

U.S. Department
of Transportation

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

**Federal Aviation
Administration**

Transmittal Letter 18-01

November 17, 2017

**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 is a corrected copy of a procedure originally published in TL 17-23 on
September 22, 2017. This correction was inadvertently omitted in TL 17-26. It is included
here, effective 12-7-17.**

Boise, ID, Boise Air Terminal/Gowen Fld, Boise, RNAV (GPS) Y RWY 28L, Amdt 5A

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: RW28L CLIMB TO 6000 DIRECT JIMMI AND HOLD, CONTINUE CLIMB-IN-HOLD TO 6000. ADDITIONAL FLIGHT DATA: HOLD W, RT, 101.97 INBOUND. CHART IN PLANVIEW: MAXIMUM HOLDING AIRSPEED 230 KIAS CHART FAS OBST: 3112 TANK 433227N/1160945W 4409 AAO 433033N/1160036W 3440 AAO 433030N/1160528W DISTANCE TO THLD FROM 325 HAT: 0.86 NM. CHART VDP AT 1.79 NM TO RW28L* *LNAV ONLY. WAAS CHANNEL # 77702 REFERENCE PATH ID: W28A CHART CIRCLING ICON. LTP HAE: 854.4 M											
CANEK	GONSE (TF) (FB) (RNP 2.00)	341.52 / 5.01	7800												
GONSE (IAF)	NESLE (TF) (FB) (RNP 1.00)	287.56 / 5.14	6800												
CELOR (IAF)	NESLE (TF) (FB) (RNP 1.00)	296.21 / 5.89	6800												
LIITL (IAF)	YOGUC (TF) (FB) (RNP 1.00)	260.11 / 5.27	7800												
YOGUC	NESLE (TF) (FB) (RNP 1.00)	249.20 / 5.32	6800												
(SEE FORM 8260-10) THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 17-23.															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT NESLE 3. FAC: 282.27 FAF: VUNCU DIST FAF TO MAP: 9.08 THLD: 9.08 4. MIN. ALT: NESLE 6800, VUNCU 5800, DUTME/6.00 NM TO RW28L 4800* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 5800 GS ALT AT: VUNCU 5800 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 50.0 34:1 IS CLEAR 8. MSA FROM: RW28L 9400				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
LPV DA	3183	3000	325	3183	3000	325	3183	3000	325	3183	3000	325	3183	3000	325
LNAV/VNAV DA	3274	4500	416	3274	4500	416	3274	4500	416	3274	4500	416	3274	4500	416
LNAV MDA	3480	2400	622	3480	2400	622	3480	1 3/8	622	3480	1 3/8	622	3480	1 3/8	622
CIRCLING	3480	1	609	3480	1	609	3740	2 1/2	869	3820	3	949	3880	3	1009
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -12C (11F) OR ABOVE 52C (126F). @ CAT C 900-2 1/2, CAT D 1000-3, CAT E 1100-3 CHART NOTE: CIRCLING NA N OF RWY 10L-28R. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CANEK ON V4-253-330 SOUTHEAST BOUND. (CONTINUED ON PAGE 2)															
CITY AND STATE BOISE, ID		ELEVATION: 2871 TDZE: 2858 AIRPORT NAME: BOISE AIR TERMINAL/GOWEN FLD		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 28L, AMDT 5A 7 DECEMBER 2017				SUP: AMDT: 5 DATED 12/10/2015					

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

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

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
NESLE (IF)	VUNCU (TF) (FB) (RNP 1.00)	292.01 / 5.39	5800
VUNCU (FAF)	DUTME/6.00 NM TO RW28L (TF) (FB) (RNP 0.30)	282.27 / 3.08	
DUTME/6.00 NM TO RW28L	RW28L (MAP) (TF) (FO) (RNP 0.30)	282.27 / 6.00	
RW28L (MAP)	3183 MSL (CA)	282.27	
3183 MSL	JIMMI (DF) (FO) (RNP 1.00)		6000

NOTES, (CONT.):

CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV ALL CATS VISIBILITY TO RVR 5000, LNAV/VNAV CAT E VISIBILITY TO 1 3/8 SM, AND LNAV CAT C/D/E VISIBILITY TO 1 3/4 SM.

QUALITY
4
CHECKED

CITY AND STATE

BOISE, ID

ELEVATION: 2871

TDZE: 2858

AIRPORT NAME:

BOISE AIR TERMINAL/GOWEN FLD

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) Y RWY 28L, AMDT 5A

7 DECEMBER 2017

SUP:

AMDT: 5

DATED: 12/10/2015

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KBOI
RUNWAY	RW28L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W28A
LTP/FTP LATITUDE	433331.1615N
LTP/FTP LONGITUDE	1161233.3940W
LTP/FTP ELLIPSOIDAL HEIGHT	+08544
FPAP LATITUDE	433412.1210N
FPAP LONGITUDE	1161433.4150W
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	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

9D0FBE6D

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+08711
FPAP ORTHOMETRIC HEIGHT	+08711

QUALITY
4
CHECKED

CITY AND STATE

BOISE, ID

ELEVATION: 2871

TDZE: 2858

AIRPORT NAME:

BOISE AIR TERMINAL/GOWEN FLD

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) Y RWY 28L, AMDT 5A

7 DECEMBER 2017

SUP:

AMDT: 5

DATED: 12/10/2015

[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. [31166](#); Amdt. No. [3775](#)]

**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 [November 17, 2017](#)

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 4 January 2018

Tucson, AZ, Tucson Intl, ILS OR LOC RWY 11L, Amdt 14A
 Tucson, AZ, Tucson Intl, LOC BC RWY 29R, Amdt 8A
 Tucson, AZ, Tucson Intl, VOR OR TACAN RWY 11L, Amdt 1B
 New Orleans, LA, Louis Armstrong New Orleans Intl, ILS OR LOC RWY 11, ILS RWY 11 (SA CAT I), ILS RWY 11 (CAT II), ILS RWY 11 (CAT III), Amdt 4
 Greenville, SC, Greenville Downtown, RADAR-1, Amdt 13B, CANCELED
 Greer, SC, Greenville Spartanburg Intl, RADAR-1, Amdt 7, CANCELED

Effective 1 February 2018

Huntsville, AL, Huntsville Intl-Carl T Jones Field, ILS OR LOC RWY 18L, Amdt 4D
 Huntsville, AL, Huntsville Intl-Carl T Jones Field, ILS OR LOC RWY 18R, ILS RWY 18R (CAT II), Amdt 24E
 Huntsville, AL, Huntsville Intl-Carl T Jones Field, ILS OR LOC RWY 36L, Amdt 10C
 Huntsville, AL, Huntsville Intl-Carl T Jones Field, ILS OR LOC RWY 36R, Amdt 2C
 Huntsville, AL, Huntsville Intl-Carl T Jones Field, RADAR-1, Amdt 10A
 Huntsville, AL, Huntsville Intl-Carl T Jones Field, RNAV (GPS) RWY 18L, Amdt 1B
 Huntsville, AL, Huntsville Intl-Carl T Jones Field, RNAV (GPS) RWY 18R, Amdt 1B
 Huntsville, AL, Huntsville Intl-Carl T Jones Field, RNAV (GPS) RWY 36L, Amdt 1B
 Huntsville, AL, Huntsville Intl-Carl T Jones Field, RNAV (GPS) RWY 36R, Amdt 1B
 Huntsville, AL, Huntsville Intl-Carl T Jones Field, Takeoff Minimums and Obstacle DP, Amdt 4A
 Talladega, AL, Talladega Muni, ILS Y OR LOC Y RWY 4, Orig
 Talladega, AL, Talladega Muni, ILS Z OR LOC Z RWY 4, Amdt 1
 Talladega, AL, Talladega Muni, RNAV (GPS) RWY 4, Amdt 2
 Talladega, AL, Talladega Muni, RNAV (GPS) RWY 22, Amdt 2
 Talladega, AL, Talladega Muni, VOR-A, Amdt 7, CANCELED
 El Dorado, AR, South Arkansas Rgnl at Goodwin Field, Takeoff Minimums and Obstacle DP, Amdt 2A
 Alturas, CA, Alturas Muni, RNAV (GPS) RWY 31, Amdt 2
 Bishop, CA, Bishop, RNAV (GPS) Y RWY 12, Orig-D
 Bishop, CA, Bishop, RNAV (GPS) Z RWY 12, Orig-E
 Byron, CA, Byron, RNAV (GPS) RWY 30, Amdt 1A
 Chico, CA, Chico Muni, RNAV (GPS) RWY 31R, Orig-C
 Half Moon Bay, CA, Half Moon Bay, RNAV (GPS) Z RWY 30, Orig-C
 Lakeport, CA, Lampson Field, RNAV (GPS)-A, Orig-C
 Los Banos, CA, Los Banos Muni, RNAV (GPS) RWY 14, Orig-B
 Paso Robles, CA, Paso Robles Muni, RNAV (GPS) RWY 31, Orig-B
 Santa Barbara, CA, Santa Barbara Muni, ILS OR LOC RWY 7, Amdt 5B
 Tracy, CA, Tracy Muni, RNAV (GPS) RWY 26, Amdt 1A

Denver, CO, Centennial, ILS OR LOC RWY 35R, Amdt 10A
 Oxford, CT, Waterbury-Oxford, ILS OR LOC RWY 36, Amdt 14B
 Orlando, FL, Executive, ILS OR LOC RWY 25, Amdt 1A
 Orlando, FL, Executive, RNAV (GPS) RWY 25, Amdt 3A
 West Palm Beach, FL, Palm Beach County Park, RNAV (GPS) RWY 34, Amdt 1
 West Palm Beach, FL, Palm Beach County Park, RNAV (GPS)-A, Amdt 1
 West Palm Beach, FL, Palm Beach County Park, RNAV (GPS)-B, Amdt 1
 West Palm Beach, FL, Palm Beach County Park, Takeoff Minimums and Obstacle DP, Amdt 3
 Iowa Falls, IA, Iowa Falls Muni, RNAV (GPS) RWY 13, Amdt 1
 Iowa Falls, IA, Iowa Falls Muni, RNAV (GPS) RWY 31, Amdt 2
 Driggs, ID, Driggs-Reed Memorial, RNAV (GPS)-A, Amdt 1A
 Twin Falls, ID, Joslin Field - Magic Valley Rgnl, RNAV (GPS) RWY 26, Amdt 1B
 Chicago/Prospect Heights/Wheeling, IL, Chicago Executive, Takeoff Minimums and Obstacle DP, Amdt 3A
 Indianapolis, IN, Indy South Greenwood, Takeoff Minimums and Obstacle DP, Amdt 5
 Olathe, KS, New Century Aircenter, ILS OR LOC RWY 36, Amdt 7A
 Topeka, KS, Philip Billard Muni, RNAV (GPS) RWY 4, Orig-A, CANCELED
 Topeka, KS, Philip Billard Muni, RNAV (GPS) RWY 22, Amdt 1, CANCELED
 Topeka, KS, Philip Billard Muni, VOR RWY 22, Amdt 21, CANCELED
 Deblois, ME, Deblois Flight Strip, DEBLOIS ONE Graphic DP
 Deblois, ME, Deblois Flight Strip, RNAV (GPS)-A, Orig
 Deblois, ME, Deblois Flight Strip, Takeoff Minimums and Obstacle DP, Orig
 Fremont, MI, Fremont Muni, VOR RWY 18, Orig-A, CANCELED
 Fremont, MI, Fremont Muni, VOR RWY 36, Amdt 7A, CANCELED
 Lansing, MI, Capital Region Intl, ILS OR LOC RWY 10R, Amdt 11B
 Lansing, MI, Capital Region Intl, ILS OR LOC RWY 28L, Amdt 27C
 Owosso, MI, Owosso Community, RNAV (GPS) RWY 11, Amdt 1D
 Owosso, MI, Owosso Community, RNAV (GPS) RWY 29, Amdt 1D
 Ray, MI, Ray Community, RNAV (GPS)-A, Orig-A
 Hutchinson, MN, Hutchinson Muni-Butler Field, RNAV (GPS) RWY 33, Orig-B
 Hutchinson, MN, Hutchinson Muni-Butler Field, VOR RWY 33, Amdt 3B
 Aurora, MO, Jerry Sumners SR Aurora Muni, Takeoff Minimums and Obstacle DP, Amdt 2
 Columbia, MO, Columbia Rgnl, ILS OR LOC RWY 2, Amdt 16A
 Columbia, MO, Columbia Rgnl, LOC BC RWY 20, Amdt 13A
 Columbia, MO, Columbia Rgnl, RNAV (GPS) RWY 2, Amdt 2A
 Columbia, MO, Columbia Rgnl, VOR Y RWY 20, Amdt 4A
 Lee's Summit, MO, Lee's Summit Muni, RNAV (GPS) RWY 18, Amdt 3
 Lee's Summit, MO, Lee's Summit Muni, RNAV (GPS) RWY 29, Amdt 3
 Lee's Summit, MO, Lee's Summit Muni, RNAV (GPS) RWY 36, Amdt 3
 Lee's Summit, MO, Lee's Summit Muni, Takeoff Minimums and Obstacle DP, Amdt 1
 Lee's Summit, MO, Lee's Summit Muni, VOR-A, Amdt 1
 Circle, MT, Circle Town County, RNAV (GPS) RWY 30, Orig-B
 Kenansville, NC, Duplin Co, LOC/NDB RWY 23, Amdt 1A, CANCELED
 Beatrice, NE, Beatrice Muni, VOR RWY 18, Amdt 3
 Beatrice, NE, Beatrice Muni, VOR RWY 36, Amdt 10

Hebron, NE, Hebron Muni, NDB RWY 12, Amdt 4C, CANCELED
 Artesia, NM, Artesia Muni, NDB RWY 31, Amdt 5A
 Dunkirk, NY, Chautauqua County/Dunkirk, Takeoff Minimums and Obstacle DP, Amdt 3
 Cleveland, OH, Burke Lakefront, Takeoff Minimums and Obstacle DP, Amdt 7
 Toledo, OH, Toledo Express, RNAV (GPS) RWY 7, Amdt 1B
 Toledo, OH, Toledo Express, RNAV (GPS) RWY 25, Amdt 2B
 Wooster, OH, Wayne County, VOR RWY 10, Amdt 1B
 Wooster, OH, Wayne County, VOR RWY 28, Orig-E
 Ardmore, OK, Ardmore Downtown Executive, RNAV (GPS) RWY 17, Orig-C
 Ardmore, OK, Ardmore Downtown Executive, RNAV (GPS) RWY 35, Orig-C
 Claremore, OK, Claremore Rgnl, RNAV (GPS) RWY 18, Amdt 1
 Claremore, OK, Claremore Rgnl, RNAV (GPS) RWY 36, Amdt 3
 Claremore, OK, Claremore Rgnl, Takeoff Minimums and Obstacle DP, Amdt 1
 Duncan, OK, Halliburton Field, LOC RWY 35, Amdt 5, CANCELED
 Duncan, OK, Halliburton Field, RNAV (GPS) RWY 17, Amdt 2
 Duncan, OK, Halliburton Field, RNAV (GPS) RWY 35, Amdt 2
 Duncan, OK, Halliburton Field, VOR RWY 35, Amdt 12, CANCELED
 Madras, OR, Madras Municipal, RNAV (GPS) RWY 16, Amdt 1C
 Newport, OR, Newport Muni, RNAV (GPS) RWY 34, Amdt 1B
 Portland, OR, Portland-Hillsboro, Takeoff Minimums and Obstacle DP, Amdt 7A
 Portland, OR, Portland Intl, ILS OR LOC RWY 28L, Amdt 5
 Portland, OR, Portland Intl, ILS OR LOC RWY 28R, Amdt 17
 Portland, OR, Portland Intl, RNAV (GPS) X RWY 28L, Amdt 4
 Portland, OR, Portland Intl, RNAV (GPS) X RWY 28R, Amdt 4
 Redmond, OR, Roberts Field, RNAV (GPS) Y RWY 5, Amdt 2A
 Redmond, OR, Roberts Field, RNAV (GPS) Y RWY 23, Amdt 1A
 Redmond, OR, Roberts Field, RNAV (GPS) Y RWY 29, Amdt 2A
 Redmond, OR, Roberts Field, RNAV (GPS) Z RWY 29, Amdt 1A
 Sunriver, OR, Sunriver, VOR RWY 18, Amdt 1D
 Bloomsburg, PA, Bloomsburg Muni, RNAV (GPS)-B, Amdt 1B
 Bloomsburg, PA, Bloomsburg Muni, VOR-A, Amdt 1B
 Mifflintown, PA, Mifflintown, RNAV (GPS) RWY 26, Orig-A
 Pittsburgh, PA, Allegheny County, Takeoff Minimums and Obstacle DP, Amdt 9
 Selinsgrove, PA, Penn Valley, Takeoff Minimums and Obstacle DP, Amdt 3A
 Selinsgrove, PA, Penn Valley, VOR-A, Amdt 7C
 Shamokin, PA, Northumberland County, RNAV (GPS) RWY 8, Orig-D
 Shamokin, PA, Northumberland County, RNAV (GPS) RWY 26, Orig-C
 Shamokin, PA, Northumberland County, Takeoff Minimums and Obstacle DP, Amdt 2A
 Shamokin, PA, Northumberland County, VOR RWY 8, Amdt 3E
 Kingstree, SC, Williamsburg Rgnl, NDB RWY 14, Amdt 4B, CANCELED
 Summerville, SC, Summerville, RNAV (GPS) RWY 6, Amdt 1
 Summerville, SC, Summerville, Takeoff Minimums and Obstacle DP, Amdt 2
 Alpine, TX, Alpine-Casparis Muni, RNAV (GPS) RWY 19, Amdt 1
 Alpine, TX, Alpine-Casparis Muni, RNAV (GPS) RWY 23, Orig
 Baytown, TX, R W J Airpark, RNAV (GPS) RWY 32, Orig-A, CANCELED

Cisco, TX, Gregory M Simmons Memorial, RNAV (RNP) Z RWY 18, Orig
Cisco, TX, Gregory M Simmons Memorial, Takeoff Minimums and Obstacle DP, Orig
Laredo, TX, Laredo Intl, Takeoff Minimums and Obstacle DP, Amdt 4A
Fillmore, UT, Fillmore Muni, RNAV (GPS) RWY 4, Amdt 1A
Huntington, UT, Huntington Muni, RNAV (GPS)-C, Orig-A
Huntington, UT, Huntington Muni, VOR-B, Amdt 1A
Nephi, UT, Nephi Muni, RNAV (GPS) RWY 35, Orig-B
Ogden, UT, Ogden-Hinckley, EMONT TWO, Graphic DP
Ogden, UT, Ogden-Hinckley, Takeoff Minimums and Obstacle DP, Amdt 2A
Price, UT, Carbon County Rgnl/Buck Davis Field, ILS OR LOC RWY 1, Amdt 1B
Price, UT, Carbon County Rgnl/Buck Davis Field, RNAV (GPS) RWY 1, Amdt 2B
Price, UT, Carbon County Rgnl/Buck Davis Field, VOR RWY 1, Amdt 1B
Wenatchee, WA, Pangborn Memorial, RNAV (RNP) RWY 12, Amdt 1A
Wenatchee, WA, Pangborn Memorial, RNAV (RNP) Z RWY 30, Amdt 1A
Wenatchee, WA, Pangborn Memorial, VOR-A, Amdt 9C

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: 5.67 NM AFTER POCIB INT/I-TUS 8.21 DME OR AT HUGIK/I-TUS 2.54 DME FIX CLIMB TO 4000 THEN CLIMBING RIGHT TURN TO 6000 ON HEADING 300 AND TUS VORTAC R-270 TO RYN NDB/TUS 12.84 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 089.80 INBOUND. CHART FAS OBST: 2609 POLE 320803N/1105742W CHART 4060 AAO 321123N/1110318W. CHART PLANVIEW NOTE: DME REQUIRED.												
DINGO INT/TUS 40.00 DME/RADAR		TACUB INT/TUS 29.10 DME		094.82 / 11.91 (AVQ BRG-275)			8000														
SSAND/TUS 30.00 DME		TUS VORTAC		250.50 / 30.00			10700														
TUS VORTAC		LIPTE INT/I-TUS 17.50 DME		303.05 / 17.75			7500														
TACUB INT/TUS 29.10 DME (IAF)		LIPTE INT/I-TUS 17.50 DME (NOPT)		123.05 / 11.35 (TUS R-303)			6000														
LIPTE INT/I-TUS 17.50 DME (IF/IAF)		WASON INT/I-TUS 12.54 DME		123.03 / 4.96 (I-TUS)			5500														
WASON INT/I-TUS 12.54 DME		CALLS INT/I-TUS 10.21 DME		123.03 / 2.33 (I-TUS)			5000														
CALLS INT/I-TUS 10.21 DME		POCIB INT/I-TUS 8.21 DME		123.03 / 2.00 (I-TUS)			4600														
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NW LIPTE, RT, 123.03 INBOUND, 6000 FT. IN LIEU OF PT (IAF) 3. FAC: 123.03 FAF: POCIB INT/I-TUS 8.21 DME DIST FAF TO MAP: 5.67 THLD: 6.07 4. MIN. ALT: LIPTE 6000, WASON 5500, CALLS 5000, POCIB 4600, PARCS INT/4.82 DME 3480* 5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 938 6. MIN GS INCPT: 4600 GS ALT AT: POCIB 4600 OM: - MM: - IM: - 7. GS ANGLE: 3.00 TCH: 55.4 34:1 IS CLEAR 8. MSA FROM: TUS VORTAC 330-240 10700, 240-330 6600																	MAG VAR: 12E		EPOCH YEAR: 1995		
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 11L	2800	2400	201	2800	2400	201	2800	2400	201	2800	2400	201	2800	2400	201						
S-LOC 11L	3480	4000	881	3480	4000	881	3480	2	881	3480	2	881	3480	2	881						
CIRCLING	3480	1 1/4	837	3480	1 1/4	837	3480	2 1/2	837	3480	2 3/4	837	3800	3	1157						
PARCS FIX MINIMUMS																					
S-LOC 11L	2960	2400	361	2960	2400	361	2960	4000	361	2960	4000	361	2960	4000	361						
CIRCLING	3160	1	517	3220	1	577	3220	1 1/2	577	3220	2	577	3800	3	1157						
NOTES: CHART PROFILE NOTE: USE I-TUS DME WHEN ON THE LOCALIZER COURSE. CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). *LOC ONLY CHART PLANVIEW NOTE: RADAR OR ADF REQUIRED FOR ARRIVALS AT DINGO. (CONTINUED ON PAGE 2)																					
CITY AND STATE		ELEVATION: 2643 TDZE: 2599				FACILITY IDENTIFIER: I-TUS		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:								
TUCSON, AZ		AIRPORT NAME: TUCSON INTL						ILS OR LOC RWY 11L, AMDT 14A 4 JANUARY 2018					AMDT: 14								
													DATED 08/30/2007								

QUALITY
 9
 CHECKED

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

NOTES, (CONT.):
CHART NOTE: ADF OR DME REQUIRED.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS CAT E VISIBILITY TO RVR 4000, S-LOC 11L CAT E VISIBILITY TO 2 1/2 SM; PARCS FIX MINIMUMS: S-LOC 11L CAT C/D/E VISIBILITY TO RVR 5500.



CITY AND STATE TUCSON, AZ	ELEVATION: 2643 TDZE: 2599 AIRPORT NAME: TUCSON INTL	FACILITY IDENTIFIER: I-TUS	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 11L, AMDT 14A 4 JANUARY 2018	SUP:
				AMDT: 14
				DATED: 08/30/2007

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: ASONE/I-TUS 0.49 DME FIX					
SULLI/TUS 20.00 DME CW (IAF)		ILEEN/I-TUS 20.24 DME			20.00 DME ARC (TUS LR-117)			8000		CLIMB TO 6800 ON TUS VORTAC R-308 TO PIMMA/TUS VORTAC 20.00 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 5800 ON RYN NDB BEARING 090 TO RYN NDB AND HOLD W, RT, 090.00 INBOUND. (ADF REQUIRED). ADDITIONAL FLIGHT DATA: HOLD SE, RT, 308.06 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD W RYN NDB, RT, 090.00 INBOUND. CHART FAS OBST: 2853 TRMSN TWR 320454N/1105333W CHART 3017 TOWER 320330N/1105134W. CHART TUS R-107 AT SULLI. CHART IN PLANVIEW: RYN NDB. GAVET TO RW29R: 3.47/50. CHART PLANVIEW NOTE: DME REQUIRED.					
ILEEN/I-TUS 20.24 DME (IF)		VAINE/I-TUS 13.74 DME			303.04 / 6.50 (I-TUS)			7200							
VAINE/I-TUS 13.74 DME		NAIRB/I-TUS 9.74 DME			303.04 / 4.00 (I-TUS)			6100							
NAIRB/I-TUS 9.74 DME		COPEY/I-TUS 5.24 DME			303.04 / 4.50 (I-TUS)			4700							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 12E EPOCH YEAR:1995					
2. PROFILE STARTS AT ILEEN/I-TUS 20.24 DME															
3. FAC 303.04 FAF COPEY/I-TUS 5.24 DME DIST FAF TO MAP _____ THLD 5.57															
4. MIN. ALT ILEEN 8000, VAINE 7200, NAIRB 6100, COPEY 4700, GAVET/I-TUS 2.24 DME 3640															
8. MSA FROM: TUS VORTAC 330-240 10700, 240-330 6600															
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-29R	3120	1	477	3120	1	477	3120	1 3/8	477	3120	1 3/8	477	3120	1 3/8	477
CIRCLING	3160	1	517	3220	1	577	3220	1 1/2	577	3220	2	577	3800	3	1157
NOTES:															
CHART NOTE: DME REQUIRED. @ CAT E 1200-3															
CHART PROFILE NOTE: USE I-TUS DME WHEN ON THE LOCALIZER COURSE.															
CHART PROFILE NOTE: DISREGARD GS INDICATIONS.															
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).															
CITY AND STATE TUCSON, AZ		ELEVATION: 2643 TDZE: 2643 AIRPORT NAME: TUCSON INTL		FACILITY IDENTIFIER: I-TUS		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: LOC BC RWY 29R, AMDT 8A 4 JANUARY 2018				SUP LOC/DME BC RWY 29R AMDT 8 DATE 08/30/2007					

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: 6.07 MILES AFTER POCIB OR AT RW11/TUS 2.38 DME DME					
DINGO INT/TUS 40.00 DME/RADAR		TACUB INT/TUS 29.10 DME		094.82 / 11.91 (AVQ BRG-095)				8000		CLIMB TO 4000 THEN CLIMBING RIGHT TURN TO 6000 (CAT. E 8000) ON HEADING 300 AND TUS VORTAC R-270 TO RYN NDB/TUS 12.8 DME AND HOLD.					
TACUB INT/TUS 29.10 DME (IAF)		LIPTE INT/TUS 17.75 DME		123.05 / 11.35 (TUS R-303)				6000							
SSAND/TUS 30.00 DME		TUS VORTAC		251.31 / 30.00				10700							
TUS VORTAC		LIPTE INT/TUS 17.75 DME		303.05 / 17.75				7500							
LIPTE INT/TUS 17.75 DME (IF/IAF)		WASON INT/TUS 12.78 DME		123.05 / 4.96 (TUS R-303)				5500		ADDITIONAL FLIGHT DATA: HOLD W, RT, 090.00 INBOUND. CHART FAS OBST: 2691 TANK 320758N/1105703W CHART VDP AT 3.55 DME DISTANCE VDP TO THLD 1.17 NM. POCIB TO RW11L: 3.05/55. CHART PLANVIEW NOTE: ADF OR DME REQUIRED.					
WASON INT/TUS 12.78 DME		CALLS INT/TUS 10.46 DME		123.05 / 2.33 (TUS R-303)				5000							
CALLS INT/TUS 10.46 DME		POCIB INT/TUS 8.46 DME		123.05 / 2.00 (TUS R-303)				4600							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 12E EPOCH YEAR:1995					
2. HOLD NW LIPTE, RT, 123.05 INBOUND, 6000 FT. IN LIEU OF PT (IAF)															
3. FAC 123.05 FAF POCIB INT/TUS 8.46 DME DIST FAF TO MAP 6.07 THLD 6.07															
4. MIN. ALT LIPTE 6000, WASON 5500, CALLS 5000, POCIB 4600, PARCS INT/TUS 5.06 DME 3480															
8. MSA FROM: TUS VORTAC 330-240 10700, 240-330 6600															
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-11L	3020	2400	421	3020	2400	421	3020	4000	421	3020	4000	421	3020	4000	421
CIRCLING	3160	1	517	3160	1	517	3220	1 1/2	577	3220	2	577	3800	3	1157
NOTES:															
CHART NOTE: ADF OR DME REQUIRED. @ CAT E 1200-3															
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).															
CHART NOTE: RADAR OR ADF REQUIRED FOR ARRIVALS AT DINGO.															
CHART NOTE: FOR INOPERATIVE ALS, INCREASE CAT E VISIBILITY TO 1 1/4 SM.															
CITY AND STATE TUCSON, AZ		ELEVATION: 2643 TDZE: 2599 AIRPORT NAME: TUCSON INTL		FACILITY IDENTIFIER: TUS		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR OR TACAN RWY 11L, AMDT 1B 4 JANUARY 2018				SUP AMDT 1A DATE 07/31/2008					

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: 6.53 NM AFTER MUDBG/I-MSY 8.32 DME/RADAR OR AT I-MSY 1.79 DME CLIMB TO 800 THEN CLIMBING RIGHT TURN TO 2000 ON HEADING 161 AND ON LEV VORTAC R-354 TO SAFES INT/LEV 38.52 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 800 THEN CLIMBING RIGHT TURN TO 2600 DIRECT HRV VORTAC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, RT, 174.44 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE HRV VORTAC, RT, 303.90 INBOUND. CHART FAS OBST: 70 SIGN 300008N/0901737W. CHART 313 STACK 300100N/0902411W. CHART VDP AT 2.67 DME* DISTANCE VDP TO THLD 0.88 NM. *LOC ONLY. CHART IN PLANVIEW: HRV VORTAC. CHART CIRCLING ICON. CHART IN PLANVIEW: RQR 5.82 DME AT VOODO.							
AWDAD INT	VOODO INT/I-MSY 24.37 DME			093.33 / 13.18 (RQR R-273)				7000									
VOODO INT/I-MSY 24.37 DME (IAF)	TURTLE/I-MSY 15.00 DME			106.47 / 9.37 (I-MSY)				4000									
TBD VOR/DME (IAF)	TURTLE/I-MSY 15.00 DME			031.95 / 28.23				4000									
TURTLE/I-MSY 15.00 DME (IF)	MUDBG/I-MSY 8.32 DME/RADAR			106.47 / 6.69 (I-MSY)				2000									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT TURTLE 3. FAC: 106.47 FAF: MUDBG/I-MSY 8.32 DME/RADAR DIST FAF TO MAP: 6.53 THLD: 6.53 4. MIN. ALT: TURTLE 4000, MUDBG 2000, WENUP/I-MSY 3.28 DME 500* 5. DIST TO THLD FROM OM: - MM: - IM: 908 150 HAT: 1922 100 HAT: 900 GS ANT: 1248 6. MIN GS INCPT: 2000 GS ALT AT: MUDBG 2000 OM: - MM: - IM: 105 7. GS ANGLE: 2.80 TCH: 56.3 8. MSA FROM: RQR VOR/DME 360-180 1800, 180-360 3100										MAG VAR: 1W		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		
S-ILS 11	204	1800	200	204	1800	200	204	1800	200	204	1800	200					
S-LOC 11	500	2400	496	500	2400	496	500	5000	496	500	5000	496					
CIRCLING	520	1	516	520	1	516	580	1 1/2	576	600	2	596					
WENUP FIX MINIMUMS																	
S-LOC 11	320	2400	316	320	2400	316	320	2400	316	320	2400	316					
CIRCLING	520	1	516	520	1	516	580	1 1/2	576	600	2	596					
NOTES: SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 11: CAT A, B, C, D, RA 150, RVR 1400, HAT 150, DA 154 MSL. CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 11: CAT A, B, C, D, RA 100, RVR 1200, HAT 100, DA 104 MSL. (CONTINUED ON PAGE 2)																	
CITY AND STATE NEW ORLEANS, LA				ELEVATION: 4 TDZE: 4 AIRPORT NAME: LOUIS ARMSTRONG NEW ORLEANS INTL				FACILITY IDENTIFIER: I-MSY		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 11, AMDT 4; ILS RWY 11 (SA CAT I), ILS RWY 11 (CAT II), ILS RWY 11 (CAT III) 4 JANUARY 2018				SUP: AMDT: 3A DATED 07/21/2016			



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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

NOTES, (CONT.):

CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 11: CAT III CAT A, B, C, D, RVR 600.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 11 CAT C/D VISIBILITY TO 1 3/8 SM AND INCREASE WENUP FIX MINIMUMS S-LOC 11 CAT C/D VISIBILITY TO RVR 4500.

CHART NOTE: RADAR OR DME REQUIRED.

SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF HUD TO DH.



CITY AND STATE NEW ORLEANS, LA	ELEVATION: 4 AIRPORT NAME: LOUIS ARMSTRONG NEW ORLEANS INTL	TDZE: 4	FACILITY IDENTIFIER: I-MSY	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 11, AMDT 4; ILS RWY 11 (SA CAT I), ILS RWY 11 (CAT II), ILS RWY 11 (CAT III) 4 JANUARY 2018	SUP:
					AMDT: 3A
					DATED: 07/21/2016

**U.S. DEPARTMENT OF TRANSPORTATION -- FEDERAL AVIATION ADMINISTRATION
RADAR -- STANDARD INSTRUMENT APPROACH PROCEDURE -- FLIGHT STANDARDS SERVICE -- FAR PART 97.31**

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH. and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

Initial approach minimum altitude(s) shall correspond with those established for enroute operation in the particular area or as set forth below. Positive identification must be established with the radar controller. From initial contact with radar to final authorized landing minimums, the instructions of the radar controller are mandatory except when; (A) Visual contact is established on final approach at or before descent to the authorized landing minimums; or (B) at pilot's discretion if it appears desirable to discontinue the approach.

Except when the radar controller may direct otherwise prior to final approach, a missed approach shall be executed as provided below when; (A) communications on final approach is lost for more than 5 seconds during a precision approach, or for more than 30 seconds during a surveillance approach; (B) directed by radar controllers; (C) visual contact is not established upon descent to authorized landing minimums; or (D) if landing is not accomplished.

RADAR TERMINAL AREA MANEUVERING SECTORS AND ALTITUDES <i>(Sectors and distances measured from radar antenna)</i>												MISSED APPROACH			
FROM	T O	DISTANCE	ALTITUDE	DISTANCE	ALTITUDE	DISTANCE	ALTITUDE	DISTANCE	ALTITUDE	DISTANCE	ALTITUDE	MAP:			

MINIMUMS

TAKEOFF:		STANDARD		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

NOTES:											ADDITIONAL FLIGHT DATA				
PROCEDURE CANCELLED EFFECTIVE: 4 JANUARY 2018											THRE:	RWY:	THRE:	RWY:	
											THRE:	RWY:	THRE:	RWY:	
LOST COMMUNICATIONS (ALL RWYS): As directed by ATC on initial contact.											MAG VAR:	EPOCH YEAR:			

CITY AND STATE		ELEVATION: AIRPORT NAME:		FACILITY IDENTIFIER:		PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:				SUP	
GREENVILLE, SC		GREENVILLE DOWNTOWN		GSP ASR		RADAR-1, AMDT 13B, 03/06/2014				AMDT: 13A	
										DATED: 07/29/08	

QUALITY
10
CHECKED

**U.S. DEPARTMENT OF TRANSPORTATION -- FEDERAL AVIATION ADMINISTRATION
RADAR -- STANDARD INSTRUMENT APPROACH PROCEDURE -- FLIGHT STANDARDS SERVICE -- FAR PART 97.31**

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH. and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

Initial approach minimum altitude(s) shall correspond with those established for enroute operation in the particular area or as set forth below. Positive identification must be established with the radar controller. From initial contact with radar to final authorized landing minimums, the instructions of the radar controller are mandatory except when; (A) Visual contact is established on final approach at or before descent to the authorized landing minimums; or (B) at pilot's discretion if it appears desirable to discontinue the approach.

Except when the radar controller may direct otherwise prior to final approach, a missed approach shall be executed as provided below when; (A) communications on final approach is lost for more than 5 seconds during a precision approach, or for more than 30 seconds during a surveillance approach; (B) directed by radar controllers; (C) visual contact is not established upon descent to authorized landing minimums; or (D) if landing is not accomplished.

RADAR TERMINAL AREA MANEUVERING SECTORS AND ALTITUDES <i>(Sectors and distances measured from radar antenna)</i>												MISSED APPROACH			
FROM	T O	DISTANCE	ALTITUDE	DISTANCE	ALTITUDE	DISTANCE	ALTITUDE	DISTANCE	ALTITUDE	DISTANCE	ALTITUDE	MAP:			

MINIMUMS

TAKEOFF:		STANDARD		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	

NOTES:

PROCEDURE CANCELLED EFFECTIVE: 4 JANUARY 2018.

ADDITIONAL FLIGHT DATA

THRE: _____	RWY: _____	THRE: _____	RWY: _____
THRE: _____	RWY: _____	THRE: _____	RWY: _____

**QUALITY
18
CHECKED**

LOST COMMUNICATIONS (ALL RWYS): As directed by ATC on initial contact.

MAG VAR: _____ EPOCH YEAR: _____

CITY AND STATE GREER, SC	ELEVATION: AIRPORT NAME: GREENVILLE SPARTANBURG INTL	FACILITY IDENTIFIER: GSP ASR	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE: RADAR-1, AMDT 7, 5/5/11	SUP
				AMDT: 6
				DATED: 09/01/05

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: 4.45 NM AFTER DEBAY INT CLIMB TO 3000 ON HEADING 185 AND DCU VOR/DME R-131 TO HOBBI INT/DCU 16.94 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 2500 THEN CLIMBING LEFT TURN TO 4000 ON HEADING 140 AND RQZ VORTAC R-187 TO FEWER INT/RQZ 29.45 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, LT, 311.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD N FEWER INT/RQZ 29.45 DME, LT, 186.51 INBOUND. CHART FAS OBST: 722 LT POLE 344008N/0864600W CHART 906 TOWER 344315N/0864606W. CHART: ASR. CHART R2104A, R2104B, R2104C. CHART WHEELER NATIONAL WILDLIFE REFUGE. CHART IN PLANVIEW: FEWER INT/RQZ 29.45 DME. CHART: RQZ VORTAC LR-269.										
RQZ VORTAC		BOLAY INT/13.87 DME		284.07 / 6.59			3000												
DCU VOR/DME		BOLAY INT/DCU 13.87 DME		040.22 / 13.87			3000												
BOLAY INT/DCU 13.87 DME (IF/IAF)		COTIN INT		184.95 / 3.50 (I-TVN)			2500												
COTIN INT		DEBAY INT		184.95 / 2.50 (I-TVN)			2100												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N BOLAY, LT, 184.95 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 184.95 FAF: DEBAY INT DIST FAF TO MAP: 4.45 THLD: 4.45 4. MIN. ALT: BOLAY 3000, COTIN 2500, DEBAY 2100, FEKSO INT 1160* 5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 1089 6. MIN GS INCPT: 2100 GS ALT AT: DEBAY 2100 OM: - MM: - IM: - 7. GS ANGLE: 3.00 TCH: 54.7 8. MSA FROM: DCU VOR/DME 3700																MAG VAR: 4W		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 18L**	809	2400	200	809	2400	200	809	2400	200	809	2400	200	809	2400	200				
S-LOC 18L	1160	2400	551	1160	2400	551	1160	5000	551	1160	6000	551	1160	1 1/2	551				
CIRCLING	1160	1	531	1160	1	531	1160	1 1/2	531	1240	2	611	1240	2 1/4	611				
FEKSO FIX MINIMUMS (DUAL VOR RECEIVERS REQUIRED)																			
S-LOC 18L	980	2400	371	980	2400	371	980	2400	371	980	4000	371	980	4000	371				
CIRCLING	1160	1	531	1160	1	531	1160	1 1/2	531	1240	2	611	1240	2 1/4	611				
NOTES: CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT. *LOC ONLY *1180 WHEN USING DECATUR ALTIMETER SETTING. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE DECATUR ALTIMETER SETTING AND INCREASE DA (CONTINUED ON PAGE 2)																			
CITY AND STATE		ELEVATION: 629 TDZE: 609		FACILITY IDENTIFIER: I-TVN		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:						SUP:							
HUNTSVILLE, AL		AIRPORT NAME:		HUNTSVILLE INTL-CARL T JONES FIELD		ILS OR LOC RWY 18L, AMDT 4D						AMDT: 4C							
						1 FEBRUARY 2018						DATED 11/13/2014							



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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

NOTES, (CONT.):

834 FEET AND ALL MDAS 40 FEET, INCREASE FEKSO FIX MINIMUMS S-LOC 18L CAT C VISIBILITY TO RVR 4000, AND CAT E VISIBILITY TO RVR 5000.

CHART NOTE: CIRCLING NA FOR CAT E EAST OF RWY 18L-36R.

CHART NOTE: FOR INOPERATIVE ALS INCREASE S-ILS 18L CAT E VISIBILITY TO RVR 4000 AND S-LOC 18L CAT E VISIBILITY TO 2 SM; FEKSO FIX MINIMUMS INCREASE S-LOC 18L CAT E VISIBILITY TO RVR 6000. FOR INOPERATIVE ALS WHEN USING DECATUR ALTIMETER SETTING, INCREASE S-ILS 18L CAT E VISIBILITY TO RVR 4000, S-LOC 18L CAT E VISIBILITY TO 2 SM; FEKSO FIX MINIMUMS INCREASE S-LOC 18L CAT E VISIBILITY TO 1 1/2 SM.

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

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.

QUALITY
16
CHECKED

CITY AND STATE

HUNTSVILLE, AL

ELEVATION: 629

TDZE: 609

AIRPORT NAME:

HUNTSVILLE INTL-CARL T JONES FIELD

FACILITY
IDENTIFIER:

I-TVN

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 18L, AMDT 4D

1 FEBRUARY 2018

SUP:

AMDT: 4C

DATED: 11/13/2014

ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.											
TERMINAL ROUTES				MISSED APPROACH											
FROM	TO	COURSE AND DISTANCE	ALTITUDE	ILS: DA LOC: 4.41 NM AFTER FEKER INT CLIMB TO 1300 THEN CLIMBING RIGHT TURN TO 3000 DIRECT DCU VOR/DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 3000 ON HEADING 182 AND ON RQZ VORTAC R-211.01 TO MASHA INT/MSL 32.73 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 094.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NW MASHA INT/MSL 32.73 DME, LT, 120.63 INBOUND. CHART FAS OBST: 906 TOWER 344315N/0864606W CHART: ASR. CHART R2104A, R2104B, R2104C. CHART WHEELER NATIONAL WILDLIFE REFUGE. CHART IN PLANVIEW: MASHA INT/MSL 32.73 DME.											
DCU VOR/DME	JASEX INT/DCU 13.40 DME	037.40 / 13.40 (RQZ LR-267)	3000												
RQZ VORTAC	JASEX INT	282.59 / 7.39	3000												
JASEX INT (IF/IAF)	GETEC INT	184.95 / 3.60 (I-HSV)	2500												
GETEC INT	FEKER INT	184.95 / 2.50 (I-HSV)	2100												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N JASEX, RT, 184.95 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 184.95 FAF: FEKER INT DIST FAF TO MAP: 4.41 THLD: 4.41 4. MIN. ALT: JASEX 3000, GETEC 2500, FEKER 2100 5. DIST TO THLD FROM OM: - MM: 0.45 IM: 859 150 HAT: - 100 HAT: 729 GS ANT: 1079 6. MIN GS INCPT: 2100 GS ALT AT: FEKER 2100 OM: - MM: 829 IM: 729 7. GS ANGLE: 3.00 TCH: 50.0 8. MSA FROM: DCU VOR/DME 3700				MAG VAR: 4W 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 18R	829	1800	200	829	1800	200	829	1800	200	829	1800	200	829	1800	200
S-LOC 18R	1120	2400	491	1120	2400	491	1120	4000	491	1120	5000	491	1120	6000	491
CIRCLING	1160	1	531	1160	1	531	1160	1 1/2	531	1240	2	611	1240	2 1/4	611
NOTES: CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 18R: CAT A, B, C, D, RA 105, RVR 1200, HAT 100, DA 729 MSL. CAT II CHART NOTE: PROCEDURE NA WHEN CONTROL TOWER CLOSED. CHART NOTE: CIRCLING NA FOR CAT E EAST OF RWY 18L-36R. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 629 TDZE: 629		FACILITY IDENTIFIER: I-HSV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
HUNTSVILLE, AL		AIRPORT NAME:		HUNTSVILLE INTL-CARL T JONES FIELD		ILS OR LOC RWY 18R, AMDT 24E; ILS RWY 18R (CAT II)				AMDT: 24D					
						1 FEBRUARY 2018				DATED		08/23/2012			



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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

NOTES, (CONT.):

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE DECATUR ALTIMETER SETTING AND INCREASE

S-ILS 18R DA TO 854 AND ALL MDA 40 FEET; INCREASE S-LOC 18R CATS C/D/E VISIBILITY 1/4 SM.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 18R CAT E VISIBILITY TO RVR 4000 AND S-LOC 18R CAT E VISIBILITY TO 1 3/4 SM.

CHART NOTE: FOR INOPERATIVE ALS WHEN USING DECATUR ALTIMETER SETTING, INCREASE S-ILS 18R CAT E VISIBILITY TO RVR 4000 AND S-LOC 18R CAT E VISIBILITY TO 2 SM.

CHART NOTE: CAT II MINIMUMS NA WHEN USING DECATUR ALTIMETER SETTING.

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.

QUALITY
16
CHECKED

CITY AND STATE

HUNTSVILLE, AL

ELEVATION: 629**TDZE: 629**

AIRPORT NAME:

HUNTSVILLE INTL-CARL T JONES FIELD

FACILITY
IDENTIFIER:
I-HSV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 18R, AMDT 24E; ILS RWY 18R (CAT II)

1 FEBRUARY 2018

SUP:

AMDT: **24D**DATED: **08/23/2012**

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.											
US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION															
TERMINAL ROUTES				MISSED APPROACH											
FROM	TO	COURSE AND DISTANCE	ALTITUDE	ILS: DA LOC: 6.58 NM AFTER CECAB INT CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 3000 DIRECT DCU VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000. ALTERNATE MA (DO NOT CHART): CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 174 AND ON RQZ VORTAC R-211 TO MASHA INT AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 094.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NW MASHA INT, LT, 120.63 INBOUND. FAS OBST: 709 TREE 343533N/0864717W CHART R2104A, R2104B, R2104C. CHART WHEELER NATIONAL WILDLIFE REFUGE. CHART IN PLANVIEW: MASHA INT. CHART RQZ VORTAC LR-201. CHART ASR.											
DCU VOR/DME	BOSAC INT/DCU 16.25 DME	153.23 / 16.25	2800												
BOSAC INT/DCU 16.25 DME (IF/IAF)	CECAB INT	004.95 / 6.00 (I-ELL)	2800												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S BOSAC, RT, 004.95 INBOUND, 2800 FT. IN LIEU OF PT (IAF) 3. FAC: 004.95 FAF: CECAB INT DIST FAF TO MAP: 6.58 THLD: 6.58 4. MIN. ALT: BOSAC 2800, CECAB 2800, HEREG INT 1160* 5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 1000 6. MIN GS INCPT: 2800 GS ALT AT: CECAB 2800 OM: - MM: - IM: - 7. GS ANGLE: 3.00 TCH: 53.4 8. MSA FROM: DCU VOR/DME 3700				MAG VAR: 4W 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 36L	815	1800	200	815	1800	200	815	1800	200	815	1800	200	815	2400	200
S-LOC 36L	1160	2400	545	1160	2400	545	1160	5000	545	1160	6000	545	1160	1 1/2	545
CIRCLING	1160	1	531	1160	1	531	1160	1 1/2	531	1240	2	611	1240	2 1/4	611
HEREG FIX MINIMUMS (DUAL VOR RECEIVERS REQUIRED)															
S-LOC 36L	960	2400	345	960	2400	345	960	2400	345	960	4000	345	960	4000	345
CIRCLING	1160	1	531	1160	1	531	1160	1 1/2	531	1240	2	611	1240	2 1/4	611
NOTES: *LOC ONLY *1200 WHEN USING DECATUR ALTIMETER SETTING. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 36L CAT E VISIBILITY TO RVR 4000, S-LOC 36L CAT E (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 629 TDZE: 615		FACILITY IDENTIFIER: I-ELL		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
HUNTSVILLE, AL		AIRPORT NAME:		HUNTSVILLE INTL-CARL T JONES FIELD		ILS OR LOC RWY 36L, AMDT 10C				AMDT: 10B					
						1 FEBRUARY 2018				DATED 11/13/2014					



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

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NOTES, (CONT.):

VISIBILITY TO 2 SM. HEREG FIX MINIMUMS S-LOC 36L INCREASE CAT E VISIBILITY TO RVR 6000.

CHART NOTE: CIRCLING NA FOR CAT E EAST OF RWY 18L-36R.

CHART PLANVIEW NOTE: CAUTION NUMEROUS MIGRATORY BIRD FLOCKS IN AREA. WILDLIFE REFUGE AREA SOUTH OF AIRPORT.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE DECATUR ALTIMETER SETTING AND INCREASE DA TO 840 AND ALL MDAS 40 FEET. FOR INOPERATIVE ALS WHEN USING DECATUR ALTIMETER SETTING INCREASE S-ILS

36L CAT E VISIBILITY TO RVR 4000, S-LOC 36L CAT E VISIBILITY TO 2 SM, HEREG FIX MINIMUMS: S-LOC 36L

INCREASE CAT E VISIBILITY TO RVR 6000.



CITY AND STATE

HUNTSVILLE, AL

ELEVATION: 629

TDZE: 615

AIRPORT NAME:

HUNTSVILLE INTL-CARL T JONES FIELD

FACILITY
IDENTIFIER:

I-ELL

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 36L, AMDT 10C

1 FEBRUARY 2018

SUP:

AMDT: 10B

DATED: 11/13/2014

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29									Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.					
TERMINAL ROUTES												MISSED APPROACH									
FROM			TO			COURSE AND DISTANCE			ALTITUDE			ILS: DA LOC: 6.34 NM AFTER UJOTY INT/I-JJC 8.12 DME/RADAR OR AT I-JJC 1.77 DME CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 3000 DIRECT RQZ VORTAC AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 2500 THEN CLIMBING RIGHT TURN TO 3000 ON HEADING 040 AND ON DCU VOR/DME R-048 TO VOYUD/DCU 22.69 DME AND HOLD SW, LT, 047.54 INBOUND. (DME REQUIRED). ADDITIONAL FLIGHT DATA: HOLD N, RT, 183.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SW VOYUD/DCU 22.69 DME, LT, 047.54 INBOUND. CHART FAS OBST: 660 TREE 343709N/0864545W CHART 869 TREE 343201N/0864637W. CHART: ASR CHART R2104A, R2104B, R2104C. CHART WHEELER NATIONAL WILDLIFE REFUGE. CHART VDP AT 2.80 DME* DISTANCE VDP TO THLD 1.03 NM. *LOC ONLY. CHART IN PLANVIEW: VOYUD/DCU 22.69 DME. CHART: RQZ VORTAC LR-200 CHART: DCU 16.13 DME AT ENIKY									
DCU VOR/DME			ENIKY INT/I-JJC 14.22 DME			152.58 / 16.13			3000			MAG VAR: 4W EPOCH YEAR: 2020									
ENIKY INT/I-JJC 14.22 DME (IF/IAF)			UJOTY INT/I-JJC 8.12 DME/RADAR			004.95 / 6.10 (I-JJC)			2700												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																					
2. HOLD S ENIKY, RT, 004.95 INBOUND, 3000 FT. IN LIEU OF PT (IAF)																					
3. FAC: 004.95 FAF: UJOTY INT/I-JJC 8.12 DME/RADAR DIST FAF TO MAP: 6.34 THLD: 6.34																					
4. MIN. ALT: ENIKY 3000, UJOTY 2700, GEPDE INT/I-JJC 3.47 DME 1140*																					
5. DIST TO THLD FROM OM: 6.34 MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 1431																					
6. MIN GS INCPT: 2700 GS ALT AT: - OM: - MM: - IM: -																					
7. GS ANGLE: 3.00 TCH: 55.3																					
8. MSA FROM: DCU VOR/DME 3700																					
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 36R	796	2400	201	796	2400	201	796	2400	201	796	2400	201	796	2400	201						
S-LOC 36R	1140	2400	545	1140	2400	545	1140	5000	545	1140	6000	545	1140	1 1/2	545						
CIRCLING	1160	1	531	1160	1	531	1160	1 1/2	531	1240	2	611	1240	2 1/4	611						
GEPDE FIX MINIMUMS																					
S-LOC 36R	980	2400	385	980	2400	385	980	2400	385	980	4000	385	980	4000	385						
CIRCLING	1160	1	531	1160	1	531	1160	1 1/2	531	1240	2	611	1240	2 1/4	611						
NOTES: CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 36L. CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT. *1180 WHEN USING DECATUR ALTIMETER SETTING. CHART NOTE: FOR INOPERATIVE MALSR, INCREASE S-ILS 36R CAT E VISIBILITY TO RVR 4000, S-LOC 36R CAT E (CONTINUED ON PAGE 2)																					
CITY AND STATE HUNTSVILLE, AL			ELEVATION: 629 TDZE: 595 AIRPORT NAME: HUNTSVILLE INTL-CARL T JONES FIELD				FACILITY IDENTIFIER: I-JJC		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 36R, AMDT 2C 1 FEBRUARY 2018					SUP: AMDT: 2B DATED 11/13/2014							

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

NOTES, (CONT.):

VISIBILITY TO 2 MILES, AND GEPDE FIX MINIMUMS S-LOC 36R CAT E VISIBILITY TO RVR 6000.

CHART NOTE: CIRCLING NA FOR CAT E EAST OF RWY 18L-36R.

CHART PLANVIEW NOTE: CAUTION NUMEROUS MIGRATORY BIRD FLOCKS IN AREA. WILDLIFE REFUGE AREA SOUTH OF AIRPORT.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE DECATUR ALTIMETER SETTING AND INCREASE S-ILS 36R DA TO 821 FEET AND ALL MDAS 40 FEET, AND GEPDE FIX MINIMUMS S-LOC 36R CAT C AND E VISIBILITY 1/4 MILE. FOR INOPERATIVE MALSR, WHEN USING DECATUR ALTIMETER SETTING, INCREASE S-ILS 36R CAT E VISIBILITY TO RVR 4000, S-LOC 36R CAT E VISIBILITY TO 2 MILES, AND GEPDE FIX MINIMUMS S-LOC 36R CAT E VISIBILITY TO 1 1/2 MILES.

CHART NOTE: VDP NA WHEN USING DECATUR ALTIMETER SETTING.



CITY AND STATE

HUNTSVILLE, AL

ELEVATION: 629

TDZE: 595

AIRPORT NAME:

HUNTSVILLE INTL-CARL T JONES FIELD

FACILITY
IDENTIFIER:

I-JJC

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 36R, AMDT 2C

1 FEBRUARY 2018

SUP:

AMDT: 2B

DATED: 11/13/2014

**U.S. DEPARTMENT OF TRANSPORTATION -- FEDERAL AVIATION ADMINISTRATION
RADAR -- STANDARD INSTRUMENT APPROACH PROCEDURE -- FLIGHT STANDARDS SERVICE -- FAR PART 97.31**

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH. and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

Initial approach minimum altitude(s) shall correspond with those established for enroute operation in the particular area or as set forth below. Positive identification must be established with the radar controller. From initial contact with radar to final authorized landing minimums, the instructions of the radar controller are mandatory except when; (A) Visual contact is established on final approach at or before descent to the authorized landing minimums; or (B) at pilot's discretion if it appears desirable to discontinue the approach.

Except when the radar controller may direct otherwise prior to final approach, a missed approach shall be executed as provided below when; (A) communications on final approach is lost for more than 5 seconds during a precision approach, or for more than 30 seconds during a surveillance approach; (B) directed by radar controllers; (C) visual contact is not established upon descent to authorized landing minimums; or (D) if landing is not accomplished.

RADAR TERMINAL AREA MANEUVERING SECTORS AND ALTITUDES <i>(Sectors and distances measured from radar antenna)</i>												MISSED APPROACH	
FROM	T O	DISTANCE	ALTITUDE	DISTANCE	ALTITUDE	DISTANCE	ALTITUDE	DISTANCE	ALTITUDE	DISTANCE	ALTITUDE	MAP:	
												MAP: RWY 18L: THLD, RWY 18R: THLD, RWY 36L: THLD, RWY 36R: THLD.	
As established by the current (INSERT LOCATION/NAME) ASR Minimum Vectoring Altitude Chart.												SEE FAA8360-10 CONTINUATION FORM.	

MINIMUMS

TAKEOFF:		STANDARD		SEE FAA FORM 8260-15A FOR THIS AIRPORT			ALTERNATE: N A									
CATEGORY =====>		A			B			C			D			E		
		DH/ MDA	VIS	HAT/HAA	DH/MDA	V I S	HAT/HAA	DH/MDA	V I S	HAT/HAA	DH/MDA	V I S	HAT/HAA	DH/MDA	V I S	HAT/HAA
ASR-18L		1160	2400	551	1160	2400	551	1160	6000	551	1160	6000	551	1160	6000	551
ASR-18R		1060	2400	431	1060	2400	431	1060	4000	431	1060	4000	431	1060	4000	431
ASR-36L		1000	2400	385	1000	2400	385	1000	3500	385	1000	3500	385	1000	3500	385
ASR-36R		1020	2400	425	1020	2400	425	1020	4000	425	1020	4000	425	1020	4000	425
CIRCLING		1160	1	531	1160	1	531	1160	1 1/2	531	1240	2	611	1240	2 1/4	611

NOTES:

SEE FAA 8260-10 CONTINUATION FORM.

ADDITIONAL FLIGHT DATA

TDZE: 609.2 RWY: 18L TDZE: 628.9 RWY: 18R

TDZE: 615.4 RWY: 36L TDZE: 594.8 RWY: 36R

RWY 18L: FAS OBST: 809 TREE 344125N/0864723W.
RWY 18R: FAS OBST: 809 TREE 344125N/0864723W.
RWY 36L: FAS OBST: 749 TREE 343637N/0864730W.
RWY 36R: FAS OBST: 760 WATER TWR 343521 N/0864434W.

MAG VAR: 4W EPOCH YEAR: 2020

LOST COMMUNICATIONS (ALL RWYS): As directed by ATC on initial contact.

CITY AND STATE	ELEVATION: TDZE: 629	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP
HUNTSVILLE, AL	AIRPORT NAME:	HSV ASR	RADAR-1, AMDT 10A 1 FEBRUARY 2018	AMDT: 10
	HUNTSVILLE INTL-CARL T JONES FIELD			DATED: 02/10/11

U.S. 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.	
ASR	INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICES		
NOTES: @ CAT E 800-2 1/4, NA WHEN CONTROL TOWER CLOSED. WHEN CONTROL TOWER CLOSED, PROCEDURE NA. CAT E CIRCLING NA EAST OF RWY 36R/18L. FOR INOPERATIVE ALS, INCREASE S-ASR18L CAT E VISIBILITY TO 2 SM, S-36L AND 36R CAT D VISIBILITY TO 1 1/4 SM, CAT E VISIBILITY TO 1 1/2 SM. FOR INOPERATIVE ALS, INCREASE S-ASR 18R CAT E VISIBILITY TO 1 1/2 SM. RWY 18L/18R: INTERMEDIATE FIX 10 NM FROM THRSHLD, MINIMUM ALTITUDE 3000; MINIMUM ALTITUDE 7 MILE FIX 3000. RWY 18L: FAF 5.00 MILES FROM THRESHOLD, MINIMUM ALTITUDE 2500; MINIMUM ALTITUDE 3 MILE FIX 1760; FINAL APPROACH COURSE 184.95, RECOMMENDED ALTITUDES 4 MILES 2140, 3 MILES 1760, 2 MILES 1400. RWY 18R: FAF 5.00 MILES FROM THRESHOLD MINIMUM ALTITUDE 2500; MINIMUM ALTITUDE 3 MILE FIX, 1780; FINAL APPROACH COURSE 184.95, RECOMMENDED ALTITUDES 4 MILES 2140, 3 MILES 1780, 2 MILES 1420. RWY 36L/36R: INTERMEDIATE FIX 10 NM FROM THRESHOLD, MINIMUM ALTITUDE 2500. RWY 36L: FAF 5.00 MILES FROM THRESHOLD, MINIMUM ALTITUDE 2500; FINAL APPROACH COURSE 004.95, RECOMMENDED ALTITUDES 4 MILES 2140, 3 MILES 1760, 2 MILES 1400. RWY 36R: FAF 5.00 MILES FROM THRESHOLD MINIMUM ALTITUDE 2500; MINIMUM ALTITUDE 3 MILE FIX, 1760; FINAL APPROACH COURSE 004.95, RECOMMENDED ALTITUDES 4 MILES 2120, 3 MILES 1760, 2 MILES 1380, 1 MILE 1020. MISSED APPROACH: RWY 18L: CLIMBING RIGHT TURN TO 3000 DIRECT DCU VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000. HOLD W, RT, 094.00 INBOUND. RWY 18R: CLIMBING RIGHT TURN TO 3000 DIRECT DCU VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000. HOLD W, RT, 094.00 INBOUND. RWY 36L: CLIMB TO 1100, THEN CLIMBING LEFT TURN TO 3000 DIRECT DCU VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000. HOLD W, RT, 094.00 INBOUND. RWY 36R: CLIMBING LEFT TURN TO 3000 DIRECT DCU VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000. HOLD W, RT, 094.00 INBOUND.			
CITY AND STATE HUNTSVILLE, AL	ELEVATION: TDZE: 629 AIRPORT NAME: HUNTSVILLE INTL-CARL T JONES FIELD	FACILITY IDENTIFIER: HSV ASR	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE: RADAR-1, AMDT 10A 1 FEBRUARY 2018
SUP:			AMDT: 10 DATED: 02/10/11

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: RW18L CLIMB TO 3000 DIRECT CANPA AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT, 004.95 INBOUND. CHART FAS OBST: 767 OL TK 343931N/0864623W CHART 1219 TREE 344354N/0864337W. CHART: ASR CHART R2104A, R2104B, R2104C. CHART WHEELER NATIONAL WILDLIFE REFUGE. DISTANCE TO THLD FROM 200 HAT: 0.46 NM. CHART VDP AT 1.12 NM TO RW18L* *LNAV ONLY. WAAS CHANNEL # 72906 REFERENCE PATH ID: W18A LTP HAE: 157.5 M																						
ELKED (IAF)				BOLAY (TF) (FB) (RNP 1.00)				102.07 / 7.21				3000																								
HATAS (IAF)				BOLAY (TF) (FB) (RNP 1.00)				272.86 / 6.74				3000																								
BOLAY (IF)				COTIN (TF) (FB) (RNP 1.00)				184.95 / 3.50				2500																								
COTIN				DEBAY (TF) (FB) (RNP 1.00)				184.95 / 2.50				2100																								
DEBAY (FAF)				FEKSO/1.70 NM TO RW18L (TF) (FB) (RNP 0.30)				184.95 / 2.75																												
(SEE FORM 8260-10)																																				
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT BOLAY 3. FAC: 184.95 FAF: DEBAY DIST FAF TO MAP: 4.45 THLD: 4.45 4. MIN. ALT: BOLAY 3000, COTIN 2500, DEBAY 2100, FEKSO/1.70 NM TO RW18L 1200* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2100 GS ALT AT: DEBAY 2100 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 54.7 34:1 IS CLEAR 8. MSA FROM: RW18L 3700																	MAG VAR: 4W EPOCH YEAR: 2020																			
MINIMUMS																																				
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT																	ALTERNATE: N A			STANDARD @																
CATEGORY =====>			A			B			C			D			E																					
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA																		
LPV DA**	809	2400	200	809	2400	200	809	2400	200	809	2400	200	809	2400	200	809	2400	200																		
LNAV/VNAV DA	1017	5000	408	1017	5000	408	1017	5000	408	1017	5000	408	1017	5000	408	1017	5000	408																		
LNAV MDA	1040	2400	431	1040	2400	431	1040	4000	431	1040	5000	431	1040	5000	431	1040	5000	431																		
CIRCLING																	1160	1	531	1160	1	531	1160	1 1/2	531	1240	2	611	1240	2 1/4	611					
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 47C (116F). CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: CIRCLING NA FOR CAT E EAST OF RWY 18L- 36R. CHART NOTE: BARO-VNAV AND VDP NA WHEN USING DECATUR ALTIMETER SETTING. (CONTINUED ON PAGE 2)																	@ NA WHEN LOCAL WEATHER NOT AVAILABLE. @ CAT E 800-2 1/4										QUALITY 16 CHECKED									
CITY AND STATE				ELEVATION: 629 TDZE: 609				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:						SUP:																		
HUNTSVILLE, AL				AIRPORT NAME:				HUNTSVILLE INTL-CARL T JONES FIELD				RNAV (GPS) RWY 18L, AMDT 1B						AMDT: 1A																		
												1 FEBRUARY 2018						DATED 03/08/2012																		

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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
FEKSO	RW18L (MAP) (TF) (FO) (RNP 0.30)	184.95 / 1.70	
RW18L (MAP)	809 MSL (CA)	184.95	
809 MSL	CANPA (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT. (VGSI ANGLE 3.00/TCH 72).

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

CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV CAT E VISIBILITY TO RVR 4000, LNAV/VNAV CAT E VISIBILITY TO 1 1/2 AND LNAV CAT E VISIBILITY TO 1 1/2 SM.

CHART PLANVIEW NOTE: CAUTION NUMEROUS MIGRATORY BIRD FLOCKS IN AREA. WILDLIFE REFUGE AREA SOUTH OF AIRPORT.

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.

CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.

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

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE DECATUR ALTIMETER SETTING AND INCREASE LPV DA TO 834, LNAV/VNAV DA TO 1042 AND ALL MDAS 40 FEET.

CHART NOTE: FOR INOPERATIVE ALS WHEN USING DECATUR ALTIMETER SETTING, INCREASE LPV CAT E VISIBILITY TO RVR 4000, LNAV/VNAV CAT E VISIBILITY TO 1 1/2 SM AND LNAV CAT E VISIBILITY TO 1 3/4 SM.

