

U.S. Department
of Transportation

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

**Federal Aviation
Administration**

Transmittal Letter 18-05

January 12, 2018

**PREPARED BY THE AERONAUTICAL INFORMATION GROUP, AJV-53
(AVAILABLE ON THE WEB AT [HTTP://NFDC.FAA.GOV](http://NFDC.FAA.GOV))**

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

[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. [31175](#); Amdt. No. [3783](#)]

**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 [January 12, 2018](#)

A handwritten signature in black ink, appearing to read "John S. Duncan", with a stylized flourish extending from 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 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 1 March 2018

Salmon, ID, Lemhi County, RNAV (GPS)-D, Amdt 2
 Yakima, WA, Yakima Air Terminal/McAllister Field, RNAV (GPS) W RWY 27, Amdt 1B
 Yakima, WA, Yakima Air Terminal/McAllister Field, RNAV (GPS) X RWY 27, Amdt 1D
 Yakima, WA, Yakima Air Terminal/McAllister Field, RNAV (RNP) Y RWY 27, Orig-C
 Yakima, WA, Yakima Air Terminal/McAllister Field, RNAV (RNP) Z RWY 27, Orig-C
 Watertown, WI, Watertown Muni, NDB RWY 5, Amdt 1E

Effective 29 March 2018

Cordova, AK, Merle K (Mudhole) Smith, ILS OR LOC RWY 27, Amdt 11C
 Cordova, AK, Merle K (Mudhole) Smith, Takeoff Minimums and Obstacle DP, Amdt 8
 Little Rock, AR, Bill and Hillary Clinton National/Adams Field, ILS OR LOC RWY 4L, Amdt 26A
 Little Rock, AR, Bill and Hillary Clinton National/Adams Field, ILS OR LOC RWY 4R, Amdt 2D
 Little Rock, AR, Bill and Hillary Clinton National/Adams Field, ILS OR LOC RWY 22L, Orig-D
 Little Rock, AR, Bill and Hillary Clinton National/Adams Field, RNAV (GPS) RWY 36, Orig-C
 Little Rock, AR, Bill and Hillary Clinton National/Adams Field, Takeoff Minimums and Obstacle DP, Amdt 9
 Bishop, CA, Bishop, Takeoff Minimums and Obstacle DP, Amdt 4A
 Oxnard, CA, Oxnard, ILS OR LOC RWY 25, Amdt 13C
 Santa Barbara, CA, Santa Barbara Muni, Takeoff Minimums and Obstacle DP, Amdt 8A
 Cortez, CO, Cortez Muni, RNAV (GPS) RWY 3, Orig-A
 Washington, DC, Ronald Reagan Washington National, ILS OR LOC RWY 1, ILS RWY 1 (SA CAT I), ILS RWY 1 (CAT II), Amdt 41C
 Washington, DC, Ronald Reagan Washington National, LDA Y RWY 19, Amdt 1A
 Washington, DC, Ronald Reagan Washington National, RNAV (GPS) RWY 33, Amdt 1A
 Washington, DC, Ronald Reagan Washington National, RNAV (RNP) RWY 19, Amdt 2B
 Washington, DC, Ronald Reagan Washington National, Takeoff Minimums and Obstacle DP, Amdt 8A
 Middletown, DE, Summit, Takeoff Minimums and Obstacle DP, Amdt 2A
 Apalachicola, FL, Apalachicola Rgnl-Cleve Randolph Field, NDB RWY 14, Amdt 2C
 Perry, FL, Perry-Foley, Takeoff Minimums and Obstacle DP, Amdt 1A
 St Petersburg-Clearwater, FL, St Pete-Clearwater Intl, Takeoff Minimums and Obstacle DP, Amdt 3B
 Tampa, FL, Tampa Intl, ILS OR LOC RWY 19L, ILS RWY 19L (SA CAT I), ILS RWY 19L (CAT II), Amdt 40D
 St Marys, GA, St Marys, RNAV (GPS) RWY 4, Orig, CANCELED
 St Marys, GA, St Marys, RNAV (GPS) RWY 13, Amdt 1, CANCELED
 St Marys, GA, St Marys, RNAV (GPS) RWY 31, Amdt 1A, CANCELED
 St Marys, GA, St Marys, Takeoff Minimums and Obstacle DP, Amdt 4, CANCELED
 Valdosta, GA, Valdosta Rgnl, RNAV (GPS) RWY 4, Amdt 1C

Valdosta, GA, Valdosta Rgnl, RNAV (GPS) RWY 17, Amdt 2B
 Decorah, IA, Decorah Muni, RNAV (GPS) RWY 29, Orig-B
 Decorah, IA, Decorah Muni, VOR RWY 29, Amdt 3E
 Ottumwa, IA, Ottumwa Rgnl, RNAV (GPS) RWY 13, Orig-B
 Chicago, IL, Chicago Midway Intl, RNAV (GPS) RWY 4L, Orig-D
 Chicago, IL, Chicago Midway Intl, RNAV (GPS) RWY 13L, Orig-E
 Chicago, IL, Chicago Midway Intl, RNAV (GPS) RWY 31R, Orig-E
 Chicago, IL, Chicago Midway Intl, RNAV (GPS) Z RWY 4R, Amdt 3D
 Chicago, IL, Chicago O'Hare Intl, ILS OR LOC RWY 15, Amdt 30D, CANCELED
 Chicago, IL, Chicago O'Hare Intl, ILS OR LOC RWY 28L, ILS RWY 28L (SA CAT I), ILS RWY 28L (CAT II), ILS RWY 28L (CAT III), Orig-A
 Chicago, IL, Chicago O'Hare Intl, ILS Y OR LOC Y RWY 10R, Orig-B
 Chicago, IL, Chicago O'Hare Intl, ILS PRM Y RWY 10R, (CLOSE PARALLEL), Orig-B
 Chicago, IL, Chicago O'Hare Intl, ILS Z OR LOC Z RWY 10R, ILS Z RWY 10R (SA CAT I), ILS Z RWY 10R (CAT II), ILS Z RWY 10R (CAT III), Orig-A
 Chicago, IL, Chicago O'Hare Intl, RNAV (GPS) RWY 15, Amdt 2E, CANCELED
 Chicago, IL, Chicago O'Hare Intl, Takeoff Minimums and Obstacle DP, Amdt 20C
 Chicago/Lake in The Hills, IL, Lake in The Hills, RNAV (GPS) RWY 26, Orig-A
 Chicago/Romeoville, IL, Lewis University, LOC RWY 2, Amdt 1A
 Chicago/Romeoville, IL, Lewis University, LOC/DME RWY 9, Amdt 1A
 Chicago/Romeoville, IL, Lewis University, RNAV (GPS) RWY 2, Amdt 2A
 Chicago/West Chicago, IL, Dupage, ILS OR LOC RWY 2L, Amdt 2E
 Chicago/West Chicago, IL, Dupage, ILS OR LOC RWY 10, Amdt 8D
 Chicago/West Chicago, IL, Dupage, RNAV (GPS) RWY 2L, Orig-E
 Chicago/West Chicago, IL, Dupage, RNAV (GPS) RWY 20L, Orig-D
 Galesburg, IL, Galesburg Muni, RNAV (GPS) RWY 21, Orig-B
 Galesburg, IL, Galesburg Muni, VOR RWY 21, Amdt 7B
 Moline, IL, Quad City Intl, ILS OR LOC RWY 9, Amdt 31C
 Moline, IL, Quad City Intl, ILS OR LOC RWY 27, Amdt 2B
 Moline, IL, Quad City Intl, RNAV (GPS) RWY 9, Amdt 1D
 Moline, IL, Quad City Intl, RNAV (GPS) RWY 13, Amdt 1C
 Moline, IL, Quad City Intl, RNAV (GPS) RWY 27, Amdt 1D
 Moline, IL, Quad City Intl, RNAV (GPS) RWY 31, Amdt 1C
 Indianapolis, IN, Indianapolis Intl, ILS OR LOC RWY 23R, ILS RWY 23R (SA CAT I), ILS RWY 23R (SA CAT II), Amdt 6
 Boston, MA, General Edward Lawrence Logan Intl, RNAV (GPS) RWY 4L, Orig-A, SUSPENDED
 Cambridge, MD, Cambridge-Dorchester Rgnl, NDB RWY 34, Amdt 8, CANCELED
 Cambridge, MD, Cambridge-Dorchester Rgnl, RNAV (GPS) RWY 34, Amdt 1
 Alma, MI, Gratiot Community, VOR RWY 18, Amdt 1B
 Battle Creek, MI, W K Kellogg, RNAV (GPS) RWY 23R, Amdt 1C
 Charlotte, MI, Fitch H Beach, RNAV (GPS) RWY 21, Amdt 1A
 Detroit, MI, Coleman A Young Muni, VOR RWY 33, Amdt 28B, CANCELED
 East Tawas, MI, Iosco County, VOR-A, Amdt 8, CANCELED
 Gladwin, MI, Gladwin Zettel Memorial, RNAV (GPS) RWY 27, Orig-B
 Grand Rapids, MI, Gerald R Ford Intl, RNAV (GPS) RWY 26L, Amdt 1C

Ionia, MI, Ionia County, VOR-A, Amdt 1, CANCELED
 Mason, MI, Mason Jewett Field, VOR-A, Amdt 5, CANCELED
 Duluth, MN, Duluth Intl, COPTER ILS OR LOC RWY 27, Amdt 2B
 Duluth, MN, Duluth Intl, ILS OR LOC RWY 9, ILS RWY 9 (SA CAT I), ILS RWY 9 (CAT II), Amdt 22B
 Duluth, MN, Duluth Intl, ILS OR LOC RWY 27, Amdt 10C
 Moorhead, MN, Moorhead Muni, RNAV (GPS) RWY 30, Amdt 1C
 St Louis, MO, St Louis Lambert Intl, ILS OR LOC RWY 12L, ILS RWY 12L (CAT II), ILS RWY 12L (CAT III), Amdt 6C
 St Louis, MO, St Louis Lambert Intl, ILS OR LOC RWY 12R, Amdt 22C
 St Louis, MO, St Louis Lambert Intl, ILS OR LOC RWY 30L, Amdt 12C
 St Louis, MO, St Louis Lambert Intl, ILS OR LOC RWY 30R, ILS RWY 30R (CAT II), ILS RWY 30R (CAT III), Amdt 11A
 St Louis, MO, St Louis Lambert Intl, RNAV (GPS) Y RWY 12L, Amdt 2D
 St Louis, MO, St Louis Lambert Intl, RNAV (GPS) Y RWY 12R, Amdt 1D
 St Louis, MO, St Louis Lambert Intl, RNAV (GPS) Y RWY 30L, Amdt 1D
 St Louis, MO, St Louis Lambert Intl, RNAV (GPS) Y RWY 30R, Amdt 2A
 St Louis, MO, St Louis Lambert Intl, RNAV (RNP) Z RWY 12L, Orig-C
 St Louis, MO, St Louis Lambert Intl, RNAV (RNP) Z RWY 12R, Orig-C
 St Louis, MO, St Louis Lambert Intl, RNAV (RNP) Z RWY 30L, Orig-C
 St Louis, MO, St Louis Lambert Intl, RNAV (RNP) Z RWY 30R, Orig-C
 Shelby, MT, Shelby, NDB RWY 23, Amdt 7A, CANCELED
 Gwinner, ND, Gwinner-Roger Melroe Field, RNAV (GPS) RWY 34, Amdt 4A
 Belen, NM, Alexander Muni, Takeoff Minimums and Obstacle DP, Amdt 1A
 Hudson, NY, Columbia County, RNAV (GPS) RWY 21, Amdt 1
 Watertown, NY, Watertown Intl, ILS OR LOC RWY 7, Amdt 8
 Dayton, OH, James M Cox Dayton Intl, ILS OR LOC RWY 18, Amdt 10A
 Dayton, OH, James M Cox Dayton Intl, ILS OR LOC RWY 24L, Amdt 10A
 Dayton, OH, James M Cox Dayton Intl, ILS OR LOC RWY 24R, Amdt 10A
 Chandler, OK, Chandler Muni, NDB RWY 35, Amdt 1A, CANCELED
 Perkasio, PA, Pennridge, RNAV (GPS) RWY 8, Amdt 1C
 Aiken, SC, Aiken Rgnl, Takeoff Minimums and Obstacle DP, Amdt 1A
 Aberdeen, SD, Aberdeen Rgnl, RNAV (GPS) RWY 13, Amdt 1
 Fort Hood/Killeen, TX, Robert Gray AAF, NDB RWY 15, Amdt 6A, CANCELED
 Fort Hood/Killeen, TX, Robert Gray AAF, RADAR-2, Orig-A
 Fort Worth, TX, Fort Worth Alliance, ILS OR LOC RWY 16L, ILS RWY 16L (CAT II), ILS RWY 16L (CAT III), Amdt 7
 Fort Worth, TX, Fort Worth Alliance, ILS OR LOC RWY 34R, Amdt 7
 Fort Worth, TX, Fort Worth Alliance, RNAV (GPS) RWY 16L, Amdt 2
 Fort Worth, TX, Fort Worth Alliance, RNAV (GPS) RWY 34R, Amdt 3
 Fort Worth, TX, Fort Worth Alliance, Takeoff Minimums and Obstacle DP, Amdt 2
 Abingdon, VA, Virginia Highlands, VOR/DME-B, Amdt 6, CANCELED
 Richlands, VA, Tazewell County, LOC/DME RWY 25, Amdt 1B
 Boscobel, WI, Boscobel, RNAV (GPS) RWY 7, Orig-A
 Mineral Point, WI, Iowa County, NDB RWY 22, Amdt 6A, CANCELED

Bluefield, WV, Mercer County, ILS OR LOC RWY 23, Amdt 15C
Bluefield, WV, Mercer County, VOR RWY 23, Amdt 5C
Pineville, WV, Kee Field, RNAV (GPS) RWY 8, Orig-C
Pineville, WV, Kee Field, RNAV (GPS) RWY 26, Orig-C

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		CEGVI						
YOWLS		ZAROD (TF) (FB) (RNP 2.00)		025.12 / 15.46				14000		CLIMB TO 12000 DIRECT REWIN AND ON TRACK 318.28 TO FAXON AND HOLD, CONTINUE CLIMB-IN-HOLD TO 12000.						
WABUD		ZAROD (TF) (FB) (RNP 2.00)		290.08 / 16.05				14000								
ZAROD (IAF)		HOSUN (TF) (FB) (RNP 1.00)		343.24 / 6.67				12000								
HOSUN		JIRBA (TF) (FB) (RNP 1.00)		344.66 / 5.54				10300								
JIRBA (IF)		CAXOD (TF) (FB) (RNP 1.00)		017.77 / 8.29				9200		ADDITIONAL FLIGHT DATA: HOLD N, RT, 163.00 INBOUND. CHART FAS OBST: 4740 VERT STR 450500N/1135300W. 6519 AAO 450132N/1135642W CHART 5434 TREE 450347N/1135425W BOSKS TO RW35: 8.91/40. FAC CROSSES RWY C/L EXTENDED 3000 FT FROM THLD. CHART CIRCLING ICON. FINAL APPROACH COURSE OFFSET 14.20 DEGREES.						
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 13E EPOCH YEAR: 2020						
2. PROFILE STARTS AT JIRBA																
3. FAC: 008.96 FAF: AYASO DIST FAF TO MAP: 6.24 THLD: 6.72																
4. MIN. ALT: JIRBA 10300, CAXOD 9200, AYASO 8700, BOSKS/2.60 NM TO CEGVI 7020																
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: CEGVI 11300																
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		6000	1 1/4	1956	6000	1 1/2	1956	6220	3	2176		NA				
NOTES: CHART NOTE: CIRCLING RWY 35 NA AT NIGHT. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: CIRCLING NA FOR CAT C E OF RWY 17-35. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT YOWLS ON V298 WESTBOUND, AND ARRIVALS AT WABUD ON V269 SOUTHEAST BOUND.																
CITY AND STATE SALMON, ID		ELEVATION: 4044 TDZE: AIRPORT NAME: LEMHI COUNTY		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS)-D, AMDT 2 1 MARCH 2018						SUP: AMDT: 1 DATED 03/31/2016				

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
CAXOD	AYASO (TF) (FB) (RNP 1.00)	021.44 / 2.07	8700
AYASO (FAF)	BOSKS/2.60 NM TO CEGVI (TF) (FB) (RNP 0.30)	008.96 / 3.64	
BOSKS/2.60 NM TO CEGVI	CEGVI (MAP) (TF) (FO) (RNP 0.30)	008.96 / 2.60	
CEGVI (MAP)	4444 MSL (CA)	008.96	
4444 MSL	REWIN (DF) (FB) (RNP 1.00)		
REWIN	FAXON (TF) (FO) (RNP 1.00)	318.28 / 22.70	12000

CITY AND STATE
SALMON, ID

ELEVATION: 4044 **TDZE:**
AIRPORT NAME:
LEMHI COUNTY

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS)-D, AMDT 2
1 MARCH 2018

SUP: **QUALITY 10 CHECKED**
AMDT: **1**
DATED: **03/31/2016**

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		LNAV: RW27 CLIMB TO 2000 THEN CLIMBING RIGHT TURN TO 6500 DIRECT GEBTE AND HOLD, CONTINUE CLIMB-IN-HOLD TO 6500. *MISSED APPROACH REQUIRES MINIMUM CLIMB OF 290 FEET PER NM TO 4100. ADDITIONAL FLIGHT DATA: HOLD S, LT, 015.00 INBOUND. CHART FAS OBST: 1131 TREE 463422N/1203146W. CHART VDP AT 0.92 NM TO RW27. CHART 1853 TOWER 463154N/1202718W 2199 AAO 463100N/1202422W CHART: R-6714 A, B, C, D. OAKSS TO RW27: 3.00/57						
SELAH		OPISE (TF) (FO) (RNP 2.00)		114.52 / 21.02				5400								
MARRK (IAF)		OPISE (NOPT) (TF) (FB) (RNP 1.00)		258.57 / 8.24				4700								
SUNED (IAF)		OPISE (NOPT) (TF) (FB) (RNP 1.00)		305.56 / 13.64				4700								
OPISE (IF/IAF)		ZUDAX (TF) (FB) (RNP 1.00)		274.27 / 3.18				3700								
ZUDAX		OAKSS (TF) (FB) (RNP 1.00)		274.21 / 7.37				2900								
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD E OPISE, LT, 274.27 INBOUND, 4700 FT. IN LIEU OF PT (IAF) 3. FAC: 274.09 FAF: OAKSS DIST FAF TO MAP: 5.63 THLD: 5.63 4. MIN. ALT: OPISE 4700, ZUDAX 3700, OAKSS 2900, AGITY/3.40 NM TO RW27 2180 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: RW27 8200																
										MAG VAR: 16E			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	
LNAV MDA*	1400	2400	332	1400	2400	332	1400	3000	332	1400	3000	332				
LNAV MDA	1980	4000	912	1980	4000	912	1980	2	912	1980	2	912				
CIRCLING	1980	1 1/4	881	1980	1 1/4	881	1980	2 3/4	881	1980	3	881				
NOTES: CHART NOTE: CIRCLING RWY 4 NA AT NIGHT. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SELAH ON V298 NORTHWEST BOUND, V468 NORTHBOUND, AND T261 NORTHWEST BOUND. (CONTINUED ON PAGE 2)																
CITY AND STATE YAKIMA, WA		ELEVATION: 1099 TDZE: 1068 AIRPORT NAME: YAKIMA AIR TERMINAL/MCALLISTER FIELD		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) W RWY 27, AMDT 1B 1 MARCH 2018						SUP:				
												AMDT: 1A				
												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
OAKSS (FAF)	AGITY/3.40 NM TO RW27 (TF) (FB) (RNP 0.30)	274.09 / 2.23	
AGITY/3.40 NM TO RW27	RW27 (MAP) (TF) (FO) (RNP 0.30)	274.06 / 3.40	
RW27 (MAP)	2000 MSL (CA)	274.06	2000
2000 MSL	GEBTE (DF) (FO) (RNP 1.00)		6500

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MARRK ON V204 EASTBOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SUNED ON V4-298 SOUTHEAST BOUND, V497 NORTHEAST BOUND, AND V497 SOUTHBOUND.

CHART NOTE: CIRCLING NA S OF RWY 9-27.

CHART PLANVIEW NOTE: SELAH TRANSITION NA WHEN R-6714 A, C, D ACTIVE.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE *LNAV CAT C AND D VISIBILITY TO RVR 5000.

QUALITY
24
CHECKED

CITY AND STATE

YAKIMA, WA

ELEVATION: 1099

TDZE: 1068

AIRPORT NAME:

YAKIMA AIR TERMINAL/MCALLISTER FIELD

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) W RWY 27, AMDT 1B

1 MARCH 2018

SUP:

AMDT: 1A

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.								
US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION												
TERMINAL ROUTES				MISSED APPROACH								
FROM	TO	COURSE AND DISTANCE	ALTITUDE	LPV: DA CLIMB TO 2100 THEN CLIMBING RIGHT TURN TO 6500 DIRECT GEBTE AND HOLD, CONTINUE CLIMB-IN-HOLD TO 6500. *MISSED APPROACH REQUIRES MINIMUM CLIMB OF 300 FEET PER NM TO 3700. ADDITIONAL FLIGHT DATA: HOLD S, LT, 015.00 INBOUND. DISTANCE TO THLD FROM 200 HAT: 0.51 NM. WAAS CHANNEL # 90512 REFERENCE PATH ID: W27A CHART: R-6714 A, B, C, D. LTP HAE: 298.5 M								
SELAH	OPISE (TF) (FO) (RNP 2.00)	114.52 / 21.02	5400									
MARRK (IAF)	OPISE (NOPT) (TF) (FB) (RNP 1.00)	258.57 / 8.24	4700									
SUNED (IAF)	OPISE (NOPT) (TF) (FB) (RNP 1.00)	305.56 / 13.64	4700									
OPISE (IF/IAF)	RACOB (TF) (FB) (RNP 1.00)	274.27 / 7.72	3800									
RACOB (FAF)	RW27 (MAP) (TF) (FO) (RNP 0.30)	274.14 / 8.46										
(SEE FORM 8260-10)												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD E OPISE, LT, 274.27 INBOUND, 4700 FT. IN LIEU OF PT (IAF) 3. FAC: 274.14 FAF: RACOB DIST FAF TO MAP: _____ THLD: _____ 4. MIN. ALT: OPISE 4700, RACOB 3800 5. DIST TO THLD FROM OM: 8.46 MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 3800 GS ALT AT: RACOB 3800 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 57.2 34:1 IS CLEAR 8. MSA FROM: RW27 8200												
				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*	1268	2400	200	1268	2400	200	1268	2400	200	1268	2400	200
LPV DA	1568	6000	500	1568	6000	500	1568	6000	500	1568	6000	500
NOTES: CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SELAH ON V298 NORTHWEST BOUND, V468 NORTHBOUND, AND T261 NORTHWEST BOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MARRK ON V204 EASTBOUND. (CONTINUED ON PAGE 2)												
CITY AND STATE		ELEVATION: 1099 TDZE: 1068		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:			SUP:			
YAKIMA, WA		AIRPORT NAME:		YAKIMA AIR TERMINAL/MCALLISTER FIELD		RNAV (GPS) X RWY 27, AMDT 1D			AMDT: 1C			
						1 MARCH 2018			DATED 08/17/2017			



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

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

TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW27 (MAP)	2100 MSL (CA)	274.14	2100
2100 MSL	GEBTE (DF) (FO) (RNP 1.00)		6500

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SUNED ON V4-298 SOUTHEAST BOUND, V497 NORTHEAST BOUND, AND V497 SOUTHBOUND.

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

CHART PLANVIEW NOTE: SELAH TRANSITION NA WHEN R-6714 A, C, D ACTIVE.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV DA ALL CATS VISIBILITY TO 1 5/8 SM.

QUALITY
24
CHECKED

CITY AND STATE
YAKIMA, WA

ELEVATION: 1099 TDZE: 1068
AIRPORT NAME:
YAKIMA AIR TERMINAL/MCALLISTER FIELD

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) X RWY 27, AMDT 1D
1 MARCH 2018

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

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

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

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KYKM
RUNWAY	RW27
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	X
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W27A
LTP/FTP LATITUDE	463355.5310N
LTP/FTP LONGITUDE	1203152.0795W
LTP/FTP ELLIPSOIDAL HEIGHT	+02985
FPAP LATITUDE	463425.9700N
FPAP LONGITUDE	1203353.4500W
THRESHOLD CROSSING HEIGHT (TCH)	00057.2
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0432
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

<u>CRC REMAINDER</u>	1FB67059
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+03197
FPAP ORTHOMETRIC HEIGHT	+03197

QUALITY
24
CHECKED

CITY AND STATE YAKIMA, WA	ELEVATION: 1099 AIRPORT NAME: YAKIMA AIR TERMINAL/MCALLISTER FIELD	TDZE: 1068 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) X RWY 27, AMDT 1D 1 MARCH 2018	SUP:
				AMDT: 1C
				DATED: 08/17/2017

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, TITLE 14 CFR PART 97.33						Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.					
TERMINAL ROUTES												MISSED APPROACH					
FROM			TO			COURSE AND DISTANCE			ALTITUDE			RNP: DA CLIMB TO 5100 ON TRACK 274.00 TO PUBBO LEFT TURN TO SIBSY AND ON TRACK 097.41 TO MUDLE AND HOLD. *MISSED APPROACH REQUIRES MINIMUM CLIMB OF 425 FEET PER NM TO 3400. ADDITIONAL FLIGHT DATA: HOLD N, RT, 192.27 INBOUND. CHART FAS OBST: 1100 POLE 463351N/1203054W CHART R-6714 A, B, C, D. DISTANCE TO THLD FROM 350 HAT: 0.98 NM. ROUTE TYPE: A, R QUALIFIER1: P QUALIFIER2: S #TCH 1106.2 MSL (DO NOT CHART)					
DATVE (IAF)			ZIVOM (TF) (FB) (RNP 1.00)			114.91 / 17.22			5300								
ZIVOM (IF)			OVTEE (RF) (FB) (RNP 0.30)			(3.50 NM RADIUS CW (CFFQK))/2.68			4500								
OVTEE			WUPRO (RF) (FB) (RNP 0.30)			(3.50 NM RADIUS CW (CFFQK))/2.44			3900								
WUPRO			OAKSS (RF) (FB) (RNP 0.30)			(3.10 NM RADIUS CW (CFRDK))/4.06			2900								
PAPPS (IAF)			WUDEB (TF) (FB) (RNP 1.00)			267.81 / 15.20			5000			ADDITIONAL FLIGHT DATA: HOLD N, RT, 192.27 INBOUND. CHART FAS OBST: 1100 POLE 463351N/1203054W CHART R-6714 A, B, C, D. DISTANCE TO THLD FROM 350 HAT: 0.98 NM. ROUTE TYPE: A, R QUALIFIER1: P QUALIFIER2: S #TCH 1106.2 MSL (DO NOT CHART)					
(SEE FORM 8260-10)																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																	
2. PROFILE STARTS AT OAKSS																	
3. FAC: <u>274.09</u> FAF: _____ DIST FAF TO MAP: _____ THLD: _____																	
4. MIN. ALT: _____																	
5. DIST TO THLD FROM OM: <u>5.63</u> MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																	
6. MIN GS INCPT: <u>2900</u> GS ALT AT: <u>OAKSS 2900</u> OM: _____ MM: _____ IM: _____																	
7. GS ANGLE: <u>3.00</u> TCH: <u>57.2</u> # <u>34:1</u> IS CLEAR																	
8. MSA FROM: <u>RW27 8200</u>												MAG VAR: 16E		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		
AUTHORIZATION REQUIRED																	
RNP 0.30 DA*	1418	3000	350	1418	3000	350	1418	3000	350	1418	3000	350					
RNP 0.30 DA	1845	2 1/4	777	1845	2 1/4	777	1845	2 1/4	777	1845	2 1/4	777					
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -17C (2F) OR ABOVE 54C (130F). @ CAT A, B, C, D 800-2 1/4 CHART NOTE: RF REQUIRED. CHART NOTE: GPS REQUIRED. CHART PLANVIEW NOTE AT ZIVOM : MAX 210 KIAS UNTIL OAKSS. (CONTINUED ON PAGE 2)																	
CITY AND STATE				ELEVATION: 1099 TDZE: 1068				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:	
YAKIMA, WA				AIRPORT NAME:								RNAV (RNP) Y RWY 27, ORIG-C				AMDT: ORIG-B	
				YAKIMA AIR TERMINAL/MCALLISTER FIELD								1 MARCH 2018				DATED 12/11/2014	



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.	
RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33					
TERMINAL ROUTES, (CONT.):					
FROM		TO	COURSE AND DISTANCE	ALTITUDE	
WUDEB (IF)	CURKA (TF) (FB) (RNP 1.00)	268.05 / 6.00	3200		
SUNED (IAF)	JURET (TF) (FB) (RNP 1.00)	293.59 / 12.03	4000		
JURET (IF)	CURKA (TF) (FB) (RNP 1.00)	293.55 / 9.38	3200		
CURKA	OAKSS (TF) (FB) (RNP 0.30)	274.13 / 2.00	2900		
SELAH (IAF)	ZOTOG (TF) (FB) (RNP 1.00)	161.76 / 13.22	5000		
ZOTOG (IF)	YIGUN (RF) (FB) (RNP 1.00)	(4.20 NM RADIUS CCW (CFVRW))/7.19	3000		
SIMCO (IAF)	MUDLE (TF) (FB) (RNP 1.00)	079.49 / 11.92	3500		
MUDLE (IF)	YIGUN (TF) (FB) (RNP 1.00)	063.60 / 6.90	3000		
YIGUN	OAKSS (RF) (FB) (RNP 0.30)	(3.70 NM RADIUS CCW (CFPKL))/9.66	2900		
OAKSS (FAF)	RW27 (MAP) (TF) (FO) (RNP 0.30)	274.09 / 5.63			
RW27 (MAP)	PUBBO (TF) (FB) (RNP 1.00)	274.00 / 4.40			
PUBBO	SIBSY (RF) (FB) (RNP 1.00)	(5.00 NM RADIUS CCW (CFVNF)) / 20.37			
SIBSY	MUDLE (TF) (FO) (RNP 1.00)	097.41 / 6.28			
NOTES, (CONT.):					
CHART PLANVIEW NOTE AT ZOTOG : MAX 210 KIAS UNTIL OAKSS.					
CHART PLANVIEW NOTE AT YIGUN : MAX 210 KIAS UNTIL OAKSS.					
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DATVE ON V298 NORTHWEST BOUND.					
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PAPPS ON V204 EASTBOUND.					
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SUNED ON V4-298 SOUTHEAST BOUND AND V497 NORTHEAST BOUND.					
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SELAH ON V298 NORTHWEST BOUND, V468 NORTH BOUND,					
CITY AND STATE		ELEVATION: 1099	TDZE: 1068	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
YAKIMA, WA		AIRPORT NAME:		RNAV	RNAV (RNP) Y RWY 27, ORIG-C
		YAKIMA AIR TERMINAL/MCALLISTER FIELD			1 MARCH 2018
					SUP:
					AMDT: ORIG-B
					DATED: 12/11/2014



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION			Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.		
RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33					
AND T261 NORTHWEST BOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SIMCO ON V448 SOUTHWEST BOUND. CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS. CHART PLANVIEW NOTE AT SELAH, DATVE, SIMCO, PAPPS, AND SUNED: (RNP 0.30). CHART NOTE: DATVE TRANSITION NA WHEN R-6714 A, C, D ACTIVE.					
QUALITY 24 CHECKED					
CITY AND STATE YAKIMA, WA	ELEVATION: 1099 AIRPORT NAME: YAKIMA AIR TERMINAL/MCALLISTER FIELD	TDZE: 1068	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (RNP) Y RWY 27, ORIG-C 1 MARCH 2018	SUP: AMDT: ORIG-B DATED: 12/11/2014

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, TITLE 14 CFR PART 97.33										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.															
TERMINAL ROUTES													MISSED APPROACH																			
FROM				TO				COURSE AND DISTANCE						ALTITUDE		RNP: DA																
DATVE (IAF)				ZIVOM (TF) (FB) (RNP 1.00)				114.91 / 17.22						5300		CLIMB TO 5100 ON TRACK 274.00 TO YEPCU LEFT TURN TO JOPDI LEFT TURN TO ZEMUN LEFT TURN TO MUDLE AND HOLD. *MISSED APPROACH REQUIRES A MINIMUM CLIMB OF 215 FEET PER NM TO 4300.																
ZIVOM (IF)				OVTEE (RF) (FB) (RNP 0.30)				(3.50 NM RADIUS CW (CFFQK))/2.68						4500																		
OVTEE				WUPRO (RF) (FB) (RNP 0.30)				(3.50 NM RADIUS CW (CFFQK))/2.44						3900																		
WUPRO				OAKSS (RF) (FB) (RNP 0.30)				(3.10 NM RADIUS CW (CFRDK))/4.06						2900																		
PAPPS (IAF)				WUDEB (TF) (FB) (RNP 1.00)				267.81 / 15.20						5000		ADDITIONAL FLIGHT DATA: HOLD N, RT, 192.27 INBOUND. CHART FAS OBST: ASC. CHART R-6714 A, B, C, D. DISTANCE TO THLD FROM 280 HAT: 0.76 NM. ROUTE TYPE: A, R QUALIFIER1: P QUALIFIER2: S #TCH 1106.2 MSL (DO NOT CHART)																
(SEE FORM 8260-10)																																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																																
2. PROFILE STARTS AT OAKSS																																
3. FAC: 274.09 FAF: _____ DIST FAF TO MAP: _____ THLD: _____																																
4. MIN. ALT: _____																																
5. DIST TO THLD FROM OM: 5.63 MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																																
6. MIN GS INCPT: 2900 GS ALT AT: OAKSS 2900 OM: _____ MM: _____ IM: _____																																
7. GS ANGLE: 3.00 TCH: 57.2 # 34:1 IS CLEAR																																
8. MSA FROM: RW27 8200													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																	
AUTHORIZATION REQUIRED																																
RNP 0.10 DA*	1348	2400	280	1348	2400	280	1348	2400	280	1348	2400	280																				
RNP 0.30 DA	1468	4500	400	1468	4500	400	1468	4500	400	1468	4500	400																				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -17C (2F) OR ABOVE 54C (130F). CHART NOTE: RF REQUIRED. CHART NOTE: GPS REQUIRED. CHART PLANVIEW NOTE AT ZIVOM : MAX 210 KIAS UNTIL OAKSS. (CONTINUED ON PAGE 2)																																
CITY AND STATE YAKIMA, WA				ELEVATION: 1099 TDZE: 1068 AIRPORT NAME: YAKIMA AIR TERMINAL/MCALLISTER FIELD				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (RNP) Z RWY 27, ORIG-C 1 MARCH 2018						SUP: AMDT: ORIG-B DATED 12/11/2014																



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION			Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.	
RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33				
TERMINAL ROUTES, (CONT.):				
FROM	TO	COURSE AND DISTANCE	ALTITUDE	
WUDEB (IF)	CURKA (TF) (FB) (RNP 1.00)	268.05 / 6.00	3200	
SUNED (IAF)	JURET (TF) (FB) (RNP 1.00)	293.59 / 12.03	4000	
JURET (IF)	CURKA (TF) (FB) (RNP 1.00)	293.55 / 9.38	3200	
CURKA	OAKSS (TF) (FB) (RNP 0.30)	274.13 / 2.00	2900	
SELAH (IAF)	ZOTOG (TF) (FB) (RNP 1.00)	161.76 / 13.22	5000	
ZOTOG (IF)	YIGUN (RF) (FB) (RNP 1.00)	(4.20 NM RADIUS CCW (CFVRW))/7.19	3000	
SIMCO (IAF)	MUDLE (TF) (FB) (RNP 1.00)	079.49 / 11.92	3500	
MUDLE (IF)	YIGUN (TF) (FB) (RNP 1.00)	063.60 / 6.90	3000	
YIGUN	OAKSS (RF) (FB) (RNP 0.30)	(3.70 NM RADIUS CCW (CFPKL))/9.66	2900	
OAKSS (FAF)	RW27 (MAP) (TF) (FB) (RNP 0.30)	274.09 / 5.63		
RW27 (MAP)	YEPCU (TF) (FB) (RNP 0.40)	274.00 / 2.43		
YEPCU	JOPDI (RF) (FB) (RNP 0.60)	(7.00 NM RADIUS CCW (CFVMN)) / 3.18		
JOPDI	ZEMUN (RF) (FB) (RNP 0.70)	(7.00 NM RADIUS CCW (CFVMN)) / 1.71		
ZEMUN	MUDLE (RF) (FO) (RNP 1.00)	(6.11 NM RADIUS CCW (CFVGZ)) / 20.06		
NOTES, (CONT.):				
CHART PLANVIEW NOTE AT YIGUN : MAX 210 KIAS UNTIL OAKSS.				
CHART PLANVIEW NOTE AT ZOTOG : MAX 210 KIAS UNTIL OAKSS.				
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DATVE ON V298 NORTHWEST BOUND.				
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PAPPS ON V204 EASTBOUND.				
CITY AND STATE	ELEVATION: 1099	TDZE: 1068	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
YAKIMA, WA	AIRPORT NAME:		RNAV	RNAV (RNP) Z RWY 27, ORIG-C
	YAKIMA AIR TERMINAL/MCALLISTER FIELD			1 MARCH 2018
			SUP:	
			AMDT:	ORIG-B
			DATED:	12/11/2014



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33			Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT , HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.		
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SUNED ON V4-298 EASTBOUND, AND V497 NORTHEAST BOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SELAH ON V298 NORTHWEST BOUND, V468 NORTHBOUND, AND T261 NORTHWEST BOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SIMCO ON V448 SOUTHWEST BOUND. CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS. CHART NOTE: MISSED APPROACH REQUIRES RNP LESS THAN 1.0. CHART PLANVIEW NOTE AT SELAH, DATVE, SIMCO, PAPPS, AND SUNED: (RNP 0.30) CHART NOTE: FOR INOPERATIVE ALS INCREASE *RNP 0.10 DA VISIBILITY ALL CATS TO RVR 4500 AND RNP 0.30 DA VISIBILITY ALL CATS TO 1 1/4 SM. CHART NOTE: DATVE TRANSITION NA WHEN R-6714 A, C, D ACTIVE.					
CITY AND STATE YAKIMA, WA	ELEVATION: 1099 AIRPORT NAME: YAKIMA AIR TERMINAL/MCALLISTER FIELD	TDZE: 1068	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (RNP) Z RWY 27, ORIG-C 1 MARCH 2018	SUP:
					AMDT: ORIG-B
					DATED: 12/11/2014



U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION NDB STANDARD INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.27							Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES										MISSED APPROACH						
FROM		TO			COURSE AND DISTANCE			ALTITUDE		MAP: RYV NDB						
BAE VOR/DME		RYV NDB			278.13 / 19.66			2500		CLIMB TO 2500 THEN RIGHT TURN DIRECT RYV NDB AND HOLD.						
										ADDITIONAL FLIGHT DATA: HOLD SW, RT, 039.00 INBOUND. CHART FAS OBST: 1089 TOWER 430521N/0884529W. FAC CROSSES RWY C/L EXTENDED 3000 FT FROM THLD.						
1. PT <u>L</u> SIDE OF COURSE <u>219.00</u> OUTBOUND <u>2500</u> FT WITHIN <u>10</u> MILES OF <u>RYV NDB</u> (IAF)																
2.																
3. FAC <u>039.00</u> FAF _____ DIST FAF TO MAP _____ THLD _____																
4. MIN. ALT _____																
8. MSA FROM: <u>RYV NDB 2700</u>										MAG VAR: <u>1W</u>			EPOCH YEAR: <u>1990</u>			
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N		A		X					
CATEGORY =====>		A			B			C			D			E		
	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	
S-05	1460	1	639	1460	1	639	1460	1 3/4	639	1460	2	639				
CIRCLING	1460	1	627	1460	1	627	1460	1 1/2	627	1720	3	887				
NOTES:																
CHART NOTE: RWY 5 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.																
CHART NOTE: STRAIGHT-IN RWY 5 NA AT NIGHT, CIRCLING RWY 5, 23 NA AT NIGHT.																
QUALITY 19 CHECKED																
CITY AND STATE WATERTOWN, WI		ELEVATION: 833 TDZE: 821 AIRPORT NAME: WATERTOWN MUNI			FACILITY IDENTIFIER: RYV		PROCEDURE NO./AMD'T NO./EFFECTIVE DATE: NDB RWY 5, AMDT 1E 1 MARCH 2018					SUP AMD'T 1D DATE 10/12/2017				

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: I-CDV 1.34 DME CLIMB TO 700 THEN CLIMBING LEFT TURN TO 5000 ON HEADING 180 AND GCR NDB BRG 206.15 TO EGGER INT/I-CDV 11.14 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 5000. <u>ALTERNATE MA (DO NOT CHART):</u> CLIMB TO 700 THEN CLIMBING LEFT TURN TO 5000 ON HEADING 120 AND JOH VOR/DME (SEE FORM 8260-10) ADDITIONAL FLIGHT DATA: HOLD SW, RT, 026.15 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD W CASEL/JOH 39.75 DME, RT, 084.54 INBOUND. CHART FAS OBST: 182 TREE 602833N/1452224W 499 AAO 602643N/1451122W CHART VDP AT 2.41 DME* DISTANCE VDP TO THLD 1.07 NM. *LOC ONLY.									
JOH VOR/DME		GCR NDB		069.67 / 33.41				6300											
ALJ NDB		GCR NDB		069.54 / 33.06				6300											
GCR NDB		FOXUL/I-CDV 20.14 DME		098.35 / 19.49				6300											
FORAT/I-CDV 44.63 DME (IAF)		FOXUL/I-CDV 20.14 DME (NOPT)		275.24 / 24.48 (I-CDV)				6000											
FOXUL/I-CDV 20.14 DME (IF/IAF)		ZONSI/I-CDV 9.82 DME		275.24 / 10.32 (I-CDV)				2800											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD E FOXUL, RT, 275.24 INBOUND, 6000 FT. IN LIEU OF PT (IAF) 3. FAC: 275.24 FAF: ZONSI/I-CDV 9.82 DME DIST FAF TO MAP: _____ THLD: 8.48 4. MIN. ALT: FOXUL 6000, ZONSI 2800, FELAW/I-CDV 4.10 DME 980* 5. DIST TO THLD FROM OM: _____ - _____ MM: _____ - _____ IM: _____ 150 HAT: _____ - _____ 100 HAT: _____ - _____ GS ANT: 1000 6. MIN GS INCPT: 2800 GS ALT AT: ZONSI 2800 OM: _____ - _____ MM: _____ - _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 57.1 8. MSA FROM: GCR NDB 103-233 4400, 233-103 9300																MAG VAR: 19E		EPOCH YEAR: 2015	
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		ILS: STANDARD #				LOC: STANDARD @					
CATEGORY =====>		A		B		C		D		E									
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA				
S-ILS 27	303	2400	250	303	2400	250	303	2400	250	303	2400	250							
S-LOC 27	440	2400	387	440	2400	387	440	3500	387	440	3500	387							
CIRCLING	460	1	406	520	1	466	520	1 1/2	466	620	2	566							
NOTES: CHART NOTE: ADF REQUIRED. CHART NOTE: DME REQUIRED. CHART PLANVIEW NOTE: ADF AND DME REQUIRED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT FORAT ON V319 EASTBOUND. (CONTINUED ON PAGE 2)																			
CITY AND STATE CORDOVA, AK		ELEVATION: 54 TDZE: 53 AIRPORT NAME: MERLE K (MUDHOLE) SMITH		FACILITY IDENTIFIER: I-CDV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 27, AMDT 11C 29 MARCH 2018						SUP: ILS OR LOC/DME RWY 27							
												AMDT: 11B							
												DATED 09/18/2014							

QUALITY
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-085 TO CASEL/JOH 39.75 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 5000.

NOTES, (CONT.):
CHART NOTE: CIRCLING NA N OF RWY 9-27.
CHART NOTE: CIRCLING TO RWY 16/34 NA AT NIGHT.



CITY AND STATE CORDOVA, AK	ELEVATION: 54 AIRPORT NAME: MERLE K (MUDHOLE) SMITH	TDZE: 53	FACILITY IDENTIFIER: I-CDV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 27, AMDT 11C 29 MARCH 2018	SUP: ILS OR LOC/DME RWY 27
					AMDT: 11B
					DATED: 09/18/2014

**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
CORDOVA, AK	MERLE K (MUDHOLE) SMITH	29 MARCH 2018	8

TAKEOFF MINIMUMS:

RWY 16, 34: NA - ATC

RWY 9: STANDARD

RWY 27: STANDARD WITH MINIMUM CLIMB OF 283 FT PER NM TO 4300.

TEXTUAL DEPARTURE PROCEDURES:

RWY 9: CLIMB TO ASSIGNED ALTITUDE ON I-CDV LOCALIZER EAST COURSE TO FORAT/I-CDV 44.63 DME BEFORE PROCEEDING ON COURSE.

RWY 27: CLIMBING LEFT TURN TO 5000 ON GCR NDB BEARING 205.30 TO EYAKS INT AND HOLD (S, RT, 025.30 INBOUND), CONTINUE CLIMB IN HOLD TO 5000 BEFORE PROCEEDING ON COURSE.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 9: TREES AND POLES BEGINNING 101 FEET FROM DER, 454 FEET LEFT OF CENTERLINE, UP TO 30 FEET AGL/68 FEET MSL.

NOTE: RWY 27: TREES BEGINNING 15 FEET FROM DER, 423 FEET LEFT OF CENTERLINE, UP TO 30 FEET AGL/84 FEET MSL.

CONTROLLING OBSTACLES:

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT:

RWY 9: 8284 FEET MSL AAO 604943.40N/1450801.50W, 3710 FEET MSL AAO 602944.00N/1450746.30W.

RWY 27: 8284 FEET MSL AAO 604943.40N/1450801.50W, 3710 FEET MSL AAO 602944.00N/1450746.30W.

REMARKS:

CHART NOTE: RWY 9: DME REQUIRED.

CHART NOTE: RWY 27: ADF REQUIRED, DO NOT EXCEED 210 KIAS UNTIL ESTABLISHED ON 205.30 BEARING FROM GCR NDB.

ABREV AMDT

**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>
CORDOVA, AK	MERLE K (MUDHOLE) SMITH	29 MARCH 2018	8

<u>FLIGHT INSPECTED BY:</u> <i>Digitally signed by</i> ADOLFO D URRUTIA	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
BROC STARRETT Dec 14, 2017	FICO	12/9/17

<u>DEVELOPED BY:</u>	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
KELLY DEAN KELLY D DEAN <i>Digitally signed by KELLY D DEAN Date: 2017.08.11 13:02:28 -05'00'</i>	AJV-5431	08/11/2017

<u>APPROVED BY:</u> <i>Digitally signed by</i> PATRICK MULQUEEN, MANAGER ADOLFO D URRUTIA	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
Dec 14, 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:
ZAN, STATE OF ALASKA DORPF/N RGN

CHANGES - REASONS:

1. CHANGED RWY 27 TAKEOFF MINIMUMS FROM STANDARD TO STANDARD WITH MNIMUM CLIMB OF 283 FEET PER NM TO 4300 - BIENNIAL REVIEW OBSTACLE EVAL OF CIH OBST.
2. CHANGED RWY 27 GCR BEARINGS FROM 202.30 TO 205.30 AND HOLDING INBOUND COURSE FROM 022.30 TO 025.30 - MAG/VAR CHANGE FROM E20 TO E17.

VCOA NOT ESTABLISHED AT ATC REQUEST DUE TO TERRAIN.

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: 4.68 NM AFTER LASKY LOM/INT/I-LIT 4.51 DME OR AT I-LIT 0.18 DME CLIMB TO 1500 THEN CLIMBING LEFT TURN TO 3500 ON HEADING 260 AND ON LIT VORTAC R-303 TO ROLAN INT/LIT 16.67 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 123.00 INBOUND. CHART FAS OBST: 455 TREE 344217N/0921530W. CHART: ASR. CHART R-2403A. CHART R-2403B. CHART VDP AT 1.04 DME* DISTANCE VDP TO THLD 1.21 NM. *LOC ONLY. CHART LIT R-149 AT MOMTE. CHART CIRCLING ICON.						
LIT VORTAC		LASKY LOM/INT/I-LIT 4.51 DME			260.42 / 6.22			2100								
MOMTE/LIT 12.00 DME CW (IAF)		WORMI/LIT 12.00 DME (NOPT)			12.00 DME ARC (LIT LR-230)			3300								
WORMI/LIT 12.00 DME (IF)		LASKY LOM/INT/I-LIT 4.51 DME (NOPT)			046.50 / 6.50 (I-LIT)			1900								
1. PT <u>R</u> SIDE OF COURSE <u>226.50</u> OUTBOUND <u>2100</u> FT WITHIN <u>10</u> MILES OF <u>LASKY LOM</u> (IAF) 2. _____ 3. FAC: <u>046.50</u> FAF: <u>LASKY LOM/INT/I-LIT 4.51 DME</u> DIST FAF TO MAP: <u>4.68</u> THLD: <u>4.68</u> 4. MIN. ALT: <u>LASKY LOM 1900, JIRUR INT/I-LIT 1.83 DME 960*</u> 5. DIST TO THLD FROM OM: <u>4.68</u> MM: <u>-</u> IM: <u>-</u> 150 HAT: <u>-</u> 100 HAT: <u>-</u> GS ANT: <u>970</u> 6. MIN GS INCPT: <u>1900</u> GS ALT AT: _____ OM: <u>1814</u> MM: <u>-</u> IM: <u>-</u> 7. GS ANGLE: <u>3.00</u> TCH: <u>51.4</u> 8. MSA FROM: <u>LIT VORTAC 3300</u>										MAG VAR: <u>0E</u> EPOCH YEAR: <u>2020</u>						
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: <u>N A</u>		ILS: <u>STANDARD</u>			LOC: <u>STANDARD @</u>				
CATEGORY <u>=====</u>		A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	
S-ILS 04L	508	4000	250	508	4000	250	508	4000	250	508	4000	250				
S-LOC 04L	960	4000	702	960	4000	702	960	1 5/8	702	960	1 5/8	702				
CIRCLING	960	1	694	1000	1	734	1180	2 3/4	914	1180	3	914				
JIRUR FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)																
S-LOC 04L	720	4000	462	720	4000	462	720	5000	462	720	5000	462				
CIRCLING	820	1	554	1000	1	734	1180	2 3/4	914	1180	3	914				
NOTES: CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-ILS 4L ALL CATS. @ CAT C 1000-2 3/4, CAT D 1000-3 CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON LIT VORTAC AIRWAY RADIALS 230 CW 303. CHART PROFILE NOTE: USE I-LIT DME WHEN ON THE LOCALIZER COURSE. (CONTINUED ON PAGE 2)																
CITY AND STATE LITTLE ROCK, AR		ELEVATION: 266 TDZE: 258 AIRPORT NAME: BILL AND HILLARY CLINTON NATIONAL/ADAMS FIELD			FACILITY IDENTIFIER: I-LIT		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 4L, AMDT 26A 29 MARCH 2018					SUP:				
												AMDT: 26				
												DATED 09/18/2014				



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

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

NOTES, (CONT.):
CHART NOTE: RWY 4L HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED.
CHART NOTE: LOC MINIMUMS: FOR INOPERATIVE ALS, INCREASE S-LOC 4L CATS A/B VISIBILITY TO 1 SM AND CATS C/D VISIBILITY TO 2 SM. JIRUR FIX MINIMUMS: FOR INOPERATIVE ALS, INCREASE S-LOC 4L CATS A/B VISIBILITY TO 1 SM AND CATS C/D VISIBILITY TO 1 3/8 SM.



CITY AND STATE LITTLE ROCK, AR	ELEVATION: 266 TDZE: 258 AIRPORT NAME: BILL AND HILLARY CLINTON NATIONAL/ADAMS FIELD	FACILITY IDENTIFIER: I-LIT	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 4L, AMDT 26A 29 MARCH 2018	SUP:
				AMDT: 26
				DATED: 09/18/2014

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: 6.14 NM AFTER GETTY INT OR AT I-CNL 1.34 DME CLIMB TO 800 THEN CLIMBING RIGHT TURN TO 4000 ON HEADING 110 AND LIT VORTAC R-089 TO ATERS INT/LIT 16.00 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 800 THEN CLIMBING RIGHT TURN TO 4000 ON HEADING 110 AND PBF VOR/DME R-004 TO ATERS INT/PBF 24.82 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD E, RT, 269.28 INBOUND. CHART FAS OBST: 512 TREE 344156N/0921520W. CHART LIT R-149 AT MOMTE. CHART CIRCLING ICON. CHART: ASR DO NOT CHART ALTERNATE MA HOLDING AT ATERS. CHART IN PLANVIEW: MYNIE OM SUBDUED. *LOC ONLY									
LIT VORTAC		GETTY INT/I-CNL 7.48 DME			250.79 / 6.55				2300											
MOMTE INT/LIT 12.00 DME CW (IAF)		BARBO/I-CNL 13.33 DME (NOPT)			12.00 DME ARC (LIT LR-227)				3500											
BARBO/I-CNL 13.33 DME (IF)		GETTY INT/I-CNL 7.48 DME			046.52 / 5.86				2300											
1. PT <u> L </u> SIDE OF COURSE <u>226.52</u> OUTBOUND <u>2300</u> FT WITHIN <u>10</u> MILES OF <u>GETTY INT</u> (IAF) 2. _____ 3. FAC: <u>046.52</u> FAF: <u>GETTY INT/I-CNL 7.48 DME</u> DIST FAF TO MAP: <u>6.14</u> THLD: <u>6.14</u> 4. MIN. ALT: <u>GETTY 2300, OGRAY/I-CNL 3.11 DME 880*</u> 5. DIST TO THLD FROM OM: <u>6.14</u> MM: <u>-</u> IM: <u>-</u> 150 HAT: <u>-</u> 100 HAT: <u>-</u> GS ANT: <u>1000</u> 6. MIN GS INCPT: <u>2300</u> GS ALT AT: <u>GETTY 2300</u> OM: <u>-</u> MM: <u>-</u> IM: <u>-</u> 7. GS ANGLE: <u>3.00</u> TCH: <u>49.1</u> 8. MSA FROM: <u>LIT VORTAC 3300</u>											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			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 04R	510	4000	250	510	4000	250	510	4000	250	510	4000	250								
S-LOC 04R	880	4000	620	880	4000	620	880	1 3/8	620	880	1 3/8	620								
CIRCLING	880	1	614	1000	1	734	1180	2 3/4	914	1180	3	914								
OGRAY FIX MINIMUMS																				
S-LOC 04R	780	4000	520	780	4000	520	780	5500	520	780	5500	520								
CIRCLING	820	1	554	1000	1	734	1180	2 3/4	914	1180	3	914								
NOTES: CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-ILS 4R. CHART NOTE: RWY 4R HELICOPTER VISIBILITY REDUCTION BELOW 3/4 NOT AUTHORIZED. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART PROFILE NOTE: USE I-CNL DME WHEN ON THE LOCALIZER COURSE.																				
CITY AND STATE		ELEVATION: 266 TDZE: 260				FACILITY IDENTIFIER: I-CNL		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 4R, AMDT 2D 29 MARCH 2018					SUP:							
LITTLE ROCK, AR		AIRPORT NAME:											AMDT: 2C							
		BILL AND HILLARY CLINTON NATIONAL/ADAMS FIELD											DATED 05/29/2014							



US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.						
TERMINAL ROUTES														MISSED APPROACH									
FROM				TO				COURSE AND DISTANCE				ALTITUDE		ILS: DA LOC: 4.62 NM AFTER JOREG/I-BWY 6.05 DME/RADAR OR AT KICEG/I-BWY 1.44 DME FIX									
DUMPI/LIT 19.00 DME				CALAY/I-BWY 13.30 DME/RADAR				209.69 / 5.23 (LIT R-030)				2500		CLIMB TO 800 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 170 AND LIT VORTAC R-230 TO BAUDE INT/LIT 18.37 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 800 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 122 AND PBF VOR/DME R-330 TO MOMTE/PBF 16.73 DME AND HOLD (DME REQUIRED). ADDITIONAL FLIGHT DATA: HOLD SW, LT, 050.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NW MOMTE/16.73 DME, LT, 150.01 INBOUND. CHART FAS OBST: 422 TOWER 344636N/0920936W. CHART VDP AT 2.44 DME* DISTANCE VDP TO THLD 1.01 NM. *LOC ONLY. CHART LIT R-089 AT QITXO. CHART IN PLANVIEW: MOMTE/16.73 DME. CHART CIRCLING ICON. CHART: LIT VORTAC 13.77 DME AT CALAY CHART: LOC/AZIMUTH OFFSET 1.87 DEGREES CHART LIT R-030 AT DUMPI AND CALAY CHART: ASR (SEE FORM 8260-10)									
CALAY/I-BWY 13.30 DME/RADAR (IAF)				EGKIV/I-BWY 11.47 DME/RADAR				228.38 / 1.83 (I-BWY)				2500											
QITXO/LIT 12.00 DME CCW (IAF)				EGKIV/I-BWY 11.47 DME/RADAR				12.00 DME ARC (LIT LR-038)				2500											
EGKIV/I-BWY 11.47 DME/RADAR (IF)				JOREG/I-BWY 6.05 DME/RADAR				228.39 / 5.42 (I-BWY)				1800											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)														MAG VAR: 0E EPOCH YEAR: 2020									
2. PROFILE STARTS AT CALAY/I-BWY 13.30 DME/RADAR																							
3. FAC: 228.39 FAF: JOREG/I-BWY 6.05 DME/RADAR DIST FAF TO MAP: 4.62 THLD: 4.62																							
4. MIN. ALT: CALAY 2500, EGKIV 2500, JOREG 1800																							
5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 960																							
6. MIN GS INCPT: 1800 GS ALT AT: JOREG 1800 OM: - MM: - IM: -																							
7. GS ANGLE: 3.00 TCH: 51.0																							
8. MSA FROM: LIT VORTAC 3300																							
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 22L	509	4000	250	509	4000	250	509	4000	250	509	4000	250											
S-LOC 22L	640	4000	381	640	4000	381	640	4000	381	640	4000	381											
CIRCLING	820	1	554	1000	1	734	1180	2 3/4	914	1180	3	914											
NOTES: CHART NOTE: DME OR RADAR REQUIRED. @ CAT C 1000-2 3/4, CAT D 1000-3 CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.																							
CITY AND STATE LITTLE ROCK, AR				ELEVATION: 266 TDZE: 259 AIRPORT NAME: BILL AND HILLARY CLINTON NATIONAL/ADAMS FIELD				FACILITY IDENTIFIER: I-BWY		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 22L, ORIG-D 29 MARCH 2018					SUP: AMDT: ORIG-C DATED 03/05/2015								

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

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ADDITIONAL FLIGHT DATA, (CONT.):
FAC CROSSES RWY C/L EXTENDED 2633 FT FROM THLD.
CHART PLANVIEW NOTE: DME OR RADAR REQUIRED.



