

U.S. Department
of Transportation

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

**Federal Aviation
Administration**

Transmittal Letter 18-10

March 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 18-09 on March
9, 2018.**

Willard, OH, Willard, VOR-A, Orig-B
Philadelphia, PA, Philadelphia Intl, ILS OR LOC RWY 27R, ILS RWY 27R (SA CAT I), ILS
RWY 27R (SA CAT II), Amdt 10H

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: MAJOJ/MFD 11.70 DME FIX																		
MFD VORTAC (IF/IAF)			YUMAN/MFD VORTAC 7.50 DME			332.28 / 7.50				3000		CLIMB TO 3000 THEN RIGHT TURN DIRECT MFD VORTAC AND HOLD.																		
THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-09.										ADDITIONAL FLIGHT DATA:																				
										HOLD SE, LT, 332.00 INBOUND. FAS OBST: 1299 AAO 405757N/0824104W. CHART CIRCLING ICON. FAC CROSSES MIDPOINT OF RWY 10-28.																				
1. PT <u>R</u> SIDE OF COURSE <u>152.28</u> OUTBOUND <u>3000</u> FT WITHIN <u>10</u> MILES OF <u>MFD VORTAC</u> (IAF)										MAG VAR: 3W EPOCH YEAR: 1965																				
2.																														
3. FAC <u>332.28</u> FAF <u>YUMAN/MFD VORTAC 7.50 DME</u> DIST FAF TO MAP <u> </u> THLD <u> </u>																														
4. MIN. ALT <u>MFD VORTAC 3000, YUMAN 3000</u>																														
8. MSA FROM: <u>MFD VORTAC 3000</u>																														
MINIMUMS																														
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A X																				
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	1680	1	713	1720	1	753	1880	2 3/4	913		NA																			
CLEVELAND-HOPKINS ALTIMETER SETTING MINIMUMS																														
CIRCLING	1720	1	753	1760	1	793	1920	3	953		NA																			
NOTES:																														
CHART NOTE: USE MANSFIELD ALTIMETER SETTING, WHEN NOT RECEIVED, USE CLEVELAND-HOPKINS ALTIMETER SETTING.																														
EQUIPMENT REQUIREMENTS NOTE: RADAR REQUIRED FOR PROCEDURE ENTRY, DME REQUIRED.																														
QUALITY 35 CHECKED																														
																CITY AND STATE			ELEVATION: 967 TDZE:			FACILITY IDENTIFIER:			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:			SUP		
																WILLARD, OH			AIRPORT NAME:			MFD			VOR-A, ORIG-B 24 MAY 2018			AMDT ORIG-A		
																DATE			10/12/2017											

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-PDP 0.16 DME									
MENGE/ARD 15.00 DME (IAF)		MRTIN INT/I-PDP 11.27 DME		200.00 / 5.13 (ARD R-200)		3000		CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 3000 ON MXE VORTAC R-115 TO MXE VORTAC AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 3000 DIRECT PTW VORTAC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SW, RT, 054.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE PTW VORTAC, RT, 332.00 INBOUND. CHART FAS OBST: 246 CRANE 395308N/0751044W. CHART 388 BRIDGE 395417N/0750733W. CHART VDP AT 1.13 DME* DISTANCE VDP TO THLD 1.28 NM. *LOC ONLY. CHART IN PLANVIEW: PTW VORTAC. CHART I-PDP DME ANTENNA IN PROFILE 395235.47N/0751311.51W. CHART: NAAS MUSTIN (ABANDONED)									
ENZEW/RBV 23.08 DME (IAF)		MRTIN INT/I-PDP 11.27 DME		267.50 / 5.52 (I-PDP)		3000											
MRTIN INT/I-PDP 11.27 DME (IF)		JALTO/I-PDP 6.12 DME		267.50 / 5.14 (I-PDP)		2100											
THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-09.																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT MRTIN INT/I-PDP 11.27 DME 3. FAC: 267.50 FAF: JALTO/I-PDP 6.12 DME DIST FAF TO MAP: _____ THLD: 6.28 4. MIN. ALT: MRTIN 3000, JALTO 2100, HADNI/I-PDP 2.01 DME 740* 5. DIST TO THLD FROM OM: _____ - _____ MM: _____ - _____ IM: _____ 150 HAT: 1878 100 HAT: 924 GS ANT: 1181 6. MIN GS INCPT: 2100 GS ALT AT: JALTO 2100 OM: _____ - _____ MM: _____ - _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 52.2 8. MSA FROM: OOD VORTAC 2600										MAG VAR: 12W 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 27R**	211	2400	200	211	2400	200	211	2400	200	211	2400	200					
S-LOC 27R	500	2400	489	500	2400	489	500	5000	489	500	5000	489					
CIRCLING	540	1	504	640	1	604	640	1 3/4	604	640	2	604					
MINIMUMS																	
SIDESTEP 27L	500	1	491	500	1	491	500	1 3/8	491	500	1 3/8	491					
NOTES: CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). SA CAT I SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED S-ILS 27R: CAT A, B, C, D, RA 157, RVR 1400, HAT 150, DA 161 MSL. SA CAT II CATEGORY II ILS SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED S-ILS 27R: CAT A,B,C,D (CONTINUED ON PAGE 2)																	
CITY AND STATE PHILADELPHIA, PA		ELEVATION: 36 AIRPORT NAME: PHILADELPHIA INTL		TDZE: 27R 11 TDZE: 27L 10		FACILITY IDENTIFIER: I-PDP		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 27R, AMDT 10H; ILS RWY 27R (SA CAT I), ILS RWY 27R (SA CAT II) 24 MAY 2018				SUP: AMDT: 10G DATED 02/01/2018					



**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.):

RA 102, RVR 1200, HAT 100, DA 111 MSL.

EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED

CHART NOTE: **RVR 1800 AUTHORIZED WITH THE USE OF FD OR AP OR HUD TO DA.

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: PROCEDURE NA FOR ARRIVALS AT ENZEW ON V123-157-213 NORTHEAST BOUND. ←

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MENGE ON V479 NORTHBOUND.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 27R CAT C/D VISIBILITY TO 1 3/8 SM.

QUALITY
40
CHECKED

CITY AND STATE

PHILADELPHIA, PA

ELEVATION: 36

AIRPORT NAME:

PHILADELPHIA INTL

TDZE: 27R 11

TDZE: 27L 10

FACILITY
IDENTIFIER:

I-PDP

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 27R, AMDT 10H; ILS RWY 27R (SA CAT I)
, ILS RWY 27R (SA CAT II)
24 MAY 2018

SUP:

AMDT: 10G

DATED: 02/01/2018

[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. [31186](#); Amdt. No. [3793](#)]

**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 [March 23, 2018](#)

A handwritten signature in black ink, appearing to read "John S. Duncan", with a stylized, flowing script.

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 26 April 2018

Harrison, AR, Boone County, Takeoff Minimums and Obstacle DP, Amdt 2A
 Kailua/Kona, HI, Ellison Onizuka Kona Intl at Keahole, RNAV (RNP) Z RWY 17, Orig-B

Effective 24 May 2018

Bettles, AK, Bettles, RNAV (GPS) RWY 2, Amdt 1
 Bettles, AK, Bettles, RNAV (GPS) RWY 20, Amdt 1
 Bettles, AK, Bettles, Takeoff Minimums and Obstacle DP, Amdt 3
 Bettles, AK, Bettles, VOR RWY 2, Amdt 2
 Birmingham, AL, Birmingham-Shuttlesworth Intl, Takeoff Minimums and Obstacle DP, Amdt 8
 Harrison, AR, Boone County, RNAV (GPS) RWY 18, Orig-A
 Melbourne, AR, Melbourne Muni-John E Miller Field, Takeoff Minimums and Obstacle DP, Amdt 1
 Morrilton, AR, Petit Jean Park, Takeoff Minimums and Obstacle DP, Amdt 2
 Palmdale, CA, Palmdale USAF Plant 42, ILS OR LOC RWY 25, Amdt 10
 Palmdale, CA, Palmdale USAF Plant 42, RNAV (GPS) RWY 7, Orig
 Palmdale, CA, Palmdale USAF Plant 42, RNAV (GPS) RWY 22, Orig
 Palmdale, CA, Palmdale USAF Plant 42, RNAV (GPS) RWY 25, Amdt 2
 Palmdale, CA, Palmdale USAF Plant 42, VOR OR TACAN RWY 25, Amdt 8
 Wray, CO, Wray Muni, RNAV (GPS) RWY 35, Amdt 2A
 Yuma, CO, Yuma Muni, RNAV (GPS) RWY 16, Orig
 Yuma, CO, Yuma Muni, RNAV (GPS) RWY 34, Orig
 Yuma, CO, Yuma Muni, Takeoff Minimums and Obstacle DP, Orig
 Greenfield, IA, Greenfield Muni, RNAV (GPS) RWY 7, Amdt 1
 Greenfield, IA, Greenfield Muni, RNAV (GPS) RWY 25, Amdt 1
 Detroit, MI, Coleman A Young Muni, Takeoff Minimums and Obstacle DP, Amdt 7A
 Detroit, MI, Willow Run, Takeoff Minimums and Obstacle DP, Amdt 10B
 Missoula, MT, Missoula Intl, ILS Y RWY 12, Orig-C
 Missoula, MT, Missoula Intl, ILS Z RWY 12, Amdt 12D
 Missoula, MT, Missoula Intl, RNAV (GPS)-D, Amdt 1
 Missoula, MT, Missoula Intl, RNAV (GPS) Y RWY 12, Amdt 3
 Missoula, MT, Missoula Intl, RNAV (RNP) RWY 30, Orig-B
 Missoula, MT, Missoula Intl, RNAV (RNP) Z RWY 12, Orig-D
 Missoula, MT, Missoula Intl, VOR-A, Amdt 13
 Missoula, MT, Missoula Intl, VOR-B, Amdt 7
 Louisburg, NC, Triangle North Executive, ILS OR LOC RWY 5, Amdt 4B
 Louisburg, NC, Triangle North Executive, VOR-A, Amdt 2C
 Raleigh/Durham, NC, Raleigh-Durham Intl, Takeoff Minimums and Obstacle DP, Amdt 6A
 Rocky Mount, NC, Rocky Mount-Wilson Rgnl, ILS OR LOC RWY 4, Amdt 16C
 Sanford, NC, Raleigh Exec Jetport at Sanford-Lee County, ILS Y OR LOC Y RWY 3, Orig-A
 Sanford, NC, Raleigh Exec Jetport at Sanford-Lee County, ILS Z OR LOC Z RWY 3, Amdt 2A

Hartington, NE, Hartington Muni/Bud Becker Fld, RNAV (GPS) RWY 31, Orig-C
 Buffalo, NY, Buffalo Niagara Intl, RNAV (GPS) Y RWY 5, Amdt 2D
 Buffalo, NY, Buffalo Niagara Intl, RNAV (RNP) Z RWY 23, Orig-A
 Dayton, OH, James M Cox Dayton Intl, ILS OR LOC RWY 18, Amdt 10A
 Dayton, OH, James M Cox Dayton Intl, ILS OR LOC RWY 24L, Amdt 10A
 Dayton, OH, James M Cox Dayton Intl, ILS OR LOC RWY 24R, Amdt 10A
 Dayton, OH, James M Cox Dayton Intl, RNAV (GPS) RWY 6R, Amdt 1B
 Dayton, OH, James M Cox Dayton Intl, RNAV (GPS) RWY 18, Amdt 1B
 Dayton, OH, James M Cox Dayton Intl, RNAV (GPS) RWY 24L, Amdt 1D
 Dayton, OH, James M Cox Dayton Intl, RNAV (GPS) RWY 36, Amdt 1A
 Dayton, OH, James M Cox Dayton Intl, RNAV (GPS) Z RWY 6L, Amdt 1D
 Dayton, OH, James M Cox Dayton Intl, RNAV (GPS) Z RWY 24R, Amdt 2A
 Dayton, OH, James M Cox Dayton Intl, RNAV (RNP) Y RWY 6L, Orig-B
 Dayton, OH, James M Cox Dayton Intl, RNAV (RNP) Y RWY 24R, Orig-B
 Marion, OH, Marion Muni, RNAV (GPS) RWY 13, Orig-A
 Marion, OH, Marion Muni, RNAV (GPS) RWY 25, Orig-A
 Marion, OH, Marion Muni, VOR-A, Amdt 1A
 Mount Gilead, OH, Morrow County, VOR-A, Amdt 5
 Franklin, PA, Venango Rgnl, ILS OR LOC RWY 21, Amdt 6B
 Franklin, PA, Venango Rgnl, RNAV (GPS) RWY 3, Amdt 1B
 Franklin, PA, Venango Rgnl, RNAV (GPS) RWY 21, Amdt 1B
 Franklin, PA, Venango Rgnl, VOR RWY 3, Amdt 5B
 Greenville, PA, Greenville Muni, RNAV (GPS)-B, Orig-A
 Greenville, PA, Greenville Muni, VOR-A, Amdt 2, CANCELED
 Price, UT, Carbon County Rgnl/Buck Davis Field, ILS OR LOC RWY 1, Amdt 1A
 Price, UT, Carbon County Rgnl/Buck Davis Field, RNAV (GPS) RWY 1, Amdt 2A
 Price, UT, Carbon County Rgnl/Buck Davis Field, VOR RWY 1, Amdt 1A
 Danville, VA, Danville Rgnl, ILS OR LOC RWY 2, Amdt 4C
 South Hill, VA, Mecklenburg-Brunswick Rgnl, LOC RWY 1, Amdt 1A
 Olympia, WA, Olympia Rgnl, ILS OR LOC RWY 17, Amdt 12C
 Olympia, WA, Olympia Rgnl, RNAV (GPS) RWY 17, Amdt 1
 Olympia, WA, Olympia Rgnl, RNAV (GPS) RWY 35, Orig-B
 Olympia, WA, Olympia Rgnl, Takeoff Minimums and Obstacle DP, Amdt 6
 Olympia, WA, Olympia Rgnl, VOR RWY 35, Amdt 13
 Olympia, WA, Olympia Rgnl, VOR-A, Amdt 2
 Appleton, WI, Appleton Intl, ILS OR LOC RWY 3, Amdt 18
 Appleton, WI, Appleton Intl, RNAV (GPS) RWY 30, Amdt 1B

**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>
HARRISON, AR	BOONE COUNTY	26 APRIL 2018	2A

TAKEOFF MINIMUMS:

RWY 36: STANDARD.

RWY 18: 1400 - 3 OR STANDARD WITH MINIMUM CLIMB OF 320 FT PER NM TO 3200.

TEXTUAL DEPARTURE PROCEDURES:

RWY 18: CLIMB ON HEADING 181.55 TO 2600 BEFORE TURNING.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 18: TREE, VEHICLES ON ROAD, POLE BEGINNING 17 FT FROM DER, 482 FT RIGHT OF CENTERLINE, UP TO 33 FT AGL/1396 FT MSL.

NOTE: RWY 36: VEGETATION, TREE BEGINNING 32 FT FROM DER, 444 FT LEFT OF CENTERLINE, UP TO 1367 FT MSL. FENCE 184 FT FROM DER, 498 FT LEFT OF CENTERLINE, 2 FT AGL/1369 FT MSL. TREE 228 FT FROM DER, 545 FT LEFT OF CENTERLINE, 1378 FT MSL. TREE 270 FT FROM DER, 524 FT RIGHT OF CENTERLINE, 1376 FT MSL. TREE 321 FT FROM DER, 520 FT LEFT OF CENTERLINE, 1379 FT MSL. TREES BEGINNING 448 FT FROM DER, 543 FT LEFT OF CENTERLINE, UP TO 1381 FT MSL. TREES BEGINNING 634 FT FROM DER, 333 FT LEFT OF CENTERLINE, UP TO 1384 FT MSL. TREE 877 FT FROM DER, 365 FT LEFT OF CENTERLINE, 1388 FT MSL. TREE 906 FT FROM DER, 334 FT LEFT OF CENTERLINE, 1394 FT MSL. TREES BEGINNING 969 FT FROM DER, 368 FT LEFT OF CENTERLINE, UP TO 1397 FT MSL. TREE 1029 FT FROM DER, 368 FT LEFT OF CENTERLINE, 1399 FT MSL. TREES BEGINNING 1065 FT FROM DER, 186 FT LEFT OF CENTERLINE, UP TO 1403 FT MSL. TREES BEGINNING 1160 FT FROM DER, 217 FT LEFT OF CENTERLINE, UP TO 1405 FT MSL. TREE 1576 FT FROM DER, 805 FT RIGHT OF CENTERLINE, 1405 FT MSL.

CONTROLLING OBSTACLES:

RWY 18: 2355 FT MSL TOWER 361137.00N/0931157.00W.

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY18: 2355 FT MSL TOWER 361137.00N/0931157.00W.



**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>
HARRISON, AR	BOONE COUNTY	26 APRIL 2018	2A

REMARKS:

CONTROLLING OBSTACLE FOR RWY 18 EXISTS, BUT THE DEPARTURE ROUTE SEPARATES AIRCRAFT FROM OBSTACLE USING STANDARD TAKEOFF MINIMUMS. WAS UNABLE TO LOWER TAKEOFF MINIMUMS DURING ABBREVIATED AMENDMENT.

FLIGHT INSPECTED BY:

ZACK SMYER
Digitally signed by
ROBERT G HAMILTON
Mar 08, 2018

OFFICE SYMBOL:

FICO

DATE:

3/7/18

DEVELOPED BY:

VICTOR B. NASO (KEITH JONES)
Digitally signed by
ROBERT G HAMILTON
Mar 08, 2018

OFFICE SYMBOL:

AJV-5413

DATE:

10/26/2017

APPROVED BY:

GEORGE E. DAVIS
Digitally signed by
ROBERT G HAMILTON
Mar 08, 2018

OFFICE SYMBOL:

AJV-5410

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:

ATA, ZME, AMGR, STATE AVIATION DIRECTOR

CHANGES - REASONS:

1. ADDED TAKEOFF OBSTACLES NOTES.
2. CHANGED TEXTUAL DEPARTURE PROCEDURES FROM "CLIMB VIA HEADING 181.55 TO 2600 BEFORE TURNING" TO "CLIMB ON HEADING 181.55 TO 2600 BEFORE TURNING".

REASON:

1. BIENNIAL REVIEW EVALUATION BASED ON NEW SURVEY INFORMATION.
2. UPDATED TO CURRENT CRITERIA.

RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, TITLE 14 CFR PART 97.33						Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.										
TERMINAL ROUTES											MISSED APPROACH					
FROM		TO			COURSE AND DISTANCE				ALTITUDE		RNP: DA CLIMB TO 5000 ON TRACK 173.82 TO WOPNA AND RIGHT TURN TO NANLE, AND ON TRACK 357.79 TO ANDES AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 113.67 INBOUND. DISTANCE TO THLD FROM 250 HAT: 0.61 NM. #TCH 102.2 MSL (DO NOT CHART) ROUTE TYPE: A, H ROUTE TYPE QUALIFIER1: F ROUTE TYPE QUALIFIER2: S					
UPP VORTAC (IAF)		SODZE (TF) (FB) (RNP 1.00)			201.71 / 11.00				5700							
SODZE		VECKI (TF) (FB) (RNP 1.00)			201.68 / 8.41				3000							
MUE VOR/DME (IAF)		ZAPSO (TF) (FB) (RNP 1.00)			247.27 / 8.00				6800							
ZAPSO		VECKI (TF) (FB) (RNP 1.00)			247.23 / 12.73				3000							
TAMMI (IAF)		VECKI (TF) (FB) (RNP 1.00)			167.48 / 9.89				3000							
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT VECKI 3. FAC: <u>173.82</u> FAF: _____ DIST FAF TO MAP: _____ THLD: _____ 4. MIN. ALT: VECKI 3000, EGIPT 1500 5. DIST TO THLD FROM OM: <u>4.39</u> MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: <u>1500</u> GS ALT AT: EGIPT 1500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>55.1</u> 34:1 IS NOT CLEAR 8. MSA FROM: RW17 14200																
											MAG VAR: 11E			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	
AUTHORIZATION REQUIRED																
RNP 0.17 DA	297	3/4	250	297	3/4	250	297	3/4	250	297	3/4	250				
RNP 0.30 DA	484	1	437	484	1	437	484	1	437	484	1	437				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW 6C (43F) OR ABOVE 48C (119F). CHART NOTE: RF REQUIRED. CHART NOTE: GPS REQUIRED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MUE VORTAC ON V3 NORTHEAST BOUND. (CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 47 TDZE: 47			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:			
KAILUA/KONA, HI		AIRPORT NAME:			ELLISON ONIZUKA KONA INTL AT KEAHOLE			RNAV (RNP) Z RWY 17, ORIG-B					AMDT: ORIG-A			
								26 APRIL 2018					DATED 11/13/2014			



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.):																												
<table><thead><tr><th>FROM</th><th>TO</th><th>COURSE AND DISTANCE</th><th>ALTITUDE</th></tr></thead><tbody><tr><td>VECKI (IF)</td><td>EGIPT (TF) (FB) (RNP 1.00)</td><td>173.83 / 6.01</td><td>1500</td></tr><tr><td>EGIPT (FAF)</td><td>RW17 (MAP) (TF) (FO) (RNP 0.30)</td><td>173.82 / 4.39</td><td></td></tr><tr><td>RW17 (MAP)</td><td>WOPNA (TF) (FB) (RNP 1.00)</td><td>173.82 / 5.59</td><td></td></tr><tr><td>WOPNA</td><td>NANLE (RF) (FB) (RNP 1.00)</td><td>(5.30 NM RADIUS CW (UKJOJ)) / 17.02</td><td></td></tr><tr><td>NANLE</td><td>ANDES (TF) (FO) (RNP 1.00)</td><td>357.79 / 8.86</td><td>5000</td></tr></tbody></table>					FROM	TO	COURSE AND DISTANCE	ALTITUDE	VECKI (IF)	EGIPT (TF) (FB) (RNP 1.00)	173.83 / 6.01	1500	EGIPT (FAF)	RW17 (MAP) (TF) (FO) (RNP 0.30)	173.82 / 4.39		RW17 (MAP)	WOPNA (TF) (FB) (RNP 1.00)	173.82 / 5.59		WOPNA	NANLE (RF) (FB) (RNP 1.00)	(5.30 NM RADIUS CW (UKJOJ)) / 17.02		NANLE	ANDES (TF) (FO) (RNP 1.00)	357.79 / 8.86	5000
FROM	TO	COURSE AND DISTANCE	ALTITUDE																									
VECKI (IF)	EGIPT (TF) (FB) (RNP 1.00)	173.83 / 6.01	1500																									
EGIPT (FAF)	RW17 (MAP) (TF) (FO) (RNP 0.30)	173.82 / 4.39																										
RW17 (MAP)	WOPNA (TF) (FB) (RNP 1.00)	173.82 / 5.59																										
WOPNA	NANLE (RF) (FB) (RNP 1.00)	(5.30 NM RADIUS CW (UKJOJ)) / 17.02																										
NANLE	ANDES (TF) (FO) (RNP 1.00)	357.79 / 8.86	5000																									
NOTES, (CONT.): CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON UPP VORTAC AIRWAY RADIALS 200 CW 287. CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.30 ALL CATS VISIBILITY TO 1 1/2 MILE.																												
QUALITY 9 CHECKED																												
CITY AND STATE KAILUA/KONA, HI	ELEVATION: 47 AIRPORT NAME: ELLISON ONIZUKA KONA INTL AT KEAHOLE	TDZE: 47	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (RNP) Z RWY 17, ORIG-B 26 APRIL 2018																								
				SUP: AMDT: ORIG-A 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		LNAV: WULPI									
PIBIC (IAF)		MELME (NOPT) (TF) (FB) (RNP 1.00)		286.28 / 8.00		3400		(DO NOT EXCEED 230 KIAS UNTIL MELME) CLIMB TO 1800 THEN CLIMBING LEFT TURN TO 3400 DIRECT MELME AND HOLD.									
IKIVE (IAF)		MELME (NOPT) (TF) (FB) (RNP 1.00)		105.76 / 8.00		3400											
MELME (IF/IAF)		CUPOV (TF) (FB) (RNP 1.00)		016.02 / 6.67		2400		ADDITIONAL FLIGHT DATA: FAS OBST: 800 AAO 665150N/1513756W. CHART VDP AT 0.85 NM TO WULPI. CHART CIRCLING ICON. CUPOV TO RW2: 3.00/36.3.									
CUPOV (FAF)		WULPI (MAP) (TF) (FO) (RNP 0.30)		016.16 / 4.94													
WULPI (MAP)		1800 MSL (CA)		016.16		1800											
1800 MSL		MELME (DF) (FO) (RNP 1.00)				3400											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																	
2. HOLD S MELME, RT, 016.02 INBOUND, 3400 FT. IN LIEU OF PT (IAF)																	
3. FAC: 016.16 FAF: CUPOV DIST FAF TO MAP: 4.94 THLD: 5.43																	
4. MIN. ALT: MELME 3400, CUPOV 2400																	
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 NOT CLEAR																	
8. MSA FROM: _____																	
MAG VAR: 16E 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	1100	1	458	1100	1	458	1100	1	458	1100	1	458					
CIRCLING	1100	1	453	1100	1	453	1320	2	673	1320	2 1/4	673					
NOTES: CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY. CHART NOTE: CIRCLING NA EAST OF RWY 2-20. CHART NOTE: FOR INOPERATIVE ALS, INCREASE CAT C/D VISIBILITY TO 1 3/8 SM. CHART NOTE: RWY 2 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. PBN REQUIREMENTS NOTE: RNP APCH.																	
CITY AND STATE BETTLES, AK		ELEVATION: 647 TDZE: 642 AIRPORT NAME: BETTLES		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 2, AMDT 1 5/24/2018				SUP: RNAV (GPS) RWY 1 AMDT: ORIG DATED 08/30/2007							

**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

	FROM	TO	ALT
1.	286/30 CW 332/30 (NOPT) 286/20 CW 332/20	286/20 CW 332/20 MELME (IF/IAF) (FB)	4500 3400
2.	332/30 CW 060/30 (NOPT)	MELME (IF/IAF) (FB)	3400
3.	060/30 CW 106/30 (NOPT) 060/9 CW 106/9	060/9 CW 106/9 MELME (IF/IAF) (FB)	6000 3400
4.	106/30 CW 196/30	106/19 CW 196/19	6800
5.	106/19 CW 196/19	IKIVE (IAF) (FB)	5100
6.	196/30 CW 286/30	196/16 CW 286/16 (FB)	6700
7.	196/16 CW 286/16	PIBIC (IAF) (FB)	4800

QUALITY
16
CHECKED

CITY AND STATE

BETTLES, AK

ELEVATION: 647

TDZE: 642

AIRPORT NAME:

BETTLES

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 2, AMDT 1

5/24/2018

SUP: RNAV (GPS) RWY 1

AMDT: ORIG

DATED: 08/30/2007

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: LEVGE									
CYCLE			HUVAD (TF) (FB) (RNP 2.00)			351.83 / 27.03			5100		CLIMB TO 3200 DIRECT SIYOD AND ON TRACK 197.32 TO MELME AND HOLD.									
TEGDE			UMYAR (TF) (FB) (RNP 2.00)			144.28 / 7.14			8300											
UMYAR			IYOLU (TF) (FB) (RNP 2.00)			144.94 / 8.73			7100											
HUVAD (IAF)			NOYIR (TF) (FB) (RNP 1.00)			274.39 / 10.32			4300											
IYOLU (IAF)			NOYIR (TF) (FB) (RNP 1.00)			224.07 / 7.03			4300		ADDITIONAL FLIGHT DATA: HOLD S, RT, 016.02 INBOUND. CHART FAS OBST: 1035 TREE 665644N/1512724W. CHART VDP AT 1.38 NM TO LEVGE. CHART CIRCLING ICON. KIYEP TO RW20: 3.00/52.0. FAC CROSSES RWY C/L EXTENDED 3007 FT FROM THLD.									
(SEE FORM 8260-10)																				
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																				
2. PROFILE STARTS AT NOYIR																				
3. FAC: 191.37 FAF: KIYEP DIST FAF TO MAP: 4.85 THLD: 5.34																				
4. MIN. ALT: NOYIR 4300, WUTOM 3200, KIYEP 2400																				
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 NOT CLEAR																				
8. MSA FROM: LEVGE 7000										MAG VAR: 16E 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	1300	1	653	1300	1	653	1300	1 7/8	653	1300	1 7/8	653								
CIRCLING	1300	1	653	1300	1	653	1320	2	673	1320	2 1/4	673								
NOTES: CHART NOTE: CIRCLING NA EAST OF RWY 2-20. PBN REQUIREMENTS NOTE: RNP APCH. CHART NOTE: RWY 20 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.																				
@ CAT D 800-2 1/4																				
QUALITY 16 CHECKED																				
CITY AND STATE BETTLES, AK			ELEVATION: 647 TDZE: 647 AIRPORT NAME: BETTLES				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 20, AMDT 1 5/24/2018					SUP: RNAV (GPS) RWY 19 AMDT: ORIG-A DATED 02/06/2014						

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

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
NOYIR (IF)	WUTOM (TF) (FB) (RNP 1.00)	216.26 / 4.46	3200
WUTOM	KIYEP (TF) (FB) (RNP 1.00)	214.29 / 2.66	2400
KIYEP (FAF)	LEVGE (MAP) (TF) (FO) (RNP 0.30)	191.37 / 4.85	
LEVGE (MAP)	1047 MSL (CA)	191.37	
1047 MSL	SIYOD (DF) (FB) (RNP 1.00)		
SIYOD	MELME (TF) (FO) (RNP 1.00)	197.32 / 11.02	3200

QUALITY
16
CHECKED

CITY AND STATE

BETTLES, AK

ELEVATION: 647

TDZE: 647

AIRPORT NAME:

BETTLES

 FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 20, AMDT 1

5/24/2018

SUP: RNAV (GPS) RWY 19

AMDT: ORIG-A

DATED: 02/06/2014

**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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CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
BETTLES, AK	BETTLES	5/24/2018	3

TAKEOFF MINIMUMS:

RWY 20: STANDARD.

RWY 2: 500 AND 2 1/2 OR STANDARD WITH A MINIMUM CLIMB OF 285 FT PER NM TO 1200.

TEXTUAL DEPARTURE PROCEDURES:

RWY 2: CLIMB HEADING 016.26 TO 2500 THEN CLIMBING LEFT TURN TO 3600 DIRECT BTT VOR/DME, CONTINUE CLIMB IN BTT HOLDING PATTERN (HOLD S, LT, 338.00 INBOUND) TO CROSS BTT VOR/DME AT OR ABOVE MEA/MCA FOR ROUTE OF FLIGHT.

RWY 20: CLIMB HEADING 196.28 TO 2000 THEN CLIMBING LEFT TURN TO 3600 DIRECT BTT VOR/DME, CONTINUE CLIMB IN BTT VOR/DME HOLDING PATTERN (HOLD S, LT, 338.00 INBOUND) TO CROSS BTT VOR/DME AT OR ABOVE MEA/MCA FOR ROUTE OF FLIGHT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 2: VEHICLE ON ROAD 4 FT FROM DER, 108 FT LEFT OF CENTERLINE, 660 FT MSL.
VEHICLE ON ROAD 19 FT FROM DER, 165 FT RIGHT OF CENTERLINE, 659 FT MSL.
TREE, VEHICLE ON ROAD BEGINNING 24 FT FROM DER, 25 FT LEFT OF CENTERLINE, UP TO 37 FT AGL/671 FT MSL.
VEHICLE ON ROAD 49 FT FROM DER, 71 FT RIGHT OF CENTERLINE, 660 FT MSL.
TREES BEGINNING 138 FT FROM DER, 29 FT LEFT OF CENTERLINE, UP TO 45 FT AGL/679 FT MSL.
TREE 410 FT FROM DER, 587 FT RIGHT OF CENTERLINE, 41 FT AGL/684 FT MSL.
TREES BEGINNING 506 FT FROM DER, 108 FT RIGHT OF CENTERLINE, UP TO 48 FT AGL/691 FT MSL.
TREE 2016 FT FROM DER, 972 FT LEFT OF CENTERLINE, 65 FT AGL/698 FT MSL.
TREE 2108 FT FROM DER, 870 FT LEFT OF CENTERLINE, 72 FT AGL/704 FT MSL.
TREE 2432 FT FROM DER, 1112 FT LEFT OF CENTERLINE, 78 FT AGL/712 FT MSL.
TREE 1.7 NM FROM DER, 2988 FT RIGHT OF CENTERLINE, 67 FT AGL/929 FT MSL.
TREES BEGINNING 1.8 NM FROM DER, 2436 FT RIGHT OF CENTERLINE, UP TO 38 FT AGL/1037 FT MSL.
TREE, TERRAIN+VEG BEGINNING 1.9 NM FROM DER, 1946 FT RIGHT OF CENTERLINE, UP TO 44 FT AGL/1059 FT MSL.

NOTE: RWY 20: VEHICLE ON ROAD 2 FT FROM DER, 112 FT LEFT OF CENTERLINE, 649 FT MSL.
TREE, SIGN, VEHICLE ON ROAD, VEGETATION, ANTENNA BEGINNING 2 FT FROM DER, 16 FT LEFT OF CENTERLINE, UP TO 36 FT AGL/670 FT MSL.
SIGN 9 FT FROM DER, 93 FT RIGHT OF CENTERLINE, 4 FT AGL/638 FT MSL.
TREES BEGINNING 104 FT FROM DER, 189 FT RIGHT OF CENTERLINE, UP TO 30 FT AGL/666 FT MSL.
TREES BEGINNING 139 FT FROM DER, 11 FT RIGHT OF CENTERLINE, UP TO 38 FT AGL/674 FT MSL.
TREES BEGINNING 342 FT FROM DER, 270 FT RIGHT OF CENTERLINE, UP TO 52 FT AGL/687 FT MSL.

CONTROLLING OBSTACLES:

RWY 2: 1059 FT TREE 665630.34N/1512719.73W.

OBSTACLE MANDATING ODP ROUTE DEVELOPMENT:

RWY 2: 3737 FT AAO 665536.00N/1510524.00W

RWY 20: 2320 FT AAO 665321.00N/1514900.00W

REMARKS:



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

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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
BETTLES, AK	BETTLES	5/24/2018	3

FLIGHT INSPECTED BY:
PENDING

Digitally signed by
OFFICE SYMBOL: **ADOLFO D URRUTIA** DATE:
FICO Mar 07, 2018

DEVELOPED BY:
IVAN BLANCO

Digitally signed by
OFFICE SYMBOL: **ADOLFO D URRUTIA** DATE:
AJV-5432 Mar 07, 2018

APPROVED BY:
PATRICK MULQUEEN

OFFICE SYMBOL: DATE:
AJV-5430

REQUIRED EFFECTIVE DATE:
5/24/2018

Digitally signed by
ADOLFO D URRUTIA
Mar 07, 2018

COORDINATED WITH:

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

OTHER:
ZAN, AMGR

CHANGES - REASONS:

1. CHANGED TAKEOFF MINIMUMS FROM: RWY 1, STANDARD WITH MINIMUM CLIMB OF 400 FT PER NM TO 2500 OR 3100-2 1/2 FOR CLIMB IN VISUAL CONDITIONS TO: RWY 2, 500 AND 2 1/2 OR STANDARD WITH A MINIMUM CLIMB OF 285 FT PER NM TO 1200 - NEW EVALUATION RESULT, NO OBSTACLES PENETRATE ODP ROUTE OCS OUTSIDE ICA EXTENDED, VCOA NOT REQUIRED AND RWY CHANGE WITH APRT MAG VAR CHANGE FROM 20E TO 16E.
2. CHANGED TEXTUAL DEPARTURE FROM: RWY 1, CLIMB HEADING 012.27 TO 2500 THEN CLIMBING LEFT TURN TO 3600 DIRECT BTT VOR/DME. CLIMB IN BTT VOR/DME HOLDING PATTERN (HOLD S, LT, 338 INBOUND) TO CROSS BTT VOR/DME AT OR ABOVE 3600 OR AS DIRECTED BY ATC TO: RWY 2: CLIMB HEADING 016.26 TO 2500 THEN CLIMBING LEFT TURN TO 3600 DIRECT BTT VOR/DME, CONTINUE CLIMB IN BTT VOR/DME HOLDING PATTERN (HOLD S, LT, 338.00 INBOUND) TO CROSS BTT VOR/DME AT OR ABOVE MEA/MCA FOR ROUTE OF FLIGHT. - TO ENSURE ENROUTE OBSTACLE CLEARANCE.
3. CHANGED TEXTUAL DEPARTURE FROM: RWY 19, CLIMB HEADING 192.28 TO 1800 THEN CLIMBING LEFT TURN TO 3600 DIRECT BTT VOR/DME. CLIMB IN BTT VOR/DME HOLDING PATTERN (HOLD S, LT, 338 INBOUND) TO CROSS BTT VOR/DME AT OR ABOVE 3600 OR AS DIRECTED BY ATC TO: RWY 20: CLIMB HEADING 196.28 TO 2000 THEN CLIMBING LEFT TURN TO 3600 DIRECT BTT VOR/DME, CONTINUE CLIMB IN BTT VOR/DME HOLDING PATTERN (HOLD S, LT, 338.00 INBOUND) TO CROSS BTT VOR/DME AT OR ABOVE MEA/MCA FOR ROUTE OF FLIGHT. - TO ENSURE ENROUTE OBSTACLE CLEARANCE.
4. UPDATED CONTROLLING OBSTACLE FROM: RWY 1: 3737 MSL SPOT + AAO 665536.30N/1510524.20W TO: RWY 2: 1059 FT TREE 665630.34N/1512719.73W. - NEW EVALUATION RESULT.
5. DELETED VCOA AND RWY 19 CONTROLLING OBSTACLES - VCOA REMOVED, NOT REQUIRED AND RWY HAS STANDARD CLIMB GRADIENT.
6. ADDED OBSTACLE MANDATING ODP ROUTE DEVELOPMENT.

QUALITY
16
CHECKED

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: BTT VOR/DME					
ZENLA/BTT 15.00 DME		BTT VOR/DME		136.06 / 15.00				4500		CLIMBING RIGHT TURN TO 3500 ON BTT VOR/DME R-124 TO HORAG/BTT 12.00 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3500. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 123.95 INBOUND. FAS OBST: 798 AAO 665124N/1513518W. CHART VDP AT 1.25 DME DISTANCE VDP TO THLD 1.34 NM. CHART BTT R-315 AT OCOCU. CHART BTT R-235 AT NITYI. CHART BTT R-124 AT HORAG. CHART CIRCLING ICON. CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES. CHART AT OR BELOW 6000 AT BTT VOR/DME FAC CROSSES RWY C/L EXTENDED 5091 FT FROM THLD.					
JEVUM/BTT 15.00 DME		BTT VOR/DME		176.06 / 15.00				4500							
OCOCU/BTT 12.00 DME CCW (IAF)		NITYI/BTT 12.00 DME (NOPT)		12.00 DME ARC				3800							
NITYI/BTT 12.00 DME CCW		VORUC/BTT 12.00 DME		12.00 DME ARC				3200							
HORAG/BTT 12.00 DME CW (IAF)		VORUC/BTT 12.00 DME (NOPT)		12.00 DME ARC				3200							
VORUC/BTT 12.00 DME (IF)		SUCNO/BTT 8.00 DME		024.00 / 4.00 (BTT R-204)				2600							
SUCNO/BTT 8.00 DME		YUSNU/BTT 4.00 DME		024.00 / 4.00 (BTT R-204)				2000							
1. PT <u> L </u> SIDE OF COURSE <u> 204.00 </u> OUTBOUND <u> 3400 </u> FT WITHIN <u> 10 </u> MILES OF <u> BTT VOR/DME </u> (IAF) 2. _____ 3. FAC <u> 024.00 </u> FAF <u> YUSNU/BTT 4.00 DME </u> DIST FAF TO MAP <u> 4.00 </u> THLD <u> 4.09 </u> 4. MIN. ALT <u> SUCNO 2600, YUSNU 2000 </u> 8. MSA FROM: <u> BTT VOR/DME 6500 </u>										MAG VAR: 20E				EPOCH YEAR: 2010	
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-02	1100	1	458	1100	1	458	1100	1	458	1100	1	458			
CIRCLING	1100	1	453	1100	1	453	1320	2	673	1320	2 1/4	673			
NOTES: EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED. @ CAT D 800-2 1/4 CHART NOTE: RWY 2 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED CHART NOTE: CIRCLING NOT AUTHORIZED EAST OF RWY 2-20 CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO CATS A/B. FOR INOPERATIVE ALS, INCREASE S-02 CAT C/D VISIBILITY TO 1 3/8 SM.															
CITY AND STATE BETTLES, AK		ELEVATION: 647 AIRPORT NAME: BETTLES		TDZE: 642		FACILITY IDENTIFIER: BTT		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR RWY 2, AMDT 2 5/24/2018				SUP		VOR RWY 1	
												AMDT		1B	
												DATE		11/10/2016	



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

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CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
BIRMINGHAM, AL	BIRMINGHAM-SHUTTLESWORTH INTL	24 MAY 2018	8

TAKEOFF MINIMUMS:

RWY 6: 300-2 WITH MINIMUM CLIMB OF 285 FT PER NM TO 1800 OR STANDARD WITH MINIMUM CLIMB OF 435 FT PER NM TO 1300 OR 1800-3 FOR VCOA.