QUALITY
16
CHECKED

CITY AND STATE
HUNTSVILLE, AL

ELEVATION: 629 TDZE: 609
AIRPORT NAME:
HUNTSVILLE INTL-CARL T JONES FIELD

FACILITY
IDENTIFIER:
RNAV

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

SUP:
AMDT: 1A
DATED: 03/08/2012

**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**DATA FIELD****DATA**

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KHSV
RUNWAY	RW18L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W18A
LTP/FTP LATITUDE	343911.1600N
LTP/FTP LONGITUDE	0864555.6700W
LTP/FTP ELLIPSOIDAL HEIGHT	+01575
FPAP LATITUDE	343732.2000N
FPAP LONGITUDE	0864557.6600W
THRESHOLD CROSSING HEIGHT (TCH)	00054.7
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

E69875F9

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+01857
FPAP ORTHOMETRIC HEIGHT	+01857

QUALITY
16
CHECKED

CITY AND STATE

HUNTSVILLE, AL

ELEVATION: 629

TDZE: 609

AIRPORT NAME:

HUNTSVILLE INTL-CARL T JONES FIELD

 FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 18L, AMDT 1B

1 FEBRUARY 2018

SUP:

AMDT: 1A

DATED: 03/08/2012

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: RW18R CLIMB TO 3000 DIRECT BOSAC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT, 004.95 INBOUND. CHART FAS OBST: 870 TANK 344227N/0864759W CHART 849 TREE 344317N/0864742W. CHART: ASR CHART R2104A, 2104B, 2104C. CHART WHEELER NATIONAL WILDLIFE REFUGE. DISTANCE TO THLD FROM 200 HAT: 0.47 NM. CHART VDP AT 1.39 NM TO RW18R* *LNAV ONLY. WAAS CHANNEL # 58206 REFERENCE PATH ID: W18B LTP HAE: 163.4 M									
HATAS (IAF)			JASEX (TF) (FB) (RNP 1.00)			273.27 / 7.56			3000												
ELKED (IAF)			JASEX (TF) (FB) (RNP 1.00)			102.79 / 6.39			3000												
JASEX (IF)			GETEC (TF) (FB) (RNP 1.00)			184.95 / 3.60			2500												
GETEC			FEKER (TF) (FB) (RNP 1.00)			184.95 / 2.50			2100												
FEKER (FAF)			RW18R (MAP) (TF) (FO) (RNP 0.30)			184.95 / 4.41															
(SEE FORM 8260-10)																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT JASEX 3. FAC: <u>184.95</u> FAF: <u>FEKER</u> DIST FAF TO MAP: <u>4.41</u> THLD: <u>4.41</u> 4. MIN. ALT: <u>JASEX 3000, GETEC 2500, FEKER 2100</u> 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: <u>2100</u> GS ALT AT: <u>FEKER 2100</u> OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>50.0</u> 34:1 IS CLEAR 8. MSA FROM: <u>RW18R 3700</u>																					
												MAG VAR: <u>4W</u>						EPOCH YEAR: <u>2020</u>			
MINIMUMS																					
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: <u>NA</u>		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	829	1800	200	829	1800	200	829	1800	200	829	1800	200	829	1800	200						
LNAV/VNAV DA	1017	4000	388	1017	4000	388	1017	4000	388	1017	4000	388	1017	4000	388						
LNAV MDA	1120	2400	491	1120	2400	491	1120	4000	491	1120	5000	491	1120	6000	491						
CIRCLING	1160	1	531	1160	1	531	1160	1 1/2	531	1240	2	611	1240	2 1/4	611						
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 47C (116F). CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: CIRCLING NA FOR CAT E EAST OF RWY 18L- 36R. CHART NOTE: BARO-VNAV AND VDP NA WHEN USING DECATUR ALTIMETER SETTING. (CONTINUED ON PAGE 2)																					
CITY AND STATE				ELEVATION: 629 TDZE: 629				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
HUNTSVILLE, AL				AIRPORT NAME:				RNAV (GPS) RWY 18R, AMDT 1B				1 FEBRUARY 2018				AMDT: 1A					
				HUNTSVILLE INTL-CARL T JONES FIELD												DATED 04/07/2011					



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
RW18R (MAP)	829 MSL (CA)	184.95	
829 MSL	BOSAC (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV CAT E VISIBILITY TO RVR 4000, LNAV/VNAV CAT E VISIBILITY TO RVR 6000 AND LNAV CAT E VISIBILITY TO 1 3/4 SM, WHEN USING DECATUR ALTIMETER SETTING, INCREASE LNAV/VNAV CAT E VISIBILITY TO 1 1/2 SM AND LNAV CAT E VISIBILITY TO 2 SM.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE DECATUR ALTIMETER SETTING AND INCREASE LPV DA TO 854, LNAV/VNAV DA TO 1042 AND ALL MDA 40 FEET; INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 5000 AND LNAV CAT C VISIBILITY TO RVR 5000, CAT D VISIBILITY TO RVR 6000 AND CAT E VISIBILITY TO 1 1/2 SM.

QUALITY
16
CHECKED

CITY AND STATE
HUNTSVILLE, AL

ELEVATION: 629 TDZE: 629
AIRPORT NAME:
HUNTSVILLE INTL-CARL T JONES FIELD

FACILITY
IDENTIFIER:
RNAV

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

SUP:
AMDT: 1A
DATED: 04/07/2011

**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	KHSV
RUNWAY	RW18R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W18B
LTP/FTP LATITUDE	343910.0270N
LTP/FTP LONGITUDE	0864655.5620W
LTP/FTP ELLIPSOIDAL HEIGHT	+01634
FPAP LATITUDE	343705.4170N
FPAP LONGITUDE	0864658.0470W
THRESHOLD CROSSING HEIGHT (TCH)	00050.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	108.50
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

4C33C15B

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+01915
FPAP ORTHOMETRIC HEIGHT	+01915

QUALITY
16
CHECKED

CITY AND STATE

HUNTSVILLE, AL

ELEVATION: 629

TDZE: 629

AIRPORT NAME:

HUNTSVILLE INTL-CARL T JONES FIELD

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 18R, AMDT 1B

1 FEBRUARY 2018

SUP:

AMDT:

1A

DATED:

04/07/2011

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: RW36L CLIMB TO 3000 DIRECT JASEX AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, RT, 184.95 INBOUND. CHART FAS OBST: 709 TREE 343533N/0864717W CHART 929 TREE 343023N/0864830W. CHART: ASR CHART R2104A, R2104B, R2104C. CHART WHEELER NATL WILDLIFE REFUGE. DISTANCE TO THLD FROM 200 HAT: 0.47 NM. CHART VDP AT 0.93 NM TO RW36L* *LNAV ONLY. WAAS CHANNEL # 82606 REFERENCE PATH ID: W36A LTP HAE: 158.2 M									
FEWER (IAF)			BOSAC (TF) (FB) (RNP 1.00)			334.81 / 6.67			2800												
MASHA (IAF)			BOSAC (TF) (FB) (RNP 1.00)			099.22 / 7.13			2800												
BOSAC (IF)			CECAB (TF) (FB) (RNP 1.00)			004.95 / 6.00			2800												
CECAB (FAF)			HEREG/1.70 NM TO RW36L (TF) (FB) (RNP 0.30)			004.95 / 4.88															
HEREG/1.70 NM TO RW36L			RW36L (MAP) (TF) (FO) (RNP 0.30)			004.95 / 1.70															
(SEE FORM 8260-10)																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT BOSAC 3. FAC: 004.95 FAF: CECAB DIST FAF TO MAP: 6.58 THLD: 6.58 4. MIN. ALT: BOSAC 2800, CECAB 2800, HEREG/1.70 NM TO RW36L 1200* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2800 GS ALT AT: CECAB 2800 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 53.4 34:1 IS CLEAR 8. MSA FROM: RW36L 3700																		MAG VAR: 4W		EPOCH YEAR: 2020	
MINIMUMS																					
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD @									
CATEGORY =====>		A			B			C			D			E							
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA						
LPV DA	815	1800	200	815	1800	200	815	1800	200	815	1800	200	815	1800	200						
LNAV/VNAV DA	969	4000	354	969	4000	354	969	4000	354	969	4000	354	969	4000	354						
LNAV MDA	960	2400	345	960	2400	345	960	2400	345	960	5000	345	960	5000	345						
CIRCLING	1160	1	531	1160	1	531	1160	1 1/2	531	1240	2	611	1240	2 1/4	611						
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 48C (118F). CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: BARO-VNAV AND VDP NA WHEN USING DECATUR ALTIMETER SETTING. CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV CAT D AND E VISIBILITY TO RVR 6000, LPV CAT E (CONTINUED ON PAGE 2)																					
CITY AND STATE				ELEVATION: 629 TDZE: 615				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
HUNTSVILLE, AL				AIRPORT NAME:				RNAV (GPS) RWY 36L, AMDT 1B				1 FEBRUARY 2018				AMDT: 1A					
				HUNTSVILLE INTL-CARL T JONES FIELD												DATED 03/08/2012					

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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW36L (MAP)	815 MSL (CA)	004.95	
815 MSL	JASEX (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

VISIBILITY TO RVR 4000 AND LNAV/NAV CAT E VISIBILITY TO RVR 6000.

CHART NOTE: CIRCLING NA FOR CAT E EAST OF RWY 18L-36R.

CHART PLANVIEW NOTE: CAUTION: NUMEROUS MIGRATORY BIRD FLOCKS IN AREA. WILDLIFE REFUGE AREA SOUTH OF AIRPORT.

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.

CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.

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

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED USE DECATUR ALTIMETER SETTING AND INCREASE LPV DA TO 840, LNAV/VNAV DA TO 994 AND ALL MDAS 40 FEET.

QUALITY
16
CHECKED

CITY AND STATE
HUNTSVILLE, AL

ELEVATION: 629 TDZE: 615
AIRPORT NAME:
HUNTSVILLE INTL-CARL T JONES FIELD

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 36L, AMDT 1B
1 FEBRUARY 2018

SUP:
AMDT: 1A
DATED: 03/08/2012

**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**DATA FIELD****DATA**

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KHSV
RUNWAY	RW36L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W36A
LTP/FTP LATITUDE	343705.4170N
LTP/FTP LONGITUDE	0864658.0470W
LTP/FTP ELLIPSOIDAL HEIGHT	+01582
FPAP LATITUDE	343910.0270N
FPAP LONGITUDE	0864655.5620W
THRESHOLD CROSSING HEIGHT (TCH)	00053.4
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	108.50
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

9D37C1FB

ADDITIONAL PATH POINT RECORD INFORMATION

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

QUALITY
16
CHECKED

CITY AND STATE

HUNTSVILLE, AL

ELEVATION: 629

TDZE: 615

AIRPORT NAME:

HUNTSVILLE INTL-CARL T JONES FIELD

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 36L, AMDT 1B

1 FEBRUARY 2018

SUP:

AMDT: 1A

DATED: 03/08/2012

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: RW36R CLIMB TO 3000 DIRECT BOLAY AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, LT, 184.95 INBOUND. CHART FAS OBST: 678 TREE 343721N/0864544W CHART 869 TREE 343201N/0864637W. CHART: ASR CHART R2104A, R2104B, R2104C. CHART WHEELER NATIONAL WILDLIFE REFUGE. DISTANCE TO THLD FROM 225 HAT: 0.55 NM. WAAS CHANNEL # 86606 REFERENCE PATH ID: W36B CHART TDZE 595. LTP HAE: 151.3 M						
FEWER (IAF)		ENIKY (TF) (FB) (RNP 1.00)		343.44 / 6.88			3000								
MASHA (IAF)		ENIKY (TF) (FB) (RNP 1.00)		094.20 / 7.94			3000								
ENIKY (IF)		UJOTY (TF) (FB) (RNP 1.00)		004.95 / 6.10			2700								
UJOTY (FAF)		GEPDE/1.70 NM TO RW36R (TF) (FB) (RNP 0.30)		004.95 / 4.64											
GEPDE/1.70 NM TO RW36R		RW36R (MAP) (TF) (FO) (RNP 0.30)		004.95 / 1.70											
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT ENIKY 3. FAC: 004.95 FAF: UJOTY DIST FAF TO MAP: 6.34 THLD: 6.34 4. MIN. ALT: ENIKY 2700, ENIKY 3000, UJOTY 2700, GEPDE/1.70 NM TO RW36R 1180* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2700 GS ALT AT: UJOTY 2700 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 55.3 34:1 IS CLEAR 8. MSA FROM: RW36R 3700															
										MAG VAR: 4W EPOCH YEAR: 2020					
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		STANDARD @						
CATEGORY ==>	A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
LPV DA	820	2400	225	820	2400	225	820	2400	225	820	2400	225	820	2400	225
LNAV/VNAV DA	933	4000	338	933	4000	338	933	4000	338	933	4000	338	933	4000	338
LNAV MDA	1040	2400	445	1040	2400	445	1040	4000	445	1040	5000	445	1040	5000	445
CIRCLING	1160	1	531	1160	1	531	1160	1 1/2	531	1240	2	611	1240	2 1/4	611
NOTES: CHART NOTE: BARO-VNAV NA WHEN USING DECATUR ALTIMETER SETTING. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 48C (118F). CHART NOTE: CIRCLING NA FOR CAT E EAST OF RWY 18L-36R. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 629 TDZE: 595		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
HUNTSVILLE, AL		AIRPORT NAME: HUNTSVILLE INTL-CARL T JONES FIELD				RNAV (GPS) RWY 36R, AMDT 1B 1 FEBRUARY 2018				AMDT: 1A					
										DATED 03/08/2012					



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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW36R (MAP)	820 MSL (CA)	004.95	
820 MSL	BOLAY (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

*RNAV ONLY

CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT. (VGSI Angle {angle}/TCH {feet}).

CHART PLANVIEW NOTE: CAUTION: NUMEROUS MIGRATORY BIRD FLOCKS IN AREA. WILDLIFE REFUGE AREA SOUTH OF AIRPORT.

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.

CHART NOTE: RNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.

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

CHART NOTE: FOR INOPERATIVE ALS WHEN USING DECATUR ALTIMETER SETTING, INCREASE LPV CAT E VISIBILITY TO RVR 4000, RNAV/VNAV CAT E VISIBILITY TO RVR 6000, AND RNAV CAT E VISIBILITY TO 1 3/4 SM.

CHART NOTE: FOR INOPERATIVE ALS INCREASE LPV CAT E VISIBILITY TO RVR 4000, RNAVVNAV CAT E VISIBILITY TO RVR 6000 AND RNAV CAT E VISIBILITY TO 1 1/2 SM.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE DECATUR ALTIMETER SETTING AND INCREASE LPV DA TO 845, RNAV/VNAV DA TO 958 AND MDAS 40 FEET, AND RNAV CAT E VISIBILITY TO RVR 6000.

QUALITY
16
CHECKED

CITY AND STATE

HUNTSVILLE, AL

ELEVATION: 629

TDZE: 595

AIRPORT NAME:

HUNTSVILLE INTL-CARL T JONES FIELD

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 36R, AMDT 1B

1 FEBRUARY 2018

SUP:

AMDT: 1A

DATED: 03/08/2012

**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**DATA FIELD****DATA**

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KHSV
RUNWAY	RW36R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W36B
LTP/FTP LATITUDE	343734.2300N
LTP/FTP LONGITUDE	0864557.6235W
LTP/FTP ELLIPSOIDAL HEIGHT	+01513
FPAP LATITUDE	343911.1600N
FPAP LONGITUDE	0864555.6700W
THRESHOLD CROSSING HEIGHT (TCH)	00055.3
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

233AC2E0

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+01795
FPAP ORTHOMETRIC HEIGHT	+01795

QUALITY
16
CHECKED

CITY AND STATE

HUNTSVILLE, AL

ELEVATION: 629

TDZE: 595

AIRPORT NAME:

HUNTSVILLE INTL-CARL T JONES FIELD

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 36R, AMDT 1B

1 FEBRUARY 2018

SUP:

AMDT:

1A

DATED:

03/08/2012

**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>
HUNTSVILLE, AL	HUNTSVILLE INTL- CARL T JONES FIELD	1 FEBRUARY 2018	4A

TAKEOFF MINIMUMS:

RWY 18L, 18R, 36L, 36R: STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

RWY 36R: CLIMB HEADING 004.95 TO 1600 BEFORE TURNING RIGHT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 18L, TREES BEGINNING 1088 FT FROM DER, 710 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/660 FT MSL.

NOTE: RWY 36L, TREES BEGINNING 1911 FT FROM DER, 904 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/719 FT MSL. TREES BEGINNING 3693 FT FROM DER, 1392 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/749 FT MSL.

NOTE: RWY 36R, FENCE 383 FT FROM DER, 602 FT RIGHT OF CENTERLINE, UP TO 11 FT AGL/620 FT MSL. TREES BEGINNING 1312 FT FROM DER, 799 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/729 FT MSL.

CONTROLLING OBSTACLES:

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 36R: 1381 FT MSL AAO 344403.00N/0864345.00W.

REMARKS:

ABBREVIATED AMENDMENT. UNABLE TO LOCATE THE PROCEDURE FILES FOR AMENDMENT 4; UTILIZED PUBLISHED IFR TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES DATA.

FLIGHT INSPECTED BY:

Digitally signed by

CARL OESTERLE

BEV L BORDY

Aug 08, 2017

OFFICE SYMBOL:

FICO

DATE:

8/4/17

DEVELOPED BY:

Digitally signed by

SYLVAN DRAKES

SYLVAN DRAKES

May 11, 2017

OFFICE SYMBOL:

AJV-5433

DATE:

05/10/2017

APPROVED BY:

Digitally signed by

PATRICK MULQUEEN

BEV L BORDY

Aug 08, 2017

OFFICE SYMBOL:

AJV-5430

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE.

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA



OTHER:

ZME, HSV APP CON, HSV ATCT, AMGR.

CHANGES - REASONS:

1. UPDATED MAGNETIC VARIATION (MAG VAR) FOR HUNTSVILLE INTL-CARL T. JONES FIELD (KHSV) FROM 1W (EPOCH YEAR 1990) "TO" 4W (EPOCH YEAR 2020) - MAGNETIC VARIATION UPDATE REQUIRED.

2. UPDATED TEXTUAL DEPARTURE PROCEDURE DESCRIPTION FROM RWY 36R: CLIMB HEADING 001.95 TO 1300 TO CLIMB HEADING 004.95 TO 1600 - NEW CONTROLLING OBSTACLE DATA.

3. CHANGED THE APOSTROPHE REPRESENTING FEET "TO" FT.

4. UPDATED OBSTACLE MANDATING ODP ROUTE DEVELOPMENT FROM 2673 FT MSL TOWER 344236.31N/0863205.29W TO 1381 FT MSL AAO 344403.00N/0864345.00W - NEW OR UPDATED SURVEY DATA.

QUALITY
3
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: RW04							
LLYLE (IF/IAF)		GACBU (TF)		038.38 / 11.50 (I-ASN)				2700		CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 3700 DIRECT JOTAV AND HOLD.							
GACBU		OX SAP		038.38 / 2.89 (I-ASN)				2300									
										ADDITIONAL FLIGHT DATA: HOLD W, RT, 111.00 INBOUND. CHART FAS OBST: 799 TREE 333129N/0860453W CHART R-2101, R2102 A, B, C CHART CIRCLING ICON CHART VDP AT 1.52 NM TO RW04* *LOC ONLY							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																	
2. HOLD SW LLYLE, LT, 038.38 INBOUND, 2800 FT. IN LIEU OF PT (IAF)																	
3. FAC: 038.38 FAF: OXSAP DIST FAF TO MAP: 5.48 THLD: 5.48																	
4. MIN. ALT: LLYLE 2800, GACBU 2700, OXSAP 2300, CIBOG 1280*																	
5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 875																	
6. MIN GS INCPT: 2300 GS ALT AT: OXSAP 2300 OM: - MM: - IM: -																	
7. GS ANGLE: 3.00 TCH: 44.7 34:1 IS CLEAR																	
8. MSA FROM:										MAG VAR: 3W				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 04	711	3/4	200	711	3/4	200	711	3/4	200	711	3/4	200					
S-LOC 04	1060	1	549	1060	1	549	1060	1 5/8	549	1060	1 5/8	549					
CIRCLING	1140	1	611	1180	1	651	1380	2 1/2	851	1500	3	971					
NOTES: CHART NOTE: RNAV 1-GPS REQUIRED. CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART NOTE: VDP NA WITH ANNISTON ALTIMETER SETTING. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ANNISTON ALTIMETER SETTING AND INCREASE DA (CONTINUED ON PAGE 2)																	
CITY AND STATE TALLADEGA, AL		ELEVATION: 529 TDZE: 511 AIRPORT NAME: TALLADEGA MUNI				FACILITY IDENTIFIER: I-ASN		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS Y OR LOC Y RWY 4, ORIG 1 FEBRUARY 2018					SUP: AMDT: NONE DATED				



**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.):

TO 746 FEET AND ALL MDA 40 FEET; INCREASE S-LOC 4 CATS C AND D VISIBILITY 1/8 SM AND CIRCLING CAT C VISIBILITY 1/4 SM.

TAA

	<u>FROM</u>	<u>TO</u>	<u>ALT</u>
1.	308/30 CW 128/30 (NOPT)	308/8 CW 128/8	3400
2.	308/8 CW 128/8	LLYLE (IF/IAF) (FB)	2800
3.	128/30 CW 308/30	128/20 CW 308/20	4000
4.	128/20 CW 308/20	LLYLE (IF/IAF) (FO)	3500

QUALITY
18
CHECKED

CITY AND STATE

TALLADEGA, AL

ELEVATION: 529

TDZE: 511

AIRPORT NAME:

TALLADEGA MUNI

FACILITY
IDENTIFIER:

I-ASN

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS Y OR LOC Y RWY 4, ORIG

1 FEBRUARY 2018

SUP:

AMDT: NONE

DATED:

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-ASN 1.13 DME							
ADZIN/I-ASN 29.43 DME (IAF)		LLYLE/I-ASN 21.00 DME (NOPT)		038.38 / 8.43 (I-ASN)		2800		CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 3700 ON HEADING 242 AND ON VUZ VORTAC R-095 TO JOTAV INT/VUZ 29.65 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 3700 ON HEADING 293 ON GAD (SEE FORM 8260-10) ADDITIONAL FLIGHT DATA: HOLD W, LT, 095.31 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SW JOTAV INT/GAD VOR/DME 24.88 DME, RT, 024.72 INBOUND. CHART FAS OBST: 799 TREE 333129N/0860453W CHART R-2101, R-2102 A, B, C. CHART VDP AT 2.65 DME* DISTANCE VDP TO THLD 1.52 NM. *LOC ONLY. CHART CIRCLING ICON. CHART IN PLANVIEW ADJACENT TO ADZIN: VUZ 39.3 DME. CHART PLANVIEW NOTE: DME REQUIRED.							
LLYLE/I-ASN 21.00 DME (IF/IAF)		GACBU/I-ASN 9.50 DME		038.38 / 11.50 (I-ASN)		2700									
GACBU/I-ASN 9.50 DME		OX SAP/I-ASN 6.61 DME		038.38 / 2.89 (I-ASN)		2300									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SW LLYLE, LT, 038.38 INBOUND, 2800 FT. IN LIEU OF PT (IAF) 3. FAC: 038.38 FAF: OX SAP/I-ASN 6.61 DME DIST FAF TO MAP: 5.48 THLD: 5.48 4. MIN. ALT: LLYLE 2800, GACBU 2700, OX SAP 2300, CIBOG/I-ASN 3.43 DME 1280* 5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 875 6. MIN GS INCPT: 2300 GS ALT AT: OX SAP 2300 OM: - MM: - IM: - 7. GS ANGLE: 3.00 TCH: 44.7 34:1 IS CLEAR 8. MSA FROM: AN LOM 360-180 4000, 180-360 3200										MAG VAR: 3W		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 04	711	3/4	200	711	3/4	200	711	3/4	200	711	3/4	200			
S-LOC 04	1060	1	549	1060	1	549	1060	1 5/8	549	1060	1 5/8	549			
CIRCLING	1140	1	611	1180	1	651	1380	2 1/2	851	1500	3	971			
NOTES: CHART NOTE: DME REQUIRED. CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART NOTE: VDP NA WITH ANNISTON ALTIMETER SETTING. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ANNISTON ALTIMETER SETTING AND INCREASE (CONTINUED ON PAGE 2)															
CITY AND STATE TALLADEGA, AL		ELEVATION: 529 TDZE: 511 AIRPORT NAME: TALLADEGA MUNI		FACILITY IDENTIFIER: I-ASN		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS Z OR LOC Z RWY 4, AMDT 1 1 FEBRUARY 2018				SUP: ILS OR LOC/DME RWY 4 AMDT: ORIG-B DATED 06/26/2014					

QUALITY
4
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.

MISSED APPROACH INSTRUCTIONS, (CONT.):
VOR/DME R-205 TO JOTAV INT/GAD VOR/DME 24.88 DME AND HOLD.

NOTES, (CONT.):
DA TO 744 FEET AND ALL MDA 40 FEET; INCREASE S-LOC 4 CAT C/D 1/8 MILE AND CIRCLING CAT C 1/4 MILE.

CITY AND STATE
TALLADEGA, AL

ELEVATION: 529 TDZE: 511
AIRPORT NAME:
TALLADEGA MUNI

FACILITY
IDENTIFIER:
I-ASN

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
ILS Z OR LOC Z RWY 4, AMDT 1
1 FEBRUARY 2018

SUP: ILS OR LOC/DME
RWY 4
AMDT: ORIG-B
DATED: 06/26/2014

QUALITY
4

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: RW04 CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 3700 DIRECT JOTAV AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 111.00 INBOUND. CHART FAS OBST: 799 TREE 333129N/0860454W CHART R-2101, R-2102 A, B, C. DISTANCE TO THLD FROM 200 HAT: 0.49 NM. CHART VDP AT 1.52 NM TO RW04* *LNAV ONLY. WAAS CHANNEL # 61008 REFERENCE PATH ID: W04A CHART CIRCLING ICON. LTP HAE: 126.4 M										
LLYLE (IF/IAF)		GACBU (TF) (FB) (RNP 1.00)			038.26 / 11.50			2700												
GACBU		OXSAP (TF) (FB) (RNP 1.00)			038.33 / 2.89			2300												
OXSAP (FAF)		CIBOG/2.30 NM TO RW04 (TF) (FB) (RNP 0.30)			038.35 / 3.18															
CIBOG/2.30 NM TO RW04		RW04 (MAP) (TF) (FO) (RNP 0.30)			038.35 / 2.30															
RW04 (MAP)		1300 MSL (CA)						1300												
1300 MSL		JOTAV (DF) (FO) (RNP 1.00)						3700												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SW LLYLE, LT, 038.38 INBOUND, 2800 FT. IN LIEU OF PT (IAF) 3. FAC: 038.35 FAF: OXSAP DIST FAF TO MAP: 5.48 THLD: 5.48 4. MIN. ALT: LLYLE 2800, GACBU 2700, OXSAP 2300, CIBOG/2.30 NM TO RW04 1280* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2300 GS ALT AT: OXSAP 2300 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 44.7 34:1 IS CLEAR 8. MSA FROM: _____											MAG VAR: 3W					EPOCH YEAR: 2010				
MINIMUMS																				
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		STANDARD @											
CATEGORY ==>	A			B			C			D			E							
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA					
LPV DA	711	3/4	200	711	3/4	200	711	3/4	200	711	3/4	200								
LNAV/VNAV DA	797	7/8	286	797	7/8	286	797	7/8	286	797	7/8	286								
LNAV MDA	1060	1	549	1060	1	549	1060	1 5/8	549	1060	1 5/8	549								
CIRCLING	1140	1	611	1180	1	651	1380	2 1/2	851	1500	3	971								
NOTES: CHART NOTE: BARO-VNAV NA WHEN USING ANNISTON ALTIMETER SETTING. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT. VGSI ANGLE {ANGLE}/TCH{FEET}. (CONTINUED ON PAGE 2)																				
CITY AND STATE				ELEVATION: 529 TDZE: 511				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:				
TALLADEGA, AL				AIRPORT NAME:								RNAV (GPS) RWY 4, AMDT 2				AMDT: 1C				
				TALLADEGA MUNI								1 FEBRUARY 2018				DATED 06/26/2014				

QUALITY
 18
 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.):

*RNAV ONLY

CHART NOTE: VDP NA WITH ANNISTON ALTIMETER SETTING.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ANNISTON ALTIMETER SETTING AND INCREASE LPV DA TO 744, RNAV/VNAV DA TO 830, AND ALL MDA 40 FEET; INCREASE RNAV/VNAV ALL CATS VISIBILITY AND RNAV CATS C/D VISIBILITY 1/8 MILE, AND CIRCLING CAT C VISIBILITY 1/4 MILE.

TAA

	FROM	TO	ALT
1.	308/30 CW 128/30 (NOPT)	308/8 CW 128/8	3400
2.	308/8 CW 128/8	LLYLE (IF/IAF)	2800
3.	128/30 CW 308/30	128/20 CW 308/20	4000
4.	128/20 CW 308/20	LLYLE (IF/IAF) (FO)	3500

QUALITY
18
CHECKED

CITY AND STATE TALLADEGA, AL	ELEVATION: 529 TDZE: 511 AIRPORT NAME: TALLADEGA MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 4, AMDT 2 1 FEBRUARY 2018	SUP:
				AMDT: 1C
				DATED: 06/26/2014

**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	KASN
RUNWAY	RW04
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W04A
LTP/FTP LATITUDE	333345.8925N
LTP/FTP LONGITUDE	0860324.9605W
LTP/FTP ELLIPSOIDAL HEIGHT	+01264
FPAP LATITUDE	333458.6700N
FPAP LONGITUDE	0860223.2100W
THRESHOLD CROSSING HEIGHT (TCH)	00044.7
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0912
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

C05B072B

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+01552
FPAP ORTHOMETRIC HEIGHT	+01552

QUALITY
18
CHECKED

CITY AND STATE

TALLADEGA, AL

ELEVATION: 529

TDZE: 511

AIRPORT NAME:

TALLADEGA MUNI

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 4, AMDT 2

1 FEBRUARY 2018

SUP:

AMDT:

1C

DATED:

06/26/2014

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33						Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.										
TERMINAL ROUTES											MISSED APPROACH					
FROM		TO			COURSE AND DISTANCE			ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW22 CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 3700 DIRECT JOTAV AND HOLD, CONTINUE CLIMB IN HOLD TO 3700. ADDITIONAL FLIGHT DATA: HOLD W, RT, 111.00 INBOUND. CHART FAS OBST: 818 TREE 333636N/0860039W CHART R-2101, R-2102 A, B, C. DISTANCE TO THLD FROM 292 HAT: 0.77 NM. CHART VDP AT 1.58 NM TO RW22* *LNAV ONLY. WAAS CHANNEL # 93720 REFERENCE PATH ID: W22A CHART CIRCLING ICON. LTP HAE: 132.2 M						
ZEKNE (IF/IAF)		KOZJE (TF) (FB) (RNP 1.00)			218.45 / 8.76			2400								
KOZJE (FAF)		SOVPE/3.00 NM TO RW22 (TF) (FB) (RNP 0.30)			218.42 / 2.74											
SOVPE/3.00 NM TO RW04		RW22 (MAP) (TF) (FO) (RNP 0.30)			218.42 / 3.00											
RW22 (MAP)		1200 MSL (CA)			218.42			1200								
1200 MSL		JOTAV (DF) (FO) (RNP 1.00)						3700								
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NE ZEKNE, RT, 218.45 INBOUND, 3100 FT. IN LIEU OF PT (IAF) 3. FAC: 218.42 FAF: KOZJE DIST FAF TO MAP: 5.74 THLD: 5.74 4. MIN. ALT: ZEKNE 3100, KOZJE 2400, SOVPE/3.00 NM TO RW22 1520* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2400 GS ALT AT: KOZJE 2400 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 45.0 34:1 IS NOT CLEAR 8. MSA FROM: _____											MAG VAR: 3W		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	
LPV DA	821	1	292	821	1	292	821	1	292	821	1	292				
LNAV/VNAV DA	1040	1 3/4	511	1040	1 3/4	511	1040	1 3/4	511	1040	1 3/4	511				
LNAV MDA	1080	1	551	1080	1	551	1080	1 5/8	551	1080	1 5/8	551				
CIRCLING	1140	1	611	1180	1	651	1380	2 1/2	851	1500	3	971				
NOTES: CHART NOTE: BARO-VNAV NA WHEN USING ANNISTON ALTIMETER SETTING. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: VDP NA WITH ANNISTON ALTIMETER SETTING. (CONTINUED ON PAGE 2)																
CITY AND STATE TALLADEGA, AL				ELEVATION: 529 TDZE: 529 AIRPORT NAME: TALLADEGA MUNI				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 22, AMDT 2 1 FEBRUARY 2018				SUP: AMDT: 1B DATED 06/26/2014		



**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.

NOTES, (CONT.):

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ANNISTON ALTIMETER SETTING AND INCREASE

LPV DA TO 856, LNAV/VNAV DA TO 1075, AND ALL MDA 40 FEET; INCREASE LPV AND LNAV/VNAV ALL CATS

VISIBILITY AND LNAV CATS C/D VISIBILITY 1/8 MILE. INCREASE CIRCLING CAT C VISIBILITY 1/4 SM.

CHART NOTE: RWY 22 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

TAA

	<u>FROM</u>	<u>TO</u>	<u>ALT</u>
1.	128/30 CW 308/30 (NOPT)	128/5 CW 308/5	3700
2.	128/5 CW 308/5	ZEKNE (IF/IAF) (FB)	3100
3.	308/30 CW 128/30	308/5 CW 128/5	4000
4.	308/5 CW 128/5	ZEKNE (IF/IAF) (FO)	3100

QUALITY
18
CHECKED

CITY AND STATE

TALLADEGA, AL

ELEVATION: 529

TDZE: 529

AIRPORT NAME:

TALLADEGA MUNI

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 22, AMDT 2

1 FEBRUARY 2018

SUP:

AMDT: 1B

DATED: 06/26/2014

**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	KASN
RUNWAY	RW22
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W22A
LTP/FTP LATITUDE	333434.5400N
LTP/FTP LONGITUDE	0860243.6900W
LTP/FTP ELLIPSOIDAL HEIGHT	+01322
FPAP LATITUDE	333321.7600N
FPAP LONGITUDE	0860345.4200W
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	0912
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

5AF2C641

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+01610
FPAP ORTHOMETRIC HEIGHT	+01610

QUALITY
18
CHECKED

CITY AND STATE

TALLADEGA, AL

ELEVATION: 529

TDZE: 529

AIRPORT NAME:

TALLADEGA MUNI

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 22, AMDT 2

1 FEBRUARY 2018

SUP:

AMDT:

1B

DATED:

06/26/2014

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											
										ADDITIONAL FLIGHT DATA:									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																			
2. _____																			
3. FAC _____ FAF _____ DIST FAF TO MAP _____ THLD _____																			
4. MIN. ALT _____																			
8. MSA FROM: _____										MAG VAR: _____ EPOCH YEAR: _____									
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 1 FEBRUARY 2018																			
CITY AND STATE TALLADEGA, AL		ELEVATION: 529 AIRPORT NAME: TALLADEGA MUNI		TDZE:		FACILITY IDENTIFIER: TDG		PROCEDURE NO./AMD'T NO./EFFECTIVE DATE: VOR-A, AMDT 7, 07/31/2008				SUP VOR OR GPS-A AMD'T 6A DATE 06/08/2006							

**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.
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
EL DORADO, AR	SOUTH ARKANSAS RGNL AT GOODWIN FIELD	1 FEBRUARY 2018	2A

TAKEOFF MINIMUMS:

RWY 4, 13, 22, 31: STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

CONTROLLING OBSTACLES:

NOTE: RWY 4: TREE 1335 FT FROM DER, 620 FT RIGHT OF CENTERLINE, 298 FT MSL. TREE 1337 FT FROM DER, 692 FT RIGHT OF CENTERLINE, 304 FT MSL. TREE 2811 FT FROM DER, 657 FT RIGHT OF CENTERLINE, 331 FT MSL. TREE 3601 FT FROM DER, 685 FT LEFT OF CENTERLINE, 353 FT MSL.

NOTE: RWY 13: TREE 83 FT FROM DER, 373 FT LEFT OF CENTERLINE, 271 FT MSL. TREE 353 FT FROM DER, 239 FT LEFT OF CENTERLINE, 282 FT MSL. TREES BEGINNING 408 FT FROM DER, 261 FT RIGHT OF CENTERLINE, UP TO 296 FT MSL. TREE 409 FT FROM DER, 273 FT LEFT OF CENTERLINE, 295 FT MSL. TREES BEGINNING 657 FT FROM DER, 315 FT LEFT OF CENTERLINE, UP TO 309 FT MSL. TREE 763 FT FROM DER, 346 FT RIGHT OF CENTERLINE, 304 FT MSL. TREE 1302 FT FROM DER, 421 FT RIGHT OF CENTERLINE, 318 FT MSL. TREE 2311 FT FROM DER, 280 FT RIGHT OF CENTERLINE, 345 FT MSL.

NOTE: RWY 31: TREE 77 FT FROM DER, 248 FT RIGHT OF CENTERLINE, 325 FT MSL. TREES BEGINNING 216 FT FROM DER, 261 FT LEFT OF CENTERLINE, UP TO 326 FT MSL. TREE 578 FT FROM DER, 294 FT RIGHT OF CENTERLINE, 326 FT MSL. TREES BEGINNING 977 FT FROM DER, 25 FT LEFT OF CENTERLINE, UP TO 353 FT MSL. TREE 1029 FT FROM DER, 352 FT RIGHT OF CENTERLINE, 335 FT MSL. TREE 2330 FT FROM DER, 304 FT RIGHT OF CENTERLINE, 399 FT MSL. TREE 2581 FT FROM DER, 572 FT RIGHT OF CENTERLINE, 406 FT MSL.

REMARKS:

FLIGHT INSPECTED BY:

ZACK SMYER

Digitally signed by

BEV L BORDY

Oct 13, 2017

OFFICE SYMBOL:

FICO

DATE:

10/11/17

DEVELOPED BY:

BEV BORDY (CHRISTINE BAYSE)

Digitally signed by

BEV L BORDY

Oct 13, 2017

OFFICE SYMBOL:

AJV-5433

DATE:

08/30/2017

APPROVED BY:

PATRICK MULQUEEN

Digitally signed by

BEV L BORDY

Oct 13, 2017

OFFICE SYMBOL:

AJV-5430

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A **ALPA** **AOPA** **APA** **HAI** **NBAA**



OTHER:

ZFW, AMGR

CHANGES - REASONS:

1.CHANGED ALL LOW CLOSE IN OBSTACLE NOTES AND REMOVED RWY 17/35.- RUNWAY CLOSED.



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 5400, THEN CLIMBING LEFT TURN TO 9000 DIRECT BACHS AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 132.84 INBOUND. FAS OBST: 4859 AAO 412500N/1203018W. DISTANCE TO THLD FROM 452 HAT: 1.29 NM. WAAS CHANNEL # 70620 REFERENCE PATH ID: W31A CHART CIRCLING ICON. LTP HAE: 1312.3 M					
BACHS		NONIY (TF) (FB) (RNP 2.00)		075.32 / 19.98				9300							
NONIY (IAF)		LUTIY (TF) (FB) (RNP 1.00)		042.35 / 7.00				7200							
LUTIY (IF)		TEFAN (TF) (FB) (RNP 1.00)		312.44 / 5.59				6300							
TEFAN (FAF)		RW31 (MAP) (TF) (FO) (RNP 0.30)		312.39 / 5.91											
RW31 (MAP)		5400 MSL (CA)		312.39				5400							
5400 MSL		BACHS (DF) (FO) (RNP 1.00)						9000							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT LUTIY 3. FAC: <u>312.39</u> FAF: <u>TEFAN</u> DIST FAF TO MAP: <u>5.91</u> THLD: <u>5.91</u> 4. MIN. ALT: <u>LUTIY 7200, TEFAN 6300</u> 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: <u>6300</u> GS ALT AT: <u>TEFAN 6300</u> OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>40.0</u> 34:1 IS NOT CLEAR 8. MSA FROM: <u>RW31 11200</u>										MAG VAR: 16E 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	4830	1 3/8	452	4830	1 3/8	452		NA			NA				
LNAV/VNAV DA	4880	1 3/8	502	4880	1 3/8	502		NA			NA				
LNAV MDA	5120	1	742	5120	1 1/4	742		NA			NA				
CIRCLING	5120	1	742	5200	1 1/4	822		NA			NA				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -23C (-9F) OR ABOVE 54C (130F). @ CAT B 900-2 CHART NOTE: RWY 31 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: PROCEDURE NA AT NIGHT. (CONTINUED ON PAGE 2)															
CITY AND STATE ALTURAS, CA		ELEVATION: 4378 TDZE: 4378 AIRPORT NAME: ALTURAS MUNI				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 31, AMDT 2 1 FEBRUARY 2018				SUP: AMDT: 1A DATED 08/21/2014			



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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

NOTES, (CONT.):

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

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BACHS VIA V452 NORTHWEST BOUND



CITY AND STATE ALTURAS, CA	ELEVATION: 4378 AIRPORT NAME: ALTURAS MUNI	TDZE: 4378 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 31, AMDT 2 1 FEBRUARY 2018	SUP:
				AMDT: 1A
				DATED: 08/21/2014

**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	KAAT
RUNWAY	RW31
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	412839.9645N
LTP/FTP LONGITUDE	1203341.6740W
LTP/FTP ELLIPSOIDAL HEIGHT	+13123
FPAP LATITUDE	412955.8440N
FPAP LONGITUDE	1203443.8995W
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	1464
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

A13674AB

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+13344
FPAP ORTHOMETRIC HEIGHT	+13344

QUALITY
18
CHECKED

CITY AND STATE

ALTURAS, CA

ELEVATION: 4378

TDZE: 4378

AIRPORT NAME:

ALTURAS MUNI

 FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 31, AMDT 2

1 FEBRUARY 2018

SUP:

AMDT: 1A

DATED: 08/21/2014

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		LNAV: HOSUM (DO NOT EXCEED 250 KIAS UNTIL NEBSE) CLIMB TO 13000 DIRECT KUPLE AND ON TRACK 159.79 TO ROCOS AND ON TRACK 114.80 TO PULIE AND ON TRACK 051.40 TO WEBAT AND ON TRACK 341.46 TO TEVOC AND ON TRACK 321.99 TO NEBSE AND ON TRACK 264.38 TO BIH VOR/DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 326.00 INBOUND. FAS OBST: 5619 AAO 372910N/1183155W. CHART: 8959 TERRAIN 371217N/1180625W CHART BISHOP MOA. CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.									
RBRTS (IAF)		CORUB (TF) (FB) (RNP 1.00)		115.27 / 6.49				12700											
CORUB		HEGIT (TF) (FB) (RNP 1.00)		115.32 / 12.00				9700											
NIKOL (IAF)		FAVEK (TF) (FB) (RNP 1.00)		156.94 / 18.01				12700											
FAVEK		HEGIT (TF) (FB) (RNP 1.00)		156.97 / 6.70				9700											
HEGIT (IF)		MUBOE (TF) (FB) (RNP 1.00)		115.47 / 3.46				8700											
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT HEGIT 3. FAC: <u>120.40</u> FAF: <u>JAAKE</u> DIST FAF TO MAP: <u>8.54</u> THLD: <u>9.54</u> 4. MIN. ALT: HEGIT 9700, MUBOE 8700, JAAKE 7900 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: HOSUM 15500																MAG VAR: 15E		EPOCH YEAR: 1985	
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				
LNAV MDA	6600	1 1/4	2477	6600	1 1/2	2477	6600	3	2477		NA								
CIRCLING	6600	1 1/4	2476	6600	1 1/2	2476	6600	3	2476		NA								
NOTES: CHART NOTE: DME/DME RNP-0.3 NA. @ CAT A, B 2500-2, CAT C 2500-3 CHART PLANVIEW NOTE AT NEBSE: MAX 250 KIAS CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT NIKOL ON V244-T298 WESTBOUND AND ON V381 NORTHWEST BOUND.																			
CITY AND STATE		ELEVATION: 4124 TDZE: 4123		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:		QUALITY 10 CHECKED							
BISHOP, CA		AIRPORT NAME: BISHOP				RNAV (GPS) Y RWY 12, ORIG-D 1 FEBRUARY 2018				AMDT: ORIG-C									
										DATED 10/12/2017									

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
MUBOE	JAAKE (TF) (FB) (RNP 1.00)	115.51 / 2.60	7900
JAAKE (FAF)	HOSUM (MAP) (TF) (FO) (RNP 0.30)	120.40 / 8.54	
HOSUM (MAP)	4524 MSL (CA)	120.40	
4524 MSL	KUPLE (DF) (FB) (RNP 1.00)		4524
KUPLE	ROCOS (TF) (FB) (RNP 1.00)	159.79 / 7.34	
ROCOS	PULIE (TF) (FB) (RNP 1.00)	114.80 / 9.00	
PULIE	WEBAT (TF) (FB) (RNP 1.00)	051.40 / 6.80	
WEBAT	TEVOC (TF) (FB) (RNP 1.00)	341.46 / 5.00	
TEVOC	NEBSE (TF) (FB) (RNP 1.00)	321.99 / 5.20	
NEBSE	BIH VOR/DME (TF) (FO) (RNP 1.00)	264.38 / 13.10	13000

CITY AND STATE

BISHOP, CA

ELEVATION: 4124
 AIRPORT NAME:

TDZE: 4123

BISHOP

 FACILITY
 IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) Y RWY 12, ORIG-D

1 FEBRUARY 2018

SUP:

AMDT:

DATED:

 QUALITY
 10
 CHECKED

ORIG-C

10/12/2017

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33									Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.					
TERMINAL ROUTES												MISSED APPROACH									
FROM			TO			COURSE AND DISTANCE			ALTITUDE			LNAV: HOSUM									
RBRTS (IAF)			CORUB (TF) (FB) (RNP 1.00)			115.27 / 6.49			12700			(DO NOT EXCEED 250 KIAS UNTIL NEBSE) CLIMB TO 13000 DIRECT KUPLE AND ON TRACK 159.79 TO ROCOS AND ON TRACK 114.80 TO PULIE AND ON TRACK 051.40 TO WEBAT AND ON TRACK 341.46 TO TEVOC AND ON TRACK 321.99 TO NEBSE AND ON TRACK 264.38 TO BIH VOR/DME AND HOLD.									
CORUB			HEGIT (TF) (FB) (RNP 1.00)			115.32 / 12.00			9700												
NIKOL (IAF)			FAVEK (TF) (FB) (RNP 1.00)			156.94 / 18.01			12700												
FAVEK			HEGIT (TF) (FB) (RNP 1.00)			156.97 / 6.70			9700												
HEGIT (IF)			MUBOE (TF) (FB) (RNP 1.00)			115.47 / 3.46			8700			ADDITIONAL FLIGHT DATA: HOLD SE, RT, 326.00 INBOUND. CHART FAS OBST: 4323 TREE 372429N/1182537W. CHART: 8959 TERRAIN 371217N/1180625W CHART BISHOP MOA. CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.									
(SEE FORM 8260-10)																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																					
2. PROFILE STARTS AT HEGIT																					
3. FAC: 120.40 FAF: JAAKE DIST FAF TO MAP: 8.54 THLD: 9.54																					
4. MIN. ALT: HEGIT 9700, MUBOE 8700, JAAKE 7900, CIMOS/4.00 NM TO HOSUM 6200, FOLMA/1.70 NM TO HOSUM 5200																					
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: HOSUM 15500												MAG VAR: 15E			EPOCH YEAR: 1985						
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						
LNAV MDA	4580	1 1/4	457	4580	1 1/4	457	4580	1 1/4	457		NA										
CIRCLING	6420	1 1/4	2296	6420	1 1/2	2296	6420	3	2296		NA										
NOTES: CHART NOTE: DME/DME RNP-0.3 NA. @ CAT A, B 2300-2, CAT C 2300-3 CHART NOTE: MISSED APPROACH REQUIRES MINIMUM CLIMB OF 325 FEET PER NM TO 11000; IF UNABLE, SEE RNAV (GPS) Y RWY 12. CHART PLANVIEW NOTE AT NEBSE: MAX 250 KIAS. (CONTINUED ON PAGE 2)																					
CITY AND STATE BISHOP, CA			ELEVATION: 4124 TDZE: 4123 AIRPORT NAME: BISHOP			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Z RWY 12, ORIG-E 1 FEBRUARY 2018						SUP: AMDT: ORIG-D DATED 10/12/2017						

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
MUBOE	JAAKE (TF) (FB) (RNP 1.00)	115.51 / 2.60	7900
JAAKE (FAF)	CIMOS/4.00 NM TO HOSUM (TF) (FB) (RNP 0.30)	120.40 / 4.54	
CIMOS/4.00 NM TO HOSUM	FOLMA/1.70 NM TO HOSUM (TF) (FB) (RNP 0.30)	120.40 / 2.30	
FOLMA/1.70 NM TO HOSUM	HOSUM (MAP) (TF) (FO) (RNP 0.30)	120.40 / 1.70	
HOSUM (MAP)	4524 MSL (CA)	120.40	
4524 MSL	KUPLE (DF) (FB)		
KUPLE	ROCOS (TF) (FB) (RNP 1.00)	159.79 / 7.34	
ROCOS	PULIE (TF) (FB) (RNP 1.00)	114.80 / 9.00	
PULIE	WEBAT (TF) (FB) (RNP 1.00)	051.40 / 6.80	
WEBAT	TEVOC (TF) (FB) (RNP 1.00)	341.46 / 5.00	
TEVOC	NEBSE (TF) (FB) (RNP 1.00)	321.99 / 5.20	
NEBSE	BIH VOR/DME (TF) (FO) (RNP 1.00)	264.38 / 13.10	13000

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT NIKOL ON V244-T298 WESTBOUND AND ON V381 NORTHWEST BOUND.

QUALITY
10
CHECKED

CITY AND STATE

BISHOP, CA

ELEVATION: 4124
AIRPORT NAME:

BISHOP

TDZE: 4123

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) Z RWY 12, ORIG-E

1 FEBRUARY 2018

SUP:

AMDT:

DATED:

ORIG-D

10/12/2017

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: RW30 CLIMB TO 1000, THEN CLIMBING RIGHT TURN 4000 DIRECT HAIRE AND HOLD, CONTINUE CLIMB-IN-HOLD 4000. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 120.32 INBOUND. CHART R-2531. CHART VDP AT 1.13 NM TO RW30* *LNAV ONLY. WAAS CHANNEL # 65902 REFERENCE PATH ID: W30A CHART WAAS SYMBOL CHART FAS OBST: 249 T-L TWR 374804N/1213538W DISTANCE TO THLD FROM 270 HAT: 0.66 NM LTP HAE: -17.4 M							
SMONE (IAF)		DASVE (TF) (FB) (RNP 1.00)		313.93 / 4.70				4900									
DASVE		MOVDD (TF) (FB) (RNP 1.00)		316.97 / 3.94				3000									
MOVDD (IF)		BABPI (TF) (FB) (RNP 1.00)		311.08 / 6.15				2600									
BABPI (FAF)		CUDUG/2.90 NM TO RW30 (TF) (FB) (RNP 0.30)		300.34 / 3.88													
CUDUG/2.90 NM TO RW30		RW30 (MAP) (TF) (FO) (RNP 0.30)		300.34 / 2.90													
(SEE FORM 8260-10)																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT MOVDD 3. FAC: 300.34 FAF: BABPI DIST FAF TO MAP: 6.78 THLD: 6.78 4. MIN. ALT: MOVDD 3000, BABPI 2600, CUDUG/2.90 NM TO RW30 1140* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2600 GS ALT AT: BABPI 2600 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.50 TCH: 30.8 34:1 IS CLEAR 8. MSA FROM: RW30 5600																	
										MAG VAR: 15E				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	325	7/8	270	325	7/8	270	325	7/8	270	325	7/8	270					
LNAV/VNAV DA	404	1 1/8	349	404	1 1/8	349	404	1 1/8	349	404	1 1/8	349					
LNAV MDA	500	1	445	500	1	445	500	1 3/8	445	500	1 3/8	445					
CIRCLING	600	1	521	600	1	521	680	1 3/4	601	820	2 1/2	741					
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 15C (59F). @ CAT D 800-2 1/2 CHART NOTE: CIRCLING NA SW OF RWY 12-30. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW: PROCEDURE NA FOR ARRIVALS AT SMONE ON T261-263 SOUTHEAST BOUND. CHART PLANVIEW: PROCEDURE NA FOR ARRIVALS AT SMONE ON T333 SOUTH BOUND.																	
CITY AND STATE		ELEVATION: 79 TDZE: 55			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:				
BYRON, CA		AIRPORT NAME: BYRON						RNAV (GPS) RWY 30, AMDT 1A 1 FEBRUARY 2018					AMDT: 1				
													DATED 08/17/2017				



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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW30 (MAP)	1000 MSL (CA)	300.34	1000
1000 MSL	HAIRE (DF) (FO) (RNP 1.00)		4000

CITY AND STATE
BYRON, CA

ELEVATION: 79 TDZE: 55
AIRPORT NAME:
BYRON

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 30, AMDT 1A
1 FEBRUARY 2018

SUP:
AMDT: 1
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	C83
RUNWAY	RW30
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W30A
LTP/FTP LATITUDE	374936.8925N
LTP/FTP LONGITUDE	1213714.0485W
LTP/FTP ELLIPSOIDAL HEIGHT	-00174
FPAP LATITUDE	375040.2600N
FPAP LONGITUDE	1213833.2080W
THRESHOLD CROSSING HEIGHT (TCH)	00030.8
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.50
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1384
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 C18D0230

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+00148
FPAP ORTHOMETRIC HEIGHT	+00148

CITY AND STATE

BYRON, CA

ELEVATION: 79

TDZE: 55

AIRPORT NAME:

BYRON

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 30, AMDT 1A

1 FEBRUARY 2018

SUP:

AMDT:

DATED:

1

 QUALITY
10
CHECKED

08/17/2017

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.					
TERMINAL ROUTES												MISSED APPROACH									
FROM			TO			COURSE AND DISTANCE			ALTITUDE			LPV: DA LNAV/VNAV: DA LNAV: RW31R CLIMB TO 3000 DIRECT ZOTWY AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 131.32 INBOUND. CHART FAS OBST: 241 TREE 394712N/1215051W CHART FAS OBST: 347 TOWER 394557N/1214925W DISTANCE TO THLD FROM 250 HAT: 0.69 NM. CHART VDP AT 1.06 NM TO RW31R* *LNAV ONLY. WAAS CHANNEL # 77912 REFERENCE PATH ID: W31A LTP HAE: 35.8 M									
GRIDD			KLEMM (TF) (FB) (RNP 2.00)			028.94 / 14.58			3000												
KLEMM (IAF)			UNJED (TF) (FB) (RNP 1.00)			311.58 / 9.10			3000												
UNJED (IF)			DIANS (TF) (FB) (RNP 1.00)			311.51 / 6.01			2000												
DIANS (FAF)			STARW/2.50 NM TO RW31R (TF) (FB) (RNP 0.30)			311.47 / 2.89															
STARW/2.50 NM TO RW31R			RW31R (MAP) (TF) (FO) (RNP 0.30)			311.47 / 2.50															
(SEE FORM 8260-10)																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT UNJED 3. FAC: 311.47 FAF: DIANS DIST FAF TO MAP: 5.39 THLD: 5.39 4. MIN. ALT: UNJED 3000, DIANS 2000, STARW/2.50 NM TO RW31R 1060* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2000 GS ALT AT: DIANS 2000 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 50.0 34:1 IS CLEAR 8. MSA FROM: RW31R 8300																		MAG VAR: 16E		EPOCH YEAR: 1990	
MINIMUMS																					
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD									
CATEGORY =====>		A			B			C			D			E							
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA						
LPV DA	476	1	250	476	1	250	476	1	250	476	1	250									
LNAV/VNAV DA	733	1 3/4	507	733	1 3/4	507	733	1 3/4	507	733	1 3/4	507									
LNAV MDA	600	1	374	600	1	374	600	1	374	600	1 1/4	374									
CIRCLING	640	1	400	700	1	460	700	1 1/2	460	800	2	560									
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 48C (118F). CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: CIRCLING NA E OF RWY 13L/31R. CHART PROFILE NOTE: VGSI AND RNAV GLIDE PATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT GRIDD ON V23 AND T261 SOUTHEAST BOUND.																					
CITY AND STATE				ELEVATION: 240 TDZE: 226				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
CHICO, CA				AIRPORT NAME: CHICO MUNI								RNAV (GPS) RWY 31R, ORIG-C 1 FEBRUARY 2018				AMDT: ORIG-B					
																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
RW31R (MAP)	476 MSL (CA)	311.47	
476 MSL	ZOTWY (DF) (FO) (RNP 1.00)		3000

CITY AND STATE
CHICO, CA

ELEVATION: 240 TDZE: 226
AIRPORT NAME:
CHICO MUNI

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 31R, ORIG-C
1 FEBRUARY 2018

SUP: **QUALITY 10 CHECKED**
AMDT: ORIG-B
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	KCIC
RUNWAY	RW31R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	394716.1780N
LTP/FTP LONGITUDE	1215104.4520W
LTP/FTP ELLIPSOIDAL HEIGHT	+00358
FPAP LATITUDE	394831.3200N
FPAP LONGITUDE	1215206.6900W
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	0704
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 D7E8086A

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+00632
FPAP ORTHOMETRIC HEIGHT	+00632

CITY AND STATE
CHICO, CA

ELEVATION: 240 TDZE: 226
AIRPORT NAME:
CHICO MUNI

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 31R, ORIG-C
1 FEBRUARY 2018

SUP: **QUALITY
10
CHECKED**
AMDT: **ORIG-B**
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 CLIMB TO 6000 DIRECT LAYKI AND ON TRACK 267.08 TO SEEMS AND HOLD, CONTINUE CLIMB-IN-HOLD TO 6000. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 144.00 INBOUND. CHART 2204 TREE 372524N/1222115W. WAAS CHANNEL # 50302 REFERENCE PATH ID: W30A DISTANCE TO THLD FROM 309 HAT: 0.77 NM. LTP HAE: -22.1 M											
SAPID (IAF)		JUMDA (TF) (FB) (RNP 1.00)		313.23 / 9.91				4200													
JUMDA (IF)		WOHLI (TF) (FB) (RNP 1.00)		302.06 / 6.10				3300													
WOHLI (FAF)		RW30 (MAP) (TF) (FO) (RNP 0.30)		302.00 / 8.50																	
RW30 (MAP)		363 MSL (CA)		302.00																	
363 MSL		LAYKI (DF) (FB) (RNP 1.00)																			
LAYKI		SEEMS (TF) (FO) (RNP 1.00)		267.08 / 3.83				6000													
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT JUMDA 3. FAC: <u>302.00</u> FAF: _____ DIST FAF TO MAP: _____ THLD: _____ 4. MIN. ALT: JUMDA 4200, WOHLI 3300 5. DIST TO THLD FROM OM: <u>8.50</u> MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: <u>3300</u> GS ALT AT: WOHLI 3300 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.50</u> TCH: <u>40.0</u> 34:1 IS CLEAR 8. MSA FROM: RW30 4500																		MAG VAR: 15E		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	363	1	309	363	1	309		NA			NA										
SAN FRANCISCO ALTIMETER SETTING MINIMUMS																					
LPV DA	391	1	337	391	1	337		NA			NA										
NOTES: CHART NOTE: DME/DME RNP-0.3 NA. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SAN FRANCISCO INTL ALTIMETER SETTING. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SAPID ON V25-V87 SOUTHEAST BOUND AND T259 SOUTHWEST BOUND.																					
CITY AND STATE		ELEVATION: 66 TDZE: 54		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:											
HALF MOON BAY, CA		AIRPORT NAME: HALF MOON BAY				RNAV (GPS) Z RWY 30, ORIG-C 1 FEBRUARY 2018				AMDT: ORIG-B											
										DATED 06/27/2013											

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	KHAF
RUNWAY	RW30
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Z
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W30A
LTP/FTP LATITUDE	373035.8200N
LTP/FTP LONGITUDE	1222949.4610W
LTP/FTP ELLIPSOIDAL HEIGHT	-00221
FPAP LATITUDE	373140.9800N
FPAP LONGITUDE	1223105.9500W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.50
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1456
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

<u>CRC REMAINDER</u>	3F563F96

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+00109
FPAP ORTHOMETRIC HEIGHT	+00109

QUALITY
10
CHECKED

CITY AND STATE HALF MOON BAY, CA	ELEVATION: 66 TDZE: 54 AIRPORT NAME: HALF MOON BAY	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Z RWY 30, ORIG-C 1 FEBRUARY 2018	SUP:
				AMDT: ORIG-B
				DATED: 06/27/2013

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33		Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.												
TERMINAL ROUTES										MISSED APPROACH						
FROM		TO		COURSE AND DISTANCE			ALTITUDE		MUFEL							
ENI VORTAC		SAVPE (TF) (FB) (RNP 2.00)		040.87 / 14.76			6700		CLIMBING LEFT TURN TO 8000 DIRECT WEPLO AND HOLD.							
WEPLO		SAVPE (TF) (FB) (RNP 2.00)		111.31 / 4.97			6700									
SAVPE (IAF)		TAPNE (TF) (FB) (RNP 1.00)		073.62 / 5.00			5800									
TAPNE (IF)		NADIE (TF) (FB) (RNP 1.00)		163.69 / 6.00			4700									
NADIE (FAF)		MUFEL (MAP) (TF) (FO) (RNP 0.30)		163.69 / 5.69					ADDITIONAL FLIGHT DATA: HOLD S, RT, 021.20 INBOUND. FAS OBST: 1958 AAO 390513N/1225431W. CHART: 2269 RD 385819N/1225508W FAC CROSSES MIDPOINT OF RWY 10-28.							
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 16E EPOCH YEAR: 1990						
2. PROFILE STARTS AT TAPNE																
3. FAC: 163.69 FAF: NADIE DIST FAF TO MAP: 5.69 THLD: _____																
4. MIN. ALT: TAPNE 5800, NADIE 4700																
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: MUFEL 8300																
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	2580	1 1/4	1200	2580	1 1/2	1200		NA			NA					
NOTES: CHART NOTE: CIRCLING NA S OF RWY 10-28. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: PROCEDURE NA AT NIGHT. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON ENI VORTAC AIRWAY RADIALS 320 CW 073. (CONTINUED ON PAGE 2)																
CITY AND STATE LAKEPORT, CA		ELEVATION: 1380 TDZE: AIRPORT NAME: LAMPSON FIELD		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS)-A, ORIG-C 1 FEBRUARY 2018					SUP: AMDT: ORIG-B DATED 01/07/2016					



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
MUFEL (MAP)	1780 MSL (CA)	163.69	
1780 MSL	WEPLO (DF) (FO) (RNP 1.00)		8000

NOTES, (CONT.):

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE UKIAH ALTIMETER SETTING AND INCREASE ALL MDA 560 FEET.

QUALITY
24
CHECKED

CITY AND STATE
LAKEPORT, CA

ELEVATION: 1380 TDZE:
AIRPORT NAME:
LAMPSON FIELD

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS)-A, ORIG-C
1 FEBRUARY 2018

SUP:
AMDT: ORIG-B
DATED: 01/07/2016

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: RW14 CLIMB TO 6500 DIRECT GEZJO AND ON TRACK 153.55 TO PXN VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO 6500. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 334.88 INBOUND. CHART FAS OBST: 249 TREE 370355N/1205259W. CHART 206 TREE 370440N/1205238W. DISTANCE TO THLD FROM 334 HAT: 0.96 NM. WAAS CHANNEL # 53715 REFERENCE PATH ID: W14A LTP HAE: 3.6 M						
PATYY (IAF)		FOSDI (TF) (FB) (RNP 1.00)			155.92 / 11.98			3300								
FOSDI (IF)		EGSOW (TF) (FB) (RNP 1.00)			137.16 / 10.00			1800								
EGSOW (FAF)		COGIS/1.60 NM TO RW14 (TF) (RNP 0.30)			137.22 / 3.51											
COGIS/1.60 NM TO RW14		RW14 (MAP) (TF) (FO) (RNP 0.30)			137.22 / 1.60											
RW14 (MAP)		455 MSL (CA)			137.22											
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT FOSDI 3. FAC: <u>137.22</u> FAF: <u>EGSOW</u> DIST FAF TO MAP: <u>5.11</u> THLD: <u>5.11</u> 4. MIN. ALT: <u>FOSDI 3300, EGSOW 1800, COGIS/1.60 NM TO RW14 660*</u> 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: <u>1800</u> GS ALT AT: <u>EGSOW 1800</u> OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>30.0</u> 34:1 IS NOT CLEAR 8. MSA FROM: <u>RW14 5200</u>																
										MAG VAR: 16E			EPOCH YEAR: 1980			
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	455	1 1/4	334	455	1 1/4	334	455	1 1/4	334	455	1 1/4	334				
LNAV/VNAV DA	519	1 1/2	398	519	1 1/2	398	519	1 1/2	398	519	1 1/2	398				
LNAV MDA	520	1	399	520	1	399	520	1 1/8	399	520	1 1/4	399				
CIRCLING	640	1	519	640	1	519	640	1 1/2	519	680	2	559				
NOTES: CHART NOTE: BARO-VNAV NA WHEN USING MERCED RGNL/MACREADY FIELD ALTIMETER SETTING. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 48C (118F). CHART NOTE: DME/DME RNP-0.3 NA. *LNAV ONLY (CONTINUED ON PAGE 2)																
CITY AND STATE LOS BANOS, CA				ELEVATION: 121 TDZE: 121 AIRPORT NAME: LOS BANOS MUNI			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 14, ORIG-B 1 FEBRUARY 2018				SUP: AMDT: ORIG-A DATED 06/22/2017			

QUALITY
 5
 CHECKED

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

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
455 MSL	GEZJO (DF) (FB) (RNP 1.00)		
GEZJO	PXN VORTAC (TF) (FO) (RNP 1.00)	153.55 / 19.49	6500

NOTES, (CONT.):

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MERCED RGNL/MACREADY FIELD ALTIMETER SETTING AND INCREASE ALL DA/MDA 60 FEET, AND ALL VISIBILITY 1/4 SM.

CHART NOTE: RWY 14 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.

CHART NOTE: CIRCLING RWY 32 NA AT NIGHT.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PATYY ON V111 NORTHBOUND, AND V113 NORTHWEST BOUND.

QUALITY
5
CHECKED

CITY AND STATE

LOS BANOS, CA

ELEVATION: 121

TDZE: 121

AIRPORT NAME:

LOS BANOS MUNI

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 14, ORIG-B

1 FEBRUARY 2018

SUP:

AMDT: ORIG-A

DATED: 06/22/2017

**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	KLSN
RUNWAY	RW14
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W14A
LTP/FTP LATITUDE	370406.7505N
LTP/FTP LONGITUDE	1205222.0680W
LTP/FTP ELLIPSOIDAL HEIGHT	+00036
FPAP LATITUDE	370247.0800N
FPAP LONGITUDE	1205131.9800W
THRESHOLD CROSSING HEIGHT (TCH)	00030.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1592
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 9B3A65E8

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+00368
FPAP ORTHOMETRIC HEIGHT	+00368

QUALITY
5
CHECKED

CITY AND STATE LOS BANOS, CA	ELEVATION: 121 TDZE: 121 AIRPORT NAME: LOS BANOS MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 14, ORIG-B 1 FEBRUARY 2018	SUP:
				AMDT: ORIG-A
				DATED: 06/22/2017

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		LNAV: RW31 CLIMBING RIGHT TURN TO 4500 DIRECT JEBNO AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 078.60 INBOUND. CHART FAS OBST: 1134 TREE 353803N/1203521W. CHART VDP AT 1.64 NM TO RW31. CHART CIRCLING ICON. 1340 AAO 353717N/1203445W 1608 AAO 353542N/1203203W DOJOS TO RW 31: 3.29/38.										
PRB VORTAC	APURE (TF) (FO) (RNP 2.00)			127.98 / 15.63			5100												
MQO VORTAC (IAF)	APURE (NOPT) (TF) (FB) (RNP 1.00)			036.36 / 20.36			5100												
AVE VOR/DME (IAF)	APURE (NOPT) (TF) (FB) (RNP 1.00)			229.01 / 24.89			5100												
APURE (IF/IAF)	EBUDE (TF) (FB) (RNP 1.00)			308.75 / 4.69			3700												
EBUDE	BAPTE (TF) (FB) (RNP 1.00)			308.71 / 4.69			2700												
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SE APURE, RT, 308.75 INBOUND, 5100 FT. IN LIEU OF PT (IAF) 3. FAC: 308.68 FAF: BAPTE DIST FAF TO MAP: 5.73 THLD: 5.73 4. MIN. ALT: APURE 5100, EBUDE 3700, BAPTE 2700, DOJOS/3.10 NM TO RW31 1960 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: RW31 5600																MAG VAR: 15E		EPOCH YEAR: 1980	
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		STANDARD @										
CATEGORY >>>>>	A			B			C			D			E						
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA				
LNAV MDA	1400	1	561	1400	1	561	1400	1 5/8	561	1400	1 5/8	561							
CIRCLING	1400	1	561	1400	1	561	1440	1 3/4	601	1720	3	881							
NOTES: CHART NOTE: RWY 31 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: VDP NA WITH SAN LUIS ALTIMETER SETTING. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON AVE VOR/DME AIRWAY RADIALS 257 CW 313. (CONTINUED ON PAGE 2)																			
CITY AND STATE PASO ROBLES, CA			ELEVATION: 839 TDZE: 839 AIRPORT NAME: PASO ROBLES MUNI			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 31, ORIG-B 1 FEBRUARY 2018				SUP:							
												AMDT: ORIG-A							
												DATED 07/21/2016							

QUALITY
 25
 CHECKED

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
BAPTE (FAF)	DOJOS/3.10 NM TO RW31 (TF) (FB) (RNP 0.30)	308.68 / 2.63	
DOJOS/3.10 NM TO RW31	RW31 (MAP) (TF) (FO) (RNP 0.30)	308.68 / 3.10	
RW31 (MAP)	1239 MSL (CA)	308.68	
1239 MSL	JEBNO (DF) (FO) (RNP 1.00)		4500

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MQO VORTAC ON V113 SOUTHBOUND AND T329 SOUTHBOUND.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SAN LUIS ALTIMETER SETTING AND INCREASE ALL MDA 160 FT, AND CIRCLING CAT C VISIBILITY 1/4 SM.