CITY AND STATE LITTLE ROCK, AR	ELEVATION: 266 TDZE: 259 AIRPORT NAME: BILL AND HILLARY CLINTON NATIONAL/ADAMS FIELD	FACILITY IDENTIFIER: I-BWY	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 22L, ORIG-D 29 MARCH 2018	SUP:
				AMDT: ORIG-C
				DATED: 03/05/2015

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		LNAV: RW36									
DOVQA (IAF)		FEHXE (NOPT) (TF) (FB) (RNP 1.00)		271.69 / 5.00		3300		CLIMBING RIGHT TURN TO 2700 DIRECT HIGHS AND HOLD.									
BAQXI (IAF)		FEHXE (NOPT) (TF) (FB) (RNP 1.00)		091.35 / 5.00		3300											
FEHXE (IF/IAF)		KAGBE (TF) (FB) (RNP 1.00)		001.52 / 8.57		2000											
KAGBE (FAF)		RW36 (MAP) (TF) (FO) (RNP 0.30)		001.52 / 5.33													
RW36 (MAP)		666 MSL (CA)		001.52		2700											
666 MSL		HIGHS (DF) (FO) (RNP 1.00)						ADDITIONAL FLIGHT DATA: HOLD NE, LT, 223.62 INBOUND. CHART FAS OBST: 501 TREE 344200N/0921506W. CHART: ASR. CHART VDP AT 1.04 NM TO RW36. CHART CIRCLING ICON. CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																	
2. HOLD S FEHXE, RT, 001.51 INBOUND, 3300 FT. IN LIEU OF PT (IAF)																	
3. FAC: 001.52 FAF: KAGBE DIST FAF TO MAP: 5.33 THLD: 5.33																	
4. MIN. ALT: FEHXE 3300, KAGBE 2000																	
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																	
6. MIN GS INCPT: _____ GS ALT AT: _____ OM: _____ MM: _____ IM: _____																	
7. GS ANGLE: _____ TCH: 34:1 IS NOT CLEAR																	
8. MSA FROM: _____																	
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	
LNAV MDA		760	1	503	760	1	503	760	1 1/2	503	760	1 1/2	503				
CIRCLING		820	1	554	1000	1	734	1180	2 3/4	914	1180	3	914				
NOTES: CHART NOTE: RWY 36 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. @ CAT C 1000-2 3/4, CAT D 1000-3 CHART NOTE: DME/DME RNP-0.3 NA.																	
CITY AND STATE LITTLE ROCK, AR		ELEVATION: 266 TDZE: 257 AIRPORT NAME: BILL AND HILLARY CLINTON NATIONAL/ADAMS FIELD		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 36, ORIG-C 29 MARCH 2018						SUP: AMDT: ORIG-B DATED 05/29/2014					



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.	272/30 CW 091/30 (NOPT)	FEHXE (IF/IAF) (FB)	3300
2.	091/30 CW 182/30	BAQXI (IAF) (FB)	3300
3.	182/30 CW 272/30	DOVQA (IAF) (FB)	3300

QUALITY
20
CHECKED

CITY AND STATE LITTLE ROCK, AR	ELEVATION: 266 AIRPORT NAME: BILL AND HILLARY CLINTON NATIONAL/ADAMS FIELD	TDZE: 257	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 36, ORIG-C 29 MARCH 2018	SUP:
					AMDT: ORIG-B
					DATED: 05/29/2014

**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
LITTLE ROCK, AR	BILL AND HILLARY CLINTON NATIONAL/ADAMS FIELD	29 MARCH 2018	9

TAKEOFF MINIMUMS:

RWY 4L, 4R, 36 STANDARD.
RWY 18, 200-1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 385 FT PER NM TO 500.
RWY 22L, 200-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 222 FT PER NM TO 500.
RWY 22R, 300-2 OR STANDARD WITH MINIMUM CLIMB OF 337 FT PER NM TO 800.

TEXTUAL DEPARTURE PROCEDURES:

RWY 22R- CLIMB HEADING 226.52 TO 1100 BEFORE TURNING RIGHT.

RWY 36- CLIMB HEADING 001.51 TO 800 BEFORE TURNING LEFT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 18: FENCE AND RAILROAD BEGINNING 488 FT FROM DER, 537 FT RIGHT OF CENTERLINE, UP TO 32 FT AGL/282 FT MSL. TREE 1146 FT FROM DER, 376 FT LEFT OF CENTERLINE, 294 FT MSL.
TREE, AND RAILROAD BEGINNING 1184 FT FROM DER, 18 FT LEFT OF CENTERLINE, UP TO 303 FT MSL.
TREE 1473 FT FROM DER, 149 FT RIGHT OF CENTERLINE, 295 FT MSL.
TREE 1902 FT FROM DER, 423 FT RIGHT OF CENTERLINE, 313 FT MSL.
VEHICLES ON ROAD 2036 FT FROM DER, 177 FT LEFT OF CENTERLINE, 313 FT MSL.
TREE 2352 FT FROM DER, 466 FT RIGHT OF CENTERLINE, 342 FT MSL.
TREES BEGINNING 2441 FT FROM DER, 217 FT LEFT OF CENTERLINE, UP TO 364 FT MSL.
TREE 2726 FT FROM DER, 154 FT LEFT OF CENTERLINE, 374 FT MSL.
TREE 2779 FT FROM DER, 131 FT RIGHT OF CENTERLINE, 361 FT MSL.
TREE 3113 FT FROM DER, 478 FT LEFT OF CENTERLINE, 390 FT MSL.
TREE 3176 FT FROM DER, 291 FT RIGHT OF CENTERLINE, 399 FT MSL.
TREE 3230 FT FROM DER, 805 FT RIGHT OF CENTERLINE, 407 FT MSL.
TREE 3249 FT FROM DER, 589 FT LEFT OF CENTERLINE, 396 FT MSL.
TREE 3287 FT FROM DER, 802 FT LEFT OF CENTERLINE, 399 FT MSL.
TREE 3701 FT FROM DER, 760 FT RIGHT OF CENTERLINE, 424 FT MSL.
TREE 3701 FT FROM DER, 617 FT LEFT OF CENTERLINE, 401 FT MSL.
TREES BEGINNING 3856 FT FROM DER, 142 FT RIGHT OF CENTERLINE, UP TO 429 FT MSL.
TREE 3945 FT FROM DER, 367 FT RIGHT OF CENTERLINE, 433 FT MSL.
TREE, ELEVATOR AND STACK BEGINNING 3998 FT FROM DER, 74 FT RIGHT OF CENTERLINE, UP TO 437 FT MSL.
TREE 1.1 NM FROM DER, 2111 FT RIGHT OF CENTERLINE, 459 FT MSL.

NOTE: RWY 22L: TREE AND BUILDING BEGINNING 780 FT FROM DER, 417 FT LEFT OF CENTERLINE, UP TO 315 FT MSL.
POLE 979 FT FROM DER, 502 FT RIGHT OF CENTERLINE, 36 FT AGL/295 FT MSL.
TOWER 1828 FT FROM DER, 884 FT LEFT OF CENTERLINE, 49 FT AGL/337 FT MSL.
POLE 2128 FT FROM DER, 754 FT LEFT OF CENTERLINE, 72 FT AGL/342 FT MSL.
TREE 2278 FT FROM DER, 174 FT LEFT OF CENTERLINE, 343 FT MSL.
TREE 2490 FT FROM DER, 890 FT LEFT OF CENTERLINE, 361 FT MSL.
TREE AND POLE BEGINNING 2511 FT FROM DER, 854 FT LEFT OF CENTERLINE, UP TO 376 FT MSL.
TREES BEGINNING 4726 FT FROM DER, 1584 FT RIGHT OF CENTERLINE, UP TO 399 FT MSL.
TREE 5149 FT FROM DER, 1422 FT RIGHT OF CENTERLINE, 401 FT MSL.
TREE 5816 FT FROM DER, 1831 FT RIGHT OF CENTERLINE, 425 FT MSL.
TREE 5878 FT FROM DER, 1931 FT RIGHT OF CENTERLINE, 429 FT MSL.
TREE 6019 FT FROM DER, 1946 FT RIGHT OF CENTERLINE, 433 FT MSL.

NOTE: RWY 22R: BUILDING 348 FT FROM DER, 478 FT RIGHT OF CENTERLINE, 17 FT AGL/267 FT MSL.
VEHICLES ON ROAD 458 FT FROM DER, 536 FT RIGHT OF CENTERLINE, 268 FT MSL.
RAILROAD 646 FT FROM DER, 570 FT RIGHT OF CENTERLINE, 274 FT MSL.
FENCE 818 FT FROM DER, 215 FT RIGHT OF CENTERLINE, 32 FT AGL/282 FT MSL.
POLE 946 FT FROM DER, 453 FT RIGHT OF CENTERLINE, 37 FT AGL/287 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>
LITTLE ROCK, AR	BILL AND HILLARY CLINTON NATIONAL/ADAMS FIELD	29 MARCH 2018	9

RAILROAD 968 FT FROM DER, 730 FT LEFT OF CENTERLINE, 285 FT MSL.
BUILDING 1167 FT FROM DER, 420 FT RIGHT OF CENTERLINE, 40 FT AGL/291 FT MSL.
TREE 1235 FT FROM DER, 759 FT LEFT OF CENTERLINE, 295 FT MSL.
POLE 1460 FT FROM DER, 101 FT RIGHT OF CENTERLINE, 42 FT AGL/293 FT MSL.
TREE 1732 FT FROM DER, 869 FT LEFT OF CENTERLINE, 313 FT MSL.
TREE 1848 FT FROM DER, 2729 FT LEFT OF CENTERLINE, 499 FT MSL.
TREE 1970 FT FROM DER, 356 FT RIGHT OF CENTERLINE, 311 FT MSL.
TREE 2871 FT FROM DER, 405 FT LEFT OF CENTERLINE, 325 FT MSL.
TREES BEGINNING 4377 FT FROM DER, 1170 FT LEFT OF CENTERLINE, UP TO 437 FT MSL.
TREE 6030 FT FROM DER, 1611 FT LEFT OF CENTERLINE, 456 FT MSL.
TREE 1.4 NM FROM DER, 2729 FT LEFT OF CENTERLINE, 499 FT MSL.
TREE 1.5 NM FROM DER, 2629 FT LEFT OF CENTERLINE, 512 FT MSL.
TANK 1.6 NM FROM DER, 2621 FT LEFT OF CENTERLINE, 66 FT AGL/508 FT MSL.

NOTE: RWY 36: TREES BEGINNING 243 FT FROM DER, 541 FT RIGHT OF CENTERLINE, UP TO 347 FT MSL.
TOWER 568 FT FROM DER, 504 FT LEFT OF CENTERLINE, 60 FT AGL/313 FT MSL.
TREE AND POLE BEGINNING 747 FT FROM DER, 2 FT LEFT OF CENTERLINE, UP TO 345 FT MSL.
TREE AND POLE BEGINNING 1074 FT FROM DER, 196 FT RIGHT OF CENTERLINE, UP TO 354 FT MSL.
TREE 3789 FT FROM DER, 492 FT LEFT OF CENTERLINE, 367 FT MSL.
TREE 3918 FT FROM DER, 546 FT RIGHT OF CENTERLINE, 369 FT MSL.
TOWER 1.9 NM FROM DER, 2637 FT LEFT OF CENTERLINE, 312 FT AGL/558 FT MSL.

CONTROLLING OBSTACLES:

RWY 18: 407 FT MSL TREE 344249.97N/0921429.77W (CLIMB GRADIENT), 437 FT MSL TREE 344242.41N/0921431.20W (CLIMB-TO-ALTITUDE), 459 MSL TREE 344211.83N/0921446.63W (CEILING/VISIBILITY)
RWY 22L: 433 FT MSL TREE 344242.79N/0921424.75W
RWY 22R: 437 FT MSL TREE 344239.88N/0921441.87W (CLIMB GRADIENT), 870 FT MSL BUILDING 344438.00N/0921633.00W, 512 FT MSL TREE 344156.10N-0921519.52W (CEILING), 508 FT MSL TANK 344155.72N-0921520.14W (VISIBILITY)

REMARKS:

<u>FLIGHT INSPECTED BY:</u>	<i>Digitally signed by</i>	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
ROBIN CAUDLE	ALLAN WILL Dec 08, 2017	FICO	12/6/17
<u>DEVELOPED BY:</u>	<i>Digitally signed by</i>	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
KISSY MAXFIELD	KISSY MAXFIELD Sep 22, 2017	AJV-5412	09/22/2017
<u>APPROVED BY:</u>	<i>Digitally signed by</i>	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
GEORGE DAVIS	ALLAN WILL Dec 08, 2017	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:
ZME, AMGR, STATE AVIATION DIRECTOR, LIT DEP CON, LIT ATCT



**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>
LITTLE ROCK, AR	BILL AND HILLARY CLINTON NATIONAL/ADAMS FIELD	29 MARCH 2018	9

CHANGES - REASONS:

1. RWY 18 CHANGED FROM "300-1 1/2 OR STD. W/ MIN CLIMB OF 391' PER NM TO 600" TO "200-1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 385 FT PER NM TO 500." - NEW CONTROLLING OBS.
2. RWY 22L CHANGED FROM "300-1¾ OR STD. W/ MIN. CLIMB OF 216' PER NM TO 500, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200' PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1500' PRIOR TO DER" TO 200-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 222 FT PER NM TO 500." - NEW CONTROLLING OBS.
3. RWY 22R CHANGED FROM "300-2 OR STD. W/ MIN. CLIMB OF 329' PER NM TO 1100" TO "300-2 OR STANDARD WITH MINIMUM CLIMB OF 337 FT PER NM TO 800."- NEW CONTROLLING OBS.
4. UPDATED ALL CLOSE IN OBS.-NEW SURVEY.



**FEDERAL AVIATION ADMINISTRATION
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TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP)
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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
BISHOP, CA	BISHOP	29 MARCH 2018	4A

TAKEOFF MINIMUMS:

RWY 8, 12, 17: 9000-3 FOR VCOA.

RWY 26: STANDARD WITH MINIMUM CLIMB OF 280 FT PER NM TO 10400 FT, OR 9000-3 FOR VCOA.

RWY 30, 35: STANDARD WITH MINIMUM CLIMB OF 285 FT PER NM TO 10500 FT, OR 9000-3 FOR VCOA.

TEXTUAL DEPARTURE PROCEDURES:

RWY 26, 30: CLIMBING RIGHT TURN ON HEADING 360, THENCE...

RWY 35: CLIMBING LEFT TURN ON HEADING 290, THENCE...

...ALL AIRCRAFT INTERCEPT BIH R-322 TO NIKOL INT/BIH 38.46 DME. AIRCRAFT DEPARTING NIKOL ON V244 WESTBOUND CROSS NIKOL AT OR ABOVE 13100; AIRCRAFT DEPARTING NIKOL ON V381 SOUTHEAST BOUND CROSS NIKOL AT OR ABOVE 13000; AIRCRAFT DEPARTING NIKOL ON T298 WESTBOUND OR T259 WESTBOUND CROSS NIKOL AT OR ABOVE 12200; ALL OTHER AIRCRAFT CROSS NIKOL AT OR ABOVE 11000.

VISUAL CLIMB OVER AIRPORT:

ALL RUNWAYS: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS BISHOP AIRPORT AT OR ABOVE 13000 FT BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 26: TREES AND BUSHES BEGINNING 69 FT FROM DER, 150 FT RIGHT OF CENTERLINE, UP TO 4197 FT MSL. TREES BEGINNING 925 FT FROM DER, 32 FT LEFT OF CENTERLINE, UP TO 4167 FT MSL.

NOTE: RWY 35: TREES BEGINNING 238 FT FROM DER, 31 FT LEFT OF CENTERLINE, UP TO 4146 FT MSL. TREES BEGINNING 215 FT FROM DER, 146 FT RIGHT OF CENTERLINE, UP TO 4146 FT MSL.

CONTROLLING OBSTACLES:

RWY 26: 8569 FT MSL AAO 374100.29N/1183440.90W (CLIMB GRADIENT).
9414 FT MSL AAO 374459.55N/1183811.06W (CLIMB-TO ALTITUDE).

RWY 30, 35: 8569 FT MSL AAO 374100.29N/1183440.90W (CLIMB GRADIENT).
9414 FT MSL AAO 374459.55N/1183811.06W (CLIMB-TO ALTITUDE).

RWY 8, 12, 17, 26, 30, 35 (VCOA): 7375 FT MSL AAO 372345.00N/1181600.00W (VCA).
14446 FT MSL AAO 373928.77N/1183937.67W (DIVERSE).

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT:

RWY 26, 30, 35: 14446 FT MSL AAO 373802.28N/1181517.64W



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TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP)
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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
BISHOP, CA	BISHOP	29 MARCH 2018	4A

REMARKS:

FLIGHT INSPECTED BY: *Digitally signed by*
DANIEL C. FAVORITE **DION E LANCIA**
Dec 28, 2017

OFFICE SYMBOL: **DATE:**
FICO 12/15/2017

DEVELOPED BY: *Digitally signed by*
RUSS ROSLEWSKI **RUSSELL ROSLEWSKI**
Dec 27, 2017

OFFICE SYMBOL: **DATE:**
AJV-5423 10/12/2017

APPROVED BY: *Digitally signed by*
JULIE MORGAN **DION E LANCIA**
Dec 28, 2017

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

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

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

OTHER:
ZOA, NORCAL APP CON, AMGR

CHANGES - REASONS:
ADDED CROSSING RESTRICTIONS AT NIKOL - ATC REQUEST TO ASSIST PILOTS TO COMPLY WITH AIRWAY OBSTACLE CLEARANCE

12/27/17: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 10/12/17.
1. CROSSING RESTRICTION ADDED AT NIKOL FOR T259 WESTBOUND.
2. INCREASED CROSSING RESTRICTION AT NIKOL FOR V244 WESTBOUND FROM 13000 TO 13100.



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: 9.73 NM AFTER NELLY INT CLIMB TO 520 THEN CLIMBING LEFT TURN TO 2000 ON CMA VOR/DME R-249 TO SQUID INT/14.70 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 540 THEN CLIMBING LEFT TURN TO 2000 ON HEADING 235 AND ON VTU VOR/DME R-269 TO SQUID INT/VTU 17.36 DME AND HOLD (DME REQUIRED). ADDITIONAL FLIGHT DATA: HOLD W, RT, 068.67 INBOUND. FAS OBST: 319 AAO 341249N/1190345W. 1839 AAO 341124N/1185920W. CHART IN PLANVIEW VTU VOR/DME DO NOT CHART: ALTERNATE MA HOLDING, HOLD W SQUID, RT, 089.07 INBOUND.								
ZUWNI INT		FIM VORTAC		167.11 / 4.00			8000										
VNY VOR/DME		GUYBE INT		249.67 / 16.54			5000										
FIM VORTAC (IAF)		CUDAK INT		163.38 / 9.52 (VNY LR-257)			4200										
GUYBE INT (IAF)		CUDAK INT		255.53 / 2.65 (I-OCR)			4200										
CUDAK INT (IF)		HUPLA INT/RADAR		255.53 / 3.35 (I-OCR)			3700										
HUPLA INT/RADAR		NELLY INT		255.53 / 3.00 (I-OCR)			3200										
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT CUDAK 3. FAC: <u>255.53</u> FAF: <u>NELLY INT</u> DIST FAF TO MAP: <u>9.73</u> THLD: <u>9.73</u> 4. MIN. ALT: CUDAK 4200, HUPLA 3700, NELLY 3200, PARDS OM 1680* 5. DIST TO THLD FROM OM: <u>4.89</u> MM: <u>-</u> IM: <u>-</u> 150 HAT: <u>-</u> 100 HAT: <u>-</u> GS ANT: 1173 6. MIN GS INCPT: <u>3200</u> GS ALT AT: <u>NELLY 3200</u> OM: <u>1683</u> MM: <u>-</u> IM: <u>-</u> 7. GS ANGLE: <u>3.00</u> TCH: <u>58.4</u> 8. MSA FROM: CMA VOR/DME 040-150 5000, 150-270 3100, 270-040 8800																	
											MAG VAR: 15E					EPOCH YEAR: 1980	
MINIMUMS																	
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		ILS: STANDARD #			LOC: STANDARD @					
CATEGORY >>>>>	A			B			C			D			E				
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA		
S-ILS 25	294	1	250	294	1	250	294	1	250	294	1	250					
S-LOC 25	580	1	536	580	1	536	580	1 1/2	536	580	1 1/2	536					
CIRCLING	580	1	535	580	1	535	580	1 1/2	535	700	2	655					
NOTES: CHART NOTE: RWY 25 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 867. *LOC ONLY CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON FIM VORTAC AIRWAY RADIALS 148 CW 195. (CONTINUED ON PAGE 2)																	
CITY AND STATE				ELEVATION: 45 TDZE: 44				FACILITY IDENTIFIER: I-OCR				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:	
OXNARD, CA				AIRPORT NAME: OXNARD								ILS OR LOC RWY 25, AMDT 13C				AMDT: 13B	
								29 MARCH 2018								DATED 03/31/2016	



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

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

NOTES, (CONT.):**CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY.****CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CAMARILLO ALTIMETER SETTING AND INCREASE****S-ILS 25 DA TO 312 AND ALL MDA 20 FEET, INCREASE S-LOC 25 CAT C/D VISIBILITY 1/8 MILE, AND CIRCLING****CAT C VISIBILITY 1/8 MILE, CAT D 1/4 MILE.**

QUALITY
24
CHECKED

CITY AND STATE

OXNARD, CA

ELEVATION: 45**TDZE: 44**

AIRPORT NAME:

OXNARD

FACILITY
IDENTIFIER:
I-OXR

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 25, AMDT 13C

29 MARCH 2018

SUP:

AMDT: **13B**DATED: **03/31/2016**

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

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

CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
SANTA BARBARA, CA	SANTA BARBARA MUNI	29 MARCH 2018	8A

TAKEOFF MINIMUMS:

RWY 33L, 33R: NA- ATC.

RWY 15L, 15R, 25: STANDARD.

RWY 7: STANDARD WITH MINIMUM CLIMB OF 260 FT PER NM TO 1100, OR 2800-3 FOR VCOA.

TEXTUAL DEPARTURE PROCEDURES:

RWY 7: CLIMBING RIGHT TURN HEADING 170.00, THENCE...

RWY 25: CLIMBING LEFT TURN HEADING 155.00, THENCE...

RWY 15L, 15R: CLIMB HEADING 151.65, THENCE...

...ON RZS R-185 TO GOLET INT, CLIMB IN GOLET INT HOLDING PATTERN (SE, RIGHT TURNS, 307.00 INBOUND), TO CROSS GOLET INT AT OR ABOVE MEA/MCA FOR ROUTE OF FLIGHT, BEFORE PROCEEDING ON COURSE.

VISUAL CLIMB OVER AIRPORT:

RWY 7: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS SANTA BARBARA MUNI AIRPORT SOUTHBOUND AT OR ABOVE 2700, THENCE...

...ON RZS R-185 TO GOLET INT, CLIMB IN GOLET INT HOLDING PATTERN (SE, RIGHT TURNS, 307.00 INBOUND), TO CROSS GOLET INT AT OR ABOVE MEA/MCA FOR ROUTE OF FLIGHT, BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 7: VEHICLES ON PARKING LOT 88 FT FROM DER, 516 FT RIGHT OF CENTERLINE, 25 FT MSL. POLE 208 FT FROM DER, 243 FT LEFT OF CENTERLINE, 25 FT AGL/36 FT MSL. VEHICLES ON PARKING LOT BEGINNING 255 FT FROM DER, 518 FT RIGHT OF CENTERLINE, UP TO 26 FT MSL. POLES AND A TREE BEGINNING 715 FT FROM DER, 579 FT RIGHT OF CENTERLINE, UP TO 47 FT MSL. TREES BEGINNING 1099 FT FROM DER, 631 FT LEFT OF CENTERLINE, UP TO 45 FT MSL. TREE, BLDG, TANK, AND A POLE BEGINNING 1225 FT FROM DER, 566 FT LEFT OF CENTERLINE, UP TO 52 FT MSL. POLES BEGINNING 1229 FT FROM DER, 569 FT RIGHT OF CENTERLINE, UP TO 53 FT MSL. TREE 1474 FT FROM DER, 752 FT RIGHT OF CENTERLINE, 57 FT MSL. TREES BEGINNING 1606 FT FROM DER, 472 FT LEFT OF CENTERLINE, UP TO 57 FT MSL. TREES BEGINNING 1671 FT FROM DER, 365 FT RIGHT OF CENTERLINE, UP TO 75 FT MSL. TREES BEGINNING 1686 FT FROM DER, 234 FT LEFT OF CENTERLINE, UP TO 65 FT MSL. TREE 2628 FT FROM DER, 421 FT RIGHT OF CENTERLINE, 79 FT MSL. TREES BEGINNING 2829 FT FROM DER, 594 FT LEFT OF CENTERLINE, UP TO 103 FT MSL. TREE 2918 FT FROM DER, 152 FT RIGHT OF CENTERLINE, 78 FT AGL/91 FT MSL. TREE 3525 FT FROM DER, 838 FT LEFT OF CENTERLINE, 111 FT MSL. TREE 4902 FT FROM DER, 1793 FT LEFT OF CENTERLINE, 145 FT MSL.

NOTE: RWY 15L: BUSHES BEGINNING 19 FT FROM DER, 18 FT RIGHT OF CENTERLINE, UP TO 6 FT AGL/17 FT MSL. BUSHES AND A SIGN BEGINNING 26 FT FROM DER, 82 FT LEFT OF CENTERLINE, UP TO 17 FT MSL. BUILDINGS BEGINNING 38 FT FROM DER, 446 FT LEFT OF CENTERLINE, UP TO 25 FT MSL. TREES, VEHICLES ON PARKING LOTS, A FENCE, AND VEHICLE ON ROAD BEGINNING 146 FT FROM DER, 345 FT LEFT OF CENTERLINE, UP TO 18 FT AGL/29 FT MSL. VEHICLE ON ROAD BEGINNING 905 FT FROM DER, 640 FT LEFT OF CENTERLINE, UP TO 44 FT MSL. POLES AND TREES BEGINNING 989 FT FROM DER, 146 FT LEFT OF CENTERLINE, UP TO 54 FT MSL. SIGN, OVERPASS, POLE, TREES, AND VEHICLE ON ROAD BEGINNING 1280 FT FROM DER, 345 FT RIGHT OF CENTERLINE, UP TO 94 FT MSL.

NOTE: RWY 15R: BUSHES BEGINNING 18 FT FROM DER, 33 FT RIGHT OF CENTERLINE, UP TO 8 FT AGL/15 FT MSL. BUSHES AND A SIGN BEGINNING 25 FT FROM DER, 240 FT LEFT OF CENTERLINE, UP TO 6 FT AGL/17 FT MSL. BUSH 993 FT FROM DER, 758 FT RIGHT OF CENTERLINE, 61 FT MSL. TREES, FENCE, POLE, SIGN, BUILDING, OVERPASS, AND VEHICLE ON ROAD BEGINNING 1099 FT FROM DER, 26 FT RIGHT OF CENTERLINE, UP TO 91 FT AGL/145 FT MSL. TREES BEGINNING 1355 FT FROM DER, 16 FT LEFT OF CENTERLINE, UP TO 25 FT AGL/55 FT MSL. TREES AND A BUSH BEGINNING 1676 FT FROM DER, 728 FT RIGHT OF CENTERLINE, UP TO 97 FT AGL/147 FT MSL.

NOTE: RWY 25: NAVAID 2 FT FROM DER, 253 FT LEFT OF CENTERLINE, 13 FT MSL. TREE 13 FT FROM DER, 486 FT LEFT OF CENTERLINE, 12 FT AGL/21 FT MSL. VEHICLE ON ROAD, 489 FT FROM DER, 593 FT RIGHT OF CENTERLINE, 27 FT MSL. TREES BEGINNING 1612 FT FROM DER, 799 FT LEFT OF CENTERLINE, UP TO 65 FT MSL. TREES BEGINNING 2299 FT FROM DER, 312 FT LEFT OF CENTERLINE, UP TO 61 FT AGL/88 FT MSL. TREE AND A POLE BEGINNING 2487 FT FROM DER, 128 FT RIGHT OF CENTERLINE, UP TO 100 FT MSL. TREES BEGINNING 3141 FT FROM DER, 183 FT RIGHT OF CENTERLINE, UP TO 110 FT MSL. TREE 3979 FT FROM DER, 1144 FT RIGHT OF CENTERLINE, 117 FT MSL.

CONTROLLING OBSTACLES:

RWY 7: 800 FT MSL AAO 342504.14N/1194516.46W (CLIMB GRADIENT) (CLIMB-TO ALTITUDE)

RWY 7 (VCOA): 2420 FT MSL AAO 342928.20N/1195143.00W

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT:

RWY 7: 7002 FT MSL AAO 344148.00N/1193918.00W

RWY 15L, 15R, 25: 6795 FT MSL AAO 344245.00N/1194839.00W



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

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

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
SANTA BARBARA, CA	SANTA BARBARA MUNI	29 MARCH 2018	8A

REMARKS:

FLIGHT INSPECTED BY:

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

Digitally signed by

DONALD H LANIER

Nov 01, 2017

OFFICE SYMBOL:

DATE:

DEVELOPED BY:

BEV BORDY (CHRISTINE BAYSE)

Digitally signed by

DONALD H LANIER

Nov 01, 2017

OFFICE SYMBOL:

AJV-5433

DATE:

10/04/2017

APPROVED BY:

PATRICK MULQUEEN

Digitally signed by

DONALD H LANIER

Nov 01, 2017

OFFICE SYMBOL:

AJV-5430

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A

ALPA

AOPA

APA

HAI

NBAA



OTHER:

ZLA, SOCAL APP CON, SBA ATCT

CHANGES - REASONS:

1. UPDATED RWY 25 TAKEOFF OBSTACLE NOTES TO ADD BACK "CENTERLINE, 117 FT MSL."-INFORMATION LEFT OFF OF PREVIOUS AMENDMENT.



RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES																MISSED APPROACH									
FROM				TO				COURSE AND DISTANCE				ALTITUDE		LNAV: OVOWY CLIMB TO 9800 DIRECT CEZ VOR/DME AND ON TRACK 313.05 TO YURVE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, LT, 312.94 INBOUND. CHART FAS OBST: 6163 TREE 371509N/1084148W. CHART VDP AT 1.02 NM TO OVOWY. ROLQE TO RW03: 2.96/46. CHART PLANVIEW NOTE: FINAL APPROACH COURSE OFFSET 5.02 DEGREES. FAC CROSSES RWY C/L EXTENDED 3000 FT FROM THLD.											
CEZ VOR/DME				TAHIB (TF) (FO) (RNP 2.00)				197.19 / 23.03				11200													
RSK VORTAC (IAF)				TAHIB (NOPT) (TF) (FB) (RNP 1.00)				286.87 / 38.20				9000													
ZENFO (IAF)				TAHIB (NOPT) (TF) (FB) (RNP 1.00)				356.15 / 27.29				9000													
TAHIB (IF/IAF)				ROLQE (TF) (FB) (RNP 1.00)				009.93 / 10.00				8000													
ROLQE (FAF)				FAPOP/3.00 NM TO OVOWY (TF) (FB) (RNP 0.30)				024.47 / 3.00																	
(SEE FORM 8260-10)																									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S TAHIB, RT, 009.93 INBOUND, 9000 FT. IN LIEU OF PT (IAF) 3. FAC: 024.47 FAF: ROLQE DIST FAF TO MAP: 6.00 THLD: 6.49 4. MIN. ALT: TAHIB 9000, ROLQE 8000, FAPOP/3.00 NM TO OVOWY 7040 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: OVOWY 14500																MAG VAR: 12E EPOCH YEAR: 2000									
MINIMUMS																									
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		STANDARD @															
CATEGORY >>>>>		A			B			C			D			E											
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA										
LNAV MDA	6440	1	522	6440	1	522	6440	1 1/2	522	6440	1 1/2	522													
CIRCLING	6560	1	642	6560	1	642	6600	2	682	6800	3	882													
NOTES: CHART NOTE: RWY 3 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 RSK VORTAC AIRWAY RADIALS 219 CW 351.																@ NA WHEN LOCAL WEATHER NOT AVAILABLE. @ CAT D 900-3									
CITY AND STATE CORTEZ, CO				ELEVATION: 5918 TDZE: 5918 AIRPORT NAME: CORTEZ MUNI				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 3, ORIG-A 29 MARCH 2018				SUP:									
																AMDT: ORIG									
																DATED 03/20/2003									

QUALITY
 10
 CHECKED

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

FROM	TO	COURSE AND DISTANCE	ALTITUDE
FAPOP/3.00 NM TO OVOWY	OVOWY (MAP) (TF) (FO) (RNP 0.30)	024.47 / 3.00	
OVOWY (MAP)	6318 MSL (CA)	024.47	
6318 MSL	CEZ VOR/DME (DF) (FB) (RNP 1.00)		
CEZ VOR/DME	YURVE (TF) (FO) (RNP 1.00)	313.05 / 15.00	9800

SUP:	
AMDT:	ORIG
DATED:	03/20/2003



US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.						
TERMINAL ROUTES														MISSED APPROACH									
FROM				TO				COURSE AND DISTANCE				ALTITUDE		ILS: DA LOC: 4.82 NM AFTER BADDN/I-DCA 5.90 DME OR AT I-DCA 1.09 DME CLIMB TO 420 THEN CLIMBING LEFT TURN TO 2200 ON DCA VOR/DME R-325 TO GTN NDB/INT/DCA 5.89 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 420 THEN CLIMBING LEFT TURN TO 2200 DIRECT GTN NDB AND HOLD NW, RT, 145.00 INBOUND. ADF REQUIRED. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 144.79 INBOUND. CHART FAS OBST: 184 BLDG 384851N/0770224W. CHART 596 MONUMENT 385322N/0770207W. CHART P-56. CHART P-73. CHART VDP AT 2.39 DME* DISTANCE VDP TO THLD 1.30 NM. *LOC ONLY. CHART CIRCLING ICON. CHART PLANVIEW NOTE: RADAR REQUIRED.									
KATRN/I-DCA 10.70 DME (IF)				BADDN/I-DCA 5.90 DME				006.49 / 4.80 (I-DCA)				1600											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)														MAG VAR: 11W EPOCH YEAR: 2000									
2. PROFILE STARTS AT KATRN/I-DCA 10.70 DME																							
3. FAC: 006.49 FAF: BADDN/I-DCA 5.90 DME DIST FAF TO MAP: 4.82 THLD: 4.82																							
4. MIN. ALT: KATRN 2500, BADDN 1600, JARAL/I-DCA 2.90 DME 620*																							
5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: 1832 100 HAT: 877 GS ANT: 1007																							
6. MIN GS INCPT: 1600 GS ALT AT: BADDN 1600 OM: 1533 MM: - IM: -																							
7. GS ANGLE: 3.00 TCH: 53.6																							
8. MSA FROM: DCA VOR/DME 2600																							
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 01	214	1800	200	214	1800	200	214	1800	200	214	1800	200											
S-LOC 01	480	2400	466	480	2400	466	480	5000	466	480	5000	466											
CIRCLING	720	1	706	720	1	706	840	2 1/2	826	900	3	886											
NOTES: SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 1: CAT A, B, C, D, RA 156, RVR 1400, HAT 150, DA 164 MSL. CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 1: CAT A, B, C, D, RA 106, RVR 1200, HAT 100, DA 114 MSL. (CONTINUED ON PAGE 2)																							
CITY AND STATE WASHINGTON, DC				ELEVATION: 14 TDZE: 14 AIRPORT NAME: RONALD REAGAN WASHINGTON NATIONAL				FACILITY IDENTIFIER: I-DCA		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 1, AMDT 41C; ILS RWY 1 (SA CAT I), ILS RWY 1 (CAT II) 29 MARCH 2018				SUP: ILS OR LOC/DME RWY 1 AMDT: 41B DATED 04/02/2015									



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

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

NOTES, (CONT.):

CHART NOTE: CIRCLING TO RWY 4 NA AT NIGHT.

CHART NOTE: CIRCLING NA NE OF RWY 15-33.

CHART NOTE: DME REQUIRED.

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

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

*LOC ONLY

CHART PLANVIEW NOTE: PROHIBITED AREA (P-56) 1.5 NM NORTH OF DCA - AVOID SURFACE TO 18,000 MSL.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 1 CATS C AND D VISIBILITY TO 1 3/8 MILE.



CITY AND STATE

WASHINGTON, DC

ELEVATION: 14

TDZE: 14

AIRPORT NAME:

RONALD REAGAN WASHINGTON NATIONAL

FACILITY
IDENTIFIER:

I-DCA

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 1, AMDT 41C; ILS RWY 1 (SA CAT I), ILS
RWY 1 (CAT II)

29 MARCH 2018

SUP: ILS OR LOC/DME
RWY 1

AMDT: 41B

DATED: 04/02/2015

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION LDA 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: LDA: 2.84 NM AFTER MINIE INT/I-ASO 6.34 DME OR AT JEVGA INT/I-ASO 3.50 DME FIX									
CROOZ/I-ASO 17.00 DME/RADAR (IF)			MAUDY INT/I-ASO 10.00 DME			149.00 / 7.00 (I-ASO)			3000		CLIMB TO 1800 DIRECT DCA VOR/DME AND ON DCA VOR/DME R-185 TO OXONN NDB/DCA 5.62 DME AND HOLD.									
MAUDY INT/I-ASO 10.00 DME			MINIE INT/I-ASO 6.34 DME			149.00 / 3.66 (I-ASO)			2000		ALTERNATE MA (DO NOT CHART): CLIMB TO 1700 THEN CLIMBING RIGHT TURN TO 1800 DIRECT OXONN NDB AND HOLD (ADF REQUIRED).									
										ADDITIONAL FLIGHT DATA: HOLD S, LT, 004.67 INBOUND. FAS OBST: 558 AAO 385724N/0770727W. CHART CIRCLING ICON. CHART P-56A/B. CHART P-73. FAC CROSSES RWY C/L EXTENDED 56 FT FROM THLD. CHART PLANVIEW NOTE: RADAR REQUIRED. CHART PLANVIEW NOTE: LOC OFFSET 37.50 DEGREES.										
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 11W EPOCH YEAR: 2020										
2. PROFILE STARTS AT CROOZ																				
3. FAC 149.00 FAF MINIE INT/I-ASO 6.34 DME DIST FAF TO MAP 2.84 THLD																				
4. MIN. ALT CROOZ 3000, MAUDY 3000, MINIE 2000																				
8. MSA FROM: DCA VOR/DME 2600																				
MINIMUMS																				
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		LDA: @								
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-LDA 19	1100	3	1087	1100	3	1087	1100	3	1087	1100	3	1087								
CIRCLING	1100	3	1086	1100	3	1086	1100	3	1086	1100	3	1086								
NOTES:																				
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY. @ CAT A, B, C, D 1100-3																				
CHART NOTE: CIRCLING NA NORTHEAST OF RWY 15-33.																				
CHART NOTE: ADF OR DME REQUIRED.																				
CHART PLANVIEW AND PROFILE NOTE: FLY VISUAL TO AIRPORT 149.00 DEGREES 3.37 NM.																				
(CONTINUED ON PAGE 2)																				
CITY AND STATE		ELEVATION: 14		TDZE: 13		FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP								
WASHINGTON, DC		AIRPORT NAME:				I-ASO		LDA Y RWY 19, AMDT 1A				AMDT 1								
		RONALD REAGAN WASHINGTON NATIONAL						29 MARCH 2018				DATE 10/12/2017								



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

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

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROHIBITED AREA (P-56) 1.5 NM NORTH OF DCA - AVOID SURFACE TO 18000 MSL.



CITY AND STATE

WASHINGTON, DC

ELEVATION: 14

TDZE: 13

AIRPORT NAME:

RONALD REAGAN WASHINGTON NATIONAL

FACILITY
IDENTIFIER:

I-ASO

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

LDA Y RWY 19, AMDT 1A

29 MARCH 2018

SUP:

AMDT: 1

DATED: 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: RW33 CLIMB TO 2200 DIRECT GTN NDB AND HOLD, CONTINUE CLIMB-IN -HOLD TO 2200. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 147.00 INBOUND. FAS OBST: 469 AAO 384221N/0765833W. CHART P-56 A AND B. CHART P-73. DISTANCE TO THLD FROM 250 HAT: 0.62 NM. CHART VDP AT 2.09 NM TO RW33* *LNAV ONLY. WAAS CHANNEL # 90123 REFERENCE PATH ID: W33A CHART CIRCLING ICON. LTP HAE: -29 M								
JANIV (IF)		CROFT (TF) (FB) (RNP 1.00)			333.73 / 6.00				1400										
CROFT (FAF)		RW33 (MAP) (TF) (FO) (RNP 0.30)			333.68 / 4.19														
RW33 (MAP)		263 MSL (CA)			333.68				2200										
263 MSL		GTN NDB (DF) (FO) (RNP 1.00)																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT JANIV 3. FAC: <u>333.68</u> FAF: <u>CROFT</u> DIST FAF TO MAP: <u>4.19</u> THLD: <u>4.19</u> 4. MIN. ALT: <u>JANIV 2100, CROFT 1400</u> 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: <u>1400</u> GS ALT AT: <u>CROFT 1400</u> OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>55.0</u> 34:1 IS CLEAR 8. MSA FROM: <u>RW33 2500</u>																MAG VAR: 11W		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	263	3/4	250	263	3/4	250	263	3/4	250	263	3/4	250							
LNAV/VNAV DA	609	2	596	609	2	596	609	2	596	609	2	596							
LNAV MDA	720	1	707	720	1	707	720	2	707	720	2	707							
CIRCLING	720	1	706	720	1	706	840	2 1/2	826	900	3	886							
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -9C (16F) OR ABOVE 54C (130F). @ CAT C 900-2 1/2, CAT D 900-3 CHART NOTE: CIRCLING NA NORTHEAST OF RWY 15-33. 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: NOTE: PROHIBITED AREA (P-56) 1.5 NM NORTH OF DCA - AVOID SURFACE TO 18000 MSL.																			
CITY AND STATE		ELEVATION: 14 TDZE: 13			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:							
WASHINGTON, DC		AIRPORT NAME:			RONALD REAGAN WASHINGTON NATIONAL		RNAV (GPS) RWY 33, AMDT 1A					AMDT: 1							
							29 MARCH 2018					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	KDCA
RUNWAY	RW33
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W33A
LTP/FTP LATITUDE	385059.2945N
LTP/FTP LONGITUDE	0770155.9525W
LTP/FTP ELLIPSOIDAL HEIGHT	-00290
FPAP LATITUDE	385210.1855N
FPAP LONGITUDE	0770305.1665W
THRESHOLD CROSSING HEIGHT (TCH)	00055.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1168
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 96B5C4D1

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+00031
FPAP ORTHOMETRIC HEIGHT	+00031

QUALITY
16
CHECKED

CITY AND STATE WASHINGTON, DC	ELEVATION: 14 AIRPORT NAME: RONALD REAGAN WASHINGTON NATIONAL	TDZE: 13	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 33, AMDT 1A 29 MARCH 2018	SUP:
					AMDT: 1
					DATED: 08/20/2015

RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, TITLE 14 CFR PART 97.33							Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES										MISSED APPROACH						
FROM		TO			COURSE AND DISTANCE			ALTITUDE		RNP: DA CLIMB TO 3000 ON THE FINAL APPROACH TRACK TO RWY 19 THEN DIRECT BADDN AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000. ADDITIONAL FLIGHT DATA: HOLD S, RT, 006.49 INBOUND. CHART: 63 BRIDGE 385227N/0770220W CHART: 191 BLDG 385257N/0770146W CHART: 596 MOMUMENT 385322N/0770207W CHART P-56A/B. DISTANCE TO THLD FROM 478 HAT: 1.34 NM. CHART MINIMUM 3000 AT FERGI. ROUTE TYPE DESCRIPTION: A, H APPROACH ROUTE QUALIFIER 2: S APPROACH ROUTE QUALIFIER 1: F #TCH 62.0 MSL (DO NOT CHART)						
FERGI (IAF)		DARIC (TF) (FB) (RNP 1.00)			137.67 / 2.30			2600								
DARIC (IF)		GREYZ (TF) (FB) (RNP 1.00)			162.52 / 3.00			1700								
GREYZ		**SETOC (RF) (FB) (RNP 0.89)			(1.80 NM RADIUS CCW (CFBGW))/ 0.67			1500								
SETOC (FAF)		**FONVI (RF) (FB) (RNP 0.30)			(1.80 NM RADIUS CCW (CFBGW))/ 0.90			1214&								
FONVI		**JUBOL (RF) (FB) (RNP 0.30)			(1.50 NM RADIUS CW (CFFJM))/ 0.81			955&								
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT DARIC 3. FAC: ** _____ FAF: _____ DIST FAF TO MAP: _____ THLD: _____ 4. MIN. ALT: DARIC 2600, GREYZ 1700, SETOC 1500 5. DIST TO THLD FROM OM: 4.52 MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 1500 GS ALT AT: & _____ OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 50.0 # 34:1 IS NOT CLEAR 8. MSA FROM: RW19 2600																
										MAG VAR: 11W EPOCH YEAR: 2020						
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		STANDARD							
CATEGORY =====>		A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	
AUTHORIZATION REQUIRED																
RNP 0.11 DA	491	1 1/2	478	491	1 1/2	478	491	1 1/2	478	491	1 1/2	478				
RNP 0.30 DA	550	1 3/4	537	550	1 3/4	537	550	1 3/4	537	550	1 3/4	537				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -9C (16F) OR ABOVE 54C (130F). CHART SPEED ICON IN PLANVIEW AT FERGI : MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT GREYZ : MAX 200 KIAS. CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY. (CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 14			TDZE: 13			FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:		
WASHINGTON, DC		AIRPORT NAME:			RONALD REAGAN WASHINGTON NATIONAL			RNAV		RNAV (RNP) RWY 19, AMDT 2B				AMDT: 2A		
										29 MARCH 2018				DATED 08/20/2015		



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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
JUBOL	**WIRSO (TF) (FB) (RNP 0.30)	143.92 / 1.49	480&
WIRSO	**FIROP (RF) (FB) (RNP 0.30)	(0.96 NM RADIUS CW (CFFJL))/ 0.71	253&
FIROP	**RW19 (MAP) (TF) (FO) (RNP 0.30)	186.52 / 0.60	62&
RW19 (MAP)	BADDN (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

CHART NOTE: RF AND GPS REQUIRED.

CHART PLANVIEW NOTE: PROHIBITED AREA (P-56) 1.5 NM NORTH OF DCA - AVOID SURFACE TO 18,000 MSL.

CHART PLANVIEW NOTE AT FERGI: (RNP 0.89)



CITY AND STATE
WASHINGTON, DC

ELEVATION: 14 TDZE: 13
AIRPORT NAME:
RONALD REAGAN WASHINGTON NATIONAL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (RNP) RWY 19, AMDT 2B
29 MARCH 2018

SUP:
AMDT: 2A
DATED: 08/20/2015

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

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

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
WASHINGTON, DC	RONALD REAGAN WASHINGTON NATIONAL	29 MARCH 2018	8A

TAKEOFF MINIMUMS:

RWY 1, 600-2 WITH MINIMUM CLIMB OF 275 FT PER NM TO 1500 OR STANDARD WITH MINIMUM CLIMB OF 460 FT PER NM TO 800.

RWY 4, 300-2 OR STANDARD WITH MINIMUM CLIMB OF 210 FT PER NM TO 400, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NOT LATER THAN 1400 FT PRIOR TO DER.

RWY 15, 300-1 3/4 OR STANDARD WITH MINIMUM CLIMB OF 215 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 1500 FT PRIOR TO DER.

RWY 19, 300-1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 205 FT PER NM TO 300, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1200 FT PRIOR TO DER.

RWY 22, 500-2 3/4 OR STANDARD WITH MINIMUM CLIMB OF 305 FT PER NM TO 600.

RWY 33, STANDARD WITH MINIMUM CLIMB OF 285 FT PER NM TO 700.

TEXTUAL DEPARTURE PROCEDURES:

RWY 1: CLIMBING LEFT TURN AS SOON AS PRACTICAL TO INTERCEPT DCA VOR/DME R-328. MAINTAIN 5000 OR AS ASSIGNED.

RWY 4: CLIMBING RIGHT TURN AS SOON AS PRACTICAL TO INTERCEPT DCA VOR/DME R-070. MAINTAIN 2000 OR AS ASSIGNED.

RWY 15: CLIMB HEADING 153.64 TO 5000 OR AS ASSIGNED.

RWY 19: CLIMB HEADING 186.50 TO 500 BEFORE TURNING RIGHT. MAINTAIN 5000 OR AS ASSIGNED.

RWY 22: CLIMB HEADING 216.56 TO 3000 OR AS ASSIGNED.

RWY 33: CLIMB ON DCA VOR/DME R-328. MAINTAIN 5000 OR AS ASSIGNED.

VISUAL CLIMB OVER AIRPORT:



TAKEOFF OBSTACLE NOTES:

NOTE: RWY 1, BUILDINGS BEGINNING 118 FT FROM DER, 332 FT RIGHT OF CENTERLINE, UP TO 10 FT AGL/22 FT MSL. FENCE 261 FT FROM DER, 514 FT LEFT OF CENTERLINE, 9 FT AGL/19 FT MSL. LIGHT POLE AND TREES BEGINNING 995 FT FROM DER, 210 FT LEFT OF CENTERLINE, UP TO 47 FT AGL/49 FT MSL. TREES BEGINNING 1008 FT FROM DER, 499 FT LEFT OF CENTERLINE, UP TO 71 FT AGL/72 FT MSL. TREES 1365 FT FROM DER, 333 FT RIGHT OF CENTERLINE, UP TO 50 FT AGL/51 FT MSL. TREES BEGINNING 1744 FT FROM DER, 152 FT LEFT OF CENTERLINE, UP TO 70 FT AGL/71 FT MSL. MONUMENT 1.7 NM FROM DER, 1787 FT RIGHT OF CENTERLINE, 556 FT AGL/595 FT MSL.

NOTE: RWY 4, TERRAIN AND MICROWAVE SENSORS BEGINNING 3 FT FROM DER, 260 FT RIGHT OF CENTERLINE, UP TO 7 FT AGL/18 FT MSL. SIGN AND TOWER BEGINNING 857 FT FROM DER, 677 FT LEFT OF CENTERLINE, UP TO 72 FT AGL/84 FT MSL. SPIRE 1.6 NM FROM DER, 208 FT RIGHT OF CENTERLINE, 236 FT AGL/265 FT MSL.

NOTE: RWY 15, ELECTRICAL SYSTEMS BEGINNING 178 FT FROM DER, 288 FT RIGHT OF CENTERLINE, UP TO 10 FT AGL/19 FT MSL. TREES 1.4 NM FROM DER, 13 FT RIGHT OF CENTERLINE, UP TO 94 FT AGL/245 FT MSL. TREES 1.5 NM FROM DER, 520 FT RIGHT OF CENTERLINE, UP TO 80 FT AGL/235 FT MSL.

NOTE: RWY 19, TREES 3434 FT FROM DER, 1135 FT RIGHT OF CENTERLINE, UP TO 96 FT AGL/105 FT MSL. BUILDING 1.1 NM FROM DER, 1891 FT RIGHT OF CENTERLINE, 171 FT AGL/189 FT MSL.

NOTE: RWY 22, LIGHT POLE 216 FT FROM DER, 478 FT LEFT OF CENTERLINE, 15 FT AGL/23 FT MSL. TREES BEGINNING 550 FT FROM DER, 498 FT RIGHT OF CENTERLINE, UP TO 56 FT AGL/57 FT MSL. TREES, BUILDINGS, AND POLES BEGINNING 1324 FT FROM DER, 205 FT RIGHT OF CENTERLINE, UP TO 82 FT AGL/110 FT MSL. TREES 3098 FT FROM DER, 18 FT RIGHT OF CENTERLINE, UP TO 82 FT AGL/91 FT MSL. TREES 2898 FT FROM DER, 605 FT LEFT OF CENTERLINE, UP TO 98 FT AGL/102 FT MSL. BUILDING AND POLE BEGINNING 4270 FT FROM DER, 651 FT RIGHT OF CENTERLINE, UP TO 110 FT AGL/148 FT MSL. BUILDING 1.7 NM FROM DER, 2473 FT RIGHT OF CENTERLINE, 200 FT AGL/420 FT MSL. BUILDING 2.3 NM FROM DER, 1008 FT RIGHT OF CENTERLINE, 324 FT AGL/443 FT MSL.