RWY 18: 600-3 WITH MINIMUM CLIMB OF 225 FT PER NM TO 1300 OR STANDARD WITH MINIMUM CLIMB OF 455 FT PER NM TO 1500 OR 1800-3 FOR VCOA.

RWY 24: STANDARD WITH MINIMUM CLIMB OF 280 FT PER NM TO 1400.

RWY 36: 300- 2 1/4 OR STANDARD WITH MINIMUM CLIMB OF 565 FT PER NM TO 1000.

TEXTUAL DEPARTURE PROCEDURES:

RWY 6: CLIMB HEADING 058.47 TO 1500 BEFORE PROCEEDING ON COURSE.

RWY 18: CLIMB HEADING 183.03 TO 2300 BEFORE PROCEEDING ON COURSE.

RWY 24: CLIMB HEADING 238.48 TO 2300 BEFORE PROCEEDING ON COURSE.

RWY 36: CLIMB HEADING 003.03 TO 1400 BEFORE PROCEEDING ON COURSE.

VISUAL CLIMB OVER AIRPORT:

RWY 6, 18: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS BIRMINGHAM-SHUTTLESWORTH INTL AT OR ABOVE 2300 BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 06: BUILDING 154 FT FROM DER, 401 FT RIGHT OF CENTERLINE, 14 FT AGL/656 FT MSL. TERRAIN 704 FT FROM DER, 652 FT LEFT OF CENTERLINE, 671 FT MSL. TERRAIN 950 FT FROM DER, 674 FT RIGHT OF CENTERLINE, 692 FT MSL. TERRAIN 957 FT FROM DER, 682 FT LEFT OF CENTERLINE, 675 FT MSL. TERRAIN 1226 FT FROM DER, 654 FT RIGHT OF CENTERLINE, 713 FT MSL. TERRAIN 1259 FT FROM DER, 705 FT LEFT OF CENTERLINE, 684 FT MSL. TERRAIN BEGINNING 1383 FT FROM DER, 391 FT RIGHT OF CENTERLINE, UP TO 718 FT MSL. TERRAIN BEGINNING 1387 FT FROM DER, 272 FT LEFT OF CENTERLINE, UP TO 706 FT MSL. TREE, TERRAIN, TRAVERSE WAYS AND FENCE BEGINNING 1450 FT FROM DER, 33 FT RIGHT OF CENTERLINE, UP TO 767 FT MSL. TERRAIN BEGINNING 1621 FT FROM DER, 166 FT LEFT OF CENTERLINE, UP TO 718 FT MSL. TERRAIN BEGINNING 1753 FT FROM DER, 5 FT LEFT OF CENTERLINE, UP TO 721 FT MSL. TERRAIN BEGINNING 1805 FT FROM DER, 110 FT LEFT OF CENTERLINE, UP TO 727 FT MSL. TERRAIN AND TRAVERSE WAY BEGINNING 1917 FT FROM DER, 708 FT LEFT OF CENTERLINE, UP TO 730 FT MSL. TERRAIN BEGINNING 1993 FT FROM DER, 112 FT LEFT OF CENTERLINE, UP TO 731 FT MSL. TERRAIN AND TRAVERSE WAY BEGINNING 2111 FT FROM DER, 321 FT LEFT OF CENTERLINE, UP TO 734 FT MSL. TERRAIN BEGINNING 2275 FT FROM DER, 111 FT LEFT OF CENTERLINE, UP TO 737 FT MSL. TRAVERSE WAY AND TERRAIN BEGINNING 2346 FT FROM DER, 325 FT LEFT OF CENTERLINE, UP TO 739 FT MSL. POLE, TERRAIN AND FENCES BEGINNING 2449 FT FROM DER, 48 FT RIGHT OF CENTERLINE, UP TO 43 FT AGL/769 FT MSL. TERRAIN BEGINNING 2497 FT FROM DER, 109 FT LEFT OF CENTERLINE, UP TO 742 FT MSL. TRAVERSE WAY 2554 FT FROM DER, 531 FT LEFT OF CENTERLINE, 744 FT MSL. TREES, TERRAIN, TRAVERSE WAY AND POLES BEGINNING 2608 FT FROM DER, 25 FT LEFT OF CENTERLINE, UP TO 779 FT MSL. TREE, TERRAIN AND POLE BEGINNING 2846 FT FROM DER, 169 FT RIGHT OF CENTERLINE, UP TO 782 FT MSL. TREE, TERRAIN, POLE AND LIGHTING BEGINNING 2983 FT FROM DER, 111 FT LEFT OF CENTERLINE, UP TO 800 FT MSL. TREE AND FENCE BEGINNING 3007 FT FROM DER, 47 FT RIGHT OF CENTERLINE, UP TO 788 FT MSL. TREES AND TERRAIN BEGINNING 3071 FT FROM DER, 59 FT RIGHT OF CENTERLINE, UP TO 800 FT MSL. POLE AND TERRAIN BEGINNING 3220 FT FROM DER, 410 FT LEFT OF CENTERLINE, UP TO 44 FT AGL/811 FT MSL. TREE AND TERRAIN BEGINNING 3308 FT FROM DER, 236 FT RIGHT OF CENTERLINE, UP TO 809 FT MSL. TREES, TERRAIN AND POLE BEGINNING 3320 FT FROM DER, 96 FT LEFT OF CENTERLINE, UP TO 816 FT MSL. TREES, TERRAIN AND FENCES BEGINNING 3529 FT FROM DER, 53 FT RIGHT OF CENTERLINE, UP TO 810 FT MSL. TREE, TERRAIN AND POLE BEGINNING 3567 FT FROM DER, 154 FT LEFT OF CENTERLINE, UP TO 832 FT MSL. TREES, TERRAIN AND POLE BEGINNING 3717 FT FROM DER, 31 FT LEFT OF CENTERLINE, UP TO 841 FT MSL. TREES AND TERRAIN BEGINNING 3978 FT FROM DER, 14 FT LEFT OF CENTERLINE, UP TO 865 FT MSL. TREES AND POLES BEGINNING 4099 FT FROM DER, 123 FT LEFT OF CENTERLINE, UP TO 870 FT MSL. TREES BEGINNING 5066 FT FROM DER, 518 FT LEFT OF CENTERLINE, UP TO 878 FT MSL. TREE 5192 FT FROM DER, 1364 FT LEFT OF CENTERLINE, 883 FT MSL. TREES BEGINNING 5202 FT FROM DER, 973 FT LEFT OF CENTERLINE, UP TO 884 FT MSL. TOWER, TREES, TERRAIN AND POLE BEGINNING 5260 FT FROM DER, 62 FT LEFT OF CENTERLINE, UP TO 97 FT AGL/897 FT MSL. TREES BEGINNING 5916 FT FROM DER, 159 FT RIGHT OF CENTERLINE, UP TO 814 FT MSL. TREES BEGINNING 1 NM FROM DER, 14 FT RIGHT OF CENTERLINE, UP TO 822 FT MSL. TREES BEGINNING 1.3 NM FROM DER, 1745 FT LEFT OF CENTERLINE, UP TO 901 FT MSL. TREE 1.6 NM FROM DER, 2148 FT LEFT OF CENTERLINE, 913 FT MSL.

NOTE: RWY 18: TERRAIN 372 FT FROM DER, 543 FT RIGHT OF CENTERLINE, 648 FT MSL. TERRAIN BEGINNING 536 FT FROM DER, 453 FT RIGHT OF CENTERLINE, UP TO 672 FT MSL. POLES, TRAVERSE WAYS AND TREES BEGINNING 771 FT FROM DER, 58 FT LEFT OF CENTERLINE, UP TO 71 FT AGL/701 FT MSL. TREES AND POLE BEGINNING 1084 FT FROM DER, 125 FT RIGHT OF CENTERLINE, UP TO 686 FT MSL. TREES BEGINNING 1220 FT FROM DER, 96 FT RIGHT OF CENTERLINE, UP TO 690 FT MSL. TREES BEGINNING 1330 FT FROM DER, 209 FT RIGHT OF CENTERLINE, UP TO 695 FT MSL. TREES AND POLES BEGINNING 1367 FT FROM DER, ON CENTERLINE, UP TO 704 FT MSL. TREES AND POLE BEGINNING 1640 FT FROM DER, 34 FT LEFT OF CENTERLINE, UP TO 704 FT MSL. TREES AND POLE BEGINNING 1674 FT FROM DER, 16 FT LEFT OF CENTERLINE, UP TO 709 FT MSL. TREES AND POLES BEGINNING 1767 FT FROM DER, 14 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/717 FT MSL. TREES, SIGN AND POLE BEGINNING 2148 FT FROM DER, 218 FT LEFT OF CENTERLINE, UP TO 724 FT MSL. TOWER AND TREES BEGINNING 2546 FT FROM DER, 44 FT LEFT OF CENTERLINE, UP TO 99 FT AGL/749 FT MSL. TREE 2813 FT FROM DER, 167 FT RIGHT OF CENTERLINE, 724 FT MSL. TREES BEGINNING 2824 FT FROM DER, 199 FT RIGHT OF CENTERLINE, UP TO 730 FT MSL. TREES BEGINNING 2958 FT FROM DER, 39 FT RIGHT OF CENTERLINE, UP TO 732 FT MSL. SPIRE 4511 FT FROM DER, 1449 FT RIGHT OF CENTERLINE, 126 FT AGL/753 FT MSL. TRANSMISSION LINES AND TREES BEGINNING 4715 FT FROM DER, 1068 FT LEFT OF CENTERLINE, UP TO 102 FT AGL/802 FT MSL. TREES BEGINNING 4969 FT FROM DER, 1024 FT LEFT OF CENTERLINE, UP TO 803 FT MSL. TREES BEGINNING 5057 FT FROM DER, 1185 FT LEFT OF CENTERLINE, UP TO 809 FT MSL. TREES AND TRANSMISSION LINE, POLE BEGINNING 5168 FT FROM DER, 221 FT LEFT OF CENTERLINE, UP TO 813 FT MSL. ANTENNA 5409 FT FROM DER, 1145 FT RIGHT OF CENTERLINE, 110 FT AGL/774 FT MSL. TREES BEGINNING 5581 FT FROM DER, 454 FT LEFT OF CENTERLINE, UP TO 819 FT MSL. TREE 5591 FT FROM DER, 48 FT RIGHT OF CENTERLINE, 781 FT MSL. TREES AND TRANSMISSION LINE BEGINNING 5680 FT FROM DER, 254 FT LEFT OF CENTERLINE, UP TO 837 FT MSL. TREE 5757 FT FROM DER, 562 FT RIGHT OF CENTERLINE, 782 FT MSL. TREES, BUILDING AND

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BIRMINGHAM, AL	BIRMINGHAM-SHUTTLESWORTH INTL	24 MAY 2018	8

TRANSMISSION LINE BEGINNING 5812 FT FROM DER, 58 FT LEFT OF CENTERLINE, UP TO 838 FT MSL. TREE 5993 FT FROM DER, 17 FT RIGHT OF CENTERLINE, 787 FT MSL. TREES AND TRANSMISSION LINES BEGINNING 5997 FT FROM DER, 299 FT LEFT OF CENTERLINE, UP TO 842 FT MSL. TREES AND POLES BEGINNING 1 NM FROM DER, 819 FT LEFT OF CENTERLINE, UP TO 844 FT MSL. TRANSMISSION LINE 1.1 NM FROM DER, 2018 FT LEFT OF CENTERLINE, 129 FT AGL/891 FT MSL. POLES, TREES AND TRANSMISSION LINE BEGINNING 1.1 NM FROM DER, 321 FT LEFT OF CENTERLINE, UP TO 126 FT AGL/893 FT MSL. TREES BEGINNING 1.2 NM FROM DER, 703 FT LEFT OF CENTERLINE, UP TO 897 FT MSL. TREE 1.2 NM FROM DER, 560 FT RIGHT OF CENTERLINE, 826 FT MSL. TREES BEGINNING 1.2 NM FROM DER, 118 FT LEFT OF CENTERLINE, UP TO 906 FT MSL. TREES BEGINNING 1.2 NM FROM DER, 220 FT RIGHT OF CENTERLINE, UP TO 843 FT MSL. TREES BEGINNING 1.3 NM FROM DER, 60 FT RIGHT OF CENTERLINE, UP TO 864 FT MSL. TREES AND POLE BEGINNING 1.3 NM FROM DER, 94 FT LEFT OF CENTERLINE, UP TO 971 FT MSL. TREES, BUILDING, AND POLE BEGINNING 1.4 NM FROM DER, 800 FT LEFT OF CENTERLINE, UP TO 1041 FT MSL. TREES, POLES, TRANSMISSION LINE, TANK AND WATER TOWER BEGINNING 1.5 NM FROM DER, 426 FT LEFT OF CENTERLINE, UP TO 1139 FT MSL. TOWER, ANTENNA, TREES, POLE AND BUILDINGS BEGINNING 1.7 NM FROM DER, 1 FT LEFT OF CENTERLINE, UP TO 150 FT AGL/1219 FT MSL. TREE 1.7 NM FROM DER, 203 FT RIGHT OF CENTERLINE, 925 FT MSL. TREES BEGINNING 1.8 NM FROM DER, 94 FT RIGHT OF CENTERLINE, UP TO 1017 FT MSL. BUILDINGS AND TREES BEGINNING 1.9 NM FROM DER, 3 FT RIGHT OF CENTERLINE, UP TO 1106 FT MSL. TREE 2 NM FROM DER, 1019 FT RIGHT OF CENTERLINE, 1120 FT MSL. TREES BEGINNING 2 NM FROM DER, 127 FT RIGHT OF CENTERLINE, UP TO 1134 FT MSL. TREES, POLE, BUILDINGS AND TOWERS BEGINNING 2.1 NM FROM DER, 423 FT RIGHT OF CENTERLINE, UP TO 1167 FT MSL. TOWERS, TREES, WATER TOWER, ANTENNA AND BUILDING BEGINNING 2.2 NM FROM DER, 807 FT RIGHT OF CENTERLINE, UP TO 114 FT AGL/1172 FT MSL.

NOTE: RWY 24: LIGHTING 7 FT FROM DER, 5 FT RIGHT OF CENTERLINE, 1 FT AGL/604 FT MSL. LIGHTING 7 FT FROM DER, 5 FT LEFT OF CENTERLINE, 2 FT AGL/604 FT MSL. TREE 991 FT FROM DER, 561 FT LEFT OF CENTERLINE, 642 FT MSL. TREES BEGINNING 1057 FT FROM DER, 648 FT LEFT OF CENTERLINE, UP TO 663 FT MSL. TREE AND SIGN BEGINNING 1610 FT FROM DER, 757 FT LEFT OF CENTERLINE, UP TO 673 FT MSL. TREE 2636 FT FROM DER, 1172 FT LEFT OF CENTERLINE, 690 FT MSL.

NOTE: RWY 36: TRAVERSE WAY, FENCES, TERRAIN AND TREE BEGINNING 159 FT FROM DER, 505 FT RIGHT OF CENTERLINE, UP TO 16 FT AGL/661 FT MSL. TERRAIN 192 FT FROM DER, 493 FT LEFT OF CENTERLINE, 653 FT MSL. TREE 326 FT FROM DER, 528 FT LEFT OF CENTERLINE, 682 FT MSL. TREES, TERRAIN, POLES, FENCES AND VEGETATION BEGINNING 467 FT FROM DER, 2 FT RIGHT OF CENTERLINE, UP TO 726 FT MSL. TREE 576 FT FROM DER, 532 FT LEFT OF CENTERLINE, 696 FT MSL. TREES AND TERRAIN BEGINNING 792 FT FROM DER, 215 FT LEFT OF CENTERLINE, UP TO 728 FT MSL. TREES AND TERRAIN BEGINNING 986 FT FROM DER, 122 FT LEFT OF CENTERLINE, UP TO 729 FT MSL. TREES BEGINNING 1332 FT FROM DER, 106 FT LEFT OF CENTERLINE, UP TO 745 FT MSL. TREES, POLE AND TRAVERSE WAY BEGINNING 1378 FT FROM DER, 188 FT LEFT OF CENTERLINE, UP TO 750 FT MSL. TREES AND TERRAIN BEGINNING 1632 FT FROM DER, 82 FT LEFT OF CENTERLINE, UP TO 768 FT MSL. TREE, TERRAIN AND VEGETATION BEGINNING 1921 FT FROM DER, 76 FT RIGHT OF CENTERLINE, UP TO 738 FT MSL. TERRAIN BEGINNING 2189 FT FROM DER, 433 FT RIGHT OF CENTERLINE, UP TO 753 FT MSL. TREES AND TERRAIN BEGINNING 2331 FT FROM DER, 38 FT RIGHT OF CENTERLINE, UP TO 785 FT MSL. TERRAIN AND TREE BEGINNING 2444 FT FROM DER, 17 FT LEFT OF CENTERLINE, UP TO 772 FT MSL. TERRAIN BEGINNING 2714 FT FROM DER, 356 FT LEFT OF CENTERLINE, UP TO 775 FT MSL. TREES, VEGETATION, TERRAIN AND POLES BEGINNING 2816 FT FROM DER, ON CENTERLINE, UP TO 839 FT MSL. TREES, TERRAIN AND POLES BEGINNING 2877 FT FROM DER, 3 FT LEFT OF CENTERLINE, UP TO 846 FT MSL. TREES AND TERRAIN BEGINNING 3808 FT FROM DER, 44 FT RIGHT OF CENTERLINE, UP TO 870 FT MSL. TREES, TERRAIN AND POLE BEGINNING 4114 FT FROM DER, 20 FT RIGHT OF CENTERLINE, UP TO 872 FT MSL. TREES BEGINNING 4345 FT FROM DER, 864 FT RIGHT OF CENTERLINE, UP TO 105 FT AGL/875 FT MSL. TREES, TERRAIN, BUILDING AND POLES BEGINNING 4427 FT FROM DER, ON CENTERLINE, UP TO 879 FT MSL. TREES AND TRAVERSE WAY BEGINNING 5381 FT FROM DER, 183 FT LEFT OF CENTERLINE, UP TO 852 FT MSL. TREE 5435 FT FROM DER, 1013 FT LEFT OF CENTERLINE, 861 FT MSL. TREE AND POLES BEGINNING 5465 FT FROM DER, 44 FT LEFT OF CENTERLINE, UP TO 864 FT MSL. TREES, POLES AND TRAVERSE WAY BEGINNING 5529 FT FROM DER, 85 FT LEFT OF CENTERLINE, UP TO 870 FT MSL. TREES BEGINNING 5653 FT FROM DER, 320 FT LEFT OF CENTERLINE, UP TO 874 FT MSL. TREES, VEGETATION, POLE, TRAVERSE WAY AND BUILDING BEGINNING 5707 FT FROM DER, 143 FT LEFT OF CENTERLINE, UP TO 879 FT MSL. TREES AND TRAVERSE WAY BEGINNING 5913 FT FROM DER, 175 FT LEFT OF CENTERLINE, UP TO 887 FT MSL. TREES, TOWER, TRAVERSE WAY, POLE, TERRAIN AND BUILDING BEGINNING 1 NM FROM DER, 32 FT LEFT OF CENTERLINE, UP TO 908 FT MSL. TREES AND POLES BEGINNING 1.1 NM FROM DER, 1193 FT RIGHT OF CENTERLINE, UP TO 907 FT MSL. TREE 1.7 NM FROM DER, 262 FT LEFT OF CENTERLINE, 109 FT AGL/919 FT MSL.

CONTROLLING OBSTACLES:

RWY 6: 865 FT MSL TREE 333458.54N/0864351.63W (CLIMB GRADIENT), 1479 FT MSL AAO 333600.83N/0864002.53W (CLIMB-TO ALTITUDE/CLIMB GRADIENT), 913 FT MSL TREE 333538.98N/0864256.20W (CEILING/VISIBILITY).

RWY 18: 1219 FT MSL TOWER 333131.00N/0864430.00W (CLIMB GRADIENT/CLIMB-TO ALTITUDE/CEILING), 1079 FT MSL TREE 333042.01N/0864539.23W (VISIBILITY), 1066 FT MSL TREE 333040.96N/0864535.19W (CLIMB GRADIENT), 1199 FT MSL AAO 332951.60N/0864340.14W (CLIMB-TO ALTITUDE).

RWY 24: 1049 FT MSL BUILDING 333104.00N/0864830.00W.

RWY 36: 846 FT MSL TREE 333452.04N/0864504.13W (CLIMB GRADIENT), 870 FT MSL TREE 333501.24N/0864433.15W (CLIMB-TO ALTITUDE), 919 FT MSL TREE 333610.19N/0864452.92W (CEILING/VISIBILITY).

RWY 6, 18 (VCOA): 2049 FT MSL TOWER 332925.00N/0864748.00W, 1444 FT MSL TOWER 333343.50N/0864206.50W.

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 6: 1444 FT MSL TOWER 333343.50N/0864206.50W, RWY 18, 24 AND 36: 2049 FT MSL TOWER 332925.00N/0864748.00W.



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BIRMINGHAM, AL	BIRMINGHAM-SHUTTLESWORTH INTL	24 MAY 2018	8

REMARKS:

FLIGHT INSPECTED BY:	<i>Digitally signed by</i> ADOLFO D URRUTIA Mar 12, 2018	OFFICE SYMBOL: FICO	DATE: 3/9/18
MARC J HINCK			
DEVELOPED BY:	<i>Digitally signed by</i> ADOLFO D URRUTIA Mar 12, 2018	OFFICE SYMBOL: AJV-5433	DATE: 09/27/2017
BEV BORDY (CHRISTINE BAYSE)			
APPROVED BY:	<i>Digitally signed by</i> ADOLFO D URRUTIA Mar 12, 2018	OFFICE SYMBOL: AJV-5430	DATE:
PATRICK MULQUEEN			

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

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

OTHER:
ZTL, BHM APP CON, BHM ATCT, ARPT MGR, HQ ANG/ZOBR, EASTERN FPT.

CHANGES - REASONS:

1. UPDATED RWY 6 TAKEOFF MINIMUMS FROM "300-1 3/4 WITH MINIMUM CLIMB OF 279 FT PER NM TO 1800 OR STANDARD WITH MINIMUM CLIMB OF 421 FT PER NM TO 1300" TO "300-2 WITH MINIMUM CLIMB OF 285 FT PER NM TO 1800 OR STANDARD WITH MINIMUM CLIMB OF 435 FT PER NM TO 1300". - NEW CONTROLLING OBSTACLES.
2. UPDATED RWY 18 TAKEOFF MINIMUMS FROM 600-3 WITH MINIMUM CLIMB OF 215 FT PER NM TO 1400 OR STANDARD WITH MINIMUM CLIMB OF 450 FT PER NM TO 1500" TO "600-3 WITH MINIMUM CLIMB OF 225 FT PER NM TO 1300 OR STANDARD WITH MINIMUM CLIMB OF 455 FT PER NM TO 1500". - NEW CONTROLLING OBSTACLES.
3. UPDATED RWY 24 TAKEOFF MINIMUMS FROM "STANDARD WITH MINIMUM CLIMB OF 271 FT PER NM TO 1400" TO "STANDARD WITH MINIMUM 280 FT PER NM TO 1400".- NEW CONTROLLING OBSTACLES.
4. UPDATED RWY 36 TAKEOFF MINIMUMS FROM "300-2 1/4 OR STANDARD WITH MINIMUM CLIMB OF 420 FT PER NM TO 1000" TO "300-2 1/4 OR STANDARD WITH MINIMUM CLIMB OF 565 FT PER NM TO 1000".- NEW CONTROLLING OBSTACLES.
5. UPDATED TAKEOFF OBSTACLE NOTES FOR ALL RUNWAYS.- NEW SURVEY.
6. UPDATED CONTROLLING OBSTACLES.- NEW SURVEYED OBSTACLES.

1/26/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 9/27/17.

1. UPDATED RWY 6 TAKEOFF MINIMUMS FROM "300-2 WITH MINIMUM CLIMB OF 285 FT PER NM TO 1800 OR STANDARD WITH MINIMUM CLIMB OF 435 FT PER NM TO 1300" TO "300-2 WITH MINIMUM CLIMB OF 285 FT PER NM TO 1800 OR STANDARD WITH MINIMUM CLIMB OF 435 FT PER NM TO 1300 OR 1800-3 FOR VCOA" PER 8260.46 2-1-1.
2. UPDATED RWY 18 TAKEOFF MINIMUMS FROM "600-3 WITH MINIMUM CLIMB OF 225 FT PER NM TO 1300 OR STANDARD WITH MINIMUM CLIMB OF 455 FT PER NM TO 1500" TO "600-3 WITH MINIMUM CLIMB OF 225 FT PER NM TO 1300 OR STANDARD WITH MINIMUM CLIMB OF 455 FT PER NM TO 1500 OR 1800-3 FOR VCOA" PER 8260.46 2-1-1.
3. ADDED VISUAL CLIMB OVER AIRPORT "RWY 6, 18: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS BIRMINGHAM-SHUTTLESWORTH INTL AT OR ABOVE 2300 BEFORE PROCEEDING ON COURSE" PER 8260.46 2-1-1.
4. ADDED VCOA CONTROLLING OBSTACLES.
5. REMOVED REMARK "ATC REQUESTS TO OPT OUT OF VCOA DEVELOPMENT".



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: RW18									
CAVEK (IAF)			ADOKE (NOPT) (TF) (FB) (RNP 1.00)			091.50 / 5.00			3200		CLIMB TO 1800 THEN CLIMBING LEFT TURN TO 3200 DIRECT BERGG AND HOLD.									
FATGO (IAF)			ADOKE (NOPT) (TF) (FB) (RNP 1.00)			271.62 / 5.00			3200											
ADOKE (IF/IAF)			OFFOV (TF) (FB) (RNP 1.00)			181.56 / 5.01			3100											
OFFOV (FAF)			RW18 (MAP) (TF) (FO) (RNP 0.30)			181.56 / 5.29														
RW18 (MAP)			1800 MSL (CA)			181.56			1800		ADDITIONAL FLIGHT DATA: HOLD E, RT, 271.82 INBOUND. CHART FAS OBST: 1436 TOWER 361605N/0930901W. CHART VDP AT 0.96 NM TO RW18. OFFOV TO RW18: 3.00/54.									
1800 MSL			BERGG (DF) (FO) (RNP 1.00)						3200											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																				
2. HOLD N ADOKE, RT, 181.56 INBOUND, 3200 FT. IN LIEU OF PT (IAF)																				
3. FAC: 181.56 FAF: OFFOV DIST FAF TO MAP: 5.29 THLD: 5.29																				
4. MIN. ALT: ADOKE 3200, OFFOV 3100																				
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 NOT CLEAR																				
8. MSA FROM: _____										MAG VAR: 4E				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					
LNAV MDA	1720	1	355	1720	1	355	1720	1	355	1720	1	355								
CIRCLING	1780	1	415	1820	1	455	1820	1 1/2	455	1920	2	555								
NOTES: CHART NOTE: RWY 18 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). PBN REQUIREMENTS NOTE: RNP APCH.																				
CITY AND STATE HARRISON, AR			ELEVATION: 1365 TDZE: 1365 AIRPORT NAME: BOONE COUNTY				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 18, ORIG-A 24 MAY 2018					SUP: AMDT: ORIG DATED 09/28/2006						



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

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TAA

	FROM	TO	ALT
1.	092/30 CW 272/30 (NOPT)	ADOKE (IF/IAF) (FB)	3200
2.	272/30 CW 002/30	FATGO (IAF) (FB)	3700
3.	002/30 CW 092/30	CAVEK (IAF) (FB)	3900

QUALITY
24
CHECKED

CITY AND STATE HARRISON, AR	ELEVATION: 1365 TDZE: 1365 AIRPORT NAME: BOONE COUNTY	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 18, ORIG-A 24 MAY 2018	SUP:
				AMDT: ORIG
				DATED: 09/28/2006

**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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CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
MELBOURNE, AR	MELBOURNE MUNI-JOHN E MILLER FIELD	24 MAY 2018	1

TAKEOFF MINIMUMS:

RWY 3: STANDARD.

RWY 21: 300-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 235 FT PER NM TO 1000 OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 2000 FT PRIOR TO DER.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 03, VEGETATION 1 FT FROM DER, 384 FT RIGHT OF CENTERLINE, 710 FT MSL.
TREE, VEGETATION BEGINNING 22 FT FROM DER, 252 FT RIGHT OF CENTERLINE, UP TO 39 FT AGL/733 FT MSL.
TREE 151 FT FROM DER, 510 FT LEFT OF CENTERLINE, 723 FT MSL.
TREE 297 FT FROM DER, 577 FT LEFT OF CENTERLINE, 725 FT MSL.
TREE 427 FT FROM DER, 519 FT LEFT OF CENTERLINE, 737 FT MSL.
TREES BEGINNING 537 FT FROM DER, 552 FT LEFT OF CENTERLINE, UP TO 749 FT MSL.
TREES BEGINNING 1044 FT FROM DER, 643 FT RIGHT OF CENTERLINE, UP TO 757 FT MSL.
TREE 1234 FT FROM DER, 582 FT RIGHT OF CENTERLINE, 771 FT MSL.
TREE 1332 FT FROM DER, 528 FT RIGHT OF CENTERLINE, 775 FT MSL.
TREE 1426 FT FROM DER, 472 FT RIGHT OF CENTERLINE, 777 FT MSL.
TREES BEGINNING 1519 FT FROM DER, 314 FT RIGHT OF CENTERLINE, UP TO 792 FT MSL.
TREE 2322 FT FROM DER, 712 FT LEFT OF CENTERLINE, 781 FT MSL.
TREE 2990 FT FROM DER, 426 FT LEFT OF CENTERLINE, 785 FT MSL.
TREE 3099 FT FROM DER, 426 FT LEFT OF CENTERLINE, 789 FT MSL.
TREE 3212 FT FROM DER, 753 FT LEFT OF CENTERLINE, 796 FT MSL.
TREE 3244 FT FROM DER, 1270 FT LEFT OF CENTERLINE, 797 FT MSL.
TREES BEGINNING 3359 FT FROM DER, 378 FT LEFT OF CENTERLINE, UP TO 806 FT MSL.
TREE 3467 FT FROM DER, 76 FT RIGHT OF CENTERLINE, 796 FT MSL.

NOTE: RWY 21, FENCE, TERRAIN, VEGETATION BEGINNING 16 FT FROM DER, 357 FT LEFT OF CENTERLINE, UP TO 756 FT MSL.
TREE, VEGETATION BEGINNING 31 FT FROM DER, 267 FT RIGHT OF CENTERLINE, UP TO 69 FT AGL/786 FT MSL.
TREES BEGINNING 170 FT FROM DER, 500 FT RIGHT OF CENTERLINE, UP TO 79 FT AGL/789 FT MSL.
TREES BEGINNING 652 FT FROM DER, 509 FT RIGHT OF CENTERLINE, UP TO 790 FT MSL.
TREES BEGINNING 983 FT FROM DER, 505 FT RIGHT OF CENTERLINE, UP TO 792 FT MSL.
TREES BEGINNING 1164 FT FROM DER, 548 FT LEFT OF CENTERLINE, UP TO 806 FT MSL.
TREES BEGINNING 1180 FT FROM DER, 503 FT RIGHT OF CENTERLINE, UP TO 793 FT MSL.
TREES BEGINNING 1357 FT FROM DER, 528 FT LEFT OF CENTERLINE, UP TO 807 FT MSL.
TREES BEGINNING 1526 FT FROM DER, 524 FT RIGHT OF CENTERLINE, UP TO 794 FT MSL.
TREES BEGINNING 1615 FT FROM DER, 515 FT LEFT OF CENTERLINE, UP TO 813 FT MSL.
TREES BEGINNING 1666 FT FROM DER, 746 FT RIGHT OF CENTERLINE, UP TO 797 FT MSL.
TREE 1732 FT FROM DER, 843 FT RIGHT OF CENTERLINE, 800 FT MSL.
TREES BEGINNING 1778 FT FROM DER, 482 FT LEFT OF CENTERLINE, UP TO 819 FT MSL.
TREE 1791 FT FROM DER, 560 FT RIGHT OF CENTERLINE, 801 FT MSL.
TREES BEGINNING 1823 FT FROM DER, 528 FT RIGHT OF CENTERLINE, UP TO 805 FT MSL.
TREE 2057 FT FROM DER, 733 FT RIGHT OF CENTERLINE, 808 FT MSL.
TREES BEGINNING 2081 FT FROM DER, 493 FT RIGHT OF CENTERLINE, UP TO 811 FT MSL.
TREES BEGINNING 2212 FT FROM DER, 353 FT RIGHT OF CENTERLINE, UP TO 813 FT MSL.
TREES BEGINNING 2298 FT FROM DER, 239 FT RIGHT OF CENTERLINE, UP TO 814 FT MSL.
TREE 2725 FT FROM DER, 1014 FT LEFT OF CENTERLINE, 822 FT MSL.
TREES BEGINNING 2740 FT FROM DER, 1074 FT LEFT OF CENTERLINE, UP TO 830 FT MSL.
TREES BEGINNING 2895 FT FROM DER, 1139 FT LEFT OF CENTERLINE, UP TO 838 FT MSL.
TREES BEGINNING 3510 FT FROM DER, 839 FT RIGHT OF CENTERLINE, UP TO 831 FT MSL.
TREE 3627 FT FROM DER, 791 FT RIGHT OF CENTERLINE, 833 FT MSL.
TREE 3928 FT FROM DER, 68 FT LEFT OF CENTERLINE, 842 FT MSL.
TREES BEGINNING 3952 FT FROM DER, 33 FT RIGHT OF CENTERLINE, UP TO 852 FT MSL.
TREE 4047 FT FROM DER, 97 FT LEFT OF CENTERLINE, 846 FT MSL.
TREE 4857 FT FROM DER, 1721 FT LEFT OF CENTERLINE, 858 FT MSL.
TREE 5119 FT FROM DER, 1713 FT LEFT OF CENTERLINE, 873 FT MSL.
TREES BEGINNING 5211 FT FROM DER, 1646 FT LEFT OF CENTERLINE, UP TO 874 FT MSL.
TREE 5465 FT FROM DER, 239 FT LEFT OF CENTERLINE, 876 FT MSL.



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

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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
MELBOURNE, AR	MELBOURNE MUNI-JOHN E MILLER FIELD	24 MAY 2018	1

TREE 5582 FT FROM DER, 399 FT LEFT OF CENTERLINE, 880 FT MSL.
TREE 5618 FT FROM DER, 265 FT LEFT OF CENTERLINE, 887 FT MSL.
TREES BEGINNING 5708 FT FROM DER, 199 FT LEFT OF CENTERLINE, UP TO 894 FT MSL.
TREES BEGINNING 5817 FT FROM DER, 45 FT LEFT OF CENTERLINE, UP TO 897 FT MSL.
TREES BEGINNING 5913 FT FROM DER, 210 FT LEFT OF CENTERLINE, UP TO 899 FT MSL.
TREE 6002 FT FROM DER, 25 FT RIGHT OF CENTERLINE, 69 FT AGL/899 FT MSL.
TREE 6012 FT FROM DER, 64 FT LEFT OF CENTERLINE, 69 FT AGL/902 FT MSL.
TANK 1 NM FROM DER, 198 FT LEFT OF CENTERLINE, 92 FT AGL/925 FT MSL.

CONTROLLING OBSTACLES:

RWY 21: 925 FT MSL TANK 360303.10N/0915040.85W. (CG/CTA/CEIL/VIS)

REMARKS:

FLIGHT INSPECTED BY:

Digitally signed by

DEZ SILAGYI

Mar 09, 2018

OFFICE SYMBOL:

FICO

DATE:

3/7/18

DEVELOPED BY:

Digitally signed by

DEZ SILAGYI

Mar 09, 2018

OFFICE SYMBOL:

AJV-5413

DATE:

11/15/2017

APPROVED BY:

Digitally signed by

DEZ SILAGYI

Mar 09, 2018

OFFICE SYMBOL:

AJV-5410

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA



OTHER:

ZME, AR AERO, ARPT MGR

CHANGES - REASONS:

1. CHANGED RWY 21 TAKEOFF MINIMUMS FROM 300-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 211 TO 1000 TO 300-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 235 FT PER NM TO 1000 OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 2000 FT PRIOR TO DER.
2. ADDED TAKEOFF OBSTACLE NOTES RWY 3/21.

REASONS:

1. 2. NEW BIENNIAL REVIEW OBSTACLE EVALUATION.



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

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CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
MORRILTON, AR	PETIT JEAN PARK	24 MAY 2018	2

TAKEOFF MINIMUMS:

RWY 3: 300-1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 326 FT PER NM TO 1300.

RWY 21: 300-2 OR STANDARD WITH MINIMUM CLIMB OF 366 FT PER NM TO 1300.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 03, POLE, TRAVERSE_WAY BEGINNING 47 FT FROM DER, 447 FT LEFT OF CENTERLINE, UP TO 28 FT AGL/968 FT MSL.

TREE, TRAVERSE_WAY BEGINNING 162 FT FROM DER, 243 FT LEFT OF CENTERLINE, UP TO 51 FT AGL/995 FT MSL.

TREE, POLE, TRAVERSE_WAY BEGINNING 205 FT FROM DER, 1 FT RIGHT OF CENTERLINE, UP TO 48 FT AGL/962 FT MSL.

TREE, POLE BEGINNING 359 FT FROM DER, 224 FT RIGHT OF CENTERLINE, UP TO 53 FT AGL/972 FT MSL.

TREE, POLE BEGINNING 496 FT FROM DER, 173 FT RIGHT OF CENTERLINE, UP TO 62 FT AGL/985 FT MSL.

TREE, POLE, BUILDING BEGINNING 588 FT FROM DER, 160 FT RIGHT OF CENTERLINE, UP TO 66 FT AGL/992 FT MSL.

TREES BEGINNING 797 FT FROM DER, 91 FT LEFT OF CENTERLINE, UP TO 64 FT AGL/1008 FT MSL.

TREE 1040 FT FROM DER, 356 FT LEFT OF CENTERLINE, 78 FT AGL/1009 FT MSL.

TREES BEGINNING 1150 FT FROM DER, 92 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/1020 FT MSL.

TREE 1162 FT FROM DER, 6 FT RIGHT OF CENTERLINE, 59 FT AGL/1003 FT MSL.

TREE 1236 FT FROM DER, 678 FT RIGHT OF CENTERLINE, 73 FT AGL/1023 FT MSL.

TREES BEGINNING 1430 FT FROM DER, 16 FT RIGHT OF CENTERLINE, UP TO 73 FT AGL/1028 FT MSL.

TREES BEGINNING 1858 FT FROM DER, 101 FT LEFT OF CENTERLINE, UP TO 88 FT AGL/1030 FT MSL.

TREES BEGINNING 2520 FT FROM DER, 16 FT LEFT OF CENTERLINE, UP TO 55 FT AGL/1039 FT MSL.

TREE 2579 FT FROM DER, 233 FT RIGHT OF CENTERLINE, 48 FT AGL/1035 FT MSL.

TREE 2640 FT FROM DER, 440 FT LEFT OF CENTERLINE, 54 FT AGL/1042 FT MSL.

TREES BEGINNING 2712 FT FROM DER, 11 FT RIGHT OF CENTERLINE, UP TO 57 FT AGL/1051 FT MSL.

TREE 2808 FT FROM DER, 53 FT LEFT OF CENTERLINE, 50 FT AGL/1049 FT MSL.

TREES BEGINNING 2993 FT FROM DER, 55 FT LEFT OF CENTERLINE, UP TO 58 FT AGL/1053 FT MSL.

TREE 3594 FT FROM DER, 38 FT RIGHT OF CENTERLINE, 56 FT AGL/1056 FT MSL.

TREE 3733 FT FROM DER, 1385 FT RIGHT OF CENTERLINE, 73 FT AGL/1064 FT MSL.

TREE 3748 FT FROM DER, 937 FT RIGHT OF CENTERLINE, 79 FT AGL/1071 FT MSL.

TREE 5154 FT FROM DER, 654 FT RIGHT OF CENTERLINE, 81 FT AGL/1133 FT MSL.