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

QUALITY
25
CHECKED

CITY AND STATE PASO ROBLES, CA	ELEVATION: 839 TDZE: 839 AIRPORT NAME: PASO ROBLES MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 31, ORIG-B 1 FEBRUARY 2018	SUP:
				AMDT: ORIG-A
				DATED: 07/21/2016

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: 5.39 NM AFTER NAPPS INT/I-SBA 6.59 DME OR AT I-SBA 1.21 DME CLIMB TO 700 THEN CLIMBING RIGHT TURN TO 4000 ON RZS VORTAC R-185 TO GOLET INT/RZS 14.43 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000. ALTERNATE MA (DO NOT CHART): CLIMB TO 700 THEN CLIMBING RIGHT TURN TO 4000 ON HEADING 160 AND FIM VORTAC (SEE FORM 8260-10) ADDITIONAL FLIGHT DATA: HOLD SE, RT, 307.00 INBOUND. CHART FAS OBST: 239 TREE 342558N/1195422W. CHART VDP AT 2.56 DME* DISTANCE VDP TO THLD 1.35 NM. *LOC ONLY.							
GVO VORTAC (IAF)		YONNI INT/GVO 3.00 DME		163.00 / 3.00				5000									
YONNI INT/GVO 3.00 DME		HABUT INT/I-SBA 12.84 DME		163.00 / 3.53 (GVO R-163) (RZS LR-245)				3500									
GOLET INT/RZS 14.43 DME (IAF)		LOBER INT/FIM 60.11 DME		250.00 / 11.05 (FIM R-250)				4000									
LOBER INT/FIM 60.11 DME		HABUT INT/I-SBA 12.84 DME		343.00 / 9.53 (GVO R-163) (RZS LR-231)				3500									
HABUT INT/I-SBA 12.84 DME (IF)		GOYED INT/I-SBA 9.48 DME		074.55 / 3.36 (I-SBA)				2700									
GOYED INT/I-SBA 9.48 DME		NAPPS INT/I-SBA 6.59 DME		074.55 / 2.89 (I-SBA)				1800									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																	
2. PROFILE STARTS AT HABUT																	
3. FAC: 074.55 FAF: NAPPS INT/I-SBA 6.59 DME DIST FAF TO MAP: 5.39 THLD: 5.39																	
4. MIN. ALT: HABUT 3500, GOYED 2700, NAPPS 1800																	
5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 1000																	
6. MIN GS INCPT: 1800 GS ALT AT: NAPPS 1800 OM: - MM: - IM: -																	
7. GS ANGLE: 3.00 TCH: 48.1																	
8. MSA FROM: RZS VORTAC 030-120 8800, 120-210 5200, 210-300 5800, 300-030 8100																	
MAG VAR: 14E EPOCH YEAR: 1985																	
MINIMUMS																	
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		ILS: #		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 07**	213	2400	200	213	2400	200	213	2400	200	213	2400	200					
S-LOC 07	500	2400	487	500	2400	487	500	4000	487	500	5000	487					
CIRCLING	800	1	787	800	1 1/4	787	800	2 1/4	787	1000	3	987					
NOTES: CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA (NA WHEN USING OXNARD ALTIMETER SETTING). CHART NOTE: CIRCLING RWY 15R NA AT NIGHT. CHART NOTE: VDP NA WHEN USING OXNARD ALTIMETER SETTING. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OXNARD ALTIMETER SETTING AND INCREASE ALL (CONTINUED ON PAGE 2)																	
CITY AND STATE SANTA BARBARA, CA		ELEVATION: 13 TDZE: 13 AIRPORT NAME: SANTA BARBARA MUNI		FACILITY IDENTIFIER: I-SBA		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 7, AMDT 5B 1 FEBRUARY 2018						SUP: AMDT: 5A DATED 04/28/2016					

@ NA WHEN LOCAL WEATHER NOT AVAILABLE.
CAT A, B 800-2, CAT C 800-2 1/4, CAT D 1000-3
@ CAT C 800-2 1/4, CAT D 1000-3QUALITY
5
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.

MISSED APPROACH INSTRUCTIONS, (CONT.):

R-250 TO GOLET INT/FIM 49.06 DME AND HOLD E, RT, 250.00 INBOUND.

NOTES, (CONT.):

DA/MDA 100 FT, AND S-LOC CAT C VISIBILITY TO RVR 5000, CAT D VISIBILITY TO RVR 6000. INCREASE

CIRCLING CAT A VISIBILITY 1/4 MILE, CAT C VISIBILITY 1/2 MILE.

FOR INOPERATIVE ALS WHEN USING OXNARD ALTIMETER SETTING, INCREASE S-ILS 7 ALL CATS VISIBILITY TO RVR 5000.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT GVO VORTAC ON T261 NORTHWEST BOUND.

QUALITY
5
CHECKED

CITY AND STATE

SANTA BARBARA, CA

ELEVATION: 13**TDZE: 13**

AIRPORT NAME:

SANTA BARBARA MUNI

FACILITY
IDENTIFIER:

I-SBA

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 7, AMDT 5B

1 FEBRUARY 2018

SUP:

AMDT: **5A**DATED: **04/28/2016**

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: UCSIJ (DO NOT EXCEED 210 KIAS UNTIL OMWAP) CLIMB TO 600 THEN CLIMBING RIGHT TURN TO 3000 DIRECT OMWAP AND HOLD. ADDITIONAL FLIGHT DATA: FAS OBST: 285 AAO 374114N/1212159W. CHART R-2531. DISTANCE TO THLD FROM 250 HAT: 0.70 NM. WAAS CHANNEL # 49040 REFERENCE PATH ID: W26A CHART CIRCLING ICON. LTP HAE: 20.3 M						
ALTAM		OMWAP (TF) (FO) (RNP 2.00)		090.09 / 27.44				4000								
PATYY (IAF)		OMWAP (NOPT) (TF) (FB) (RNP 1.00)		315.81 / 13.74				3000								
OMWAP (IF/IAF)		IVABE (TF) (FB) (RNP 1.00)		254.75 / 6.09				2000								
IVABE (FAF)		UCSIJ (MAP) (TF) (FO) (RNP 0.30)		254.67 / 4.95				2000								
UCSIJ (MAP)		600 MSL (CA)		254.67				600								
600 MSL		OMWAP (DF) (FO) (RNP 1.00)						3000								
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD E OMWAP, RT, 254.75 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 254.67 FAF: IVABE DIST FAF TO MAP: 4.95 THLD: 5.61 4. MIN. ALT: OMWAP 3000, IVABE 2000 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2000 GS ALT AT: IVABE 2000 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 34:1 IS NOT CLEAR 8. MSA FROM: UCSIJ 5600										MAG VAR: 15E 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	436	7/8	250	436	7/8	250	436	7/8	250		NA					
LNAV/VNAV DA	493	1 1/8	307	493	1 1/8	307	493	1 1/8	307		NA					
LNAV MDA	540	1	354	540	1	354	540	1	354		NA					
CIRCLING	580	1	387	660	1	467	660	1 1/2	467		NA					
NOTES: CHART NOTE: BARO-VNAV NA WHEN USING STOCKTON ALTIMETER SETTING. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F). CHART NOTE: CIRCLING NA SW OF RWY 12-30. CHART NOTE: CIRCLING RWY 30 NA AT NIGHT. (CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 193 TDZE: 186				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:				
TRACY, CA		AIRPORT NAME: TRACY MUNI				RNAV		RNAV (GPS) RWY 26, AMDT 1A 1 FEBRUARY 2018				AMDT: 1				
												DATED 06/22/2017				



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

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NOTES, (CONT.):

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

CHART NOTE: DME/DME RNP-0.3 NA.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ALTAM ON V28 SOUTHWEST BOUND AND V334 NORTHBOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PATYY ON V111-113 SOUTHBOUND.

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

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE STOCKTON ALTIMETER SETTING: INCREASE LPV DA TO 496, LNAV/VNAV DA TO 553; INCREASE ALL MDA 60 FEET AND LPV ALL CATS VISIBILITY 1/4 SM, LNAV/VNAV ALL CATS VISIBILITY 1/8 SM, AND LNAV CAT C VISIBILITY 1/8 SM.

QUALITY
16
CHECKED

CITY AND STATE TRACY, CA	ELEVATION: 193 AIRPORT NAME: TRACY MUNI	TDZE: 186	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 26, AMDT 1A 1 FEBRUARY 2018	SUP:
					AMDT: 1
					DATED: 06/22/2017

**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	KTCY
RUNWAY	RW26
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W26A
LTP/FTP LATITUDE	374125.9870N
LTP/FTP LONGITUDE	1212611.0370W
LTP/FTP ELLIPSOIDAL HEIGHT	+00203
FPAP LATITUDE	374125.3435N
FPAP LONGITUDE	1212803.2870W
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	1704
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 A8E5CA16

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+00526
FPAP ORTHOMETRIC HEIGHT	+00526

QUALITY
16
CHECKED

CITY AND STATE TRACY, CA	ELEVATION: 193 AIRPORT NAME: TRACY MUNI	TDZE: 186 TRACY MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 26, AMDT 1A 1 FEBRUARY 2018	SUP:
					AMDT: 1
					DATED: 06/22/2017

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-APA 1.81 DME					
FIRPI/I-APA 14.51 DME/RADAR (IF)		JIDOG/I-APA 8.08 DME		349.95 / 6.43 (I-APA)				8000		CLIMB TO 7400 THEN CLIMBING RIGHT TURN TO 9200 ON HEADING 160 AND FQF VORTAC R-197 TO HOHUM INT/FQF 22.49 DME AND HOLD.					
										ADDITIONAL FLIGHT DATA: HOLD N, LT, 197.00 INBOUND. CHART FAS OBST: 6296 TREE 393043N/1045117W. 6567 TREE 392640N/1045144W. 6422 T-L TWR 393027N/1045041W. CHART VDP AT 3.78 DME* DISTANCE VDP TO THLD 1.97 NM. *LOC ONLY. CHART CIRCLING ICON. CHART MANDATORY 9000 AT FIRPI. CHART PLANVIEW NOTE: RADAR AND DME REQUIRED.					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 8E EPOCH YEAR: 2015					
2. PROFILE STARTS AT FIRPI/I-APA 14.51 DME/RADAR															
3. FAC: 349.95 FAF: JIDOG/I-APA 8.08 DME DIST FAF TO MAP: _____ THLD: 6.27															
4. MIN. ALT: JIDOG 8000, LECET/I-APA 4.31 DME 6740*															
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: 1074															
6. MIN GS INCPT: 8000 GS ALT AT: JIDOG 8000 OM: _____ MM: _____ IM: _____															
7. GS ANGLE: 3.10 TCH: 50.6															
8. MSA FROM: FQF VORTAC 360-180 8400, 180-360 9600															
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 35R	6085	1/2	200	6085	1/2	200	6085	1/2	200	6085	1/2	200			
S-LOC 35R	6560	1/2	675	6560	1/2	675	6560	1 1/2	675	6560	1 1/2	675			
SIDESTEP 35L	6560	1	691	6560	1	691	6560	2	691	6560	2	691			
CIRCLING	6560	1	675	6560	1	675	6740	2 1/2	855	6900	3	1015			
NOTES: CHART NOTE: DME REQUIRED. @ CAT C 900-2 1/2, CAT D 1100-3 CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT. CHART PLANVIEW NOTE AT FIRPI: MAXIMUM 210 KIAS. CHART NOTE: STRAIGHT-IN RWY 35L NA AT NIGHT.															
CITY AND STATE DENVER, CO		ELEVATION: 5885 AIRPORT NAME: CENTENNIAL		TDZE: 35R 5885 TDZE: 35L 5869		FACILITY IDENTIFIER: I-APA		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 35R, AMDT 10A 1 FEBRUARY 2018				SUP: ILS OR LOC/DME RWY 35R AMDT: 10 DATED 08/20/2015			



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: I-OCX 0.98 DME CLIMB TO 1260 THEN CLIMBING LEFT TURN TO 2500 DIRECT JWE NDB AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1400 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 350 AND BDR VOR/DME R-009 TO ZATMI INT/PWL 24.35 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000. ADDITIONAL FLIGHT DATA: HOLD S, RT, 004.78 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NW ZATMI INT/PWL 24.35 DME, RT, 135.44 INBOUND. FAS OBST: 829 TREE 412729N/0730734W. CHART VDP AT 2.11 DME* DISTANCE VDP TO THLD 1.13 NM. *LOC ONLY. CHART IN PLANVIEW: ZATMI INT/PWL 24.35 DME. CHART CIRCLING ICON. CHART PLANVIEW NOTE: DME REQUIRED.						
BDR VOR/DME (IAF)		CUTMA/I-OCX 12.60 DME		023.35 / 7.33				2500								
CUTMA/I-OCX 12.60 DME (IF)		DAAVY/I-OCX 6.50 DME		004.78 / 6.10 (I-OCX)				2500								
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT CUTMA/I-OCX 12.60 DME 3. FAC: 004.78 FAF: DAAVY/I-OCX 6.50 DME DIST FAF TO MAP: _____ THLD: 5.52 4. MIN. ALT: CUTMA 2500, DAAVY 2500, HUMOM/I-OCX 2.78 DME 1220 5. DIST TO THLD FROM OM: _____ - MM: _____ - IM: _____ 150 HAT: _____ - 100 HAT: _____ - GS ANT: 867 6. MIN GS INCPT: 2500 GS ALT AT: DAAVY 2500 OM: _____ - MM: _____ - IM: _____ 7. GS ANGLE: 3.00 TCH: 55.8 8. MSA FROM: BDR VOR/DME 090-270 1900, 270-090 2800											MAG VAR: 14W		EPOCH YEAR: 1995			
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT											ALTERNATE: N A		☒ X			
CATEGORY =====>		A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	
S-ILS 36	965	7/8	244	965	7/8	244	965	7/8	244	965	7/8	244				
S-LOC 36	1100	1	379	1100	1	379	1100	1 1/8	379	1100	1 1/8	379				
CIRCLING	1420	1	694	1420	1	694	1460	2	734	1560	2 3/4	834				
NOTES: CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: ADF AND DME REQUIRED. CHART PROFILE NOTE: GS UNUSABLE BELOW 965 MSL. CHART NOTE: VDP NA WITH DANBURY ALTIMETER SETTING. (CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 726			TDZE: 721			FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:		
OXFORD, CT		AIRPORT NAME:			WATERBURY-OXFORD			I-OCX		ILS OR LOC RWY 36, AMDT 14B				AMDT: 14A		
										1 FEBRUARY 2018				DATED 07/24/2014		



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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

NOTES, (CONT.):

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE DANBURY ALTIMETER SETTING AND INCREASE ALL DA 77 FEET AND ALL MDA 80 FEET; INCREASE S-ILS 36 ALL CATS VISIBILITY 1/4 SM AND INCREASE S-LOC 36 AND CIRCLING VISIBILITY CAT C 1/2 SM AND CAT D VISIBILITY 1/4 SM.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON BDR VOR/DME AIRWAY RADIALS 336 CW 077.

CHART NOTE: *1300 WHEN USING DANBURY ALTIMETER SETTING.

QUALITY
16
CHECKED

CITY AND STATE
OXFORD, CT

ELEVATION: 726 TDZE: 721
AIRPORT NAME:
WATERBURY-OXFORD

FACILITY
IDENTIFIER:
I-XXC

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
ILS OR LOC RWY 36, AMDT 14B
1 FEBRUARY 2018

SUP:
AMDT: **14A**
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.									
TERMINAL ROUTES														MISSED APPROACH												
FROM				TO				COURSE AND DISTANCE				ALTITUDE		ILS: DA LOC: 2.97 NM AFTER LMOND/I-EXO 4.13 DME/RADAR OR AT I-EXO 1.16 DME												
LOUKE/I-EXO 12.38 DME/RADAR (IF/IAF)				ENLOW/I-EXO 9.44 DME/RADAR				252.71 / 2.94 (I-EXO)				2000		CLIMB TO 2000 ON ORL VORTAC R-247 TO ESRAQ/ORL VORTAC 12.20 DME AND HOLD.												
ENLOW/I-EXO 9.44 DME/RADAR				MARYB/I-EXO 7.34 DME/RADAR				252.71 / 2.10 (I-EXO)				1500														
MARYB/I-EXO 7.34 DME/RADAR				LMOND/I-EXO 4.13 DME/RADAR				252.71 / 3.21 (I-EXO)				1100														
														ADDITIONAL FLIGHT DATA: HOLD SW, RT, 067.15 INBOUND. CHART FAS OBST: 218 TOWER 283356N/0811716W. 274 AAO 283355N/0811544W. CHART VDP AT 2.18 DME* DISTANCE VDP TO THLD 1.02 NM. *LOC ONLY. CHART MANDATORY 2000 AT ENLOW. CHART MANDATORY 1500 AT MARYB. CHART MANDATORY 1100 AT LMOND. CHART CIRCLING ICON. CHART: KMCO IN PLANVIEW. CHART PLANVIEW NOTE: RADAR REQUIRED.												
1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)														MAG VAR: 6W EPOCH YEAR: 2015												
2. HOLD E LOUKE, LT, 252.71 INBOUND, 2800 FT. IN LIEU OF PT (IAF)																										
3. FAC: 252.71 FAF: LMOND/I-EXO 4.13 DME/RADAR DIST FAF TO MAP: 2.97 THLD: 2.97																										
4. MIN. ALT: LOUKE 2800, ENLOW 2000, MARYB 1500, LMOND 1100																										
5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 860																										
6. MIN GS INCPT: 1100 GS ALT AT: LMOND 1100 OM: - MM: - IM: -																										
7. GS ANGLE: 3.00 TCH: 46.0																										
8. MSA FROM: ORL VORTAC 3000																										
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 25	313	3/4	200	313	3/4	200	313	3/4	200	313	3/4	200														
S-LOC 25	480	1	367	480	1	367	480	1	367	480	1	367														
CIRCLING	580	1	467	680	1	567	860	2 1/4	747	860	2 1/2	747														
NOTES: CHART NOTE: CIRCLING RWY 31 NA AT NIGHT. CHART NOTE: DME OR RADAR REQUIRED. CHART NOTE: IN MINIMUM VISIBILITY CONDITIONS, BRIGHT LIGHTS ON HIGHWAY 1/2 MILE SOUTH OF AIRPORT MAY BE MISTAKEN FOR RUNWAY LIGHTS.																										
CITY AND STATE ORLANDO, FL							ELEVATION: 113 TDZE: 113 AIRPORT NAME: EXECUTIVE			FACILITY IDENTIFIER: I-EXO			PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 25, AMDT 1A 1 FEBRUARY 2018				SUP: AMDT: 1 DATED 09/15/2016									



RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES																MISSED APPROACH									
FROM				TO				COURSE AND DISTANCE				ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW25 CLIMB TO 2000 DIRECT ESRAQ AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 072.60 INBOUND. CHART FAS OBST: 227 TOWER 283355N/0811745W. DISTANCE TO THLD FROM 200 HAT: 0.49 NM. CHART VDP AT 1.20 NM TO RW25* *LNAV ONLY. WAAS CHANNEL # 58125 REFERENCE PATH ID: W25A CHART MANDATORY 2000 AT ENLOW. CHART MANDATORY 1500 AT MARYB. CHART MANDATORY 1100 AT LMOND. CHART CIRCLING ICON. CHART: KMCO IN PLANVIEW. CHART PLANVIEW NOTE: RADAR REQUIRED. LTP HAE: 5.7 M											
LOUKE (IF/IAF)				ENLOW (TF) (FB) (RNP 1.00)				252.81 / 2.94				2000													
ENLOW				MARYB (TF) (FB) (RNP 1.00)				252.78 / 2.10				1500													
MARYB				LMOND (TF) (FB) (RNP 1.00)				252.76 / 3.21				1100													
LMOND (FAF)				RW25 (MAP) (TF) (FO) (RNP 0.30)				252.73 / 2.97																	
RW25 (MAP)				313 MSL (CA)				252.73				2000													
313 MSL				ESRAQ (DF) (FO) (RNP 1.00)																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD E LOUKE, LT, 252.81 INBOUND, 2800 FT. IN LIEU OF PT (IAF) 3. FAC: 252.73 FAF: LMOND DIST FAF TO MAP: 2.97 THLD: 2.97 4. MIN. ALT: LOUKE 2800, ENLOW 2000, MARYB 1500, LMOND 1100 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 1100 GS ALT AT: LMOND 1100 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 46.0 34:1 IS CLEAR 8. MSA FROM: RW25 3000																MAG VAR: 6W 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	313	3/4	200	313	3/4	200	313	3/4	200	313	3/4	200													
LNAV/VNAV DA	371	7/8	258	371	7/8	258	371	7/8	258	371	7/8	258													
LNAV MDA	540	1	427	540	1	427	540	1 1/4	427	540	1 1/4	427													
CIRCLING	580	1	467	680	1	567	860	2 1/4	747	860	2 1/2	747													
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 2C (36F) OR ABOVE 54C (130F). @ CAT C 800-2 1/4, CAT D 800-2 1/2 CHART NOTE: CIRCLING RWY 31 NA AT NIGHT. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: IN MINIMUM VISIBILITY CONDITIONS, BRIGHT LIGHTS ON HIGHWAY 1/2 MILE SOUTH OF AIRPORT MAY BE MISTAKEN FOR RUNWAY LIGHTS.																									
CITY AND STATE				ELEVATION: 113 TDZE: 113				FACILITY IDENTIFIER:				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
ORLANDO, FL				AIRPORT NAME:				RNAV				RNAV (GPS) RWY 25, AMDT 3A				AMDT: 3									
				EXECUTIVE								1 FEBRUARY 2018				DATED 09/15/2016									



**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	KORL
RUNWAY	RW25
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W25A
LTP/FTP LATITUDE	283257.6925N
LTP/FTP LONGITUDE	0811919.5530W
LTP/FTP ELLIPSOIDAL HEIGHT	+00057
FPAP LATITUDE	283222.3630N
FPAP LONGITUDE	0812052.4850W
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	0920
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

F0533404

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00334
FPAP ORTHOMETRIC HEIGHT	+00334

QUALITY
29
CHECKED

CITY AND STATE

ORLANDO, FL

ELEVATION: 113

TDZE: 113

AIRPORT NAME:

EXECUTIVE

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 25, AMDT 3A

1 FEBRUARY 2018

SUP:

AMDT:

3

DATED:

09/15/2016

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		LP: NUYIT LNAV: NUYIT (DO NOT EXCEED 200 KIAS UNTIL UGLEE) CLIMB TO 700 THEN CLIMBING LEFT TURN TO 2000 DIRECT UGLEE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT, 010.00 INBOUND. CHART FAS OBST: 125 TREE 263441N/0800427W CHART FAS OBST: 148 TREE 263410N/0800420W WAAS CHANNEL # 69232 REFERENCE PATH ID: W34A CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES. FICTITIOUS THRESHOLD POINT (CFDSL) DO NOT CHART. CHART CIRCLING ICON. FAC CROSSES RWY C/L EXTENDED 3000 FT FROM THLD. CHART PLANVIEW NOTE: FINAL APPROACH COURSE OFFSET 20.00 DEGREES. LTP HAE: -22.2 M									
VURYU (IAF)		KISEC (NOPT) (TF) (FB) (RNP 1.00)			321.44 / 5.00			2300											
MRLIN (IAF)		KISEC (NOPT) (TF) (FB) (RNP 1.00)			280.28 / 10.66			2300											
KISEC (IF/IAF)		JOVLI (TF) (FB) (RNP 1.00)			304.85 / 3.52			1700											
JOVLI (FAF)		WIBGA/1.53 NM TO NUYIT (TF) (FB) (RNP 0.30)			319.00 / 2.43														
WIBGA/1.53 NM TO NUYIT		NUYIT (MAP) (TF) (FO) (RNP 0.30)			319.00 / 1.53														
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SE KISEC, LT, 304.85 INBOUND, 2300 FT. IN LIEU OF PT (IAF) 3. FAC: 319.00 FAF: JOVLI DIST FAF TO MAP: 3.96 THLD: 4.42 4. MIN. ALT: KISEC 2300, JOVLI 1700, WIBGA/1.53 NM TO NUYIT 800 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: NUYIT 2600																MAG VAR: 7W		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	380	1	366	380	1	366	380	1	366		NA								
LNAV MDA	400	1	386	400	1	386	400	1 1/8	386		NA								
CIRCLING	460	1	446	520	1	506	580	1 1/2	566		NA								
NOTES: CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MRLIN ON BR68V NORTHEAST BOUND, ON BR64V EASTBOUND AND ON BR54V-55V SOUTHEAST BOUND. CHART NOTE: RWY 34 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. (CONTINUED ON PAGE 2)																			
CITY AND STATE		ELEVATION: 14 TDZE: 14			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:			SUP: RNAV (GPS) RWY 33			ORIG-A					
WEST PALM BEACH, FL		AIRPORT NAME:			PALM BEACH COUNTY PARK			RNAV (GPS) RWY 34, AMDT 1			AMDT:			06/22/2017					
								1 FEBRUARY 2018			DATED								

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
NUYIT (MAP)	700 MSL (CA)	319.00	700
700 MSL	UGLEE (DF) (FO) (RNP 1.00)		2000

NOTES, (CONT.):

CHART NOTE: CIRCLING TO RWYS 4, 16, 22, 28 NA AT NIGHT.

CHART NOTE: STRAIGHT-IN RWY 34 NA AT NIGHT, CIRCLING RWY 34 NA AT NIGHT.

QUALITY
10
CHECKED

CITY AND STATE

WEST PALM BEACH, FL

ELEVATION: 14

TDZE: 14

AIRPORT NAME:

PALM BEACH COUNTY PARK

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 34, AMDT 1

1 FEBRUARY 2018

SUP: RNAV (GPS) RWY 33

AMDT: ORIG-A

DATED: 06/22/2017

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KLNA
RUNWAY	RW34
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W34A
LTP/FTP LATITUDE	263516.4300N
LTP/FTP LONGITUDE	0800457.2850W
LTP/FTP ELLIPSOIDAL HEIGHT	-00222
FPAP LATITUDE	263616.1835N
FPAP LONGITUDE	0800611.1920W
THRESHOLD CROSSING HEIGHT (TCH)	00000.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	00.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0

CRC REMAINDER

9A2A13D3

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00040
FPAP ORTHOMETRIC HEIGHT	+00040

QUALITY
10
CHECKED

CITY AND STATE

WEST PALM BEACH, FL

ELEVATION: 14

TDZE: 14

AIRPORT NAME:

PALM BEACH COUNTY PARK

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 34, AMDT 1

1 FEBRUARY 2018

SUP: RNAV (GPS) RWY 33

AMDT: ORIG-A

DATED: 06/22/2017

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.				
US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION								
TERMINAL ROUTES				MISSED APPROACH				
FROM	TO	COURSE AND DISTANCE	ALTITUDE	LNAV: RW10 (DO NOT EXCEED 210 KIAS UNTIL TURN COMPLETION) CLIMBING RIGHT TURN TO 2000 DIRECT UGLEE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT, 010.00 INBOUND. CHART FAS OBST: 158 TREE 263549N/0800521W CHART: 1314 TOWER 263521N/0801243W KUVBE TO RW10: 3.00/45.1. CHART CIRCLING ICON. FAC CROSSES RWY 10 THLD.				
PHK VOR/DME	LMORE (TF) (FB) (RNP 2.00)	132.55 / 17.66	2600					
LMORE (IAF)	ZOTUB (NOPT) (TF) (FB) (RNP 1.00)	103.08 / 7.82	2600					
ARKES (IAF)	ZOTUB (NOPT) (TF) (FB) (RNP 1.00)	087.89 / 7.51	2600					
ZOTUB (IF/IAF)	KUVBE (TF) (FB) (RNP 1.00)	098.87 / 3.43	2200					
KUVBE (FAF)	YEGUP/2.60 NM TO RW10 (TF) (FB) (RNP 0.30)	098.89 / 4.13						
(SEE FORM 8260-10)								
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD W ZOTUB, RT, 098.87 INBOUND, 2600 FT. IN LIEU OF PT (IAF) 3. FAC: 098.89 FAF: KUVBE DIST FAF TO MAP: 6.73 THLD: 6.73 4. MIN. ALT: ZOTUB 2600, KUVBE 2200, YEGUP/2.60 NM TO RW10 880 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: RW10 2600								
				MAG VAR: 7W EPOCH YEAR: 2020				
MINIMUMS								
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT				ALTERNATE: N A				
CATEGORY =====>				STANDARD				
	A		B		C		D	
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS
CIRCLING	460	1	446	520	1	506	580	1 1/2
NOTES: CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ARKES ON V159 NORTHBOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON PHK VOR/DME AIRWAY RADIALS 115 CW 211. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). (CONTINUED ON PAGE 2)								
CITY AND STATE		ELEVATION: 14 TDZE:		FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:		SUP:
WEST PALM BEACH, FL		AIRPORT NAME:		RNAV		RNAV (GPS)-A, AMDT 1 1 FEBRUARY 2018		AMDT: ORIG-A
		PALM BEACH COUNTY PARK						DATED 04/27/2017

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
YEGUP/2.60 NM TO RW10	RW10 (MAP) (TF) (FO) (RNP 0.30)	098.89 / 2.60	
RW10 (MAP)	414 MSL (CA)	098.89	
414 MSL	UGLEE (DF) (FO) (RNP 1.00)		2000

NOTES, (CONT.):

CHART NOTE: RWY 10 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

CHART NOTE: CIRCLING TO RWYS 4, 16, 22, 28, 34 NA AT NIGHT.

CITY AND STATE

WEST PALM BEACH, FL

ELEVATION: 14

TDZE:

AIRPORT NAME:

PALM BEACH COUNTY PARK

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS)-A, AMDT 1

1 FEBRUARY 2018

SUP:

AMDT: ORIG-A

DATED: 04/27/2017

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.			
US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							
TERMINAL ROUTES				MISSED APPROACH			
FROM	TO	COURSE AND DISTANCE	ALTITUDE	LNAV: RW28 (DO NOT EXCEED 210 KIAS UNTIL TURN COMPLETION) CLIMBING LEFT TURN TO 2000 DIRECT UGLEE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT, 010.00 INBOUND. FAS OBST: 208 SHIP 263500N/0800124W RUCOG TO RW28: 4.00/45. CHART CIRCLING ICON. FAC CROSSES RWY 28 THLD.			
STOOP	YANBU (TF) (FB) (RNP 2.00)	162.13 / 36.88	2500				
YANBU (IAF)	CUVMO (NOPT) (TF) (FB) (RNP 1.00)	209.02 / 7.00	2500				
MRLIN (IAF)	CUVMO (NOPT) (TF) (FB) (RNP 1.00)	313.71 / 8.42	2500				
CUVMO (IF/IAF)	RUCOG (TF) (FB) (RNP 1.00)	279.04 / 6.29	1700				
RUCOG (FAF)	RW28 (MAP) (TF) (FO) (RNP 0.30)	278.99 / 3.87					
(SEE FORM 8260-10)							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD E CUVMO, LT, 279.04 INBOUND, 2500 FT. IN LIEU OF PT (IAF) 3. FAC: 278.99 FAF: RUCOG DIST FAF TO MAP: 3.87 THLD: 3.87 4. MIN. ALT: CUVMO 2500, RUCOG 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: _____ 8. MSA FROM: RW28 2600							
				MAG VAR: 7W EPOCH YEAR: 2020			
MINIMUMS							
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT				ALTERNATE: N A			
CATEGORY =====>				STANDARD			
	A		B		C		D
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA
CIRCLING	460	1	446	520	1	506	580
							1 1/2
							566
							NA
NOTES: CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT STOOP ON V295 NORTHWEST BOUND AND ON V492-537 NORTH BOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MRLIN ON BR68V NORTHEAST BOUND, ON BR64V-68V EAST (CONTINUED ON PAGE 2)							
CITY AND STATE		ELEVATION: 14 TDZE:		FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	
WEST PALM BEACH, FL		AIRPORT NAME:		RNAV		RNAV (GPS)-B, AMDT 1 1 FEBRUARY 2018	
		PALM BEACH COUNTY PARK				SUP: ORIG DATED 08/22/2013	

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
RW28 (MAP)	414 MSL (CA)	278.99	
414 MSL	UGLEE (DF) (FO) (RNP 1.00)		2000

NOTES, (CONT.):

BOUND AND ON BR54V-55V SOUTHEAST BOUND.

CHART NOTE: RWY 28 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.

CHART NOTE: CIRCLING TO RWYS 4, 16, 22, 28, 34 NA AT NIGHT.

CITY AND STATE

WEST PALM BEACH, FL

ELEVATION: 14

TDZE:

AIRPORT NAME:

PALM BEACH COUNTY PARK

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS)-B, AMDT 1

1 FEBRUARY 2018

SUP:

AMDT:

DATED:

QUALITY
10
CHECKED

ORIG

08/22/2013

**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>
WEST PALM BEACH, FL	PALM BEACH COUNTY PARK	1 FEBRUARY 2018	3

TAKEOFF MINIMUMS:

RWY 10, 28: NA - NOISE ABATEMENT.
RWY 4, 16, 22, 34: STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

RWY 22: CLIMB HEADING 218.98 TO 1100 BEFORE TURNING RIGHT.
RWY 34: CLIMB HEADING 338.97 TO 700 BEFORE TURNING LEFT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 4, TREE 39 FT FROM DER, 227 FT RIGHT OF CENTERLINE, 23 FT MSL.
TREE 75 FT FROM DER, 223 FT RIGHT OF CENTERLINE, 29 FT MSL.
TREES BEGINNING 78 FT FROM DER, 46 FT RIGHT OF CENTERLINE, UP TO 44 FT MSL.
TREE 519 FT FROM DER, 573 FT LEFT OF CENTERLINE, 39 FT MSL.
TREES BEGINNING 667 FT FROM DER, 38 FT LEFT OF CENTERLINE, UP TO 46 FT MSL.
TREES BEGINNING 925 FT FROM DER, 106 FT LEFT OF CENTERLINE, UP TO 58 FT MSL.
TREES BEGINNING 1260 FT FROM DER, 337 FT LEFT OF CENTERLINE, UP TO 59 FT MSL.
POLE 1284 FT FROM DER, 794 FT RIGHT OF CENTERLINE, 42 FT AGL/49 FT MSL.
TREE 1376 FT FROM DER, 494 FT LEFT OF CENTERLINE, 71 FT MSL.
TREE 1639 FT FROM DER, 143 FT RIGHT OF CENTERLINE, 57 FT MSL.
TREE 1732 FT FROM DER, 535 FT LEFT OF CENTERLINE, 87 FT MSL.
TREE 1804 FT FROM DER, 230 FT RIGHT OF CENTERLINE, 64 FT MSL.
TREE 3083 FT FROM DER, 430 FT RIGHT OF CENTERLINE, 100 FT MSL.
TREE 3214 FT FROM DER, 294 FT RIGHT OF CENTERLINE, 102 FT MSL.

NOTE: RWY 16, BUILDINGS BEGINNING 14 FT FROM DER, 233 FT RIGHT OF CENTERLINE, UP TO 25 FT AGL/37 FT MSL.
TREES BEGINNING 19 FT FROM DER, 353 FT LEFT OF CENTERLINE, UP TO 20 FT MSL.
BUILDING, TREES, POLE BEGINNING 111 FT FROM DER, 316 FT RIGHT OF CENTERLINE, UP TO 34 FT AGL/45 FT MSL.
TREES BEGINNING 158 FT FROM DER, 127 FT LEFT OF CENTERLINE, UP TO 21 FT MSL.
POLES BEGINNING 678 FT FROM DER, 335 FT RIGHT OF CENTERLINE, UP TO 35 FT AGL/47 FT MSL.
POLES, TREE, BUILDING BEGINNING 759 FT FROM DER, 56 FT RIGHT OF CENTERLINE, UP TO 37 FT AGL/50 FT MSL.
POLE 957 FT FROM DER, 93 FT LEFT OF CENTERLINE, 26 FT AGL/40 FT MSL.
POLE 1079 FT FROM DER, 115 FT LEFT OF CENTERLINE, 27 FT AGL/42 FT MSL.
POLES BEGINNING 1112 FT FROM DER, 337 FT LEFT OF CENTERLINE, UP TO 31 FT AGL/46 FT MSL.
TREE 1785 FT FROM DER, 388 FT LEFT OF CENTERLINE, 77 FT MSL.
TREE 1860 FT FROM DER, 186 FT RIGHT OF CENTERLINE, 60 FT MSL.
TREES BEGINNING 1891 FT FROM DER, 82 FT LEFT OF CENTERLINE, UP TO 91 FT MSL.

NOTE: RWY 22, TREE 411 FT FROM DER, 607 FT LEFT OF CENTERLINE, 52 FT MSL.
POLES, VEHICLE ON ROAD, TRANSMISSION LINES, TREE BEGINNING 425 FT FROM DER, 103 FT LEFT OF CENTERLINE, UP TO 47 FT AGL/57 FT MSL.
TREE 805 FT FROM DER, 46 FT RIGHT OF CENTERLINE, 33 FT MSL.
TREE 866 FT FROM DER, 138 FT RIGHT OF CENTERLINE, 36 FT MSL.
POLES, TREES BEGINNING 955 FT FROM DER, 5 FT RIGHT OF CENTERLINE, UP TO 32 FT AGL/46 FT MSL.
TRANSMISSION LINE, TREES BEGINNING 1058 FT FROM DER, 9 FT LEFT OF CENTERLINE, UP TO 48 FT AGL/59 FT MSL.
POLE 1262 FT FROM DER, 777 FT RIGHT OF CENTERLINE, 47 FT AGL/61 FT MSL.
POLES, TREE BEGINNING 1292 FT FROM DER, 26 FT RIGHT OF CENTERLINE, UP TO 51 FT AGL/65 FT MSL.
TREE 1648 FT FROM DER, 514 FT RIGHT OF CENTERLINE, 97 FT MSL.
TOWER 1711 FT FROM DER, 689 FT LEFT OF CENTERLINE, 55 FT AGL/69 FT MSL.
TREE 2926 FT FROM DER, 53 FT RIGHT OF CENTERLINE, 102 FT MSL.
TREE 2980 FT FROM DER, 148 FT LEFT OF CENTERLINE, 88 FT MSL.
TREE 3050 FT FROM DER, 9 FT LEFT OF CENTERLINE, 107 FT MSL.

NOTE: RWY 34, TREE 23 FT FROM DER, 400 FT RIGHT OF CENTERLINE, 21 FT MSL.
TREES BEGINNING 37 FT FROM DER, 341 FT LEFT OF CENTERLINE, UP TO 26 FT MSL.
TREES BEGINNING 359 FT FROM DER, 355 FT RIGHT OF CENTERLINE, UP TO 39 FT MSL.
TREE 384 FT FROM DER, 390 FT LEFT OF CENTERLINE, 28 FT MSL.
TREE 390 FT FROM DER, 523 FT LEFT OF CENTERLINE, 40 FT MSL.
TREES, BUILDING BEGINNING 470 FT FROM DER, 243 FT RIGHT OF CENTERLINE, UP TO 45 FT MSL.
TREES BEGINNING 486 FT FROM DER, 55 FT LEFT OF CENTERLINE, UP TO 43 FT MSL.
TREES BEGINNING 673 FT FROM DER, 352 FT LEFT OF CENTERLINE, UP TO 46 FT MSL.
TREES BEGINNING 758 FT FROM DER, 183 FT LEFT OF CENTERLINE, UP TO 49 FT MSL.
TREE 788 FT FROM DER, 485 FT RIGHT OF CENTERLINE, 52 FT MSL.
TREES BEGINNING 796 FT FROM DER, 298 FT RIGHT OF CENTERLINE, UP TO 57 FT MSL.

QUALITY
24
CHECKED

**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

WEST PALM BEACH, FL

AIRPORT

PALM BEACH COUNTY PARK

EFFECTIVE DATE

1 FEBRUARY 2018

AMDT NO

3

TREES, POLE BEGINNING 888 FT FROM DER, 87 FT LEFT OF CENTERLINE, UP TO 51 FT MSL.
TREE 1013 FT FROM DER, 133 FT LEFT OF CENTERLINE, 53 FT MSL.
TREES BEGINNING 1100 FT FROM DER, 67 FT LEFT OF CENTERLINE, UP TO 58 FT MSL.
TREE, POLES BEGINNING 1133 FT FROM DER, 204 FT RIGHT OF CENTERLINE, UP TO 59 FT MSL.
TREES BEGINNING 1412 FT FROM DER, 32 FT LEFT OF CENTERLINE, UP TO 69 FT MSL.

CONTROLLING OBSTACLES:

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT:

RWY 22: 1552 FT MSL TOWER (12-001773) 263430.70N-0801431.10W.

RWY 34: 1314 FT MSL TOWER (12-004716) 263521.24N-0801242.76W.

REMARKS:

Digitally signed by

FLIGHT INSPECTED BY: **DONALD H LANIER**

Oct 03, 2017

JAMES L. REINEBOLD JR

OFFICE SYMBOL:

FICO

DATE:

9-1-17

DEVELOPED BY:

ANDREA CHANEY

Digitally signed by

ANDREA J CHANEY

Oct 03, 2017

OFFICE SYMBOL:

AJV-5433

DATE:

6-30-17

APPROVED BY:

PAT MULQUEEN

Digitally signed by

DONALD H LANIER

Oct 03, 2017

OFFICE SYMBOL:

AJV-5430

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A

ALPA

AOPA

APA

HAI

NBAA



OTHER:

PBI ATCT, ZMA, ARPT MGR

CHANGES - REASONS:

1. RWY 03/21 CHANGED TO RWY 04/22. RWY 09/27 CHANGED TO RWY 10/28. RWY 15/33 CHANGED TO RWY 16/34 - AIRPORT MAG VAR CHANGED FROM 6W TO 7W.
2. TEXTUAL DEPARTURE PROCEDURE: RWY 21: CLIMB HEADING 217.98 TO 1100 BEFORE TURNING RIGHT CHANGED TO RWY 22: CLIMB HEADING 218.98 TO 1100 BEFORE TURNING RIGHT PER MAG VAR CHANGE.
3. TEXTUAL DEPARTURE PROCEDURE: RWY 33: CLIMB HEADING 337.97 TO 800 BEFORE TURNING LEFT CHANGED TO RWY 34: CLIMB HEADING 338.97 TO 700 BEFORE TURNING LEFT PER MAG VAR CHANGE.
4. TAKEOFF OBSTACLE NOTES AND CONTROLLING OBSTACLES UPDATED PER NEW AIRPORT SURVEY.

QUALITY
34
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: RW13 CLIMB TO 1600 THEN CLIMBING RIGHT TURN TO 4000 DIRECT SHODR AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, RT, 181.02 INBOUND. CHART FAS OBST: 1228 TREE 422935N/0931750W DISTANCE TO THLD FROM 250 HAT: 0.66 NM. CHART VDP AT 0.97 NM TO RW13* *LNAV ONLY. WAAS CHANNEL # 53332 REFERENCE PATH ID: W13A CHART CIRCLING ICON. LTP HAE: 314.2 M											
ZIVNI (IF/IAF)				YITUG (TF) (FB) (RNP 1.00)				134.07 / 6.70				2800													
YITUG (FAF)				HENSO/1.70 NM TO RW13 (TF) (FB) (RNP 0.30)				134.14 / 3.42																	
HENSO/1.70 NM TO RW13				RW13 (MAP) (TF) (FO) (RNP 0.30)				134.14 / 1.70																	
RW13 (MAP)				1600 MSL (CA)				134.14				1600													
1600 MSL				SHODR (DF) (FO) (RNP 1.00)								4000													
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NW ZIVNI, RT, 134.07 INBOUND, 4000 FT. IN LIEU OF PT (IAF) 3. FAC: 134.14 FAF: YITUG DIST FAF TO MAP: 5.12 THLD: 5.12 4. MIN. ALT: ZIVNI 4000, YITUG 2800, HENSO/1.70 NM TO RW13 1700* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2800 GS ALT AT: YITUG 2800 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 34:1 IS CLEAR 8. MSA FROM: _____																MAG VAR: 1E					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	1379	1	250	1379	1	250	1379	1	250	1379	1	250													
LNAV/VNAV DA	1389	1	260	1389	1	260	1389	1	260	1389	1	260													
LNAV MDA	1480	1	351	1480	1	351	1480	1	351	1480	1	351													
CIRCLING	1540	1	403	1620	1	483	1760	1 3/4	623	1760	2	623													
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.																									
CITY AND STATE				ELEVATION: 1137 TDZE: 1129				FACILITY IDENTIFIER:				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
IOWA FALLS, IA				AIRPORT NAME:				RNAV				RNAV (GPS) RWY 13, AMDT 1				AMDT: ORIG-A									
				IOWA FALLS MUNI								1 FEBRUARY 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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TAA

	FROM	TO	ALT
1.	044/30 CW 224/30 (NOPT)	ZIVNI (IF/IAF) (FB)	4000
2.	224/30 CW 044/30	ZIVNI (IF/IAF) (FO)	4000

QUALITY
16
CHECKED

CITY AND STATE IOWA FALLS, IA	ELEVATION: 1137 TDZE: 1129 AIRPORT NAME: IOWA FALLS MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 13, AMDT 1 1 FEBRUARY 2018	SUP:
				AMDT: ORIG-A
				DATED: 07/24/2014

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

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KIFA
RUNWAY	RW13
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W13A
LTP/FTP LATITUDE	422833.0200N
LTP/FTP LONGITUDE	0931636.2200W
LTP/FTP ELLIPSOIDAL HEIGHT	+03142
FPAP LATITUDE	422729.7675N
FPAP LONGITUDE	0931511.4040W
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	1352
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

3BE00316

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03441
FPAP ORTHOMETRIC HEIGHT	+03441

QUALITY
16
CHECKED

CITY AND STATE

IOWA FALLS, IA

ELEVATION: 1137

TDZE: 1129

AIRPORT NAME:

IOWA FALLS MUNI

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 13, AMDT 1

1 FEBRUARY 2018

SUP:

AMDT: ORIG-A

DATED: 07/24/2014

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES																	MISSED APPROACH									
FROM				TO				COURSE AND DISTANCE						ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW31 CLIMB TO 1600 THEN CLIMBING RIGHT TURN TO 4000 DIRECT ARTYS AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000. ADDITIONAL FLIGHT DATA: HOLD E, RT, 271.87 INBOUND. CHART FAS OBST: 1222 TREE 422720N/0931517W DISTANCE TO THLD FROM 250 HAT: 0.66 NM. CHART VDP AT 0.95 NM TO RW31* *LNAV ONLY. WAAS CHANNEL # 86732 REFERENCE PATH ID: W31A CHART CIRCLING ICON. LTP HAE: 316.5 M										
VEYUD (IF/IAF)				ZIROL (TF) (FB) (RNP 1.00)				314.33 / 6.70						2800												
ZIROL (FAF)				WISBU/2.00 NM TO RW31 (TF) (FB) (RNP 0.30)				314.26 / 3.10																		
WISBU/2.00 NM TO RW31				RW31 (MAP) (TF) (FO) (RNP 0.30)				314.26 / 2.00																		
RW31 (MAP)				1600 MSL (CA)				314.26						1600												
1600 MSL				ARTYS (DF) (FO) (RNP 1.00)										4000												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SE VEYUD, RT, 314.33 INBOUND, 4000 FT. IN LIEU OF PT (IAF) 3. FAC: 314.26 FAF: ZIROL DIST FAF TO MAP: 5.10 THLD: 5.10 4. MIN. ALT: VEYUD 4000, ZIROL 2800, WISBU/2.00 NM TO RW31 1800* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2800 GS ALT AT: ZIROL 2800 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 34:1 IS CLEAR 8. MSA FROM: _____																	MAG VAR: 1E					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	1387	1	250	1387	1	250	1387	1	250	1387	1	250														
LNAV/VNAV DA	1387	1	250	1387	1	250	1387	1	250	1387	1	250														
LNAV MDA	1480	1	343	1480	1	343	1480	1	343	1480	1	343														
CIRCLING	1540	1	403	1620	1	483	1760	1 3/4	623	1760	2	623														
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.																										
CITY AND STATE IOWA FALLS, IA				ELEVATION: 1137 TDZE: 1137 AIRPORT NAME: IOWA FALLS MUNI				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 31, AMDT 2 1 FEBRUARY 2018				SUP:										
																AMDT: 1A										
																DATED 08/21/2014										

QUALITY
 16
 CHECKED

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.	224/30 CW 044/30 (NOPT)	VEYUD (IF/IAF) (FB)	4000
2.	044/30 CW 224/30	VEYUD (IF/IAF) (FO)	4000

QUALITY
16
CHECKED

CITY AND STATE IOWA FALLS, IA	ELEVATION: 1137	TDZE: 1137	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 31, AMDT 2 1 FEBRUARY 2018	SUP:
	AIRPORT NAME:				AMDT: 1A
	IOWA FALLS MUNI				DATED: 08/21/2014

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KIFA
RUNWAY	RW31
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	422800.7600N
LTP/FTP LONGITUDE	0931552.9600W
LTP/FTP ELLIPSOIDAL HEIGHT	+03165
FPAP LATITUDE	422904.0060N
FPAP LONGITUDE	0931717.7965W
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	1352
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 D99B65AC

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03465
FPAP ORTHOMETRIC HEIGHT	+03465

QUALITY
16
CHECKED

CITY AND STATE IOWA FALLS, IA	ELEVATION: 1137 TDZE: 1137 AIRPORT NAME: IOWA FALLS MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 31, AMDT 2 1 FEBRUARY 2018	SUP:
				AMDT: 1A
				DATED: 08/21/2014

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		DIGUQ					
QUIRT		PIKEQ (TF) (FO) (RNP 2.00)		269.36 / 23.51				14800		(DO NOT EXCEED 185 KIAS UNTIL ESTABLISHED DIRECT PIKEQ) CLIMB TO 7500 THEN CLIMBING RIGHT TURN TO 10000 DIRECT PIKEQ AND HOLD.					
SABAT (IAF)		PIKEQ (NOPT) (TF) (FB) (RNP 1.00)		088.62 / 23.10				10000							
PIKEQ (IF/IAF)		TIHQI (TF) (FB) (RNP 1.00)		152.58 / 7.31				8100							
TIHQI (FAF)		DIGUQ (MAP) (TF) (FO) (RNP 0.30)		168.00 / 4.66						ADDITIONAL FLIGHT DATA: FAS OBST: 6520 AAO 434857N/1110503W. FAC CROSSES MIDPOINT OF RWY 04-22. CHART CIRCLING ICON.					
DIGUQ (MAP)		7500 MSL (CA)		168.00				7500							
7500 MSL		PIKEQ (DF) (FO) (RNP 1.00)						10000							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)															
2. HOLD NW PIKEQ, RT, 152.58 INBOUND, 10000 FT. IN LIEU OF PT (IAF)															
3. FAC: 168.00 FAF: TIHQI _____ DIST FAF TO MAP: _____ THLD: _____															
4. MIN. ALT: PIKEQ 10000, TIHQI 8100															
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: DIGUQ 15000															
										MAG VAR: 12E			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
CIRCLING	6900	1	669	6900	1	669	6900	1 3/4	669	7400	3	1169			
NOTES: CHART NOTE: CIRCLING NA FOR CATS C AND D SE OF RWY 4-22. @ CAT D 1200-3 CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SABAT ON T331 SOUTHWEST BOUND.															
CITY AND STATE DRIGGS, ID		ELEVATION: 6231 TDZE: AIRPORT NAME: DRIGGS-REED MEMORIAL		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS)-A, AMDT 1A 1 FEBRUARY 2018				SUP: AMDT: 1 DATED 11/10/2016					

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.															
TERMINAL ROUTES										MISSED APPROACH									
FROM		TO			COURSE AND DISTANCE			ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW26 CLIMB TO 4700 THEN CLIMBING RIGHT TURN TO 6000 DIRECT UYEME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NW, LT, 118.06 INBOUND. FAS OBST: 4419 AAO 422818N/1142136W. DISTANCE TO THLD FROM 200 HATH: 0.45 NM. CHART VDP AT 1.48 NM TO RW26* *LNAV ONLY. WAAS CHANNEL # 56311 REFERENCE PATH ID: W26A CHART CIRCLING ICON. LTP HAE: 1250.2 M									
KINZE		HAZZL (TF) (FB) (RNP 2.00)			139.09 / 29.76			7200											
TWF VORTAC		SOREE (TF) (FO) (RNP 2.00)			078.00 / 13.00			7200											
SAMAN		SOREE (TF) (FO) (RNP 2.00)			044.68 / 24.08			8000											
HAZZL (IAF)		SOREE (NOPT) (TF) (FB) (RNP 1.00)			195.61 / 11.37			7200											
MALTT (IAF)		GABBY (NOPT) (TF) (FB) (RNP 1.00)			258.62 / 17.48			8200											
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD E SOREE, RT, 258.51 INBOUND, 7200 FT. IN LIEU OF PT (IAF) 3. FAC: 258.41 FAF: VUPCU DIST FAF TO MAP: 5.94 THLD: 5.94 4. MIN. ALT: SOREE 7200, VUPCU 6100 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 6100 GS ALT AT: VUPCU 6100 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 55.2 34:1 IS CLEAR 8. MSA FROM: RW26 9300																MAG VAR: 13E		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	4354	1/2	200	4354	1/2	200	4354	1/2	200	4354	1/2	200							
LNAV/VNAV DA	4533	3/4	379	4533	3/4	379	4533	3/4	379	4533	3/4	379							
LNAV MDA	4680	1/2	526	4680	1/2	526	4680	1	526	4680	1	526							
CIRCLING	4700	1	546	4780	1	626	5160	3	1006	5160	3	1006							
NOTES: CHART NOTE: CIRCLING TO RWY 30 NA AT NIGHT. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 49C (121F). CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DRYAD ON T331 SOUTHWEST BOUND. (CONTINUED ON PAGE 2)																			
CITY AND STATE TWIN FALLS, ID		ELEVATION: 4154 TDZE: 4154 AIRPORT NAME: JOSLIN FIELD - MAGIC VALLEY RGNL			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 26, AMDT 1B 1 FEBRUARY 2018					SUP:							
												AMDT: 1A							
												DATED 04/28/2016							



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
GABBY	SOREE (TF) (FB) (RNP 1.00)	258.69 / 4.01	7200
DRYAD (IAF)	ZUROV (NOPT) (TF) (FB) (RNP 1.00)	320.84 / 16.08	8800
ZUROV	SOREE (TF) (FB) (RNP 1.00)	321.19 / 4.45	7200
SOREE (IF/IAF)	VUPCU (TF) (FB) (RNP 1.00)	258.51 / 6.24	6100
VUPCU (FAF)	RW26 (MAP) (TF) (FO) (RNP 0.30)	258.41 / 5.94	
RW26 (MAP)	4700 MSL (CA)	258.41	4700
4700 MSL	UYEME (DF) (FO) (RNP 1.00)		6000

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MALTT ON V101 SOUTHEAST BOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT KINZE ON V444 NORTHWEST BOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT TWF VORTAC ON AIRWAY RADIALS 097 CW 138.

QUALITY
19
CHECKED

CITY AND STATE

TWIN FALLS, ID

ELEVATION: 4154

TDZE: 4154

AIRPORT NAME:

JOSLIN FIELD - MAGIC VALLEY RGNL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 26, AMDT 1B

1 FEBRUARY 2018

SUP:

AMDT: 1A

DATED: 04/28/2016

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

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KTWF
RUNWAY	RW26
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W26A
LTP/FTP LATITUDE	422850.5745N
LTP/FTP LONGITUDE	1142815.5040W
LTP/FTP ELLIPSOIDAL HEIGHT	+12502
FPAP LATITUDE	422852.6095N
FPAP LONGITUDE	1143015.8850W
THRESHOLD CROSSING HEIGHT (TCH)	00055.2
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0096
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

238050D1

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+12655
FPAP ORTHOMETRIC HEIGHT	+12655

QUALITY
19
CHECKED

CITY AND STATE

TWIN FALLS, ID

ELEVATION: 4154

TDZE: 4154

AIRPORT NAME:

JOSLIN FIELD - MAGIC VALLEY RGNL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 26, AMDT 1B

1 FEBRUARY 2018

SUP:

AMDT:

1A

DATED:

04/28/2016

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

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CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
CHICAGO/PROSPECT HEIGHTS/ WHEELING, IL	CHICAGO EXECUTIVE	1 FEBRUARY 2018	3A

TAKEOFF MINIMUMS:

RWY 6, 24: NA - ATC REQUEST

RWY 16, 34: STANDARD

RWY 12: 300-1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 230 FT PER NM TO 900, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1700 FT PRIOR TO DER

RWY 30: 300-1 OR STANDARD WITH MINIMUM CLIMB OF 250 FT PER NM TO 900, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 2000 FT PRIOR TO DER

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 12: BUILDING, POLE BEGINNING 53 FT FROM DER, 57 FT RIGHT OF CENTERLINE, UP TO 16 FT AGL/658 FT MSL. VEHICLES ON TRAVERSE WAY BEGINNING 114 FT FROM DER, 484 FT RIGHT OF CENTERLINE, UP TO 15 FT AGL/664 FT MSL. FENCE, POLE BEGINNING 126 FT FROM DER, 31 FT LEFT OF CENTERLINE, UP TO 8 FT AGL/648 FT MSL. BUILDING, FENCE BEGINNING 192 FT FROM DER, 133 FT RIGHT OF CENTERLINE, UP TO 22 FT AGL/663 FT MSL. VEHICLES ON TRAVERSE WAY, FENCE BEGINNING 202 FT FROM DER, 7 FT LEFT OF CENTERLINE, UP TO 655 FT MSL. LIGHTING, SIGN, VEHICLES ON TRAVERSE WAY, BUILDING BEGINNING 243 FT FROM DER, 51 FT LEFT OF CENTERLINE, UP TO 678 FT MSL. BUILDING, TREE, VEHICLES ON TRAVERSE WAY, POLE BEGINNING 255 FT FROM DER, 35 FT RIGHT OF CENTERLINE, UP TO 35 FT AGL/677 FT MSL. TREE, VEHICLES ON TRAVERSE WAY, POLE BEGINNING 417 FT FROM DER, 47 FT LEFT OF CENTERLINE, UP TO 696 FT MSL. TREE, POLE BEGINNING 561 FT FROM DER, 110 FT LEFT OF CENTERLINE, UP TO 699 FT MSL. TREE, POLE BEGINNING 620 FT FROM DER, 6 FT LEFT OF CENTERLINE, UP TO 702 FT MSL. BUILDING, POLE BEGINNING 661 FT FROM DER, 14 FT RIGHT OF CENTERLINE, UP TO 32 FT AGL/681 FT MSL. TREE, POLE, VEHICLES ON TRAVERSE WAY BEGINNING 712 FT FROM DER, 80 FT RIGHT OF CENTERLINE, UP TO 684 FT MSL. TREES BEGINNING 797 FT FROM DER, 139 FT LEFT OF CENTERLINE, UP TO 709 FT MSL. POLE, VEHICLES ON TRAVERSE WAY, TREE, TRANSMISSION LINE BEGINNING 838 FT FROM DER, 45 FT RIGHT OF CENTERLINE, UP TO 36 FT AGL/690 FT MSL. TREE, VEHICLES ON TRAVERSE WAY BEGINNING 931 FT FROM DER, 26 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/717 FT MSL. TREE, POLE, TRANSMISSION LINE BEGINNING 1186 FT FROM DER, 89 FT RIGHT OF CENTERLINE, UP TO 703 FT MSL. TREE, BUILDING, POLE BEGINNING 1394 FT FROM DER, 112 FT RIGHT OF CENTERLINE, UP TO 715 FT MSL. TREES BEGINNING 1945 FT FROM DER, 44 FT LEFT OF CENTERLINE, UP TO 725 FT MSL. TREES BEGINNING 2026 FT FROM DER, 20 FT LEFT OF CENTERLINE, UP TO 738 FT MSL. TREES BEGINNING 2373 FT FROM DER, 66 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/731 FT MSL. BUILDING 4040 FT FROM DER, 1148 FT RIGHT OF CENTERLINE, 114 FT AGL/755 FT MSL. BUILDING 4117 FT FROM DER, 1190 FT RIGHT OF CENTERLINE, 128 FT AGL/769 FT MSL. POLE 1 NM FROM DER, 2072 FT LEFT OF CENTERLINE, 138 FT AGL/798 FT MSL. BUILDING 1.1 NM FROM DER, 141 FT LEFT OF CENTERLINE, 174 FT AGL/834 FT MSL. BUILDING 1.1 NM FROM DER, 141 FT LEFT OF CENTERLINE, 152 FT AGL/818 FT MSL.

NOTE: RWY 16: GENERAL UTILITY 39 FT FROM DER, 113 FT RIGHT OF CENTERLINE, 4 FT AGL/646 FT MSL. BUILDING 55 FT FROM DER, 464 FT RIGHT OF CENTERLINE, 656 FT MSL. BUILDING, VEHICLES ON TRAVERSE WAY BEGINNING 91 FT FROM DER, 298 FT RIGHT OF CENTERLINE, UP TO 658 FT MSL. POLE, SIGN, VEHICLES ON TRAVERSE WAY BEGINNING 275 FT FROM DER, 25 FT RIGHT OF CENTERLINE, UP TO 29 FT AGL/672 FT MSL. NAVAID 297 FT FROM DER, 2 FT LEFT OF CENTERLINE, 11 FT AGL/653 FT MSL. VEHICLES ON TRAVERSE WAY BEGINNING 306 FT FROM DER, 365 FT LEFT OF CENTERLINE, UP TO 15 FT AGL/671 FT MSL. VEHICLES ON TRAVERSE WAY, 319 FT FROM DER, 230 FT LEFT OF CENTERLINE, 15 FT AGL/672 FT MSL. VEHICLES ON TRAVERSE WAY BEGINNING 402 FT FROM DER, 11 FT LEFT OF CENTERLINE, UP TO 15 FT AGL/673 FT MSL. TREE, TRANSMISSION LINE, POLE BEGINNING 442 FT FROM DER, 62 FT RIGHT OF CENTERLINE, UP TO 682 FT MSL. TREE, BUILDING BEGINNING 573 FT FROM DER, 34 FT LEFT OF CENTERLINE, UP TO 38 FT AGL/680 FT MSL. TREE 1026 FT FROM DER, 237 FT RIGHT OF CENTERLINE, 684 FT MSL. TREE, POLE BEGINNING 1082 FT FROM DER, 23 FT RIGHT OF CENTERLINE, UP TO 688 FT MSL. TREE 1094 FT FROM DER, 642 FT LEFT OF CENTERLINE, 684 FT MSL. TREE, BUILDING BEGINNING 1102 FT FROM DER, 33 FT LEFT OF CENTERLINE, UP TO 685 FT MSL. TREES BEGINNING 1237 FT FROM DER, 252 FT LEFT OF CENTERLINE, UP TO 689 FT MSL. TREES BEGINNING 1248 FT FROM DER, 285 FT RIGHT OF CENTERLINE, UP TO 693 FT MSL. TREE 1370 FT FROM DER, 349 FT LEFT OF CENTERLINE, 695 FT MSL. TREE, TOWER BEGINNING 1461 FT FROM DER, 183 FT LEFT OF CENTERLINE, UP TO 78 FT AGL/717 FT MSL. TREES BEGINNING 1502 FT FROM DER, 14 FT RIGHT OF CENTERLINE, UP TO 79 FT AGL/720 FT MSL. TREE 2073 FT FROM DER, 894 FT LEFT OF CENTERLINE, 718 FT MSL. TREES BEGINNING 2173 FT FROM DER, 97 FT RIGHT OF CENTERLINE, UP TO 726 FT MSL.

NOTE: RWY 30: FENCE 25 FT FROM DER, 108 FT LEFT OF CENTERLINE, 5 FT AGL/650 FT MSL. VEHICLES ON TRAVERSE WAY, FENCE BEGINNING 47 FT FROM DER, 25 FT RIGHT OF CENTERLINE, UP TO 658 FT MSL. TREE 56 FT FROM DER, 285 FT LEFT OF CENTERLINE, 36 FT AGL/683 FT MSL. TREE, VEHICLES ON TRAVERSE WAY, FENCE BEGINNING 77 FT FROM DER, 41 FT LEFT OF CENTERLINE, UP TO 689 FT MSL. BUILDING, VEHICLES ON TRAVERSE WAY, POLE BEGINNING 79 FT FROM DER, 66 FT RIGHT OF CENTERLINE, UP TO 670 FT MSL. POLE, VEHICLES ON TRAVERSE WAY, TREE, TRANSMISSION LINE BEGINNING 235 FT FROM DER, 99 FT RIGHT OF CENTERLINE, UP TO 34 FT AGL/678 FT MSL. BUILDING 383 FT FROM

**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>
CHICAGO/PROSPECT HEIGHTS/ WHEELING, IL	CHICAGO EXECUTIVE	1 FEBRUARY 2018	3A

DER, 594 FT LEFT OF CENTERLINE, 44 FT AGL/691 FT MSL TREE, BUILDING BEGINNING 393 FT FROM DER, 1 FT LEFT OF CENTERLINE, UP TO 697 FT MSL. TREE, BUILDING, TRANSMISSION LINE, POLE BEGINNING 523 FT FROM DER, 240 FT RIGHT OF CENTERLINE, UP TO 679 FT MSL. TREE, BUILDING, POLE, TRANSMISSION LINE BEGINNING 636 FT FROM DER, 48 FT RIGHT OF CENTERLINE, UP TO 689 FT MSL. TREE, BUILDING, POLE BEGINNING 794 FT FROM DER, 123 FT RIGHT OF CENTERLINE, UP TO 709 FT MSL. TREES BEGINNING 1114 FT FROM DER, 82 FT LEFT OF CENTERLINE, UP TO 702 FT MSL. TREES BEGINNING 1267 FT FROM DER ON CENTERLINE, UP TO 89 FT AGL/730 FT MSL. TREES BEGINNING 1580 FT FROM DER, 51 FT LEFT OF CENTERLINE, UP TO 712 FT MSL. TRANSMISSION LINE 2741 FT FROM DER, 1053 FT LEFT OF CENTERLINE, 110 FT AGL/760 FT MSL. TRANSMISSION LINE, TREE BEGINNING 2977 FT FROM DER, 96 FT LEFT OF CENTERLINE, UP TO 118 FT AGL/768 FT MSL. TRANSMISSION LINE 3858 FT FROM DER, 172 FT RIGHT OF CENTERLINE, 757 FT MSL. TRANSMISSION LINE BEGINNING 3873 FT FROM DER, 160 FT RIGHT OF CENTERLINE, UP TO 108 FT AGL/776 FT MSL. TRANSMISSION LINE 4732 FT FROM DER, 1004 FT RIGHT OF CENTERLINE, 133 FT AGL/778 FT MSL. TRANSMISSION LINE 4792 FT FROM DER, 938 FT RIGHT OF CENTERLINE, 141 FT AGL/790 FT MSL. TANK, TRANSMISSION LINE BEGINNING 5087 FT FROM DER, 760 FT RIGHT OF CENTERLINE, UP TO 802 FT MSL.

