREASE LPV DA TO 1660 FEET, LNAV/VNAV DA TO 1776 FEET, VISIBILITY LPV ALL CATS 1/8 MILE, LNAV/VNAV ALL CATS 3/8 MILE; INCREASE ALL MDA 100 FEET AND VISIBILITY LNAV CATS C/D 1/4 MILE AND CIRCLING CAT D 1/2 MILE. THIS IS RNAV (GPS) RWY 32, AMDT 1C. 1712151617-PERM

FDC **7/6224** BIE IAP BEATRICE MUNI, Beatrice, NE. RNAV (GPS) RWY 36, AMDT 2A... CIRCLING CAT C MDA 2000/HAA 676 VISIBILITY 2, CAT D MDA 2100/HAA 776 VISIBILITY 2 1/2. CHART CIRCLING ICON. DELETE NOTE: BARO-VNAV NA WHEN USING LINCOLN ALTIMETER SETTING. DELETE NOTE: VDP NA WITH LINCOLN ALTIMETER SETTING. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LINCOLN ALTIMETER SETTING AND INCREASE ALL DA 91 FEET AND ALL MDA 100 FEET. INCREASE LNAV CAT C/D VISIBILITY 3/8 MILE, AND CIRCLING CAT C VISIBILITY 1/4 MILE, AND CAT D VISIBILITY 1/2 MILE. THIS IS RNAV (GPS) RWY 36, AMDT 2B. 1712151617-PERM

FDC **7/8296** OVE IAP OROVILLE MUNI, Oroville, CA. RNAV (GPS) RWY 2, AMDT 1... CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH ANGLES NOT COINCIDENT (VGSI ANGLE {3.00}/TCH {44}). THIS IS RNAV (GPS) RWY 2, AMDT 1A. 1711021756-PERM

FDC **7/9842** CDB IAP COLD BAY, Cold Bay, AK. RNAV (GPS) RWY 26, AMDT 3... DELETE NOTE: CHART AT OR ABOVE 3000 AT SOTOE. DELETE***FROM LNAV MDA*** (MDA 700/HAT 599 LINE OF MINIMA). ADD ***TO LNAV MDA (MDA 500/HAT 399 LINE OF MINIMA). ADD NOTE: CHART AT OR ABOVE 1900 AT SOTOE. THIS IS RNAV (GPS) RWY 26, AMDT 3A. 1712070901-PERM

FDC **8/2954** DUC IAP HALLIBURTON FIELD, Duncan, OK. RNAV (GPS) RWY 35, AMDT 2... CHANGE TERMINAL ROUTE TO READ: CALSA (IAF) TO ACUGI (IF/IAF) COURSE 265.36. THIS IS RNAV (GPS) RWY 35, AMDT 2A. 1802010901-PERM

FDC **8/3737** SUX IAP SIOUX GATEWAY/COL BUD DAY FIELD, Sioux City, IA. ILS OR LOC RWY 31, AMDT 25D... DELETE NOTE: *RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHART NOTE: *RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA (NA WHEN USING LE MARS ALTIMETER SETTING). THIS IS ILS OR LOC RWY 31, AMDT 25E. 1801311941-PERM

FDC **8/4541** FNL IAP FORT COLLINS-LOVELAND MUNI, Fort Collins/Loveland, CO. ILS OR LOC RWY 33, AMDT 6B... CHANGE AIRPORT NAME FROM FT COLLINS-LOVELAND MUNI TO NORTHERN COLORADO RGNL. CHART NOTE: FOR INOPERATIVE ALS, WHEN USING DENVER INTL ALTIMETER SETTING INCREASE S-ILS 33 VISIBILITY ALL CATS TO 1 1/4 MILE. DELETE NOTE: FOR INOPERATIVE MALSR, WHEN USING DENVER INTL ALTIMETER SETTING INCREASE S-ILS 33 VISIBILITY ALL CATS TO 1 1/4 MILE. THIS IS ILS OR LOC RWY 33, AMDT 6C. 1802011524-PERM

FDC **8/4542** FNL IAP FORT COLLINS-LOVELAND MUNI, Fort Collins/Loveland, CO. RNAV (GPS) RWY 15, ORIG... CHANGE AIRPORT NAME FROM FT COLLINS-LOVELAND MUNI TO NORTHERN COLORADO RGNL. THIS IS RNAV (GPS) RWY 15, ORIG-A. 1802011524-PERM