TREE 1 NM FROM DER, 958 FT LEFT OF CENTERLINE, 61 FT AGL/1157 FT MSL.

NOTE: RWY 21, FENCE 2 FT FROM DER, 250 FT RIGHT OF CENTERLINE, 12 FT AGL/896 FT MSL.

TREE 116 FT FROM DER, 367 FT RIGHT OF CENTERLINE, 60 FT AGL/944 FT MSL.

TREE 1018 FT FROM DER, 420 FT LEFT OF CENTERLINE, 53 FT AGL/939 FT MSL.

TREE 1134 FT FROM DER, 672 FT LEFT OF CENTERLINE, 69 FT AGL/962 FT MSL.

TREE 1181 FT FROM DER, 478 FT LEFT OF CENTERLINE, 92 FT AGL/984 FT MSL.

TREES BEGINNING 1350 FT FROM DER, 60 FT LEFT OF CENTERLINE, UP TO 91 FT AGL/987 FT MSL.

TREE 1390 FT FROM DER, 521 FT RIGHT OF CENTERLINE, 81 FT AGL/964 FT MSL.

TREE 1568 FT FROM DER, 663 FT RIGHT OF CENTERLINE, 86 FT AGL/972 FT MSL.

TREE, BUILDING BEGINNING 1588 FT FROM DER, 314 FT RIGHT OF CENTERLINE, UP TO 90 FT AGL/982 FT MSL.

TREE 1638 FT FROM DER, 208 FT LEFT OF CENTERLINE, 93 FT AGL/996 FT MSL.

TREE, TRAVERSE_WAY BEGINNING 1765 FT FROM DER, 52 FT LEFT OF CENTERLINE, UP TO 93 FT AGL/997 FT MSL.

TREE 1909 FT FROM DER, 679 FT LEFT OF CENTERLINE, 88 FT AGL/1007 FT MSL.

TREES BEGINNING 2067 FT FROM DER, 36 FT LEFT OF CENTERLINE, UP TO 96 FT AGL/1015 FT MSL.

TREES BEGINNING 2101 FT FROM DER, 62 FT RIGHT OF CENTERLINE, UP TO 84 FT AGL/997 FT MSL.

TREE, BUILDING, POLE BEGINNING 2287 FT FROM DER, 247 FT LEFT OF CENTERLINE, UP TO 82 FT AGL/1016 FT MSL.

TREE 2579 FT FROM DER, 1184 FT RIGHT OF CENTERLINE, 90 FT AGL/1002 FT MSL.

TREE, POLE BEGINNING 2909 FT FROM DER, 268 FT RIGHT OF CENTERLINE, UP TO 83 FT AGL/1019 FT MSL.



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

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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
MORRILTON, AR	PETIT JEAN PARK	24 MAY 2018	2

TREES BEGINNING 3104 FT FROM DER, 40 FT RIGHT OF CENTERLINE, UP TO 83 FT AGL/1029 FT MSL.
TREE, POLE BEGINNING 3165 FT FROM DER, 44 FT LEFT OF CENTERLINE, UP TO 75 FT AGL/1037 FT MSL.
TREE, POLE BEGINNING 3504 FT FROM DER, 14 FT LEFT OF CENTERLINE, UP TO 68 FT AGL/1049 FT MSL.
TREES BEGINNING 4070 FT FROM DER, 1187 FT RIGHT OF CENTERLINE, UP TO 77 FT AGL/1031 FT MSL.
TREE 4375 FT FROM DER, 419 FT RIGHT OF CENTERLINE, 87 FT AGL/1033 FT MSL.
TREES BEGINNING 4405 FT FROM DER, 99 FT RIGHT OF CENTERLINE, UP TO 90 FT AGL/1034 FT MSL.
TREE 1.2 NM FROM DER, 2579 FT LEFT OF CENTERLINE, 64 FT AGL/1198 FT MSL.

CONTROLLING OBSTACLES:

RWY 3: 1133 FT MSL TREE 350926.57N/0925338.95W (CG), 1137 FT MSL TREE 350933.80N/0925313.61W (VIS), 1157 FT MSL TREE 350942.55N/0925350.36W (CGTA/CIG)

RWY 21: 1049 FT MSL TREE 350718.11N/0925457.22W (CG), 1215 FT MSL TREE 350628.10N/0925511.32W (CIG), 1144 FT MSL TREE 350617.11N/0925528.86W (VIS), 1198 FT MSL TREE 350634.72N/0925508.61W (CGTA)

REMARKS:

FLIGHT INSPECTED BY:

Digitally signed by

ZACK SMYER

DION E LANCIA

Mar 09, 2018

OFFICE SYMBOL:

FICO

DATE:

3/7/18

DEVELOPED BY:

VICTOR NASO
(CHARLES THIBODEAUX)

Digitally signed by

DION E LANCIA

Mar 09, 2018

OFFICE SYMBOL:

AJV-5413

DATE:

12/05/2017

APPROVED BY:

GEORGE DAVIS

Digitally signed by

DION E LANCIA

Mar 09, 2018

OFFICE SYMBOL:

AJV-5410

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA



OTHER:

AMGR, ZME

CHANGES - REASONS:

1. CHANGED RWY 3 FROM STANDARD TO 300-1 1/2 OR STANDARD WITH A MINIMUM CLIMB OF 326 FT PER NM TO 1300.
2. ADDED RWY 3/21 TAKEOFF OBSTACLE NOTES.
3. DELETED TEXTUAL DEPARTURE FOR RWY 3.
4. CHANGED RWY 21 TAKEOFF MINS FROM: 400-2 OR STANDARD WITH MINIMUM CLIMB OF 420 FT PER NM TO 1400 TO, 300-2 OR STANDARD WITH MINIMUM CLIMB OF 366 FT PER NM TO 1300.

REASONS:

- 1, 2, 4. NEW CONTROLLING OBSTACLES.
3. NOT REQUIRED.



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: 6.08 NM AFTER FORDA INT/PMD 5.63 DME CLIMB TO 3000 THEN CLIMBING RIGHT TURN TO 6700 ON HEADING 318.00 AND ON PMD VORTAC R-298 TO FISCH INT/PMD 14.26 DME/RADAR AND HOLD, CONTINUE CLIMB-IN-HOLD TO 6700. ADDITIONAL FLIGHT DATA: HOLD SE, LT, 298.00 INBOUND. CHART FAS OBST: 2564 TREE 343758N/1180010W. CHART CIRCLING ICON.							
PMD VORTAC		FORDA INT/PMD 5.63 DME		070.05 / 5.63		6500									
ETHER INT/PMD 14.99 DME (IAF)		AMANE INT/PMD 9.62 DME		209.00 / 1.25 (HDG) & 254.20 / 4.45 (I-PMD)		4900									
AMANE INT/PMD 9.62 DME (IF)		FORDA INT/PMD 5.63 DME (NOPT)		254.20 / 4.00 (I-PMD)		4500									
1. PT <u>R</u> SIDE OF COURSE <u>074.20</u> OUTBOUND <u>5000</u> FT WITHIN <u>10</u> MILES OF <u>FORDA</u> (IAF) 2. _____ 3. FAC: <u>254.20</u> FAF: <u>FORDA INT/PMD 5.63 DME</u> DIST FAF TO MAP: <u>6.08</u> THLD: <u>6.08</u> 4. MIN. ALT: <u>AMANE 4900, FORDA 4500, SKKEE/PMD 2.54 DME 3500*</u> 5. DIST TO THLD FROM OM: <u>-</u> MM: <u>-</u> IM: <u>-</u> 150 HAT: <u>-</u> 100 HAT: <u>-</u> GS ANT: <u>1340</u> 6. MIN GS INCPT: <u>4500</u> GS ALT AT: <u>FORDA 4500</u> OM: <u>-</u> MM: <u>-</u> IM: <u>-</u> 7. GS ANGLE: <u>3.00</u> TCH: <u>63.3</u> 8. MSA FROM: <u>PMD VORTAC 070-180 11300, 180-340 7800, 340-070 5400</u>								MAG VAR: 12E		EPOCH YEAR: 2020					
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 25	2703	3/4	200	2703	3/4	200	2703	3/4	200	2703	3/4	200	2703	3/4	200
S-LOC 25	3500	1 1/4	997	3500	1 1/2	997	3500	3	997	3500	3	997	3500	3	997
CIRCLING	3500	1 1/4	957	3500	1 1/2	957	3500	3	957	3740	3	1197	3760	3	1217
SKKEE FIX MINIMUMS (DME REQUIRED)															
S-LOC 25	2820	1	317	2820	1	317	2820	7/8	317	2820	7/8	317	2820	7/8	317
CIRCLING	3020	1	477	3060	1	517	3140	1 1/2	597	3740	3	1197	3760	3	1217
NOTES: CHART NOTE: DME FROM PMD VORTAC. SIMULTANEOUS RECEPTION OF I-PMD AND PMD DME REQUIRED. CHART NOTE: CIRCLING NA FOR CATS C, D, AND E SOUTH OF RWYS 4 AND 25. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON PMD VORTAC AIRWAY RADIALS 067 CW 142. CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 2543 TDZE: 2503		FACILITY IDENTIFIER: I-PMD		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
PALMDALE, CA		AIRPORT NAME: PALMDALE USAF PLANT 42				ILS OR LOC RWY 25, AMDT 10 24 MAY 2018				AMDT: 9A					
										DATED 07/24/2014					



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.):

*LOC ONLY

CHART PLANVIEW NOTE: PROCEDURE TURN NA FOR CAT E AIRCRAFT.

CHART PLANVIEW NOTE: CAUTION: HIGH TERRAIN 5 NM SW OF AIRPORT.

QUALITY
19
CHECKED

CITY AND STATE

PALMDALE, CA

ELEVATION: 2543

TDZE: 2503

AIRPORT NAME:

PALMDALE USAF PLANT 42

FACILITY
IDENTIFIER:

I-PMD

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 25, AMDT 10

24 MAY 2018

SUP:

AMDT: 9A

DATED: 07/24/2014

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		LP: RW07 LNAV: RW07 CLIMBING RIGHT TURN TO 7000 DIRECT IMSIJ AND HOLD. ADDITIONAL FLIGHT DATA: HOLD E, LT, 276.00 INBOUND. CHART FAS OBST: 2659 TREE 343713N/1180810W, 2629 TREE 343737N/1180808W. 4022 AAO 343722N/1181549W. 4089 AAO 343738N/1181633W. 2649 TREE 343734N/1180831W. CHART VDP AT 0.78 NM TO RW07. WAAS CHANNEL # 53441 REFERENCE PATH ID: W07A CHART CIRCLING ICON. ZENAB TO RW7: 3.50/50. CHART PLANVIEW NOTE: FINAL APPROACH COURSE OFFSET 3.00 DEGREES. LTP HAE: 742.9 M MAG VAR: 12E EPOCH YEAR: 2020						
JEFFY (IAF)		YUGKU (TF) (FB) (RNP 1.00)			106.54 / 5.30			7100								
YUGKU		RGAMI/RADAR (TF) (FB) (RNP 1.00)			106.60 / 6.61			7000								
RGAMI/RADAR (IF)		HIVYU (TF) (FB) (RNP 1.00)			092.02 / 3.00			6200								
HIVYU		JITLA (TF) (FB) (RNP 1.00)			092.06 / 3.00			5500								
JITLA (FAF)		UWEJO/5.00 NM TO RW07 (TF) (FB) (RNP 0.30)			077.09 / 2.83											
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT JEFFY 3. FAC: 077.09 FAF: JITLA DIST FAF TO MAP: 7.83 THLD: 7.83 4. MIN. ALT: JEFFY 8000, YUGKU 7100, RGAMI 7000, HIVYU 6200, JITLA 5500, UWEJO/5.00 NM TO RW07 4440, (SEE FORM 8260-10) 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 CLEAR 8. MSA FROM: RW07 10600																
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	2880	1	340	2880	1	340	2880	1	340	2880	1	340				
LNAV MDA	2920	1	380	2920	1	380	2920	1	380	2920	1	380				
CIRCLING	3020	1	477	3060	1	517	3140	1 1/2	597	3740	3	1197				
NOTES: CHART NOTE: CIRCLING NA FOR CATS C AND D SOUTH OF RWYS 4 AND 25. @ CAT D 1200-3 CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT JEFFY ON V165-459 AND V137 NORTHWEST BOUND. CHART PLANVIEW NOTE: CAUTION: HIGH TERRAIN 5 NM SW OF AIRPORT.																
CITY AND STATE PALMDALE, CA		ELEVATION: 2543 TDZE: 2540 AIRPORT NAME: PALMDALE USAF PLANT 42			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 7, ORIG 24 MAY 2018					SUP:				
												AMDT: NONE				
												DATED				



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.

LINE 4, (CONT.):

ZENAB/1.60 NM TO RW07 3180

TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
UWEJO/5.00 NM TO RW07	ZENAB/1.60 NM TO RW07 (TF) (FB) (RNP 0.30)	077.09 / 3.40	
ZENAB/1.60 NM TO RW07	RW07 (MAP) (TF) (FO) (RNP 0.30)	077.09 / 1.60	
RW07 (MAP)	2880 MSL (CA)		
2880 MSL	IMSIJ (DF) (FO) (RNP 1.00)		7000

QUALITY
19
CHECKED

CITY AND STATE PALMDALE, CA	ELEVATION: 2543	TDZE: 2540	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 7, ORIG 24 MAY 2018	SUP:
	AIRPORT NAME:				AMDT: NONE
	PALMDALE USAF PLANT 42				DATED:

**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	KPMD
RUNWAY	RW07
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W07A
LTP/FTP LATITUDE	343750.1060N
LTP/FTP LONGITUDE	1180647.0290W
LTP/FTP ELLIPSOIDAL HEIGHT	+07429
FPAP LATITUDE	343751.3700N
FPAP LONGITUDE	1180459.0665W
THRESHOLD CROSSING HEIGHT (TCH)	00050.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.50
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
 <u>CRC REMAINDER</u>	 4FE0997B

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+07743
FPAP ORTHOMETRIC HEIGHT	+07743

QUALITY
19
CHECKED

CITY AND STATE PALMDALE, CA	ELEVATION: 2543 AIRPORT NAME: PALMDALE USAF PLANT 42	TDZE: 2540 	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 7, ORIG 24 MAY 2018	SUP:
					AMDT: NONE
					DATED:

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		LP: OQXIB LNAV: OQXIB												
ETHER (IAF)				IXIGE (TF) (FB) (RNP 1.00)				298.79 / 5.04				5100		CLIMB TO 3000 THEN CLIMBING RIGHT TURN TO 6700 DIRECT OLTIW AND ON TRACK 326.69 TO FISCH AND HOLD, CONTINUE CLIMB-IN-HOLD TO 6700.												
IXIGE (IF)				HOGAX (TF) (FB) (RNP 1.00)				244.50 / 6.12				4300														
HOGAX (FAF)				JOSOP/1.80 NM TO OQXIB (TF) (FB) (RNP 0.30)				222.87 / 3.22																		
JOSOP/1.80 NM TO OQXIB				OQXIB (MAP) (TF) (FO) (RNP 0.30)				222.87 / 1.80						ADDITIONAL FLIGHT DATA: HOLD SE, LT, 301.00 INBOUND. CHART FAS OBST: 2594 BUILDING 343831N/1180417W, 2524 TREE 343910N/1180121W. CHART 2670 TOWER 343955N/1180044W. WAAS CHANNEL # 45741 REFERENCE PATH ID: W22A CHART CIRCLING ICON. JOSOP TO RW22: 2.75/52. CHART PLANVIEW NOTE: FINAL APPROACH COURSE OFFSET 3.00 DEGREES. LTP HAE: 727.9 M												
OQXIB (MAP)				3000 MSL (CA)				222.87				3000														
(SEE FORM 8260-10)																										
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																										
2. PROFILE STARTS AT ETHER																										
3. FAC: 222.87 FAF: HOGAX DIST FAF TO MAP: 5.02 THLD: 6.02																										
4. MIN. ALT: ETHER 6000, IXIGE 5100, HOGAX 4300, JOSOP/1.80 NM TO OQXIB 3360																										
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 CLEAR																										
8. MSA FROM: OQXIB 10900																										
MAG VAR: 12E EPOCH YEAR: 2020																										
MINIMUMS																										
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A			STANDARD @																
CATEGORY =====>		A			B			C			D			E												
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA											
LP MDA	2780	1 1/4	282	2780	1 1/4	282	2780	1 1/4	282	2780	1 1/4	282														
LNAV MDA	2860	1 1/4	362	2860	1 1/4	362	2860	1 1/4	362	2860	1 1/4	362														
CIRCLING	3020	1 1/4	477	3060	1 1/4	517	3140	1 1/2	597	3740	3	1197														
NOTES: CHART NOTE: CIRCLING NA FOR CATS C AND D SOUTH OF RWYS 4 AND 25. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ETHER ON V12 EAST BOUND. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART PLANVIEW NOTE: CAUTION: HIGH TERRAIN 5 NM SW OF AIRPORT.																										
CITY AND STATE PALMDALE, CA				ELEVATION: 2543 TDZE: 2498 AIRPORT NAME: PALMDALE USAF PLANT 42				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 22, ORIG 24 MAY 2018						SUP: AMDT: NONE DATED										



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
3000 MSL	OLTIW (DF) (FB) (RNP 1.00)		
OLTIW	FISCH (TF) (FO) (RNP 1.00)	326.69 / 9.11	6700

QUALITY
26
CHECKED

CITY AND STATE
PALMDALE, CA

ELEVATION: 2543 TDZE: 2498
AIRPORT NAME:
PALMDALE USAF PLANT 42

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 22, ORIG
24 MAY 2018

SUP:
AMDT: NONE
DATED:

**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	KPMD
RUNWAY	RW22
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W22A
LTP/FTP LATITUDE	343814.2360N
LTP/FTP LONGITUDE	1180336.9660W
LTP/FTP ELLIPSOIDAL HEIGHT	+07279
FPAP LATITUDE	343722.7935N
FPAP LONGITUDE	1180505.1980W
THRESHOLD CROSSING HEIGHT (TCH)	00052.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	02.75
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0

<u>CRC REMAINDER</u>	C538AA75
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+07593
FPAP ORTHOMETRIC HEIGHT	+07593

QUALITY
9
CHECKED

CITY AND STATE PALMDALE, CA	ELEVATION: 2543 AIRPORT NAME: PALMDALE USAF PLANT 42	TDZE: 2498 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 22, ORIG 24 MAY 2018	SUP:
				AMDT: NONE
				DATED:

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: RW25 CLIMB 6700 DIRECT JJOEL AND ON TRACK 330.97 DIRECT FISCH AND HOLD, CONTINUE CLIMB-IN-HOLD TO 6700. ADDITIONAL FLIGHT DATA: HOLD SE, LT, 301.00 INBOUND. CHART FAS OBST: 2594 BUILDING 343831N/1180417W. DISTANCE TO THLD FROM 200 HAT: 0.44 NM. CHART VDP AT 1.01 NM TO RW25* *LNAV ONLY. WAAS CHANNEL # 86520 REFERENCE PATH ID: W25A CHART CIRCLING ICON. LTP HAE: 730.3 M									
ETHER (IAF)			DOLTN (TF) (FB) (RNP 1.00)			239.55 / 3.45			4900												
DOLTN (IF)			FORDA (TF) (FB) (RNP 1.00)			254.34 / 6.01			4500												
FORDA (FAF)			SKKEE/3.00 NM TO RW25 (TF) (FB) (RNP 0.30)			254.27 / 3.08															
SKKEE/3.00 NM TO RW25			RW25 (MAP) (TF) (FO) (RNP 0.30)			254.27 / 3.00															
RW25 (MAP)			2703 MSL (CA)			254.27															
(SEE FORM 8260-10)																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT DOLTN 3. FAC: 254.27 FAF: FORDA DIST FAF TO MAP: 6.08 THLD: 6.08 4. MIN. ALT: DOLTN 4900, FORDA 4500, SKKEE/3.00 NM TO RW25 3500* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 4500 GS ALT AT: FORDA 4500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 63.3 34:1 IS CLEAR 8. MSA FROM: RW25 10900																		MAG VAR: 12E		EPOCH YEAR: 2020	
MINIMUMS																					
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD @									
CATEGORY =====>		A			B			C			D			E							
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA						
LPV DA	2703	3/4	200	2703	3/4	200	2703	3/4	200	2703	3/4	200									
LNAV/VNAV DA	2806	1	303	2806	1	303	2806	1	303	2806	1	303									
LNAV MDA	2880	1	377	2880	1	377	2880	1	377	2880	1	377									
CIRCLING	3020	1	477	3060	1	517	3140	1 1/2	597	3740	3	1197									
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -6C (22F) OR ABOVE 50C (123F). @ CAT D 1200-3 CHART NOTE: CIRCLING NA FOR CATS C AND D SOUTH OF RWYS 4 AND 25. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ETHER ON V12 NORTHEAST BOUND. (CONTINUED ON PAGE 2)																					
CITY AND STATE				ELEVATION: 2543 TDZE: 2503				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
PALMDALE, CA				AIRPORT NAME:								RNAV (GPS) RWY 25, AMDT 2				AMDT: 1A					
				PALMDALE USAF PLANT 42								24 MAY 2018				DATED 07/24/2014					



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
2703 MSL	JJOEL (DF) (FB) (RNP 1.00)		
JJOEL	FISCH (TF) (FO) (RNP 1.00)	330.97 / 10.56	6700

NOTES, (CONT.):

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

CHART PLANVIEW NOTE: CAUTION: HIGH TERRAIN 5 NM SW OF AIRPORT.

QUALITY
19
CHECKED

CITY AND STATE
PALMDALE, CA

ELEVATION: 2543 TDZE: 2503
AIRPORT NAME:
PALMDALE USAF PLANT 42

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 25, AMDT 2
24 MAY 2018

SUP:
AMDT: 1A
DATED: 07/24/2014

**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	KPMD
RUNWAY	RW25
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W25A
LTP/FTP LATITUDE	343757.9910N
LTP/FTP LONGITUDE	1180423.7430W
LTP/FTP ELLIPSOIDAL HEIGHT	+07293
FPAP LATITUDE	343750.1050N
FPAP LONGITUDE	1180647.0290W
THRESHOLD CROSSING HEIGHT (TCH)	00063.3
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

ECE29BD3

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+07616
FPAP ORTHOMETRIC HEIGHT	+07616

QUALITY
19
CHECKED

CITY AND STATE

PALMDALE, CA

ELEVATION: 2543

TDZE: 2503

AIRPORT NAME:

PALMDALE USAF PLANT 42

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 25, AMDT 2

24 MAY 2018

SUP:

AMDT: 1A

DATED: 07/24/2014

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION VOR OR TACAN 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: EKOTY/PMD 0.30 DME					
CIVOK/PMD 12.00 DME (IF)		WUGIT/PMD 7.00 DME			265.10 / 5.00 (PMD R-085)			4300		CLIMB TO 5000 ON PMD VORTAC R-282 THEN CLIMBING RIGHT TURN TO 7000 DIRECT PMD VORTAC AND HOLD (TACAN AIRCRAFT CLIMBING RIGHT TURN TO 6700 ON PMD VORTAC R-298 TO FISCH INT/14.26 DME AND HOLD SE, LT, 298.00 INBOUND, CONTINUE CLIMB-IN-HOLD TO 6700).					
WUGIT/PMD 7.00 DME		THERO/PMD 4.00 DME			265.10 / 3.00 (PMD R-085)			4000							
										ADDITIONAL FLIGHT DATA: HOLD E, RT, 283.84 INBOUND. CHART FAS OBST: 2589 TREE 343631N/1180200W. 2599 TREE 343618N/1180050W. CHART AT OR ABOVE 5200 AT PMD VORTAC. CHART CIRCLING ICON. THERO TO RW25: 3.04/58. CHART PLANVIEW NOTE: DME REQUIRED.					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 15E EPOCH YEAR:1980					
2. TEARDROP R-070 OUTBOUND, R-265 INBOUND, 5200 WITHIN 15 NM. OF PMD VORTAC (IAF).															
3. FAC 265.10 FAF THERO/PMD 4.00 DME DIST FAF TO MAP _____ THLD 4.47															
4. MIN. ALT CIVOK 5200, WUGIT 4300, THERO 4000, STRAS/PMD 2.49 DME 3500															
8. MSA FROM: PMD VORTAC 070-180 11300, 180-340 7800, 340-070 5400															
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-25	2840	1	337	2840	1	337	2840	1	337	2840	1	337	2840	1	337
CIRCLING	3020	1	477	3060	1	517	3140	1 1/2	597	3740	3	1197	3760	3	1217
NOTES:															
CHART NOTE: CIRCLING NA FOR CATS C, D, AND E SOUTH OF RWYS 4 AND 25.										@ CAT D 1200-3, CAT E 1300-3					
CHART NOTE: DME REQUIRED.															
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON PMD VORTAC AIRWAY RADIALS 067 CW 142.															
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).															
(CONTINUED ON PAGE 2)															
CITY AND STATE PALMDALE, CA		ELEVATION: 2543 TDZE: 2503 AIRPORT NAME: PALMDALE USAF PLANT 42		FACILITY IDENTIFIER: PMD		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR OR TACAN RWY 25, AMDT 8 24 MAY 2018				SUP VOR/DME OR TACAN RWY 25 AMDT 7 DATE 04/08/2010					



U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
VOR OR TACAN 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 PROFILE NOTE: REMAIN WITHIN 15 NM OF PMD VORTAC.

CHART PLANVIEW NOTE: CAUTION: HIGH TERRAIN 5 NM SW OF AIRPORT.

QUALITY
19
CHECKED

CITY AND STATE

PALMDALE, CA

ELEVATION: 2543

TDZE: 2503

AIRPORT NAME:

PALMDALE USAF PLANT 42

FACILITY
IDENTIFIER:

PMD

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

VOR OR TACAN RWY 25, AMDT 8

24 MAY 2018

SUP: VOR/DME OR
TACAN RWY 25

AMDT: 7

DATED: 04/08/2010

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: 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: HAGLA 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 WRAY, CO				ELEVATION: 3677 TDZE: 3653 AIRPORT NAME: WRAY MUNI				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 35, AMDT 2A 24 MAY 2018				SUP: AMDT: 2 DATED 03/29/2018							



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 GLIDEPATH 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 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

	FROM	TO	ALT
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
50
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 2A 24 MAY 2018	SUP:
				AMDT: 2
				DATED: 03/29/2018

**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	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
50
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 2A

24 MAY 2018

SUP:

AMDT:

2

DATED:

03/29/2018

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: RW16 CLIMB TO 7000 DIRECT CEMAP AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT, 346.89 INBOUND. FAS OBST: 4330 AAO 401034N/1024413W. DISTANCE TO THLD FROM 250 HAT: 0.66 NM. CHART VDP AT 1.34 NM TO RW16* *LNAV ONLY. WAAS CHANNEL # 56541 REFERENCE PATH ID: W16A CHART CIRCLING ICON. LTP HAE: 1238.1 M									
SYLIS (IAF)		PATNE (NOPT) (TF) (FB) (RNP 1.00)			256.99 / 10.00			7000											
ZAROT (IAF)		PATNE (NOPT) (TF) (FB) (RNP 1.00)			076.71 / 10.00			7000											
PATNE (IF/IAF)		HUNCH (TF) (FB) (RNP 1.00)			166.85 / 8.00			5800											
HUNCH (FAF)		RW16 (MAP) (TF) (FO) (RNP 0.30)			166.86 / 5.12			7000											
RW16 (MAP)		4382 MSL (CA)			166.86														
4382 MSL		CEMAP (DF) (FO) (RNP 1.00)																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N PATNE, RT, 166.85 INBOUND, 7000 FT. IN LIEU OF PT (IAF) 3. FAC: 166.86 FAF: HUNCH DIST FAF TO MAP: 5.12 THLD: 5.12 4. MIN. ALT: PATNE 7000, HUNCH 5800 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 5800 GS ALT AT: HUNCH 5800 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 38.8 20:1 IS CLEAR 34:1 IS NOT CLEAR 8. MSA FROM: _____																MAG VAR: 7E		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	4382	1	250	4382	1	250	4382	1	250		NA								
LNAV/VNAV DA	4452	1	320	4452	1	320	4452	1	320		NA								
LNAV MDA	4580	1	448	4580	1	448	4580	1 3/8	448		NA								
CIRCLING	4620	1	482	4640	1	502	4700	1 1/2	562		NA								
NOTES: CHART NOTE: CIRCLING NA TO RWYS 12 AND 30. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -23C (-9F) OR ABOVE 54C (130F). CHART NOTE: RWY 16 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA.																			
CITY AND STATE		ELEVATION: 4138 TDZE: 4132			FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:								
YUMA, CO		AIRPORT NAME:			RNAV		RNAV (GPS) RWY 16, ORIG				AMDT: NONE								
		YUMA MUNI					24 MAY 2018				DATED								



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.

TAA

	FROM	TO	ALT
1.	077/30 CW 257/30 (NOPT)	PATNE (IF/IAF) (FB)	7000
2.	257/30 CW 347/30	SYLIS (IAF) (FB)	9500
3.	347/30 CW 077/30	ZAROT (IAF) (FB)	9500

QUALITY
23
CHECKED

CITY AND STATE YUMA, CO	ELEVATION: 4138 TDZE: 4132 AIRPORT NAME: YUMA MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 16, ORIG 24 MAY 2018	SUP:
				AMDT: NONE
				DATED:

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	2V6
RUNWAY	RW16
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W16A
LTP/FTP LATITUDE	400636.4860N
LTP/FTP LONGITUDE	1024254.9210W
LTP/FTP ELLIPSOIDAL HEIGHT	+12381
FPAP LATITUDE	400507.8295N
FPAP LONGITUDE	1024242.5225W
THRESHOLD CROSSING HEIGHT (TCH)	00038.8
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1472
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 42BB2E4D

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+12593
FPAP ORTHOMETRIC HEIGHT	+12593

QUALITY
23
CHECKED

CITY AND STATE YUMA, CO	ELEVATION: 4138 AIRPORT NAME: YUMA MUNI	TDZE: 4132 YUMA MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 16, ORIG 24 MAY 2018	SUP:
					AMDT: NONE
					DATED:

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 7000 DIRECT PATNE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, RT, 166.85 INBOUND. CHART FAS OBST: 4237 BUILDING 400242N/1024304W. 4400 AAO 400100N/1024323W. DISTANCE TO THLD FROM 200 HAT: 0.67 NM. CHART VDP AT 1.03 NM TO RW34* *LNAV ONLY. WAAS CHANNEL # 61241 REFERENCE PATH ID: W34A CHART CIRCLING ICON. LTP HAE: 1238.6 M											
RASPS (IAF)				CEMAP (NOPT) (TF) (FB) (RNP 1.00)				076.75 / 10.00				7000													
OUNCE (IAF)				CEMAP (NOPT) (TF) (FB) (RNP 1.00)				257.03 / 10.00				7000													
CEMAP (IF/IAF)				GNARR (TF) (FB) (RNP 1.00)				346.89 / 8.00				5800													
GNARR (FAF)				RW34 (MAP) (TF) (FO) (RNP 0.30)				346.88 / 5.07																	
RW34 (MAP)				4333 MSL (CA)				346.88						MAG VAR: 7E EPOCH YEAR: 2020											
4333 MSL				PATNE (DF) (FO) (RNP 1.00)								7000													
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S CEMAP, RT, 346.89 INBOUND, 7000 FT. IN LIEU OF PT (IAF) 3. FAC: 346.88 FAF: GNARR DIST FAF TO MAP: 5.07 THLD: 5.07 4. MIN. ALT: CEMAP 7000, GNARR 5800 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 5800 GS ALT AT: GNARR 5800 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 51.0 20:1 IS CLEAR 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	4333	1	200	4333	1	200	4333	1	200		NA														
LNAV/VNAV DA	4383	1	250	4383	1	250	4383	1	250		NA														
LNAV MDA	4500	1	367	4500	1	367	4500	1	367		NA														
CIRCLING	4620	1	482	4640	1	502	4700	1 1/2	562		NA														
NOTES: CHART NOTE: CIRCLING NA TO RWYS 12 AND 30. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -23C (-9F) 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: 4138 TDZE: 4133				FACILITY IDENTIFIER:				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
YUMA, CO				AIRPORT NAME:				RNAV				RNAV (GPS) RWY 34, ORIG				AMDT: NONE									
				YUMA MUNI								24 MAY 2018				DATED									



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

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TAA

	FROM	TO	ALT
1.	257/30 CW 077/30 (NOPT)	CEMAP (IF/IAF) (FB)	7000
2.	077/30 CW 167/30	RASPS (IAF) (FB)	9500
3.	167/30 CW 257/30	OUNCE (IAF) (FB)	9500

QUALITY
23
CHECKED

CITY AND STATE YUMA, CO	ELEVATION: 4138 TDZE: 4133 AIRPORT NAME: YUMA MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 34, ORIG 24 MAY 2018	SUP:
				AMDT: NONE
				DATED:

**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	2V6
RUNWAY	RW34
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W34A
LTP/FTP LATITUDE	400555.2205N
LTP/FTP LONGITUDE	1024249.1485W
LTP/FTP ELLIPSOIDAL HEIGHT	+12386
FPAP LATITUDE	400723.8775N
FPAP LONGITUDE	1024301.5520W
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	1472
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
 <u>CRC REMAINDER</u>	 8D510976

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+12598
FPAP ORTHOMETRIC HEIGHT	+12598

CITY AND STATE

YUMA, CO

ELEVATION: 4138

TDZE: 4133

AIRPORT NAME:

YUMA MUNI

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 34, ORIG

24 MAY 2018

SUP:

AMDT: NONE

DATED:

 QUALITY
23
CHECKED

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

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

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
YUMA, CO	YUMA MUNI	24 MAY 2018	ORIG

TAKEOFF MINIMUMS:

RWY 12, 30: NA - AIRPORT.

RWY 16: STANDARD.

RWY 34: 200-1 1/8 OR STANDARD WITH MINIMUM CLIMB OF 240 FT PER NM TO 4400.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 16: TERRAIN AND LIGHTING BEGINNING 15 FT FROM DER, 111 FT RIGHT OF CENTERLINE, UP TO 4134 FT MSL.

NOTE: RWY 34: TERRAIN AND SIGN BEGINNING 13 FT FROM DER, 199 FT LEFT OF CENTERLINE, UP TO 4132 FT MSL. TREES BEGINNING 845 FT FROM DER, 525 FT LEFT OF CENTERLINE, UP TO 4172 FT MSL. GRAIN ELEVATOR 2298 FT FROM DER, 821 FT RIGHT OF CENTERLINE, 87 FT AGL/4216 FT MSL. TREE 2871 FT FROM DER, 1198 FT LEFT OF CENTERLINE, 4205 FT MSL. BUILDING 5750 FT FROM DER, 830 FT LEFT OF CENTERLINE, 172 FT AGL/4302 FT MSL.

CONTROLLING OBSTACLES:

RWY 34: 4302 BUILDING 400732.11N/1024312.46W.

REMARKS:

FLIGHT INSPECTED BY:

THOMAS E MOLOKIE

OFFICE SYMBOL Digitally signed by **DATE:**

FICO **ADOLFO D URRUTIA** 2/6/18
Feb 13, 2018

DEVELOPED BY:

ADOLFO URRUTIA (CHRISTINE BAYSE)

OFFICE SYMBOL: Digitally signed by **DATE:**

AJV-5432 **ADOLFO D URRUTIA** 2/25/2017
Feb 13, 2018

APPROVED BY:

PATRICK MULQUEEN

OFFICE SYMBOL:

AJV-5430

DATE:

Digitally signed by
ADOLFO D URRUTIA
Feb 13, 2018

REQUIRED EFFECTIVE DATE:

EFFECTIVE CONCURRENT WITH AIRSPACE DOCKET 17-ANM-32

COORDINATED WITH:

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

OTHER:

APRT MGR, ZDV, STATE AERO, WESTERN FPT

CHANGES - REASONS:

QUALITY
23
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										MISSED APPROACH							
FROM		TO		COURSE AND DISTANCE				ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW07							
CETUB		WUGRA (TF) (FB) (RNP 2.00)		007.06 / 20.66				3000		CLIMB TO 3000 DIRECT ZOLNI AND HOLD.							
BRIDJ		IVUJO (TF) (FO) (RNP 2.00)		253.88 / 20.90				3000									
LYMAN (IAF)		IVUJO (NOPT) (TF) (FB) (RNP 1.00)		085.44 / 6.22				3000		ADDITIONAL FLIGHT DATA: HOLD E, RT, 255.13 INBOUND. CHART FAS OBST: 1403 TREE 411928N/0942703W. DISTANCE TO THLD FROM 302 HAT: 0.84 NM. WAAS CHANNEL # 42941 REFERENCE PATH ID: W07A CHART CIRCLING ICON. CHART: CRESTON AWOS-3 LTP HAE: 384.5 M							
WUGRA (IAF)		IVUJO (NOPT) (TF) (FB) (RNP 1.00)		344.82 / 6.00				3000									
IVUJO (IF/IAF) (SEE FORM 8260-10)		JIDAP (TF) (FB) (RNP 1.00)		074.80 / 6.10				3000									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD W IVUJO, RT, 074.80 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 074.89 FAF: JIDAP DIST FAF TO MAP: 5.03 THLD: 5.03 4. MIN. ALT: IVUJO 3000, JIDAP 3000, RURCE/3.00 NM TO RW07 2340* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 3000 GS ALT AT: JIDAP 3000 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW07 3000										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		
LPV DA	1665	1	302	1665	1	302	1665	1	302		NA						
LNAV/VNAV DA	1665	1	302	1665	1	302	1665	1	302		NA						
LNAV MDA	1720	1	357	1720	1	357	1720	1	357		NA						
CIRCLING	1900	1	536	2080	1	716	2260	2 3/4	896		NA						
NOTES: CHART NOTE: CIRCLING RWY 14,32 NA AT NIGHT. *LNAV ONLY CHART NOTE: USE CRESTON ALTIMETER SETTING; WHEN NOT RECEIVED, USE DES MOINES ALTIMETER SETTING: INCREASE DA TO 1756 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE ALL MDA 100 FEET AND VISIBILITY CAT B (CONTINUED ON PAGE 2)																	
CITY AND STATE GREENFIELD, IA		ELEVATION: 1364 TDZE: 1363 AIRPORT NAME: GREENFIELD MUNI				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 7, AMDT 1 24 MAY 2018				SUP: AMDT: ORIG-B DATED 02/01/2018					



**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>
JIDAP (FAF)	RURCE/3.00 NM TO RW07 (TF) (FB) (RNP 0.30)	074.89 / 2.03	
RURCE/3.00 NM TO RW07	RW07 (MAP) (TF) (FO) (RNP 0.30)	074.89 / 3.00	
RW07 (MAP)	1665 MSL (CA)	074.89	
1665 MSL	ZOLNI (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

1/4 SM AND CAT C 3/8 SM.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CETUB ON V181 SOUTHEAST BOUND.

CHART NOTE: BARO-VNAV NA.

PBN REQUIREMENTS NOTE: RNP APCH.