NOTE: RWY 34: SIGN 26 FT FROM DER, 492 FT RIGHT OF CENTERLINE, 11 FT AGL/645 FT MSL. SIGN, GENERAL UTILITY BEGINNING 29 FT FROM DER, 115 FT LEFT OF CENTERLINE, UP TO 6 FT AGL/646 FT MSL. GENERAL UTILITY 39 FT FROM DER, 115 FT RIGHT OF CENTERLINE, 6 FT AGL/647 FT MSL. TREE, POLE, VEHICLES ON TRAVERSE WAY BEGINNING 115 FT FROM DER, 55 FT LEFT OF CENTERLINE, UP TO 723 FT MSL. VEHICLES ON TRAVERSE WAY 392 FT FROM DER, 584 FT RIGHT OF CENTERLINE, 15 FT AGL/678 FT MSL. VEHICLES ON TRAVERSE WAY BEGINNING 526 FT FROM DER, 331 FT RIGHT OF CENTERLINE, UP TO 15 FT AGL/679 FT MSL. TREE, VEHICLES ON TRAVERSE WAY BEGINNING 594 FT FROM DER, 29 FT RIGHT OF CENTERLINE, UP TO 686 FT MSL. TREE, BUILDING, POLE, TRANSMISSION LINE BEGINNING 708 FT FROM DER, 225 FT RIGHT OF CENTERLINE, UP TO 697 FT MSL. TREES BEGINNING 1507 FT FROM DER, 491 FT RIGHT OF CENTERLINE, UP TO 700 FT MSL. TREE, TRANSMISSION LINE, POLE BEGINNING 1661 FT FROM DER, 53 FT RIGHT OF CENTERLINE, UP TO 701 FT MSL. TREES BEGINNING 2131 FT FROM DER, 121 FT RIGHT OF CENTERLINE, UP TO 712 FT MSL. TREE 2862 FT FROM DER, 637 FT RIGHT OF CENTERLINE, 716 FT MSL. TREE 2927 FT FROM DER, 106 FT RIGHT OF CENTERLINE, 723 FT MSL. TREES BEGINNING 2986 FT FROM DER, 373 FT RIGHT OF CENTERLINE, UP TO 727 FT MSL.

CONTROLLING OBSTACLES:

RWY 12: 834 FT MSL BUILDING 420604.00N/0875211.00W
RWY 30: 802 FT MSL ANT ON WATER TWR 420725.61N/0875520.71W

REMARKS:

FLIGHT INSPECTED BY:

OFFICE SYMBOL:

DATE:

PROCESSED IAW FLIGHT INSPECTION TEAM (AJW-33) MEMO, MAY 30, 2017, SUBJECT: FLIGHT INSPECTION NOT REQUIRED.

*Digitally signed by
STEVEN A VARGAS
Oct 16, 2017*

DEVELOPED BY:

OFFICE SYMBOL:

DATE:

ROSE BOONE

*Digitally signed by
ROSE BOONE
Aug 22, 2017*

AJV-5412

08/09/2017

APPROVED BY:

OFFICE SYMBOL:

DATE:

JULIE MORGAN

*Digitally signed by
STEVEN A VARGAS
Oct 16, 2017*

AJV-5420

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA



OTHER:

PWK ATCT, ORD APP CON, ARPT MGR

CHANGES - REASONS:

REMOVED TAKEOFF MINIMUMS AND OBSTACLE NOTES FOR RWY 6 AND 24.
UPDATED TAKEOFF OBSTACLE NOTES FOR ALL RUNWAYS

REASON:

ATC REQUEST



**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
INDIANAPOLIS, IN	INDY SOUTH GREENWOOD	1 FEBRUARY 2018	5

TAKEOFF MINIMUMS:

RWY 1, 19: STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

RWY 1: CLIMB HEADING 009.65 TO 1500 BEFORE TURNING RIGHT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 1: POLES BEGINNING 7 FT FROM DER, 224 FT LEFT OF CENTERLINE, UP TO 17 FT AGL/835 FT MSL.
TREE 41 FT FROM DER, 364 FT RIGHT OF CENTERLINE, 26 FT AGL/846 FT MSL.
BUILDING 105 FT FROM DER, 495 FT RIGHT OF CENTERLINE, 27 FT AGL/848 FT MSL.
BUILDING 430 FT FROM DER, 603 FT LEFT OF CENTERLINE, 37 FT AGL/857 FT MSL.
BUILDING, TREE, POLE BEGINNING 458 FT FROM DER, 378 FT RIGHT OF CENTERLINE, UP TO 40 FT AGL/858 FT MSL.
BUILDING, POLE BEGINNING 463 FT FROM DER, 562 FT LEFT OF CENTERLINE, UP TO 39 FT AGL/859 FT MSL.
BUILDING, POLE, TREE BEGINNING 506 FT FROM DER, 470 FT LEFT OF CENTERLINE, UP TO 45 FT AGL/865 FT MSL.
POLE 671 FT FROM DER, 464 FT RIGHT OF CENTERLINE, 51 FT AGL/868 FT MSL.
POLE, TRAVERSE WAY, SIGN, BUILDING, TREE BEGINNING 690 FT FROM DER, 245 FT RIGHT OF CENTERLINE, UP TO 53 FT AGL/872 FT MSL.
TRANSMISSION LINE, POLE BEGINNING 1555 FT FROM DER, 659 FT RIGHT OF CENTERLINE, UP TO 70 FT AGL/893 FT MSL.
TREES BEGINNING 1917 FT FROM DER, 321 FT LEFT OF CENTERLINE, UP TO 90 FT AGL/899 FT MSL.
TREES BEGINNING 2026 FT FROM DER, 328 FT LEFT OF CENTERLINE, UP TO 103 FT AGL/907 FT MSL.
TREE, TRANSMISSION LINE BEGINNING 2328 FT FROM DER, 795 FT RIGHT OF CENTERLINE, UP TO 76 FT AGL/894 FT MSL.
TREE, TRANSMISSION LINE BEGINNING 2463 FT FROM DER, 376 FT RIGHT OF CENTERLINE, UP TO 77 FT AGL/898 FT MSL.
BUILDING 5365 FT FROM DER, 1405 FT RIGHT OF CENTERLINE, 135 FT AGL/957 FT MSL.

NOTE: RWY 19: TERRAIN 2 FT FROM DER, 496 FT LEFT OF CENTERLINE, 824 FT MSL.
FENCE 12 FT FROM DER, 490 FT RIGHT OF CENTERLINE, 4 FT AGL/826 FT MSL.
TREE 212 FT FROM DER, 549 FT LEFT OF CENTERLINE, 52 FT AGL/873 FT MSL.
TREE 543 FT FROM DER, 417 FT RIGHT OF CENTERLINE, 18 FT AGL/845 FT MSL.
TREE, BUILDING BEGINNING 564 FT FROM DER, 612 FT LEFT OF CENTERLINE, UP TO 62 FT AGL/884 FT MSL.
TREE 638 FT FROM DER, 402 FT RIGHT OF CENTERLINE, 20 FT AGL/849 FT MSL.
TREE 752 FT FROM DER, 383 FT RIGHT OF CENTERLINE, 24 FT AGL/852 FT MSL.
TREES BEGINNING 782 FT FROM DER, 65 FT RIGHT OF CENTERLINE, UP TO 41 FT AGL/868 FT MSL.
TREE, POLE BEGINNING 953 FT FROM DER, 9 FT LEFT OF CENTERLINE, UP TO 62 FT AGL/886 FT MSL.
TREE, POLE BEGINNING 1155 FT FROM DER, 145 FT RIGHT OF CENTERLINE, UP TO 69 FT AGL/896 FT MSL.
TREES BEGINNING 1487 FT FROM DER, 83 FT RIGHT OF CENTERLINE, UP TO 78 FT AGL/902 FT MSL.
TREES BEGINNING 1561 FT FROM DER, 25 FT RIGHT OF CENTERLINE, UP TO 76 FT AGL/904 FT MSL.
TREES BEGINNING 2035 FT FROM DER, 270 FT RIGHT OF CENTERLINE, UP TO 87 FT AGL/908 FT MSL.
TREES BEGINNING 2161 FT FROM DER, 634 FT LEFT OF CENTERLINE, UP TO 76 FT AGL/908 FT MSL.
TREES BEGINNING 2706 FT FROM DER, 156 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/916 FT MSL.
TREES BEGINNING 2730 FT FROM DER, 248 FT RIGHT OF CENTERLINE, UP TO 98 FT AGL/923 FT MSL.
TREE 3079 FT FROM DER, 1113 FT LEFT OF CENTERLINE, 60 FT AGL/918 FT MSL.
TREES BEGINNING 3080 FT FROM DER, 181 FT LEFT OF CENTERLINE, UP TO 64 FT AGL/921 FT MSL.
TREES BEGINNING 3246 FT FROM DER, 131 FT LEFT OF CENTERLINE, UP TO 72 FT AGL/923 FT MSL.
TREE 4071 FT FROM DER, 127 FT LEFT OF CENTERLINE, 79 FT AGL/944 FT MSL.

CONTROLLING OBSTACLES:

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 1: 1542 FT MSL TOWER 394006.00N/0860144.00W.



**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>
INDIANAPOLIS, IN	INDY SOUTH GREENWOOD	1 FEBRUARY 2018	5

REMARKS:

<u>FLIGHT INSPECTED BY:</u>	<i>Digitally signed by</i>	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
PAUL R ARMSTRONG	ALLAN WILL	FICO	10/03/2017
	Oct 17, 2017		

<u>DEVELOPED BY:</u>	<i>Digitally signed by</i>	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
MIKE MELSEN	MIKE MELSEN	AJV-5412	08/04/2017
	Aug 16, 2017		

<u>APPROVED BY:</u>	<i>Digitally signed by</i>	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
GEORGE DAVIS	ALLAN WILL	AJV-5410	
	Oct 17, 2017		

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

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

OTHER:
ZID, IND APP CON, IND ATCT

CHANGES - REASONS:

1. AIRPORT NAME CHANGED FROM GREENWOOD MUNI TO INDY SOUTH GREENWOOD - AIRPORT REQUEST.
2. CHANGED RUNWAY 19 TAKEOFF MINIMUMS FROM "300-1 OR STANDARD WITH MINIMUM CLIMB OF 484 FT PER NM TO 1200" TO "STANDARD" - PREVIOUS CONTROLLING OBSTACLE NO LONGER IN THE WORK AREA - NEW SURVEY IN 2016.
3. UPDATED TAKEOFF OBSTACLE NOTES - NEW SURVEY IN 2016.
4. REMOVED RWY 19 CONTROLLING OBSTACLE (985 MSL TANK) - OBSTACLE NO LONGER IN DATABASE.

QUALITY
3
CHECKED

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES														MISSED APPROACH												
FROM				TO			COURSE AND DISTANCE				ALTITUDE		ILS: DA LOC: I-IXD 1.37 DME													
ANX VORTAC				SKINI/I-IXD 6.37 DME			232.14 / 41.72				4000		CLIMB TO 2700 THEN CLIMBING LEFT TURN TO 4000 ON TOP VORTAC R-107 TO RUGBB/MCI 25.00 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 3000 THEN LEFT TURN ON HEADING 200 AND ON BUM VORTAC R-309 TO FRELS INT/BUM 27.33 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SW, RT, 043.24 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE FRELS INT/BUM 27.33 DME, RT, 309.00 INBOUND. CHART FAS OBST: 1104 SIGN 384842N/0945320W. CHART 1279 AAO 384542N/0945406W. CHART VDP AT 2.35 DME* DISTANCE VDP TO THLD 0.98 NM. *LOC ONLY. CHART CIRCLING ICON. CHART IN PLANVIEW: FRELS INT/BUM 27.33 DME CHART PLANVIEW NOTE: DME REQUIRED.													
TOP VORTAC				SKINI/I-IXD 6.37 DME			122.79 / 39.06				3100															
MCI VORTAC				SKINI/I-IXD 6.37 DME			187.43 / 33.72				2700															
BUM VORTAC (IAF)				FRELS INT/I-IXD 14.36 DME (NOPT)			309.00 / 27.33				2700															
FRELS INT/I-IXD 14.56 DME (IF)				SKINI/I-IXD 6.37 DME			356.04 / 8.18 (I-IXD)				2700															
1. PT <u>R</u> SIDE OF COURSE <u>176.04</u> OUTBOUND <u>2700</u> FT WITHIN <u>10</u> MILES OF <u>SKINI</u> (IAF)																										
2. _____																										
3. FAC: <u>356.04</u> FAF: <u>SKINI/I-IXD 6.37 DME</u> DIST FAF TO MAP: _____ THLD: <u>5.00</u>																										
4. MIN. ALT: <u>SKINI 2700, ZIXAT/I-IXD 2.87 DME 1580*</u>																										
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: <u>951</u>																										
6. MIN GS INCPT: <u>2700</u> GS ALT AT: <u>SKINI 2700</u> OM: _____ MM: _____ IM: _____																										
7. GS ANGLE: <u>3.00</u> TCH: <u>55.3</u>																										
8. MSA FROM: <u>MCI VORTAC 3100 (29 NM)</u>																										
MAG VAR: 4E 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 36	1267	1/2	200	1267	1/2	200	1267	1/2	200	1267	1/2	200														
S-LOC 36	1420	1/2	353	1420	1/2	353	1420	5/8	353	1420	5/8	353														
CIRCLING	1560	1	473	1560	1	473	1580	1 1/2	493	1640	2	553														
NOTES: CHART NOTE: DME REQUIRED. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 36 CAT C/D VISIBILITY TO 1 SM.																										
CITY AND STATE OLATHE, KS				ELEVATION: 1087 TDZE: 1067 AIRPORT NAME: NEW CENTURY AIRCENTER				FACILITY IDENTIFIER: I-IXD		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 36, AMDT 7A 1 FEBRUARY 2018				SUP: ILS OR LOC/DME RWY 36 AMDT: 7 DATED 04/02/2015												



US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33		Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.													
TERMINAL ROUTES										MISSED APPROACH							
FROM		TO		COURSE AND DISTANCE				ALTITUDE		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: _____																	
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: _____																	
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A							
CATEGORY =====>																	
		DH/MDA	VIS		DH/MDA	VIS		DH/MDA	VIS		DH/MDA	VIS		DH/MDA	VIS		
NOTES:																	
PROCEDURE CANCELED EFFECTIVE 1 FEBRUARY 2018																	
CITY AND STATE TOPEKA, KS		ELEVATION: 881 TDZE: 879 AIRPORT NAME: PHILIP BILLARD MUNI		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 4, ORIG-A, 11/25/2004 1 FEBRUARY 2018						SUP: AMDT: ORIG DATED 12/25/2003					

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		ADDITIONAL FLIGHT DATA:					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)															
2. _____															
3. FAC: _____ FAF: _____ DIST FAF TO MAP: _____ THLD: _____															
4. MIN. ALT: _____															
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____															
6. MIN GS INCPT: _____ GS ALT AT: _____ OM: _____ MM: _____ IM: _____															
7. GS ANGLE: _____ TCH: _____															
8. MSA FROM: _____										MAG VAR: _____			EPOCH YEAR: _____		
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT															
ALTERNATE: N A															
CATEGORY =====>															
		DH/MDA VIS		DH/MDA VIS				DH/MDA VIS				DH/MDA VIS			
NOTES:															
PROCEDURE CANCELED EFFECTIVE 1 FEBRUARY 2018															
CITY AND STATE TOPEKA, KS		ELEVATION: 881 TDZE: 879 AIRPORT NAME: PHILIP BILLARD MUNI				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 22, AMDT 1, 11/23/2006				SUP: AMDT: ORIG DATED 12/25/2003			

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)																			
2. ____																			
3. FAC ____ FAF ____ DIST FAF TO MAP ____ THLD ____																			
4. MIN. ALT ____																			
8. MSA FROM: ____										MAG VAR: ____ EPOCH YEAR: ____									
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 1 FEBRUARY 2018																			
CITY AND STATE TOPEKA, KS				ELEVATION: 881 TDZE: 879 AIRPORT NAME: PHILIP BILLARD MUNI				FACILITY IDENTIFIER: TOP		PROCEDURE NO./AMD'T NO./EFFECTIVE DATE: VOR RWY 22, AMDT 21, 11/23/2006						SUP AMD'T 20 DATE 07/02/2002			

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

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<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
DEBLOIS	ONE		NONE		1 FEBRUARY 2018

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

DP ROUTE DESCRIPTION:

RWY 33: CLIMB HEADING 331.18 TO 1400 THEN CLIMBING LEFT TURN HEADING 250 TO 1900 BEFORE PROCEEDING ON COURSE.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

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

PROCEDURAL DATA NOTES:

TAKEOFF MINIMUMS:

RWY 15, 33: STANDARD.

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 15, ROAD 76 FT FROM DER, 81 FT LEFT OF CENTERLINE, 15 FT AGL/228 FT MSL. ROAD AND TREES 81 FT FROM DER, 257 FT LEFT OF CENTERLINE, 100 FT AGL/297 FT MSL. TREES BEGINNING 143 FT FROM DER, 19 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/301 FT MSL. TREES BEGINNING 234 FT FROM DER, 42 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/301 FT MSL. TREES BEGINNING 879 FT FROM DER, 80 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/304 FT MSL. TREES BEGINNING 1339 FT FROM DER, 11 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/304 FT MSL. TREES BEGINNING 1462 FT FROM DER, 19 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/307 FT MSL.

NOTE: RWY 33, TREE 16 FT FROM DER, 504 FT RIGHT OF CENTERLINE, 100 FT AGL/304 FT MSL. TREES BEGINNING 45 FT FROM DER, 16 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/307 FT MSL. TREES BEGINNING 169 FT FROM DER, 44 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/307 FT MSL. TREES BEGINNING 752 FT FROM DER, 14 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/310 FT MSL. TREES BEGINNING 1241 FT FROM DER, 15 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/317 FT MSL. TREES BEGINNING 2071 FT FROM DER, 1026 FT RIGHT OF CENTERLINE, 100 FT AGL/314 FT MSL. TREES BEGINNING 2100 FT FROM DER, 16 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/317 FT MSL. TREES BEGINNING 3663 FT FROM DER, 136 FT LEFT OF CENTERLINE, 100 FT AGL/320 FT MSL. TREES BEGINNING 3696 FT FROM DER, 77 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/320 FT MSL.

CONTROLLING OBSTACLES:

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 33: 1677 FEET MSL AAO 445154.00N/0680636.00W, 1086 FEET MSL WINDMILL 444611.50N/0680718.58W.

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

AIRPORTS SERVED:

<u>AIRPORT NAME</u>	<u>CITY</u>	<u>STATE</u>
DEBLOIS FLIGHT STRIP	DEBLOIS	ME



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

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<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
DEBLOIS	ONE		NONE		1 FEBRUARY 2018

COMMUNICATIONS:

ZBW

FIXES AND/OR NAVAIDS:

REMARKS:

TURN TO HEADING 250 COORDINATED WITH ATC TO AVOID DEEP WOODS MOA AND MITIGATE OBSTACLES.

FLIGHT INSPECTED BY:

John D Jeffers

Digitally signed by

BEV L BORDY

Jun 01, 2017

OFFICE SYMBOL:

FICO

DATE:

5/30/17

DEVELOPED BY:

SCOTT BAGENSIE

Digitally signed by

SCOTT BAGENSIE

Apr 18, 2017

Digitally signed by

OFFICE SYMBOL:

AJV-5433

DATE:

03/21/2017

APPROVED BY:

PATRICK MULQUEEN

Digitally signed by

BEV L BORDY

Jun 01, 2017

OFFICE SYMBOL:

AJV-5430

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A

ALPA

AOPA

APA

HAI

NBAA

☐☒☒☐☐☒

OTHER:

AMGR, ZBW, BGR APPCON

CHANGES - REASONS:

AIRPORT CONVERTED FROM VFR TO IFR.



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: RW33 CLIMBING RIGHT TURN TO 3000 DIRECT DAANK AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000. ADDITIONAL FLIGHT DATA: FAS OBST: 420 AAO 444124N/0675451W 555 AAO 444118N/0675406W CHART HANCOCK COUNTY-BAR HARBOR AWOS. CHART CIRCLING ICON. FINAL APPROACH COURSE ALIGNED TO RWY 33 THLD. SEVIE TO RW33: 3.00/40									
PAATI (IAF)		DAANK (NOPT) (TF) (FB) (RNP 1.00)			061.23 / 5.30			3000											
MEEMS (IAF)		DAANK (NOPT) (TF) (FB) (RNP 1.00)			241.35 / 5.25			3000											
DAANK (IF/IAF)		SEVIE (TF) (FB) (RNP 1.00)			331.29 / 5.30			1600											
SEVIE (FAF)		RW33 (MAP) (TF) (FO) (RNP 0.30)			331.23 / 4.25														
RW33 (MAP)		616 MSL (CA)			331.23														
616 MSL		DAANK (DF) (FO) (RNP 1.00)						3000											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SE DAANK, RT, 331.29 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 331.23 FAF: SEVIE _____ DIST FAF TO MAP: 4.25 THLD: _____ 4. MIN. ALT: DAANK 3000, SEVIE 1600 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: _____ GS ALT AT: _____ OM: _____ MM: _____ IM: _____ 7. GS ANGLE: _____ TCH: 34:1 IS NOT CLEAR 8. MSA FROM: _____																MAG VAR: 16W		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				
CIRCLING	820	1	604	920	1	704	1080	2 1/2	864		NA								
NOTES: CHART NOTE: RWY 15, 33 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: PROCEDURE NA AT NIGHT. CHART NOTE: WHEN BAR HARBOR ALTIMETER SETTING NOT RECEIVED, USE BANGOR ALTIMETER SETTING AND INCREASE ALL MDA 20 FEET AND VISIBILITY CAT C 1/4 SM.																			
CITY AND STATE		ELEVATION: 216 TDZE:			FACILITY IDENTIFIER:			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:							
DEBLOIS, ME		AIRPORT NAME:			RNAV			RNAV (GPS)-A, ORIG 1 FEBRUARY 2018				AMDT: NONE							
		DEBLOIS FLIGHT STRIP										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.	241/30 CW 061/30 (NOPT)	DAANK (IF/IAF) (FB)	3000
2.	061/30 CW 151/30	PAATI (IAF) (FB)	3000
3.	151/30 CW 241/30	MEEMS (IAF) (FB)	3000

QUALITY
16
CHECKED

CITY AND STATE DEBLOIS, ME	ELEVATION: 216 AIRPORT NAME: DEBLOIS FLIGHT STRIP	TDZE: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS)-A, ORIG 1 FEBRUARY 2018	SUP:
				AMDT: NONE
				DATED:

**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>
DEBLOIS, ME	DEBLOIS FLIGHT STRIP	1 FEBRUARY 2018	ORIG

TAKEOFF MINIMUMS:

TEXTUAL DEPARTURE PROCEDURES:
RWY 33 - USE DEBLOIS DEPARTURE.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

CONTROLLING OBSTACLES:

REMARKS:

FLIGHT INSPECTED BY:

John D Jeffers

Digitally signed by

BEV L BORDY

Jun 01, 2017

OFFICE SYMBOL:

FICO

DATE:

5/30/17

DEVELOPED BY:

SCOTT BAGENSIE

Digitally signed by

SCOTT BAGENSIE

Apr 18, 2017

OFFICE SYMBOL:

AJV-5433

DATE:

03/21/2017

APPROVED BY:

PATRICK MULQUEEN

Digitally signed by

BEV L BORDY

Jun 01, 2017

OFFICE SYMBOL:

AJV-5430

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA



OTHER:

AMGR, ZBW, BGR APPCON

CHANGES - REASONS:

AIRPORT CONVERTED FROM VFR TO IFR.

4/14/17: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 3/21/17. (JD)
PROCEDURE CONVERTED TO GRAPHIC ODP.

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											
										ADDITIONAL FLIGHT DATA:									
1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)																			
2. _____																			
3. FAC ____ FAF ____ DIST FAF TO MAP ____ THLD ____																			
4. MIN. ALT ____																			
8. MSA FROM: _____										MAG VAR: _____ EPOCH YEAR: _____									
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 1 FEBRUARY 2018																			
CITY AND STATE FREMONT, MI		ELEVATION: 772 AIRPORT NAME: FREMONT MUNI		TDZE: 760		FACILITY IDENTIFIER: MKG		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR RWY 36, AMDT 7A, 12/17/2009				SUP AMDT 7 DATE 01/18/2007							

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29									Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are 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: 4.50 NM AFTER FAMLI OM/RADAR									
UNSUB/VIO 18.53 DME (IAF)			PETKE/RADAR			050.00 / 2.49 (HDG) & 095.61 / 8.84 (I-CPQ)			2500			CLIMB TO 2000 THEN CLIMBING LEFT TURN TO 2700 ON HEADING 070 AND ON FNT VORTAC R-257 TO ERRYS INT AND HOLD.									
PETKE/RADAR (IF)			FAMLI OM/RADAR			095.61 / 6.10 (I-CPQ)			2400												
												ADDITIONAL FLIGHT DATA: HOLD E, RT, 256.70 INBOUND. FAS OBST: 1080 AAO 424626N/0844132W. CHART: ASR CHART CIRCLING ICON. CHART VIO R-100 AT UNSUB. CHART PLANVIEW NOTE: RADAR REQUIRED.									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																					
2. PROFILE STARTS AT PETKE																					
3. FAC: 095.61 FAF: FAMLI OM/RADAR DIST FAF TO MAP: 4.50 THLD: 4.50																					
4. MIN. ALT: PETKE 2500, FAMLI OM 2400																					
5. DIST TO THLD FROM OM: 4.50 MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 1160																					
6. MIN GS INCPT: 2400 GS ALT AT: - OM: 2367 MM: - IM: -																					
7. GS ANGLE: 3.00 TCH: 56.1																					
8. MSA FROM: KLAN 3000												MAG VAR: 5W EPOCH YEAR: 1985									
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 10R**	1061	2400	200	1061	2400	200	1061	2400	200	1061	2400	200									
S-LOC 10R	1340	2400	479	1340	2400	479	1340	5000	479	1340	5000	479									
CIRCLING	1380	1	519	1380	1	519	1600	2	739	1760	3	899									
NOTES: CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHART NOTE: CIRCLING RWY 10L, 28R NA AT NIGHT. CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).																					
							# CAT C 800-2, CAT D 900-3 @ CAT D 900-3														
CITY AND STATE LANSING, MI							ELEVATION: 861 TDZE: 861 AIRPORT NAME: CAPITAL REGION INTL			FACILITY IDENTIFIER: I-CPQ			PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 10R, AMDT 11B 1 FEBRUARY 2018			SUP: AMDT: 11A DATED 03/02/2017					

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: 4.71 NM AFTER BURYE/I-LAN 6.29 DME/RADAR OR AT I-LAN 1.59 DME CLIMB TO 2500 THEN CLIMBING LEFT TURN TO 3000 ON VIO VOR/DME R-100 TO UNSUN/VIO 18.53 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 100.44 INBOUND. FAS OBST: 1050 AAO 424617N/0842836W. CHART: ASR. CHART VDP AT 2.84 DME* DISTANCE VDP TO THLD 1.25 NM. *LOC ONLY. CHART CIRCLING ICON. CHART JXN R-034 AT QUBEE CHART PLANVIEW NOTE: RADAR REQUIRED.							
QUBEE/JXN 30.84 DME (IAF)		WIGSA/I-LAN 12.70 DME/RADAR		321.00 / 5.30 (HDG) & 275.63 / 4.85 (I-LAN)				2500									
WIGSA/I-LAN 12.70 DME/RADAR (IF)		BURYE/I-LAN 6.29 DME/RADAR		275.63 / 6.41 (I-LAN)				2400									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT WIGSA/I-LAN 12.70 DME/RADAR 3. FAC: <u>275.63</u> FAF: <u>BURYE/I-LAN 6.29 DME/RADAR</u> DIST FAF TO MAP: <u>4.71</u> THLD: <u>4.71</u> 4. MIN. ALT: WIGSA 2500, BURYE 2400 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: 921 6. MIN GS INCPT: <u>2400</u> GS ALT AT: <u>BURYE 2400</u> OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>53.1</u> 8. MSA FROM: KLAN 3000										MAG VAR: 5W		EPOCH YEAR: 1985					
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 28L**	1052	2400	200	1052	2400	200	1052	2400	200	1052	2400	200					
S-LOC 28L	1300	2400	448	1300	2400	448	1300	4500	448	1300	4500	448					
CIRCLING	1380	1	519	1380	1	519	1600	2	739	1760	3	899					
NOTES: CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHART NOTE: CIRCLING RWY 10L, 28R NA AT NIGHT. CHART NOTE: DME REQUIRED.																	
CITY AND STATE LANSING, MI							ELEVATION: 861 TDZE: 852 AIRPORT NAME: CAPITAL REGION INTL			FACILITY IDENTIFIER: I-LAN			PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 28L, AMDT 27C 1 FEBRUARY 2018			SUP:	
																AMDT: 27B	
																DATED 03/02/2017	



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: RW11 CLIMB TO 3000 DIRECT FIKTA AND ON TRACK 056.92 TO CLIOO AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 334.03 INBOUND. CHART FAS OBST: 894 TREE 425958N/0841203W. DISTANCE TO THLD FROM 343 HAT: 0.96 NM. WAAS CHANNEL # 50209 REFERENCE PATH ID: W11A LTP HAE: 190.2 M				
ASHUR	HIKNO (TF) (FB) (RNP 2.00)	207.63 / 3.50	2600					
CLIOO	HIKNO (TF) (FB) (RNP 2.00)	277.57 / 22.61	2600					
HIKNO (IAF)	ZIGIT (TF) (FB) (RNP 1.00)	198.50 / 5.00	2600					
JIGON (IAF)	ZIGIT (TF) (FB) (RNP 1.00)	018.46 / 5.00	2600					
ZIGIT (IF)	OVITE (TF) (FB) (RNP 1.00)	108.48 / 6.10	2600					
(SEE FORM 8260-10)								
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT ZIGIT 3. FAC: <u>108.57</u> FAF: <u>OVITE</u> DIST FAF TO MAP: <u>5.65</u> THLD: <u>5.65</u> 4. MIN. ALT: <u>ZIGIT 2600, OVITE 2600, FABAD/2.30 NM TO RW11 1500*</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>OVITE 2600</u> OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>40.0</u> 34:1 IS NOT CLEAR 8. MSA FROM: <u>RW11 3100</u>								
				MAG VAR: 6W EPOCH YEAR: 2000				
MINIMUMS								
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT				ALTERNATE: N A				
CATEGORY >>>>>	A		B		C		D	
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS
LPV DA	1079	1 1/4	343	1079	1 1/4	343	1079	1 1/4
LNAV/VNAV DA	1258	2	522	1258	2	522	1258	2
LNAV MDA	1180	1	444	1180	1	444	1180	1 1/4
CIRCLING	1240	1	504	1240	1	504	1260	1 1/2
NOTES: CHART NOTE: CIRCLING NA TO RWYS 6, 18, 24, AND 36. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). CHART NOTE: RWY 11 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)								
CITY AND STATE		ELEVATION: 737 TDZE: 736		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:		SUP:
OWOSSO, MI		AIRPORT NAME:				RNAV (GPS) RWY 11, AMDT 1D		AMDT: 1C
		OWOSSO COMMUNITY				1 FEBRUARY 2018		DATED 10/13/2016

QUALITY
 16
 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
OVITE (FAF)	FABAD/2.30 NM TO RW11 (TF) (FB) (RNP 0.30)	108.57 / 3.35	
FABAD/2.30 NM TO RW11	RW11 (MAP) (TF) (FO) (RNP 0.30)	108.57 / 2.30	
RW11 (MAP)	1079 MSL (CA)	108.57	
1079 MSL	FIKTA (DF) (FB) (RNP 1.00)		
FIKTA	CLIOO (TF) (FO) (RNP 1.00)	056.92 / 12.00	3000

NOTES, (CONT.):

CHART PROFILE NOTE: VGS1 AND RNAV GLIDEPATH NOT COINCIDENT.

* LNAV ONLY

CHART NOTE: PROCEDURE NA AT NIGHT.

CITY AND STATE
OWOSSO, MI

ELEVATION: 737 TDZE: 736
AIRPORT NAME:
OWOSSO COMMUNITY

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 11, AMDT 1D
1 FEBRUARY 2018

SUP:
AMDT: 1C
DATED: 10/13/2016

QUALITY
16
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	KRNP
RUNWAY	RW11
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W11A
LTP/FTP LATITUDE	425939.3000N
LTP/FTP LONGITUDE	0840848.3365W
LTP/FTP ELLIPSOIDAL HEIGHT	+01902
FPAP LATITUDE	425919.7515N
FPAP LONGITUDE	0840649.8895W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1440
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 99C72761

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02235
FPAP ORTHOMETRIC HEIGHT	+02235

QUALITY
16
CHECKED

CITY AND STATE OWOSSO, MI	ELEVATION: 737 AIRPORT NAME: OWOSSO COMMUNITY	TDZE: 736 	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 11, AMDT 1D 1 FEBRUARY 2018	SUP:
					AMDT: 1C
					DATED: 10/13/2016

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		LNAV: RW29 CLIMB TO 2600 DIRECT ZIGIT AND HOLD. ADDITIONAL FLIGHT DATA: HOLD E, RT, 288.48 INBOUND. CHART FAS OBST: 929 TREE 425836N/0840541W. CASKA TO RW29: 3.04/40.							
CLIOO		HAMBU (TF) (FB) (RNP 2.00)			181.20 / 4.64			2400									
ERRYS		FOBER (TF) (FB) (RNP 2.00)			093.71 / 10.54			2400									
FOBER (IAF)		GURVE (TF) (FB) (RNP 1.00)			018.82 / 5.00			2400									
HAMBU (IAF)		GURVE (TF) (FB) (RNP 1.00)			198.86 / 5.00			2400									
KATTY (IAF)		GURVE (TF) (FB) (RNP 1.00)			273.32 / 16.35			2400									
(SEE FORM 8260-10)																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT GURVE 3. FAC: <u>288.75</u> FAF: <u>CASKA</u> DIST FAF TO MAP: <u>5.03</u> THLD: <u>5.03</u> 4. MIN. ALT: <u>GURVE 2400, CASKA 2400, FIKTA/2.30 NM TO RW29 1500</u> 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: _____ GS ALT AT: _____ OM: _____ MM: _____ IM: _____ 7. GS ANGLE: _____ TCH: <u>34:1 IS NOT CLEAR</u> 8. MSA FROM: <u>RW29 3100</u>																	
											MAG VAR: 6W					EPOCH YEAR: 2000	
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		
LNAV MDA	1180	1	443	1180	1	443	1180	1 1/4	443		NA						
CIRCLING	1240	1	503	1240	1	503	1260	1 1/2	523		NA						
NOTES: CHART NOTE: CIRCLING NA TO RWYS 6, 18, 24 AND 36. CHART NOTE: RWY 29 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CLIOO ON V133 NORTHBOUND. (CONTINUED ON PAGE 2)																	
CITY AND STATE				ELEVATION: 737 TDZE: 737				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:	
OWOSSO, MI				AIRPORT NAME:								RNAV (GPS) RWY 29, AMDT 1D				AMDT: 1C	
				OWOSSO COMMUNITY								1 FEBRUARY 2018				DATED 10/13/2016	



**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, (CONT.):

<u>FROM</u>	<u>TO</u>	<u>COURSE AND DISTANCE</u>	<u>ALTITUDE</u>
GURVE (IF)	CASKA (TF) (FB) (RNP 1.00)	288.84 / 6.10	2400
CASKA (FAF)	FIKTA/2.30 NM TO RW29 (TF) (FB) (RNP 0.30)	288.75 / 2.73	
FIKTA/2.30 NM TO RW29	RW29 (MAP) (TF) (FO) (RNP 0.30)	288.75 / 2.30	
RW29 (MAP)	1137 MSL (CA)	288.75	
1137 MSL	ZIGIT (DF) (FO) (RNP 1.00)		2600

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT KATTY ON V450 AND T781 EASTBOUND.

CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT.

CHART NOTE: PROCEDURE NA AT NIGHT.

QUALITY
16
CHECKED

CITY AND STATE

OWOSSO, MI

ELEVATION: 737

TDZE: 737

AIRPORT NAME:

OWOSSO COMMUNITY

 FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 29, AMDT 1D

1 FEBRUARY 2018

SUP:

AMDT: **1C**DATED: **10/13/2016**

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		LNAV: RW09							
IKTIH (IF/IAF)		HODPI (TF) (FB) (RNP 1.00)		090.65 / 7.37				2500		CLIMB TO 2000 THEN CLIMBING LEFT TURN TO 4000 DIRECT HIGIG AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000.							
HODPI (FAF)		OVUHU/2.10 NM TO RW09 (TF) (FB) (RNP 0.30)		093.95 / 3.63													
OVUHU/2.10 NM TO RW09		RW09 (MAP) (TF) (FO) (RNP 0.30)		093.95 / 2.10						ADDITIONAL FLIGHT DATA: HOLD E, RT, 261.60 INBOUND. FAS OBST: 739 TREE 424428N/0825347W CHART CIRCLING ICON. HODPI TO RW09: 3.00/45. CHART OAKLAND/TROY AWOS-3 CHART PLANVIEW NOTE: RADAR REQUIRED.							
RW09 (MAP)		2000 MSL (CA)		093.95				2000									
2000 MSL		HIGIG (DF) (FO) (RNP 1.00)						4000									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 6W EPOCH YEAR: 1985							
2. PROFILE STARTS AT IKTIH																	
3. FAC: 093.95 FAF: HODPI DIST FAF TO MAP: 5.73 THLD: 5.73																	
4. MIN. ALT: IKTIH 2500, HODPI 2500, OVUHU/2.10 NM TO RW09 1340																	
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: RW09 2900																	
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		1100	1	468	1220	1	588		NA			NA					
NOTES: CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: PROCEDURE NA AT NIGHT. CHART NOTE: USE TROY ALTIMETER SETTING. WHEN NOT RECEIVED USE PONTIAC ALTIMETER SETTING AND INCREASE ALL MDAS 60 FT.																	
CITY AND STATE RAY, MI		ELEVATION: 632 TDZE: AIRPORT NAME: RAY COMMUNITY		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS)-A, ORIG-A 1 FEBRUARY 2018						SUP: AMDT: ORIG DATED 01/08/2015					



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: RW33 CLIMB TO 3100 DIRECT PUBBI AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 148.38 INBOUND. CHART FAS OBST: 1179 TREE 445044N/0942309W. DISTANCE TO THLD FROM 250 HAT: 0.66 NM. WAAS CHANNEL # 86322 REFERENCE PATH ID: W33A CHART VDP AT 1.06 MILES TO RW33* LTP HAE: 296.4 M							
WULEP (IAF)		WOBGI (NOPT) (TF) (FB) (RNP 1.00)			276.54 / 27.39			3000									
BEEGR (IAF)		WOBGI (NOPT) (TF) (FB) (RNP 1.00)			004.31 / 8.24			3000									
WOBGI (IF/IAF)		NOYRI (TF) (FB) (RNP 1.00)			328.57 / 6.90			2700									
NOYRI (FAF)		CUNGI/1.60 NM TO RW33 (TF) (FB) (RNP 0.30)			328.52 / 3.42												
CUNGI/1.60 NM TO RW33		RW33 (MAP) (TF) (FO) (RNP 0.30)			328.49 / 1.60												
(SEE FORM 8260-10)																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SE WOBGI, RT, 328.57 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 328.52 FAF: NOYRI DIST FAF TO MAP: 5.02 THLD: 5.02 4. MIN. ALT: WOBGI 3000, NOYRI 2700, CUNGI/1.60 NM TO RW33 1600* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2700 GS ALT AT: NOYRI 2700 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 34:1 IS CLEAR 8. MSA FROM: RW33 2800																	
											MAG VAR: 4E					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	1312	1	250	1312	1	250	1312	1	250		NA						
LNAV/VNAV DA	1349	1	287	1349	1	287	1349	1	287		NA						
LNAV MDA	1440	1	378	1440	1	378	1440	1	378		NA						
CIRCLING	1540	1	478	1540	1	478	1540	1 1/2	478		NA						
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 WULEP ON V456 NORTHBOUND. *LNAV ONLY																	
CITY AND STATE		ELEVATION: 1062 TDZE: 1062			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:					
HUTCHINSON, MN		AIRPORT NAME:			HUTCHINSON MUNI-BUTLER FIELD		RNAV (GPS) RWY 33, ORIG-B					AMDT: ORIG-A					
							1 FEBRUARY 2018					DATED 12/11/2014					



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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW33 (MAP)	1312 MSL (CA)	328.49	
1312 MSL	PUBBI (DF) (FO) (RNP 1.00)		3100

QUALITY
16
CHECKED

CITY AND STATE
HUTCHINSON, MN

ELEVATION: 1062 TDZE: 1062
AIRPORT NAME:
HUTCHINSON MUNI-BUTLER FIELD

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 33, ORIG-B
1 FEBRUARY 2018

SUP:
AMDT: ORIG-A
DATED: 12/11/2014

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KHCD
RUNWAY	RW33
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W33A
LTP/FTP LATITUDE	445118.0485N
LTP/FTP LONGITUDE	0942244.1855W
LTP/FTP ELLIPSOIDAL HEIGHT	+02964
FPAP LATITUDE	445237.0600N
FPAP LONGITUDE	0942342.0900W
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	1528
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 0CD77C16

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03238
FPAP ORTHOMETRIC HEIGHT	+03238

QUALITY
16
CHECKED

CITY AND STATE HUTCHINSON, MN	ELEVATION: 1062 AIRPORT NAME: HUTCHINSON MUNI-BUTLER FIELD	TDZE: 1062 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 33, ORIG-B 1 FEBRUARY 2018	SUP:
				AMDT: ORIG-A
				DATED: 12/11/2014

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: GUBGE/14.31 DME																		
DWN VORTAC BEEGR INT (IF/IAF)			HOFFA/19.40 DME			160.00 / 19.40			3000		CLIMB TO 2000 THEN CLIMBING LEFT TURN TO 2700 ON DWN VORTAC R-160 TO HOFFA/19.40 DME AND HOLD.																		
			HOFFA/19.40 DME (NOPT)			340.00 / 14.12 (DWN R-160)			2600																				
			ADDITIONAL FLIGHT DATA: HOLD S, RT, 340.00 INBOUND. CHART FAS OBST: 1179 TREE 445044N/0942309W. HOFFA TO RW33: 2.77/40. CHART VDP AT 15.48 DME DISTANCE VDP TO THLD 1.21 NM. FAC CROSSES RWY C/L EXTENDED 135 FT FROM THLD. CHART PLANVIEW NOTE: DME REQUIRED.																										
1. PT <u>L</u> SIDE OF COURSE <u>160.00</u> OUTBOUND <u>2700</u> FT WITHIN <u>10</u> MILES OF <u>HOFFA</u> (IAF)										MAG VAR: 7E EPOCH YEAR:1965																			
2.																													
3. FAC <u>340.00</u> FAF <u>HOFFA/19.40 DME</u> DIST FAF TO MAP <u> </u> THLD <u>5.09</u>																													
4. MIN. ALT <u>HOFFA 2600, WUKDI/16.50 DME 1600*</u>																													
8. MSA FROM: <u>DWN VORTAC 3300</u>																													
MINIMUMS																													
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD																	
CATEGORY =====>		A			B			C			D			E															
	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA														
S-33	1460	1	398	1460	1	398	1460	1 1/8	398		NA																		
CIRCLING	1540	1	478	1540	1	478	1540	1 1/2	478		NA																		
NOTES: CHART NOTE: DME REQUIRED. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI Angle {angle}/TCH {feet}).																													
QUALITY 16 CHECKED																													
																CITY AND STATE HUTCHINSON, MN			ELEVATION: 1062 TDZE: 1062 AIRPORT NAME: HUTCHINSON MUNI-BUTLER FIELD			FACILITY IDENTIFIER: DWN		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR RWY 33, AMDT 3B 1 FEBRUARY 2018				SUP VOR/DME RWY 33	
																AMDT 3A		DATE 12/11/2014											

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

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

CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
AURORA, MO	JERRY SUMNERS SR AURORA MUNI	1 FEBRUARY 2018	2

TAKEOFF MINIMUMS:
RWY 18, 36, STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 18: TREES BEGINNING 65 FT FROM DER, 252 FT RIGHT OF CENTERLINE, UP TO 58 FT AGL/1469 FT MSL.
SIGN 217 FT FROM DER, 406 FT LEFT OF CENTERLINE, 1437 FT MSL.
ROAD 244 FT FROM DER, 502 FT LEFT OF CENTERLINE, 1438 FT MSL.
TREES BEGINNING 291 FT FROM DER, 312 FT RIGHT OF CENTERLINE, UP TO 1470 FT MSL.
TREE, ROAD BEGINNING 371 FT FROM DER, 316 FT LEFT OF CENTERLINE, UP TO 1445 FT MSL.
TREE, POLE BEGINNING 408 FT FROM DER, 251 FT RIGHT OF CENTERLINE, UP TO 1473 FT MSL.
TREE 473 FT FROM DER, 491 FT LEFT OF CENTERLINE, 1480 FT MSL.
TREE, ROAD BEGINNING 502 FT FROM DER, 29 FT LEFT OF CENTERLINE, UP TO 69 FT AGL/1504 FT MSL.
TREES BEGINNING 737 FT FROM DER, 45 FT RIGHT OF CENTERLINE, UP TO 1482 FT MSL.
TREES BEGINNING 843 FT FROM DER, 43 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/1511 FT MSL.
TREE, POLE, TRANSMISSION LINE BEGINNING 951 FT FROM DER, 132 FT LEFT OF CENTERLINE, UP TO 1514 FT MSL.
TREE 1040 FT FROM DER, 143 FT RIGHT OF CENTERLINE, 61 FT AGL/1483 FT MSL.
TREES BEGINNING 1080 FT FROM DER, 93 FT RIGHT OF CENTERLINE, UP TO 66 FT AGL/1486 FT MSL.
POLE, TREE BEGINNING 1546 FT FROM DER, 282 FT RIGHT OF CENTERLINE, UP TO 1494 FT MSL.
TREE 1601 FT FROM DER, 437 FT RIGHT OF CENTERLINE, 1495 FT MSL.
TREES BEGINNING 1617 FT FROM DER, 235 FT RIGHT OF CENTERLINE, UP TO 1497 FT MSL.
TREE, BUILDING, TRANSMISSION LINE BEGINNING 1806 FT FROM DER, 240 FT RIGHT OF CENTERLINE, UP TO 1507 FT MSL.
TREE 3509 FT FROM DER, 520 FT LEFT OF CENTERLINE, 71 FT AGL/1517 FT MSL.

NOTE: RWY 36: TREES BEGINNING 35 FT FROM DER, 263 FT LEFT OF CENTERLINE, UP TO 1483 FT MSL.
TREE 42 FT FROM DER, 447 FT RIGHT OF CENTERLINE, 69 FT AGL/1502 FT MSL.
TREE, POLE, TRANSMISSION LINE BEGINNING 117 FT FROM DER, 197 FT RIGHT OF CENTERLINE, UP TO 72 FT AGL/1505 FT MSL.
TREES BEGINNING 244 FT FROM DER, 457 FT LEFT OF CENTERLINE, UP TO 1488 FT MSL.
TREE, POLE, SIGN BEGINNING 506 FT FROM DER, 260 FT LEFT OF CENTERLINE, UP TO 1494 FT MSL.

CONTROLLING OBSTACLES:

REMARKS:

FLIGHT INSPECTED BY: *Digitally signed by*
BEV L BORDY
ROBIN CAUDLE Nov 03, 2017

OFFICE SYMBOL: FICO
DATE: 10/23/2017

DEVELOPED BY: *Digitally signed by*
KISSY MAXFIELD
KISSY MAXFIELD Sep 21, 2017

OFFICE SYMBOL: AJV-5412
DATE: 09/21/2017

APPROVED BY: *Digitally signed by*
VICTOR B NASO
GEORGE DAVIS Oct 04, 2017

OFFICE SYMBOL: AJV-5410
DATE:

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

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

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
AURORA, MO	JERRY SUMNERS SR AURORA MUNI	1 FEBRUARY 2018	2

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:
SGF APP CON, ZKC, AMGR

CHANGES - REASONS:

1. AIRPORT NAME CHANGED FROM AURORA MEMORIAL MUNI TO JERRY SUMNERS SR AURORA MUNI .
2. CHANGED RWY 18 TAKEOFF MINIMUMS FROM 300-1 OR STANDARD WITH MINIMUM CLIMB OF 400' PER NM TO 1600 TO STANDARD.
3. ADDED CLOSE IN OBS TO RWY 18 AND 36, NEW SURVEY.



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-COU 1.25 DME CLIMB TO 2700 ON I-COU LOCALIZER N COURSE (021) TO BOVEN/I-COU 5.50 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, LT, 201.44 INBOUND. CHART FAS OBST: 940 TREE 384810N/0921340W. CHART VDP AT 2.07 DME* DISTANCE VDP TO THLD 0.81 NM. *LOC ONLY. CHART CIRCLING ICON.				
COU VOR/DME	YATGU/I-COU 7.11 DME	202.49 / 6.27	2700					
HLV VORTAC	YATGU/I-COU 7.11 DME	189.47 / 24.83	2700					
MIZZU/HLV 36.05 DME (IAF)	CATIL/I-COU 12.96 DME (NOPT)	101.43 / 7.31 (HDG) & 021.43 / 3.88 (I-COU) (COU LR-209)	3000					
CATIL/I-COU 12.96 DME (IF)	YATGU/I-COU 7.11 DME	021.43 / 5.86 (I-COU)	2700					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S YATGU, LT, 021.43 INBOUND, 2700 FT. IN LIEU OF PT (IAF) 3. FAC: 021.43 FAF: YATGU/I-COU 7.11 DME DIST FAF TO MAP: _____ THLD: 5.86 4. MIN. ALT: YATGU 2700, NEUKS/I-COU 3.25 DME 1540* 5. DIST TO THLD FROM OM: _____ - _____ MM: _____ - _____ IM: _____ - 150 HAT: _____ - 100 HAT: _____ - GS ANT: 1151 6. MIN GS INCPT: 2700 GS ALT AT: YATGU 2700 OM: _____ - _____ MM: _____ - _____ IM: _____ - 7. GS ANGLE: 2.83 TCH: 58.2 8. MSA FROM: COU VOR/DME 3100								
				MAG VAR: 0E 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	
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS
S-ILS 02**	1089	2400	200	1089	2400	200	1089	2400
S-LOC 02	1200	2400	311	1200	2400	311	1200	2400
CIRCLING	1300	1	411	1340	1	451	1340	1 1/2
NOTES: CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHART NOTE: CIRCLING NA FOR CAT D W OF RWYS 2 AND 13. CHART NOTE: DME REQUIRED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON HLW VORTAC AIRWAY RADIALS 155 CW 177.								
CITY AND STATE COLUMBIA, MO		ELEVATION: 889 TDZE: 889 AIRPORT NAME: COLUMBIA RGNL		FACILITY IDENTIFIER: I-COU		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 2, AMDT 16A 1 FEBRUARY 2018		SUP:
								AMDT: 16
								DATED 10/12/2017

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION LOC STANDARD INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.25								Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES										MISSED APPROACH							
FROM		TO		COURSE AND DISTANCE				ALTITUDE		MAP: LOC: YICCU/I-COU 0.48 DME FIX							
COU VOR/DME		BOVEN/I-COU 5.50 DME		020.40 / 6.34				2700		CLIMB TO 1700 THEN CLIMBING LEFT TURN TO 2700 ON HEADING 355 AND ON I-COU LOCALIZER N COURSE (021) TO BOVEN/I-COU 5.50 DME AND HOLD. ADDITIONAL FLIGHT DATA: CHART FAS OBST: 990 TREE 385145N/0921201W. CHART CIRCLING ICON. BOVEN TO RW20: 2.94/40. CHART PLANVIEW NOTE: DME REQUIRED. CHART IN PROFILE VIEW: I-COU DME ANTENNA							
HLV VORTAC (IAF)		YESNU/I-COU 11.50 DME (NOPT)		172.33 / 6.62				3500									
JAGGI/HLV 8.86 DME (IAF)		YESNU/I-COU 11.50 DME (NOPT)		262.00 / 7.00 (HDG) & 201.43 / 4.32 (I-COU) (COU LR-027)				3500									
YESNU/I-COU 11.50 DME (IF)		ZEBRI/I-COU 10.00 DME		201.43 / 1.50 (I-COU)				3500									
ZEBRI/I-COU 10.00 DME		BOVEN/I-COU 5.50 DME		201.43 / 4.50 (I-COU)				2700									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N BOVEN, LT, 201.43 INBOUND, 2700 FT. IN LIEU OF PT (IAF) 3. FAC 201.43 FAF BOVEN/I-COU 5.50 DME DIST FAF TO MAP _____ THLD 5.68 4. MIN. ALT BOVEN 2700, JURLI/I-COU 2.62 DME 1800 8. MSA FROM: COU VOR/DME 3100														MAG VAR: 0E		EPOCH YEAR: 2020	
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-LOC 20	1240	3/4	351	1240	3/4	351	1240	7/8	351	1240	7/8	351					
CIRCLING	1300	1	411	1340	1	451	1340	1 1/2	451	1440	2	551					
NOTES: @ NA WHEN CONTROL TOWER CLOSED. CHART NOTE: CIRCLING NA FOR CAT D W OF RWYS 2 AND 13. CHART NOTE: DME REQUIRED. CHART PROFILE NOTE: DISREGARD GS INDICATIONS. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON HLK VORTAC AIRWAY RADIALS 155 CW 203.																	
CITY AND STATE COLUMBIA, MO		ELEVATION: 889 AIRPORT NAME: COLUMBIA RGNL		TDZE: 889		FACILITY IDENTIFIER: I-COU		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: LOC BC RWY 20, AMDT 13A 1 FEBRUARY 2018				SUP					
												AMDT 13					
												DATE 10/12/2017					



RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.					
TERMINAL ROUTES												MISSED APPROACH									
FROM			TO			COURSE AND DISTANCE			ALTITUDE			LPV: DA LNAV/VNAV: DA LNAV: RW02 CLIMB TO 3100 DIRECT AGVOY AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, RT, 201.50 INBOUND. CHART FAS OBST: 965 TREE 384747N/0921359W. DISTANCE TO THLD FROM 200 HAT: 0.51 NM. CHART VDP AT 0.92 NM TO RW02* *LNAV ONLY. WAAS CHANNEL # 77599 REFERENCE PATH ID: W02A CHART CIRCLING ICON. LTP HAE: 236.4 M									
LIDPE (IAF)			ULUFA (NOPT) (TF) (FB) (RNP 1.00)			111.30 / 6.50			3100												
RAGVE (IAF)			ULUFA (NOPT) (TF) (FB) (RNP 1.00)			291.46 / 6.50			3100												
ULUFA (IF/IAF)			FECFE (TF) (FB) (RNP 1.00)			021.38 / 6.50			2500												
FECFE (FAF)			SHAME/2.80 NM TO RW02 (TF) (FB) (RNP 0.30)			021.41 / 2.14															
SHAME/2.80 NM TO RW02			RW02 (MAP) (TF) (FO) (RNP 0.30)			021.41 / 2.80															
(SEE FORM 8260-10)																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S ULUFA, LT, 021.38 INBOUND, 3100 FT. IN LIEU OF PT (IAF) 3. FAC: 021.41 FAF: FECFE DIST FAF TO MAP: 4.94 THLD: 4.94 4. MIN. ALT: ULUFA 3100, FECFE 2500, SHAME/2.80 NM TO RW02 1820* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2500 GS ALT AT: FECFE 2500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 45.0 34:1 IS CLEAR 8. MSA FROM: _____																					
												MAG VAR: 0E			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**	1089	2400	200	1089	2400	200	1089	2400	200	1089	2400	200									
LNAV/VNAV DA	1143	2400	254	1143	2400	254	1143	2400	254	1143	2400	254									
LNAV MDA	1220	2400	331	1220	2400	331	1220	2400	331	1220	2400	331									
CIRCLING	1300	1	411	1340	1	451	1340	1 1/2	451	1440	2	551									
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F). CHART NOTE: CIRCLING NA FOR CAT D W OF RWYS 2 AND 13. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 4500 CHART NOTE: **RVR 1800 AUTHORIZED WITH THE USE OF FD OR AP OR HUD TO DA.																					
CITY AND STATE				ELEVATION: 889 TDZE: 889				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
COLUMBIA, MO				AIRPORT NAME:								RNAV (GPS) RWY 2, AMDT 2A				AMDT: 2					
				COLUMBIA RGNL								1 FEBRUARY 2018				DATED 10/12/2017					



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

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW02 (MAP)	1089 MSL (CA)	021.41	

1089 MSL	AGVOY (DF) (FO) (RNP 1.00)		3100

TAA

	FROM	TO	ALT
1.	291/30 CW 064/30 (NOPT)	ULUFA (IF/IAF) (FB)	3100
	064/30 CW 111/30 (NOPT)	064/24 CW 111/24	3900
	064/24 CW 111/24	ULUFA (IF/IAF) (FB)	3100
2.	111/30 CW 201/30	LIDPE (IAF) (FB)	3100
3.	201/30 CW 291/30	RAGVE (IAF) (FB)	3100

QUALITY
25
CHECKED

CITY AND STATE COLUMBIA, MO	ELEVATION: 889	TDZE: 889	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 2, AMDT 2A 1 FEBRUARY 2018	SUP:
	AIRPORT NAME: COLUMBIA RGNL				AMDT: 2
					DATED: 10/12/2017

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCOU
RUNWAY	RW02
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W02A
LTP/FTP LATITUDE	384818.7755N
LTP/FTP LONGITUDE	0921325.4150W
LTP/FTP ELLIPSOIDAL HEIGHT	+02364
FPAP LATITUDE	384941.7920N
FPAP LONGITUDE	0921243.7500W
THRESHOLD CROSSING HEIGHT (TCH)	00045.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0768
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

10581A45

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+02689
FPAP ORTHOMETRIC HEIGHT	+02689

QUALITY
25
CHECKED

CITY AND STATE

COLUMBIA, MO

ELEVATION: 889

TDZE: 889

AIRPORT NAME:

COLUMBIA RGNL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 2, AMDT 2A

1 FEBRUARY 2018

SUP:

AMDT:

2

DATED:

10/12/2017

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION VOR STANDARD INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.23										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.										
TERMINAL ROUTES										MISSED APPROACH										
FROM			TO			COURSE AND DISTANCE			ALTITUDE		MAP: MIVNE/COU VOR/DME 0.67 DME									
BNTON			COU VOR/DME			348.59 / 13.18			2700		CLIMB TO 1400 THEN CLIMBING LEFT TURN TO 2600 ON COU VOR/DME R-016 TO GRMPY/COU 5.70 DME AND HOLD.									
MIZZU INT			COU VOR/DME			044.29 / 18.80			3100											
COU VOR/DME			GRMPY/COU 5.70 DME			015.75 / 5.70			2700											
HLV VORTAC (IAF)			EMUBE/COU 12.00 DME (NOPT)			181.99 / 6.67			2600											
EMUBE/COU 12.00 DME (IF)			GRMPY/COU 5.70 DME			195.75 / 6.30 (COU R-016)			2600											
										ADDITIONAL FLIGHT DATA: FAS OBST: 1100 AAO 385332N/0921149W. CHART VDP AT 2.03 DME DISTANCE VDP TO THLD 1.36 NM. CHART CIRCLING ICON. GRUMPY TO RW20: 3.14/40 FAC CROSSES RWY C/L EXTENDED 3000 FT FROM THLD. CHART PLANVIEW NOTE: DME REQUIRED.										
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 0E EPOCH YEAR: 2020										
2. HOLD N GRMPY, LT, 195.75 INBOUND, 2600 FT. IN LIEU OF PT (IAF)																				
3. FAC 195.75 FAF GRMPY/COU 5.70 DME DIST FAF TO MAP _____ THLD 5.03																				
4. MIN. ALT GRMPY 2600																				
8. MSA FROM: COU VOR/DME 3100																				
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-20	1360	3/4	471	1360	3/4	471	1360	1 1/4	471	1360	1 1/4	471								
CIRCLING	1360	1	471	1360	1	471	1360	1 1/2	471	1440	2	551								
NOTES: CHART NOTE: CIRCLING NA FOR CAT D W OF RWYS 2 AND 13. CHART NOTE: DME REQUIRED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HLX VORTAC ON V175 NORTHBOUND.																				
CITY AND STATE COLUMBIA, MO		ELEVATION: 889 TDZE: 889 AIRPORT NAME: COLUMBIA RGNL		FACILITY IDENTIFIER: COU		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR Y RWY 20, AMDT 4A 1 FEBRUARY 2018					SUP AMDT 4 DATE 10/12/2017									

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33									Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.														
TERMINAL ROUTES													MISSED APPROACH																	
FROM			TO			COURSE AND DISTANCE			ALTITUDE			LPV: DA LNAV/VNAV: DA LNAV: RW18																		
SOXOE (IF/IAF)			KISNE (TF) (FB) (RNP 1.00)			181.40 / 6.98			2600			CLIMB TO 3000 DIRECT WOMPO AND HOLD.																		
KISNE (FAF)			RW18 (MAP) (TF) (FO) (RNP 0.30)			181.39 / 4.90																								
RW18 (MAP)			1249 MSL (CA)			181.39			3000																					
1249 MSL			WOMPO (DF) (FO) (RNP 1.00)									ADDITIONAL FLIGHT DATA: HOLD S, LT, 001.38 INBOUND. FAS OBST: 1100 AAO 390155N/0942239W. 1160 AAO 390257N/0942319W DISTANCE TO THLD FROM 250 HAT: 0.66 NM. CHART VDP AT 1.01 NM TO RW18* *LNAV ONLY. WAAS CHANNEL # 82204 REFERENCE PATH ID: W18A CHART CIRCLING ICON LTP HAE: 270.8 M																		
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)													MAG VAR: 2E EPOCH YEAR: 2010																	
2. HOLD N SOXOE, LT, 181.40 INBOUND, 3000 FT. IN LIEU OF PT (IAF)																														
3. FAC: 181.39 FAF: KISNE DIST FAF TO MAP: 4.90 THLD: 4.90																														
4. MIN. ALT: SOXOE 3000, KISNE 2600																														
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																														
6. MIN GS INCPT: 2600 GS ALT AT: KISNE 2600 OM: _____ MM: _____ IM: _____																														
7. GS ANGLE: 3.00 TCH: 44.0 34:1 IS NOT 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	1249	3/4	250	1249	3/4	250	1249	3/4	250	1249	3/4	250																		
LNAV/VNAV DA	1366	1	367	1366	1	367	1366	1	367	1366	1	367																		
LNAV MDA	1360	1	361	1360	1	361	1360	1	361	1360	1	361																		
CIRCLING																1440	1	436	1540	1	536	1780	2 1/4	776	1780	2 1/2	776			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F). CHART NOTE: RWY 18 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: BARO-VNAV AND VDP NA WHEN USING CHARLES B. WHEELER DOWNTOWN ALTIMETER SETTING. (CONTINUED ON PAGE 2)																														
CITY AND STATE LEE'S SUMMIT, MO				ELEVATION: 1004 TDZE: 999 AIRPORT NAME: LEE'S SUMMIT MUNI				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 18, AMDT 3, 02/01/2018						SUP: AMDT: 2A DATED 02/05/2015														

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

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NOTES, (CONT.):

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CHARLES B. WHEELER DOWNTOWN ALTIMETER
SETTING: INCREASE LPV DA TO 1317 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE LNAV/VNAV DA TO 1434
FEET AND ALL VISIBILITIES 1/4 SM; INCREASE ALL MDA 80 FEET AND LNAV VISIBILITY CAT C AND D 3/8 SM,
CIRCLING CAT C AND D 1/4 SM.

TAA

	FROM	TO	ALT
1.	091/30 CW 271/30 (NOPT)	SOXOE (IF/IAF) (FB)	3000
2.	271/30 CW 091/30	SOXOE (IF/IAF) (FO)	3100

QUALITY
6
CHECKED

CITY AND STATE LEE'S SUMMIT, MO	ELEVATION: 1004 TDZE: 999 AIRPORT NAME: LEE'S SUMMIT MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 18, AMDT 3, 02/01/2018	SUP:
				AMDT: 2A
				DATED: 02/05/2015

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

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CITY AND STATE LEE'S SUMMIT, MO	ELEVATION: 1004	TDZE: 999	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 18, AMDT 3, 02/01/2018	SUP:
	AIRPORT NAME:				AMDT: 2A
	LEE'S SUMMIT MUNI				DATED: 02/05/2015

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KLXT
RUNWAY	RW18
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W18A
LTP/FTP LATITUDE	385802.2300N
LTP/FTP LONGITUDE	0942224.2500W
LTP/FTP ELLIPSOIDAL HEIGHT	+02708
FPAP LATITUDE	385633.2020N
FPAP LONGITUDE	0942231.0050W
THRESHOLD CROSSING HEIGHT (TCH)	00044.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1072
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

09D846BB

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03032
FPAP ORTHOMETRIC HEIGHT	+03032

QUALITY
6
CHECKED

CITY AND STATE

LEE'S SUMMIT, MO

ELEVATION: 1004

TDZE: 999

AIRPORT NAME:

LEE'S SUMMIT MUNI

 FACILITY
IDENTIFIER:

RNAV

 PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 18, AMDT 3, 02/01/2018

SUP:

AMDT: 2A

DATED: 02/05/2015

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		LPV: DA LNAV/VNAV: DA LNAV: RW29 CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 3000 DIRECT LYMES AND HOLD. ADDITIONAL FLIGHT DATA: HOLD E, LT, 269.01 INBOUND. CHART FAS OBST: 1107 ELEVATOR 385714N/0942159W. 1220 AAO 385421N/0941625W DISTANCE TO THLD FROM 250 HAT: 0.67 NM. CHART VDP AT 1.00 NM TO RW29* *LNAV ONLY. WAAS CHANNEL # 48905 REFERENCE PATH ID: W29A CHART CIRCLING ICON. LTP HAE: 272.8 M									
ZONKI (IF/IAF)				PUKAS (TF) (FB) (RNP 1.00)				291.56 / 7.00				2600											
PUKAS (FAF)				ZEVED/1.70 NM TO RW29 (TF) (FB) (RNP 0.30)				291.47 / 3.19															
ZEVED/1.70 NM TO RW29				RW29 (MAP) (TF) (FO) (RNP 0.30)				291.47 / 1.70															
RW29 (MAP)				1500 MSL (CA)				291.47				1500											
1500 MSL				LYMES (DF) (FO) (RNP 1.00)								3000											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)														MAG VAR: 2E EPOCH YEAR: 2010									
2. HOLD E ZONKI, LT, 291.56 INBOUND, 3100 FT. IN LIEU OF PT (IAF)																							
3. FAC: 291.47 FAF: PUKAS DIST FAF TO MAP: 4.89 THLD: 4.89																							
4. MIN. ALT: ZONKI 3100, PUKAS 2600, ZEVED/1.70 NM TO RW29 1580*																							
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																							
6. MIN GS INCPT: 2600 GS ALT AT: PUKAS 2600 OM: _____ MM: _____ IM: _____																							
7. GS ANGLE: 3.00 TCH: 40.0 34:1 IS CLEAR																							
8. MSA FROM: _____																							
MINIMUMS																							
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A			STANDARD @													
CATEGORY ==>		A			B			C			D			E									
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA								
LPV DA	1254	3/4	250	1254	3/4	250	1254	3/4	250	1254	3/4	250											
LNAV/VNAV DA	1291	7/8	287	1291	7/8	287	1291	7/8	287	1291	7/8	287											
LNAV MDA	1360	1	356	1360	1	356	1360	1	356	1360	1	356											
CIRCLING	1440	1	436	1540	1	536	1780	2 1/4	776	1780	2 1/2	776											
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 NOTE: VDP AND BARO-VNAV NA WHEN USING CHARLES B. WHEELER DOWNTOWN ALTIMETER SETTING.																							
@ NA WHEN LOCAL WEATHER NOT AVAILABLE. @ CAT C 800-2 1/4, CAT D 800-2 1/2																							
(CONTINUED ON PAGE 2)																							
CITY AND STATE LEE'S SUMMIT, MO				ELEVATION: 1004 TDZE: 1004 AIRPORT NAME: LEE'S SUMMIT MUNI				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 29, AMDT 3, 02/01/2018					SUP: AMDT: 2A DATED 02/05/2015								

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

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NOTES, (CONT.):

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CHARLES B. WHEELER DOWNTOWN ALTIMETER

SETTING: INCREASE LPV DA TO 1322 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE LNAV/VNAV DA TO 1359

FEET AND ALL VISIBILITIES 1/8 SM; INCREASE ALL MDA 80 FEET AND VISIBILITY CAT C AND D 1/4 SM.