NOTE: RWY 33, SIGN 18 FT FROM DER, 191 FT LEFT OF CENTERLINE, 3 FT AGL/15 FT MSL. FENCE AND POLE BEGINNING 27 FT FROM DER, 332 FT RIGHT OF CENTERLINE, UP TO 18 FT AGL/28 FT MSL. VEHICLES ON ROAD AND TREES BEGINNING 365 FT FROM DER, 344 FT LEFT OF CENTERLINE, UP TO 51 FT AGL/70 FT MSL. TREES BEGINNING 533 FT FROM DER, 101 FT LEFT OF CENTERLINE, UP TO 37 FT AGL/39 FT MSL. POLES AND TREES BEGINNING 641 FT FROM DER, 165 FT RIGHT OF CENTERLINE, UP TO 56 FT AGL/60 FT MSL. CRANES AND TREES BEGINNING 882 FT FROM DER, 289 FT LEFT OF CENTERLINE, UP TO 82 FT AGL/95 FT MSL. TREES BEGINNING 1603 FT FROM DER, 78 FT RIGHT OF CENTERLINE, UP TO 79 FT AGL/83 FT MSL. POLES AND BUILDINGS BEGINNING 1777 FT FROM DER, 868 FT LEFT OF CENTERLINE, UP TO 124 FT AGL/145 FT MSL. POLES BEGINNING 2917 FT FROM DER, 511 FT RIGHT OF CENTERLINE, UP TO 78 FT AGL/105 FT MSL. BUILDINGS AND ANTENNAS BEGINNING 4379 FT FROM DER, 246 FT LEFT OF CENTERLINE, UP TO 115 FT AGL/151 FT MSL.

CONTROLLING OBSTACLES:

RWY 1: 1049 FT MSL TOWER 385624.20N/0770452.42W (275 FT PER NM CLIMB GRADIENT). 595 FT MSL MONUMENT 385322.00N/0770207.00W (460 FT PER NM CLIMB GRADIENT, CEILING, VISIBILITY).

**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>
WASHINGTON, DC	RONALD REAGAN WASHINGTON NATIONAL	29 MARCH 2018	8A

RWY 4: 265 FT MSL SPIRE 385238.83N/0770106.34W.

RWY 15: 245 FT MSL TREE 384949.86N/0770048.40W (CLIMB GRADIENT, CLIMB-TO ALTITUDE, CEILING). 239 FT MSL TREE 384944.42N/0770051.15W (VISIBILITY).

RWY 19: 189 FT MSL BUILDING 384920.48N/0770229.29W.

RWY 22: 370 FT MSL BUILDING 384900.00N/0770359.00W (CLIMB GRADIENT, CLIMB-TO ALTITUDE). 443 FT MSL BUILDING 384826.98N/0770357.36W (CEILING, VISIBILITY).

RWY 33: 470 FT MSL BUILDING 385343.00N/0770415.00W.

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT:

RWY 4 - 1048 FT MSL TOWER 385746.00N/0770135.00W.

RWY 33 - 1049 FT MSL TOWER 385624.20N/0770452.42W.

REMARKS:

CHART NOTE AT BOTTOM OF TAKEOFF MINIMUMS: PROHIBITED AREA (P-56) 1.5 NM NORTH OF AIRPORT.

1. UNABLE TO CONSTRUCT RWY 1 AND RWY 33 DEPARTURE ROUTES THAT WOULD PERMIT A STANDARD 200 FT PER NM CLIMB. ATC HAS REQUESTED TO OPT OUT OF PUBLISHING A VCOA AS IT IS NOT PRACTICAL DUE TO HIGH TRAFFIC VOLUME AND PROHIBITED AIRSPACE 1.5 NM NORTH OF THE AIRPORT.
2. DEPARTURE ROUTES FOR RWY 15, 19, 22 AND CLIMB TO ALTITUDES FOR RWY 1, 4, 33 PUBLISHED FOR PROHIBITED AIRSPACE AVOIDANCE AND TO MEET ATC FLOW REQUIREMENTS.
3. RWY 1: 460 FT PER NM CLIMB GRADIENT ROUNDED UP TO NEXT HIGHEST 5 FT INCREMENT FOR PUBLICATION (COMPUTED VALUE 455 FT PER NM); 275 FT PER NM CLIMB GRADIENT ROUND TO NEXT HIGHEST 5 FT INCREMENT FOR PUBLICATION (COMPUTED VALUE 272 FT PER NM).
4. RWY 4 CLIMB GRADIENT ROUNDED UP TO NEXT HIGHEST 5 FT INCREMENT FOR PUBLICATION (COMPUTED VALUE 209 FT PER NM).
5. RWY 15 CLIMB GRADIENT ROUNDED UP TO NEXT HIGHEST 5 FT INCREMENT FOR PUBLICATION (COMPUTED VALUE 213 FT PER NM).
6. RWY 19 CLIMB GRADIENT ROUNDED UP TO NEXT HIGHEST 5 FT INCREMENT FOR PUBLICATION (COMPUTED VALUE 203 FT PER NM).
7. RWY 22 CLIMB GRADIENT ROUNDED UP TO NEXT HIGHEST 5 FT INCREMENT FOR PUBLICATION (COMPUTED VALUE 303 FT PER NM).
8. RWY 33 CLIMB GRADIENT ROUNDED UP TO NEXT HIGHEST 5 FT INCREMENT FOR PUBLICATION (COMPUTED VALUE 281 FT)

FLIGHT INSPECTED BY:

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

Digitally signed by

DONALD H LANIER

Dec 26, 2017

OFFICE SYMBOL:

AJW-333

DATE:

DEVELOPED BY:

BEV BORDY (CHRISTINE BAYSE)

Digitally signed by

DONALD H LANIER

Dec 26, 2017

OFFICE SYMBOL:

AJV-5433

DATE:

09/14/2017

APPROVED BY:

PATRICK MULQUEEN

Digitally signed by

DONALD H LANIER

Dec 26, 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:

ZDC, POTOMAC APP CON, DCA TOWER, ARPT MGR

CHANGES - REASONS:

1. CHANGED TEXTUAL DEPARTURE PROCEDURES FOR RWY 15 FROM "CLIMB HEADING 151.64 TO 5000 OR AS ASSIGNED" TO "CLIMB HEADING 153.64 TO 5000 OR AS ASSIGNED".- AIRPORT MAG VAR UPDATED FROM 9W TO 11W.
2. UPDATED TEXTUAL DEPARTURE PROCEDURES RWY 19 FROM "CLIMB HEADING 184.50 TO 500 BEFORE TURNING RIGHT..." TO "CLIMB HEADING 186.50 TO 500 BEFORE TURNING RIGHT..."- AIRPORT MAG VAR UPDATED FROM 9W TO 11W.
3. UPDATED TEXTUAL DEPARTURE PROCEDURES RWY 22 FROM "CLIMB HEADING 214.56 TO 3000 OR AS ASSIGNED" TO "CLIMB HEADING 216.56 TO 3000 OR AS ASSIGNED".- AIRPORT MAG VAR UPDATED FROM 9W TO 11W.

QUALITY
24
CHECKED

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

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

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
MIDDLETOWN, DE	SUMMIT	29 MARCH 2018	2A

TAKEOFF MINIMUMS:

RWY 17: STANDARD

RWY 35: 300 - 1 1/8 OR STANDARD WITH MINIMUM CLIMB OF 300 FT PER NM TO 400.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 17: TREES BEGINNING 14 FT FROM DER, 474 FT RIGHT OF CENTERLINE, UP TO 45 FT AGL/111 FT MSL. TREE 1277 FT FROM DER, 395 FT RIGHT OF CENTERLINE, 60 FT AGL/126 FT MSL. TREE 1349 FT FROM DER, 661 FT RIGHT OF CENTERLINE, 91 FT AGL/156 FT MSL. POLE AND CATENARY BEGINNING 1379 FT FROM DER, 378 FT LEFT OF CENTERLINE, UP TO 34 FT AGL/101 FT MSL. TREE 1627 FT FROM DER, 906 FT RIGHT OF CENTERLINE, 97 FT AGL/160 FT MSL. TREES BEGINNING 1639 FT FROM DER, 384 FT RIGHT OF CENTERLINE, UP TO 97 FT AGL/161 FT MSL.

NOTE: RWY 35: TREE 39 FT FROM DER, 475 FT LEFT OF CENTERLINE, 50 FT AGL/115 FT MSL. TRAVERSE WAY 350 FT FROM DER, 404 FT RIGHT OF CENTERLINE, 81 FT MSL. POLE 357 FT FROM DER, 487 FT RIGHT OF CENTERLINE, 43 FT AGL/104 FT MSL. TREES BEGINNING 381 FT FROM DER, 359 FT LEFT OF CENTERLINE, UP TO 53 FT AGL/119 FT MSL. POLES AND TREE BEGINNING 689 FT FROM DER, 28 FT RIGHT OF CENTERLINE, UP TO 43 FT AGL/106 FT MSL. TREES BEGINNING 1380 FT FROM DER, 43 FT RIGHT OF CENTERLINE, UP TO 67 FT AGL/127 FT MSL. TREES AND ELEVATOR BEGINNING 1782 FT FROM DER, 194 FT RIGHT OF CENTERLINE, UP TO 77 FT AGL/128 FT MSL. TREES BEGINNING 1970 FT FROM DER, 368 FT LEFT OF CENTERLINE, UP TO 61 FT AGL/127 FT MSL. TREE 3473 FT FROM DER, 167 FT LEFT OF CENTERLINE, 88 FT AGL/157 FT MSL. TRANSMISSION LINE 5084 FT FROM DER, 575 FT RIGHT OF CENTERLINE, 178 FT AGL/243 FT MSL. TOWER 5086 FT FROM DER, 1066 FT RIGHT OF CENTERLINE, 202 FT AGL/255 FT MSL. TOWER 5591 FT FROM DER, 1094 FT RIGHT OF CENTERLINE, 169 FT AGL/257 FT MSL. TRANSMISSION LINE 5734 FT FROM DER, 564 FT RIGHT OF CENTERLINE, 170 FT AGL/245 FT MSL.

CONTROLLING OBSTACLES:

RWY 35: 255 FT MSL TOWER 393226.10N/0754324.67W (CLIMB GRADIENT/CLIMB-TO ALTITUDE), 257 FT MSL TOWER 393231.00N/0754326.00W (CEILING), 245 FT MSL TRANSMISSION LINE 393231.00N/0754333.00W (VISIBILITY).

REMARKS:

FLIGHT INSPECTED BY:

STEPHEN BAUER

Digitally signed by
ADOLFO D URRUTIA

Dec 20, 2017

OFFICE SYMBOL:

FICO

DATE:

12/15/17

DEVELOPED BY:

ADOLFO URRUTIA (CHRISTINE BAYSE)

Digitally signed by
ADOLFO D URRUTIA

Dec 20, 2017

OFFICE SYMBOL:

AJV-5432

DATE:

11/09/2017

APPROVED BY:

PATRICK MULQUEEN

Digitally signed by
ADOLFO D URRUTIA

OFFICE SYMBOL:

AJV-5430

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

Dec 20, 2017

COORDINATED WITH:

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

☐ ☒ ☒ ☐ ☐ ☒

OTHER:

ZDC, PHL APCH, ILG ATCT, ARPT MGR, EASTERN FPT

CHANGES - REASONS:

1. UPDATED RWY 35 TAKEOFF MINIMUMS FROM "300-1 OR STANDARD WITH MINIMUM CLIMB OF 280 FT PER NM TO 400" TO "300-1 1/8 OR STANDARD WITH MINIMUM CLIMB OF 300 FT PER NM TO 400". - NEW CONTROLLING OBSTACLES.
2. UPDATED TAKEOFF OBSTACLE NOTES FOR RWY 17 AND 35.- NEW SURVEYED OBSTACLES.
3. UPDATED RWY 35 CONTROLLING OBSTACLES- NEW SURVEYED OBSTACLES.

QUALITY
3
CHECKED

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION NDB STANDARD INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.27							Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES										MISSED APPROACH						
FROM		TO		COURSE AND DISTANCE				ALTITUDE		MAP: AAF NDB						
TERES INT		AAF NDB		253.46 / 38.30				2100		CLIMB TO 1300 THEN CLIMBING RIGHT TURN TO 2100 DIRECT AAF NDB AND HOLD, CONTINUE CLIMB-IN-HOLD TO 2100.						
										ADDITIONAL FLIGHT DATA: HOLD NW, RT, 145.83 INBOUND. FAS OBST: 215 AAO 294823N/0850424W. CHART W-151B, W-470A, TYNDALL E, F, G MOAS. FAC CROSSES RWY C/L EXTENDED 3003 FT FROM THLD. CHART PLANVIEW NOTE: RADAR REQUIRED.						
1. PT <u>L</u> SIDE OF COURSE <u>325.83</u> OUTBOUND <u>2100</u> FT WITHIN <u>10</u> MILES OF <u>AAF NDB</u> (IAF)																
2.																
3. FAC <u>145.83</u> FAF DIST FAF TO MAP THLD																
4. MIN. ALT																
8. MSA FROM: <u>AAF NDB 2100</u>										MAG VAR: <u>3W</u> EPOCH YEAR: <u>2010</u>						
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		X							
CATEGORY =====>		A			B			C			D			E		
	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	
S-14	580	1	560	580	1	560	580	1 3/4	560	580	1 3/4	560				
CIRCLING	600	1	580	600	1	580	600	1 3/4	580	600	2 1/4	580				
NOTES:																
CHART NOTE: RWY 14 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.																
CHART NOTE: STRAIGHT-IN RWY 14 NA AT NIGHT, CIRCLING RWY 6, 18, 36 NA AT NIGHT.																
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED; USE NORTHWEST FLORIDA BEACHES INTL ALTIMETER. SETTING AND INCREASE ALL MDA 140 FEET, INCREASE S-14 AND CIRCLING CAT C/D VISIBILITY 1/4 MILE.																
QUALITY 40 CHECKED																
CITY AND STATE		ELEVATION: 20 TDZE: 20		FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP						
APALACHICOLA, FL		AIRPORT NAME:		AAF		NDB RWY 14, AMDT 2C 29 MARCH 2018				AMDT 2B						
		APALACHICOLA RGNL-CLEVE RANDOLPH FIELD								DATE 08/20/2015						

**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>
PERRY, FL	PERRY-FOLEY	29 MARCH 2018	1A

TAKEOFF MINIMUMS:

RWY 12, 18, 30, 36: STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

RWY 36: CLIMB HEADING 350.00 TO 600 BEFORE TURNING RIGHT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 12: TREES BEGINNING 1227 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 100 FT AGL/144 FT MSL.
NOTE: RWY 18: TREES AND ROAD BEGINNING 5 FT FROM DER, 122 FT RIGHT OF CENTERLINE, UP TO 15 FT AGL/55 FT MSL. TREES BEGINNING 800 FT FROM DER, 6 FT RIGHT OF CENTERLINE, UP TO 78 FT AGL/113 FT MSL. TREES BEGINNING 833 FT FROM DER, 84 FT LEFT OF CENTERLINE, UP TO 75 FT AGL/114 FT MSL. TREES BEGINNING 2718 FT FROM DER, 478 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/155 FT MSL.
NOTE: RWY 30: TREES BEGINNING 857 FT FROM DER, 384 FT LEFT OF CENTERLINE, UP TO 72 FT AGL/132 FT MSL. TREES AND POLE BEGINNING 1093 FT FROM DER, 292 FT RIGHT OF CENTERLINE, UP TO 77 FT AGL/123 FT MSL. TREES BEGINNING 1660 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 100 FT AGL/139 FT MSL.
NOTE: RWY 36, TREES BEGINNING 335 FT FROM DER, 506 FT RIGHT OF CENTERLINE, UP TO 69 FT AGL/113 FT MSL. TREES BEGINNING 875 FT FROM DER, 644 FT LEFT OF CENTERLINE, UP TO 72 FT AGL/116 FT MSL. TREES BEGINNING 1009 FT FROM DER, 76 FT LEFT OF CENTERLINE, UP TO 79 FT AGL/123 FT MSL. TREES AND POLES BEGINNING 1517 FT FROM DER, 22 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/149 FT MSL. TREES BEGINNING 2075 FT FROM DER, 205 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/146 FT MSL. TOWER 2.4 NM FROM DER, 4367 FT RIGHT OF CENTERLINE, 415 FT AGL/454 FT MSL.

CONTROLLING OBSTACLES:

454 FT MSL TOWER 300659.00N/0833414.00W.

OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 36 - 549 FT MSL TOWER 300623.00N/0833342.00W.

REMARKS:

FLIGHT INSPECTED BY:

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

OFFICE SYMBOL:

DATE:

VICTOR B NASO

Dec 04, 2017

DEVELOPED BY:

VICTOR NASO
(CHARLES THIBODEAUX)

Digitally signed by

VICTOR B NASO

Dec 04, 2017

OFFICE SYMBOL:

AJV-5413

DATE:

09/06/2017

APPROVED BY:

GEORGE DAVIS

Digitally signed by

VICTOR B NASO

Dec 04, 2017

OFFICE SYMBOL:

AJV-5410

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

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



OTHER:

ZJX, TALLAHASSEE APP CON

CHANGES - REASONS:

1. REMOVED RWY 6/24 FROM TAKEOFF MINIMUMS.
2. REMOVED RWY 6 TEXTUAL DEPARTURE PROCEDURES INSTRUCTIONS.

REASONS:

1. 2. RWY 6/24 CLOSED.



**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>
ST PETERSBURG-CLEARWATER, FL	ST PETE-CLEARWATER INTL	29 MARCH 2018	3B

TAKEOFF MINIMUMS:

RWY 4, 18, 36: STANDARD

RWY 22: 200-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 230 FT PER NM TO 300, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1700 FT PRIOR TO DER.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 4: TREES BEGINNING 174 FT FROM DER, 279 FT RIGHT OF CENTERLINE, UP TO 61 FT AGL/65 FT MSL. BUSH 495 FT FROM DER, 258 FT RIGHT OF CENTERLINE, 27 FT AGL/31 FT MSL. BUSH 511 FT FROM DER, 326 FT LEFT OF CENTERLINE, 17 FT AGL/21 FT MSL. TREES BEGINNING 523 FT FROM DER, 225 FT LEFT OF CENTERLINE, UP TO 17 FT AGL/21 FT MSL. BOATS BEGINNING 775 FT FROM DER, ON CENTERLINE UP TO 25 FT AGL/25 FT MSL.

NOTE: RWY 18: BUILDING 689 FT FROM DER, 418 FT RIGHT OF CENTERLINE, 34 FT AGL/44 FT MSL. SIGNS BEGINNING 909 FT FROM DER, 98 FT RIGHT OF CENTERLINE, UP TO 50 FT AGL/58 FT MSL. POLES BEGINNING 970 FT FROM DER, 114 FT RIGHT OF CENTERLINE, UP TO 51 FT AGL/58 FT MSL. POLES BEGINNING 1015 FT FROM DER, 103 FT LEFT OF CENTERLINE, UP TO 40 FT AGL/47 FT MSL. SIGN 1336 FT FROM DER, 198 FT LEFT OF CENTERLINE, 46 FT AGL/53 FT MSL. TREE 2100 FT FROM DER, 996 FT RIGHT OF CENTERLINE, 96 FT AGL/105 FT MSL. ANTENNA ON HOPPER 2583 FT FROM DER, 801 FT RIGHT OF CENTERLINE, 76 FT AGL/89 FT MSL.

NOTE: RWY 22: TOWER 123 FT FROM DER, 359 FT LEFT OF CENTERLINE, 24 FT AGL/33 FT MSL. TREES BEGINNING 1235 FT FROM DER, 270 FT LEFT OF CENTERLINE, UP TO 65 FT AGL/70 FT MSL. TREE 1629 FT FROM DER, 88 FT RIGHT OF CENTERLINE, 61 FT AGL/70 FT MSL. TOWER 5591 FT FROM DER, 266 FT RIGHT OF CENTERLINE, 153 FT AGL/168 FT MSL.

NOTE: RWY 36: BOATS BEGINNING 646 FT FROM DER, 655 FT LEFT OF CENTERLINE, UP TO 25 FT AGL/25 FT MSL.

CONTROLLING OBSTACLES:

RWY 22: 168 FT MSL TOWER 275319.00N/0824203.00W

REMARKS:

FLIGHT INSPECTED BY:

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

Digitally signed by
ADOLFO D URRUTIA
Nov 17, 2017

OFFICE SYMBOL:

AJW-333

DATE:

DEVELOPED BY:

ADOLFO URRUTIA (CHRISTINE BAYSE)
Nov 17, 2017

Digitally signed by

ADOLFO D URRUTIA

OFFICE SYMBOL:

AJV-5432

DATE:

11/03/2017

APPROVED BY:

PATRICK MULQUEEN
Nov 17, 2017

Digitally signed by

ADOLFO D URRUTIA

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:

EASTERN FPT, ZMA, KPKE ATCT, APT MGR.

CHANGES - REASONS:

1. REMOVED RWY 18R/36L FROM TAKEOFF MINIMUMS.- RWY CONVERTED TO TAXIWAY.
2. CHANGED ALL REFERENCES OF RWY 18L/36R TO RWY 18/36.- NO PARALLEL RUNWAY.
3. REMOVED RWY 9/27 FROM TAKEOFF MINIMUMS, TEXTUAL DEPARTURE PROCEDURE, AND TAKEOFF OBSTACLE NOTES AND CONTROLLING OBSTACLES.-RWY CLOSED INDEFINITELY PER APT MGR.

QUALITY
3
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: 5.88 NM AFTER COSME LOM CLIMB TO 600 THEN CLIMBING LEFT TURN TO 2800 ON HEADING 160 AND ON PIE VORTAC R-138 TO GIBBS INT/PIE 29.33 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 3000 ON SRQ VOR/DME R-007 TO CARIR INT/SRQ 16.76 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 317.79 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD S CARIR INT/SRQ 16.76 DME, RT, 007.36 INBOUND. CHART FAS OBST: 188 TOWER 280143N/0823155W. CHART IN PLANVIEW: CARIR INT/SRQ 16.76 DME. CHART CIRCLING ICON.					
BUCCS/RADAR (IF)		COSME LOM			186.73 / 3.30			2000							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT BUCCS 3. FAC: <u>186.73</u> FAF: <u>COSME LOM</u> DIST FAF TO MAP: <u>5.88</u> THLD: <u>5.88</u> 4. MIN. ALT: BUCCS 3000, COSME LOM 2000 5. DIST TO THLD FROM OM: <u>5.88</u> MM: <u>-</u> IM: <u>1010</u> 150 HAT: <u>1816</u> 100 HAT: <u>883</u> GS ANT: <u>1048</u> 6. MIN GS INCPT: <u>2000</u> GS ALT AT: _____ OM: <u>1984</u> MM: <u>-</u> IM: <u>133</u> 7. GS ANGLE: <u>3.00</u> TCH: <u>51.0</u> 8. MSA FROM: TP LOM 2700										MAG VAR: 5W		EPOCH YEAR: 2010			
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 19L	226	1800	200	226	1800	200	226	1800	200	226	1800	200	226	1800	200
S-LOC 19L	440	2400	414	440	2400	414	440	4000	414	440	4000	414	440	4000	414
CIRCLING	560	1	534	560	1	534	680	1 3/4	654	980	3	954		NA	
NOTES: SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 19L: CAT A, B, C, D, RA 150, RVR 1400, HAT 150, DA 176 MSL. CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 19L: CAT A, B, C, D, RA 101, RVR 1200, HAT 100, DA 126 MSL. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 26		TDZE: 26		FACILITY IDENTIFIER: I-TPA		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:			
TAMPA, FL		AIRPORT NAME: TAMPA INTL						ILS OR LOC RWY 19L, AMDT 40D; ILS RWY 19L (SA CAT I), ILS RWY 19L (CAT II) 29 MARCH 2018				AMDT: 40C			
												DATED 06/26/2014			



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

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NOTES, (CONT.):**CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.****CHART NOTE: RADAR REQUIRED.****SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF HUD TO DH.****CAT II RVR 1000 CHART NOTE: RVR 1000 AUTHORIZED WITH SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF AUTOLAND OR HUD TO TOUCHDOWN.****CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).****CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 19L CAT E VISIBILITY TO RVR 4000 AND S-LOC 19L CAT E VISIBILITY TO RVR 6000.**

QUALITY
19
CHECKED

CITY AND STATE

TAMPA, FL

ELEVATION: 26**TDZE: 26**

AIRPORT NAME:

TAMPA INTL

FACILITY
IDENTIFIER:
I-TPA

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

**ILS OR LOC RWY 19L, AMDT 40D; ILS RWY 19L (SA CAT I)
, ILS RWY 19L (CAT II)**

29 MARCH 2018

SUP:

AMDT: **40C**DATED: **06/26/2014**

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		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 29 MARCH 2018																	
CITY AND STATE ST MARYS, GA		ELEVATION: 23 TDZE: 23 AIRPORT NAME: ST MARYS		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 4, ORIG, 09/23/2010						SUP: AMDT: NONE DATED					



US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES										MISSED APPROACH					
FROM		TO		COURSE AND DISTANCE				ALTITUDE		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 29 MARCH 2018															
CITY AND STATE ST MARYS, GA		ELEVATION: 23 TDZE: 23 AIRPORT NAME: ST MARYS				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 13, AMDT 1, 08/27/2009				SUP: AMDT: ORIG DATED 12/22/2005			



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 29 MARCH 2018																	
CITY AND STATE ST MARYS, GA		ELEVATION: 23 TDZE: 23 AIRPORT NAME: ST MARYS		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 31, AMDT 1A, 09/18/2014						SUP: AMDT: 1 DATED 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>
ST MARYS, GA	ST MARYS	01/10/2013	4

TAKEOFF MINIMUMS:

Procedure Canceled Effective 29 MARCH 2018

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

CONTROLLING OBSTACLES:

REMARKS:

FLIGHT INSPECTED BY:

OFFICE SYMBOL:

DATE:

DEVELOPED BY:

DAVID TEFFETELLER (JAMES LAFFERTY)

Digitally signed by
DAVID TEFFETELLER

Dec 04, 2017

OFFICE SYMBOL:
AJV-5433

DATE:
09/26/2017

APPROVED BY:

PARTICK MULQUEEN

Digitally signed by
DAVID TEFFETELLER

Dec 04, 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:

AMGR, JAX APP CON, GA STATE AERO

CHANGES - REASONS:



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: RW04 CLIMB TO 3000 DIRECT PURVE AND ON TRACK 326.82 TO JOGOS AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, RT, 169.54 INBOUND. FAS OBST: 309 AAO 304658N/0831716W. 319 AAO 304456N/0831759W. CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.											
TAY VORTAC	JAVBU (TF) (FB) (RNP 2.00)	281.41 / 40.65	1900												
GEF VORTAC (IAF)	AZAHE (NOPT) (TF) (FB) (RNP 1.00)	081.69 / 19.79	1900												
JAVBU (IAF)	AZAHE (NOPT) (TF) (FB) (RNP 1.00)	310.80 / 5.00	1900												
AZAHE (IF/IAF)	CIMSA (TF) (FB) (RNP 1.00)	040.76 / 6.36	1900												
CIMSA (FAF)	WOPEL/1.80 NM TO RW04 (TF) (FB) (RNP 0.30)	040.79 / 2.98													
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SW AZAHE, RT, 040.76 INBOUND, 1900 FT. IN LIEU OF PT (IAF) 3. FAC: 040.79 FAF: CIMSA DIST FAF TO MAP: 4.78 THLD: 4.78 4. MIN. ALT: AZAHE 1900, CIMSA 1900, WOPEL/1.80 NM TO RW04 860 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: RW04 2200															
				MAG VAR: 5W 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
LNAV MDA	560	1	358	560	1	358	560	1	358	560	1	358			
CIRCLING	640	1	437	660	1	457	660	1 1/2	457	780	2	577			
NOTES: CHART NOTE: RWY 4 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. @ NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON GEF VORTAC AIRWAY RADIALS 091 CW 145. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MOULTRIE ALTIMETER SETTING AND INCREASE (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 203 TDZE: 202		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
VALDOSTA, GA		AIRPORT NAME: VALDOSTA RGNL				RNAV (GPS) RWY 4, AMDT 1C 29 MARCH 2018				AMDT: 1B					
										DATED 06/22/2017					



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
WOPEL/1.80 NM TO RW04	RW04 (MAP) (TF) (FO) (RNP 0.30)	040.79 / 1.80	
RW04 (MAP)	560 MSL (CA)	040.79	
560 MSL	PURVE (DF) (FB) (RNP 1.00)		
PURVE	JOGOS (TF) (FO) (RNP 1.00)	326.82 / 10.39	3000

NOTES, (CONT.):

ALL MDA 100 FEET AND LNAV CAT C AND D VISIBILITY 3/8 SM, CIRCLING CAT D 1/4 SM.
 CHART NOTE: STRAIGHT-IN RWY 4 NA AT NIGHT, CIRCLING RWY 4, 13, 31 NA AT NIGHT.

QUALITY
6
CHECKED

CITY AND STATE

VALDOSTA, GA

ELEVATION: 203

TDZE: 202

AIRPORT NAME:

VALDOSTA RGNL

 FACILITY
 IDENTIFIER:
 RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 4, AMDT 1C

29 MARCH 2018

SUP:

AMDT: 1B

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.																	
TERMINAL ROUTES										MISSED APPROACH											
FROM		TO			COURSE AND DISTANCE				ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW17 CLIMB TO 2700 DIRECT YUPUY AND TRACK 176.65 TO HADDE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT, 353.65 INBOUND. CHART FAS OBST: 469 TOWER 304930N/0831716W. DISTANCE TO THLD FROM 255 HAT: 0.65 NM. CHART VDP AT 1.48 NM TO RW17* *LNAV ONLY. WAAS CHANNEL # 87101 REFERENCE PATH ID: W17A LTP HAE: 31.9 M										
GEF VORTAC		HIVNI (TF) (FB) (RNP 2.00)			039.94 / 28.95				2700												
HIVNI (IAF)		CUVGA (NOPT) (TF) (FB) (RNP 1.00)			085.72 / 8.00				2200												
CUVGA (IF)		ZURAR (TF) (FB) (RNP 1.00)			175.80 / 5.94				1800												
ZURAR (FAF)		RW17 (MAP) (TF) (FO) (RNP 0.30)			175.81 / 4.88																
RW17 (MAP)		454 MSL (CA)			175.81																
(SEE FORM 8260-10)																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT CUVGA _____ 3. FAC: 175.81 FAF: ZURAR _____ DIST FAF TO MAP: 4.88 THLD: 4.88 4. MIN. ALT: CUVGA 2200, ZURAR 1800 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 1800 GS ALT AT: ZURAR 1800 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 50.2 34:1 IS NOT CLEAR 8. MSA FROM: RW17 2200																		MAG VAR: 5W		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	454	3/4	255	454	3/4	255	454	3/4	255	454	3/4	255									
LNAV/VNAV DA	458	7/8	259	458	7/8	259	458	7/8	259	458	7/8	259									
LNAV MDA	720	1	521	720	1	521	720	1 1/2	521	720	1 1/2	521									
CIRCLING	720	1	517	720	1	517	720	1 1/2	517	780	2	577									
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -6C (22F) OR ABOVE 54C (130F). @ NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART NOTE: CIRCLING RWY 4, 13, 31 NA AT NIGHT. CHART NOTE: RWY 17 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: 203 TDZE: 199			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:								
VALDOSTA, GA		AIRPORT NAME: VALDOSTA RGNL						RNAV (GPS) RWY 17, AMDT 2B					AMDT: 2A								
								29 MARCH 2018					DATED 08/17/2017								

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

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

TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
454 MSL	YUPUY (DF) (FB) (RNP 1.00)		
YUPUY	HADDE (TF) (FO) (RNP 1.00)	176.65 / 13.16	2700

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON GEF VORTAC AIRWAY RADIALS 337 CW 122.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MOULTRIE ALTIMETER SETTING: INCREASE LPV DA TO 542 FEET AND ALL VISIBILITIES 3/8 SM; INCREASE LNAV/VNAV DA TO 546 AND ALL VISIBILITIES 1/4 SM; INCREASE ALL MDA 100 FEET AND VISIBILITY CAT C AND D 1/4 SM.

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

QUALITY
6
CHECKED

CITY AND STATE VALDOSTA, GA	ELEVATION: 203	TDZE: 199	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 17, AMDT 2B 29 MARCH 2018	SUP:
	AIRPORT NAME:				AMDT: 2A
	VALDOSTA RGNL				DATED: 08/17/2017

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

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

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KVLD
RUNWAY	RW17
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W17A
LTP/FTP LATITUDE	304725.6680N
LTP/FTP LONGITUDE	0831630.7780W
LTP/FTP ELLIPSOIDAL HEIGHT	+00319
FPAP LATITUDE	304557.5075N
FPAP LONGITUDE	0831614.2785W
THRESHOLD CROSSING HEIGHT (TCH)	00050.2
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0312
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

794A53DC

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00598
FPAP ORTHOMETRIC HEIGHT	+00598

QUALITY
6
CHECKED

CITY AND STATE

VALDOSTA, GA

ELEVATION: 203

TDZE: 199

AIRPORT NAME:

VALDOSTA RGNL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 17, AMDT 2B

29 MARCH 2018

SUP:

AMDT:

2A

DATED:

08/17/2017

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33			Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.											
TERMINAL ROUTES										MISSED APPROACH						
FROM		TO		COURSE AND DISTANCE			ALTITUDE		LNAV: RW29							
UKN VOR/DME		FAYNE (TF) (FO) (RNP 2.00)		160.15 / 5.46			2900		CLIMBING LEFT TURN TO 2900 DIRECT FAYNE AND HOLD.							
FAYNE (IF/IAF)		AVELE (TF) (FB) (RNP 1.00)		293.83 / 6.10			2900									
AVELE (FAF)		KUCCE/2.30 NM TO RW29 (TF) (FB) (RNP 0.30)		293.75 / 2.97					ADDITIONAL FLIGHT DATA: HOLD SE, RT, 293.83 INBOUND. CHART FAS OBST: 1319 TREE 431635N/0914324W. VISUAL SEGMENT - OBSTACLES							
KUCCE/2.30 NM TO RW29		RW29 (MAP) (TF) (FO) (RNP 0.30)		293.75 / 2.30												
RW29 (MAP)		1558 MSL (CA)		293.75												
1558 MSL		FAYNE (DF) (FO) (RNP 1.00)					2900									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																
2. HOLD SE FAYNE, RT, 293.83 INBOUND, 2900 FT. IN LIEU OF PT (IAF)																
3. FAC: 293.75 FAF: AVELE DIST FAF TO MAP: 5.27 THLD: 5.27																
4. MIN. ALT: FAYNE 2900, AVELE 2900, KUCCE/2.30 NM TO RW29 1920																
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																
6. MIN GS INCPT: _____ GS ALT AT: _____ OM: _____ MM: _____ IM: _____																
7. GS ANGLE: _____ TCH: 20:1 IS CLEAR 34:1 IS NOT CLEAR																
8. MSA FROM: RW29 2800																
MAG VAR: 1E EPOCH YEAR: 1995																
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD				
CATEGORY =====>		A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	
LNAV MDA	1580	1	422	1580	1	422		NA			NA					
CIRCLING	1620	1	462	1620	1	462		NA			NA					
NOTES: CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON UNK VOR/DME AIRWAY RADIALS 084 CW 216. CHART NOTE: RWY 29 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.																
CITY AND STATE DECORAH, IA		ELEVATION: 1158 TDZE: 1158 AIRPORT NAME: DECORAH MUNI			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 29, ORIG-B 29 MARCH 2018					SUP: AMDT: ORIG-A DATED 05/07/2009				

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION VOR STANDARD INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.23										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES										MISSED APPROACH									
FROM			TO			COURSE AND DISTANCE				ALTITUDE		MAP: 8.57 NM AFTER UKN VOR/DME							
												CLIMB TO 2900 THEN LEFT TURN DIRECT UKN VOR/DME AND HOLD.							
												ADDITIONAL FLIGHT DATA: HOLD E, RT, 262.00 INBOUND. CHART FAS OBST: 1319 TREE 431530N/0914330W.							
1. PT <u>L</u> SIDE OF COURSE <u>082.31</u> OUTBOUND <u>2900</u> FT WITHIN <u>10</u> MILES OF <u>UKN VOR/DME</u> (IAF)																			
2.																			
3. FAC <u>262.31</u> FAF <u>UKN VOR/DME</u> DIST FAF TO MAP <u>8.57</u> THLD <u>8.57</u>																			
4. MIN. ALT <u>UKN VOR/DME 2900, JUXOP/UKN VOR/DME 5.00 DME 1780</u>																			
8. MSA FROM: <u>UKN VOR/DME 2900</u>										MAG VAR: 5E					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-29	1780	1	622	1780	1	622		NA			NA								
CIRCLING	1780	1	622	1780	1	622		NA			NA								
JUXOP FIX MINIMUMS																			
S-29	1580	1	422	1580	1	422		NA			NA								
CIRCLING	1620	1	462	1620	1	462		NA			NA								
NOTES:																			
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).																			
CHART NOTE: RWY 29 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.																			
CITY AND STATE DECORAH, IA		ELEVATION: 1158 TDZE: 1158 AIRPORT NAME: DECORAH MUNI				FACILITY IDENTIFIER: UKN		PROCEDURE NO./AMD'T NO./EFFECTIVE DATE: VOR RWY 29, AMD'T 3E 29 MARCH 2018						SUP AMD'T 3D DATE 08/18/2016					



**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.



CITY AND STATE

DECORAH, IA

ELEVATION: 1158

TDZE: 1158

AIRPORT NAME:

DECORAH MUNI

FACILITY
IDENTIFIER:

UKN

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

VOR RWY 29, AMDT 3E

29 MARCH 2018

SUP:

AMDT: 3D

DATED: 08/18/2016

RNAV - STANDARD 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 2800 DIRECT HEVPI AND ON TRACK 124.90 TO OTM VOR/DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 303.00 INBOUND. CHART FAS OBST: 898 TREE 410617N/0922720W. DISTANCE TO THLD FROM 250 HAT: 0.67 NM. WAAS CHANNEL # 86300 REFERENCE PATH ID: W13A LTP HAE: 223.5 M											
OTM VOR/DME				JODUN (TF) (FB) (RNP 2.00)				310.03 / 19.65				2800													
BUSSY (IAF)				JODUN (NOPT) (TF) (FB) (RNP 1.00)				067.36 / 10.21				2800													
NASAL (IAF)				JODUN (NOPT) (TF) (FB) (RNP 1.00)				177.44 / 13.78				2800													
JODUN (IF/IAF)				LITIY (TF) (FB) (RNP 1.00)				131.87 / 6.08				2800													
LITIY (FAF)				NIKRE/1.30 NM TO RW13 (TF) (FB) (RNP 0.30)				131.93 / 4.62																	
(SEE FORM 8260-10)																									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NW JODUN, RT, 131.87 INBOUND, 2800 FT. IN LIEU OF PT (IAF) 3. FAC: 131.93 FAF: LITIY DIST FAF TO MAP: 5.92 THLD: 5.92 4. MIN. ALT: JODUN 2800, LITIY 2800, NIKRE/1.30 NM TO RW13 1280* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2800 GS ALT AT: LITIY OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 41.0 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW13 3000																MAG VAR: 3E EPOCH YEAR: 1985									
MINIMUMS																									
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		#		STANDARD													
CATEGORY =====>		A			B			C			D			E											
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA										
LPV DA	1094	3/4	250	1094	3/4	250	1094	3/4	250		NA														
LNAV/VNAV DA	1135	7/8	291	1135	7/8	291	1135	7/8	291		NA														
LNAV MDA	1160	1	316	1160	1	316	1160	7/8	316		NA														
CIRCLING	1260	1	415	1300	1	455	1300	1 1/2	455		NA														
NOTES: CHART NOTE: CIRCLING TO RWY 4 NA AT NIGHT. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 47C (117F). CHART NOTE: DME/DME RNP-0.3 NA. *LNAV ONLY																# NA WHEN LOCAL WEATHER NOT AVAILABLE.									
CITY AND STATE OTTUMWA, IA				ELEVATION: 845 TDZE: 844 AIRPORT NAME: OTTUMWA RGNL				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 13, ORIG-B 29 MARCH 2018				SUP:											
														AMDT: ORIG-A											
														DATED 05/07/2009											



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

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

TERMINAL ROUTES, (CONT.):

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

QUALITY
19
CHECKED

CITY AND STATE

OTTUMWA, IA

ELEVATION: 845

TDZE: 844

AIRPORT NAME:

OTTUMWA RGNL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 13, ORIG-B

29 MARCH 2018

SUP:

AMDT: ORIG-A

DATED: 05/07/2009

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

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

FAS DATA BLOCK INFORMATION

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

ADDITIONAL PATH POINT RECORD INFORMATION

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

QUALITY
19
CHECKED

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

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES																MISSED APPROACH									
FROM				TO				COURSE AND DISTANCE				ALTITUDE		LNAV: RW04L CLIMBING RIGHT TURN TO 2400 DIRECT PAKLE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 317.52 INBOUND. FAS OBST: 839 AAO 414415N/0874930W. CHART 853 TOWER 414403N/0875024W. CHART VDP AT 1.38 NM TO RW04L. CHART CIRCLING ICON. HADGI TO RW04L: 3.03/55.											
CGT VORTAC				PAKLE (TF) (FB) (RNP 2.00)				299.70 / 13.02				2400													
EON VORTAC				TASUE (TF) (FB) (RNP 2.00)				339.82 / 21.77				2300													
JOT VOR/DME				TASUE (TF) (FB) (RNP 2.00)				081.52 / 15.18				2300													
PAKLE (IAF)				JERNU (TF) (FB) (RNP 1.00)				317.52 / 5.00				2300													
TASUE (IAF)				JERNU (TF) (FB) (RNP 1.00)				047.31 / 5.00				2300													
(SEE FORM 8260-10)																									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT JERNU 3. FAC: <u>047.41</u> FAF: <u>HADGI</u> DIST FAF TO MAP: <u>5.04</u> THLD: <u>5.04</u> 4. MIN. ALT: <u>JERNU 2300, HADGI 2300</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>RW04L 3400</u>																MAG VAR: <u>4W</u> EPOCH YEAR: <u>2015</u>									
MINIMUMS																									
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		STANDARD															
CATEGORY =====>		A			B			C			D			E											
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA										
LNAV MDA	1100	1	483	1100	1	483	1100	1 3/8	483	1100	1 3/8	483													
CIRCLING	1120	1	500	1120	1	500	1340	2	720	1340	2 1/4	720													
NOTES: CHART NOTE: CIRCLING TO RWY 31R NA AT NIGHT. CHART NOTE: RWY 4L HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).																									
CITY AND STATE				ELEVATION: 620 TDZE: 617				FACILITY IDENTIFIER:				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
CHICAGO, IL				AIRPORT NAME:				RNAV				RNAV (GPS) RWY 4L, ORIG-D				AMDT: ORIG-C									
				CHICAGO MIDWAY INTL								29 MARCH 2018				DATED 07/24/2014									

QUALITY
 10
 CHECKED

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

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

TERMINAL ROUTES, (CONT.):

<u>FROM</u>	<u>TO</u>	<u>COURSE AND DISTANCE</u>	<u>ALTITUDE</u>
JERNU (IF)	HADGI (TF) (FB) (RNP 1.00)	047.35 / 5.00	2300
HADGI (FAF)	RW04L (MAP) (TF) (FO) (RNP 0.30)	047.41 / 5.04	
RW04L (MAP)	1020 MSL (CA)	047.41	
1020 MSL	PAKLE (DF) (FO) (RNP 1.00)		2400

CITY AND STATE
CHICAGO, IL

ELEVATION: 620 TDZE: 617
 AIRPORT NAME:
CHICAGO MIDWAY INTL

FACILITY
 IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 4L, ORIG-D
 29 MARCH 2018

SUP: **ORIG-C**
 AMDT: **ORIG-C**
 DATED: **07/24/2014**

QUALITY
 10
 CHECKED

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33									Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.					
TERMINAL ROUTES												MISSED APPROACH									
FROM			TO			COURSE AND DISTANCE			ALTITUDE			LNAV: RW13L									
CGT VORTAC			KANLE (TF) (FB) (RNP 2.00)			320.72 / 27.74			2300			CLIMBING RIGHT TURN TO 2100 DIRECT IGEY THEN CLIMB TO 2600 ON TRACK 187.02 TO EON VORTAC AND HOLD.									
EON VORTAC			KANLE (TF) (FB) (RNP 2.00)			349.14 / 35.77			2400												
JOT VOR/DME			KANLE (TF) (FB) (RNP 2.00)			042.81 / 23.10			2300												
KANLE (IAF)			HANOD (TF) (FB) (RNP 1.00)			047.51 / 5.00			2300												
HANOD (IF)			EXEKE (TF) (FB) (RNP 1.00)			137.44 / 5.00			2300			ADDITIONAL FLIGHT DATA: HOLD N, RT, 181.00 INBOUND. FAS OBST: 819 AA0 414959N/0874853W. CHART CIRCLING ICON. CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES. CHART MANDATORY 2100 AT IGEY.									
(SEE FORM 8260-10)																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																					
2. PROFILE STARTS AT HANOD																					
3. FAC: 137.50 FAF: EXEKE DIST FAF TO MAP: 5.07 THLD: 5.07																					
4. MIN. ALT: HANOD 2300, EXEKE 2300																					
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: RW13L 3400												MAG VAR: 4W			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						
LNAV MDA	1080	1	471	1080	1	471	1080	1 3/8	471	1080	1 3/8	471									
CIRCLING	1120	1	500	1120	1	500	1340	2	720	1340	2 1/4	720									
NOTES: CHART NOTE: CIRCLING TO RWY 31R NA AT NIGHT. CHART NOTE: RWY 13L HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA.																					
CITY AND STATE CHICAGO, IL			ELEVATION: 620 TDZE: 609 AIRPORT NAME: CHICAGO MIDWAY INTL			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 13L, ORIG-E 29 MARCH 2018					SUP: AMDT: ORIG-D 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, (CONT.):

<u>FROM</u>	<u>TO</u>	<u>COURSE AND DISTANCE</u>	<u>ALTITUDE</u>
EXEKE (FAF)	RW13L (MAP) (TF) (FO) (RNP 0.30)	137.50 / 5.07	
RW13L (MAP)	1020 MSL (CA)	137.50	
1020 MSL	IGECY (DF) (FB) (RNP 1.00)		2100
IGECY	EON VORTAC (TF) (FO) (RNP 1.00)	187.02 / 19.95	2600

CITY AND STATE
CHICAGO, IL

ELEVATION: 620 TDZE: 609
AIRPORT NAME:
CHICAGO MIDWAY INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 13L, ORIG-E
29 MARCH 2018

SUP: **QUALITY
10
CHECKED**
AMDT: **ORIG-D**
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		LNAV: RW31R								
EON VORTAC				PANUE (TF) (FB) (RNP 2.00)			020.45 / 21.05				2400		CLIMBING LEFT TURN TO 2300 DIRECT IGECY THEN CLIMB TO 2600 ON TRACK 187.02 TO EON VORTAC AND HOLD.								
JOT VOR/DME				PANUE (TF) (FB) (RNP 2.00)			086.89 / 29.93				2400										
ORD VOR/DME				IDUDE (TF) (FB) (RNP 2.00)			132.57 / 23.88				3400										
CGT VORTAC (IAF)				HAKBO (TF) (FB) (RNP 1.00)			001.14 / 9.41				2300										
IDUDE (IAF)				HAKBO (TF) (FB) (RNP 1.00)			228.05 / 6.00				2300		ADDITIONAL FLIGHT DATA: HOLD N, RT, 181.00 INBOUND. CHART FAS OBST: 762 TOWER 414718N/0874419W. CHART CIRCLING ICON. FANEK TO RW31R: 3.05/55. CHART MANDATORY 2300 AT IGECY.								
(SEE FORM 8260-10)																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																					
2. PROFILE STARTS AT HAKBO																					
3. FAC: 317.62 FAF: FANEK DIST FAF TO MAP: 5.06 THLD: 5.06																					
4. MIN. ALT: HAKBO 2300, FANEK 2300, CENAP/1.80 NM TO RW31R 1240																					
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: RW31R 3400														MAG VAR: 4W				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						
LNAV MDA	1060	1	450	1060	1	450	1060	1 3/8	450	1060	1 3/8	450									
CIRCLING	1120	1	500	1120	1	500	1340	2	720	1340	2 1/4	720									
NOTES: CHART NOTE: RWY 31R HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. @ CAT D 800-2 1/4 CHART NOTE: DME/DME RNP-0.3 NA. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART NOTE: STRAIGHT-IN RWY 31R AND CIRCLING RWY 31R NA AT NIGHT.																					
CITY AND STATE CHICAGO, IL				ELEVATION: 620 TDZE: 610 AIRPORT NAME: CHICAGO MIDWAY INTL				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 31R, ORIG-E 29 MARCH 2018					SUP: AMDT: ORIG-D DATED 07/24/2014						

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
PANUE (IAF)	HAKBO (TF) (FB) (RNP 1.00)	047.52 / 5.00	2300
HAKBO (IF)	FANEK (TF) (FB) (RNP 1.00)	317.68 / 5.01	2300
FANEK (FAF)	CENAP/1.80 NM TO RW31R (TF) (FB) (RNP 0.30)	317.62 / 3.26	
CENAP/1.80 NM TO RW31R	RW31R (MAP) (TF) (FO) (RNP 0.30)	317.62 / 1.80	
RW31R (MAP)	1020 MSL (CA)	317.62	
1020 MSL	IGECY (DF) (FB) (RNP 1.00)		2300
IGECY	EON VORTAC (TF) (FO) (RNP 1.00)	187.02 / 19.95	2600

 CITY AND STATE
 CHICAGO, IL

 ELEVATION: 620 TDZE: 610
 AIRPORT NAME:
 CHICAGO MIDWAY INTL

 FACILITY
 IDENTIFIER:
 RNAV

 PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 31R, ORIG-E
 29 MARCH 2018

 SUP: **QUALITY
10
CHECKED**
 AMDT: **ORIG-D**
 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: RW04R CLIMB TO 1100 THEN CLIMBING RIGHT TURN TO 2600 DIRECT EON VORTAC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, RT, 181.00 INBOUND. CHART FAS OBST: 811 STACK 414606N/0874537W. DISTANCE TO THLD FROM 250 HAT: 0.63 NM. CHART VDP AT 1.23 NM TO RW04R* *LNAV ONLY. WAAS CHANNEL # 65614 REFERENCE PATH ID: W04A CHART CIRCLING ICON. LTP HAE: 155.3 M									
JOT VOR/DME (IAF)		BANER (TF) (FB) (RNP 1.00)		080.02 / 16.06				5000											
WUPOR (IAF)		BANER (TF) (FB) (RNP 1.00)		047.18 / 16.00				5000											
BANER (IF)		CADON (TF) (FB) (RNP 1.00)		047.34 / 3.40				4000											
CADON		CITGO (TF) (FB) (RNP 1.00)		047.37 / 5.16				2400											
CITGO (FAF)		OLOXE/2.50 NM TO RW04R (TF) (FB) (RNP 0.30)		047.43 / 2.94															
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT BANER 3. FAC: 047.43 FAF: CITGO DIST FAF TO MAP: 5.44 THLD: 5.44 4. MIN. ALT: BANER 5000, CADON 4000, CITGO 2400, OLOXE/2.50 NM TO RW04R 1460* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2400 GS ALT AT: CITGO 2400 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 49.8 34:1 IS NOT CLEAR 8. MSA FROM: RW04R 3400																MAG VAR: 4W		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	869	4000	250	869	4000	250	869	5000	250	869	5000	250							
LNAV/VNAV DA	1097	1 5/8	478	1097	1 5/8	478	1097	1 5/8	478	1097	1 5/8	478							
LNAV MDA	1080	5500	461	1080	5500	461	1080	1 3/8	461	1080	1 3/8	461							
CIRCLING	1120	1	500	1120	1	500	1340	2	720	1340	2 1/4	720							
NOTES: CHART NOTE: CIRCLING TO RWY 31R NA AT NIGHT. @ CAT D 800-2 1/4 CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -19C (-2F) OR ABOVE 54C (130F). CHART NOTE: RWY 4R HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)																			
CITY AND STATE		ELEVATION: 620 TDZE: 619				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:							
CHICAGO, IL		AIRPORT NAME:				RNAV		RNAV (GPS) Z RWY 4R, AMDT 3D				AMDT: 3C							
		CHICAGO MIDWAY INTL						29 MARCH 2018				DATED 07/24/2014							

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
OLOXE/2.50 NM TO RW04R	RW04R (MAP) (TF) (FO) (RNP 0.30)	047.43 / 2.50	
RW04R (MAP)	1100 MSL (CA)	047.43	1100
1100 MSL	EON VORTAC (DF) (FO) (RNP 1.00)		2600

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT JOT VOR/DME ON V8 WESTBOUND.