QUALITY
6
CHECKED

CITY AND STATE

GREENFIELD, IA

ELEVATION: 1364

TDZE: 1363

AIRPORT NAME:

GREENFIELD MUNI

 FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 7, AMDT 1

24 MAY 2018

SUP:

AMDT: **ORIG-B**DATED: **02/01/2018**

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

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FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGFZ
RUNWAY	RW07
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W07A
LTP/FTP LATITUDE	411935.4475N
LTP/FTP LONGITUDE	0942657.5190W
LTP/FTP ELLIPSOIDAL HEIGHT	+03845
FPAP LATITUDE	411952.5010N
FPAP LONGITUDE	0942501.4365W
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	1720
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 E3B4257E

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04143
FPAP ORTHOMETRIC HEIGHT	+04143

QUALITY
6
CHECKED

CITY AND STATE GREENFIELD, IA	ELEVATION: 1364 AIRPORT NAME: GREENFIELD MUNI	TDZE: 1363 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 7, AMDT 1 24 MAY 2018	SUP:
				AMDT: ORIG-B
				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: RW25 CLIMB TO 3000 DIRECT IVUJO AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 074.80 INBOUND. CHART FAS OBST: 1417 TREE 411952N/0942539W. DISTANCE TO THLD FROM 302 HAT: 0.82 NM. WAAS CHANNEL # 87141 REFERENCE PATH ID: W25A CHART CIRCLING ICON. CHART: CRESTON AWOS-3 LTP HAE: 385.8 M									
LINDE		HOSGU (TF) (FB) (RNP 2.00)			167.75 / 11.52			3000											
WIVEY		JITED (TF) (FB) (RNP 2.00)			272.77 / 20.11			3000											
HOSGU (IAF)		ZOLNI (NOPT) (TF) (FB) (RNP 1.00)			165.11 / 6.00			3000											
JITED (IAF)		ZOLNI (NOPT) (TF) (FB) (RNP 1.00)			345.15 / 6.00			3000											
ZOLNI (IF/IAF)		FIBGU (TF) (FB) (RNP 1.00)			255.13 / 6.10			3000											
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD E ZOLNI, RT, 255.13 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 255.04 FAF: FIBGU DIST FAF TO MAP: 5.01 THLD: 5.01 4. MIN. ALT: ZOLNI 3000, FIBGU 3000, CEXUV/3.00 NM TO RW25 2340* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 3000 GS ALT AT: FIBGU 3000 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW25 3000																MAG VAR: 4E		EPOCH YEAR: 1995	
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	1666	1	302	1666	1	302	1666	1	302		NA								
LNAV/VNAV DA	1666	1	302	1666	1	302	1666	1	302		NA								
LNAV MDA	1720	1	356	1720	1	356	1720	1	356		NA								
CIRCLING	1900	1	536	2080	1	716	2260	2 3/4	896		NA								
NOTES: CHART NOTE: CIRCLING RWY 14,32 NA AT NIGHT. *LNAV ONLY CHART NOTE: USE CRESTON ALTIMETER SETTING; WHEN NOT RECEIVED, USE DES MOINES ALTIMETER SETTING: INCREASE DA TO 1757 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE ALL MDA 100 FEET AND VISIBILITY CAT B (CONTINUED ON PAGE 2)																			
CITY AND STATE		ELEVATION: 1364 TDZE: 1364			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:							
GREENFIELD, IA		AIRPORT NAME: GREENFIELD MUNI						RNAV (GPS) RWY 25, AMDT 1 24 MAY 2018				AMDT: ORIG-B							
												DATED 02/01/2018							



**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>
FIBGU (FAF)	CEXUV/3.00 NM TO RW25 (TF) (FB) (RNP 0.30)	255.04 / 2.01	
CEXUV/3.00 NM TO RW25	RW25 (MAP) (TF) (FO) (RNP 0.30)	255.04 / 3.00	
RW25 (MAP)	1666 MSL (CA)	255.04	
1666 MSL	IVUJO (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

1/4 SM AND CAT C 3/8 SM.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT LINDE ON V175 NORTHWEST BOUND AND ON V172 NORTHEAST BOUND, AND ARRIVALS AT WIVEY ON V13-77-161 NORTHBOUND.

CHART NOTE: BARO-VNAV NA.

PBN REQUIREMENTS NOTE: RNP APCH.

QUALITY
6
CHECKED

CITY AND STATE

GREENFIELD, IA

ELEVATION: 1364

TDZE: 1364

AIRPORT NAME:

GREENFIELD MUNI

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 25, AMDT 1

24 MAY 2018

SUP:

AMDT: ORIG-B

DATED: 02/01/2018

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

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FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGFZ
RUNWAY	RW25
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W25A
LTP/FTP LATITUDE	411941.8760N
LTP/FTP LONGITUDE	0942613.7815W
LTP/FTP ELLIPSOIDAL HEIGHT	+03858
FPAP LATITUDE	411924.8025N
FPAP LONGITUDE	0942809.8540W
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	1720
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 8255FC90

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04156
FPAP ORTHOMETRIC HEIGHT	+04156

QUALITY
6
CHECKED

CITY AND STATE GREENFIELD, IA	ELEVATION: 1364 AIRPORT NAME: GREENFIELD MUNI	TDZE: 1364 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 25, AMDT 1 24 MAY 2018	SUP:
				AMDT: ORIG-B
				DATED: 02/01/2018

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

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Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
DETROIT, MI	COLEMAN A YOUNG MUNI	24 MAY 2018	7A

TAKEOFF MINIMUMS:

RWY 7, 15, 33, STANDARD.

RWY 25, STANDARD WITH MINIMUM CLIMB OF 210 FEET PER NM TO 1000, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A 200 FEET PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1400 FEET PRIOR TO DEPARTURE END OF RUNWAY.

TEXTUAL DEPARTURE PROCEDURES:

RWY 33, CLIMB HEADING 328.33 TO 1800 BEFORE TURNING LEFT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 07, BUILDING, POLE, TREE, TRANSMISSION LINE, STACK BEGINNING 290 FT FROM DER, 65 FT RIGHT OF CENTERLINE, UP TO 77 FT AGL/695 FT MSL. POLE 459 FT FROM DER, 138 FT LEFT OF CENTERLINE, 31 FT AGL/654 FT MSL. TREE, LIGHTING BEGINNING 909 FT FROM DER, 96 FT LEFT OF CENTERLINE, UP TO 680 FT MSL

NOTE: RWY 15, BUILDING 449 FT FROM DER, 317 FT LEFT OF CENTERLINE, 16 FT AGL/637 FT MSL. BUILDING, TREES BEGINNING 662 FT FROM DER, 220 FT LEFT OF CENTERLINE, UP TO 77 FT AGL/695 FT MSL. BUILDING 803 FT FROM DER, 521 FT RIGHT OF CENTERLINE, 656 FT MSL. TREE 1058 FT FROM DER, 367 FT RIGHT OF CENTERLINE, 659 FT MSL. TREE 1527 FT FROM DER, 445 FT RIGHT OF CENTERLINE, 669 FT MSL. TREE 1990 FT FROM DER, 492 FT RIGHT OF CENTERLINE, 679 FT MSL. POLE 3401 FT FROM DER, 1110 FT RIGHT OF CENTERLINE, 106 FT AGL/722 FT MSL.

NOTE: RWY 25, VEHICLE ON ROAD 1 FT FROM DER, 125 FT LEFT OF CENTERLINE, 650 FT MSL. BUILDING, VEHICLES ON ROAD, STACK, BEGINNING 48 FT FROM DER, 39 FT LEFT OF CENTERLINE, UP TO 36 FT AGL/662 FT MSL. TREE, POLE BEGINNING 456 FT FROM DER, 132 FT RIGHT OF CENTERLINE, UP TO 658 FT MSL. TREE, STACK BEGINNING 908 FT FROM DER, 11 FT LEFT OF CENTERLINE, UP TO 683 FT MSL. TREE 1109 FT FROM DER, 325 FT RIGHT OF CENTERLINE, 685 FT MSL. TREES BEGINNING 1294 FT FROM DER, 132 FT LEFT OF CENTERLINE, UP TO 703 FT MSL. TOWER 2828 FT FROM DER, 1224 FT LEFT OF CENTERLINE, 141 FT AGL/770 FT MSL. STACK 1.5 NM FROM DER, 2412 FT LEFT OF CENTERLINE, 241 FT AGL/871 FT MSL.

NOTE: RWY 33, TREE 113 FT FROM DER, 414 FT LEFT OF CENTERLINE, 666 FT MSL. TREE 233 FT FROM DER, 512 FT LEFT OF CENTERLINE, 677 FT MSL. TREE, POLE BEGINNING 449 FT FROM DER, 118 FT LEFT OF CENTERLINE, UP TO 681 FT MSL.

TREE 743 FT FROM DER, 505 FT RIGHT OF CENTERLINE, 661 FT MSL. TREES BEGINNING 1707 FT FROM DER, 366 FT LEFT OF CENTERLINE, UP TO 694 FT MSL. TREES BEGINNING 1753 FT FROM DER, 83 FT RIGHT OF CENTERLINE, UP TO 709 FT MSL.

CONTROLLING OBSTACLES:

RWY 25, 871 FT MSL STACK 422307.00N/0830235.00W

OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 33, 1749 FT MSL TOWER 422653.00N/0831023.00W

REMARKS:

FLIGHT INSPECTED BY:	<i>Digitally signed by</i> ROBERT G HAMILTON Mar 14, 2018	OFFICE SYMBOL: FICO	DATE: 03/12/2018
	RUSSELL P ELLIOTT		

DEVELOPED BY:	<i>Digitally signed by</i> JIMMY S HUGHES Dec 20, 2017	OFFICE SYMBOL: AJV-5422	DATE: 11/20/2017
	JIMMY SANG HUGHES		

APPROVED BY:	<i>Digitally signed by</i> ROBERT G HAMILTON Mar 14, 2018	OFFICE SYMBOL: AJV-5420	DATE:
	JULIE MORGAN		

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:

ZOB, DET ATCT, DTW APP CON, AMGR

CHANGES - REASONS:

1. UPDATED TAKEOFF OBSTACLE NOTES - BRING FORM TO UPDATED CRITERIA
2. CHANGED RWY 25 TAKEOFF MINIMUM FROM STANDARD WITH A MINIMUM CLIMB OF 215 FEET PER NM TO 1400, OR ALTERNATIVELY, WITH



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

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Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
DETROIT, MI	COLEMAN A YOUNG MUNI	24 MAY 2018	7A

STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FEET PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1300 FEET PRIOR TO DEPARTURE END OF RUNWAY." TO "RWY 25, STANDARD WITH MINIMUM CLIMB OF 210 FEET PER NM TO 1000, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FEET PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1400 FEET PRIOR TO DEPARTURE END OF RUNWAY." " - CURRENT OBSTACLE EVALUATION.



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

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CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
DETROIT, MI	WILLOW RUN	24 MAY 2018	10B

TAKEOFF MINIMUMS:

RWY 05R, 05L, 09, 23R, 23L: STANDARD.

RWY 27: 300-1 1/2 OR STANDARD WITH A MINIMUM CLIMB OF 209 FEET PER NM TO 1000, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FEET PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1300 FEET PRIOR TO DEPARTURE END OF RUNWAY

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 05R, ELECTRICAL SYSTEM BEGINNING 5 FT FROM DER, 56 FT RIGHT OF CENTERLINE, UP TO 3 FT AGL/703 FT MSL. ELECTRICAL SYSTEM 5 FT FROM DER, 56 FT LEFT OF CENTERLINE, 3 FT AGL/703 FT MSL. TRANSMISSION LINE 1070 FT FROM DER, 593 FT LEFT OF CENTERLINE, 34 FT AGL/731 FT MSL. TRANSMISSION LINE 1180 FT FROM DER, 492 FT LEFT OF CENTERLINE, 36 FT AGL/732 FT MSL. TREE 1406 FT FROM DER, 799 FT LEFT OF CENTERLINE, 42 FT AGL/741 FT MSL. TREE 1591 FT FROM DER, 902 FT LEFT OF CENTERLINE, 50 FT AGL/750 FT MSL. TREES BEGINNING 2193 FT FROM DER, 1037 FT RIGHT OF CENTERLINE, UP TO 69 FT AGL/762 FT MSL. TREE 2344 FT FROM DER, 1076 FT LEFT OF CENTERLINE, 68 FT AGL/769 FT MSL.

NOTE: RWY 05L, TRANSMISSION LINE BEGINNING 1390 FT FROM DER, 817 FT LEFT OF CENTERLINE, UP TO 39 FT AGL/744 FT MSL. TREE 1603 FT FROM DER, 802 FT LEFT OF CENTERLINE, 75 FT AGL/780 FT MSL. TREES BEGINNING 1668 FT FROM DER, 394 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/786 FT MSL. TREES BEGINNING 2745 FT FROM DER, 1010 FT LEFT OF CENTERLINE, UP TO 89 FT AGL/791 FT MSL. TREE 3407 FT FROM DER, 967 FT LEFT OF CENTERLINE, 95 FT AGL/796 FT MSL.

NOTE: RWY 09, ELECTRICAL SYSTEM 10 FT FROM DER, 88 FT LEFT OF CENTERLINE, 2 FT AGL/700 FT MSL. BUILDING, NAVAID BEGINNING 150 FT FROM DER, 487 FT LEFT OF CENTERLINE, UP TO 18 FT AGL/715 FT MSL. TRAVERSE WAY BEGINNING 720 FT FROM DER, 641 FT RIGHT OF CENTERLINE, UP TO 35 FT AGL/736 FT MSL. TREE 1036 FT FROM DER, 550 FT LEFT OF CENTERLINE, 35 FT AGL/729 FT MSL. TREES BEGINNING 1113 FT FROM DER, 763 FT RIGHT OF CENTERLINE, UP TO 52 FT AGL/752 FT MSL. TREE 1347 FT FROM DER, 856 FT LEFT OF CENTERLINE, 59 FT AGL/754 FT MSL. TREES BEGINNING 1477 FT FROM DER, 791 FT LEFT OF CENTERLINE, UP TO 69 FT AGL/762 FT MSL. TREE 1692 FT FROM DER, 774 FT LEFT OF CENTERLINE, 77 FT AGL/773 FT MSL. STACK 1778 FT FROM DER, 892 FT RIGHT OF CENTERLINE, 70 FT AGL/770 FT MSL. TREE 1889 FT FROM DER, 775 FT LEFT OF CENTERLINE, 78 FT AGL/774 FT MSL. TREES BEGINNING 2104 FT FROM DER, 776 FT LEFT OF CENTERLINE, UP TO 81 FT AGL/776 FT MSL. TREES BEGINNING 2883 FT FROM DER, 787 FT LEFT OF CENTERLINE, UP TO 84 FT AGL/780 FT MSL. TREE 3773 FT FROM DER, 737 FT LEFT OF CENTERLINE, 100 FT AGL/796 FT MSL. TREE 3929 FT FROM DER, 516 FT LEFT OF CENTERLINE, 104 FT AGL/799 FT MSL.

NOTE: RWY 23L, ELECTRICAL SYSTEM 4 FT FROM DER, 69 FT LEFT OF CENTERLINE, 3 FT AGL/716 FT MSL. ELECTRICAL SYSTEM 5 FT FROM DER, 89 FT RIGHT OF CENTERLINE, 2 FT AGL/716 FT MSL. SIGN, TREE, POLE BEGINNING 21 FT FROM DER, 49 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/816 FT MSL. SIGN 33 FT FROM DER, 501 FT RIGHT OF CENTERLINE, 3 FT AGL/717 FT MSL. TREES, ELECTRICAL SYSTEM BEGINNING 141 FT FROM DER, 3 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/816 FT MSL. TREES BEGINNING 886 FT FROM DER, 39 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/819 FT MSL. TREES BEGINNING 1095 FT FROM DER, 4 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/819 FT MSL. TREE 1708 FT FROM DER, 879 FT RIGHT OF CENTERLINE, 100 FT AGL/822 FT MSL. TREES BEGINNING 1752 FT FROM DER, 127 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/826 FT MSL. TREES BEGINNING 1916 FT FROM DER, 61 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/829 FT MSL. TREES BEGINNING 2245 FT FROM DER, 17 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/832 FT MSL. TREES BEGINNING 2837 FT FROM DER, 70 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/822 FT MSL. TREES BEGINNING 3001 FT FROM DER, 291 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/832 FT MSL. TREES BEGINNING 3166 FT FROM DER, 48 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/835 FT MSL.

NOTE: RWY 23R, SIGN 61 FT FROM DER, 252 FT LEFT OF CENTERLINE, 3 FT AGL/717 FT MSL. TREES, POLE, BUILDING BEGINNING 82 FT FROM DER, 14 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/819 FT MSL. TREE 126 FT FROM DER, 140 FT LEFT OF CENTERLINE, 100 FT AGL/812 FT MSL. TREES BEGINNING 170 FT FROM DER, 51 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/816 FT MSL. TREES, BUILDING BEGINNING 783 FT FROM DER, 9 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/822 FT MSL. TREES BEGINNING 915 FT FROM DER, 29 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/819 FT MSL. TREES BEGINNING 1780 FT FROM DER, 250 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/826 FT MSL. TREES BEGINNING 1857 FT FROM DER, 58 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/829 FT MSL. TREES BEGINNING 1944 FT FROM DER, 7 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/829 FT MSL. TREES, STACK BEGINNING 2273 FT FROM DER, 14 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/832 FT MSL. TREES BEGINNING 3358 FT FROM DER, 51 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/835 FT MSL.

NOTE: RWY 27, FENCE BEGINNING 110 FT FROM DER, 353 FT RIGHT OF CENTERLINE, UP TO 6 FT AGL/722 FT MSL. TREE 118 FT FROM DER, 481 FT RIGHT OF CENTERLINE, 25 FT AGL/742 FT MSL. TREE, FENCE BEGINNING 181 FT FROM DER, 353 FT RIGHT OF CENTERLINE, UP TO 26 FT AGL/745 FT MSL. TREE, FENCE BEGINNING 200 FT FROM DER, 353 FT RIGHT OF CENTERLINE, UP TO 52 FT AGL/769 FT MSL. TERRAIN, FENCE BEGINNING 468 FT FROM DER, 93 FT LEFT OF CENTERLINE, UP TO 729 FT MSL. TREE, POLE BEGINNING 503 FT FROM DER, 212 FT RIGHT OF CENTERLINE, UP TO 51 FT AGL/771 FT MSL. POLE 768 FT FROM DER, 102 FT LEFT OF CENTERLINE, 26 FT AGL/742 FT MSL. POLE 841 FT FROM DER, 174 FT LEFT OF CENTERLINE, 27 FT AGL/744 FT MSL. POLE BEGINNING 985 FT FROM DER, 42 FT LEFT OF CENTERLINE, UP TO 35 FT AGL/752 FT MSL. POLE 1222 FT FROM DER, 423 FT LEFT OF CENTERLINE, 43 FT AGL/760 FT MSL. POLE 1243 FT FROM DER, 38 FT LEFT OF CENTERLINE, 44 FT AGL/761 FT MSL. POLE, BUILDING BEGINNING 1559 FT FROM DER, 43 FT LEFT OF CENTERLINE, UP TO 54 FT AGL/772 FT MSL. BUILDING 1786 FT FROM DER, 865 FT LEFT OF CENTERLINE, 55 FT AGL/773 FT MSL. BUILDING BEGINNING 1816 FT FROM DER, 789 FT LEFT OF CENTERLINE, UP TO 58 FT AGL/777 FT MSL. BUILDING, POLE BEGINNING 1843 FT FROM DER, 45 FT LEFT OF CENTERLINE, UP TO 59 FT AGL/778 FT MSL. TREE 2836 FT FROM DER, 833 FT RIGHT OF CENTERLINE, 68 FT AGL/789 FT MSL. TREE 2869 FT FROM DER, 985 FT RIGHT OF CENTERLINE, 75 FT AGL/794 FT MSL. TREES BEGINNING 2910 FT FROM DER, 1007 FT RIGHT OF CENTERLINE, UP TO 76 FT AGL/795 FT MSL. BUILDING 2931 FT FROM DER, 784 FT LEFT OF CENTERLINE, 68 FT AGL/789 FT MSL. TRANSMISSION LINE 3710 FT FROM DER, 390 FT RIGHT OF CENTERLINE, 90 FT AGL/812 FT MSL. TRANSMISSION LINE, CATENARY BEGINNING 3961 FT FROM DER, 775 FT LEFT OF CENTERLINE, UP TO 101 FT AGL/825 FT MSL. TREE 4002 FT

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP)
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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
DETROIT, MI	WILLOW RUN	24 MAY 2018	10B

FROM DER, 1392 FT RIGHT OF CENTERLINE, 85 FT AGL/817 FT MSL. TRANSMISSION LINE 4076 FT FROM DER, 119 FT LEFT OF CENTERLINE, 104 FT AGL/830 FT MSL. TREE 4482 FT FROM DER, 471 FT RIGHT OF CENTERLINE, 104 FT AGL/834 FT MSL. TOWER 1.1 NM FROM DER, 468 FT LEFT OF CENTERLINE, 165 FT AGL/903 FT MSL.

CONTROLLING OBSTACLES:

RWY 27, 903 FT MSL TOWER 421431.78N-0833411.47W

REMARKS:

<u>FLIGHT INSPECTED BY:</u>	<i>Digitally signed by</i> ROBERT G HAMILTON Mar 20, 2018	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
RUSSELL P ELLIOTT		FICO	3/13/18
<u>DEVELOPED BY:</u>	<i>Digitally signed by</i> JIMMY S HUGHES Nov 29, 2017	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
JIMMY SANG HUGHES		AJV-5422	11/17/2017
<u>APPROVED BY:</u>	<i>Digitally signed by</i> ROBERT G HAMILTON Mar 20, 2018	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
JULIE MORGAN		AJV-5420	

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

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

OTHER:

DTW ATCT, YIP ATCT, ZOB, AMGR

CHANGES - REASONS:

1. UPDATED TAKE OFF OBSTACLE NOTES.
2. INCREASED RWY 27 CG FROM 206 TO 209, SAME CONTROLLING OBSTACLE, NEW AIRPORT SURVEY CHANGED TOWER HEIGHT FROM 900 MSL TO 903 MSL.



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							
MLP VOR/DME (IAF)		NEGOE/MSO 25.00 DME		094.95 / 47.90			10500		CLIMB TO 6200 THEN CLIMBING RIGHT TURN TO 8500 ON MSO VOR/DME R-154 THEN CLIMBING LEFT TURN TO 9100 DIRECT MSO VOR/DME AND HOLD.							
EMIBE/MSO 25.00 DME CCW (IAF)		NEGOE/MSO 25.00 DME		25.00 DME ARC (MSO LR-303)			10500									
JIROS/MSO 25.00 DME CW (IAF)		DIPHU/MSO 25.00 DME		25.00 DME ARC			12000		ADDITIONAL FLIGHT DATA: HOLD S, RT, 344.00 INBOUND. CHART MSO R-344 AT EMIBE. CHART MSO R-243 AT JIROS. CHART MSO R-262 AT DIPHU.							
DIPHU/MSO 25.00 DME CW		NEGOE/MSO 25.00 DME		25.00 DME ARC (MSO LR-293)			10500									
NEGOE/MSO 25.00 DME (IF)		JELEG/MSO VOR/DME 17.48 DME		117.45 / 7.51 (I-MSO)			8600									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																
2. PROFILE STARTS AT NEGOE/MSO 25.00 DME																
3. FAC: 117.45 FAF: _____ DIST FAF TO MAP: _____ THLD: _____																
4. MIN. ALT: NEGOE 10500, JELEG 8600																
5. DIST TO THLD FROM OM: _____ - _____ MM: _____ - _____ IM: _____ - 150 HAT: _____ - 100 HAT: _____ - GS ANT: 992																
6. MIN GS INCPT: 8600 GS ALT AT: JELEG 8600 OM: _____ - _____ MM: _____ - _____ IM: _____ -																
7. GS ANGLE: 3.00 TCH: 45.0																
8. MSA FROM: MSO VOR/DME 049-139 9200, 139-229 10800, 229-319 9200, 319-049 10600										MAG VAR: 13E			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
S-ILS 12		5022	7	1822	5022	7	1822	5022	7	1822	5022	7	1822			
NOTES: CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY. EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED. CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).																
CITY AND STATE MISSOULA, MT		ELEVATION: 3206 TDZE: 3200 AIRPORT NAME: MISSOULA INTL			FACILITY IDENTIFIER: I-MSO		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS Y RWY 12, ORIG-C 5/24/2018				SUP: ILS Y RWY 11 AMDT: ORIG-B DATED 06/30/2011					

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 CLIMBING RIGHT TURN TO 10300 ON MSO VOR/DME R-159 TO JEPSN/MSO 26.50 DME AND HOLD. MISSED APPROACH REQUIRES MINIMUM CLIMB OF 410 FEET PER NM TO 9800; IF UNABLE TO MEET CLIMB GRADIENT, SEE ILS Y RWY 12. ADDITIONAL FLIGHT DATA: HOLD S, RT, 339.00 INBOUND. CHART MSO R-344 AT EMIBE. CHART MSO R-243 AT JIROS. CHART MSO R-262 AT DIPHU.									
MLP VOR/DME (IAF)		NEGOE/MSO 25.00 DME		094.95 / 47.90				10500											
EMIBE/MSO 25.00 DME CCW (IAF)		NEGOE/MSO 25.00 DME		25.00 DME ARC (MSO LR-303)				10500											
JIROS/MSO 25.00 DME CW (IAF)		DIPHU/MSO 25.00 DME		25.00 DME ARC				12000											
DIPHU/MSO 25.00 DME CW		NEGOE/MSO 25.00 DME		25.00 DME ARC (MSO LR-293)				10500											
NEGOE/MSO 25.00 DME (IF)		JELEG/MSO VOR/DME 17.48 DME		117.45 / 7.51 (I-MSO)				8600											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT NEGOE/MSO 25.00 DME 3. FAC: <u>117.45</u> FAF: _____ DIST FAF TO MAP: _____ THLD: _____ 4. MIN. ALT: NEGOE 10500, JELEG 8600 5. DIST TO THLD FROM OM: _____ - MM: _____ - IM: _____ 150 HAT: _____ - 100 HAT: _____ - GS ANT: 992 6. MIN GS INCPT: <u>8600</u> GS ALT AT: <u>JELEG 8600</u> OM: _____ - MM: _____ - IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>45.0</u> 8. MSA FROM: MSO VOR/DME 049-139 9200, 139-229 10800, 229-319 9200, 319-049 10600																MAG VAR: 13E		EPOCH YEAR: 2020	
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 12	3411	2400	211	3411	2400	211	3411	2400	211	3411	2400	211							
NOTES: EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED. CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).																# NA WHEN CONTROL TOWER CLOSED.			
CITY AND STATE MISSOULA, MT		ELEVATION: 3206 TDZE: 3200 AIRPORT NAME: MISSOULA INTL		FACILITY IDENTIFIER: I-MSO		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS Z RWY 12, AMDT 12D 5/24/2018						SUP: ILS Z RWY 11							
												AMDT: 12C							
												DATED 04/05/2012							

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		ALHOB						
UBIJO		STACC (TF) (FB) (RNP 2.00)		287.96 / 43.03				11300		CLIMBING LEFT TURN TO 9600 DIRECT WENKE AND ON TRACK 276.74 TO LIBRE AND HOLD, CONTINUE CLIMB-IN-HOLD TO 9600.						
STACC		BOTBY (TF) (FB) (RNP 2.00)		287.31 / 6.00				10300								
NOHHA		BOTBY (TF) (FB) (RNP 2.00)		014.80 / 4.63				10300								
BOTBY (IAF)		VISVE (TF) (FB) (RNP 1.00)		339.04 / 5.00				8100								
VISVE (IF)		WOJHO (TF) (FB) (RNP 1.00)		339.02 / 5.28				6800		ADDITIONAL FLIGHT DATA: HOLD W, RT, 104.00 INBOUND. FAS OBST: 3600 AAO 464832N/1140354W. FAC CROSSES MIDPOINT OF RWY 12/30. CHART CIRCLING ICON.						
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																
2. PROFILE STARTS AT VISVE																
3. FAC: 339.05 FAF: WOJHO DIST FAF TO MAP: 6.67 THLD:																
4. MIN. ALT: VISVE 8100, WOJHO 6800																
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: ALHOB 10800																
MAG VAR: 13E 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
CIRCLING		4280	1 1/4	1074	4700	1 1/2	1494	4700	3	1494	5140	3	1934			
NOTES: CHART NOTE: CIRCLING NA FOR CATS C AND D NE OF RWY 12-30. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT UBIJO ON V86 SOUTHEAST BOUND. PBN REQUIREMENTS NOTE: RNP APCH.																
@ CAT A 1100-2, CAT B 1500-2, CAT C 1500-3, CAT D 2000-3																
CITY AND STATE MISSOULA, MT		ELEVATION: 3206 TDZE: AIRPORT NAME: MISSOULA INTL		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS)-D, AMDT 1 5/24/2018						SUP: AMDT: ORIG DATED 09/23/2010				

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
WOJHO (FAF)	ALHOB (MAP) (TF) (FO) (RNP 0.30)	339.05 / 6.67	
ALHOB (MAP)	3606 MSL (CA)	339.05	
3606 MSL	WENKE (DF) (FB) (RNP 1.00)		
WENKE	LIBRE (TF) (FO) (RNP 1.00)	276.74 / 14.74	9600

CITY AND STATE
MISSOULA, MT

ELEVATION: 3206 TDZE:
AIRPORT NAME:
MISSOULA INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS)-D, AMDT 1
5/24/2018

SUP:
AMDT: ORIG
DATED: 09/23/2010

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.								
TERMINAL ROUTES				MISSED APPROACH								
FROM	TO	COURSE AND DISTANCE	ALTITUDE	LPV: DA LNAV: RW12 (DO NOT EXCEED 200 KIAS UNTIL CINON) CLIMB TO 12000 DIRECT CINON AND ON TRACK 178.96 TO TUSEE AND ON TRACK 168.23 TO JENKI AND HOLD, CONTINUE CLIMB-IN-HOLD TO 12000. &&MISSED APPROACH REQUIRES MINIMUM CLIMB OF 325 FEET PER NM TO 7700. ADDITIONAL FLIGHT DATA: HOLD N, RT, 167.01 INBOUND. CHART FAS OBST: 3354 TOWER 465711N/1140826W. DISTANCE TO THLD FROM 200 HAT: 0.48 NM. CHART VDP AT 1.23 NM TO RW12* *LNAV ONLY. WAAS CHANNEL # 65715 REFERENCE PATH ID: W12B CHART CIRCLING ICON. LTP HAE: 958.1 M								
JENKI	EHRAY (TF) (FB) (RNP 2.00)	308.80 / 25.02	11800									
EHRAY	RIVAL (TF) (FB) (RNP 2.00)	308.53 / 11.00	9500									
RIVAL	LANNY (TF) (FB) (RNP 2.00)	338.17 / 13.62	9400									
CHARL	ODIRE (TF) (FB) (RNP 2.00)	207.83 / 24.58	9400									
LANNY (IAF)	ODIRE (NOPT) (TF) (FB) (RNP 1.00)	027.88 / 10.00	9400									
(SEE FORM 8260-10)												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NW ODIRE, RT, 117.15 INBOUND, 9400 FT. IN LIEU OF PT (IAF) 3. FAC: 117.32 FAF: SUPPY _____ DIST FAF TO MAP: 9.27 THLD: 9.27 4. MIN. ALT: ODIRE 9400, CALIP 7000, SUPPY 6200, BEGPE/5.00 NM TO RW12 4840* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 6200 GS ALT AT: SUPPY 6200 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 55.0 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW12 11000												
				MAG VAR: 13E 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
LPV DA&&**	3400	2400	200	3400	2400	200	3400	2400	200	3400	2400	200
LPV DA%	4229	4	1029	4229	4	1029	4229	4	1029	4229	4	1029
LNAV MDA&&	3640	2400	440	3640	2400	440	3640	4000	440	3640	4000	440
LNAV MDA#	4520	4000	1320	4520	5500	1320	4520	3	1320	4520	3	1320
CIRCLING	4520	1 1/4	1314	4700	1 1/2	1494	4700	3	1494	5140	3	1934
NOTES: CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHART NOTE: CIRCLING NA FOR CATS C AND D NE OF RWY 12-30. CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO LNAV # CATS C/D. CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO LPV % ALL CATS. (CONTINUED ON PAGE 2)												
CITY AND STATE		ELEVATION: 3206 TDZE: 3200		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:		SUP: RNAV (GPS) Y RWY				
MISSOULA, MT		AIRPORT NAME:				RNAV (GPS) Y RWY 12, AMDT 3		11				
		MISSOULA INTL				5/24/2018		AMDT: 2				
								DATED 11/18/2010				



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
ODIRE (IF)	CALIP (TF) (FB) (RNP 1.00)	117.15 / 9.99	7000
CALIP	SUPPY (TF) (FB) (RNP 1.00)	117.29 / 2.74	6200
SUPPY (FAF)	BEGPE/5.00 NM TO RW12 (TF) (FB) (RNP 0.30)	117.32 / 4.27	
BEGPE/5.00 NM TO RW12	RW12 (MAP) (TF) (FO) (RNP 0.30)	117.32 / 5.00	
RW12 (MAP)	3400 MSL (CA)	117.32	
3400 MSL	CINON (DF) (FB) (RNP 1.00)		
CINON	TUSEE (TF) (FB) (RNP 1.00)	178.96 / 8.07	
TUSEE	JENKI (TF) (FO) (RNP 1.00)	168.23 / 24.45	12000

NOTES, (CONT.):

PBN REQUIREMENTS NOTE: RNP APCH.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT JENKI ON V231 SOUTHBOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CHARL ON V120 EASTBOUND AND ON V231 NORTHBOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT RIVAL ON V187 SOUTHWEST BOUND.

QUALITY
10
CHECKED

CITY AND STATE MISSOULA, MT	ELEVATION: 3206 AIRPORT NAME: MISSOULA INTL	TDZE: 3200 RNAV	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 12, AMDT 3 5/24/2018	SUP: RNAV (GPS) Y RWY 11
					AMDT: 2
					DATED: 11/18/2010

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.



CITY AND STATE MISSOULA, MT	ELEVATION: 3206 TDZE: 3200 AIRPORT NAME: MISSOULA INTL	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 12, AMDT 3 5/24/2018	SUP: RNAV (GPS) Y RWY 11
				AMDT: 2
				DATED: 11/18/2010

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.



CITY AND STATE MISSOULA, MT	ELEVATION: 3206 TDZE: 3200 AIRPORT NAME: MISSOULA INTL	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 12, AMDT 3 5/24/2018	SUP: RNAV (GPS) Y RWY 11
				AMDT: 2
				DATED: 11/18/2010

**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	KMSO
RUNWAY	RW12
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W12B
LTP/FTP LATITUDE	465529.4395N
LTP/FTP LONGITUDE	1140623.6135W
LTP/FTP ELLIPSOIDAL HEIGHT	+09581
FPAP LATITUDE	465428.5950N
FPAP LONGITUDE	1140439.5015W
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>	1BDF098B
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+09730
FPAP ORTHOMETRIC HEIGHT	+09730

QUALITY
10
CHECKED

CITY AND STATE MISSOULA, MT	ELEVATION: 3206 AIRPORT NAME: MISSOULA INTL	TDZE: 3200 MISSOULA INTL	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 12, AMDT 3 5/24/2018	SUP: RNAV (GPS) Y RWY 11
					AMDT: 2
					DATED: 11/18/2010

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 11000 ON TRACK 297.47 TO SUPPLY AND ON TRACK 292.06 TO HEDVA AND ON TRACK 297.00 TO LOCIV, THEN RIGHT TURN TO NEYOC AND ON TRACK 131.09 TO ARLEE AND HOLD. *MISSED APPROACH REQUIRES MINIMUM CLIMB OF 215 FEET PER NM TO 5000. ADDITIONAL FLIGHT DATA: HOLD N, RT, 164.30 INBOUND. DISTANCE TO THLD FROM 317 HAT: 0.84 NM. ROUTE TYPE: A, H. ROUTE TYPE QUALIFIER 1: F. ROUTE TYPE QUALIFIER 2: S. # TCH 3255.5 MSL (DO NOT CHART).								
MSO VOR/DME (IAF)		CUPRA (TF) (FB) (RNP 1.00)			110.46 / 9.87				9000										
CUPRA		WAMIS (RF) (FB) (RNP 1.00)			(6.60 NM RADIUS CW (CFDSC))/16.02				8800										
PIXXI		RONKY (TF) (FB) (RNP 1.50)			250.60 / 46.59				10000										
RONKY (IAF)		WAMIS (TF) (FB) (RNP 0.80)			249.79 / 5.00				8800										
WAMIS		TUFFY (RF) (FB) (RNP 0.70)			(4.86 NM RADIUS CW (CFDSK))/8.93				6600										
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT TUFFY 3. FAC: <u>297.50</u> FAF: _____ DIST FAF TO MAP: _____ THLD: _____ 4. MIN. ALT: TUFFY 6600, CEBED 6000 5. DIST TO THLD FROM OM: <u>7.22</u> MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: <u>5600</u> GS ALT AT: JEXOM 5600, FISIS 5135, STOVN 4089 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>50.0#</u> 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW30 10900																MAG VAR: 13E		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*	3524	1	318	3524	1	318	3524	1	318	3524	1	318							
RNP 0.30 DA	3582	1 1/4	376	3582	1 1/4	376	3582	1 1/4	376	3582	1	376							
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -21C (-5F) OR ABOVE 43C (109F). CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, PROCEDURE NA. CHART SPEED ICON IN PLANVIEW AT CUPRA : MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT WAMIS : MAX 210 KIAS. (CONTINUED ON PAGE 2)																			
CITY AND STATE MISSOULA, MT		ELEVATION: 3206 TDZE: 3206 AIRPORT NAME: MISSOULA INTL		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (RNP) RWY 30, ORIG-B 5/24/2018				SUP: RNAV (RNP) RWY 29									
										AMDT: ORIG-A									
										DATED 06/30/2011									



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	
WEDAK		NOHHA (TF) (FB) (RNP 2.00)	347.02 / 40.20	9800	
NOHHA (IAF)		TUFFY (TF) (FB) (RNP 0.70)	347.01 / 9.00	6600	
TUFFY (IF)		CEBED (TF) (FB) (RNP 0.70)	354.91 / 4.47	6000	
CEBED		JEXOM (TF) (FB) (RNP 0.50)	020.98 / 2.18	5600	
JEXOM (FAF)		FISIS (TF) (FB) (RNP 0.30)	021.01 / 1.41		
FISIS		STOVN (RF) (FB) (RNP 0.30)	(2.20 NM RADIUS CCW (CFDSQ))/3.21		
STOVN		RW30 (MAP) (TF) (FO) (RNP 0.30)	297.50 / 2.60		
RW30 (MAP)		SUPPY (TF) (FB) (RNP 1.00)	297.47 / 10.83		
SUPPY		HEDVA (TF) (FB) (RNP 1.00)	292.06 / 6.36		
HEDVA		LOCIV (TF) (FB) (RNP 1.00)	297.00 / 8.00		
LOCIV		NEYOC (RF) (FB) (RNP 1.00)	(7.12 NM RADIUS CW (CFDSZ)) / 24.11		
NEYOC		ARLEE (TF) (FO) (RNP 1.00)	131.09 / 14.12	11000	
NOTES, (CONT.):					
PBN REQUIREMENTS NOTE: RNP AR APCH, RF REQUIRED.					
CHART PLANVIEW NOTE AT MSO VOR/DME, PIXXI, WEDAK: (RNP 0.50).					
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON MSC VOR/DME AIRWAY RADIALS 059 CW 167.					
CITY AND STATE		ELEVATION: 3206 TDZE: 3206	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP: RNAV (RNP) RWY 29
MISSOULA, MT		AIRPORT NAME:	RNAV	RNAV (RNP) RWY 30, ORIG-B	AMDT: ORIG-A
		MISSOULA INTL		5/24/2018	DATED: 06/30/2011



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 13000 ON TRACK 117.45 TO OKASE AND ON TRACK 123.36 TO TAGOE AND HOLD, CONTINUE CLIMB-IN-HOLD TO 13000. ##MISSED APPROACH REQUIRES MINIMUM CLIMB OF 350 FEET PER NM TO 8300; IF UNABLE TO MEET CLIMB GRADIENT, SEE RNAV (GPS) Y RWY 12. **MISSED APPROACH REQUIRES MINIMUM CLIMB OF 425 FEET PER NM TO 8300. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 300.01 INBOUND. CHART FAS OBST: 3323 OL ON TWR 465617N/1140712W. DISTANCE TO THLD FROM 318 HAT: 0.88 NM. ROUTE TYPE: A, H. ROUTE TYPE QUALIFIER 1: F. ROUTE TYPE QUALIFIER 2: S. # TCH 3237.3 (DO NOT CHART).						
MLP VOR/DME		NABNE (TF) (FB) (RNP 2.00)			095.80 / 45.17			10000								
LOLLO		JUMIS (TF) (FB) (RNP 2.00)			264.93 / 16.97			10000								
JUMIS		NABNE (RF) (FB) (RNP 2.00)			(11.65 NM RADIUS CW (CFCJT))/44.50			10000								
NABNE (IAF)		FERSI (TF) (FB) (RNP 1.00)			123.62 / 9.40			8600								
FERSI (IF)		SUCTO (TF) (FB) (RNP 1.00)			107.68 / 6.80			6500								
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT FERSI 3. FAC: <u>117.35</u> FAF: _____ DIST FAF TO MAP: _____ THLD: _____ 4. MIN. ALT: <u>FERSI 8600, SUCTO 6500, WENKE 5600</u> 5. DIST TO THLD FROM OM: <u>7.27</u> MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: <u>5600</u> GS ALT AT: <u>WENKE 5600</u> OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> MSATCH: <u>44.9#</u> 20:1 IS CLEAR 34:1 IS NOT CLEAR 8. FROM: <u>RW12 11100</u>																
										MAG VAR: 13E 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 0.12 DA**	3518	4000	318	3518	4000	318	3518	4000	318	3518	4000	318				
RNP 0.30 DA##	3880	2	680	3880	2	680	3880	2	680	3880	2	680				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -21C (-6F) OR ABOVE 43C (109F). NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.12 ALL CATS VISIBILITY TO RVR 6000. CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.30 ALL CATS VISIBILITY TO 2 1/2 SM. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). (CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 3206 TDZE: 3200			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP: RNAV (RNP) Z RWY				
MISSOULA, MT		AIRPORT NAME: MISSOULA INTL					RNAV (RNP) Z RWY 12, ORIG-D 5/24/2018					11				
												AMDT: ORIG-C				
												DATED 04/05/2012				



