

U.S. Department
of Transportation

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

**Federal Aviation
Administration**

Transmittal Letter 18-25

October 19, 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. [31220](#); Amdt. No. [3823](#)]

**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 **OCTOBER 19, 2018**.



Rick Domingo
Executive Director, Flight Standards Service

ADOPTION OF THE AMENDMENT

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

Part 97—Standard Instrument Approach Procedures

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

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

2. Part 97 is amended to read as follows:

Effective 6 December 2018

Chandler, AZ, Stellar Airpark, Takeoff Minimums and Obstacle DP, Amdt 3
 Porterville, CA, Porterville Muni, Takeoff Minimums and Obstacle DP, Amdt 2A
 Hollywood, FL, North Perry, RNAV (GPS) RWY 10R, Orig-C
 Hollywood, FL, North Perry, RNAV (GPS) RWY 28R, Orig-C
 Perry, GA, Perry-Houston County, ILS OR LOC RWY 36, Orig-A
 Provincetown, MA, Provincetown Muni, ILS OR LOC RWY 7, Amdt 9A
 Chillicothe, MO, Chillicothe Muni, RNAV (GPS) RWY 32, Amdt 1A
 Hattiesburg-Laurel, MS, Hattiesburg-Laurel Rgnl, Takeoff Minimums and Obstacle DP, Amdt 4
 Whiteville, NC, Columbus County Muni, NDB RWY 6, Amdt 6
 Whiteville, NC, Columbus County Muni, RNAV (GPS) RWY 6, Amdt 1
 Wurtsboro, NY, Wurtsboro-Sullivan County, Takeoff Minimums and Obstacle DP, Amdt 2
 Findlay, OH, Findlay, Takeoff Minimums and Obstacle DP, Amdt 1

Effective 3 January 2019

Anchorage, AK, Ted Stevens Anchorage Intl, RNAV (RNP) RWY 33, Amdt 1
 Buckland, AK, Buckland, RNAV (GPS) RWY 11, Amdt 2A
 Dillingham, AK, Dillingham, RNAV (GPS) RWY 1, Amdt 2D
 Dillingham, AK, Dillingham, VOR RWY 1, Amdt 9D
 Kotlik, AK, Kotlik, RNAV (GPS) RWY 2, Orig-D
 Kotzebue, AK, Ralph Wien Memorial, ILS OR LOC RWY 9, Amdt 1A
 Kotzebue, AK, Ralph Wien Memorial, RNAV (GPS) RWY 9, Orig-C
 Kotzebue, AK, Ralph Wien Memorial, RNAV (GPS) RWY 27, Orig-C
 Kotzebue, AK, Ralph Wien Memorial, VOR RWY 9, Orig-D
 Kotzebue, AK, Ralph Wien Memorial, VOR RWY 27, Orig-B
 Bay Minette, AL, Bay Minette Muni, RNAV (GPS) RWY 8, Amdt 1B
 Reform, AL, North Pickens, RNAV (GPS) RWY 19, Amdt 1B
 Mena, AR, Mena Intermountain Muni, Takeoff Minimums and Obstacle DP, Amdt 6
 Bullhead City, AZ, Laughlin/Bullhead Intl, RNAV (GPS) RWY 16, Amdt 2C
 Willits, CA, Ells Field-Willits Muni, RNAV (GPS) RWY 34, Amdt 1C
 Fort Morgan, CO, Fort Morgan Muni, RNAV (GPS) RWY 14, Amdt 1A
 Oxford, CT, Waterbury-Oxford, Takeoff Minimums and Obstacle DP, Amdt 6
 Daytona Beach, FL, Daytona Beach Intl, VOR RWY 16, Amdt 18C, CANCELED
 Deland, FL, Deland Muni-Sidney H Taylor Field, VOR/DME RWY 23, Orig-A, CANCELED
 Marco Island, FL, Marco Island Executive, RNAV (GPS) RWY 17, Orig-A
 Marco Island, FL, Marco Island Executive, RNAV (GPS) RWY 35, Orig-B
 Marco Island, FL, Marco Island Executive, Takeoff Minimums and Obstacle DP, Amdt 3
 Marco Island, FL, Marco Island Executive, VOR/DME RWY 17, Amdt 7, CANCELED
 Miami, FL, Miami Intl, ILS OR LOC RWY 9, Amdt 10B

New Smyrna Beach, FL, New Smyrna Beach Muni, Takeoff Minimums and Obstacle DP, Amdt 3
 Ormond Beach, FL, Ormond Beach Muni, Takeoff Minimums and Obstacle DP, Orig-A
 Ormond Beach, FL, Ormond Beach Muni, VOR RWY 17, Amdt 2B, CANCELED
 Sebring, FL, Sebring Rgnl, RNAV (GPS) RWY 32, Orig-B
 St Petersburg, FL, Albert Whitted, RNAV (GPS) RWY 18, Orig-E
 St Petersburg, FL, Albert Whitted, Takeoff Minimums and Obstacle DP, Amdt 3
 Lagrange, GA, Lagrange-Callaway, VOR RWY 13, Amdt 16A
 Mount Pleasant, IA, Mount Pleasant Muni, NDB RWY 33, Amdt 6B, CANCELED
 Bonners Ferry, ID, Boundary County, KARPS TWO, Graphic DP
 Chicago, IL, Chicago O'Hare Intl, ILS OR LOC RWY 9L, ILS RWY 9L SA CAT I, ILS RWY 9L
 CAT II, ILS RWY 9L CAT III, Amdt 4A
 Chicago, IL, Chicago O'Hare Intl, ILS OR LOC RWY 27R, ILS RWY 27R SA CAT I, ILS RWY 27R
 CAT II, ILS RWY 27R CAT III, Amdt 4A
 Chicago, IL, Chicago O'Hare Intl, RNAV (GPS) RWY 9L, Amdt 3B
 Chicago, IL, Chicago O'Hare Intl, RNAV (GPS) RWY 27R, Amdt 3B
 Decatur, IL, Decatur, ILS OR LOC RWY 6, Amdt 14
 Decatur, IL, Decatur, LOC BC RWY 24, Amdt 11
 Decatur, IL, Decatur, RNAV (GPS) RWY 30, Amdt 2
 Decatur, IL, Decatur, RNAV (GPS) RWY 36, Amdt 2
 Decatur, IL, Decatur, VOR RWY 36, Amdt 17
 Fairfield, IL, Fairfield Muni, Takeoff Minimums and Obstacle DP, Amdt 3
 Paris, IL, Edgar County, RNAV (GPS) RWY 9, Amdt 1A
 Paris, IL, Edgar County, RNAV (GPS) RWY 18, Orig-A
 Paris, IL, Edgar County, RNAV (GPS) RWY 27, Amdt 1B
 Paris, IL, Edgar County, RNAV (GPS) RWY 36, Orig-A
 Columbus, IN, Columbus Muni, ILS OR LOC RWY 23, Amdt 8
 Connersville, IN, Mettel Field, RNAV (GPS) RWY 18, Amdt 2
 Connersville, IN, Mettel Field, RNAV (GPS) RWY 36, Amdt 3
 Hutchinson, KS, Hutchinson Rgnl, RNAV (GPS) RWY 4, Amdt 1A
 Hutchinson, KS, Hutchinson Rgnl, RNAV (GPS) RWY 35, Orig-A
 Kingman, KS, Kingman Airport - Clyde Cessna Field, RNAV (GPS) RWY 18, Amdt 1A
 Neodesha, KS, Neodesha Muni, Takeoff Minimums and Obstacle DP, Orig
 Scott City, KS, Scott City Muni, NDB RWY 35, Amdt 1A, CANCELED
 Tribune, KS, Tribune Muni, RNAV (GPS) RWY 17, Orig-A
 Owensboro, KY, Owensboro-Daviess County Rgnl, VOR RWY 36, Amdt 19B
 Oakdale, LA, Allen Parish, NDB RWY 36, Amdt 1, CANCELED
 Baldwin, MI, Baldwin Muni, Takeoff Minimums and Obstacle DP, Amdt 1
 Beaver Island, MI, Beaver Island, NDB RWY 27, Amdt 1A, CANCELED
 Frankfort, MI, Frankfort Dow Memorial Field, VOR/DME-A, Amdt 1A, CANCELED
 Manistique, MI, Schoolcraft County, VOR RWY 28, Amdt 1A, CANCELED
 Niles, MI, Jerry Tyler Memorial, RNAV (GPS) RWY 33, Orig-B
 Pellston, MI, Pellston Rgnl Airport of Emmet County, RNAV (GPS) RWY 5, Orig-C
 Sault STE Marie, MI, Chippewa County Intl, RNAV (GPS) RWY 16, Amdt 1B
 Rochester, MN, Rochester Intl, COPTER ILS Y OR LOC Y RWY 31, Amdt 3

Rochester, MN, Rochester Intl, ILS Z OR LOC Z RWY 31, ILS RWY 31 SA CAT I, ILS RWY 31 SA CAT II, Amdt 23
 Rochester, MN, Rochester Intl, RNAV (GPS) RWY 31, Amdt 2
 Cameron, MO, Cameron Memorial, RNAV (GPS) RWY 17, Amdt 1A
 Cameron, MO, Cameron Memorial, RNAV (GPS) RWY 35, Amdt 1A
 Poplar Bluff, MO, Poplar Bluff Muni, RNAV (GPS) RWY 18, Orig-A
 Poplar Bluff, MO, Poplar Bluff Muni, RNAV (GPS) RWY 36, Orig-A
 Sullivan, MO, Sullivan Regional, NDB RWY 24, Orig-B, CANCELED
 Grenada, MS, Grenada Muni, RNAV (GPS) RWY 4, Amdt 1C
 Grenada, MS, Grenada Muni, RNAV (GPS) RWY 13, Amdt 1B
 Grenada, MS, Grenada Muni, RNAV (GPS) RWY 22, Amdt 1C
 Grenada, MS, Grenada Muni, RNAV (GPS) RWY 31, Amdt 1B
 Billings, MT, Billings Logan Intl, ILS Y OR LOC Y RWY 10L, Amdt 26A
 Bozeman, MT, Bozeman Yellowstone Intl, ILS OR LOC RWY 12, Amdt 9C
 Bozeman, MT, Bozeman Yellowstone Intl, RNAV (GPS)-A, Amdt 2C
 Bozeman, MT, Bozeman Yellowstone Intl, RNAV (GPS) Y RWY 12, Orig-C
 Bozeman, MT, Bozeman Yellowstone Intl, VOR RWY 12, Amdt 15C
 Concord, NC, Concord-Padgett Rgnl, ILS OR LOC RWY 20, Amdt 2A
 Concord, NC, Concord-Padgett Rgnl, RNAV (GPS) RWY 2, Amdt 1A
 Concord, NC, Concord-Padgett Rgnl, RNAV (GPS) RWY 20, Orig-A
 Concord, NC, Concord-Padgett Rgnl, Takeoff Minimums and Obstacle DP, Amdt 3A
 Star, NC, Montgomery County, RNAV (GPS) RWY 21, Orig-B
 Andover, NJ, Aeroflex-Andover, Takeoff Minimums and Obstacle DP, Amdt 2
 Pittstown, NJ, Sky Manor, RNAV (GPS) RWY 7, Amdt 1A
 Pittstown, NJ, Sky Manor, RNAV (GPS) RWY 25, Orig-B
 Lovelock, NV, Derby Field, Takeoff Minimums and Obstacle DP, Amdt 1
 Middletown, NY, Randall, RNAV (GPS) RWY 8, Amdt 1B
 Middletown, NY, Randall, RNAV (GPS) RWY 26, Amdt 1B
 Middletown, NY, Randall, VOR RWY 8, Amdt 7B
 Rochester, NY, Greater Rochester Intl, RNAV (GPS) RWY 10, Amdt 1B
 Rome, NY, Griffiss Intl, Takeoff Minimums and Obstacle DP, Amdt 1A
 Cincinnati, OH, Cincinnati Muni Airport Lunken Field, ILS OR LOC RWY 21L, Amdt 20
 Cincinnati, OH, Cincinnati Muni Airport Lunken Field, LOC BC RWY 3R, Amdt 9
 Cincinnati, OH, Cincinnati Muni Airport Lunken Field, NDB RWY 25, Amdt 12B, CANCELED
 Defiance, OH, Defiance Memorial, RNAV (GPS) RWY 12, Amdt 1A
 Hillsboro, OH, Highland County, NDB RWY 23, Amdt 5A, CANCELED
 Wadsworth, OH, Wadsworth Muni, VOR-A, Amdt 2A
 Idabel, OK, Mc Curtain County Rgnl, RNAV (GPS) RWY 2, Amdt 1
 Idabel, OK, Mc Curtain County Rgnl, RNAV (GPS) RWY 20, Amdt 1
 Tahlequah, OK, Tahlequah Muni, NDB RWY 17, Amdt 2, CANCELED
 Lebanon, PA, Keller Brothers, RNAV (GPS) RWY 7, Orig-B
 Lebanon, PA, Keller Brothers, RNAV (GPS) RWY 25, Orig-B
 Pickens, SC, Pickens County, NDB RWY 5, Amdt 1, CANCELED
 Chattanooga, TN, Lovell Field, ILS OR LOC RWY 2, Amdt 7D
 Chattanooga, TN, Lovell Field, ILS OR LOC RWY 20, ILS RWY 20 CAT II, Amdt 36C

Chattanooga, TN, Lovell Field, RNAV (GPS) RWY 2, Amdt 1A
 Chattanooga, TN, Lovell Field, RNAV (GPS) RWY 15, Amdt 1
 Chattanooga, TN, Lovell Field, RNAV (GPS) RWY 20, Amdt 1A
 Chattanooga, TN, Lovell Field, RNAV (GPS) RWY 33, Amdt 1
 Chattanooga, TN, Lovell Field, Takeoff Minimums and Obstacle DP, Amdt 12
 Chattanooga, TN, Lovell Field, VOR RWY 33, Amdt 17B
 Mountain City, TN, Johnson County, RNAV (GPS) RWY 6, Orig-A
 Mountain City, TN, Johnson County, RNAV (GPS) RWY 24, Orig-A
 Burnet, TX, Burnet Muni Kate Craddock Field, Takeoff Minimums and Obstacle DP, Amdt 2
 College Station, TX, Easterwood Field, VOR OR TACAN RWY 11, Amdt 19E
 Houston, TX, Houston-Southwest, RNAV (GPS) RWY 9, Amdt 2A
 Kerrville, TX, Kerrville Muni/Louis Schreiner Field, Takeoff Minimums and Obstacle DP, Amdt 2
 Port Isabel, TX, Port Isabel-Cameron County, VOR/DME-B, Amdt 3A, CANCELED
 Brookneal, VA, Brookneal/Campbell County, RNAV (GPS) RWY 24, Amdt 1B
 Lynchburg, VA, Lynchburg Rgnl/Preston Glenn Fld, ILS OR LOC RWY 4, Amdt 17B
 Lynchburg, VA, Lynchburg Rgnl/Preston Glenn Fld, RNAV (GPS) RWY 4, Orig-B
 Lynchburg, VA, Lynchburg Rgnl/Preston Glenn Fld, RNAV (GPS) RWY 22, Orig-B
 Lynchburg, VA, Lynchburg Rgnl/Preston Glenn Fld, VOR RWY 22, Amdt 8D
 Kenosha, WI, Kenosha Rgnl, RNAV (GPS) RWY 15, Orig-A
 Kenosha, WI, Kenosha Rgnl, RNAV (GPS) RWY 25R, Orig-A
 Kenosha, WI, Kenosha Rgnl, RNAV (GPS) RWY 33, Orig-A
 Marshfield, WI, Marshfield Muni, NDB RWY 16, Amdt 11, CANCELED
 Middleton, WI, Middleton Muni - Morey Field, Takeoff Minimums and Obstacle DP, Amdt 2
 Milwaukee, WI, General Mitchell Intl, LOC RWY 25L, Amdt 6A
 Logan, WV, Logan County, RNAV (GPS) RWY 6, Amdt 1A
 Milton, WV, Ona Airpark, RNAV (GPS)-A, Orig-A
 Morgantown, WV, Morgantown Muni-Walter L Bill Hart Fld, RNAV (GPS) RWY 36, Amdt 1
 Saratoga, WY, Shively Field, Takeoff Minimums and Obstacle DP, Orig-A

**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
CHANDLER, AZ	STELLAR AIRPARK	6 DECEMBER 2018	3

TAKEOFF MINIMUMS:
RWY 17, 35: STANDARD.

TEXTUAL DEPARTURE PROCEDURES:
RWY 17: CLIMBING LEFT TURN HEADING 150 THENCE...
RWY 35: CLIMBING RIGHT TURN HEADING 190 THENCE...

... INTERCEPT TFD VORTAC R-350 SOUTHBOUND TO TFD VORTAC.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:
NOTE: RWY 17, POLE 648 FT FROM DER, 482 FT LEFT OF CENTERLINE, 52 FT AGL/1212 FT MSL.
POLE 656 FT FROM DER, 190 FT LEFT OF CENTERLINE, 52 FT AGL/1213 FT MSL.
POLES BEGINNING 661 FT FROM DER, 39 FT RIGHT OF CENTERLINE, UP TO 34 FT AGL/1196 FT MSL.
POLES BEGINNING 671 FT FROM DER, 420 FT RIGHT OF CENTERLINE, UP TO 52 FT AGL/1216 FT MSL.
TRANSMISSION LINE, SIGN BEGINNING 869 FT FROM DER, 288 FT RIGHT OF CENTERLINE, UP TO 50 FT AGL/1224 FT MSL.
SIGN 906 FT FROM DER, 260 FT LEFT OF CENTERLINE, 42 FT AGL/1214 FT MSL.
NOTE: RWY 35, POLE 72 FT FROM DER, 357 FT LEFT OF CENTERLINE, 30 FT AGL/1208 FT MSL.
BUILDING 777 FT FROM DER, 300 FT RIGHT OF CENTERLINE, 30 FT AGL/1218 FT MSL.
BUILDING 1282 FT FROM DER, 767 FT RIGHT OF CENTERLINE, 45 FT AGL/1233 FT MSL.

CONTROLLING OBSTACLES:
OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 17: 4511 AAO 331100.00N/1121145.00W, RWY 35: 3049 FT MSL TOWER 332002.00N/1120342.00W.

REMARKS:

FLIGHT INSPECTED BY:	<i>Digitally signed by</i>	OFFICE SYMBOL:	DATE:
THOMAS E MOLOKIE	ALLAN WILL Oct 02, 2018	FICO	9/26/18
DEVELOPED BY:	<i>Digitally signed by</i>	OFFICE SYMBOL:	DATE:
MICHAEL R. GARRITY JR.	MICHAEL GARRITY Oct 01, 2018	AJV-5421	07/09/2018
APPROVED BY:	<i>Digitally signed by</i>	OFFICE SYMBOL:	DATE:
JULIE MORGAN	ALLAN WILL Oct 02, 2018	AJV-5420	

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

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

OTHER:
ZAB, PHX APCH, AMGR



**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
CHANDLER, AZ	STELLAR AIRPARK	6 DECEMBER 2018	3

CHANGES - REASONS:

1. CHANGED RWY 17 FROM TURN LEFT, CLIMB VIA HEADING 150 TO READ CLIMBING LEFT TURN HEADING 150 THENCE... IN TEXTUAL DEPARTURE PROCEDURE SECTION - VIA NO LONGER PERMITTED IN WORDING.
2. CHANGED RWY 35 FROM TURN RIGHT TO READ CLIMBING RIGHT TURN HEADING 200 THENCE... IN TEXTUAL DEPARTURE PROCEDURE SECTION - HEADING PROVIDED FOR INTERCEPT/IMPROVE READABILITY WITH CHANGE TO ALL AIRCRAFT PORTION OF PROCEDURE.
3. CHANGED ALL AIRCRAFT CLIMB VIA TFD R 350 DIRECT TFD TO READ ... INTERCEPT TFD VORTAC R-350 SOUTHBOUND TO TFD VORTAC IN TEXTUAL DEPARTURE SECTION - VIA NO LONGER PERMITTED IN WORDING/IMPROVE READABILITY.
4. ADDED LOW CLOSE-IN OBSTACLES TO TAKEOFF OBSTACLE NOTES SECTION - REQUIRED BY CRITERIA/TARGETS CALCULATIONS//FDC 8/5903.
5. ADDED RWY 17: 4511 AAO 331100.00N/1121145.00W AND RWY 35: 3049 FT MSL TOWER 332002.00N/1120342.00W AS OBSTACLES MANDATING ODP ROUTE DEVELOPMENT IN CONTROLLING OBSTACLES SECTION - TARGETS CALCULATIONS.

10/01/2018: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 07/09/18.

1. CHANGED RWY 35 HEADING FROM 200 TO READ 190 IN TAKEOFF DEPARTURE PROCEDURES SECTION.



**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
PORTERVILLE, CA	PORTERVILLE MUNI	6 DECEMBER 2018	2A

TAKEOFF MINIMUMS:

RWY 12: STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 600.

RWY 30: STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

RWY 12: CLIMBING RIGHT TURN THENCE...

RWY 30: CLIMBING LEFT TURN THENCE...

...CLIMB DIRECT TTE VOR/DME. AIRCRAFT DEPARTING TTE VOR/DME R-146 CW R-330 CLIMB ON COURSE. ALL OTHER AIRCRAFT CLIMB IN TTE VOR/DME HOLDING PATTERN (HOLD NW, RT, 143 INBOUND) TO CROSS TTE R-331 CW R-060, 8600; R-061 CW R-145, 7000.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 12, TREE 618 FT FROM DER, 241 FT RIGHT OF CENTERLINE, 460 FT MSL.

TREES BEGINNING 776 FT FROM DER, 193 FT LEFT OF CENTERLINE, UP TO 467 FT MSL.

POLE 906 FT FROM DER, 588 FT LEFT OF CENTERLINE, 43 FT AGL/491 FT MSL.

NOTE: RWY 30, FENCE 176 FT FROM DER, 499 FT RIGHT OF CENTERLINE, 6 FT AGL/436 FT MSL.

CONTROLLING OBSTACLES:

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 12, 30: 14002 FT MSL AAO 363134.20N/1182842.39W. 10109 FT MSL AAO 360036.35N/1182326.94W.

REMARKS:

RWY 12 CG/CGTA REQUIRED TO MITIGATE CIH PATTERN SLOPING SURFACE PENETRATION.

FLIGHT INSPECTED BY:

Digitally signed by

DEZ SILAGYI

Sep 14, 2018

OFFICE SYMBOL:

FICO

DATE:

9/9/18

DEVELOPED BY:

Digitally signed by

DEZ SILAGYI

Sep 14, 2018

OFFICE SYMBOL:

AJV-5421

DATE:

07/11/2018

APPROVED BY:

Digitally signed by

DEZ SILAGYI

Sep 14, 2018

OFFICE SYMBOL:

AJV-5420

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

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

☐☒☒☐☐☒

OTHER:

ZLA, BFL APCH, RIU FSS, AMGR

CHANGES - REASONS:

1. TAKEOFF MINIMUMS SECTION: CHANGED RWY 12 FROM 200-1 OR STANDARD WITH MINIMUM CLIMB RATE OF 220' PER NM TO 600' TO READ STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 600 - 200-1 NOT PUBLISHED PER CRITERIA/MITIGATED CIH PATTERN SLOPING SURFACE PENETRATION.

2. TAKEOFF DEPARTURE PROCEDURES SECTION: REMOVED NOTE: 559' FROST FAN 3000' ESE RWY 12 - NEW SURVEY/OBSTACLE REMOVED.

3. TAKEOFF OBSTACLE NOTES SECTION: ADDED TAKEOFF OBSTACLE NOTES - REQUIRED BY CRITERIA/IFDC 8/2704 IMPLEMENTED/TARGETS CALCULATIONS.

4. CONTROLLING OBSTACLES SECTION: REMOVED 14591 TREE/10080 TREE AND ADDED 14002 AAO/10109 AAO AS OBSTACLES MANDATING ODP ROUTE DEVELOPMENT - 14591 TREE OUTSIDE TARGETS DIVERSE DEPARTURE EVALUATION AREA/10080 TREE NOT HIGHEST OBSTACLE IN TTE R-061 CW R-145 SECTOR/MAP STUDY.