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

CITY AND STATE
CHICAGO, IL

ELEVATION: 620 TDZE: 619
AIRPORT NAME:
CHICAGO MIDWAY INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) Z RWY 4R, AMDT 3D
29 MARCH 2018

SUP:
AMDT: 3C
DATED: 07/24/2014

QUALITY
10
CHECKED

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

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

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMDW
RUNWAY	RW04R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Z
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W04A
LTP/FTP LATITUDE	414648.6980N
LTP/FTP LONGITUDE	0874528.8450W
LTP/FTP ELLIPSOIDAL HEIGHT	+01553
FPAP LATITUDE	414753.3705N
FPAP LONGITUDE	0874406.8735W
THRESHOLD CROSSING HEIGHT (TCH)	00049.8
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0944
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 78F13BB7

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01887
FPAP ORTHOMETRIC HEIGHT	+01887

CITY AND STATE
CHICAGO, IL

ELEVATION: 620 TDZE: 619
AIRPORT NAME:
CHICAGO MIDWAY INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) Z RWY 4R, AMDT 3D
29 MARCH 2018

SUP:
AMDT: 3C
DATED: 07/24/2014

QUALITY
10
CHECKED

US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

ILS - STANDARD
INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.29

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

TERMINAL ROUTES				MISSED APPROACH				
FROM	TO	COURSE AND DISTANCE	ALTITUDE					
				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 <u>29 MARCH 2018</u>								
CITY AND STATE		ELEVATION: 680 TDZE: 668		FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:		SUP: ILS OR LOC RWY
CHICAGO, IL		AIRPORT NAME:		I-ORD		ILS OR LOC RWY 15, AMDT 30D, 09/15/2016		14R
		CHICAGO O'HARE INTL						AMDT: 30C
								DATED 03/12/2012

QUALITY
16
CHECKED

ILS - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES																	MISSED APPROACH									
FROM				TO				COURSE AND DISTANCE				ALTITUDE		ILS: DA LOC: 4.67 NM AFTER PONCC INT/I-VQX 4.34 DME/RADAR OR AT I-VQX 0.34 DME CLIMB TO 1200 THEN CLIMBING LEFT TURN TO 4000 DIRECT CGT VORTAC AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1200 THEN CLIMBING LEFT TURN TO 4000 DIRECT JOT VOR/DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 336.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SW JOT VOR/DME, RT, 066.00 INBOUND. CHART FAS OBST: 807 TOWER 415719N/0875153W. CHART VDP AT 0.76 DME* DISTANCE VDP TO THLD 1.09 NM. *LOC ONLY. CHART IN PLANVIEW: JOT VOR/DME. CHART IN PROFILE VIEW: I-VQX DME ANTENNA.												
VOGLR (IAF)				LYSIN (TF) (FB) (RNP 1.00)				275.46 / 17.17				9000														
LYSIN/26.46 DME/RADAR				KEGNE/23.32 DME/RADAR				273.88 / 3.14 (I-VQX)				8000														
KEGNE/23.32 DME/RADAR				JAVON/20.18 DME/RADAR				273.88 / 3.14 (I-VQX)				7000														
JAVON/20.18 DME/RADAR				HANSO/17.05 DME/RADAR				273.88 / 3.14 (I-VQX)				6000														
HANSO/17.05 DME/RADAR				FITAR/13.91 DME/RADAR				273.88 / 3.14 (I-VQX)				5000														
FITAR/13.91 DME/RADAR (IF)				CAKOS/10.77 DME/RADAR				273.88 / 3.14 (I-VQX)				4000														
CAKOS/10.77 DME/RADAR				PONCC INT/4.34 DME/RADAR				273.88 / 6.43 (I-VQX)				2200														
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT LYSIN/26.46 DME/RADAR 3. FAC: 273.88 FAF: PONCC INT/4.34 DME/RADAR DIST FAF TO MAP: 4.67 THLD: 4.67 4. MIN. ALT: LYSIN 9000, KEGNE 8000, JAVON 7000, HANSO 6000, FITAR 5000, CAKOS 4000, PONCC 2200, (SEE FORM 8260-10) 5. DIST TO THLD FROM OM: _____ - _____ MM: _____ - _____ IM: 1026 150 HAT: 1985 100 HAT: 1031 GS ANT: 994 6. MIN GS INCPT: 2200 GS ALT AT: PONCC 2200 OM: _____ - _____ MM: _____ - _____ IM: 767 7. GS ANGLE: 3.00 TCH: 55.0 8. MSA FROM: ORD VOR/DME 3400																	MAG VAR: 4W			EPOCH YEAR: 2015						
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	867	1800	200	867	1800	200	867	1800	200	867	1800	200														
S-LOC 28L	1240	2400	573	1240	2400	573	1240	1 1/4	573	1240	1 1/4	573														
ALKYL FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)																										
S-LOC 28L	1060	2400	393	1060	2400	393	1060	3500	393	1060	3500	393														
NOTES: <u>SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED;</u> S-ILS 28L: CAT A, B, C, D, RA 157, RVR 1400, HAT 150, DA 817 MSL. <u>CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED;</u> S-ILS 28L: CAT A, B, C, D, RA 106, RVR 1200, HAT 100, DA 767 MSL. (CONTINUED ON PAGE 2)																										
CITY AND STATE				ELEVATION: 680 TDZE: 667				FACILITY IDENTIFIER: I-VQX				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:										
CHICAGO, IL				AIRPORT NAME:								ILS OR LOC RWY 28L, ORIG-A; ILS RWY 28L (SA CAT I), ILS RWY 28L (CAT II), ILS RWY 28L (CAT III)				AMDT: ORIG										
				CHICAGO O'HARE INTL								29 MARCH 2018				DATED 10/15/2015										



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

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

LINE 4, (CONT.):

ALKYL INT/1.47 DME 1240*

NOTES, (CONT.):

CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 28L: CAT III CAT A, B, C, D, RVR 600.

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.

CHART NOTE: FOR INOPERATIVE ALSF-2, INCREASE S-LOC 28L CAT C AND D VISIBILITY TO 1 5/8 MILE.

CHART NOTE: DME OR RADAR REQUIRED.

CHART PLANVIEW NOTE: RNAV 1-GPS OR RADAR REQUIRED.

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

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

QUALITY
4
CHECKED

CITY AND STATE

CHICAGO, IL

ELEVATION: 680

TDZE: 667

AIRPORT NAME:

CHICAGO O'HARE INTL

FACILITY
IDENTIFIER:
I-VQX

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 28L, ORIG-A; ILS RWY 28L (SA CAT I),
ILS RWY 28L (CAT II), ILS RWY 28L (CAT III)

29 MARCH 2018

SUP:

AMDT: ORIG

DATED: 10/15/2015

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: 4.51 NM AFTER FLLYN INT/I-BYW 6.57 DME/RADAR OR AT WUGIX/2.06 DME FIX CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 4000 DIRECT DPA VOR/DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 4000 DIRECT JOT VOR/DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 068.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SW JOT VOR/DME, RT, 066.00 INBOUND. CHART FAS OBST: 852 TANK 415733N/0875658W. CHART VDP AT 2.86 DME* DISTANCE VDP TO THLD 1.21 NM. *LOC ONLY. CHART IN PLANVIEW: JOT VOR/DME. FICTITIOUS THRESHOLD POINT (CFLCC) DO NOT CHART. FAC CROSSES RWY C/L EXTENDED 2462 FT FROM THLD. CHART PLANVIEW NOTE: LOC OFFSET 2.50 DEGREES.						
GIBNS (IAF)	FERLL (TF) (FB) (RNP 1.00)			086.94 / 20.13			9000									
FERLL/27.83 DME/RADAR	MLSEN/24.68 DME/RADAR			091.36 / 3.14 (I-BYW)			8000									
MLSEN/24.68 DME/RADAR	OLLGA/21.54 DME/RADAR			091.36 / 3.14 (I-BYW)			7000									
OLLGA/21.54 DME/RADAR	LEATH/18.39 DME/RADAR			091.36 / 3.14 (I-BYW)			6000									
LEATH/18.39 DME/RADAR	GOOZY/15.26 DME/RADAR			091.36 / 3.13 (I-BYW)			5000									
GOOZY/15.26 DME/RADAR (IF)	KVENN/12.11 DME/RADAR			091.36 / 3.14 (I-BYW)			4000									
KVENN/12.11 DME/RADAR	FLLYN INT/6.57 DME/RADAR			091.36 / 5.55 (I-BYW)			2300									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT FERLL/27.83 DME 3. FAC: 091.36 FAF: FLLYN INT/6.57 DME/RADAR DIST FAF TO MAP: 4.51 THLD: 4.91 4. MIN. ALT: FERLL 9000, MLSEN 8000, OLLGA 7000, LEATH 6000, GOOZY 5000, KVENN 4000, FLLYN 2300, (SEE FORM 8260-10) 5. DIST TO THLD FROM OM: _____ - _____ MM: _____ - _____ IM: _____ 150 HAT: _____ - _____ 100 HAT: _____ - _____ GS ANT: 1112 6. MIN GS INCPT: 2300 GS ALT AT: FLLYN 2300 OM: _____ - _____ MM: _____ - _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 55.0 8. MSA FROM: ORD VOR/DME 3400										MAG VAR: 4W		EPOCH YEAR: 2015				
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	930	3/4	250	930	3/4	250	930	3/4	250	930	3/4	250				
S-LOC 10R	1220	3/4	540	1220	3/4	540	1220	1	540	1220	1	540				
TRUFL FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)																
S-LOC 10R	1120	3/4	440	1120	3/4	440	1120	3/4	440	1120	3/4	440				
NOTES: CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: DME OR RADAR REQUIRED. CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-ILS 10R ALL CATS. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 10R CAT A AND B VISIBILITY TO 1 SM. (CONTINUED ON PAGE 2)																
CITY AND STATE			ELEVATION: 680 TDZE: 680			FACILITY IDENTIFIER: I-BYW		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:			
CHICAGO, IL			AIRPORT NAME:					ILS Y OR LOC Y RWY 10R, ORIG-B					AMDT: ORIG-A			
			CHICAGO O'HARE INTL					29 MARCH 2018					DATED 06/22/2017			



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

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LINE 4, (CONT.):
TRUFL INT/3.45 DME 1220*

NOTES, (CONT.):
CHART NOTE: RWY 10R HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: RNAV 1-GPS OR RADAR REQUIRED.

QUALITY
4
CHECKED

CITY AND STATE CHICAGO, IL	ELEVATION: 680 TDZE: 680 AIRPORT NAME: CHICAGO O'HARE INTL	FACILITY IDENTIFIER: I-BYW	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS Y OR LOC Y RWY 10R, ORIG-B 29 MARCH 2018	SUP:
				AMDT: ORIG-A
				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								
GIBNS (IAF)		FERLL (TF) (FB) (RNP 1.00)		086.94 / 20.13		9000		CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 4000 DIRECT DPA VOR/DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 4000 DIRECT JOT VOR/DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 068.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SW JOT VOR/DME, RT, 066.00 INBOUND. CHART IN PLANVIEW: JOT VOR/DME. FICTITIOUS THRESHOLD POINT (CFLCC) DO NOT CHART. FAC CROSSES RWY C/L EXTENDED 2462 FT FROM THLD. CHART PLANVIEW NOTE: LOC OFFSET 2.50 DEGREES.								
FERLL/27.83 DME/RADAR		MLSEN/24.68 DME/RADAR		091.36 / 3.14 (I-BYW)		8000										
MLSEN/24.68 DME/RADAR		OLLGA/21.54 DME/RADAR		091.36 / 3.14 (I-BYW)		7000										
OLLGA/21.54 DME/RADAR		LEATH/18.39 DME/RADAR		091.36 / 3.14 (I-BYW)		6000										
LEATH/18.39 DME/RADAR		GOOZY/15.26 DME/RADAR		091.36 / 3.13 (I-BYW)		5000										
GOOZY/15.26 DME/RADAR (IF)		KVENN/12.11 DME/RADAR		091.36 / 3.14 (I-BYW)		4000										
KVENN/12.11 DME/RADAR		FLLYN INT/6.57 DME/RADAR		091.36 / 5.55 (I-BYW)		2300										
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT FERLL/27.83 DME 3. FAC: 091.36 FAF: _____ DIST FAF TO MAP: _____ THLD: _____ 4. MIN. ALT: FERLL 9000, MLSEN 8000, OLLGA 7000, LEATH 6000, GOOZY 5000, KVENN 4000, FLLYN 2300 5. DIST TO THLD FROM OM: 4.91 MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 1112 6. MIN GS INCPT: 2300 GS ALT AT: FLLYN 2300 OM: - MM: - IM: - 7. GS ANGLE: 3.00 TCH: 55.0 8. MSA FROM: ORD VOR/DME 3400										MAG VAR: 4W		EPOCH YEAR: 2015				
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT				ALTERNATE: N A		ILS: STANDARD										
CATEGORY ==>		A		B		C		D		E						
		DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
S-ILS 10R		930	3/4	250	930	3/4	250	930	3/4	250	930	3/4	250			
NOTES: CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. PROCEDURE NOT AUTHORIZED WHEN GLIDE SLOPE NOT AVAILABLE. DUAL VHF COMM REQUIRED. SEE ADDITIONAL REQUIREMENTS ON AAUP. CHART NOTE: DME OR RADAR REQUIRED. CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-ILS 10R ALL CATS. (CONTINUED ON PAGE 2)																
CITY AND STATE CHICAGO, IL		ELEVATION: 680 TDZE: 680 AIRPORT NAME: CHICAGO O'HARE INTL		FACILITY IDENTIFIER: I-BYW		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS PRM Y RWY 10R, ORIG-B (CLOSE PARALLEL) 29 MARCH 2018						SUP: AMDT: ORIG-A DATED 06/22/2017				



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

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NOTES, (CONT.):
CHART NOTE: RWY 10R HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: RNAV 1-GPS OR RADAR REQUIRED.



CITY AND STATE CHICAGO, IL	ELEVATION: 680 TDZE: 680 AIRPORT NAME: CHICAGO O'HARE INTL	FACILITY IDENTIFIER: I-BYW	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS PRM Y RWY 10R, ORIG-B (CLOSE PARALLEL) 29 MARCH 2018	SUP:
				AMDT: ORIG-A
				DATED: 06/22/2017

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: 4.91 NM AFTER KUULA INT/I-IZJ 6.48 DME/RADAR OR AT I-IZJ 1.57 DME CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 4000 DIRECT DPA VOR/DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 4000 DIRECT JOT VOR/DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 068.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SW JOT VOR/DME, RT, 066.00 INBOUND. CHART FAS OBST: 834 TANK 415733N/0875658W. CHART VDP AT 2.71 DME* DISTANCE VDP TO THLD 1.14 NM. *LOC ONLY. CHART IN PLANVIEW: JOT VOR/DME.						
GIBNS (IAF)		SAFLY (TF) (FB) (RNP 1.00)		086.75 / 20.20				9000								
SAFLY/27.72 DME/RADAR		POPOF/24.57 DME/RADAR		093.87 / 3.14 (I-IZJ)				8000								
POPOF/24.57 DME/RADAR		DAYZE/21.43 DME/RADAR		093.87 / 3.14 (I-IZJ)				7000								
DAYZE/21.43 DME/RADAR		BNITO/18.29 DME/RADAR		093.87 / 3.14 (I-IZJ)				6000								
BNITO/18.29 DME/RADAR		BOOTR/15.15 DME/RADAR		093.87 / 3.14 (I-IZJ)				5000								
BOOTR/15.15 DME/RADAR (IF)		NIRRA/12.00 DME/RADAR		093.87 / 3.15 (I-IZJ)				4000								
NIRRA/12.00 DME/RADAR		KUULA INT/6.48 DME/RADAR		093.87 / 5.52 (I-IZJ)				2300								
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT SAFLY/27.72 DME 3. FAC: 093.87 FAF: KUULA INT/6.48 DME/RADAR DIST FAF TO MAP: 4.91 THLD: 4.91 4. MIN. ALT: SAFLY 9000, POPOF 8000, DAYZE 7000, BNITO 6000, BOOTR 5000, NIRRA 4000, KUULA 2300, (SEE FORM 8260-10) 5. DIST TO THLD FROM OM: _____ - _____ MM: _____ - _____ IM: 859 150 HAT: 1815 100 HAT: 861 GS ANT: 1112 6. MIN GS INCPT: 2300 GS ALT AT: KUULA 2300 OM: _____ - _____ MM: _____ - _____ IM: 780 7. GS ANGLE: 3.00 TCH: 54.9 8. MSA FROM: ORD VOR/DME 3400										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 10R	880	1800	200	880	1800	200	880	1800	200	880	1800	200				
S-LOC 10R	1100	2400	420	1100	2400	420	1100	2400	420	1100	2400	420				
NOTES: SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 10R: CAT A, B, C, D, RA 165, RVR 1400, HAT 150, DA 830 MSL. CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 10R: CAT A, B, C, D, RA 110, RVR 1200, HAT 100, DA 780 MSL. (CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 680 TDZE: 680				FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:				
CHICAGO, IL		AIRPORT NAME:				I-IZJ		ILS Z OR LOC Z RWY 10R, ORIG-A; ILS Z RWY 10R (SA CAT I), ILS Z RWY 10R (CAT II), ILS Z RWY 10R (CAT III)				AMDT: ORIG				
		CHICAGO O'HARE INTL						29 MARCH 2018				DATED 06/22/2017				

QUALITY
 4
 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.		
LINE 4, (CONT.): ALYEA INT/3.37 DME/RADAR 1220*					
NOTES, (CONT.): CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 10R: CAT III CAT A, B, C, D, RVR 600. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: DME OR RADAR REQUIRED. SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF HUD TO DH. CAT II RVR 1000 CHART NOTE: RVR 1000 AUTHORIZED WITH SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF AUTOLAND OR HUD TO TOUCHDOWN. CHART PLANVIEW NOTE: RNAV 1-GPS OR RADAR REQUIRED. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 10R CAT C AND D VISIBILITY TO RVR 6000.					
CITY AND STATE CHICAGO, IL	ELEVATION: 680 AIRPORT NAME: CHICAGO O'HARE INTL	TDZE: 680	FACILITY IDENTIFIER: I-IJ	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS Z OR LOC Z RWY 10R, ORIG-A; ILS Z RWY 10R (SA CAT I), ILS Z RWY 10R (CAT II), ILS Z RWY 10R (CAT III) 29 MARCH 2018	SUP:
					AMDT: ORIG
					DATED: 06/22/2017



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		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	
NOTES:															
PROCEDURE CANCELED EFFECTIVE 29 MARCH 2018															
CITY AND STATE CHICAGO, IL		ELEVATION: 680		TDZE: 668		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMD'T NO./EFFECTIVE DATE: RNAV (GPS) RWY 15, AMDT 2E, 08/17/2017				SUP: AMD'T: 2D DATED 09/15/2016			
		AIRPORT NAME: CHICAGO O'HARE INTL													

**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>
CHICAGO, IL	CHICAGO O'HARE INTL	29 MARCH 2018	20C

TAKEOFF MINIMUMS:

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

RWY 27L: STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 900, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1500 FEET PRIOR TO DER.

RWY 27R: STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 1800.

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

RWY 28L: STANDARD WITH MINIMUM CLIMB OF 235 FT PER NM TO 1000, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1900 FEET PRIOR TO DER.

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

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 4L: TOWER ON BUILDING 3301 FT FROM DER, 1248 FT RIGHT OF CENTERLINE, 109 FT AGL/750 FT MSL.

NOTE: RWY 4R: AIRCRAFT ON TAXIWAY 152 FT FROM DER, 329 FT LEFT OF CENTERLINE, 80 FT AGL/735 FT MSL. TREE 809 FT FROM DER, 610 FT RIGHT OF CENTERLINE, 675 FT MSL.

NOTE: RWY 9L: BUILDING 2771 FT FROM DER, 1233 FT RIGHT OF CENTERLINE, 94 FT AGL/745 FT MSL.

NOTE: RWY 9R: POLE 877 FT FROM DER, 688 FT RIGHT OF CENTERLINE, 29 FT AGL/673 FT MSL.

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

NOTE: RWY 10L: AIRCRAFT ON TAXIWAY BEGINNING 32 FT FROM DER, 439 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/735 FT MSL. SIGN AND TOWER ON BUILDING BEGINNING 2518 FT FROM DER, 729 FT RIGHT OF CENTERLINE, UP TO 88 FT AGL/732 FT MSL. TOWER 3958 FT FROM DER, 1287 FT RIGHT OF CENTERLINE, 127 FT AGL/771 FT MSL. POLE 4388 FT FROM DER, 1585 FT LEFT OF CENTERLINE, 124 FT AGL/762 FT MSL.

NOTE: RWY 10R: TREE 2190 FT FROM DER, 1020 FT RIGHT OF CENTERLINE, 714 FT MSL. TREES BEGINNING 2202 FT FROM DER, 1016 FT RIGHT OF CENTERLINE, UP TO 715 FT MSL. TREE 2248 FT FROM DER, 777 FT RIGHT OF CENTERLINE, 716 FT MSL. TREES BEGINNING 2265 FT FROM DER, 780 FT RIGHT OF CENTERLINE, UP TO 717 FT MSL. TREES BEGINNING 2365 FT FROM DER, 586 FT RIGHT OF CENTERLINE, UP TO 720 FT MSL. TREE 2412 FT FROM DER, 735 FT RIGHT OF CENTERLINE, 723 FT MSL. TREES BEGINNING 2415 FT FROM DER, 586 FT RIGHT OF CENTERLINE, UP TO 71 FT AGL/724 FT MSL.

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

NOTE: RWY 22R: AIRCRAFT ON TAXIWAY 34 FT FROM DER, 429 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/736 FT MSL.

NOTE: RWY 27L: AIRCRAFT ON TAXIWAY 70 FT FROM DER, 407 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/740 FT MSL. POLE 5860 FT FROM DER, 1822 FT LEFT OF CENTERLINE, 147 FT AGL/812 FT MSL.

NOTE: RWY 27R: TANK 1509 FT FROM DER, 886 FT LEFT OF CENTERLINE, 56 FT AGL/726 FT MSL. ELEVATOR 2778 FT FROM DER, 1019 FT LEFT OF CENTERLINE, 111 FT AGL/776 FT MSL.

NOTE: RWY 28C: TREE 2373 FT FROM DER, 1099 FT LEFT OF CENTERLINE, 737 FT MSL. TREE 2559 FT FROM DER, 257 FT RIGHT OF CENTERLINE, 737 FT MSL. TREE 2907 FT FROM DER, 1196 FT LEFT OF CENTERLINE, 746 FT MSL. TREE 3526 FT FROM DER, 695 FT LEFT OF CENTERLINE, 768 FT MSL.

NOTE: RWY 28L: RAILROAD BEGINNING 590 FT FROM DER, 639 FT LEFT OF CENTERLINE, UP TO 700 FT MSL. POLE 1070 FT FROM DER, 697 FT LEFT OF CENTERLINE, 707 FT MSL. TREE 1583 FT FROM DER, 803 FT LEFT OF CENTERLINE, 724 FT MSL. TREES BEGINNING 1590 FT FROM DER, 724 FT LEFT OF CENTERLINE, UP TO 734 FT MSL. TREE 1877 FT FROM DER, 825 FT LEFT OF CENTERLINE, 740 FT MSL. TREES BEGINNING 1911 FT FROM DER, 788 FT LEFT OF CENTERLINE, UP TO 79 FT AGL/751 FT MSL. TREES BEGINNING 2552 FT FROM DER, 717 FT LEFT OF CENTERLINE,

QUALITY
3
CHECKED

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

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

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
CHICAGO, IL	CHICAGO O'HARE INTL	29 MARCH 2018	20C

UP TO 758 FT MSL. TANK 5913 FT FROM DER, 741 FT RIGHT OF CENTERLINE, 167 FT AGL/834 FT MSL.

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

CONTROLLING OBSTACLES:

RWY 27L: 812 FT MSL POLE 415844.00N/0875620.00W.

RWY 27R: 1468 FT MSL TOWER 420042.49N/0880206.93W.

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

RWY 28L: 852 FT MSL TANK 415732.96N/0875658.25W.

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

REMARKS:

1. DEPARTURE ROUTES THAT WOULD AUTHORIZE STANDARD TAKEOFF MINIMUMS WITH A 200 FT PER NM CLIMB GRADIENT AND MEET ATC FLOW REQUIREMENTS CAN NOT BE CONSTRUCTED FOR RWY 27L, 27R, 28C, 28L AND 28R. NON-STANDARD CLIMB GRADIENTS PUBLISHED TO MITIGATE 40:1 PENETRATIONS PER ATC REQUEST.
2. ATC REQUESTS TO OPT OUT OF VCOA REQUIREMENT DUE TO TRAFFIC VOLUME AND COMPLEXITY.
3. AIRBUS 380 (80 FT AGL) USED AS WORST CASE FOR AIRCRAFT ON TAXIWAYS.
4. RWY 27L AND RWY 27R CLIMB GRADIENTS ROUNDED UP TO 220 FT PER NM FOR PUBLICATION (COMPUTED VALUE IS 218 FT PER NM).
5. RWY 28L CLIMB GRADIENT COMPUTES TO 210 FT PER NM TO 900. RETAINED PUBLISHED 235 FT PER NM TO 1000 CLIMB GRADIENT UNTIL NEXT FULL AMENDMENT.
6. RWY 28R CLIMB GRADIENT ROUNDED UP TO 225 FT PER NM FOR PUBLICATION (COMPUTED VALUE IS 222 FT PER NM).

QUALITY
3
CHECKED

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

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

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
CHICAGO, IL	CHICAGO O'HARE INTL	29 MARCH 2018	20C

FLIGHT INSPECTED BY: *Digitally signed by*
BRIAN HARRELSON
DION E LANCIA
Nov 16, 2017

OFFICE SYMBOL: FICO
DATE: 11/16/17

DEVELOPED BY: *Digitally signed by*
HEIDI SNIDER
HEIDI SNIDER
Oct 02, 2017

OFFICE SYMBOL: AJV-5423
DATE: 10/02/2017

APPROVED BY: *Digitally signed by*
JULIE MORGAN
DION E LANCIA
Nov 16, 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:
ZAU, ORD APP CON, ORD ATCT, AMGR

CHANGES - REASONS:

1. AMENDED TAKE OFF MINIMUMS, REMOVED RWY 15 & RWY 33 - RWY DECOMMISSIONING.
2. AMENDED TAKEOFF OBSTACLE NOTES, REMOVED RWY 15 & RWY 33 - RWY DECOMMISSIONING.
3. REMOVED RWY 33 CONTROLLING OBSTACLE - RWY DECOMMISSIONING.
4. REMOVED REMARKS REGARDING RWY 15 & RWY 33 - RWY DECOMMISSIONING.

QUALITY
3
CHECKED

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION				RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.								
TERMINAL ROUTES										MISSED APPROACH						
FROM		TO		COURSE AND DISTANCE				ALTITUDE		LNAV: RW26 CLIMB TO 1800 THEN CLIMBING RIGHT TURN TO 2500 DIRECT EHUHY AND HOLD. ADDITIONAL FLIGHT DATA: CHART FAS OBST: 1049 TREE 421318N/0881739W. CHART 1030 TWR 421242N/0885720W. UBHOD TO RW26: 2.93/40.						
GRIFT		EHUHY (TF) (FO) (RNP 2.00)		096.94 / 35.70				2600								
KRENA		IJBII (TF) (FB) (RNP 2.00)		102.96 / 17.36				2500								
IJBII (IAF)		EHUHY (NOPT) (TF) (FB) (RNP 1.00)		171.85 / 5.00				2500								
EHUHY (IF/IAF)		UBHOD (TF) (FB) (RNP 1.00)		261.86 / 5.27				2400								
UBHOD (FAF)		RW26 (MAP) (TF) (FO) (RNP 0.30)		261.78 / 4.73												
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD E EHUHY, RT, 261.86 INBOUND, 2500 FT. IN LIEU OF PT (IAF) 3. FAC: 261.78 FAF: UBHOD DIST FAF TO MAP: 4.73 THLD: 4.73 4. MIN. ALT: EHUHY 2500, UBHOD 2400 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: _____ GS ALT AT: _____ OM: _____ MM: _____ IM: _____ 7. GS ANGLE: _____ TCH: 34:1 IS NOT CLEAR 8. MSA FROM: RW26 2600																
										MAG VAR: 2W			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	
LNAV MDA	1300	1	413	1300	1	413	1300	1 1/4	413		NA					
CIRCLING	1380	1	493	1380	1	493	1380	1 1/2	493		NA					
CHICAGO DUPAGE ALTIMETER SETTING																
LNAV MDA	1360	1	473	1360	1	473	1360	1 3/8	473		NA					
CIRCLING	1460	1	573	1460	1	573	1460	1 1/2	573		NA					
NOTES: 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 KRENA ON V-24-100-228 WESTBOUND. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). (CONTINUED ON PAGE 2)																
CITY AND STATE CHICAGO/LAKE IN THE HILLS, IL				ELEVATION: 887 TDZE: 887 AIRPORT NAME: LAKE IN THE HILLS				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 26, ORIG-A 29 MARCH 2018				SUP: AMDT: ORIG DATED 03/15/2007		

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.

TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW26 (MAP)	1800 MSL (CA)	261.78	1800
1800 MSL	EHUHY (DF) (FO) (RNP 1.00)		2500

NOTES, (CONT.):

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

QUALITY
18
CHECKED

CITY AND STATE

CHICAGO/LAKE IN THE HILLS, IL

ELEVATION: 887

TDZE: 887

AIRPORT NAME:

LAKE IN THE HILLS

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 26, ORIG-A

29 MARCH 2018

SUP:

AMDT: **ORIG**

DATED: **03/15/2007**

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: 4.91 NM AFTER JIMMO INT OR AT I-JQH 1.24 DME						
JOT VOR/DME		JIMMO INT/I-JQH 6.14 DME			098.43 / 8.78			2300		CLIMBING RIGHT TURN TO 2500 VIA JOT VOR/DME R-065 TO BOJAK INT/OBK 33.77 DME AND HOLD, OR AS DIRECTED BY ATC. ALTERNATE MA (DO NOT CHART): CLIMBING LEFT TURN TO 2300 DIRECT JOT VOR/DME AND HOLD SW, RT, 066.00 INBOUND. ADDITIONAL FLIGHT DATA: HOLD N, RT, 183.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SW JOT VOR/DME, RT, 066.00 INBOUND. CHART FAS OBST: 805 WATER TOWER 413445N/0880610W. FAS OBST: 880 AAO 413230N/0880645W. CHART 930 TOWER 413400N/0880714W. CHART VDP AT 2.38 DME DISTANCE VDP TO THLD 1.14 NM. CHART IN PLANVIEW: JOT VOR/DME. JIMMO TO RW02: 3.04/37						
1. PT <u> R </u> SIDE OF COURSE <u> 195.73 </u> OUTBOUND <u> 2300 </u> FT WITHIN <u> 10 </u> MILES OF <u> JIMMO </u> (IAF) 2. _____ 3. FAC <u> 015.73 </u> FAF <u> JIMMO INT/I-JQH 6.14 DME </u> DIST FAF TO MAP <u> 4.91 </u> THLD <u> 4.91 </u> 4. MIN. ALT <u> JIMMO INT/I-JQH 6.14 DME 2300, TURRK/I-JQH 2.94 DME 1260 </u> 8. MSA FROM: <u> JOT VOR/DME 2600 </u>										MAG VAR: 2W EPOCH YEAR: 2000						
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-02	1260	1	581	1260	1	581	1260	1 1/2	581	1260	1 3/4	581				
CIRCLING	1260	1	581	1260	1	581	1260	1 1/2	581	1440	2 1/2	761				
TURRK FIX MINIMUMS																
S-02	1080	1	401	1080	1	401	1080	1 1/4	401	1080	1 1/4	401				
CIRCLING	1260	1	581	1260	1	581	1260	1 1/2	581	1440	2 1/2	761				
NOTES:																
CITY AND STATE CHICAGO/ROMEOVILLE, IL		ELEVATION: 679 TDZE: 679 AIRPORT NAME: LEWIS UNIVERSITY			FACILITY IDENTIFIER: I-JQH		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: LOC RWY 2, AMDT 1A 29 MARCH 2018					SUP AMDT 1 DATE 06/03/2010				



U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION LOC/DME 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: RW09 OR AT 1.08 DME							
DPA VOR/DME (IAF)		GATLY INT/I-LOT 10.66 DME (NOPT)			173.09 / 17.39			2500		CLIMB TO 1300 THEN CLIMBING RIGHT TURN TO 2500 DIRECT JOT VOR/DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1300 THEN CLIMBING RIGHT TURN TO 2500 VIA CGT VORTAC R-278 TO GATLY INT/I-LOT 10.66 DME AND HOLD W, RT, 089.73 INBOUND. ADDITIONAL FLIGHT DATA: HOLD SW, RT, 066.00 INBOUND. CHART FAS OBST: 840 CRANE 413629N/0880747W. CHART VDP AT 2.29 DME DISTANCE VDP TO THLD 1.21 NM. HOBLT TO RW09: 3.03/41							
JOT VOR/DME (IAF)		GATLY INT/I-LOT 10.66 DME (NOPT)			359.04 / 3.31			2500									
GATLY INT/I-LOT 10.66 DME (IF/IAF)		HOBLT/I-LOT 4.46 DME			089.73 / 6.20 (I-LOT)			1800									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD W GATLY, RT, 089.73 INBOUND, 2500 FT. IN LIEU OF PT (IAF) _____ 3. FAC 089.73 FAF HOBLT/I-LOT 4.46 DME _____ DIST FAF TO MAP _____ THLD 3.38 4. MIN. ALT GATLY 2500, HOBLT 1800 8. MSA FROM: JOT VOR/DME 2600														MAG VAR: 2W		EPOCH YEAR: 2000	
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-09	1100	1	427	1100	1	427	1100	1 1/4	427	1100	1 1/2	427					
CIRCLING	1260	1	581	1260	1	581	1260	1 1/2	581	1440	2 1/2	761					
NOTES: 																	
CITY AND STATE CHICAGO/ROMEOVILLE, IL				ELEVATION: 679 TDZE: 673 AIRPORT NAME: LEWIS UNIVERSITY				FACILITY IDENTIFIER: I-LOT		PROCEDURE NO./AMD'T NO./EFFECTIVE DATE: LOC/DME RWY 9, AMDT 1A 29 MARCH 2018				SUP AMD'T 1 DATE 08/30/2007			

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.											
TERMINAL ROUTES				MISSED APPROACH											
FROM	TO	COURSE AND DISTANCE	ALTITUDE	LPV: DA LNAV/VNAV: DA LNAV: RW02 CLIMB TO 2500 DIRECT ALASE AND RIGHT TURN ON TRACK 115.62 TO BOJAK AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT, 002.99 INBOUND. CHART FAS OBST: 930 TOWER 413400N/0880714W, 895 STACK 413443N/0880544W. DISTANCE TO THLD FROM 200 HAT: 0.51 NM. CHART VDP AT 1.65 NM TO RW02* *LNAV ONLY. WAAS CHANNEL # 93520 REFERENCE PATH ID: W02A LTP HAE: 173.9 M											
JOT VOR/DME	CAMLI (TF) (FO) (RNP 2.00)	138.23 / 10.42	2300												
EON VORTAC (IAF)	CAMLI (NOPT) (TF) (FB) (RNP 1.00)	300.74 / 18.93	2300												
MEDAN (IAF)	CAMLI (NOPT) (TF) (FB) (RNP 1.00)	051.96 / 7.45	2300												
CAMLI (IF/IAF)	JIMMO (TF) (FB) (RNP 1.00)	015.69 / 6.10	2300												
JIMMO (FAF)	RW02 (MAP) (TF) (FO) (RNP 0.30)	015.71 / 4.91													
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S CAMLI, RT, 015.69 INBOUND, 2300 FT. IN LIEU OF PT (IAF) 3. FAC: 015.71 FAF: JIMMO DIST FAF TO MAP: 4.91 THLD: 4.91 4. MIN. ALT: CAMLI 2300, JIMMO 2300 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2300 GS ALT AT: JIMMO 2300 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 37.0 34:1 IS CLEAR 8. MSA FROM: RW02 3400															
				MAG VAR: 2W EPOCH YEAR: 2000											
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT				ALTERNATE: N A		STANDARD @									
CATEGORY >>>>>	A		B		C		D		E						
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
LPV DA	879	3/4	200	879	3/4	200	879	3/4	200	879	3/4	200			
LNAV/VNAV DA	1256	2	577	1256	2	577	1256	2	577	1256	2	577			
LNAV MDA	1240	1	561	1240	1	561	1240	1 1/2	561	1240	1 3/4	561			
CIRCLING	1260	1	581	1260	1	581	1260	1 1/2	581	1440	2 1/2	761			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 47C (116F). @ CAT D 800-2 1/2 CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT JOT VOR/DME ON V8 WESTBOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT EON VORTAC ON V156 EASTBOUND.															
CITY AND STATE		ELEVATION: 679 TDZE: 679		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
CHICAGO/ROMEOVILLE, IL		AIRPORT NAME:		LEWIS UNIVERSITY		RNAV (GPS) RWY 2, AMDT 2A 29 MARCH 2018				AMDT: 2					
										DATED 07/29/2010					



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

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

TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW02 (MAP)	879 MSL (CA)	015.71	
879 MSL	ALASE (DF) (FB) (RNP 1.00)		
ALASE	BOJAK (TF) (FO) (RNP 1.00)	115.62 / 5.18	2500

CITY AND STATE
CHICAGO/ROMEOVILLE, IL

ELEVATION: 679 TDZE: 679
AIRPORT NAME:
LEWIS UNIVERSITY

FACILITY
IDENTIFIER:
RNAV

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

SUP:
AMDT: 2
DATED: 07/29/2010

QUALITY
24
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	KLOT
RUNWAY	RW02
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W02A
LTP/FTP LATITUDE	413557.2335N
LTP/FTP LONGITUDE	0880603.2275W
LTP/FTP ELLIPSOIDAL HEIGHT	+01739
FPAP LATITUDE	413723.8200N
FPAP LONGITUDE	0880535.0300W
THRESHOLD CROSSING HEIGHT (TCH)	00037.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0768
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
 <u>CRC REMAINDER</u>	 29AD319C

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02070
FPAP ORTHOMETRIC HEIGHT	+02070

QUALITY
24
CHECKED

CITY AND STATE CHICAGO/ROMEOVILLE, IL	ELEVATION: 679 TDZE: 679 AIRPORT NAME: LEWIS UNIVERSITY	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 2, AMDT 2A 29 MARCH 2018	SUP:
				AMDT: 2
				DATED: 07/29/2010

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29									Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.					
TERMINAL ROUTES												MISSED APPROACH									
FROM			TO			COURSE AND DISTANCE			ALTITUDE			ILS: DA LOC: 5.17 NM AFTER SPNCE OM/INT									
JOT VOR/DME (IAF)			BOMER INT/9.91 DME			359.08 / 9.91			3000			CLIMB TO 1200 THEN CLIMBING LEFT TURN TO 3000 DIRECT DPA VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000. ALTERNATE MA (DO NOT CHART): CLIMB TO 1200 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 210 AND JOT VOR/DME R-347 TO VAINS INT/JOT 13.01 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 068.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD N VAINS INT/JOT 13.01 DME, RT, 167.38 INBOUND. CHART FAS OBST: 1187 TOWER 414827N/0881607W. CHART 1187 TOWER 414827N/0881607W. CHART 1175 TOWER 414831N/0881612W. CHART IN PLANVIEW: VAINS INT/JOT 13.01 DME.									
BOMER INT/9.91 DME (IF)			SPNCE OM/INT			015.01 / 6.10 (I-GVK)			2500												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)												MAG VAR: 1W EPOCH YEAR: 1985									
2. PROFILE STARTS AT JOT VOR/DME																					
3. FAC: 015.01 FAF: SPNCE OM/INT DIST FAF TO MAP: 5.17 THLD: 5.17																					
4. MIN. ALT: JOT VOR/DME 3000, BOMER 3000, SPNCE OM 2500																					
5. DIST TO THLD FROM OM: 5.17 MM: 0.41 IM: - 150 HAT: - 100 HAT: - GS ANT: 935																					
6. MIN GS INCPT: 2500 GS ALT AT: - OM: 2472 MM: 932 IM: -																					
7. GS ANGLE: 3.00 TCH: 49.7																					
8. MSA FROM: DPA VOR/DME 2600																					
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 02L	954	1/2	200	954	1/2	200	954	1/2	200	954	1/2	200									
S-LOC 02L	1500	1/2	746	1500	3/4	746	1500	1 3/4	746	1500	1 3/4	746									
CIRCLING	1500	1	741	1500	1 1/4	741	1500	2 1/4	741	1500	2 1/2	741									
NOTES: CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE AURORA ALTIMETER SETTING AND INCREASE ALL DA 37 FEET AND ALL MDA 40 FEET. INCREASE S-LOC 2L AND CIRCLING CAT C VISIBILITY 1/4 MILE. CHART NOTE: CIRCLING RWY 15, 28, 33 NA AT NIGHT. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON JOT VOR/DME AIRWAY RADIALS 314 CW 328.																					
CITY AND STATE CHICAGO/WEST CHICAGO, IL			ELEVATION: 759 TDZE: 754 AIRPORT NAME: DUPAGE			FACILITY IDENTIFIER: I-GVK		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 2L, AMDT 2E 29 MARCH 2018					SUP: AMDT: 2D DATED 02/04/2016								



US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29									Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.					
TERMINAL ROUTES												MISSED APPROACH									
FROM			TO			COURSE AND DISTANCE			ALTITUDE			ILS: DA LOC: 5.25 NM AFTER LYLLE OM/INT									
DPA VOR/DME			LYLLE OM/INT			328.08 / 2.23			3000			CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 2600 DIRECT JOT VOR/DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1200 THEN CLIMBING LEFT TURN TO 2500 ON HEADING 360 FOR RADAR VECTORS. ADDITIONAL FLIGHT DATA: HOLD E, RT, 282.32 INBOUND. CHART FAS OBST: 903 TOWER 415455N/0881739W. 1099 AAO 415452N/0882301W. CHART IN PLANVIEW: (LBHAF) AT 415600.63N/0883101.13W									
1. PT <u>R</u> SIDE OF COURSE <u>277.01</u> OUTBOUND <u>3000</u> FT WITHIN <u>10</u> MILES OF <u>LYLLE OM</u> (IAF)																					
2.																					
3. FAC: <u>097.01</u> FAF: <u>LYLLE OM/INT</u> DIST FAF TO MAP: <u>5.25</u> THLD: <u>5.25</u>																					
4. MIN. ALT: <u>LYLLE OM/INT 2600, HOVUB INT 1300*</u>																					
5. DIST TO THLD FROM OM: <u>5.25</u> MM: <u>-</u> IM: <u>-</u> 150 HAT: <u>-</u> 100 HAT: <u>-</u> GS ANT: <u>939</u>																					
6. MIN GS INCPT: <u>2600</u> GS ALT AT: <u>-</u> OM: <u>2501</u> MM: <u>-</u> IM: <u>-</u>																					
7. GS ANGLE: <u>3.00</u> TCH: <u>50.3</u>																					
8. MSA FROM: <u>DPA VOR/DME 2600</u>												MAG VAR: <u>1W</u> EPOCH YEAR: <u>1985</u>									
MINIMUMS																					
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT												ALTERNATE: <u>NA</u>		ILS: <u>STANDARD #</u>		LOC: <u>STANDARD @</u>					
CATEGORY <u>=====</u>		A			B			C			D			E							
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA						
S-ILS 10	956	3/4	200	956	3/4	200	956	3/4	200	956	3/4	200									
S-LOC 10	1300	1	544	1300	1	544	1300	1 5/8	544	1300	1 5/8	544									
CIRCLING	1300	1	541	1300	1	541	1360	1 3/4	601	1360	2	601									
HOVUB INT MINIMUMS (DUAL VOR RECEIVERS REQUIRED)																					
S-LOC 10	1220	1	464	1220	1	464	1220	1 3/8	464	1220	1 3/8	464									
CIRCLING	1260	1	501	1260	1	501	1360	1 3/4	601	1360	2	601									
NOTES: *LOC ONLY *1340 WHEN USING CHICAGO/AURORA ALTIMETER SETTING. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CHICAGO/AURORA ALTIMETER SETTING AND INCREASE ALL DA 37 FEET AND ALL MDA 40 FEET, AND INCREASE S-LOC 10 CATS C AND D AND HOVUB INT (CONTINUED ON PAGE 2)																					
CITY AND STATE CHICAGO/WEST CHICAGO, IL			ELEVATION: 759 TDZE: 756 AIRPORT NAME: DUPAGE			FACILITY IDENTIFIER: I-DPA			PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 10, AMDT 8D 29 MARCH 2018						SUP: AMDT: 8C DATED 02/04/2016						

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

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NOTES, (CONT.):

MINIMUMS S-LOC 10 CATS C AND D VISIBILITY 1/8 MILE.

CHART NOTE: CIRCLING RWY 15, 28, 33 NA AT NIGHT.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DPA VOR/DME ON V6 EASTBOUND.

QUALITY
16
CHECKED

CITY AND STATE

CHICAGO/WEST CHICAGO, IL

ELEVATION: 759

TDZE: 756

AIRPORT NAME:

DUPAGE

FACILITY
IDENTIFIER:

I-DPA

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 10, AMDT 8D

29 MARCH 2018

SUP:

AMDT: 8C

DATED: 02/04/2016

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: RW02L CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 3000 DIRECT NUELG AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 150.93 INBOUND. FAS OBST: 999 AAO 414922N/0881735W. CHART 1187 TOWER 414827N/0881607W. DISTANCE TO THLD FROM 200 HAT: 0.47 NM. CHART VDP AT 1.44 NM TO RW02L* *LNAV ONLY. WAAS CHANNEL # 86830 REFERENCE PATH ID: W02B LTP HAE: 195.7 M					
PLANO		CEXAB (TF) (FB) (RNP 2.00)			087.91 / 8.09				3000							
CEXAB (IAF)		BOMER (NOPT) (TF) (FB) (RNP 1.00)			045.54 / 7.75				3000							
JOT VOR/DME (IAF)		BOMER (NOPT) (TF) (FB) (RNP 1.00)			002.08 / 9.91				3000							
BOMER (IF/IAF)		ZETKO (TF) (FB) (RNP 1.00)			014.97 / 5.93				2500							
ZETKO (FAF)		RW02L (MAP) (TF) (FO) (RNP 0.30)			014.99 / 5.34											
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S BOMER, RT, 014.97 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 014.99 FAF: ZETKO DIST FAF TO MAP: 5.34 THLD: 5.34 4. MIN. ALT: BOMER 3000, ZETKO 2500 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2500 GS ALT AT: ZETKO 2500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 49.7 34:1 IS CLEAR 8. MSA FROM: RW02L 3400																
											MAG VAR: 1W EPOCH YEAR: 1985					
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT											ALTERNATE: N A		STANDARD @			
CATEGORY =====>		A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	
LPV DA	954	1/2	200	954	1/2	200	954	1/2	200	954	1/2	200				
LNAV/VNAV DA	1114	3/4	360	1114	3/4	360	1114	3/4	360	1114	3/4	360				
LNAV MDA	1260	1/2	506	1260	1/2	506	1260	1	506	1260	1	506				
CIRCLING	1260	1	501	1260	1	501	1360	1 3/4	601	1360	2	601				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). @ NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE AURORA ALTIMETER SETTING AND INCREASE ALL DA 37 FEET AND ALL MDA 40 FEET; INCREASE LNAV/VNAV ALL CATS AND LNAV CAT C/D VISIBILITY 1/8 MILE. (CONTINUED ON PAGE 2)																
CITY AND STATE CHICAGO/WEST CHICAGO, IL				ELEVATION: 759 TDZE: 754 AIRPORT NAME: DUPAGE				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 2L, ORIG-E 29 MARCH 2018				SUP: AMDT: ORIG-D DATED 02/04/2016		

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
RW02L (MAP)	1300 MSL (CA)	014.99	1300
1300 MSL	NUELG (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

CHART NOTE: FOR INOPERATIVE MALSR, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 1/8 AND LNAV CAT C/D VISIBILITY TO 1 3/8 MILE.

CHART NOTE: FOR INOPERATIVE MALSR WHEN USING AURORA ALTIMETER SETTING, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 3/8 AND LNAV CAT C/D VISIBILITY TO 1 5/8 MILE.

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

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON JOT VOR/DME AIRWAY RADIALS 314 CW 328.

CHART NOTE: CIRCLING RWY 15, 28, 33 NA AT NIGHT.

QUALITY
16
CHECKED

CITY AND STATE

CHICAGO/WEST CHICAGO, IL

ELEVATION: 759

TDZE: 754

AIRPORT NAME:

DUPAGE

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 2L, ORIG-E

29 MARCH 2018

SUP:

AMDT: ORIG-D

DATED: 02/04/2016

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

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

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KDPA
RUNWAY	RW02L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W02B
LTP/FTP LATITUDE	415338.5085N
LTP/FTP LONGITUDE	0881512.7675W
LTP/FTP ELLIPSOIDAL HEIGHT	+01957
FPAP LATITUDE	415505.0000N
FPAP LONGITUDE	0881443.8800W
THRESHOLD CROSSING HEIGHT (TCH)	00049.7
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0440
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
 <u>CRC REMAINDER</u>	 6704E491

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02289
FPAP ORTHOMETRIC HEIGHT	+02289

QUALITY
16
CHECKED

CITY AND STATE CHICAGO/WEST CHICAGO, IL	ELEVATION: 759 AIRPORT NAME: TDZE: 754 DUPAGE	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 2L, ORIG-E 29 MARCH 2018	SUP:
				AMDT: ORIG-D
				DATED: 02/04/2016

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: RW20L									
DPA VOR/DME			JOLON (TF) (FO) (RNP 2.00)			032.24 / 14.52			3000			CLIMB TO 2500 DIRECT GIDVE AND ON TRACK 181.69 TO JOT VOR/DME AND HOLD.									
NUELG			JOLON (TF) (FO) (RNP 2.00)			073.23 / 22.25			3000												
FARMM (IAF)			JOLON (NOPT) (TF) (FB) (RNP 1.00)			151.98 / 16.37			3000			ADDITIONAL FLIGHT DATA: HOLD SW, RT, 051.00 INBOUND. CHART FAS OBST: 934 TRMSN TWR 415604N/0881321W. ZOGUB TO RW20L: 3.00/40.									
JOLON (IF/IAF)			ZOGUB (TF) (FB) (RNP 1.00)			195.05 / 6.20			2500												
ZOGUB (FAF)			PECBI/1.90 NM TO RW20L (TF) (FB) (RNP 0.30)			195.03 / 3.44															
(SEE FORM 8260-10)																					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																					
2. HOLD N JOLON, RT, 195.05 INBOUND, 3000 FT. IN LIEU OF PT (IAF)																					
3. FAC: 195.03 FAF: ZOGUB DIST FAF TO MAP: 5.34 THLD: 5.34																					
4. MIN. ALT: JOLON 3000, ZOGUB 2500, PECBI/1.90 NM TO RW20L 1400																					
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: RW20L 3400																					
MAG VAR: 1W EPOCH YEAR: 1985																					
MINIMUMS																					
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD @									
CATEGORY =====>		A			B			C			D			E							
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA						
LNAV MDA	1200	1	441	1200	1	441	1200	1 3/8	441	1200	1 3/8	441									
CIRCLING	1260	1	501	1260	1	501	1360	1 3/4	601	1360	2	601									
NOTES: CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT FARMM ON V24-100-228 NORTHWEST BOUND. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE AURORA ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET. (CONTINUED ON PAGE 2)																					
CITY AND STATE CHICAGO/WEST CHICAGO, IL				ELEVATION: 759 TDZE: 759 AIRPORT NAME: DUPAGE				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 20L, ORIG-D 29 MARCH 2018						SUP: AMDT: ORIG-C DATED 02/04/2016					

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

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

TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
PECBI/1.90 NM TO RW20L	RW20L (MAP) (TF) (FO) (RNP 0.30)	195.03 / 1.90	
RW20L (MAP)	1159 MSL (CA)	195.03	
1159 MSL	GIDVE (DF) (FB) (RNP 1.00)		
GIDVE	JOT VOR/DME (TF) (FO) (RNP 1.00)	181.69 / 8.90	2500

NOTES, (CONT.):

CHART NOTE: CIRCLING RWY 15, 28, 33 NA AT NIGHT.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT NUELG ON V177 NORTHWEST BOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT FARMM ON V24-100-228 NORTHWEST BOUND.

QUALITY
16
CHECKED

CITY AND STATE CHICAGO/WEST CHICAGO, IL	ELEVATION: 759	TDZE: 759	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 20L, ORIG-D 29 MARCH 2018	SUP:
	AIRPORT NAME:				AMDT: ORIG-C
	DUPAGE				DATED: 02/04/2016

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: RW21 CLIMB TO 1700 THEN CLIMBING RIGHT TURN TO 3000 DIRECT EJIYU AND HOLD. ADDITIONAL FLIGHT DATA: CHART FAS OBST: 899 TREE 405839N/0902434W. DISTANCE TO THLD FROM 200 HAT: 0.46 NM. CHART VDP AT 1.07 NM TO RW21* *LNAV ONLY. WAAS CHANNEL # 50428 REFERENCE PATH ID: W21A LTP HAE: 199.9 M						
MZV VOR/DME		ZOLAD (TF) (FB) (RNP 2.00)		117.08 / 15.56			3000								
BDF VORTAC		FAMEM (TF) (FB) (RNP 2.00)		264.12 / 27.95			3000								
FAMEM (IAF)		EJIYU (NOPT) (TF) (FB) (RNP 1.00)		250.32 / 5.00			3000								
ZOLAD (IAF)		EJIYU (NOPT) (TF) (FB) (RNP 1.00)		160.23 / 5.00			3000								
EJIYU (IF/IAF)		ZOXYO (TF) (FB) (RNP 1.00)		205.25 / 6.00			2500								
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NE EJIYU, RT, 205.25 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 205.21 FAF: ZOXYO DIST FAF TO MAP: 5.28 THLD: 5.28 4. MIN. ALT: EJIYU 3000, ZOXYO 2500, XUNVY/2.60 NM TO RW21 1640* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2500 GS ALT AT: ZOXYO 2500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 54.6 34:1 IS CLEAR 8. MSA FROM: RW21 3100															
										MAG VAR: 3E			EPOCH YEAR: 1980		
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		STANDARD @					
CATEGORY ==>		A		B		C		D		E					
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
LPV DA	964	3/4	200	964	3/4	200	964	3/4	200	964	3/4	200			
LNAV/VNAV DA	1060	7/8	296	1060	7/8	296	1060	7/8	296	1060	7/8	296			
LNAV MDA	1160	1	396	1160	1	396	1160	1 1/8	396	1160	1 1/8	396			
CIRCLING	1220	1	456	1220	1	456	1220	1 1/2	456	1340	2	576			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 39C (102F). @ NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART NOTE: CIRCLING RWY 10 NA AT NIGHT. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON MZV VOR/DME AIRWAY RADIALS 077 CW 195. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 764 TDZE: 764		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
GALESBURG, IL		AIRPORT NAME: GALESBURG MUNI				RNAV (GPS) RWY 21, ORIG-B 29 MARCH 2018				AMDT: ORIG-A					
										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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
ZOXYO (FAF)	XUNVY/2.60 NM TO RW21 (TF) (FB) (RNP 0.30)	205.21 / 2.68	
XUNVY/2.60 NM TO RW21	RW21 (MAP) (TF) (FO) (RNP 0.30)	205.19 / 2.60	
RW21 (MAP)	1700 MSL (CA)	205.19	
1700 MSL	EJIYU (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON BDF VORTAC AIRWAY RADIALS 198 CW 282.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MACOMB ALTIMETER SETTING AND INCREASE ALL DA 71 FT AND ALL MDA 80 FT, INCREASE LPV VISIBILITY TO 7/8 SM ALL CATS, INCREASE LNAV/VNAV VISIBILITY TO 1 1/4 SM ALL CATS, INCREASE LNAV CATS C/D VISIBILITY TO 1 3/8 SM.