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	
SUCTO	WENKE (TF) (FB) (RNP 1.00)		117.30 / 3.20	5600	
WENKE (FAF)	RW12 (MAP) (TF) (FO) (RNP 0.30)		117.35 / 7.27		
RW12 (MAP)	OKASE (TF) (FB) (RNP 1.00)		117.45 / 6.20		
OKASE	TAGOE (TF) (FO) (RNP 1.00)		123.36 / 6.52	13000	
NOTES, (CONT.):					
PBN REQUIREMENTS NOTE: RNP AR APCH.					
CHART PLANVIEW NOTE ADJACENT TO JUMIS (IAF): RF REQUIRED AT JUMIS.					
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT LOLLO ON V187 EASTBOUND AND ON ARRIVALS AT MLP VOR/DME ON V120 WESTBOUND AND V2 NORTHWESTBOUND.					
CHART NOTE: WHEN LOCAL WEATHER NOT RECEIVED, PROCEDURE NA.					
CITY AND STATE		ELEVATION: 3206 TDZE: 3200	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP: RNAV (RNP) Z RWY 11
MISSOULA, MT		AIRPORT NAME:	RNAV	RNAV (RNP) Z RWY 12, ORIG-D	AMDT: ORIG-C
		MISSOULA INTL		5/24/2018	DATED: 04/05/2012



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: MADEP/MSO 1.40 DME									
SQIDS/MSO 11.00 DME		MSO VOR/DME			239.19 / 11.00			10100		CLIMB DIRECT MSO VOR/DME THEN CLIMBING RIGHT TURN TO 8500 ON MSO VOR/DME R-156 OUTBOUND THEN CLIMBING LEFT TURN TO 9100 DIRECT TO MSO VOR/DME AND HOLD.									
SPUNK/MSO 11.00 DME		MSO VOR/DME			268.04 / 11.00			9500											
TAGOE/MSO 11.32 DME		MSO VOR/DME			300.16 / 11.32			8900											
MSO VOR/DME		HUSON/MSO 6.00 DME			285.00 / 6.00			8900											
ALTON/MSO 16.00 DME (IAF)		NOSPE/MSO 13.00 DME (NOPT)			105.00 / 3.00 (MSO LR-285)			8600											
SULFY/MSO 13.00 DME CCW (IAF)		NOSPE/MSO 13.00 DME (NOPT)			13.00 DME ARC			8600		ADDITIONAL FLIGHT DATA: HOLD S, RT, 344.00 INBOUND. FAS OBST: 4179 AAO 465633N/1141406W. CHART MSO R-344 AT SULFY. CHART MSO R-243 AT WAANE. CHART MSO R-264 AT HULPA. CHART CIRCLING ICON. CHART MSO R-059 AT SQIDS. CHART MSO R-088 AT SPUNK. CHART MSO R-120 AT TAGOE. FAC 2806 FT R OF RWY 12.									
WAANE/MSO 13.00 DME CW (IAF)		HULPA/MSO 13.00 DME (NOPT)			13.00 DME ARC			9700											
(SEE FORM 8260-10)																			
1. PT <u>L</u> SIDE OF COURSE <u>285.00</u> OUTBOUND <u>8900</u> FT WITHIN <u>10</u> MILES OF <u>HUSON</u> (IAF)										MAG VAR: 13E EPOCH YEAR:2020									
2.																			
3. FAC <u>105.00</u> FAF <u>HUSON/MSO 6.00 DME</u> DIST FAF TO MAP <u></u> THLD <u></u>																			
4. MIN. ALT <u>WAMAS 7700, HUSON 6900</u>																			
8. MSA FROM: <u>MSO VOR/DME 049-139 9200, 139-229 10800, 229-319 9200, 319-049 10600</u>																			
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		@							
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		5120	1 1/4	1914	5120	1 1/2	1914	5120	3	1914	5160	3	1954						
NOTES:																			
EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED.										@ CAT A, B 2000-2, CAT C, D 2000-3									
CITY AND STATE MISSOULA, MT		ELEVATION: 3206 AIRPORT NAME: MISSOULA INTL			TDZE:			FACILITY IDENTIFIER: MSO			PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR-A, AMDT 13 5/24/2018					SUP VOR/DME-A AMDT 12 DATE 09/23/2010			



**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, (CONT.):

<u>FROM</u>	<u>TO</u>	<u>COURSE AND DISTANCE</u>	<u>ALTITUDE</u>
HULPA/MSO 13.00 DME CW	NOSPE/MSO 13.00 DME	13.00 DME ARC	8600
NOSPE/MSO 13.00 DME (IF)	WAMAS/MSO 10.00 DME	105.00 / 3.00 (MSO R-285)	7700
WAMAS/MSO 10.00 DME	HUSON/MSO 6.00 DME	105.00 / 4.00 (MSO R-285)	6900

QUALITY
10
CHECKED

CITY AND STATE

MISSOULA, MT

ELEVATION: 3206

TDZE:

AIRPORT NAME:

MISSOULA INTL

FACILITY
IDENTIFIER:

MSO

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

VOR-A, AMDT 13

5/24/2018

SUP: **VOR/DME-A**AMDT: **12**DATED: **09/23/2010**

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: MAJOS/MSO 1.00 DME					
MSO VOR/DME		STEVI/MSO 10.00 DME			159.00 / 10.00			10000		CLIMB TO 9600 DIRECT MSO VOR/DME AND ON MSO VOR/DME R-285 TO LIBRE/MSO 23.00 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 9600. ADDITIONAL FLIGHT DATA: HOLD W, RT, 104.84 INBOUND. FAS OBST: 3979 AAO 464814N/1140148W. CHART MSO R-243 AT DAIRE. CHART MSO R-177 AT DMFOX. CHART MSO R-059 AT OCEDA. CHART MSO R-088 AT BAMBE. CHART MSO R-120 AT PUNNS. CHART CIRCLING ICON. FAC CROSSES AIRPORT 1296 FT EAST OF AIRPORT REFERENCE POINT.					
DAIRE/MSO 16.00 DME CCW (IAF)		DMFOX/MSO 16.00 DME (NOPT)			16.00 DME ARC			11200							
DMFOX/MSO 16.00 DME CCW		WURTH/MSO 16.00 DME			16.00 DME ARC			9300							
OCEDA/MSO 16.00 DME CW (IAF)		WURTH/MSO 16.00 DME (NOPT)			16.00 DME ARC			8700							
BAMBE/MSO 16.00 DME CW (IAF)		WURTH/MSO 16.00 DME (NOPT)			16.00 DME ARC			8700							
PUNNS/MSO 16.00 DME CW (IAF)		WURTH/MSO 16.00 DME (NOPT)			16.00 DME ARC			8700							
(SEE FORM 8260-10)															
1. PT <u> L </u> SIDE OF COURSE <u> 159.00 </u> OUTBOUND <u> 10000 </u> FT WITHIN <u> 10 </u> MILES OF <u> STEVI </u> (IAF)														MAG VAR: 13E EPOCH YEAR: 2020	
2. _____															
3. FAC <u> 339.00 </u> FAF <u> STEVI/MSO 10.00 DME </u> DIST FAF TO MAP <u> 9.00 </u> THLD _____															
4. MIN. ALT <u> STEVI 8100, ERRIK/MSO 6.00 DME 6680 </u>															
8. MSA FROM: <u> MSO VOR/DME 049-139 9200, 139-229 10800, 229-319 9200, 319-049 10600 </u>															
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		@					
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	4920	1 1/4	1714	4920	1 1/2	1714	4920	3	1714	5160	3	1954			
NOTES:															
EQUIPMENT REQUIREMENTS NOTE: RADAR REQUIRED FOR PROCEDURE ENTRY AT JEPSN. @ CAT A, B 1800-2, CAT C 1800-3, CAT D 2000-3															
EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED.															
QUALITY 24 CHECKED															
CITY AND STATE		ELEVATION: 3206 TDZE:		FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP		VOR/DME-B			
MISSOULA, MT		AIRPORT NAME:		MSO		VOR-B, AMDT 7 5/24/2018				AMDT		6			
		MISSOULA INTL								DATE		09/23/2010			

**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, (CONT.):

<u>FROM</u>	<u>TO</u>	<u>COURSE AND DISTANCE</u>	<u>ALTITUDE</u>
JEPSN/MSO 26.50 DME (IAF)	WURTH/MSO 16.00 DME (NOPT)	339.00 / 10.50 (MSO R-159)	8700
OCFOW/MSO 25.00 DME (IAF)	WURTH/MSO 16.00 DME (NOPT)	024.00 / 4.92 & 339.00 / 5.28 (MSO R-159)	8800
WURTH/MSO 16.00 DME (IF)	STEV/MSO 10.00 DME	339.00 / 6.00 (MSO R-159)	8100

QUALITY
24
CHECKED

CITY AND STATE

MISSOULA, MT

ELEVATION: 3206

TDZE:

AIRPORT NAME:

MISSOULA INTL

FACILITY
IDENTIFIER:

MSO

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

VOR-B, AMDT 7

5/24/2018

SUP: **VOR/DME-B**AMDT: **6**DATED: **09/23/2010**

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.											
TERMINAL ROUTES										MISSED APPROACH					
FROM		TO		COURSE AND DISTANCE		ALTITUDE		ILS: DA LOC: 6.26 NM AFTER TANTE INT/I-LHZ 7.34 DME/RADAR OR AT I-LHZ 1.08 DME							
TYI VORTAC		EKLAW INT/I-LHZ 15.84 DME/RADAR		262.10 / 40.86		3400		CLIMB TO 1400 THEN CLIMBING RIGHT TURN TO 2600 ON HEADING 190 AND ON RDU VORTAC R-092 TO ZEBUL INT/RDU 19.64 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1400 THEN CLIMBING RIGHT TURN TO 2600 ON HEADING 190 AND ON TYI VORTAC R-269 TO ZEBUL INT/TYI 33.34 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD E, RT, 271.91 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD W ZEBUL INT/TYI 33.34 DME, RT, 088.55 INBOUND. CHART FAS OBST: 439 TREE 360027N/0782041W. CHART VDP AT 2.05 DME* DISTANCE VDP TO THLD 0.97 NM. *LOC ONLY. CHART RDU VORTAC 13.20 DME AT EKLAW.							
RDU VORTAC (IAF)		EKLAW INT/I-LHZ 15.84 DME/RADAR (NOPT)		112.25 / 13.20		3400									
EKLAW INT/I-LHZ 15.84 DME/RADAR (IF/IAF)		TANTE INT/I-LHZ 7.34 DME/RADAR		046.48 / 8.50 (I-LHZ)		2400									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SW EKLAW, RT, 046.48 INBOUND, 3400 FT. IN LIEU OF PT (IAF) 3. FAC: 046.48 FAF: TANTE INT/I-LHZ 7.34 DME/RADAR DIST FAF TO MAP: 6.26 THLD: 6.26 4. MIN. ALT: EKLAW 3400, TANTE 2400, JEBIX/I-LHZ 3.08 DME/RADAR 960** 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: 849 6. MIN GS INCPT: 2400 GS ALT AT: TANTE 2400 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 39.4 8. MSA FROM: RDU VORTAC 3400										MAG VAR: 9W		EPOCH YEAR: 2010			
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 05	568	1/2	200	568	1/2	200	568	1/2	200	568	1/2	200			
S-LOC 05	960	1/2	592	960	1/2	592	960	1 1/4	592	960	1 1/4	592			
CIRCLING	960	1	592	960	1	592	960	1 3/4	592	960	2	592			
JEBIX FIX MINIMUMS															
S-LOC 05	700	1/2	332	700	1/2	332	700	3/4	332	700	3/4	332			
CIRCLING	800	1	432	820	1	452	820	1 1/2	452	920	2	552			
NOTES: CHART NOTE: VDP NA WHEN USING RALEIGH-DURHAM ALTIMETER SETTING. EQUIPMENT REQUIREMENTS NOTE: DME OR RADAR REQUIRED. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE RALEIGH-DURHAM ALTIMETER SETTING AND INCREASE ALL DA 65 FT AND ALL MDA 80 FT; INCREASE S-LOC AND CIRCLING CATS C/D VISIBILITIES 1/4 SM. (CONTINUED ON PAGE 2)															
CITY AND STATE LOUISBURG, NC		ELEVATION: 368 TDZE: 368 AIRPORT NAME: TRIANGLE NORTH EXECUTIVE		FACILITY IDENTIFIER: I-LHZ		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 5, AMDT 4B, 05/24/2018						SUP: AMDT: 4A DATED 07/24/2014			

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.

NOTES, (CONT.):
CHART NOTE: FOR INOPERATIVE ALS WHEN USING RALEIGH-DURHAM ALTIMETER SETTING, INCREASE S-ILS ALL CATS
VISIBILITY TO 7/8 SM, S-LOC CATS C/D VISIBILITY TO 1 7/8 SM AND JEBIX FIX MINIMUMS S-LOC CATS C/D
VISIBILITY TO 1 1/8 SM.
#1040 WHEN USING RALEIGH-DURHAM ALTIMETER SETTING.

CITY AND STATE LOUISBURG, NC	ELEVATION: 368	TDZE: 368	FACILITY IDENTIFIER: I-LHZ	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 5, AMDT 4B, 05/24/2018	SUP:
	AIRPORT NAME: TRIANGLE NORTH EXECUTIVE				AMDT: 4A
					DATED: 07/24/2014



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: GOYEC/RDU 23.46 DME									
RDU VORTAC (IAF)			MOBFO/RDU 12.50 DME			077.06 / 12.50			2600		CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 2600 ON HEADING 280 AND ON RDU VORTAC R-077 TO OGOSH/RDU 18.50 DME AND HOLD.									
MOBFO/RDU 12.50 DME (IF)			OGOSH/RDU 18.50 DME			077.06 / 6.00 (RDU R-077)			2100											
										ADDITIONAL FLIGHT DATA: HOLD W, RT, 077.06 INBOUND. CHART FAS OBST: 694 TOWER 355828N/0782235W. FAC CROSSES 496 FT NORTH OF RW05										
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 9W EPOCH YEAR: 2020										
2. PROFILE STARTS AT MOBFO/RDU 12.50 DME																				
3. FAC 077.06 FAF OGOSH/RDU 18.50 DME DIST FAF TO MAP _____ THLD _____																				
4. MIN. ALT MOBFO 2600, OGOSH 2100																				
8. MSA FROM: RDU VORTAC 3400																				
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		1060	1	692	1060	1 1/4	692	1060	2	692	1060	2 1/4	692							
NOTES:																				
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON RDU VORTAC AIRWAY RADIALS 025 CW 125.										@ CAT D 800-2 1/4										
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE RALEIGH-DURHAM ALTIMETER SETTING AND INCREASE ALL MDA 80 FT AND CATS C/D VISIBILITY 1/4 SM.										QUALITY 10 CHECKED										
EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED																				
CITY AND STATE LOUISBURG, NC		ELEVATION: 368 AIRPORT NAME: TRIANGLE NORTH EXECUTIVE			TDZE:		FACILITY IDENTIFIER: RDU		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR-A, AMDT 2C, 05/24/2018					SUP VOR/DME-A						
														AMDT 2B						
														DATE 10/20/2011						

**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
RALEIGH/DURHAM, NC	RALEIGH-DURHAM INTL	24 MAY 2018	6A

TAKEOFF MINIMUMS:

RWY 5L, 5R, 14, 23L, 23R: STANDARD
RWY 32: 300-1

TEXTUAL DEPARTURE PROCEDURES:

RWY 14: CLIMB HEADING 144.15 TO 1400 BEFORE TURNING RIGHT.
RWY 23L: CLIMB HEADING 234.15 TO 1900 BEFORE TURNING LEFT.
RWY 23R: CLIMB HEADING 234.16 TO 1800 BEFORE TURNING LEFT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 5L: TREES 3802 FT FROM DER, 1237 FT LEFT OF CENTERLINE, UP TO 77 FT AGL/506 FT MSL. TANK AND TREES BEGINNING 2011 FT FROM DER, 948 FT RIGHT OF CENTERLINE, UP TO 138 FT AGL/547 FT MSL.
NOTE: RWY 5R: TREES 1436 FT FROM DER, 803 FT RIGHT OF CENTERLINE, UP TO 80 FT AGL/469 FT MSL.
NOTE: RWY 14: TREES BEGINNING 2021 FT FROM DER, 510 FT LEFT OF CENTERLINE, UP TO 116 FT AGL/545 FT MSL. TREES BEGINNING 2467 FT FROM DER, 2 FT RIGHT OF CENTERLINE, UP TO 122 FT AGL/571 FT MSL.
NOTE: RWY 23L: TREES 1495 FT FROM DER, 797 FT LEFT OF CENTERLINE, UP TO 58 FT AGL/447 FT MSL. LIGHT POLE 1457 FT FROM DER, 878 FT RIGHT OF CENTERLINE, 93 FT AGL/452 FT MSL.
NOTE: RWY 32: LIGHT POLES BEGINNING 1170 FT FROM DER, 618 FT LEFT OF CENTERLINE, UP TO 55 FT AGL/486 FT MSL. HANGAR 1242 FT FROM DER, 753 FT RIGHT OF CENTERLINE, 34 FT AGL/473 FT MSL. CONTROL TOWER 2207 FT FROM DER, 910 FT RIGHT OF CENTERLINE, 231 FT AGL/660 FT MSL.

CONTROLLING OBSTACLES:

RWY 32: 660 FT MSL CONTROL TOWER 355251.94N/0784708.71W.

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT:

RWY 14, 23L, 23R: 2049 FT MSL TOWER 354251.00N/0784903.00W.

REMARKS:

APPROVAL LETTER ON FILE AUTHORIZING RWY 32 TAKEOFF MINIMUMS OF 300-1. THE 660 MSL CONTROL TOWER REQUIRES A CLIMB GRADIENT OF 813 FT PER NM WHICH WAS DISAPPROVED BY AFS.
ABBREVIATED AMENDMENT.

FLIGHT INSPECTED BY:

OFFICE SYMBOL:

DATE:
Digitally signed by

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW FLIGHT INSPECTION TEAM (AJW-333) MEMO, MAY 30, 2017. **ALLAN WILL**

Feb 02, 2018

DEVELOPED BY: *Digitally signed by*

OFFICE SYMBOL:
AJV-5412

DATE:
12/12/2017

MIKE MELSEN **MIKE MELSEN**
Dec 29, 2017

Digitally signed by

OFFICE SYMBOL:
AJV-5410

DATE:

APPROVED BY:

GEORGE DAVIS

ALLAN WILL

Feb 02, 2018

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

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

OTHER:

ZDC, RDU APP CON, RDU ATCT, AIRPORT MANAGER

CHANGES - REASONS:

1. ADDED 2 DEGREES TO ALL MAGNETIC HEADINGS - COMPUTED USING UPDATED KRDU REFERENCE MAG VAR.
2. AMENDED REFERENCE MAG VAR FROM KRDU 7W/1985 TO KRDU 9W/2020 - MATCH AIRNAV DATA FOR AIRPORT.
3. ADDED ABBREVIATED AMENDMENT UNDER REMARKS - IAW 8260.46F APPENDIX E DOCUMENTATION CRITERIA.
4. RWY 14, RWY 23L AND RWY 23R CONTROLLING OBSTACLES MOVED UNDER HEADING "OBSTACLES MANDATING ODP ROUTE DEVELOPMENT" (PREVIOUSLY LISTED AS CONTROLLING OBSTACLES) - OBSTACLES USED FOR THE TEXTUAL DP.
5. ADDED "APPROVAL LETTER ON FILE AUTHORIZING RWY 32 TAKEOFF MINIMUMS OF 300-1. THE 660 MSL CONTROL TOWER REQUIRES A CLIMB

QUALITY
3
CHECKED

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

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
RALEIGH/DURHAM, NC	RALEIGH-DURHAM INTL	24 MAY 2018	6A

GRADIENT OF 813 FT PER NM WHICH WAS DISAPPROVED BY AFS" - NOTE REQUIRED TO EXPLAIN APPROVAL OF 300-1 TAKEOFF MINIMUMS FOR RWY 32.



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: 5.80 NM AFTER JAMBE OM									
TYI VORTAC			BELGA			227.34 / 23.77			2700		CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 2100 DIRECT TYI VORTAC AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 2700 ON HEADING 230 AND ON ISO VORTAC R-314 TO BELGA AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NE, RT, 237.79 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SW BELGA, RT, 042.30 INBOUND. CHART FAS OBST: 272 TREE 354754N/0775636W. CHART CIRCLING ICON. CHART: WILSON INDUSTRIAL AIR CENTER.									
ISO VORTAC (IAF)			BELGA (NOPT)			314.04 / 29.77			2700											
RDU VORTAC (IAF)			BELGA (NOPT)			115.96 / 38.43			2700											
BELGA (IF/IAF)			JAMBE OM			042.30 / 6.01 (I-RWI)			2100											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 9W EPOCH YEAR: 2005										
2. HOLD SW BELGA, RT, 042.22 INBOUND, 2700 FT. IN LIEU OF PT (IAF)																				
3. FAC: 042.30 FAF: JAMBE OM DIST FAF TO MAP: 5.80 THLD: 5.80																				
4. MIN. ALT: BELGA 2700, JAMBE OM 2100																				
5. DIST TO THLD FROM OM: 5.80 MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 1148																				
6. MIN GS INCPT: 2100 GS ALT AT: JAMBE OM OM: 2093 MM: - IM: -																				
7. GS ANGLE: 3.00 TCH: 56.1																				
8. MSA FROM: TYI VORTAC 3300																				
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 04	408	1/2	250	408	1/2	250	408	1/2	250	408	1/2	250								
S-LOC 04	540	1/2	382	540	1/2	382	540	5/8	382	540	3/4	382								
CIRCLING	600	1	442	620	1	462	720	1 1/2	562	740	2	582								
NOTES: CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).																				
CITY AND STATE ROCKY MOUNT, NC			ELEVATION: 158 TDZE: 158 AIRPORT NAME: ROCKY MOUNT-WILSON RGNL				FACILITY IDENTIFIER: RWI		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 4, AMDT 16C, 05/25/2017				SUP: AMDT: 16B DATED 05/26/2016							



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: 5.68 NM AFTER HEDYY/I-TTA 6.91 DME/RADAR OR AT I-TTA 1.23 DME CLIMB TO 1300 THEN CLIMBING LEFT TURN DIRECT IKTOW AND HOLD. ADDITIONAL FLIGHT DATA: CHART FAS OBST: 358 TREE 353324N/0790632W. 650 AAO 352910N/0790931W. CHART VDP AT 2.26 DME* DISTANCE VDP TO THLD 1.03 NM. *LOC ONLY. CHART CIRCLING ICON.					
IKTOW INT/I-TTA 12.21 DME/RADAR (IF/IAF)			HEDYY/I-TTA 6.91 DME/RADAR			029.01 / 5.30			2100							
1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF) 2. HOLD SW IKTOW, RT, 029.01 INBOUND, 2100 FT. IN LIEU OF PT (IAF) 3. FAC: 029.01 FAF: HEDYY/I-TTA 6.91 DME/RADAR DIST FAF TO MAP: 5.68 THLD: 5.68 4. MIN. ALT: IKTOW 2100, HEDYY 2100, AMIRS/I-TTA 3.03 DME 940* 5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 910 6. MIN GS INCPT: 2100 GS ALT AT: HEDYY 2100 OM: - MM: - IM: - 7. GS ANGLE: 3.00 TCH: 45.0 8. MSA FROM:										MAG VAR: 8W 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 03	446	1/2	200	446	1/2	200	446	1/2	200	446	1/2	200				
S-LOC 03	620	1/2	374	620	1/2	374	620	5/8	374	620	5/8	374				
CIRCLING	760	1	514	820	1	574	840	1 1/2	594	960	2 1/4	714				
NOTES: EQUIPMENT REQUIREMENTS NOTE: RNAV 1-GPS OR RADAR REQUIRED FOR PROCEDURE ENTRY. @ CAT D 800-2 1/4 PBN REQUIREMENTS NOTE: RNAV 1-GPS REQUIRED. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE RALEIGH/DURHAM ALTIMETER SETTING: INCREASE DA TO 527 FT; INCREASE ALL MDAS 100 FT AND S-LOC 3 CATS C AND D VISIBILITY TO 1 SM AND CIRCLING CAT (CONTINUED ON PAGE 2)																
CITY AND STATE SANFORD, NC			ELEVATION: 246 TDZE: 246 AIRPORT NAME: RALEIGH EXEC JETPORT AT SANFORD-LEE COUNTY			FACILITY IDENTIFIER: I-TTA		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS Y OR LOC Y RWY 3, ORIG-A, 05/24/2018				SUP:				
												AMDT: ORIG				
												DATED 10/15/2015				



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.

NOTES, (CONT.):

C VISIBILITY TO 2 SM AND CAT D TO 2 3/4 SM.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 3 CATS C AND D VISIBILITY TO 1 SM.

CHART NOTE: FOR INOPERATIVE ALS WHEN USING RALEIGH/DURHAM ALTIMETER SETTING, INCREASE S-ILS 3 ALL

CATS VISIBILITY TO 7/8 SM AND INCREASE S-LOC 3 CATS C AND D VISIBILITY TO 1 3/8 SM.

CHART NOTE: VDP NA WHEN USING RALEIGH/DURHAM ALTIMETER SETTING.

TAA

	<u>FROM</u>	<u>TO</u>	<u>ALT</u>
1.	299/30 CW 119/30 (NOPT)	299/10 CW 119/10	2400
2.	299/10 CW 119/10	IKTOW INT/I-TTA 12.21 DME/RADAR	2100
3.	119/30 CW 299/30	119/10 CW 299/10	3200
4.	119/10 CW 299/10	IKTOW INT/I-TTA 12.21 DME/RADAR	2100

QUALITY
19
CHECKED

CITY AND STATE SANFORD, NC	ELEVATION: 246 AIRPORT NAME: RALEIGH EXEC JETPORT AT SANFORD-LEE COUNTY	TDZE: 246	FACILITY IDENTIFIER: I-TTA	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS Y OR LOC Y RWY 3, ORIG-A, 05/24/2018	SUP:
					AMDT: ORIG
					DATED: 10/15/2015

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.													
TERMINAL ROUTES										MISSED APPROACH							
FROM		TO		COURSE AND DISTANCE				ALTITUDE		ILS: DA LOC: 5.68 NM AFTER HEDYY/I-TTA 6.91 DME/RADAR OR AT I-TTA 1.23 DME CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 2100 ON HEADING 209.01 AND LIB VORTAC R-142.39 TO IKTOW INT/I-TTA 12.21 DME/RADAR AND HOLD. <u>ALTERNATE MA (DO NOT CHART):</u> CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 2300 ON HEADING 278 AND RDU VORTAC R-253 TO MERIL INT AND HOLD. ADDITIONAL FLIGHT DATA: CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD E MERIL INT, RT, 253.14 INBOUND. CHART FAS OBST: 358 TREE 353324N/0790632W. 650 AAO 352910N/0790931W. CHART VDP AT 2.26 DME* DISTANCE VDP TO THLD 1.03 NM. *LOC ONLY. CHART IN PLANVIEW: MERIL INT. CHART CIRCLING ICON. CHART LIB 32.19 DME AT IKTOW. CHART RDU 34.32 DME AT IKTOW.							
RDU VORTAC		IKTOW INT/I-TTA 12.21 DME/RADAR		224.08 / 34.32				2600									
LIB VORTAC		IKTOW INT/I-TTA 12.21 DME/RADAR		142.39 / 32.19				2300									
IKTOW INT/I-TTA 12.21 DME/RADAR (IF/IAF)		HEDYY/I-TTA 6.91 DME/RADAR		029.01 / 5.30 (I-TTA)				2100									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SW IKTOW, RT, 029.01 INBOUND, 2100 FT. IN LIEU OF PT (IAF) 3. FAC: 029.01 FAF: HEDYY/I-TTA 6.91 DME/RADAR DIST FAF TO MAP: 5.68 THLD: 5.68 4. MIN. ALT: IKTOW 2100, HEDYY 2100, AMIRS/I-TTA 3.03 DME 860*# 5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 910 6. MIN GS INCPT: 2100 GS ALT AT: HEDYY 2100 OM: - MM: - IM: - 7. GS ANGLE: 3.00 TCH: 45.0 8. MSA FROM: RDU VORTAC 3400										MAG VAR: 8W		EPOCH YEAR: 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 03	446	1/2	200	446	1/2	200	446	1/2	200	446	1/2	200					
S-LOC 03	860	1/2	614	860	1/2	614	860	1 3/8	614	860	1 3/8	614					
CIRCLING	860	1	614	860	1	614	860	1 3/4	614	960	2 1/4	714					
AMIRS FIX MINIMUMS																	
S-LOC 03	620	1/2	374	620	1/2	374	620	5/8	374	620	5/8	374					
CIRCLING	760	1	514	820	1	574	840	1 1/2	594	960	2 1/4	714					
NOTES: #960 WHEN USING RALEIGH/DURHAM ALTIMETER SETTING. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE RALEIGH/DURHAM ALTIMETER SETTING: INCREASE DA TO 527 FT; INCREASE ALL MDAS 100 FT AND S-LOC 3 CATS C AND D VISIBILITY TO 1 5/8 SM, INCREASE CIRCLING CAT C VISIBILITY TO 2 SM AND CAT D TO 2 3/4 SM; AMIRS FIX MINIMUMS: INCREASE S-LOC 3 CATS C (CONTINUED ON PAGE 2)																	
CITY AND STATE		ELEVATION: 246 TDZE: 246				FACILITY IDENTIFIER: I-TTA		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
SANFORD, NC		AIRPORT NAME:						ILS Z OR LOC Z RWY 3, AMDT 2A, 05/24/2018				AMDT: 2					
		RALEIGH EXEC JETPORT AT SANFORD-LEE COUNTY										DATED 10/15/2015					



**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.

NOTES, (CONT.):

AND D VISIBILITY TO 1 SM, AND CIRCLING CAT C VISIBILITY TO 2 SM AND CAT D VISIBILITY TO 2 3/4 SM.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 3 CATS C AND D VISIBILITY TO 1 3/4 SM. AMIRS FIX

MINIMUMS: INCREASE S-LOC 3 CATS C AND D VISIBILITY TO 1 SM.

CHART NOTE: FOR INOPERATIVE ALS WHEN USING RALEIGH/DURHAM ALTIMETER SETTING, INCREASE S-ILS 3 ALL

CATS VISIBILITY TO 7/8 SM AND S-LOC 3 CATS C AND D VISIBILITY TO 2 SM. AMIRS FIX MINIMUMS: INCREASE

S-LOC 3 CATS C AND D VISIBILITY TO 1 3/8 SM.

CHART NOTE: VDP NA WHEN USING RALEIGH/DURHAM ALTIMETER SETTING.

EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED FOR LOC ONLY.

QUALITY
19
CHECKED

CITY AND STATE

SANFORD, NC

ELEVATION: 246

TDZE: 246

AIRPORT NAME:

RALEIGH EXEC JETPORT AT SANFORD-LEE
COUNTYFACILITY
IDENTIFIER:
I-TTA

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS Z OR LOC Z RWY 3, AMDT 2A, 05/24/2018

SUP:

AMDT: 2

DATED: 10/15/2015

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: RW31 CLIMB TO 3200 DIRECT COVIL AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 135.03 INBOUND. CHART FAS OBST: 1649 TREE 423351N/0971307W. DISTANCE TO THLD FROM 307 HAT: 0.82 NM. WAAS CHANNEL # 86523 REFERENCE PATH ID: W31A CHART YANKTON AWOS-3 LTP HAE: 395.7 M							
HURLI		DUVAS (TF) (FB) (RNP 2.00)			234.49 / 9.77			3200									
MAGET		BAYNY (TF) (FB) (RNP 2.00)			050.30 / 12.34			3400									
BAYNY (IAF)		COTPO (NOPT) (TF) (FB) (RNP 1.00)			045.16 / 5.00			3200									
DUVAS (IAF)		COTPO (NOPT) (TF) (FB) (RNP 1.00)			225.29 / 6.00			3200									
ATLES (IAF)		COTPO (NOPT) (TF) (FB) (RNP 1.00)			291.81 / 10.83			3200									
(SEE FORM 8260-10)																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SE COTPO, RT, 315.22 INBOUND, 3200 FT. IN LIEU OF PT (IAF) 3. FAC: 315.17 FAF: ANLIE DIST FAF TO MAP: 5.57 THLD: 5.57 4. MIN. ALT: COTPO 3200, ANLIE 3200, WUNIT/2.50 NM TO RW31 2220* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 3200 GS ALT AT: ANLIE 3200 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 45.0 20:1 IS CLEAR 34:1 IS NOT CLEAR 8. MSA FROM: RW31 3800														MAG VAR: 6E		EPOCH YEAR: 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		
LPV DA	1690	1	307	1690	1	307		NA			NA						
LNAV/VNAV DA	1962	1 7/8	579	1962	1 7/8	579		NA			NA						
LNAV MDA	1980	1	597	1980	1	597											
CIRCLING	2020	1	632	2020	1	632		NA			NA						
NOTES: CHART NOTE: BARO-VNAV NA. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). *LNAV ONLY CHART NOTE: USE YANKTON ALTIMETER SETTING; WHEN NOT RECEIVED, USE WAYNE ALTIMETER SETTING AND (CONTINUED ON PAGE 2)																	
CITY AND STATE		ELEVATION: 1388 TDZE: 1383				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:						SUP:			
HARTINGTON, NE		AIRPORT NAME:						RNAV (GPS) RWY 31, ORIG-C						AMDT: ORIG-B			
		HARTINGTON MUNI/ BUD BECKER FLD						24 MAY 2018						DATED 07/21/2016			



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
COTPO (IF/IAF)	ANLIE (TF) (FB) (RNP 1.00)	315.22 / 5.00	3200
ANLIE (FAF)	WUNIT/2.50 NM TO RW31 (TF) (FB) (RNP 0.30)	315.17 / 3.07	
WUNIT/2.50 NM TO RW31	RW31 (MAP) (TF) (FO) (RNP 0.30)	315.17 / 2.50	
RW31 (MAP)	1690 MSL (CA)	315.17	
1690 MSL	COVIL (DF) (FO) (RNP 1.00)		3200

NOTES, (CONT.):

INCREASE LPV DA TO 1697, LNAV/VNAV DA TO 1969 FEET, AND ALL MDA 20 FEET.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MAGET ON V181 SOUTHBOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HURLI ON V159 SOUTHEAST BOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ATLES ON V100 EASTBOUND.

CHART NOTE: RWY 31 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED

CHART NOTE: CIRCLING NA TO RWYS 3 AND 21.

PBN REQUIREMENTS NOTE: RNP APCH.