QUALITY
9
CHECKED

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> NORTH PERRY	<u>AIRPORT ID</u> KHWO	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 10R	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> HOLLYWOOD	<u>STATE</u> FL
<u>AIRPORT ELEVATION</u> 9	<u>TDZE</u> 8	<u>SUPERSEDED</u> RNAV (GPS) RWY 10R	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 06/25/2015	<u>MAG VAR</u> 6W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 6 DECEMBER 2018	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2015

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
FRRDY	IF	NICYI		TF	FB	1.00	096.23	7.43	1600
NICYI	FAF	HIMIX	MAP	TF	FO	0.30	096.29	4.01	
HIMIX	MAP	409 MSL		CA			096.29		
409 MSL		FRRDY		DF	FO	1.00			2000

MISSED APPROACH

MAP:

LNAV: HIMIX

MISSED APPROACH INSTRUCTIONS:

CLIMBING LEFT TURN TO 2000 DIRECT FRRDY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- PROFILE STARTS AT FRRDY
- FAC:** 096.29 **FAF:** NICYI **DIST FAF TO MAP:** 4.01 **DIST FAF TO THLD:** 5.01
- MIN ALT:** FRRDY 2000, NICYI 1600
- DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **GS ANT:**
- MIN GP INCPT:** **GP ALT AT FAF :** **OM:** **MM:** **IM:**
- GP ANGLE:** **34:1:** IS NOT CLEAR **20:1:** IS CLEAR **TCH:**
- MSA FROM:** HIMIX 2100

PBN REQUIREMENTS NOTE:

RNP APCH.



NOTES:

CHART NOTE: RWY 10R HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT FRRDY ON V157-511-599 NORTHWEST BOUND.
CHART NOTE: CIRCLING RWY 01R, 10L, 19L, 28R NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART OPA-LOCKA EXECUTIVE AIRPORT
NICYI TO RW10R: 2.91/45.
CHART FAS OBST: 222 TOWER 260027N/0801618W.
HOLD W, RT, 096.23 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	480	1 1/4	472	480	1 1/4	472	480	1 3/8	472		NA				
CIRCLING	560	1 1/4	551	560	1 1/4	551	560	1 1/2	551		NA				

CHANGES - REASONS

20:1 PENETRATION NOTE CHANGED FROM WHEN VGSI INOP, CIRCLING RWY 19L AND 01R NA AT NIGHT "TO" CIRCLING RWY 01R, 10L, 19L, 28R NA AT NIGHT - NEW CRITERIA WORDING, NO RUNWAY EDGE LIGHTS FOR RWYS 01R, 10L, 19L, 28R, AND NO AFS-400 APPROVAL LETTER ON FILE FOR VGSI.
DELETED CHART NOTE: DME/DME RNP-0.3 NA - REPLACED WITH PBN REQUIREMENT NOTE: RNP APCH.
DELETED ALL BACK UP ALTIMETER NOTES - CONTINGENCY ALTIMETER INFORMATION LISTED ON THE BACK OF THE 8260-9. KHWO AND KFLI WEATHER SOURCE TRANSMITTED TO WMSR.
FAS OBST 224 TOWER 260027N/0801618W HEIGHT CHANGED FROM 224 TO 222 - NEW SURVEY.
(CA) CHANGED FROM 408 TO 409 - AIRPORT ELEVATION CHANGED FROM 8 TO 9.
HELICOPTER NOTE ADDED RWY 10R - NEW CRITERIA WORDING.
REMOVED NOTE: NA WHEN LOCAL WEATHER NOT AVAILABLE - BACKUP ALTIMETER MOVED TO BACK OF THE 8260-9 AS A CONTINGENCY ALTIMETER.

PREVIOUS P-NOTAM CHANGES AND REASONS INCORPORATED IN THIS AMENDMENT.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZMA, AMGR, MIA APP/CON.

FLIGHT CHECKED BY

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

DEVELOPED BY

DEANNA M. FIELDS

Digitally signed by
DEANNA M FIELDS
Aug 21, 2018

APPROVED BY

JULIE MORGAN

OFFICE

OFFICE

AJV-5421

OFFICE

AJV-5420

DATE

Digitally signed by
ROBERT G HAMILTON
Aug 28, 2018

DATE

07/03/2018

DATE

Digitally signed by
ROBERT G HAMILTON
Aug 28, 2018

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> NORTH PERRY	<u>AIRPORT ID</u> KHWO	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 28R	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> HOLLYWOOD	<u>STATE</u> FL
<u>AIRPORT ELEVATION</u> 9	<u>TDZE</u> 9	<u>SUPERSEDED</u> RNAV (GPS) RWY 28R	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 06/25/2015	<u>MAG VAR</u> 6W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 6 DECEMBER 2018	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2015

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
CUDES	IF	CIBIB		TF	FB	1.00	275.31	5.30	1700
CIBIB	FAF	JUMUV	MAP	TF	FO	0.30	269.12	4.94	
JUMUV	MAP	409 MSL		CA			269.12		
409 MSL		FRRDY		DF	FO	1.00			2000

MISSED APPROACH

MAP:

LNAV: JUMUV

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 DIRECT FRRDY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- PROFILE STARTS AT CUDES
- FAC: 269.12 FAF: CIBIB DIST FAF TO MAP: 4.94 DIST FAF TO THLD: 5.19
- MIN ALT: CUDES 2000, CIBIB 1700
- DIST TO THLD FROM OM: MM: IM: 150 HAT: GS ANT:
- MIN GP INCPT: GP ALT AT FAF : OM: MM: IM:
- GP ANGLE: 34:1: IS NOT CLEAR 20:1: IS CLEAR TCH:
- MSA FROM: JUMUV 2100

PBN REQUIREMENTS NOTE:



RNP APCH.
RADAR REQUIRED FOR PROCEDURE ENTRY.

NOTES:

CHART NOTE: RWY 28R HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: STRAIGHT-IN MINIMUMS NA AT NIGHT.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: CIRCLING RWY 01R, 10L, 19L, 28R NA AT NIGHT

ADDITIONAL FLIGHT DATA:

CHART OPA-LOCKA EXECUTIVE AIRPORT
CIBIB TO RW28R: 3.00/43.
CHART FAS OBST: 219 ANTENNA 260036N/0801029W.
FAC CROSSES RWY C/L EXTENDED 1500 FT FROM THLD.
HOLD W, RT, 096.23 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	520	1	511	520	1	511	520	1 3/8	511		NA				
CIRCLING	560	1	551	560	1	551	560	1 1/2	551		NA				

CHANGES - REASONS

ADDED 20:1 IS CLEAR - NO 20:1 PENETRATORS.
20:1 PENETRATION NOTE CHANGED FROM WHEN VGSI INOP, CIRCLING RWY 19L AND 01R NA AT NIGHT "TO" CIRCLING RWY 01R, 10L, 19L, 28R NA AT NIGHT - NEW CRITERIA WORDING, NO RUNWAY EDGE LIGHTS FOR RWYS 01R, 10L, 19L, 28R, AND NO AFS-400 APPROVAL LETTER ON FILE FOR VGSI.
DELETED CHART NOTE: DME/DME RNP-0.3 NA - REPLACED WITH PBN REQUIREMENT NOTE: RNP APCH.
DELETED CHART PLANVIEW NOTE: RADAR REQUIRED - REPLACED WITH EQUIPMENT NAVSPEC REQUIREMENTS RADAR REQUIRED FOR PROCEDURE ENTRY.
DELETED ALL BACK UP ALTIMETER NOTES - CONTINGENCY ALTIMETER INFORMATION LISTED ON THE BACK OF THE 8260-9. KHWO AND KFLI WEATHER SOURCE TRANSMITTED TO WMSR.
FAS OBST CHANGED FROM 215 TOWER 260040N/0800934W TO 219 ANTENNA 260036N/0801029W-NEW SURVEY.
LNAV HAT ALL CATS CHANGED FROM 512 TO 511- TDZE CHANGED FROM 8 TO 9.
CIRCLING HAA ALL CATS CHANGED FROM 552 TO 511 - AIRPORT ELEVATION CHANGED FROM 8 TO 9.
(CA) CHANGED FROM 408 TO 409 - AIRPORT ELEVATION CHANGED FROM 8 TO 9.
HELICOPTER NOTE ADDED RWY 28R - NEW CRITERIA WORDING.
ADDED PBN REQUIREMENT NOTE: RNP APCH - EQUIPMENT NAVSPEC REQUIREMENTS.
REMOVED NOTE: NA WHEN LOCAL WEATHER NOT AVAILABLE - BACKUP ALTIMETER MOVED TO BACK OF THE 8260-9 AS A CONTINGENCY ALTIMETER.

PREVIOUS P-NOTAM CHANGES AND REASONS INCORPORATED IN THIS AMENDMENT



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZMA, MIA APP CON, AMGR

FLIGHT CHECKED BY

ALEX KRAUSE

Digitally signed by

DAVID DANNER

Oct 11, 2018

OFFICE

FICO

DATE

09/28/2018

DEVELOPED BY

DEANNA M. FIELDS

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DEANNA M FIELDS

Aug 21, 2018

OFFICE

AJV-5421

DATE

07/11/2018

APPROVED BY

JULIE MORGAN

Digitally signed by

DAVID DANNER

Oct 11, 2018

OFFICE

AJV-5420

DATE

TITLE

MANAGER



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

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

<u>AIRPORT</u> PERRY-HOUSTON COUNTY	<u>AIRPORT ID</u> KPXE	<u>PROCEDURE NAME</u> ILS OR LOC RWY 36	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> PERRY	<u>STATE</u> GA	
<u>AIRPORT ELEVATION</u> 418	<u>TDZE</u> 417	<u>SUPERSEDED</u> ILS OR LOC RWY 36	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 11/18/2010	<u>MAG VAR</u> 3W	<u>EPOCH YEAR</u> 1995
<u>FACILITY</u> I-PXE	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 6 DECEMBER 2018	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
GUVRN INT	IAF	SSONY INT	NOPT				002.48	10.49 (I-PXE)	2100
SSONY INT	IF/IAF	PRDUE INT					002.48	5.80 (I-PXE)	1600

MISSED APPROACH

MAP:

ILS: DA
LOC: 3.57 NM AFTER PRDUE INT

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1000 THEN CLIMBING LEFT TURN TO 3000 HEADING 270 AND MCN VORTAC R-239 TO POTAR INT/MCN 23.91 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1000 THEN CLIMBING LEFT TURN TO 3000 DIRECT IZS NDB AND HOLD N, RT, 184.01 INBOUND (ADF REQUIRED).

PROFILE:

1. **PT** **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
2. HOLD S SSONY, RT, 002.48 INBOUND, 2100 FT. IN LIEU OF PT (IAF), MAX 4000.
3. **FAC:** 002.48 **FAF:** PRDUE INT **DIST FAF TO MAP:** 3.57 **DIST FAF TO THLD:** 3.57
4. **MIN ALT:** SSONY INT 2100, PRDUE INT 1600
5. **DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **GS ANT:** 817
6. **MIN GS INCPT:** 1600 **GS ALT AT FAF :** PRDUE INT 1600 **OM:** **MM:** **IM:**
7. **GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 41.2
8. **MSA FROM:** VNA VORTAC 2600

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 900.



CHART NOTE: RWY 36 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED USE MACON ALTIMETER SETTING AND INCREASE DA TO 789 AND ALL MDA 40 FEET.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 36 CATS A/B VISIBILITY TO 1 SM AND CATS C/D TO 1 3/8 SM.
CHART NOTE: FOR INOPERATIVE ALS WHEN USING MACON ALTIMETER SETTING, INCREASE S-LOC 36 CATS A/B VISIBILITY TO 1 SM.
CHART PLANVIEW NOTE: NOPT FOR ARRIVALS AT SSONY ON V243 NORTHWEST BOUND.

ADDITIONAL FLIGHT DATA:

CHART MCN R-195 AT SSONY AND R-190 AT GUVNR
CHART IN PLANVIEW: IZS NDB
CHART FAS OBST: 637 TOWER 322613N/0834540W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD N IZS NDB, RT, 184.01 INBOUND.
HOLD NW, LT, 119.48 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-ILS 36	751	3/4	334	751	3/4	334	751	3/4	334	751	3/4	334			
S-LOC 36	900	3/4	483	900	3/4	483	900	1	483	900	1	483			
CIRCLING	900	1	482	900	1	482	960	1 1/2	542	980	2	562			

CHANGES - REASONS

1. ADDED NOTE "AUTOPILOT COUPLED APPROACH NA BELOW 900" - FLIGHT CHECK RESTRICTION.
2. CHANGED INOP TABLE NOTE FROM "FOR INOPERATIVE MALSR, INCREASE S-ILS 36 ALL CATS VISIBILITY TO 1 1/4 AND S-LOC 36 CATS A AND B TO 1 MILE" TO "FOR INOPERATIVE ALS, INCREASE S-LOC 36 CATS A/B VISIBILITY TO 1 SM AND CATS C/D TO 1 3/8 SM - INCREASE TO NO APPROACH LIGHT MINIMUM APPLIES ONLY TO S-LOC 36 LINE OF MINIMUMS.
3. ADDED NOTE "FOR INOPERATIVE ALS WHEN USING MACON ALTIMETER SETTING, INCREASE S-LOC 36 CATS A/B VISIBILITY TO 1 SM" - IAW 8260.3C TABLE 3-3-3 AND 3-3-4.
4. CHANGED S-LOC 36 CAT C VISIBILITY FROM 3/4 TO 1 SM - IAW 8260.3C, TABLE 3-3-1 MINIMUM VISIBILITY VALUES.
5. CHANGED REMOTE ALTIMETER NOTE "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED USE MACON ALTIMETER SETTING AND INCREASE ALL DA 38 FEET AND ALL MEA 40 FEET, INCREASE S-LOC C/D VISIBILITY 1/4 MILE" TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED USE MACON ALTIMETER SETTING AND INCREASE DA TO 789 AND ALL MDA 40 FEET" - S-LOC 36 CAT C VISIBILITY INCREASED TO 1 SM, NO CHANGE TO VISIBILITY REQUIRED FOR CAT C/D WHEN USING MACON ALTIMETER SETTING.
6. CHANGED NOTE "VISIBILITY REDUCTION BY HELICOPTERS NA" TO "RWY 36 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED" - IAW 8260.19H NOTE FORMAT.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: AMGR, ZBW, ATL TRACON

FLIGHT CHECKED BY

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

DEVELOPED BY

GEORGETTE P. BARNETT

Digitally signed by
GEORGETTE P BARNETT

Jul 16, 2018

APPROVED BY

JULIE MORGAN

OFFICE

OFFICE

AJV-5422

OFFICE

AJV-5420

DATE

DATE

07/12/2018

DATE

Digitally signed by
ROBERT G HAMILTON
Aug 21, 2018

Digitally signed by
ROBERT G HAMILTON
Aug 21, 2018

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
ILS STANDARD INSTRUMENT APPROACH PROCEDURE

TITLE 14 CFR PART 97.29

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<u>AIRPORT</u> PROVINCETOWN MUNI	<u>AIRPORT ID</u> KPVC	<u>PROCEDURE NAME</u> ILS OR LOC RWY 7	<u>ORIGINAL/AMENDMENT</u> 9A	<u>CITY</u> PROVINCETOWN	<u>STATE</u> MA
<u>AIRPORT ELEVATION</u> 8	<u>TDZE</u> 8	<u>SUPERSEDED</u> ILS OR LOC RWY 7	<u>ORIGINAL/AMENDMENT</u> 9	<u>DATED</u> 02/04/2016	<u>MAG VAR</u> 16W
<u>FACILITY</u> I-VQO	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 6 DECEMBER 2018	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1995

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
DUNKK INT	IAF	WOMEK INT/I-VQO 14.79 DME					153.96	10.66 (BOS R-154)	3000
WOMEK INT/I-VQO 14.79 DME	IF	PHONY/I-VQO 6.78 DME					075.30	8.00 (I-VQO)	2000

MISSED APPROACH

MAP:

ILS: DA
LOC: 6.13 NM AFTER PHONY/I-VQO 6.78 DME OR AT I-VQO 0.65 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 800 THEN CLIMBING LEFT TURN TO 2000 DIRECT PVC NDB AND HOLD, CONTINUE CLIMB-IN-HOLD TO 2000.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 700 THEN CLIMBING RIGHT TURN TO 2000 DIRECT LFV VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 2000.

PROFILE:

- PT** **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
- PROFILE STARTS AT WOMEK
- 3. FAC:** 075.30 **FAF:** PHONY/I-VQO 6.78 DME **DIST FAF TO MAP:** 6.13 **DIST FAF TO THLD:** 6.13
- 4. MIN ALT:** WOMEK INT/I-VQO 14.79 DME 3000, PHONY/I-VQO 6.78 DME 2000, FABIX INT/I-VQO 2.85 DME 660#*
- 5. DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **GS ANT:** 762
- 6. MIN GS INCPT:** 2000 **GS ALT AT FAF :** PHONY/I-VQO 6.78 DME 2000 **OM:** **MM:** **IM:**
- 7. GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 40.0
- 8. MSA FROM:** PVC NDB 1800

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED FOR LOC ONLY, ADF

NOTES:

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DUNKK ON V141 NORTHWEST BOUND.



CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-ILS 7.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE HYANNIS ALTIMETER SETTING AND INCREASE ALL DA TO 271 AND ALL MDA 80 FEET: INCREASE S-LOC 7 AND FABIX FIX MINIMUMS S-LOC 7 ALL CATS VISIBILITY 1/4 SM.
CHART NOTE: VDP NA WHEN USING HYANNIS ALTIMETER SETTING.
CHART NOTE: FOR INOPERATIVE ALS WHEN USING HYANNIS ALTIMETER SETTING, INCREASE S-ILS 7 ALL CATS VISIBILITY TO 7/8 SM.
#740 WHEN USING HYANNIS ALTIMETER SETTING.

ADDITIONAL FLIGHT DATA:

CHART IN PLANVIEW: LfV VOR/DME
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD S LfV VOR/DME, LT, 360.00 INBOUND
CHART CIRCLING ICON.
CHART VDP AT 1.51 DME*
DISTANCE VDP TO THLD 0.85 NM
* LOC ONLY
FAS OBST: 64 SHIP 420340N/0701443W.
HOLD W, LT, 075.30 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-ILS 07	208	3/4	200	208	3/4	200		NA			NA				
S-LOC 07	660	3/4	652	660	3/4	652		NA			NA				
CIRCLING	660	1	652	660	1	652		NA			NA				
FABIX FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED).															
S-LOC 07	320	3/4	312	320	3/4	312		NA			NA				
CIRCLING	460	1	452	660	1	652		NA			NA				

CHANGES - REASONS

1. CHANGED PHONY INT/I-VQO 6.78 DME TO PHONY/I-VQO 6.78 DME. - LfV VOR/DME RADIAL NO LONGER SUPPORTS FIX MAKE UP AS INTERSECTION.
2. ADDED EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED FOR LOC ONLY, ADF. - FAF NO LONGER AN INTERSECTION, DME FIX ONLY.



COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZBW, CAPE APP CON, AIRPORT MANAGER

FLIGHT CHECKED BY

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

DEVELOPED BY

JIMMY S. HUGHES

Digitally signed by
JIMMY S HUGHES
Aug 27, 2018

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5422

OFFICE

AJV-5420

DATE

07/10/2018

DATE

Digitally signed by
ROBERT G HAMILTON
Sep 04, 2018

Digitally signed by
ROBERT G HAMILTON
Sep 04, 2018

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> CHILLICOTHE MUNI	<u>AIRPORT ID</u> KCHT	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 32	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> CHILLICOTHE	<u>STATE</u> MO
<u>AIRPORT ELEVATION</u> 783	<u>TDZE</u> 782	<u>SUPERSEDED</u> RNAV (GPS) RWY 32	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 07/02/2009	<u>MAG VAR</u> 3E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 6 DECEMBER 2018	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1995

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 230/30 CW 050/30	NOPT	TUDEE	IF/IAF	2900
2. 050/30 CW 140/30		WERLI	IAF	2900
3. 140/30 CW 230/30		140/19 CW 230/19		3000
4. 140/19 CW 230/19		REDSE	IAF	2900

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
WERLI	IAF	TUDEE	NOPT	TF	FB	1.00	050.33	5.00	2900
REDSE	IAF	TUDEE	NOPT	TF	FB	1.00	230.45	5.00	2900
TUDEE	IF/IAF	POSNE		TF	FB	1.00	320.39	6.16	2500
POSNE	FAF	RW32	MAP	TF	FO	0.30	320.34	5.24	
RW32	MAP	1148 MSL		CA			320.34		
1148 MSL		NOLIE		DF	FO	1.00			2900

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW32

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2900 DIRECT NOLIE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SE TUDEE, RT, 320.39 INBOUND, 2900 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 320.34FAF: POSNEDIST FAF TO MAP: 5.24DIST FAF TO THLD: 5.24

4. MIN ALT: TUDEE 2900, POSNE 2500

5. DIST TO THLD FROM OM:MM:IM:150 HAT:366 HAT: 1.01GS ANT:

6. MIN GP INCPT: 2500GP ALT AT FAF : POSNE 2500OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 44.3

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 2 AND 20.
CHART NOTE: CIRCLING RWY 14 NA AT NIGHT.
CHART NOTE: BARO-VNAV AND VDP NA WHEN USING KANSAS CITY INTERNATIONAL ALTIMETER SETTING.
CHART NOTE: RWY 32 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 54C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE KANSAS CITY INTERNATIONAL ALTIMETER SETTING AND INCREASE LPV DA TO 1329 AND LNAV/VNAV DA TO 1335 AND ALL MDA 200 FEET, INCREASE ALL LPV VISIBILITIES 3/8 SM AND LNAV/VNAV VISIBILITIES 1/8 SM.

ADDITIONAL FLIGHT DATA:

975 AAO 394218N/0932512W
CHART VDP AT 1.06 NM TO RW32*
*LNAV ONLY
WAAS CHANNEL #70413
REFERENCE PATH ID: W32A
CHART FAS OBST: 944 TREE 394709N/0932918W.
HOLD NW, RT, 140.21 INBOUND
LTP HAE: 205.8 M

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	1148	1 1/4	366	1148	1 1/4	366		NA			NA				
LNAV/VNAV DA	1154	1 1/2	372	1154	1 1/2	372		NA			NA				
LNAV MDA	1200	1	418	1200	1	418		NA			NA				
CIRCLING	1280	1	497	1280	1	497		NA			NA				



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>
CHILLICOTHE MUNI	KCHT	RNAV (GPS) RWY 32	1A	CHILLICOTHE	MO

CHANGES - REASONS

- 1. CHANGED INTERMEDIATE RNP VALUE FROM 0.50 TO 1.00 - UPDATED TO 8260.58A CHANGE 1 TABLE 1-2-1.
- 2. ADDED "RWY 32" TO THE HELICOPTER VISIBILITY REDUCTION NA NOTE - IAW 8260.19H 8-6-11 (K(3)) MINIMUMS.
- 3. DELETED DME/DME RNP-0.3 NA - IAW 8260.19H 8-6-8 (B(1)) PBN NAVSPEC.
- 4. ADDED PBN NOTE RNP APCH - IAW 8260.19H 8-6-8 (B(1)) PBN NAVSPEC.
- 5. ADDED 20:1 CLEAR NOTE - IAW 8260.19H 8-6-7 (G(3)) FOR DOCUMENTING CLEAR SLOPES FOR RNAV PROCEDURE.
- 6. CHANGED DISTANCE 366 HAT TO TDZE FROM 1.07 TO 1.01.
- 7. ADDED CHART NOTE CIRCLING NA TO RWYS 2 AND 20 - NO SURVEY AT THESE RUNWAYS TO VALIDATE THE OIS SLOPE IS CLEAR.
- 8. ADDED CHART NOTE CIRCLING TO RWY 14 NA AT NIGHT - NEW 20:1 PENETRATIONS AT RWY 14.
- 9. UPDATED VGSI AND RNAV GLIDEPATH NOT COINCIDENT NOTE BY ADDING THE PRE-CURSOR TO THE ANGLE AND TCH VALUE FORMAT - IAW 8260.19H 8-6-9 (M(1)) DOCUMENTING NON-COINCIDENT GLIDEPATHS AND DESCENT ANGLES.
- 10. CHANGED THE BARO-VNAV NOTE TO REMOVE FAHRENHEIT VALUES - IAW 8260.19H 8-6-9 (S) BARO VNAV FORMATTING OF CHART NOTE.
- 11. CHANGED ALTERNATE ALTIMETER NOTE FROM "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE KANSAS CITY INTERNATIONAL ALTIMETER SETTING AND INCREASE ALL DA 181 FEET AND ALL MDA 200 FEET, AND INCREASE LPV ALL CATS VISIBILITY 3/4 MILE AND LNAV/VNAV ALL CATS VISIBILITY 1/2 MILE."TO "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE KANSAS CITY INTERNATIONAL ALTIMETER SETTING AND INCREASE LPV DA TO 1329 AND LNAV/VNAV TO 1335 AND ALL MDA 200 FEET, INCREASE ALL LPV VISIBILITIES 3/8 SM AND LNAV/VNAV VISIBILITIES 1/8 SM." - IAW8260.19H 8-6-11 (N(2)) ALTERNATE ALTIMETER NOTE FORMATTING/NEW VISIBILITIES TABLE APPLIED.
- 12. ADDED CA LEG TO MISSED APPROACH - IAW 8260.19H APPENDIX K AND L CODING REQUIREMENT .
- 13. CHANGED CRC REMAINDER FROM 8AD9002A TO C91EC7CD - LTP/FTP ELLIPSOIDAL HEIGHT CHANGED.
- 14. ADDED 7:1 OBSTACLE TO ADDITIONAL DATA - UPDATED AIRPORT SURVEY.