TAA

	FROM	TO	ALT
1.	202/30 CW 022/30 (NOPT)	ZONKI (IF/IAF) (FB)	3100
2.	022/30 CW 202/30	ZONKI (IF/IAF) (FO)	3100

QUALITY
6
CHECKED

CITY AND STATE LEE'S SUMMIT, MO	ELEVATION: 1004 TDZE: 1004 AIRPORT NAME: LEE'S SUMMIT MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 29, AMDT 3, 02/01/2018	SUP:
				AMDT: 2A
				DATED: 02/05/2015

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KLXT
RUNWAY	RW29
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W29A
LTP/FTP LATITUDE	385721.6935N
LTP/FTP LONGITUDE	0942145.2850W
LTP/FTP ELLIPSOIDAL HEIGHT	+02728
FPAP LATITUDE	385757.1155N
FPAP LONGITUDE	0942330.1190W
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	1536
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

B011E234

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03052
FPAP ORTHOMETRIC HEIGHT	+03052

QUALITY
6
CHECKED

CITY AND STATE

LEE'S SUMMIT, MO

ELEVATION: 1004

TDZE: 1004

AIRPORT NAME:

LEE'S SUMMIT MUNI

 FACILITY
IDENTIFIER:

RNAV

 PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 29, AMDT 3, 02/01/2018

SUP:

AMDT: 2A

DATED: 02/05/2015

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33						Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.														
TERMINAL ROUTES											MISSED APPROACH									
FROM		TO			COURSE AND DISTANCE				ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW36 CLIMB TO 3000 DIRECT SOXOE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, LT, 181.40 INBOUND. CHART FAS OBST: 1234 TOWER 385450N/0942235W. DISTANCE TO THLD FROM 302 HAT: 0.84 NM. CHART VDP AT 1.59 NM TO RW36* *LNAV ONLY. WAAS CHANNEL # 48805 REFERENCE PATH ID: W36A CHART CIRCLING ICON. LTP HAE: 268 M									
WOMPO (IF/IAF)		JAPES (TF) (FB) (RNP 1.00)			001.38 / 6.78				2600											
JAPES (FAF)		JOBAD/2.30 NM TO RW36 (TF) (FB) (RNP 0.30)			001.39 / 2.63															
JOBAD/2.30 NM TO RW36		RW36 (MAP) (TF) (FO) (RNP 0.30)			001.39 / 2.30															
RW36 (MAP)		1299 MSL (CA)			001.39				3000											
1299 MSL		SOXOE (DF) (FO) (RNP 1.00)																		
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S WOMPO, LT, 001.38 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 001.39 FAF: JAPES DIST FAF TO MAP: 4.93 THLD: 4.93 4. MIN. ALT: WOMPO 3000, JAPES 2600, JOBAD/2.30 NM TO RW36 1760* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2600 GS ALT AT: JAPES 2600 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 44.9 34:1 IS NOT CLEAR 8. MSA FROM: _____																	MAG VAR: 2E		EPOCH YEAR: 2010	
MINIMUMS																				
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD @								
CATEGORY =====>		A			B			C			D			E						
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA					
LPV DA	1306	7/8	309	1306	7/8	309	1306	7/8	309	1306	7/8	309								
LNAV/VNAV DA	1299	7/8	302	1299	7/8	302	1299	7/8	302	1299	7/8	302								
LNAV MDA	1540	1	543	1540	1	543	1540	1 5/8	543	1540	1 5/8	543								
CIRCLING	1540	1	536	1540	1	536	1780	2 1/4	776	1780	2 1/2	776								
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F). CHART NOTE: RWY 36 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: VDP AND BARO-VNAV NA WHEN USING CHARLES B. WHEELER DOWNTOWN ALTIMETER SETTING. (CONTINUED ON PAGE 2)																				
CITY AND STATE				ELEVATION: 1004 TDZE: 997				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:				
LEE'S SUMMIT, MO				AIRPORT NAME:								RNAV (GPS) RWY 36, AMDT 3, 02/01/2018				AMDT: 2A				
				LEE'S SUMMIT MUNI												DATED 02/05/2015				



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

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NOTES, (CONT.):

**CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CHARLES B. WHEELER DOWNTOWN ALTIMETER
SETTING: INCREASE LPV DA TO 1374 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE LNAV/VNAV DA TO 1367
FEET AND ALL VISIBILITIES 1/8 SM; INCREASE ALL MDA 80 FEET AND LNAV VISIBILITY CATS C AND D 1/8 SM,
CIRCLING CATS C AND D 1/4 SM.**

TAA

	FROM	TO	ALT
1.	271/30 CW 091/30 (NOPT)	WOMPO (IF/IAF) (FB)	3000
2.	091/30 CW 271/30	WOMPO (IF/IAF) (FO)	3100

QUALITY
6
CHECKED

CITY AND STATE LEE'S SUMMIT, MO	ELEVATION: 1004 TDZE: 997 AIRPORT NAME: LEE'S SUMMIT MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 36, AMDT 3, 02/01/2018	SUP:
				AMDT: 2A
				DATED: 02/05/2015

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KLXT
RUNWAY	RW36
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W36A
LTP/FTP LATITUDE	385707.9400N
LTP/FTP LONGITUDE	0942228.3700W
LTP/FTP ELLIPSOIDAL HEIGHT	+02680
FPAP LATITUDE	385836.9680N
FPAP LONGITUDE	0942221.6140W
THRESHOLD CROSSING HEIGHT (TCH)	00044.9
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1072
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 27B92654

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03005
FPAP ORTHOMETRIC HEIGHT	+03005

QUALITY
6
CHECKED

CITY AND STATE LEE'S SUMMIT, MO	ELEVATION: 1004 AIRPORT NAME: LEE'S SUMMIT MUNI	TDZE: 997 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 36, AMDT 3, 02/01/2018	SUP:
				AMDT: 2A
				DATED: 02/05/2015

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

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
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CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
LEE'S SUMMIT, MO	LEE'S SUMMIT MUNI	02/01/2018	1

TAKEOFF MINIMUMS:
STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 11: VEHICLE ON ROAD 6 FT FROM DER, 14 FT LEFT OF CENTERLINE, 1002 FT MSL. FENCE, TERRAIN AND VEHICLE ON ROAD BEGINNING 15 FT FROM DER, 256 FT RIGHT OF CENTERLINE, UP TO 1014 FT MSL. SIGN AND TERRAIN BEGINNING 18 FT FROM DER, 125 FT LEFT OF CENTERLINE, UP TO 1004 FT MSL. BUILDING 139 FT FROM DER, 387 FT LEFT OF CENTERLINE, 27 FT AGL/1023 FT MSL. BUILDING 169 FT FROM DER, 334 FT RIGHT OF CENTERLINE, 26 FT AGL/1018 FT MSL. TREES, VEHICLE ON ROAD AND FENCE BEGINNING 179 FT FROM DER, 339 FT LEFT OF CENTERLINE, UP TO 31 FT AGL/1029 FT MSL. BUILDINGS AND TREE BEGINNING 182 FT FROM DER, 398 FT RIGHT OF CENTERLINE, UP TO 1021 FT MSL. TREES BEGINNING 447 FT FROM DER, 181 FT LEFT OF CENTERLINE, UP TO 1039 FT MSL.

NOTE: RWY 18: TREE 1 FT FROM DER, 414 FT LEFT OF CENTERLINE, 1018 FT MSL. TREE 29 FT FROM DER, 470 FT RIGHT OF CENTERLINE, 991 FT MSL. TREES BEGINNING 112 FT FROM DER, 268 FT LEFT OF CENTERLINE, UP TO 75 FT AGL/1027 FT MSL. TREE 717 FT FROM DER, 654 FT LEFT OF CENTERLINE, 1057 FT MSL. TREES AND VEGETATION BEGINNING 732 FT FROM DER, 383 FT LEFT OF CENTERLINE, UP TO 1059 FT MSL. TREES BEGINNING 764 FT FROM DER, 467 FT RIGHT OF CENTERLINE, UP TO 1030 FT MSL. TREES, VEGETATION, FENCES AND POLE BEGINNING 888 FT FROM DER, 383 FT LEFT OF CENTERLINE, UP TO 58 FT AGL/1062 FT MSL. TREES AND POLE BEGINNING 2490 FT FROM DER, 622 FT LEFT OF CENTERLINE, UP TO 1076 FT MSL. TREES AND POLE BEGINNING 2796 FT FROM DER, 47 FT LEFT OF CENTERLINE, UP TO 1079 FT MSL. TREES AND BUILDING BEGINNING 2922 FT FROM DER, 48 FT LEFT OF CENTERLINE, UP TO 1083 FT MSL. TREES AND POLE BEGINNING 3047 FT FROM DER, 56 FT LEFT OF CENTERLINE, UP TO 1090 FT MSL. TREES BEGINNING 3064 FT FROM DER, 410 FT RIGHT OF CENTERLINE, UP TO 1076 FT MSL.

NOTE: RWY 29: FENCE 129 FT FROM DER, 496 FT LEFT OF CENTERLINE, 998 FT MSL. BUILDING, TANK, FENCE AND VEHICLES ON ROAD BEGINNING 140 FT FROM DER, 387 FT RIGHT OF CENTERLINE, UP TO 15 FT AGL/1006 FT MSL. POLES AND VEHICLES ON ROAD BEGINNING 223 FT FROM DER, 407 FT RIGHT OF CENTERLINE, UP TO 25 FT AGL/1017 FT MSL. POLE, TOWER AND BUILDING BEGINNING 380 FT FROM DER, 430 FT RIGHT OF CENTERLINE, UP TO 1028 FT MSL. TREE 515 FT FROM DER, 491 FT LEFT OF CENTERLINE, 1014 FT MSL. TREE 538 FT FROM DER, 636 FT LEFT OF CENTERLINE, 1029 FT MSL. TREE 1850 FT FROM DER, 991 FT RIGHT OF CENTERLINE, 1043 FT MSL. TREE 2125 FT FROM DER, 895 FT RIGHT OF CENTERLINE, 1050 FT MSL.

NOTE: RWY 36: VERTICAL STRUCTURE 25 FT FROM DER, 505 FT RIGHT OF CENTERLINE, 7 FT AGL/1001 FT MSL. TREES AND POLE BEGINNING 62 FT FROM DER, 393 FT RIGHT OF CENTERLINE, UP TO 1010 FT MSL. TREE 121 FT FROM DER, 517 FT LEFT OF CENTERLINE, 999 FT MSL. TREES BEGINNING 216 FT FROM DER, 244 FT LEFT OF CENTERLINE, UP TO 1011 FT MSL. TREES BEGINNING 424 FT FROM DER, 253 FT RIGHT OF CENTERLINE, UP TO 1019 FT MSL. TREE 715 FT FROM DER, 469 FT LEFT OF CENTERLINE, 1016 FT MSL. TREE 1409 FT FROM DER, 234 FT RIGHT OF CENTERLINE, 49 FT AGL/1031 FT MSL.

CONTROLLING OBSTACLES:

QUALITY
3
CHECKED

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

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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
LEE'S SUMMIT, MO	LEE'S SUMMIT MUNI	02/01/2018	1

REMARKS:

<u>FLIGHT INSPECTED BY:</u>	<i>Digitally signed by</i> BEV L BORDY	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
PENDING	Oct 13, 2017		
<u>DEVELOPED BY:</u>	<i>Digitally signed by</i> BEV L BORDY	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
BEV BORDY (CHRISTINE BAYSE)	Oct 13, 2017	AJV-5433	07/31/2017
<u>APPROVED BY:</u>	<i>Digitally signed by</i> BEV L BORDY	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
PATRICK MULQUEEN	Oct 13, 2017	AJV-5430	

REQUIRED EFFECTIVE DATE:
02/01/2018-RUNWAY CONSTRUCTION PROJECT

COORDINATED WITH:

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

OTHER:
MCI APP CON, MKC ATCT, ZKC, CENTRAL FPT.

CHANGES - REASONS:
1. UPDATED TAKEOFF OBSTACLE NOTES.- NEW SURVEY AND RWY 18-36 RUNWAY EXTENSION.

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: 4.93 NM AFTER JIFIE/ANX 8.80 DME/RADAR OR AT CATRU/ANX 13.73 DME FIX							
ANX VORTAC (IF/IAF)			JIFIE/ANX 8.80 DME/RADAR			229.00 / 8.80				2500		CLIMBING LEFT TURN TO 2900 DIRECT ANX VORTAC AND HOLD.							
										ADDITIONAL FLIGHT DATA: HOLD E, RT, 268.00 INBOUND. CHART FAS OBST: 1162 TOWER 390038N/0941807W. 1191 AAO 390018N/0941642W CHART CIRCLING ICON. FAC CROSSES RWY 18/36 342 FEET LEFT OF RWY 18 THLD.									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																			
2. PROFILE STARTS AT ANX VORTAC																			
3. FAC 229.00 FAF JIFIE/ANX 8.80 DME/RADAR										DIST FAF TO MAP 4.93 THLD									
4. MIN. ALT ANX VORTAC 2900, JIFIE 2500																			
8. MSA FROM: ANX VORTAC 3100										MAG VAR: 7E EPOCH YEAR: 1965									
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD @							
CATEGORY =====>		A			B			C			D			E					
		MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA			
CIRCLING		1440	1	436	1540	1	536	1780	2 1/4	776	1780	2 1/2	776						
NOTES:																			
CHART NOTE: DME OR RADAR REQUIRED.										@ NA WHEN LOCAL WEATHER NOT AVAILABLE.									
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON ANX VORTAC AIRWAY RADIALS 153 CW 236.										@ CAT C 800-2 1/4, CAT D 800-2 1/2									
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CHARLES B. WHEELER DOWNTOWN ALTIMETER SETTING AND INCREASE ALL MDA 80 FEET, AND CAT C AND D VISIBILITY 1/4 MILE.																			
CITY AND STATE		ELEVATION: 1004			TDZE:			FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP		VOR/DME-A		
LEE'S SUMMIT, MO		AIRPORT NAME:						ANX		VOR-A, AMDT 1, 02/01/2018					AMDT		ORIG-A		
		LEE'S SUMMIT MUNI													DATE		06/05/2008		



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

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QUALITY
6
CHECKED

CITY AND STATE

LEE'S SUMMIT, MO

ELEVATION: 1004

TDZE:

AIRPORT NAME:

LEE'S SUMMIT MUNI

FACILITY
IDENTIFIER:

ANXPROCEDURE NO./AMDT NO./EFFECTIVE DATE:

VOR-A, AMDT 1, 02/01/2018

SUP: VOR/DME-A

AMDT: ORIG-A

DATED: 06/05/2008

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: RW30 CLIMB TO 5000 DIRECT JONOK AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 130.81 INBOUND. FAS OBST: 2991 AAO 472221N/1052937W. 3040 AAO 472149N/1052929W. CHART GLENDIVE AWOS-3 DISTANCE TO THLD FROM 541 HAT: 1.57 NM. WAAS CHANNEL # 49030 REFERENCE PATH ID: W30A LTP HAE: 727.5 M											
EXADE				CETBI (TF) (FO) (RNP 2.00)				230.48 / 39.17				5300													
ZITGA (IAF)				CETBI (NOPT) (TF) (FB) (RNP 1.00)				349.49 / 21.50				5000													
CETBI (IF/IAF)				WOPKU (TF) (FB) (RNP 1.00)				311.08 / 5.37				4500													
WOPKU (FAF)				WITUS/3.70 NM TO RW30 (TF) (FB) (RNP 0.30)				311.01 / 2.64																	
WITUS/3.70 NM TO RW30				RW30 (MAP) (TF) (FO) (RNP 0.30)				311.01 / 3.70																	
(SEE FORM 8260-10)																									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SE CETBI, LT, 311.08 INBOUND, 5000 FT. IN LIEU OF PT (IAF) 3. FAC: 311.01 FAF: WOPKU DIST FAF TO MAP: 6.34 THLD: 6.34 4. MIN. ALT: CETBI 5000, WOPKU 4500, WITUS/3.70 NM TO RW30 3660* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 4500 GS ALT AT: WOPKU 4500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 34:1 IS NOT CLEAR 8. MSA FROM: RW30 4900																MAG VAR: 9E				EPOCH YEAR: 2015					
MINIMUMS																									
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A X																	
CATEGORY ==>		A			B			C			D			E											
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA										
LPV DA	2982	1 7/8	541	2982	1 7/8	541	2982	1 7/8	541	2982	1 7/8	541													
LNAV/VNAV DA	3335	4	894	3335	4	894	3335	4	894	3335	4	894													
LNAV MDA	3540	1 1/4	1099	3540	1 1/2	1099	3540	3/8	1099	3540	3/8	1099													
CIRCLING	3540	1 1/4	1099	3540	1 1/2	1099	3540	3	1099	3540	3	1099													
NOTES: CHART NOTE: CIRCLING TO RWY 12 NA AT NIGHT. CHART NOTE: BARO-VNAV NA. CHART NOTE: WHEN VGSI INOP, STRAIGHT-IN/CIRCLING RWY 30 PROCEDURE NA AT NIGHT. CHART NOTE: RWY 30 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. (CONTINUED ON PAGE 2)																									
CITY AND STATE				ELEVATION: 2441 TDZE: 2441				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
CIRCLE, MT				AIRPORT NAME:				RNAV				RNAV (GPS) RWY 30, ORIG-B 1 FEBRUARY 2018				AMDT: ORIG-A									
				CIRCLE TOWN COUNTY												DATED 12/11/2014									

QUALITY
 10
 CHECKED

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

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW30 (MAP)	2841 MSL (CA)	311.01	
2841 MSL	JONOK (DF) (FO) (RNP 1.00)		5000

NOTES, (CONT.):

CHART NOTE: DME/DME RNP-0.3 NA.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT EXADE ON T331 AND V465 NORTHEAST BOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ZITGA ON V465 SOUTHWEST BOUND.

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

*LNAV ONLY

CHART NOTE: USE GLENDIVE ALTIMETER SETTING

CITY AND STATE

CIRCLE, MT

ELEVATION: 2441

TDZE: 2441

AIRPORT NAME:

CIRCLE TOWN COUNTY

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 30, ORIG-B

1 FEBRUARY 2018

SUP:

AMDT:

DATED:

QUALITY
10

CHECKED

ORIG-A

12/11/2014

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	4U6
RUNWAY	RW30
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W30A
LTP/FTP LATITUDE	472451.1445N
LTP/FTP LONGITUDE	1053317.7070W
LTP/FTP ELLIPSOIDAL HEIGHT	+07275
FPAP LATITUDE	472559.2900N
FPAP LONGITUDE	1053442.1800W
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	1504
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

0F04F393

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+07441
FPAP ORTHOMETRIC HEIGHT	+07441

QUALITY
10

CHECKED

CITY AND STATE

CIRCLE, MT

ELEVATION: 2441

TDZE: 2441

AIRPORT NAME:

CIRCLE TOWN COUNTY

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 30, ORIG-B

1 FEBRUARY 2018

SUP:

AMDT:

DATED:

ORIG-A

12/11/2014

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 HATH, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES										MISSED APPROACH									
FROM		TO		COURSE AND DISTANCE				ALTITUDE											
										ADDITIONAL FLIGHT DATA:									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																			
2. _____																			
3. FAC _____ FAF _____ DIST FAF TO MAP _____ THLD _____																			
4. MIN. ALT _____																			
8. MSA FROM: _____										MAG VAR: _____ EPOCH YEAR: _____									
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 1 FEBRUARY 2018																			
CITY AND STATE KENANSVILLE, NC				ELEVATION: 137 TDZE: 137 AIRPORT NAME: DUPLIN CO				FACILITY IDENTIFIER: I-PZR				PROCEDURE NO./AMDT NO./EFFECTIVE DATE: LOC/NDB RWY 23, AMDT 1A, 12/11/2014				SUP AMDT 1 DATE 06/30/2011			

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: BIE VOR						
KOPFY INT PWE VORTAC		BIE VOR			097.63 / 11.63			3300		CLIMB TO 3000 THEN CLIMBING RIGHT TURN TO 3300 DIRECT BIE VOR AND HOLD.						
		BIE VOR			278.70 / 25.91			3300								
ADDITIONAL FLIGHT DATA: HOLD N, RT, 176.00 INBOUND. CHART FAS OBST: 1452 TOWER 401901N/0964446W. CHART 1830 TOWER 402803N/0964543W. CHART CIRCLING ICON. GUPEC TO RW18: 3.00/45. CHART 1718 TOWER 402305N/0964213W FAC CROSSES RWY C/L EXTENDED 2028 FT FROM THLD.																
1. PT <u> R </u> SIDE OF COURSE <u> 356.00 </u> OUTBOUND <u> 3300 </u> FT WITHIN <u> 10 </u> MILES OF <u> BIE VOR </u> (IAF)																
2. _____																
3. FAC <u> 176.00 </u> FAF _____ DIST FAF TO MAP _____ THLD _____																
4. MIN. ALT <u> GUPEC INT 2400 </u>																
8. MSA FROM: <u> BIE VOR 3300 </u>										MAG VAR: 7E			EPOCH YEAR: 1980			
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	
S-18	2400	1 1/4	1076	2400	1 1/2	1076	2400	3	1076	2400	3	1076				
CIRCLING	2400	1 1/4	1076	2400	1 1/2	1076	2400	3	1076	2400	3	1076				
GUPEC FIX MINIMUMS (DUAL VOR RECEIVERS REQUIRED)																
S-18	1760	1	436	1760	1	436	1760	1 1/4	436	1760	1 1/4	436				
CIRCLING	1820	1	496	1820	1	496	2000	2	676	2100	2 1/2	776				
NOTES:																
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON PWE VORTAC AIRWAY RADIALS 252 CW 329.										@ CAT A, B 1100-2, CAT C, D 1100-3						
CHART NOTE: RWY 18 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.																
CITY AND STATE BEATRICE, NE		ELEVATION: 1324		TDZE: 1324		FACILITY IDENTIFIER: BIE		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR RWY 18, AMDT 3 1 FEBRUARY 2018				SUP				
		AIRPORT NAME: BEATRICE MUNI		AMDT								2A				
				DATE								08/21/2014				



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

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QUALITY
25
CHECKED

CITY AND STATE

BEATRICE, NE

ELEVATION: 1324

TDZE: 1324

AIRPORT NAME:

BEATRICE MUNI

FACILITY
IDENTIFIER:

BIE

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

VOR RWY 18, AMDT 3

1 FEBRUARY 2018

SUP:

AMDT: 2A

DATED: 08/21/2014

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: 5.19 NM AFTER CUEBE INT OR AT CFCJR.														
PWE VORTAC			CUEBE INT			266.23 / 24.87			3100		CLIMB TO 3000 THEN LEFT TURN DIRECT BIE VOR AND HOLD.														
BIE VOR			CUEBE INT			169.52 / 5.61			3000																
										ADDITIONAL FLIGHT DATA: HOLD N, RT, 165.00 INBOUND. CHART FAS OBST: 1681 TOWER 401549N/0964627W. CHART CIRCLING ICON. CUEBE TO RW36: 3.00/41. FAC CROSSES RWY C/L EXTENDED 2973 FT FROM THLD.															
1. PT <u>L</u> SIDE OF COURSE <u>169.52</u> OUTBOUND <u>3000</u> FT WITHIN <u>10</u> MILES OF <u>CUEBE INT</u> (IAF)										MAG VAR: 7E EPOCH YEAR:1980															
2.																									
3. FAC <u>349.52</u> FAF <u>CUEBE INT</u> DIST FAF TO MAP <u>5.19</u> THLD <u>5.19</u>																									
4. MIN. ALT <u>CUEBE INT 3000</u>																									
8. MSA FROM: <u>BIE VOR 3300</u>																									
MINIMUMS																									
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD @													
CATEGORY =====>		A			B			C			D			E											
		MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA									
S-36		1940	3/4	633	1940	3/4	633	1940	1 3/8	633	1940	1 3/8	633												
CIRCLING		1940	1	616	1940	1	616	2000	2	676	2100	2 1/2	776												
NOTES:																									
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON PWE VORTAC AIRWAY RADIALS 216 CW 292.										@ CAT D 800-2 1/2															
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-36 CAT A/B VISIBILITY TO 1 SM AND CAT C/D VISIBILITY TO 1 3/4 SM.										QUALITY 25 CHECKED															
CITY AND STATE		ELEVATION: 1324 TDZE: 1307			FACILITY IDENTIFIER:			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:												SUP					
BEATRICE, NE		AIRPORT NAME:			BIE			VOR RWY 36, AMDT 10												AMDT 9A					
		BEATRICE MUNI						1 FEBRUARY 2018												DATE 02/05/2015					

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.



CITY AND STATE

BEATRICE, NE

ELEVATION: 1324

TDZE: 1307

AIRPORT NAME:

BEATRICE MUNI

FACILITY
IDENTIFIER:

BIE

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

VOR RWY 36, AMDT 10

1 FEBRUARY 2018

SUP:

AMDT: 9A

DATED: 02/05/2015

U.S. 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.								
NDB STANDARD INSTRUMENT APPROACH PROCEDURE															
FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.27															
TERMINAL ROUTES										MISSED APPROACH					
FROM		TO			COURSE AND DISTANCE			ALTITUDE		MAP: ATS NDB					
CNM VORTAC		ATS NDB			329.64 / 37.62			6100		CLIMBING RIGHT TURN TO 5800 IN ATS NDB HOLDING PATTERN.					
CME VORTAC		ATS NDB			152.36 / 30.14			6300							
HOB VORTAC		ATS NDB			271.35 / 61.63			6800							
PIO VOR/DME		ATS NDB			053.41 / 46.96			8800							
										ADDITIONAL FLIGHT DATA: HOLD SE, RT, 321.00 INBOUND. FAS OBST: 3709 AAO 324722N/1042731W. CHART 5400 PRIOR TO ATS NDB IN PROFILE. CHART CIRCLING ICON. FAC CROSSES RWY C/L EXTENDED 3576 FT FROM THLD.					
1. PT <u>R</u> SIDE OF COURSE <u>141.00</u> OUTBOUND <u>5300</u> FT WITHIN <u>10</u> MILES OF <u>ATS NDB</u> (IAF)															
2.															
3. FAC <u>321.00</u> FAF _____ DIST FAF TO MAP _____ THLD _____															
4. MIN. ALT _____															
8. MSA FROM: <u>ATS NDB 180-360 6400, 360-180 5800</u>										MAG VAR: <u>9E</u> EPOCH YEAR: <u>2000</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
<u>S-31</u>	<u>4060</u>	<u>1</u>	<u>540</u>	<u>4060</u>	<u>1</u>	<u>540</u>	<u>4060</u>	<u>1 1/2</u>	<u>540</u>	<u>4060</u>	<u>1 1/2</u>	<u>540</u>			
<u>CIRCLING</u>	<u>4060</u>	<u>1</u>	<u>515</u>	<u>4060</u>	<u>1</u>	<u>515</u>	<u>4080</u>	<u>1 1/2</u>	<u>535</u>	<u>4240</u>	<u>2 1/4</u>	<u>695</u>			
NOTES:															
@ CAT D 800-2 1/4															
QUALITY 19 CHECKED															
CITY AND STATE		ELEVATION: <u>3545</u> TDZE: <u>3520</u>			FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP			
<u>ARTESIA, NM</u>		AIRPORT NAME:			<u>ATS</u>		<u>NDB RWY 31, AMDT 5A</u>					AMDT <u>5</u>			
		<u>ARTESIA MUNI</u>					<u>1 FEBRUARY 2018</u>					DATE <u>10/12/2017</u>			

**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>
DUNKIRK, NY	CHAUTAUQUA COUNTY/DUNKIRK	1 FEBRUARY 2018	3

TAKEOFF MINIMUMS:

RWY 6, STANDARD OR 2300-3 FOR CLIMB IN VISUAL CONDITIONS.

RWY 15, STANDARD WITH MINIMUM CLIMB OF 455 FT PER NM TO 2500 OR 2300-3 FOR CLIMB IN VISUAL CONDITIONS.

RWY 24, STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 2500 OR 2300-3 FOR CLIMB IN VISUAL CONDITIONS.

RWY 33, STANDARD WITH MINIMUM CLIMB OF 250 FT PER NM TO 2000 OR 2300-3 FOR CLIMB IN VISUAL CONDITIONS.

TEXTUAL DEPARTURE PROCEDURES:

RWY 6: CLIMB HEADING 059.28 TO 1900 BEFORE TURNING.

RWY 15: CLIMB HEADING 149.29 TO 3400 BEFORE TURNING.

RWY 24: CLIMB HEADING 239.30 TO 2600 BEFORE TURNING.

RWY 33: CLIMB HEADING 329.30 TO 1900 BEFORE TURNING.

VISUAL CLIMB OVER AIRPORT:

RWY 6, 15, 24, 33: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS CHAUTAUQUA COUNTY / DUNKIRK AIRPORT AT OR ABOVE 2800 BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 6, NAVAID 11 FT FROM DER, 91 FT LEFT OF CENTERLINE, 3 FT AGL/663 FT MSL.

LIGHTING 11 FT FROM DER, 30 FT RIGHT OF CENTERLINE, 1 FT AGL/662 FT MSL.

TREE 657 FT FROM DER, 104 FT LEFT OF CENTERLINE, 696 FT MSL.

TREES BEGINNING 739 FT FROM DER, 203 FT RIGHT OF CENTERLINE, UP TO 704 FT MSL.

TREES BEGINNING 756 FT FROM DER, 56 FT LEFT OF CENTERLINE, UP TO 730 FT MSL.

TREE 849 FT FROM DER, 298 FT RIGHT OF CENTERLINE, 711 FT MSL.

TREES BEGINNING 866 FT FROM DER, 228 FT RIGHT OF CENTERLINE, UP TO 717 FT MSL.

TREES AND POLES BEGINNING 964 FT FROM DER, 13 FT LEFT OF CENTERLINE, UP TO 736 FT MSL.

TREES BEGINNING 1150 FT FROM DER, 48 FT RIGHT OF CENTERLINE, UP TO 721 FT MSL.

TREES AND POLES BEGINNING 1303 FT FROM DER, 27 FT RIGHT OF CENTERLINE, UP TO 728 FT MSL.

TREES BEGINNING 2376 FT FROM DER, 383 FT RIGHT OF CENTERLINE, UP TO 741 FT MSL.

TREES AND POLE BEGINNING 2424 FT FROM DER, 39 FT RIGHT OF CENTERLINE, UP TO 761 FT MSL.

TREE 2736 FT FROM DER, 44 FT LEFT OF CENTERLINE, 740 FT MSL.

TREES BEGINNING 2807 FT FROM DER, 66 FT LEFT OF CENTERLINE, UP TO 743 FT MSL.

TREE 3298 FT FROM DER, 990 FT LEFT OF CENTERLINE, 746 FT MSL.

TREE 3418 FT FROM DER, 1240 FT LEFT OF CENTERLINE, 749 FT MSL.

NOTE: RWY 15, ELECTRICAL SYSTEM 2 FT FROM DER, 156 FT RIGHT OF CENTERLINE, 2 FT AGL/694 FT MSL.

TREE 5 FT FROM DER, 32 FT LEFT OF CENTERLINE, 1061 FT MSL.

TREE 7 FT FROM DER, 673 FT RIGHT OF CENTERLINE, 1061 FT MSL.

ELECTRICAL SYSTEM 9 FT FROM DER, 29 FT LEFT OF CENTERLINE, 3 FT AGL/695 FT MSL.

TREE 33 FT FROM DER, 949 FT RIGHT OF CENTERLINE, 1062 FT MSL.

TREE AND VEGETATION BEGINNING 102 FT FROM DER, 423 FT LEFT OF CENTERLINE, UP TO 1058 FT MSL.

TREE 126 FT FROM DER, 2852 FT RIGHT OF CENTERLINE, 1079 FT MSL.

TREES BEGINNING 168 FT FROM DER, 1267 FT RIGHT OF CENTERLINE, UP TO 1108 FT MSL.

TREES AND FENCE BEGINNING 349 FT FROM DER, 260 FT RIGHT OF CENTERLINE, UP TO 1118 FT MSL.

TREES BEGINNING 362 FT FROM DER, 173 FT LEFT OF CENTERLINE, UP TO 1071 FT MSL.

TREES BEGINNING 514 FT FROM DER, 594 FT RIGHT OF CENTERLINE, UP TO 773 FT MSL.

TREES BEGINNING 537 FT FROM DER, 3296 FT RIGHT OF CENTERLINE, UP TO 1122 FT MSL.

TREE 566 FT FROM DER, 661 FT LEFT OF CENTERLINE, 1090 FT MSL.

TREES BEGINNING 620 FT FROM DER, 2278 FT RIGHT OF CENTERLINE, UP TO 1151 FT MSL.

TREE 667 FT FROM DER, 1055 FT LEFT OF CENTERLINE, 1091 FT MSL.

TREES BEGINNING 718 FT FROM DER, 259 FT RIGHT OF CENTERLINE, UP TO 1155 FT MSL.

TREES BEGINNING 740 FT FROM DER, 130 FT LEFT OF CENTERLINE, UP TO 1098 FT MSL.

TREES BEGINNING 860 FT FROM DER, 251 FT LEFT OF CENTERLINE, UP TO 1105 FT MSL.

TREE 893 FT FROM DER, 250 FT LEFT OF CENTERLINE, 744 FT MSL.

TREE 948 FT FROM DER, 608 FT LEFT OF CENTERLINE, 765 FT MSL.

TREE 951 FT FROM DER, 1814 FT LEFT OF CENTERLINE, 1101 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>
DUNKIRK, NY	CHAUTAUQUA COUNTY/DUNKIRK	1 FEBRUARY 2018	3

TREE 1057 FT FROM DER, 190 FT LEFT OF CENTERLINE, 731 FT MSL.
TREES BEGINNING 1183 FT FROM DER, 1274 FT LEFT OF CENTERLINE, UP TO 1131 FT MSL.
TREE 1227 FT FROM DER, 111 FT RIGHT OF CENTERLINE, 748 FT MSL.
TREE 1237 FT FROM DER, 3974 FT RIGHT OF CENTERLINE, 1140 FT MSL.
TREE 1259 FT FROM DER, 1505 FT RIGHT OF CENTERLINE, 1144 FT MSL.
TREE 1263 FT FROM DER, 9 FT RIGHT OF CENTERLINE, 1158 FT MSL.
TREE 1277 FT FROM DER, 520 FT LEFT OF CENTERLINE, 1152 FT MSL.
TREE 1279 FT FROM DER, 156 FT LEFT OF CENTERLINE, 766 FT MSL.
TREES BEGINNING 1286 FT FROM DER, 681 FT RIGHT OF CENTERLINE, UP TO 1159 FT MSL.
TREES BEGINNING 1293 FT FROM DER, 46 FT LEFT OF CENTERLINE, UP TO 1145 FT MSL.
TREE, POLE, AND TRANSMISSION LINE BEGINNING 1324 FT FROM DER, 82 FT RIGHT OF CENTERLINE, UP TO 745 FT MSL.
TREE 1359 FT FROM DER, 3174 FT RIGHT OF CENTERLINE, 1143 FT MSL.
TREE 1407 FT FROM DER, 3804 FT RIGHT OF CENTERLINE, 1149 FT MSL.
TREE 1453 FT FROM DER, 109 FT RIGHT OF CENTERLINE, 749 FT MSL.
TREE 1462 FT FROM DER, 282 FT LEFT OF CENTERLINE, 746 FT MSL.
VEGETATION 1465 FT FROM DER, 4041 FT LEFT OF CENTERLINE, 100 FT AGL/1111 FT MSL.
TREES BEGINNING 1470 FT FROM DER, 105 FT RIGHT OF CENTERLINE, UP TO 757 FT MSL.
TREE 1509 FT FROM DER, 173 FT LEFT OF CENTERLINE, 739 FT MSL.
TREE 1539 FT FROM DER, 2232 FT LEFT OF CENTERLINE, 1124 FT MSL.
TREES BEGINNING 1550 FT FROM DER, 262 FT LEFT OF CENTERLINE, UP TO 1160 FT MSL.
TREE 1599 FT FROM DER, 2403 FT RIGHT OF CENTERLINE, 1167 FT MSL.
TREES BEGINNING 1637 FT FROM DER, 165 FT RIGHT OF CENTERLINE, UP TO 1168 FT MSL.
VEGETATION AND TREES BEGINNING 1666 FT FROM DER, 91 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/1193 FT MSL.
TREE 1701 FT FROM DER, 429 FT LEFT OF CENTERLINE, 1168 FT MSL.
TREE 1759 FT FROM DER, 271 FT RIGHT OF CENTERLINE, 762 FT MSL.
TREES BEGINNING 1768 FT FROM DER, 663 FT LEFT OF CENTERLINE, UP TO 1171 FT MSL.
TREES BEGINNING 1770 FT FROM DER, 41 FT RIGHT OF CENTERLINE, UP TO 1162 FT MSL.
TREE 1805 FT FROM DER, 662 FT LEFT OF CENTERLINE, 769 FT MSL.
TREES BEGINNING 1806 FT FROM DER, 2070 FT RIGHT OF CENTERLINE, UP TO 1179 FT MSL.
TREE 1826 FT FROM DER, 742 FT RIGHT OF CENTERLINE, 767 FT MSL.
VEGETATION 1832 FT FROM DER, 4014 FT LEFT OF CENTERLINE, 100 FT AGL/1134 FT MSL.
TREE 1838 FT FROM DER, 2116 FT LEFT OF CENTERLINE, 1156 FT MSL.
TREES BEGINNING 1853 FT FROM DER, 153 FT RIGHT OF CENTERLINE, UP TO 1174 FT MSL.
TREE, VEGETATION BEGINNING 1867 FT FROM DER, 504 FT LEFT OF CENTERLINE, UP TO 1173 FT MSL.
TREES BEGINNING 1894 FT FROM DER, 2679 FT RIGHT OF CENTERLINE, UP TO 1179 FT MSL.
TREE 1952 FT FROM DER, 2435 FT RIGHT OF CENTERLINE, 1184 FT MSL.
VEGETATION AND TREE BEGINNING 2041 FT FROM DER, 734 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/1193 FT MSL.
TREES BEGINNING 2135 FT FROM DER, 308 FT LEFT OF CENTERLINE, UP TO 1207 FT MSL.
TREES BEGINNING 2221 FT FROM DER, 2217 FT RIGHT OF CENTERLINE, UP TO 1199 FT MSL.
TREE 2273 FT FROM DER, 351 FT LEFT OF CENTERLINE, 779 FT MSL.
TREES AND VEGETATION BEGINNING 2284 FT FROM DER, 1172 FT LEFT OF CENTERLINE, UP TO 1210 FT MSL.
VEGETATION AND TREES BEGINNING 2310 FT FROM DER, 909 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/1219 FT MSL.
TREE 2386 FT FROM DER, 307 FT LEFT OF CENTERLINE, 792 FT MSL.
TREE 2391 FT FROM DER, 967 FT LEFT OF CENTERLINE, 804 FT MSL.
VEGETATION BEGINNING 2416 FT FROM DER, 4010 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/1223 FT MSL.
TREE 2419 FT FROM DER, 2817 FT LEFT OF CENTERLINE, 1153 FT MSL.
TREES BEGINNING 2467 FT FROM DER, 134 FT LEFT OF CENTERLINE, UP TO 795 FT MSL.
VEGETATION 2549 FT FROM DER, 4328 FT LEFT OF CENTERLINE, 100 FT AGL/1150 FT MSL.
TREE 2550 FT FROM DER, 326 FT LEFT OF CENTERLINE, 783 FT MSL.
TREE 2553 FT FROM DER, 528 FT LEFT OF CENTERLINE, 800 FT MSL.
TREES BEGINNING 2557 FT FROM DER, 5 FT LEFT OF CENTERLINE, UP TO 1227 FT MSL.
TREES BEGINNING 2565 FT FROM DER, 1135 FT RIGHT OF CENTERLINE, UP TO 1223 FT MSL.
TREES BEGINNING 2632 FT FROM DER, 2545 FT RIGHT OF CENTERLINE, UP TO 1230 FT MSL.
TREE 2633 FT FROM DER, 266 FT LEFT OF CENTERLINE, 801 FT MSL.
TREES BEGINNING 2643 FT FROM DER, 84 FT LEFT OF CENTERLINE, UP TO 809 FT MSL.
VEGETATION AND TREES BEGINNING 2682 FT FROM DER, 28 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/1252 FT MSL.
TREE 2733 FT FROM DER, 1936 FT LEFT OF CENTERLINE, 1204 FT MSL.
TREE 2737 FT FROM DER, 382 FT LEFT OF CENTERLINE, 795 FT MSL.
VEGETATION 2740 FT FROM DER, 4130 FT LEFT OF CENTERLINE, 100 FT AGL/1141 FT MSL.
TREE 2742 FT FROM DER, 2 FT LEFT OF CENTERLINE, 792 FT MSL.
TREES BEGINNING 2778 FT FROM DER, 122 FT LEFT OF CENTERLINE, UP TO 803 FT MSL.
TREE 2799 FT FROM DER, 1824 FT LEFT OF CENTERLINE, 1202 FT MSL.
TREES BEGINNING 2802 FT FROM DER, 677 FT LEFT OF CENTERLINE, UP TO 1235 FT MSL.
TREES BEGINNING 2875 FT FROM DER, 36 FT LEFT OF CENTERLINE, UP TO 805 FT MSL.
VEGETATION 2912 FT FROM DER, 4300 FT LEFT OF CENTERLINE, 100 FT AGL/1144 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>
DUNKIRK, NY	CHAUTAUQUA COUNTY/DUNKIRK	1 FEBRUARY 2018	3

TREE 2921 FT FROM DER, 977 FT LEFT OF CENTERLINE, 1237 FT MSL.
TREES BEGINNING 2937 FT FROM DER, 109 FT LEFT OF CENTERLINE, UP TO 802 FT MSL.
VEGETATION, TREES, POLES AND TRANSMISSION LINES BEGINNING 3056 FT FROM DER, 3 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/1259 FT MSL.
TREES AND VEGETATION BEGINNING 3058 FT FROM DER, 67 FT LEFT OF CENTERLINE, UP TO 1168 FT MSL.
TREES, TRANSMISSION LINES, AND POLES BEGINNING 3122 FT FROM DER, 202 FT LEFT OF CENTERLINE, UP TO 793 FT MSL.
TRANSMISSION LINE, POLE AND TREES BEGINNING 3646 FT FROM DER, 96 FT LEFT OF CENTERLINE, UP TO 76 FT AGL/800 FT MSL.
TREE 4345 FT FROM DER, 1386 FT LEFT OF CENTERLINE, 806 FT MSL.
TREE 4747 FT FROM DER, 500 FT LEFT OF CENTERLINE, 824 FT MSL.
TREES BEGINNING 5139 FT FROM DER, 24 FT LEFT OF CENTERLINE, UP TO 854 FT MSL.
TREES BEGINNING 5779 FT FROM DER, 265 FT LEFT OF CENTERLINE, UP TO 857 FT MSL.
TREE 1 NM FROM DER, 30 FT LEFT OF CENTERLINE, 865 FT MSL.
TREE 1.1 NM FROM DER, 235 FT LEFT OF CENTERLINE, 872 FT MSL.
TREES BEGINNING 1.1 NM FROM DER, 78 FT LEFT OF CENTERLINE, UP TO 876 FT MSL.
TREES BEGINNING 1.1 NM FROM DER, 68 FT LEFT OF CENTERLINE, UP TO 880 FT MSL.
TREES BEGINNING 1.2 NM FROM DER, 783 FT LEFT OF CENTERLINE, UP TO 882 FT MSL.
TREE 1.2 NM FROM DER, 1615 FT LEFT OF CENTERLINE, 885 FT MSL.
TREES BEGINNING 1.2 NM FROM DER, 971 FT LEFT OF CENTERLINE, UP TO 889 FT MSL.
TREES BEGINNING 1.2 NM FROM DER, 766 FT LEFT OF CENTERLINE, UP TO 892 FT MSL.
TREE 1.2 NM FROM DER, 1091 FT LEFT OF CENTERLINE, 893 FT MSL.
TREE 1.3 NM FROM DER, 1450 FT LEFT OF CENTERLINE, 900 FT MSL.
TREES BEGINNING 1.3 NM FROM DER, 1106 FT LEFT OF CENTERLINE, UP TO 904 FT MSL.
TREES BEGINNING 1.3 NM FROM DER, 969 FT LEFT OF CENTERLINE, UP TO 912 FT MSL.
TREES BEGINNING 1.3 NM FROM DER, 1370 FT LEFT OF CENTERLINE, UP TO 915 FT MSL.
TREE 1.4 NM FROM DER, 2147 FT LEFT OF CENTERLINE, 926 FT MSL.
TREE 1.5 NM FROM DER, 1329 FT LEFT OF CENTERLINE, 936 FT MSL.
TREES BEGINNING 1.6 NM FROM DER, 1733 FT LEFT OF CENTERLINE, UP TO 954 FT MSL.
TREE 1.6 NM FROM DER, 2216 FT LEFT OF CENTERLINE, 956 FT MSL.
TREE 1.8 NM FROM DER, 1162 FT LEFT OF CENTERLINE, 989 FT MSL.
TREES BEGINNING 1.9 NM FROM DER, 2071 FT LEFT OF CENTERLINE, UP TO 1026 FT MSL.
TREE 1.9 NM FROM DER, 544 FT LEFT OF CENTERLINE, 1046 FT MSL.

NOTE: RWY 24, LIGHTING 9 FT FROM DER, 95 FT LEFT OF CENTERLINE, 2 FT AGL/675 FT MSL.
LIGHTING 9 FT FROM DER, 99 FT RIGHT OF CENTERLINE, 2 FT AGL/675 FT MSL.
TERRAIN BEGINNING 23 FT FROM DER, 334 FT LEFT OF CENTERLINE, UP TO 683 FT MSL.
TREES BEGINNING 745 FT FROM DER, 89 FT LEFT OF CENTERLINE, UP TO 749 FT MSL.
TREES BEGINNING 1337 FT FROM DER, 8 FT RIGHT OF CENTERLINE, UP TO 741 FT MSL.
TREES BEGINNING 2095 FT FROM DER, 134 FT LEFT OF CENTERLINE, UP TO 757 FT MSL.
TREE 2504 FT FROM DER, 1041 FT RIGHT OF CENTERLINE, 744 FT MSL.
TREE 3186 FT FROM DER, 445 FT LEFT OF CENTERLINE, 758 FT MSL.
TREES BEGINNING 3193 FT FROM DER, 405 FT LEFT OF CENTERLINE, UP TO 768 FT MSL.
TREES BEGINNING 3300 FT FROM DER, 424 FT LEFT OF CENTERLINE, UP TO 772 FT MSL.
TREES BEGINNING 3462 FT FROM DER, 405 FT LEFT OF CENTERLINE, UP TO 778 FT MSL.
TREE 3522 FT FROM DER, 107 FT RIGHT OF CENTERLINE, 774 FT MSL.
TREE 3564 FT FROM DER, 892 FT LEFT OF CENTERLINE, 779 FT MSL.
TREES BEGINNING 3573 FT FROM DER, 370 FT LEFT OF CENTERLINE, UP TO 785 FT MSL.
TREES BEGINNING 3665 FT FROM DER, 875 FT LEFT OF CENTERLINE, UP TO 788 FT MSL.

NOTE: RWY 33, VEGETATION 7 FT FROM DER, 436 FT LEFT OF CENTERLINE, 674 FT MSL.
TREE 912 FT FROM DER, 29 FT LEFT OF CENTERLINE, 691 FT MSL.
TREES BEGINNING 945 FT FROM DER, 148 FT LEFT OF CENTERLINE, UP TO 694 FT MSL.
TREE 957 FT FROM DER, 65 FT RIGHT OF CENTERLINE, 685 FT MSL.
TREE 1080 FT FROM DER, 234 FT LEFT OF CENTERLINE, 704 FT MSL.
TREES BEGINNING 1161 FT FROM DER, 178 FT LEFT OF CENTERLINE, UP TO 721 FT MSL.
TREES BEGINNING 1183 FT FROM DER, 110 FT RIGHT OF CENTERLINE, UP TO 715 FT MSL.
TREES BEGINNING 1622 FT FROM DER, 46 FT LEFT OF CENTERLINE, UP TO 722 FT MSL.
TREE 2189 FT FROM DER, 287 FT RIGHT OF CENTERLINE, 719 FT MSL.
TREE 2290 FT FROM DER, 19 FT RIGHT OF CENTERLINE, 724 FT MSL.
TREE 2366 FT FROM DER, 150 FT RIGHT OF CENTERLINE, 727 FT MSL.
TREE 2401 FT FROM DER, 11 FT RIGHT OF CENTERLINE, 735 FT MSL.
TREE 2516 FT FROM DER, 11 FT LEFT OF CENTERLINE, 724 FT MSL.
TREE 2523 FT FROM DER, 827 FT LEFT OF CENTERLINE, 730 FT MSL.
TREE 3296 FT FROM DER, 190 FT RIGHT OF CENTERLINE, 747 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>
DUNKIRK, NY	CHAUTAUQUA COUNTY/DUNKIRK	1 FEBRUARY 2018	3

CONTROLLING OBSTACLES:

RWY 6: 2849 FT MSL TOWER (36-001812) 422336N/0791344W (CTA)

RWY 15: 2034 FT MSL WINDMILL (36-123754) 422538.68N/0791347.13W (CG/CGTA); 2849 FT MSL TOWER (36-001812) 422336N/0791344W (CTA)

RWY 24: 2047 FT MSL TOWER (36-000488) 422209N/0792315W (CG/CGTA); 2849 FT MSL TOWER (36-001812) 422336N/0791344W (CTA)

RWY 33: 2849 FT MSL TOWER (36-001812) 422336N/0791344W (CG/CGTA/CTA)

VCOA: 1954 FT MSL WINDMILL (36-123760) 422550.18N/0791508.62W (VCA); 2849 FT MSL TOWER (36-001812) 422336N/0791344W (CTA)

OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: 2849 FT MSL TOWER (36-001812) 422336N/0791344W

REMARKS:

PER ATC, RWY 33 CLIMB GRADIENT AND CLIMB-TO-ALT NECESSARY TO ENSURE SEPARATION FROM CANADIAN AIRSPACE.

VCOA AND STRAIGHT AHEAD DEPARTURES DEVELOPED PER ATC AND FPT REQUEST DUE TO DECOMMISSIONING OF DKK VOR/DME.



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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
DUNKIRK, NY	CHAUTAUQUA COUNTY/DUNKIRK	1 FEBRUARY 2018	3

FLIGHT INSPECTED BY:	<i>Digitally signed by</i> ROBERT G HAMILTON	OFFICE SYMBOL:	DATE:
BRIAN HANSEN	Nov 07, 2017	FICO	11/2/17

DEVELOPED BY:	<i>Digitally signed by</i> LUCAS MCCLOUD	OFFICE SYMBOL:	DATE:
LUCAS MCCLOUD	Oct 16, 2017	AJV-5422	09/19/2017

APPROVED BY:	<i>Digitally signed by</i> ROBERT G HAMILTON	OFFICE SYMBOL:	DATE:
JULIE MORGAN	Nov 07, 2017	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:
BUF ATCT, AMGR

CHANGES - REASONS:

1. REMOVED DEPARTURE ROUTING TO DKK VORTAC - VORTAC DECOMMISSIONING, NOW STRAIGHT AHEAD OR VCOA ONLY
2. ADDED VCOA FOR ALL RUNWAYS - ATC/FPT REQUEST
3. UPDATED ALL STRAIGHT AHEAD DEPARTURE HDGS, CTAS, CG/CGTAS - NEW 11/2014 VG SURVEYS AND DEPARTURE ROUTING
4. T/O MINS RWY 24 CHANGED FROM 'STANDARD' TO 'STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 2500 OR 2300-3 FOR CLIMB IN VISUAL CONDITIONS' - ATC/FPT REQUEST NEW DEPARTURE ROUTING
5. T/O MINS RWY 15 CHANGED FROM 'STANDARD WITH MINIMUM CLIMB OF 354FT PER NM TO 2000' TO 'STANDARD WITH MINIMUM CLIMB OF 455 FT PER NM TO 2500 OR 2300-3 FOR CLIMB IN VISUAL CONDITIONS' - ATC/FPT REQUEST NEW DEPARTURE ROUTING
6. DP RWY 6 CHANGED FROM 'CLIMB HEADING 059.29 TO 2200 THEN CLIMBING LEFT TURN ON HEADING 210 AND DKK R-020 TO DKK VORTAC BEFORE PROCEEDING ON COURSE' TO 'CLIMB HEADING 059.28 TO 1900 BEFORE TURNING' - ATC/FPT REQUEST NEW DEPARTURE ROUTING
7. DP RWY 15 CHANGED FROM 'CLIMB HEADING 149.29 TO 2600 THEN CLIMBING LEFT TURN ON HEADING 265 AND DKK R-085 TO DKK VORTAC BEFORE PROCEEDING ON COURSE' TO 'CLIMB HEADING 149.29 TO 3400 BEFORE TURNING' - ATC/FPT REQUEST NEW DEPARTURE ROUTING
8. DP RWY 24 CHANGED FROM 'CLIMB HEADING 239.30 TO 2600 THEN CLIMBING RIGHT TURN ON HEADING 087 AND DKK R-268 TO DKK VORTAC BEFORE PROCEEDING ON COURSE' TO 'CLIMB HEADING 239.30 TO 2600 BEFORE TURNING' - ATC/FPT REQUEST NEW DEPARTURE ROUTING
9. DP RWY 33 CHANGED FROM 'CLIMB HEADING 329.29 TO 2000 THEN CLIMBING RIGHT TURN ON HEADING 175 AND DKK R-358 TO DKK VORTAC BEFORE PROCEEDING ON COURSE' TO 'CLIMB HEADING 329.30 TO 1900 BEFORE TURNING' - ATC/FPT REQUEST NEW DEPARTURE ROUTING
10. TAKEOFF OBSTACLE NOTES: OBSTACLES REGROUPED VIA DEPARTURE OBSTACLE GROUPER - PER TARGETS BUILD AND 2014 VG SURVEY
11. ADDED CONTROLLING OBSTACLES BASED ON NEW ODPS AND TAKEOFF MINS- NEW 11/2014 VG SURVEYS AND DEPARTURE ROUTING



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CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
CLEVELAND, OH	BURKE LAKEFRONT	1 FEBRUARY 2018	7

TAKEOFF MINIMUMS:

RWY 6L, 200-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 900.
RWY 6R, 300-1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 290 FT PER NM TO 1000.
RWY 24L, 400-1 3/8 OR STANDARD WITH MINIMUM CLIMB OF 757 FT PER NM TO 1000.
RWY 24R, 200-1 OR STANDARD WITH MINIMUM CLIMB OF 490 FT PER NM TO 900.

TEXTUAL DEPARTURE PROCEDURES:

RWY 6L/R: CLIMBING LEFT TURN TO 2000 ON HEADING 350 TO INTERCEPT CXR VOR/DME R-286 TO CRIBS INTERSECTION BEFORE PROCEEDING ON COURSE.
RWY 24L/R: CLIMBING RIGHT TURN TO 2000 ON HEADING 350 TO INTERCEPT CXR VOR/DME R-286 TO CRIBS INTERSECTION BEFORE PROCEEDING ON COURSE.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 6L: LIGHTING 9 FT FROM DER, 54 FT LEFT AND RIGHT OF CENTERLINE, 2 FT AGL/584 FT MSL. TREE 842 FT FROM DER, 720 FT RIGHT OF CENTERLINE, 622 FT MSL. POLE 964 FT FROM DER, 235 FT LEFT OF CENTERLINE, 24 FT AGL/618 FT MSL. CRANE 969 FT FROM DER, 589 FT RIGHT OF CENTERLINE, 73 FT AGL/641 FT MSL. TREE 2294 FT FROM DER, 265 FT RIGHT OF CENTERLINE, 650 FT MSL. POLES AND TREE BEGINNING 2303 FT FROM DER, 222 FT RIGHT OF CENTERLINE, UP TO 84 FT AGL/665 FT MSL. POLES, TREE AND TRANSMISSION LINE BEGINNING 2327 FT FROM DER, 166 FT RIGHT OF CENTERLINE, UP TO 90 FT AGL/674 FT MSL. BUILDINGS AND BRIDGE BEGINNING 2682 FT FROM DER, 597 FT RIGHT OF CENTERLINE, UP TO 124 FT AGL/704 FT MSL. TOWER 1 NM FROM DER, 1347 FT RIGHT OF CENTERLINE, 150 FT AGL/758 FT MSL.

NOTE: RWY 6R: SIGN AND LIGHTING BEGINNING 27 FT FROM DER, 89 FT LEFT OF CENTERLINE, UP TO 4 FT AGL/585 FT MSL. LIGHTING 41 FT FROM DER, 89 FT RIGHT OF CENTERLINE, 3 FT AGL/585 FT MSL. WIND INDICATOR 175 FT FROM DER, 242 FT LEFT OF CENTERLINE, 11 FT AGL/590 FT MSL. POLE 177 FT FROM DER, 241 FT LEFT OF CENTERLINE, 14 FT AGL/594 FT MSL. POLE 471 FT FROM DER, 612 FT RIGHT OF CENTERLINE, 37 FT AGL/617 FT MSL. POLES AND SIGN BEGINNING 626 FT FROM DER, 595 FT RIGHT OF CENTERLINE, UP TO 37 FT AGL/618 FT MSL. POLES BEGINNING 1009 FT FROM DER, 569 FT RIGHT OF CENTERLINE, UP TO 56 FT AGL/637 FT MSL. POLE AND DOME BEGINNING 1874 FT FROM DER, 568 FT RIGHT OF CENTERLINE, UP TO 70 FT AGL/651 FT MSL. POLES 3098 FT FROM DER, 1282 FT RIGHT OF CENTERLINE, 708 FT MSL. TRANSMISSION LINES, POLE AND BUILDING BEGINNING 3720 FT FROM DER, 96 FT RIGHT OF CENTERLINE, UP TO 93 FT AGL/714 FT MSL. TOWER, POLES AND BUILDING BEGINNING 4310 FT FROM DER, 170 FT RIGHT OF CENTERLINE, UP TO 106 FT AGL/737 FT MSL. ANTENNA AND TOWER BEGINNING 1.2 NM FROM DER, 2237 FT RIGHT OF CENTERLINE, UP TO 170 FT AGL/794 FT MSL. TOWER 1.2 NM FROM DER, 1827 FT RIGHT OF CENTERLINE, 227 FT AGL/849 FT MSL.

NOTE: RWY 24L: POLES BEGINNING 8 FT FROM DER, 28 FT LEFT AND RIGHT OF CENTERLINE, UP TO 1 FT AGL/581 FT MSL. LIGHTING BEGINNING 10 FT FROM DER, 29 FT LEFT AND RIGHT OF CENTERLINE, 2 FT AGL/582 FT MSL. FENCE 184 FT FROM DER, 451 FT LEFT OF CENTERLINE, 9 FT AGL/590 FT MSL. BUILDING 197 FT FROM DER, 502 FT LEFT OF CENTERLINE, 27 FT AGL/610 FT MSL. BUILDING AND TANK BEGINNING 213 FT FROM DER, 411 FT LEFT OF CENTERLINE, UP TO 30 FT AGL/613 FT MSL. NAVAID 245 FT FROM DER, 499 FT RIGHT OF CENTERLINE, 9 FT AGL/587 FT MSL. POLE 900 FT FROM DER, 621 FT LEFT OF CENTERLINE, 60 FT AGL/628 FT MSL. CRANE, POLES AND SHIP BEGINNING 1038 FT FROM DER, 38 FT LEFT OF CENTERLINE, UP TO 85 FT AGL/653 FT MSL. POLE 1319 FT FROM DER, 161 FT RIGHT OF CENTERLINE, 64 FT AGL/632 FT MSL. BUILDINGS BEGINNING 1685 FT FROM DER, 643 FT LEFT OF CENTERLINE, 169 FT AGL/741 FT MSL. BUILDINGS, DOME, POLE AND SHIP BEGINNING 1748 FT FROM DER, 367 FT LEFT OF CENTERLINE, UP TO 167 FT AGL/745 FT MSL. SHIP 2146 FT FROM DER, 90 FT RIGHT OF CENTERLINE, 65 FT AGL/637 FT MSL. WINDMILLS BEGINNING 2340 FT FROM DER, 1119 FT LEFT OF CENTERLINE, UP TO 152 FT AGL/750 FT MSL. STADIUM AND CRANES BEGINNING 2821 FT FROM DER, 317 FT LEFT OF CENTERLINE, UP TO 176 FT AGL/763 FT MSL. BUILDING, SHIPS, CRANE, ELEVATOR, BRIDGE BEGINNING 5056 FT FROM DER, 207 FT LEFT OF CENTERLINE, UP TO 275 FT AGL/896 FT MSL.

NOTE: RWY 24R: LIGHTING AND SIGN BEGINNING 10 FT FROM DER, 55 FT LEFT AND RIGHT OF CENTERLINE, UP TO 2 FT AGL/582 FT MSL. POLE AND SHIP BEGINNING 1514 FT FROM DER, 338 FT LEFT OF CENTERLINE, UP TO 64 FT AGL/632 FT MSL. POLE AND SHIP BEGINNING 2324 FT FROM DER, 866 FT LEFT OF CENTERLINE, UP TO 86 FT AGL/654 FT MSL. STADIUM AND CRANES BEGINNING 3015 FT FROM DER, 816 FT LEFT OF CENTERLINE, UP TO 176 FT AGL/763 FT MSL. CRANE 5727 FT FROM DER, 1699 FT RIGHT OF CENTERLINE, 152 FT AGL/731 FT MSL.

CONTROLLING OBSTACLES:

RWY 6L: 758 FT MSL TOWER 413147.86N/0813857.11W.

RWY 6R: 737 FT MSL TOWER 413123.91N/0813934.47W (CLIMB GRADIENT), 849 FT MSL TOWER 413137.06N/0813855.71W (CEILING/CLIMB-TO ALTITUDE), 794 FT MSL ANTENNA 413132.77N/0813854.66W (VISIBILITY).

RWY 24L: 740 FT MSL BUILDING 413031.10N/0814144.07W (CLIMB GRADIENT), 896 FT MSL BUILDING 413004.41N/0814214.10W (CEILING/CLIMB-TO ALTITUDE), 787 FT MSL BRIDGE 412953.73N/0814231.66W (VISIBILITY).

RWY 24R: 763 FT MSL STADIUM 413025.30N/0814156.85W (CLIMB GRADIENT/CLIMB-TO ALTITUDE/CEILING), 757 FT MSL STADIUM 413025.15N/0814158.35W (VISIBILITY).

OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 6L, 6R, 24L, 24R: 1603 FT MSL BUILDING 413003.75N/0814137.82W.



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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
CLEVELAND, OH	BURKE LAKEFRONT	1 FEBRUARY 2018	7

REMARKS:

AFS APPROVAL LETTER ON FILE FOR RWY 24L MINIMUM CLIMB OF 757 FT PER NM TO 1000.

FLIGHT INSPECTED BY:	<i>Digitally signed by</i> BEV L BORDY	OFFICE SYMBOL:	DATE:
SHAWN D MAXWELL	Oct 18, 2017	FICO	10/13/17
DEVELOPED BY:	<i>Digitally signed by</i> BEV L BORDY	OFFICE SYMBOL:	DATE:
BEV BORDY (CHRISTINE BAYSE)	Oct 18, 2017	AJV-5433	08/24/2017
APPROVED BY:	<i>Digitally signed by</i> BEV L BORDY	OFFICE SYMBOL:	DATE:
PATRICK MULQUEEN	Oct 18, 2017	AJV-5430	

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

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

OTHER:

ZOB, CLE APP CON, BKL ATCT, AMGR, CENTRAL FPT

CHANGES - REASONS:

1. UPDATED TAKEOFF MINIMUMS FOR RWY 6L FROM "300-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 439 FT PER NM TO 1000" TO 200-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 900". - 856 FT MSL TOWER DISMANTLED.
2. UPDATED TAKEOFF MINIMUMS FOR RWY 6R FROM "300-1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 332 FT PER NM TO 1000" TO "300-1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 290 FT PER NM TO 1000". - 856 FT MSL TOWER DISMANTLED.
3. UPDATED TAKEOFF MINIMUMS FOR RWY 24R FROM "200-1 OR STANDARD WITH MINIMUM CLIMB OF 492 FT PER NM TO 900" TO "200-1 OR STANDARD WITH MINIMUM CLIMB OF 490 FT PER NM TO 900"- OBSTACLE SURVEY.
4. UPDATED TAKEOFF OBSTACLE NOTES. - NEW SURVYED OBSTACLES.
5. UPDATED CONTROLLING OBSTACLES FOR RWY 6L/R AND 24R AND OBSTACLE MANDATING ODP ROUTE DEVELOPMENT. - NEW OBSTACLES AND OBSTACLES REMOVED FROM DATABASE.