QUALITY
16
CHECKED

CITY AND STATE

HARTINGTON, NE

ELEVATION: 1388

TDZE: 1383

AIRPORT NAME:

HARTINGTON MUNI/ BUD BECKER FLD

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 31, ORIG-C

24 MAY 2018

SUP:

AMDT: ORIG-B

DATED: 07/21/2016

**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	0B4
RUNWAY	RW31
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	423600.6950N
LTP/FTP LONGITUDE	0971456.2265W
LTP/FTP ELLIPSOIDAL HEIGHT	+03957
FPAP LATITUDE	423710.0800N
FPAP LONGITUDE	0971611.9800W
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	1672
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

301146F5

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04212
FPAP ORTHOMETRIC HEIGHT	+04212

QUALITY
16
CHECKED

CITY AND STATE

HARTINGTON, NE

ELEVATION: 1388

TDZE: 1383

AIRPORT NAME:

HARTINGTON MUNI/ BUD BECKER FLD

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 31, ORIG-C
24 MAY 2018

SUP:

AMDT: **ORIG-B**DATED: **07/21/2016**

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: RW05 CLIMB TO 3000 DIRECT TRAVA AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NE, RT, 235.07 INBOUND. CHART FAS OBST: 809 TOWER 425547N/0784521W. DISTANCE TO THLD FROM 200 HAT: 0.49 NM. CHART VDP AT 1.05 NM TO RW05* *LNAV ONLY. WAAS CHANNEL # 70311 REFERENCE PATH ID: W05A CHART CIRCLING ICON. LTP HAE: 172.4 M					
BUF VOR/DME		WABUS (TF) (FO) (RNP 2.00)		246.75 / 15.31				3000							
LANGS		RITEE (TF) (FB) (RNP 2.00)		036.38 / 6.40				3700							
VICCU (IAF)		WABUS (NOPT) (TF) (FB) (RNP 1.00)		139.72 / 7.89				3000							
RITEE (IAF)		WABUS (NOPT) (TF) (FB) (RNP 1.00)		329.89 / 8.40				3000							
WABUS (IF/IAF)		HIRIN (TF) (FB) (RNP 1.00)		054.81 / 7.00				2400							
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SW WABUS, RT, 054.81 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 054.88 FAF: HIRIN DIST FAF TO MAP: 5.26 THLD: 5.26 4. MIN. ALT: WABUS 3000, HIRIN 2400, LANEC/2.50 NM TO RW05 1520* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2400 GS ALT AT: HIRIN 2400 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 46.0 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW05 3900															
										MAG VAR: 11W			EPOCH YEAR: 2015		
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	908	1800	200	908	1800	200	908	1800	200	908	1800	200			
LNAV/VNAV DA	997	2400	289	997	2400	289	997	2400	289	997	2400	289			
LNAV MDA	1060	2400	352	1060	2400	352	1060	3500	352	1060	3500	352			
CIRCLING	1200	1	473	1200	1	473	1220	1 1/2	493	1340	2	613			
NOTES: 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 PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT LANGS ON V115 SOUTHWEST BOUND AND V464 WESTBOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON BUF VOR/DME AIRWAY RADIALS 158 CW 314. PBN REQUIREMENT NOTES: RNP APCH.															
CITY AND STATE		ELEVATION: 727 TDZE: 708		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
BUFFALO, NY		AIRPORT NAME:		BUFFALO NIAGARA INTL		RNAV (GPS) Y RWY 5, AMDT 2D				AMDT: 2C					
						24 MAY 2018				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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
HIRIN (FAF)	LANEC/2.50 NM TO RW05 (TF) (FB) (RNP 0.30)	054.88 / 2.76	
LANEC/2.50 NM TO RW05	RW05 (MAP) (TF) (FO) (RNP 0.30)	054.88 / 2.50	
RW05 (MAP)	908 MSL (CA)	054.88	
908 MSL	TRAVA (DF) (FO) (RNP 1.00)		3000

CITY AND STATE

BUFFALO, NY

ELEVATION: 727

TDZE: 708

AIRPORT NAME:

BUFFALO NIAGARA INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) Y RWY 5, AMDT 2D

24 MAY 2018

SUP:

AMDT:

DATED:

 QUALITY
10
CHECKED
2C**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	KBUF
RUNWAY	RW05
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W05A
LTP/FTP LATITUDE	425556.1235N
LTP/FTP LONGITUDE	0784425.0755W
LTP/FTP ELLIPSOIDAL HEIGHT	+01724
FPAP LATITUDE	425700.2895N
FPAP LONGITUDE	0784300.8900W
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	0224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

<u>CRC REMAINDER</u>	9DD8C092
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+02074
FPAP ORTHOMETRIC HEIGHT	+02074

CITY AND STATE

BUFFALO, NY

ELEVATION: 727

TDZE: 708

AIRPORT NAME:

BUFFALO NIAGARA INTL

 FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) Y RWY 5, AMDT 2D

24 MAY 2018

SUP:

AMDT:

DATED:

 QUALITY
10
CHECKED

2C

08/17/2017

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												
SUSKE (IAF)				BUFST (TF) (FB) (RNP 1.00)				063.15 / 6.65				5500		CLIMB TO 3000 ON THE RNAV MISSED APPROACH ROUTE TO WABUS AND HOLD.												
BUFST				FOTBL (TF) (FB) (RNP 1.00)				063.23 / 4.55				5000														
TRAVA (IAF)				BUULS (TF) (FB) (RNP 1.00)				235.07 / 5.57				2700														
FOTBL (IF)				ZADUM (TF) (FB) (RNP 1.00)				054.89 / 3.45				3900														
COZZS (IF)				EFFCT (TF) (FB) (RNP 1.00)				055.00 / 3.14				4000														
(SEE FORM 8260-10)														ADDITIONAL FLIGHT DATA: HOLD SW, RT, 054.81 INBOUND. DISTANCE TO THLD FROM 388 HAT: 1.06 NM #TCH 777.0 MSL (DO NOT CHART) ROUTE TYPE: A, H ROUTE TYPE QUALIFIER 1: F ROUTE TYPE QUALIFIER 2: S CHART MANDATORY 5000 AT FOTBL CHART MANDATORY 5000 AT COZZS CHART MANDATORY 4000 AT WNNGS CHART MANDATORY 2700 AT BUULS CHART MINIMUM 5500 AT SUSKE CHART MINIMUM 3500 AT TRAVA												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																										
2. PROFILE STARTS AT BIILS																										
3. FAC: 234.98 FAF: _____ DIST FAF TO MAP: _____ THLD: _____																										
4. MIN. ALT: BIILS 1800																										
5. DIST TO THLD FROM OM: 3.21 MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																										
6. MIN GS INCPT: 1800 GS ALT AT: BIILS 1800 OM: _____ MM: _____ IM: _____																										
7. GS ANGLE: 3.00 TCH: 51.1 # 20:1 IS CLEAR 34:1 IS CLEAR																										
8. MSA FROM: RW23 3900																										
MAG VAR: 11W EPOCH YEAR: 2015																										
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											
AUTHORIZATION REQUIRED																										
RNP 0.10 DA	1114	4500	388	1114	4500	388	1114	4500	388	1114	4500	388														
RNP 0.20 DA	1170	5500	444	1170	5500	444	1170	5500	444	1170	5500	444														
RNP 0.30 DA	1228	1 1/4	502	1228	1 1/4	502	1228	1 1/4	502	1228	1 1/4	502														
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -18C (0F) OR ABOVE 54C (130F). CHART PLANVIEW NOTE ADJACENT TO SUSKE IAF, WNNGS IF, COZZS IF: RF REQUIRED. CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS. CHART SPEED ICON IN PLANVIEW AT FOTBL, BUULS, WNNGS, COZZS: MAX 210 KIAS (CONTINUED ON PAGE 2)																										
CITY AND STATE BUFFALO, NY				ELEVATION: 727 TDZE: 726 AIRPORT NAME: BUFFALO NIAGARA INTL				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (RNP) Z RWY 23, ORIG-A 24 MAY 2018						SUP: AMDT: ORIG 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	
WNNGS (IF)	JEDAR (TF) (FB) (RNP 1.00)	351.85 / 3.00	3200		
ZADUM	JABET (RF) (FB) (RNP 1.00)	(2.49 NM RADIUS CW (CFQFT))/4.12	2700		
EFFCT	JEDAR (RF) (FB) (RNP 1.00)	(2.49 NM RADIUS CCW (CFNBR))/2.75	3200		
JEDAR	ZUDAT (RF) (FB) (RNP 1.00)	(2.62 NM RADIUS CCW (CFHSN))/2.00	2600		
JABET	BIILS (RF) (FB) (RNP 1.00)	(2.02 NM RADIUS CW (CFJJB))/3.00	1800		
BUULS (IF)	BIILS (TF) (FB) (RNP 1.00)	235.02 / 3.00	1800		
ZUDAT	BIILS (RF) (FB) (RNP 1.00)	(2.02 NM RADIUS CCW (CFJRZ))/2.57	1800		
BIILS (FAF)	RW23 (MAP) (TF) (FO) (RNP 0.30)	234.98 / 3.21			
RW23 (MAP)	WABUS (TF) (FO) (RNP 1.00)	234.95 / 13.50	3000		
NOTES, (CONT.): CHART NOTE: FOR INOPERATIVE ALSF, INCREASE RNP 0.10 ALL CATS VISIBILITY TO 1 1/4 CHART NOTE: FOR INOPERATIVE ALSF, INCREASE RNP 0.20 ALL CATS VISIBILITY TO 1 1/2 CHART NOTE: FOR INOPERATIVE ALSF, INCREASE RNP 0.30 ALL CATS VISIBILITY TO 1 3/4 EQUIPMENT REQUIREMENTS NOTE: RNP AR APCH.					
CITY AND STATE	ELEVATION: 727	TDZE: 726	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
BUFFALO, NY	AIRPORT NAME:		RNAV	RNAV (RNP) Z RWY 23, ORIG-A	AMDT: ORIG
	BUFFALO NIAGARA INTL			24 MAY 2018	DATED: 09/18/2014

QUALITY
10
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: 4.82 NM AFTER WALMA INT									
ROD VORTAC (IAF)			KIRON INT/ROD 10.00 DME			240.01 / 10.00			3000		CLIMB TO 3100 THEN RIGHT TURN DIRECT DQN VOR/DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 3100 LEFT TURN DIRECT SGH VOR/DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 084.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE SGH VOR/DME, RT, 297.12 INBOUND. CHART FAS OBST: 1122 TRMSN TWR 395633N/0841259W. CHART IN PLANVIEW: SGH VOR/DME. CHART CIRCLING ICON.									
KIRON INT/ROD 10.00 DME (IF)			GILPE INT			184.52 / 5.48 (I-DAY)			2600											
GILPE INT			WALMA INT			184.52 / 6.18 (I-DAY)			2600											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 6W EPOCH YEAR: 2020										
2. PROFILE STARTS AT KIRON INT/ROD 10.00 DME																				
3. FAC: 184.52 FAF: WALMA INT DIST FAF TO MAP: 4.82 THLD: 4.82																				
4. MIN. ALT: KIRON 3000, GILPE 2600, WALMA 2600																				
5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 974																				
6. MIN GS INCPT: 2600 GS ALT AT: WALMA 2600 OM: - MM: - IM: -																				
7. GS ANGLE: 3.00 TCH: 54.8																				
8. MSA FROM: DQN VOR/DME 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 18**	1196	2400	200	1196	2400	200	1196	2400	200	1196	2400	200								
S-LOC 18	1380	2400	384	1380	2400	384	1380	2400	384	1380	4000	384								
CIRCLING	1580	1	571	1580	1	571	1580	1 1/2	571	1640	2	631								
NOTES: CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT ROD VORTAC ON AIRWAY RADIALS 207 CW 273.																				
CITY AND STATE DAYTON, OH		ELEVATION: 1009 TDZE: 996 AIRPORT NAME: JAMES M COX DAYTON INTL			FACILITY IDENTIFIER: I-DAY		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 18, AMDT 10A 24 MAY 2018					SUP: AMDT: 10 DATED 08/27/2009								



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: 4.69 NM AFTER ZAMBO OM/INT									
DQN VOR/DME			ZAMBO OM/INT			109.09 / 13.54			2800			CLIMB TO 3000 ON HEADING 241 AND DQN R-180 TO MIMMS INT AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1500 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 045 AND ON ROD VORTAC R-195 TO ZAMBO OM/INT AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000. ADDITIONAL FLIGHT DATA: HOLD W, RT, 092.99 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NE ZAMBO OM/INT, RT, 241.36 INBOUND. FAS OBST: 1179 AAO 395554N/0840736W. CHART CIRCLING ICON. CHART IN PLANVIEW: ROD VORTAC R-195 AND DQN VOR/DME R-109 MAY BE USED TO LOCATE ZAMBO INTERSECTION.									
ROD VORTAC (IAF)			TARRY INT			162.01 / 15.20			2800												
TARRY INT (IF/IAF)			ZAMBO OM/INT (NOPT)			241.37 / 11.42 (I-EGK)			2600												
1. PT <u>L</u> SIDE OF COURSE <u>061.37</u> OUTBOUND <u>2800</u> FT WITHIN <u>10</u> MILES OF <u>ZAMBO OM/INT</u> (IAF)												MAG VAR: 6W EPOCH YEAR: 2020									
2. _____																					
3. FAC: <u>241.37</u> FAF: <u>ZAMBO OM/INT</u> DIST FAF TO MAP: <u>4.69</u> THLD: <u>4.69</u>																					
4. MIN. ALT: <u>ZAMBO OM/INT 2600</u>																					
5. DIST TO THLD FROM OM: <u>4.69</u> MM: <u>-</u> IM: <u>-</u> 150 HAT: <u>-</u> 100 HAT: <u>-</u> GS ANT: <u>900</u>																					
6. MIN GS INCPT: <u>2600</u> GS ALT AT: <u>-</u> OM: <u>2564</u> MM: <u>-</u> IM: <u>-</u>																					
7. GS ANGLE: <u>3.00</u> TCH: <u>50.0</u>																					
8. MSA FROM: <u>DQN VOR/DME 3100</u>																					
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 24L**	1207	2400	200	1207	2400	200	1207	2400	200	1207	2400	200									
S-LOC 24L	1500	2400	493	1500	2400	493	1500	5000	493	1500	5000	493									
CIRCLING	1580	1	571	1580	1	571	1580	1 1/2	571	1640	2	631									
NOTES: CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ROD VORTAC ON V47 NORTHEAST BOUND AND AT TARRY ON V12 EASTBOUND. (CONTINUED ON PAGE 2)																					
CITY AND STATE DAYTON, OH			ELEVATION: 1009 TDZE: 1007 AIRPORT NAME: JAMES M COX DAYTON INTL				FACILITY IDENTIFIER: I-EGK		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 24L, AMDT 10A 24 MAY 2018						SUP: AMDT: 10 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 MALSR, INCREASE S-LOC 24L CAT C/D VISIBILITY TO 1 3/8 MILE.

QUALITY
16
CHECKED

CITY AND STATE

DAYTON, OH

ELEVATION: 1009

TDZE: 1007

AIRPORT NAME:

JAMES M COX DAYTON INTL

FACILITY
IDENTIFIER:

I-EGK

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 24L, AMDT 10A

24 MAY 2018

SUP:

AMDT: 10

DATED: 05/26/2016

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.											
TERMINAL ROUTES										MISSED APPROACH					
FROM		TO		COURSE AND DISTANCE				ALTITUDE		ILS: DA LOC: 4.87 NM AFTER HABNU/I-VUQ 6.82 DME OR AT I-VUQ 1.95 DME CLIMB TO 3000 THEN RIGHT TURN DIRECT DQN VOR/DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 2700 DIRECT BRUNY LOM AND HOLD. (ADF REQUIRED). ADDITIONAL FLIGHT DATA: HOLD W, RT, 084.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SW BRUNY LOM, RT, 061.33 INBOUND. FAS OBST: 1149 AAO 395648N/0840739W. CHART 1261 ATCT 395400N/0841332W. CHART VDP AT 3.04 DME* DISTANCE VDP TO THLD 1.09 NM. *LOC ONLY. CHART IN PLANVIEW: BRUNY LOM. CHART CIRCLING ICON. CHART IN PLANVIEW: ROD VORTAC R-196 AND DQN VOR/DME R-107 MAY BE USED TO LOCATE HABNU INTERSECTION.					
DQN VOR/DME		HABNU INT/I-VUQ 6.82 DME		106.59 / 12.91				2800							
ROD VORTAC		BONEE INT/I-VUQ 16.79 DME		167.91 / 14.76				2800							
BONEE INT/I-VUQ 16.79 DME (IAF)		UYOGO INT/I-VUQ 12.83 DME (NOPT)		241.35 / 3.96 (I-VUQ)				2700							
UYOGO INT/I-VUQ 12.83 DME (IF)		HABNU INT/I-VUQ 6.82 DME		241.35 / 6.02 (I-VUQ)				2600							
1. PT <u>L</u> SIDE OF COURSE <u>061.35</u> OUTBOUND <u>2800</u> FT WITHIN <u>10</u> MILES OF <u>HABNU</u> (IAF)										MAG VAR: 6W EPOCH YEAR: 2020					
2.															
3. FAC: <u>241.35</u> FAF: <u>HABNU INT/I-VUQ 6.82 DME</u> DIST FAF TO MAP: <u>4.87</u> THLD: <u>4.87</u>															
4. MIN. ALT: <u>HABNU INT/I-VUQ 6.82 DME 2600</u>															
5. DIST TO THLD FROM OM: <u>-</u> MM: <u>-</u> IM: <u>-</u> 150 HAT: <u>-</u> 100 HAT: <u>-</u> GS ANT: <u>1050</u>															
6. MIN GS INCPT: <u>2600</u> GS ALT AT: <u>HABNU 2600</u> OM: <u>-</u> MM: <u>-</u> IM: <u>-</u>															
7. GS ANGLE: <u>3.00</u> TCH: <u>54.9</u>															
8. MSA FROM: <u>DQN VOR/DME 3100</u>															
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 24R	1203	2400	206	1203	2400	206	1203	2400	206	1203	2400	206			
S-LOC 24R	1400	2400	403	1400	2400	403	1400	4000	403	1400	4000	403			
CIRCLING	1580	1	571	1580	1	571	1580	1 1/2	571	1640	2	631			
NOTES: CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: FOR INOPERATIVE MALSR, INCREASE S-LOC 24R CAT C/D VISIBILITY TO RVR 6000.															
CITY AND STATE DAYTON, OH		ELEVATION: 1009 TDZE: 997 AIRPORT NAME: JAMES M COX DAYTON INTL				FACILITY IDENTIFIER: I-VUQ		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 24R, AMDT 10A 24 MAY 2018				SUP: AMDT: 10 DATED 05/26/2016			



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: RW06R						
CAMMS		ALIAS (TF) (FB) (RNP 2.00)		064.86 / 6.14			3000		CLIMB TO 3000 DIRECT TARRY AND HOLD.						
ALIAS (IAF)		MEKTE (TF) (FB) (RNP 1.00)		061.19 / 4.33			3000								
MEKTE (IF)		CIBLO (TF) (FB) (RNP 1.00)		061.23 / 6.04			2700								
CIBLO (FAF)		RW06R (MAP) (TF) (FO) (RNP 0.30)		061.30 / 5.09											
RW06R (MAP)		1259 MSL (CA)		061.30					ADDITIONAL FLIGHT DATA: HOLD NE, RT, 241.36 INBOUND. CHART FAS OBST: 1261 LIGHTG 395400N/0841332W. DISTANCE TO THLD FROM 250 HAT: 0.63 NM. CHART VDP AT 1.45 NM TO RW06R* *LNAV ONLY. WAAS CHANNEL # 90414 REFERENCE PATH ID: W06B CHART CIRCLING ICON. LTP HAE: 273.2 M						
1259 MSL		TARRY (DF) (FO) (RNP 1.00)					3000								
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 6W EPOCH YEAR: 2020					
2. PROFILE STARTS AT ALIAS															
3. FAC: 061.30 FAF: CIBLO DIST FAF TO MAP: 5.09 THLD: 5.09															
4. MIN. ALT: ALIAS 3000, MEKTE 3000, CIBLO 2700															
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____															
6. MIN GS INCPT: 2700 GS ALT AT: CIBLO 2700 OM: _____ MM: _____ IM: _____															
7. GS ANGLE: 3.00 TCH: 53.3 20:1 IS CLEAR 34:1 IS NOT CLEAR															
8. MSA FROM: RW06R 3100															
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	1259	3/4	250	1259	3/4	250	1259	3/4	250	1259	3/4	250			
LNAV/VNAV DA	1496	1 3/4	487	1496	1 3/4	487	1496	1 3/4	487	1496	1 3/4	487			
LNAV MDA	1520	1	511	1520	1	511	1520	1 1/2	511	1520	1 3/4	511			
CIRCLING															
	1580	1	571	1580	1	571	1580	1 1/2	571	1640	2	631			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -19C (-4F) OR ABOVE 54C (130F). CHART NOTE: RWY 6R HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)															
CITY AND STATE DAYTON, OH		ELEVATION: 1009 TDZE: 1009 AIRPORT NAME: JAMES M COX DAYTON INTL		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 6R, AMDT 1B 24 MAY 2018				SUP: AMDT: 1A DATED 04/05/2012					

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 - STANDARD					
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33					
NOTES, (CONT.): CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CAMMS ON V275 SOUTHWEST BOUND. CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS. CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.					
CITY AND STATE DAYTON, OH	ELEVATION: 1009 AIRPORT NAME: JAMES M COX DAYTON INTL	TDZE: 1009	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 6R, AMDT 1B 24 MAY 2018	SUP: QUALITY 10 CHECKED
					AMDT: 1A
					DATED: 04/05/2012

**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	KDAY
RUNWAY	RW06R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W06B
LTP/FTP LATITUDE	395325.9850N
LTP/FTP LONGITUDE	0841323.6480W
LTP/FTP ELLIPSOIDAL HEIGHT	+02732
FPAP LATITUDE	395416.6600N
FPAP LONGITUDE	0841148.3900W
THRESHOLD CROSSING HEIGHT (TCH)	00053.3
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0528
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 17BCB844

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+03063
FPAP ORTHOMETRIC HEIGHT	+03063

CITY AND STATE
DAYTON, OH

ELEVATION: 1009 TDZE: 1009
AIRPORT NAME:
JAMES M COX DAYTON INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 6R, AMDT 1B
24 MAY 2018

SUP: **QUALITY
10
CHECKED**
AMDT: 1A
DATED: 04/05/2012

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 GUPNE AND ON TRACK 255.22 TO CAMMS AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SW, RT, 029.00 INBOUND. CHART FAS OBST: 1154 TOWER 395756N/0841148W. CHART 1164 TOWER 395923N/0841156W DISTANCE TO THLD FROM 200 HAT: 0.47 NM. CHART VDP AT 1.18 NM TO RW18* *LNAV ONLY. WAAS CHANNEL # 86914 REFERENCE PATH ID: W18A CHART CIRCLING ICON. LTP HAE: 268.8 M						
DQN VOR/DME	SEBRE (TF) (FB) (RNP 2.00)			039.27 / 5.89			3000								
ROD VORTAC	KIRON (TF) (FB) (RNP 2.00)			241.01 / 10.00			3000								
KIRON (IAF)	GILPE (TF) (FB) (RNP 1.00)			184.51 / 5.48			2600								
SEBRE (IAF)	GILPE (TF) (FB) (RNP 1.00)			094.44 / 5.00			2600								
GILPE (IF)	WALMA (TF) (FB) (RNP 1.00)			184.51 / 6.18			2600								
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT GILPE 3. FAC: <u>184.52</u> FAF: <u>WALMA</u> DIST FAF TO MAP: <u>4.82</u> THLD: <u>4.82</u> 4. MIN. ALT: <u>GILPE 2600, WALMA 2600</u> 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: <u>2600</u> GS ALT AT: <u>WALMA</u> OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>54.8</u> 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: <u>RW18 3100</u>															
										MAG VAR: 6W			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 **	1196	2400	200	1196	2400	200	1196	2400	200	1196	2400	200			
LNAV/VNAV DA	1406	5000	410	1406	5000	410	1406	5000	410	1406	5000	410			
LNAV MDA	1420	2400	424	1420	2400	424	1420	4000	424	1420	5000	424			
CIRCLING	1580	1	571	1580	1	571	1580	1 1/2	571	1640	2	631			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -19C (-2F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT ROD VORTAC ON AIRWAY RADIALS 207 CW 273. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT DQN VOR/DME ON AIRWAY RADIALS 359 CW 085. (CONTINUED ON PAGE 2)															
CITY AND STATE			ELEVATION: 1009 TDZE: 996			FACILITY IDENTIFIER:			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:		
DAYTON, OH			AIRPORT NAME:			RNAV			RNAV (GPS) RWY 18, AMDT 1B				AMDT: 1A		
			JAMES M COX DAYTON INTL						24 MAY 2018				DATED 08/17/2017		

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
WALMA (FAF)	RW18 (MAP) (TF) (FO) (RNP 0.30)	184.52 / 4.82	
RW18 (MAP)	1196 MSL (CA)	184.52	
1196 MSL	GUPNE (DF) (FB) (RNP 1.00)		
GUPNE	CAMMS (TF) (FO) (RNP 1.00)	255.22 / 20.00	3000

NOTES, (CONT.):

CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 6000.

QUALITY
10
CHECKED

CITY AND STATE
DAYTON, OH

ELEVATION: 1009 TDZE: 996
AIRPORT NAME:
JAMES M COX DAYTON INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 18, AMDT 1B
24 MAY 2018

SUP:
AMDT: 1A
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	KDAY
RUNWAY	RW18
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W18A
LTP/FTP LATITUDE	395502.3575N
LTP/FTP LONGITUDE	0841243.3840W
LTP/FTP ELLIPSOIDAL HEIGHT	+02688
FPAP LATITUDE	395333.2200N
FPAP LONGITUDE	0841240.3900W
THRESHOLD CROSSING HEIGHT (TCH)	00054.8
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0160
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

<u>CRC REMAINDER</u>	D29CEDA4
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+03019
FPAP ORTHOMETRIC HEIGHT	+03019

CITY AND STATE
DAYTON, OH

ELEVATION: 1009 TDZE: 996
AIRPORT NAME:
JAMES M COX DAYTON INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 18, AMDT 1B
24 MAY 2018

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

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		LPV: DA LNAV/VNAV: DA LNAV: RW24L CLIMB TO 3000 DIRECT WANSU AND ON TRACK 227.06 TO MIMMS AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 096.00 INBOUND. CHART FAS OBST: 1151 ANT ON OL TANK 395350N/0841149W. DISTANCE TO THLD FROM 200 HAT: 0.49 NM. CHART VDP AT 1.15 NM TO RW24L* *LNAV ONLY. WAAS CHANNEL # 50414 REFERENCE PATH ID: W24A CHART CIRCLING ICON. LTP HAE: 272 M											
ROD VORTAC				TARRY (TF) (FB) (RNP 2.00)				163.00 / 15.20				3000													
TARRY (IAF)				JAVDO (TF) (FB) (RNP 1.00)				241.44 / 5.30				3000													
JAVDO (IF)				OKIDE (TF) (FB) (RNP 1.00)				241.50 / 6.01				2600													
OKIDE (FAF)				RW24L (MAP) (TF) (FO) (RNP 0.30)				241.44 / 4.80																	
RW24L (MAP)				1207 MSL (CA)				241.44																	
(SEE FORM 8260-10)																									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT TARRY 3. FAC: 241.44 FAF: OKIDE DIST FAF TO MAP: 4.80 THLD: 4.80 4. MIN. ALT: TARRY 3000, JAVDO 3000, OKIDE 2600 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2600 GS ALT AT: OKIDE 2600 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 51.1 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW24L 3100																MAG VAR: 6W 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 **	1207	2400	200	1207	2400	200	1207	2400	200	1207	2400	200													
LNAV/VNAV DA	1402	5000	395	1402	5000	395	1402	5000	395	1402	5000	395													
LNAV MDA	1420	2400	413	1420	2400	413	1420	4000	413	1420	5000	413													
CIRCLING	1580	1	571	1580	1	571	1580	1 1/2	571	1640	2	631													
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -19C (-2F) OR ABOVE 54C (130F). CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT TARRY ON V12 EASTBOUND, AND FOR ARRIVAL AT ROD (CONTINUED ON PAGE 2)																									
CITY AND STATE				ELEVATION: 1009 TDZE: 1007				FACILITY IDENTIFIER:				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
DAYTON, OH				AIRPORT NAME:				RNAV				RNAV (GPS) RWY 24L, AMDT 1D				AMDT: 1C									
				JAMES M COX DAYTON INTL								24 MAY 2018				DATED 08/17/2017									

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
1207 MSL	WANSU (DF) (FB) (RNP 1.00)		
WANSU	MIMMS (TF) (FO) (RNP 1.00)	227.06 / 9.36	3000

NOTES, (CONT.):

VORTAC VIA V47 NORTHEAST BOUND.

CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.

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

CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA

CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV CAT C/D VISIBILITY TO RVR 6000.

CITY AND STATE
DAYTON, OH

ELEVATION: 1009 TDZE: 1007
AIRPORT NAME:
JAMES M COX DAYTON INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 24L, AMDT 1D
24 MAY 2018

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

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	KDAY
RUNWAY	RW24L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W24A
LTP/FTP LATITUDE	395406.9100N
LTP/FTP LONGITUDE	0841206.7570W
LTP/FTP ELLIPSOIDAL HEIGHT	+02720
FPAP LATITUDE	395316.2200N
FPAP LONGITUDE	0841342.0000W
THRESHOLD CROSSING HEIGHT (TCH)	00051.1
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0528
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
 <u>CRC REMAINDER</u>	 4BB03E64

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+03051
FPAP ORTHOMETRIC HEIGHT	+03051

CITY AND STATE

DAYTON, OH

ELEVATION: 1009

TDZE: 1007

AIRPORT NAME:

JAMES M COX DAYTON INTL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 24L, AMDT 1D

24 MAY 2018

SUP:

AMDT:

DATED:

 QUALITY
10
CHECKED

1C

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			LNAV/VNAV: DA LNAV: RW36									
CINPA (IAF)			FOSDU (TF) (FB) (RNP 1.00)			067.95 / 9.43			3100			CLIMB TO 3000 DIRECT KIRON AND HOLD.									
FOSDU (IF)			GUPNE (TF) (FB) (RNP 1.00)			004.52 / 6.00			2700												
GUPNE (FAF)			RW36 (MAP) (TF) (FB) (RNP 0.30)			004.52 / 5.10						ADDITIONAL FLIGHT DATA: HOLD N, RT, 184.51 INBOUND. CHART FAS OBST: 1163 ANT ON OL TANK 395257N/0841220W. DISTANCE TO THLD FROM 441 HAT: 1.20 NM. CHART VDP AT 1.36 NM TO RW36* *LNAV ONLY. CHART CIRCLING ICON.									
RW36 (MAP)			1409 MSL (CA)			004.52															
1409 MSL			KIRON (DF) (FO) (RNP 1.00)						3000												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)												MAG VAR: 6W EPOCH YEAR: 2020									
2. PROFILE STARTS AT FOSDU																					
3. FAC: 004.52 FAF: GUPNE DIST FAF TO MAP: 5.06 THLD: 5.06																					
4. MIN. ALT: FOSDU 3100, GUPNE 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: 3.00 TCH: 59.9 20:1 IS CLEAR 34:1 IS NOT CLEAR																					
8. MSA FROM: RW36 3100																					
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/VNAV DA	1449	1 1/2	441	1449	1 1/2	441	1449	1 1/2	441	1449	1 1/2	441									
LNAV MDA	1500	1	492	1500	1	492	1500	1 1/4	492	1500	1 1/2	492									
CIRCLING	1580	1	571	1580	1	571	1580	1 1/2	571	1640	2	631									
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -19C (-2F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT CINPA ON V47 SOUTHWEST BOUND. CHART NOTE: RWY 36 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.																					
CITY AND STATE DAYTON, OH			ELEVATION: 1009 TDZE: 1008 AIRPORT NAME: JAMES M COX DAYTON INTL				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 36, AMDT 1A 24 MAY 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: RW06L CLIMB TO 3000 DIRECT HEGUK AND ON TRACK 331.34 TO ICASI AND ON TRACK 270.00 TO DQN VOR/DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 086.00 INBOUND. CHART FAS OBST: 1116 TOWER 395130N/0841712W. DISTANCE TO THLD FROM 200 HAT: 0.47 NM. CHART VDP AT 1.11 NM TO RW06L* *LNAV ONLY. WAAS CHANNEL # 42913 REFERENCE PATH ID: W06A CHART CIRCLING ICON. LTP HAE: 271 M						
DQN VOR/DME		DUGPE (TF) (FB) (RNP 2.00)		214.07 / 10.82			3000								
RID VORTAC (IAF)		EREME (TF) (FB) (RNP 1.00)		089.56 / 18.31			2700								
DUGPE (IAF)		EREME (TF) (FB) (RNP 1.00)		151.17 / 5.00			2700								
EREME (IF)		CIBIR (TF) (FB) (RNP 1.00)		061.21 / 6.10			2700								
CIBIR (FAF)		RW06L (MAP) (TF) (FO) (RNP 0.30)		061.28 / 5.11											
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT EREME 3. FAC: 061.28 FAF: CIBIR DIST FAF TO MAP: 5.11 THLD: 5.11 4. MIN. ALT: EREME 2700, CIBIR 2700 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2700 GS ALT AT: CIBIR 2700 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 50.7 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW06L 3100															
											MAG VAR: 6W 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	1198	1800	200	1198	1800	200	1198	1800	200	1198	1800	200			
LNAV/VNAV DA	1366	4000	368	1366	4000	368	1366	4000	368	1366	4000	368			
LNAV MDA	1420	2400	422	1420	2400	422	1420	4000	422	1420	5000	422			
CIRCLING	1580	1	571	1580	1	571	1580	1 1/2	571	1640	2	631			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -19C (-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}). CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. (CONTINUED ON PAGE 2)															
CITY AND STATE DAYTON, OH				ELEVATION: 1009 TDZE: 998 AIRPORT NAME: JAMES M COX DAYTON INTL				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Z RWY 6L, AMDT 1D 24 MAY 2018				SUP: AMDT: 1C 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 - STANDARD INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33					
TERMINAL ROUTES, (CONT.):					
FROM		TO	COURSE AND DISTANCE	ALTITUDE	
RW06L (MAP)		1198 MSL (CA)	061.28		
1198 MSL		HEGUK (DF) (FB) (RNP 1.00)			
HEGUK		ICASI (TF) (FB) (RNP 1.00)	331.34 / 6.08		
ICASI		DQN VOR/DME (TF) (FO)(RNP 1.00)	270.00 / 8.06	3000	
NOTES, (CONT.):					
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/VNAV ALL CATS VISIBILITY TO RVR 5000.					
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F).					
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON RID VORTAC AIRWAY RADIALS 031 CW 055.					
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON DQN VOR/DME AIRWAY RADIALS 208 CW 287.					
CITY AND STATE		ELEVATION: 1009	TDZE: 998	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
DAYTON, OH		AIRPORT NAME:		RNAV	RNAV (GPS) Z RWY 6L, AMDT 1D
		JAMES M COX DAYTON INTL			24 MAY 2018
					SUP: 10
					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	KDAY
RUNWAY	RW06L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Z
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W06A
LTP/FTP LATITUDE	395342.3885N
LTP/FTP LONGITUDE	0841445.6640W
LTP/FTP ELLIPSOIDAL HEIGHT	+02710
FPAP LATITUDE	395443.6500N
FPAP LONGITUDE	0841250.6200W
THRESHOLD CROSSING HEIGHT (TCH)	00050.7
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>	F7DB4AEB
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+03041
FPAP ORTHOMETRIC HEIGHT	+03041

CITY AND STATE
DAYTON, OH

ELEVATION: 1009 TDZE: 998
AIRPORT NAME:
JAMES M COX DAYTON INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) Z RWY 6L, AMDT 1D
24 MAY 2018

SUP: **QUALITY
10
CHECKED**
AMDT: 1C
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: RW24R CLIMB TO 3000 DIRECT ZUXOT AND ON TRACK 237.62 TO ALIAS AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SW, RT, 057.63 INBOUND. FAS OBST: 1149 AAO 395648N/0840739W. CHART CIRCLING ICON DISTANCE TO THLD FROM 206 HAT: 0.48 NM. CHART VDP AT 1.22 NM TO RW24R* *LNAV ONLY. WAAS CHANNEL # 66013 REFERENCE PATH ID: W24B LTP HAE: 270.3 M					
ROD VORTAC		BONEE (TF) (FB) (RNP 2.00)			168.91 / 14.76			3000							
BONEE (IAF)		DEDVE (TF) (FB) (RNP 1.00)			241.61 / 4.64			3000							
DEDVE (IF)		HABNU (TF) (FB) (RNP 1.00)			241.49 / 5.33			2600							
HABNU (FAF)		RW24R (MAP) (TF) (FO) (RNP 0.30)			241.41 / 4.87										
RW24R (MAP)		1203 MSL (CA)			241.41										
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT BONEE 3. FAC: 242.41 FAF: HABNU DIST FAF TO MAP: 4.87 THLD: 4.87 4. MIN. ALT: BONEE 3000, DEDVE 3000, HABNU 2600 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2600 GS ALT AT: HABNU 2600 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 54.9 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW24R 3100										MAG VAR: 6W 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	1203	2400	206	1203	2400	206	1203	2400	206	1203	2400	206			
LNAV/VNAV DA	1294	2400	297	1294	2400	297	1294	2400	297	1294	2400	297			
LNAV MDA	1440	2400	443	1440	2400	443	1440	4500	443	1440	4500	443			
CIRCLING	1580	1	571	1580	1	571	1580	1 1/2	571	1640	2	631			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -19C (-2F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS. (CONTINUED ON PAGE 2)															
CITY AND STATE DAYTON, OH		ELEVATION: 1009 TDZE: 997 AIRPORT NAME: JAMES M COX DAYTON INTL			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Z RWY 24R, AMDT 2A 24 MAY 2018					SUP: AMDT: 2 DATED 05/26/2016			

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 - STANDARD					
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33					
TERMINAL ROUTES, (CONT.):					
FROM		TO	COURSE AND DISTANCE	ALTITUDE	
1203 MSL		ZUXOT (DF) (FB) (RNP 1.00)			
ZUXOT		ALIAS (TF) (FO) (RNP 1.00)	237.62 / 12.77	3000	
NOTES, (CONT.):					
CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.					
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON ROD VORTAC AIRWAY RADIALS 088 CW 207 AND ARRIVALS AT BONEE ON V12 EASTBOUND.					
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 4500.					
CITY AND STATE		ELEVATION: 1009	TDZE: 997	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
DAYTON, OH		AIRPORT NAME:		RNAV	RNAV (GPS) Z RWY 24R, AMDT 2A
		JAMES M COX DAYTON INTL			24 MAY 2018
					SUP:
					AMDT: 2
					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**DATA FIELD****DATA**

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KDAY
RUNWAY	RW24R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Z
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W24B
LTP/FTP LATITUDE	395443.6505N
LTP/FTP LONGITUDE	0841250.6145W
LTP/FTP ELLIPSOIDAL HEIGHT	+02703
FPAP LATITUDE	395342.3885N
FPAP LONGITUDE	0841445.6640W
THRESHOLD CROSSING HEIGHT (TCH)	00054.9
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

DD81DBCC

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+03035
FPAP ORTHOMETRIC HEIGHT	+03035

QUALITY
10
CHECKED

CITY AND STATE

DAYTON, OH

ELEVATION: 1009

TDZE: 997

AIRPORT NAME:

JAMES M COX DAYTON INTL

 FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) Z RWY 24R, AMDT 2A

24 MAY 2018

SUP:

AMDT:

DATED:

2

05/26/2016

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												
FOVKU (IAF)				WETAR (TF) (FB) (RNP 1.00)				181.22 / 5.15				4400		CLIMB TO 3000 ON THE RNAV MISSED APPROACH ROUTE TO BONEE AND HOLD.												
COWED (IAF)				HUNTU (TF) (FB) (RNP 1.00)				061.21 / 4.37				2900														
SAWER (IAF)				RISHI (TF) (FB) (RNP 1.00)				001.17 / 3.00				3600														
TANSY (IF)				WODNO (TF) (FB) (RNP 1.00)				241.33 / 6.00				4300														
WETAR (IF)				SUPLE (TF) (FB) (RNP 1.00)				181.23 / 3.00				3500														
(SEE FORM 8260-10)														ADDITIONAL FLIGHT DATA: HOLD SW, RT, 061.57 INBOUND. DISTANCE TO THLD FROM 360 HATH: 0.97 NM #TCH 1048.3 MSL (DO NOT CHART) ROUTE TYPE: A, H ROUTE TYPE QUALIFIER 1: F ROUTE TYPE QUALIFIER 2: S CHART MANDATORY 6000 AT FOVKU CHART MANDATORY 2900 AT HUNTU CHART MANDATORY 4100 AT SAWER CHART MANDATORY 6000 AT TANSY CHART MINIMUM 4000 AT COWED												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																										
2. PROFILE STARTS AT DURNS																										
3. FAC: 061.30 FAF: DURNS DIST FAF TO MAP: _____ THLD: _____																										
4. MIN. ALT: DURNS 2000																										
5. DIST TO THLD FROM OM: 2.99 MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																										
6. MIN GS INCPT: 2000 GS ALT AT: _____ OM: _____ MM: _____ IM: _____																										
7. GS ANGLE: 3.00 TCH: 50.7 # 20:1 IS CLEAR 34:1 IS CLEAR																										
8. MSA FROM: RW06L 3100																										
MAG VAR: 6W 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											
AUTHORIZATION REQUIRED																										
RNP 0.10 DA	1358	4000	360	1358	4000	360	1358	4000	360	1358	4000	360														
RNP 0.30 DA	1464	6000	466	1464	6000	466	1464	6000	466	1464	6000	466														
NOTES: CHART NOTE: GPS REQUIRED. CHART PLANVIEW NOTE AT WETAR : MAX 210 KIAS UNTIL DURNS. CHART PLANVIEW NOTE AT RISHI : MAX 210 KIAS UNTIL DURNS. CHART PLANVIEW NOTE AT WODNO : MAX 210 KIAS UNTIL DURNS. (CONTINUED ON PAGE 2)																										
CITY AND STATE DAYTON, OH				ELEVATION: 1009 TDZE: 998 AIRPORT NAME: JAMES M COX DAYTON INTL				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (RNP) Y RWY 6L, ORIG-B 24 MAY 2018						SUP: AMDT: ORIG-A DATED 04/30/2015										

QUALITY
10
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	
HUNTU (IF)	DURNS (TF) (FB) (RNP 1.00)	061.26 / 3.00		2000	
RISHI (IF)	ROVGE (TF) (FB) (RNP 1.00)	001.17 / 3.00		2700	
WODNO	SUPLE (RF) (FB) (RNP 1.00)	(2.60 NM RADIUS CCW (CFKLB))/2.72		3500	
SUPLE	DURNS (RF) (FB) (RNP 1.00)	(2.50 NM RADIUS CCW (CFJBP))/5.24		2000	
ROVGE	DURNS (RF) (FB) (RNP 1.00)	(2.38 NM RADIUS CW (CFHZQ))/2.50		2000	
DURNS (FAF)	RW06L (MAP) (TF) (FO) (RNP 0.30)	061.30 / 2.99			
RW06L (MAP)	HOMIX (TF) (FB) (RNP 1.00)	061.33 / 11.85			
HOMIX	BONEE (TF) (FO) (RNP 1.00)	061.57 / 4.79		3000	
NOTES, (CONT.): CHART PLANVIEW NOTE ADJACENT TO FOVKU, SAWER IAF: RF REQUIRED. CHART PLANVIEW NOTE ADJACENT TO TANSY IF: 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 UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -19C (-2F) OR ABOVE 54C (130F). CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.10 ALL CATS VISIBILITY TO RVR 6000. CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.30 ALL CATS VISIBILITY TO 1 5/8.					
CITY AND STATE DAYTON, OH	ELEVATION: 1009 AIRPORT NAME: JAMES M COX DAYTON INTL	TDZE: 998	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (RNP) Y RWY 6L, ORIG-B 24 MAY 2018	SUP: QUALITY 10 CHECKED AMDT: ORIG-A DATED: 04/30/2015

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												
HOPRI (IAF)				JESTS (TF) (FB) (RNP 1.00)				198.98 / 3.00				3400		CLIMB TO 3000 ON THE RNAV MISSED APPROACH ROUTE TO COWED AND HOLD.												
HOXIM (IAF)				EARNs (TF) (FB) (RNP 1.00)				241.47 / 4.08				2900														
PIRNS (IAF)				OVEDE (TF) (FB) (RNP 1.00)				333.57 / 4.00				4100														
GNASH (IF)				FABKA (TF) (FB) (RNP 1.00)				061.27 / 6.00				4400														
JESTS (IF)				NEMIE (TF) (FB) (RNP 1.00)				198.97 / 3.00				2500		ADDITIONAL FLIGHT DATA: HOLD NE, RT, 241.35 INBOUND. HOLD NE, RT, 241.35 INBOUND CHART MANDATORY 4000 AT HOPRI. CHART AT OR ABOVE 4000 AT HOXIM. CHART MANDATORY 5000 AT PIRNS. CHART MANDATORY 6000 AT GNASH. CHART MANDATORY 6000 AT JATAD. CHART MANDATORY 2900 AT EARNs DISTANCE TO THLD FROM 337 HATH: 0.89 NM #TCH 1050.5 MSL (DO NOT CHART) ROUTE TYPE: A, H ROUTE TYPE QUALIFIER 1: F ROUTE TYPE QUALIFIER 2: S												
(SEE FORM 8260-10)																										
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																										
2. PROFILE STARTS AT WAPLI																										
3. FAC: 241.39 FAF: WAPLI DIST FAF TO MAP: _____ THLD: _____																										
4. MIN. ALT: HOPRI 4000, HOXIM 4000, PIRNS 5000, GNASH 6000, JATAD 6000																										
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																										
6. MIN GS INCPT: 2000 GS ALT AT: _____ OM: _____ MM: _____ IM: _____																										
7. GS ANGLE: 3.00 TCH: 54.9 # 20:1 IS CLEAR 34:1 IS CLEAR																										
8. MSA FROM: RW24R 3100																										
MAG VAR: 6W 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											
AUTHORIZATION REQUIRED																										
RNP 0.10 DA	1334	3500	337	1334	3500	337	1334	3500	337	1334	3500	337														
RNP 0.30 DA	1418	5000	421	1418	5000	421	1418	5000	421	1418	5000	421														
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -19C (-2F) OR ABOVE 54C (130F). CHART NOTE: GPS REQUIRED. CHART SPEED ICON IN PLANVIEW AT JESTS : MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT OVEDE : MAX 210 KIAS. (CONTINUED ON PAGE 2)																										
CITY AND STATE DAYTON, OH				ELEVATION: 1009 TDZE: 997 AIRPORT NAME: JAMES M COX DAYTON INTL				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (RNP) Y RWY 24R, ORIG-B 24 MAY 2018						SUP: AMDT: ORIG-A DATED 04/30/2015										

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		
EARNs (IF)		WAPLI (TF) (FB) (RNP 1.00)	241.42 / 3.00	2000		
OVEDE (IF)		ZABEP (TF) (FB) (RNP 1.00)	333.54 / 3.00	3200		
JATAD (IF)		OAVES (TF) (FB) (RNP 1.00)	061.36 / 6.00	4400		
FABKA		NEMIE (RF) (FB) (RNP 1.00)	(2.60 NM RADIUS CW (CFJLW))/6.24	2500		
NEMIE		WAPLI (RF) (FB) (RNP 1.00)	(2.30 NM RADIUS CW (CFJQG))/1.70	2000		
OAVES		ZABEP (RF) (FB) (RNP 1.00)	(2.59 NM RADIUS CCW (CFJSG))/3.97	3200		
ZABEP		WAPLI (RF) (FB) (RNP 1.00)	(2.47 NM RADIUS CCW (CFJVN))/3.97	2000		
WAPLI (FAF)		RW24R (MAP) (TF) (FO) (RNP 0.30)	241.39 / 2.98			
RW24R (MAP)		COWED (TF) (FO) (RNP 1.00)	241.35 / 12.16	3000		
NOTES, (CONT.): CHART PLANVIEW NOTE AT FABKA : MAX 210 KIAS UNTIL WAPLI. CHART PLANVIEW NOTE AT OAVES : MAX 210 KIAS UNTIL WAPLI. CHART PLANVIEW NOTE ADJACENT TO HOPRI IAF: RF REQUIRED. CHART PLANVIEW NOTE ADJACENT TO PIRNS IAF: RF REQUIRED. CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS. CHART PLANVIEW NOTE ADJACENT TO GNASH IF: RF REQUIRED. CHART PLANVIEW NOTE ADJACENT TO JATAD IF: RF REQUIRED. CHART PLANVIEW NOTE AT HOPRI IAF: RNP 0.50. CHART PLANVIEW NOTE AT GNASH IF : RNP 0.50. CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.10 ALL CATS VISIBILITY TO RVR 5500. CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.30 ALL CATS VISIBILITY TO 1 3/8.						
CITY AND STATE DAYTON, OH		ELEVATION: 1009 AIRPORT NAME: JAMES M COX DAYTON INTL	TDZE: 997	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (RNP) Y RWY 24R, ORIG-B 24 MAY 2018	SUP: AMDT: ORIG-A DATED: 04/30/2015



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: RW13								
JUVDU (IAF)			OTOGE (NOPT) (TF) (FB) (RNP 1.00)				206.01 / 5.75				2600		CLIMB TO 3000 DIRECT NACIS AND TRACK 045.42 TO LEBJE AND HOLD.								
ESSIE (IAF)			OTOGE (NOPT) (TF) (FB) (RNP 1.00)				034.73 / 11.12				2600										
OTOGE (IF/IAF)			SERIE (TF) (FB) (RNP 1.00)				124.81 / 6.31				2500										
SERIE (FAF)			UYELE/2.50 NM TO RW13 (TF) (FB) (RNP 0.30)				124.88 / 2.07														
UYELE			RW13 (MAP) (TF) (FO) (RNP 0.30)				124.88 / 2.50						ADDITIONAL FLIGHT DATA: HOLD NE, RT, 245.10 INBOUND. CHART FAS OBST: 1095 ELEVATOR 403737N/0830453W. CHART VDP AT 1.10 NM TO RW13. SERIE TO RW13: 3.04/40.								
(SEE FORM 8260-10)																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																					
2. HOLD NW OTOGE, RT, 124.81 INBOUND, 2600 FT. IN LIEU OF PT (IAF)																					
3. FAC: 124.88 FAF: SERIE DIST FAF TO MAP: 4.57 THLD: 4.57																					
4. MIN. ALT: OTOGE 2600, SERIE 2500, UYELE/2.50 NM TO RW13 1800																					
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 NOT CLEAR																					
8. MSA FROM: RW13 3100																					
MAG VAR: 5W 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						
LNAV MDA	1360	1	369	1360	1	369	1360	1	369	1360	1 1/4	369									
CIRCLING	1480	1	487	1500	1	507	1540	1 1/2	547	1560	2	567									
NOTES: CHART NOTE: RWY 13 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART NOTE: VDP NA WHEN USING OHIO STATE UNIVERSITY ALTIMETER SETTING. PBN REQUIREMENTS NOTE: RNP APCH. (CONTINUED ON PAGE 2)																					
CITY AND STATE MARION, OH				ELEVATION: 993 TDZE: 991 AIRPORT NAME: MARION MUNI				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 13, ORIG-A 24 MAY 2018						SUP: AMDT: ORIG DATED 04/10/2008					



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
RW13 (MAP)	1360 MSL (CA)	124.88	
1360 MSL	NACIS (DF) (FB) (RNP 1.00)		
NACIS	LEBJE (TF) (FO) (RNP 1.00)	045.42 / 10.18	3000

NOTES, (CONT.):

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OHIO STATE UNIVERSITY ALTIMETER SETTING:
INCREASE ALL MDAS 100 FEET; INCREASE LNAV CATS C/D AND CIRCLING CAT C VISIBILITY 3/8 SM.