COORDINATED WITH:

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

FLIGHT CHECKED BY

ANTHONY D VALLERA

Digitally signed by
DAVID TEFFETELLER
Sep 10, 2018

OFFICE
FICO

DATE

9/5/18

DEVELOPED BY

SCOTT BAGENSIE

Digitally signed by
DAVID TEFFETELLER
Aug 20, 2018

OFFICE
AJV-5433

DATE

07/16/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
DAVID TEFFETELLER
Sep 10, 2018

OFFICE
AJV-5430

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCHT
RUNWAY	RW32
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W32A
LTP/FTP LATITUDE	394640.3015N
LTP/FTP LONGITUDE	0932929.5250W
LTP/FTP ELLIPSOIDAL HEIGHT	+02058
FPAP LATITUDE	394751.7900N
FPAP LONGITUDE	0933038.6200W
THRESHOLD CROSSING HEIGHT (TCH)	00044.3
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1560
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	C91EC7CD
<u>ADDITIONAL PATH POINT RECORD INFORMATION</u>	
ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+02327
FPAP ORTHOMETRIC HEIGHT	+02327



**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>
HATTIESBURG-LAUREL, MS	HATTIESBURG-LAUREL RGNL	6 DECEMBER 2018	4

TAKEOFF MINIMUMS:

RWY 18: STANDARD
RWY 36: STANDARD

TEXTUAL DEPARTURE PROCEDURES:

RWY 18, 36: CLIMB RUNWAY HEADING TO 1000 BEFORE TURNING EAST.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 18, TREE 50 FT FROM DER, 275 FT RIGHT OF CENTERLINE, 304 FT MSL. TREE 194 FT FROM DER, 325 FT RIGHT OF CENTERLINE, 318 FT MSL. TREES BEGINNING 346 FT FROM DER, 467 FT LEFT OF CENTERLINE, UP TO 329 FT MSL. TREE 531 FT FROM DER, 466 FT LEFT OF CENTERLINE, 331 FT MSL. TREE 1019 FT FROM DER, 579 FT RIGHT OF CENTERLINE, 331 FT MSL. TREES BEGINNING 1051 FT FROM DER, 264 FT RIGHT OF CENTERLINE, UP TO 340 FT MSL. TREE 1134 FT FROM DER, 465 FT LEFT OF CENTERLINE, 332 FT MSL. TREES BEGINNING 1172 FT FROM DER, 371 FT RIGHT OF CENTERLINE, UP TO 343 FT MSL. TREE 1438 FT FROM DER, 536 FT LEFT OF CENTERLINE, 342 FT MSL.

NOTE: RWY 36, TREE 515 FT FROM DER, 551 FT RIGHT OF CENTERLINE, 326 FT MSL. TREES BEGINNING 760 FT FROM DER, 639 FT RIGHT OF CENTERLINE, UP TO 329 FT MSL. TREE 1579 FT FROM DER, 660 FT LEFT OF CENTERLINE, 345 FT MSL. TREE 1840 FT FROM DER, 923 FT LEFT OF CENTERLINE, 369 FT MSL.

CONTROLLING OBSTACLES:

REMARKS:

ROUTE LEFT TO MATCH PREVIOUS DEPARTURE DEVELOPMENT. NO 40:1 PENETRATIONS.

FLIGHT INSPECTED BY:

OFFICE SYMBOL:

DATE:

FLIGHT INSPECTION REVIEW NOT REQUIRED – PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-333) MEMO, DEC 22, 2017

Digitally signed by

DEVELOPED BY:

ROBERT G HAMILTON

OFFICE SYMBOL:

DATE:

ROBERT HAMILTON (AUSTIN GOTCHER)

Digitally signed by

ROBERT G HAMILTON

Aug 07, 2018

AJV-5422

07/05/2018

Aug 07, 2018

APPROVED BY:

Digitally signed by

ROBERT G HAMILTON

OFFICE SYMBOL:

DATE:

JULIE MORGAN

Aug 07, 2018

AJV-5420

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A

ALPA

AOPA

APA

HAI

NBAA

☐☒☒☐☐☒

OTHER:

ZHU, ZME, APTMGR

CHANGES - REASONS:

1. UPDATED TAKE OFF OBSTACLE NOTES - IAW 8260.46F.



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
NDB STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.27

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<u>AIRPORT</u> COLUMBUS COUNTY MUNI	<u>AIRPORT ID</u> KCPC	<u>PROCEDURE NAME</u> NDB RWY 6	<u>ORIGINAL/AMENDMENT</u> 6	<u>CITY</u> WHITEVILLE	<u>STATE</u> NC
<u>AIRPORT ELEVATION</u> 99	<u>TDZE</u> 99	<u>SUPERSEDED</u> NDB RWY 6	<u>ORIGINAL/AMENDMENT</u> 5B	<u>DATED</u> 05/29/2014	<u>MAG VAR</u> 7W
<u>FACILITY</u> CPC	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 6 DECEMBER 2018	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1985

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
JAYDB INT		CPC NDB					267.39	17.58	2000
CRE VORTAC		CPC NDB					004.30	27.52	2000

MISSED APPROACH

MAP:

CPC NDB

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1100 THEN CLIMBING RIGHT TURN TO 2000 DIRECT CPC NDB AND HOLD, CONTINUE CLIMB-IN-HOLD TO 2000.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L **SIDE OF COURSE** 239.31 **OUTBOUND** 2000 **FT WITHIN** 10 **MILES OF** CPC (IAF)

2.

3. **FAC:** 059.31 **FAF:** **DIST FAF TO MAP:** **DIST FAF TO THLD:**

4. **MIN ALT:**

8. **MSA FROM:** CPC NDB 3100

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: RWY 6 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ELIZABETHTOWN ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET, INCREASE S-6 CAT C/D AND CIRCLING CAT C VISIBILITY 1/8 SM AND CIRCLING CAT D VISIBILITY 1/4 SM.

ADDITIONAL FLIGHT DATA:



CHART CIRCLING ICON.
CHART FAS OBST: 405 TOWER 341527N/0784824W.
FAC CROSSES RWY C/L EXTENDED 2836 FT FROM THLD.
HOLD SW, RT, 059.31 INBOUND

MINIMUMS:

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

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

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-06	680	1	581	680	1	581	680	1 3/4	581	680	1 3/4	581			
CIRCLING	680	1	581	680	1	581	680	1 3/4	581	780	2 1/4	681			

CHANGES - REASONS

1. CHANGED FIX NAME FROM RAPEN TO JAYDB - PER FPT REQUEST.
2. REMOVED CHART NOTE: NIGHT LANDING: RWY 6 CAT C/D NA - NO 20:1 VISUAL SURFACE PENETRATIONS.
3. CHANGED CHART NOTE: S-6 CAT C/D AND CIRCLING CAT C VISIBILITY 1/4 MILE TO CHART NOTE: S-6 CAT C/D AND CIRCLING CAT C VISIBILITY 1/8 SM AND CIRCLING CAT D VISIBILITY 1/4 SM. - IAW 8260.3C TABLE 3-3-1.
4. CHANGED S-6 AND CIRCLING CAT C VISIBILITY FROM 1 1/2 SM TO 1 3/4 SM - IAW 8260.3C TABLE 3-3-1.
5. CHANGED CIRCLING CAT D VISIBILITY FROM 2 SM TO 2 1/4 SM - IAW 8260.3C TABLE 3-3-7.
6. ADDED NEW CIRCLING RADII - PER FPT CHECKLIST.
7. CHANGED CIRCLING CAT D MDA/HAA FROM 680/581 TO 780/681 - NEW CONTROLLING OBSTACLE.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZJX, MYR APP CON, AIRPORT MANAGER

<u>FLIGHT CHECKED BY</u>		<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
KEVIN RIESE		ADOLFO D URRUTIA	FICO	9/20/18	
<u>DEVELOPED BY</u>		<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
LONNIE EVERHART (MICHAEL NOLAN)		ADOLFO D URRUTIA	AJV-5400	04/11/2018	
<u>APPROVED BY</u>		Sep 26, 2018	<i>Digitally signed by</i>	<u>DATE</u>	<u>TITLE</u>
LONNIE EVERHART			ADOLFO D URRUTIA	AJV-5400	MANAGER
			Sep 26, 2018		



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> COLUMBUS COUNTY MUNI	<u>AIRPORT ID</u> KCPC	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 6	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> WHITEVILLE	<u>STATE</u> NC
<u>AIRPORT ELEVATION</u> 99	<u>TDZE</u> 99	<u>SUPERSEDED</u> RNAV (GPS) RWY 6	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 05/29/2014	<u>MAG VAR</u> 7W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 6 DECEMBER 2018	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1985

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
JAYDB		WADED		TF	FO	2.00	254.26	28.85	2000
LAVIE	IAF	WADED	NOPT	TF	FB	1.00	144.00	11.58	2000
CRE VORTAC	IAF	WADED	NOPT	TF	FB	1.00	342.84	21.05	2000
WADED	IF/IAF	SODOC		TF	FB	1.00	054.53	6.10	2000
SODOC	FAF	RW06	MAP	TF	FO	0.30	054.58	5.75	
RW06	MAP	499 MSL		CA			054.58		
499 MSL		WADED		DF	FO	1.00			2000

MISSED APPROACH

MAP:

LNAV: RW06

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 2000 DIRECT WADED AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SW WADED, RT, 054.53 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 054.58

FAF: SODOC

DIST FAF TO MAP: 5.75

DIST FAF TO THLD: 5.75

4. MIN ALT: WADED 2000, SODOC 2000

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:

6. MIN GP INCPT:

GP ALT AT FAF :

OM:

MM:

IM:

7. GP ANGLE:

34:1: IS NOT CLEAR

20:1: IS CLEAR

TCH:

8. MSA FROM: RW06 3100

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: VDP NA WHEN USING ELIZABETHTOWN ALTIMETER SETTING.
CHART NOTE: RWY 6 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ELIZABETHTOWN ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET, LNAV CAT C/D VISIBILITY 1/8 SM AND CIRCLING CAT C/D VISIBLTY 1/4 SM.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CRE VORTAC ON AIRWAY RADIALS 302 CW 056.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
SODOC TO RW06: 3.05/40.
CHART VDP AT 1.32 NM TO RW06
FAS OBST: 309 AAO 341320N/0784655W.

MINIMUMS:

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

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

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	560	1	461	560	1	461	560	1 3/8	461	560	1 3/8	461			
CIRCLING	560	1	461	580	1	481	680	1 1/2	581	780	2 1/4	681			



CHANGES - REASONS

- 1. CHANGED FIX NAME FROM RAPEN TO JAYDB - PER FPT REQUEST.
- 2. REMOVE CHART NOTE: NIGHT LANDING: RWY 6 CAT C/D NA - NO 20:1 VISUAL SURFACE PENETRATIONS.
- 3. INCORPORATED NOTAM !FDC 8/5054 - PER FPT REQUEST.
- 4. CHANGED CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ELIZABETHTOWN ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET, AND LNAV CAT D VISIBILITY 1/4 MILE TO CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ELIZABETHTOWN ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET, LNAV CAT C/D VISIBILITY 1/8 SM AND CIRCLING CAT C/D VISIBILTY 1/4 SM - IAW 8260.3C TABLE 3-3-1.
- 5. CHANGED CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA TO CHART NOTE: RWY 6 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA - 34:1 PENETRATE VISUAL SURFACE.
- 6. ADDED NEW CIRCLING RADII - PER FPT CHECKLIST.
- 7. CHANGED CIRCLING MDA/HAA: CAT B FROM 560/461 TO 580/481, CAT C FROM 560/461 TO 680/581 AND CAT D FROM 660/561 TO 780/681 - OBSTACLE EVALUATION FOR NEW CIRCLING RADII.
- 8. CHANGED CIRCLING CAT D VISIBILITY FROM 2 TO 2 1/4 - IAW 8260.3C TABLE 3-3-7.
- 9. CHANGED PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CRE VORTAC ON AIRWAY RADIALS 302 CW 357 TO PROCEDURE NA FOR ARRIVALS AT CRE VORTAC ON AIRWAY RADIALS 302 CW 056.
- 10. ADDED VDP - NO OBSTACLES PENTRATE THE 20:1 SURFACE.
- 11. ADDED VDP NA NOTE. - VDP NOT AUTHORIZED WITH REMOTE ALTIMETER SOURCE.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZJX , MYR APP CON, AIRPORT MANAGER.

FLIGHT CHECKED BY

KEVIN RIESE
ADOLFO D URRUTIA

Digitally signed by

DEVELOPED BY

SEP 26, 2018
LONNIE EVERHART (MICHAEL NOLAN)
ADOLFO D URRUTIA
SEP 26, 2018

Digitally signed by

APPROVED BY

LONNIE EVERHART
ADOLFO D URRUTIA
SEP 26, 2018

Digitally signed by

OFFICE

FICO

OFFICE

AJV-5400

OFFICE

AJV-5400

DATE

9/20/18

DATE

04/18/2018

DATE

TITLE

MANAGER



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

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
WURTSBORO, NY	WURTSBORO-SULLIVAN COUNTY	6 DECEMBER 2018	2

TAKEOFF MINIMUMS:

RWY 5, 9, 14, 18, 27, 32, 36 NA - OBSTACLES

RWY 23, STANDARD WITH MINIMUM CLIMB OF 365 FEET PER NM TO 1900 OR 2000-3 FOR VCOA.

TEXTUAL DEPARTURE PROCEDURES:

RWY 23, CLIMB HEADING 227.77 TO 2100 BEFORE PROCEEDING ON COURSE.

VISUAL CLIMB OVER AIRPORT:

RWY 23, OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS WURTSBORO-SULLIVAN COUNTY AIRPORT AT OR ABOVE 2400 BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 23, TERRAIN 32 FT FROM DER, 187 FT RIGHT OF CENTERLINE, 549 FT MSL.
TREE, POLE BEGINNING 80 FT FROM DER, 20 FT LEFT OF CENTERLINE, UP TO 650 FT MSL.
TREE 125 FT FROM DER, 87 FT RIGHT OF CENTERLINE, 567 FT MSL.
TREE 160 FT FROM DER, 210 FT RIGHT OF CENTERLINE, 576 FT MSL.
TREES BEGINNING 169 FT FROM DER, 352 FT RIGHT OF CENTERLINE, UP TO 641 FT MSL.
TREE, BUILDING, POLE BEGINNING 224 FT FROM DER, 526 FT RIGHT OF CENTERLINE, UP TO 648 FT MSL.
TREES BEGINNING 2527 FT FROM DER, 583 FT RIGHT OF CENTERLINE, UP TO 662 FT MSL.
TREES BEGINNING 3392 FT FROM DER, 490 FT RIGHT OF CENTERLINE, UP TO 664 FT MSL.
TREES BEGINNING 3590 FT FROM DER, 451 FT RIGHT OF CENTERLINE, UP TO 669 FT MSL.
TREES BEGINNING 3755 FT FROM DER, 1192 FT RIGHT OF CENTERLINE, UP TO 680 FT MSL.
TREE 3938 FT FROM DER, 1364 FT RIGHT OF CENTERLINE, 686 FT MSL.
TREES BEGINNING 3951 FT FROM DER, 1215 FT RIGHT OF CENTERLINE, UP TO 689 FT MSL.
TREES BEGINNING 4510 FT FROM DER, 1411 FT RIGHT OF CENTERLINE, UP TO 693 FT MSL.
TREE 4795 FT FROM DER, 1738 FT RIGHT OF CENTERLINE, 709 FT MSL.
TREES BEGINNING 4801 FT FROM DER, 1371 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/727 FT MSL.
TREES BEGINNING 5694 FT FROM DER, 1749 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/783 FT MSL.
TREES BEGINNING 1 NM FROM DER, 1818 FT RIGHT OF CENTERLINE, UP TO 784 FT MSL.
TREES BEGINNING 1 NM FROM DER, 1962 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/793 FT MSL.
TREES BEGINNING 1.5 NM FROM DER, 2627 FT RIGHT OF CENTERLINE, UP TO 793 FT MSL.
TREES BEGINNING 1.5 NM FROM DER, 2731 FT RIGHT OF CENTERLINE, UP TO 811 FT MSL.
TREES BEGINNING 1.5 NM FROM DER, 2958 FT RIGHT OF CENTERLINE, UP TO 820 FT MSL.
TREES BEGINNING 1.6 NM FROM DER, 2781 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/852 FT MSL.
TREES BEGINNING 1.6 NM FROM DER, 2966 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/858 FT MSL.
TREES BEGINNING 1.6 NM FROM DER, 2789 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/904 FT MSL.
TREES BEGINNING 1.7 NM FROM DER, 2796 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/931 FT MSL.
TREES BEGINNING 1.7 NM FROM DER, 2804 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/957 FT MSL.
TREE 2 NM FROM DER, 3823 FT LEFT OF CENTERLINE, 885 FT MSL.
TREE 2 NM FROM DER, 3807 FT LEFT OF CENTERLINE, 891 FT MSL.
TREE 2.1 NM FROM DER, 3818 FT LEFT OF CENTERLINE, 899 FT MSL.
TREES BEGINNING 2.1 NM FROM DER, 3875 FT LEFT OF CENTERLINE, UP TO 928 FT MSL.
TREE 2.3 NM FROM DER, 4245 FT LEFT OF CENTERLINE, 100 FT AGL/940 FT MSL.
TREES BEGINNING 2.3 NM FROM DER, 3606 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/960 FT MSL.
TREES BEGINNING 2.4 NM FROM DER, 4052 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/980 FT MSL.
TREES BEGINNING 2.4 NM FROM DER, 4044 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/1039 FT MSL.

CONTROLLING OBSTACLES:

RWY 23, 1421 FT MSL AAO 413230.00N/0742918.00W (CLIMB GRADIENT), 1562 FT MSL AAO 413148.00N/0742951.00W (CLIMB-TO ALTITUDE).

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT:

RWY 23, 1429 FT MSL TREES 413451.00N/0742709.00W, 1823 FT MSL TOWER 413623.00N/0743154.00W.

RWY 23: 1926 FT MSL AAO 413848.00N/0742448.00W (VCA), 2464 FT MSL AAO 414021.00N/0742121.00W (VCOA DIVERSE EVAL).

REMARKS:

MAP STUDY ACCOMPLISHED. (2C) ACCURACY CODE APPLIED TO VEGETATION AND AAO.

Digitally signed by

DAVID DANNER

Sep 25, 2018

FLIGHT INSPECTED BY:

Jorge A Malcun

OFFICE SYMBOL:

FICO

9-15-18

DATE:



**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>
WURTSBORO, NY	WURTSBORO-SULLIVAN COUNTY	6 DECEMBER 2018	2

DEVELOPED BY:	<i>Digitally signed by</i>	OFFICE SYMBOL:	DATE:
DEANNA M. FIELDS	DEANNA M FIELDS	AJV-5421	08/01/2018
	Aug 10, 2018		

APPROVED BY:	<i>Digitally signed by</i>	OFFICE SYMBOL:	DATE:
JULIE A. MORGAN	DAVID DANNER	AJV-5420	
	Sep 25, 2018		

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

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

OTHER:
ZNY, NY APP CON AND APT MGR

CHANGES - REASONS:

1. RWY 23 TAKEOFF MINIMUMS CHANGED FROM STANDARD WITH MINIMUM CLIMB OF 388 FEET PER NM TO 2100 "TO" STANDARD WITH MINIMUM CLIMB OF 365 FEET PER NM TO 1900 OR 2000-3 FOR VCOA - EVALUATED USING UPDATED OBSTACLE SURVEY ADDED SINCE LAST AMENDMENT.
2. TEXTUAL DEPARTURE PROCEDURES RWY 23 HEADING 228 CHANGED TO 227.77 - RWY ALIGNMENT.
3. UPDATED RWY 23 TAKEOFF OBSTACLE NOTES - EVALUATED USING UPDATED OBSTACLE SURVEY ADDED SINCE LAST AMENDMENT. GROUPED AND FORMATTED IN ACCORDANCE WITH THE DEPARTURE OBSTACLE GROUPER SOP (1.0).
4. UPDATED CONTROLLING AND MANDATING ODP ROUTE OBSTACLE DATA - EVALUATED USING UPDATED OBSTACLE SURVEY ADDED SINCE LAST AMENDMENT.
5. VCOA ADDED - OBSTACLES IN ICA OUTSIDE OF 3 SM.

QUALITY
3
CHECKED

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

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
FINDLAY, OH	FINDLAY	6 DECEMBER 2018	1

TAKEOFF MINIMUMS:

RWY 7, 18, 36: STANDARD

RWY 25: 300-1 5/8 OR STANDARD WITH MINIMUM CLIMB OF 210 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 1400 FEET PRIOR TO DER.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE RWY 07: ROAD WITH VEHICLES BEGINNING 55 FEET FROM DER, 308 FEET RIGHT OF CENTERLINE, UP TO 15 FEET AGL/821 FEET MSL.

WALL, POLE BEGINNING 121 FEET FROM DER, 48 FEET LEFT OF CENTERLINE, UP TO 10 FEET AGL/816 FEET MSL.

TREE, ROAD WITH VEHICLES, POLE BEGINNING 154 FEET FROM DER, 69 FEET RIGHT OF CENTERLINE, UP TO 32 FEET AGL/838 FEET MSL.

ROAD WITH VEHICLES BEGINNING 210 FEET FROM DER, 1 FEET LEFT OF CENTERLINE, UP TO 15 FEET AGL/821 FEET MSL.

TREES BEGINNING 279 FEET FROM DER, 45 FEET RIGHT OF CENTERLINE, UP TO 33 FEET AGL/839 FEET MSL.

TREE, POLE, BUILDING BEGINNING 338 FEET FROM DER, 33 FEET LEFT OF CENTERLINE, UP TO 26 FEET AGL/832 FEET MSL.

TREE 1715 FEET FROM DER, 959 FEET RIGHT OF CENTERLINE, 54 FEET AGL/860 FEET MSL.

TREES BEGINNING 1846 FEET FROM DER, 407 FEET RIGHT OF CENTERLINE, UP TO 64 FEET AGL/870 FEET MSL.

BUILDING 2374 FEET FROM DER, 1054 FEET RIGHT OF CENTERLINE, 110 FEET AGL/916 FEET MSL.

BUILDING, TREE, WIND INDICATOR BEGINNING 2417 FEET FROM DER, 109 FEET RIGHT OF CENTERLINE, UP TO 121 FEET AGL/927 FEET MSL.

NOTE RWY 18: TREE 2786 FEET FROM DER, 150 FEET LEFT OF CENTERLINE, 876 FEET MSL.

NOTE RWY 25: FENCE, VEGETATION BEGINNING 26 FEET FROM DER, 141 FEET LEFT OF CENTERLINE, UP TO 6 FEET AGL/799 FEET MSL. ROAD WITH VEHICLES BEGINNING 133 FEET FROM DER, 108 FEET RIGHT OF CENTERLINE, UP TO 15 FEET AGL/803 FEET MSL.

SIGN, TREE, POLE BEGINNING 473 FEET FROM DER, 421 FEET RIGHT OF CENTERLINE, UP TO 64 FEET AGL/852 FEET MSL.

TREE, POLE, ROAD WITH VEHICLES BEGINNING 785 FEET FROM DER, 397 FEET RIGHT OF CENTERLINE, UP TO 15 FEET AGL/802 FEET MSL.

ELEVATOR, TREE BEGINNING 1824 FEET FROM DER, 295 FEET RIGHT OF CENTERLINE, UP TO 78 FEET AGL/869 FEET MSL.

TREES BEGINNING 2207 FEET FROM DER, 454 FEET RIGHT OF CENTERLINE, UP TO 88 FEET AGL/876 FEET MSL.

ELEVATOR 1.2 NM FROM DER, 1040 FEET RIGHT OF CENTERLINE, 206 FEET AGL/999 FEET MSL.

ELEVATOR 1.3 NM FROM DER, 1114 FEET RIGHT OF CENTERLINE, 207 FEET AGL/1000 FEET MSL.

NOTE RWY 36: POLE 1191 FEET FROM DER, 742 FEET RIGHT OF CENTERLINE, 39 FEET AGL/835 FEET MSL.

TREE 1559 FEET FROM DER, 498 FEET LEFT OF CENTERLINE, 51 FEET AGL/847 FEET MSL.