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

QUALITY
24
CHECKED

CITY AND STATE GALESBURG, IL	ELEVATION: 764 AIRPORT NAME: GALESBURG MUNI	TDZE: 764 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 21, ORIG-B 29 MARCH 2018	SUP:
				AMDT: ORIG-A
				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	KGBG
RUNWAY	RW21
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W21A
LTP/FTP LATITUDE	405641.6915N
LTP/FTP LONGITUDE	0902535.7290W
LTP/FTP ELLIPSOIDAL HEIGHT	+01999
FPAP LATITUDE	405523.0905N
FPAP LONGITUDE	0902631.2205W
THRESHOLD CROSSING HEIGHT (TCH)	00054.6
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0984
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

9E32BB7C

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02330
FPAP ORTHOMETRIC HEIGHT	+02330

QUALITY
24
CHECKED

CITY AND STATE

GALESBURG, IL

ELEVATION: 764

TDZE: 764

AIRPORT NAME:

GALESBURG MUNI

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 21, ORIG-B

29 MARCH 2018

SUP:

AMDT:

ORIG-A

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: GBG VOR/DME						
GBG VOR/DME		WATAG INT/GBG 4.99 DME			031.00 / 4.99			2400		CLIMB TO 2000 THEN CLIMBING RIGHT TURN TO 3000 ON GBG VOR/DME R-031 TO ONEID INT/GBG 9.99 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NE, RT, 211.00 INBOUND. CHART FAS OBST: 970 TOWER 405834N/0902303W. WATAG TO RW21: 3.37/55 FAC CROSSES RWY C/L EXTENDED 2561 FT FROM THLD.						
BDF VORTAC		WATAG INT/GBG 4.99 DME			255.78 / 36.79			2400								
MZV VOR/DME		WATAG INT/GBG 4.99 DME			142.41 / 22.37			2400								
1. PT <u> R </u> SIDE OF COURSE <u> 031.00 </u> OUTBOUND <u> 2400 </u> FT WITHIN <u> 10 </u> MILES OF <u> WATAG </u> (IAF) 2. _____ 3. FAC <u> 211.00 </u> FAF <u> WATAG INT/GBG 4.99 DME </u> DIST FAF TO MAP _____ THLD <u> 4.42 </u> 4. MIN. ALT <u> WATAG INT/GBG 4.99 DME 2400, WOLIM INT/GBG 2.10 DME 1340* </u> 8. MSA FROM: <u> GBG VOR/DME 090-270 2500, 270-090 3100 </u>										MAG VAR: 3E		EPOCH YEAR: 1980				
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-21	1340	1	576	1340	1	576	1340	1 5/8	576	1340	1 5/8	576				
CIRCLING	1340	1	576	1340	1	576	1340	1 5/8	576	1340	2	576				
WOLIM FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)																
S-21	1220	1	456	1220	1	456	1220	1 3/8	456	1220	1 3/8	456				
CIRCLING	1220	1	456	1220	1	456	1220	1 1/2	456	1340	2	576				
NOTES: CHART NOTE: CIRCLING RWY 10 NA AT NIGHT. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MACOMB ALTIMETER SETTING AND INCREASE ALL MDA 80 FT, INCREASE S-21 CATS C/D AND CIRCLING CAT C VISIBILITY TO 1 7/8 SM, INCREASE WOLIM FIX (CONTINUED ON PAGE 2)																
CITY AND STATE GALESBURG, IL		ELEVATION: 764		TDZE: 764		FACILITY IDENTIFIER: GBG		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR RWY 21, AMDT 7B 29 MARCH 2018				SUP				
		AIRPORT NAME: GALESBURG MUNI										AMDT 7A				
												DATE 08/21/2014				



**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.):**MINIMUMS S-21 CATS C/D VISIBILITY TO 1 1/2 SM.*****1360 WHEN USING MACOMB ALTIMETER SETTING.**

CITY AND STATE

GALESBURG, IL

ELEVATION: 764**TDZE: 764**

AIRPORT NAME:

GALESBURG MUNI

FACILITY
IDENTIFIER:

GBG

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

VOR RWY 21, AMDT 7B

29 MARCH 2018

SUP:

AMDT: **7A**DATED: **08/21/2014**

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29		Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.											
TERMINAL ROUTES										MISSED APPROACH					
FROM		TO		COURSE AND DISTANCE				ALTITUDE		ILS: DA LOC: 4.31 NM AFTER SKRAP INT/I-MLI 4.08 DME OR AT I-MLI 0.23 DME					
CVA VORTAC		SKRAP INT/I-MLI 4.08 DME		198.11 / 16.69				3100		CLIMB TO 1100 THEN CLIMBING RIGHT TURN TO 2300 DIRECT MZV VOR/DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 3000 VIA HEADING 090 TO INTERCEPT CVA VORTAC R-140 INBOUND TO CVA VORTAC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 072.66 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NE CVA VORTAC, RT, 216.00 INBOUND. CHART FAS OBST: 677 LT POLE 412709N/0903247W. CHART IN PLANVIEW: CVA VORTAC. CHART AT SKRAP INT CVA 16.69 DME AND MZV 7.81 DME.					
MZV VOR/DME		SKRAP INT/I-MLI 4.08 DME		000.20 / 7.81				2400							
IOW VOR/DME (IAF)		TOCKY INT/I-MLI 11.00 DME (NOPT)		090.72 / 37.97				2300							
TOCKY INT/I-MLI 11.00 DME (IF)		SKRAP INT/I-MLI 4.08 DME		090.18 / 6.92 (I-MLI)				2000							
1. PT <u>L</u> SIDE OF COURSE <u>270.18</u> OUTBOUND <u>2400</u> FT WITHIN <u>10</u> MILES OF <u>SKRAP</u> (IAF)										MAG VAR: 1E EPOCH YEAR: 1985					
2.															
3. FAC: <u>090.18</u> FAF: <u>SKRAP INT/I-MLI 4.08 DME</u> DIST FAF TO MAP: <u>4.31</u> THLD: <u>4.31</u>															
4. MIN. ALT: <u>SKRAP INT/I-MLI 4.08 DME 2000, ZIKRA INT/I-MLI 1.07 DME 1040*</u>															
5. DIST TO THLD FROM OM: <u>-</u> MM: <u>-</u> IM: <u>-</u> 150 HAT: <u>-</u> 100 HAT: <u>-</u> GS ANT: <u>882</u>															
6. MIN GS INCPT: <u>2000</u> GS ALT AT: <u>SKRAP INT/I-MLI 4.08 DME 2000</u> OM: <u>-</u> MM: <u>-</u> IM: <u>-</u>															
7. GS ANGLE: <u>3.00</u> TCH: <u>49.6</u>															
8. MSA FROM: <u>MZV VOR/DME 360-270 3100, 270-360 2700</u>															
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		ILS: STANDARD #		LOC: STANDARD @				
CATEGORY =====>		A		B		C		D		E					
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
S-ILS 09**	787	2400	200	787	2400	200	787	2400	200	787	2400	200			
S-LOC 09	1040	2400	453	1040	2400	453	1040	5000	453	1040	5000	453			
CIRCLING	1140	1	550	1160	1	570	1160	1 1/2	570	1260	2	670			
ZIKRA MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)															
S-LOC 09	940	2400	353	940	2400	353	940	3500	353	940	3500	353			
CIRCLING	1140	1	550	1160	1	570	1160	1 1/2	570	1260	2	670			
NOTES: CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHART NOTE: CIRCLING TO RWY 05 NA AT NIGHT. *LOC ONLY *1100 WHEN USING DAVENPORT ALTIMETER SETTING. (CONTINUED ON PAGE 2)															
CITY AND STATE MOLINE, IL		ELEVATION: 590 TDZE: 587 AIRPORT NAME: QUAD CITY INTL		FACILITY IDENTIFIER: I-MLI		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 9, AMDT 31C 29 MARCH 2018						SUP: AMDT: 31B DATED 09/14/2017			

QUALITY
10
CHECKED

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

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

NOTES, (CONT.):

CHART PLANVIEW NOTE: DME REQUIRED FOR PROCEDURE ENTRY AT CVA VORTAC AND MZV VOR/DME.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE DAVENPORT ALTIMETER SETTING: INCREASE DA TO 825 FT; INCREASE ALL MDA 60 FT AND CIRCLING VISIBILITY CATS C AND D 1/4 SM.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 09 CATS C AND D VISIBILITY TO 1 3/8 SM. ZIKRA MINIMUMS: FOR INOPERATIVE ALS, INCREASE S-LOC CATS C AND D VISIBILITY TO 1 SM.

CITY AND STATE
MOLINE, IL

ELEVATION: 590 TDZE: 587
AIRPORT NAME:
QUAD CITY INTL

FACILITY
IDENTIFIER:
I-MLI

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
ILS OR LOC RWY 9, AMDT 31C
29 MARCH 2018

SUP: **QUALITY
10
CHECKED**
AMDT: 31B
DATED: 09/14/2017

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: 5.18 NM AFTER KAYES INT OR AT I-GEQ 1.88 DME						
CVA VORTAC		KAYES INT/I-GEQ 7.06 DME		158.81 / 16.43				3100		CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 2300 DIRECT MZV VOR/DME AND HOLD, OR AS DIRECTED BY ATC. ALTERNATE MA (DO NOT CHART): CLIMB TO 3000 ON HEADING 270 AND CVA VORTAC R-220 TO CVA VORTAC AND HOLD.						
MZV VOR/DME		KAYES INT/I-GEQ 7.06 DME		052.44 / 14.05				2300								
										ADDITIONAL FLIGHT DATA: HOLD W, RT, 072.66 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NE CVA VORTAC, RT, 216.00 INBOUND. CHART FAS OBST: 766 TREE 412650N/0902717W. CHART VDP AT 3.24 DME* DISTANCE VDP TO THLD 1.36 NM. *LOC ONLY. CHART IN PLANVIEW: CVA VORTAC. CHART (CFBDB) AT 412639.89N-0901428.04W. CHART 990 TOWER 412702.00N/0902055.00W.						
1. PT L SIDE OF COURSE 090.20 OUTBOUND 2300 FT WITHIN 10 MILES OF KAYES (IAF)										MAG VAR: 1E EPOCH YEAR: 1985						
2.																
3. FAC: 270.20 FAF: KAYES INT/I-GEQ 7.06 DME DIST FAF TO MAP: 5.18 THLD: 5.18																
4. MIN. ALT: KAYES INT/I-GEQ 7.06 DME 2300																
5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 939																
6. MIN GS INCPT: 2300 GS ALT AT: KAYES 2300 OM: - MM: - IM: -																
7. GS ANGLE: 3.00 TCH: 51.8																
8. MSA FROM: MZV VOR/DME 360-270 3100, 270-360 2700																
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT				ALTERNATE: N A		ILS: STANDARD #		LOC: STANDARD @								
CATEGORY ==>		A		B		C		D		E						
		DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
S-ILS 27**		781	2400	200	781	2400	200	781	2400	200	781	2400	200			
S-LOC 27		1060	2400	479	1060	2400	479	1060	4000	479	1060	5000	479			
CIRCLING		1140	1	550	1140	1	550	1140	1 1/2	550	1260	2	670			
NOTES: CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHART NOTE: CIRCLING TO RWY 05 NA AT NIGHT. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE DAVENPORT ALTIMETER SETTING AND INCREASE DA TO 828 FEET AND ALL MDA 60 FEET, INCREASE S-LOC-27 AND CIRCLING CATS C/D VISIBILITY 1/4 SM.																
CITY AND STATE MOLINE, IL		ELEVATION: 590 TDZE: 581 AIRPORT NAME: QUAD CITY INTL		FACILITY IDENTIFIER: I-GEQ		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 27, AMDT 2B 29 MARCH 2018						SUP: AMDT: 2A DATED 03/07/2013				

QUALITY
10
CHECKED

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.													
TERMINAL ROUTES										MISSED APPROACH							
FROM		TO		COURSE AND DISTANCE				ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW09 CLIMB TO 2500 DIRECT TATNE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD E, RT, 270.38 INBOUND. CHART FAS OBST: 779 TREE 412623N/0903309W. DISTANCE TO THLD FROM 200 HAT: 0.47 NM. CHART VDP AT 1.36 NM TO RW09* *LNAV ONLY. WAAS CHANNEL # 61123 REFERENCE PATH ID: W09A LTP HAE: 143.2 M							
CVA VORTAC		TOCKY (TF) (FO) (RNP 2.00)		219.75 / 20.22				2400									
MZV VOR/DME		TOCKY (TF) (FO) (RNP 2.00)		320.89 / 10.06				2400									
POCIN		BUFAL (TF) (FB) (RNP 2.00)		041.13 / 8.08				2300									
ZELMI		CIROD (TF) (FB) (RNP 2.00)		114.70 / 8.88				2700									
BUFAL (IAF)		TOCKY (NOPT) (TF) (FB) (RNP 1.00)		032.15 / 6.27				2300									
(SEE FORM 8260-10)																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD W TOCKY, RT, 090.02 INBOUND, 2300 FT. IN LIEU OF PT (IAF) 3. FAC: 090.12 FAF: SKRAP DIST FAF TO MAP: 4.31 THLD: 4.31 4. MIN. ALT: TOCKY 2300, SKRAP 2000, MERBE/1.90 NM TO RW09 1220* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2000 GS ALT AT: SKRAP 2000 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 49.6 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW09 3100																	
										MAG VAR: 1E				EPOCH YEAR: 1985			
MINIMUMS																	
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD @					
CATEGORY =====>		A			B			C			D			E			
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA		
LPV DA**	787	2400	200	787	2400	200	787	2400	200	787	2400	200					
LNAV/VNAV DA	1122	1 3/8	535	1122	1 3/8	535	1122	1 3/8	535	1122	1 3/8	535					
LNAV MDA	1060	2400	473	1060	2400	473	1060	5000	473	1060	5000	473					
CIRCLING	1140	1	550	1160	1	570	1160	1 1/2	570	1260	2	670					
NOTES: CHART NOTE: CIRCLING TO RWY 5 NA AT NIGHT. CHART NOTE: BARO-VNAV NA WHEN USING DAVENPORT ALTIMETER SETTING. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -26C (-14F) OR ABOVE 40C (104F). CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)																	
CITY AND STATE		ELEVATION: 590 TDZE: 587				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
MOLINE, IL		AIRPORT NAME: QUAD CITY INTL						RNAV (GPS) RWY 9, AMDT 1D 29 MARCH 2018				AMDT: 1C					
												DATED 02/01/2018					



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
CIROD (IAF)	TOCKY (NOPT) (TF) (FB) (RNP 1.00)	148.95 / 7.00	2300
TOCKY (IF/IAF)	SKRAP (TF) (FB) (RNP 1.00)	090.02 / 6.92	2000
SKRAP (FAF)	MERBE/1.90 NM TO RW09 (TF) (FB) (RNP 0.30)	090.12 / 2.41	
MERBE/1.90 NM TO RW09	RW09 (MAP) (TF) (FO) (RNP 0.30)	090.12 / 1.90	
RW09 (MAP)	787 MSL (CA)	090.12	
787 MSL	TATNE (DF) (FO) (RNP 1.00)		2500

NOTES, (CONT.):

CHART NOTE: VDP NA WITH DAVENPORT ALTIMETER SETTING.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON CVA VORTAC AIRWAY RADIALS 149 CW 277.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MZV VOR/DME ON V156 SOUTHEAST BOUND.

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

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

LPV DA TO 825 FEET AND LNAV/VNAV DA TO 1160 FEET AND LNAV/VNAV VISIBILITY ALL CATS 1/8 SM; INCREASE

ALL MDA 60 FT AND LNAV VISIBILITY CATS C AND D 1/8 SM, CIRCLING CATS C AND D 1/4 SM.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV VISIBILITY CATS C AND D TO 1 3/8 SM. WHEN USING DAVENPORT ALTIMETER INCREASE LNAV/VNAV VISIBILITY ALL CATS TO 2 SM, LNAV VISIBILITY CATS C AND D TO 1 5/8 SM.

CITY AND STATE

MOLINE, IL

ELEVATION: 590

TDZE: 587

AIRPORT NAME:

QUAD CITY INTL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 9, AMDT 1D

29 MARCH 2018

SUP:

AMDT:

DATED: 02/01/2018

 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	KMLI
RUNWAY	RW09
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W09A
LTP/FTP LATITUDE	412657.0685N
LTP/FTP LONGITUDE	0903137.2790W
LTP/FTP ELLIPSOIDAL HEIGHT	+01432
FPAP LATITUDE	412655.0200N
FPAP LONGITUDE	0902925.9700W
THRESHOLD CROSSING HEIGHT (TCH)	00049.6
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>	 A6381D82

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01761
FPAP ORTHOMETRIC HEIGHT	+01761

CITY AND STATE
MOLINE, IL

ELEVATION: 590 TDZE: 587
AIRPORT NAME:
QUAD CITY INTL

FACILITY
IDENTIFIER:
RNAV

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

SUP:
AMDT: 1C
DATED: 02/01/2018

QUALITY
10
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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 3000 DIRECT ARACI AND ON TRACK 195.01 TO MIGNE AND ON TRACK 274.92 TO MZV VOR/DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 072.66 INBOUND. CHART FAS OBST: 874 TANK 412846N/0903249W, 745 TREE 412833N/0903142W. DISTANCE TO THLD FROM 318 HAT: 0.86 NM. CHART VDP AT 1.59 NM TO RW13* *LNAV ONLY. WAAS CHANNEL # 42515 REFERENCE PATH ID: W13A LTP HAE: 145.4 M												
NAYIL (IAF)				IDOP (NOPT) (TF) (FB) (RNP 1.00)				216.26 / 6.00				2500														
NEBIC (IAF)				IDOP (NOPT) (TF) (FB) (RNP 1.00)				036.16 / 6.00				2500														
IDOP (IF/IAF)				FIRPA (TF) (FB) (RNP 1.00)				126.21 / 8.15				2300														
FIRPA (FAF)				ALECU/2.60 NM TO RW13 (TF) (FB) (RNP 0.30)				126.31 / 2.60																		
ALECU/2.60 NM TO RW13				RW13 (MAP) (TF) (FO) (RNP 0.30)				126.31 / 2.60																		
(SEE FORM 8260-10)																										
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NW IDOP, RT, 126.21 INBOUND, 2500 FT. IN LIEU OF PT (IAF) 3. FAC: 126.31 FAF: FIRPA DIST FAF TO MAP: 5.16 THLD: 5.16 4. MIN. ALT: IDOP 2500, FIRPA 2300, ALECU/2.60 NM TO RW13 1460* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2300 GS ALT AT: FIRPA OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 48.3 34:1 IS NOT CLEAR 8. MSA FROM: _____																	MAG VAR: 1E					EPOCH YEAR: 1985				
MINIMUMS																										
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A			STANDARD @													
CATEGORY ==>		A			B			C			D			E												
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA											
LPV DA	908	1	318	908	1	318	908	1	318	908	1	318														
LNAV/VNAV DA	1292	2 1/2	702	1292	2 1/2	702	1292	2 1/2	702	1292	2 1/2	702														
LNAV MDA	1140	1	550	1140	1	550	1140	1 1/2	550	1140	1 3/4	550														
CIRCLING	1140	1	550	1140	1	550	1140	1 1/2	550	1260	2	670														
NOTES: CHART NOTE: CIRCLING TO RWY 5 NA AT NIGHT. 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. *LNAV ONLY (CONTINUED ON PAGE 2)																	@ NA WHEN LOCAL WEATHER NOT AVAILABLE.									
CITY AND STATE				ELEVATION: 590 TDZE: 590				FACILITY IDENTIFIER:				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:										
MOLINE, IL				AIRPORT NAME:				RNAV				RNAV (GPS) RWY 13, AMDT 1C				AMDT: 1B										
				QUAD CITY INTL								29 MARCH 2018				DATED 08/18/2016										



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.):

<u>FROM</u>	<u>TO</u>	<u>COURSE AND DISTANCE</u>	<u>ALTITUDE</u>
RW13 (MAP)	908 MSL (CA)	126.31	
908 MSL	ARACI (DF) (FB) (RNP 1.00)		
ARACI	MIGNE (TF) (FB) (RNP 1.00)	195.01 / 6.83	
MIGNE	MZV VOR/DME (TF) (FO) (RNP 1.00)	274.92 / 6.50	3000

NOTES, (CONT.):

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE DAVENPORT ALTIMETER SETTING AND INCREASE LPV DA TO 955 FEET, LNAV/VNAV DA TO 1339 FEET AND ALL MDA 60 FEET; INCREASE LPV ALL CATS, LNAV/VNAV ALL CATS, LNAV CATS C AND D, AND CIRCLING CATS C AND D VISIBILITY 1/4 SM.
 CHART NOTE: RWY 13 HELICOPTER REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
 CHART NOTE: VDP AND BARO-VNAV NA WHEN USING DAVENPORT ALTIMETER SETTING.

TAA

	<u>FROM</u>	<u>TO</u>	<u>ALT</u>
1.	036/30 CW 216/30 (NOPT)	036/8 CW 216/8	3300
2.	036/8 CW 216/8	IDOPE (IF/IAF) (FB)	2500
3.	216/30 CW 306/30	NAYIL (IAF) (FB)	3100
4.	306/30 CW 036/30	NEBIC (IAF) (FB)	3100

QUALITY
10
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CITY AND STATE MOLINE, IL	ELEVATION: 590 AIRPORT NAME: QUAD CITY INTL	TDZE: 590 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 13, AMDT 1C 29 MARCH 2018	SUP:
				AMDT: 1B
				DATED: 08/18/2016

**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	KMLI
RUNWAY	RW13
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W13A
LTP/FTP LATITUDE	412717.8820N
LTP/FTP LONGITUDE	0903055.5580W
LTP/FTP ELLIPSOIDAL HEIGHT	+01454
FPAP LATITUDE	412623.7600N
FPAP LONGITUDE	0902921.4100W
THRESHOLD CROSSING HEIGHT (TCH)	00048.3
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0528
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 A44CF157

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01782
FPAP ORTHOMETRIC HEIGHT	+01782

CITY AND STATE
MOLINE, IL

ELEVATION: 590 TDZE: 590
AIRPORT NAME:
QUAD CITY INTL

FACILITY
IDENTIFIER:
RNAV

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

SUP: **10**
AMDT: **1B**
DATED: **08/18/2016**

QUALITY
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RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.											
TERMINAL ROUTES										MISSED APPROACH					
FROM		TO		COURSE AND DISTANCE				ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW27 CLIMB TO 2300 DIRECT TOCKY AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 090.02 INBOUND. CHART FAS OBST: 832 POWER LINES 412622N/0902730W. DISTANCE TO THLD FROM 200 HAT: 0.49 NM. WAAS CHANNEL # 86824 REFERENCE PATH ID: W27A LTP HAE: 142.1 M					
CVA VORTAC		TATNE (TF) (FO) (RNP 2.00)		142.20 / 19.79				2700							
YOBUV		JEDAG (TF) (FB) (RNP 2.00)		214.13 / 14.85				2500							
WAKDI		ZARGI (TF) (FB) (RNP 2.00)		327.58 / 9.65				2500							
MZV VOR/DME		TATNE (TF) (FO) (RNP 2.00)		067.48 / 20.25				2500							
JEDAG (IAF)		TATNE (NOPT) (TF) (FB) (RNP 1.00)		224.07 / 7.00				2500							
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD E TATNE, RT, 270.38 INBOUND, 2500 FT. IN LIEU OF PT (IAF) 3. FAC: 270.28 FAF: OTTEN DIST FAF TO MAP: 5.26 THLD: 5.26 4. MIN. ALT: TATNE 2500, OTTEN 2300, AUDIE/1.90 NM TO RW27 1220* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2300 GS ALT AT: OTTEN 2300 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 51.8 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW27 3100															
										MAG VAR: 1E			EPOCH YEAR: 1985		
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		STANDARD @					
CATEGORY =====>		A		B		C		D		E					
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
LPV DA**	781	2400	200	781	2400	200	781	2400	200	781	2400	200			
LNAV/VNAV DA	1186	1 5/8	605	1186	1 5/8	605	1186	1 5/8	605	1186	1 5/8	605			
LNAV MDA	1100	2400	519	1100	2400	519	1100	5500	519	1100	5500	519			
CIRCLING	1140	1	550	1160	1	570	1160	1 1/2	570	1260	2	670			
NOTES: CHART NOTE: CIRCLING TO RWY 5 NA AT NIGHT. @ NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART NOTE: BARO-VNAV NA WHEN USING DAVENPORT ALTIMETER SETTING. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -26C (-14F) OR ABOVE 40C (104F). CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 590 TDZE: 581		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
MOLINE, IL		AIRPORT NAME:		QUAD CITY INTL		RNAV (GPS) RWY 27, AMDT 1D				AMDT: 1C					
						29 MARCH 2018				DATED 02/01/2018					

QUALITY
10
CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION			Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.	
RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33				
TERMINAL ROUTES, (CONT.):				
FROM	TO	COURSE AND DISTANCE	ALTITUDE	
ZARGI (IAF)	TATNE (NOPT) (TF) (FB) (RNP 1.00)	314.07 / 7.00	2500	
TATNE (IF/IAF)	OTTEN (TF) (FB) (RNP 1.00)	270.38 / 6.93	2300	
OTTEN (FAF)	AUDIE/1.90 NM TO RW27 (TF) (FB) (RNP 0.30)	270.28 / 3.36		
AUDIE/1.90 NM TO RW27	RW27 (MAP) (TF) (FO) (RNP 0.30)	270.28 / 1.90		
RW27 (MAP)	781 MSL (CA)	270.28		
781 MSL	TOCKY (DF) (FO) (RNP 1.00)		2300	
NOTES, (CONT.):				
*LNAV ONLY				
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON CVA VORTAC AIRWAY RADIALS 057 CW 149.				
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON MZV VOR/DME AIRWAY RADIALS 077 CW 130.				
CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.				
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE DAVENPORT ALTIMETER SETTING: INCREASE LPV DA TO 828 FEET AND LNAV/VNAV DA TO 1233 FEET AND LNAV/VNAV VISIBILITY ALL CATS 1/8 SM; INCREASE ALL MDA 60 FEET AND LNAV VISIBILITY CATS C AND D 1/4 SM, CIRCLING VISIBILITY CATS C AND D 1/4 SM.				
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV VISIBILITY ALL CATS TO 2 SM, LNAV VISIBILITY CATS C AND D TO 1 3/8 SM. WHEN USING DAVENPORT ALTIMETER INCREASE LNAV VISIBILITY CATS C AND D TO 1 5/8 SM.				
CITY AND STATE	ELEVATION: 590	TDZE: 581	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
MOLINE, IL	AIRPORT NAME:		RNAV	RNAV (GPS) RWY 27, AMDT 1D
	QUAD CITY INTL			29 MARCH 2018
			SUP:	QUALITY 10 CHECKED
			AMDT:	1C
			DATED:	02/01/2018

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

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

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMLI
RUNWAY	RW27
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W27A
LTP/FTP LATITUDE	412655.0185N
LTP/FTP LONGITUDE	0902925.9655W
LTP/FTP ELLIPSOIDAL HEIGHT	+01421
FPAP LATITUDE	412657.0650N
FPAP LONGITUDE	0903137.2725W
THRESHOLD CROSSING HEIGHT (TCH)	00051.8
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

332A758B

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01749
FPAP ORTHOMETRIC HEIGHT	+01749

CITY AND STATE

MOLINE, IL

ELEVATION: 590

TDZE: 581

AIRPORT NAME:

QUAD CITY INTL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 27, AMDT 1D

29 MARCH 2018

SUP:

AMDT:

DATED:

QUALITY
10
CHECKED

1C

02/01/2018

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.												
TERMINAL ROUTES										MISSED APPROACH						
FROM		TO			COURSE AND DISTANCE			ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW31 CLIMB TO 3000 DIRECT ALECU AND ON TRACK 235.24 TO MUTME AND ON TRACK 165.07 TO MZV VOR/DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 072.66 INBOUND. CHART FAS OBST: 829 T-LINE 412525N/0902852W. DISTANCE TO THLD FROM 448 HAT: 1.27 NM. CHART VDP AT 1.42 NM TO RW31* *LNAV ONLY. WAAS CHANNEL # 86715 REFERENCE PATH ID: W31A LTP HAE: 143.9 M						
SABCO (IAF)		PCITY (NOPT) (TF) (FB) (RNP 1.00)			036.50 / 6.00			2500								
SILTE (IAF)		PCITY (NOPT) (TF) (FB) (RNP 1.00)			216.60 / 6.00			2500								
PCITY (IF/IAF)		FIKOS (TF) (FB) (RNP 1.00)			306.55 / 8.96			2300								
FIKOS (FAF)		ARACI/2.40 NM TO RW31 (TF) (FB) (RNP 0.30)			306.45 / 2.78											
ARACI/2.40 NM TO RW31		RW31 (MAP) (TF) (FO) (RNP 0.30)			306.45 / 2.40											
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SE PCITY, RT, 306.55 INBOUND, 2500 FT. IN LIEU OF PT (IAF) 3. FAC: 306.45 FAF: FIKOS DIST FAF TO MAP: 5.18 THLD: 5.18 4. MIN. ALT: PCITY 2500, FIKOS 2300, ARACI/2.40 NM TO RW31 1380* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2300 GS ALT AT: FIKOS OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 47.6 20:1 IS CLEAR 34:1 IS NOT CLEAR 8. MSA FROM: _____																
										MAG VAR: 1E			EPOCH YEAR: 1985			
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		STANDARD @							
CATEGORY =====>		A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	
LPV DA	1031	1 1/2	448	1031	1 1/2	448	1031	1 1/2	448	1031	1 1/2	448				
LNAV/VNAV DA	1160	2	577	1160	2	577	1160	2	577	1160	2	577				
LNAV MDA	1080	1	497	1080	1	497	1080	1 1/4	497	1080	1 1/2	497				
CIRCLING	1140	1	550	1140	1	550	1140	1 1/2	550	1260	2	670				
NOTES: CHART NOTE: CIRCLING TO RWY 5 NA AT NIGHT. 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. *LNAV ONLY (CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 590 TDZE: 583			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:				
MOLINE, IL		AIRPORT NAME: QUAD CITY INTL					RNAV (GPS) RWY 31, AMDT 1C 29 MARCH 2018					AMDT: 1B				
												DATED 09/15/2016				

 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.):

<u>FROM</u>	<u>TO</u>	<u>COURSE AND DISTANCE</u>	<u>ALTITUDE</u>
RW31 (MAP)	990 MSL (CA)	306.45	
990 MSL	ALECU (DF) (FB) (RNP 1.00)		
ALECU	MUTME (TF) (FB) (RNP 1.00)	235.24 / 6.04	
MUTME	MZV VOR/DME (TF) (FO) (RNP 1.00)	165.07 / 6.44	3000

NOTES, (CONT.):

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE DAVENPORT ALTIMETER SETTING AND INCREASE LPV DA TO 1078 FEET AND LNAV/VNAV DA TO 1207 FEET AND ALL MDA 60 FEET, INCREASE LPV ALL CATS, LNAV/VNAV ALL CATS, LNAV CATS C AND D, AND CIRCLING CATS C AND D VISIBILITY 1/4 SM.
 CHART NOTE: BARO-VNAV AND VDP NA WHEN USING DAVENPORT ALTIMETER SETTING.
 CHART NOTE: RWY 31 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

TAA

	<u>FROM</u>	<u>TO</u>	<u>ALT</u>
1.	217/30 CW 037/30 (NOPT)	PCITY (IF/IAF) (FB)	2500
2.	037/30 CW 127/30	SABCO (IAF) (FB)	3300
3.	127/30 CW 217/30	SILTE (IAF) (FB)	3100

QUALITY
10
CHECKED

CITY AND STATE MOLINE, IL	ELEVATION: 590 AIRPORT NAME: QUAD CITY INTL	TDZE: 583 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 31, AMDT 1C 29 MARCH 2018	SUP:
				AMDT: 1B
				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

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMLI
RUNWAY	RW31
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	412637.2200N
LTP/FTP LONGITUDE	0902944.8275W
LTP/FTP ELLIPSOIDAL HEIGHT	+01439
FPAP LATITUDE	412731.3400N
FPAP LONGITUDE	0903118.9800W
THRESHOLD CROSSING HEIGHT (TCH)	00047.6
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0688
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 83684A07

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01767
FPAP ORTHOMETRIC HEIGHT	+01767

CITY AND STATE

MOLINE, IL

ELEVATION: 590

TDZE: 583

AIRPORT NAME:

QUAD CITY INTL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 31, AMDT 1C

29 MARCH 2018

SUP:

AMDT:

DATED: 09/15/2016

 QUALITY
10
CHECKED

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES														MISSED APPROACH												
FROM				TO				COURSE AND DISTANCE				ALTITUDE		ILS: DA LOC: 5.53 NM AFTER CKERD INT/I-UZK 5.36 DME/RADAR OR AT I-UZK 0.18 DME												
CLANG INT/VHP 24.63 DME (IAF)				RACEN INT/I-UZK 12.89 DME/RADAR				275.00 / 0.82 (HDG) & 229.56 / 11.34 (I-UZK)				5000		CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 3000 DIRECT VHP VORTAC AND ON VHP R-303 TO KEADY/VHP 4.86 DME/RADAR AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 4000 ON HEADING 240 AND ON TTH (SEE FORM 8260-10) ADDITIONAL FLIGHT DATA: HOLD NW, RT, 122.97 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD E CLOTT/TTH 23.33 DME/RADAR, RT, 257.00 INBOUND. CHART FAS OBST: 930 TOWER 394613N/0861452W. 950 AAO 394829N/0861241W. CHART CIRCLING ICON CHART IN PROFILE: I-UZK DME ANTENNA CHART VDP AT 0.85 DME* DISTANCE VDP TO THLD 1.02 NM. *LOC ONLY. CHART IN PLANVIEW: CLOTT/TTH 23.33 DME/RADAR.												
RACEN INT/I-UZK 12.89 DME/RADAR (IAF)				DRVVR INT/I-UZK 9.76 DME/RADAR				229.56 / 3.13 (I-UZK)				4000														
DRVVR INT/I-UZK 9.76 DME/RADAR (IF)				CKERD INT/I-UZK 5.36 DME/RADAR				229.56 / 4.40 (I-UZK)				2600														
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)														MAG VAR: 5W EPOCH YEAR: 2015												
2. PROFILE STARTS AT RACEN INT/I-UZK 12.89 DME/RADAR																										
3. FAC: 229.56 FAF: CKERD INT/I-UZK 5.36 DME/RADAR DIST FAF TO MAP: 5.53 THLD: 5.53																										
4. MIN. ALT: RACEN 5000, DRVVR 4000, CKERD 2600																										
5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: 1813 100 HAT: 860 GS ANT: 1160																										
6. MIN GS INCPT: 2600 GS ALT AT: CKERD 2600 OM: - MM: - IM: -																										
7. GS ANGLE: 3.00 TCH: 55.0																										
8. MSA FROM: VHP VORTAC 3100																										
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 23R**	983	2400	200	983	2400	200	983	2400	200	983	2400	200														
S-LOC 23R	1180	2400	397	1180	2400	397	1180	3500	397	1180	3500	397														
CIRCLING	1420	1	624	1420	1	624	1420	1 3/4	624	1560	2 1/2	764														
NOTES: SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 23R: CAT A, B, C, D, RA 140, RVR 1400, HAT 150, DA 933 MSL. SA CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 23R: CAT A, B, C, D, RA 96, RVR 1200, HAT 100, DA 883 MSL. (CONTINUED ON PAGE 2)																										
CITY AND STATE INDIANAPOLIS, IN				ELEVATION: 796 TDZE: 783 AIRPORT NAME: INDIANAPOLIS INTL				FACILITY IDENTIFIER: I-UZK		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 23R, AMDT 6; ILS RWY 23R (SA CAT I), ILS RWY 23R (SA CAT II) 29 MARCH 2018					SUP: ILS OR LOC RWY 23R AMDT: 5 DATED 11/10/2016											



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.	
MISSED APPROACH INSTRUCTIONS, (CONT.): VORTAC R-077 TO CLOTT/TTH 23.33 DME/RADAR AND HOLD. (DME REQUIRED).				
NOTES, (CONT.): CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: DME OR RADAR REQUIRED. SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF HUD TO DH. SA CAT II CHART NOTE: REDUCED LIGHTING: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF AUTOLAND OR HUD TO TOUCHDOWN. CHART SPEED ICON IN PLANVIEW AT RACEN : MAX 210 KIAS. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CLANG ON V14-192-210 NORTHEAST BOUND. CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).				
QUALITY 10 CHECKED				
CITY AND STATE INDIANAPOLIS, IN	ELEVATION: 796 AIRPORT NAME: INDIANAPOLIS INTL	TDZE: 783	FACILITY IDENTIFIER: I-UZK	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 23R, AMDT 6; ILS RWY 23R (SA CAT I) , ILS RWY 23R (SA CAT II) 29 MARCH 2018
				SUP: ILS OR LOC RWY 23R
				AMDT: 5
				DATED: 11/10/2016

U.S. 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											
PROCEDURE SUSPENDED				EFFECTIVE <u>29 MARCH 2018</u>																			
												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: _____																							
MINIMUMS																MAG VAR: _____ EPOCH YEAR: _____							
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								
NOTES:																QUALITY 26 CHECKED							
CITY AND STATE				ELEVATION: 19 TDZE: 14				FACILITY IDENTIFIER:				PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:				SUP:							
BOSTON, MA				AIRPORT NAME:				RNAV				RNAV (GPS) RWY 4L, ORIG-A, 10/12/2017				AMDT: ORIG							
				GENERAL EDWARD LAWRENCE LOGAN INTL												DATED 04/27/2017							

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION NDB STANDARD INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.27										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT , HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES										MISSED APPROACH									
FROM		TO		COURSE AND DISTANCE				ALTITUDE											
										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			MDA	VIS
NOTES:																			
PROCEDURE CANCELED EFFECTIVE 29 MARCH 2018																			
CITY AND STATE CAMBRIDGE, MD				ELEVATION: 20 TDZE: 20 AIRPORT NAME: CAMBRIDGE-DORCHESTER RGNL				FACILITY IDENTIFIER: CGE				PROCEDURE NO./AMDТ NO./EFFECTIVE DATE: NDB RWY 34, AMDT 8, 07/21/2016				SUP NDB OR GPS RWY 34 AMDT 7B DATE 05/02/2013			

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION						INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.					
TERMINAL ROUTES												MISSED APPROACH									
FROM			TO			COURSE AND DISTANCE			ALTITUDE			LPV: DA LNAV/VNAV: DA LNAV: RW34 CLIMB TO 2000 DIRECT OVAYO AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 153.72 INBOUND. FAS OBST: 219 AAO 382928N/0755857W. DISTANCE TO THLD FROM 266 HAT: 0.67 NM. CHART VDP AT 1.24 NM TO RW34* *LNAV ONLY. WAAS CHANNEL # 45540 REFERENCE PATH ID: W34A CHART CIRCLING ICON. LTP HAE: -30.4 M									
GOFER			PROFS (TF) (FO) (RNP 2.00)			106.42 / 18.69			2000												
SBY VORTAC (IAF)			PROFS (NOPT) (TF) (FB) (RNP 1.00)			287.51 / 17.84			2000												
PROFS (IF/IAF)			WUGUM (TF) (FB) (RNP 1.00)			333.91 / 6.10			1700												
WUGUM (FAF)			RW34 (MAP) (TF) (FO) (RNP 0.30)			333.86 / 5.11			1700												
RW34 (MAP)			286 MSL (CA)			333.86			2000												
286 MSL			OVAYO (DF) (FO) (RNP 1.00)																		
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SE PROFS, RT, 333.91 INBOUND, 2000 FT. IN LIEU OF PT (IAF) 3. FAC: 333.86 FAF: WUGUM DIST FAF TO MAP: 5.11 THLD: 5.11 4. MIN. ALT: PROFS 2000, WUGUM 1700 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 1700 GS ALT AT: WUGUM 1700 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 57.0 34:1 IS NOT CLEAR 8. MSA FROM: RW34 2100																		MAG VAR: 10W		EPOCH YEAR: 1985	
MINIMUMS																					
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD @									
CATEGORY =====>		A			B			C			D			E							
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA						
LPV DA	286	7/8	266	286	7/8	266	286	7/8	266	286	7/8	266									
LNAV/VNAV DA	309	7/8	289	309	7/8	289	309	7/8	289	309	7/8	289									
LNAV MDA	480	1	460	480	1	460	480	1 3/8	460	480	1 3/8	460									
CIRCLING	480	1	460	480	1	460	660	1 3/4	640	780	2 1/2	760									
NOTES: CHART NOTE: CIRCLING NA AT NIGHT. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F). CHART NOTE: RWY 34 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)																		@ CAT D 800-2 1/2			
CITY AND STATE CAMBRIDGE, MD				ELEVATION: 20 TDZE: 20 AIRPORT NAME: CAMBRIDGE-DORCHESTER RGNL				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 34, AMDT 1 29 MARCH 2018				SUP: AMDT: ORIG DATED 07/21/2016							



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

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

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON SBY VORTAC AIRWAY RADIALS 218 CW 012.

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



CITY AND STATE CAMBRIDGE, MD	ELEVATION: 20 AIRPORT NAME: CAMBRIDGE-DORCHESTER RGNL	TDZE: 20	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 34, AMDT 1 29 MARCH 2018	SUP:
					AMDT: ORIG
					DATED: 07/21/2016

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

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

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCGE
RUNWAY	RW34
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W34A
LTP/FTP LATITUDE	383203.6950N
LTP/FTP LONGITUDE	0760132.7915W
LTP/FTP ELLIPSOIDAL HEIGHT	-00304
FPAP LATITUDE	383315.6815N
FPAP LONGITUDE	0760239.8425W
THRESHOLD CROSSING HEIGHT (TCH)	00057.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
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>	 D01B5F62

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+00048
FPAP ORTHOMETRIC HEIGHT	+00048

QUALITY
24
CHECKED

CITY AND STATE CAMBRIDGE, MD	ELEVATION: 20 AIRPORT NAME: CAMBRIDGE-DORCHESTER RGNL	TDZE: 20	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 34, AMDT 1 29 MARCH 2018	SUP:
					AMDT: ORIG
					DATED: 07/21/2016

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: FIKIB/17.97 DME FIX					
MOP VOR/DME (IAF)		FILKO/MOP VOR/DME 7.00 DME			178.38 / 7.00			2600		CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 2600 ON MOP VOR/DME R-178 DIRECT FILKO/MOP VOR/DME 7.00 DME AND HOLD.					
FILKO/MOP VOR/DME 7.00 DME (IF)		CAVOK/MOP VOR/DME 13.00 DME			178.38 / 6.00			2400							
										ADDITIONAL FLIGHT DATA: HOLD N, RT, 178.38 INBOUND. CHART FAS OBST: 889 TREE 432015N/0844334W. CAVOK TO RW18: 3.03/50.					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 5W EPOCH YEAR:1995					
2. PROFILE STARTS AT MOP VOR/DME															
3. FAC 178.38 FAF CAVOK/MOP VOR/DME 13.00 DME DIST FAF TO MAP _____ THLD 4.97															
4. MIN. ALT MOP VOR/DME 3000, FILKO 2600, CAVOK 2400, RISEE/MOP VOR/DME 16.00 DME 1420															
8. MSA FROM: MOP VOR/DME 3100															
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	1140	1	387	1140	1	387	1140	1 1/4	387		NA				
CIRCLING	1180	1	426	1220	1	466	1220	1 1/2	466		NA				
NOTES:															
CHART NOTE: NIGHT LANDING: RWY 18, 36 NA.															
CHART NOTE: DME REQUIRED.															
CHART NOTE: STRAIGHT-IN RWY 18 NA AT NIGHT, CIRCLING RWY 18, 36 NA AT NIGHT.															
CHART NOTE: RWY 18 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.															
CITY AND STATE ALMA, MI		ELEVATION: 754 AIRPORT NAME: GRATIOT COMMUNITY		TDZE: 753		FACILITY IDENTIFIER: MOP		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR RWY 18, AMDT 1B 29 MARCH 2018				SUP VOR/DME RWY 18			
												AMDT 1A			
												DATE 04/30/2015			



**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.

QUALITY
4
CHECKED

CITY AND STATE

ALMA, MI

ELEVATION: 754

TDZE: 753

AIRPORT NAME:

GRATIOT COMMUNITY

FACILITY
IDENTIFIER:

MOP

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

VOR RWY 18, AMDT 1B

29 MARCH 2018

SUP: VOR/DME RWY 18

AMDT: 1A

DATED: 04/30/2015

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: RW23R CLIMB TO 2500 DIRECT WEVSO AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SW, RT, 046.48 INBOUND. CHART FAS OBST: 1096 TOWER 421906N/0851313W. FAS OBST: 1130 AAO 422151N/0851146W. 1130 AAO 422141N/0851031W. CHART: ASR DISTANCE TO THLD FROM 200 HAT: 0.47 NM. CHART VDP AT 1.26 NM TO RW23R* *LNAV ONLY. WAAS CHANNEL # 56411 REFERENCE PATH ID: W23A CHART CIRCLING ICON. LTP HAE: 249.6 M									
VIO VOR/DME		ZULSI (TF) (FB) (RNP 2.00)		143.74 / 19.62				3000											
YOVUR (IAF)		WIPIL (NOPT) (TF) (FB) (RNP 1.00)		316.79 / 6.00				2500											
ZULSI (IAF)		WIPIL (NOPT) (TF) (FB) (RNP 1.00)		136.63 / 8.00				2500											
WIPIL (IF/IAF)		UYUNA (TF) (FB) (RNP 1.00)		226.72 / 6.80				2200											
UYUNA (FAF)		RW23R (MAP) (TF) (FO) (RNP 0.30)		226.65 / 3.84															
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NE WIPIL, RT, 226.72 INBOUND, 2500 FT. IN LIEU OF PT (IAF) 3. FAC: 226.65 FAF: UYUNA DIST FAF TO MAP: 3.84 THLD: 3.84 4. MIN. ALT: WIPIL 2500, UYUNA 2200 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2200 GS ALT AT: UYUNA 2200 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 49.4 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW23R 3000																MAG VAR: 4W		EPOCH YEAR: 1985	
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		STANDARD @									
CATEGORY =====>		A		B		C		D		E									
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA				
LPV DA**	1129	2400	200	1129	2400	200	1129	2400	200	1129	2400	200							
LNAV/VNAV DA	1258	3200	329	1258	3200	329	1258	3200	329	1258	3200	329							
LNAV MDA	1380	2400	451	1380	2400	451	1380	4500	451	1380	4500	451							
CIRCLING	1420	1	468	1480	1	528	1520	1 1/2	568	1520	2	568							
NOTES: CHART NOTE: CIRCLING NA TO RWYS 5R AND 23L. CHART NOTE: CIRCLING TO RWY 31 NA AT NIGHT. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20C (-4F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)																			
CITY AND STATE		ELEVATION: 952 TDZE: 929		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
BATTLE CREEK, MI		AIRPORT NAME:		W K KELLOGG		RNAV (GPS) RWY 23R, AMDT 1C				AMDT: 1B									
						29 MARCH 2018				DATED 12/07/2017									



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
RW23R (MAP)	1129 MSL (CA)	226.65	
1129 MSL	WEVSO (DF) (FO) (RNP 1.00)		2500

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON VIO VOR/DME AIRWAY RADIALS 058 CW 171.
CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.

CITY AND STATE
BATTLE CREEK, MI

ELEVATION: 952 TDZE: 929
AIRPORT NAME:
W K KELLOGG

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 23R, AMDT 1C
29 MARCH 2018

SUP:
AMDT: 1B
DATED: 12/07/2017

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**DATA FIELD****DATA**

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KBTL
RUNWAY	RW23R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W23A
LTP/FTP LATITUDE	421857.3725N
LTP/FTP LONGITUDE	0851427.4055W
LTP/FTP ELLIPSOIDAL HEIGHT	+02496
FPAP LATITUDE	421744.6330N
FPAP LONGITUDE	0851557.5225W
THRESHOLD CROSSING HEIGHT (TCH)	00049.4
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

0212E371

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02830
FPAP ORTHOMETRIC HEIGHT	+02830

QUALITY
10
CHECKED

CITY AND STATE

BATTLE CREEK, MI

ELEVATION: 952

TDZE: 929

AIRPORT NAME:

W K KELLOGG

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 23R, AMDT 1C

29 MARCH 2018

SUP:

AMDT: 1B

DATED: 12/07/2017

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: RW21							
UNSUB		LUYRI (TF) (FO) (RNP 2.00)		096.02 / 15.87				3000		CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 3000 DIRECT LESSY AND HOLD.							
LESSY		LUYRI (TF) (FO) (RNP 2.00)		344.15 / 20.28				3000									
ERRYS (IAF)		LUYRI (NOPT) (TF) (FB) (RNP 1.00)		261.33 / 26.19				3000									
LUYRI (IF/IAF)		HURES (TF) (FB) (RNP 1.00)		206.67 / 7.31				2500									
HURES (FAF)		RW21 (MAP) (TF) (FO) (RNP 0.30)		206.63 / 3.69						ADDITIONAL FLIGHT DATA: HOLD W, RT, 095.59 INBOUND. CHART FAS OBST: 1032 TREE 423709N/0844731W. CHART 1367 TOWER 423836N/0844757W. CHART CIRCLING ICON. HURES TO RW21: 4.00/40.							
(SEE FORM 8260-10)																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																	
2. HOLD NE LUYRI, RT, 206.67 INBOUND, 3000 FT. IN LIEU OF PT (IAF)																	
3. FAC: 206.63 FAF: HURES DIST FAF TO MAP: 3.69 THLD: 3.69																	
4. MIN. ALT: LUYRI 3000, HURES 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: 34:1 IS NOT CLEAR																	
8. MSA FROM: RW21 3000																	
MAG VAR: 6W EPOCH YEAR: 2020																	
MINIMUMS																	
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD					
CATEGORY ==>		A		B		C		D		E							
		DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	
LNAV MDA		1300	1	409	1300	1	409		NA			NA					
CIRCLING		1380	1	489	1480	1	589		NA			NA					
NOTES: CHART NOTE: CIRCLING NA TO RWYS 15 AND 33. CHART NOTE: RWY 21 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: PROCEDURE NA AT NIGHT.																	
CITY AND STATE CHARLOTTE, MI		ELEVATION: 891 TDZE: 891 AIRPORT NAME: FITCH H BEACH		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 21, AMDT 1A 29 MARCH 2018						SUP: AMDT: 1 DATED 06/22/2017					

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
RW21 (MAP)	1300 MSL (CA)	206.63	1300
1300 MSL	LESSY (DF) (FO) (RNP 1.00)		3000

CITY AND STATE
CHARLOTTE, MI

ELEVATION: 891 TDZE: 891
AIRPORT NAME:
FITCH H BEACH

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 21, AMDT 1A
29 MARCH 2018

SUP: **QUALITY 10 CHECKED**
AMDT: 1
DATED: 06/22/2017

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									
										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 29 MARCH 2018																			
CITY AND STATE DETROIT, MI				ELEVATION: 626 TDZE: 626 AIRPORT NAME: COLEMAN A YOUNG MUNI				FACILITY IDENTIFIER: YQG		PROCEDURE NO./AMD'T NO./EFFECTIVE DATE: VOR RWY 33, AMDT 28B, 12/07/2017						SUP AMD'T 28A DATE 05/28/2015			

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: RW27 LNAV: RW27													
MOP VOR/DME				WELVI (TF) (FO) (RNP 2.00)			053.53 / 33.23				3000		CLIMBING LEFT TURN TO 2600 DIRECT WHIPP AND HOLD.													
BANJO				WELVI (TF) (FO) (RNP 2.00)			176.93 / 7.85				3000															
MBS VOR/DME (IAF)				WELVI (NOPT) (TF) (FB) (RNP 1.00)			357.00 / 27.15				3000															
WELVI (IF/IAF)				JIDUM (TF) (FB) (RNP 1.00)			271.91 / 7.89				2600															
JIDUM (FAF)				RW27 (MAP) (TF) (FO) (RNP 0.30)			271.79 / 5.61						ADDITIONAL FLIGHT DATA: HOLD NW, RT, 141.46 INBOUND. FAS OBST: 954 AAO 435829N/0842316W. WAAS CHANNEL # 99326 REFERENCE PATH ID: W27A JIDUM TO RW27: 3.00/40 LTP HAE: 201.1 M													
(SEE FORM 8260-10)																										
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																										
2. HOLD E WELVI, RT, 271.91 INBOUND, 3000 FT. IN LIEU OF PT (IAF)																										
3. FAC: 271.79 FAF: JIDUM DIST FAF TO MAP: 5.61 THLD: 5.61																										
4. MIN. ALT: WELVI 3000, JIDUM 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: 20:1 IS NOT CLEAR 34:1 IS NOT CLEAR																										
8. MSA FROM: RW27 3300																										
MAG VAR: 4W 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											
LP MDA	1280	1	507	1280	1	507	1280	1 3/8	507	1280	1 3/8	507														
LNAV MDA	1280	1	507	1280	1	507	1280	1 3/8	507	1280	1 3/8	507														
CIRCLING	1420	1	646	1500	1	726	1500	2	726	1500	2 1/4	726														
NOTES: CHART NOTE: CIRCLING NA TO RWYS 15 AND 33. CHART NOTE: RWY 27 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 GLADWIN, MI				ELEVATION: 774 TDZE: 773 AIRPORT NAME: GLADWIN ZETTEL MEMORIAL				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 27, ORIG-B 29 MARCH 2018						SUP: AMDT: ORIG-A DATED 05/28/2015										



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
RW27 (MAP)	1174 MSL (CA)	271.79	
1174 MSL	WHIPP (DF) (FO) (RNP 1.00)		2600

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON MOP VOR/DME AIRWAY RADIALS 336 CW 106.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON MBS VOR/DME AIRWAY RADIALS 284 CW 016.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: USE MOUNT PLEASANT ALTIMETER SETTING; WHEN NOT RECEIVED, USE MIDLAND ALTIMETER SETTING AND INCREASE ALL MDA 20 FEET; INCREASE LP AND LNAV CATS C/D VISIBILITY 1/8 SM AND CIRCLING CATS C/D VISIBILITY 1/4 SM.
PBN REQUIREMENT NOTE: RNP APCH



CITY AND STATE
GLADWIN, MI

ELEVATION: 774 TDZE: 773
AIRPORT NAME:
GLADWIN ZETTEL MEMORIAL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 27, ORIG-B
29 MARCH 2018

SUP:	
AMDT:	ORIG-A
DATED:	05/28/2015

**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	KGDW
RUNWAY	RW27
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W27A
LTP/FTP LATITUDE	435820.1360N
LTP/FTP LONGITUDE	0842754.1185W
LTP/FTP ELLIPSOIDAL HEIGHT	+02011
FPAP LATITUDE	435816.5500N
FPAP LONGITUDE	0842957.4000W
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	1320
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
 <u>CRC REMAINDER</u>	 16837A50

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02355
FPAP ORTHOMETRIC HEIGHT	+02355

QUALITY
16
CHECKED

CITY AND STATE GLADWIN, MI	ELEVATION: 774 AIRPORT NAME: GLADWIN ZETTEL MEMORIAL	TDZE: 773 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 27, ORIG-B 29 MARCH 2018	SUP:
				AMDT: ORIG-A
				DATED: 05/28/2015

RNAV - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES																	MISSED APPROACH									
FROM				TO				COURSE AND DISTANCE				ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW26L CLIMB TO 2700 DIRECT FERLI AND TRACK 267.22 TO JAKES AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 087.32 INBOUND. CHART FAS OBST: 850 TREE 425303N/0852933W. CHART: ASR. DISTANCE TO THLD FROM 200 HAT: 0.46 NM. CHART VDP AT 1.31 NM TO RW26L* *LNAV ONLY. WAAS CHANNEL # 86713 REFERENCE PATH ID: W26B CHART CIRCLING ICON. LTP HAE: 206.9 M												
UNSUB (IAF)				HAPIG (TF) (FB) (RNP 1.00)				329.58 / 11.85				2700														
HAPIG (IF)				CAVUS (TF) (FB) (RNP 1.00)				267.50 / 6.10				2700														
CAVUS (FAF)				DAXEJ/2.50 NM TO RW26L (TF) (FB) (RNP 0.30)				267.41 / 3.23																		
DAXEJ/2.50 NM TO RW26L				RW26L (MAP) (TF) (FO) (RNP 0.30)				267.41 / 2.50																		
RW26L (MAP)				990 MSL (CA)				267.41																		
(SEE FORM 8260-10)																										
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT HAPIG 3. FAC: 267.41 FAF: CAVUS DIST FAF TO MAP: 5.73 THLD: 5.73 4. MIN. ALT: HAPIG 2700, CAVUS 2700, DAXEJ/2.50 NM TO RW26L 1640* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2700 GS ALT AT: CAVUS 2700 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 55.4 34:1 IS CLEAR 8. MSA FROM: RW26L 3000																	MAG VAR: 6W					EPOCH YEAR: 2020				
MINIMUMS																										
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD														
CATEGORY =====>		A			B			C			D			E												
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA											
LPV DA**	990	2400	200	990	2400	200	990	2400	200	990	2400	200														
LNAV/VNAV DA	1114	2400	324	1114	2400	324	1114	2400	324	1114	4000	324														
LNAV MDA	1280	2400	490	1280	2400	490	1280	4000	490	1280	5000	490														
CIRCLING	1280	1	486	1280	1	486	1340	1 1/2	546	1360	2	566														
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV CAT D VISIBILITY TO RVR 5000. CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.																										
CITY AND STATE				ELEVATION: 794 TDZE: 790				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:										
GRAND RAPIDS, MI				AIRPORT NAME:								RNAV (GPS) RWY 26L, AMDT 1C				AMDT: 1B										
				GERALD R FORD INTL								29 MARCH 2018				DATED 12/07/2017										