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 CLIMB TO 3000 DIRECT AKEPE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD E, RT, 252.33 INBOUND. CHART FAS OBST: 829 TOWER 413506N/0835034W. DISTANCE TO THLD FROM 335 HAT: 0.88 NM. CHART VDP AT 1.26 NM TO RW07* *LNAV ONLY. WAAS CHANNEL # 99399 REFERENCE PATH ID: W07A CHART CIRCLING ICON. CHART: ASR LTP HAE: 172.8 M							
RANDL (IAF)		ATVIY (NOPT) (TF) (FB) (RNP 1.00)			159.30 / 16.55			3000									
MCLUR (IAF)		ATVIY (NOPT) (TF) (FB) (RNP 1.00)			000.29 / 11.55			3000									
ATVIY (IF/IAF)		SULVE (TF) (FB) (RNP 1.00)			072.02 / 6.01			2200									
SULVE (FAF)		RW07 (MAP) (TF) (FO) (RNP 0.30)			072.10 / 4.53												
RW07 (MAP)		1018 MSL (CA)			072.10			3000									
1018 MSL		AKEPE (DF) (FO) (RNP 1.00)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD W ATVIY, RT, 072.02 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 072.10 FAF: SULVE DIST FAF TO MAP: 4.53 THLD: 4.53 4. MIN. ALT: ATVIY 3000, SULVE 2200 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2200 GS ALT AT: SULVE 2200 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 55.0 34:1 IS CLEAR 8. MSA FROM: RW07 3100										MAG VAR: 5W		EPOCH YEAR: 1990					
MINIMUMS																	
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD @					
CATEGORY >>>>>	A			B			C			D			E				
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA		
LPV DA	1018	4000	335	1018	4000	335	1018	4000	335	1018	4000	335	1018	4000	335		
LNAV/VNAV DA	1129	5000	446	1129	5000	446	1129	5000	446	1129	5000	446	1129	5000	446		
LNAV MDA	1140	2400	457	1140	2400	457	1140	4000	457	1140	5000	457	1140	5000	457		
CIRCLING	1200	1	517	1200	1	517	1360	2	677	1400	2 1/4	717	1400	2 1/2	717		
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F). @ CAT D 800-2 1/4, CAT E 800-2 1/2 CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV ALL CATS VISIBILITY TO RVR 5000, LNAV/VNAV CAT E VISIBILITY TO 1 3/8 SM, INCREASE LNAV CAT E VISIBILITY TO 1 3/8 SM.																	
CITY AND STATE		ELEVATION: 683 TDZE: 683			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:						SUP:				
TOLEDO, OH		AIRPORT NAME: TOLEDO EXPRESS					RNAV (GPS) RWY 7, AMDT 1B						AMDT: 1A				
							1 FEBRUARY 2018						DATED 02/10/2011				



**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	KTOL
RUNWAY	RW07
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W07A
LTP/FTP LATITUDE	413452.9915N
LTP/FTP LONGITUDE	0834950.5230W
LTP/FTP ELLIPSOIDAL HEIGHT	+01728
FPAP LATITUDE	413533.6200N
FPAP LONGITUDE	0834741.9665W
THRESHOLD CROSSING HEIGHT (TCH)	00055.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

CA2D3420

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02080
FPAP ORTHOMETRIC HEIGHT	+02080

QUALITY
16
CHECKED

CITY AND STATE

TOLEDO, OH

ELEVATION: 683

TDZE: 683

AIRPORT NAME:

TOLEDO EXPRESS

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 7, AMDT 1B

1 FEBRUARY 2018

SUP:

AMDT:

1A

DATED:

02/10/2011

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 ATVIY AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 072.02 INBOUND. CHART FAS OBST: 786 TOWER 413529N/0834654W. DISTANCE TO THLD FROM 200 HAT: 0.51 NM. CHART VDP AT 1.01 NM TO RW25* *LNAV ONLY. WAAS CHANNEL # 48899 REFERENCE PATH ID: W25A CHART CIRCLING ICON. CHART: ASR LTP HAE: 167.4 M								
CRL VOR/DME	VELXE (TF) (FB) (RNP 2.00)			205.20 / 19.55			3000										
VWV VOR/DME	SEFOJ (TF) (FB) (RNP 2.00)			037.61 / 9.73			3000										
VELXE (IAF)	AKEPE (NOPT) (TF) (FB) (RNP 1.00)			162.30 / 5.00			3000										
SEFOJ (IAF)	AKEPE (NOPT) (TF) (FB) (RNP 1.00)			342.36 / 5.00			3000										
AKEPE (IF/IAF) (SEE FORM 8260-10)	VUGCO (TF) (FB) (RNP 1.00)			252.33 / 6.01			2400										
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD E AKEPE, RT, 252.33 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 252.25 FAF: VUGCO DIST FAF TO MAP: 5.21 THLD: 5.21 4. MIN. ALT: AKEPE 3000, VUGCO 2400, RIYOS/1.80 NM TO RW25 1280* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2400 GS ALT AT: VUGCO 2400 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 51.6 34:1 IS CLEAR 8. MSA FROM: RW25 3100										MAG VAR: 5W		EPOCH YEAR: 1990					
MINIMUMS																	
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD @					
CATEGORY ==>	A			B			C			D			E				
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA		
LPV DA**	878	2400	200	878	2400	200	878	2400	200	878	2400	200	878	2400	200		
LNAV/VNAV DA	1065	5000	387	1065	5000	387	1065	5000	387	1065	5000	387	1065	5000	387		
LNAV MDA	1040	2400	362	1040	2400	362	1040	2400	362	1040	5000	362	1040	5000	362		
CIRCLING	1200	1	517	1200	1	517	1360	2	677	1400	2 1/4	717	1400	2 1/2	717		
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F). @ CAT D 800-2 1/4, CAT E 800-2 1/2 CHART NOTE: DME/DME RNP-0.3 NA. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). *LNAV ONLY (CONTINUED ON PAGE 2)																	
CITY AND STATE TOLEDO, OH		ELEVATION: 683 TDZE: 678 AIRPORT NAME: TOLEDO EXPRESS		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 25, AMDT 2B 1 FEBRUARY 2018						SUP: AMDT: 2A DATED 05/31/2012					

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, (CONT.):

<u>FROM</u>	<u>TO</u>	<u>COURSE AND DISTANCE</u>	<u>ALTITUDE</u>
VUGCO (FAF)	RIYOS/1.80 NM TO RW25 (TF) (FB) (RNP 0.30)	252.25 / 3.44	
RIYOS/1.80 NM TO RW25	RW25 (MAP) (TF) (FO) (RNP 0.30)	252.25 / 1.77	
RW25 (MAP)	878 MSL (CA)	252.25	
878 MSL	ATVIY (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

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

CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV CAT E VISIBILITY TO RVR 4000, LNAV/VNAV CAT E VISIBILITY TO 1 1/2 MILE, LNAV CAT D/E VISIBILITY TO RVR 6000.

QUALITY
16
CHECKED

CITY AND STATE TOLEDO, OH	ELEVATION: 683 AIRPORT NAME: TOLEDO EXPRESS	TDZE: 678 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 25, AMDT 2B 1 FEBRUARY 2018	SUP:
				AMDT: 2A
				DATED: 05/31/2012

**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	KTOL
RUNWAY	RW25
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W25A
LTP/FTP LATITUDE	413533.6200N
LTP/FTP LONGITUDE	0834741.9665W
LTP/FTP ELLIPSOIDAL HEIGHT	+01674
FPAP LATITUDE	413452.9915N
FPAP LONGITUDE	0834950.5230W
THRESHOLD CROSSING HEIGHT (TCH)	00051.6
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>	C8FB4FA6

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02026
FPAP ORTHOMETRIC HEIGHT	+02026

QUALITY
16
CHECKED

CITY AND STATE TOLEDO, OH	ELEVATION: 683 AIRPORT NAME: TOLEDO EXPRESS	TDZE: 678 TOLEDO EXPRESS	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 25, AMDT 2B 1 FEBRUARY 2018	SUP:
					AMDT: 2A
					DATED: 05/31/2012

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: 5.32 NM AFTER PTATO/BSV 28.00 DME OR AT BSV 22.68 DME							
BSV VOR/DME			PTATO/BSV 28.00 DME			294.92 / 28.00				2800		CLIMB TO 2800 DIRECT BSV VOR/DME AND HOLD.							
										ADDITIONAL FLIGHT DATA: HOLD SE, RT, 296.00 INBOUND. CHART FAS OBST: 1540 TOWER 405424N/0815912W. PTATO TO RW10: 2.92/40. CHART PLANVIEW NOTE: DME REQUIRED.									
1. PT <u>R</u> SIDE OF COURSE <u>294.92</u> OUTBOUND <u>2800</u> FT WITHIN <u>10</u> MILES OF <u>PTATO</u> (IAF)																			
2.																			
3. FAC <u>114.92</u> FAF <u>PTATO/BSV 28.00 DME</u> DIST FAF TO MAP <u>5.32</u> THLD <u>5.32</u>																			
4. MIN. ALT <u>PTATO/BSV 28.00 DME 2800</u>																			
8. MSA FROM: <u>BSV VOR/DME 3100 (30 NM)</u>										MAG VAR: <u>4W</u> EPOCH YEAR: <u>1965</u>									
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD @							
CATEGORY =====>		A			B			C			D			E					
		MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA			
S-10		1840	1	727	1840	1 1/4	727	1840	2	727	1840	2 1/4	727						
CIRCLING		1840	1	704	1840	1 1/4	704	1840	2	704	1840	2 1/4	704						
NOTES:																			
CHART NOTE: DME REQUIRED.										@ NA WHEN LOCAL WEATHER NOT AVAILABLE.									
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).										@ CAT D 800-2 1/4									
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE AKRON-CANTON RGNL ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET; INCREASE S-10 CAT C/D AND CIRCLING CAT C/D VISIBILITIES 1/4 MILE.																			
CHART NOTE: RWY 10 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.																			
CITY AND STATE WOOSTER, OH		ELEVATION: 1136 TDZE: 1113 AIRPORT NAME: WAYNE COUNTY			FACILITY IDENTIFIER: BSV			PROCEDURE NO./AMDТ NO./EFFECTIVE DATE: VOR RWY 10, AMDТ 1B 1 FEBRUARY 2018								SUP AMDТ 1A DATE 04/28/2016			



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: 4.92 NM AFTER AMOSE/BSV 17.00 DME OR AT BSV 21.92 DME						
BSV VOR/DME (IF/IAF)		AMOSE/BSV 17.00 DME			295.67 / 17.00 (BSV R-296)			2800		CLIMB TO 2800 THEN LEFT TURN DIRECT BSV VOR/DME AND HOLD.						
										ADDITIONAL FLIGHT DATA: CHART FAS OBST: 1345 TOWER (36-1113) 405135N/0814837W. 1421 TOWER (36-1584) 404918N/0814508W. AMOSE TO RW28: 3.12/35. CHART PLANVIEW NOTE: DME REQUIRED.						
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																
2. HOLD SE BSV VOR/DME, RT, 296.00 INBOUND, 2800 FT. IN LIEU OF PT (IAF)																
3. FAC 295.67 FAF AMOSE/BSV 17.00 DME DIST FAF TO MAP 4.92 THLD 4.92																
4. MIN. ALT BSV VOR/DME 2800, AMOSE 2800																
8. MSA FROM: BSV VOR/DME 3100										MAG VAR: 4W					EPOCH YEAR: 1965	
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		STANDARD							
CATEGORY =====>		A			B			C			D			E		
		MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA
S-28		1660	1	526	1660	1 1/4	526	1660	1 1/2	526	1660	1 3/4	526			
CIRCLING		1660	1	524	1660	1 1/4	524	1660	1 1/2	524	1700	2	564			
NOTES:																
CHART NOTE: DME REQUIRED.																
CHART PLANVIEW NOTE: NOPT FOR ARRIVAL ON BSV VORTAC AIRWAY RADIALS 048 CW 188.																
CHART PROFILE NOTE: VGSI AND DESCENT GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).																
CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.																
(CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 1136 TDZE: 1134			FACILITY IDENTIFIER:		PROCEDURE NO./AMD T NO./EFFECTIVE DATE:					SUP				
WOOSTER, OH					BSV		VOR RWY 28, ORIG-E					AMDT ORIG-D				
		WAYNE COUNTY					1 FEBRUARY 2018					DATE 04/28/2016				



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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

NOTES, (CONT.):

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE AKRON-CANTON RGNL ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET.

QUALITY
19
CHECKED

CITY AND STATE

WOOSTER, OH

ELEVATION: 1136

TDZE: 1134

AIRPORT NAME:

WAYNE COUNTY

FACILITY
IDENTIFIER:

BSV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

VOR RWY 28, ORIG-E

1 FEBRUARY 2018

SUP:

AMDT: ORIG-D

DATED: 04/28/2016

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		LP: RW17 LNAV: RW17 CLIMB TO 3000 DIRECT VAAMP AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT, 355.18 INBOUND. FAS OBST: 1099 AAO 341233N/0970740W. WAAS CHANNEL # 48921 REFERENCE PATH ID: W17A CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES. LTP HAE: 229.8 M						
ADM VORTAC		VILLE (TF) (FO) (RNP 2.00)			008.86 / 9.34			3000								
JULKU (IAF)		VILLE (NOPT) (TF) (FB) (RNP 1.00)			241.29 / 7.27			3000								
ZALUN (IAF)		VILLE (NOPT) (TF) (FB) (RNP 1.00)			118.07 / 7.27			3000								
VILLE (IF/IAF)		KALVY (TF) (FB) (RNP 1.00)			175.18 / 7.24			2600								
KALVY (FAF)		RW17 (MAP) (TF) (FO) (RNP 0.30)			175.18 / 5.32											
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N VILLE, RT, 175.18 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 175.18 FAF: KALVY DIST FAF TO MAP: 5.32 THLD: 5.32 4. MIN. ALT: VILLE 3000, KALVY 2600 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: RW17 3600																
										MAG VAR: 4E			EPOCH YEAR: 2010			
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		STANDARD @							
CATEGORY =====>		A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	
LP MDA	1360	1	520	1360	1	520	1360	1 1/2	520	1360	1 1/2	520				
LNAV MDA	1360	1	520	1360	1	520	1360	1 1/2	520	1360	1 1/2	520				
CIRCLING	1400	1	555	1400	1	555	1400	1 1/2	555	1640	2 1/2	795				
NOTES: CHART NOTE: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. @ CAT D 800-2 1/2 CHART NOTE: DME/DME RNP-0.3 NA.																
CITY AND STATE		ELEVATION: 845 TDZE: 840			FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:				
ARDMORE, OK		AIRPORT NAME:			RNAV		RNAV (GPS) RWY 17, ORIG-C					AMDT: ORIG-B				
		ARDMORE DOWNTOWN EXECUTIVE					1 FEBRUARY 2018					DATED 10/15/2015				

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

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW17 (MAP)	1245 MSL (CA)	175.18	
1245 MSL	VAAMP (DF) (FO) (RNP 1.00)		3000

CITY AND STATE
ARDMORE, OK

ELEVATION: 845 TDZE: 840
AIRPORT NAME:
ARDMORE DOWNTOWN EXECUTIVE

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 17, ORIG-C
1 FEBRUARY 2018

SUP: **QUALITY 10 CHECKED**
AMDT: ORIG-B
DATED: 10/15/2015

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	1F0
RUNWAY	RW17
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W17A
LTP/FTP LATITUDE	340913.8810N
LTP/FTP LONGITUDE	0970721.9810W
LTP/FTP ELLIPSOIDAL HEIGHT	+02298
FPAP LATITUDE	340744.6400N
FPAP LONGITUDE	0970720.4300W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	00.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
 <u>CRC REMAINDER</u>	 835DC8F3

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+02560
FPAP ORTHOMETRIC HEIGHT	+02560

CITY AND STATE
ARDMORE, OK

ELEVATION: 845 TDZE: 840
AIRPORT NAME:
ARDMORE DOWNTOWN EXECUTIVE

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 17, ORIG-C
1 FEBRUARY 2018

SUP: **QUALITY
10
CHECKED**
AMDT: ORIG-B
DATED: 10/15/2015

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES														MISSED APPROACH												
FROM				TO			COURSE AND DISTANCE				ALTITUDE		LP: RW35 LNAV: RW35													
ADM VORTAC				VAAMP (TF) (FO) (RNP 2.00)			167.58 / 16.77				3000		CLIMB TO 3000 DIRECT VILLE AND HOLD.													
VAAMP (IF/IAF)				AUSTE (TF) (FB) (RNP 1.00)			355.18 / 7.31				2500															
AUSTE (FAF)				WIKVO/2.60 NM TO RW35 (TF) (FB) (RNP 0.30)			355.18 / 2.40																			
WIKVO/2.60 NM TO RW35				RW35 (MAP) (TF) (FO) (RNP 0.30)			355.18 / 2.60																			
RW35 (MAP)				1200 MSL (CA)			355.18				3000		ADDITIONAL FLIGHT DATA: HOLD N, RT, 175.18 INBOUND. CHART FAS OBST: 970 TRANSMISSION_LINE 340705N/0970742W, 899 TREE 340823N/0970727W. CHART VDP AT 0.92 NM TO RW35. WAAS CHANNEL # 62921 REFERENCE PATH ID: W35A AUSTE TO RW35: 3.00/40. LTP HAE: 231.4 M													
1200 MSL				VILLE (DF) (FO) (RNP 1.00)																						
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																										
2. HOLD S VAAMP, RT, 355.18 INBOUND, 3000 FT. IN LIEU OF PT (IAF)																										
3. FAC: 355.18 FAF: AUSTE DIST FAF TO MAP: 5.00 THLD: 5.00																										
4. MIN. ALT: VAAMP 3000, AUSTE 2500, WIKVO/2.60 NM TO RW35 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 3600																										
MAG VAR: 4E EPOCH YEAR: 2010																										
MINIMUMS																										
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A			STANDARD @																
CATEGORY =====>		A			B			C			D			E												
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA											
LP MDA	1200	1	355	1200	1	355	1200	1	355	1200	1	355														
LNAV MDA	1220	1	375	1220	1	375	1220	1	375	1220	1	375														
CIRCLING	1400	1	555	1400	1	555	1400	1 1/2	555	1640	2 1/2	795														
NOTES: CHART NOTE: RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. @ CAT D 800-2 1/2 CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON ADM VORTAC AIRWAY RADIALS 125 CW 213. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).																										
CITY AND STATE ARDMORE, OK				ELEVATION: 845 TDZE: 845 AIRPORT NAME: ARDMORE DOWNTOWN EXECUTIVE				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 35, ORIG-C 1 FEBRUARY 2018					SUP: AMDT: ORIG-B DATED 10/15/2015											

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	1F0
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	340824.2890N
LTP/FTP LONGITUDE	0970721.1190W
LTP/FTP ELLIPSOIDAL HEIGHT	+02314
FPAP LATITUDE	340953.6800N
FPAP LONGITUDE	0970722.6600W
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)	0.0
 <u>CRC REMAINDER</u>	 90AEFBC

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+02575
FPAP ORTHOMETRIC HEIGHT	+02575

CITY AND STATE
ARDMORE, OK

ELEVATION: 845 TDZE: 845
AIRPORT NAME:
ARDMORE DOWNTOWN EXECUTIVE

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 35, ORIG-C
1 FEBRUARY 2018

SUP: **QUALITY
10
CHECKED**
AMDT: ORIG-B
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: RW18 CLIMB TO 2400 DIRECT DAVLE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT, 355.11 INBOUND. CHART FAS OBST: 949 TREE 361909N/0952913W. DISTANCE TO THLD FROM 250 HAT: 0.72 NM. CHART VDP AT 1.44 NM TO RW18* *LNAV ONLY. WAAS CHANNEL # 63214 REFERENCE PATH ID: W18A CHART CIRCLING ICON. LTP HAE: 183.2 M									
GAFWU (IAF)		CAMOB (NOPT) (TF) (FB) (RNP 1.00)			265.18 / 6.00			2500											
FOSVI (IAF)		CAMOB (NOPT) (TF) (FB) (RNP 1.00)			085.04 / 6.00			2500											
CAMOB (IF/IAF)		CUMOL (TF) (FB) (RNP 1.00)			175.11 / 6.05			2400											
CUMOL (FAF)		HEGLI/2.30 NM TO RW18 (TF) (FB) (RNP 0.30)			175.11 / 2.91														
HEGLI/2.30 NM TO RW18		RW18 (MAP) (TF) (FO) (RNP 0.30)			175.11 / 2.30														
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N CAMOB, RT, 175.11 INBOUND, 2500 FT. IN LIEU OF PT (IAF) 3. FAC: 175.11 FAF: CUMOL DIST FAF TO MAP: 5.21 THLD: 5.21 4. MIN. ALT: CAMOB 2500, CUMOL 2400, HEGLI/2.30 NM TO RW18 1460* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2400 GS ALT AT: CUMOL 2400 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 43.1 34:1 IS CLEAR 8. MSA FROM: _____																MAG VAR: 5E		EPOCH YEAR: 1990	
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		STANDARD									
CATEGORY ==>		A			B			C			D			E					
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA				
LPV DA	968	3/4	250	968	3/4	250	968	3/4	250		NA								
LNAV/VNAV DA	1281	1 1/2	563	1281	1 1/2	563	1281	1 1/2	563		NA								
LNAV MDA	1200	3/4	482	1200	3/4	482	1200	1 1/4	482		NA								
CIRCLING	1260	1	527	1260	1	527	1380	1 3/4	647		NA								
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. CHART SPEED ICON IN PLANVIEW AT GAFWU: MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT FOSVI: MAX 210 KIAS. CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV CATS A/B VISIBILITY TO 1 5/8 SM.																			
CITY AND STATE		ELEVATION: 733 TDZE: 718			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:			SUP: RNAV (GPS) RWY 17								
CLAREMORE, OK		AIRPORT NAME: CLAREMORE RGNL						RNAV (GPS) RWY 18, AMDT 1			AMDT: ORIG								
								1 FEBRUARY 2018			DATED 08/27/2009								



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
RW18 (MAP)	968 MSL (CA)	175.11	
968 MSL	DAVLE (DF) (FO) (RNP 1.00)		2400

TAA

	FROM	TO	ALT
1.	085/30 CW 265/30 (NOPT) 085/5 CW 265/5	085/5 CW 265/5 CAMOB (IF/IAF) (FB)	3100 2500
2.	265/30 CW 355/30	GAFWU (IAF) (FB)	2800
3.	355/30 CW 085/30	FOSVI (IAF) (FB)	3600



CITY AND STATE CLAREMORE, OK	ELEVATION: 733	TDZE: 718	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 18, AMDT 1 1 FEBRUARY 2018	SUP: RNAV (GPS) RWY 17
	AIRPORT NAME: CLAREMORE RGNL				AMDT: ORIG
					DATED: 08/27/2009

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGCM
RUNWAY	RW18
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W18A
LTP/FTP LATITUDE	361759.4660N
LTP/FTP LONGITUDE	0952846.5795W
LTP/FTP ELLIPSOIDAL HEIGHT	+01832
FPAP LATITUDE	361630.2415N
FPAP LONGITUDE	0952846.7910W
THRESHOLD CROSSING HEIGHT (TCH)	00043.1
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

CRC REMAINDER

C926C733

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+02124
FPAP ORTHOMETRIC HEIGHT	+02124

QUALITY
10
CHECKED

CITY AND STATE CLAREMORE, OK	ELEVATION: 733 AIRPORT NAME: CLAREMORE RGNL	TDZE: 718 CLAREMORE RGNL	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 18, AMDT 1 1 FEBRUARY 2018	SUP: RNAV (GPS) RWY 17
					AMDT: ORIG
					DATED: 08/27/2009

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: RW36 CLIMB TO 2500 DIRECT CAMOB AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, RT, 175.11 INBOUND. CHART FAS OBST: 787 TREE 361607N/0952845W. DISTANCE TO THLD FROM 250 HAT: 0.70 NM. CHART VDP AT 1.37 NM TO RW36* *LNAV ONLY. WAAS CHANNEL # 99714 REFERENCE PATH ID: W36A CHART CIRCLING ICON. LTP HAE: 194.2 M									
ELIRE (IAF)		DAVLE (NOPT) (TF) (FB) (RNP 1.00)			085.03 / 6.00			2400											
FAMPO (IAF)		DAVLE (NOPT) (TF) (FB) (RNP 1.00)			265.18 / 6.00			2400											
DAVLE (IF/IAF)		COVEZ (TF) (FB) (RNP 1.00)			355.11 / 5.91			2400											
COVEZ (FAF)		CIGEM/2.40 NM TO RW36 (TF) (FB) (RNP 0.30)			355.11 / 2.75														
CIGEM/2.40 NM TO RW36 (SEE FORM 8260-10)		RW36 (MAP) (TF) (FO) (RNP 0.30)			355.11 / 2.40														
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S DAVLE, RT, 355.11 INBOUND, 2400 FT. IN LIEU OF PT (IAF) 3. FAC: 355.11 FAF: COVEZ _____ DIST FAF TO MAP: 5.15 THLD: 5.15 4. MIN. ALT: DAVLE 2400, COVEZ 2400, CIGEM/2.40 NM TO RW36 1520* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2400 GS ALT AT: COVEZ 2400 _____ OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 28.4 34:1 IS CLEAR 8. MSA FROM: _____																MAG VAR: 5E		EPOCH YEAR: 1990	
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		STANDARD										
CATEGORY ==>		A			B			C			D			E					
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA				
LPV DA	983	3/4	250	983	3/4	250	983	3/4	250		NA								
LNAV/VNAV DA	983	3/4	250	983	3/4	250	983	3/4	250		NA								
LNAV MDA	1040	1	307	1040	1	307	1040	1 3/8	307		NA								
CIRCLING	1260	1	527	1260	1	527	1380	1 3/4	647		NA								
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. CHART SPEED ICON IN PLANVIEW AT ELIRE: MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT FAMPO: MAX 210 KIAS.																			
CITY AND STATE CLAREMORE, OK		ELEVATION: 733 TDZE: 733 AIRPORT NAME: CLAREMORE RGNL			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 36, AMDT 3 1 FEBRUARY 2018					SUP: RNAV (GPS) RWY 35							
												AMDT: 2							
												DATED 08/27/2009							



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

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW36 (MAP)	983 MSL (CA)	355.11	

983 MSL	CAMOB (DF) (FO) (RNP 1.00)	2500

TAA

	FROM	TO	ALT
1.	265/30 CW 085/30 (NOPT) 265/7 CW 085/7	265/7 CW 085/7 DAVLE (IF/IAF) (FB)	3600 2400
2.	085/30 CW 175/30 085/15 CW 175/15	085/15 CW 175/15 ELIRE (IAF) (FB)	3300 2400
3.	175/30 CW 265/30 175/10 CW 265/10	175/10 CW 265/10 FAMPO (IAF) (FB)	2800 2500

CITY AND STATE
CLAREMORE, OK

ELEVATION: 733 TDZE: 733
AIRPORT NAME:
CLAREMORE RGNL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 36, AMDT 3
1 FEBRUARY 2018

SUP: RNAV (GPS) RWY 35
AMDT: 2
DATED: 08/27/2009

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.

QUALITY
10
CHECKED

CITY AND STATE CLAREMORE, OK	ELEVATION: 733	TDZE: 733	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 36, AMDT 3 1 FEBRUARY 2018	SUP: RNAV (GPS) RWY 35
	AIRPORT NAME: CLAREMORE RGNL				AMDT: 2
					DATED: 08/27/2009

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGCM
RUNWAY	RW36
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W36A
LTP/FTP LATITUDE	361708.0450N
LTP/FTP LONGITUDE	0952846.7040W
LTP/FTP ELLIPSOIDAL HEIGHT	+01942
FPAP LATITUDE	361837.2695N
FPAP LONGITUDE	0952846.4925W
THRESHOLD CROSSING HEIGHT (TCH)	00028.4
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

CRC REMAINDER

7CFA17DA

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+02234
FPAP ORTHOMETRIC HEIGHT	+02234

QUALITY
10
CHECKED

CITY AND STATE

CLAREMORE, OK

ELEVATION: 733

TDZE: 733

AIRPORT NAME:

CLAREMORE RGNL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 36, AMDT 3

1 FEBRUARY 2018

SUP:

AMDT:

DATED:

RNAV (GPS) RWY 35

2

08/27/2009

**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.

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
CLAREMORE, OK	CLAREMORE RGNL	1 FEBRUARY 2018	1

TAKEOFF MINIMUMS:

RWY 18, STANDARD.

RWY 36, 300 - 1 3/8 OR STANDARD WITH MINIMUM CLIMB OF 306 FT PER NM TO 1100.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 18, TERRAIN 450 FT FROM DER, 505 FT LEFT OF CENTERLINE, 753 FT MSL.

NOTE: RWY 36, TREE 473 FT FROM DER, 342 FT LEFT OF CENTERLINE, 19 FT AGL/719 FT MSL.

TREE 1103 FT FROM DER, 510 FT RIGHT OF CENTERLINE, 27 FT AGL/729 FT MSL.

TREE 1149 FT FROM DER, 478 FT LEFT OF CENTERLINE, 38 FT AGL/727 FT MSL.

TREE 1510 FT FROM DER, 241 FT RIGHT OF CENTERLINE, 46 FT AGL/735 FT MSL.

TREE 1570 FT FROM DER, 557 FT RIGHT OF CENTERLINE, 42 FT AGL/739 FT MSL.

TREE 1 NM FROM DER, 1917 FT LEFT OF CENTERLINE, 100 FT AGL/949 FT MSL.

CONTROLLING OBSTACLES:

RWY 36: 949 MSL TREE 361904.78N/0952909.86W.

REMARKS:

FLIGHT INSPECTED BY:

JEFFREY ECKMAN

Digitally signed by
DAVID TEFFETELLER
Sep 18, 2017

OFFICE SYMBOL:

FICO

DATE:

9/27/17

DEVELOPED BY:

ANDREA CHANEY

Digitally signed by
ANDREA J CHANEY
Aug 25, 2017

OFFICE SYMBOL:

AJV-5433

DATE:

08/24/2017

APPROVED BY:

PAT MULQUEEN

Digitally signed by
DAVID TEFFETELLER
Sep 18, 2017

OFFICE SYMBOL:

AJV-5430

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

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

OTHER:

ZKC, TUL APP CON, ST. AV. DIR., AMGR

CHANGES - REASONS:

1. RWY 17 CHANGED TO RWY 18 AND RWY 35 CHANGED TO RWY 36 PER FPT REQUEST.
2. TAKEOFF MINIMUMS: RWY 17, STANDARD CHANGED TO RWY 18, STANDARD.
3. TAKEOFF MINIMUMS: 'RWY 35, 300 - 1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 300 FT PER NM TO 1100' CHANGED TO 'RWY 36, 300 - 1 3/8 OR STANDARD WITH MINIMUM CLIMB OF 306 FT PER NM TO 1100' WITH NEW EVALUATION.
4. TAKEOFF OBSTACLE NOTES UPDATED WITH NEW EVALUATION. RWY 17 CHANGED TO RWY 18 AND RWY 35 CHANGED TO RWY 36.
5. CONTROLLING OBSTACLES: 'RWY 35: 949 MSL TREE 361904.78N/0952909.86W' CHANGED TO 'RWY 36: 949 MSL TREE 361904.78N/0952909.86W' WITH NEW EVALUATION.



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											
										ADDITIONAL FLIGHT DATA:									
1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)																			
2. _____																			
3. FAC ____ FAF _____ DIST FAF TO MAP ____ THLD _____																			
4. MIN. ALT _____																			
8. MSA FROM: _____										MAG VAR: _____ EPOCH YEAR: _____									
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 1 FEBRUARY 2018																			
CITY AND STATE DUNCAN, OK				ELEVATION: 1113 TDZE: 1094 AIRPORT NAME: HALLIBURTON FIELD				FACILITY IDENTIFIER: I-DUC		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: LOC RWY 35, AMDT 5, 09/23/2010						SUP AMDT 4C DATE 09/01/2005			

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: RW17 CLIMB TO 3000 DIRECT ACUGI AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT, 355.30 INBOUND. CHART FAS OBST: 1474 TOWER 343043N/0975808W. CHART : 1585 TOWER 343359N/0975711W DISTANCE TO THLD FROM 200 HAT: 0.46 NM. CHART VDP AT 1.79 NM TO RW17* *LNAV ONLY. WAAS CHANNEL # 93619 REFERENCE PATH ID: W17A CHART CIRCLING ICON. LTP HAE: 313.9 M												
ADM VORTAC				BECAR (TF) (FB) (RNP 2.00)				304.61 / 43.93				3000														
LAW VOR/DME				ACUDI (TF) (FB) (RNP 2.00)				055.57 / 20.05				3000														
BECAR (IAF)				CEPAC (TF) (FB) (RNP 1.00)				265.36 / 5.00				3000														
ACUDI (IAF)				CEPAC (TF) (FB) (RNP 1.00)				085.24 / 5.00				3000														
CEPAC (IF/IAF)				DOCTA (TF) (FB) (RNP 1.00)				175.30 / 6.03				2800														
(SEE FORM 8260-10)																										
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N CEPAC, RT, 175.30 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 175.30 FAF: DOCTA DIST FAF TO MAP: 5.13 THLD: 5.13 4. MIN. ALT: CEPAC 3000, DOCTA 2800, TEPACO/2.70 NM TO RW17 2020* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2800 GS ALT AT: DOCTA 2800 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 52.6 34:1 IS CLEAR 8. MSA FROM: RW17 3000																	MAG VAR: 4E					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	1314	3/4	200	1314	3/4	200	1314	3/4	200	1314	3/4	200														
LNAV/VNAV DA	1806	2 1/2	692	1806	2 1/2	692	1806	2 1/2	692	1806	2 1/2	692														
LNAV MDA	1740	3/4	626	1740	3/4	626	1740	1 3/4	626	1740	1 3/4	626														
CIRCLING	1740	1	626	1740	1	626	1780	1 3/4	666	1780	2	666														
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 SPEED ICON IN PLANVIEW AT BECAR : MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT ACUDI : MAX 210 KIAS. (CONTINUED ON PAGE 2)																										
CITY AND STATE				ELEVATION: 1114 TDZE: 1114				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:										
DUNCAN, OK				AIRPORT NAME:								RNAV (GPS) RWY 17, AMDT 2				AMDT: 1										
				HALLIBURTON FIELD								1 FEBRUARY 2018				DATED 09/23/2010										



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.):

<u>FROM</u>	<u>TO</u>	<u>COURSE AND DISTANCE</u>	<u>ALTITUDE</u>
DOCTA (FAF)	TEPCO/2.70 NM TO RW17 (TF) (FB) (RNP 0.30)	175.30 / 2.43	
TEPCO/2.70 NM TO RW17	RW17 (MAP) (TF) (FO) (RNP 0.30)	175.30 / 2.70	
RW17 (MAP)	1314 MSL (CA)	175.30	
1314 MSL	ACUGI (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

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

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON ADM VORTAC AIRWAY RADIALS 337 CW 030.

CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO LPV ALL CATS, LNAV/VNAV ALL CATS, LNAV CATS C/D.

QUALITY
16
CHECKED

CITY AND STATE DUNCAN, OK	ELEVATION: 1114 AIRPORT NAME: HALLIBURTON FIELD	TDZE: 1114	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 17, AMDT 2 1 FEBRUARY 2018	SUP:
					AMDT: 1
					DATED: 09/23/2010

**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**DATA FIELD****DATA**

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KDUC
RUNWAY	RW17
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W17A
LTP/FTP LATITUDE	342848.0265N
LTP/FTP LONGITUDE	0975735.9830W
LTP/FTP ELLIPSOIDAL HEIGHT	+03139
FPAP LATITUDE	342718.7820N
FPAP LONGITUDE	0975734.6670W
THRESHOLD CROSSING HEIGHT (TCH)	00052.6
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0824
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

57D15887

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+03396
FPAP ORTHOMETRIC HEIGHT	+03396



CITY AND STATE

DUNCAN, OK

ELEVATION: 1114

TDZE: 1114

AIRPORT NAME:

HALLIBURTON FIELD

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 17, AMDT 2

1 FEBRUARY 2018

SUP:

AMDT:

1

DATED:

09/23/2010

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 3000 DIRECT CEPAC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, RT, 175.30 INBOUND. CHART FAS OBST: 1264 STACK 342525N/0975722W. DISTANCE TO THLD FROM 200 HAT: 0.50 NM. CHART VDP AT 1.22 NM TO RW35* *LNAV ONLY. WAAS CHANNEL # 40241 REFERENCE PATH ID: W35A CHART CIRCLING ICON. LTP HAE: 305.8 M									
ADM VORTAC			CALSA (TF) (FB) (RNP 2.00)			272.93 / 34.47			3000												
LAW VOR/DME			BICAL (TF) (FB) (RNP 2.00)			122.53 / 22.00			3000												
BICAL (IAF)			ACUGI (TF) (FB) (RNP 1.00)			085.24 / 5.00			3000												
CALSA (IAF)			ACUGI (TF) (FB) (RNP 1.00)			263.36 / 5.00			3000												
ACUGI (IF/IAF)			GYROE (TF) (FB) (RNP 1.00)			355.30 / 6.12			2700												
(SEE FORM 8260-10)																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S ACUGI, RT, 355.30 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 355.30 FAF: GYROE DIST FAF TO MAP: 4.93 THLD: 4.93 4. MIN. ALT: ACUGI 3000, GYROE 2700 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2700 GS ALT AT: GYROE 2700 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 41.7 34:1 IS CLEAR 8. MSA FROM: RW35 3000																		MAG VAR: 4E		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	1294	3/4	200	1294	3/4	200	1294	3/4	200	1294	3/4	200									
LNAV/VNAV DA	1397	7/8	303	1397	7/8	303	1397	7/8	303	1397	7/8	303									
LNAV MDA	1520	1	426	1520	1	426	1520	1 1/4	426	1520	1 1/4	426									
CIRCLING	1560	1	446	1580	1	466	1780	1 3/4	666	1780	2	666									
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 SPEED ICON IN PLANVIEW AT ACUGI : MAX 180 KIAS. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON ADM VORTAC AIRWAY RADIALS 213 CW 337.																					
CITY AND STATE				ELEVATION: 1114 TDZE: 1094				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
DUNCAN, OK				AIRPORT NAME:								RNAV (GPS) RWY 35, AMDT 2				AMDT: 1					
				HALLIBURTON FIELD								1 FEBRUARY 2018				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
GYROE (FAF)	RW35 (MAP) (TF) (FO) (RNP 0.30)	355.30 / 4.93	
RW35 (MAP)	1294 MSL (CA)	355.30	
1294 MSL	CEPAC (DF) (FO) (RNP 1.00)		3000

QUALITY
16
CHECKED

CITY AND STATE
DUNCAN, OK

ELEVATION: 1114 TDZE: 1094
AIRPORT NAME:
HALLIBURTON FIELD

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 35, AMDT 2
1 FEBRUARY 2018

SUP:
AMDT: 1
DATED: 09/23/2010

**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	KDUC
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	342745.4630N
LTP/FTP LONGITUDE	0975735.0610W
LTP/FTP ELLIPSOIDAL HEIGHT	+03058
FPAP LATITUDE	342914.7080N
FPAP LONGITUDE	0975736.3780W
THRESHOLD CROSSING HEIGHT (TCH)	00041.7
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0824
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

<u>CRC REMAINDER</u>	2EBABF3C

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+03314
FPAP ORTHOMETRIC HEIGHT	+03314

QUALITY
16
CHECKED

CITY AND STATE DUNCAN, OK	ELEVATION: 1114 AIRPORT NAME: HALLIBURTON FIELD	TDZE: 1094 RDZE: 1094	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 35, AMDT 2 1 FEBRUARY 2018	SUP:
					AMDT: 1
					DATED: 09/23/2010

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)																			
2. ____																			
3. FAC ____ FAF ____ DIST FAF TO MAP ____ THLD ____																			
4. MIN. ALT ____																			
8. MSA FROM:										MAG VAR: EPOCH YEAR:									
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 1 FEBRUARY 2018																			
CITY AND STATE DUNCAN, OK				ELEVATION: 1113 TDZE: 1094 AIRPORT NAME: HALLIBURTON FIELD				FACILITY IDENTIFIER: DUC		PROCEDURE NO./AMD'T NO./EFFECTIVE DATE: VOR RWY 35, AMDT 12, 09/23/2010						SUP AMD'T 11 DATE 09/01/2005			

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: RW16 CLIMB TO 7000 DIRECT HUKRI AND ON TRACK 074.02 TO JOREM AND ON TRACK 042.35 TO ZEMAB AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NE, RT, 212.43 INBOUND. CHART FAS OBST: 2499 TREE 444104N/1210917W. DISTANCE TO THLD FROM 350 HAT: 0.93 NM. WAAS CHANNEL # 93518 REFERENCE PATH ID: W16A LTP HAE: 719.2 M									
COVBO		SUPOC (TF) (FB) (RNP 2.00)		264.56 / 16.25				7000											
ZEMAB		SUPOC (TF) (FB) (RNP 2.00)		286.61 / 20.88				7000											
SUPOC (IAF)		HETIM (TF) (FB) (RNP 1.00)		234.13 / 7.80				5500											
HETIM (IF)		TIWEP (TF) (FB) (RNP 1.00)		164.01 / 3.80				4600											
TIWEP		KIKCE (TF) (FB) (RNP 1.00)		164.01 / 2.44				4000											
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT HETIM 3. FAC: 164.01 FAF: KIKCE DIST FAF TO MAP: 4.76 THLD: 4.76 4. MIN. ALT: HETIM 5500, TIWEP 4600, KIKCE 4000, FEPOS/3.20 NM TO RW16 3500* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 4000 GS ALT AT: KIKCE 4000 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 54.0 34:1 IS NOT CLEAR 8. MSA FROM: RW16 11700																MAG VAR: 16E		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				
LPV DA	2783	1 1/8	350	2783	1 1/8	350	2783	1 1/8	350		NA								
LNAV/VNAV DA	2843	1 3/8	410	2843	1 3/8	410	2843	1 3/8	410		NA								
LNAV MDA	3040	1	607	3040	1	607	3040	1 3/4	607		NA								
CIRCLING	3040	1	603	3040	1	603	3040	1 3/4	603		NA								
NOTES: CHART NOTE: BARO-VNAV NA WHEN USING REDMOND ALTIMETER SETTING. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -19C (-2F) 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. (CONTINUED ON PAGE 2)																			
CITY AND STATE		ELEVATION: 2437 TDZE: 2433				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:							
MADRAS, OR		AIRPORT NAME: MADRAS MUNICIPAL						RNAV (GPS) RWY 16, AMDT 1C 1 FEBRUARY 2018				AMDT: 1B							
												DATED 10/12/2017							

QUALITY
 25
 CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

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

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
KIKCE (FAF)	FEPOS/3.20 NM TO RW16 (TF) (FB) (RNP 0.30)	164.01 / 1.56	
FEPOS/3.20 NM TO RW16	RW16 (MAP) (TF) (FO) (RNP 0.30)	164.01 / 3.20	
RW16 (MAP)	2783 MSL (CA)	164.01	
2783 MSL	HUKRI (DF) (FB) (RNP 1.00)		
HUKRI	JOREM (TF) (FB) (RNP 1.00)	074.02 / 8.80	
JOREM	ZEMAB (TF) (FO) (RNP 1.00)	042.35 / 19.06	7000

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT COVBO ON V500 EASTBOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ZEMAB ON V536 NORTHEAST BOUND.

*LNAV ONLY

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SUPOC ON T261 NORTHEAST BOUND.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE REDMOND ALTIMETER SETTING AND INCREASE ALL DA AND MDA 580 FEET; INCREASE LPV ALL CATS VISIBILITY 2 7/8 SM, LNAV/VNAV ALL CATS VISIBILITY 2 5/8 SM, LNAV AND CIRCLING CAT A VISIBILITY 1/4 SM, LNAV AND CIRCLING CAT B VISIBILITY 1/2 SM, AND INCREASE LNAV AND CIRCLING CAT C VISIBILITY 1 1/4 SM.

QUALITY
25
CHECKED

CITY AND STATE

MADRAS, OR

ELEVATION: 2437

TDZE: 2433

AIRPORT NAME:

MADRAS MUNICIPAL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 16, AMDT 1C

1 FEBRUARY 2018

SUP:

AMDT:

1B

DATED:

10/12/2017

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	S33
RUNWAY	RW16
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W16A
LTP/FTP LATITUDE	444026.5060N
LTP/FTP LONGITUDE	1210912.1855W
LTP/FTP ELLIPSOIDAL HEIGHT	+07192
FPAP LATITUDE	443857.4100N
FPAP LONGITUDE	1210912.2100W
THRESHOLD CROSSING HEIGHT (TCH)	00054.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1200
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 48B1AD7A

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+07406
FPAP ORTHOMETRIC HEIGHT	+07406

QUALITY
25
CHECKED

CITY AND STATE MADRAS, OR	ELEVATION: 2437 AIRPORT NAME: MADRAS MUNICIPAL	TDZE: 2433	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 16, AMDT 1C 1 FEBRUARY 2018	SUP:
					AMDT: 1B
					DATED: 10/12/2017

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		LNAV: AVAVE CLIMB TO 2500 THEN CLIMBING LEFT TURN TO 4000 DIRECT TULBE AND HOLD. ADDITIONAL FLIGHT DATA: CHART FAS OBST: 598 TREE 443227N/1240219W. 960 AAO 442930N/1235951W CHART VDP AT 1.73 NM TO AVAVE. CHART CIRCLING ICON. JONLA TO RW34: 3.50/57.7. FAC CROSSES RWY C/L EXTENDED 3038 FT FROM THLD. CHART PLANVIEW NOTE: FINAL APPROACH OFFSET 11.28 DEGREES.							
ONP VORTAC		TULBE (TF) (FO) (RNP 2.00)			151.44 / 17.00			4000									
BOSVE (IAF)		TULBE (NOPT) (TF) (FB) (RNP 1.00)			018.97 / 10.15			4000									
TULBE (IF/IAF)		WILIK (TF) (FB) (RNP 1.00)			331.51 / 6.77			2700									
WILIK		JONLA (TF) (FB) (RNP 1.00)			331.40 / 4.99			2100									
JONLA (FAF)		AVAVE (MAP) (TF) (FO) (RNP 0.30)			331.05 / 4.58												
(SEE FORM 8260-10)																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SE TULBE, LT, 331.51 INBOUND, 4000 FT. IN LIEU OF PT (IAF) 3. FAC: 331.05 FAF: JONLA DIST FAF TO MAP: 4.58 THLD: 5.07 4. MIN. ALT: TULBE 4000, WILIK 2700, JONLA 2100 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: AVAVE 5300																	
											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	860	1	702	860	1	702	860	2	702	860	2	702					
CIRCLING	880	1	720	1000	1 1/4	840	1400	3	1240	1600	3	1440					
NOTES: CHART NOTE: RWY 34 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. @ CAT B 900-2, CAT C 1300-3, CAT D 1500-3 CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ONP VORTAC ON V452 WESTBOUND AND T257-V27-V182 NORTHBOUND.																	
CITY AND STATE		ELEVATION: 160 TDZE: 158			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:					
NEWPORT, OR		AIRPORT NAME:					RNAV (GPS) RWY 34, AMDT 1B					AMDT: 1A					
		NEWPORT MUNI					1 FEBRUARY 2018					DATED 03/30/2017					

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
AVAVE (MAP)	2500 MSL (CA)	331.05	2500
2500 MSL	TULBE (DF) (FO) (RNP 1.00)		4000

CITY AND STATE
NEWPORT, OR

ELEVATION: 160 TDZE: 158
AIRPORT NAME:
NEWPORT MUNI

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 34, AMDT 1B
1 FEBRUARY 2018

SUP:
AMDT: 1A
DATED: 03/30/2017

QUALITY
10
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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CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
PORTLAND, OR	PORTLAND-HILLSBORO	1 FEBRUARY 2018	7A

TAKEOFF MINIMUMS:

RWY 13L, 20, STANDARD.

RWY 2, STANDARD WITH MINIMUM CLIMB OF 215 FT PER NM TO 1900 OR 600-2 1/2 FOR CLIMB IN VISUAL CONDITIONS.

RWY 13R, 200-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 233 FT PER NM TO 400 OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1800 FT PRIOR TO DER.

RWY 31L, STANDARD WITH MINIMUM CLIMB OF 242 FT PER NM TO 2700 OR 600-2 1/2 FOR CLIMB IN VISUAL CONDITIONS.

RWY 31R, STANDARD WITH MINIMUM CLIMB OF 230 FT PER NM TO 2700 OR 600-2 1/2 FOR CLIMB IN VISUAL CONDITIONS.

TEXTUAL DEPARTURE PROCEDURES:

RWY 13L, 13R: CLIMBING RIGHT TURN DIRECT UBG VOR/DME THENCE...

RWY 2, 20, 31L, 31R: CLIMBING LEFT TURN DIRECT UBG VOR/DME THENCE...

...CONTINUE CLIMB IN UBG VOR/DME HOLDING PATTERN (HOLD WEST, RIGHT TURNS, 108.00 INBOUND) TO CROSS UBG VOR/DME AT OR ABOVE MEA FOR DIRECTION OF FLIGHT BEFORE PROCEEDING ON COURSE.

VISUAL CLIMB OVER AIRPORT:

RWY 2, 31L, 31R: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS PORTLAND-HILLSBORO AIRPORT AT OR ABOVE 700 THEN PROCEED DIRECT UBG VOR/DME...

...CONTINUE CLIMB IN UBG VOR/DME HOLDING PATTERN (HOLD WEST, RIGHT TURNS, 108.00 INBOUND) TO CROSS UBG VOR/DME AT OR ABOVE MEA FOR DIRECTION OF FLIGHT BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 2, FENCE 35 FT FROM DER, 498 FT LEFT OF CENTERLINE, 4 FT AGL/212 FT MSL.
FENCE 70 FT FROM DER, 378 FT RIGHT OF CENTERLINE, 8 FT AGL/214 FT MSL.
FENCE 163 FT FROM DER, 333 FT LEFT OF CENTERLINE, 11 FT AGL/219 FT MSL.
VEHICLES ON ROAD 246 FT FROM DER, 252 FT RIGHT OF CENTERLINE, 218 FT MSL.
VEHICLES ON ROAD 452 FT FROM DER, 1 FT RIGHT OF CENTERLINE, 220 FT MSL.
TREE 1793 FT FROM DER, 608 FT RIGHT OF CENTERLINE, 270 FT MSL.
TANK AND BUILDING BEGINNING 2423 FT FROM DER, 895 FT LEFT OF CENTERLINE, UP TO 60 FT AGL/274 FT MSL.
BUILDING 2668 FT FROM DER, 798 FT LEFT OF CENTERLINE, 67 FT AGL/279 FT MSL.

NOTE: RWY 13L, NAVAID 10 FT FROM DER, 20 FT RIGHT OF CENTERLINE, 1 FT AGL/207 FT MSL.
SIGN 60 FT FROM DER, 202 FT LEFT OF CENTERLINE, 2 FT AGL/208 FT MSL.
TREES BEGINNING 2518 FT FROM DER, 270 FT LEFT OF CENTERLINE, UP TO 302 FT MSL.
TREE 2741 FT FROM DER, 523 FT LEFT OF CENTERLINE, 323 FT MSL.
TREES BEGINNING 2776 FT FROM DER, 264 FT LEFT OF CENTERLINE, UP TO 329 FT MSL.
TREES BEGINNING 3303 FT FROM DER, 259 FT LEFT OF CENTERLINE, UP TO 330 FT MSL.
TREE 3385 FT FROM DER, 360 FT LEFT OF CENTERLINE, 337 FT MSL.
TOWER 4794 FT FROM DER, 781 FT LEFT OF CENTERLINE, 160 FT AGL/350 FT MSL.

NOTE: RWY 13R, POLE 38 FT FROM DER, 150 FT LEFT OF CENTERLINE, 4 FT AGL/200 FT MSL.
SIGN 72 FT FROM DER, 299 FT RIGHT OF CENTERLINE, 5 FT AGL/201 FT MSL.
TREE 1030 FT FROM DER, 754 FT RIGHT OF CENTERLINE, 260 FT MSL.
TREE 1103 FT FROM DER, 613 FT LEFT OF CENTERLINE, 234 FT MSL.
TREES BEGINNING 1835 FT FROM DER, 172 FT LEFT OF CENTERLINE, UP TO 307 FT MSL.
TREE 2458 FT FROM DER, 434 FT RIGHT OF CENTERLINE, 263 FT MSL.
TREE 2617 FT FROM DER, 230 FT RIGHT OF CENTERLINE, 274 FT MSL.
TREES BEGINNING 2666 FT FROM DER, 10 FT RIGHT OF CENTERLINE, UP TO 290 FT MSL.
TREES BEGINNING 3343 FT FROM DER, 146 FT RIGHT OF CENTERLINE, UP TO 316 FT MSL.
TREE 3388 FT FROM DER, 124 FT RIGHT OF CENTERLINE, 320 FT MSL.
TREE 3417 FT FROM DER, 154 FT RIGHT OF CENTERLINE, 321 FT MSL.
TREE 3490 FT FROM DER, 578 FT RIGHT OF CENTERLINE, 322 FT MSL.
TREES BEGINNING 3529 FT FROM DER, 28 FT RIGHT OF CENTERLINE, UP TO 326 FT MSL.
TREE 3625 FT FROM DER, 218 FT LEFT OF CENTERLINE, 308 FT MSL.
TREES BEGINNING 3736 FT FROM DER, 12 FT LEFT OF CENTERLINE, UP TO 328 FT MSL.
TREES BEGINNING 3844 FT FROM DER, 8 FT RIGHT OF CENTERLINE, UP TO 334 FT MSL.
TREES BEGINNING 4454 FT FROM DER, 506 FT RIGHT OF CENTERLINE, UP TO 342 FT MSL.
TREE 5186 FT FROM DER, 639 FT RIGHT OF CENTERLINE, 343 FT MSL.
TREE 5264 FT FROM DER, 704 FT RIGHT OF CENTERLINE, 348 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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CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
PORTLAND, OR	PORTLAND-HILLSBORO	1 FEBRUARY 2018	7A

NOTE: RWY 20, POLES AND FENCE BEGINNING 14 FT FROM DER, 261 FT RIGHT OF CENTERLINE, UP TO 27 FT AGL/229 FT MSL.
POLE, TREE, AND BUILDINGS BEGINNING 215 FT FROM DER, 418 FT LEFT OF CENTERLINE, UP TO 34 FT AGL/236 FT MSL.
TREES BEGINNING 767 FT FROM DER, 611 FT LEFT OF CENTERLINE, UP TO 290 FT MSL.
TREES BEGINNING 772 FT FROM DER, 417 FT RIGHT OF CENTERLINE, UP TO 52 FT AGL/250 FT MSL.
TREES AND POLE BEGINNING 823 FT FROM DER, 411 FT RIGHT OF CENTERLINE, UP TO 53 FT AGL/253 FT MSL.
TREES AND POLE BEGINNING 1139 FT FROM DER, 454 FT LEFT OF CENTERLINE, UP TO 294 FT MSL.
TREE 2430 FT FROM DER, 671 FT RIGHT OF CENTERLINE, 280 FT MSL.
TREES BEGINNING 2514 FT FROM DER, 31 FT LEFT OF CENTERLINE, UP TO 311 FT MSL.
TREE 4822 FT FROM DER, 337 FT LEFT OF CENTERLINE, 327 FT MSL.

NOTE: RWY 31L, TREES BEGINNING 1663 FT FROM DER, 625 FT RIGHT OF CENTERLINE, UP TO 271 FT MSL.

NOTE: RWY 31R, NAVAID 10 FT FROM DER, 20 FT LEFT OF CENTERLINE, 4 FT AGL/201 FT MSL.
SIGN 20 FT FROM DER, 162 FT RIGHT OF CENTERLINE, 5 FT AGL/202 FT MSL.
BUSH 116 FT FROM DER, 193 FT LEFT OF CENTERLINE, 205 FT MSL.
TREES, POLE, AND TOWER BEGINNING 1259 FT FROM DER, 138 FT RIGHT OF CENTERLINE, UP TO 272 FT MSL.

CONTROLLING OBSTACLES:

RWY 2: 1404 FT MSL AAO 453958.33N/1225558.82W

RWY 13R: 351 FT MSL TREE 453120.61N/1225602.57W

RWY 31L, 31R: 379 FT MSL TREE 453352.72N/1225810.28W (CG); 2020 FT MSL AAO 453219.10N/1231215.50W (CTA)

VISUAL CLIMB AREA OBSTACLE: 410 FT MSL TREE 453439.45N/1225536.60W

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: 2053 FT MSL TOWER 453121.42N/1224511.35W

REMARKS:

RETAINED ROUTE TO UBG VOR/DME AND CLIMB IN HOLD TO ENROUTE ALTITUDE DUE TO ATC REQUIREMENT DUE TO PROXIMITY TO KPDX.

FLIGHT INSPECTED BY:

CHARLES D. CUNNINGHAM
(FLIGHT INSPECTION NOT REQUIRED)

Digitally signed by
ROBERT G HAMILTON
Aug 21, 2017

OFFICE SYMBOL:
FICO

DATE:
02/03/2015

DEVELOPED BY:

LUCAS MCCLOUD

Digitally signed by
LUCAS MCCLOUD
Aug 08, 2017

OFFICE SYMBOL:
AJV-5422

DATE:
07/31/2017

APPROVED BY:

JULIE MORGAN

Digitally signed by
ROBERT G HAMILTON
Aug 21, 2017

OFFICE SYMBOL:
AJV-5420

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

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

OTHER:

ARPT MGR, HIO ATCT, ZSE, PDX APP CON, WFPT

CHANGES - REASONS:

1. CHANGED RWY 31L TAKEOFF MINIMUMS CG FROM 240 TO 242 (SAME CONTROLLING OBS) - NEW TARGETS-CALCULATED REQ'D CG.
2. TAKEOFF OBSTACLE NOTES: OBSTACLES REGROUPED VIA DEPARTURE OBSTACLE GROUPER - PER TARGETS BUILD AND CURRENT OBS DB.
3. OBSTACLE MANDATING ODP ROUTE DEVELOPMENT UPDATED FROM 2049 FT TO 2053 FT MSL TOWER (SAME COORDS) - PER OBS DB.
4. VCOA OBS REMOVED FROM RWYS 2, 31L/31R AND RESTATED AS 'VISUAL CLIMB AREA OBSTACLE: 410 FT MSL TREE 453439.45N/1225536.60W'

THIS IS A MINOR AMENDMENT AND DOES NOT QUALIFY AS A PERIODIC REVIEW.

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

QUALITY
3
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: 6.04 NM AFTER ADDUM/I-JMJ 5.84 DME/RADAR OR AT I-JMJ 0.20 DME									
MAVER			WALAP (TF) (FB) (RNP 2.00)			036.84 / 11.79			4000			CLIMB TO 2100 THEN CLIMBING LEFT TURN TO 4000 ON UBG R-360 TO UBG VOR/DME AND HOLD.									
WALAP (IAF)			HPSTR (TF) (FB) (RNP 1.00)			357.15 / 14.69			3700												
SHAFR (IAF)			REEDI (TF) (FB) (RNP 1.00)			218.72 / 7.29			5700			ALTERNATE MA (DO NOT CHART): CLIMB TO 2100 THEN CLIMBING LEFT TURN TO 4000 ON BTG R-194 TO ENDZZ/BTG 23.00 DME AND HOLD (DME REQUIRED).									
REEDI (IAF)			HPSTR (TF) (FB) (RNP 1.00)			253.59 / 5.28			3700												
HPSTR/I-JMJ 13.20 DME/RADAR (IF)			HANAH/I-JMJ 8.84 DME/RADAR			283.03 / 4.36 (I-JMJ R-283)			2900			ADDITIONAL FLIGHT DATA: HOLD S, LT, 003.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD N ENDZZ/BTG 23.00 DME, RT, 193.68 INBOUND. CHART FAS OBST: 323 TANK 453242N/1223129W 419 AAO 453220N/1223016W CHART VDP AT 1.01 DME* DISTANCE VDP TO THLD 1.20 NM. *LOC ONLY. CHART IN PLANVIEW: ENDZZ/BTG 23.00 DME. CHART MANDATORY 6700 AT SHAFR. CHART CIRCLING ICON.									
HANAH/I-JMJ 8.84 DME/RADAR			ADDUM/I-JMJ 5.84 DME/RADAR			283.03 / 3.00 (I-JMJ R-283)			2000												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)												MAG VAR: 16E EPOCH YEAR: 2010									
2. PROFILE STARTS AT HPSTR/I-JMJ 13.20 DME/RADAR																					
3. FAC: 283.03 FAF: ADDUM/I-JMJ 5.84 DME/RADAR DIST FAF TO MAP: 6.04 THLD: 6.04																					
4. MIN. ALT: SHAFR 6700, HPSTR 3700, HANAH 2900, ADDUM 2000, YINUP/I-JMJ 3.60 DME/RADAR 1280*																					
5. DIST TO THLD FROM OM: _____ - _____ MM: _____ - _____ IM: _____ - 150 HAT: _____ - 100 HAT: _____ - GS ANT: 1049																					
6. MIN GS INCPT: 2000 GS ALT AT: ADDUM 2000 OM: _____ - _____ MM: _____ - _____ IM: _____ -																					
7. GS ANGLE: 3.00 TCH: 54.8																					
8. MSA FROM: BTG VORTAC 120-300 3400, 300-120 6000																					
MINIMUMS																					
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		ILS: #		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 28L	306	2400	283	306	2400	283	306	2400	283	306	2400	283	306	2400	283						
S-LOC 28L	480	2400	457	480	2400	457	480	4500	457	480	4500	457	480	4500	457						
CIRCLING	720	1	689	760	1	729	1060	3	1029	1060	3	1029	1140	3	1109						
NOTES: CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 580. CHART NOTE: DME OR RADAR REQUIRED. CHART PLANVIEW NOTE ADJACENT TO MAVER: RNAV 1-DME/DME/IRU OR GPS REQUIRED. (CONTINUED ON PAGE 2)																					
CITY AND STATE PORTLAND, OR		ELEVATION: 31 TDZE: 23 AIRPORT NAME: PORTLAND INTL			FACILITY IDENTIFIER: I-JMJ		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 28L, AMDT 5 1 FEBRUARY 2018					SUP: AMDT: 4 DATED 06/25/2015									

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

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NOTES, (CONT.):

CHART PLANVIEW NOTE ADJACENT TO SHAFR: RNAV 1-DME/DME/IRU OR GPS REQUIRED.

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

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 28L CAT E VISIBILITY TO RVR 4500 AND INCREASE S-LOC 28L CAT E VISIBILITY TO 1 3/8 SM.

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

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MAVER ON V448 SOUTHBOUND AND ON V165 EASTBOUND.

QUALITY
20
CHECKED

CITY AND STATE

PORTLAND, OR

ELEVATION: 31

TDZE: 23

AIRPORT NAME:

PORTLAND INTL

FACILITY
IDENTIFIER:

I-JMJ

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 28L, AMDT 5

1 FEBRUARY 2018

SUP:

AMDT: 4

DATED: 06/25/2015

ILS - STANDARD US DEPARTMENT OF TRANSPORTATION INSTRUMENT APPROACH PROCEDURE FEDERAL AVIATION ADMINISTRATION TITLE 14 CFR PART 97.29							Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.												
TERMINAL ROUTES										MISSED APPROACH									
FROM		TO			COURSE AND DISTANCE			ALTITUDE		ILS: DA LOC: 6.01 NM AFTER TOLOC/I-IAP 7.68 DME/RADAR OR AT I-IAP 1.67 DME CLIMB TO 600 THEN CLIMBING RIGHT TURN TO 4200 DIRECT BTG VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4200. ALTERNATE MA (DO NOT CHART): CLIMB TO 600 THEN CLIMBING RIGHT TURN TO 5000 ON HEADING 313 AND ON UBG VOR/DME R-007 TO AASEN/UBG 32.50 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 5000 (DME REQUIRED). ADDITIONAL FLIGHT DATA: HOLD N, RT, 163.83 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD S AASEN/UBG 32.50 DME, RT, 007.21 INBOUND. CHART FAS OBST: 295 ANTENNA 453326N/1223006W 300 TOWER 453330N/1222858W CHART VDP AT 3.11 DME* DISTANCE VDP TO THLD 1.44 NM. *LOC ONLY. CHART IN PLANVIEW: AASEN/UBG 32.50 DME. CHART CIRCLING ICON. CHART MANDATORY 6700 AT SHAFR. CHART PLANVIEW NOTE: DME OR RADAR REQUIRED.									
BTG VORTAC		NACIY/I-IAP 14.07 DME			122.26 / 19.76			3700											
MAVER		CUKIS (TF) (FB) (RNP 2.00)			020.14 / 17.47			4000											
CUKIS (IAF)		NACIY (NOPT) (TF) (FB) (RNP 1.00)			359.37 / 8.32			3700											
SHAFR (IAF)		REEDI (TF) (FB) (RNP 1.00)			218.72 / 7.29			5700											
REEDI (IAF)		NACIY (NOPT) (TF) (FB) (RNP 1.00)			260.92 / 5.54			3700											
(SEE FORM 8260-10)																			
1. PT <u> </u> SIDE OF COURSE <u> </u> OUTBOUND <u> </u> FT WITHIN <u> </u> MILES OF <u> </u> (IAF) 2. HOLD E NACIY, LT, 283.04 INBOUND, 3700 FT. IN LIEU OF PT (IAF) 3. FAC: <u>283.04</u> FAF: <u>TOLOC/I-IAP 7.68 DME/RADAR</u> DIST FAF TO MAP: <u>6.01</u> THLD: <u>6.01</u> 4. MIN. ALT: NACIY 3700, OMMSI 2900, TOLOC 2000, WUGPU/I-IAP 5.37 DME/RADAR 1260* 5. DIST TO THLD FROM OM: <u> </u> - <u> </u> MM: <u> </u> - <u> </u> IM: <u> </u> 150 HAT: <u> </u> - 100 HAT: <u> </u> - GS ANT: 1049 6. MIN GS INCPT: <u>2000</u> GS ALT AT: <u>TOLOC 2000</u> OM: <u> </u> - <u> </u> MM: <u> </u> - <u> </u> IM: <u> </u> - 7. GS ANGLE: <u>3.00</u> TCH: <u>54.3</u> 8. MSA FROM: BTG VORTAC 120-300 3400, 300-120 6000																MAG VAR: 16E		EPOCH YEAR: 2010	
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		ILS: #		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 28R	281	2400	250	281	2400	250	281	2400	250	281	2400	250	281	2400	250				
S-LOC 28R	560	2400	529	560	2400	529	560	5500	529	560	5500	529	560	5500	529				
CIRCLING	720	1	689	760	1	729	1060	3	1029	1060	3	1029	1140	3	1109				
NOTES: CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MAVER ON V448 SOUTHBOUND AND ON V165 EASTBOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON BTG VORTAC AIRWAY RADIALS 062 CW 182. CHART PLANVIEW NOTE ADJACENT TO MAVER: RNAV 1-DME/DME/IRU OR GPS REQUIRED. (CONTINUED ON PAGE 2)																# CAT A 700-2, CAT B 800-2, CAT C, D 1100-3, CAT E 1200-3 @ CAT C, D 1100-3, CAT E 1200-3		QUALITY 20 CHECKED	
CITY AND STATE				ELEVATION: 31 TDZE: 31				FACILITY IDENTIFIER:				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:			
PORTLAND, OR				AIRPORT NAME:				I-IAP				ILS OR LOC RWY 28R, AMDT 17				AMDT: 16			
				PORTLAND INTL								1 FEBRUARY 2018				DATED 06/25/2015			

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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
NACIY INT/I-IAP 14.07 DME/RADAR (IF/IAF)	OMMSI/I-IAP 10.68 DME/RADAR	283.04 / 3.39 (I-IAP R-283)	2900
OMMSI/I-IAP 10.68 DME/RADAR	TOLOC/I-IAP 7.68 DME/RADAR	283.04 / 3.00 (I-IAP R-283)	2000

NOTES, (CONT.):

CHART PLANVIEW NOTE ADJACENT TO SHAFR: RNAV 1-DME/DME/IRU OR GPS REQUIRED.