CONTROLLING OBSTACLES:

RWY 25: 999 FEET MSL ELEVATOR 410022.30N/0834232.98W (CLIMB GRADIENT) (CLIMB-TO ALTITUDE), 1000 FEET MSL ELEVATOR 410022.80N/0834233.96W (CEILING) (VISIBILITY)

REMARKS:

FLIGHT INSPECTED BY:

JAMES ONIEAL

Digitally signed by
DAVID TEFFETELLER
Aug 31, 2018

OFFICE SYMBOL:
FICO

DATE:
8/27/18

DEVELOPED BY:

ROBERT GRIM

Digitally signed by
ROBERT GRIM
Jul 13, 2018

OFFICE SYMBOL:
AJV-5431

DATE:
07/13/2018

APPROVED BY:

PATRICK MULQUEEN

Digitally signed by
DAVID TEFFETELLER
Aug 31, 2018

OFFICE SYMBOL:
AJV-5430

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

QUALITY
3
CHECKED

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

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CITY, STATE
FINDLAY, OH

AIRPORT
FINDLAY

EFFECTIVE DATE	AMDT NO
6 DECEMBER 2018	1

COORDINATED WITH:

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

OTHER:
TOLEDO APP/DEP CON, AMGR

CHANGES - REASONS:

1. TAKEOFF MINIMUMS RWY 25 CHANGED FROM STANDARD TO 300-1 5/8 OR STANDARD WITH MINIMUM CLIMB OF 210 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 1400 FEET PRIOR TO DER - PER TARGETS EVALUATION (39-066499 - 999 FEET MSL ELEVATOR 410022.30N/0834232.98W, 39-030657 - 1000 FEET MSL ELEVATOR 410022.80N/0834233.96W) AND PREVIOUS EVALUATION/NOTAM.
2. UPDATED TAKEOFF NOTES - IAW 8260.46F APPENDIX D, SECTION 1, PARA 9A.



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (RNP) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> TED STEVENS ANCHORAGE INTL	<u>AIRPORT ID</u> PANC	<u>PROCEDURE NAME</u> RNAV (RNP) RWY 33	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> ANCHORAGE	<u>STATE</u> AK
<u>AIRPORT ELEVATION</u> 151	<u>TDZE</u> 121	<u>SUPERSEDED</u> RNAV (RNP) RWY 33	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>DATED</u> 02/01/2018	<u>MAG VAR</u> 16E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
HOPER	IAF	TAVUE		TF	FB	1.00	299.04	3.20	6800
TAVUE		SULNE		TF	FB	1.00	298.97	3.90	5500
SULNE		JULIN		RF	FB	1.00	(3.24 NM RADIUS CCW (CFWDD))	4.43	4000
JULIN		JEMOT		RF	FB	1.00	(2.33 NM RADIUS CCW (CFCZD))	3.02	3000
ZIREN	IAF	JEMOT		TF	FB	1.00	146.17	6.00	3000
JEMOT		CAMLO		RF	FB	1.00	(2.22 NM RADIUS CCW (CFGNX))	3.06	2200
WOLAK	IAF	CAMLO		TF	FB	1.00	067.25	6.00	2200
CAMLO		HURKI		RF	FB	1.00	(2.11 NM RADIUS CCW (CFQGG))	3.63	2200
HURKI	IF	FOXON		TF	FB	1.00	328.95	3.33	1200
FOXON	PFAF	DA	MAP	TF	FO	0.30	328.91	3.20	
DA	MAP	MURRS		TF	FB	1.00	328.91	8.01	
MURRS		BGQ VORTAC		TF	FO	1.00	353.27	17.21	4000

MISSED APPROACH

MAP:

RNP: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4000 ON THE RNAV MISSED APPROACH ROUTE TO BGQ VORTAC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)					
2.	PROFILE STARTS AT HURKI								
3. FAC:	328.91	FAF: FOXON	DIST FAF TO MAP:	DIST FAF TO THLD:					
4. MIN ALT:	HURKI 2200, FOXON 1200								
5. DIST TO THLD FROM OM:	3.20	MM:	IM:	150 HAT:	342 HAT: 0.89	GS ANT:			
6. MIN GP INCPT:	1200	GP ALT AT FAF : FOXON 1200			OM:	MM:	IM:		
7. GP ANGLE:	3.00	34:1:	IS NOT CLEAR	20:1:	IS NOT CLEAR	TCH:	60.0		
8. MSA FROM:	RW33 8800								

PBN REQUIREMENTS NOTE:

RNP AR APCH
RF REQUIRED

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -17°C OR ABOVE 54°C.
CHART PLANVIEW NOTE: RADAR REQUIRED
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HOPER ON V320-440.
CHART PLANVIEW NOTE AT SULNE: MAX 210 KIAS UNTIL HURKI.
CHART PLANVIEW NOTE AT JEMOT: MAX 210 KIAS UNTIL HURKI.
CHART PLANVIEW NOTE AT CAMLO: MAX 210 KIAS UNTIL HURKI.

ADDITIONAL FLIGHT DATA:

CHART MANDATORY 3000 AT ZIREN
CHART AT/ABOVE 8000 AT HOPER
WAAS CHANNEL #50442
REFERENCE PATH ID: W33A
HOLD N, RT, 168.00 INBOUND



MINIMUMS:

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

ALTERNATE: NA ☐

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
AUTHORIZATION REQUIRED															
RNP 0.11 DA	463	1	342	463	1	342	463	1	342	463	1	342			
RNP 0.20 DA	525	1 1/8	404	525	1 1/8	404	525	1 1/8	404	525	1 1/8	404			
RNP 0.30 DA	687	1 5/8	566	687	1 5/8	566	687	1 5/8	566	687	1 5/8	566			



CHANGES - REASONS

1. TERMINAL ROUTES: CHANGED COURSE AND DISTANCE FROM HOPER TO TAVUE FROM 300.41/3.33 TO 299.04/3.20 - NUMEROUS FIXES ON PROCEDURE MOVED SOUTH TO ACCOMMODATE NEW 60 FT TCH TO A NEWLY DISPLACED THLD.
2. TERMINAL ROUTES: CHANGED COURSE AND DISTANCE FROM TAVUE TO SULNE FROM 300.34/4.00 TO 298.97/3.90 - NUMEROUS FIXES ON PROCEDURE MOVED SOUTH TO ACCOMMODATE NEW 60 FT TCH TO A NEWLY DISPLACED THLD.
3. TERMINAL ROUTES: CHANGED DISTANCE FROM SULNE TO JULIN FROM 4.51 TO 4.43 - NUMEROUS FIXES ON PROCEDURE MOVED SOUTH TO ACCOMMODATE NEW 60 FT TCH TO A NEWLY DISPLACED THLD.
4. TERMINAL ROUTES: CHANGED COURSE FROM WOLAK TO CAMLO FROM 067.26 TO 067.25 - NUMEROUS FIXES ON PROCEDURE MOVED SOUTH TO ACCOMMODATE NEW 60 FT TCH TO A NEWLY DISPLACED THLD.
5. TERMINAL ROUTES: CHANGED COURSE AND DISTANCE FROM HURKI TO FOXON FROM 328.94/3.04 TO 328.95/3.33 - NUMEROUS FIXES ON PROCEDURE MOVED SOUTH TO ACCOMMODATE NEW 60 FT TCH TO A NEWLY DISPLACED THLD.
6. TERMINAL ROUTES: CHANGED DISTANCE FROM FOXON TO MISSED APPROACH POINT FROM 3.11 TO 3.20 - NEW 60 FT TCH TO A NEWLY DISPLACED THLD.
7. TERMINAL ROUTES: CHANGED COURSE AND DISTANCE FROM MISSED APPROACH POINT TO MURRS FROM 328.89/7.20 TO 328.91/8.01 - DISPLACED THRESHOLD MOVED, MISSED COURSE CHANGED TO MATCH FINAL COURSE.
8. LINE 5: REMOVED 3.11 FROM OUTER MARKER - OUTER MARKER DOES NOT EXIST, NO ILS ASSOCIATED WITH RWY 33.
9. LINE 5: ADDED "342 HAT: 0.89" - NEW 8260-3 FORM CHANGED TO REFLECT 8260.19H.
10. LINE 7: CHANGED GS ANGLE AND TCH FROM 3.10/55.0 TO 3.00/60 - MATCHED VGSI DATA IN PENDING DATA.
11. LINE 8: CHANGED MSA FROM 8900 TO 8800 - NEW OBSTACLE ANALYSIS.
12. MINIMUMS: RNP 0.11 DA/HAT & VISIBILITY CHANGED FROM 545/424- 1 3/8 TO 463/342-1 - NEW OBSTACLE ANALYSIS.
13. MINIMUMS: RNP 0.20 DA/HAT & VISIBILITY CHANGED FROM 654/533- 1 3/4 TO 525/404- 1 1/8 - NEW OBSTACLE ANALYSIS.
14. MINIMUMS: RNP 0.30 DA/HAT & VISIBILITY CHANGED FROM 722/601- 2 TO 687/566- 1 5/8 - NEW OBSTACLE ANALYSIS.
15. ADDED PBN REQUIREMENTS NOTES: RNP APCH, RF REQUIRED, AND RNP 0.30 - NEW CRITERIA.
16. MODIFIED BARO-VNAV NOTE FROM "PROCEDURE NA BELOW -23C (-9F) OR ABOVE 47C (117F)" TO PROCEDURE NA BELOW -17C OR ABOVE 54C" - FARENHEIT REMOVED PER CRITERIA, NEW TEMP BASED ON 5 YEAR STUDY.
17. ADDITIONAL FLIGHT DATA, REMOVED ALL ARINC INFO: "ROUTE TYPE : A, H" "ROUTE TYPE QUALIFIER 2: S" "ROUTE TYPE QUALIFIER 1: F" - ARINC INFO NO LONGER REQUIRED TO BE IN ADDITIONAL FLIGHT DATA PER CURRENT CRITERIA.
18. ADDITIONAL FLIGHT DATA, REMOVED "#TCH 175.9 MSL (DO NOT CHART)" - NO LONGER REQUIRED TO BE IN ADDITIONAL FLIGHT DATA PER CURRENT CRITERIA.
19. REMOVED CHART PROFILE NOTE "VGSI AND RNAV GLIDESPATHTH NOT COINCIDENT" NOTE - VGSI AND GLIDEPATH ARE NOW COINCIDENT BASED ON PENDING RWY DATA.
20. REMOVED CHART NOTE "GPS REQUIRED" AND PLANVIEW NOTE "RADAR REQUIRED" - NO LONGER REQUIRED BY CRITERIA FOR RNP PROCEDURES.

PDF EDITS:
1. ADDED TO LINE 4: "HURKI 2200" DUE TO SIAP LIMITATION.

10/05/2018: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 06/29/2018.
1. ADDED CHART PLANVIEW NOTE: RADAR REQUIRED.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZAN, AMGR, ALASKA DOT, ANC APP CON, ATA

FLIGHT CHECKED BY

EDWARD WILLIAM MESA

Digitally signed by

DONALD H LANIER

Oct 05, 2018

OFFICE

FIOG

DATE

09/28/2018

DEVELOPED BY

COLTON CROWDER

Digitally signed by

COLTON CROWDER

Oct 05, 2018

OFFICE

AJV-5431

DATE

06/29/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

DONALD H LANIER

Oct 05, 2018

OFFICE

AJV-5430

DATE

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> BUCKLAND	<u>AIRPORT ID</u> PABL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 11	<u>ORIGINAL/AMENDMENT</u> 2A	<u>CITY</u> BUCKLAND	<u>STATE</u> AK
<u>AIRPORT ELEVATION</u> 29	<u>TDZE</u> 29	<u>SUPERSEDED</u> RNAV (GPS) RWY 11	<u>ORIGINAL/AMENDMENT</u> 2	<u>DATED</u> 07/19/2018	<u>MAG VAR</u> 11E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 020/30 CW 200/30	NOPT	020/12 CW 200/12		4400
1. 020/12 CW 200/12		HAGVA	IF/IAF	2900
2. 200/30 CW 290/30		200/15 CW 290/15		5600
2. 200/15 CW 290/15		WADUN	IAF	4200
3. 290/30 CW 020/30		290/15 CW 020/15		4800
4. 290/15 CW 020/15		KENKE	IAF	3900

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
WADUN	IAF	HAGVA	NOPT	TF	FB	1.00	200.51	8.00	2900
KENKE	IAF	HAGVA	NOPT	TF	FB	1.00	020.20	8.00	2900
HAGVA	IF/IAF	BIHGO		TF	FB	1.00	110.35	7.70	1900
BIHGO	FAF	WIBLO/1.90 NM TO RW11		TF	FB	0.30	110.60	3.89	
WIBLO/1.90 NM TO RW11		RW11	MAP	TF	FO	0.30	110.60	1.90	
RW11	MAP	279 MSL		CA			110.60		
279 MSL		JAMUR		DF	FO	1.00			3100

QUALITY
14
CHECKED

MISSED APPROACH

MAP:
LPV: DA
LNAV/VNAV: DA
LNAV: RW11

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3100 DIRECT JAMUR AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3100.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)				
2.	HOLD W HAGVA, RT, 110.35 INBOUND, 2900 FT. IN LIEU OF PT (IAF), MAX 6000.							
3. FAC:	110.60	FAF: BIHGO	DIST FAF TO MAP: 5.79	DIST FAF TO THLD: 5.79				
4. MIN ALT:	HAGVA 2900, BIHGO 1900, WIBLO/1.90 NM TO RW11 660*							
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	250 HAT: 0.69	GS ANT:			
6. MIN GP INCPT: 1900	GP ALT AT FAF : BIHGO 1900		OM:	MM:	IM:			
7. GP ANGLE: 3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 30.0					
8. MSA FROM:								

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING SELAWIK ALTIMETER SETTING.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -21C OR ABOVE 54C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: WHEN LOCAL ALTIMETER SETTING IS NOT RECEIVED USE SELAWIK ALTIMETER SETTING: INCREASE DA TO 387 FT AND ALL VISIBILITIES 3/8 SM; INCREASE ALL MDAS 120 FT AND VISIBILITY CAT C 1/4 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON
310 AAO 660148N1612019W
CHART VDP AT 0.90 NM TO RW11*
*LNAV ONLY
WAAS CHANNEL #58041
REFERENCE PATH ID: W11A
CHART FAS OBST: 79 TREE 655845N/1611100W.
HOLD E, RT, 291.17 INBOUND
LTP HAE: 13 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.



CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	279	1	250	279	1	250	279	1	250		NA				
LNAV/VNAV DA	279	1	250	279	1	250	279	1	250		NA				
LNAV MDA	340	1	311	340	1	311	340	1	311		NA				
CIRCLING	540	1	511	540	1	511	640	1 3/4	611		NA				

CHANGES - REASONS

1. CHANGED CHART NOTE FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -21C (-5F) OR ABOVE 54C (130F)." TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -21C OR ABOVE 54C" - UPDATED CHART NOTE PER 8260.19H, 8-6-9 (S)
2. RESTORED SEGMENT KENKE TO HAGVA - CORRECTED FIX KENKE COORDINATES TO 655915.28N/1614751.06W - ERRONOUSLY MOVED 0.4 NM SE / CLEAR T-NOTAM 8/8018.



<u>AIRPORT</u> BUCKLAND	<u>AIRPORT ID</u> PABL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 11	<u>ORIGINAL/AMENDMENT</u> 2A	<u>CITY</u> BUCKLAND	<u>STATE</u> AK
<u>COORDINATED WITH:</u>					
A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ <u>OTHER:</u> ZAN, ANC FPO, AK DOT/PF					
<u>FLIGHT CHECKED BY</u> THOMAS ROBERT CONKLIN		<i>Digitally signed by</i> ADOLFO D URRUTIA Sep 20, 2018	<u>OFFICE</u> FIOG	<u>DATE</u> 05/18/2018	
<u>DEVELOPED BY</u> WARDELL HENNING		<i>Digitally signed by</i> ADOLFO D URRUTIA Sep 20, 2018	<u>OFFICE</u> AJV-5433	<u>DATE</u> 08/21/2018	<i>Digitally signed by</i> DAN POWELL Sep 20, 2018
<u>APPROVED BY</u> PATRICK MULQUEEN			<u>OFFICE</u> AJV-5430	<u>DATE</u>	<u>TITLE</u> MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	PABL
RUNWAY	RW11
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W11A
LTP/FTP LATITUDE	655901.9205N
LTP/FTP LONGITUDE	1610929.7375W
LTP/FTP ELLIPSOIDAL HEIGHT	+00130
FPAP LATITUDE	655815.1275N
FPAP LONGITUDE	1610624.5850W
THRESHOLD CROSSING HEIGHT (TCH)	00030.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1776
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER	ED0FD3ED

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	PA
LTP ORTHOMETRIC HEIGHT	+00083
FPAP ORTHOMETRIC HEIGHT	+00083



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> DILLINGHAM	<u>AIRPORT ID</u> PADL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 1	<u>ORIGINAL/AMENDMENT</u> 2D	<u>CITY</u> DILLINGHAM	<u>STATE</u> AK
<u>AIRPORT ELEVATION</u> 82	<u>TDZE</u> 82	<u>SUPERSEDED</u> RNAV (GPS) RWY 1	<u>ORIGINAL/AMENDMENT</u> 2C	<u>DATED</u> 07/24/2014	<u>MAG VAR</u> 15E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2010

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 282/30 CW 101/30	NOPT	282/8 CW 101/8		4600
2. 282/8 CW 101/8		RALRY	IF/IAF	2600
3. 101/30 CW 191/30		JOVRY	IAF	5100
4. 191/30 CW 282/30		KIYGE	IAF	4300

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
JOVRY	IAF	RALRY	NOPT	TF	FB	1.00	101.10	9.86	2600
KIYGE	IAF	RALRY	NOPT	TF	FB	1.00	281.58	9.86	2600
RALRY	IF/IAF	SUBWA		TF	FB	1.00	011.34	6.69	1700
SUBWA	FAF	RW01	MAP	TF	FO	0.30	011.42	4.97	
RW01	MAP	332 MSL		CA			011.42		
332 MSL		ZEDAG		DF	FO	1.00			4300

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW01

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4300 DIRECT ZEDAG AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4300.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD S RALRY, RT, 011.34 INBOUND, 2600 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 011.42FAF: SUBWADIST FAF TO MAP: 4.97DIST FAF TO THLD: 4.97
4. MIN ALT: RALRY 2600, SUBWA 1700
5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.64GS ANT:
6. MIN GP INCPT: 1700GP ALT AT FAF : SUBWA 1700OM:MM:IM:
7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 45.0
8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: CIRCLING NA E OF RWY 1-19.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -25C OR ABOVE 54C.
CHART NOTE: RWY 01 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.63 NM TO RW01*
*LNAV ONLY
WAAS CHANNEL #82025
REFERENCE PATH ID: W01A
CHART FAS OBST: 340 TWR 590003N/1583253W.
HOLD N, RT, 191.65 INBOUND
LTP HAE: 36 M

MINIMUMS:

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

ALTERNATE: NA

☐

STANDARD - CAT D 800-2 1/4

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	332	1	250	332	1	250	332	1	250	332	1	250			
LNAV/VNAV DA	459	1 1/4	377	459	1 1/4	377	459	1 1/4	377	459	1 1/4	377			
LNAV MDA	640	1	558	640	1	558	640	1 5/8	558	640	1 5/8	558			
CIRCLING	640	1	558	640	1	558	700	1 3/4	618	780	2 1/4	698			



AIRPORT	AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	CITY	STATE
DILLINGHAM	PADL	RNAV (GPS) RWY 1	2D	DILLINGHAM	AK

CHANGES - REASONS

- 1. INCORPORATED ABBREVIATED AMDTS 2A-C. - FAAO 8260.19H PARAGRAPH 8-3-4C.
- 2. DELETED NOTE: CIRCLING RWY 19 NA AT NIGHT. - 20:1 OBSTACLE REMOVED.
- 3. RAISED CATS C AND D CIRCLING - VISIBILITY FROM 640- 1 5/8 AND 640- 2 TO 700- 1 3/4 AND 780-2 1/4 AND ADDED CHART CIRCLING ICON TO ADDITIONAL FLIGHT DATA. - FAAO 8260.3C NEW CIRCLING CRITERIA APPLIED. (FLIGHT CHECKED ON THE RNAV (GPS) RWY 19 AMDT 3.)
- 4. MOVED AND UPDATED CONTINGENCY ALTIMETER NOTE TO 8260-9 REMARKS.- FOR CONTINGENCY PURPOSES.
- 5. ADDED CHART VDP AT 1.63 NM TO RW01 TO ADDITIONAL FLIGHT DATA. - 20:1 OBSTACLE REMOVED.
- 6. CHANGED LTP HAE FROM 35.5 TO 36. - NEW AIRNAV DATA.
- 7. DELETED NOTE: INOPERATIVE TABLE DOES NOT APPLY. - RWY 1 HAS NO ALS.
- 8. CHANGED LTP COORDINATES FROM 590212.6130N/ 1583047.1300W TO 590212.6135N/15883047.1305W, FPAP COORDINATES FROM 590332.1600N/1582930.1900W TO 590332.1620N/1582930.1910W, CRC REMAINDER FROM FAFC3216 TO D93E4AAF AND LTP /FPAP ORTHOMETRIC HEIGHT FROM 0024 TO 0027 IN FAS DATA. - NEW DATA PULL.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZAN, ARPT MGR, STATE OF ALASKA DOT & PF, ATA

FLIGHT CHECKED BY

JOHN D JEFFERS

DEVELOPED BY *Digitally signed by*
LIAM DONAHUE **LIAM DONAHUE**
Sep 11, 2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
DONALD H LANIER
Sep 21, 2018

Digitally signed by
DONALD H LANIER
Sep 21, 2018

OFFICE

FICO

OFFICE

AJV-5431

OFFICE

AJV-5430

DATE

9/19/18

DATE

07/31/2018

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	PADL
RUNWAY	RW01
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W01A
LTP/FTP LATITUDE	590212.6135N
LTP/FTP LONGITUDE	1583047.1305W
LTP/FTP ELLIPSOIDAL HEIGHT	+00360
FPAP LATITUDE	590332.1620N
FPAP LONGITUDE	1582930.1910W
THRESHOLD CROSSING HEIGHT (TCH)	00045.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0800
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	D93E4AAF
<u>ADDITIONAL PATH POINT RECORD INFORMATION</u>	
ICAO CODE	PA
LTP ORTHOMETRIC HEIGHT	+00227
FPAP ORTHOMETRIC HEIGHT	+00227



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.23

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<u>AIRPORT</u> DILLINGHAM	<u>AIRPORT ID</u> PADL	<u>PROCEDURE NAME</u> VOR RWY 1	<u>ORIGINAL/AMENDMENT</u> 9D	<u>CITY</u> DILLINGHAM	<u>STATE</u> AK	
<u>AIRPORT ELEVATION</u> 82	<u>TDZE</u> 82	<u>SUPERSEDED</u> VOR RWY 1	<u>ORIGINAL/AMENDMENT</u> 9C	<u>DATED</u> 07/24/2014	<u>MAG VAR</u> 15E	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> DLG	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
ENYUJ/10.00 DME CCW	IAF	EMHUT/10.00 DME	NOPT				10.00 DME ARC		3500
ODWUJ/10.00 DME CCW	IAF	EMHUT/10.00 DME	NOPT				10.00 DME ARC		3500
PEDUJ/10.00 DME CCW	IAF	EMHUT/10.00 DME					10.00 DME ARC		3500
QOPRI/10.00 DME CW	IAF	EMHUT/10.00 DME	NOPT				10.00 DME ARC		1800
UFTIV/10.00 DME CW	IAF	EMHUT/10.00 DME	NOPT				10.00 DME ARC		1800
OCDIJ/10.00 DME CW	IAF	EMHUT/10.00 DME					10.00 DME ARC		1800
EMHUT/10.00 DME	IF	DLG VOR/DME					010.33	10.00	1100

MISSED APPROACH

MAP:

2.84 NM AFTER DLG VOR/DME OR AT DLG VOR/DME 2.84 DME

MISSED APPROACH INSTRUCTIONS:

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

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L **SIDE OF COURSE** 190.33 **OUTBOUND** 2000 **FT WITHIN** 10 **MILES OF** DLG VOR/DME (IAF)
- 2.
3. **FAC:** 010.33 **FAF:** DLG VOR/DME **DIST FAF TO MAP:** 2.84 **DIST FAF TO THLD:** 2.84
4. **MIN ALT:** DLG VOR/DME 1100
8. **MSA FROM:** DLG VOR/DME 035-210 1800, 210-035 4100

EQUIPMENT REQUIREMENTS NOTES:



NOTES:

CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: RWY 01 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: CIRCLING NA E OF RWY 1-19.