FDC **8/4543** FNL IAP FORT COLLINS-LOVELAND MUNI, Fort Collins/Loveland, CO. RNAV (GPS) RWY 33, AMDT 1A... CHANGE AIRPORT NAME FROM FT COLLINS-LOVELAND MUNI TO NORTHERN COLORADO RGNL. CHART NOTE: FOR INOPERATIVE ALS WHEN USING DENVER INTL ALTIMETER SETTING, INCREASE LPV ALL CATS VISIBILITY TO 1 1/8 MILE. DELETE NOTE: FOR INOPERATIVE MALSR WHEN USING DENVER INTL ALTIMETER SETTING, INCREASE LPV ALL CATS VISIBILITY TO 1 1/8 MILE. THIS IS RNAV (GPS) RWY 33, AMDT 1B. 1802011524-PERM

FDC **8/4545** FNL IAP FORT COLLINS-LOVELAND MUNI, Fort Collins/Loveland, CO. VOR/DME-A, AMDT 7 ... CHART NOTE: DME REQUIRED. CHANGE AIRPORT NAME FROM FT COLLINS-LOVELAND MUNI TO NORTHERN COLORADO RGNL. THIS IS VOR-A, AMDT 7A 1802011524-PERM

FDC **8/4872** BPT IAP JACK BROOKS RGNL, Beaumont/Port Arthur, TX. RNAV (GPS) RWY 12, ORIG-A... DELETE NOTE: ASTERISK, ASTERISK RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHART NOTE: ASTERISK, ASTERISK RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA (NA WHEN USING ORANGE COUNTY ALTIMETER SETTING). THIS IS RNAV (GPS) RWY 12, ORIG-B. 1802012011-PERM

FDC **8/5986** DSM IAP DES MOINES INTL, Des Moines, IA. RNAV (GPS) RWY 13, AMDT 2... CHANGE LPV MINIMUMS FROM "LPV DA 1122/24 200" TO READ "LPV DA # 1122/24 200". THIS IS RNAV (GPS) RWY 13, AMDT 2A. 1802052034-PERM

FDC **8/6296** ROW IAP U.S. DOD ROSWELL INTL AIR CENTER, Roswell, NM. RADAR-1, ORIG-A... ASR RWY 17 MDA 4080, HAT 414 ALL CATS, VISIBILITY CAT C 1 1/8 SM. CHART FAS OBSTACLE: 3821 TOWER 332003N/1043120W. THIS IS RADAR-1, ORIG-B. 1802061300-PERM

FDC **8/7173** SUS IAP SPIRIT OF ST LOUIS, St Louis, MO. ILS OR LOC RWY 8R, AMDT 14A... DELETE NOTE: *RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHART NOTE: *RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA (NA WHEN USING ST LOUIS LAMBERT INTL ALTIMETER SETTING). THIS IS ILS OR LOC RWY 8R, AMDT 14B. 1802071904-PERM

FDC **8/7174** SUS IAP SPIRIT OF ST LOUIS, St Louis, MO. ILS OR LOC RWY 26L, ORIG-C... DELETE NOTE: *RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHART NOTE: *RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA (NA WHEN USING ST LOUIS LAMBERT INTL ALTIMETER SETTING). THIS IS ILS OR LOC RWY 26L, ORIG-D. 1802071904-PERM

FDC **8/7701** IJD IAP WINDHAM, Willimantic, CT. RNAV (GPS) RWY 9, AMDT 1A...
CHART NOTE: PROCEDURE NA AT NIGHT. CHART NOTE: RWY 09 HELICOPTER
VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: WHEN
VGSI INOP, CIRCLING RWY 27 NA AT NIGHT. DELETE NOTE: CIRCLING TO RWY
09, 18, 36 NA AT NIGHT. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION
BELOW 1 SM NA. DELETE NOTE: STRAIGHT-IN MINIMUMS NA AT NIGHT. THIS IS
RNAV (GPS) RWY 9, AMDT 1B. 1802081829-PERM

FDC **8/7849** OPF ODP MIAMI-OPA LOCKA EXECUTIVE, Miami, FL. TAKEOFF
MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 9... CHANGE
AIRPORT NAME FROM OPA-LOCKA EXECUTIVE TO MIAMI-OPA LOCKA
EXECUTIVE. ALL OTHER DATA REMAINS AS PUBLISHED. THIS IS TAKEOFF
MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 9A. 1802082233-
PERM

FDC **8/9475** KOA ODP ELLISON ONIZUKA KONA INTL AT KEAHOLE, Kailua/Kona, HI.
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 5...
CHANGE AIRPORT NAME FROM KONA INTL AT KEAHOLE TO ELLISON ONIZUKA
KONA INTL AT KEAHOLE. THIS IS TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES, AMDT 5A. 1802131725-PERM