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

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 28R CAT E VISIBILITY TO RVR 4000; INCREASE S-LOC 28R

CAT E VISIBILITY TO 1 1/2 SM.

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

QUALITY
20
CHECKED

CITY AND STATE

PORTLAND, OR

ELEVATION: 31

TDZE: 31

AIRPORT NAME:

PORTLAND INTL

FACILITY
IDENTIFIER:

I-IAP

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 28R, AMDT 17

1 FEBRUARY 2018

SUP:

AMDT: 16

DATED: 06/25/2015

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: RW28L CLIMB TO 2100 THEN CLIMBING LEFT TURN TO 4000 DIRECT UBG VOR/DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, LT, 003.00 INBOUND. CHART FAS OBST: 323 TANK 453242N/1223129W CHART 295 ANTENNA 453326N/1223006W. DISTANCE TO THLD FROM 286 HAT: 0.73 NM. CHART VDP AT 1.39 NM TO RW28L* *LNAV ONLY. WAAS CHANNEL # 56205 REFERENCE PATH ID: W28B CHART MANDATORY 6700 AT SHAFR. CHART CIRCLING ICON. LTP HAE: -15.8 M								
MAVER	WALAP (TF) (FB) (RNP 2.00)	036.84 / 11.79	4000									
WALAP (IAF)	HPSTR (NOPT) (TF) (FB) (RNP 1.00)	357.15 / 14.69	3700									
SHAFR (IAF)	REEDI (TF) (FB) (RNP 1.00)	218.72 / 7.29	5700									
REEDI	HPSTR (TF) (FB) (RNP 1.00)	253.59 / 5.28	3700									
HPSTR (IF)	HANAH (TF) (FB) (RNP 1.00)	283.23 / 4.36	2900									
(SEE FORM 8260-10)												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT HPSTR 3. FAC: <u>283.12</u> FAF: <u>ADDUM</u> DIST FAF TO MAP: <u>6.04</u> THLD: <u>6.04</u> 4. MIN. ALT: <u>SHAFR 6700, HPSTR 3700, HANAH 2900, ADDUM 2000, YINUP/3.80 NM TO RW28L 1280*</u> 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: <u>2000</u> GS ALT AT: <u>ADDUM 2000</u> OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>54.8</u> 34:1 IS CLEAR 8. MSA FROM: <u>RW28L 5900</u>												
				MAG VAR: 16E EPOCH YEAR: 2010								
MINIMUMS												
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT				ALTERNATE: N A								
CATEGORY =====>				STANDARD @								
	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	309	2200	286	309	2200	286	309	2200	286	309	2200	286
LNAV/VNAV DA	368	3000	345	368	3000	345	368	3000	345	368	3000	345
LNAV MDA	540	2400	517	540	2400	517	540	5500	517	540	5500	517
CIRCLING	720	1	689	760	1	729	1060	3	1029	1060	3	1029
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -6C (22F) OR ABOVE 54C (130F). @ CAT C, D 1100-3 CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)												
CITY AND STATE PORTLAND, OR		ELEVATION: 31 TDZE: 23 AIRPORT NAME: PORTLAND INTL		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) X RWY 28L, AMDT 4 1 FEBRUARY 2018				SUP: AMDT: 3 DATED 06/25/2015		



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
HANAH	ADDUM (TF) (FB) (RNP 1.00)	283.16 / 3.00	2000
ADDUM (FAF)	YINUP/3.80 NM TO RW28L (TF) (FB) (RNP 0.30)	283.12 / 2.24	
YINUP/3.80 NM TO RW28L	RW28L (MAP) (TF) (FO) (RNP 0.30)	283.12 / 3.80	
RW28L (MAP)	2100 MSL (CA)	283.12	2100
2100 MSL	UBG VOR/DME (DF) (FO) (RNP 1.00)		4000

NOTES, (CONT.):

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

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

CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV CAT C/D VISIBILITY TO 1 3/8 SM.

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

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MAVER ON V448 SOUTHBOUND AND ON V165 EASTBOUND.

QUALITY
20
CHECKED

CITY AND STATE

PORTLAND, OR

ELEVATION: 31

TDZE: 23

AIRPORT NAME:

PORTLAND INTL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:

RNAV (GPS) X RWY 28L, AMDT 4

1 FEBRUARY 2018

SUP:

AMDT: 3

DATED: 06/25/2015

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KPDX
RUNWAY	RW28L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	X
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W28B
LTP/FTP LATITUDE	453449.8530N
LTP/FTP LONGITUDE	1223502.0460W
LTP/FTP ELLIPSOIDAL HEIGHT	-00158
FPAP LATITUDE	453542.5345N
FPAP LONGITUDE	1223717.3020W
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	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

7F3F2477

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+00069
FPAP ORTHOMETRIC HEIGHT	+00069

QUALITY
20
CHECKED

CITY AND STATE PORTLAND, OR	ELEVATION: 31 AIRPORT NAME: PORTLAND INTL	TDZE: 23 PORTLAND INTL	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) X RWY 28L, AMDT 4 1 FEBRUARY 2018	SUP:
					AMDT: 3
					DATED: 06/25/2015

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: RW28R CLIMB TO 600 THEN CLIMBING RIGHT TURN TO 4200 DIRECT BTG VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4200. ADDITIONAL FLIGHT DATA: HOLD N, RT, 165.00 INBOUND. CHART FAS OBST: 187 TREE 453529N/1223355W CHART: 300 TOWER 453330N/1222858W DISTANCE TO THLD FROM 250 HAT: 0.62 NM. CHART VDP AT 1.06 NM TO RW28R* *LNAV ONLY. WAAS CHANNEL # 60905 REFERENCE PATH ID: W28A CHART CIRCLING ICON. CHART MANDATORY 6700 AT SHAFR. LTP HAE: -13.4 M						
MAVER		CUKIS (TF) (FB) (RNP 2.00)			020.14 / 17.47			4000								
CUKIS (IAF)		NACIY (TF) (FB) (RNP 1.00)			359.37 / 8.32			3700								
SHAFR (IAF)		REEDI (TF) (FB) (RNP 1.00)			218.72 / 7.29			5700								
REEDI (IAF)		NACIY (TF) (FB) (RNP 1.00)			260.92 / 5.54			3700								
NACIY (IF)		OMMSI (TF) (FB) (RNP 1.00)			283.22 / 3.39			2900								
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT NACIY 3. FAC: 283.13 FAF: TOLOC DIST FAF TO MAP: 6.01 THLD: 6.01 4. MIN. ALT: NACIY 3700, OMMSI 2900, TOLOC 2000, WUGPU/3.70 NM TO RW28R 1260* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2000 GS ALT AT: TOLOC 2000 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 54.3 34:1 IS CLEAR 8. MSA FROM: RW28R 6000										MAG VAR: 16E EPOCH YEAR: 2010						
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		STANDARD @							
CATEGORY =====>		A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	
LPV DA	281	2400	250	281	2400	250	281	2400	250	281	2400	250				
LNAV/VNAV DA	446	4500	415	446	4500	415	446	4500	415	446	4500	415				
LNAV MDA	440	2400	409	440	2400	409	440	4000	409	440	4000	409				
CIRCLING	720	1	689	760	1	729	1060	3	1029	1060	3	1029				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -6C (22F) OR ABOVE 54C (130F). @ CAT C, D 1100-3 CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 31 TDZE: 31			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:			
PORTLAND, OR		AIRPORT NAME:			PORTLAND INTL			RNAV (GPS) X RWY 28R, AMDT 4					AMDT: 3			
								1 FEBRUARY 2018					DATED 06/25/2015			

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
OMMSI	TOLOC (TF) (FB) (RNP 1.00)	283.17 / 3.00	2000
TOLOC (FAF)	WUGPU/3.70 NM TO RW28R (TF) (FB) (RNP 0.30)	283.13 / 2.31	
WUGPU/3.70 NM TO RW28R	RW28R (MAP) (TF) (FO) (RNP 0.30)	283.13 / 3.70	
RW28R (MAP)	600 MSL (CA)	283.13	600
600 MSL	BTG VORTAC (DF) (FO) (RNP 1.00)		4200

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MAVER ON V448 SOUTHBOUND AND ON V165 EASTBOUND.

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

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

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

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

QUALITY
20
CHECKED

CITY AND STATE

PORTLAND, OR

ELEVATION: 31

TDZE: 31

AIRPORT NAME:

PORTLAND INTL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:

RNAV (GPS) X RWY 28R, AMDT 4

1 FEBRUARY 2018

SUP:

AMDT: 3

DATED: 06/25/2015

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KPDX
RUNWAY	RW28R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	X
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W28A
LTP/FTP LATITUDE	453502.9425N
LTP/FTP LONGITUDE	1223405.8395W
LTP/FTP ELLIPSOIDAL HEIGHT	-00134
FPAP LATITUDE	453547.4540N
FPAP LONGITUDE	1223600.0580W
THRESHOLD CROSSING HEIGHT (TCH)	00054.3
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)	50.0
 <u>CRC REMAINDER</u>	 103CC754

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+00094
FPAP ORTHOMETRIC HEIGHT	+00094

QUALITY
20
CHECKED

CITY AND STATE PORTLAND, OR	ELEVATION: 31 AIRPORT NAME: PORTLAND INTL	TDZE: 31 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) X RWY 28R, AMDT 4 1 FEBRUARY 2018	SUP:
				AMDT: 3
				DATED: 06/25/2015

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: RW05 CLIMB TO 9500 DIRECT COFMO AND ON TRACK 135.79 TO SAKKO AND HOLD, CONTINUE CLIMB-IN-HOLD TO 9500. ADDITIONAL FLIGHT DATA: HOLD E, RT, 276.42 INBOUND. CHART FAS OBST: 3219 TREE 441353N/1211049W. 3340 AAO 441451N/1211403W DISTANCE TO THLD FROM 250 HAT: 0.63 NM. CHART VDP AT 1.24 NM TO RW05* *LNAV ONLY. WAAS CHANNEL # 70514 REFERENCE PATH ID: W05A CHART CIRCLING ICON. LTP HAE: 915.8 M											
SAKKO	WUMUT (TF) (FB) (RNP 2.00)	235.84 / 16.16	6800												
WUMUT	OCTAD (TF) (FB) (RNP 2.00)	251.47 / 9.66	6800												
COPPR	OCTAD (TF) (FB) (RNP 2.00)	064.88 / 9.14	8800												
HORRN	EHENE (TF) (FB) (RNP 2.00)	148.41 / 12.25	8700												
WISSL	EHENE (TF) (FB) (RNP 2.00)	183.95 / 19.60	8700												
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT ZIBID 3. FAC: <u>046.28</u> FAF: KICBY DIST FAF TO MAP: <u>5.89</u> THLD: <u>5.89</u> 4. MIN. ALT: ZIBID 5900, KICBY 5000, PIBME/3.20 NM TO RW05 4140* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: <u>5000</u> GS ALT AT: KICBY 5000 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>50.0</u> 34:1 IS CLEAR 8. MSA FROM: RW05 11600				MAG VAR: 14E EPOCH YEAR: 2020											
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT				ALTERNATE: N A		STANDARD @									
CATEGORY ==>	A		B		C		D		E						
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
LPV DA	3325	3/4	250	3325	3/4	250	3325	3/4	250	3325	3/4	250			
LNAV/VNAV DA	3347	7/8	272	3347	7/8	272	3347	7/8	272	3347	7/8	272			
LNAV MDA	3520	1	445	3520	1	445	3520	1 3/8	445	3520	1 3/8	445			
CIRCLING	3540	1	460	3560	1	480	3640	1 1/2	560	3760	2 1/4	680			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20C (-4F) OR ABOVE 53C (127F). @ CAT D 800-2 1/4 CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SAKKO ON V269 EASTBOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT COPPR ON V595 SOUTHBOUND. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 3080 TDZE: 3075		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
REDMOND, OR		AIRPORT NAME:		ROBERTS FIELD		RNAV (GPS) Y RWY 5, AMDT 2A 1 FEBRUARY 2018				AMDT: 2					
										DATED 08/20/2015					



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
CUPRI	EHENE (TF) (FB) (RNP 2.00)	199.29 / 23.77	6800
EHENE (IAF)	ZIBID (TF) (FB) (RNP 1.00)	121.43 / 10.39	5900
OCTAD (IAF)	ZIBID (TF) (FB) (RNP 1.00)	337.50 / 9.53	5900
ZIBID (IF)	KICBY (TF) (FB) (RNP 1.00)	049.63 / 5.17	5000
KICBY (FAF)	PIBME/3.20 NM TO RW05 (TF) (FB) (RNP 0.30)	046.28 / 2.69	
PIBME/3.20 NM TO RW05	RW05 (MAP) (TF) (FO) (RNP 0.30)	046.28 / 3.20	
RW05 (MAP)	3325 MSL (CA)	046.28	
3325 MSL	COFMO (DF) (FB) (RNP 1.00)		
COFMO	SAKKO (TF) (FO) (RNP 1.00)	135.79 / 15.26	9500

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HORRN ON V165 NORTHWEST BOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT WISSL ON T304 NORTHWEST BOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CUPRI ON V25 AND T261 NORTHBOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT OCTAD ON V25 SOUTHBOUND.

QUALITY
16
CHECKED

CITY AND STATE

REDMOND, OR

ELEVATION: 3080

TDZE: 3075

AIRPORT NAME:

ROBERTS FIELD

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) Y RWY 5, AMDT 2A

1 FEBRUARY 2018

SUP:

AMDT:

2

DATED:

08/20/2015

**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	KRDM
RUNWAY	RW05
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W05A
LTP/FTP LATITUDE	441458.2335N
LTP/FTP LONGITUDE	1210942.4245W
LTP/FTP ELLIPSOIDAL HEIGHT	+09158
FPAP LATITUDE	441542.2815N
FPAP LONGITUDE	1210754.6680W
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	0608
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 42887322

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+09370
FPAP ORTHOMETRIC HEIGHT	+09370

QUALITY
16
CHECKED

CITY AND STATE REDMOND, OR	ELEVATION: 3080 AIRPORT NAME: ROBERTS FIELD	TDZE: 3075	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 5, AMDT 2A 1 FEBRUARY 2018	SUP:
					AMDT: 2
					DATED: 08/20/2015

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: RW23 CLIMB TO 8500 DIRECT WELPU AND ON TRACK 138.16 TO URBIA AND HOLD, CONTINUE CLIMB-IN-HOLD TO 8500. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 306.00 INBOUND. CHART FAS OBST: 3189 TREE 441552N/1210639W. DISTANCE TO THLD FROM 200 HAT: 0.48 NM. CHART VDP AT 1.08 NM TO RW23* *LNAV ONLY. WAAS CHANNEL # 82514 REFERENCE PATH ID: W23A CHART CIRCLING ICON. LTP HAE: 909.7 M								
CUPRI	ARNOY (TF) (FB) (RNP 2.00)	101.32 / 16.28	7500									
FESOD	NIFLI (TF) (FB) (RNP 2.00)	035.07 / 36.77	7800									
HORRN	ARNOY (TF) (FB) (RNP 2.00)	073.52 / 31.43	8000									
SAKKO	NIFLI (TF) (FB) (RNP 2.00)	356.97 / 10.89	7000									
URBIA	NIFLI (TF) (FB) (RNP 2.00)	036.16 / 25.77	7500									
(SEE FORM 8260-10)												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT YUBUB 3. FAC: 226.46 FAF: VERNN DIST FAF TO MAP: 6.28 THLD: 6.28 4. MIN. ALT: YUBUB 6600, HUTKI 5800, VERNN 5100, ARUBE/2.20 NM TO RW23 3800* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 5100 GS ALT AT: VERNN 5100 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 47.1 34:1 IS CLEAR 8. MSA FROM: RW23 11700												
				MAG VAR: 14E EPOCH YEAR: 2020								
MINIMUMS												
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT				ALTERNATE: N A								
CATEGORY =====>				STANDARD @								
	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	3265	1/2	200	3265	1/2	200	3265	1/2	200	3265	1/2	200
LNAV/VNAV DA	3381	5/8	316	3381	5/8	316	3381	5/8	316	3381	5/8	316
LNAV MDA	3440	1/2	375	3440	1/2	375	3440	3/4	375	3440	3/4	375
CIRCLING	3540	1	460	3560	1	480	3640	1 1/2	560	3760	2 1/4	680
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20C (-4F) OR ABOVE 53C (128F). @ CAT D 800-2 1/4 CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT FESOD ON V25 SOUTHBOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HORRN ON V165 NORTHWEST BOUND. (CONTINUED ON PAGE 2)												
CITY AND STATE		ELEVATION: 3080 TDZE: 3067		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:			SUP:			
REDMOND, OR		AIRPORT NAME:		ROBERTS FIELD		RNAV (GPS) Y RWY 23, AMDT 1A			AMDT: 1			
						1 FEBRUARY 2018			DATED 08/20/2015			



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

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

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
ARNOY (IAF)	YUBUB (TF) (FB) (RNP 1.00)	138.55 / 7.82	6600
NIFLI (IAF)	YUBUB (TF) (FB) (RNP 1.00)	311.07 / 7.00	6600
YUBUB (IF)	HUTKI (TF) (FB) (RNP 1.00)	226.59 / 4.73	5800
HUTKI	VERNN (TF) (FB) (RNP 1.00)	226.52 / 4.39	5100
VERNN (FAF)	ARUBE/2.20 NM TO RW23 (TF) (FB) (RNP 0.30)	226.46 / 4.08	
ARUBE/2.20 NM TO RW23	RW23 (MAP) (TF) (FO) (RNP 0.30)	226.46 / 2.20	
RW23 (MAP)	3265 MSL (CA)	226.46	
3265 MSL	WELPU (DF) (FB) (RNP 1.00)		
WELPU	URBIA (TF) (FO) (RNP 1.00)	138.16 / 11.52	8500

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT URBIA ON V165 SOUTHBOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SAKKO ON V269 EASTBOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CUPRI ON V25 AND T261 NORTHBOUND

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ARNOY ON V536 NORTHEAST BOUND.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 7/8 SM AND LNAV CAT C/D VISIBILITY TO 1 SM.

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

QUALITY
16
CHECKED

CITY AND STATE

REDMOND, OR

ELEVATION: 3080

TDZE: 3067

AIRPORT NAME:

ROBERTS FIELD

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:

RNAV (GPS) Y RWY 23, AMDT 1A

1 FEBRUARY 2018

SUP:

AMDT: 1

DATED: 08/20/2015

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KRDM
RUNWAY	RW23
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W23A
LTP/FTP LATITUDE	441532.5950N
LTP/FTP LONGITUDE	1210818.3920W
LTP/FTP ELLIPSOIDAL HEIGHT	+09097
FPAP LATITUDE	441448.5305N
FPAP LONGITUDE	1211006.1405W
THRESHOLD CROSSING HEIGHT (TCH)	00047.1
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0608
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

45D34AC6

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+09308
FPAP ORTHOMETRIC HEIGHT	+09308

QUALITY
16
CHECKED

CITY AND STATE

REDMOND, OR

ELEVATION: 3080

TDZE: 3067

AIRPORT NAME:

ROBERTS FIELD

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) Y RWY 23, AMDT 1A

1 FEBRUARY 2018

SUP:

AMDT: 1

DATED: 08/20/2015

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: RW29 CLIMB TO 4000 THEN CLIMBING RIGHT TURN TO 7000 DIRECT YONKU AND HOLD, CONTINUE CLIMB-IN-HOLD TO 7000. ADDITIONAL FLIGHT DATA: HOLD N, RT, 167.55 INBOUND. CHART FAS OBST: 3210 TREE 441353N/1210729W. CHART VDP AT 1.30 NM TO RW29. TISTE TO RW29: 3.76/43 CHART CIRCLING ICON						
POCIT		NUCLA (TF) (FB) (RNP 2.00)			003.94 / 17.69			8800								
DSD VORTAC		AWBAN (TF) (FO) (RNP 2.00)			097.94 / 20.78			7600								
NUCLA (IAF)		AWBAN (NOPT) (TF) (FB) (RNP 1.00)			004.04 / 9.00			7600								
FUFQO (IAF)		AWBAN (NOPT) (TF) (FB) (RNP 1.00)			273.03 / 8.29			7600								
AWBAN (IF/IAF)		TISTE (TF) (FB) (RNP 1.00)			288.09 / 6.10			6400								
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD E AWBAN, RT, 288.09 INBOUND, 7600 FT. IN LIEU OF PT (IAF) 3. FAC: 288.01 FAF: TISTE DIST FAF TO MAP: 8.20 THLD: 8.20 4. MIN. ALT: AWBAN 7600, TISTE 6400, HAPET/7.00 NM TO RW29 5920, JEKMO/4.50 NM TO RW29 4900, (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: RW29 11600																
										MAG VAR: 14E			EPOCH YEAR: 2020			
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		STANDARD						
CATEGORY =====>		A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	
LNAV MDA	3560	1	480	3560	1	480	3560	1 3/8	480		NA					
CIRCLING	3560	1	480	3560	1	480	3640	1 1/2	560		NA					
NOTES: CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON DSD VORTAC RADIALS 030 CW 181. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT FUFQO ON V269 EASTBOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT POCIT ON V165 SOUTHEAST BOUND.																
CITY AND STATE REDMOND, OR		ELEVATION: 3080 TDZE: 3080 AIRPORT NAME: ROBERTS FIELD		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 29, AMDT 2A 1 FEBRUARY 2018						SUP:				
												AMDT: 2				
												DATED 08/20/2015				



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

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LINE 4, (CONT.):

BODKE/2.00 NM TO RW29 3900

TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
TISTE (FAF)	HAPET/7.00 NM TO RW29 (TF) (FB) (RNP 0.30)	288.01 / 1.20	
HAPET/7.00 NM TO RW29	JEKMO/4.50 NM TO RW29 (TF) (FB) (RNP 0.30)	288.01 / 2.50	
JEKMO/4.50 NM TO RW29	BODKE/2.00 NM TO RW29 (TF) (FB) (RNP 0.30)	288.01 / 2.50	
BODKE/2.00 NM TO RW29	RW29 (MAP) (TF) (FO) (RNP 0.30)	288.01 / 2.00	
RW29 (MAP)	4000 MSL (CA)	288.01	4000
4000 MSL	YONKU (DF) (FO) (RNP 1.00)		7000

QUALITY
16
CHECKED

CITY AND STATE REDMOND, OR	ELEVATION: 3080	TDZE: 3080	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 29, AMDT 2A 1 FEBRUARY 2018	SUP:
	AIRPORT NAME:				AMDT: 2
	ROBERTS FIELD				DATED: 08/20/2015

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 CLIMB TO 4000 THEN CLIMBING RIGHT TURN TO 7000 DIRECT YONKU AND HOLD, CONTINUE CLIMB-IN-HOLD TO 7000. ADDITIONAL FLIGHT DATA: HOLD N, RT, 167.55 INBOUND. DISTANCE TO THLD FROM 286 HAT: 0.76 NM. WAAS CHANNEL # 90214 REFERENCE PATH ID: W29A LTP HAE: 917.8 M							
POCIT		NUCLA (TF) (FB) (RNP 2.00)			003.94 / 17.69			8800									
DSD VORTAC		AWBAN (TF) (FO) (RNP 2.00)			097.94 / 20.78			7600									
NUCLA (IAF)		AWBAN (NOPT) (TF) (FB) (RNP 1.00)			004.04 / 9.00			7600									
FUFQO (IAF)		AWBAN (NOPT) (TF) (FB) (RNP 1.00)			273.03 / 8.29			7600									
AWBAN (IF/IAF)		COLTA (TF) (FB) (RNP 1.00)			288.09 / 7.18			6300									
(SEE FORM 8260-10)																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD E AWBAN, RT, 288.09 INBOUND, 7600 FT. IN LIEU OF PT (IAF) 3. FAC: 288.00 FAF: COLTA DIST FAF TO MAP: 7.12 THLD: 7.12 4. MIN. ALT: AWBAN 7600, COLTA 6300 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 6300 GS ALT AT: COLTA 6300 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 4.20 TCH: 43.0 34:1 IS CLEAR 8. MSA FROM: RW29 11600																	
														MAG VAR: 14E		EPOCH YEAR: 2020	
MINIMUMS																	
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		STANDARD							
CATEGORY >>>>>		A			B			C			D			E			
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA		
LPV DA	3366	1	286	3366	1	286		NA			NA						
LNAV/VNAV DA	3366	1	286	3366	1	286		NA			NA						
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20C (-4F) OR ABOVE 43C (110F). CHART NOTE: DME/DME RNP-0.3 NA. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON DSD VORTAC RADIALS 030 CW 181. (CONTINUED ON PAGE 2)																	
CITY AND STATE		ELEVATION: 3080 TDZE: 3080			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:						
REDMOND, OR		AIRPORT NAME:			ROBERTS FIELD		RNAV (GPS) Z RWY 29, AMDT 1A				AMDT: 1						
							1 FEBRUARY 2018				DATED 08/20/2015						



**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>
COLTA (FAF)	RW29 (MAP) (TF) (FO) (RNP 0.30)	288.00 / 7.12	
RW29 (MAP)	4000 MSL (CA)	288.00	4000
4000 MSL	YONKU (DF) (FO) (RNP 1.00)		7000

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT POCIT ON V165 SOUTHEAST BOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT FUFQO ON V269 EASTBOUND.

QUALITY
16
CHECKED

CITY AND STATE

REDMOND, OR

ELEVATION: 3080

TDZE: 3080

AIRPORT NAME:

ROBERTS FIELD

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) Z RWY 29, AMDT 1A

1 FEBRUARY 2018

SUP:

AMDT: 1

DATED: 08/20/2015

**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	KRDM
RUNWAY	RW29
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Z
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W29A
LTP/FTP LATITUDE	441455.5995N
LTP/FTP LONGITUDE	1210818.5275W
LTP/FTP ELLIPSOIDAL HEIGHT	+09178
FPAP LATITUDE	441542.6615N
FPAP LONGITUDE	1211003.7805W
THRESHOLD CROSSING HEIGHT (TCH)	00043.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	04.20
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0616
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 D4ADE78D

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+09388
FPAP ORTHOMETRIC HEIGHT	+09388

QUALITY
16
CHECKED

CITY AND STATE REDMOND, OR	ELEVATION: 3080 AIRPORT NAME: ROBERTS FIELD	TDZE: 3080 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Z RWY 29, AMDT 1A 1 FEBRUARY 2018	SUP:
				AMDT: 1
				DATED: 08/20/2015

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: DOCAS/DSD 23.05 DME						
DSD VORTAC (IAF) COKAY/DSD 11.00 DME (IF)		COKAY/DSD 11.00 DME PEDME/DSD 17.00 DME		178.03 / 11.00 178.03 / 6.00 (DSD R-178)				7000 6200		CLIMBING LEFT TURN TO 7000 ON DSD R-178 TO DSD VORTAC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, LT, 178.03 INBOUND. CHART FAS OBST: 5359 TREE 435351N/1213039W. PEDME TO RW18: 3.04/40.						
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT DSD VORTAC 3. FAC 178.03 FAF PEDME/DSD 17.00 DME DIST FAF TO MAP _____ THLD 6.21 4. MIN. ALT DSD VORTAC 7000, COKAY 7000, PEDME 6200 8. MSA FROM: DSD VORTAC 130-320 11600, 320-130 7100										MAG VAR: 18E EPOCH YEAR: 1990						
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	
S-18	5440	1 1/4	1278	5440	1 1/2	1278	5440	3	1278	5440	3	1278				
CIRCLING	5440	1 1/4	1277	5440	1 1/2	1277	5440	3	1277	5440	3	1277				
REDMOND ALTIMETER SETTING MINIMUMS																
S-18	5660	1 1/4	1498	5660	1 1/2	1498	5660	3	1498	5660	3	1498				
CIRCLING	5660	1 1/4	1497	5660	1 1/2	1497	5660	3	1497	5660	3	1497				
NOTES: CHART NOTE: RWY 18 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME REQUIRED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON DSD VORTAC AIRWAY RADIALS 092 CW 196. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). (CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 4163 TDZE: 4162		FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP VOR/DME RWY 18						
SUNRIVER, OR		AIRPORT NAME:		DSD		VOR RWY 18, AMDT 1D 1 FEBRUARY 2018				AMDT 1C						
		SUNRIVER								DATE 03/31/2016						



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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

NOTES, (CONT.):

CHART NOTE: OBTAIN LOCAL ALTIMETER SETTING ON CTAF; WHEN NOT RECEIVED, USE REDMOND ALTIMETER SETTING.



CITY AND STATE

SUNRIVER, OR

ELEVATION: 4163**TDZE: 4162**

AIRPORT NAME:

SUNRIVER

FACILITY
IDENTIFIER:

DSD

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

VOR RWY 18, AMDT 1D

1 FEBRUARY 2018

SUP: **VOR/DME RWY 18**AMDT: **1C**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		LNNAV: GANRE CLIMBING LEFT TURN TO 4000 DIRECT MIP VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000. ADDITIONAL FLIGHT DATA: HOLD W, LT, 112.00 INBOUND. CHART FAS OBST: 994 TREE 405820N/0762957W. CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES. CHART CIRCLING ICON.						
FQM VOR/DME		PUNLE (TF) (FB) (RNP 2.00)		181.47 / 21.83				4000								
MIP VORTAC		JEMIP (TF) (FO) (RNP 2.00)		178.19 / 7.00				3200								
SEG VOR/DME (IAF)		JEMIP (NOPT) (TF) (FB) (RNP 1.00)		070.36 / 13.65				3200								
PUNLE (IAF)		JEMIP (NOPT) (TF) (FB) (RNP 1.00)		159.84 / 5.00				3200								
JEMIP (IF/IAF)		FOLEV (TF) (FB) (RNP 1.00)		069.88 / 5.00				2500								
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD W JEMIP, RT, 069.88 INBOUND, 3200 FT. IN LIEU OF PT (IAF) 3. FAC: 072.81 FAF: FOLEV _____ DIST FAF TO MAP: 4.99 THLD: _____ 4. MIN. ALT: JEMIP 3200, FOLEV 2500 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: GANRE 4000																
										MAG VAR: 12W			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	1540	1 1/4	1059	1560	1 1/2	1079		NA			NA					
NOTES: CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: PROCEDURE NA AT NIGHT. CHART NOTE: USE WILLIAMSPORT ALTIMETER SETTING.																
CITY AND STATE		ELEVATION: 481		TDZE:		FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:				
BLOOMSBURG, PA		AIRPORT NAME:		BLOOMSBURG MUNI		RNAV		RNAV (GPS)-B, AMDT 1B 1 FEBRUARY 2018				AMDT: 1A				
												DATED 06/23/2016				



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.):

<u>FROM</u>	<u>TO</u>	<u>COURSE AND DISTANCE</u>	<u>ALTITUDE</u>
FOLEV (FAF)	GANRE (MAP) (TF) (FO) (RNP 0.30)	072.81 / 4.99	
GANRE (MAP)	881 MSL (CA)	072.81	
881 MSL	MIP VORTAC (DF) (FO) (RNP 1.00)		4000

QUALITY
16
CHECKED

CITY AND STATE BLOOMSBURG, PA	ELEVATION: 481	TDZE:	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS)-B, AMDT 1B 1 FEBRUARY 2018	SUP:
	AIRPORT NAME:				AMDT: 1A
	BLOOMSBURG MUNI				DATED: 06/23/2016

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: 4.32 NM AFTER RYDOR INT/MIP 6.00 DME OR AT CORUS/MIP 10.32 DME FIX						
MIP VORTAC (IF/IAF)		RYDOR INT/MIP 6.00 DME			108.00 / 6.00			2300		CLIMBING LEFT TURN TO 4000 DIRECT MIP VORTAC AND HOLD.						
										ADDITIONAL FLIGHT DATA: HOLD W, LT, 109.00 INBOUND. CHART FAS OBST: 1597 TOWER 405912N/0763247W. RYDOR TO RW09: 3.88/40. CHART CIRCLING ICON FAC CROSSES RWY C/L EXTENDED 262 FT FROM THLD.						
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																
2. HOLD W MIP VORTAC, LT, 109.00 INBOUND, 4000 FT. IN LIEU OF PT (IAF)																
3. FAC 108.00 FAF RYDOR INT/MIP 6.00 DME DIST FAF TO MAP 4.32 THLD																
4. MIN. ALT RYDOR 2300																
8. MSA FROM: MIP VORTAC 3900										MAG VAR: 9W			EPOCH YEAR: 1965			
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		1920	1 1/4	1439	1920	1 1/2	1439		NA			NA				
NOTES: CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: PROCEDURE NA AT NIGHT. CHART PLANVIEW NOTE: NOPT FOR ARRIVAL AT MIP VORTAC ON AIRWAY RADIAL 289. CHART NOTE: USE WILLIAMSPORT ALTIMETER SETTING.																
CITY AND STATE BLOOMSBURG, PA		ELEVATION: 481 AIRPORT NAME: BLOOMSBURG MUNI			TDZE:		FACILITY IDENTIFIER: MIP		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR-A, AMDT 1B 1 FEBRUARY 2018				SUP AMDT 1A DATE 06/23/2016			



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		LNAV: YOYUL CLIMBING LEFT TURN TO 4000 DIRECT WOBKA AND HOLD. ADDITIONAL FLIGHT DATA: HOLD E, RT, 267.54 INBOUND. FAS OBST: 1269 AAO 403850N/0771809W. CHART 1179 AAO 403653N/0771558W. ZOXIX TO RW26: 3.39/35. CHART PENN VALLEY ASOS 119.275 FREQUENCY. FAC CROSSES RWY C/L EXTENDED 2978 FT FROM THLD. CHART PLANVIEW NOTE: FINAL APPROACH COURSE OFFSET 10.08 DEGREES.						
RASHE		WOBKA (TF) (FO) (RNP 2.00)		104.91 / 22.98				4000								
SEG VOR/DME (IAF)		WOBKA (NOPT) (TF) (FB) (RNP 1.00)		245.32 / 14.51				4000								
WOBKA (IF/IAF)		IYIKA (TF) (FB) (RNP 1.00)		267.54 / 3.21				3600								
IYIKA		ZOXIX (TF) (FB) (RNP 1.00)		267.54 / 2.80				2800								
ZOXIX (FAF)		YOYUL (MAP) (TF) (FO) (RNP 0.30)		267.46 / 5.71												
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD E WOBKA, RT, 267.54 INBOUND, 4000 FT. IN LIEU OF PT (IAF) 3. FAC: 267.46 FAF: ZOXIX DIST FAF TO MAP: 5.71 THLD: 6.19 4. MIN. ALT: WOBKA 4000, IYIKA 3600, ZOXIX 2800 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: YOYUL 3900																
										MAG VAR: 11W EPOCH YEAR: 2005						
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A X						
CATEGORY ==>		A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	
LNAV MDA	1440	1 1/4	895	1440	1 1/4	895		NA			NA					
CIRCLING	1560	1 1/4	1015	1640	1 1/2	1095		NA			NA					
NOTES: CHART NOTE: RWY 26 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: PROCEDURE NA AT NIGHT. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT RASHE ON V276 WESTBOUND AND V33-184-265 NORTHWEST (CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 545 TDZE: 545				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:				
MIFFLINTOWN, PA		AIRPORT NAME: MIFFLINTOWN						RNAV (GPS) RWY 26, ORIG-A 1 FEBRUARY 2018				AMDT: ORIG				
												DATED 04/13/2006				



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
YOYUL (MAP)	945 MSL (CA)	267.46	
945 MSL	WOBKA (DF) (FO) (RNP 1.00)		4000

NOTES, (CONT.):
BOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON SEG VOR/DME AIRWAY RADIALS 204 CW 287.

CHART NOTE: USE PENN VALLEY ALTIMETER SETTING, IF NOT RECEIVED, USE REEDSVILLE ALTIMETER SETTING AND INCREASE ALL MDAS 240 FEET.

QUALITY
24
CHECKED

CITY AND STATE
MIFFLINTOWN, PA

ELEVATION: 545 TDZE: 545
AIRPORT NAME:
MIFFLINTOWN

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 26, ORIG-A
1 FEBRUARY 2018

SUP:	
AMDT:	ORIG
DATED:	04/13/2006

**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>
PITTSBURGH, PA	ALLEGHENY COUNTY	1 FEBRUARY 2018	9

TAKEOFF MINIMUMS:

RWY 10, 28, 31: STANDARD.

RWY 13: STANDARD WITH MINIMUM CLIMB OF 205 FT PER NM TO 1800 OR 900-2 1/2 FOR VCOA.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

RWY 13: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS ALLEGHENY COUNTY AIRPORT AT OR ABOVE 2000 BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 10: VERTICAL POINT 2 FT FROM DER, 75 FT RIGHT OF CENTERLINE, 1 FT AGL/1251 FT MSL. TREE 3525 FT FROM DER, 746 FT LEFT OF CENTERLINE, 85 FT AGL/1341 FT MSL. TREE 3750 FT FROM DER, 578 FT LEFT OF CENTERLINE, 67 FT AGL/1350 FT MSL. TREE 3786 FT FROM DER, 518 FT LEFT OF CENTERLINE, 72 FT AGL/1353 FT MSL.

NOTE: RWY 13: POLE 175 FT FROM DER, 335 FT RIGHT OF CENTERLINE, 26 FT AGL/1264 FT MSL. TREE 362 FT FROM DER, 295 FT RIGHT OF CENTERLINE, 53 FT AGL/1288 FT MSL. VERTICAL POINT 460 FT FROM DER, 588 FT RIGHT OF CENTERLINE, 60 FT AGL/1296 FT MSL. TREE 912 FT FROM DER, 527 FT RIGHT OF CENTERLINE, 73 FT AGL/1312 FT MSL.

NOTE: RWY 31: LIGHT 10 FT FROM DER, 87 FT RIGHT OF CENTERLINE, 4 FT AGL/1246 FT MSL. POLES BEGINNING 264 FT FROM DER, 298 FT RIGHT OF CENTERLINE, 38 FT AGL/1263 FT MSL.

CONTROLLING OBSTACLES:

RWY 13: 1663 FT MSL TOWER 401917.99N/0795239.25W.

RWY 13: (VCOA) 1663 FT MSL TOWER 401917.99N/0795239.25W.



**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>
PITTSBURGH, PA	ALLEGHENY COUNTY	1 FEBRUARY 2018	9

REMARKS:

<u>FLIGHT INSPECTED BY:</u>	<i>Digitally signed by</i> ROBERT G HAMILTON Nov 14, 2017	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
BOB S PRESSLER		FICO	10/26/17

<u>DEVELOPED BY:</u>	<i>Digitally signed by RALPH ALAN DUMAR</i> RALPH ALAN DUMAR	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
RALPH DUMAR	Date: 2017.08.21 10:51:58 -05'00'	AJV-5422	08/21/2017

<u>APPROVED BY:</u>	<i>Digitally signed by</i> ROBERT G HAMILTON Nov 14, 2017	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
JULIE MORGAN		AJV-5420	

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

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

OTHER:
ZOB, PIT APP CON, AGC ATCT, AMGR

CHANGES - REASONS:

ADDED RWY 13 CG/CGTA - EXISTING 1663 FT MSL TOWER PENETRATES DIVERSE A SURFACE BY 5.34 FT, BASED ON NEW 8260.3C DISTANCE MEASURING CRITERIA.
ADDED VCOA FOR RWY 13 - 1663 TOWER LOCATED OUTSIDE 3 SM FROM DER PER 8260.46F.

11/13/17: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 10/31/17.
1. CHANGED AIRPORT NAME FROM "KAGC" TO "ALLEGHENY COUNTY."



**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>
SELINGSGROVE, PA	PENN VALLEY	1 FEBRUARY 2018	3A

TAKEOFF MINIMUMS:

RWY 17, STANDARD WITH MINIMUM CLIMB OF 500 FT PER NM TO 1500 OR 1500-2 1/2 FOR VCOA.

RWY 35, 500-2 WITH MINIMUM CLIMB OF 500 FT PER NM TO 1300 OR 1500-2 1/2 FOR VCOA.

TEXTUAL DEPARTURE PROCEDURES:

RWY 17: CLIMBING RIGHT TURN DIRECT SEG VOR/DME BEFORE PROCEEDING ON COURSE. DO NOT EXCEED 180 KIAS UNTIL SEG VOR/DME.

RWY 35: CLIMB HEADING 350 TO 1900 BEFORE PROCEEDING ON COURSE.

VISUAL CLIMB OVER AIRPORT:

ALL RUNWAYS: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS PENN VALLEY AIRPORT AT OR ABOVE 1800 BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 17, TREES BEGINNING 1.8 NM FROM DER, 1068 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/919 FT MSL. TREES BEGINNING 29 FT FROM DER, 151 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/559 FT MSL. POLE 2520 FT FROM DER, 84 FT RIGHT OF CENTERLINE, 58 FT AGL/508 FT MSL.

NOTE: RWY 35, TREES BEGINNING 273 FT FROM DER, 75 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/539 FT MSL. TREES BEGINNING 1947 FT FROM DER, 624 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/899 FT MSL.

CONTROLLING OBSTACLES:

RWY 17: 1739 FT MSL AAO 404510.53N/0764859.52W.

RWY 35: 1039 FT MSL AAO 405257.09N/0765322.00W (CLIMB-TO ALTITUDE), 1759 FT MSL TOWER 405632.30N/0764903.87W (CEILING/VISIBILITY), 899 FT MSL TREE 405028.84N/0765212.50W (CLIMB GRADIENT).

VCOA: 1040 FT MSL TOWER 404905.00N/0765322.00W, 1739 FT MSL AAO 404510.53N/0764859.52W.

REMARKS:



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

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

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
SELINGSGROVE, PA	PENN VALLEY	1 FEBRUARY 2018	3A

<u>FLIGHT INSPECTED BY:</u>	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
PROCESSED IAW FLIGHT INSPECTION TEAM (AJV-333) MEMO, MAY 30, 2017, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED.		

<u>DEVELOPED BY:</u>	<i>Digitally signed by</i> DONALD H LANIER Sep 22, 2017	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
BEV BORDY (JACOB MAXFIELD)	DONALD H LANIER Sep 22, 2017	AVJ-5433	09/05/2017

<u>APPROVED BY:</u>	<i>Digitally signed by</i> DONALD H LANIER Sep 22, 2017	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
PATRICK MULQUEEN		AJV-5430	

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

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

OTHER:
ZNY, MDT APP CON, AIRPORT MANAGER

CHANGES - REASONS:
CHANGED ALL REFERENCES OF SELINGSGROVE (SEG) VORTAC TO SELINGSGROVE (SEG) VOR/DME- TACAN ANTENNA REPLACED WITH DME.
CHANGED "...FOR CLIMB IN VISUAL CONDITIONS" TO "...FOR VCOA" IN TAKEOFF MINIMUMS - IAW 8260.46F APPENDIX D. SEC 1. 6.C.(3)(B).
DELETED "...OR FOR CLIMB IN VISUAL CONDITIONS, CROSS PENN VALLEY AIRPORT AT OR ABOVE 1800 BEFORE PROCEEDING ON COURSE"
FROM TEXTUAL DEPARTURE PROCEDURE BOTH RUNWAYS AND ADDED "ALL RUNWAYS: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING
IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS PENN VALLEY AIRPORT AT OR ABOVE 1800 BEFORE PROCEEDING ON COURSE" TO
VISUAL CLIMB OVER AIRPORT - IAW 8260.46F APPENDIX D. SEC 1. 8.
ADDED THE TYPES OF CONTROLLING OBSTACLES TO CONTROLLING OBSTACLES - IAW 8260.46F APPENDIX D. SEC 1. 10.A.

THIS DOES NOT SATISFY PERIODIC REVIEW REQUIREMENTS.

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: ZASIX/1.77 DME						
										CLIMBING LEFT TURN TO 3400 DIRECT SEG VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3400.						
										ADDITIONAL FLIGHT DATA: HOLD SW, RT, 034.39 INBOUND. CHART FAS OBST: 1040 CELL-TOWER 404905N/0765322W. FAC CROSSES MIDPOINT OF RWY 17-35						
1. PT <u>L</u> SIDE OF COURSE <u>214.39</u> OUTBOUND <u>3400</u> FT WITHIN <u>10</u> MILES OF <u>SEG VOR/DME</u> (IAF)																
2.																
3. FAC <u>034.39</u> FAF <u>SEG VOR/DME</u> DIST FAF TO MAP <u>1.77</u> THLD																
4. MIN. ALT <u>SEG VOR/DME 1900</u>																
8. MSA FROM: <u>SEG VOR/DME 030-210 3200, 210-030 3700</u>										MAG VAR: <u>8W</u> EPOCH YEAR: <u>1965</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		1400	1 1/4	936	1400	1 1/4	936		NA			NA				
NOTES:																
CHART NOTE: RWY 17, 35 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.										@ NA WHEN LOCAL WEATHER NOT AVAILABLE.						
CHART NOTE: PROCEDURE NA AT NIGHT.										@ CAT A, B 1000-2						
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SEG VOR/DME ON V106 EASTBOUND.																
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WILLIAMSPORT ALTIMETER SETTING AND INCREASE ALL MDA 300 FEET AND CIRCLING CAT B VISIBILITY 1/4 MILE.																
CITY AND STATE SELINGSGROVE, PA		ELEVATION: 464 AIRPORT NAME: PENN VALLEY			TDZE:		FACILITY IDENTIFIER: SEG		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR-A, AMDT 7C 1 FEBRUARY 2018					SUP AMDT 7B DATE 06/25/2015		



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: RW08 CLIMB TO 2300 THEN CLIMBING RIGHT TURN TO 4000 DIRECT SEG VOR/DME AND HOLD. ADDITIONAL FLIGHT DATA: CHART FAS OBST: 1339 TREE 404950N/0763714W, 1240 TREE 405001N/0763605W. 1639 AAO 404732N/0763942W. DISTANCE TO THLD FROM 267 HAT: 0.71 NM. WAAS CHANNEL # 87024 REFERENCE PATH ID: W08A LTP HAE: 226.7 M						
SEG VOR/DME (IF/IAF)		ZENGU (TF) (FB) (RNP 1.00)			094.37 / 10.10			2500								
ZENGU (FAF)		YANUB/3.00 NM TO RW08 (TF) (FB) (RNP 0.30)			083.35 / 2.05											
YANUB/3.00 NM TO RW08		RW08 (MAP) (TF) (FO) (RNP 0.30)			083.38 / 3.00											
RW08 (MAP)		2300 MSL (CA)			083.38			2300								
2300 MSL		SEG VOR/DME (DF) (FO) (RNP 1.00)						4000								
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD W SEG VOR/DME, RT, 094.37 INBOUND, 4000 FT. IN LIEU OF PT (IAF) 3. FAC: 083.35 FAF: ZENGU DIST FAF TO MAP: 5.05 THLD: 5.05 4. MIN. ALT: SEG VOR/DME 4000, ZENGU 2500, YANUB/3.00 NM TO RW08 1840* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2500 GS ALT AT: ZENGU 2500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 34:1 IS NOT CLEAR 8. MSA FROM: RW08 3900																
										MAG VAR: 11W 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	1146	1	267	1146	1	267	1146	1	267		NA					
LNAV/VNAV DA	1603	2 1/2	724	1603	2 1/2	724	1603	2 1/2	724		NA					
LNAV MDA	1620	1	741	1620	1 1/4	741	1620	2 1/2	741		NA					
CIRCLING	1820	1 1/4	939	1860	1 1/2	979	1880	3	999		NA					
NOTES: CHART NOTE: BARO-VNAV NA WHEN USING SELINS GROVE ALTIMETER SETTING. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 881 TDZE: 879			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:				
SHAMOKIN, PA		AIRPORT NAME:						RNAV (GPS) RWY 8, ORIG-D				AMDT: ORIG-C				
		NORTHUMBERLAND COUNTY						1 FEBRUARY 2018				DATED 12/11/2014				



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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

NOTES, (CONT.):

CHART NOTE: PROCEDURE NA AT NIGHT.

*LNAV ONLY

CHART PLANVIEW NOTE: NOPT FOR ARRIVALS ON SELINGSGROVE (SEG) VOR/DME AIRWAY RADIALS 204, 287 AND 320.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SELINGSGROVE ALTIMETER SETTING, AND INCREASE ALL DA 94 FEET AND ALL MDA 100 FEET, INCREASE LPV ALL CATS VISIBILITY 1/4 SM; LNAV/VNAV ALL CATS VISIBILITY 1/2 SM; AND LNAV CAT C VISIBILITY 1/2 SM.

QUALITY
24
CHECKED

CITY AND STATE SHAMOKIN, PA	ELEVATION: 881 AIRPORT NAME: NORTHUMBERLAND COUNTY	TDZE: 879	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 8, ORIG-D 1 FEBRUARY 2018	SUP:
					AMDT: ORIG-C
					DATED: 12/11/2014

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	N79
RUNWAY	RW08
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W08A
LTP/FTP LATITUDE	405008.0035N
LTP/FTP LONGITUDE	0763329.2885W
LTP/FTP ELLIPSOIDAL HEIGHT	+02267
FPAP LATITUDE	405034.9100N
FPAP LONGITUDE	0763137.3700W
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	1744
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

A9A409F3

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+02598
FPAP ORTHOMETRIC HEIGHT	+02598

QUALITY
24
CHECKED

CITY AND STATE

SHAMOKIN, PA

ELEVATION: 881

TDZE: 879

AIRPORT NAME:

NORTHUMBERLAND COUNTY

 FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 8, ORIG-D

1 FEBRUARY 2018

SUP:

AMDT: ORIG-C

DATED: 12/11/2014

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33							Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES										MISSED APPROACH						
FROM		TO			COURSE AND DISTANCE			ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW26 CLIMB TO 3000 DIRECT YUTYO AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 083.34 INBOUND. CHART FAS OBST: 1230 TREE 405113N/0763134W. 1840 AAO 405039N/0762400W. DISTANCE TO THLD FROM 555 HAT: 1.61 NM. WAAS CHANNEL # 50424 REFERENCE PATH ID: W26A LTP HAE: 235.2 M						
SEG VOR/DME		USIGY (TF) (FO) (RNP 2.00)			087.39 / 26.79			4200								
DIANO (IAF)		USIGY (NOPT) (TF) (FB) (RNP 1.00)			222.55 / 7.46			4000								
USIGY (IF/IAF)		NOHUB (TF) (FB) (RNP 1.00)			263.57 / 5.00			2900								
NOHUB (FAF)		JUMUX/2.70 NM TO RW26 (TF) (FB) (RNP 0.30)			263.50 / 3.52											
JUMUX/2.70 NM TO RW26		RW26 (MAP) (TF) (FO) (RNP 0.30)			263.50 / 2.70											
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD E USIGY, RT, 263.57 INBOUND, 4000 FT. IN LIEU OF PT (IAF) 3. FAC: 263.50 FAF: NOHUB DIST FAF TO MAP: 6.22 THLD: 6.22 4. MIN. ALT: USIGY 4000, NOHUB 2900, JUMUX/2.70 NM TO RW26 1780* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2900 GS ALT AT: NOHUB 2900 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 34:1 IS NOT CLEAR 8. MSA FROM: RW26 3900																
										MAG VAR: 11W			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	1436	1 7/8	555	1436	1 7/8	555	1436	1 7/8	555		NA					
LNAV/VNAV DA	1559	2 1/2	678	1559	2 1/2	678	1559	2 1/2	678		NA					
LNAV MDA	1480	1	599	1480	1	599	1480	1 3/4	599		NA					
CIRCLING	1820	1 1/4	939	1860	1 1/2	979	1880	3	999		NA					
NOTES: CHART NOTE: BARO-VNAV NA WHEN USING SELINS GROVE ALTIMETER SETTING. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)																
CITY AND STATE				ELEVATION: 881 TDZE: 881			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:			SUP:			
SHAMOKIN, PA				AIRPORT NAME:						RNAV (GPS) RWY 26, ORIG-C			AMDT: ORIG-B			
				NORTHUMBERLAND COUNTY						1 FEBRUARY 2018			DATED 12/11/2014			



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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW26 (MAP)	1281 MSL (CA)	263.50	
1281 MSL	YUTYO (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

CHART NOTE: PROCEDURE NA AT NIGHT.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DIANO ON V499 NORTHBOUND AND V164 SOUTHEAST BOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON SEG VOR/DME AIRWAY RADIALS 017 CW 146.

*LNAV ONLY

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SELINGSGROVE ALTIMETER SETTING AND INCREASE ALL DA 94 FEET AND ALL MDA 100 FEET, INCREASE VISIBILITY LPV ALL CATS 3/8 SM; LNAV/VNAV ALL CATS 1/4 SM; LNAV CAT C 1/4 MILE.

QUALITY
24
CHECKED

CITY AND STATE
SHAMOKIN, PA

ELEVATION: 881 TDZE: 881
AIRPORT NAME:
NORTHUMBERLAND COUNTY

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 26, ORIG-C
1 FEBRUARY 2018

SUP:	
AMDT:	ORIG-B
DATED:	12/11/2014

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	N79
RUNWAY	RW26
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W26A
LTP/FTP LATITUDE	405017.8380N
LTP/FTP LONGITUDE	0763248.3965W
LTP/FTP ELLIPSOIDAL HEIGHT	+02352
FPAP LATITUDE	404950.9000N
FPAP LONGITUDE	0763440.3000W
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	1744
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

1FD36B0A

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+02684
FPAP ORTHOMETRIC HEIGHT	+02684

QUALITY
24
CHECKED

CITY AND STATE

SHAMOKIN, PA

ELEVATION: 881

TDZE: 881

AIRPORT NAME:

NORTHUMBERLAND COUNTY

 FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 26, ORIG-C

1 FEBRUARY 2018

SUP:

AMDT: ORIG-B

DATED: 12/11/2014

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

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

CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
SHAMOKIN, PA	NORTHUMBERLAND COUNTY	1 FEBRUARY 2018	2A

TAKEOFF MINIMUMS:

RWY 08, 400-2 OR STANDARD WITH MINIMUM CLIMB OF 540 FT PER NM TO 1600.
RWY 26, 400-2 1/2 OR STANDARD WITH MINIMUM CLIMB OF 270 FT PER NM TO 1400.

TEXTUAL DEPARTURE PROCEDURES:

RWY 08- CLIMB TO 1600 THEN CLIMBING LEFT TURN TO 4000 DIRECT SEG VOR/DME.
RWY 26- CLIMB TO 1400 THEN CLIMB TO 4000 ON SEG R-088 TO SEG VOR/DME.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 08: TREES BEGINNING 33 FT FROM DER, 366 FT LEFT OF CENTERLINE, UP TO 70 FT AGL/950 FT MSL. POLE 68 FT FROM DER, 459 FT RIGHT OF CENTERLINE, 39 FT AGL/910 FT MSL. VEHICLES ON ROADWAY BEGINNING 279 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 15 FT AGL/952 FT MSL. TREES BEGINNING 1548 FT FROM DER, 197 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/1171 FT MSL. BUILDINGS BEGINNING 2631 FT FROM DER, 870 FT LEFT OF CENTERLINE, UP TO 38 FT AGL/1164 FT MSL. FENCE BEGINNING 5683 FT FROM DER, 1796 FT LEFT OF CENTERLINE, UP TO 6 FT AGL/1099 FT MSL. POLE 1.1 NM FROM DER, 1662 FT LEFT OF CENTERLINE, 23 FT AGL/1091 FT MSL.

NOTE: RWY 26: TREES BEGINNING 10 FT FROM DER, 242 FT LEFT OF CENTERLINE, UP TO 13 FT AGL/865 FT MSL. TREES BEGINNING 84 FT FROM DER, 184 FT RIGHT OF CENTERLINE, UP TO 20 FT AGL/872 FT MSL. TREES BEGINNING 2.1 NM FROM DER, 2621 FT RIGHT OF CENTERLINE, UP TO 80 FT AGL/1240 FT MSL.

CONTROLLING OBSTACLES:

RWY 08: 1090 FT MSL TREE 405038.17N/0763215.28W
RWY 26: 1230 FT MSL TREE 405002.15N/0763558.70W.

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT:

RWY 08: 1947 FT MSL TOWER 404909.00N/0762815.00W
RWY 26: 1733 FT MSL AAO 404800.00N/0763733.00W.

REMARKS:

FLIGHT INSPECTED BY: *Digitally signed by*
FLIGHT INSPECTION NOT REQUIRED: **DONALD H LANIER**
MANAGER ROBERT STUCKERT
Sep 25, 2017

OFFICE SYMBOL: AJW-331
DATE: 04/22/2014

DEVELOPED BY: *Digitally signed by*
BEV BORDY (CHRISTINE BAYSE) **DONALD H LANIER**
Sep 25, 2017

OFFICE SYMBOL: AJV-5433
DATE: 09/01/2017

APPROVED BY: *Digitally signed by*
PATRICK MULQUEEN **DONALD H LANIER**
Sep 25, 2017

OFFICE SYMBOL: AJV-5430
DATE:

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

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

OTHER:
HAR TRACON, ZNY, AMGR

CHANGES - REASONS:

1. CHANGED ALL REFERENCES OF SEG VORTAC TO SEG VOR/DME.- TACAN ANTENNA REPLACED WITH DME.



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: 5.09 NM AFTER AMBIE INT/SEG 10.00 DME OR AT SEG 15.09 DME							
SEG VOR/DME (IF/IAF)			AMBIE INT/10.00 DME			087.66 / 10.00				2600		CLIMBING LEFT TURN TO 4000 DIRECT SEG VOR/DME AND HOLD.							
										ADDITIONAL FLIGHT DATA: FAS OBST: 1719 AAO 404800N/0763733W. AMBIE TO RW08: 3.16/40. FAC CROSSES RWY C/L EXTENDED 532 FT FROM THLD.									
1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)																			
2. HOLD W SEG VOR/DME, RT, 087.66 INBOUND, 4000 FT. IN LIEU OF PT (IAF)																			
3. FAC 087.66 FAF AMBIE INT/10.00 DME DIST FAF TO MAP 5.09 THLD 5.09																			
4. MIN. ALT SEG VOR/DME 3500, AMBIE 2600																			
8. MSA FROM: SEG VOR/DME 150-330 3700, 330-150 3400										MAG VAR: 8W EPOCH YEAR:1965									
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			
S-08		1980	1 1/4	1101	1980	1 1/2	1101	1980	3	1101		NA							
CIRCLING		1980	1 1/4	1099	1980	1 1/2	1099	1980	3	1099		NA							
NOTES:																			
CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.																			
CHART NOTE: PROCEDURE NA AT NIGHT.																			
CHART PLANVIEW NOTE: NOPT FOR ARRIVAL ON SEG VOR/DME AIRWAY RADIALS 204 CW 320.																			
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SELINGSGROVE ALTIMETER SETTING AND INCREASE ALL MDA 100 FEET.																			
CITY AND STATE		ELEVATION: 881 TDZE: 879			FACILITY IDENTIFIER:			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:						SUP					
SHAMOKIN, PA		AIRPORT NAME:			SEG			VOR RWY 8, AMDT 3E 1 FEBRUARY 2018						AMDT 3D					
		NORTHUMBERLAND COUNTY												DATE 12/11/2014					

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are 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		MDA	VIS			
NOTES:																	
PROCEDURE CANCELED EFFECTIVE 1 FEBRUARY 2018																	
CITY AND STATE KINGSTREE, SC			ELEVATION: 67 TDZE: 66 AIRPORT NAME: WILLIAMSBURG RGNL			FACILITY IDENTIFIER: CKI		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: NDB RWY 14, AMDT 4B, 06/27/2013						SUP AMDT 4A DATE 05/02/2013			

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.													
TERMINAL ROUTES										MISSED APPROACH							
FROM		TO			COURSE AND DISTANCE			ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW06 CLIMB TO 2600 DIRECT PROSO AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NE, RT, 236.15 INBOUND. CHART FAS OBST: 162 TREE 330156N/0801911W. 265 AAO 330055N/0802230W. DISTANCE TO THLD FROM 200 HAT: 0.55 NM. CHART VDP AT 1.44 NM TO RW06* *LNAV ONLY. WAAS CHANNEL # 49018 REFERENCE PATH ID: W06A CHART CIRCLING ICON. LTP HAE: -20.5 M							
HERMN		INARE (TF) (FO) (RNP 2.00)			246.59 / 28.24			2600									
SACKS (IAF)		INARE (NOPT) (TF) (FB) (RNP 1.00)			145.07 / 14.31			2600									
INARE (IF/IAF)		OMOLY (TF) (FB) (RNP 1.00)			055.96 / 5.00			1700									
OMOLY (FAF)		RW06 (MAP) (TF) (FO) (RNP 0.30)			056.01 / 5.09												
RW06 (MAP)		253 MSL (CA)			056.01			2600									
253 MSL		PROSO (DF) (FO) (RNP 1.00)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SW INARE, LT, 055.96 INBOUND, 2600 FT. IN LIEU OF PT (IAF) 3. FAC: 056.01 FAF: OMOLY DIST FAF TO MAP: 5.09 THLD: 5.09 4. MIN. ALT: INARE 2600, OMOLY 1700 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 1700 GS ALT AT: OMOLY 1700 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 34:1 IS CLEAR 8. MSA FROM: RW06 2400										MAG VAR: 7W		EPOCH YEAR: 2010					
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	253	3/4	200	253	3/4	200	253	3/4	200		NA						
LNAV/VNAV DA	477	1 1/4	424	477	1 1/4	424	477	1 1/4	424		NA						
LNAV MDA	540	1	487	540	1	487	540	1 3/8	487		NA						
CIRCLING	860	1	804	860	1	804	860	2 1/4	804		NA						
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F). CHART NOTE: BARO-VNAV AND VDP NA WHEN USING CHARLESTON AFB/INTL ALTIMETER SETTING. CHART NOTE: CIRCLING RWY 24 NA AT NIGHT. CHART NOTE: DME/DME RNP-0.3 NA.										@ NA WHEN LOCAL WEATHER NOT AVAILABLE. @ CAT A, B 900-2, CAT C 900-2 1/4							
CITY AND STATE		ELEVATION: 56 TDZE: 53			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
SUMMERVILLE, SC		AIRPORT NAME: SUMMERVILLE						RNAV (GPS) RWY 6, AMDT 1 1 FEBRUARY 2018				AMDT: ORIG-A					
												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	KDYB
RUNWAY	RW06
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W06A
LTP/FTP LATITUDE	330327.9475N
LTP/FTP LONGITUDE	0801713.5255W
LTP/FTP ELLIPSOIDAL HEIGHT	-00205
FPAP LATITUDE	330434.8700N
FPAP LONGITUDE	0801541.9000W
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	1624
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
 <u>CRC REMAINDER</u>	 99EE9BB1

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00117
FPAP ORTHOMETRIC HEIGHT	+00117

QUALITY
5
CHECKED

CITY AND STATE SUMMERVILLE, SC	ELEVATION: 56 AIRPORT NAME: SUMMERVILLE	TDZE: 53	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 6, AMDT 1 1 FEBRUARY 2018	SUP:
					AMDT: ORIG-A
					DATED: 11/18/2010

**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
SUMMERVILLE, SC	SUMMERVILLE	1 FEBRUARY 2018	2

TAKEOFF MINIMUMS:

RWY 6, 24: STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

RWY 6: CLIMB HEADING 56.06 TO 600 BEFORE TURNING LEFT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 06: LIGHTING 10 FT FROM DER, 15 FT RIGHT OF CENTERLINE, 1 FT AGL/54 FT MSL.

TREE, 22 FT FROM DER, 471 FT LEFT OF CENTERLINE, 66 FT MSL.

VEHICLES ON PERIMETER ROAD CROSSING CENTERLINE, 500 FT FROM DER, 15 FT AGL/61 FT MSL.

BUILDING 283 FT FROM DER, 563 FT LEFT OF CENTERLINE, 77 FT MSL.

TREE 481 FT FROM DER, 566 FT RIGHT OF CENTERLINE, 109 FT MSL.

TREE 524 FT FROM DER, 433 FT LEFT OF CENTERLINE, 109 FT MSL.

TREES, BEGINNING 552 FT FROM DER, 444 FT RIGHT OF CENTERLINE, UP TO 115 FT MSL.

TREES, BEGINNING 595 FT FROM DER, 1 FT LEFT OF CENTERLINE, UP TO 127 FT MSL.

TREES, BEGINNING 663 FT FROM DER, 394 FT RIGHT OF CENTERLINE, UP TO 130 FT MSL.

TREES, BEGINNING 1040 FT FROM DER, ON CENTERLINE, UP TO 137 FT MSL.

TREES, BEGINNING 2360 FT FROM DER, 69 FT RIGHT OF CENTERLINE, UP TO 139 FT MSL.

NOTE: RWY 24: TREES, BEGINNING 0 FT FROM DER, 357 FT RIGHT OF CENTERLINE, UP TO 92 FT AGL/116 FT MSL.

TREES, BEGINNING 82 FT FROM DER, 21 FT LEFT OF CENTERLINE, UP TO 17 FT AGL/41 FT MSL.

TREE 922 FT FROM DER, 667 FT LEFT OF CENTERLINE, 87 FT MSL.

TREES, BEGINNING 1018 FT FROM DER, 627 FT LEFT OF CENTERLINE, UP TO 91 FT MSL.

TREE 1187 FT FROM DER, 813 FT LEFT OF CENTERLINE, 93 FT MSL.

TREES, BEGINNING 1303 FT FROM DER, 622 FT LEFT OF CENTERLINE, UP TO 95 FT MSL.

TREES, BEGINNING 1452 FT FROM DER, 627 FT LEFT OF CENTERLINE, UP TO 101 FT MSL.

TREES, BEGINNING 1552 FT FROM DER, 578 FT LEFT OF CENTERLINE, UP TO 104 FT MSL.

TREES, BEGINNING 1979 FT FROM DER, 938 FT LEFT OF CENTERLINE, UP TO 105 FT MSL.

TREE 2115 FT FROM DER, 822 FT LEFT OF CENTERLINE, 108 FT MSL.

TREES, BEGINNING 2118 FT FROM DER, 507 FT LEFT OF CENTERLINE, UP TO 111 FT MSL.

CONTROLLING OBSTACLES:

RWY 06 - 555 MSL TOWER 330456.22N-0801705.75W.

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>
SUMMERVILLE, SC	SUMMERVILLE	1 FEBRUARY 2018	2

FLIGHT INSPECTED BY:

BLAKE SEARLES

Digitally signed by
DONALD H LANIER
Oct 31, 2017

OFFICE SYMBOL:

FICO

DATE:

10/25/17

DEVELOPED BY:

IVAN BLANCO

Digitally signed by
IVAN BLANCO
Aug 29, 2017

OFFICE SYMBOL:

AJV-5432

DATE:

08/28/2017

APPROVED BY:

PAT MULQUEEN

Digitally signed by
DONALD H LANIER
Oct 31, 2017

OFFICE SYMBOL:

AJV-5430

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A **ALPA** **AOPA** **APA** **HAI** **NBAA**

☐☒☒☐☐☒

OTHER:

ZJX, CHS APP CON, AMGR.

CHANGES - REASONS:

1. UPDATED RWY 6 INITIAL DEPARTURE HEADING FROM 56.05 TO 56.06 - NEW SURVEY 06/02/2011.
2. DELETED RWY 24 TEXTUAL DEPARTURE PROCEDURE AND CONTROLLING OBSTACLE - NO LONGER REQUIRED WITH NEW SURVEY/EVALUATION.
3. UPDATED RWY 6/24 TAKEOFF OBSTACLE NOTES - NEW SURVEY/EVALUATION.