ADDITIONAL FLIGHT DATA:

DLG VOR/DME TO RW01: 3.25/45
CHART: 417 TWR 590239N/1582722W
CHART CIRCLING ICON.
CHART DLG R-293 AT ENYUJ.
CHART DLG R-260 AT ODWUJ.
CHART DLG R-246 AT PEDUJ.
CHART DLG R-105 AT QOPRI.
CHART DLG R-090 AT UFTIV.
CHART DLG R-044 AT OCDIJ.
CHART VDP AT 1.64 DME
DISTANCE VDP TO THLD 1.19 NM
CHART FAS OBST: 184 TREE 590040N/1583343W.
CHART: 340 TWR 590003N/1583253W.
HOLD S, RT, 010.85 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/4

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-01	500	1	418	500	1	418	500	1 1/4	418	500	1 1/4	418			
CIRCLING	600	1	518	600	1	518	700	1 3/4	618	780	2 1/4	698			

CHANGES - REASONS

1. DELETED NOTE: CIRCLING RWY 19 NA AT NIGHT. - 20:1 OBSTACLE REMOVED.
2. MOVED AND UPDATED CONTINGENCY ALTIMETER NOTE TO 8260-9 REMARKS.- FOR CONTINGENCY PURPOSES.
3. RAISED CATS C AND D CIRCLING - VISIBILITY FROM 600- 1 1/2 AND 640- 2 TO 700- 1 3/4 AND 780-2 1/4 AND ADDED CHART CIRCLING ICON TO ADDITIONAL FLIGHT DATA. - FAAO 8260.3C NEW CIRCLING CRITERIA APPLIED. (FLIGHT CHECKED ON THE RNAV (GPS) RWY 19 AMDT 3.)
4. INCORPORATED ABBREVIATED AMDTS A-C. - FAAO 8260.19H PARAGRAPH 8-3-4C.
5. ADDED VDP AT 1.64 DM, 1.19 NM FROM THLD. - 20:1 OBSTACLE REMOVED.
6. RAISED FAF ALTITUDE FROM 1000 TO 1100. - NEW IAPA 7:1 DG CALCULATIONS.
7. CHANGED VOR/DME TO RW01 IN ADDITIONAL FLIGHT DATA FROM 2.92/45 TO 3.25/45. - NEW FAF ALTITUDE.
8. ADDED PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). - NEW FAF ALTITUDE.



<u>AIRPORT</u> DILLINGHAM	<u>AIRPORT ID</u> PADL	<u>PROCEDURE NAME</u> VOR RWY 1	<u>ORIGINAL/AMENDMENT</u> 9D	<u>CITY</u> DILLINGHAM	<u>STATE</u> AK
<u>COORDINATED WITH:</u>					
A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ <u>OTHER:</u> ZAN, AIRPORT MANAGER, STATE OF ALASKA DOT&PF, ATA					
<u>FLIGHT CHECKED BY</u>		<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
JOHN D JEFFERS		DONALD H LANIER	FICO	9/19/18	
Sep 21, 2018					
<u>DEVELOPED BY</u>		<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
LIAM DONAHUE		LIAM DONAHUE	AJV-5431	07/31/2018	
Sep 11, 2018					
<u>APPROVED BY</u>		<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
PATRICK MULQUEEN		DONALD H LANIER	AJV-5430		MANAGER
Sep 21, 2018					



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> KOTLIK	<u>AIRPORT ID</u> PFKO	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 2	<u>ORIGINAL/AMENDMENT</u> ORIG-D	<u>CITY</u> KOTLIK	<u>STATE</u> AK
<u>AIRPORT ELEVATION</u> 14	<u>TDZE</u> 13	<u>SUPERSEDED</u> RNAV (GPS) RWY 2	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>DATED</u> 03/05/2015	<u>MAG VAR</u> 15E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2005

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
ENM VOR/DME	IAF	JADEV		TF	FB	1.00	060.06	20.86	2500
GOYWI	IAF	JADEV		TF	FB	1.00	307.49	11.34	2500
PICNI	IAF	JADEV		TF	FB	1.00	106.98	7.69	2500
JADEV	IF	IYOKO		TF	FB	1.00	017.23	6.00	1600
IYOKO	FAF	RW02	MAP	TF	FO	0.30	017.33	5.00	
RW02	MAP	414 MSL		CA			017.33		
414 MSL		KEGEY		DF	FO	1.00			3500

MISSED APPROACH

MAP:

LNAV: RW02

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3500 DIRECT KEGEY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT JADEV

3. FAC: 017.33

FAF: IYOKO

DIST FAF TO MAP: 5.00

DIST FAF TO THLD: 5.00

4. MIN ALT: JADEV 2500, IYOKO 1600

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:

6. MIN GP INCPT:

GP ALT AT FAF :

OM:

MM:

IM:

7. GP ANGLE:

34:1: IS NOT CLEAR

20:1: IS CLEAR

TCH:

8. MSA FROM: RW02 3100

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: CIRCLING RWY 20 NA AT NIGHT.
CHART NOTE: RWY 2 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PROFILE NOTE: PROCEDURE NA FOR ARRIVALS AT PICNI ON V385 SOUTHWEST BOUND.
CHART PROFILE NOTE: PROCEDURE NA FOR ARRIVALS AT GOYWI ON V488 SOUTHWEST BOUND AND V506 SOUTHEAST BOUND.
CHART PROFILE NOTE: PROCEDURE NA FOR ARRIVAL ON ENM VOR/DME AIRWAY RADIALS 335 CW 133.

ADDITIONAL FLIGHT DATA:

CHART EMMONAK AWOS-3 135.35
IYOKO TO RW02: 2.91/40.
CHART FAS OBST: 39 TOWER 630155N/1633318W.
HOLD NE, RT, 223.75 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	500	1	487	500	1	487		NA			NA				
CIRCLING	560	1	546	560	1	546		NA			NA				



CHANGES - REASONS

- 1. REMOVED CHART NOTE: DME/DME RNP-0.3 NA - NEW CRITERIA.
- 2. ADDED PBN EQUIPMENT REQUIREMENT NOTE: RNP APCH - NEW CRITERIA.
- 3. ADDED CHART NOTE: RWY 2 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - 34:1 PENETRATION.
- 4. CHANGED LINE 7 FROM 34:1 IS CLEAR TO 34:1 IS NOT CLEAR - 34:1 PENETRATION DISCOVERED DURING OBSTACLE ANALYSIS.
- 5. ADDED CHART NOTE: CIRCLING RWY 20 NA AT NIGHT - 20:1 PENETRATIONS IN RWY 20 VISUAL AREA.
- 6. CHANGED CIRCLING HAA FROM 545 TO 546 ALL CATS - AIRPORT ELEVATION CHANGED FROM 15 TO 14.
- 7. ADDED TO LINE 7: 20:1 IS NOT CLEAR - 20:1 OBSTACLES PENETRATE THE CIRCLING VISUAL AREAS.
- 8. LNAV HAT CHANGED FROM 485 TO 487 - TDZE ELEVATION CHANGED FROM 15 TO 13.
- 9. CHART PROFILE NOTE CHANGED FROM "PROCEDURE NA FOR ARRIVALS AT PICNI VIA B-27 NORTHWEST BOUND" TO "PROCEDURE NA FOR ARRIVALS AT PICNI ON V385 SOUTHWEST BOUND" - PICNI IS NOT ON B-27, AND TURN FROM V385 EXCEEDS 90 DEGREES.
- 10. CHART PROFILE NOTE CHANGED FROM "PROCEDURE NA FOR ARRIVALS AT GOYWI VIA V-506 SOUTHEAST BOUND" TO "PROCEDURE NA FOR ARRIVALS AT GOYWI ON V488 SOUTHWEST BOUND AND V506 SOUTHEAST BOUND" - TURNS EXCEED 90 DEGREES.
- 11. CHART PROFILE NOTE CHANGED FROM "PROCEDURE NA FOR ARRIVALS ON ENM VOR/DME AIRWAY RADIALS 038 CW 075" TO "PROCEDURE NA FOR ARRIVAL ON ENM VOR/DME AIRWAY RADIALS 335 CW 133" - TURNS EXCEED 90 DEGREES.



COORDINATED WITH:

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

FLIGHT CHECKED BY

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

DEVELOPED BY

COLTON CROWDER

Digitally signed by
COLTON CROWDER
Sep 17, 2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
DONALD H LANIER
Sep 19, 2018

OFFICE

OFFICE

AJV-5431

OFFICE

AJV-5430

DATE

DATE

08/03/2018

DATE

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
ILS STANDARD INSTRUMENT APPROACH PROCEDURE

TITLE 14 CFR PART 97.29

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

<u>AIRPORT</u> RALPH WIEN MEMORIAL	<u>AIRPORT ID</u> PAOT	<u>PROCEDURE NAME</u> ILS OR LOC RWY 9	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> KOTZEBUE	<u>STATE</u> AK
<u>AIRPORT ELEVATION</u> 15	<u>TDZE</u> 13	<u>SUPERSEDED</u> ILS OR LOC RWY 9	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 12/07/2017	<u>MAG VAR</u> 11E
<u>FACILITY</u> I-OTZ	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
FIWWI/OTZ 25.00 DME		HUPUG/OTZ 12.00 DME					118.90	13.00 (OTZ R-299)	3900
OTZ VOR/DME		TUBDE/I-OTZ 11.31 DME					264.69	12.00	2500
HHM NDB		TUBDE/I-OTZ 11.31 DME					264.47	11.31	2500
OMPAE/OTZ 12.00 DME CCW	IAF	HUPUG/OTZ 12.00 DME	NOPT				12.00 DME ARC		2000
HUPUG/OTZ 12.00 DME CCW	IAF	TUBDE/I-OTZ 11.31 DME	NOPT				12.00 DME ARC (OTZ LR-275)		1600
NECSI/OTZ 12.00 DME CW	IAF	TUBDE/I-OTZ 11.31 DME	NOPT				12.00 DME ARC (OTZ LR-255)		1600
TUBDE/I-OTZ 11.31 DME	IF/IAF	KAYEC/I-OTZ 5.16 DME					088.88	6.14 (I-OTZ)	1400

MISSED APPROACH

MAP:

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

MISSED APPROACH INSTRUCTIONS:

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

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

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



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD W TUBDE, RT, 088.88 INBOUND, 1600 FT. IN LIEU OF PT (IAF), MAX 4500.
3. FAC: 088.88FAF: KAYEC/I-OTZ 5.16 DMEDIST FAF TO MAP:DIST FAF TO THLD: 4.24
4. MIN ALT: TUBDE/I-OTZ 11.31 DME 1600, KAYEC/I-OTZ 5.16 DME 1400
5. DIST TO THLD FROM OM:MM:IM:150 HAT:GS ANT: 790
6. MIN GS INCPT: 1400GS ALT AT FAF : KAYEC/I-OTZ 5.16 DME 1400OM:MM:IM:
7. GP ANGLE: 3.0034:1:20:1:TCH: 37.7
8. MSA FROM: OTZ VOR/DME 360-090 3600, 090-270 1600, 270-360 3200

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED

NOTES:

CHART NOTE: STRAIGHT-IN RWY 9 NA AT NIGHT, CIRCLING RWY 9, 18, 36 NA AT NIGHT, CIRCLING RWY 27 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD.
CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PROFILE NOTE: USE I-OTZ DME WHEN ON THE LOCALIZER COURSE.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
FICTITIOUS THRESHOLD POINT (CFCJG) DO NOT CHART.
CHART PLANVIEW NOTE: LOC OFFSET 1.90 DEGREES.
CHART OTZ R-330 AT OMPAE.
CHART OTZ R-299 AT HUPUG.
CHART OTZ R-191 AT NECSI.
CHART IN PLANVIEW: HHM NDB
CHART VDP AT 1.77 DME*
DISTANCE VDP TO THLD 0.84 NM
* LOC ONLY
CHART FAS OBST: 51 LIGHTING 665327N/1623630W.
FAC CROSSES RWY C/L EXTENDED 2680 FT FROM THLD.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE HHM NDB, RT, 298.60 INBOUND.
HOLD SE, RT, 294.60 INBOUND

MINIMUMS:

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

ALTERNATE: NA

☐

ILS: STANDARD; LOC: STANDARD - CAT D 800-2 1/4

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-ILS 09	263	5000	250	263	5000	250	263	5000	250	263	5000	250			
S-LOC 09	320	5500	307	320	5500	307	320	5000	307	320	5000	307			
CIRCLING	520	1	505	520	1	505	720	2	705	720	2 1/4	705			



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>
RALPH WIEN MEMORIAL	PAOT	ILS OR LOC RWY 9	1A	KOTZEBUE	AK

CHANGES - REASONS

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



COORDINATED WITH:

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

FLIGHT CHECKED BY

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

DEVELOPED BY

LONNIE EVERHART (JOSHUA DUGAN)

APPROVED BY

LONNIE EVERHART

OFFICE

OFFICE

OFFICE

AJV-5400

AJV-5400

DATE

DATE

DATE

08/20/2018

Digitally signed by
ROBERT G HAMILTON
Sep 28, 2018

Digitally signed by
ROBERT G HAMILTON
Sep 28, 2018

Digitally signed by
ROBERT G HAMILTON
Sep 28, 2018

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

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

TAA

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

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
GIGRE	IAF	KOTEC	NOPT	TF	FB	1.00	150.28	5.00	1900
HERDU	IAF	KOTEC	NOPT	TF	FB	1.00	000.27	8.89	1900
KOTEC	IF/IAF	ZIKBO		TF	FB	1.00	090.34	6.99	1500
ZIKBO	PFAF	RW09	MAP	TF	FO	0.30	090.61	4.54	
RW09	MAP	500 MSL		CA			090.61		500
500 MSL		HERDU		DF	FO	1.00			2000



MISSED APPROACH

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

MISSED APPROACH INSTRUCTIONS:
CLIMB TO 500 THEN CLIMBING RIGHT TURN TO 2000 DIRECT HERDU AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

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

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: STRAIGHT-IN RWY 9 NA AT NIGHT, CIRCLING RWY 9, 18, 36 NA AT NIGHT, CIRCLING RWY 27 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD.
CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20C OR ABOVE 54C.

ADDITIONAL FLIGHT DATA:

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

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/4



CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	263	5000	250	263	5000	250	263	5000	250	263	5000	250			
LNAV/VNAV DA	263	5000	250	263	5000	250	263	5000	250	263	5000	250			
LNAV MDA	360	5500	347	360	5500	347	360	5500	347	360	5500	347			
CIRCLING	520	1	505	520	1	505	720	2	705	720	2 1/4	705			

CHANGES - REASONS

1. NOTES: ADDED RWY 9 STRAIGHT -IN AND CIRCLING NA A NIGHT. - 20:1 PENETRATIONS.
2. MINUMUMS: UPDATED LPV, LNAV/VNAV DA VIS TO RVR 5000. - 20:1 PENETRATIONS.
3. NOTES: ADDED RWY 9 HELICOPTER VIS REDUCTION BELOW 1 SM NOT AUTHORIZED. - 20:1 PENETRATIONS.
4. DELETED DME/DME RNP NOTE - CURRENT CRITERIA.
5. ADDED PBN REQUIREMENTS NOTE RNP APCH - CURRENT CRITERIA.



COORDINATED WITH:

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

FLIGHT CHECKED BY

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

DEVELOPED BY

LONNIE EVERHART (JOSHUA DUGAN)

APPROVED BY

LONNIE EVERHART

OFFICE

OFFICE

AJV-5400

OFFICE

AJV-5400

DATE

Digitally signed by
ROBERT G HAMILTON
Sep 28, 2018

DATE

Digitally signed by
ROBERT G HAMILTON
Sep 28, 2018

DATE

Digitally signed by
ROBERT G HAMILTON
Sep 28, 2018

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

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



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

TAA

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

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
LIYRE	IAF	NEMDE	NOPT	TF	FB	1.00	001.20	8.00	2000
ZIPYU	IAF	NEMDE	NOPT	TF	FB	1.00	181.33	8.00	2000
NEMDE	IF/IAF	ACUDU		TF	FB	1.00	271.26	7.32	1600
ACUDU	FAF	JUTIX/2.11 NM TO RW27		TF	FB	0.30	270.99	2.28	
JUTIX/2.11 NM TO RW27		RW27	MAP	TF	FO	0.30	270.99	2.11	
RW27	MAP	415 MSL		CA			270.99		
415 MSL		NEMDE		DF	FO	1.00			2000



MISSED APPROACH

MAP:
LNAV: RW27

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

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)
2.	HOLD E NEMDE, RT, 271.26 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 14000.			
3. FAC:	270.99	FAF: ACUDU	DIST FAF TO MAP: 4.39	DIST FAF TO THLD: 4.39
4. MIN ALT:	NEMDE 2000, ACUDU 1600, JUTIX/2.11 NM TO RW27 800			
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	GS ANT:
6. MIN GP INCPT:	GP ALT AT FAF :	OM:	MM:	IM:
7. GP ANGLE:	34:1: IS NOT CLEAR	20:1: IS NOT CLEAR	TCH:	
8. MSA FROM:				

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING RWY 9, 18, 36 NA AT NIGHT.
CHART NOTE: RWY 27 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: STRAIGHT-IN RWY 27 AT NIGHT, CIRCLING RWY 27 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD.

ADDITIONAL FLIGHT DATA:

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

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/4

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	420	1	405	420	1	405	420	1 1/8	405	420	1 1/8	405			
CIRCLING	520	1	505	520	1	505	720	2	705	720	2 1/4	705			

CHANGES - REASONS

1. NOTES: ADDED RWY 9 TO CIRCLING AT NIGHT NA NOTE. - 20:1 PENETRATIONS.
2. DELETED DME/DME RNP NOTE - UPDATED TO CURRENT CRITERIA.
3. ADDED PBN REQUIREMENTS NOTE: RNP APCH - UPDATED TO CURRENT CRITERIA.
4. UPDATED OPERATIONAL VGSI REQUIREMENTS NOTE - UPDATED TO CURRENT CRITERIA.



<u>AIRPORT</u> RALPH WIEN MEMORIAL	<u>AIRPORT ID</u> PAOT	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 27	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> KOTZEBUE	<u>STATE</u> AK

COORDINATED WITH:

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

<u>FLIGHT CHECKED BY</u>	<u>OFFICE</u>	<u>DATE</u>	Digitally signed by ROBERT G HAMILTON Sep 28, 2018	
FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, DEC 22, 2017.				
<u>DEVELOPED BY</u>	<u>OFFICE</u>	<u>DATE</u>	Digitally signed by ROBERT G HAMILTON Sep 28, 2018	
LONNIE EVERHART (JOSHUA DUGAN)	AJV-5400			
<u>APPROVED BY</u>	<u>OFFICE</u>	<u>DATE</u>	Digitally signed by ROBERT G HAMILTON Sep 28, 2018	<u>TITLE</u> MANAGER
LONNIE EVERHART	AJV-5400			



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.23

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

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
FIWWI/25.00 DME		HUPUG/12.00 DME					118.90	13.00 (OTZ R-299)	3900
HHM NDB		KEPTE/4.59 DME	IAF				255.48	3.97	2500
OTZ VOR/DME		KEPTE/4.59 DME	IAF				263.73	4.59	2500
OMPAE/12.00 DME CCW	IAF	HUPUG/12.00 DME	NOPT				12.00 DME ARC		2000
HUPUG/12.00 DME CCW	IAF	VAGUY/12.00 DME	NOPT				12.00 DME ARC (OTZ LR-274)		1600
NECSI/12.00 DME CW	IAF	VAGUY/12.00 DME	NOPT				12.00 DME ARC (OTZ LR-254)		1600
VAGUY/12.00 DME	IF	KEPTE/4.59 DME					083.73	7.41 (OTZ R-264)	1000

MISSED APPROACH

MAP:

WUXIP/1.62 DME FIX

MISSED APPROACH INSTRUCTIONS:

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

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L SIDE OF COURSE 263.73 OUTBOUND 1500 FT WITHIN 10 MILES OF KEPTE/OTZ 4.59 DME (IAF)
- 2.
3. FAC: 083.73 FAF: KEPTE/4.59 DME DIST FAF TO MAP: DIST FAF TO THLD: 2.97
4. MIN ALT: KEPTE/4.59 DME 1000
8. MSA FROM: OTZ VOR/DME 360-090 3700, 090-270 1600, 270-360 3300

EQUIPMENT REQUIREMENTS NOTES:



DME REQUIRED

NOTES:

CHART NOTE: STRAIGHT-IN RWY 9 NA AT NIGHT, CIRCLING RWY 9, 18, 36 NA AT NIGHT, CIRCLING RWY 27 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD.
CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: ARRIVALS ON B2, B3, B27, G18, AND V506 DESCEND TO 4300 IN HHM NDB HOLDING PATTERN PRIOR TO COMMENCING APPROACH .

ADDITIONAL FLIGHT DATA:

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

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/4

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-09	340	5500	327	340	5500	327	340	5000	327	340	5000	327			
CIRCLING	520	1	505	520	1	505	720	2	705	720	2 1/4	705			

CHANGES - REASONS

1. NOTES: ADDED CHART NOTE RWY 9 STRAIGHT-IN AND CIRCLING NA AT NIGHT - 20:1 PENETRATIONS.
2. NOTES: ADDED CHART NOTE RWY 9 HELICOPTER VIS REDUCTION NOTE - 20:1 PENETRATIONS.
3. REPLACED CHART NOTE DME REQUIRED WITH EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED - CURRENT CRITERIA.

COORDINATED WITH:

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

FLIGHT CHECKED BY

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

DEVELOPED BY

LONNIE EVERHART (JOSHUA DUGAN)

APPROVED BY

LONNIE EVERHART

OFFICE

OFFICE

AJV-5400

OFFICE

AJV-5400

Digitally signed by
DATE ROBERT G HAMILTON
Sep 28, 2018

Digitally signed by
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Sep 28, 2018

DATE Digitally signed by
ROBERT G HAMILTON
Sep 28, 2018
TITLE



**FEDERAL AVIATION ADMINISTRATION
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TITLE 14 CFR PART 97.23**

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

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
OTZ VOR/DME		LOTIC/3.50 DME	IAF				076.81	3.50	2500
JUMAS/12.00 DME CCW	IAF	ZOTOR/12.00 DME	NOPT				12.00 DME ARC (OTZ LR-087)		1600
MUNUE/12.00 DME CW	IAF	ZOTOR/12.00 DME	NOPT				12.00 DME ARC		1600
ZOTOR/12.00 DME	IF	LOTIC/3.50 DME					256.81	8.50 (OTZ R-077)	1600

MISSED APPROACH

MAP:

OTZ VOR/DME

MISSED APPROACH INSTRUCTIONS:

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

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

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

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED.

NOTES:

CHART NOTE: CIRCLING TO RWY 9, 18, 36 NA AT NIGHT.
CHART NOTE: RWY 27 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: STRAIGHT IN RWY 27 AT NIGHT, CIRCLING RWY 27 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE GLIDEPATH UNTIL THRESHOLD.



ADDITIONAL FLIGHT DATA:

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

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/4

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-27	440	1	425	440	1	425	440	1 1/4	425	440	1 1/4	425			
CIRCLING	520	1	505	520	1	505	720	2	705	720	2 1/4	705			

CHANGES - REASONS

1. NOTES: ADDED RWY 9 TO CIRCLING NA AT NIGHT NOTE. - 20:1 PENETRATIONS.
2. DELETED CHART NOTE DME REQUIRED ADDED EQUIPMENT REQUIREMENT NOTE DME REQUIRED - CURRENT CRITERIA.
3. UPDATED VGSI REQUIRED NOTE TERMINOLOGY - CURRENT CRITERIA.