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
990 MSL	FERLI (DF) (FB) (RNP 1.00)		
FERLI	JAKES (TF) (FO) (RNP 1.00)	267.22 / 7.71	2700

QUALITY
24
CHECKED

CITY AND STATE
GRAND RAPIDS, MI

ELEVATION: 794 TDZE: 790
AIRPORT NAME:
GERALD R FORD INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 26L, AMDT 1C
29 MARCH 2018

SUP:
AMDT: 1B
DATED: 12/07/2017

**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	KGRR
RUNWAY	RW26L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W26B
LTP/FTP LATITUDE	425250.8105N
LTP/FTP LONGITUDE	0853019.1200W
LTP/FTP ELLIPSOIDAL HEIGHT	+02069
FPAP LATITUDE	425235.8810N
FPAP LONGITUDE	0853231.8820W
THRESHOLD CROSSING HEIGHT (TCH)	00055.4
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
 <u>CRC REMAINDER</u>	 4F0D3905

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02406
FPAP ORTHOMETRIC HEIGHT	+02406

QUALITY
24
CHECKED

CITY AND STATE GRAND RAPIDS, MI	ELEVATION: 794 AIRPORT NAME: GERALD R FORD INTL	TDZE: 790 	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 26L, AMDT 1C 29 MARCH 2018	SUP:
					AMDT: 1B
					DATED: 12/07/2017

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									
										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 29 MARCH 2018																			
CITY AND STATE IONIA, MI				ELEVATION: 818 AIRPORT NAME: IONIA COUNTY				TDZE:		FACILITY IDENTIFIER: LAN		PROCEDURE NO./AMDТ NO./EFFECTIVE DATE: VOR-A, AMDT 1, 04/10/2008				SUP AMDT ORIG DATE 05/27/1993			

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 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)										MAG VAR: _____ EPOCH YEAR: _____									
2. _____																			
3. FAC ____ FAF ____ DIST FAF TO MAP ____ THLD ____																			
4. MIN. ALT ____																			
8. MSA FROM: _____																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A									
CATEGORY =====>																			
		MDA	VIS			MDA	VIS			MDA	VIS			MDA	VIS				
NOTES:																			
PROCEDURE CANCELED EFFECTIVE 29 MARCH 2018																			
CITY AND STATE MASON, MI			ELEVATION: 920 AIRPORT NAME: MASON JEWETT FIELD			TDZE:		FACILITY IDENTIFIER: LAN		PROCEDURE NO./AMD'T NO./EFFECTIVE DATE: VOR-A, AMDT 5, 03/07/2013				SUP VOR OR GPS-A					
														AMD'T 4					
														DATE 10/27/2005					



US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							COPTER ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29							Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.						
TERMINAL ROUTES														MISSED APPROACH						
FROM				TO			COURSE AND DISTANCE				ALTITUDE			ILS: DA LOC: 5.18 NM AFTER ANDOE OM/RADAR						
DLH VORTAC				ANDOE OM/RADAR			065.82 / 6.49				3200			CLIMB TO 3000 THEN CLIMBING RIGHT TURN TO 4500 ON HEADING 060 AND ON DLH VORTAC R-017 TO CHERL INT/DLH 15.00 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 3300 DIRECT PYKLA LOM/RADAR AND HOLD (ADF OR RADAR REQUIRED). ADDITIONAL FLIGHT DATA: HOLD N, RT, 197.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD W PYKLA LOM/RADAR, RT, 093.26 INBOUND. FAS OBST: 1609 AAO 465050N/0920435W. CHART IN PLANVIEW: PYKLA LOM. CHART: ASR. CHART PLANVIEW NOTE: RADAR REQUIRED.						
1. PT L SIDE OF COURSE 093.29 OUTBOUND 3200 FT WITHIN 5 MILES OF ANDOE OM (IAF)														MAG VAR: 1W EPOCH YEAR: 2020						
2.																				
3. FAC: 273.29 FAF: ANDOE OM/RADAR DIST FAF TO MAP: 5.18 THLD: 5.18																				
4. MIN. ALT: ANDOE OM/RADAR 3200																				
5. DIST TO THLD FROM OM: 5.18 MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 1593																				
6. MIN GS INCPT: 3200 GS ALT AT: OM: 3180 MM: - IM: -																				
7. GS ANGLE: 3.00 TCH: 85.3																				
8. MSA FROM: DLH VORTAC 3100																				
MINIMUMS																				
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A			ILS: STANDARD			LOC: STANDARD							
CATEGORY ==>		COPTER																		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA					
H-ILS 27	1621	2000	200																	
H-LOC 27	1860	1200	439																	
NOTES: CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO H-ILS 27. CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).																				
CITY AND STATE DULUTH, MN		ELEVATION: 1428 TDZE: 1421 AIRPORT NAME: DULUTH INTL			FACILITY IDENTIFIER: I-JUD		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: COPTER ILS OR LOC RWY 27, AMDT 2B 29 MARCH 2018					SUP: AMDT: 2A DATED 04/30/2015								

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.						
TERMINAL ROUTES														MISSED APPROACH									
FROM				TO			COURSE AND DISTANCE				ALTITUDE			ILS: DA LOC: 5.55 NM AFTER PYKLA LOM/RADAR									
DLH VORTAC				PYKLA LOM/RADAR			287.71 / 6.79				3300			CLIMB TO 3000 THEN CLIMBING LEFT TURN TO 4500 ON HEADING 320 AND ON DLH VORTAC R-017 TO CHERL INT/DLH 15.00 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 2700 THEN CLIMBING LEFT TURN TO 3300 DIRECT PYKLA LOM/RADAR AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, RT, 197.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD W PYKLA LOM/RADAR, RT, 093.26 INBOUND. FAS OBST: 1699 AAO 465057N/0921801W. CHART CIRCLING ICON. CHART: ASR. CHART IN PLANVIEW: (CFBSJ) AT 465054.60N-0922708.08W. CHART PLANVIEW NOTE: ADF OR RADAR REQUIRED.									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)														MAG VAR: 1W EPOCH YEAR: 2020									
2. HOLD W PYKLA LOM, RT, 093.26 INBOUND, 3300 FT. IN LIEU OF PT (IAF)																							
3. FAC: 093.26 FAF: PYKLA LOM/RADAR DIST FAF TO MAP: 5.55 THLD: 5.55																							
4. MIN. ALT: PYKLA LOM 3300																							
5. DIST TO THLD FROM OM: 5.55 MM: - IM: 1059 150 HAT: 1736 100 HAT: 782 GS ANT: 1154																							
6. MIN GS INCPT: 3300 GS ALT AT: _____ OM: 3284 MM: - IM: 1542																							
7. GS ANGLE: 3.00 TCH: 59.0																							
8. MSA FROM: PYKLA LOM 3100																							
MINIMUMS																							
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A			ILS: STANDARD				LOC: STANDARD @									
CATEGORY =====>		A			B			C			D			E									
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA								
S-ILS 09	1628	1800	200	1628	1800	200	1628	1800	200	1628	1800	200	1628	1800	200								
S-LOC 09	1960	2400	532	1960	2400	532	1960	5500	532	1960	5500	532	1960	5500	532								
CIRCLING	1960	1	532	1960	1	532	1960	1 1/2	532	2400	3	972	2400	3	972								
NOTES: SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 9: CAT A, B, C, D, RA 144, @ CAT D, E 1000-3 RVR 1400, HAT 150, DA 1578 MSL. CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 9: CAT A, B, C, D, RA 101, RVR 1200, HAT 100, DA 1528 MSL. (CONTINUED ON PAGE 2)																							
CITY AND STATE DULUTH, MN				ELEVATION: 1428 TDZE: 1428 AIRPORT NAME: DULUTH INTL				FACILITY IDENTIFIER: I-DLH		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 9, AMDT 22B; ILS RWY 9 (SA CAT I), ILS RWY 9 (CAT II) 29 MARCH 2018					SUP: AMDT: 22A 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: CIRCLING NA FOR CAT E SE OF RWY 3-27.
CHART NOTE: ADF OR RADAR REQUIRED.
SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF HUD TO DH.
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 9 CAT E VISIBILITY TO RVR 4000 AND S-LOC 9 CAT C/D/E VISIBILITY TO 1 1/2 SM.



CITY AND STATE DULUTH, MN	ELEVATION: 1428 TDZE: 1428 AIRPORT NAME: DULUTH INTL	FACILITY IDENTIFIER: I-DLH	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 9, AMDT 22B; ILS RWY 9 (SA CAT I), ILS RWY 9 (CAT II) 29 MARCH 2018	SUP:
				AMDT: 22A
				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: 5.18 NM AFTER ANDOE OM/RADAR												
DLH VORTAC				ANDOE OM/RADAR				065.82 / 6.49				3200		CLIMB TO 3000 THEN CLIMBING RIGHT TURN TO 4500 ON HEADING 060 AND ON DLH VORTAC R-017 TO CHERL INT/DLH 15.00 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 3300 DIRECT PYKLA LOM/RADAR AND HOLD (ADF OR RADAR REQUIRED). ADDITIONAL FLIGHT DATA: HOLD N, RT, 197.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD W PYKLA LOM/RADAR, RT, 093.26 INBOUND. FAS OBST: 1609 AAO 465050N/0920435W. CHART DLH R-182 AT DAYAR. CHART DLH R-009 AT FOSUP. CHART IN PLANVIEW: PYKLA LOM/RADAR. CHART CIRCLING ICON. CHART: ASR. CHART PLANVIEW NOTE: DME OR RADAR REQUIRED.												
DAYAR/DLH 15.00 DME CCW (IAF)				WIRSA INT/DLH 15.00 DME (NOPT)				15.00 DME ARC (DLH LR-086)				3200														
FOSUP/DLH 15.00 DME CW (IAF)				WIRSA/DLH 15.00 DME (NOPT)				15.00 DME ARC (DLH LR-070)				3200														
WIRSA/DLH 15.00 DME (IF)				ANDOE OM/RADAR				273.29 / 8.77 (I-JUD)				3200														
1. PT <u>L</u> SIDE OF COURSE <u>093.29</u> OUTBOUND <u>3200</u> FT WITHIN <u>15</u> MILES OF <u>ANDOE OM</u> (IAF)																										
2. _____																										
3. FAC: <u>273.29</u> FAF: <u>ANDOE OM/RADAR</u> DIST FAF TO MAP: <u>5.18</u> THLD: <u>5.18</u>																										
4. MIN. ALT: <u>ANDOE OM 3200</u>																										
5. DIST TO THLD FROM OM: <u>5.18</u> MM: <u>-</u> IM: <u>-</u> 150 HAT: <u>-</u> 100 HAT: <u>-</u> GS ANT: <u>1593</u>																										
6. MIN GS INCPT: <u>3200</u> GS ALT AT: _____ OM: <u>3180</u> MM: <u>-</u> IM: <u>-</u>																										
7. GS ANGLE: <u>3.00</u> TCH: <u>85.3</u>																										
8. MSA FROM: <u>DLH VORTAC 3100</u>																										
MAG VAR: <u>1W</u> EPOCH YEAR: <u>2020</u>																										
MINIMUMS																										
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: <u>N A</u>			ILS: <u>STANDARD</u>			LOC: <u>STANDARD @</u>													
CATEGORY <u>=====</u>		A			B			C			D			E												
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA											
S-ILS 27	1621	4000	200	1621	4000	200	1651	4000	230	1651	4000	230	1651	4000	230											
S-LOC 27	1860	2400	439	1860	2400	439	1860	4500	439	1860	4500	439	1860	4500	439											
CIRCLING	1880	1	452	1900	1	472	1940	1 1/2	512	2400	3	972	2400	3	972											
NOTES: CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-ILS 27. CHART NOTE: CIRCLING NA FOR CAT E SE OF RWY 3-27. CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 27 CAT E VISIBILITY TO 1 3/8 SM.																										
CITY AND STATE <u>DULUTH, MN</u>							ELEVATION: <u>1428</u> TDZE: <u>1421</u> AIRPORT NAME: <u>DULUTH INTL</u>			FACILITY IDENTIFIER: <u>I-JUD</u>		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: <u>ILS OR LOC RWY 27, AMDT 10C</u> <u>29 MARCH 2018</u>					SUP: AMDT: <u>10B</u> DATED <u>10/13/2016</u>									



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 1700 THEN CLIMBING RIGHT TURN TO 3600 DIRECT IVEJE AND HOLD. ADDITIONAL FLIGHT DATA: CHART FAS OBST: 1049 TREE 465045N/0963924W. DISTANCE TO THLD FROM 250 HAT: 0.66 NM. WAAS CHANNEL # 70630 REFERENCE PATH ID: W30A CHART VDP AT 1.12 MILES TO RWY 30. LTP HAE: 253.1 M					
IRILE		IVEJE (TF) (FO) (RNP 2.00)			170.55 / 16.05			3600							
FAR VOR/DME		IVEJE (TF) (FO) (RNP 2.00)			086.49 / 17.91			3600							
STARR (IAF)		IVEJE (NOPT) (TF) (FB) (RNP 1.00)			301.11 / 27.07			3600							
IVEJE (IF/IAF)		ETCIR (TF) (FB) (RNP 1.00)			293.48 / 5.84			2600							
ETCIR (FAF)		JESGA/2.10 NM TO RW30 (TF) (FB) (RNP 0.30)			293.39 / 3.06										
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SE IVEJE, RT, 293.48 INBOUND, 3600 FT. IN LIEU OF PT (IAF) 3. FAC: 293.39 FAF: ETCIR DIST FAF TO MAP: 5.16 THLD: 5.16 4. MIN. ALT: IVEJE 3600, ETCIR 2600, JESGA/2.10 NM TO RW30 1620* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2600 GS ALT AT: ETCIR 2600 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 20:1 IS CLEAR ; 34:1 IS CLEAR 8. MSA FROM: RW30 3600															
										MAG VAR: 3E			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	1168	1	250	1168	1	250		NA			NA				
LNAV/VNAV DA	1211	1	293	1211	1	293		NA			NA				
LNAV MDA	1300	1	382	1300	1	382		NA			NA				
CIRCLING	1360	1	442	1380	1	462		NA			NA				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). @ NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT FAR VOR/DME ON V2 NORTHWEST BOUND. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 918 TDZE: 918			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:			
MOORHEAD, MN		AIRPORT NAME: MOORHEAD MUNI					RNAV (GPS) RWY 30, AMDT 1C 29 MARCH 2018					AMDT: 1B			
												DATED 11/10/2016			

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
JESGA/2.10 NM TO RW30	RW30 (MAP) (TF) (FO) (RNP 0.30)	293.39 / 2.10	
RW30 (MAP)	1700 MSL (CA)	293.39	1700
1700 MSL	IVEJE (DF) (FO) (RNP 1.00)		3600

NOTES, (CONT.):

*LNAV ONLY

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE HECTOR INTL ALTIMETER SETTING AND INCREASE ALL DA 21 FEET, INCREASE ALL MDA 40 FEET.

QUALITY
10
CHECKED

CITY AND STATE MOORHEAD, MN	ELEVATION: 918	TDZE: 918	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 30, AMDT 1C 29 MARCH 2018	SUP:
	AIRPORT NAME:				AMDT: 1B
	MOORHEAD MUNI				DATED: 11/10/2016

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

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

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KJKJ
RUNWAY	RW30
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W30A
LTP/FTP LATITUDE	465011.9930N
LTP/FTP LONGITUDE	0963922.7335W
LTP/FTP ELLIPSOIDAL HEIGHT	+02531
FPAP LATITUDE	465051.4500N
FPAP LONGITUDE	0964119.0900W
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	1440
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

0CD7E9DA

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+02797
FPAP ORTHOMETRIC HEIGHT	+02797

QUALITY
10
CHECKED

CITY AND STATE

MOORHEAD, MN

ELEVATION: 918

TDZE: 918

AIRPORT NAME:

MOORHEAD MUNI

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 30, AMDT 1C

29 MARCH 2018

SUP:

AMDT:

1B

DATED:

11/10/2016

ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29							Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.												
TERMINAL ROUTES										MISSED APPROACH									
FROM		TO		COURSE AND DISTANCE			ALTITUDE		ILS: DA LOC: 5.92 NM AFTER GREEP INT/I-LDZ 7.59 DME/RADAR OR AT 1.67 DME CLIMB TO 2500 THEN CLIMBING LEFT TURN TO 3000 DIRECT TO VORTAC AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1000 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 357 AND STL VORTAC R-031 TO FASHE/STL 19.37 DME AND HOLD. (DME REQUIRED). ADDITIONAL FLIGHT DATA: HOLD E, RT, 270.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NE FASHE/STL 19.37 DME, RT, 211.29 INBOUND. CHART FAS OBST: 714 TREE 384551N/0902302W. CHART VDP AT 2.92 DME* DISTANCE VDP TO THLD 1.24 NM. *LOC ONLY. CHART IN PLANVIEW: FASHE/STL 19.37 DME.										
RUYON INT/I-LDZ 20.67 DME/RADAR (IAF)		MUVDE INT/I-LDZ 17.93 DME/RADAR		123.19 / 2.74 (I-LDZ)			6000												
MUVDE INT/I-LDZ 17.93 DME/RADAR		EUBIE INT/I-LDZ 15.04 DME/RADAR		123.19 / 2.90 (I-LDZ)			5000												
EUBIE INT/I-LDZ 15.04 DME/RADAR (IF)		FARIS INT/I-LDZ 10.61 DME/RADAR		123.19 / 4.43 (I-LDZ)			3500												
FARIS INT/I-LDZ 10.61 DME/RADAR		GREEP INT/I-LDZ 7.59 DME/RADAR		123.19 / 3.01 (I-LDZ)			2500												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT RUYON INT/I-LDZ 20.67 DME/RADAR 3. FAC: 123.19 FAF: GREEP INT/I-LDZ 7.59 DME/RADAR DIST FAF TO MAP: 5.92 THLD: 5.92 4. MIN. ALT: RUYON 6000, MUVDE 6000, EUBIE 5000, FARIS 3500, GREEP 2500 5. DIST TO THLD FROM OM: _____ MM: _____ IM: 1051 150 HAT: _____ 100 HAT: 1128 GS ANT: 999 6. MIN GS INCPT: 2500 GS ALT AT: GREEP 2500 OM: _____ MM: _____ IM: 639 7. GS ANGLE: 3.00 TCH: 53.6 8. MSA FROM: STL VORTAC 090-270 2800, 270-090 2300																MAG VAR: 1W		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 12L	741	1800	200	741	1800	200	741	1800	200	741	1800	200	741	2400	200				
S-LOC 12L	980	2400	439	980	2400	439	980	4000	439	980	5000	439	980	5000	439				
NOTES: CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 12L: CAT A, B, C, D, RA 112, RVR 1200, HAT 100, DA 641 MSL. CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 12L: CAT III CAT A, B, C, D, RVR 600. (CONTINUED ON PAGE 2)																			
CITY AND STATE		ELEVATION: 618 TDZE: 541		FACILITY IDENTIFIER: I-LDZ		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:						SUP:							
ST LOUIS, MO		AIRPORT NAME:		ST LOUIS LAMBERT INTL		ILS OR LOC RWY 12L, AMDT 6C; ILS RWY 12L (CAT II), ILS RWY 12L (CAT III)						AMDT: 6B							
						29 MARCH 2018						DATED 08/17/2017							

QUALITY
 26
 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 PLANVIEW NOTE: RADAR AND DME REQUIRED.****CHART NOTE: DISREGARD OM INDICATIONS.****CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 12L CAT E VISIBILITY TO RVR 4000 AND S-LOC 12L CAT E VISIBILITY TO 1 1/2 SM.****CHART ILS OR LOC RWY 12L NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 11. SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 12R REQUIRES USE OF VERTICAL GUIDANCE; MAINTAIN LAST ASSIGNED ALTITUDE UNTIL ESTABLISHED ON GLIDESLOPE.****CHART ILS RWY 12L (CAT II & III) NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 11.**

QUALITY
26
CHECKED

CITY AND STATE

ST LOUIS, MO

ELEVATION: 618**TDZE: 541**

AIRPORT NAME:

ST LOUIS LAMBERT INTL

FACILITY
IDENTIFIER:

I-LDZ

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

**ILS OR LOC RWY 12L, AMDT 6C; ILS RWY 12L (CAT II),
ILS RWY 12L (CAT III)**

29 MARCH 2018

SUP:

AMDT: **6B**DATED: **08/17/2017**

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: 5.36 NM AFTER OBLIO LOM/INT/I-LMR 7.25 DME/RADAR OR AT I-LMR 1.89 DME CLIMB TO 1500 THEN CLIMBING LEFT TURN TO 5000 ON STL VORTAC R-128 TO FONTI INT/22.44 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 5000. ALTERNATE MA (DO NOT CHART): CLIMB TO 1500 THEN CLIMBING LEFT TURN TO 3000 DIRECT TOY VORTAC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 308.40 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD E TOY VORTAC, RT, 270.00 INBOUND. CHART FAS OBST: 697 TREE 384538N/0902343W. CHART 714 TREE 384551N/0902302W. 759 AAO 384751N/0902859W. CHART VDP AT 3.04 DME* DISTANCE VDP TO THLD 1.15 NM. *LOC ONLY. CHART IN PLANVIEW: TOY VORTAC.									
SADEN INT (IAF)			PAULY/I-LMR 17.83 DME/RADAR			078.00 / 2.07 (HDG) & 123.19 / 1.73 (I-LMR)			4500												
PAULY/I-LMR 17.83 DME/RADAR (IF)			NAIRN/I-LMR 12.49 DME/RADAR			123.19 / 5.34 (I-LMR)			3600												
NAIRN/I-LMR 12.49 DME/RADAR			OBLIO LOM/INT/I-LMR 7.25 DME/RADAR			123.19 / 5.24 (I-LMR)			2400												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT PAULY 3. FAC: 123.19 FAF: OBLIO LOM/INT/I-LMR 7.25 DME/RADAR DIST FAF TO MAP: 5.36 THLD: 5.36 4. MIN. ALT: PAULY 4500, NAIRN 3600, OBLIO LOM 2400 5. DIST TO THLD FROM OM: 5.36 MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 1152 6. MIN GS INCPT: 2400 GS ALT AT: - OM: 2350 MM: - IM: - 7. GS ANGLE: 3.00 TCH: 54.4 8. MSA FROM: LM LOM 3000												MAG VAR: 1W			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 12R	740	1800	200	740	1800	200	740	1800	200	740	1800	200	740	1800	200						
S-LOC 12R	960	4000	420	960	4000	420	960	4000	420	960	4000	420	960	4000	420						
SIDESTEP 12L	980	1	439	980	1	439	980	1 1/2	439	980	2	439	980	2	439						
NOTES: CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO SIDESTEP RWY 12L. CHART NOTE: RWY 12R HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SADEN ON V4 WESTBOUND. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 12R CAT E VISIBILITY TO RVR 4000, S-LOC 12R CATS A/B (CONTINUED ON PAGE 2)																					
CITY AND STATE ST LOUIS, MO			ELEVATION: 618 AIRPORT NAME: ST LOUIS LAMBERT INTL			TDZE: 12R 540 TDZE: 12L 541		FACILITY IDENTIFIER: I-LMR		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 12R, AMDT 22C 29 MARCH 2018				SUP: AMDT: 22B DATED 08/17/2017							



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.

NOTES, (CONT.):

VISIBILITY TO RVR 5000, AND S-LOC 12 CAT E VISIBILITY TO RVR 6000.

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 11. SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 12L REQUIRES USE OF VERTICAL GUIDANCE; MAINTAIN LAST ASSIGNED ALTITUDE UNTIL ESTABLISHED ON GLIDESLOPE.

QUALITY
26
CHECKED

CITY AND STATE

ST LOUIS, MO

ELEVATION: 618

AIRPORT NAME:

ST LOUIS LAMBERT INTL

TDZE: 12R 540
TDZE: 12L 541FACILITY
IDENTIFIER:
I-LMR

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 12R, AMDT 22C

29 MARCH 2018

SUP:

AMDT: 22B

DATED: 08/17/2017

ILS - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29									Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.					
TERMINAL ROUTES												MISSED APPROACH									
FROM			TO			COURSE AND DISTANCE			ALTITUDE			ILS: DA LOC: 4.71 NM AFTER MOIDD OM/INT CLIMB TO 3000 DIRECT OBLIO LOM/INT AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1040 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 283.00 AND CSX VOR/DME R-280 TO HULSO/CSX 16.00 DME AND HOLD (DME REQUIRED). ADDITIONAL FLIGHT DATA: HOLD NW, LT, 123.30 INBOUND. CHART FAS OBST: 769 TREE 384221N/0901745W. CHART: ALTERNATE MA HOLDING, HOLD W HULSO/CSX 16.00 DME, LT, 100.00 INBOUND.									
MOODS INT (IAF)			FONTI INT/STL VORTAC 22.44 DME			360.00 / 1.65 (HDG) & 303.20 / 4.27 (I-BKY)			4500												
FONTI INT/STL VORTAC 22.44 DME (IF)			JOICE/STL VORTAC 19.02 DME			303.20 / 3.46 (I-BKY)			3500												
JOICE/STL VORTAC 19.02 DME			MOIDD OM/INT			303.20 / 4.81 (I-BKY)			2200												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT FONTI 3. FAC: <u>303.20</u> FAF: <u>MOIDD OM/INT</u> DIST FAF TO MAP: <u>4.71</u> THLD: <u>4.71</u> 4. MIN. ALT: FONTI 4500, JOICE 3500, MOIDD OM 2200 5. DIST TO THLD FROM OM: <u>4.71</u> MM: <u>-</u> IM: <u>-</u> 150 HAT: <u>-</u> 100 HAT: <u>-</u> GS ANT: 1425 6. MIN GS INCPT: <u>2200</u> GS ALT AT: <u>-</u> OM: <u>2171</u> MM: <u>-</u> IM: <u>-</u> 7. GS ANGLE: <u>3.00</u> TCH: <u>57.8</u> 8. MSA FROM: STL VORTAC 090-270 2800, 270-090 2300																		MAG VAR: 1W		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 30L**	783	2400	200	783	2400	200	783	2400	200	783	2400	200	783	2400	200						
S-LOC 30L	1140	2400	557	1140	2400	557	1140	5000	557	1140	6000	557	1140	1 1/2	557						
NOTES: CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHART NOTE: ADF REQUIRED. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 30L CAT E VISIBILITY TO RVR 4000 AND S-LOC 30L CAT E VISIBILITY TO 2 SM. (CONTINUED ON PAGE 2)																					
CITY AND STATE		ELEVATION: 618		TDZE: 583		FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
ST LOUIS, MO		AIRPORT NAME:		ST LOUIS LAMBERT INTL		I-BKY		ILS OR LOC RWY 30L, AMDT 12C				AMDT: 12B									
								29 MARCH 2018				DATED 08/17/2017									



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.

NOTES, (CONT.):

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 30R REQUIRES USE OF VERTICAL GUIDANCE; MAINTAIN LAST ASSIGNED ALTITUDE UNTIL ESTABLISHED ON GLIDESLOPE.

QUALITY
26
CHECKED

CITY AND STATE

ST LOUIS, MO

ELEVATION: 618

TDZE: 583

AIRPORT NAME:

ST LOUIS LAMBERT INTL

FACILITY
IDENTIFIER:

I-BKY

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 30L, AMDT 12C

29 MARCH 2018

SUP:

AMDT: 12B

DATED: 08/17/2017

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: 4.52 NM AFTER RELEY INT/I-SJW 6.17 DME/RADAR OR AT I-SJW 1.65 DME								
TYRSH INT/I-SJW 17.65 DME/RADAR (IAF)		HIXOM INT/I-SJW 14.78 DME/RADAR		303.21 / 2.87 (I-SJW)		5000		CLIMB TO 1020 THEN CLIMBING RIGHT TURN TO 3000 ON HEADING 050 AND CSX VOR/DME R-012 TO FASHE INT/CSX 23.31 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1020 THEN CLIMBING RIGHT TURN TO 3000 DIRECT TOY VORTAC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, RT, 191.58 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD E TOY VORTAC, RT, 270.00 INBOUND. FAS OBST: 820 AAO 384249N/0901629W. CHART VDP AT 2.96 DME* DISTANCE VDP TO THLD 1.31 NM. *LOC ONLY. CHART IN PLANVIEW: TOY VORTAC. CHART PLANVIEW NOTE: RADAR REQUIRED.								
HIXOM INT/I-SJW 14.78 DME/RADAR (IF)		EXALE INT/I-SJW 10.35 DME/RADAR		303.21 / 4.44 (I-SJW)		3500										
EXALE INT/I-SJW 10.35 DME/RADAR		RELEY INT/I-SJW 6.17 DME/RADAR		303.21 / 4.18 (I-SJW)		2100										
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT TYRSH 3. FAC: 303.21 FAF: RELEY INT/I-SJW 6.17 DME/RADAR DIST FAF TO MAP: 4.52 THLD: 4.52 4. MIN. ALT: TYRSH 5000, HIXOM 5000, EXALE 3500, RELEY 2100 5. DIST TO THLD FROM OM: - MM: - IM: 821 150 HAT: - 100 HAT: 830 GS ANT: 1200 6. MIN GS INCPT: 2100 GS ALT AT: RELEY 2100 OM: - MM: - IM: 705 7. GS ANGLE: 3.00 TCH: 57.0 8. MSA FROM: STL VORTAC 090-270 2800, 270-090 2300										MAG VAR: 1W		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 30R		805	1800	200	805	1800	200	805	1800	200	805	1800	200	805	2400	200
S-LOC 30R		1080	2400	475	1080	2400	475	1080	5000	475	1080	5000	475	1080	5000	475
NOTES: CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 30R: CAT A, B, C, D, RA 116, RVR 1200, HAT 100, DA 705 MSL. CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 30R: CAT III CAT A, B, C, D, RVR 600. (CONTINUED ON PAGE 2)																
CITY AND STATE ST LOUIS, MO		ELEVATION: 618 TDZE: 605 AIRPORT NAME: ST LOUIS LAMBERT INTL		FACILITY IDENTIFIER: I-SJW		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 30R, AMDT 11A; ILS RWY 30R (CAT II), ILS RWY 30R (CAT III) 29 MARCH 2018						SUP: AMDT: 11 DATED 02/01/2018				

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

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

NOTES, (CONT.):

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 30R CAT E VISIBILITY TO RVR 4000 AND S-LOC 30R CAT C/D/E VISIBILITY TO 1 3/8 SM.

CHART ILS OR LOC RWY 30R NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 30L REQUIRES USE OF VERTICAL GUIDANCE; MAINTAIN LAST ASSIGNED ALTITUDE UNTIL ESTABLISHED ON GLIDESLOPE.

CHART ILS RWY 30R (CAT II & III) NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 29.

QUALITY
26
CHECKED

CITY AND STATE

ST LOUIS, MO

ELEVATION: 618**TDZE: 605**

AIRPORT NAME:

ST LOUIS LAMBERT INTL

FACILITY
IDENTIFIER:
I-SJW

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

**ILS OR LOC RWY 30R, AMDT 11A; ILS RWY 30R (CAT II),
ILS RWY 30R (CAT III)
29 MARCH 2018**

SUP:

AMDT: **11**DATED: **02/01/2018**

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: RW12L CLIMB TO 3000 DIRECT ODITY AND ON TRACK 071.17 TO TOY VORTAC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 083.00 INBOUND. CHART FAS OBST: 774 CTRL TWR 384436N/0902158W. DISTANCE TO THLD FROM 410 HAT: 1.16 NM. CHART VDP AT 1.43 NM TO RW12L* *LNAV ONLY. WAAS CHANNEL # 69499 REFERENCE PATH ID: W12A LTP HAE: 129.7 M CHART PLANVIEW NOTE: RADAR REQUIRED											
RUYON (IAF)				EUBIE (TF) (FB) (RNP 1.00)				122.98 / 5.64				4000													
EUBIE (IF)				GREEP (TF) (FB) (RNP 1.00)				123.04 / 7.44				2500													
GREEP (FAF)				RW12L (MAP) (TF) (FO) (RNP 0.30)				123.12 / 5.92																	
RW12L (MAP)				951 MSL (CA)				123.12																	
951 MSL				ODITY (DF) (FB) (RNP 1.00)																					
ODITY				TOY VORTAC (TF) (FO) (RNP 1.00)				071.17 / 13.43				3000													
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT RUYON 3. FAC: <u>123.12</u> FAF: <u>GREEP</u> DIST FAF TO MAP: <u>5.92</u> THLD: <u>5.92</u> 4. MIN. ALT: <u>RUYON 5000, EUBIE 4000, GREEP 2500</u> 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: <u>2500</u> GS ALT AT: <u>GREEP 2500</u> OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>53.6</u> 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: <u>RW12L 3000</u>																MAG VAR: 1W				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	951	5000	410	951	5000	410	951	5000	410	951	5000	410	951	5000	410										
LNAV/VNAV DA	1040	6000	499	1040	6000	499	1040	6000	499	1040	6000	499	1040	6000	499										
LNAV MDA	1040	2400	499	1040	2400	499	1040	4000	499	1040	5000	499	1040	6000	499										
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 NOTE: FOR INOPERATIVE ALS, INCREASE LPV ALL CATS VISIBILITY TO 1 1/2 SM, LNAV/VNAV CAT E VISIBILITY TO 1 3/4 SM, AND LNAV CAT E VISIBILITY TO 1 3/4 SM. (CONTINUED ON PAGE 2)																									
CITY AND STATE				ELEVATION: 618 TDZE: 541				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
ST LOUIS, MO				AIRPORT NAME:								RNAV (GPS) Y RWY 12L, AMDT 2D				AMDT: 2C									
				ST LOUIS LAMBERT INTL								29 MARCH 2018				DATED 08/17/2017									



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

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

NOTES, (CONT.):

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 11.

CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.

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

QUALITY
26
CHECKED

CITY AND STATE ST LOUIS, MO	ELEVATION: 618 TDZE: 541 AIRPORT NAME: ST LOUIS LAMBERT INTL	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 12L, AMDT 2D 29 MARCH 2018	SUP:
				AMDT: 2C
				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	KSTL
RUNWAY	RW12L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W12A
LTP/FTP LATITUDE	384506.4060N
LTP/FTP LONGITUDE	0902158.6570W
LTP/FTP ELLIPSOIDAL HEIGHT	+01297
FPAP LATITUDE	384418.9900N
FPAP LONGITUDE	0902022.5100W
THRESHOLD CROSSING HEIGHT (TCH)	00053.6
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)	50.0
 <u>CRC REMAINDER</u>	 1084EC3E

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+01610
FPAP ORTHOMETRIC HEIGHT	+01610

QUALITY
26
CHECKED

CITY AND STATE ST LOUIS, MO	ELEVATION: 618 TDZE: 541 AIRPORT NAME: ST LOUIS LAMBERT INTL	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 12L, AMDT 2D 29 MARCH 2018	SUP:
				AMDT: 2C
				DATED: 08/17/2017

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		LPV: DA LNAV/VNAV: DA LNAV: RW12R CLIMB TO 5000 DIRECT FONTI AND HOLD, CONTINUE CLIMB-IN-HOLD TO 5000. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 309.40 INBOUND. CHART IN PLANVIEW: MAXIMUM HOLDING AIRSPEED 230 KIAS. CHART FAS OBST: 741 OL ANT 384548N/0902243W. DISTANCE TO THLD FROM 200 HAT: 0.46 NM. CHART VDP AT 1.28 NM TO RW12R* *LNAV ONLY. WAAS CHANNEL # 78121 REFERENCE PATH ID: W12B LTP HAE: 133.2 M											
FTZ VORTAC (IAF)		PAULY (TF) (FB) (RNP 1.00)		050.97 / 18.69		4500													
PAULY (IF)		NAIRN (TF) (FB) (RNP 1.00)		123.00 / 5.34		3600													
NAIRN		TUDNE (TF) (FB) (RNP 1.00)		123.05 / 4.92		2400													
TUDNE (FAF)		RW12R (MAP) (TF) (FO) (RNP 0.30)		123.13 / 5.67															
RW12R (MAP)		740 MSL (CA)		123.13		5000													
740 MSL		FONTI (DF) (FO) (RNP 1.00)																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT PAULY 3. FAC: <u>123.13</u> FAF: <u>TUDNE</u> DIST FAF TO MAP: <u>5.67</u> THLD: <u>5.67</u> 4. MIN. ALT: <u>PAULY 4500, NAIRN 3600, TUDNE 2400</u> 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: <u>2400</u> GS ALT AT: <u>TUDNE 2400</u> OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>54.4</u> 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: <u>RW12R 3000</u>										MAG VAR: 1W		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		
LPV DA	740	1800	200	740	1800	200	740	1800	200	740	1800	200	740	1800	200				
LNAV/VNAV DA	1103	2	563	1103	2	563	1103	2	563	1103	2	563	1103	2	563				
LNAV MDA	1000	4000	460	1000	4000	460	1000	4000	460	1000	5000	460	1000	5000	460				
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 PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON FTZ VORTAC AIRWAY RADIALS 003 CW 095. CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV CAT E VISIBILITY TO RVR 4000, LNAV CATS A/B VISIBILITY (CONTINUED ON PAGE 2)																			
CITY AND STATE				ELEVATION: 618 TDZE: 540				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:			
ST LOUIS, MO				AIRPORT NAME:								RNAV (GPS) Y RWY 12R, AMDT 1D				AMDT: 1C			
				ST LOUIS LAMBERT INTL								29 MARCH 2018				DATED 08/17/2017			



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

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

NOTES, (CONT.):

TO RVR 5000, AND LNAV CAT E VISIBILITY TO 1 1/2 SM.

CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO LNAV/VNAV.

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 11.

CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.

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



CITY AND STATE ST LOUIS, MO	ELEVATION: 618 TDZE: 540 AIRPORT NAME: ST LOUIS LAMBERT INTL	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 12R, AMDT 1D 29 MARCH 2018	SUP:
				AMDT: 1C
				DATED: 08/17/2017

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

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

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSTL
RUNWAY	RW12R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W12B
LTP/FTP LATITUDE	384511.5885N
LTP/FTP LONGITUDE	0902239.9755W
LTP/FTP ELLIPSOIDAL HEIGHT	+01332
FPAP LATITUDE	384416.0100N
FPAP LONGITUDE	0902047.2700W
THRESHOLD CROSSING HEIGHT (TCH)	00054.4
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

880D21BE

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+01645
FPAP ORTHOMETRIC HEIGHT	+01645

QUALITY
26
CHECKED

CITY AND STATE ST LOUIS, MO	ELEVATION: 618 TDZE: 540 AIRPORT NAME: ST LOUIS LAMBERT INTL	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 12R, AMDT 1D 29 MARCH 2018	SUP:
				AMDT: 1C
				DATED: 08/17/2017

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.											
TERMINAL ROUTES										MISSED APPROACH					
FROM		TO		COURSE AND DISTANCE				ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW30L CLIMB TO 3000 DIRECT OBLIO LOM AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000. ADDITIONAL FLIGHT DATA: HOLD NW, LT, 123.20 INBOUND. FAS OBST: 849 AAO 384200N/0901721W. DISTANCE TO THLD FROM 200 HAT: 0.45 NM. CHART VDP AT 1.44 NM TO RW30L* *LNAV ONLY. WAAS CHANNEL # 99621 REFERENCE PATH ID: W30B CHART IN PLANVIEW: MAXIMUM HOLDING AIRSPEED 230 KIAS. LTP HAE: 146.3 M					
SUGAR (IAF)		FONTI (TF) (FB) (RNP 1.00)		294.49 / 14.82				4500							
FONTI (IF)		ZETGO (TF) (FB) (RNP 1.00)		303.34 / 3.46				3500							
ZETGO		TORME (TF) (FB) (RNP 1.00)		303.31 / 4.62				2200							
TORME (FAF)		RW30L (MAP) (TF) (FO) (RNP 0.30)		303.26 / 4.90											
RW30L (MAP)		783 MSL (CA)		303.26											
783 MSL		OBLIO LOM (DF) (FO) (RNP 1.00)						3000							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT FONTI 3. FAC: 303.26 FAF: TORME DIST FAF TO MAP: 4.90 THLD: 4.90 4. MIN. ALT: FONTI 4500, ZETGO 3500, TORME 2200 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2200 GS ALT AT: TORME 2200 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 57.8 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW30L 3000										MAG VAR: 1W 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**	783	2400	200	783	2400	200	783	2400	200	783	2400	200	783	2400	200
LNAV/VNAV DA	988	5000	405	988	5000	405	988	5000	405	988	5000	405	988	5000	405
LNAV MDA	1100	2400	517	1100	2400	517	1100	5000	517	1100	6000	517	1100	6000	517
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 PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SUGAR ON V44 EASTBOUND. CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV CAT E VISIBILITY TO RVR 4000, LNAV/VNAV CAT E (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 618 TDZE: 583				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:			
ST LOUIS, MO		AIRPORT NAME:				RNAV		RNAV (GPS) Y RWY 30L, AMDT 1D				AMDT: 1C			
		ST LOUIS LAMBERT INTL						29 MARCH 2018				DATED 08/17/2017			



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

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

NOTES, (CONT.):

VISIBILITY TO 1 1/2 SM, AND LNAV CAT E VISIBILITY TO 1 3/4 SM.

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 29.

CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.

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

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

QUALITY
26
CHECKED

CITY AND STATE

ST LOUIS, MO

ELEVATION: 618

TDZE: 583

AIRPORT NAME:

ST LOUIS LAMBERT INTL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) Y RWY 30L, AMDT 1D

29 MARCH 2018

SUP:

AMDT: 1C

DATED: 08/17/2017

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

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

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSTL
RUNWAY	RW30L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W30B
LTP/FTP LATITUDE	384417.0760N
LTP/FTP LONGITUDE	0902049.4240W
LTP/FTP ELLIPSOIDAL HEIGHT	+01463
FPAP LATITUDE	384514.0500N
FPAP LONGITUDE	0902244.9700W
THRESHOLD CROSSING HEIGHT (TCH)	00057.8
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

11CDFFC5

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+01776
FPAP ORTHOMETRIC HEIGHT	+01776

QUALITY
26
CHECKED

CITY AND STATE

ST LOUIS, MO

ELEVATION: 618

TDZE: 583

AIRPORT NAME:

ST LOUIS LAMBERT INTL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) Y RWY 30L, AMDT 1D

29 MARCH 2018

SUP:

AMDT:

1C

DATED:

08/17/2017

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.															
TERMINAL ROUTES										MISSED APPROACH									
FROM		TO		COURSE AND DISTANCE				ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW30R CLIMB TO 3000 DIRECT IDLOC AND ON TRACK 024.66 TO FASHE AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NE, RT, 211.29 INBOUND. CHART FAS OBST: 740 TOWER 384435N/0902000W. DISTANCE TO THLD FROM 200 HAT: 0.45 NM. WAAS CHANNEL # 73000 REFERENCE PATH ID: W30A LTP HAE: 152.9 M CHART PLANVIEW NOTE: RADAR REQUIRED									
TYRSH (IAF)		HIXOM (TF) (FB) (RNP 1.00)		303.39 / 2.87				5000											
HIXOM (IF)		EXALE (TF) (FB) (RNP 1.00)		303.36 / 4.44				3500											
EXALE		RELEY (TF) (FB) (RNP 1.00)		303.31 / 4.18				2100											
RELEY (FAF)		CEVTA/1.40 NM TO RW30R (TF) (FB) (RNP 0.30)		303.26 / 3.12															
CEVTA/1.40 NM TO RW30R		RW30R (MAP) (TF) (FO) (RNP 0.30)		303.26 / 1.40															
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT TYRSH 3. FAC: <u>303.26</u> FAF: <u>RELEY</u> DIST FAF TO MAP: <u>4.52</u> THLD: <u>4.52</u> 4. MIN. ALT: <u>TYRSH 5000, HIXOM 5000, EXALE 3500, RELEY 2100, CEVTA/1.40 NM TO RW30R 1100*</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>RELEY 2100</u> OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>57.0</u> 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: <u>RW30R 3000</u>																MAG VAR: 1W		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	805	1800	200	805	1800	200	805	1800	200	805	1800	200	805	1800	200				
LNAV/VNAV DA	901	2400	296	901	2400	296	901	2400	296	901	2400	296	901	2400	296				
LNAV MDA	1000	2400	395	1000	2400	395	1000	3500	395	1000	3500	395	1000	3500	395				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. *LNAV ONLY CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV CAT E VISIBILITY TO RVR 4000, LNAV/VNAV ALL CATS (CONTINUED ON PAGE 2)																			
CITY AND STATE		ELEVATION: 618 TDZE: 605		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
ST LOUIS, MO		AIRPORT NAME:		ST LOUIS LAMBERT INTL		RNAV (GPS) Y RWY 30R, AMDT 2A				AMDT: 2									
						29 MARCH 2018				DATED 02/01/2018									



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

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

TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW30R (MAP)	805 MSL (CA)	303.26	
805 MSL	IDLOC (DF) (FB) (RNP 1.00)		
IDLOC	FASHE (TF) (FO) (RNP 1.00)	024.66 / 22.24	3000

NOTES, (CONT.):

VISIBILITY TO 4500, LNAV CAT D VISIBILITY TO RVR 6000, AND LNAV CAT E VISIBILITY TO 1 1/8 SM.
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 29.
CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.
CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.

QUALITY
26
CHECKED

CITY AND STATE
ST LOUIS, MO

ELEVATION: 618 TDZE: 605
AIRPORT NAME:
ST LOUIS LAMBERT INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) Y RWY 30R, AMDT 2A
29 MARCH 2018

SUP:
AMDT: 2
DATED: 02/01/2018

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

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

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

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSTL
RUNWAY	RW30R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W30A
LTP/FTP LATITUDE	384418.9850N
LTP/FTP LONGITUDE	0902022.5070W
LTP/FTP ELLIPSOIDAL HEIGHT	+01529
FPAP LATITUDE	384506.5200N
FPAP LONGITUDE	0902158.8800W
THRESHOLD CROSSING HEIGHT (TCH)	00057.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0008
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

40CC7DC6

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+01843
FPAP ORTHOMETRIC HEIGHT	+01843

QUALITY
26
CHECKED

CITY AND STATE

ST LOUIS, MO

ELEVATION: 618

TDZE: 605

AIRPORT NAME:

ST LOUIS LAMBERT INTL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) Y RWY 30R, AMDT 2A

29 MARCH 2018

SUP:

AMDT: 2

DATED: 02/01/2018

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION				RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, TITLE 14 CFR PART 97.33				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.											
TERMINAL ROUTES										MISSED APPROACH									
FROM		TO		COURSE AND DISTANCE				ALTITUDE		RNP: DA CLIMB TO 3000 ON TRACK 123.19 TO ODITY AND ON TRACK 071.17 TO TOY VORTAC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 083.00 INBOUND. ROUTE TYPE: A, H ROUTE TYPE QUALIFIER 1: F ROUTE TYPE QUALIFIER 2: S DISTANCE TO THLD FROM 502 HAT: 1.45 NM. CHART AT OR ABOVE 5000 AT HRBEE AND RRIPP CHART AT OR ABOVE 8000, AT OR BELOW 9000 AT VEEGE CHART MANDATORY 7000 AT STAAN CHART AT OR ABOVE 6000 AT RUYON #TCH 581.9 (DO NOT CHART) CHART PLANVIEW NOTE: RADAR REQUIRED									
STAAN (IAF)		KARRP (TF) (FB) (RNP 1.00)		083.65 / 5.53				6000											
KARRP		AARBY (TF) (FB) (RNP 1.00)		083.70 / 4.21				4000											
AARBY (IF)		FARIS (TF) (FB) (RNP 1.00)		083.75 / 6.91				3400											
RUYON (IAF)		EUBIE (TF) (FB) (RNP 1.00)		122.98 / 5.64				4200											
EUBIE (IF)		FARIS (TF) (FB) (RNP 1.00)		123.04 / 4.43				3400											
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT KIRKA 3. FAC: <u>123.15</u> FAF: _____ DIST FAF TO MAP: _____ THLD: _____ 4. MIN. ALT: KIRKA 2400, OHROB 1700 5. DIST TO THLD FROM OM: <u>3.51</u> MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: <u>1700</u> GS ALT AT: OHROB 1700 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>53.6</u> # <u>20:1 IS CLEAR 34:1 IS NOT CLEAR</u> 8. MSA FROM: RW12L 3000																MAG VAR: 1W		EPOCH YEAR: 2020	
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		STANDARD									
CATEGORY =====>		A		B		C		D		E									
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA				
AUTHORIZATION REQUIRED																			
RNP 0.30 DA	1043	6000	502	1043	6000	502	1043	6000	502	1043	6000	502							
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -16C (4F) OR ABOVE 54C (130F). CHART NOTE: GPS REQUIRED. CHART SPEED ICON IN PLANVIEW AT RUYON : MAX 250 KIAS. CHART SPEED ICON IN PLANVIEW AT STAAN : MAX 250 KIAS. (CONTINUED ON PAGE 2)																			
CITY AND STATE		ELEVATION: 618 TDZE: 541		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
ST LOUIS, MO		AIRPORT NAME: ST LOUIS LAMBERT INTL				RNAV (RNP) Z RWY 12L, ORIG-C 29 MARCH 2018				AMDT: ORIG-B									
										DATED 08/17/2017									



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION			Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT , HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.	
RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33				
TERMINAL ROUTES, (CONT.):				
FROM	TO	COURSE AND DISTANCE	ALTITUDE	
VEEGE (IAF)	YADDI (TF) (FB) (RNP 1.00)	148.06 / 10.27	5500	
YADDI	CORDL (TF) (FB) (RNP 1.00)	148.13 / 5.70	4000	
CORDL (IF)	FARIS (TF) (FB) (RNP 1.00)	148.13 / 6.23	3400	
RRIPP (IF)	SSAMM (TF) (FB) (RNP 1.00)	302.80 / 2.91	5000	
SSAMM	KIRKA (RF) (FB) (RNP 1.00)	(2.61 NM RADIUS CW (CFBPX))/8.21	2400	
FARIS	KIRKA (TF) (FB) (RNP 1.00)	123.07 / 2.84	2400	
HRBEE (IF)	BUFEE (TF) (FB) (RNP 1.00)	301.32 / 2.89	5000	
BUFEE	KIRKA (RF) (FB) (RNP 1.00)	(2.80 NM RADIUS CCW (CFBPV))/8.71	2400	
KIRKA	OHROB (TF) (FB) (RNP 1.00)	123.14 / 2.58	1700	
OHROB (FAF)	RW12L (MAP) (TF) (FO) (RNP 0.30)	123.15 / 3.51		
RW12L (MAP)	ODITY (TF) (FB)	123.19 / 9.92		
ODITY	TOY VORTAC (TF) (FO)	071.17 / 13.43	3000	
NOTES, (CONT.): CHART SPEED ICON IN PLANVIEW AT AARBY : MAX 250 KIAS. CHART SPEED ICON IN PLANVIEW AT KARRP : MAX 250 KIAS. CHART SPEED ICON IN PLANVIEW AT EUBIE : MAX 250 KIAS. CHART SPEED ICON IN PLANVIEW AT VEEGE : MAX 250 KIAS. CHART SPEED ICON IN PLANVIEW AT RRIPP : MAX 250 KIAS. CHART SPEED ICON IN PLANVIEW AT CORDL : MAX 250 KIAS. CHART SPEED ICON IN PLANVIEW AT FARIS : MAX 250 KIAS. CHART SPEED ICON IN PLANVIEW AT SSAMM : MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT HRBEE : MAX 250 KIAS. CHART SPEED ICON IN PLANVIEW AT BUFEE : MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT KIRKA : MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT OHROB : MAX 165 KIAS.				
CITY AND STATE	ELEVATION: 618 TDZE: 541	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
ST LOUIS, MO	AIRPORT NAME:	RNAV	RNAV (RNP) Z RWY 12L, ORIG-C 29 MARCH 2018	AMDT: ORIG-B
	ST LOUIS LAMBERT INTL			DATED: 08/17/2017



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
**RNAV (RNP) - STANDARD,
INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33**

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

CHART PLANVIEW NOTE ADJACENT TO RRIPP IF: RF REQUIRED.

CHART PLANVIEW NOTE ADJACENT TO HRBEE IF: RF REQUIRED.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.30 ALL CATS VISIBILITY TO 1 3/4 SM.

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 11, EXCEPT FOR ARRIVALS AT RRIPP AND HRBEE.

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

CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.