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: RW19 (DO NOT EXCEED 165 KIAS UNTIL ODKAE) CLIMB TO 5200 THEN CLIMBING LEFT TURN TO 9000 DIRECT ODKAE AND HOLD, CONTINUE CLIMB-IN-HOLD TO 9000. ADDITIONAL FLIGHT DATA: HOLD NE, LT, 232.83 INBOUND. CHART FAS OBST: 4642 TREE 302430N/1033930W. DISTANCE TO THLD FROM 482 HAT: 1.49 NM. CHART VDP AT 2.21 NM TO RW19* *LNAV ONLY. WAAS CHANNEL # 77923 REFERENCE PATH ID: W19A CHART CIRCLING ICON. LTP HAE: 1335.2 M									
FST VORTAC		TIFME (TF) (FO) (RNP 2.00)		226.03 / 38.68				10000											
MRF VOR/DME		TIFME (TF) (FO) (RNP 2.00)		039.34 / 25.44				10000											
TIFME (IF/IAF)		RUWEL (TF) (FB) (RNP 1.00)		193.73 / 6.00				6500											
RUWEL (FAF)		RW19 (MAP) (TF) (FO) (RNP 0.30)		193.70 / 6.31				5200											
RW19 (MAP)		5200 MSL (CA)		193.70				5200											
5200 MSL		ODKAE (DF) (FO) (RNP 1.00)						9000											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N TIFME, RT, 193.73 INBOUND, 8000 FT. IN LIEU OF PT (IAF) 3. FAC: 193.70 FAF: RUWEL DIST FAF TO MAP: 6.31 THLD: 6.31 4. MIN. ALT: TIFME 8000, RUWEL 6500 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: 40.0 34:1 IS NOT CLEAR 8. MSA FROM: RW19 9100																MAG VAR: 9E		EPOCH YEAR: 1990	
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		STANDARD @									
CATEGORY =====>		A		B		C		D		E									
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA				
LPV DA	4964	1 3/8	482	4964	1 3/8	482	4964	1 3/8	482		NA								
LNAV/VNAV DA	5125	1 7/8	643	5125	1 7/8	643	5125	1 7/8	643		NA								
LNAV MDA	5180	1	698	5180	1	698	5180	2	698		NA								
CIRCLING	5180	1	666	5460	1 1/4	946	5760	3	1246		NA								
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -23C (-9F) OR ABOVE 54C (130F). @ CAT B 1000-2, CAT C 1300-3 CHART NOTE: CIRCLING NA W OF RWY 1-19. CHART NOTE: RWY 19 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).																			
CITY AND STATE		ELEVATION: 4514 TDZE: 4482				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:							
ALPINE, TX		AIRPORT NAME: ALPINE-CASPARIS MUNI						RNAV (GPS) RWY 19, AMDT 1 1 FEBRUARY 2018				AMDT: ORIG-A							
												DATED 09/18/2014							

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

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CITY AND STATE
ALPINE, TX

ELEVATION: 4514 TDZE: 4482
AIRPORT NAME:
ALPINE-CASPARIS MUNI

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 19, AMDT 1
1 FEBRUARY 2018

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

QUALITY
10
CHECKED

**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	E38
RUNWAY	RW19
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W19A
LTP/FTP LATITUDE	302326.2600N
LTP/FTP LONGITUDE	1034045.8490W
LTP/FTP ELLIPSOIDAL HEIGHT	+13352
FPAP LATITUDE	302203.8550N
FPAP LONGITUDE	1034125.5615W
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	0920
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

<u>CRC REMAINDER</u>	C4D0D8DC

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+13562
FPAP ORTHOMETRIC HEIGHT	+13562

CITY AND STATE

ALPINE, TX

ELEVATION: 4514

TDZE: 4482

AIRPORT NAME:

ALPINE-CASPARIS MUNI

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 19, AMDT 1

1 FEBRUARY 2018

SUP:

AMDT:

DATED:

 QUALITY
10
CHECKED

ORIG-A

09/18/2014

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.											
TERMINAL ROUTES										MISSED APPROACH					
FROM		TO		COURSE AND DISTANCE				ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW23 (DO NOT EXCEED 165 KIAS UNTIL ODKAE) CLIMB TO 5400 THEN CLIMBING LEFT TURN TO 9000 DIRECT ODKAE AND HOLD, CONTINUE CLIMB-IN-HOLD TO 9000. ADDITIONAL FLIGHT DATA: FAS OBST: 4699 AAO 302531N/1033532W. OBST: 4879 AAO 302530N/1033412W DISTANCE TO THLD FROM 517 HAT: 1.61 NM. CHART VDP AT 2.84 NM TO RW23* *LNAV ONLY. WAAS CHANNEL # 50234 REFERENCE PATH ID: W23A CHART CIRCLING ICON. LTP HAE: 1334.7 M					
FST VORTAC		ODKAE (TF) (FO) (RNP 2.00)		213.00 / 36.82				10000							
MRF VOR/DME		ODKAE (TF) (FO) (RNP 2.00)		056.72 / 28.65				10000							
ODKAE (IF/IAF)		JOLKU (TF) (FB) (RNP 1.00)		232.83 / 7.00				6500							
JOLKU (FAF)		RW23 (MAP) (TF) (FO) (RNP 0.30)		232.76 / 6.32				5400							
RW23 (MAP)		5400 MSL (CA)		232.76				5400							
5400 MSL		ODKAE (DF) (FO) (RNP 1.00)						9000							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NE ODKAE, LT, 232.83 INBOUND, 8000 FT. IN LIEU OF PT (IAF) 3. FAC: 232.76 FAF: JOLKU DIST FAF TO MAP: 6.32 THLD: 6.32 4. MIN. ALT: ODKAE 8000, JOLKU 6500 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 6500 GS ALT AT: JOLKU 6500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 34:1 IS NOT CLEAR 8. MSA FROM: RW23 9000										MAG VAR: 9E EPOCH YEAR: 1990					
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	4999	1 3/8	517	4999	1 3/8	517	4999	1 3/8	517		NA				
LNAV/VNAV DA	5087	1 3/4	605	5087	1 3/4	605	5087	1 3/4	605		NA				
LNAV MDA	5400	1 1/4	918	5400	1 1/4	918	5400	2 1/2	918		NA				
CIRCLING	5400	1 1/4	886	5460	1 1/4	946	5760	3	1246		NA				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -23C (-9F) OR ABOVE 54C (130F). @ CAT A 900-2, CAT B 1000-2, CAT C 1300-3 CHART NOTE: CIRCLING NA W OF RWY 1-19. CHART NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON FST VORTAC AIRWAY RADIALS 273 CW 283.															
CITY AND STATE		ELEVATION: 4514 TDZE: 4482				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:			
ALPINE, TX		AIRPORT NAME: ALPINE-CASPARIS MUNI						RNAV (GPS) RWY 23, ORIG				AMDT: NONE			
								1 FEBRUARY 2018				DATED			

**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	E38
RUNWAY	RW23
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W23A
LTP/FTP LATITUDE	302320.0720N
LTP/FTP LONGITUDE	1034037.9665W
LTP/FTP ELLIPSOIDAL HEIGHT	+13347
FPAP LATITUDE	302237.7355N
FPAP LONGITUDE	1034208.6680W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 C1000026

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+13557
FPAP ORTHOMETRIC HEIGHT	+13557

CITY AND STATE

ALPINE, TX

ELEVATION: 4514

TDZE: 4482

AIRPORT NAME:

ALPINE-CASPARIS MUNI

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 23, ORIG
1 FEBRUARY 2018

SUP:

AMDT:

DATED:

 QUALITY
10
CHECKED

NONE

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		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: _____															
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: _____															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT				ALTERNATE: N A											
CATEGORY =====>															
		DH/MDA VIS		DH/MDA VIS				DH/MDA VIS				DH/MDA VIS			
NOTES:															
PROCEDURE CANCELED EFFECTIVE 1 FEBRUARY 2018															
CITY AND STATE BAYTOWN, TX		ELEVATION: 33 TDZE: 31 AIRPORT NAME: R W J AIRPARK		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 32, ORIG-A, 10/15/2015				SUP: AMDT: ORIG DATED 01/20/2005		QUALITY 10 CHECKED			

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.											
U.S. Department of Transportation Federal Aviation Administration															
TERMINAL ROUTES								MISSED APPROACH							
FROM	TO	COURSE AND DISTANCE			ALTITUDE			RNP: DA CLIMB TO 3500 ON TRACK 176.58 TO GROFF AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT 356.58 INBOUND DISTANCE TO THLD FROM 326 HAT: 0.89 NM ROUTE TYPE: A, H							
ODORE (IAF)(40E)	ACTED (NoPT)(TF)(FB)(40E)(43I) (RNP 1.00)	266.64/6.00			3500										
MAZES (IAF)(40E)	ACTED (NoPT)(TF)(FB)(40E)(43I) (RNP 1.00)	086.52/6.00			3500										
ACTED (IF/IAF)(40E)(43I)	CASIG (TF)(FB)(40E)(43F) (RNP 1.0)	176.58/6.14			3300										
CASIG (FAF)(40E)(43F)	RW18 (TF)(FO)(40G)(41Y)(43M)	176.58													
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N ACTED, RT, 176.58 INBOUND, 3500 FT. IN LIEU OF PT (IAF)(40E)(41E)(43C) 3. FAC: 176.58 FAF: _____ DIST FAF TO MAP: _____ THLD: _____ 4. MIN. ALT: ACTED 3500, CASIG 3300 5. DIST TO THLD FROM OM: 4.86 MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 3300 GS ALT AT: CASIG 3300 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 45.0# 34:1 IS NOT CLEAR 8. MSA FROM: _____								ROUTE TYPE QUALIFIER1: F ROUTE TYPE QUALIFIER2: S # TCH 1751.98 MSL (DO NOT CHART) MAG VAR: 4E 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
RNP 0.30 DA	2036	1 1/8	326	2036	1 1/8	326	2036	1 1/8	326						
NOTES:															
CHART NOTE: GPS REQUIRED.															
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, PROCEDURE NA.															
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -18C (0F) OR ABOVE 54C (130F).															
CITY AND STATE		ELEVATION: 1711		TDZE: 1710		FACILITY IDENTIFIER:		PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:				SUP:			
CISCO, TX		AIRPORT NAME:		GREGORY M SIMMONS MEMORIAL		RNAV		RNAV (RNP) Z RWY 18, ORIG				AMDT: NONE			
								1 FEBRUARY 2018				DATED			

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICES			Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are 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 <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 30%;">FROM</th> <th style="text-align: left; width: 30%;">TO</th> <th style="text-align: left; width: 40%;">ALT</th> </tr> </thead> <tbody> <tr> <td>1. 087/30 CW 267/30 (NoPT)</td> <td>ACTED (IF/IAF)(FB)</td> <td>3500</td> </tr> <tr> <td>2. 267/30 CW 357/30</td> <td>ODORE (IAF)(FB)</td> <td>3500</td> </tr> <tr> <td>3. 357/30 CW 087/30</td> <td>MAZES (IAF)(FB)</td> <td>4000</td> </tr> </tbody> </table> TERMINAL ROUTES CONT: <table style="width: 100%; border-collapse: collapse; margin-top: 20px;"> <thead> <tr> <th style="text-align: left; width: 25%;">FROM</th> <th style="text-align: left; width: 25%;">TO</th> <th style="text-align: left; width: 35%;">COURSE AND DISTANCE</th> <th style="text-align: left; width: 15%;">ALTITUDE</th> </tr> </thead> <tbody> <tr> <td>RW18 (MAP)(40G)(41Y)(43M)</td> <td>2111 MSL (CA)(42M)</td> <td>176.58</td> <td></td> </tr> <tr> <td>2111 MSL</td> <td>GROFF (DF)(FO)(40E)(41E)(43H) (RNP 1.00)</td> <td>176.58/11.99</td> <td>3500</td> </tr> </tbody> </table>						FROM	TO	ALT	1. 087/30 CW 267/30 (NoPT)	ACTED (IF/IAF)(FB)	3500	2. 267/30 CW 357/30	ODORE (IAF)(FB)	3500	3. 357/30 CW 087/30	MAZES (IAF)(FB)	4000	FROM	TO	COURSE AND DISTANCE	ALTITUDE	RW18 (MAP)(40G)(41Y)(43M)	2111 MSL (CA)(42M)	176.58		2111 MSL	GROFF (DF)(FO)(40E)(41E)(43H) (RNP 1.00)	176.58/11.99	3500
FROM	TO	ALT																											
1. 087/30 CW 267/30 (NoPT)	ACTED (IF/IAF)(FB)	3500																											
2. 267/30 CW 357/30	ODORE (IAF)(FB)	3500																											
3. 357/30 CW 087/30	MAZES (IAF)(FB)	4000																											
FROM	TO	COURSE AND DISTANCE	ALTITUDE																										
RW18 (MAP)(40G)(41Y)(43M)	2111 MSL (CA)(42M)	176.58																											
2111 MSL	GROFF (DF)(FO)(40E)(41E)(43H) (RNP 1.00)	176.58/11.99	3500																										
CITY AND STATE	ELEVATION: 1711 TDZE: 1710 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:																									
CISCO, TX	GREGORY M SIMMONS MEMORIAL	RNAV	RNAV (RNP) Z RWY 18, ORIG 1 FEBRUARY 2018	AMDT:																									
				DATED:																									

**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

CISCO, TX

AIRPORT

GREGORY M SIMMONS MEMORIAL

EFFECTIVE DATE

1 FEBRUARY 2018

AMDT NO

ORIG

TAKEOFF MINIMUMS:

RWY 18, 36, STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 18, PIPES, POLES AND FENCE BEGINNING 8 FEET FROM DER, 275 FEET RIGHT OF CENTERLINE, UP TO 23 FEET AGL/1737 FEET MSL. TREES BEGINNING 69 FEET FROM DER, 511 FEET RIGHT OF CENTERLINE, UP TO 29 FEET AGL/1737 FEET MSL. TREES BEGINNING 558 FEET FROM DER, 79 FEET RIGHT OF CENTERLINE, UP TO 29 FEET AGL/1742 FEET MSL. TREES BEGINNING 754 FEET FROM DER, 28 FEET RIGHT OF CENTERLINE, UP TO 36 FEET AGL/1739 FEET MSL. TREE 139 FEET FROM DER, 476 FEET LEFT OF CENTERLINE, 39 FEET AGL/1739 MSL. TREES BEGINNING 502 FEET FROM DER, 58 FEET LEFT OF CENTERLINE, UP TO 34 FEET AGL/1743 FEET MSL.

NOTE: RWY 36, TERRAIN 42 FEET FROM DER, 20 FEET RIGHT OF CENTERLINE, 1708 FEET MSL. BLAST WALL, OBSTRUCTION LIGHTS AND FENCE BEGINNING 37 FEET FROM DER, CROSSING CENTERLINE FROM 298 FEET LEFT TO 153 FEET RIGHT, UP TO 9 FEET AGL/1715 FEET MSL. VEHICLE ON ROAD BEGINNING 98 FEET FROM DER, CROSSING CENTERLINE FROM 501 FEET LEFT TO 355 FEET RIGHT, 15 FEET AGL/1713 FEET MSL. VEHICLE ON INTERSTATE BEGINNING 176 FEET FROM DER, CROSSING CENTERLINE FROM 519 FEET LEFT TO 25 FEET LEFT, 24 FEET AGL/1716 FEET MSL. PYLONS BEGINNING 396 FEET FROM DER, CROSSING CENTERLINE FROM 118 FEET LEFT TO 229 FEET RIGHT OF CENTERLINE, UP TO 26 FEET AGL/1728 FEET MSL. TREES BEGINNING 412 FEET FROM DER, 10 FEET LEFT OF CENTERLINE, UP TO 31 FEET AGL/1727 FEET MSL. TREES BEGINNING 381 FEET FROM DER, 25 FEET RIGHT OF CENTERLINE, UP TO 32 FEET AGL/1733 FEET MSL.

CONTROLLING OBSTACLES:

REMARKS:

NON-FAA SERVICE PROVIDER

FLIGHT INSPECTED BY:

CHRISTIAN F. BAUR



OFFICE SYMBOL:

HAC

DATE:

01/05/2016

DEVELOPED BY:

BRIAN BERUBEE



OFFICE SYMBOL:

HAC

DATE:

06/06/2015

APPROVED BY:

CHRISTIAN F. BAUR



OFFICE SYMBOL:

HAC

DATE:

01/05/2016

REQUIRED EFFECTIVE DATE:

COORDINATED WITH:

A4A

ALPA

AOPA

APA

HAI

NBAA

☐☐☒☐☐☒

OTHER:

ABI APP CON, AMGR

CHANGES - REASONS:

**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
LAREDO, TX	LAREDO INTL	1 FEBRUARY 2018	4A

TAKEOFF MINIMUMS:
STANDARD

TEXTUAL DEPARTURE PROCEDURES:

RWY 14: CLIMB HEADING 142.31 TO 1000 BEFORE TURNING RIGHT.
RWY 17L: CLIMB HEADING 1630.00 TO 1200 BEFORE TURNING RIGHT.
RWY 17R: CLIMB HEADING 163.00 TO 1300 BEFORE TURNING RIGHT.
RWY 32: CLIMB HEADING 322.31 TO 1200 BEFORE TURNING LEFT.
RWY 35L, 35R: CLIMB HEADING 357.56 TO 1000 BEFORE TURNING LEFT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 14, TREES BEGINNING 135 FT FROM DER, 298 FT LEFT OF CENTERLINE, UP TO 59 FT AGL/ 519 FT MSL. SIGN 226 FT FROM DER, 244 FT LEFT OF CENTERLINE, 14 FT AGL/ 474 FT MSL.

NOTE: RWY 17L, TERRAIN BEGINNING 48 FT FROM DER, 333 FT RIGHT OF CENTERLINE, UP TO 478 FT MSL.

NOTE: RWY 17R, TERRAIN BEGINNING 4 FT FROM DER, 219 FT RIGHT OF CENTERLINE, UP TO 489 FT MSL. LIGHT POLES BEGINNING 894 FT FROM DER, 344 FT RIGHT OF CENTERLINE, UP TO 41 FT AGL/ 511 FT MSL.

NOTE: RWY 32, AIRCRAFT ON TAXIWAY BEGINNING 50 FT FROM DER, 367 FT LEFT OF CENTERLINE, UP TO 75 FT AGL/ 584 FT MSL. TREES BEGINNING 768 FT FROM DER, 584 FT LEFT OF CENTERLINE, UP TO 59 FT AGL/ 559 FT MSL. TREES BEGINNING 88 FT FROM DER, 275 FT RIGHT OF CENTERLINE, UP TO 59 FT AGL/ 559 FT MSL.

NOTE: RWY 35, MALSR 5 FT FROM DER, ON CENTERLINE, 5 FT AGL/ 505 FT MSL. NAVAID 10 FT FROM DER, ON CENTERLINE, 5 FT AGL/ 505 FT MSL. ANTENNA ON BUILDING 81 FT FROM DER, 404 FT LEFT OF CENTERLINE, 30 FT AGL/ 520 FT MSL.

NOTE: RWY 35R, TERRAIN BEGINNING 19 FT FROM DER, 191 FT LEFT OF CENTERLINE, UPTO 500 FT MSL. TERRAIN BEGINNING 176 FT FROM DER, 489 FT RIGHT OF CENTERLINE, UP TO 512 FT MSL.

CONTROLLING OBSTACLES:

OBSTACLES MANDATING ROUTE DEVELOPMENT: RWY 14, 17L, 17R, 32, 35L, 35R: 1449 FT MSL TOWER 273113.00N/0993120.00W.

REMARKS:

FLIGHT INSPECTED BY:

PROCESSED IAW FLIGHT INSPECTION TEAM (AJW-33)
MEMO, MAY 30, 2017, SUBJECT: FLIGHT INSPECTION NOT
REQUIRED.

Digitally signed by

STEVEN A VARGAS

Oct 10, 2017

OFFICE SYMBOL:

DATE:

DEVELOPED BY:

ROSE BOONE

Digitally signed by

ROSE BOONE

Oct 05, 2017

OFFICE SYMBOL:

AJV-5412

DATE:

08/29/2017

APPROVED BY:

JULIE MORGAN

Digitally signed by

STEVEN A VARGAS

Oct 10, 2017

OFFICE SYMBOL:

AJV-5420

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A **ALPA** **AOPA** **APA** **HAI** **NBAA**



OTHER:

LRD ATCT, ZHU, AMGR



**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

LAREDO, TX

AIRPORT

LAREDO INTL

EFFECTIVE DATE

1 FEBRUARY 2018

AMDT NO

4A

CHANGES - REASONS:

1. ADDED 3 DEGREES TO ALL COURSES- AIRPORT MAGVAR CHANGED FROM 8E/1985 TO 5E/2020



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: RW04 CLIMB TO 5500 THEN CLIMBING LEFT TURN TO 9600 DIRECT YADNU AND ON TRACK 295.95 TO DTA VORTAC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, LT, 004.00 INBOUND. CHART FAS OBST: 4932 FENCE 385718N/1122200W. DISTANCE TO THLD FROM 250 HAT: 0.83 NM. CHART VDP AT 1.32 NM TO RW04* *LNAV ONLY. WAAS CHANNEL # 42917 REFERENCE PATH ID: W04A CHART CIRCLING ICON. LTP HAE: 1478 M							
DTA VORTAC		KEPGE (TF) (FO) (RNP 2.00)			176.79 / 29.23			8200									
DETAN		KEPGE (TF) (FO) (RNP 2.00)			350.88 / 26.85			12000									
MUBNE (IAF)		KEPGE (NOPT) (TF) (FB) (RNP 1.00)			100.87 / 7.18			8200									
KEPGE (IF/IAF)		JAMEP (TF) (FB) (RNP 1.00)			041.36 / 7.30			6900									
JAMEP (FAF)		RW04 (MAP) (TF) (FO) (RNP 0.30)			041.43 / 6.15												
(SEE FORM 8260-10)																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SW KEPGE, LT, 041.36 INBOUND, 8200 FT. IN LIEU OF PT (IAF) 3. FAC: 041.43 FAF: JAMEP DIST FAF TO MAP: 6.15 THLD: 6.15 4. MIN. ALT: KEPGE 8200, JAMEP 6900 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 6900 GS ALT AT: JAMEP 6900 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 30.0 34:1 IS CLEAR 8. MSA FROM: RW04 12600														MAG VAR: 12E		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		
LPV DA	5206	1	250	5206	1	250	5206	1	250		NA						
LNAV/VNAV DA	5301	1 3/8	345	5301	1 3/8	345	5301	1 3/8	345		NA						
LNAV MDA	5360	1	404	5360	1	404	5360	1 1/8	404		NA						
CIRCLING	5620	1	635	5620	1	635	6200	3	1215		NA						
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -24C (-11F) OR ABOVE 54C (130F). CHART NOTE: BARO-VNAV AND VDP NA WHEN USING MILFORD ALTIMETER SETTING. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DETAN ON V244 WESTBOUND AND ON T298 SOUTHWEST BOUND.																	
CITY AND STATE		ELEVATION: 4985 TDZE: 4956				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
FILLMORE, UT		AIRPORT NAME: FILLMORE MUNI						RNAV (GPS) RWY 4, AMDT 1A 1 FEBRUARY 2018				AMDT: 1					
												DATED 10/12/2017					

QUALITY
10
CHECKED

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

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TERMINAL ROUTES, (CONT.):

<u>FROM</u>	<u>TO</u>	<u>COURSE AND DISTANCE</u>	<u>ALTITUDE</u>
RW04 (MAP)	5500 MSL (CA)	014.43	5500
5500 MSL	YADNU (DF) (FB) (RNP 1.00)		
YADNU	DTA VORTAC (TF) (FO) (RNP 1.00)	295.95 / 15.32	9600

CITY AND STATE
 FILLMORE, UT

ELEVATION: 4985 TDZE: 4956
 AIRPORT NAME:
 FILLMORE MUNI

FACILITY
 IDENTIFIER:
 RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
 RNAV (GPS) RWY 4, AMDT 1A
 1 FEBRUARY 2018

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

QUALITY
 10
 CHECKED

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

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KFOM
RUNWAY	RW04
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W04A
LTP/FTP LATITUDE	385714.4665N
LTP/FTP LONGITUDE	1122212.9585W
LTP/FTP ELLIPSOIDAL HEIGHT	+14780
FPAP LATITUDE	385807.5055N
FPAP LONGITUDE	1122041.1240W
THRESHOLD CROSSING HEIGHT (TCH)	00030.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1216
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

54D5C7C9

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+14970
FPAP ORTHOMETRIC HEIGHT	+14970

CITY AND STATE

FILLMORE, UT

ELEVATION: 4985

TDZE: 4956

AIRPORT NAME:

FILLMORE MUNI

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 4, AMDT 1A

1 FEBRUARY 2018

SUP:

AMDT:

1

DATED:

10/12/2017

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		LNAV: CEGVO CLIMBING LEFT TURN TO 10000 DIRECT PUC VOR/DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT, 009.00 INBOUND. CHART FAS OBST: 6219 TREE 392515N/1105357W. CHART 6259 TREE 392542N/1105345W. FAC CROSSES INTERSECTION OF RWYS 8-26 AND 12-30. CHART PRICE ASOS									
ARBIH		PUC VOR/DME (TF) (FB) (RNP 2.00)		112.59 / 10.00				11100											
PUC VOR/DME (IAF)		TIVPE (TF) (FB) (RNP 1.00)		193.68 / 5.00				9400											
TIVPE (IF)		MYZER (TF) (FB) (RNP 1.00)		193.65 / 7.00				7800											
MYZER (FAF)		CEGVO (MAP) (TF) (FO) (RNP 0.30)		193.60 / 4.16															
CEGVO (MAP)		6315 MSL (CA)		193.60															
6315 MSL		PUC VOR/DME (DF) (FO) (RNP 1.00)						10000											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT TIVPE 3. FAC: <u>193.60</u> FAF: <u>MYZER</u> DIST FAF TO MAP: <u>4.16</u> THLD: _____ 4. MIN. ALT: TIVPE 9400, MYZER 7800 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: CEGVO 12500																MAG VAR: 14E		EPOCH YEAR: 1985	
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	6520	1	605	6520	1	605	6600	2	685		NA								
NOTES: CHART NOTE: RWY 8, 12, 26, 30 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: PROCEDURE NA AT NIGHT. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON PUC VOR/DME AIRWAY RADIALS 164 CW 224. CHART NOTE: USE PRICE ALTIMETER SETTING; WHEN NOT RECEIVED, PROCEDURE NA.																			
CITY AND STATE		ELEVATION: 5915 TDZE:		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
HUNTINGTON, UT		AIRPORT NAME:		HUNTINGTON MUNI		RNAV (GPS)-C, ORIG-A 1 FEBRUARY 2018				AMDT: ORIG									
										DATED 10/30/2003									



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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

QUALITY
24
CHECKED

CITY AND STATE HUNTINGTON, UT	ELEVATION: 5915 AIRPORT NAME: HUNTINGTON MUNI	TDZE:	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS)-C, ORIG-A 1 FEBRUARY 2018	SUP:
					AMDT: ORIG
					DATED: 01/18/2007

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: CEGVO/16.16 DME FIX									
ARBIH/10.00 DME			PUC VOR/DME			112.70 / 10.00			10600		CLIMBING LEFT TURN TO 10000 ON PUC VOR/DME R-183 TO PUC VOR/DME AND HOLD.									
PUC VOR/DME (IAF)			TIVPE/5.00 DME			193.68 / 5.00			9400											
TIVPE/5.00 DME (IF)			MYZER/12.00 DME			193.68 / 7.00 (PUC R-194)			7800											
										ADDITIONAL FLIGHT DATA: HOLD S, RT, 009.00 INBOUND. CHART FAS OBST: 6319 TREE 392538N/1105439W. CHART 6499 TREE 392642N/1105354W. FAC CROSSES INTERSECTION OF RWYS 8-26 AND 12-30 CHART PRICE ASOS										
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 14E EPOCH YEAR:1985										
2. PROFILE STARTS AT TIVPE/5.00 DME																				
3. FAC 193.68 FAF MYZER/12.00 DME DIST FAF TO MAP _____ THLD _____																				
4. MIN. ALT TIVPE 9400, MYZER 7800																				
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 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	6620	1	705	6620	1	705	6620	2	705		NA									
NOTES:																				
CHART NOTE: RWY 8, 12, 26, 30 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.																				
CHART NOTE: DME REQUIRED.																				
CHART NOTE: PROCEDURE NA AT NIGHT.																				
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON PUC VOR/DME AIRWAY RADIALS 164 CW 224.																				
CHART NOTE: USE PRICE ALTIMETER SETTING; WHEN NOT RECEIVED, PROCEDURE NA.																				
CITY AND STATE HUNTINGTON, UT				ELEVATION: 5915 TDZE: AIRPORT NAME: HUNTINGTON MUNI			FACILITY IDENTIFIER: PUC		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR-B, AMDT 1A 1 FEBRUARY 2018				SUP VOR/DME-B AMDT 1 DATE 10/30/2003							

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.															
TERMINAL ROUTES										MISSED APPROACH									
FROM		TO		COURSE AND DISTANCE				ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW35 CLIMB TO 8200 THEN CLIMBING LEFT TURN TO 10600 DIRECT PILTE AND HOLD. ADDITIONAL FLIGHT DATA: CHART FAS OBST: 5838 TOWER 393732N/1115432W. DISTANCE TO THLD FROM 250 HAT: 0.66 NM. CHART VDP AT 2.63 NM TO RW35* *LNAV ONLY. WAAS CHANNEL # 58221 REFERENCE PATH ID: W35A LTP HAE: 1513 M									
PUC VOR/DME		WASLI (TF) (FB) (RNP 2.00)		246.52 / 35.43				16000											
WASLI		PILTE (TF) (FO) (RNP 2.00)		245.25 / 23.37				13000											
FFU VORTAC		PILTE (TF) (FO) (RNP 2.00)		170.55 / 52.74				10600											
DTA VORTAC (IAF)		RAPPO (NOPT) (TF) (FB) (RNP 1.00)		070.34 / 18.00				10800											
RAPPO		PILTE (TF) (FB) (RNP 1.00)		049.86 / 6.93				10600											
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S PILTE, RT, 013.12 INBOUND, 10600 FT. IN LIEU OF PT (IAF) 3. FAC: 347.85 FAF: ACAGO DIST FAF TO MAP: 6.40 THLD: 6.40 4. MIN. ALT: PILTE 10600, JESTO 7600, ACAGO 7100 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 7100 GS ALT AT: ACAGO 7100 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 34:1 IS NOT CLEAR 8. MSA FROM: RW35 13200																MAG VAR: 12E		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				
LPV DA	5272	7/8	250	5272	7/8	250	5272	7/8	250	5272	7/8	250							
LNAV/VNAV DA	5596	2	574	5596	2	574	5596	2	574	5596	2	574							
LNAV MDA	5900	1	878	5900	1 1/4	878	5900	2 1/2	878	5900	2 1/2	878							
CIRCLING	5900	1 1/4	878	5900	1 1/4	878	5900	2 1/2	878	5900	2 3/4	878							
NOTES: CHART NOTE: BARO-VNAV NA WHEN USING PROVO ALTIMETER SETTING. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -24C (-11F) OR ABOVE 12C (53F). CHART NOTE: CIRCLING NA FOR CAT D E OF RWY 17-35. CHART NOTE: RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. (CONTINUED ON PAGE 2)																			
CITY AND STATE		ELEVATION: 5022 TDZE: 5022				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:							
NEPHI, UT		AIRPORT NAME:				RNAV		RNAV (GPS) RWY 35, ORIG-B				AMDT: ORIG-A							
		NEPHI MUNI						1 FEBRUARY 2018				DATED 12/11/2014							

QUALITY
 25
 CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

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

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
PILTE (IF/IAF)	JESTO (TF) (FB) (RNP 1.00)	013.12 / 11.18	7600
JESTO	ACAGO (TF) (FB) (RNP 1.00)	002.66 / 3.48	7100
ACAGO (FAF)	RW35 (MAP) (TF) (FO) (RNP 0.30)	347.85 / 6.40	
RW35 (MAP)	8200 MSL (CA)	347.85	8200
8200 MSL	PILTE (DF) (FO) (RNP 1.00)		10600

NOTES, (CONT.):

CHART NOTE: DME/DME RNP-0.3 NA.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PUC VOR/DME ON V208 NORTHBOUND AND T298 NORTHEAST BOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT FFU VORTAC ON V200 WESTBOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DTA VORTAC ON V257 SOUTHBOUND.

CHART NOTE: VDP NA WITH PROVO ALTIMETER SETTING.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PROVO ALTIMETER SETTING AND INCREASE ALL DA 142 FEET; INCREASE ALL MDA 160 FEET AND VISIBILITY ALL CATS 1/2 SM.

QUALITY
25
CHECKED

CITY AND STATE

NEPHI, UT

ELEVATION: 5022

TDZE: 5022

AIRPORT NAME:

NEPHI MUNI

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 35, ORIG-B

1 FEBRUARY 2018

SUP:

AMDT: ORIG-A

DATED: 12/11/2014

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

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	U14
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	394340.5270N
LTP/FTP LONGITUDE	1115212.0760W
LTP/FTP ELLIPSOIDAL HEIGHT	+15130
FPAP LATITUDE	394509.7000N
FPAP LONGITUDE	1115212.3800W
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	0832
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 B82C6EB0

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+15307
FPAP ORTHOMETRIC HEIGHT	+15307

QUALITY
25
CHECKED

CITY AND STATE NEPHI, UT	ELEVATION: 5022 AIRPORT NAME: NEPHI MUNI	TDZE: 5022	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 35, ORIG-B 1 FEBRUARY 2018	SUP:
					AMDT: ORIG-A
					DATED: 12/11/2014

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

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

<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
EMONT	TWO	EMONT2.EMONT	ONE	04/10/2008	1 FEBRUARY 2018

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

DP ROUTE DESCRIPTION:

TAKEOFF RUNWAY 3: CLIMBING LEFT TURN DIRECT OGD VORTAC THEN ON OGD R-221 TO EMONT INT/OGD 18.09 DME, THENCE....

VCOA RUNWAY 3: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS OGD VORTAC SOUTHWEST BOUND AT OR ABOVE 8500, THEN ON OGD R-221 TO EMONT, THENCE...

TAKEOFF RUNWAY 21: CLIMBING RIGHT TURN HEADING 250.00 TO INTERCEPT OGD R-221 TO EMONT INT/OGD 18.09 DME, THENCE...

TAKEOFF RUNWAY 35: CLIMBING LEFT TURN DIRECT OGD VORTAC THEN ON OGD R-221 TO EMONT INT/OGD 18.09 DME, THENCE...

...CLIMB IN EMONT INT HOLDING PATTERN (HOLD SW, RT, 040.99 INBOUND) TO MEA/MCA FOR ASSIGNED ROUTE OF FLIGHT.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

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

PROCEDURAL DATA NOTES:

TAKEOFF MINIMUMS:

RWY 17: NA-OBSTACLES.

RWY 21, 35: STANDARD.

RWY 3: STANDARD WITH MINIMUM CLIMB OF 356 FT PER NM TO 6100 OR 4200-3 FOR VCOA.

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 3, NAVAID, VEHICLE ON ROAD BEGINNING 195 FEET FROM DER, 267 FEET RIGHT OF CENTERLINE, UP TO 17 FEET AGL/4426 FEET MSL. POLE 241 FEET FROM DER, 535 FEET LEFT OF CENTERLINE, 39 FEET AGL/4447 FEET MSL. POLE 348 FEET FROM DER, 582 FEET RIGHT OF CENTERLINE, 41 FEET AGL/4451 FEET MSL. TREES, BUILDING BEGINNING 375 FEET FROM DER, 62 FEET LEFT OF CENTERLINE, UP TO 4451 FEET MSL. TREE, POLE BEGINNING 430 FEET FROM DER, 502 FEET RIGHT OF CENTERLINE, UP TO 4455 FEET MSL.

NOTE: RWY 21, TREE 702 FEET FROM DER, 649 FEET LEFT OF CENTERLINE, 4492 FEET MSL. TREE 1133 FEET FROM DER, 701 FEET LEFT OF CENTERLINE, 4513 FEET MSL. TREES, BUILDING, POLE BEGINNING 2074 FEET FROM DER, 792 FEET LEFT OF CENTERLINE, UP TO 4570 FEET MSL. TREE 3429 FEET FROM DER, 421 FEET RIGHT OF CENTERLINE, 4561 FEET MSL.

NOTE: RWY 35, NOTE: RWY 35, TREE 209 FEET FROM DER, 185 FEET LEFT OF CENTERLINE, 4446 FEET MSL. TREE 243 FEET FROM DER, 233 FEET LEFT OF CENTERLINE, 4447 FEET MSL. TREES BEGINNING 292 FEET FROM DER, 87 FEET RIGHT OF CENTERLINE, UP TO 4454 FEET MSL. TREE 686 FEET FROM DER, 397 FEET RIGHT OF CENTERLINE, 4479 FEET MSL.

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

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

<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
EMONT	TWO	EMONT2.EMONT	ONE	04/10/2008	1 FEBRUARY 2018

CONTROLLING OBSTACLES:

RWY 3: 5639 MSL AAO 411555.41N/1115622.83W (CLIMB GRADIENT/CLIMB-TO ALTITUDE).

RWY 3 (VCOA): 8159 FEET AAO 411119.00N/1115416.00W.

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 3, 21, 35: 9770 FEET MSL AAO 411159.66N/1115255.61W.

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

REFERENCE MAG VAR: KOGD 14E EPOCH YR: 1985.

CHART HOLDING PATTERN AT EMONT, HOLD SW, RT,040.99 INBOUND.

AIRPORTS SERVED:

<u>AIRPORT NAME</u>	<u>CITY</u>	<u>STATE</u>
OGDEN-HINCKLEY	OGDEN	UT

COMMUNICATIONS:

ATIS, GND CON, TWR, SLC APP CON, HIF APP CON.

FIXES AND/OR NAVAIDS:

REMARKS:

ABBREVIATED AMENDMENT.

FLIGHT INSPECTED BY:

FLIGHT INSPECTION REVIEW NOT REQUIRED -
PROCESSED IAW FLIGHT INSPECTION TEAM (AJW-333)
MEMO MAY 30 2017

Digitally signed by

ALLAN WILL

Sep 11, 2017

OFFICE SYMBOL:

DATE:

DEVELOPED BY:

VICTOR B. NASO (TODD BOWLING)

Digitally signed by

ALLAN WILL

Sep 11, 2017

OFFICE SYMBOL:

DATE:

AJV-5413

07/31/2017

APPROVED BY:

GEORGE E. DAVIS

Digitally signed by

ALLAN WILL

Sep 11, 2017

OFFICE SYMBOL:

DATE:

AJV-5410

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:



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

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

<u>DP NAME</u>						<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
EMONT						TWO	EMONT2.EMONT	ONE	04/10/2008	1 FEBRUARY 2018
<u>A4A</u>	<u>ALPA</u>	<u>AOPA</u>	<u>APA</u>	<u>HAI</u>	<u>NBAA</u>					
☒	☒	☒	☒	☐	☒					

OTHER:

ARPT MGR, OGD ATCT, SLC APP CON, ZLC

CHANGES - REASONS:

1. CHANGED RWY 16/34 TO RWY 17/35 - RWY NUMBERS CHANGED TO MATCH CURRENT MAGNETIC HEADING.
2. REMOVE DEPARTURE INSTRUCTIONS FOR RWY 7/25 - RWY CLOSED.
3. CHANGED VCOA INSTRUCTIONS TO INCLUDE OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE - REF 8260.46F APPENDIX D EXAMPLE.
4. TAKEOFF RUNWAY 3/35 CHANGED WORDING FROM "VIA" AND ADDED ""ON" TO INSTRUCTIONS - REF 8260.19G.
5. ADDED REFERENCE MAG VAR KOGD 14E EPOCH YR:1985.
6. UPDATED TAKEOFF OBSTACLE NOTES IAW 8260.46F APPENDIX D, SEC 1, 9B.
7. VCOA CIG CHANGED FROM 4100 TO 4200/APPLICATION OF 8260.3C 14-4-4A.
8. CONTROLLING OBSTACLE FOR RWY 3 CHANGED FROM TERRAIN TO AAO DUE TO 200 AAO APPLICATION TO TERRAIN.



**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>
OGDEN, UT	OGDEN-HINCKLEY	1 FEBRUARY 2018	2A

TAKEOFF MINIMUMS:

TEXTUAL DEPARTURE PROCEDURES:
USE EMONT DEPARTURE.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

CONTROLLING OBSTACLES:

REMARKS:
ABBREVIATED AMENDMENT

FLIGHT INSPECTED BY:
FLIGHT INSPECTION REVIEW NOT REQUIRED -
PROCESSED IAW FLIGHT INSPECTION TEAM
(AJW-333) MEMO, MAY 30, 2017

DEVELOPED BY:
VICTOR NASO
(TODD BOWLING)

APPROVED BY:
GEORGE DAVIS

Digitally signed by
ALLAN WILL
Sep 11, 2017

Digitally signed by
ALLAN WILL
Sep 11, 2017

Digitally signed by
ALLAN WILL
Sep 11, 2017

OFFICE SYMBOL: **DATE:**

OFFICE SYMBOL: **DATE:**
AJV-5413 08/01/2017

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

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

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

OTHER:
ATA, OGD ATCT, SLC APP CON, ARPT MGR, ZLC

CHANGES - REASONS:
1. DELETED RUNWAYS THAT ARE NA DUE TO OBSTACLES - NOT NEEDED, SHOWN ON EMONT ODP.

QUALITY
8
CHECKED

ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29						Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.														
TERMINAL ROUTES											MISSED APPROACH									
FROM		TO			COURSE AND DISTANCE				ALTITUDE		ILS: DA LOC: 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. * LOC ONLY CHART PUC R-095 AT COPUK. CHART PUC R-164 AT FOSOV. CHART PLANVIEW NOTE: DME REQUIRED CHART VDP AT 2.73 DME* DISTANCE VDP TO THLD 1.18 MILES 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	8460	3	2502								
NOTES: CHART NOTE: DME REQUIRED. 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. CHART NOTE: CIRCLING RWY 8, 19, 26, 33 NA AT NIGHT.																				
CITY AND STATE PRICE, UT		ELEVATION: 5958 TDZE: 5862 AIRPORT NAME: CARBON COUNTY RGNL/BUCK DAVIS FIELD			FACILITY IDENTIFIER: I-PUC		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 1, AMDT 1B 1 FEBRUARY 2018					SUP:								
												AMDT: 1A								
												DATED 12/07/2017								

QUALITY
8
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		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 249 FEET PER NM TO 7100. ADDITIONAL FLIGHT DATA: HOLD S, RT, 343.96 INBOUND. CHART FAS OBST: 5814 TREE 393618N/1104517W. FAS OBST: 5979 AAO 393224N/1104742W. CHART VDP AT 0.80 NM TO RW01. WAAS CHANNEL # 78037 REFERENCE PATH ID: W01A JESKI TO RW01: 3.00/53.8. CHART CIRCLING ICON 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: 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**	6120	3/4	258	6120	3/4	258	6120	3/4	258	6120	3/4	258							
LP MDA	6260	3/4	398	6260	3/4	398	6260	3/4	398	6260	3/4	398							
LNAV MDA**	6240	3/4	378	6240	3/4	378	6240	3/4	378	6240	3/4	378							
LNAV MDA	6340	3/4	478	6340	3/4	478	6340	3/4	478	6340	3/4	478							
CIRCLING	6660	1	702	6860	1 1/4	902	7120	3	1162		NA								
NOTES: CHART NOTE: DME/DME RNP-0.3 NA. @ CAT B 1000-2, CAT C 1200-3 CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT COPUK ON V134 EASTBOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ADIBE ON V208 SOUTHBOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON PUC VOR/DME AIRWAY RADIALS 164 CW 224. (CONTINUED ON PAGE 2)																			
CITY AND STATE		ELEVATION: 5958 TDZE: 5862			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:							
PRICE, UT		AIRPORT NAME:					RNAV (GPS) RWY 1, AMDT 2B					AMDT: 2							
		CARBON COUNTY RGNL/BUCK DAVIS FIELD					1 FEBRUARY 2018					DATED 04/30/2015							

 QUALITY
8
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
RW01 (MAP)	6300 MSL (CA)	007.33	6300
6300 MSL	FOSOV (DF) (FO) (RNP 1.00)		10000

NOTES, (CONT.):

CHART NOTE: FOR INOPERATIVE ALS INCREASE LP AND LNAV CAT D VISIBILITY 1/4 SM.

CHART NOTE: CIRCLING RWY 8, 19, 26, 33 NA AT NIGHT.

QUALITY
8
CHECKED

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 2B
1 FEBRUARY 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	393742.4000N
FPAP LONGITUDE	1104442.4400W
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>	12B26395

ADDITIONAL PATH POINT RECORD INFORMATION

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

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 2B
1 FEBRUARY 2018

SUP: **QUALITY 8 CHECKED**
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. 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. WELEN TO RW36: 2.98/52. CHART PLANVIEW NOTE: DME REQUIRED CHART CIRCLING ICON FAC 441 FT R OF RWY C/L EXTENDED 3000 FT FROM THLD.					
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							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 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										MAG VAR: 14E				EPOCH YEAR: 1985	
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 PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PUC VOR/DME ON T298 NORTHEAST BOUND. @ CAT B 1000-2, CAT C 1200-3 CHART NOTE: CIRCLING RWY 8, 19, 26, 33 NA AT NIGHT.															
CITY AND STATE PRICE, UT		ELEVATION: 5958 AIRPORT NAME: CARBON COUNTY RGNL/BUCK DAVIS FIELD		TDZE: 5862		FACILITY IDENTIFIER: PUC		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR RWY 1, AMDT 1B 1 FEBRUARY 2018				SUP VOR/DME RWY 1			
												AMDT 1			
												DATE 03/05/2015			



US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION				RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, TITLE 14 CFR PART 97.33				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.							
TERMINAL ROUTES										MISSED APPROACH					
FROM		TO		COURSE AND DISTANCE				ALTITUDE		RNP: DA CLIMB TO 5400 ON TRACK 120.02 TO JOKRU AND ON TRACK 115.43 TO QUINT AND HOLD. **MISSED APPROACH REQUIRES A MINIMUM CLIMB OF 319 FEET PER NM TO 3700. #MISSED APPROACH REQUIRES A MINIMUM CLIMB OF 295 FEET PER NM TO 3700. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 297.00 INBOUND. ROUTE TYPE: A, H ROUTE TYPE QUALIFIER 1: F ROUTE TYPE QUALIFIER 2: S DISTANCE TO THLD FROM 770 HAT: 2.30 NM. #TCH 1261.8 MSL (DO NOT CHART)					
EPH VORTAC		JETNU (TF) (FB) (RNP 2.00)		283.31 / 25.60				6000							
JETNU (IAF)		WULIP (TF) (FB) (RNP 1.00)		283.16 / 4.62				5400							
QUINT (IAF)		VENJU (TF) (FB) (RNP 1.00)		333.15 / 21.08				5400							
CASHS (IAF)		ZUBEX (TF) (FB) (RNP 1.00)		079.20 / 9.48				6400							
ZUBEX		VENJU (RF) (FB) (RNP 1.00)		(8.15 NM RADIUS CCW (CFGBD))/15.13				5400							
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT FEMAM 3. FAC: _____ * _____ FAF: _____ DIST FAF TO MAP: _____ THLD: _____ 4. MIN. ALT: FEMAM 5200, CIRZI 3700 5. DIST TO THLD FROM OM: <u>7.66</u> MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: <u>3700</u> GS ALT AT: CIRZI 3700, YUBBU 2854 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>45.0</u> # <u>34:1</u> IS NOT CLEAR 8. MSA FROM: RW12 10700															
										MAG VAR: 15E			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 0.15 DA**	1995	3	770	1995	3	770	1995	3	770	1995	3	770			
RNP 0.19 DA#	2072	3	847	2072	3	847	2072	3	847	2072	3	847			
RNP 0.30 DA	2417	5	1192	2417	5	1192	2417	5	1192	2417	5	1192			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -10C (14F) OR ABOVE 54C (130F). @ CAT A, B, C, D 1200-5 CHART NOTE: RF REQUIRED. CHART NOTE: GPS REQUIRED. CHART PLANVIEW NOTE AT ZUBEX : MAX 240 KIAS UNTIL VENJU. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 1249 TDZE: 1225				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:			
WENATCHEE, WA		AIRPORT NAME:				PANGBORN MEMORIAL		RNAV (RNP) RWY 12, AMDT 1A				AMDT: 1			
								1 FEBRUARY 2018				DATED 11/10/2016			

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.	
RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33					
TERMINAL ROUTES, (CONT.):					
FROM		TO	COURSE AND DISTANCE	ALTITUDE	
VENJU		WULIP (RF) (FB) (RNP 1.00)	(5.11 NM RADIUS CCW (CFIHP))/4.45	5400	
WULIP		FEMAM (RF) (FB) (RNP 0.30)	(5.29 NM RADIUS CCW (CFVBS))/8.29	5200	
FEMAM (IF)		CIRZI (TF) (FB) (RNP 0.30)	193.15 / 5.00	3700	
CIRZI (FAF)		*YUBBU (RF) (FB)	(2.08 NM RADIUS CCW (CFVBB))/2.66		
YUBBU		*RW12 (MAP) (TF) (FO)	119.95 / 5.00		
RW12 (MAP)		JOKRU (TF) (FB) (RNP 1.00)	120.02 / 7.21		
JOKRU		QUINT (TF) (FO) (RNP 1.00)	115.43 / 9.86	5400	
NOTES, (CONT.): CHART PLANVIEW NOTE AT VENJU: MAX 230 KIAS UNTIL FEMAM. CHART PLANVIEW NOTE AT WULIP : MAX 230 KIAS UNTIL FEMAM. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT EPH VORTAC ON V120 EASTBOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT QUINT ON V357 SOUTHEAST BOUND AND T261 SOUTHBOUND. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART NOTE: FD OR HUD REQUIRED. CHART PLANVIEW NOTE AT EPH VORTAC, QUINT, CASHS: RNP 0.30.					
CITY AND STATE WENATCHEE, WA		ELEVATION: 1249 AIRPORT NAME: PANGBORN MEMORIAL	TDZE: 1225	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (RNP) RWY 12, AMDT 1A 1 FEBRUARY 2018
					SUP:
					AMDT: 1
					DATED: 11/10/2016

QUALITY
24
CHECKED

RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, TITLE 14 CFR PART 97.33						Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.										
TERMINAL ROUTES											MISSED APPROACH					
FROM		TO		COURSE AND DISTANCE			ALTITUDE		RNP: DA CLIMB TO 6000 ON TRACK 300.03 TO KULOC, RIGHT TURN TO FEXUB, AND ON TRACK 135.03 TO QUINT AND HOLD. **MISSED APPROACH REQUIRES MINIMUM CLIMB OF 320 FEET PER NM TO 5500. #MISSED APPROACH REQUIRES MINIMUM CLIMB OF 325 FEET PER NM TO 5500. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 297.00 INBOUND. DISTANCE TO THLD FROM 363 HAT: 0.80 NM. ROUTE TYPE: A, H ROUTE TYPE QUALIFIER 1: F ROUTE TYPE QUALIFIER 2: S #TCH 1291 MSL (DO NOT CHART)							
EAT VOR/DME (IAF)		VEDUC (TF) (FB) (RNP 1.00)		074.66 / 9.43			6000									
VEDUC		CORTH (RF) (FB) (RNP 1.00)		(5.30 NM RADIUS CW (CFFZK))/11.15			5000									
CORTH		HESNI (RF) (FB) (RNP 1.00)		(4.21 NM RADIUS CW (CFLBG))/8.99			3900									
QUINT (IAF)		HESNI (TF) (FB) (RNP 1.00)		285.98 / 6.62			3900									
ZAXUL (IAF)		HESNI (TF) (FB) (RNP 1.00)		343.95 / 6.20			3900									
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT HESNI 3. FAC: * _____ FAF: _____ DIST FAF TO MAP: _____ THLD: _____ 4. MIN. ALT: HESNI 3900, DOOGI 3000 5. DIST TO THLD FROM OM: <u>4.47</u> MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: <u>3000</u> GS ALT AT: DOOGI 3000, CUKSI 2411, YURLU (CONT.). OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.60</u> TCH: <u>60.0</u> # <u>34:1</u> IS CLEAR 8. MSA FROM: RW30 10700																
											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	
AUTHORIZATION REQUIRED																
RNP 0.17 DA**	1595	1	363	1595	1	363	1595	1	363		NA					
RNP 0.30 DA#	1686	1 3/8	454	1686	1 3/8	454	1686	1 3/8	454		NA					
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -10C (14F) OR ABOVE 44C (111F). CHART NOTE: RF REQUIRED. CHART NOTE: GPS REQUIRED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT EAT VOR/DME ON V120 WESTBOUND. (CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 1249 TDZE: 1232			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:				
WENATCHEE, WA		AIRPORT NAME: PANGBORN MEMORIAL					RNAV (RNP) Z RWY 30, AMDT 1A 1 FEBRUARY 2018					AMDT: 1				
												DATED 11/10/2016				



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.	
RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33					
LINE 6 GS ALT AT, (CONT.): 1979					
TERMINAL ROUTES, (CONT.):					
FROM		TO	COURSE AND DISTANCE	ALTITUDE	
HESNI (IF)	DOOGI (TF) (FB) (RNP 0.30)		317.60 / 5.52	3000	
DOOGI (FAF)	*CUKSI (RF) (FB)		(1.35 NM RADIUS CCW (CFDSN))/1.54		
CUKSI	*YURLU (RF) (FB)		(1.35 NM RADIUS CW (CFVFW))/1.13		
YURLU	*RW30 (MAP) (TF)		300.05 / 1.80		
RW30 (MAP)	KULOC (TF) (FB) (RNP 1.00)		300.03 / 5.44		
KULOC	FEXUB (RF) (FB) (RNP 1.00)		(3.20 NM RADIUS CW (CFGBT)) / 10.89		
FEXUB	QUINT (TF) (FO) (RNP 1.00)		135.03 / 21.23	6000	
NOTES, (CONT.):					
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT QUINT ON T261 NORTHEAST BOUND AND SOUTHBOUND.					
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART NOTE: FD OR HUD REQUIRED.					
CHART PLANVIEW NOTE AT EAT VOR/DME, QUINT, ZAXUL: RNP 0.30.					
CITY AND STATE		ELEVATION: 1249 TDZE: 1232	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
WENATCHEE, WA		AIRPORT NAME:	RNAV	RNAV (RNP) Z RWY 30, AMDT 1A	AMDT: 1
		PANGBORN MEMORIAL		1 FEBRUARY 2018	DATED: 11/10/2016



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: IKMIQ/0.71 DME							
EAT VOR/DME		CEXOS/5.00 DME		109.01 / 5.00				5800		CLIMB TO 3900 THEN CLIMBING LEFT TURN TO 6000 DIRECT EAT VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 6000. ADDITIONAL FLIGHT DATA: HOLD E, RT, 257.00 INBOUND. FAS OBST: 2638 AAO 472039N/1200809W. CHART 5200 PRIOR TO CEXOS IN PROFILE. FAC CROSSES MIDPOINT OF RWY 12-30. CHART CIRCLING ICON							
COYYA INT/EAT 18.52 DME (IAF)		CRUMM/12.77 DME (NOPT)		244.00 / 1.83 & 289.01 / 4.42 (EAT R-109)				4800									
QUINT/EAT 16.63 DME (IAF)		CRUMM/12.77 DME (NOPT)		339.00 / 3.02 & 289.01 / 1.76 (EAT R-109)				4800									
CRUMM/12.77 DME (IF)		CEXOS/5.00 DME		289.01 / 7.77 (EAT R-109)				3900									
1. PT <u> L </u> SIDE OF COURSE <u> 109.01 </u> OUTBOUND <u> 4800 </u> FT WITHIN <u> 10 </u> MILES OF <u> CEXOS </u> (IAF) 2. _____ 3. FAC <u> 289.01 </u> FAF <u> CEXOS/5.00 DME </u> DIST FAF TO MAP _____ THLD _____ 4. MIN. ALT <u> CEXOS 3900 </u> 8. MSA FROM: <u> EAT VOR/DME 004-094 5500, 094-184 7800, 184-004 10700 </u>														MAG VAR: 15E		EPOCH YEAR: 2020	
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	3180	1 1/4	1931	3180	1 1/2	1931	3200	3	1951	3900	3	2651					
NOTES: CHART NOTE: DME REQUIRED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT EAT VOR/DME ON V120 WESTBOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT QUINT ON T261 SOUTHBOUND. CHART NOTE: CIRCLING NA NE OF RWY 12-30.																@ CAT A, B 2000-2, CAT C 2000-3, CAT D 2700-3	
CITY AND STATE WENATCHEE, WA		ELEVATION: 1249 AIRPORT NAME: PANGBORN MEMORIAL		TDZE:		FACILITY IDENTIFIER: EAT		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR-A, AMDT 9C 1 FEBRUARY 2018				SUP					
												AMDT		9B			
												DATE		12/07/2017			



[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. [31167](#); Amdt. No. [3776](#)

**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 [November 17, 2017](#)

A handwritten signature in black ink, appearing to read "John S. Duncan", with a stylized flourish at the end.

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
4-Jan-18	NM	Hobbs	Lea County Rgnl	7/0612	11/6/17	LOC/DME BC RWY 21, Amdt 6A
4-Jan-18	NM	Hobbs	Lea County Rgnl	7/0651	11/6/17	RNAV (GPS) RWY 3, Amdt 2A
4-Jan-18	NM	Hobbs	Lea County Rgnl	7/0654	11/6/17	ILS OR LOC RWY 3, Amdt 7A
4-Jan-18	NM	Hobbs	Lea County Rgnl	7/0655	11/6/17	RNAV (GPS) RWY 21, Amdt 1A
4-Jan-18	NM	Hobbs	Lea County Rgnl	7/0656	11/6/17	RNAV (GPS) RWY 30, Amdt 1A
4-Jan-18	NM	Hobbs	Lea County Rgnl	7/0872	11/6/17	VOR/DME OR TACAN RWY 21, Amdt 9B
4-Jan-18	MA	Beverly	Beverly Rgnl	7/1084	11/6/17	RNAV (GPS) RWY 16, Amdt 1D
4-Jan-18	IL	Mattoon/ Charleston	Coles County Memorial	7/3399	11/6/17	VOR RWY 6, Amdt 13A
4-Jan-18	IL	Mattoon/ Charleston	Coles County Memorial	7/3400	11/6/17	ILS OR LOC RWY 29, Amdt 6C
4-Jan-18	IL	Mattoon/ Charleston	Coles County Memorial	7/3401	11/6/17	RNAV (GPS) RWY 24, Amdt 1
4-Jan-18	IL	Mattoon/ Charleston	Coles County Memorial	7/3402	11/6/17	RNAV (GPS) RWY 6, Orig
4-Jan-18	IL	Mattoon/ Charleston	Coles County Memorial	7/3403	11/6/17	RNAV (GPS) RWY 11, Orig
4-Jan-18	IL	Mattoon/ Charleston	Coles County Memorial	7/3404	11/6/17	RNAV (GPS) RWY 29, Amdt 1
4-Jan-18	KS	Pittsburg	Atkinson Muni	7/4229	11/6/17	RNAV (GPS) RWY 4, Amdt 1D
4-Jan-18	IL	Mattoon/ Charleston	Coles County Memorial	7/8801	11/6/17	VOR RWY 24, Amdt 11A

AIRAC Date: 4 JANUARY 2018

FDC **7/0612** HOB IAP LEA COUNTY RGNL, Hobbs, NM. LOC/DME BC RWY 21 AMDT 6A ... CHART NOTE: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE CIRCLING RWY 17 NA AT NIGHT. CIRCLING CAT B MDA 4160/HAA 499. CHART NOTE: DME REQUIRED. CHART PLANVIEW NOTE: DME REQUIRED. THIS IS LOC BC RWY 21 AMDT 6B 1707131641-PERM

FDC **7/0651** HOB IAP LEA COUNTY RGNL, Hobbs, NM. RNAV (GPS) RWY 3, AMDT 2A... CHART NOTE: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: CIRCLING RWY 17 NA AT NIGHT. CIRCLING CAT B MDA 4160/HAA 499. THIS IS RNAV (GPS) RWY 3, AMDT 2B. 1707131644-PERM

FDC **7/0654** HOB IAP LEA COUNTY RGNL, Hobbs, NM. ILS OR LOC RWY 3, AMDT 7A... CHART NOTE: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: CIRCLING RWY 17 NA AT NIGHT. CIRCLING CAT B MDA 4160/HAA 499. THIS IS ILS OR LOC RWY 3, AMDT 7B. 1707131644-PERM

FDC **7/0655** HOB IAP LEA COUNTY RGNL, Hobbs, NM. RNAV (GPS) RWY 21, AMDT 1A... CHART NOTE: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: CIRCLING RWY 17 NA AT NIGHT. CIRCLING CAT B MDA 4160/HAA 499. THIS IS RNAV (GPS) RWY 21, AMDT 1B. 1707131644-PERM

FDC **7/0656** HOB IAP LEA COUNTY RGNL, Hobbs, NM. RNAV (GPS) RWY 30, AMDT 1A... CHART NOTE: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: CIRCLING RWY 17 NA AT NIGHT. CIRCLING CAT B MDA 4160/HAA 499. THIS IS RNAV (GPS) RWY 30, AMDT 1B. 1707131644-PERM

FDC **7/0872** HOB IAP LEA COUNTY RGNL, Hobbs, NM. VOR/DME OR TACAN RWY 21 AMDT 9B ... CHART NOTE: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE CIRCLING RWY 17 NA AT NIGHT. S-21 MDA 4120 /HAT 471 ALL CATS. CIRCLING CAT B MDA 4160/HAA 499. CHART NOTE: DME REQUIRED. CHART PLANVIEW NOTE: DME REQUIRED. CHART VDP AT 5.83 DME; DISTANCE VDP TO THLD 1.34 NM. CHART FAS OBST: 3851 STACK 324314N/1031159W. THIS IS VOR OR TACAN RWY 21 AMDT 9C 1709111650-PERM

FDC **7/1084** BVY IAP BEVERLY RGNL, Beverly, MA. RNAV (GPS) RWY 16, AMDT 1D... LNAV/VNAV DA 422/HAT 315 ALL CATS. CHART NOTE: CIRCLING RWY 9 NA AT NIGHT. CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: RWY 16 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA. DELETE NOTE: NIGHT LANDING: RWY 9, 27 NA. THIS IS RNAV (GPS) RWY 16, AMDT 1E. 1709111932-PERM

FDC **7/3399** MTO COLES COUNTY MEMORIAL, Mattoon/Charleston, IL. VOR RWY 6, AMDT 13A... CHART CIRCLING ICON. CHART FAS OBST: 858 TREE 392555N/0881817W. CHART NOTE: RWY 6 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. S-6 MDA 1240/HAT 518 ALL CATS, VIS CAT C 1 3/8, CIRCLING CATS A/B/C MDA 1240/HAA 518, CAT D MDA 1380/HAA 658. BAYIX FIX MINIMUMS (DME REQUIRED) S-6 CAT C VIS 1 1/8, CIRCLING CAT A MDA/1160/HAA 438, CAT B MDA 1180/HAA 458, CAT C MDA 1240/HAA 518, CAT D MDA 1380/HAA 658. CHART PROFILE NOTE: *1340 WHEN USING CHAMPAIGN/URBANA ALTIMETER SETTING. DELETE PROFILE NOTE: *1320 WHEN USING CHAMPAIGN/URBANA ALTIMETER SETTING. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CHAMPAIGN/URBANA ALTIMETER SETTING AND INCREASE ALL MDAS 100 FEET AND VISIBILITY CAT C AND D 1/2 SM. CHART NOTE: CIRCLING NA TO RWYS 18 AND 36. DELETE NOTE: WHEN LOCAL NOT RECEIVED, USE CHAMPAIGN/URBANA ALTIMETER SETTING AND INCREASE ALL MDA 100 FEET. INCREASE S-6 CAT C AND D VISIBILITY 1/4 MILE AND BAYIZ FIX MINIMUMS S-6 CATS C AND D VISIBILITY 1/4 MILE. THIS IS VOR RWY 6, AMDT 13B. 1706161534-PERM

FDC **7/3400** MTO IAP COLES COUNTY MEMORIAL, Mattoon/Charleston, IL. ILS OR LOC RWY 29, AMDT 6C... DELETE: MSA MT 25 NM 2500. CHART MSA FROM MTO VOR/DME 25 NM 360-360 2500. DELETE: ALTERNATE MISSED APPROACH. DELETE NOTE: ADF OR DME REQUIRED. DELETE: PROCEDURE TURN. DELETE: TERMINAL ROUTE FROM MOBBY INT TO ZEBRE (MT) LOM/MTO VOR/DME 5.65 DME. CHANGE ALL REFERENCE TO ZEBRE (MT) LOM/MTO VOR/DME 5.65 DME TO ZEBRE OM/MTO VOR/DME 5.65 DME. DELETE: TERMINAL ROUTE FROM ARCOL INT TO ZEBRE (MT) LOM/MTO VOR/DME 5.65 DME. DELETE: TERMINAL ROUTE FROM MTO VOR/DME TO ZEBRE (MT) LOM/MTO VOR/DME 5.65 DME. DELETE: TERMINAL ROUTE FROM AXC VORTAC TO MTO VOR/DME. CHART NOTE: CIRCLING NA TO RWYS 18 AND 36. THIS IS ILS OR LOC RWY 29, AMDT 6D. 1706161542-PERM

FDC **7/3401** MTO IAP COLES COUNTY MEMORIAL, Mattoon/Charleston, IL. RNAV (GPS) RWY 24, AMDT 1... CHART NOTE: CIRCLING NA TO RWYS 18 AND 36. THIS IS RNAV (GPS) RWY 24, AMDT 1A. 1706161547-PERM

FDC **7/3402** MTO IAP COLES COUNTY MEMORIAL, Mattoon/Charleston, IL. RNAV (GPS) RWY 6, ORIG... CHART NOTE: CIRCLING NA TO RWYS 18 AND 36. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA. CHART NOTE: RWY 6 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. THIS IS RNAV (GPS) RWY 6, ORIG-A. 1706161553-PERM

FDC **7/3403** MTO IAP COLES COUNTY MEMORIAL, Mattoon/Charleston, IL. RNAV (GPS) RWY 11, ORIG... CHART NOTE: CIRCLING NA TO RWYS 18 AND 36. LNAV/VNAV ALL CATS VIS 1 5/8. THIS IS RNAV (GPS) RWY 11, ORIG-A. 1706161558-PERM

FDC **7/3404** MTO IAP COLES COUNTY MEMORIAL, Mattoon/Charleston, IL. RNAV (GPS) RWY 29, AMDT 1... CHART NOTE: CIRCLING NA TO RWYS 18 AND 36. THIS IS RNAV (GPS) RWY 29, AMDT 1A. 1706161601-PERM

FDC **7/4229** PTS IAP ATKINSON MUNI, Pittsburg, KS. RNAV (GPS) RWY 4, AMDT 1D... LNAV CAT A/B/C MDA 1300/HAT 354. CHART VDP AT 0.98 NM TO RW04ASTERISK. THIS IS RNAV (GPS) RWY 4, AMDT 1E. 1709141952-PERM

FDC **7/8801** MTO IAP COLES COUNTY MEMORIAL, Mattoon/Charleston, IL. VOR RWY 24, AMDT 11A... CHART NOTE: CIRCLING NA TO RWYS 18 AND 36. CHART CIRCLING ICON. CIRCLING CAT D MDA 1380/HAA 658. BEGOW FIX MINIMUMS: CIRCLING CAT C MDA 1240/HAA 518, CAT D MDA 1380/HAA 658. THIS IS VOR RWY 24, AMDT 11B. 1709211200-PERM