COORDINATED WITH:

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

FLIGHT CHECKED BY

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

DEVELOPED BY

LONNIE EVERHART (JOSHUA DUGAN)

APPROVED BY

LONNIE EVERHART

OFFICE

AJV-5400

OFFICE

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DATE

Digitally signed by
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Sep 28, 2018

TITLE
MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> BAY MINETTE MUNI	<u>AIRPORT ID</u> K1R8	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 8	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> BAY MINETTE	<u>STATE</u> AL	
<u>AIRPORT ELEVATION</u> 248	<u>TDZE</u> 231	<u>SUPERSEDED</u> RNAV (GPS) RWY 8	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 05/28/2015	<u>MAG VAR</u> 0E	<u>EPOCH YEAR</u> 2000
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
GIKEY	IAF	UMMAP	NOPT	TF	FB	1.00	100.60	12.87	2000
UMMAP	IF/IAF	OTZOT		TF	FB	1.00	085.65	6.50	2000
OTZOT	FAF	RW08	MAP	TF	FO	0.30	085.72	5.51	
RW08	MAP	800 MSL		CA			085.72		800
800 MSL		UMMAP		DF	FO	1.00			2000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW08

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 800 THEN CLIMBING LEFT TURN TO 2000 DIRECT UMMAP AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- HOLD W UMMAP, RT, 085.65 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 4000.
- FAC: 085.72 FAF: OTZOT DIST FAF TO MAP: 5.51 DIST FAF TO THLD: 5.51
- MIN ALT: UMMAP 2000, OTZOT 2000
- DIST TO THLD FROM OM: MM: IM: 150 HAT: 405 HAT: 1.14 GS ANT:
- MIN GP INCPT: 2000 GP ALT AT FAF : OTZOT 2000 OM: MM: IM:
- GP ANGLE: 3.00 34:1: IS CLEAR 20:1: IS CLEAR TCH: 40.0
- MSA FROM: RW08 3100



PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: BARO-VNAV NA.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT GIKEY ON V11 NORTHWEST BOUND.
CHART NOTE: USE MOBILE REGIONAL ALTIMETER SETTING, WHEN NOT RECEIVED, USE MOBILE DOWNTOWN ALTIMETER SETTING AND INCREASE ALL DA/MDA 20 FEET; INCREASE LNAV/VNAV ALL CATS VISIBILITY 1/8 MILE.
CHART NOTE: CIRCLING RWY 26 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART FAS OBST: 348 TREE 305204N/0875005W
CHART A-292
WAAS CHANNEL #56620
REFERENCE PATH ID: W08A
LTP HAE: 34.6 M

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	636	1 3/8	405	636	1 3/8	405	636	1 3/8	405		NA				
LNAV/VNAV DA	718	1 5/8	487	718	1 5/8	487	718	1 5/8	487		NA				
LNAV MDA	660	1	429	660	1	429	660	1 3/8	429		NA				
CIRCLING	740	1	492	840	1	592	1020	2 1/4	772		NA				

CHANGES - REASONS

1. TERMINAL ROUTES: CHANGED CA LEG FROM 700 TO 800 - TO CORRECT TURNING POINT FOR MISSED.
2. CHANGED MISSED APPROACH FROM CLIMB TO 700 THEN CLIMBING LEFT TURN TO 2000 DIRECT UMMAP AND HOLD TO CLIMB TO 800 THEN CLIMBING LEFT TURN TO 2000 DIRECT UMMAP AND HOLD - TO CORRECT CA LEG ALTITUDE.
3. DELETED CHART NOTE: DME/DME RNP-0.3 NA AND ADDED PBN EQUIPMENT REQUIREMENTS NOTE: RNP APCH - PER 8260.19H DOCUMENTATION CRITERIA.
4. NOTES: DELETED HELICOPTER VISIBILITY NOTE FROM VISIBILITY REDUCTION BY HELICOPTERS NA - 34:1 PENS NO LONGER EXIST.
5. MINIMUMS: UPDATED DAS AND MDAS AND LNAV HAT - INCORPORATED AMENDMENT 1A (P-NOTAM).
6. NOTES: CHANGED CHART NOTE FROM NIGHT LANDING: RWY 26 NA TO CIRCLING RWY 26 NA AT NIGHT - CRITERIA: 8260.19H, PARA 8-6-11 O(2G).
7. ADDITIONAL FLIGHT DATA: DELETED CHART WAAS SYMBOL - INCORPORATED AMENDMENT 1A (P-NOTAM).
8. CIRCLING MINIMUMS: INCREASED CIRCLING MDA CAT B FROM 740 TO 840 - NEW OBSTACLE EVALUATION AND VISCHECK CALCULATIONS.
9. CIRCLING MINIMUMS: INCREASED CIRCLING MDA CAT C FROM 740 TO 1020; VISIBILITY FROM 1 1/2 TO 2 1/4 - NEW OBSTACLE EVALUATIONAND VISCHECK CALCULATIONS.
10. ADDITIONAL FLIGHT DATA: ADDED CHART CIRCLING ICON - UPDATED CIRCLING AREA RADII.
11. FAS DATA BLOCK: CHANGED FPAFP FROM 305217.7400N/0874757.7700W TO 30521.7385N/0874757.7710W, CRC REMAINDER FROM E3F284BB TO 20A6CB0B.

08/30/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 06/21/18:
1. ADDITIONAL FLIGHT DATA: DELETED CHART MOBILE REGIONAL ASOS 135.575 - NO LONGER REQUIRED.

10/11/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 09/24/18:
1. ADDITIONAL FLIGHT DATA: ADDED FAS OBST INFORMATION.
2. MINIMUMS: CHANGED CIRCLING CAT B VISIBILITY BACK TO 1; CHANGED CIRCLING CAT C VISIBILITY FROM 3 TO 2 1/4 - CORRECTED VISCHECK CALCULATIONS.

CANCELS T-NOTAM 8/3363.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZJX, MOB APP CON, AIRPORT MGR

FLIGHT CHECKED BY

JEFFREY ECKMAN

Digitally signed by
DAVID DANNER
Oct 11, 2018

OFFICE

FICO

DATE

9/19/18

DEVELOPED BY

JAMES ROGERS

Digitally signed by
JAMES ROGERS
Oct 11, 2018

OFFICE

AJV-5421

DATE

06/21/2018

APPROVED BY

JULIE MORGAN

Digitally signed by
DAVID DANNER
Oct 11, 2018

OFFICE

AJV-5420

DATE

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> NORTH PICKENS	<u>AIRPORT ID</u> K3M8	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 19	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> REFORM	<u>STATE</u> AL
<u>AIRPORT ELEVATION</u> 237	<u>TDZE</u> 237	<u>SUPERSEDED</u> RNAV (GPS) RWY 19	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 05/29/2014	<u>MAG VAR</u> 1W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 098/30 CW 278/30	NOPT	098/10 CW 278/10		4000
1. 098/10 CW 278/10		JUMKU	IF/IAF	3000
3. 278/30 CW 098/30	PT	JUMKU	IF/IAF	4000

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
JUMKU	IF/IAF	DINNI		TF	FB	1.00	187.56	6.01	2100
DINNI	FAF	ZOKSI/2.40 NM TO RW19		TF	FB	0.30	187.55	3.33	
ZOKSI/2.40 NM TO RW19		RW19	MAP	TF	FO	0.30	187.54	2.40	
RW19	MAP	637 MSL		CA			187.54		
637 MSL		BLANG		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LP: RW19
 LNAV: RW19

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT BLANG AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N JUMKU, RT, 187.56 INBOUND, 3000 FT. IN LIEU OF PT (IF/IAF), MAX 6000.

3. FAC: 187.55FAF: DINNI

DIST FAF TO MAP: 5.73

DIST FAF TO THLD: 5.73

4. MIN ALT: JUMKU 3000, DINNI 2100, ZOKSI/2.40 NM TO RW19 1040

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

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

7. GP ANGLE:34:1: IS NOT CLEAR20:1: IS NOT CLEARTCH:

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: RWY 19 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: OBTAIN LOCAL ALTIMETER SETTING ON CTAF; WHEN NOT RECEIVED, USE TUSCALOOSA ALTIMETER SETTING AND INCREASE ALL MDAS 80 FEET, INCREASE VISIBILITY LP CAT C/D 1-1/4 SM AND LNAV CAT C/D AND CIRCLING ALL CATS 1/4 SM

ADDITIONAL FLIGHT DATA:

CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART COLUMBUS 1 MOA
CHART A-440
CHART MERIDIAN 1 EAST MOA
WAAS CHANNEL #72729
REFERENCE PATH ID: W19A
CHART FAS OBST: 439 TREE 332524N/0880018W, 539 TREE 332617N/0875956W.
HOLD S, RT, 007.52 INBOUND
LTP HAE: 43.7 M

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LP MDA	700	1	463	700	1	463	700	1 3/8	463	700	1 3/8	463			
LNAV MDA	800	1	563	800	1	563	800	1 5/8	563	800	1 5/8	563			
CIRCLING	1000	1	763	1000	1	763	1000	2 1/4	763	1000	2 1/2	763			



CHANGES - REASONS

- 1. REMOVE VDA/TCH - PER FLIGHT CHECK.
- 2. CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES - IAW MEMORANDUM DATED 5/23/13 REVISED IMPLEMENTATION OF AFS 400 MEMORANDUM VERTICAL DESCENT ANGLE.
- 3. DELETE PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT - IAW MEMORANDUM DATED 5/23/13 REVISED IMPLEMENTATION OF AFS 400 MEMORANDUM VERTICAL DESCENT ANGLE.
- 4. PBN REQUIREMENTS NOTE: RNP APCH - IAW MEMORANDUM DATED 7/18/2018 IMPLEMENTATION OF FAA ORDER 8260.19H CHANGE 1, FLIGHT PROCEDURES AND AIRSPACE.
- 5. DELETED NOTE: DME/DME RNP-0.3 NA - IAW MEMORANDUM DATED 7/18/2018 IMPLEMENTATION OF FAA ORDER 8260.19H CHANGE 1, FLIGHT PROCEDURES AND AIRSPACE.
- 6. UPDATED BACKUP ALTIMETER SETTING NOTE FROM: "OBTAIN LOCAL ALTIMETER SETTING NOTE ON CTAF; WHEN NOT RECEIVED, USE TUSCALOOSA ALTIMETER SETTING AND INCREASE ALL MDA 80 FEET. INCREASE LP VISIBILITY CAT C AND D 1-1/4 MILES AND LNAV VISIBILITY CAT C AND D 1/4 MILE. INCREASE CIRCLING VISIBILITY ALL CATS 1/4 MILE" TO: "OBTAIN LOCAL ALTIMETER SETTING ON CTAF; WHEN NOT RECEIVED, USE TUSCALOOSA ALTIMETER SETTING AND INCREASE ALL MDAS 80 FEET, INCREASE VISIBILITY LP CAT C/D 1-1/4 SM AND LNAV CAT C/D AND CIRCLING ALL CATS 1/4 SM" - USE OF "MDAS" VICE "MDA"; USE OF "SM" VICE "MILE".
- 7. CRC REMAINDER CHANGED FROM 3150O36BTO 0190EBFF - REMOVED TCH 40' AND GPA 03.00 FROM FAS DATA.
- 8. CHANGED HELICOPTER VISIBILITY NOTE FROM: "HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA" TO: "RWY 19 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" - SPECIFY RUNWAY.

PDF EDIT:
ADDED TDZE 237 TO 8260-3.



COORDINATED WITH:

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

FLIGHT CHECKED BY

JEFFREY ECKMAN

Digitally signed by
DONALD H LANIER
Oct 01, 2018

OFFICE

FICO

DATE

9/27/18

DEVELOPED BY

MIKE MELSSEN

Digitally signed by
MIKE MELSSEN
Sep 06, 2018

OFFICE

AJV-5412

DATE

07/27/2018

APPROVED BY

GEORGE DAVIS

Digitally signed by
DONALD H LANIER
Oct 01, 2018

OFFICE

AJV-5410

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	3M8
RUNWAY	RW19
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W19A
LTP/FTP LATITUDE	332337.5900N
LTP/FTP LONGITUDE	0880020.2300W
LTP/FTP ELLIPSOIDAL HEIGHT	+00437
FPAP LATITUDE	332208.9000N
FPAP LONGITUDE	0880032.3500W
THRESHOLD CROSSING HEIGHT (TCH)	00000.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	00.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1184
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	0190EBFF
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00722
FPAP ORTHOMETRIC HEIGHT	+00722



**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

MENA, AR

AIRPORT

MENA INTERMOUNTAIN MUNI

EFFECTIVE DATE

3 JANUARY 2019

AMDT NO

6

TAKEOFF MINIMUMS:

RWY 9: STANDARD

RWY 17: STANDARD WITH MINIMUM CLIMB OF 435 FT PER NM TO 2700 OR 1900-3 FOR CLIMB IN VISUAL CONDITIONS.

RWY 27: STANDARD WITH MINIMUM CLIMB OF 425 FT PER NM TO 2100 OR 1900-3 FOR CLIMB IN VISUAL CONDITIONS.

RWY 35: STANDARD WITH MINIMUM CLIMB OF 465 FT PER NM TO 3300 OR 1900-3 FOR CLIMB IN VISUAL CONDITIONS.

TEXTUAL DEPARTURE PROCEDURES:

RWY 9: CLIMB HEADING 089.18 TO 2100 BEFORE TURNING RIGHT.

RWY 17: CLIMB HEADING 170.43 TO 2800 BEFORE TURNING RIGHT.

RWY 27: CLIMB HEADING 269.19 TO 2000 BEFORE TURNING LEFT.

VISUAL CLIMB OVER AIRPORT:

RWY 17, 27, 35: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS MENA INTERMOUNTAIN MUNICIPAL AIRPORT AT OR ABOVE 2800 BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 9: LIGHTING 10 FT FROM DER, 28 FT RIGHT OF CENTERLINE, 2 FT AGL/1051 FT MSL. LIGHTING, NAVAID BEGINNING 11 FT FROM DER, 28 FT LEFT OF CENTERLINE, UP TO 2 FT AGL/1051 FT MSL. VEGETATION 66 FT FROM DER, 479 FT LEFT OF CENTERLINE, 1058 FT MSL.

NOTE: RWY 17: NAVAID 39 FT FROM DER, 75 FT RIGHT OF CENTERLINE, 3 FT AGL/1081 FT MSL. NAVAID 39 FT FROM DER, 76 FT LEFT OF CENTERLINE, 3 FT AGL/1081 FT MSL. VEGETATION 444 FT FROM DER, 604 FT LEFT OF CENTERLINE, 1092 FT MSL. TREE 657 FT FROM DER, 611 FT LEFT OF CENTERLINE, 1109 FT MSL. TREES BEGINNING 831 FT FROM DER, 147 FT LEFT OF CENTERLINE, UP TO 1110 FT MSL. TREE 1080 FT FROM DER, 755 FT LEFT OF CENTERLINE, 1146 FT MSL. TREE 3764 FT FROM DER, 1176 FT LEFT OF CENTERLINE, 1183 FT MSL. TREE 3957 FT FROM DER, 58 FT LEFT OF CENTERLINE, 1187 FT MSL. TREES BEGINNING 1.5 NM FROM DER, 132 FT LEFT OF CENTERLINE, UP TO 1355 FT MSL. TREE 1.5 NM FROM DER, 2400 FT RIGHT OF CENTERLINE, 1328 FT MSL. TREE 1.5 NM FROM DER, 93 FT RIGHT OF CENTERLINE, 1338 FT MSL. TREES BEGINNING 1.5 NM FROM DER, 2229 FT RIGHT OF CENTERLINE, UP TO 1354 FT MSL. TREES BEGINNING 1.5 NM FROM DER, 141 FT LEFT OF CENTERLINE, UP TO 1412 FT MSL. TREES BEGINNING 1.6 NM FROM DER, 299 FT RIGHT OF CENTERLINE, UP TO 1387 FT MSL. TREES BEGINNING 1.6 NM FROM DER, 413 FT LEFT OF CENTERLINE, UP TO 1419 FT MSL. TREE 1.6 NM FROM DER, 37 FT RIGHT OF CENTERLINE, 1455 FT MSL. TREES BEGINNING 1.6 NM FROM DER, 269 FT RIGHT OF CENTERLINE, UP TO 1469 FT MSL. TREE 1.6 NM FROM DER, 156 FT LEFT OF CENTERLINE, 1464 FT MSL. TREES BEGINNING 1.6 NM FROM DER, 1660 FT LEFT OF CENTERLINE, UP TO 1471 FT MSL. TREES BEGINNING 1.6 NM FROM DER, 437 FT LEFT OF CENTERLINE, UP TO 1487 FT MSL. TREES BEGINNING 1.6 NM FROM DER, 524 FT RIGHT OF CENTERLINE, UP TO 1486 FT MSL. TREE 1.6 NM FROM DER, 254 FT RIGHT OF CENTERLINE, 1541 FT MSL. TREE 1.6 NM FROM DER, 238 FT LEFT OF CENTERLINE, 1537 FT MSL. TREES BEGINNING 1.6 NM FROM DER, 37 FT RIGHT OF CENTERLINE, UP TO 1586 FT MSL. TREES BEGINNING 1.6 NM FROM DER, 851 FT LEFT OF CENTERLINE, UP TO 1542 FT MSL. TREES BEGINNING 1.7 NM FROM DER, 84 FT LEFT OF CENTERLINE, UP TO 1631 FT MSL. TREES BEGINNING 1.8 NM FROM DER, 211 FT LEFT OF CENTERLINE, UP TO 1658 FT MSL. TREES, POLE BEGINNING 1.8 NM FROM DER, 39 FT RIGHT OF CENTERLINE, UP TO 1591 FT MSL. TREES BEGINNING 2.1 NM FROM DER, 2255 FT RIGHT OF CENTERLINE, UP TO 1634 FT MSL. TREES BEGINNING 2.2 NM FROM DER, 1778 FT RIGHT OF CENTERLINE, UP TO 1652 FT MSL. TREES BEGINNING 2.2 NM FROM DER, 2711 FT RIGHT OF CENTERLINE, UP TO 1666 FT MSL. TREES BEGINNING 2.3 NM FROM DER, 74 FT RIGHT OF CENTERLINE, UP TO 1689 FT MSL. TREES BEGINNING 2.4 NM FROM DER, 440 FT RIGHT OF CENTERLINE, UP TO 1708 FT MSL. TREES BEGINNING 2.5 NM FROM DER, 18 FT RIGHT OF CENTERLINE, UP TO 1754 FT MSL. POLE, TREES BEGINNING 2.5 NM FROM DER, 218 FT LEFT OF CENTERLINE, UP TO 57 FT AGL/1767 FT MSL. TREE 2.5 NM FROM DER, 824 FT LEFT OF CENTERLINE, 1796 FT MSL. TREE 2.5 NM FROM DER, 1144 FT LEFT OF CENTERLINE, 1831 FT MSL.

NOTE: RWY 27: NAVAID 39 FT FROM DER, 90 FT LEFT OF CENTERLINE, 2 FT AGL/1079 FT MSL. NAVAID 39 FT FROM DER, 89 FT RIGHT OF CENTERLINE, 1079 FT MSL. TREE 333 FT FROM DER, 537 FT RIGHT OF CENTERLINE, 1099 FT MSL. TREES BEGINNING 415 FT FROM DER, 327 FT RIGHT OF CENTERLINE, UP TO 1108 FT MSL. TREES BEGINNING 723 FT FROM DER, 515 FT RIGHT OF CENTERLINE, UP TO 1109 FT MSL. TREES BEGINNING 946 FT FROM DER, 450 FT RIGHT OF CENTERLINE, UP TO 1110 FT MSL. TREE 1070 FT FROM DER, 471 FT RIGHT OF CENTERLINE, 1112 FT MSL. TREE 1124 FT FROM DER, 573 FT LEFT OF CENTERLINE, 1110 FT MSL. TREE 1184 FT FROM DER, 694 FT RIGHT OF CENTERLINE, 1127 FT MSL. TREES BEGINNING 1201 FT FROM DER, 380 FT LEFT OF CENTERLINE, UP TO 1148 FT MSL. TREES BEGINNING 1411 FT FROM DER, 110 FT RIGHT OF CENTERLINE, UP TO 1145 FT MSL. TREES BEGINNING 1658 FT FROM DER, 496 FT LEFT OF CENTERLINE, UP TO 1149 FT MSL. TREES BEGINNING 1875 FT FROM DER, 449 FT RIGHT OF CENTERLINE, UP TO 1146 FT MSL. TREES BEGINNING 1913 FT FROM DER, 271 FT RIGHT OF CENTERLINE, UP TO 1152 FT MSL. TREES BEGINNING 2074 FT FROM DER, 163 FT LEFT OF CENTERLINE, UP TO 1152 FT MSL. TREES BEGINNING 2122 FT FROM DER, 34 FT LEFT OF CENTERLINE, UP TO 1158 FT MSL. TREE 2165 FT FROM DER, 117 FT RIGHT OF CENTERLINE, 1155 FT MSL. TREES BEGINNING 2201 FT FROM DER, 208 FT RIGHT OF CENTERLINE, UP TO 1157 FT MSL. TREES BEGINNING 2302 FT FROM DER, 14 FT RIGHT OF CENTERLINE, UP TO 1162 FT MSL. TREES BEGINNING 2471 FT FROM DER, 155 FT LEFT OF CENTERLINE, UP TO 1159 FT MSL. TREES BEGINNING 2567 FT FROM DER, 5 FT RIGHT OF CENTERLINE, UP TO 1164 FT MSL. TREES BEGINNING 2634 FT FROM DER, 319 FT LEFT OF CENTERLINE, UP TO 1165 FT MSL. TREES BEGINNING 2743 FT FROM DER, 121 FT LEFT OF CENTERLINE, UP TO 1167 FT MSL. TREES BEGINNING 2789 FT FROM DER, 107 FT RIGHT OF CENTERLINE, UP TO 1167 FT MSL. TREES BEGINNING 2950 FT FROM DER, 13 FT LEFT OF CENTERLINE, UP TO 1169 FT MSL. TREES BEGINNING 2973 FT FROM DER, 79 FT RIGHT OF CENTERLINE, UP TO 1175 FT MSL. TREES BEGINNING 3163 FT FROM DER, 75 FT LEFT OF CENTERLINE, UP TO 1171 FT MSL. TREES BEGINNING 3297 FT FROM DER, 862 FT RIGHT OF CENTERLINE, UP TO 1176 FT MSL. TREE 4266 FT FROM DER, 482 FT RIGHT OF CENTERLINE, 1186 FT MSL. TREE 1.3 NM FROM DER, 2513 FT LEFT OF CENTERLINE, 1292 FT MSL. TREE 1.4 NM FROM DER, 2508 FT LEFT OF CENTERLINE, 1295 FT MSL. TREE 1.5 NM FROM DER, 2542 FT LEFT OF CENTERLINE, 1315 FT MSL. TREE 1.5 NM FROM DER, 2775 FT LEFT OF CENTERLINE, 1401 FT MSL. TREE 1.5 NM FROM DER, 2547 FT LEFT OF CENTERLINE, 1413 FT MSL. TREES BEGINNING 1.5 NM FROM DER, 2167 FT LEFT OF CENTERLINE, UP TO 1424 FT MSL. TREE 1.5 NM FROM DER, 2665 FT LEFT OF CENTERLINE, 1445 FT MSL. TREES BEGINNING 1.5 NM FROM DER, 2156 FT LEFT OF CENTERLINE, UP TO 1500 FT MSL. TREES BEGINNING 1.5 NM FROM DER, 1896 FT LEFT OF CENTERLINE, UP TO 1529 FT MSL. TREES, BUILDINGS BEGINNING 1.6 NM FROM DER, 1928 FT LEFT OF CENTERLINE, UP TO 1592 FT MSL. BUILDING, TREES BEGINNING 1.8 NM FROM DER, 1384 FT LEFT OF CENTERLINE, UP TO 27 FT AGL/1609 FT MSL. TREES BEGINNING 1.8 NM FROM DER, 868 FT LEFT OF CENTERLINE, UP TO 1615 FT MSL. TREES BEGINNING 1.9 NM FROM DER, 685 FT LEFT

**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>
MENA, AR	MENA INTERMOUNTAIN MUNI	3 JANUARY 2019	6

OF CENTERLINE, UP TO 1652 FT MSL. BUILDING, TREES BEGINNING 1.9 NM FROM DER, 259 FT LEFT OF CENTERLINE, UP TO 51 FT AGL/1715 FT MSL. TREES BEGINNING 2.1 NM FROM DER, 53 FT RIGHT OF CENTERLINE, UP TO 1449 FT MSL. TREE, POLE BEGINNING 2.2 NM FROM DER, 320 FT RIGHT OF CENTERLINE, UP TO 1462 FT MSL.

NOTE: RWY 35: BUILDINGS BEGINNING 26 FT FROM DER, 365 FT RIGHT OF CENTERLINE, UP TO 30 FT AGL/1069 FT MSL. TREES, POLE BEGINNING 106 FT FROM DER, 41 FT LEFT OF CENTERLINE, UP TO 1106 FT MSL. TREES BEGINNING 641 FT FROM DER, 425 FT RIGHT OF CENTERLINE, UP TO 1120 FT MSL. TREES BEGINNING 1074 FT FROM DER, 117 FT RIGHT OF CENTERLINE, UP TO 1130 FT MSL. TREE 2146 FT FROM DER, 60 FT LEFT OF CENTERLINE, 1120 FT MSL.