QUALITY
6
CHECKED

CITY AND STATE
MARION, OH

ELEVATION: 993 TDZE: 991
AIRPORT NAME:
MARION MUNI

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 13, ORIG-A
24 MAY 2018

SUP:	
AMDT:	ORIG
DATED:	04/10/2008

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		LPV: DA LNAV/VNAV: DA LNAV: RW25 CLIMB TO 2600 DIRECT CABDA AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SW, RT, 064.81 INBOUND. FAS OBST: 1209 AAO 403930N/0825941W. DISTANCE TO THLD FROM 341 HAT: 0.94 NM. CHART VDP AT 1.36 NM TO RW25* *LNAV ONLY. WAAS CHANNEL # 62904 REFERENCE PATH ID: W25A LTP HAE: 268.4 M							
GIVES		CATES (TF) (FB) (RNP 2.00)			330.89 / 15.99			3000									
CATES (IAF)		LEBJE (NOPT) (TF) (FB) (RNP 1.00)			335.13 / 5.00			3000									
MFD VORTAC (IAF)		LEBJE (NOPT) (TF) (FB) (RNP 1.00)			235.67 / 14.70			3000									
LEBJE (IF/IAF)		EYEHE (TF) (FB) (RNP 1.00)			245.10 / 6.20			2700									
EYEHE (FAF)		RW25 (MAP) (TF) (FO) (RNP 0.30)			245.02 / 5.16												
(SEE FORM 8260-10)																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NE LEBJE, RT, 245.10 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 245.02 FAF: EYEHE DIST FAF TO MAP: 5.16 THLD: 5.16 4. MIN. ALT: LEBJE 3000, EYEHE 2700 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2700 GS ALT AT: EYEHE 2700 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 20:1 IS CLEAR 34:1 IS NOT CLEAR 8. MSA FROM: RW25 3100																	
										MAG VAR: 5W				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	1334	1 1/4	341	1334	1 1/4	341	1334	1 1/4	341	1334	1 1/4	341					
LNAV/VNAV DA	1443	1 1/2	450	1443	1 1/2	450	1443	1 1/2	450	1443	1 1/2	450					
LNAV MDA	1460	1	467	1460	1	467	1460	1 5/8	467	1460	1 5/8	467					
CIRCLING	1480	1	487	1500	1	507	1540	1 3/4	547	1560	2	567					
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). @ NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART NOTE: BARO-VNAV AND VDP NA WHEN USING OHIO STATE UNIVERSITY ALTIMETER SETTING. CHART NOTE: RWY 25 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). (CONTINUED ON PAGE 2)																	
CITY AND STATE MARION, OH				ELEVATION: 993 TDZE: 993 AIRPORT NAME: MARION MUNI				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 25, ORIG-A 24 MAY 2018				SUP: AMDT: ORIG DATED 08/30/2007			

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
RW25 (MAP)	1334 MSL (CA)	245.02	
1334 MSL	CABDA (DF) (FO) (RNP 1.00)		2600

NOTES, (CONT.):

PBN REQUIREMENTS NOTE: RNP APCH.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OHIO STATE UNIVERSITY ALTIMETER SETTING AND INCREASE ALL DAS 87 FEET AND ALL MDAS 100 FEET.

QUALITY
6
CHECKED

CITY AND STATE
MARION, OH

ELEVATION: 993 TDZE: 993
AIRPORT NAME:
MARION MUNI

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 25, ORIG-A
24 MAY 2018

SUP:
AMDT: ORIG
DATED: 08/30/2007

**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	KMNN
RUNWAY	RW25
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W25A
LTP/FTP LATITUDE	403705.8570N
LTP/FTP LONGITUDE	0830320.6805W
LTP/FTP ELLIPSOIDAL HEIGHT	+02684
FPAP LATITUDE	403621.2130N
FPAP LONGITUDE	0830501.9510W
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

311E3767

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+03028
FPAP ORTHOMETRIC HEIGHT	+03028

QUALITY
6
CHECKED

CITY AND STATE

MARION, OH

ELEVATION: 993

TDZE: 993

AIRPORT NAME:

MARION MUNI

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 25, ORIG-A

24 MAY 2018

SUP:

AMDT:

ORIG

DATED:

08/30/2007

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: BUD VOR							
												CLIMBING RIGHT TURN TO 2900 IN BUD VOR HOLDING PATTERN.							
												ADDITIONAL FLIGHT DATA: HOLD E, RT, 261.00 INBOUND. FAS OBST: 1339 AAO 403700N/0825021W.							
1. PT <u>L</u> SIDE OF COURSE <u>081.00</u> OUTBOUND <u>2900</u> FT WITHIN <u>10</u> MILES OF <u>BUD VOR</u> (IAF)																			
2.																			
3. FAC <u>261.00</u> FAF										DIST FAF TO MAP THLD									
4. MIN. ALT																			
8. MSA FROM: <u>BUD VOR 3100</u>										MAG VAR: <u>5W</u> EPOCH YEAR: <u>1985</u>									
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: <u>N A</u>		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		1640	1	647	1640	1	647	1640	1 3/4	647	1640	2	647						
NOTES:																			
EQUIPMENT REQUIREMENTS NOTE: RADAR REQUIRED FOR PROCEDURE ENTRY.										@ NA WHEN LOCAL WEATHER NOT AVAILABLE.									
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OHIO STATE UNIVERSITY ALTIMETER SETTING:																			
INCREASE ALL MDAS 100 FEET AND VISIBILITY CATS C AND D 1/2 SM.																			
CITY AND STATE MARION, OH		ELEVATION: 993 AIRPORT NAME: MARION MUNI			TDZE:			FACILITY IDENTIFIER: BUD			PROCEDURE NO./AMD'T NO./EFFECTIVE DATE: VOR-A, AMDT 1A 24 MAY 2018					SUP AMD'T 1 DATE 08/30/2007			



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: 7.75 NM AFTER ZENUD INT OR AT (CFRJM)									
BUD VOR			ZENUD INT			124.39 / 19.23			3000		CLIMBING LEFT TURN TO 3000 ON BUD VOR R-124 TO ZENUD INT AND HOLD.									
APE VORTAC			ZENUD INT			350.76 / 19.12			3000											
										ADDITIONAL FLIGHT DATA: HOLD SE, LT, 304.39 INBOUND. FAS OBST: 1500 AAO 402552N/0824215W. 1510 AAO 402521N/0824210W. FAC CROSSES MIDPOINT OF RWY 10/28. CHART CIRCLING ICON. CHART: MARION MUNI ASOS										
1. PT <u>R</u> SIDE OF COURSE <u>124.39</u> OUTBOUND <u>3000</u> FT WITHIN <u>10</u> MILES OF <u>ZENUD INT</u> (IAF)										MAG VAR: 5W EPOCH YEAR: 1985										
2.																				
3. FAC <u>304.39</u> FAF <u>ZENUD INT</u> DIST FAF TO MAP <u>7.75</u> THLD																				
4. MIN. ALT <u>ZENUD INT 3000</u>																				
8. MSA FROM: <u>BUD VOR 3100</u>																				
MINIMUMS																				
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A X										
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		1880	1	794	1880	1	794	1940	2 1/2	854		NA								
NOTES: CHART NOTE: CIRCLING RWY 28 NA AT NIGHT. CHART NOTE: RWY 28 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: USE MARION ALTIMETER SETTING, WHEN NOT RECEIVED USE MANSFIELD ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET AND ALL VISIBILITIES 1/4 SM.																				
CITY AND STATE MOUNT GILEAD, OH				ELEVATION: 1086 TDZE: AIRPORT NAME: MORROW COUNTY				FACILITY IDENTIFIER: BUD		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR-A, AMDT 5 24 MAY 2018						SUP AMDT 4 DATE 05/02/2013				



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: 4.99 NM AFTER AYUSU INT					
DACCA/RADAR (IF)		AYUSU INT		207.27 / 6.85 (I-FKL)				3200		CLIMB TO 2200 THEN CLIMBING RIGHT TURN TO 3400 DIRECT FKL VOR AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3400.					
										ADDITIONAL FLIGHT DATA: HOLD N, RT, 186.00 INBOUND. CHART FAS OBST: 1639 TREE 412651N/0794953W.					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)															
2. PROFILE STARTS AT DACCA															
3. FAC: 207.27 FAF: AYUSU INT DIST FAF TO MAP: 4.99 THLD: 4.99															
4. MIN. ALT: DACCA 3400, AYUSU 3200															
5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 976															
6. MIN GS INCPT: 3200 GS ALT AT: AYUSU 3200 OM: - MM: - IM: -															
7. GS ANGLE: 3.00 TCH: 55.0															
8. MSA FROM: FKL VOR 3300										MAG VAR: 10W EPOCH YEAR: 2005					
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 21	1740	1/2	200	1740	1/2	200	1740	1/2	200	1740	1/2	200			
S-LOC 21	1900	1/2	360	1900	1/2	360	1900	5/8	360	1900	5/8	360			
CIRCLING	1960	1	420	2000	1	460	2000	1 1/2	460	2100	2	560			
NOTES: EQUIPMENT REQUIREMENTS NOTE: RADAR REQUIRED TO DEFINE DACCA EQUIPMENT REQUIREMENTS NOTE: RADAR REQUIRED FOR PROCEDURE ENTRY. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 21 CAT C/D VISIBILITY TO 1 SM. CHART NOTE: CIRCLING RWY 12 NA AT NIGHT.															
CITY AND STATE FRANKLIN, PA		ELEVATION: 1540 TDZE: 1540 AIRPORT NAME: VENANGO RGNL		FACILITY IDENTIFIER: I-FKL		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 21, AMDT 6B 24 MAY 2018						SUP: AMDT: 6A 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		LNAV: RW03 CLIMBING LEFT TURN TO 3200 DIRECT BUVCA AND HOLD. ADDITIONAL FLIGHT DATA: CHART FAS OBST: 1719 TREE 411840N/0795412W. CHART VDP AT 1.28 NM TO RW03. AYIGE TO RW03: 3.05/45.									
PEREA (IAF)		BUVCA (NOPT) (TF) (FB) (RNP 1.00)			335.04 / 3.94			3200											
VOLAN (IAF)		BUVCA (NOPT) (TF) (FB) (RNP 1.00)			079.45 / 10.08			3200											
BUVCA (IF/IAF)		AYIGE (TF) (FB) (RNP 1.00)			027.22 / 6.02			3200											
AYIGE (FAF)		RW03 (MAP) (TF) (FO) (RNP 0.30)			027.25 / 5.04			3200											
RW03 (MAP)		1940 MSL (CA)			027.25														
1940 MSL		BUVCA (DF) (FO) (RNP 1.00)						3200											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SW BUVCA, RT, 027.22 INBOUND, 3200 FT. IN LIEU OF PT (IAF) 3. FAC: 027.25 FAF: AYIGE DIST FAF TO MAP: 5.04 THLD: 5.04 4. MIN. ALT: BUVCA 3200, AYIGE 3200 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 NOT CLEAR 8. MSA FROM: RW03 3200																MAG VAR: 10W		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				
LNAV MDA	1980	1	441	1980	1	441	1980	1	441	1980	1 1/4	441							
CIRCLING	1980	1	440	2000	1	460	2000	1 1/2	460	2100	2	560							
NOTES: CHART NOTE: RWY 3 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT VOLAN ON V-10 NORTHWEST BOUND. CHART NOTE: CIRCLING RWY 12 NA AT NIGHT. PBN REQUIREMENTS NOTE: RNP APCH.																			
CITY AND STATE FRANKLIN, PA		ELEVATION: 1540 TDZE: 1539 AIRPORT NAME: VENANGO RGNL			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 3, AMDT 1B 24 MAY 2018					SUP:							
												AMDT: 1A							
												DATED 04/02/2015							



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: RW21 CLIMB TO 3400 DIRECT BUVC A AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SW, RT, 027.22 INBOUND. CHART FAS OBST: 1612 TANK 412244N/0795058W. DISTANCE TO THLD FROM 263 HAT: 0.67 NM. CHART VDP AT 0.98 NM TO RW21* *LNAV ONLY. WAAS CHANNEL # 77501 REFERENCE PATH ID: W21A LTP HAE: 434.1 M							
FKL VOR		DACCA (TF) (FO) (RNP 2.00)			033.47 / 8.68			3400									
DACCA (IF/IAF)		AYUSU (TF) (FB) (RNP 1.00)			207.32 / 6.85			3200									
AYUSU (FAF)		RW21 (MAP) (TF) (FO) (RNP 0.30)			207.29 / 4.99												
RW21 (MAP)		1803 MSL (CA)			207.29			3400									
1803 MSL		BUVCA (DF) (FO) (RNP 1.00)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NE DACCA, RT, 207.32 INBOUND, 3400 FT. IN LIEU OF PT (IAF) 3. FAC: 207.29 FAF: AYUSU DIST FAF TO MAP: 4.99 THLD: 4.99 4. MIN. ALT: DACCA 3400, AYUSU 3200 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 3200 GS ALT AT: AYUSU 3200 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 55.0 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW21 3200											MAG VAR: 10W 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	1803	1/2	263	1803	1/2	263	1803	1/2	263	1803	1/2	263					
LNAV/VNAV DA	1901	3/4	361	1901	3/4	361	1901	3/4	361	1901	3/4	361					
LNAV MDA	1900	1/2	360	1900	1/2	360	1900	5/8	360	1900	5/8	360					
CIRCLING	1960	1 1/4	420	2000	1 1/4	460	2000	1 1/2	460	2100	2	560					
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C (0F) OR ABOVE 45C (114F). CHART NOTE: CIRCLING RWY 12 NA AT NIGHT. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON FKL VOR AIRWAY RADIAL 056. PBN REQUIREMENTS NOTE: RNP APCH. (CONTINUED ON PAGE 2)																	
CITY AND STATE FRANKLIN, PA				ELEVATION: 1540 TDZE: 1540 AIRPORT NAME: VENANGO RGNL				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 21, AMDT 1B 24 MAY 2018				SUP:	
																AMDT: 1A	
																DATED 04/02/2015	

QUALITY
 40
 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 NOTE: FOR INOPERATIVE ALS, INCREASE LPV ALL CATS VISIBILITY TO 7/8 SM AND LNAV CATS C/D VISIBILITY TO 1 SM.

QUALITY
40
CHECKED

CITY AND STATE

FRANKLIN, PA

ELEVATION: 1540

TDZE: 1540

AIRPORT NAME:

VENANGO RGNL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 21, AMDT 1B

24 MAY 2018

SUP:

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	KFKL
RUNWAY	RW21
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W21A
LTP/FTP LATITUDE	412258.4850N
LTP/FTP LONGITUDE	0795128.9050W
LTP/FTP ELLIPSOIDAL HEIGHT	+04341
FPAP LATITUDE	412133.3510N
FPAP LONGITUDE	0795204.0120W
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	1168
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

<u>CRC REMAINDER</u>	00FBFBD3
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+04675
FPAP ORTHOMETRIC HEIGHT	+04675

QUALITY
40
CHECKED

CITY AND STATE FRANKLIN, PA	ELEVATION: 1540 AIRPORT NAME: VENANGO RGNL	TDZE: 1540 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 21, AMDT 1B 24 MAY 2018	SUP:
				AMDT: 1A
				DATED: 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: 5.10 NM AFTER FARGE/RADAR					
EWC VOR/DME (IAF)		PEREA INT/EWC 23.95 DME			045.99 / 23.95			3600		CLIMB TO 3300 DIRECT FKL VOR AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3300.					
PEREA INT/EWC 23.95 DME (IF)		FARGE/RADAR			010.27 / 8.73 (FKL R-190)			3200							
										ADDITIONAL FLIGHT DATA: HOLD N, RT, 186.00 INBOUND. CHART FAS OBST: 1699 TREE 411751N/0795302W. FARGE TO RW03: 3.01/45.					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 6W EPOCH YEAR:1965					
2. PROFILE STARTS AT PEREA															
3. FAC 010.27 FAF FARGE/RADAR DIST FAF TO MAP 5.10 THLD 5.10															
4. MIN. ALT PEREA 3600, FARGE 3200															
8. MSA FROM: FKL VOR 3300															
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	1960	1	421	1960	1	421	1960	1 1/4	421	1960	1 1/4	421			
CIRCLING	1960	1	420	2000	1	460	2000	1 1/2	460	2100	2	560			
NOTES: CHART NOTE: RWY 3 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON EWC VORTAC RADIAL 006. CHART NOTE: CIRCLING RWY 12 NA AT NIGHT. EQUIPMENT REQUIREMENTS NOTE: RADAR REQUIRED.															
CITY AND STATE FRANKLIN, PA		ELEVATION: 1540 TDZE: 1539 AIRPORT NAME: VENANGO RGNL			FACILITY IDENTIFIER: FKL		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR RWY 3, AMDT 5B 24 MAY 2018					SUP AMDT 5A DATE 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: RW15						
MORNG (IF)		ARTSY (TF) (FB) (RNP 1.00)		149.41 / 6.50				2700		CLIMBING LEFT TURN TO 2900 DIRECT HAGAR AND HOLD.						
ARTSY (FAF)		RW15 (MAP) (TF) (FO) (RNP 0.30)		149.47 / 4.71												
RW15 (MAP)		1606 MSL (CA)		149.47												
1606 MSL		HAGAR (DF) (FO) (RNP 1.00)						2900		ADDITIONAL FLIGHT DATA: HOLD W, RT, 087.14 INBOUND. FAS OBST: 1449 AAO 412927N/0802521W. 1253 AAO 413045N/0802624W CHART YOUNGSTOWN/WARREN ASOS ARTSY TO RW15: 3.00/42.6. CHART CIRCLING ICON						
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																
2. PROFILE STARTS AT MORNG																
3. FAC: 149.47 FAF: ARTSY DIST FAF TO MAP: 4.71 THLD:																
4. MIN. ALT: MORNG 2700, ARTSY 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:																
8. MSA FROM: RW15 3600																
MAG VAR: 9W 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
CIRCLING		1740	1	534	1840	1	634		NA			NA				
NOTES: CHART NOTE: RWY 15 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: PROCEDURE NA AT NIGHT. CHART NOTE: USE YOUNGSTOWN ALTIMETER SETTING. PBN REQUIREMENTS NOTE: RNP APCH.																
CITY AND STATE GREENVILLE, PA		ELEVATION: 1206 TDZE: AIRPORT NAME: GREENVILLE MUNI		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS)-B, ORIG-A 24 MAY 2018						SUP: AMDT: ORIG DATED 11/12/2015				



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									
										ADDITIONAL FLIGHT DATA:									
1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)										MAG VAR: EPOCH YEAR:									
2. _____																			
3. FAC ____ FAF ____ DIST FAF TO MAP ____ THLD ____																			
4. MIN. ALT ____																			
8. MSA FROM: _____																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A									
CATEGORY =====>																			
		MDA	VIS			MDA	VIS			MDA	VIS			MDA	VIS				
NOTES:																			
PROCEDURE CANCELED EFFECTIVE 24 MAY 2018																			
CITY AND STATE GREENVILLE, PA			ELEVATION: 1206 TDZE: AIRPORT NAME: GREENVILLE MUNI			FACILITY IDENTIFIER: YNG			PROCEDURE NO./AMD'T NO./EFFECTIVE DATE: VOR-A, AMDT 2, 11/12/2015				SUP VOR OR GPS-A						
													AMD'T 1A						
													DATE 10/16/2014						

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: WEPIV/I-PUC 1.70 DME CLIMB TO 6300 THEN CLIMBING RIGHT TURN TO 10000 ON HEADING 200 AND ON PUC VOR/DME R-164 TO FOSOV/PUC 12.00 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 10000. **MISSED APPROACH REQUIRES MINIMUM CLIMB OF 339 FEET PER NM TO 7100. ADDITIONAL FLIGHT DATA: HOLD S, RT, 343.96 INBOUND. FAS OBST: 5979 AAO 393224N/1104742W. CHART VDP AT 2.73 DME* DISTANCE VDP TO THLD 1.18 NM. *LOC ONLY. CHART PUC R-095 AT COPUK. CHART PUC R-164 AT FOSOV. CHART CIRCLING ICON.									
PUC VOR/DME		SAROE/I-PUC 13.62 DME		184.86 / 12.00				8700											
COPUK/PUC 12.00 DME CW (IAF)		SAROE/I-PUC 13.62 DME (NOPT)		12.00 DME ARC				8700											
FOSOV/PUC 12.00 DME CW (IAF)		SAROE/I-PUC 13.62 DME (NOPT)		12.00 DME ARC (PUC LR-175)				8700											
SAROE/I-PUC 13.62 DME (IF/IAF)		JESKI/I-PUC 6.68 DME		007.35 / 6.94 (I-PUC)				7500											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S SAROE, RT, 007.35 INBOUND, 8700 FT. IN LIEU OF PT (IAF) 3. FAC: 007.35 FAF: JESKI/I-PUC 6.68 DME DIST FAF TO MAP: _____ THLD: 5.13 4. MIN. ALT: SAROE 8700, JESKI 7500 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: 786 6. MIN GS INCPT: 7500 GS ALT AT: JESKI 7500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 53.8 8. MSA FROM: PUC VOR/DME 113-203 10600, 203-293 12400, 293-113 11600																MAG VAR: 11E		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				
S-ILS 01**	6062	3/4	200	6062	3/4	200	6062	3/4	200	6062	3/4	200							
S-ILS 01	6127	3/4	265	6127	3/4	265	6127	3/4	265	6127	3/4	265							
S-LOC 01	6240	3/4	378	6240	3/4	378	6240	3/4	378	6240	3/4	378							
CIRCLING	6660	1	702	6860	1 1/4	902	7120	3	1162		NA								
NOTES: CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-ILS 1** ALL CATS. CHART NOTE: CIRCLING RWY 8, 19, 26, 33 NA AT NIGHT. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PUC VOR/DME ON T298 NORTHEAST BOUND. CHART PROFILE NOTE: USE I-PUC DME WHEN ON THE LOCALIZER COURSE. (CONTINUED ON PAGE 2)																			
CITY AND STATE		ELEVATION: 5958 TDZE: 5862				FACILITY IDENTIFIER: I-PUC		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP: ILS OR LOC/DME RWY 1							
PRICE, UT		AIRPORT NAME:						ILS OR LOC RWY 1, AMDT 1A				AMDT: 1							
		CARBON COUNTY RGNL/BUCK DAVIS FIELD						24 MAY 2018				DATED 03/05/2015							

QUALITY
18
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.

NOTES, (CONT.):

EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED FOR PROCEDURE ENTRY.

EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 1 ALL CATS VISIBILITY TO 7/8 SM.

QUALITY
18
CHECKED

CITY AND STATE PRICE, UT	ELEVATION: 5958 AIRPORT NAME: CARBON COUNTY RGNL/BUCK DAVIS FIELD	TDZE: 5862	FACILITY IDENTIFIER: I-PUC	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 1, AMDT 1A 24 MAY 2018	SUP: ILS OR LOC/DME RWY 1
					AMDT: 1
					DATED: 03/05/2015

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		LP: RW01 LNAV: RW01 CLIMB TO 6300 THEN CLIMBING RIGHT TURN TO 10000 DIRECT FOSOV AND HOLD, CONTINUE CLIMB-IN-HOLD TO 10000. **MISSED APPROACH REQUIRES MINIMUM CLIMB OF 296 FEET PER NM TO 7500. ADDITIONAL FLIGHT DATA: HOLD S, RT, 343.96 INBOUND. FAS OBST: 5999 AAO 393229N/1104746W. FAS OBST: 5979 AAO 393231N/1104737W. CHART VDP AT 1.18 NM TO RW01. WAAS CHANNEL # 78037 REFERENCE PATH ID: W01A CHART CIRCLING ICON. JESKI TO RW01: 3.00/53.80. LTP HAE: 1754.5 M									
PUC VOR/DME		SAROE (TF) (FO) (RNP 2.00)		187.86 / 12.00				8900											
COPUK		SAROE (TF) (FO) (RNP 2.00)		233.11 / 16.94				8900											
ADIBE (IAF)		SAROE (NOPT) (TF) (FB) (RNP 1.00)		334.14 / 19.27				8900											
SAROE (IF/IAF)		JESKI (TF) (FB) (RNP 1.00)		007.30 / 6.94				7500											
JESKI (FAF)		RW01 (MAP) (TF) (FO) (RNP 0.30)		007.33 / 5.13															
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S SAROE, RT, 007.30 INBOUND, 8900 FT. IN LIEU OF PT (IAF) 3. FAC: 007.33 FAF: JESKI DIST FAF TO MAP: 5.13 THLD: 5.13 4. MIN. ALT: SAROE 8900, JESKI 7500 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: RW01 12400																MAG VAR: 11E		EPOCH YEAR: 2015	
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**	6240	3/4	378	6240	3/4	378	6240	3/4	378	6240	3/4	378							
LNAV MDA**	6260	3/4	398	6260	3/4	398	6260	7/8	398	6260	7/8	398							
LP MDA	6320	3/4	458	6320	3/4	458	6320	1	458	6320	1	458							
LNAV MDA	6500	3/4	638	6500	3/4	638	6500	1 1/2	638	6500	1 1/2	638							
CIRCLING	6660	1	702	6860	1 1/4	902	7120	3	1162		NA								
NOTES: CHART NOTE: CIRCLING RWY 8, 19, 26, 33 NA AT NIGHT. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PUC VOR/DME ON T298 NORTHEAST BOUND. PBN REQUIREMENTS NOTE: RNP APCH. CHART NOTE: FOR INOPERATIVE ALS, INCREASE LP CAT C/D VISIBILITY TO 1 3/8 SM.																			
CITY AND STATE		ELEVATION: 5958 TDZE: 5862				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:							
PRICE, UT		AIRPORT NAME:				RNAV		RNAV (GPS) RWY 1, AMDT 2A				AMDT: 2							
		CARBON COUNTY RGNL/BUCK DAVIS FIELD						24 MAY 2018				DATED 04/30/2015							



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
RW01 (MAP)	6300 MSL (CA)	007.33	6300
6300 MSL	FOSOV (DF) (FO) (RNP 1.00)		10000



CITY AND STATE
PRICE, UT

ELEVATION: 5958 TDZE: 5862
AIRPORT NAME:
CARBON COUNTY RGNL/BUCK DAVIS FIELD

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 1, AMDT 2A
24 MAY 2018

SUP:
AMDT: 2
DATED: 04/30/2015

**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	KPUC
RUNWAY	RW01
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W01A
LTP/FTP LATITUDE	393617.7155N
LTP/FTP LONGITUDE	1104518.7700W
LTP/FTP ELLIPSOIDAL HEIGHT	+17545
FPAP LATITUDE	393742.3540N
FPAP LONGITUDE	1104442.4660W
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	0216
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
 <u>CRC REMAINDER</u>	 89C041CA

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+17714
FPAP ORTHOMETRIC HEIGHT	+17714

QUALITY
18
CHECKED

CITY AND STATE PRICE, UT	ELEVATION: 5958 AIRPORT NAME: CARBON COUNTY RGNL/BUCK DAVIS FIELD	TDZE: 5862 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 1, AMDT 2A 24 MAY 2018	SUP:
				AMDT: 2
				DATED: 04/30/2015

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: PUC VOR/DME								
PUC VOR/DME			PUKNE/12.00 DME			189.00 / 12.00			8900		CLIMBING RIGHT TURN TO 10000 ON HEADING 200 AND ON PUC VOR/DME R-164 TO FOSOV/PUC 12.00 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 10000.								
COPUK/12.00 DME CW (IAF)			PUKNE/12.00 DME (NOPT)			12.00 DME ARC			8900										
FOSOV/12.00 DME CW (IAF)			PUKNE/12.00 DME (NOPT)			12.00 DME ARC			8900										
PUKNE/12.00 DME (IF/IAF)			HUNIK/8.25 DME			008.99 / 3.75 (PUC R-189)			8000										
HUNIK/8.25 DME			WELEN/5.11 DME			008.99 / 3.14 (PUC R-189)			7500										
										ADDITIONAL FLIGHT DATA: HOLD S, RT, 343.96 INBOUND. FAS OBST: 6039 AAO 393239N/1104842W. CHART VDP AT 1.29 DME DISTANCE VDP TO THLD 1.36 NM. CHART PUC R-095 AT COPUK. CHART PUC R-164 AT FOSOV. CHART CIRCLING ICON. WELEN TO RW01: 2.98/52. FAC 441 FT R OF RWY C/L EXTENDED 3000 FT FROM THLD.									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 14E EPOCH YEAR:1985									
2. HOLD S PUKNE, RT, 008.99 INBOUND, 8900 FT. IN LIEU OF PT (IAF)																			
3. FAC 008.99 FAF WELEN/5.11 DME _____ DIST FAF TO MAP _____ THLD 5.17																			
4. MIN. ALT PUKNE 8900, HUNIK 8000, WELEN 7500																			
8. MSA FROM: PUC VOR/DME 113-203 10600, 203-293 12400, 293-113 11600																			
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-01		6300	3/4	438	6300	3/4	438	6300	1	438	6300	1	438						
CIRCLING		6660	1	702	6860	1 1/4	902	7120	3	1162		NA							
NOTES:																			
CHART NOTE: CIRCLING RWY 8, 19, 26, 33 NA AT NIGHT.										@ CAT B 1000-2, CAT C 1200-3									
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PUC VOR/DME ON T298 NORTHEAST BOUND.																			
EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED FOR PROCEDURE ENTRY.																			
EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED.																			
CITY AND STATE PRICE, UT		ELEVATION: 5958 TDZE: 5862 AIRPORT NAME: CARBON COUNTY RGNL/BUCK DAVIS FIELD			FACILITY IDENTIFIER: PUC		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR RWY 1, AMDT 1A 24 MAY 2018					SUP VOR/DME RWY 1 AMDT 1 DATE 03/05/2015							



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: 4.48 NM AFTER FABIC OM									
DAN VOR				LANTA INT				202.89 / 12.07				3000		CLIMB TO 2300 THEN CLIMBING RIGHT TURN TO 3000 DIRECT DAN VOR AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 2000 THEN CLIMBING RIGHT TURN TO 3000 DIRECT SBV VORTAC AND HOLD W, RT, 080.55 INBOUND. ADDITIONAL FLIGHT DATA: HOLD SW, RT, 030.11 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD W SBV VORTAC, RT, 080.55 INBOUND. FAS OBST: 779 AAO 363038N/0792147W. 819 AAO 362814N/0792145W. CHART IN PLANVIEW: SBV VORTAC.									
GSO VORTAC (IAF)				LANTA INT (NOPT)				057.12 / 33.92				3000											
LANTA INT (IF/IAF)				FABIC OM				025.31 / 7.17				2100											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)														MAG VAR: 9W EPOCH YEAR: 2010									
2. HOLD SW LANTA, RT, 025.31 INBOUND, 3000 FT. IN LIEU OF PT (IAF)																							
3. FAC: 025.31 FAF: FABIC OM DIST FAF TO MAP: 4.48 THLD: 4.48																							
4. MIN. ALT: LANTA 3000																							
5. DIST TO THLD FROM OM: 4.48 MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 900																							
6. MIN GS INCPT: 2100 GS ALT AT: - OM: 2035 MM: - IM: -																							
7. GS ANGLE: 3.00 TCH: 54.4																							
8. MSA FROM: DAN VOR 270-360 3300, 360-270 2700																							
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 02	759	1/2	200	759	1/2	200	759	1/2	200	759	1/2	200											
S-LOC 02	1040	1/2	481	1040	1/2	481	1040	3/4	481	1040	1	481											
CIRCLING	1080	1	509	1080	1	509	1080	1 1/2	509	1140	2	569											
NOTES: CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON GSO VORTAC AIRWAY RADIALS 360 CW 108. # @ NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ROXBORO, NC ALTIMETER SETTING: INCREASE DA TO 821 FEET; INCREASE ALL MDA 80 FEET AND VISIBILITY S-LOC 2 CATS C AND D 1/4 SM. CHART NOTE: FOR INOPERATIVE ALS WHEN USING ROXBORO, NC ALTIMETER SETTING, INCREASE S-ILS 2 VISIBILITY ALL CATS TO 1.																							
CITY AND STATE DANVILLE, VA				ELEVATION: 571 TDZE: 559 AIRPORT NAME: DANVILLE RGNL				FACILITY IDENTIFIER: I-DAN		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 2, AMDT 4C, 05/24/2018					SUP: AMDT: 4B DATED 10/16/2014								



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: I-AVC 0.88 DME						
RDU VORTAC		WUKMU/I-AVC 11.82 DME (NOPT)			052.49 / 51.93			3000		CLIMB TO 900 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 310 AND SBV VORTAC R-086 TO HARVY INT/SBV 26.52 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1100 THEN CLIMBING RIGHT TURN TO 5000 ON HEADING 127 AND TYI VORTAC R-354 TO DUFFI/TYI VORTAC 22.73 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD E, LT, 265.59 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD S DUFFI/TYI VORTAC 22.73 DME, RT, 354.22 INBOUND. CHART FAS OBST: 491 TREE 364006N/0780301W. CHART VDP AT 1.95 DME DISTANCE VDP TO THLD 1.07 NM. CHART IN PLANVIEW: DUFFI/TYI VORTAC 22.73 DME. CHART CIRCLING ICON. BRERR TO RW01: 3.02/40. CHART ODALS RWY 1.						
TYI VORTAC		WUKMU/I-AVC 11.82 DME (NOPT)			337.24 / 35.40			3000								
WUKMU/I-AVC 11.82 DME (IF/IAF)		BRERR/I-AVC 5.82 DME			006.60 / 6.00 (I-AVC)			2000								
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 9W EPOCH YEAR: 2000						
2. HOLD S WUKMU, RT, 006.60 INBOUND, 3000 FT. IN LIEU OF PT (IAF)																
3. FAC 006.60 FAF BRERR/I-AVC 5.82 DME DIST FAF TO MAP _____ THLD 4.93																
4. MIN. ALT WUKMU 3000, BRERR 2000, MACBI/I-AVC 3.18 DME 1140																
8. MSA FROM: KAVC 2500																
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-01	760	1	343	760	1	343	760	1	343	760	1	343				
CIRCLING	860	1	419	900	1	459	1060	1 3/4	619	1060	2	619				
NOTES:																
CHART NOTE: RWY 1 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. @ NA WHEN AVC FBO CLOSED.																
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON RDU VORTAC AIRWAY RADIALS 356 CW 068.																
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON TYI VORTAC AIRWAY RADIALS 354 CW 024.																
EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED FOR PROCEDURE ENTRY.																
(CONTINUED ON PAGE 2)																
CITY AND STATE SOUTH HILL, VA		ELEVATION: 441 TDZE: 417 AIRPORT NAME: MECKLENBURG-BRUNSWICK RGNL		FACILITY IDENTIFIER: I-AVC		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: LOC RWY 1, AMDT 1A, 05/24/2018					SUP AMDT 1 DATE 04/27/2017					



**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.):**EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED.****CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY.**

QUALITY
18
CHECKED

CITY AND STATE

SOUTH HILL, VA

ELEVATION: 441**TDZE: 417**

AIRPORT NAME:

MECKLENBURG-BRUNSWICK RGNL

FACILITY
IDENTIFIER:

I-AVC

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

LOC RWY 1, AMDT 1A, 05/24/2018

SUP:

AMDT: 1

DATED: 04/27/2017

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: 6.75 NM AFTER OPOYU/OLM 7.03 DME/RADAR OR AT OLM 0.28 DME												
OLM VORTAC				OPOYU/OLM 7.03 DME/RADAR				351.67 / 7.03				3300		CLIMB TO 1400 THEN CLIMB TO 5500 ON OLM VORTAC R-176 TO CETRA INT/OLM 15.00 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 5500.												
HOOME INT (IAF)				YIYSU/OLM 13.12 DME/RADAR (NOPT)				176.31 / 7.44 (I-OLM)				2900														
YIYSU/OLM 13.12 DME/RADAR (IF)				OPOYU/OLM 7.03 DME/RADAR				176.31 / 6.10 (I-OLM)				2400														
1. PT <u>L</u> SIDE OF COURSE <u>356.31</u> OUTBOUND <u>2900</u> FT WITHIN <u>10</u> MILES OF <u>OPOYU</u> (IAF)																	ADDITIONAL FLIGHT DATA: HOLD S, RT, 356.00 INBOUND. CHART FAS OBST: 387 TANK 470236N/1225241W. CHART R-6703. CHART CIRCLING ICON. CHART SEA VORTAC R-230 AND 21.60 DME AT HOOME CHART 3300 PRIOR TO OPOYU IN PROFILE									
2. _____																										
3. FAC: <u>176.31</u> FAF: <u>OPOYU/OLM 7.03 DME/RADAR</u> DIST FAF TO MAP: <u>6.75</u> THLD: <u>6.75</u>																										
4. MIN. ALT: <u>OPOYU 2400</u>																										
5. DIST TO THLD FROM OM: <u>-</u> MM: <u>-</u> IM: <u>-</u> 150 HAT: <u>-</u> 100 HAT: <u>-</u> GS ANT: <u>1030</u>																										
6. MIN GS INCPT: <u>2400</u> GS ALT AT: <u>OPOYU 2400</u> OM: <u>-</u> MM: <u>-</u> IM: <u>-</u>																										
7. GS ANGLE: <u>3.00</u> TCH: <u>53.4</u>																										
8. MSA FROM: <u>OLM VORTAC 020-200 5400, 200-020 4500</u>																										
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 17	407	1/2	200	407	1/2	200	407	1/2	200	407	1/2	200														
S-LOC 17	680	1/2	473	680	1/2	473	680	1	473	680	1	473														
CIRCLING	720	1	512	860	1	652	1020	2 1/2	812	1020	2 3/4	812														
NOTES: CHART NOTE: DME OR RADAR REQUIRED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HOOME ON V27 NORTHEAST BOUND CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 17 CAT C/D VISIBILITY TO 1 3/8 SM																										
# @ NA WHEN TOWER CLOSED. # CAT B 700-2, CAT C 900-2 1/2, CAT D 900-2 3/4 @ CAT C 900-2 1/2, CAT D 900-2 3/4																										
CITY AND STATE OLYMPIA, WA				ELEVATION: 208 TDZE: 207 AIRPORT NAME: OLYMPIA RGNL				FACILITY IDENTIFIER: I-OLM		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 17, AMDT 12C 24 MAY 2018						SUP: AMDT: 12B DATED 03/31/2016										



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: RW17 CLIMB TO 4000 DIRECT CORER AND ON TRACK 181.44 TO CETRA AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000. ADDITIONAL FLIGHT DATA: HOLD S, RT, 001.39 INBOUND. CHART FAS OBST: 387 TANK 470236N/1225241W. DISTANCE TO THLD FROM 200 HAT: 0.49 NM. CHART VDP AT 1.34 NM TO RW17* *LNAV ONLY. WAAS CHANNEL # 45599 REFERENCE PATH ID: W17A CHART CIRCLING ICON. LTP HAE: 38.6 M						
SEA VORTAC		HOGVU (TF) (FB) (RNP 2.00)			206.85 / 22.21			6000								
OLM VORTAC		BOSTO (TF) (FO) (RNP 2.00)			355.96 / 12.90			3100								
WONKU (IAF)		BOSTO (NOPT) (TF) (FB) (RNP 1.00)			086.14 / 12.09			3000								
CARRO (IAF)		BOSTO (NOPT) (TF) (FB) (RNP 1.00)			159.44 / 6.71			3000								
HOGVU (IAF)		BOSTO (NOPT) (TF) (FB) (RNP 1.00)			266.47 / 7.12			3000								
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N BOSTO, RT, 176.35 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 176.33 FAF: OPOYU DIST FAF TO MAP: 6.75 THLD: 6.75 4. MIN. ALT: BOSTO 3000, OPOYU 2400 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2400 GS ALT AT: OPOYU 2400 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 53.4 34:1 IS CLEAR 8. MSA FROM: RW17 5400																
										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	407	1/2	200	407	1/2	200	407	1/2	200	407	1/2	200				
LNAV/VNAV DA	629	3/4	422	629	3/4	422	629	3/4	422	629	3/4	422				
LNAV MDA	680	1/2	473	680	1/2	473	680	1	473	680	1	473				
CIRCLING	720	1	512	860	1	652	1020	2 1/2	812	1020	2 3/4	812				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -9C (16F) OR ABOVE 54C (130F). @ CAT C 900-2 1/2, CAT D 900-2 3/4 CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: FOR INOPERATIVE ALS; INCREASE LNAV/VNAV VISIBILITY ALL CATS TO 1 1/8 SM. INCREASE LNAV CATS C/D TO 1 3/8 SM. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SEA VORTAC ON AIRWAY RADIALS 168 CW 178.																
CITY AND STATE		ELEVATION: 208 TDZE: 207			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:				
OLYMPIA, WA		AIRPORT NAME:			OLYMPIA RGNL		RNAV (GPS) RWY 17, AMDT 1					AMDT: ORIG-A				
							24 MAY 2018					DATED 05/07/2009				



**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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
BOSTO (IF/IAF)	OPOYU (TF) (FB) (RNP 1.00)	176.35 / 5.88	2400
OPOYU (FAF)	RW17 (MAP) (TF) (FO) (RNP 0.30)	176.33 / 6.75	
RW17 (MAP)	407 MSL (CA)	176.33	
407 MSL	CORER (DF) (FB) (RNP 1.00)		
CORER	CETRA (TF) (FO) (RNP 1.00)	181.44 / 9.89	4000

QUALITY
18
CHECKED

CITY AND STATE

OLYMPIA, WA

ELEVATION: 208

TDZE: 207

AIRPORT NAME:

OLYMPIA RGNL

 FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 17, AMDT 1

24 MAY 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	KOLM
RUNWAY	RW17
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W17A
LTP/FTP LATITUDE	465834.9200N
LTP/FTP LONGITUDE	1225408.6000W
LTP/FTP ELLIPSOIDAL HEIGHT	+00386
FPAP LATITUDE	465707.5895N
FPAP LONGITUDE	1225434.1080W
THRESHOLD CROSSING HEIGHT (TCH)	00053.4
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1072
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
 <u>CRC REMAINDER</u>	 69ED499A

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+00599
FPAP ORTHOMETRIC HEIGHT	+00599

QUALITY
18
CHECKED

CITY AND STATE OLYMPIA, WA	ELEVATION: 208 AIRPORT NAME: OLYMPIA RGNL	TDZE: 207 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 17, AMDT 1 24 MAY 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												MISSED APPROACH									
FROM			TO			COURSE AND DISTANCE			ALTITUDE			LNAV: RW35									
OLM VORTAC			CETRA (TF) (FO) (RNP 2.00)			180.00 / 15.00			4000			CLIMB TO 4000 DIRECT BOSTO AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000.									
RINDS (IAF)			CETRA (NOPT) (TF) (FB) (RNP 1.00)			090.05 / 7.03			4000												
TONNO (IAF)			CETRA (NOPT) (TF) (FB) (RNP 1.00)			271.66 / 7.11			4000												
CETRA (IF/IAF)			CORER (TF) (FB) (RNP 1.00)			001.39 / 9.89			1700												
CORER (FAF)			RW35 (MAP) (TF) (FO) (RNP 0.30)			356.28 / 4.48						ADDITIONAL FLIGHT DATA: HOLD N, RT, 176.35 INBOUND. CHART FAS OBST: 573 AAO 465417N/1225600W. CHART VDP AT 1.83 NM TO RW35. CHART CIRCLING ICON. CORER TO RW35: 3.04/50.									
(SEE FORM 8260-10)																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																					
2. HOLD S CETRA, RT, 001.39 INBOUND, 4000 FT. IN LIEU OF PT (IAF)																					
3. FAC: 356.28 FAF: CORER DIST FAF TO MAP: 4.48 THLD: 4.48																					
4. MIN. ALT: CETRA 4000, CORER 1700																					
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 5600																					
												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						
LNAV MDA	840	1	632	840	1	632	840	1 3/4	632	840	1 3/4	632									
CIRCLING	840	1	632	860	1	652	1020	2 1/2	812	1020	2 3/4	812									
NOTES: CHART NOTE: RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. @ CAT C 900-2 1/2, CAT D 900-2 3/4 CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON OLM VORTAC RADIALS 095 CW 250																					
CITY AND STATE OLYMPIA, WA			ELEVATION: 208 TDZE: 208 AIRPORT NAME: OLYMPIA RGNL			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 35, ORIG-B 24 MAY 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
RW35 (MAP)	608 MSL (CA)	356.28	
608 MSL	BOSTO (DF) (FO) (RNP 1.00)		4000

QUALITY
18
CHECKED

CITY AND STATE
OLYMPIA, WA

ELEVATION: 208 TDZE: 208
AIRPORT NAME:
OLYMPIA RGNL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 35, ORIG-B
24 MAY 2018

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

**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
OLYMPIA, WA	OLYMPIA RGNL	24 MAY 2018	6

TAKEOFF MINIMUMS:

RWY 8, 26, 35: STANDARD
RWY 17: 300-2 OR STANDARD WITH MINIMUM CLIMB OF 720 FEET PER NM TO 500.

TEXTUAL DEPARTURE PROCEDURES:

RWY 8: CLIMB HEADING 088.68 TO 1000, THEN CLIMBING LEFT TURN DIRECT OLM VORTAC, THENCE...
RWY 17: CLIMB HEADING 176.31 TO 1200, THEN CLIMBING RIGHT TURN DIRECT OLM VORTAC, THENCE...
RWY 26: CLIMBING LEFT TURN DIRECT OLM VORTAC, THENCE...
RWY 35: CLIMBING RIGHT TURN DIRECT OLM VORTAC, THENCE...

...CONTINUE CLIMB IN OLM VORTAC HOLDING PATTERN (S, RT, 356.00 INBOUND) TO CROSS OLM VORTAC AT OR ABOVE MEA/MCA FOR ROUTE OF FLIGHT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 08: POLE 879 FT FROM DER, 348 FT LEFT OF CENTERLINE, 31 FT AGL/236 FT MSL. TREES BEGINNING 970 FT FROM DER, 213 FT LEFT OF CENTERLINE, UP TO 267 FT MSL. TREE 1635 FT FROM DER, 434 FT RIGHT OF CENTERLINE, 267 FT MSL. TREE 1743 FT FROM DER, 539 FT RIGHT OF CENTERLINE, 291 FT MSL. TREE 2270 FT FROM DER, 341 FT LEFT OF CENTERLINE, 275 FT MSL. TREE, TOWER BEGINNING 2931 FT FROM DER, 130 FT RIGHT OF CENTERLINE, UP TO 320 FT MSL. TREES BEGINNING 3168 FT FROM DER, 569 FT LEFT OF CENTERLINE, UP TO 343 FT MSL.

NOTE: RWY 17: TREES BEGINNING 751 FT FROM DER, 658 FT RIGHT OF CENTERLINE, UP TO 281 FT MSL. TREES BEGINNING 1005 FT FROM DER, 634 FT LEFT OF CENTERLINE, UP TO 293 FT MSL. TREES BEGINNING 1160 FT FROM DER, 719 FT RIGHT OF CENTERLINE, UP TO 306 FT MSL. TREES BEGINNING 1203 FT FROM DER, 664 FT LEFT OF CENTERLINE, UP TO 298 FT MSL. TREES BEGINNING 1293 FT FROM DER, 681 FT RIGHT OF CENTERLINE, UP TO 331 FT MSL. TREES BEGINNING 1418 FT FROM DER, 70 FT RIGHT OF CENTERLINE, UP TO 340 FT MSL. TREES BEGINNING 1758 FT FROM DER, 221 FT LEFT OF CENTERLINE, UP TO 337 FT MSL. TREES BEGINNING 1820 FT FROM DER, 112 FT LEFT OF CENTERLINE, UP TO 366 FT MSL. TREES BEGINNING 3873 FT FROM DER, 437 FT LEFT OF CENTERLINE, UP TO 377 FT MSL. TREES BEGINNING 3953 FT FROM DER, 3 FT RIGHT OF CENTERLINE, UP TO 370 FT MSL. TREES BEGINNING 4000 FT FROM DER, 23 FT LEFT OF CENTERLINE, UP TO 388 FT MSL. TREE 1.5 NM FROM DER, 2745 FT LEFT OF CENTERLINE, 490 FT MSL.

NOTE: RWY 26: TREE 338 FT FROM DER, 339 FT RIGHT OF CENTERLINE, 220 FT MSL. BUILDING 475 FT FROM DER, 594 FT LEFT OF CENTERLINE, 28 FT AGL/224 FT MSL. TREE 496 FT FROM DER, 555 FT RIGHT OF CENTERLINE, 237 FT MSL. TREES BEGINNING 2171 FT FROM DER, 623 FT RIGHT OF CENTERLINE, UP TO 309 FT MSL. TREES BEGINNING 4173 FT FROM DER, 680 FT LEFT OF CENTERLINE, UP TO 330 FT MSL.

NOTE: RWY 35: BUILDING 692 FT FROM DER, 620 FT RIGHT OF CENTERLINE, 32 FT AGL/226 FT MSL. TREES BEGINNING 961 FT FROM DER, 652 FT RIGHT OF CENTERLINE, UP TO 266 FT MSL. TREE 1664 FT FROM DER, 912 FT RIGHT OF CENTERLINE, 267 FT MSL. TREES BEGINNING 1714 FT FROM DER, 634 FT RIGHT OF CENTERLINE, UP TO 283 FT MSL. TREES BEGINNING 1940 FT FROM DER, 895 FT RIGHT OF CENTERLINE, UP TO 287 FT MSL. TREES BEGINNING 2175 FT FROM DER, 859 FT LEFT OF CENTERLINE, UP TO 275 FT MSL. TREES BEGINNING 2358 FT FROM DER, 834 FT RIGHT OF CENTERLINE, UP TO 288 FT MSL. TREES BEGINNING 2851 FT FROM DER, 1033 FT RIGHT OF CENTERLINE, UP TO 299 FT MSL. TREES BEGINNING 3025 FT FROM DER, 1046 FT RIGHT OF CENTERLINE, UP TO 315 FT MSL. TREE 3878 FT FROM DER, 702 FT LEFT OF CENTERLINE, 298 FT MSL. TREES BEGINNING 4015 FT FROM DER, 198 FT LEFT OF CENTERLINE, UP TO 313 FT MSL.

CONTROLLING OBSTACLES:

RWY 17: 366 FT MSL TREE 465722.50N/1225417.86W (CLIMB GRADIENT/CLIMB-TO ALTITUDE), 490 FT MSL TREE 465603.97N/1225412.31W (CEILING/VISIBILITY).

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 8, 17, 26, 35: 2041 FT MSL AAO 470032.41N/1230305.13W.

REMARKS:

LETTER OF APPROVAL ON FILE FOR CLIMB GRADIENT EXCEEDING 500 FT PER NM WHEN DEPARTING RWY 17.
THE PROXIMITY OF THE DEPARTURE ROUTE TO R6703 HAS BEEN APPROVED BY ATC.



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

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Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
OLYMPIA, WA	OLYMPIA RGNL	24 MAY 2018	6

<u>FLIGHT INSPECTED BY:</u>	<i>Digitally signed by</i>	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
PAUL KOSCEKA	BEV L BORDY	FICO	12/1/17
	Mar 15, 2018		
<u>DEVELOPED BY:</u>	<i>Digitally signed by</i>	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
BEV BORDY (CHRISTINE BAYSE)	BEV L BORDY	AJV-5433	08/10/2017
	Mar 15, 2018		
<u>APPROVED BY:</u>	<i>Digitally signed by</i>	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
PATRICK MULQUEEN	BEV L BORDY	AJV-5430	
	Mar 15, 2018		

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:
SEA APP CON, OLM ATCT, ZSE, AIRPORT MANAGER, WESTERN FPT.

CHANGES - REASONS:

1. UPDATED RWY 17 TAKEOFF MINIMUMS FROM "300-2 OR STANDARD WITH MINIMUM CLIMB OF 706 FEET PER NM TO 600, OR 2200-3 FOR CLIMB IN VISUAL CONDITIONS" TO "300-2 OR STANDARD WITH MINIMUM CLIMB OF 720 FEET PER NM TO 500". - 8260.3 AND TARGETS CALCULATIONS.
2. UPDATED TEXTUAL DEPARTURE PROCEDURE RWY 8 FROM "CLIMB HEADING 084.68 TO 1000..." TO "CLIMB HEADING 088.68 TO 1000...". -MAG VAR UPDATED FROM 19E/1995 TO 15E/2020.
3. UPDATED TEXTUAL DEPARTURE PROCEDURE RWY 17 FROM "CLIMB HEADING 172.31 TO 1200..." TO "CLIMB HEADING 176.31 TO 1200..." AND REMOVED OR CLIMB IN VISUAL CONDITIONS TO CROSS OLM VORTAC AT OR ABOVE 2300".- 8260-3 AND MAG VAR UPDATED FROM 19E/1995 TO 15E/2020.
4. UPDATED TEXTUAL DEPARTURE PROCEDURE RWY 26 FROM "CLIMBING RIGHT TURN DIRECT OLM VORTAC, THENCE..." TO "CLIMBING LEFT TURN DIRECT OLM VORTAC, THENCE..." - TO AVOID OBSTACLES.
5. UPDATED TAKEOFF OBSTACLE NOTES.- NEW OBSTACLES.
6. ADDED REMARKS "LETTER OF APPROVAL ON FILE FOR CLIMB GRADIENT EXCEEDING 500 FT PER NM WHEN DEPARTING RWY 17" AND "THE PROXIMITY OF THE DEPARTURE ROUTE TO R6703 HAS BEEN APPROVED BY ATC"-FOR CLARIFICATION.

QUALITY
3
CHECKED

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: COYAS/OLM 0.64 DME																
MCKEN INT/OLM 15.28 DME CW (IAF)			JOGLU/OLM 15.28 DME			15.28 DME ARC			4200		CLIMB TO 4000 ON OLM VORTAC R-356 TO ZAVIT/8.20 DME THEN CLIMBING LEFT TURN DIRECT OLM VORTAC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, LT, 356.00 INBOUND. CHART FAS OBST: 573 AAO 465417N/1225600W. CHART VDP AT 2.47 DME DISTANCE VDP TO THLD 1.83 NM. CHART OLM R-095 AT MCKEN. CHART OLM R-201 AT OZEYO. CHART CIRCLING ICON. SCOOT TO RW35: 3.13/50. CHART R-6703 FAC CROSSES RWY C/L EXTENDED 3516 FT FROM THLD. CHART PLANVIEW NOTE: DME REQUIRED.																
OZEYO/15.28 DME CCW (IAF)			JOGLU/OLM 15.28 DME			15.28 DME ARC			4200																		
HOKBO/20.00 DME (IAF)			JOGLU/OLM 15.28 DME			356.00 / 4.72 (OLM R-176)			4200																		
JOGLU/OLM 15.28 DME (IF)			SCOOT/OLM 5.00 DME			356.00 / 10.28 (OLM R-176)			1700																		
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 19E		EPOCH YEAR:1995															
2. PROFILE STARTS AT JOGLU																											
3. FAC 356.00 FAF SCOOT/OLM 5.00 DME DIST FAF TO MAP _____ THLD 4.36																											
4. MIN. ALT JOGLU 4200, SCOOT 1700																											
8. MSA FROM: OLM VORTAC 020-200 5400, 200-020 4500																											
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-35		840	1	632	840	1	632	840	1 3/4	632	840	1 3/4	632														
CIRCLING		840	1	632	860	1	652	1020	2 1/2	812	1020	2 3/4	812														
NOTES:																											
CHART NOTE: RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. @ CAT C 900-2 1/2, CAT D 900-2 3/4																											
CHART NOTE: DME REQUIRED.																											
QUALITY 18 CHECKED																											
																CITY AND STATE OLYMPIA, WA		ELEVATION: 208 TDZE: 208 AIRPORT NAME: OLYMPIA RGNL		FACILITY IDENTIFIER: OLM		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR RWY 35, AMDT 13 24 MAY 2018				SUP VOR/DME RWY 35	
																										AMDT 12B	
DATE 09/18/2014																											

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: 4.80 NM AFTER HABOR/OLM 5.08 DME/RADAR							
OLM VORTAC			HABOR/OLM 5.08 DME/RADAR			351.43 / 5.08				3000		CLIMB TO 4200 ON OLM VORTAC R-171 TO ZIMBU/OLM 5.09 DME AND CLIMBING RIGHT TURN DIRECT OLM VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4200.							
										ADDITIONAL FLIGHT DATA: HOLD S, LT, 356.00 INBOUND. CHART FAS OBST: 612 TOWER 470056N/1225504W. CHART CIRCLING ICON. CHART: R-6703 CHART PLANVIEW NOTE: DME OR RADAR REQUIRED.									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																			
2. HOLD N HABOR, RT, 171.43 INBOUND, 4200 FT. IN LIEU OF PT (IAF) _____																			
3. FAC 171.43 FAF HABOR/OLM VORTAC 5.08 DME/RADAR _____ DIST FAF TO MAP 4.80 THLD _____																			
4. MIN. ALT HABOR/OLM VORTAC 5.08 DME/RADAR 2500 _____																			
8. MSA FROM: OLM VORTAC 020-200 5400, 200-020 4500										MAG VAR: 19E EPOCH YEAR:1995									
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		880	1	672	880	1	672	1020	2 1/2	812	1020	2 3/4	812						
NOTES:																			
CHART NOTE: DME REQUIRED.										@ CAT C 900-2 1/2, CAT D 900-2 3/4									
CITY AND STATE		ELEVATION: 208			TDZE:			FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP		QUALITY		
OLYMPIA, WA		AIRPORT NAME:			OLYMPIA RGNL			OLM		VOR-A, AMDT 2 24 MAY 2018					AMDT		27 CHECKED		
															DATE		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: 6.17 NM AFTER GAMIE INT/I-ATW 7.66 DME OR AT I-ATW 1.49 DME CLIMB TO 2000 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 310 AND OSH VORTAC R-355 TO BECKY INT/OSH VORTAC 33.81 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 2900 DIRECT GRB VORTAC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT, 355.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NW GRB VORTAC, LT, 145.00 INBOUND. FAS OBST: 1109 AAO 441143N/0883308W. CHART VDP AT 2.88 DME* DISTANCE VDP TO THLD 1.39 NM. *LOC ONLY. CHART IN PLANVIEW: GRB VORTAC. CHART CIRCLING ICON. CHART OSH 6.17 DME AT APIXE.									
GRB VORTAC		APIXE INT/I-ATW 13.56 DME		212.97 / 35.16		2900											
OSH VORTAC (IAF)		APIXE INT/I-ATW 13.56 DME (NOPT)		317.28 / 6.17		2900											
APIXE INT/I-ATW 13.56 DME (IF/IAF)		GAMIE INT/I-ATW 7.66 DME		028.11 / 5.89 (I-ATW)		2900											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SW APIXE, RT, 028.11 INBOUND, 2900 FT. IN LIEU OF PT (IAF) 3. FAC: 028.11 FAF: GAMIE INT/I-ATW 7.66 DME DIST FAF TO MAP: 6.17 THLD: 6.17 4. MIN. ALT: APIXE 2900, GAMIE 2900 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: 1001 6. MIN GS INCPT: 2900 GS ALT AT: GAMIE 2900 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 47.4 8. MSA FROM: OSH VORTAC 2700										MAG VAR: 2W		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 03		1088	2400	200	1088	2400	200	1088	2400	200	1088	2400	200				
S-LOC 03		1380	2400	492	1380	2400	492	1380	5000	492	1380	5000	492				
CIRCLING		1380	1	462	1380	1	462	1400	1 1/2	482	1480	2	562				
NOTES: CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT OSH VORTAC ON V191 SOUTHEAST BOUND. # @ NA WHEN CONTROL TOWER CLOSED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON GRB VORTAC AIRWAY RADIALS 161 CW 269. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 3 CATS C/D VISIBILITY TO 1 3/8 SM.																	
CITY AND STATE APPLETON, WI		ELEVATION: 918 TDZE: 888 AIRPORT NAME: APPLETON INTL		FACILITY IDENTIFIER: I-ATW		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 3, AMDT 18 24 MAY 2018						SUP: AMDT: 17C 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.

CITY AND STATE
APPLETON, WI

ELEVATION: 918 TDZE: 888
AIRPORT NAME:
APPLETON INTL

FACILITY
IDENTIFIER:
I-ATW

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
ILS OR LOC RWY 3, AMDT 18
24 MAY 2018

SUP:
AMDT: 17C
DATED: 10/15/2015

QUALITY
10
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.

CITY AND STATE
APPLETON, WI

ELEVATION: 918 TDZE: 888
AIRPORT NAME:
APPLETON INTL

FACILITY
IDENTIFIER:
I-ATW

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
ILS OR LOC RWY 3, AMDT 18
24 MAY 2018

SUP:
AMDT: 17C
DATED: 10/15/2015

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.														
TERMINAL ROUTES											MISSED APPROACH									
FROM	TO			COURSE AND DISTANCE			ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW30 CLIMB TO 2600 DIRECT ARALE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 117.96 INBOUND. CHART FAS OBST: 1010 TOWER 441442N/0883016W. CHART 1068 TOWER 441332N/0882245W. DISTANCE TO THLD FROM 200 HAT: 0.52 NM. CHART VDP AT 1.26 NM TO RW30* *LNAV ONLY. WAAS CHANNEL # 42517 REFERENCE PATH ID: W30A CHART CIRCLING ICON. LTP HAE: 225.3 M											
OSH VORTAC	TOMBE (TF) (FB) (RNP 2.00)			061.21 / 12.04			2700													
GRB VORTAC	SUDIE (TF) (FB) (RNP 2.00)			184.53 / 18.79			2700													
TOMBE (IAF)	APESE (NOPT) (TF) (FB) (RNP 1.00)			028.26 / 5.00			2700													
SUDIE (IAF)	APESE (NOPT) (TF) (FB) (RNP 1.00)			208.34 / 5.00			2700													
APESE (IF/IAF)	ZUMUG (TF) (FB) (RNP 1.00)			298.30 / 6.10			2700													
(SEE FORM 8260-10)																				
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SE APESE, RT, 298.30 INBOUND, 2700 FT. IN LIEU OF PT (IAF) 3. FAC: 298.21 FAF: ZUMUG DIST FAF TO MAP: 5.54 THLD: 5.54 4. MIN. ALT: APESE 2700, ZUMUG 2700 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2700 GS ALT AT: ZUMUG 2700 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 50.0 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW30 3100											MAG VAR: 2W					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	1075	1/2	200	1075	1/2	200	1075	1/2	200	1075	1/2	200								
LNAV/VNAV DA	1310	1	435	1310	1	435	1310	1	435	1310	1	435								
LNAV MDA	1320	1/2	445	1320	1/2	445	1320	7/8	445	1320	1	445								
CIRCLING	1340	1	422	1380	1	462	1400	1 1/2	482	1480	2	562								
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON OSH VORTAC AIRWAY RADIALS 337 CW 023. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON GRB VORTAC AIRWAY RADIALS 115 CW 269. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). PBN REQUIREMENTS NOTE: RNP APCH.																				
CITY AND STATE			ELEVATION: 918 TDZE: 875			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:							
APPLETON, WI			AIRPORT NAME:						RNAV (GPS) RWY 30, AMDT 1B				AMDT: 1A							
			APPLETON INTL						24 MAY 2018				DATED 10/15/2015							

QUALITY
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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
ZUMUG (FAF)	RW30 (MAP) (TF) (FO) (RNP 0.30)	298.21 / 5.54	
RW30 (MAP)	1075 MSL (CA)	298.21	
1075 MSL	ARALE (DF) (FO) (RNP 1.00)		2600

CITY AND STATE
APPLETON, WI

ELEVATION: 918 TDZE: 875
AIRPORT NAME:
APPLETON INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 30, AMDT 1B
24 MAY 2018

SUP:
AMDT: 1A
DATED: 10/15/2015

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**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	KATW
RUNWAY	RW30
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W30A
LTP/FTP LATITUDE	441511.9640N
LTP/FTP LONGITUDE	0883026.8345W
LTP/FTP ELLIPSOIDAL HEIGHT	+02253
FPAP LATITUDE	441551.1900N
FPAP LONGITUDE	0883218.1600W
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)	35.0
 <u>CRC REMAINDER</u>	 89BF45D6

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02616
FPAP ORTHOMETRIC HEIGHT	+02616

CITY AND STATE
APPLETON, WI

ELEVATION: 918 TDZE: 875
AIRPORT NAME:
APPLETON INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 30, AMDT 1B
24 MAY 2018

SUP:
AMDT: 1A
DATED: 10/15/2015

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[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. [31187](#); Amdt. No. [3794](#)

**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 [March 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
26-Apr-18	MN	Alexandria	Chandler Field	8/0189	3/1/18	This NOTAM, published in TL 18-09, is hereby rescinded in its entirety.
AIRAC DATE	STATE	CITY	AIRPORT	FDC NUMBER	FDC DATE	SUBJECT
26-Apr-18	CA	Fresno	Fresno Yosemite Intl	7/9103	3/8/18	LOC Y RWY 11L, Amdt 2C
26-Apr-18	AL	Courtland	Courtland	8/0390	3/16/18	Takeoff Minimums and (Obstacle) DP, Amdt 2
26-Apr-18	MN	Alexandria	Chandler Field	8/0431	3/14/18	RNAV (GPS) RWY 22, Orig
26-Apr-18	IN	Indianapolis	Indianapolis Rgnl	8/0900	3/16/18	VOR RWY 34, Amdt 2C
26-Apr-18	CO	Colorado Springs	City Of Colorado Springs Muni	8/1731	3/14/18	RNAV (GPS) Y RWY 35L, Amdt 1A
26-Apr-18	LA	Lafayette	Lafayette Rgnl/Paul Fournet Field	8/1749	3/16/18	ILS OR LOC RWY 4R, Amdt 2D
26-Apr-18	LA	Lafayette	Lafayette Rgnl/Paul Fournet Field	8/1750	3/16/18	RNAV (GPS) RWY 4R, Amdt 1C
26-Apr-18	LA	Lafayette	Lafayette Rgnl/Paul Fournet Field	8/1752	3/16/18	RNAV (GPS) RWY 22L, Amdt 1B
26-Apr-18	LA	Lafayette	Lafayette Rgnl/Paul Fournet Field	8/1753	3/16/18	ILS OR LOC RWY 22L, Amdt 5C
26-Apr-18	LA	Lake Charles	Lake Charles Rgnl	8/4569	3/13/18	RNAV (GPS) RWY 15, Amdt 1A
26-Apr-18	OK	Stillwater	Stillwater Rgnl	8/4810	3/15/18	RNAV (GPS) RWY 35, Amdt 1A
26-Apr-18	MS	Meridian	Key Field	8/6080	3/8/18	ILS OR LOC RWY 1, Amdt 26A
26-Apr-18	CA	Sacramento	Sacramento Intl	8/7363	3/13/18	ILS OR LOC RWY 34L, Amdt 7F
26-Apr-18	CA	Arcata/Eureka	California Redwood Coast-Humboldt County	8/7880	3/8/18	RNAV (GPS) RWY 32, Amdt 2
26-Apr-18	MI	Marlette	Marlette	8/8447	3/13/18	Takeoff Minimums and (Obstacle) DP, Orig
26-Apr-18	AZ	Casa Grande	Casa Grande Muni	8/9260	3/14/18	VOR RWY 5, Amdt 4D
26-Apr-18	AZ	Casa Grande	Casa Grande Muni	8/9263	3/14/18	ILS OR LOC/DME RWY 5, Amdt 6F

AIRAC Date: 26 APRIL 2018

FDC **7/9103** FAT IAP FRESNO YOSEMITE INTL, Fresno, CA. LOC Y RWY 11L, AMDT 2C... ALTERNATE MINIMUMS: STANDARD EXCEPT CAT E 900-2 3/4. THIS IS LOC Y RWY 11L, AMDT 2D. 1712291914-PERM

FDC **8/0390** 9A4 ODP COURTLAND, Courtland, AL. TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 2... CHANGE ALL REFERENCES FROM RWY 17/35 TO RWY 18/36. ALL OTHER DATA REMAINS AS PUBLISHED. THIS IS TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 2A. 1803121251-PERM

FDC **8/0431** AXN IAP CHANDLER FIELD, Alexandria, MN. RNAV (GPS) RWY 22, ORIG... CHART NOTE: RWY 22 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: DME/DME RNP-0.3 NA. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. THIS IS RNAV (GPS) RWY 22, ORIG-A. 1803121557-PERM

FDC **8/0900** MQJ IAP INDIANAPOLIS RGNL, Indianapolis, IN. VOR RWY 34, AMDT 2C... CHANGE BACKUP ALTIMETER NOTE TO READ: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE INDIANAPOLIS INTL ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET AND CIRCLING CAT D VISIBILITY 1/4 SM. THIS IS VOR RWY 34, AMDT 2D. 1803131153-PERM

FDC **8/1731** COS IAP CITY OF COLORADO SPRINGS MUNI, Colorado Springs, CO. RNAV (GPS) Y RWY 35L, AMDT 1A ... CHART NOTE: ASTERISK, ASTERISK RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHANGE LPV DA TO LPV DA ASTERISK, ASTERISK. THIS IS RNAV (GPS) Y RWY 35L, AMDT 1B. 1801052003-PERM

FDC **8/1749** LFT IAP LAFAYETTE RGNL/PAUL FOURNET FIELD, Lafayette, LA. ILS OR LOC RWY 4R, AMDT 2D... DELETE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE 3.00/TCH 53). DELETE NOTE: DME REQUIRED. DELETE PLANVIEW NOTE: DME REQUIRED. EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED FOR PROCEDURE ENTRY AND FOR LOC ONLY. CHART APT ELEV 42, DELETE APT ELEV 41. CHART TDZE 40, DELETE TDZE 39. S-ILS 4R HAT 276 ALL CATS; S-LOC 4R HAT 460 ALL CATS; CIRCLING HAA CAT A 498, CAT B/C 538, CAT D 618. THIS IS ILS OR LOC RWY 4R, AMDT 2E. 1803141418-PERM

FDC **8/1750** LFT IAP LAFAYETTE RGNL/PAUL FOURNET FIELD, Lafayette, LA. RNAV (GPS) RWY 4R, AMDT 1C... DELETE PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE 3.00/TCH 53). DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. CHART APT ELEV 42, DELETE APT ELEV 41. CHART TDZE 40, DELETE TDZE 39. LPV HAT 277 ALL CATS; LNAV/VNAV HAT 460 ALL CATS; LNAV HAT 460 ALL CATS; CIRCLING HAA CAT A 498, CAT B/C 538, CAT D 618. THIS IS RNAV (GPS) RWY 4R, AMDT 1D. 1803141418-PERM

FDC **8/1752** LFT IAP LAFAYETTE RGNL/PAUL FOURNET FIELD, Lafayette, LA. RNAV (GPS) RWY 22L, AMDT 1B... CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE 3.00/TCH 49.5). DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 22L, AMDT 1C. 1803141418-PERM

FDC **8/1753** LFT IAP LAFAYETTE RGNL/PAUL FOURNET FIELD, Lafayette, LA. ILS OR LOC RWY 22L, AMDT 5C... DELETE NOTE: **RVR 1800 AUTHORIZED WITH THE 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 ACADIANA RGNL ALTIMETER SETTING). CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE 3.00/TCH 49.5). THIS IS ILS OR LOC RWY 22L, AMDT 5D. 1803141422-PERM

FDC **8/4569** LCH IAP LAKE CHARLES RGNL, Lake Charles, LA. RNAV (GPS) RWY 15, AMDT 1A... CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. THIS IS RNAV (GPS) RWY 15, AMDT 1B. 1802271836-PERM

FDC **8/4810** SWO IAP STILLWATER RGNL, Stillwater, OK. RNAV (GPS) RWY 35, AMDT 1A... LNAV/VNAV DA 1256/HAT 290, VIS 1 ALL CATS. DELETE NOTE: DME/DME-RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH.. THIS IS RNAV (GPS) RWY 35, AMDT 1B. 1802280117-PERM

FDC **8/6080** MEI IAP KEY FIELD, Meridian, MS. ILS OR LOC RWY 1, AMDT 26A... 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 HATTIESBURG-LAUREL RGNL ALTIMETER SETTING). DELETE NOTE: NIGHT LANDING: RWY 22 NA. CHART NOTE: CIRCLING RWY 22 NA AT NIGHT. DELETE PLANVIEW NOTE: GPS OR DME REQUIRED. DELETE PLANVIEW NOTE: DME REQUIRED. EQUIPMENT REQUIREMENTS NOTE: RNAV 1-GPS OR DME REQUIRED FOR PROCEDURE ENTRY. THIS IS ILS OR LOC RWY 1, AMDT 26B. 1803011634-PERM

FDC **8/7363** SMF IAP SACRAMENTO INTL, Sacramento, CA. ILS OR LOC RWY 34L, AMDT 7F... DELETE NOTE: RADAR OR DME REQUIRED. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SACRAMENTO EXECUTIVE ALTIMETER SETTING: INCREASE DA TO 264 FEET; INCREASE ALL MDAS 40 FEET AND VISIBILITY CAT C AND D TO RVR 4000. EQUIPMENT REQUIREMENTS NOTE: RADAR OR DME REQUIRED FOR LOC ONLY. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 34L CATS C AND D VISIBILITY TO RVR 6000. THIS IS ILS OR LOC RWY 34L, AMDT 7G. 1803051513-PERM

FDC **8/7880** ACV IAP CALIFORNIA REDWOOD COAST-HUMBOLDT COUNTY, Arcata/Eureka, CA. RNAV (GPS) RWY 32, AMDT 2... DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 2C (29F) OR ABOVE 54C (130F). CHART NOTE: BARO-VNAV NA. LPV DA VISIBILITY RVR 1800 ALL CATS. THIS IS RNAV (GPS) RWY 32, AMDT 2A. 1803061224-PERM

FDC **8/8447** 77G ODP MARLETTE, Marlette, MI. TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES ORIG... TAKE-OFF MINIMUMS: RWY 09, 27 NA - ENVIRONMENTAL. DELETE TAKEOFF OBSTACLE NOTES RWY 9 AND 27. ALL OTHER DATA REMAINS AS PUBLISHED. THIS IS TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, ORIG-A. 1803071244-PERM

FDC **8/9260** CGZ IAP CASA GRANDE MUNI, Casa Grande, AZ. VOR RWY 5, AMDT 4D... CHART MSA FROM TFD VORTAC 25 NM 320-080 5200, 080-320 5800. CHART NOTE: RWY 5 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: CIRCLING RWY 23 NA AT NIGHT. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-5 CATS A/B VISIBILITY TO 1. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: CIRCLING TO RWY 23 NA AT NIGHT. DELETE NOTE: FOR INOPERATIVE MALSR, INCREASE S-5 VISIBILITY CATS A/B TO 1 MILE. THIS IS VOR RWY 5, AMDT 4E. 1802131344-PERM

FDC **8/9263** CGZ IAP CASA GRANDE MUNI, Casa Grande, AZ. ILS OR LOC/DME RWY 5, AMDT 6F ... CHART MSA FROM TFD VORTAC 25 NM 320-080 5200, 080-320 5800. CHART NOTE: RWY 5 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: CIRCLING RWY 23 NA AT NIGHT. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 5 CATS A/B VISIBILITY TO 1. EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED FOR LOC ONLY. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: CIRCLING TO RWY 23 NA AT NIGHT. DELETE NOTE: FOR INOPERATIVE MALSR, INCREASE S-LOC 5 CATS A/B VISIBILITY TO 1. THIS IS ILS OR LOC RWY 5, AMDT 6G. 1802131346-PERM