QUALITY
26
CHECKED

CITY AND STATE

ST LOUIS, MO

ELEVATION: 618

TDZE: 541

AIRPORT NAME:

ST LOUIS LAMBERT INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (RNP) Z RWY 12L, ORIG-C

29 MARCH 2018

SUP:

AMDT: **ORIG-B**

DATED: **08/17/2017**

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION				RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, TITLE 14 CFR PART 97.33				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.							
TERMINAL ROUTES										MISSED APPROACH					
FROM		TO		COURSE AND DISTANCE				ALTITUDE		RNP: DA CLIMB TO 5000 ON TRACK 123.20 TO FONTI AND HOLD, CONTINUE CLIMB-IN-HOLD TO 5000. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 309.40 INBOUND. ROUTE TYPE: A, H ROUTE TYPE QUALIFIER 1: F ROUTE TYPE QUALIFIER 2: S DISTANCE TO THLD FROM 458 HAT: 1.27 NM. #TCH 594.2 (DO NOT CHART) CHART MANDATORY 7000 AT STAAN CHART AT OR ABOVE 5000 AT RRIPP AND HRBEE CHART AT OR ABOVE 6000 AT JACSN CHART AT OR ABOVE 8000, AT OR BELOW 9000 AT VEEGE CHART PLANVIEW NOTE: RADAR REQUIRED					
STAAN (IAF)		KARRP (TF) (FB) (RNP 1.00)		083.65 / 5.53				6000							
KARRP		AARBY (TF) (FB) (RNP 1.00)		083.70 / 4.21				4000							
AARBY (IF)		FAULK (TF) (FB) (RNP 1.00)		085.27 / 6.80				3000							
JACSN (IAF)		PAULY (TF) (FB) (RNP 1.00)		122.95 / 3.14				5000							
PAULY		NAIRN (TF) (FB) (RNP 1.00)		123.00 / 5.34				3600							
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT HOPWD _____ 3. FAC: <u>123.15</u> FAF: _____ DIST FAF TO MAP: _____ THLD: _____ 4. MIN. ALT: HOPWD 1700 5. DIST TO THLD FROM OM: <u>3.47</u> MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: <u>1700</u> GS ALT AT: HOPWD 1700 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>54.4</u> # <u>20:1 IS CLEAR</u> <u>34:1 IS NOT CLEAR</u> 8. MSA FROM: RW12R 3000															
										MAG VAR: 1W		EPOCH YEAR: 2020			
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		STANDARD					
CATEGORY =====>		A		B		C		D		E					
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
AUTHORIZATION REQUIRED															
RNP 0.30 DA	998	6000	458	998	6000	458	998	6000	458	998	6000	458			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -16C (4F) OR ABOVE 54C (130F). CHART NOTE: GPS REQUIRED. CHART SPEED ICON IN PLANVIEW AT DUZER : MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT KLISH : MAX 180 KIAS. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 618 TDZE: 540				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:			
ST LOUIS, MO		AIRPORT NAME:				RNAV		RNAV (RNP) Z RWY 12R, ORIG-C				AMDT: ORIG-B			
		ST LOUIS LAMBERT INTL						29 MARCH 2018				DATED 08/17/2017			



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION			Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.	
RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33				
TERMINAL ROUTES, (CONT.):				
FROM	TO	COURSE AND DISTANCE	ALTITUDE	
NAIRN	FAULK (TF) (FB) (RNP 1.00)	123.07 / 2.19	3000	
VEEGE (IAF)	YADDI (TF) (FB) (RNP 1.00)	148.06 / 10.27	5500	
YADDI	CORDL (TF) (FB) (RNP 1.00)	148.13 / 5.70	4000	
CORDL (IF)	FAULK (TF) (FB) (RNP 1.00)	149.80 / 6.35	3000	
FAULK	KLISH (TF) (FB) (RNP 1.00)	123.06 / 2.83	2300	
RRIPP (IF)	DUZER (TF) (FB) (RNP 1.00)	302.79 / 2.91	5000	
DUZER	KLISH (RF) (FB) (RNP 1.00)	(2.50 NM RADIUS CW (CFBPW))/7.87	2300	
HRBEE (IF)	BUFEE (TF) (FB) (RNP 1.00)	301.32 / 2.89	5000	
BUFEE	KLISH (RF) (FB) (RNP 1.00)	(2.91 NM RADIUS CCW (CFBPZ))/9.04	2300	
KLISH	HOPWD (TF) (FB) (RNP 1.00)	123.13 / 2.11	1700	
HOPWD (FAF)	RW12R (MAP) (TF) (FO) (RNP 0.30)	123.15 / 3.47		
RW12R (MAP)	FONTI (TF) (FO) (RNP 1.00)	123.20 / 12.97	5000	
NOTES, (CONT.): CHART SPEED ICON IN PLANVIEW AT BUFEE : MAX 210 KIAS. CHART PLANVIEW NOTE ADJACENT TO RRIPP IF: RF REQUIRED. CHART PLANVIEW NOTE ADJACENT TO HRBEE IF: RF REQUIRED. CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.30 ALL CATS VISIBILITY TO 1 1/2 SM. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 11, EXCEPT FOR ARRIVALS AT RRIPP AND HRBEE. CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS. CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.				
CITY AND STATE	ELEVATION: 618	TDZE: 540	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
ST LOUIS, MO	AIRPORT NAME:		RNAV	RNAV (RNP) Z RWY 12R, ORIG-C
	ST LOUIS LAMBERT INTL			29 MARCH 2018
			SUP:	
			AMDT:	ORIG-B
			DATED:	08/17/2017



RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, TITLE 14 CFR PART 97.33						Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.										
TERMINAL ROUTES											MISSED APPROACH					
FROM		TO			COURSE AND DISTANCE			ALTITUDE		RNP: DA CLIMB TO 3000 DIRECT OBLIO LOM AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000. ADDITIONAL FLIGHT DATA: HOLD NW, LT, 123.20 INBOUND. ROUTE TYPE: A, H ROUTE TYPE QUALIFIER 1: F ROUTE TYPE QUALIFIER 2: S DISTANCE TO THLD FROM 360 HAT: 0.95 NM. CHART MINIMUM 6000 AT FDRKO AND MAXIMUM 7000 AT FDRKO. CHART MINIMUM 8000 AT TEEBE AND MAXIMUM 9000 AT TEEBE. CHART MINIMUM 6000 AT KAACE. CHART MINIMUM 5000 AT PEJAA. CHART MINIMUM 5000 AT JYAAR. #TCH 640.6 (DO NOT CHART) CHART PLANVIEW NOTE: RADAR REQUIRED						
FDRKO (IAF)		SHREC (TF) (FB) (RNP 1.00)			250.93 / 6.06			5000								
KAACE (IAF)		FONTI (TF) (FB) (RNP 1.00)			303.44 / 4.26			4300								
TEEBE (IAF)		BUSO (TF) (FB) (RNP 1.00)			349.91 / 12.81			5000								
SHREC (IF)		ZETGO (TF) (FB) (RNP 1.00)			252.04 / 5.35			3500								
FONTI (IF)		ZETGO (TF) (FB) (RNP 1.00)			303.34 / 3.46			3500								
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT SAYIT 3. FAC: <u>303.26</u> FAF: _____ DIST FAF TO MAP: _____ THLD: _____ 4. MIN. ALT: <u>SAYIT 2200</u> 5. DIST TO THLD FROM OM: <u>4.90</u> MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: <u>2200</u> GS ALT AT: <u>SAYIT 2200</u> OM: _____ MM: _____ IM: _____ 7. GS ANGLE: <u>3.00</u> TCH: <u>57.8#</u> 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: <u>RW30L 3000</u>																
											MAG VAR: 1W 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 0.15 DA	943	3200	360	943	3200	360	943	3200	360	943	3200	360				
RNP 0.30 DA	1000	4500	417	1000	4500	417	1000	4500	417	1000	4500	417				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -16C (4F) OR ABOVE 54C (130F). CHART NOTE: GPS REQUIRED. CHART SPEED ICON IN PLANVIEW AT PEJAA : MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT JYAAR : MAX 210 KIAS. (CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 618 TDZE: 583			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:				
ST LOUIS, MO		AIRPORT NAME:						RNAV (RNP) Z RWY 30L, ORIG-C				AMDT: ORIG-B				
		ST LOUIS LAMBERT INTL						29 MARCH 2018				DATED 08/17/2017				



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION			Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.	
RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33				
TERMINAL ROUTES, (CONT.):				
FROM	TO	COURSE AND DISTANCE	ALTITUDE	
BUSSO (IF)	ZETGO (TF) (FB) (RNP 1.00)	345.94 / 5.18	3500	
JYAAR (IF)	DOBLZ (TF) (FB) (RNP 1.00)	123.48 / 3.00	5000	
DOBLZ	LIZZK (RF) (FB) (RNP 1.00)	(2.63 NM RADIUS CW (CFPTW))/8.25	2500	
ZETGO	LIZZK (TF) (FB) (RNP 1.00)	303.30 / 3.70	2500	
LIZZK	SAYIT (TF) (FB) (RNP 0.30)	303.31 / 0.92	2200	
PEJAA (IF)	ALMAC (TF) (FB) (RNP 1.00)	123.20 / 3.11	5000	
ALMAC	SLAYY (RF) (FB) (RNP 1.00)	(2.83 NM RADIUS CCW (CFBPQ))/4.50	3600	
SLAYY	SAYIT (RF) (FB) (RNP 1.00)	(2.83 NM RADIUS CCW (CFBPQ))/4.40	2200	
SAYIT (FAF)	RW30L (MAP) (TF) (FO) (RNP 0.30)	303.26 / 4.90		
RW30L (MAP)	943 MSL (CA)	303.26		
943 MSL	OBLIO LOM (DF) (FO) (RNP 1.00)		3000	
NOTES, (CONT.):				
CHART PLANVIEW NOTE ADJACENT TO JYAAR IF: RF REQUIRED.				
CHART PLANVIEW NOTE ADJACENT TO PEJAA IF: RF REQUIRED.				
CHART PLANVIEW NOTE AT FDRKO: (RNP 0.30).				
CHART PLANVIEW NOTE AT KAACE: (RNP 0.30).				
CHART PLANVIEW NOTE AT TEEBE: (RNP 0.30).				
CHART PLANVIEW NOTE AT JYAAR: (RNP 0.30).				
CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.				
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 29, EXCEPT FOR ARRIVALS AT JYAAR AND PEJAA.				
CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.				
CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.15 ALL CATS VISIBILITY TO RVR 6000 AND RNP 0.30 ALL CATS VISIBILITY TO 1 3/8 SM.				
CITY AND STATE	ELEVATION: 618	TDZE: 583	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:
ST LOUIS, MO	AIRPORT NAME:		RNAV	RNAV (RNP) Z RWY 30L, ORIG-C
	ST LOUIS LAMBERT INTL			29 MARCH 2018
			SUP:	
			AMDT:	ORIG-B
			DATED:	08/17/2017



US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, TITLE 14 CFR PART 97.33		Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.													
TERMINAL ROUTES										MISSED APPROACH							
FROM		TO		COURSE AND DISTANCE		ALTITUDE		RNP: DA									
FDRKO (IAF)		SHREC (TF) (FB) (RNP 1.00)		250.93 / 6.06		5000		CLIMB TO 1100 THEN CLIMBING RIGHT TURN TO 3000 DIRECT FASHE AND HOLD.									
TYRSH (IAF)		HIXOM (TF) (FB) (RNP 1.00)		303.39 / 2.87		4300											
TEEBE (IAF)		BUSO (TF) (FB) (RNP 1.00)		349.91 / 12.81		5000											
SHREC (IF)		BAKIZ (TF) (FB) (RNP 1.00)		250.86 / 5.00		3700											
HIXOM (IF)		BAKIZ (TF) (FB) (RNP 1.00)		303.36 / 3.59		3700											
(SEE FORM 8260-10)								ADDITIONAL FLIGHT DATA: HOLD NE, RT, 211.29 INBOUND. ROUTE TYPE: A, H ROUTE TYPE QUALIFIER 1: F ROUTE TYPE QUALIFIER 1: S DISTANCE TO THLD FROM 364 HAT: 0.97 NM. CHART MINIMUM 5000 AT TYRSH. CHART MINIMUM 8000 AT TEEBE AND MAXIMUM 9000 AT TEEBE. CHART MINIMUM 6000 AT FDRKO AND MAXIMUM 7000 AT FDRKO. #TCH 661.3 (DO NOT CHART) CHART MINIMUM 5000 AT JYAAR. CHART MINIMUM 5000 AT PEJAA. CHART PLANVIEW NOTE: RADAR REQUIRED									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 1W EPOCH YEAR: 2020							
2. PROFILE STARTS AT REHMM																	
3. FAC: 303.26 FAF: _____ DIST FAF TO MAP: _____ THLD: _____																	
4. MIN. ALT: REHMM 2100																	
5. DIST TO THLD FROM OM: 4.52 MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																	
6. MIN GS INCPT: 2100 GS ALT AT: REHMM 2100 OM: _____ MM: _____ IM: _____																	
7. GS ANGLE: 3.00 TCH: 56.8 # 20:1 IS CLEAR 34:1 IS CLEAR																	
8. MSA FROM: RW30R 3000																	
MINIMUMS																	
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT				ALTERNATE: N A		STANDARD											
CATEGORY ==>		A		B		C		D		E							
		DH/MDA VIS HAT/HAA		DH/MDA VIS HAT/HAA		DH/MDA VIS HAT/HAA		DH/MDA VIS HAT/HAA		DH/MDA VIS HAT/HAA							
AUTHORIZATION REQUIRED																	
RNP 0.30 DA		969 4000 364		969 4000 364		969 4000 364		969 4000 364		969 4000 364							
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -16C (4F) OR ABOVE 54C (130F). CHART NOTE: GPS REQUIRED. CHART SPEED ICON IN PLANVIEW AT PEJAA : MAX 210 KIAS. CHART SPEED ICON IN PLANVIEW AT JYAAR : MAX 210 KIAS. (CONTINUED ON PAGE 2)																	
CITY AND STATE ST LOUIS, MO		ELEVATION: 618 TDZE: 605 AIRPORT NAME: ST LOUIS LAMBERT INTL		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (RNP) Z RWY 30R, ORIG-C 29 MARCH 2018						SUP: AMDT: ORIG-B DATED 08/17/2017					



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION			Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.	
RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33				
TERMINAL ROUTES, (CONT.):				
FROM	TO	COURSE AND DISTANCE	ALTITUDE	
BUSSO (IF)	BAKIZ (TF) (FB) (RNP 1.00)	350.00 / 5.12	3700	
BAKIZ	LETAA (TF) (FB) (RNP 1.00)	303.32 / 4.00	2500	
JYAAR (IF)	DOBLZ (TF) (FB) (RNP 1.00)	123.48 / 3.00	5000	
DOBLZ	LETAA (RF) (FB) (RNP 1.00)	(2.52 NM RADIUS CW (CFPTR))/7.91	2500	
LETAA	REHMM (TF) (FB) (RNP 1.00)	303.26 / 1.02	2100	
PEJAA (IF)	DMOTO (TF) (FB) (RNP 1.00)	123.19 / 3.01	5000	
DMOTO	RUBEC (RF) (FB) (RNP 1.00)	(2.94 NM RADIUS CCW (CFPTS))/4.52	3600	
RUBEC	REHMM (RF) (FB) (RNP 1.00)	(2.94 NM RADIUS CCW (CFPTS))/4.71	2100	
REHMM (FAF)	RW30R (MAP) (TF) (FO) (RNP 0.30)	303.26 / 4.52		
RW30R (MAP)	1100 MSL (CA)	303.26	1100	
1100 MSL	FASHE (DF) (FO) (RNP 1.00)		3000	
NOTES, (CONT.): CHART PLANVIEW NOTE ADJACENT TO JYAAR IF: RF REQUIRED. CHART PLANVIEW NOTE ADJACENT TO PEJAA IF: RF REQUIRED. CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 29, EXCEPT FOR ARRIVALS AT JYAAR AND PEJAA. CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS. CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.30 ALL CATS VISIBILITY TO RVR 6000.				
CITY AND STATE	ELEVATION: 618	TDZE: 605	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:
ST LOUIS, MO	AIRPORT NAME:		RNAV	RNAV (RNP) Z RWY 30R, ORIG-C
	ST LOUIS LAMBERT INTL			29 MARCH 2018
			SUP:	
			AMDT:	ORIG-B
			DATED:	08/17/2017



Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are 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
29
CHECKED

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33						Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.										
TERMINAL ROUTES											MISSED APPROACH					
FROM		TO		COURSE AND DISTANCE				ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW34 CLIMB TO 3500 DIRECT FILON AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, RT, 159.78 INBOUND. CHART FAS OBST: 1323 TREE 461054N/0973813W DISTANCE TO THLD FROM 250 HAT: 0.67 NM. CHART VDP AT 0.94 NM TO RW34* *LNAV ONLY. WAAS CHANNEL # 99317 REFERENCE PATH ID: W34A CHART CIRCLING ICON. LTP HAE: 356.9 M						
WASWK (IF/IAF)		CORWN (TF) (FB) (RNP 1.00)		339.88 / 6.00				2900								
CORWN (FAF)		BUMGE/2.00 NM TO RW34 (TF) (FB) (RNP 0.30)		339.85 / 3.04												
BUMGE/2.00 NM TO RW34		RW34 (MAP) (TF) (FO) (RNP 0.30)		339.85 / 2.00												
RW34 (MAP)		1507 MSL (CA)		339.85				3500								
1507 MSL		FILON (DF) (FO) (RNP 1.00)														
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S WASWK, RT, 339.88 INBOUND, 3500 FT. IN LIEU OF PT (IAF) 3. FAC: 339.85 FAF: CORWN DIST FAF TO MAP: 5.04 THLD: 5.04 4. MIN. ALT: WASWK 3500, CORWN 2900, BUMGE/2.00 NM TO RW34 1920* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2900 GS ALT AT: CORWN 2900 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 40.0 34:1 IS CLEAR 8. MSA FROM: _____											MAG VAR: 4E		EPOCH YEAR: 2010			
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		STANDARD @							
CATEGORY =====>		A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	
LPV DA	1507	1	250	1507	1	250	1507	1	250	1507	1	250				
LNAV/VNAV DA	1507	1	250	1507	1	250	1507	1	250	1507	1	250				
LNAV MDA	1580	1	323	1580	1	323	1580	1	323	1580	1	323				
CIRCLING	1780	1	514	1780	1	514	1840	1 1/2	574	2060	2 1/2	794				
NOTES: CHART NOTE: CIRCLING NA TO RWYS 6 AND 24. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. CHART PROFILE NOTE: VGSI AND GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). (CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 1266 TDZE: 1257			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:					SUP:				
GWINNER, ND		AIRPORT NAME:			GWINNER-ROGER MELROE FIELD		RNAV (GPS) RWY 34, AMDT 4A					AMDT: 4				
							29 MARCH 2018					DATED 09/18/2014				



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

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

NOTES, (CONT.):

*LNAV ONLY

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

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

TAA

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

QUALITY
29
CHECKED

CITY AND STATE

GWINNER, ND

ELEVATION: 1266

TDZE: 1257

AIRPORT NAME:

GWINNER-ROGER MELROE FIELD

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 34, AMDT 4A

29 MARCH 2018

SUP:

AMDT: 4

DATED: 09/18/2014

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

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

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGWR
RUNWAY	RW34
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W34A
LTP/FTP LATITUDE	461237.3060N
LTP/FTP LONGITUDE	0973821.6890W
LTP/FTP ELLIPSOIDAL HEIGHT	+03569
FPAP LATITUDE	461402.8515N
FPAP LONGITUDE	0973857.4350W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 1861C02E

ADDITIONAL PATH POINT RECORD INFORMATION

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

QUALITY
29
CHECKED

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

**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>
BELEN, NM	ALEXANDER MUNI	29 MARCH 2018	1A

TAKEOFF MINIMUMS:

RWY 13, 31: NA - ENVIRONMENTAL.

RWY 3: STANDARD WITH MINIMUM CLIMB OF 350 FT PER NM TO 12000, OR 3300-3 FOR VCOA.

RWY 21: STANDARD WITH MINIMUM CLIMB OF 325 FT PER NM TO 11900, OR 3300-3 FOR VCOA.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

RWY 3, 21: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS ALEXANDER MUNICIPAL AIRPORT AT OR ABOVE 8400 BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 21: POWER POLES BEGINNING 1150 FT FROM DER, 275 FT LEFT OF CENTERLINE, UP TO 34 FT AGL/5236 FT MSL.

CONTROLLING OBSTACLES:

RWY 3, 21: 10298 FT MSL AAO 343531.10N/1062646.60W; 5236 FT MSL POWER POLE 343806.33N/1065056.39W (VCOA)

REMARKS:

FLIGHT INSPECTED BY:

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

OFFICE SYMBOL:

DATE:
Digitally signed by

BEV L BORDY
Dec 29, 2017

DEVELOPED BY:

VICTOR B. NASO (ANDRE TUCKER)

Digitally signed by
VICTOR B NASO
Dec 22, 2017

OFFICE SYMBOL:
AJV-5413

DATE:
10/24/2017

APPROVED BY:

GEORGE E. DAVIS

Digitally signed by
VICTOR B NASO
Dec 22, 2017

OFFICE SYMBOL:
AJV-5410

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

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

OTHER:

CHANGES - REASONS:

1. UPDATED TAKEOFF OBSTACLE NOTES ALL RUNWAYS - NEW SURVEY 12/10/2015.
2. ADDED RWY 13, 31: NA - ENVIRONMENTAL - RWY NOT EVALUATED FOR IFR OPERATIONS.

QUALITY
3
CHECKED

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES																	MISSED APPROACH									
FROM				TO				COURSE AND DISTANCE				ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW21												
PYXES (IAF)				JAPUT (NOPT) (TF) (FB) (RNP 1.00)				274.72 / 6.00				3200		CLIMB TO 3200 DIRECT KROWL AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3200.												
ZIBRO (IAF)				JAPUT (NOPT) (TF) (FB) (RNP 1.00)				134.55 / 6.00				3200														
JAPUT (IF/IAF)				QEZAZ (TF) (RNP 1.00)				204.63 / 5.99				2000														
QEZAZ (FAF)				HARDA/2.20 NM TO RW21 (TF) (FB) (RNP 0.30)				204.62 / 2.50																		
HARDA/2.20 NM TO RW21 (SEE FORM 8260-10)				RW21 (MAP) (TF) (FO) (RNP 0.30)				204.62 / 2.20						ADDITIONAL FLIGHT DATA: HOLD SW, RT, 024.57 INBOUND. CHART FAS OBST: 439 TREE 421749N/0734210W. DISTANCE TO THLD FROM 368 HAT: 0.83 NM. WAAS CHANNEL # 40215 REFERENCE PATH ID: W21A CHART CIRCLING ICON. LTP HAE: 27.7 M												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																										
2. HOLD NE JAPUT, RT, 204.63 INBOUND, 3200 FT. IN LIEU OF PT (IAF)																										
3. FAC: 204.62 FAF: QEZAZ DIST FAF TO MAP: 4.70 THLD: 4.70																										
4. MIN. ALT: JAPUT 3200, QEZAZ 2000, HARDA/2.20 NM TO RW21 1060*																										
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																										
6. MIN GS INCPT: 2000 GS ALT AT: QEZAZ 2000 OM: _____ MM: _____ IM: _____																										
7. GS ANGLE: 3.50 TCH: 60.0 34:1 IS NOT CLEAR																										
8. MSA FROM: _____																										
MAG VAR: 13W EPOCH YEAR: 1965																										
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	562	1	368	562	1	368	562	1	368	562	1	368														
LNAV/VNAV DA	633	1 1/4	439	633	1 1/4	439	633	1 1/4	439	633	1 1/4	439														
LNAV MDA	700	1	506	700	1	506	700	1 3/8	506	700	1 3/8	506														
CIRCLING	740	1	542	860	1	662	860	1 3/4	662	1020	2 3/4	822														
NOTES: CHART NOTE: BARO-VNAV NA WHEN USING ALBANY ALTIMETER SETTING. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 14C (58F). CHART NOTE: RWY 21 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)																										
CITY AND STATE HUDSON, NY				ELEVATION: 198 TDZE: 194 AIRPORT NAME: COLUMBIA COUNTY				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 21, AMDT 1 29 MARCH 2018						SUP: AMDT: ORIG-B DATED 09/17/2015										

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

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

TERMINAL ROUTES, (CONT.):

<u>FROM</u>	<u>TO</u>	<u>COURSE AND DISTANCE</u>	<u>ALTITUDE</u>
RW21 (MAP)	562 MSL (CA)	204.62	
562 MSL	KROWL (DF) (FO) (RNP 1.00)		3200

NOTES, (CONT.):

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

*LNAV ONLY

CHART NOTE: STRAIGHT-IN RWY 21 AND CIRCLING RWY 21 NA AT NIGHT.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ALBANY ALTIMETER SETTING AND INCREASE LPV DA TO 638 FT AND VISIBILITY TO 1 3/8 SM ALL CATS, LNAV/VNAV DA TO 709 FT AND VISIBILITY TO 1 3/8 SM ALL CATS; INCREASE ALL MDA 80 FT, LNAV CAT C/D VISIBILITY TO 1 3/4 SM, CIRCLING CAT C TO 2 1/4 SM, AND CAT D TO 3 SM.

TAA

	<u>FROM</u>	<u>TO</u>	<u>ALT</u>
1.	135/30 CW 275/30 (NOPT)	135/7 CW 275/7	5700
2.	135/7 CW 275/7	JAPUT (IF/IAF) (FB)	3200
3.	275/30 CW 025/30	PYXES (IAF) (FB)	4900
4.	025/30 CW 135/30	025/15 CW 135/15	6300
5.	025/15 CW 135/15	ZIBRO (IAF) (FB)	4300

QUALITY
5
CHECKED

CITY AND STATE HUDSON, NY	ELEVATION: 198 AIRPORT NAME: COLUMBIA COUNTY	TDZE: 194 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 21, AMDT 1 29 MARCH 2018	SUP:
				AMDT: ORIG-B
				DATED: 09/17/2015

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	1B1
RUNWAY	RW21
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W21A
LTP/FTP LATITUDE	421752.9960N
LTP/FTP LONGITUDE	0734230.4315W
LTP/FTP ELLIPSOIDAL HEIGHT	+00277
FPAP LATITUDE	421625.6835N
FPAP LONGITUDE	0734254.5665W
THRESHOLD CROSSING HEIGHT (TCH)	00060.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.50
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1168
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
<u>CRC REMAINDER</u>	D0143B3E

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+00591
FPAP ORTHOMETRIC HEIGHT	+00591

QUALITY
5
CHECKED

CITY AND STATE HUDSON, NY	ELEVATION: 198 TDZE: 194 AIRPORT NAME: COLUMBIA COUNTY	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 21, AMDT 1 29 MARCH 2018	SUP:
				AMDT: ORIG-B
				DATED: 09/17/2015

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: 4.78 NM AFTER WOLLS OM CLIMB TO 900 THEN CLIMBING LEFT TURN TO 2400 DIRECT ART VORTAC AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 900 THEN CLIMBING RIGHT TURN TO 3100 ON HEADING 214, EXPECT RADAR VECTORS. (RADAR REQUIRED). ADDITIONAL FLIGHT DATA: HOLD SW, RT, 043.00 INBOUND. CHART FAS OBST: 455 TWR 435605N/0760657W. CHART ART R-275 AT ZIRAX. CHART CIRCLING ICON. CHART WHEELER-SACK AAF ATIS 119.525.									
ART VORTAC		ZIRAX/ART 12.40 DME			275.00 / 12.40				3000											
ZIRAX/ART 12.40 DME CCW (IAF)		HENDI INT/ART 12.40 DME			12.40 DME ARC				3000											
SYR VORTAC (IAF)		HENDI INT/ART 12.40 DME			004.91 / 41.00				3000											
HENDI INT/ART 12.40 DME (IF)		WOLLS OM			065.45 / 10.07 (I-ART)				2000											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT HENDI INT/ART 12.40 DME 3. FAC: 065.45 FAF: WOLLS OM DIST FAF TO MAP: 4.78 THLD: 4.78 4. MIN. ALT: HENDI 3000, WOLLS OM 2000 5. DIST TO THLD FROM OM: 4.78 MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 962 6. MIN GS INCPT: 2000 GS ALT AT: - OM: 1909 MM: - IM: - 7. GS ANGLE: 3.00 TCH: 55.0 8. MSA FROM: ART VORTAC 020-200 3900, 200-020 3600																	MAG VAR: 12W		EPOCH YEAR: 1980	
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	519	1/2	200	519	1/2	200	519	1/2	200	519	1/2	200								
S-LOC 07	760	1/2	441	760	1/2	441	760	7/8	441	760	7/8	441								
CIRCLING	960	1	629	960	1	629	980	1 3/4	649	1080	2 1/2	749								
NOTES: CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).																				
										# CAT A, B, C 700-2, CAT D 800-2 1/2 @ CAT D 800-2 1/2				QUALITY 11 CHECKED						
CITY AND STATE				ELEVATION: 331 TDZE: 319				FACILITY IDENTIFIER:				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:				
WATERTOWN, NY				AIRPORT NAME:				I-ART				ILS OR LOC RWY 7, AMDT 8				AMDT: 7A				
				WATERTOWN INTL								29 MARCH 2018				DATED 06/26/2014				

ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29							Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES										MISSED APPROACH						
FROM		TO		COURSE AND DISTANCE				ALTITUDE		ILS: DA LOC: 4.82 NM AFTER WALMA INT CLIMB TO 3100 THEN RIGHT TURN DIRECT DQN VOR/DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 3100 LEFT TURN DIRECT SGH VOR/DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 084.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE SGH VOR/DME, RT, 297.12 INBOUND. CHART FAS OBST: 1122 TRMSN TWR 395633N/0841259W. CHART: ASR CHART IN PLANVIEW: SGH VOR/DME. CHART CIRCLING ICON.						
ROD VORTAC (IAF)		KIRON INT/ROD 10.00 DME		240.01 / 10.00				3000								
KIRON INT/ROD 10.00 DME (IF)		GILPE INT		184.52 / 5.48 (I-DAY)				2600								
GILPE INT		WALMA INT		184.52 / 6.18 (I-DAY)				2600								
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT KIRON INT/ROD 10.00 DME 3. FAC: <u>184.52</u> FAF: <u>WALMA INT</u> DIST FAF TO MAP: <u>4.82</u> THLD: <u>4.82</u> 4. MIN. ALT: <u>KIRON 3000, GILPE 2600, WALMA 2600</u> 5. DIST TO THLD FROM OM: _____ - _____ MM: _____ - _____ IM: _____ - 150 HAT: _____ - 100 HAT: _____ - GS ANT: <u>974</u> 6. MIN GS INCPT: <u>2600</u> GS ALT AT: <u>WALMA 2600</u> OM: _____ - _____ MM: _____ - _____ IM: _____ - 7. GS ANGLE: <u>3.00</u> TCH: <u>54.8</u> 8. MSA FROM: <u>DQN VOR/DME 3100</u>										MAG VAR: 6W		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 18**	1196	2400	200	1196	2400	200	1196	2400	200	1196	2400	200				
S-LOC 18	1380	2400	384	1380	2400	384	1380	2400	384	1380	4000	384				
CIRCLING	1580	1	571	1580	1	571	1580	1 1/2	571	1640	2	631				
NOTES: CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT ROD VORTAC ON AIRWAY RADIALS 207 CW 273.																
CITY AND STATE DAYTON, OH		ELEVATION: 1009 TDZE: 996 AIRPORT NAME: JAMES M COX DAYTON INTL		FACILITY IDENTIFIER: I-DAY		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 18, AMDT 10A 29 MARCH 2018						SUP:				
												AMDT: 10				
												DATED 08/27/2009				

QUALITY
16
CHECKED

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES														MISSED APPROACH												
FROM				TO				COURSE AND DISTANCE				ALTITUDE		ILS: DA LOC: 4.69 NM AFTER ZAMBO OM/INT												
DQN VOR/DME				ZAMBO OM/INT				109.09 / 13.54				2800		CLIMB TO 3000 ON HEADING 241 AND DQN R-180 TO MIMMS INT AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1500 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 045 AND ON ROD VORTAC R-195 TO ZAMBO OM/INT AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000. ADDITIONAL FLIGHT DATA: HOLD W, RT, 092.99 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NE ZAMBO OM/INT, RT, 241.36 INBOUND. FAS OBST: 1179 AAO 395554N/0840736W. CHART CIRCLING ICON. CHART IN PLANVIEW: ROD VORTAC R-195 AND DQN VOR/DME R-109 MAY BE USED TO LOCATE ZAMBO INTERSECTION.												
ROD VORTAC (IAF)				TARRY INT				162.01 / 15.20				2800														
TARRY INT (IF/IAF)				ZAMBO OM/INT (NOPT)				241.37 / 11.42 (I-EGK)				2600														
1. PT <u>L</u> SIDE OF COURSE <u>061.37</u> OUTBOUND <u>2800</u> FT WITHIN <u>10</u> MILES OF <u>ZAMBO OM/INT</u> (IAF)														MAG VAR: 6W EPOCH YEAR: 2020												
2. _____																										
3. FAC: <u>241.37</u> FAF: <u>ZAMBO OM/INT</u> DIST FAF TO MAP: <u>4.69</u> THLD: <u>4.69</u>																										
4. MIN. ALT: <u>ZAMBO OM/INT 2600</u>																										
5. DIST TO THLD FROM OM: <u>4.69</u> MM: <u>-</u> IM: <u>-</u> 150 HAT: <u>-</u> 100 HAT: <u>-</u> GS ANT: <u>900</u>																										
6. MIN GS INCPT: <u>2600</u> GS ALT AT: <u>-</u> OM: <u>2564</u> MM: <u>-</u> IM: <u>-</u>																										
7. GS ANGLE: <u>3.00</u> TCH: <u>50.0</u>																										
8. MSA FROM: <u>DQN VOR/DME 3100</u>																										
MINIMUMS																										
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A			ILS: STANDARD #			LOC: STANDARD													
CATEGORY =====>		A			B			C			D			E												
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA											
S-ILS 24L**	1207	2400	200	1207	2400	200	1207	2400	200	1207	2400	200														
S-LOC 24L	1500	2400	493	1500	2400	493	1500	5000	493	1500	5000	493														
CIRCLING	1580	1	571	1580	1	571	1580	1 1/2	571	1640	2	631														
NOTES: CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ROD VORTAC ON V47 NORTHEAST BOUND AND AT TARRY ON V12 EASTBOUND. (CONTINUED ON PAGE 2)																										
CITY AND STATE DAYTON, OH				ELEVATION: 1009 TDZE: 1007 AIRPORT NAME: JAMES M COX DAYTON INTL				FACILITY IDENTIFIER: I-EGK		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 24L, AMDT 10A 29 MARCH 2018						SUP: AMDT: 10 DATED 05/26/2016										



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

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NOTES, (CONT.):
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR INOPERATIVE MALSR, INCREASE S-LOC 24L CAT C/D VISIBILITY TO 1 3/8 MILE.



CITY AND STATE DAYTON, OH	ELEVATION: 1009 TDZE: 1007 AIRPORT NAME: JAMES M COX DAYTON INTL	FACILITY IDENTIFIER: I-EGK	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 24L, AMDT 10A 29 MARCH 2018	SUP:
				AMDT: 10
				DATED: 05/26/2016

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.						
TERMINAL ROUTES														MISSED APPROACH									
FROM				TO				COURSE AND DISTANCE				ALTITUDE		ILS: DA LOC: 4.87 NM AFTER HABNU/I-VUQ 6.82 DME OR AT I-VUQ 1.95 DME									
DQN VOR/DME				HABNU INT/I-VUQ 6.82 DME				106.59 / 12.91				2800		CLIMB TO 3000 THEN RIGHT TURN DIRECT DQN VOR/DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 2700 DIRECT BRUNY LOM AND HOLD. (ADF REQUIRED). ADDITIONAL FLIGHT DATA: HOLD W, RT, 084.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SW BRUNY LOM, RT, 061.33 INBOUND. FAS OBST: 1149 AAO 395648N/0840739W. CHART 1261 ATCT 395400N/0841332W. CHART VDP AT 3.04 DME* DISTANCE VDP TO THLD 1.09 NM. *LOC ONLY. CHART IN PLANVIEW: BRUNY LOM. CHART CIRCLING ICON. CHART IN PLANVIEW: ROD VORTAC R-196 AND DQN VOR/DME R-107 MAY BE USED TO LOCATE HABNU INTERSECTION.									
ROD VORTAC				BONEE INT/I-VUQ 16.79 DME				167.91 / 14.76				2800											
BONEE INT/I-VUQ 16.79 DME (IAF)				UYOGO INT/I-VUQ 12.83 DME (NOPT)				241.35 / 3.96 (I-VUQ)				2700											
UYOGO INT/I-VUQ 12.83 DME (IF)				HABNU INT/I-VUQ 6.82 DME				241.35 / 6.02 (I-VUQ)				2600											
1. PT <u>L</u> SIDE OF COURSE <u>061.35</u> OUTBOUND <u>2800</u> FT WITHIN <u>10</u> MILES OF <u>HABNU</u> (IAF)														MAG VAR: 6W EPOCH YEAR: 2020									
2. _____																							
3. FAC: <u>241.35</u> FAF: <u>HABNU INT/I-VUQ 6.82 DME</u> DIST FAF TO MAP: <u>4.87</u> THLD: <u>4.87</u>																							
4. MIN. ALT: <u>HABNU INT/I-VUQ 6.82 DME 2600</u>																							
5. DIST TO THLD FROM OM: <u>-</u> MM: <u>-</u> IM: <u>-</u> 150 HAT: <u>-</u> 100 HAT: <u>-</u> GS ANT: <u>1050</u>																							
6. MIN GS INCPT: <u>2600</u> GS ALT AT: <u>HABNU 2600</u> OM: <u>-</u> MM: <u>-</u> IM: <u>-</u>																							
7. GS ANGLE: <u>3.00</u> TCH: <u>54.9</u>																							
8. MSA FROM: <u>DQN VOR/DME 3100</u>																							
MINIMUMS																							
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A			ILS: STANDARD				LOC: STANDARD									
CATEGORY =====>		A			B			C			D			E									
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA								
S-ILS 24R	1203	2400	206	1203	2400	206	1203	2400	206	1203	2400	206											
S-LOC 24R	1400	2400	403	1400	2400	403	1400	4000	403	1400	4000	403											
CIRCLING	1580	1	571	1580	1	571	1580	1 1/2	571	1640	2	631											
NOTES: CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: FOR INOPERATIVE MALSR, INCREASE S-LOC 24R CAT C/D VISIBILITY TO RVR 6000.																							
CITY AND STATE DAYTON, OH				ELEVATION: 1009 TDZE: 997 AIRPORT NAME: JAMES M COX DAYTON INTL				FACILITY IDENTIFIER: I-VUQ		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 24R, AMDT 10A 29 MARCH 2018					SUP: AMDT: 10 DATED 05/26/2016								



RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33						Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.											
TERMINAL ROUTES											MISSED APPROACH						
FROM	TO			COURSE AND DISTANCE			ALTITUDE		LNAV: RW08 CLIMBING RIGHT TURN TO 2700 DIRECT CEXIR AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 081.58 INBOUND. CHART FAS OBST: 879 TREE 402255N/0752024W. CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.								
PTW VORTAC (IAF)	CEXIR (TF) (FB) (RNP 1.00)			037.54 / 7.30			2700										
CEXIR (IF)	EKSIC (TF) (FB) (RNP 1.00)			081.58 / 6.04			1800										
EKSIC (FAF)	EWOKO/1.90 NM TO RW08 (TF) (FB) (RNP 0.30)			081.66 / 1.60													
EWOKO/1.90 NM TO RW08	RW08 (MAP) (TF) (FO) (RNP 0.30)			081.66 / 1.90													
RW08 (MAP)	968 MSL (CA)			081.66			2700										
968 MSL	CEXIR (DF) (FO) (RNP 1.00)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT CEXIR 3. FAC: <u>081.66</u> FAF: <u>EKSIC</u> DIST FAF TO MAP: <u>3.50</u> THLD: <u>3.50</u> 4. MIN. ALT: <u>CEXIR 2700, EKSIC 1800, EWOKO/1.90 NM TO RW08 1220</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>20:1 IS CLEAR 34:1 IS NOT CLEAR</u> 8. MSA FROM: <u>RW08 2800</u>																	
											MAG VAR: 12W					EPOCH YEAR: 2005	
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	1140	1	581	1140	1	581	1140	1 3/4	581		NA						
CIRCLING	1260	1	692	1260	1	692	1260	2	692		NA						
NOTES: CHART NOTE: RWY 8 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE QUAKERTOWN ALTIMETER SETTING AND INCREASE ALL MDAS 20 FEET. (CONTINUED ON PAGE 2)																	
CITY AND STATE		ELEVATION: 568 TDZE: 559		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:							
PERKASIE, PA		AIRPORT NAME: PENNRIDGE				RNAV (GPS) RWY 8, AMDT 1C 29 MARCH 2018				AMDT: 1B							
										DATED 10/16/2014							



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 PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON PTW VORTAC AIRWAY RADIALS 354 CW 095.

CHART NOTE: CIRCLING RWY 26 NA AT NIGHT.

QUALITY
29
CHECKED

CITY AND STATE PERKASIE, PA	ELEVATION: 568 TDZE: 559 AIRPORT NAME: PENNRIDGE	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 8, AMDT 1C 29 MARCH 2018	SUP:
				AMDT: 1B
				DATED: 10/16/2014

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

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

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
AIKEN, SC	AIKEN RGNL	29 MARCH 2018	1A

TAKEOFF MINIMUMS:

RWY 7, 19, 25 STANDARD.

RWY 1, 200-1 1/4 OR STANDARD WITH A MINIMUM CLIMB OF 220 FEET PER NM TO 800, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FEET PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1400 FEET PRIOR TO DEPARTURE END OF RUNWAY.

TEXTUAL DEPARTURE PROCEDURES:

RWY 19- CLIMB HEADING 186.37 TO 1100 BEFORE TURNING WEST.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 1, TERRAIN 74 FEET FROM DER, 9 FEET LEFT OF CENTERLINE, 496 FEET MSL. TREES BEGINNING 169 FEET FROM DER, 35 FEET LEFT OF CENTERLINE, UP TO 100 FEET AGL/659 FEET MSL. TREE 6,023 FEET FROM DER, 1,609 FEET LEFT OF CENTERLINE, UP TO 100 FEET AGL/649 FEET MSL. TERRAIN BEGINNING 75 FEET FROM DER, 246 FEET RIGHT OF CENTERLINE UP TO 496 FEET MSL. TREES BEGINNING 1,322 FEET FROM DER, 241 FEET RIGHT OF CENTERLINE, UP TO 100 FEET AGL/609 FEET MSL.

NOTE: RWY 7, TERRAIN BEGINNING 51 FEET FROM DER, 207 FEET RIGHT OF CENTERLINE UP TO 499 FEET MSL. TREES BEGINNING 1,230 FEET FROM DER, 550 FEET RIGHT OF CENTERLINE, UP TO 100 FEET AGL/609 FEET MSL. TREES BEGINNING 1,601 FEET FROM DER, 731 FEET LEFT OF CENTERLINE, UP TO 56 FEET AGL/563 FEET MSL.

NOTE: RWY 19, TREES BEGINNING ABEAM DER, 110 FEET RIGHT OF CENTERLINE, UP TO 100 FEET AGL/629 FEET MSL TREES BEGINNING 6 FEET FROM DER, 82 FEET LEFT OF CENTERLINE, UP TO 100 FEET AGL/639 FEET MSL.

NOTE: RWY 25, TREE 1,244 FEET FROM DER, 766 FEET RIGHT OF CENTERLINE, 73 FEET AGL/572 FEET MSL. TREE 1,506 FEET FROM DER, 661 FEET LEFT OF CENTERLINE, 72 FEET AGL/561 FEET MSL.

CONTROLLING OBSTACLES:

RWY 1: 649 FEET MSL TREE 334011.79N/0814109.50W.

OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 19: 1,105 FEET MSL TOWER 333510.00N/0814253.00W.

REMARKS:

FLIGHT INSPECTED BY:

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

Digitally signed by

ALLAN WILL

Dec 18, 2017

OFFICE SYMBOL:

DATE:

DEVELOPED BY:

Digitally signed by
AJ FIELDS
Nov 13, 2017

OFFICE SYMBOL:

AJV-5412

DATE:

11/13/2017

APPROVED BY:

GEORGE DAVIS

Digitally signed by

ALLAN WILL

Dec 18, 2017

OFFICE SYMBOL:

AJV-5410

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

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

OTHER:

ZTL, AGS APP CON, KAIK AMGR

CHANGES - REASONS:

1. CHANGED AIRPORT NAME FROM AIKEN MUNI TO AIKEN RGNL-AIRPORT NAME CHANGED IN DATA BASE FOR 3/29/18.
2. CHANGED ' TO FEET-ALL GUIDANCE ON DOCUMENTATION USES THE WORD FEET SPELLED OUT NOT A SYMBOL OR ABBREVIATION.
3. TAKEOFF OBSTACLE NOTES REMOVED THE WORD "NUMEROUS" WHEN REFERRING TO TREES-REDUNDANT.
4. ADDED OBSTACLE MANDATING ODP ROUTE DEVELOPMENT, TO RWY 19 CONTROLLING OBSTACLE--CLARIFY THE PURPOSE OF THE DOCUMENTED OBSTACLE.

QUALITY
3
CHECKED

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: RW13 CLIMB TO 3000 DIRECT DOXCU AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 308.20 INBOUND. CHART FAS OBST: 1459 TOWER 452737N/0982721W. DISTANCE TO THLD FROM 200 HAT: 0.47 NM. CHART VDP AT 1.09 NM TO RW13* *LNAV ONLY. WAAS CHANNEL # 40341 REFERENCE PATH ID: W13A CHART CIRCLING ICON. LTP HAE: 372.3 M						
HATHR (IF/IAF)		GUBDE (TF) (FB) (RNP 1.00)			127.91 / 6.03			3000								
GUBDE (FAF)		LOWOB/2.50 NM TO RW13 (TF) (FB) (RNP 0.30)			127.99 / 2.67											
LOWOB/2.50 NM TO RW13		RW13 (MAP) (TF) (FO) (RNP 0.30)			127.99 / 2.50											
RW13 (MAP)		1502 MSL (CA)			127.99											
1502 MSL		DOXCU (DF) (FO) (RNP 1.00)						3000								
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NW HATHR, RT, 127.91 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 127.99 FAF: GUBDE DIST FAF TO MAP: 5.17 THLD: 5.17 4. MIN. ALT: HATHR 3000, GUBDE 3000, LOWOB/2.50 NM TO RW13 2140* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 3000 GS ALT AT: GUBDE 3000 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 50.6 34:1 IS CLEAR 8. MSA FROM: _____										MAG VAR: 7E EPOCH YEAR: 2000						
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		STANDARD @							
CATEGORY =====>		A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	
LPV DA	1502	3/4	200	1502	3/4	200	1502	3/4	200	1502	3/4	200				
LNAV/VNAV DA	1752	1 3/8	450	1752	1 3/8	450	1752	1 3/8	450	1752	1 3/8	450				
LNAV MDA	1700	1	398	1700	1	398	1700	1 1/8	398	1700	1 1/8	398				
CIRCLING	1760	1	458	1860	1	558	1960	1 3/4	658	2160	2 3/4	858				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -21C (-5F) OR ABOVE 54C (130F). @ CAT D 900-2 3/4 CHART NOTE: DME/DME RNP-0.3 NA.																
CITY AND STATE ABERDEEN, SD		ELEVATION: 1302 TDZE: 1302 AIRPORT NAME: ABERDEEN RGNL			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 13, AMDT 1 29 MARCH 2018					SUP:				
												AMDT: ORIG				
												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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TAA

	FROM	TO	ALT
1.	038/30 CW 218/30 (NOPT)	038/10 CW 218/10	3700
2.	038/10 CW 218/10	HATHR (IF/IAF) (FB)	3000
3.	218/30 CW 038/30	HATHR (IF/IAF) (FO)	3200

QUALITY
16
CHECKED

CITY AND STATE ABERDEEN, SD	ELEVATION: 1302 TDZE: 1302 AIRPORT NAME: ABERDEEN RGNL	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 13, AMDT 1 29 MARCH 2018	SUP:
				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

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KABR
RUNWAY	RW13
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W13A
LTP/FTP LATITUDE	452718.8480N
LTP/FTP LONGITUDE	0982540.9345W
LTP/FTP ELLIPSOIDAL HEIGHT	+03723
FPAP LATITUDE	452615.7900N
FPAP LONGITUDE	0982411.5410W
THRESHOLD CROSSING HEIGHT (TCH)	00050.6
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0648
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
 <u>CRC REMAINDER</u>	 3E3ADA2D

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03968
FPAP ORTHOMETRIC HEIGHT	+03968

QUALITY
16
CHECKED

CITY AND STATE ABERDEEN, SD	ELEVATION: 1302 AIRPORT NAME: ABERDEEN RGNL	TDZE: 1302	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 13, AMDT 1 29 MARCH 2018	SUP:
					AMDT: ORIG
					DATED: 08/27/2009

**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:
												RWY 15: DA RWY 33: DA
												RWY 15: CLIMB TO 2000 THEN CLIMBING RIGHT TURN TO 3000 DIRECT AGJ VORTAC AND HOLD N, RT, 194.00 INBOUND.
												RWY 33: CLIMB TO 2000 THEN CLIMBING LEFT TURN TO 3000 DIRECT AGJ VORTAC AND HOLD N, RT, 194.00 INBOUND.

AS ESTABLISHED BY THE CURRENT ROGER GRAY AAF ASR MINIMUM VECTORING ALTITUDE CHART

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	
PAR S-15	1215	2400	200	1215	2400	200	1215	2400	200	1215	2400	200	1215	2400	200	
PAR S-33	1208	1/2	213	1208	1/2	213	1208	1/2	213	1208	1/2	213	1208	1/2	213	

NOTES:

CHART NOTE: FOR INOPERATIVE ALS, INCREASE PAR S-15 CAT E VISIBILITY TO RVR 4000 AND PAR S-33 CAT E VISIBILITY TO 3/4 SM.

CHART NOTE: RWY 15 VGSI AND PAR GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

CHART NOTE: RWY 33 VGSI AND PAR GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

PAR RWY 15: PFAF 5.97 NM FROM THLD. GLIDE SLOPE INTERCEPT ALTITUDE 3000, FINAL APPROACH COURSE 153.34.

PAR RWY 33: PFAF 6.09 NM FROM THLD. GLIDE SLOPE INTERCEPT ALTITUDE 3000, FINAL APPROACH COURSE 333.35.

LOST COMMUNICATIONS (ALL RWYS): AS DIRECTED BY ATC ON INITIAL CONTACT

ADDITIONAL FLIGHT DATA

TDZE: 1015 RWY: 15 TDZE: RWY:
TDZE: 995 RWY: 33 TDZE: RWY:

PAR RWY 15: GS 3.00 / TCH 51.0 / RPI 1062

PAR RWY 33: GS 3.00 / TCH 52.8 / RPI 973

MAG VAR: 4E EPOCH YEAR: 2020

CITY AND STATE	ELEVATION: 1015 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP RADAR-2
FORT HOOD/KILLEEN, TX	ROBERT GRAY AAF	GRK PAR	RADAR-2, ORIG-A 29 MARCH 2018	AMDT: ORIG
				DATED: 01/12/12

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: 5.09 NM AFTER WIGZU/RADAR OR AT I-UPE 1.90 DME CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 3000 ON HEADING 330 AND FUZ VORTAC R-303 TO OBLON INT/FUZ 24.00 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 3000 ON HEADING 330 AND TTT VOR/DME R-297 TO OBLON INT/TTT 30.41 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 123.08 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NW OBLON INT/TTT 30.41 DME, RT, 116.57 INBOUND. FAS OBST: 880 TREE 330439N/0972050W. CHART VDP AT 3.03 DME* DISTANCE VDP TO THLD 1.13 NM. *LOC ONLY. CHART CIRCLING ICON. CHART PLANVIEW NOTE: DME OR RADAR REQUIRED.					
UKW VORTAC (IAF)		ARGUE/UKW 31.20 DME/RADAR		125.75 / 31.20				4000							
ARGUE/I-UPE 13.00 DME/RADAR (IF)		WIGZU/I-UPE 6.99 DME/RADAR		166.21 / 6.01 (I-UPE)				2400							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT ARGUE/I-UPE 13.00 DME/RADAR 3. FAC: 166.21 FAF: WIGZU/I-UPE 6.99 DME/RADAR DIST FAF TO MAP: 5.09 THLD: 5.09 4. MIN. ALT: ARGUE 4000, WIGZU 2400 5. DIST TO THLD FROM OM: - MM: - IM: 362 150 HAT: - 100 HAT: 866 GS ANT: 1049 6. MIN GS INCPT: 2400 GS ALT AT: WIGZU 2400 OM: - MM: - IM: 797 7. GS ANGLE: 3.00 TCH: 54.6 8. MSA FROM: FUZ VORTAC 130-230 3600, 230-130 2700										MAG VAR: 4E		EPOCH YEAR: 2015			
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 16L	923	1800	200	923	1800	200	923	1800	200	923	1800	200	923	1800	200
S-LOC 16L	1140	2400	417	1140	2400	417	1140	4000	417	1140	4000	417	1140	4000	417
SIDESTEP 16R	1140	1	419	1140	1	419	1140	1 1/2	419	1140	2	419	1140	2	419
CIRCLING	1160	1	437	1320	1	597	1360	1 3/4	637	1380	2	657	1380	2 1/4	657
NOTES: CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 16L: CAT A, B, C, D, RA 101, RVR 1200, HAT 100, DA 823 MSL. CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 16L: CAT III CAT A, B, C, D, RVR 600. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 723		TDZE: 16L 723		FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:			
FORT WORTH, TX		AIRPORT NAME:		TDZE: 16R 721		I-UPE		ILS OR LOC RWY 16L, AMDT 7, 03/29/2018; ILS RWY 16L (CAT II), ILS RWY 16L (CAT III)				AMDT: 6A			
		FORT WORTH ALLIANCE						29 MARCH 2018				DATED 04/05/2012			



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

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NOTES, (CONT.):
CHART NOTE: CIRCLING NA EAST OF RWY 16L-34R.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 16L CAT E VISIBILITY TO RVR 4000 AND S-LOC 16L CAT C/D/E VISIBILITY TO RVR 6000.



CITY AND STATE FORT WORTH, TX	ELEVATION: 723 AIRPORT NAME: FORT WORTH ALLIANCE	TDZE: 16L 723 TDZE: 16R 721	FACILITY IDENTIFIER: I-UPE	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 16L, AMDT 7, 03/29/2018; ILS RWY 16L (CAT II), ILS RWY 16L (CAT III) 29 MARCH 2018	SUP:
					AMDT: 6A
					DATED: 04/05/2012

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

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



CITY AND STATE FORT WORTH, TX	ELEVATION: 723	TDZE: 16L 723	FACILITY IDENTIFIER: I-UPE	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 16L, AMDT 7, 03/29/2018; ILS RWY 16L (CAT II), ILS RWY 16L (CAT III) 29 MARCH 2018	SUP:
	AIRPORT NAME:	TDZE: 16R 721			AMDT: 6A
	FORT WORTH ALLIANCE	DATED: 04/05/2012			

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29		Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.											
TERMINAL ROUTES										MISSED APPROACH					
FROM		TO		COURSE AND DISTANCE				ALTITUDE		ILS: DA LOC: 5.27 NM AFTER ERPIF INT/I-JVX 5.18 DME OR AT I-JVX 0.12 DME CLIMB TO 1200 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 270 AND FUZ VORTAC R-303 TO OBLON INT/FUZ 24.00 DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1200 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 270 AND TTT VOR/DME R-297 TO OBLON INT/TTT 30.41 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 123.08 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NW OBLON INT/TTT 30.41 DME, RT, 116.57 INBOUND. FAS OBST: 990 AAO 325512N/0971845W. CHART IN PROFILE: I-JVX DME ANTENNA. CHART VDP AT 1.53 DME* DISTANCE VDP TO THLD 1.62 NM. *LOC ONLY. CHART CIRCLING ICON. CHART PLANVIEW NOTE: RADAR REQUIRED.					
UCCOL INT/I-JVX 11.88 DME (IF)		ERPIF INT/I-JVX 5.18 DME		346.21 / 6.70 (I-JVX)				2400							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT UCCOL INT/I-JVX 11.88 DME 3. FAC: 346.21 FAF: ERPIF INT/I-JVX 5.18 DME DIST FAF TO MAP: 5.27 THLD: 5.27 4. MIN. ALT: UCCOL 3000, ERPIF 2400 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: 1010 6. MIN GS INCPT: 2400 GS ALT AT: ERPIF 2400 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 58.0 8. MSA FROM: FUZ VORTAC 130-230 3600, 230-130 2700										MAG VAR: 4E EPOCH YEAR: 2015					
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 34R	881	1800	200	881	1800	200	881	1800	200	881	1800	200	881	1800	200
S-LOC 34R	1240	2400	559	1240	2400	559	1240	6000	559	1240	6000	559	1240	6000	559
SIDESTEP 34L	1240	1	554	1240	1	554	1240	1 1/2	554	1240	2	554	1240	2	554
CIRCLING	1240	1	517	1320	1	597	1360	1 3/4	637	1380	2	657	1380	2 1/4	657
NOTES: CHART NOTE: CIRCLING NA EAST OF RWY 16L-34R. @ CAT E 800-2 1/4 CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 34R CAT E VISIBILITY TO RVR 4000 AND S-LOC 34R CAT E VISIBILITY TO 1 5/8 SM.															
CITY AND STATE FORT WORTH, TX		ELEVATION: 723 AIRPORT NAME: FORT WORTH ALLIANCE		TDZE: 34R 681 TDZE: 34L 686		FACILITY IDENTIFIER: I-JVX		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 34R, AMDT 7, 03/29/2018				SUP: AMDT: 6A DATED 09/18/2014			



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

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CITY AND STATE
FORT WORTH, TX

ELEVATION: 723 TDZE: 34R 681
AIRPORT NAME: TDZE: 34L 686
FORT WORTH ALLIANCE

FACILITY
IDENTIFIER:
I-JVX

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
ILS OR LOC RWY 34R, AMDT 7, 03/29/2018

SUP:
AMDT: 6A
DATED: 09/18/2014

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.											
US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION															
TERMINAL ROUTES				MISSED APPROACH											
FROM	TO	COURSE AND DISTANCE	ALTITUDE	LPV: DA LNAV/VNAV: DA LNAV: RW16L CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 3000 DIRECT OBLON AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 122.08 INBOUND. CHART FAS OBST: 857 TANK 330210N/0972001W. DISTANCE TO THLD FROM 200 HAT: 0.46 NM. CHART VDP AT 1.07 NM TO RW16L* *LNAV ONLY. WAAS CHANNEL # 82541 REFERENCE PATH ID: W16B CHART CIRCLING ICON. LTP HAE: 192.6 M											
UKW VORTAC	RAVYA (TF) (FB) (RNP 2.00)	139.84 / 26.84	4000												
MQP VORTAC	RAVYA (TF) (FB) (RNP 2.00)	038.61 / 36.49	4000												
RAVYA (IAF)	ARGUE (TF) (FB) (RNP 1.00)	079.37 / 7.49	3000												
ARGUE (IF)	WIGZU (TF) (FB) (RNP 1.00)	166.19 / 6.01	2400												
WIGZU (FAF)	LVLEE/2.50 NM TO RW16L (TF) (FB) (RNP 0.30)	166.20 / 2.59													
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT ARGUE _____ 3. FAC: 166.20 FAF: WIGZU _____ DIST FAF TO MAP: 5.09 THLD: 5.09 4. MIN. ALT: ARGUE 3000, WIGZU 2400, LVLEE/2.50 NM TO RW16L 1560* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2400 GS ALT AT: WIGZU 2400 _____ OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 54.6 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW16L 4000				MAG VAR: 4E 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	923	1800	200	923	1800	200	923	1800	200	923	1800	200	923	1800	200
LNAV/VNAV DA	1016	2400	293	1016	2400	293	1016	2400	293	1016	2400	293	1016	2400	293
LNAV MDA	1120	2400	397	1120	2400	397	1120	3500	397	1120	3500	397	1120	3500	397
CIRCLING	1160	1	437	1320	1	597	1360	1 3/4	637	1380	2	657	1380	2 1/4	657
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -8C (18F) OR ABOVE 54C (130F). @ CAT E 800-2 1/4 CHART NOTE: CIRCLING NA EAST OF RWY 16L-34R. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MQP VORTAC ON V568 SOUTHEAST BOUND. (CONTINUED ON PAGE 2)															
CITY AND STATE		ELEVATION: 723 TDZE: 723		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
FORT WORTH, TX		AIRPORT NAME:		FORT WORTH ALLIANCE		RNAV (GPS) RWY 16L, AMDT 2, 03/29/2018				AMDT: 1A					
										DATED 09/18/2014					

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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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
LVLEE	RW16L (MAP) (TF) (FO) (RNP 0.30)	166.20 / 2.50	
RW16L (MAP)	1200 MSL (CA)	166.20	1200
1200 MSL	OBLON (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON UKW VORTAC AIRWAY RADIALS 065 CW 184.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV CAT E VISIBILITY TO RVR 4000, LNAV/VNAV ALL CATS VISIBILITY TO RVR 4500 AND LNAV CAT E VISIBILITY TO RVR 6000.