CONTROLLING OBSTACLES:

RWY 17: 2240 FT MSL AAO 342859.93N/0941143.14W (CLIMB GRADIENT), 2327 FT MSL AAO 342843.07N/0941111.75W (CLIMB TO ALTITUDE)
RWY 27: 1715 FT MSL BUILDING 343225.61N/0941454.23W (CLIMB GRADIENT, 1901 FT MSL TREE 343125.96N/0941457.99W (CLIMB TO ALTITUDE)
RWY 35: 2707 FT MSL AAO 343741.62N/0941459.85W
OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 9 - 2327 FT MSL AAO 342843.07/0941111.75W, RWY 17 - 1874 FT MSL TREE 343048.60N/0941328.19W, RWY 27 - 1825 FT MSL TREE 343107.22N/0941344.49W
RWY 17, 27, 35 (VCOA): 2707 FT MSL AAO 343741.62N/0941459.85W, 2327 FT MSL AAO 342843.07N/0941111.75W

REMARKS:

<u>FLIGHT INSPECTED BY:</u>	<i>Digitally signed by</i> DONALD H LANIER	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
BRIAN HARRELSON	Sep 27, 2018	FICO	09/25/2018

<u>DEVELOPED BY:</u>	<i>Digitally signed by</i> NICHOLAS JACKSON	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
NICHOLAS K. JACKSON	Aug 17, 2018	AJV-5431	07/12/2018

<u>APPROVED BY:</u>	<i>Digitally signed by</i> DONALD H LANIER	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
PATRICK MULQUEEN	Sep 27, 2018	AJV-5430	

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

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

OTHER:
ZME, AMGR

CHANGES - REASONS:

RWY 9 TAKEOFF MINIMUMS CHANGED FROM 284 FT PER NM TO 3500 TO STANDARD. - ROUTE/CLIMB- TO ALTITUDE DEVELOPED TO REMOVE CLIMB GRADIENT/ CRITEIRA IAW 8260.3C, 14-1-6 AND 8260.46F, TABLE 2-1-1.
RWY 17 TAKEOFF MINIMUMS CHANGED FROM 426 FT PER NM TO 3400 TO 435 FT PER NM TO 2700. - NEW CONTROLLING OBSTRUCTION IDENTIFIED AND NEW CRITERIA IAW 8260.3C, 14-1-6 AND 8260.46F, TABLE 2-1-1.
RWY 27 TAKEOFF MINIMUMS CHANGED FROM 408 FT PER NM TO 3500 TO 425 FT PER NM TO 2100. - NEW CONTROLLING OBSTRUCTION IDENTIFIED AND NEW CRITERIA IAW 8260.3C, 14-1-6 AND 8260.46F, TABLE 2-1-1.
RWY 35 TAKEOFF MINIMUMS CHANGED FROM 293 FT PER NM TO 3400 TO 465 FT PER NM TO 3300. - NEW CONTROLLING OBSTRUCTION IDENTIFIED AND NEW CRITERIA IAW 8260.3C, 14-1-6 AND 8260.46F, TABLE 2-1-1.
TEXTUAL DEPARTURE ROUTES ADDED FOR RUNWAYS 9, 17, 27. - ROUTES ADDED TO MITIGATE HIGHER CLIMB GRADIENTS.
VCOA CEILING/VIS CHANGED FROM 1300-2 1/2 TO 1900-3. - NEW CONTROLLING OBSTRUCTION IDENTIFIED AND NEW CRITERIA IAW 8260.3C, 14-4-3.
VCOA CLIMB TO ALTITUDE CHANGED FROM 2300 TO 2800. - NEW CONTROLLING OBSTRUCTION IDENTIFIED AND NEW CRITERIA IAW 8260.3C, 14-4-3.
UPDATED TAKEOFF OBSTACLE NOTES FOR ALL RWYS. - PER 8260.46F TABLE 2-1-1 & APPDX D, SECTION 1, #9 (8260.15A).
UPDATED CONTROLLING OBSTACLES FOR ALL RWYS. - IAW 8260.3C AND 8260.46F CHAPTER 14, APPDX D, SECTION 1, #10 (8260-15A).
COORDINATED WITH BLOCK: REMOVED APA AND ADDED ALPA - AMERICAN AIRLINES DOES NOT SERVICE AIRPORT AND ALL PART 97 DP'S ARE REQUIRED TO BE COORDINATED WITH ALPA.

QUALITY
8
CHECKED

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> LAUGHLIN/BULLHEAD INTL	<u>AIRPORT ID</u> KIFP	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 16	<u>ORIGINAL/AMENDMENT</u> 2C	<u>CITY</u> BULLHEAD CITY	<u>STATE</u> AZ	
<u>AIRPORT ELEVATION</u> 707	<u>TDZE</u> 646	<u>SUPERSEDED</u> RNAV (GPS) RWY 16	<u>ORIGINAL/AMENDMENT</u> 2B	<u>DATED</u> 08/17/2017	<u>MAG VAR</u> 12E	<u>EPOCH YEAR</u> 2005
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
GFS VORTAC		LAKIY		TF	FO	2.00	038.54	32.60	8000
EED VORTAC		LAKIY		TF	FO	2.00	335.73	43.53	8000
IGM VOR/DME		LAKIY		TF	FO	2.00	278.06	38.02	8100
LYNSY	IAF	LAKIY	NOPT	TF	FB	1.00	145.52	11.97	6600
LAKIY	IF/IAF	MEBDE		TF	FB	1.00	144.29	11.26	3300
MEBDE	FAF	RW16	MAP	TF	FO	0.30	164.45	8.25	
RW16	MAP	1107 MSL		CA			164.45		
1107 MSL		CALRA		DF	FO	1.00			6300

MISSED APPROACH

MAP:

LP: RW16
LNAV: RW16

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 6300 DIRECT CALRA AND HOLD, CONTINUE CLIMB-IN-HOLD TO 6300.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD NW LAKIY, RT, 144.29 INBOUND, 6600 FT. IN LIEU OF PT (IAF), MAX 14000.

3. FAC: 164.45

FAF: MEBDE

DIST FAF TO MAP: 8.25

DIST FAF TO THLD: 8.25

4. MIN ALT: LAKIY 6600, MEBDE 3300

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:

6. MIN GP INCPT:

GP ALT AT FAF :

OM:

MM:

IM:

7. GP ANGLE:

34:1 IS NOT CLEAR

20:1 IS CLEAR

TCH:

8. MSA FROM: RW16 8400

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: RWY 16 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON GFS VORTAC AIRWAY RADIALS 308 CW 054.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON EED VORTAC AIRWAY RADIALS 257 CW 026.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
MEBDE TO RW16: 3.00/46.
CHART VDP AT 3.68 NM TO RW16
WAAS CHANNEL #82624
REFERENCE PATH ID: W16A
FAS OBST: 1415 AAO 351656N/1143308W, 1400 AAO 351739N/1143325W.
1440 AAO 351747N/1143308W.
HOLD S, LT, 344.47 INBOUND
LTP HAE: 160.7 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT A, B 1300-2, CAT C 1300-3, CAT D 1700-3

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LP MDA	1860	1 1/4	1214	1860	1 1/2	1214	1860	3	1214	1860	3	1214			
LNAV MDA	1860	1 1/4	1214	1860	1 1/2	1214	1860	3	1214	1860	3	1214			
CIRCLING	1860	1 1/4	1153	1860	1 1/2	1153	1860	3	1153	2340	3	1633			



AIRPORT	AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	CITY	STATE
LAUGHLIN/BULLHEAD INTL	KIFP	RNAV (GPS) RWY 16	2C	BULLHEAD CITY	AZ

CHANGES - REASONS

- 1. CHANGED LP AND LNAV HAT FROM 1213 TO 1214 - TDZE CHANGED FROM 647 TO 646.
- 2. CHANGED CAT A-C CIRCLING HAA FROM 1159 TO 1153 - AIRPORT ELEVATION CHANGED FROM 701 TO 707.
- 3. CHANGED CAT D CIRCLING MDA/HAA FROM 1860/1159 TO 2340/1633 - NEW CIRCLING AREA ADDED TO MATCH RNAV GPS RWY 34.
- 4. ADDED CIRCLING ICON - TO MATCH PUBLISHED CIRCLING ON RNAV GPS RWY 34.
- 5. ADDED VDP AT 3.68 NM TO RW16 - 20:1 VISUAL SURFACE IS CLEAR.
- 6. CHANGED RWY 16 HELICOPTER VISIBILITY FROM 1 SM TO 3/4 SM - 20:1 VISUAL SURFACE IS CLEAR.
- 7. CHANGED MISSED APPROACH CA ALTITUDE FROM 1101 TO 1107 - AIRPORT ELEVATION CHANGED FROM 701 TO 707.
- 8. REPLACED DME/DME RNP-0.3 NA WITH PBN REQUIREMENTS NOTE: RNP APCH - 8260.58A TABLE 1-2-1.
- 9. ADDED CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}) - VDA ADDED.
- 10. ADDED VDA: MEBDE TO RW16: 3.00/46 - OBSTACLE DATA BASE UPDATED.
- 11. MOVED BACK-UP ALTIMETER SETTING NOT TO -9 AS A CONTINGENCY NOTE - LOCAL WEATHER TRANSMITTED ON WMSCR AND DEEMED RELIABLE.
- 12. CHANGED ALTERNATE MINIMUMS, CAT A, B FROM 1200-2 TO 1300-2, CAT C FROM 1200-3 TO 1300-3, CAT D FROM 1200-3 TO 1700-3 AND REMOVED NA NOTE - NEW HIGHER CIRCLING MINS AND LOCAL WEATHER TRANSMITS ON WMSCR.
- 13. CHANGED CRC REMAINDER FROM DC2F4477 TO 78649968 - LTP/FTP ELLIPSOIDAL AND ORTHOMETRCI HEIGHTS CHANGED, LTP/FPAP LAT/LONG COORDINATES UPDATED, LENGTH OFFSET CHANGED.



COORDINATED WITH:

A4A

☐

ALPA

☒

AOPA

☒

APA

☒

HAI

☐

NBAA

☒

OTHER:

ZLA, LAS APP, IFP ATCT, AMGR, AZ AERO, NV AERO, ATA

FLIGHT CHECKED BY	<i>Digitally signed by</i>	OFFICE	DATE	
CHRISTOPHER D FORMAN	DAVID DANNER	FICO	09/25/2018	
	Sep 27, 2018			
DEVELOPED BY	<i>Digitally signed by</i>	OFFICE	DATE	
LEO PALMER	LEO PALMER	AJV-5423	08/21/2018	
	Sep 10, 2018			
APPROVED BY	<i>Digitally signed by</i>	OFFICE	DATE	TITLE
JULIE MORGAN	DAVID DANNER	AJV-5420		MANAGER
	Sep 27, 2018			



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KIFP
RUNWAY	RW16
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W16A
LTP/FTP LATITUDE	350958.5645N
LTP/FTP LONGITUDE	1143336.7565W
LTP/FTP ELLIPSOIDAL HEIGHT	+01607
FPAP LATITUDE	350829.4935N
FPAP LONGITUDE	1143330.0475W
THRESHOLD CROSSING HEIGHT (TCH)	00046.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0160
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	78649968

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+01907
FPAP ORTHOMETRIC HEIGHT	+01907



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> ELLS FIELD-WILLITS MUNI	<u>AIRPORT ID</u> KO28	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 34	<u>ORIGINAL/AMENDMENT</u> 1C	<u>CITY</u> WILLITS	<u>STATE</u> CA
<u>AIRPORT ELEVATION</u> 2066	<u>TDZE</u> 2066	<u>SUPERSEDED</u> RNAV (GPS) RWY 34	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 04/28/2016	<u>MAG VAR</u> 16E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 249/30 CW 069/30	NOPT	249/10 CW 069/10		8500
2. 249/10 CW 069/10		HERMT	IF/IAF	6000
3. 069/30 CW 159/30		NIKBY	IAF	6500
4. 159/30 CW 249/30		IGAYO	IAF	9300

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
NIKBY	IAF	HERMT	NOPT	TF	FB	1.00	069.17	7.00	6000
IGAYO	IAF	HERMT	NOPT	TF	FB	1.00	249.35	7.00	6000
HERMT	IF/IAF	TREAS		TF	FB	1.00	339.26	7.02	3900
TREAS	FAF	JENBU/4.40 NM TO RW34		TF	FB	0.30	339.24	1.28	
JENBU/4.40 NM TO RW34		RW34	MAP	TF	FO	0.30	339.24	4.40	
RW34	MAP	2466 MSL		CA			339.24		
2466 MSL		ENI VORTAC		DF	FO	1.00			6000

MISSED APPROACH

MAP:

LNAV: RW34

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 6000 DIRECT ENI VORTAC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S HERMT, RT, 339.26 INBOUND, 6000 FT. IN LIEU OF PT (IAF), MAX 10000.

3. FAC: 339.24FAF: TREASDIST FAF TO MAP: 5.68DIST FAF TO THLD: 5.68

4. MIN ALT: HERMT 6000, TREAS 3900, JENBU/4.40 NM TO RW34 3500

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

6. MIN GP INCPT:GP ALT AT FAF :OM:

7. GP ANGLE:34:1: IS NOT CLEAR20:1: IS NOT CLEARTCH:

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: CIRCLING NA W OF RWY 16-34.
CHART NOTE: RWY 34 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: USE UKIAH ALTIMETER SETTING; WHEN NOT RECEIVED, PROCEDURE NA.

ADDITIONAL FLIGHT DATA:

CHART UKIAH ASOS
TREAS TO RW34: 3.04/40.
CHART MAXWELL3 MOA
FAS OBST: 2484 AAO 392319N/1232226W.
HOLD S, RT, 022.00 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	3300	1 1/4	1234	3300	1 1/2	1234	3300	3	1234		NA				
CIRCLING	3300	1 1/4	1234	3300	1 1/2	1234	3300	3	1234		NA				



CHANGES - REASONS

- 1. DELETED CHART NOTE: DME/DME RNP-0.3 NA - IAW 8260.19H, PARA 1-1-5F(14), REMOVED THE REQUIREMENT FOR THIS NOTE.
- 2. CHANGED VDA FROM "3.05/40" TO "3.04/40" - PROCEDURE BUILD.
- 3. SDF ALTITUDE CHANGED FROM "3480" TO "3500" - NEW CONTROLLING OBSTACLE WITH UPDATED RASS AND PRECIPITOUS TERRAIN ADJUSTMENTS.
- 4. CHANGED LNAV MDA/HAT FROM "3200/1137" TO "3300/1234" - NEW CONTROLLING OBSTACLE WITH UPDATED RASS AND PRECIPITOUS TERRAIN ADJUSTMENTS.
- 5. CHANGED CIRCLING MDA/HAA FROM "3200/1137" TO "3300/1234" - UPDATED STRAIGHT-IN MINIMA.
- 6. ADDED PBN REQUIREMENTS NOTE: RNP APCH - REQUIREMENTS NOTE APPLIED PER 8260.58A, CHANGE 1.
- 7. CHANGED COURSE AT PFAF FROM "339.26" TO "339.24" - PROCEDURE BUILD.
- 8. CHANGED FAS OBST FROM "2599 AAO 392337N/1232259W" TO "2484 AAO 392319N/1232226W" - NEW CONTROLLING OBSTACLE.
- 9. ADDED MAX ALTITUDE OF 10000 AT HOLD-IN-LIEU FIX HERMT - NEW REPORTS FORMAT NOW INCLUDES MAXIMUM ALTITUDE FOR HOLD-IN-LIEU FIXES.
- 10. CHANGED MISSED APPROACH "CA" ALTITUDE FROM "2463" TO "2466" - PER 8260.58A; WHEN THE FIRST FIX AFTER THE CODED MAP IS ON THE FAC EXTENDED, THE SPECIFIED CA ALTITUDE IS THE DA, MDA, OR 400 FEET ABOVE THE AIRPORT ELEVATION WHICHEVER IS LOWEST.
- 11. DELETED ADDITIONAL FLIGHT DATA "CHART MAXWELL 1, CHART MAXWELL 2" - MOA AREAS ARE NOT WITHIN PLANVIEW AREA.

THIS AMENDMENT CANCELS NOTAM IFDC 8/0005.

PDF EDIT 7/30/18: JAMES LAFFERTY, DELETED STATEMENT "ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED".

9/27/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 7/30/18.
1. CHANGED LINE 9 UNDER CHANGES AND REASONS MAX ALTITUDE FOR HERMT FROM "14000" TO "10000".



<u>AIRPORT</u> ELLS FIELD-WILLITS MUNI	<u>AIRPORT ID</u> KO28	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 34	<u>ORIGINAL/AMENDMENT</u> 1C	<u>CITY</u> WILLITS	<u>STATE</u> CA
<u>COORDINATED WITH:</u>					
A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZOA, AMGR, CA AREO					
<u>FLIGHT CHECKED BY</u>		<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
GARY J VEER		DAVID TEFFETELLER	FICO	9/24/18	
		Oct 01, 2018			
<u>DEVELOPED BY</u>		<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
JAMES LAFFERTY		JAMES LAFFERTY	AJV-5433	07/30/2018	
		Aug 15, 2018			
<u>APPROVED BY</u>		<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
PATRICK MULQUEEN		DAVID TEFFETELLER	AJV-5430		MANAGER
		Oct 01, 2018			



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
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TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> FORT MORGAN MUNI	<u>AIRPORT ID</u> KFMM	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 14	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> FORT MORGAN	<u>STATE</u> CO
<u>AIRPORT ELEVATION</u> 4595	<u>TDZE</u> 4595	<u>SUPERSEDED</u> RNAV (GPS) RWY 14	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 02/04/2016	<u>MAG VAR</u> 8E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2015

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 054/30 CW 234/30	NOPT	054/15 CW 234/15		8000
2. 054/15 CW 234/15		ECUDI	IF/IAF	7400
3. 234/30 CW 324/30		CAPVA	IAF	7400
4. 324/30 CW 054/30		324/15 CW 054/15		8100
5. 324/15 CW 054/15		DEKTE	IAF	7400

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
DEKTE	IAF	ECUDI	NOPT	TF	FB	1.00	053.40	10.00	7400
CAPVA	IAF	ECUDI	NOPT	TF	FB	1.00	233.65	10.00	7400
ECUDI	IF/IAF	FEPAS		TF	FB	1.00	143.53	7.40	6200
FEPAS	FAF	GISEY/2.30 NM TO RW14		TF	FB	0.30	143.58	2.64	
GISEY/2.30 NM TO RW14		RW14	MAP	TF	FO	0.30	143.58	2.30	
RW14	MAP	4845 MSL		CA			143.58		
4845 MSL		HARPU		DF	FO	1.00			7400



MISSED APPROACH

MAP:
LPV: DA
LNAV/VNAV: DA
LNAV: RW14

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 7400 DIRECT HARPU AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)					
2.	HOLD NW ECUDI, RT, 143.53 INBOUND, 7400 FT. IN LIEU OF PT (IAF), MAX 14000.								
3. FAC:	143.58	FAF: FEPAS	DIST FAF TO MAP: 4.94	DIST FAF TO THLD: 4.94					
4. MIN ALT:	ECUDI 7400, FEPAS 6200, GISEY/2.30 NM TO RW14 5340*								
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	250 HAT: 0.69	GS ANT:				
6. MIN GP INCPT: 6200	GP ALT AT FAF : FEPAS 6200		OM:	MM:	IM:				
7. GP ANGLE: 3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 30.0						
8. MSA FROM:									

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING RWY 8, 17, 26, 32, 35 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.18 NM TO RW14*
*LNAV ONLY
WAAS CHANNEL #86330
REFERENCE PATH ID: W14A
CHART FAS OBST: 4745 RD (N) 402238N/1035036W.
HOLD SE, RT, 323.71 INBOUND
LTP HAE: 1381.2 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/2



CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	4845	1	250	4845	1	250	4845	1	250	4845	1	250			
LNAV/VNAV DA	4845	1	250	4845	1	250	4845	1	250	4845	1	250			
LNAV MDA	5000	1	405	5000	1	405	5000	1 1/8	405	5000	1 1/8	405			
CIRCLING	5040	1	445	5080	1	485	5120	1 1/2	525	5340	2 1/2	745			

CHANGES - REASONS

1. PROFILE SECTION, LINE 2, ADDED MAX HOLDING ALTITUDE 14000 - CURRENT DOCUMENTATION POLICY.
2. PROFILE SECTION, LINE 7, ADDED "20:1 IS CLEAR" - CURRENT DOCUMENTATION POLICY.
3. REPLACED DME/DME NOTE WITH PBN REQUIREMENTS NOTE - CURRENT DOCUMENTATION POLICY.
4. REMOVED BACKUP ALTIMETER NOTE AND PLACED ON FROM 8260-9 - CURRENT DOCUMENTATION POLICY.
5. REWORDED NIGHT LANDING NOTE TO SAY CIRCLING NA AT NIGHT - CURRENT DOCUMENTATION POLICY.
6. REMOVED "NA WHEN LOCAL WEATHER NOT AVAILABLE" FROM ALTERNATE MINIMUMS - BACKUP ALTIMETER REMOVED FROM CHART.



COORDINATED WITH:

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

FLIGHT CHECKED BY

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

Digitally signed by **OFFICE**
DEZ SILAGYI
Sep 05, 2018

DATE

DEVELOPED BY

RUSS ROSLEWSKI

Digitally signed by
RUSSELL ROSLEWSKI
Aug 03, 2018

OFFICE
AJV-5421

DATE
08/03/2018

APPROVED BY

JULIE MORGAN

Digitally signed by
DEZ SILAGYI
Sep 05, 2018

OFFICE
AJV-5420

DATE

TITLE
MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KFMM
RUNWAY	RW14
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W14A
LTP/FTP LATITUDE	402041.4650N
LTP/FTP LONGITUDE	1034842.0900W
LTP/FTP ELLIPSOIDAL HEIGHT	+13812
FPAP LATITUDE	401923.0220N
FPAP LONGITUDE	1034746.7010W
THRESHOLD CROSSING HEIGHT (TCH)	00030.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	6F1D0606
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+14006
FPAP ORTHOMETRIC HEIGHT	+14006



**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
OXFORD, CT	WATERBURY-OXFORD	01/03/2019	6

TAKEOFF MINIMUMS:

RWY 18: STANDARD

RWY 36: 300-1 1/8 OR STANDARD WITH MINIMUM CLIMB OF 340 FT PER NM TO 1000.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 18, TREES BEGINNING 29 FT FROM DER, 384 FT RIGHT OF CENTERLINE, UP TO 699 FT MSL. TREES BEGINNING 151 FT FROM DER, 120 FT LEFT OF CENTERLINE, UP TO 703 FT MSL. TREES BEGINNING 264 FT FROM DER, 12 FT RIGHT OF CENTERLINE, UP TO 703 FT MSL. TREES BEGINNING 281 FT FROM DER, 87 FT LEFT OF CENTERLINE, UP TO 707 FT MSL. TREES BEGINNING 288 FT FROM DER, 8 FT RIGHT OF CENTERLINE, UP TO 704 FT MSL. TREES BEGINNING 290 FT FROM DER, 19 FT LEFT OF CENTERLINE, UP TO 712 FT MSL. TREE 341 FT FROM DER, 303 FT LEFT OF CENTERLINE, 714 FT MSL. TREES BEGINNING 342 FT FROM DER, 16 FT LEFT OF CENTERLINE, UP TO 73 FT AGL/718 FT MSL. TOWER, TREE BEGINNING 509 FT FROM DER, 213 FT LEFT OF CENTERLINE, UP TO 82 FT AGL/733 FT MSL. TRANSMISSION LINE, TREES BEGINNING 513 FT FROM DER, 4 FT LEFT OF CENTERLINE, UP TO 81 FT AGL/734 FT MSL. TREES BEGINNING 659 FT FROM DER, 28 FT RIGHT OF CENTERLINE, UP TO 706 FT MSL. TREES BEGINNING 686 FT FROM DER, 20 FT RIGHT OF CENTERLINE, UP TO 708 FT MSL. TREES BEGINNING 780 FT FROM DER, 48 FT RIGHT OF CENTERLINE, UP TO 709 FT MSL. TREES BEGINNING 862 FT FROM DER, 12 FT RIGHT OF CENTERLINE, UP TO 712 FT MSL. TREES BEGINNING 957 FT FROM DER, 151 FT LEFT OF CENTERLINE, UP TO 746 FT MSL. TREES BEGINNING 963 FT FROM DER, 25 FT LEFT OF CENTERLINE, UP TO 762 FT MSL. TREES, TOWER, TRANSMISSION LINE BEGINNING 1026 FT FROM DER, 158 FT LEFT OF CENTERLINE, UP TO 765 FT MSL. TREE 1273 FT FROM DER, 254 FT RIGHT OF CENTERLINE, 715 FT MSL. TREE 1351 FT FROM DER, 198 FT RIGHT OF CENTERLINE, 718 FT MSL. TREES BEGINNING 1373 FT FROM DER, 174 FT RIGHT OF CENTERLINE, UP TO 720 FT MSL. TREES BEGINNING 1606 FT FROM DER, 245 FT LEFT OF CENTERLINE, UP TO 768 FT MSL. TREES BEGINNING 1648 FT FROM DER, 400 FT LEFT OF CENTERLINE, UP TO 76 FT AGL/776 FT MSL. TREES BEGINNING 1806 FT FROM DER, 74 FT LEFT OF CENTERLINE, UP TO 777 FT MSL. TREE 2151 FT FROM DER, 35 FT RIGHT OF CENTERLINE, 736 FT MSL. TREES BEGINNING 2156 FT FROM DER, 6 FT RIGHT OF CENTERLINE, UP TO 742 FT MSL. TREES BEGINNING 2191 FT FROM DER, 323 FT LEFT OF CENTERLINE, UP TO 95 FT AGL/780 FT MSL. TREES BEGINNING 2378 FT FROM DER, 349 FT LEFT OF CENTERLINE, UP TO 783 FT MSL. TREES BEGINNING 2604 FT FROM DER, 377 FT LEFT OF CENTERLINE, UP TO 786 FT MSL. TREE 3396 FT FROM DER, 666 FT LEFT OF CENTERLINE, 788 FT MSL. TREES BEGINNING 3537 FT FROM DER, 731 FT LEFT OF CENTERLINE, UP TO 798 FT MSL.