QUALITY
16
CHECKED

CITY AND STATE FORT WORTH, TX	ELEVATION: 723	TDZE: 723	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 16L, AMDT 2, 03/29/2018	SUP:
	AIRPORT NAME:				AMDT: 1A
	FORT WORTH ALLIANCE				DATED: 09/18/2014

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

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

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KAFW
RUNWAY	RW16L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W16B
LTP/FTP LATITUDE	330019.5410N
LTP/FTP LONGITUDE	0971917.4965W
LTP/FTP ELLIPSOIDAL HEIGHT	+01926
FPAP LATITUDE	325832.2960N
FPAP LONGITUDE	0971855.5440W
THRESHOLD CROSSING HEIGHT (TCH)	00054.6
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>	 05E00B7F

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+02204
FPAP ORTHOMETRIC HEIGHT	+02204

QUALITY
16
CHECKED

CITY AND STATE FORT WORTH, TX	ELEVATION: 723 AIRPORT NAME: FORT WORTH ALLIANCE	TDZE: 723 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 16L, AMDT 2, 03/29/2018	SUP:
				AMDT: 1A
				DATED: 09/18/2014

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: RW34R CLIMB TO 3000 DIRECT WIGZU AND ON TRACK 282.50 TO OBLON AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 122.08 INBOUND. FAS OBST: 990 AAO 325512N/0971844W. DISTANCE TO THLD FROM 200 HAT: 0.50 NM. CHART VDP AT 1.62 NM TO RW34R* *LNAV ONLY. WAAS CHANNEL # 82324 REFERENCE PATH ID: W34A CHART CIRCLING ICON. LTP HAE: 174.7 M												
UCCOL (IF)				ERPIF (TF) (FB) (RNP 1.00)				346.23 / 6.70				2400														
ERPIF (FAF)				RW34R (MAP) (TF) (FO) (RNP 0.30)				346.22 / 5.27																		
RW34R (MAP)				881 MSL (CA)				346.22																		
881 MSL				WIGZU (DF) (FB) (RNP 1.00)																						
WIGZU				OBLON (TF) (FO) (RNP 1.00)				282.50 / 11.06				3000														
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT UCCOL 3. FAC: 346.22 FAF: ERPIF DIST FAF TO MAP: 5.27 THLD: 5.27 4. MIN. ALT: UCCOL 3000, ERPIF 2400 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2400 GS ALT AT: ERPIF 2400 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 58.0 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW34R 4000																	MAG VAR: 4E					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	881	1800	200	881	1800	200	881	1800	200	881	1800	200	881	1800	200											
LNAV/VNAV DA	1437	1 3/4	756	1437	1 3/4	756	1437	1 3/4	756	1437	1 3/4	756	1437	1 3/4	756											
LNAV MDA	1240	2400	559	1240	2400	559	1240	6000	559	1240	6000	559	1240	6000	559											
CIRCLING	1240	1	517	1320	1	597	1360	1 3/4	637	1380	2	657	1380	2 1/4	657											
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -8C (18F) OR ABOVE 54C (130F). @ CAT E 800-2 1/4 CHART NOTE: CIRCLING NA EAST OF RWY 16L-34R. CHART NOTE: DME/DME RNP-0.3 NA. FOR INOPERATIVE ALS, INCREASE LPV CAT E VISIBILITY TO RVR 4000, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 2 SM, INCREASE LNAV CAT E VISIBILITY TO 1 5/8 SM.																										
CITY AND STATE				ELEVATION: 723 TDZE: 681				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:										
FORT WORTH, TX				AIRPORT NAME:				RNAV				RNAV (GPS) RWY 34R, AMDT 3, 03/29/2018				AMDT: 2C										
				FORT WORTH ALLIANCE												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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CITY AND STATE FORT WORTH, TX	ELEVATION: 723	TDZE: 681	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 34R, AMDT 3, 03/29/2018	SUP:
	AIRPORT NAME:				AMDT: 2C
	FORT WORTH ALLIANCE				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	KAFW
RUNWAY	RW34R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W34A
LTP/FTP LATITUDE	325832.2960N
LTP/FTP LONGITUDE	0971855.5440W
LTP/FTP ELLIPSOIDAL HEIGHT	+01747
FPAP LATITUDE	330019.5410N
FPAP LONGITUDE	0971917.4970W
THRESHOLD CROSSING HEIGHT (TCH)	00058.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

7E0CDB93

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+02024
FPAP ORTHOMETRIC HEIGHT	+02024

QUALITY
16
CHECKED

CITY AND STATE

FORT WORTH, TX

ELEVATION: 723

TDZE: 681

AIRPORT NAME:

FORT WORTH ALLIANCE

 FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 34R, AMDT 3, 03/29/2018

SUP:

AMDT:

2C

DATED:

10/12/2017

**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>
FORT WORTH, TX	FORT WORTH ALLIANCE	03/29/2018	2

TAKEOFF MINIMUMS:

RWY 34L, 34R: STANDARD.

RWY 16L, 16R: 300-2 1/4 OR STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 1100, OR ALTERNATIVELY WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1900 FEET PRIOR TO DER.

TEXTUAL DEPARTURE PROCEDURES:

RWY 16R: CLIMB HEADING 166.21 TO 1100 BEFORE TURNING RIGHT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 16L, VEHICLES ON ROAD BEGINNING 59 FT FROM DER, 481 FT LEFT OF CENTERLINE, UP TO 677 FT MSL.

MULTIPLE POLES BEGINNING 1069 FT FROM DER, 689 FT LEFT OF CENTERLINE, UP TO 43 FT AGL/700 FT MSL.

WATER TOWER 1.7 NM FROM DER, 3109 FT RIGHT OF CENTERLINE, 154 FT AGL/961 FT MSL.

NOTE: RWY 16R, FENCE 3 FT FROM DER, 249 FT RIGHT OF CENTERLINE, 8 FT AGL/669 FT MSL.

VEHICLES ON ROAD BEGINNING 5 FT FROM DER, 10 FT RIGHT OF CENTERLINE, UP TO 677 FT MSL.

POLE 1303 FT FROM DER, 518 FT RIGHT OF CENTERLINE, 36 FT AGL/698 FT MSL.

POLE 1579 FT FROM DER, 876 FT RIGHT OF CENTERLINE, 37 FT AGL/709 FT MSL.

WATER TOWER 1.7 NM FROM DER, 2509 FT RIGHT OF CENTERLINE, 154 FT AGL/961 FT MSL.

CONTROLLING OBSTACLES:

RWY 16L, 16R: 961 FT MSL WATER TOWER 325641.35N/0971909.88W

OBSTACLE MANDATING ODP ROUTE DEVELOPMENT:

RWY 16R: 1002 FT MSL TOWER 325653.00N/0971932.00W.



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

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

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
FORT WORTH, TX	FORT WORTH ALLIANCE	03/29/2018	2

REMARKS:

FLIGHT INSPECTED BY:

PENDING

Digitally signed by

DION E LANCIA

Nov 02, 2017

OFFICE SYMBOL:

DATE:

DEVELOPED BY:

RUSS ROSLEWSKI

Digitally signed by

RUSSELL ROSLEWSKI

Oct 31, 2017

OFFICE SYMBOL:

AJV-5423

DATE:

09/27/2017

APPROVED BY:

JULIE MORGAN

Digitally signed by

DION E LANCIA

Nov 02, 2017

OFFICE SYMBOL:

AJV-542

DATE:

REQUIRED EFFECTIVE DATE:

03/29/2018 - RUNWAY CONSTRUCTION PROJECT

COORDINATED WITH:

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



OTHER:

ZFW, REGIONAL APP CON, AIRPORT MANAGER, STATE AVIATION DIR.

CHANGES - REASONS:

CHANGED RWY 16L CLIMB GRADIENT FROM 208 TO 220 - NEW OBSTACLE SURVEY

CHANGED RWY 16L RTRL LENGTH FROM 1400 FT TO 1900 FT - NEW OBSTACLE SURVEY

CHANGED RWY 16R CLIMB GRADIENT FROM 210 TO 220 - NEW OBSTACLE SURVEY

CHANGED RWY 16R RTRL LENGTH FROM 1500 FT TO 1900 FT - NEW OBSTACLE SURVEY

UPDATED RWY 16L AND RWY 16R TAKEOFF OBSTACLE NOTES - NEW OBSTACLE SURVEY

REMOVED RWY 34L AND RWY 34R TAKEOFF OBSTACLE NOTES - OBSTACLE REMOVAL, NEW SURVEY AND EVALUATION

UPDATED RWY 16L AND RWY 16R CONTROLLING OBSTACLES - NEW OBSTACLE SURVEY



U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION VOR/DME STANDARD INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.23										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT , HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES										MISSED APPROACH									
FROM		TO		COURSE AND DISTANCE				ALTITUDE											
										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 29 MARCH 2018																			
CITY AND STATE ABINGDON, VA				ELEVATION: 2087 TDZE: AIRPORT NAME: VIRGINIA HIGHLANDS				FACILITY IDENTIFIER: HMV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR/DME-B, AMDT 6, 08/27/2009				SUP VOR/DME OR GPS-B AMDT 5B DATE 01/01/1987			

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION LOC/DME 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: 0.74 DME									
BLF VOR/DME (IAF)			NAYIC/I-JFZ 16.32 DME			244.13 / 16.50			5900		CLIMBING RIGHT TURN TO 6000 ON HEADING 324 AND GZG R-011 TO STACY INT/GZG 31.42 DME TO AND HOLD, OR AS DIRECTED BY ATC. ALTERNATE MA (DO NOT CHART): CLIMBING RIGHT TURN TO 7000 ON HEADING 032 AND BLF R-277 TO KENYA INT/BLF (SEE FORM 8260-10) ADDITIONAL FLIGHT DATA: HOLD S, RT, 011.07 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD W KENYA INT/BLF 16.90 DME, RT, 096.57 INBOUND. CHART FAS OBST: 2939 TREE 370405N/0814644W. LATIC TO RW25: 3.00/54 CHART ARRIVAL HOLDING AT BLF VOR/DME: HOLD NE, RT, 243.96 INBOUND, 6000.									
NAYIC/I-JFZ 16.32 DME (IF)			DIKTE/9.08 DME			251.63 / 7.24 (I-JFZ)			5300											
DIKTE/9.08 DME			LATIC/6.37 DME			251.63 / 2.71 (I-JFZ)			4500											
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)										MAG VAR: 6W EPOCH YEAR:1995										
2. PROFILE STARTS AT NAYIC/I-JFZ 16.32 DME																				
3. FAC 251.63 FAF LATIC/6.37 DME DIST FAF TO MAP _____ THLD 5.63																				
4. MIN. ALT NAYIC 5900, DIKTE 5300, LATIC 4500, JANEX/2.74 DME 3340																				
8. MSA FROM: GZG VOR/DME 058-328 7000, 328-058 5900																				
MINIMUMS																				
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD @								
CATEGORY =====>		A			B			C			D			E						
		MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA				
S-25		3200	1	547	3200	1	547	3200	1 5/8	547		NA								
CIRCLING		3240	1	587	3240	1	587	3240	1 5/8	587		NA								
NOTES:																				
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).										@ NA WHEN LOCAL WEATHER NOT AVAILABLE.										
CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA.																				
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED USE WISE ALTIMETER SETTING AND INCREASE ALL																				
MDA 100 FEET, INCREASE S-25 CAT C VISIBILITY 1/4 MILE AND CIRCLING CAT C VISIBILITY 3/8 MILE.																				
(CONTINUED ON PAGE 2)																				
CITY AND STATE		ELEVATION: 2653 TDZE: 2653			FACILITY IDENTIFIER:			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP								
RICHLANDS, VA		AIRPORT NAME:			I-JFZ			LOC/DME RWY 25, AMDT 1B				AMDT 1A								
		TAZEWELL COUNTY						29 MARCH 2018				DATE 11/13/2014								



**LOC/DME 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.

MISSED APPROACH INSTRUCTIONS, (CONT.):

16.90 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 7000. (DME REQUIRED.).

NOTES, (CONT.):

CHART NOTE: WHEN VGSI INOP, STRAIGHT-IN/CIRCLING RWY 25 NA AT NIGHT.

CHART PLANVIEW NOTE: NOPT FOR ARRIVAL ON BLF VOR/DME AIRWAY RADIALS 340 CW 122.

CHART NOTE: WHEN VGSI INOP, CIRCLING RWY 7 NA AT NIGHT.

QUALITY
4
CHECKED

CITY AND STATE

RICHLANDS, VA

ELEVATION: 2653**TDZE: 2653**

AIRPORT NAME:

TAZEWELL COUNTY

FACILITY
IDENTIFIER:

I-JFZ

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

LOC/DME RWY 25, AMDT 1B

29 MARCH 2018

SUP:

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

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: RW07 CLIMB TO 3000 DIRECT WOREG AND HOLD. ADDITIONAL FLIGHT DATA: HOLD E, RT, 248.27 INBOUND. CHART FAS OBST: 1299 AAO 430830N/0904736W. DISTANCE TO THLD FROM 370 HAT: 1.05 NM. CHART VDP AT 2.66 NM TO RW07* *LNAV ONLY. WAAS CHANNEL # 77902 REFERENCE PATH ID: W07A LTP HAE: 170.7 M							
QUEST		FIGIS (TF) (FB) (RNP 2.00)		182.40 / 7.82				3000									
FARON (IAF)		ZETUT (NOPT) (TF) (FB) (RNP 1.00)		338.58 / 5.60				3000									
FIGIS (IAF)		ZETUT (NOPT) (TF) (FB) (RNP 1.00)		157.88 / 5.00				3000									
UKN VOR/DME (IAF)		ZETUT (NOPT) (TF) (FB) (RNP 1.00)		115.09 / 29.03				3000									
ZETUT (IF/IAF) (SEE FORM 8260-10)		HAGBO (TF) (FB) (RNP 1.00)		067.91 / 6.05				2700									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD W ZETUT, RT, 067.91 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 068.00 FAF: HAGBO DIST FAF TO MAP: 6.15 THLD: 6.15 4. MIN. ALT: ZETUT 3000, HAGBO 2700 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2700 GS ALT AT: HAGBO 2700 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 38.0 20:1 IS CLEAR 34:1 IS NOT CLEAR 8. MSA FROM: RW07 2800										MAG VAR: 1W		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	1040	1 1/4	370	1040	1 1/4	370	1040	1 1/4	370		NA						
LNAV MDA	1560	1 1/4	890	1560	1 1/4	890	1560	2 3/4	890		NA						
CIRCLING	1560	1 1/4	887	1560	1 1/4	887	1580	2 3/4	907		NA						
NOTES: CHART NOTE: CIRCLING RWY 2, 20 NA AT NIGHT. CHART NOTE: RWY 7 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LONE ROCK ALTIMETER SETTING AND INCREASE (CONTINUED ON PAGE 2)																	
CITY AND STATE BOSCOBEL, WI		ELEVATION: 673 TDZE: 670 AIRPORT NAME: BOSCOBEL		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 7, ORIG-A 29 MARCH 2018						SUP:					
												AMDT: ORIG					
												DATED 08/30/2007					



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

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

TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
HAGBO (FAF)	RW07 (MAP) (TF) (FO) (RNP 0.30)	068.00 / 6.15	
RW07 (MAP)	1040 MSL (CA)	068.00	
1040 MSL	WOREG (DF) (FO) (RNP 1.00)		3000

NOTES, (CONT.):

ALL DAS/MDAS 60 FEET.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT UKN VOR/DME ON V218 AND V246 NORTHWEST BOUND.

CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH ANGLE NOT COINCIDENT.

QUALITY
20
CHECKED

CITY AND STATE
BOSCOBEL, WI

ELEVATION: 673 TDZE: 670
AIRPORT NAME:
BOSCOBEL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 7, ORIG-A
29 MARCH 2018

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

**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	KOVS
RUNWAY	RW07
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W07A
LTP/FTP LATITUDE	430937.4275N
LTP/FTP LONGITUDE	0904044.4715W
LTP/FTP ELLIPSOIDAL HEIGHT	+01707
FPAP LATITUDE	431012.1100N
FPAP LONGITUDE	0903852.3200W
THRESHOLD CROSSING HEIGHT (TCH)	00038.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

3B278463

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02037
FPAP ORTHOMETRIC HEIGHT	+02037

QUALITY
20
CHECKED

CITY AND STATE

BOSCOBEL, WI

ELEVATION: 673

TDZE: 670

AIRPORT NAME:

BOSCOBEL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 7, ORIG-A

29 MARCH 2018

SUP:

AMDT:

ORIG

DATED:

08/30/2007

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION NDB STANDARD INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.27										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except 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 29 MARCH 2018																			
CITY AND STATE MINERAL POINT, WI		ELEVATION: 1171 THRE: 1171 AIRPORT NAME: IOWA COUNTY				FACILITY IDENTIFIER: MRJ		PROCEDURE NO./AMDТ NO./EFFECTIVE DATE: NDB RWY 22, AMDТ 6A, 08/21/2014						SUP AMDТ 6 DATE 09/20/2012					



ILS - STANDARD US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.																			
TERMINAL ROUTES																	MISSED APPROACH																			
FROM				TO				COURSE AND DISTANCE				ALTITUDE		ILS: DA LOC: 4.97 NM AFTER BLUEF OM/BLF VOR/DME 4.47 DME CLIMB TO 3800 THEN CLIMBING RIGHT TURN TO 6000 ON HEADING 020 AND BLF VOR/DME R-340 TO KEGLY INT/BLF 11.00 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, LT, 339.54 INBOUND. CHART FAS OBST: 2970 TREE 371859N/0811050W. CHART BLF R-340 AT KEGLY. CHART BLF R-122 AT HECKE. CHART BKW 20.55 DME AT DROWE INT. CHART NOTE IN PLANVIEW: USE OF BKW R-175 AND BLF R-045 MAYBE NECESSARY TO LOCATE DROWE INTERSECTION.																						
BKW VOR/DME (IAF)				DROWE INT/BLF VOR/DME 11.00 DME				175.00 / 20.55				5600																								
ESTEM INT/BLF 16.56 DME (IAF)				DROWE INT/BLF VOR/DME 11.00 DME				224.61 / 5.56 (BLF R-045)				5600																								
KEGLY/BLF 11.00 DME CW (IAF)				DROWE INT/BLF VOR/DME 11.00 DME				11.00 DME ARC (BLF LR-034)				5600																								
HECKE/BLF 11.00 DME CCW (IAF)				DROWE INT/BLF VOR/DME 11.00 DME				11.00 DME ARC (BLF LR-056)				5600																								
DROWE INT/BLF VOR/DME 11.00 DME (IF)				BLUEF OM/BLF VOR/DME 4.47 DME				228.88 / 6.53 (I-BLF)				4600																								
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT DROWE 3. FAC: 228.88 FAF: BLUEF OM/BLF VOR/DME 4.47 DME DIST FAF TO MAP: 4.97 THLD: 4.97 4. MIN. ALT: DROWE 5600, BLUEF OM 4600 5. DIST TO THLD FROM OM: 4.97 MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 1127 6. MIN GS INCPT: 4600 GS ALT AT: - OM: 4524 MM: - IM: - 7. GS ANGLE: 3.00 TCH: 58.0 8. MSA FROM: BLF VOR/DME 6000																	MAG VAR: 7W 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	DH/MDA	VIS	HAT/HAA																		
S-ILS 23	3157	1	300	3157	1	300	3157	1	300	3157	1	300	3157	1	300																					
S-LOC 23	3520	1	663	3520	1	663	3520	1 3/4	663	3520	2	663	3520	2	663																					
CIRCLING	3520	1	663	3520	1	663	3560	2	703	3560	2 1/4	703																								
NOTES: CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 3200 MSL. CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE BECKLEY ALTIMETER SETTING AND INCREASE ALL DA 443 FEET AND ALL MDA 460 FEET; INCREASE S-ILS 23 ALL CATS VISIBILITY 2 1/2 MILE AND S-LOC 23 CAT (CONTINUED ON PAGE 2)																	# @ NA WHEN LOCAL WEATHER NOT AVAILABLE. # CAT A, B 700-2, CAT C 800-2, CAT D 800-2 1/4 @ CAT D 800-2 1/4										QUALITY 24 CHECKED									
CITY AND STATE				ELEVATION: 2857 TDZE: 2857				FACILITY IDENTIFIER: I-BLF				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:						SUP:																		
BLUEFIELD, WV				AIRPORT NAME:								ILS OR LOC RWY 23, AMDT 15C						AMDT: 15B																		
				MERCER COUNTY								29 MARCH 2018						DATED 04/28/2016																		

ILS - STANDARD

INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29

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

NOTES, (CONT.):

A VISIBILITY TO 1 1/4 MILE, CAT B TO 1 1/2 MILE AND CATS C AND D TO 3 MILES.

CHART NOTE: CIRCLING NA SE OF RWY 5-23.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BKW VOR/DME ON V258 NORTHWEST BOUND.

QUALITY
24
CHECKED

CITY AND STATE

BLUEFIELD, WV

ELEVATION: 2857

TDZE: 2857

AIRPORT NAME:

MERCER COUNTY

FACILITY
IDENTIFIER:

I-BLF

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 23, AMDT 15C

29 MARCH 2018

SUP:

AMDT: 15B

DATED: 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: BLF VOR/DME							
BKW VOR/DME (IAF)		DROWE/BLF 11.00 DME (NOPT)		175.00 / 20.55				5600		CLIMB TO 3800 THEN CLIMBING RIGHT TURN TO 6000 ON HEADING 020 AND BLF R-340 TO KEGLY/BLF 11.00 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, LT, 339.54 INBOUND. CHART FAS OBST: 3075 TREE 372146N/0810936W. CHART VDP AT 1.16 DME DISTANCE VDP TO THLD 1.66 NM. CHART BLF R-340 AT KEGLY. CHART BLF R-122 AT HECKE. CHART 5600 PRIOR TO BLF VOR/DME IN PROFILE. RIBVE TO RW23: 2.91/55.							
ESTEM/BLF 16.56 DME (IAF)		DROWE/BLF 11.00 DME (NOPT)		224.61 / 5.55 (BLF R-045)				5600									
KEGLY/BLF 11.00 DME CW (IAF)		DROWE/BLF 11.00 DME (NOPT)		11.00 DME ARC				5600									
HECKE/BLF 11.00 DME CCW (IAF)		DROWE/BLF 11.00 DME (NOPT)		11.00 DME ARC				5600									
DROWE/BLF 11.00 DME (IF)		RIBVE/BLF 4.00 DME		224.61 / 7.00 (BLF R-045)				4300									
1. PT <u> L </u> SIDE OF COURSE <u> 044.61 </u> OUTBOUND <u> 5100 </u> FT WITHIN <u> 10 </u> MILES OF <u> BLF VOR/DME </u> (IAF) 2. _____ 3. FAC <u> 224.61 </u> FAF <u> RIBVE/BLF 4.00 DME </u> DIST FAF TO MAP _____ THLD <u> 4.50 </u> 4. MIN. ALT <u> RIBVE/BLF 4.00 DME 4300 </u> 8. MSA FROM: <u> BLF VOR/DME 6000 </u>														MAG VAR: 3W		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-23	3440	1	583	3440	1	583	3440	1 1/2	583	3440	1 3/4	583					
CIRCLING	3440	1	583	3440	1	583	3560	2	703	3560	2 1/4	703					
NOTES: CHART NOTE: DME REQUIRED. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE BECKLEY ALTIMETER SETTING AND INCREASE ALL MDA 460 FEET; INCREASE S-23 VISIBILITY CAT A 1/4 MILE, CAT B 1/2 MILE, CAT C 1 1/2 MILE, CAT D 1 (CONTINUED ON PAGE 2) @ NA WHEN LOCAL WEATHER NOT AVAILABLE. @ CAT D 800-2 1/4																	
CITY AND STATE BLUEFIELD, WV		ELEVATION: 2857		TDZE: 2857		FACILITY IDENTIFIER: BLF		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR RWY 23, AMDT 5C 29 MARCH 2018				SUP VOR/DME RWY 23					
		AIRPORT NAME: MERCER COUNTY		AMDT 5B													
				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.):

1/4 MILE; INCREASE CIRCLING VISIBILITY CAT A 1/4 MILE, CAT B 1/2 MILE CAT C 1 MILE, CAT D 3/4 MILE.

CHART NOTE: VDP NA WHEN USING BECKLEY ALTIMETER SETTING.

CHART NOTE: CIRCLING NA SE OF RWY 5-23.

QUALITY
24
CHECKED

CITY AND STATE

BLUEFIELD, WV

ELEVATION: 2857

TDZE: 2857

AIRPORT NAME:

MERCER COUNTY

FACILITY
IDENTIFIER:

BLF

PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:

VOR RWY 23, AMDT 5C

29 MARCH 2018

SUP: VOR/DME RWY 23

AMDT: 5B

DATED: 04/28/2016

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.									
TERMINAL ROUTES																	MISSED APPROACH									
FROM				TO				COURSE AND DISTANCE				ALTITUDE		LNAV: RW08												
HVQ VOR/DME				OZSAL (TF) (FB) (RNP 2.00)				187.29 / 44.04				5600		CLIMB TO 5000 DIRECT OGINY AND HOLD.												
BLF VOR/DME				ALOYE (TF) (FB) (RNP 2.00)				294.78 / 27.37				5600														
OZSAL (IAF)				WASPA (TF) (FB) (RNP 1.00)				159.37 / 5.00				4000														
ALOYE (IAF)				WASPA (TF) (FB) (RNP 1.00)				349.42 / 5.00				4000														
WASPA (IF)				KAKLY (TF) (FB) (RNP 1.00)				074.40 / 5.00				3400														
(SEE FORM 8260-10)														ADDITIONAL FLIGHT DATA: HOLD NE, RT, 247.47 INBOUND. CHART FAS OBST: 2177 TREE 373621N/0813419W. CHART 4030 TOWER 371534N/811030W CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																										
2. PROFILE STARTS AT WASPA																										
3. FAC: 074.45 FAF: KAKLY DIST FAF TO MAP: 5.00 THLD: 5.00																										
4. MIN. ALT: WASPA 4000, KAKLY 3400																										
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																										
6. MIN GS INCPT: _____ GS ALT AT: _____ OM: _____ MM: _____ IM: _____																										
7. GS ANGLE: _____ TCH: 20:1 IS NOT CLEAR 34:1 IS NOT CLEAR																										
8. MSA FROM: RW08 5600																										
MAG VAR: 5W 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											
LNAV MDA	2460	1	690	2460	1	690	2460	2	690		NA															
CIRCLING	2620	1 1/4	837	2620	1 1/4	837	2620	2 1/2	837		NA															
NOTES: CHART NOTE: RWY 8 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 HVQ VOR/DME AIRWAY RADIALS 119 CW 261. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON BLF VOR/DME AIRWAY RADIALS 239 CW 010.																										
CITY AND STATE PINEVILLE, WV				ELEVATION: 1783 TDZE: 1770 AIRPORT NAME: KEE FIELD				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 8, ORIG-C 29 MARCH 2018						SUP: GPS RWY 8										
																AMDT: ORIG-B										
																DATED 09/04/2003										

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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
KAKLY (FAF)	RW08 (MAP) (TF) (FO) (RNP 0.30)	074.45 / 5.00	
RW08 (MAP)	2183 MSL (CA)	074.45	
2183 MSL	OGINY (DF) (FO) (RNP 1.00)		5000

QUALITY
10
CHECKED

CITY AND STATE
PINEVILLE, WV

ELEVATION: 1783 TDZE: 1770
AIRPORT NAME:
KEE FIELD

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 8, ORIG-C
29 MARCH 2018

SUP: GPS RWY 8
AMDT: ORIG-B
DATED: 09/04/2003

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		LNAV: AXNAP					
SCRIB		EDATY (TF) (FB) (RNP 2.00)		171.41 / 26.73				5000		CLIMBING LEFT TURN 4400 DIRECT EDATY AND HOLD. ADDITIONAL FLIGHT DATA: FAS OBST: 2315 TREE 373707N/0813134W. CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES. FAC CROSSES RWY C/L EXTENDED 3038 FT FROM THLD.					
BLF VOR/DME		EDATY (TF) (FB) (RNP 2.00)		345.99 / 22.59				5900							
BKW VOR/DME (IAF)		EDATY (TF) (FB) (RNP 1.00)		241.78 / 12.83				5000							
EDATY (IF/IAF)		OMIJU (TF) (FB) (RNP 1.00)		254.65 / 5.00				3500							
OMIJU (FAF)		HAKAS/3.50 NM TO AXNAP (TF) (FB) (RNP 0.30)		254.65 / 1.50											
(SEE FORM 8260-10)															

1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)									
2. HOLD E EDATY, RT, 254.65 INBOUND, 4400 FT. IN LIEU OF PT (IAF)									
3. FAC: 254.59 FAF: OMIJU DIST FAF TO MAP: 5.00 THLD: 5.50									
4. MIN. ALT: EDATY 4400, OMIJU 3500, HAKAS/3.50 NM TO AXNAP 3000									
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____									
6. MIN GS INCPT: _____ GS ALT AT: _____ OM: _____ MM: _____ IM: _____									
7. GS ANGLE: _____ TCH: 20:1 IS NOT CLEAR 34:1 IS NOT CLEAR									
8. MSA FROM: AXNAP 5600									

MAG VAR: 5W
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
LNAV MDA	2580	1	809	2580	1 1/4	809	2580	2 1/2	809		NA				
CIRCLING	2620	1 1/4	837	2620	1 1/4	837	2620	2 1/2	837		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 ARRIVAL ON BLF VOR/DME AIRWAY RADIALS 277 CW 074.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON BKW VOR/DME AIRWAY RADIALS 161 CW 324.

QUALITY
10
CHECKED

CITY AND STATE PINEVILLE, WV		ELEVATION: 1783 TDZE: 1771 AIRPORT NAME: KEE FIELD		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 26, ORIG-C 29 MARCH 2018		SUP: GPS RWY 26 AMDT: ORIG-B DATED 09/04/2003	
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US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

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

TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
HAKAS/3.50 NM TO AXNAP	AXNAP (MAP) (TF) (FO) (RNP 0.30)	254.59 / 3.50	
AXNAP (MAP)	2183 MSL (CA)	254.59	
2183 MSL	EDATY (DF) (FO) (RNP 1.00)		4400

QUALITY
10
CHECKED

CITY AND STATE
PINEVILLE, WV

ELEVATION: 1783 TDZE: 1771
AIRPORT NAME:
KEE FIELD

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 26, ORIG-C
29 MARCH 2018

SUP: GPS RWY 26
AMDT: ORIG-B
DATED: 09/04/2003

[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. [31176](#); Amdt. No. [3784](#)

**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 [January 12, 2018](#)

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

John S. Duncan
Director, Flight Standards Service

ADOPTION OF THE AMENDMENT

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

PART 97 – STANDARD INSTRUMENT APPROACH PROCEDURES

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

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

2. Part 97 is amended to read as follows:

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

.....EFFECTIVE UPON PUBLICATION

AIRAC DATE	STATE	CITY	AIRPORT	FDC NUMBER	FDC DATE	SUBJECT
1-Mar-18	CO	Greeley	Greeley-Weld County	7/0041	12/27/17	ILS OR LOC/DME RWY 35, Amdt 3
1-Mar-18	MS	Gulfport	Gulfport-Biloxi Intl	7/0124	1/3/18	RNAV (GPS) RWY 36, Amdt 2
1-Mar-18	MS	Gulfport	Gulfport-Biloxi Intl	7/0125	1/3/18	RNAV (GPS) RWY 18, Amdt 2
1-Mar-18	OR	Ontario	Ontario Muni	7/0542	1/9/18	NDB RWY 33, Amdt 6
1-Mar-18	ME	Eastport	Eastport Muni	7/0546	12/27/17	RNAV (GPS) RWY 15, Amdt 1
1-Mar-18	CO	Greeley	Greeley-Weld County	7/0992	12/27/17	RNAV (GPS) RWY 35, Amdt 1
1-Mar-18	SC	Allendale	Allendale County	7/1027	12/27/17	RNAV (GPS) RWY 35, Orig-A
1-Mar-18	OH	Lima	Lima Allen County	7/1170	1/9/18	RNAV (GPS) RWY 28, Amdt 2A
1-Mar-18	CA	Van Nuys	Van Nuys	7/1257	1/9/18	VOR-B, Amdt 4
1-Mar-18	MN	Hinckley	Field Of Dreams	7/1674	1/9/18	RNAV (GPS) RWY 6, Orig
1-Mar-18	MN	Hinckley	Field Of Dreams	7/1678	1/9/18	RNAV (GPS) RWY 24, Orig
1-Mar-18	OH	Upper Sandusky	Wyandot County	7/1878	12/27/17	VOR-A, Amdt 3C
1-Mar-18	OK	Muskogee	Davis Field	7/2894	12/27/17	Takeoff Minimums and Obstacle DP, Orig
1-Mar-18	TX	La Grange	Fayette Rgnl Air Center	7/3087	12/27/17	RNAV (GPS) RWY 16, Amdt 2A
1-Mar-18	TX	La Grange	Fayette Rgnl Air Center	7/3088	12/27/17	RNAV (GPS) RWY 34, Amdt 2A
1-Mar-18	CO	Greeley	Greeley-Weld County	7/4146	12/27/17	VOR-A, Amdt 10
1-Mar-18	CO	Greeley	Greeley-Weld County	7/4186	12/27/17	RNAV (GPS) RWY 28, Amdt 1
1-Mar-18	CO	Greeley	Greeley-Weld County	7/4191	12/27/17	RNAV (GPS) RWY 17, Amdt 1
1-Mar-18	CO	Greeley	Greeley-Weld County	7/4201	12/27/17	RNAV (GPS) RWY 10, Amdt 1A
1-Mar-18	MN	Thief River Falls	Thief River Falls Rgnl	7/5050	12/29/17	VOR RWY 31, Amdt 8C
1-Mar-18	MS	Oxford	University-Oxford	7/6703	1/9/18	RNAV (GPS) RWY 27, Amdt 1
1-Mar-18	OH	Cambridge	Cambridge Muni	7/6941	12/27/17	RNAV (GPS) RWY 22, Orig-C
1-Mar-18	OH	Cambridge	Cambridge Muni	7/6942	12/27/17	RNAV (GPS) RWY 4, Orig-C
1-Mar-18	MN	Mc Gregor	Isedor Iverson	7/8234	12/27/17	RNAV (GPS) RWY 32, Orig
1-Mar-18	NY	New York	Laguardia	7/9835	12/27/17	RVAV (GPS) Y RWY 22, Amdt 2C

1-Mar-18	NY	New York	Laguardia	7/9836	12/27/17	ILS OR LOC RWY 22, ILS RWY 22 (SA CAT I AND II), Amdt 21
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AIRAC Date: 1 MARCH 2018

FDC **7/0041** GXY IAP GREELEY-WELD COUNTY, Greeley, CO. ILS OR LOC/DME RWY 35, AMDT 3 ... CIRCLING CAT A MDA 5120/HAA 423, CAT B MDA 5200/HAA 503, CAT C MDA 5200/HAA 503. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED USE FORT COLLINS-LOVELAND MUNI ALTIMETER SETTING AND INCREASE DA TO 4950 FEET AND ALL VISIBILITIES 1/4 MILE: INCREASE ALL MDA 100 FEET AND S-LOC 35 CATS C/D AND CIRCLING CAT D VISIBILITY 1/4 MILE. CHART NOTE: WHEN LOCAL ALTIMETER NOT RECEIVED, USE FORT COLLINS/LOVELAND ALTIMETER SETTING AND INCREASE DA TO 4950 FEET AND ALL VISIBILITIES 1/4 SM; INCREASE ALL MDAS 100 FEET AND VISIBILITY CATS C AND D 1/4 SM. DELETE NOTE: VDP NA WITH FORT COLLINS-LOVELAND MUNI ALTIMETER SETTING. CHART NOTE: VDP NA WHEN USING FORT COLLINS/LOVELAND ALTIMETER SETTING. THIS IS ILS OR LOC RWY 35, AMDT 3A. 1709221847-PERM

FDC **7/0124** GPT IAP GULFPORT-BILOXI INTL, Gulfport, MS. RNAV (GPS) RWY 36, AMDT 2... CHANGE: TAA INBOUND COURSES TO READ: 272/30 CW 092/30 (NOPT) TO RUDAW (IF/IAF), AND 092/30 CW TO 272/30 TO RUDAW (IF/IAF).. THIS IS RNAV (GPS) RWY 36, AMDT 2A. 1712070901-PERM

FDC **7/0125** GPT IAP GULFPORT-BILOXI INTL, Gulfport, MS. RNAV (GPS) RWY 18, AMDT 2... CHANGE TAA INBOUND COURSES TO READ: 092/30 CW 272/30 (NOPT) TO BOSWU (IF/IAF), AND 272/30 CW TO 092/30 TO BOSWU (IF/IAF).. THIS IS RNAV (GPS) RWY 18, AMDT 2A. 1712070901-PERM

FDC **7/0542** ONO IAP ONTARIO MUNI, Ontario, OR. NDB RWY 33, AMDT 6... CHANGE COURSE HOSTS INT TO ONO NDB FROM 071.10 TO 072.10. CHANGE COURSE FROM BOI VORTAC TO ONO NDB FROM 295.58 TO 291.58. THIS IS NDB RWY 33, AMDT 6A. 1712071216-PERM

FDC **7/0546** EPM IAP EASTPORT MUNI, Eastport, ME. RNAV (GPS) RWY 15, AMDT 1... CHART NOTE: STRAIGHT-IN RWY 15 NA AT NIGHT, CIRCLING RWY 15 NA AT NIGHT. THIS IS RNAV (GPS) RWY 15, AMDT 1A. 1710101651-PERM

FDC **7/0992** GXY IAP GREELEY-WELD COUNTY, Greeley, CO. RNAV (GPS) RWY 35, AMDT 1... LNAV MDA 5020/HAT 355 ALL CATS, VIS CAT C/D 1 SM. CIRCLING CAT A MDA 5120/HAA 423, CAT B/C MDA 5200/HAA 503. VDP AT 0.99 NM TO RW35ASTERISK. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FORT COLLINS/LOVELAND ALTIMETER SETTING: INCREASE LPV DA TO 4950 FEET AND VISIBILITY 1/8 SM, LNAV/VNAV DA TO 5000 FEET AND VISIBILITY 1/4 SM; INCREASE ALL MDAS 100 FEET AND VISIBILITY LNAV CAT C/D 3/8 SM AND CIRCLING CAT C/D 1/4 SM. DELETE NOTE: VDP AND BARO-VNAV NA WHEN USING FORT COLLINS- LOVELAND MUNI ALTIMETER SETTING. CHART NOTE: VDP AND BARO-VNAV NA WHEN USING FORT COLLINS/LOVELAND ALTIMETER SETTING. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FORT COLLINS - LOVELAND MUNI ALTIMETER SETTING AND INCREASE ALL DA 85 FEET AND MDA 100 FEET, LPV ALL CATS VISIBILITIES TO 1 MILE AND LNAV/VNAV ALL CATS TO 1 1/8 MILE, INCREASE LNAV CAT C/D AND CIRCLING CAT D VISIBILITY 1/4 MILE. CHART FAS OBST: 4762 BLDG 402609N/1043709W. THIS IS RNAV (GPS) RWY 35, AMDT 1A. 1709251452-PERM

FDC **7/1027** AQX IAP ALLENDALE COUNTY, Allendale, SC. RNAV (GPS) RWY 35, ORIG-A... TERMINAL ROUTE LUCNE (IF/IAF) TO HETIN MINIMUM ALTITUDE 1800. THIS IS RNAV (GPS) RWY 35, ORIG-B. 1712071636-PERM

FDC **7/1170** AOH IAP LIMA ALLEN COUNTY, Lima, OH. RNAV (GPS) RWY 28, AMDT 2A... LNAV/VNAV MDA 1397/HAT 422 ALL CATS. THIS IS RNAV (GPS) RWY 28, AMDT 2B. 1706131317-PERM

FDC **7/1257** VNY IAP VAN NUYS, Van Nuys, CA. VOR-B, AMDT 4... ALTERNATE MINIMUMS: CAT A/B 900-2, CAT C 900-2 1/2, CAT D 1000-3. THIS IS VOR-B, AMDT 4A. 1710111107-PERM

FDC **7/1674** 04W IAP FIELD OF DREAMS, Hinckley, MN. RNAV (GPS) RWY 6, ORIG... CHART NOTE: PROCEDURE NA AT NIGHT. CHART NOTE: RWY 6 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: VDP NA WHEN USING MORA ALTIMETER SETTING. DELETE VDP AT 1.69 NM TO RW06. THIS IS RNAV (GPS) RWY 6, ORIG-A. 1711221952-PERM

FDC **7/1678** 04W IAP FIELD OF DREAMS, Hinckley, MN. RNAV (GPS) RWY 24, ORIG... CHART NOTE: PROCEDURE NA AT NIGHT. CHART NOTE: RWY 24 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: VDP NA WHEN USING MORA ALTIMETER SETTING. DELETE VDP AT 1.28 NM TO RW24. THIS IS RNAV (GPS) RWY 24, ORIG-A. 1711221956-PERM

FDC **7/1878** 56D IAP WYANDOT COUNTY, Upper Sandusky, OH. VOR-A, AMDT 3C... YEVUN FIX MINIMUMS (DME REQUIRED) CIRCLING MDA 1420/HAA 590 ALL CATS. THIS IS VOR-A, AMDT 3D. 1710241822-PERM

FDC **7/2894** MKO ODP DAVIS FIELD, Muskogee, OK. TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES ORIG... CHANGE AIRPORT NAME FROM DAVIS FIELD TO MUSKOGEE-DAVIS RGNL. THIS IS TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, ORIG-A. 1710121402-PERM

FDC **7/3087** 3T5 IAP FAYETTE RGNL AIR CENTER, La Grange, TX. RNAV (GPS) RWY 16, AMDT 2A... CHART NOTE: RWY 16 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: WHEN VGSI INOP, CIRCLING RWY 34 NA AT NIGHT. DELETE NOTE: WHEN VGSI INOP, STRAIGHT-IN/CIRCLING RWY 16 PROCEDURE NA AT NIGHT. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. THIS IS RNAV (GPS) RWY 16, AMDT 2B. 1711281429-PERM

FDC **7/3088** 3T5 IAP FAYETTE RGNL AIR CENTER, La Grange, TX. RNAV (GPS) RWY 34, AMDT 2A... CHART NOTE: RWY 34 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: WHEN VGSI INOP, CIRCLING RWY 16 NA AT NIGHT. DELETE NOTE: WHEN VGSI INOP, STRAIGHT-IN/CIRCLING RWY 34 PROCEDURE NA AT NIGHT. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. THIS IS RNAV (GPS) RWY 34, AMDT 2B. 1711281429-PERM

FDC **7/4146** GXY IAP GREELEY-WELD COUNTY, Greeley, CO. VOR-A, AMDT 10... CHART: WESAR FIX MINIMUMS: (DME REQUIRED). DELETE: WESAR FIX MINIMUMS: (DME OR RADAR REQUIRED). CHART NOTE: DME REQUIRED. DELETE ALL REFERENCE TO RADAR AT WESAR AND YURUK. WESAR FIX MINIMUMS (DME REQUIRED) CIRCLING CAT A MDA 5120/HAA 423, CAT B/C MDA 5200/HAA 503. CHART CIRCLING ICON. DELETE NOTE WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FORT COLLINS-LOVELAND MUNI ALTIMETER SETTING AND INCREASE ALL MDA 100 FEET; INCREASE CAT C AND D AND WESAR FIX MINIMUMS CAT D VISIBILITY 1/4 MILE. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FORT COLLINS/LOVELAND ALTIMETER SETTING AND INCREASE ALL MDA 100 FEET AND VISIBILITY CAT C/D AND WESAR FIX MINIMUMS CAT C/D 1/4 SM. DELETE PROFILE NOTE: ASTERISK5400 WHEN USING FORT COLLINS-LOVELAND MUNII ALTIMETER SETTING. CHART PROFILE NOTE: ASTERISK5400 WHEN USING FORT COLLINS/LOVELAND ALTIMETER SETTING. THIS IS VOR-A, AMDT 10A. 1709141917-PERM

FDC **7/4186** GXY IAP GREELEY-WELD COUNTY, Greeley, CO. RNAV (GPS) RWY 28, AMDT 1... CIRCLING CAT A MDA 5120/HAA 423, CAT B/C MDA 5200/HAA 503. DELETE NOTE: BARO-VNAV AND VDP NA WHEN USING FORT COLLINS-LOVELAND MUNI ALTIMETER SETTING. CHART NOTE: BARO-VNAV AND VDP NA WHEN USING FORT COLLINS/LOVELAND ALTIMETER SETTING. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FORT COLLINS-LOVELAND MUNI ALTIMETER SETTING AND INCREASE ALL DA 85 FT AND ALL MDA 100 FT. INCREASE LPV ALL CATS VISIBILITY 1/8 MILE, INCREASE LNAV/VNAV ALL CATS VISIBILITY 3/8 MILE, INCREASE LNAV VISIBILITY CATS C AND D 1/4 MILE AND CIRCLING CAT D VISIBILITY 1/4 MILE. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FORT COLLINS/LOVELAND ALTIMETER SETTING: INCREASE LPV DA TO 4935 FEET AND VISIBILITY 1/8 SM, LNAV/VNAV DA TO 4985 FEET AND VISIBILITY 1/4 SM; INCREASE ALL MDAS 100 FEET AND VISIBILITY CATS C AND D 1/4 SM. THIS IS RNAV (GPS) RWY 28, AMDT 1A. 1709141932-PERM

FDC **7/4191** GXY IAP GREELEY-WELD COUNTY, Greeley, CO. RNAV (GPS) RWY 17, AMDT 1... CIRCLING CATS B/C MDA 5200/HAA 503. DELETE NOTE: VDP AND BARO-VNAV NA WHEN USING FORT COLLINS/LOVELAND MUNI ALTIMETER. CHART NOTE: VDP AND BARO-VNAV NA WHEN USING FORT COLLINS/LOVELAND ALTIMETER SETTING. CHART NOTE: RWY 17 HELICOPTER VISIBILITY BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FORT COLLINS-LOVELAND MUNI ALTIMETER SETTING AND INCREASE ALL DA 85 FEET AND MDA 100 FT, INCREASE LPV ALL CATS VISIBILITY 1/8 MILE, INCREASE LNAV/VNAV ALL CATS VISIBILITY 3/8 MILE, INCREASE LNAV VISIBILITY CATS C AND D 1/4 MILE, AND CIRCLING CAT C VISIBILITY 1/8 MILE, CAT D VISIBILITY 1/4 MILE. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FORT COLLINS/LOVELAND ALTIMETER SETTING: INCREASE LPV DA TO 4982 FEET AND VISIBILITY 1/8 SM AND LNAV/VNAV DA TO 5032 FEET AND VISIBILITY 1/4 SM; INCREASE ALL MDAS 100 FEET AND VISIBILITY LNAV CAT C 1/8 SM AND CIRCLING CAT C/D 1/4 SM. THIS IS RNAV (GPS) RWY 17, AMDT 1A. 1709141936-PERM

FDC **7/4201** GXY IAP GREELEY-WELD COUNTY, Greeley, CO. RNAV (GPS) RWY 10, AMDT 1A... CIRCLING CAT A MDA 5120/HAA 423, CAT B/C MDA 5200/HAA 503. DELETE NOTE: BARO-VNAV AND VDP NA WHEN USING FORT COLLINS-LOVELAND MUNI ALTIMETER SETTING. CHART NOTE: BARO-VNAV AND VDP NA WHEN USING FORT COLLINS/LOVELAND ALTIMETER SETTING. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED USE FORT COLLINS-LOVELAND MUNI ALTIMETER SETTING AND INCREASE ALL DA 85 FEET AND ALL MDA 100 FEET; INCREASE LPV AND LNAV/VNAV VISIBILITY ALL CATS 3/8 MILE; LNAV CAT C AND D AND CIRCLING CAT D VISIBILITY 1/4 MILE. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FORT COLLINS/LOVELAND ALTIMETER SETTING: INCREASE ALL DA TO 4996 FEET AND ALL VISIBILITIES 1/4 SM; INCREASE ALL MDAS 100 FEET AND VISIBILITY CATS C AND D 1/4 SM. THIS IS RNAV (GPS) RWY 10, AMDT 1B. 1709141942-PERM

FDC **7/5050** TVF IAP THIEF RIVER FALLS RGNL, Thief River Falls, MN. VOR RWY 31, AMDT 8C... DELETE TDZE 1113, CHART TDZE 1114. CHART APT ELEV 1119. S-31 MDA 1660/HAT 546 ALL CATS, VISIBILITY CAT C/D 1-1/8. CIRCLING CATS A/B/C MDA 1660/HAA 541, VISIBILITY CAT C 1-5/8. CIRCLING CAT D HAA 561. CHANGE MISSED APPROACH INSTRUCTIONS TO READ: CLIMB TO 2700 ON TVF R-297 THEN LEFT TURN DIRECT TVF VOR/DME AND HOLD. THIS IS VOR RWY 31, AMDT 8D. 1709151916-PERM

FDC **7/6703** UOX IAP UNIVERSITY-OXFORD, Oxford, MS. RNAV (GPS) RWY 27, AMDT 1... DELETE DESCENT ANGLE: ZAGUM TO RW27: 3.43/53.4. ADD DESCENT ANGLE: ZAGUM TO RW27: 3.50/53.4. CHART NOTE: RWY 27 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM N/A. THIS IS RNAV (GPS) RWY 27, AMDT 1A. 1711011553-PERM

FDC **7/6941** CDI IAP CAMBRIDGE MUNI, Cambridge, OH. RNAV (GPS) RWY 22, ORIG-C... CIRCLING CAT B MDA 1520/HAA 721. CHART NOTE: CIRCLING RWY 4 NA AT NIGHT. CHART NOTE: RWY 22 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: RWY 4 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA. DELETE NOTE: NIGHT LANDING RWY 4 NA. THIS IS RNAV (GPS) RWY 22, ORIG-D. 1709061359-PERM

FDC **7/6942** CDI IAP CAMBRIDGE MUNI, Cambridge, OH. RNAV (GPS) RWY 4, ORIG-C... CIRCLING CAT B MDA 1520/HAA 721. CHART NOTE: STRAIGHT-IN RWY 4 NA AT NIGHT, CIRCLING RWY 4 NA AT NIGHT. CHART NOTE: RWY 4 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. DELETE NOTE: NIGHT LANDING RWY 4 NA. THIS IS RNAV (GPS) RWY 4, ORIG-D. 1709061400-PERM

FDC **7/8234** HZX IAP ISEDOR IVERSON, Mc Gregor, MN. RNAV (GPS) RWY 32, ORIG... CIRCLING CAT B MDA 1700/HAA 472. CHART CIRCLING ICON. DELETE NOTE: PROCEDURE NA AT NIGHT. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE AITKIN ALTIMETER SETTING AND INCREASE ALL MDAS 40 FEET. DELETE NOTE: IF LOCAL ALTIMETER SETTING NOT RECEIVED, USE AITKIN ALTIMETER SETTING AND INCREASE ALL MDAS 40 FEET. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {3.00}/TCH {19}). CHART NOTE: VDP NA WHEN USING AITKIN ALTIMETER SETTING. DELETE PROFILE NOTE: VDP NA WITH AITKIN ALTIMETER SETTING. ALTERNATE MINIMUMS: STANDARD. CHART VDP AT 1.10 NM TO RW32. THIS IS RNAV (GPS) RWY 32, ORIG-A. 1710051416-PERM

FDC **7/9835** LGA IAP LAGUARDIA, New York, NY. RNAV (GPS) Y RWY 22, AMDT 2C... DELETE GS ALT AT: GREKO 1869. CHART GS ALT AT: GREKO 1900. THIS IS RNAV (GPS) Y RWY 22, AMDT 2D. 1712070901-PERM

FDC **7/9836** LGA IAP LAGUARDIA, New York, NY. ILS OR LOC RWY 22, ILS RWY 22 (SA CAT I AND II), AMDT 21... DELETE GS ALT AT: GREKO 1869. CHART GS ALT AT: GREKO 1900. THIS IS ILS OR LOC RWY 22, ILS RWY 22 (SA CAT I AND II), AMDT 21A. 1712070901-PERM