NOTE: RWY 36, TREE 55 FT FROM DER, 451 FT LEFT OF CENTERLINE, 55 FT AGL/736 FT MSL. TREES BEGINNING 126 FT FROM DER, 381 FT LEFT OF CENTERLINE, UP TO 750 FT MSL. TREES BEGINNING 403 FT FROM DER, 228 FT LEFT OF CENTERLINE, UP TO 751 FT MSL. TREE 465 FT FROM DER, 534 FT RIGHT OF CENTERLINE, 65 FT AGL/748 FT MSL. TREES BEGINNING 479 FT FROM DER, 346 FT RIGHT OF CENTERLINE, UP TO 761 FT MSL. TREE 625 FT FROM DER, 371 FT LEFT OF CENTERLINE, 754 FT MSL. TREES BEGINNING 768 FT FROM DER, 185 FT RIGHT OF CENTERLINE, UP TO 94 FT AGL/765 FT MSL. TREE 3334 FT FROM DER, 1392 FT RIGHT OF CENTERLINE, 849 FT MSL. TREES BEGINNING 3572 FT FROM DER, 1165 FT RIGHT OF CENTERLINE, UP TO 868 FT MSL. TREES BEGINNING 3739 FT FROM DER, 1195 FT RIGHT OF CENTERLINE, UP TO 80 FT AGL/888 FT MSL. TREES BEGINNING 3866 FT FROM DER, 0 FT OF CENTERLINE, UP TO 85 FT AGL/891 FT MSL. TREE 5049 FT FROM DER, 53 FT LEFT OF CENTERLINE, 858 FT MSL. TREE 5051 FT FROM DER, 13 FT LEFT OF CENTERLINE, 860 FT MSL. TREE 5087 FT FROM DER, 48 FT LEFT OF CENTERLINE, 865 FT MSL. TREES BEGINNING 5109 FT FROM DER, 32 FT LEFT OF CENTERLINE, UP TO 867 FT MSL. TREES BEGINNING 5142 FT FROM DER, 14 FT LEFT OF CENTERLINE, UP TO 873 FT MSL. TREES BEGINNING 5200 FT FROM DER, 50 FT LEFT OF CENTERLINE, UP TO 874 FT MSL. TREE 5245 FT FROM DER, 52 FT LEFT OF CENTERLINE, 877 FT MSL. TREES BEGINNING 5274 FT FROM DER, 3 FT LEFT OF CENTERLINE, UP TO 880 FT MSL. TREES BEGINNING 5303 FT FROM DER, 25 FT LEFT OF CENTERLINE, UP TO 882 FT MSL. TREES BEGINNING 5326 FT FROM DER, 0 FT LEFT OF CENTERLINE, UP TO 884 FT MSL. TREES BEGINNING 5480 FT FROM DER, 16 FT RIGHT OF CENTERLINE, UP TO 883 FT MSL.

CONTROLLING OBSTACLES:

RWY 36: 888 FT MSL TREE 412948.92N/0730801.20W (CG/CGTA), 891 FT MSL TREE 412950.16N/0730801.57W (CEILING), 883 FT MSL TREE 413003.66N/0730823.27W (VISIBILITY).

REMARKS:

FLIGHT INSPECTED BY:

PENDING

Digitally signed by

ALLAN WILL

Aug 28, 2018

OFFICE SYMBOL:

DATE:

DEVELOPED BY:

LONNIE EVERHART (CASEY HILL)

Digitally signed by

ALLAN WILL

Aug 28, 2018

OFFICE SYMBOL:

AJV-5400

DATE:

6/13/18

APPROVED BY:

LONNIE EVERHART

Digitally signed by

ALLAN WILL

Aug 28, 2018

OFFICE SYMBOL:

AJV-5400

DATE:

**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>
OXFORD, CT	WATERBURY-OXFORD	01/03/2019	6

REQUIRED EFFECTIVE DATE:
01/03/2019

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

OTHER:
ZBW, NYC APP CON, OXC ATCT, BOS FPO, AMGR

CHANGES - REASONS:
UPDATED CONTROLLING OBSTACLE LAT/LONG - NEW SURVEY DATA.
UPDATED TAKEOFF OBSTACLE NOTES - NEW SURVEY DATA.
REMOVED REDUCED TAKEOFF LENGTH FROM TAKEOFF MINIMUMS - CONTROLLING OBSTACLE NO LONGER PENETRATES THE 40:1 IN THE ICA DUE TO RUNWAY CONSTRUCTION.
ADDED A4A AND REMOVED ATA FROM COORDINATED WITH BLOCK - AIRPORT SERVED BY SCHEDULER AIR CARRIERS/ATA REPLACED BY A4A.
RWY 36 MINIMUMS CHANGED FROM 300-1 OR STANDARD WITH MINIMUM CLIMB OF 240 FEET PER NM TO 1000 TO 300-1 1/8 OR STANDARD WITH MINIMUM CLIMB OF 340 FEET PER NM TO 1000 - NEW SURVEY.

08/23/2018: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 06/13/18.
1. DEPARTURE AND APPROACHES MOVED TO 01/03/2019 HARD DATE DUE TO OBSTACLE DATA.

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.23

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<u>AIRPORT</u> DAYTONA BEACH INTL	<u>AIRPORT ID</u> KDAB	<u>PROCEDURE NAME</u> VOR RWY 16	<u>ORIGINAL/AMENDMENT</u> 18C	<u>CITY</u> DAYTONA BEACH	<u>STATE</u> FL	
<u>AIRPORT ELEVATION</u> 34	<u>TDZE</u> 33	<u>SUPERSEDED</u> VOR RWY 16	<u>ORIGINAL/AMENDMENT</u> 18B	<u>DATED</u> 2/28/2014	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u> CANCEL		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>

PROCEDURE CANCELLED EFFECTIVE 01/03/2019

MISSED APPROACH

MAP:

MISSED APPROACH INSTRUCTIONS:

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)

2.

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

4. MIN ALT:

8. MSA FROM:

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

MINIMUMS:



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

ALTERNATE: NA ☐

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA

CHANGES - REASONS

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZJX, AIRPORT MANAGER, ATA

FLIGHT CHECKED BY

OFFICE

DATE

Digitally signed by

BEV L BORDY

Aug 27, 2018

OFFICE

AJV-5400

DATE

07/31/2018

DEVELOPED BY

LONNIE EVERHART (DEAN GRACEY)

APPROVED BY

LONNIE EVERHART

Digitally signed by

BEV L BORDY

Aug 27, 2018

OFFICE

AJV-5400

DATE

TITLE

MANAGER



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

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<u>AIRPORT</u> DELAND MUNI-SIDNEY H TAYLOR FIELD	<u>AIRPORT ID</u> KDED	<u>PROCEDURE NAME</u> VOR/DME RWY 23	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> DELAND	<u>STATE</u> FL	
<u>AIRPORT ELEVATION</u> 79	<u>THRE</u> 78	<u>SUPERSEDED</u> VOR/DME RWY 23	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 08/25/2011	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u> CANCEL		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>

PROCEDURE CANCELLED EFFECTIVE 01/03/2019

MISSED APPROACH

MAP:

MISSED APPROACH INSTRUCTIONS:

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)

2.

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

4. MIN ALT:

8. MSA FROM:

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

MINIMUMS:



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

ALTERNATE: NA ☐

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA

CHANGES - REASONS

COORDINATED WITH:

A4A ☐ ALPA ☐ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: DAB APP CON, KDED APT MGT

FLIGHT CHECKED BY

DEVELOPED BY

LONNIE EVERHART (DEAN GRACEY)

APPROVED BY

LONNIE EVERHART

<i>Digitally signed by</i> BEV L BORDY Aug 27, 2018	<u>OFFICE</u> <u>OFFICE</u> AJV-5400	<u>DATE</u> <u>DATE</u> 07/31/2018
<i>Digitally signed by</i> BEV L BORDY Aug 27, 2018	<u>OFFICE</u> <u>OFFICE</u> AJV-5400	<u>DATE</u> <u>DATE</u>

TITLE
MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> MARCO ISLAND EXECUTIVE	<u>AIRPORT ID</u> KMKY	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> MARCO ISLAND	<u>STATE</u> FL
<u>AIRPORT ELEVATION</u> 5	<u>TDZE</u> 5	<u>SUPERSEDED</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 12/17/2009	<u>MAG VAR</u> 3W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1995

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
DEEDS		AVCOF		TF	FO	2.00	297.34	28.59	2100
AVCOF	IF/IAF	EJAMO		TF	FB	1.00	170.68	6.10	1500
EJAMO	FAF	AYWEN/2.40 NM TO RW17		TF	FB	0.30	170.69	2.05	
AYWEN/2.40 NM TO RW17		RW17	MAP	TF	FO	0.30	170.69	2.40	
RW17	MAP	300 MSL		CA			170.69		
300 MSL		ONSAW		DF	FO	1.00			2000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW17

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 DIRECT ONSAW AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N AVCOF, RT, 170.68 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 170.69FAF: EJAMODIST FAF TO MAP: 4.45DIST FAF TO THLD: 4.45

4. MIN ALT: AVCOF 2000, EJAMO 1500, AYWEN/2.40 NM TO RW17 820*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:295 HAT: 0.74GS ANT:

6. MIN GP INCPT: 1500GP ALT AT FAF : EJAMO 1500OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 60.0

8. MSA FROM: RW17 2300

PBN REQUIREMENTS NOTE:

PBN APCH.

NOTES:

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING NAPLES ALTIMETER SETTING.
CHART NOTE: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DEEDS ON V35 SOUTHEAST BOUND.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 2C OR ABOVE 54C.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE NAPLES ALTIMETER SETTING AND INCREASE ALL DA 26 FEET AND ALL MDA 40 FEET; INCREASE LNAV/VNAV ALL CATS VISIBILITY 1/4 SM.

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.65 NM TO RW17*
*LNAV ONLY
WAAS CHANNEL #93516
REFERENCE PATH ID: W17A
CHART FAS OBST: 109 TREE 260155N/0814028W.
HOLD S, RT, 350.72 INBOUND
LTP HAE: -21.9 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	300	1	295	300	1	295	300	1	295	300	1	295			
LNAV/VNAV DA	458	1 1/2	453	458	1 1/2	453	458	1 1/2	453	458	1 1/2	453			
LNAV MDA	560	1	555	560	1	555	560	1 1/2	555	560	1 3/4	555			
CIRCLING	620	1	615	620	1	615	620	1 3/4	615	620	2	615			



AIRPORT	AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	CITY	STATE
MARCO ISLAND EXECUTIVE	KMKY	RNAV (GPS) RWY 17	ORIG-A	MARCO ISLAND	FL

CHANGES - REASONS

- 1. CHANGED AIRPORT NAME FROM MARCO ISLAND TO MARCO ISLAND EXECUTIVE - AIRPORT NAME CHANGED IN AIRNAV.
- 2. ADDED PBN APCH TO EQUIPMENT REQUIREMENT NOTES - PER 8260.19H
- 3. ADDED CA LEG TO MISSED APPROACH - PER 8260.58A.
- 4. ADDED 20:1 IS CLEAR - VISUAL SURFACE EVALUATION.
- 5. REMOVED FAHRENHEIT FROM BARO-VNAV TEMP NOTE - PER 8260.19H.
- 6. REMOVED DME/DME RNP-0.3 NA - PER 8260.19H.
- 7. ADDED RWY 17 TO HELICOPTER NOTE - PER 8260.19H
- 8. ALT MINS CHANGED FROM NA TO STANDARD - ALT MINS AUTHORIZED.
- 9. PROCEDURE NA FOR ARRIVALS AT DEEDS CHANGED FROM "VIA" TO "ON" - CURRENT CRITERIA.
- 10. REMOVED CHART FAS OBST: 57 ANT 260006N/0814031W FROM ADDITIONAL FLIGHT DATA - NOT REQUIRED FOR LNAV/VNAV.
- 11. FAS DATA: CRC REMAINDER CHANGED FROM 7A3E45BD TO 1B8F4CBC - LTP/FTP DATA CHANGED.
- 12. FAS DATA: LTP/FTP ELLIPSODIAL HEIGHT CHANGED FROM -00220 TO -00219 - LTP/FTP DATA CHANGED.
- 13. FAS DATA: LTP/FTP LAT/LONG CHANGED FROM 260006.3345N/0814026.9395W TO 260006.3390N/0814026.9390W - AIRNAV DATA CHANGED.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZMA, RSW APP CON, AMGR, EASTERN FPT

FLIGHT CHECKED BY

JOHN D JEFFERS

Digitally signed by

DONALD H LANIER

Sep 27, 2018

OFFICE

FICO

DATE

9/20/18

DEVELOPED BY

LONNIE EVERHART (THERON CYRUS)

Digitally signed by

DONALD H LANIER

Sep 27, 2018

OFFICE

AJV-5400

DATE

08/24/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by

DONALD H LANIER

Sep 27, 2018

OFFICE

AJV-5400

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMKY
RUNWAY	RW17
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W17A
LTP/FTP LATITUDE	260006.3390N
LTP/FTP LONGITUDE	0814026.9390W
LTP/FTP ELLIPSOIDAL HEIGHT	-00219
FPAP LATITUDE	255839.0100N
FPAP LONGITUDE	0814005.8800W
THRESHOLD CROSSING HEIGHT (TCH)	00060.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	1B8F4CBC
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00015
FPAP ORTHOMETRIC HEIGHT	+00015



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> MARCO ISLAND EXECUTIVE	<u>AIRPORT ID</u> KMKY	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> MARCO ISLAND	<u>STATE</u> FL
<u>AIRPORT ELEVATION</u> 5	<u>TDZE</u> 5	<u>SUPERSEDED</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 09/18/2014	<u>MAG VAR</u> 3W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1995

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
DEEDS		TAGJO		TF	FB	2.00	245.38	18.68	2000
TAGJO	IAF	ONSAW	NOPT	TF	FB	1.00	260.76	5.00	2000
COPGI	IAF	ONSAW	NOPT	TF	FB	1.00	080.68	5.00	2000
ONSAW	IF/IAF	PARYE		TF	FB	1.00	350.72	6.10	1500
PARYE	FAF	RW35	MAP	TF	FO	0.30	350.71	4.51	
RW35	MAP	286 MSL		CA			350.71		
286 MSL		AVCOF		DF	FO	1.00			

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW35

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT AVCOF AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S ONSAW, RT, 350.72 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 350.71FAF: PARYEDIST FAF TO MAP: 4.51DIST FAF TO THLD: 4.51

4. MIN ALT: ONSAW 2000, PARYE 1500

5. DIST TO THLD FROM OM:MM:IM:150 HAT:281 HAT: 0.76GS ANT:

6. MIN GP INCPT: 1500GP ALT AT FAF : PARYE 1500OM:MM:IM:

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

8. MSA FROM: RW35 2300

PBN REQUIREMENTS NOTE:

PBN APCH.

NOTES:

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING NAPLES ALTIMETER SETTING.
CHART NOTE: RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DEEDS ON V601 NORTHBOUND.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE NAPLES ALTIMETER SETTING AND INCREASE LPV DA TO 312 FEET, LNAV/VNAV DA TO 420 FEET, AND ALL MDA 40 FEET.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 2C OR ABOVE 54C.

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.51 NM TO RW35*
*LNAV ONLY
WAAS CHANNEL #53316
REFERENCE PATH ID: W35A
CHART FAS OBST: 109 TREE 255521N/0813900W.
HOLD N, RT, 170.68 INBOUND
LTP HAE: -21.8 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	286	1	281	286	1	281	286	1	281	286	1	281			
LNAV/VNAV DA	394	1 1/2	389	394	1 1/2	389	394	1 1/2	389	394	1 1/2	389			
LNAV MDA	520	1	515	520	1	515	520	1 1/2	515	520	1 3/4	515			
CIRCLING	620	1	615	620	1	615	620	1 3/4	615	620	2	615			



AIRPORT	AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	CITY	STATE
MARCO ISLAND EXECUTIVE	KMKY	RNAV (GPS) RWY 35	ORIG-B	MARCO ISLAND	FL

CHANGES - REASONS

- 1. CHANGED AIRPORT NAME FROM MARCO ISLAND TO MARCO ISLAND EXECUTIVE - AIRPORT NAME CHANGED IN AIRNAV.
- 2. REMOVED CHART NOTE: DME/DME RNP-0.3 NA - PER 8260.19H
- 3. ADDED PBN APCH TO EQUIPMENT REQUIREMENT NOTES - PER 8260.19H
- 4. ADDED CA LEG TO MISSED APPROACH - PER 8260.58A.
- 5. ADDED 20:1 IS CLEAR - VISUAL SURFACE EVALUATION.
- 6. REMOVED FAHRENHEIT FROM BARO-VNAV TEMP NOTE - PER 8260.19H.
- 7. ADDED RWY 35 TO HELICOPTER NOTE - PER 8260.19H
- 8. ALT MINS CHANGED FROM NA TO STANDARD - ALT MINS AUTHORIZED.
- 9. PROCEDURE NA FOR ARRIVALS AT DEEDS CHANGED FROM "VIA" TO "ON" - CURRENT CRITERIA.
- 10. FAS DATA: CRC REMAINDER CHANGED FROM 3EE160A8 TO D7194025 - LTP/FTP DATA CHANGED.
- 11. FAS DATA: LTP/FTP ELLIPSODIAL HEIGHT CHANGED FROM -00219 TO -00218 - LTP/FTP DATA CHANGED.
- 12. FAS DATA: LTP/FTP LAT/LONG CHANGED FROM 255917.9540N/0814015.2715W TO 255917.9520/0814015.2700 - AIRNAV DATA CHANGED.



<u>AIRPORT</u> MARCO ISLAND EXECUTIVE	<u>AIRPORT ID</u> KMKY	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> MARCO ISLAND	<u>STATE</u> FL
<u>COORDINATED WITH:</u>					
A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ <u>OTHER:</u> ZMA, RSW APP CON, AMGR, EASTERN FPT					
<u>FLIGHT CHECKED BY</u>		<u>OFFICE</u>	<u>DATE</u>		
JOHN D JEFFERS		FICO	9/20/18		
<u>DEVELOPED BY</u>		<u>OFFICE</u>	<u>DATE</u>		
LONNIE EVERHART (THERON CYRUS)		AJV-5400	08/28/2018		
<u>APPROVED BY</u>		<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>	
LONNIE EVERHART		AJV-5400		MANAGER	
Digitally signed by DONALD H LANIER Sep 27, 2018					
Digitally signed by DONALD H LANIER Sep 27, 2018					



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMKY
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	255917.9520N
LTP/FTP LONGITUDE	0814015.2700W
LTP/FTP ELLIPSOIDAL HEIGHT	-00218
FPAP LATITUDE	260045.2600N
FPAP LONGITUDE	0814036.3400W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	D7194025
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00016
FPAP ORTHOMETRIC HEIGHT	+00016



**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
MARCO ISLAND, FL	MARCO ISLAND EXECUTIVE	3 JANUARY 2019	3

TAKEOFF MINIMUMS:

RWY 17, 35 STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

RWY 35: CLIMB HEADING 005.00 TO 700 BEFORE TURNING WEST.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 17: TREE 16 FT FROM DER, 478 FT RIGHT OF CENTERLINE, 12 FT MSL. TREES BEGINNING 20 FT FROM DER, 265 FT LEFT OF CENTERLINE, UP TO 13 FT MSL. POLE AND TREE BEGINNING 77 FT FROM DER, 309 FT RIGHT OF CENTERLINE, UP TO 25 FT AGL/25 FT MSL. TREES BEGINNING 186 FT FROM DER, 431 FT LEFT OF CENTERLINE, UP TO 28 FT MSL. TREES BEGINNING 473 FT FROM DER, 5 FT LEFT OF CENTERLINE, UP TO 32 FT MSL. TREE 689 FT FROM DER, 582 FT RIGHT OF CENTERLINE, 26 FT MSL. TREES BEGINNING 826 FT FROM DER, ON CENTERLINE, UP TO 30 FT MSL. TREES BEGINNING 951 FT FROM DER, 265 FT LEFT OF CENTERLINE, UP TO 35 FT MSL. TREES BEGINNING 972 FT FROM DER, 270 FT RIGHT OF CENTERLINE, UP TO 36 FT MSL. TREE 1106 FT FROM DER, 702 FT RIGHT OF CENTERLINE, 38 FT MSL. TREE 1113 FT FROM DER, 321 FT LEFT OF CENTERLINE, 36 FT MSL. TREES BEGINNING 1154 FT FROM DER, 249 FT LEFT OF CENTERLINE, UP TO 39 FT MSL. TREES BEGINNING 1246 FT FROM DER, 499 FT LEFT OF CENTERLINE, UP TO 47 FT MSL. TREE 1303 FT FROM DER, 394 FT RIGHT OF CENTERLINE, 39 FT MSL. TREE 1354 FT FROM DER, 658 FT RIGHT OF CENTERLINE, 43 FT MSL. TREES BEGINNING 1396 FT FROM DER, 98 FT RIGHT OF CENTERLINE, UP TO 48 FT MSL. TREES BEGINNING 1476 FT FROM DER, 239 FT RIGHT OF CENTERLINE, UP TO 50 FT MSL.

NOTE: RWY 35: TOWER, SIGN AND TREE BEGINNING 10 FT FROM DER, 31 FT LEFT OF CENTERLINE, UP TO 56 FT AGL/57 FT MSL. TREES BEGINNING 178 FT FROM DER, 51 FT RIGHT OF CENTERLINE, UP TO 43 FT MSL. TREE 1568 FT FROM DER, 795 FT RIGHT OF CENTERLINE, 45 FT MSL. TREE 1895 FT FROM DER, 337 FT RIGHT OF CENTERLINE, 58 FT MSL.

CONTROLLING OBSTACLES:

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 35: 531 FT MSL TOWER 260311.32N/0814210.40W.



**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>
MARCO ISLAND, FL	MARCO ISLAND EXECUTIVE	3 JANUARY 2019	3

REMARKS:

CAUTION: STROBELIGHT AND UNMARKED BALLOON ON CABLE TO 14000 FT IN R-2916, 78 NM SOUTH OF MARCO ISLAND. ALL AIRCRAFT SHOULD ESTABLISH POSITIVE COURSE GUIDANCE TO ENSURE AVOIDANCE OF THIS OBSTACLE.

FLIGHT INSPECTED BY:

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, DECEMBER 22, 2017
SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED

Digitally signed by **OFFICE SYMBOL:**

DATE:

ADOLFO D URRUTIA

Sep 26, 2018

DEVELOPED BY:

SYLVAN DRAKES

Digitally signed by

SYLVAN DRAKES

Jul 27, 2018

OFFICE SYMBOL:

AJV-5433

DATE:

07/27/2018

APPROVED BY:

PATRICK MULQUEEN

Digitally signed by

ADOLFO D URRUTIA

Sep 26, 2018

OFFICE SYMBOL:

AJV-5430

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE.

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA



OTHER:

ARPT MGR, RSW ATCT.

CHANGES - REASONS:

1. UPDATED AIRPORT NAME FROM MARCO ISLAND TO MARCO ISLAND EXECUTIVE - PROPOSED AIRPORT NAME CHANGE WITH UPDATED AIRPORT PENDING DATA IN AIRNAV.
2. UPDATED RWY 17, 35 TAKEOFF OBSTACLE NOTES - NEW/UPDATED SURVEY DATA.
3. ADDED OBSTACLES MANDATING ODP ROUTE DEVELOPMENT TO CONTROLLING OBSTACLE - TAKEOFF MINIMUMS ARE STANDARD.

QUALITY
3
CHECKED

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

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
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<u>AIRPORT</u> MARCO ISLAND EXECUTIVE	<u>AIRPORT ID</u> KMKY	<u>PROCEDURE NAME</u> VOR/DME RWY 17	<u>ORIGINAL/AMENDMENT</u> 7	<u>CITY</u> MARCO ISLAND	<u>STATE</u> FL	
<u>AIRPORT ELEVATION</u> 5	<u>TDZE</u> 5	<u>SUPERSEDED</u> VOR/DME RWY 17	<u>ORIGINAL/AMENDMENT</u> 6A	<u>DATED</u> 10/10/1996	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> 04/08/2010	<u>CANCEL/SUSPEND</u> CANCEL		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>

PROCEDURE CANCELLED EFFECTIVE 3 JANUARY 2019

MISSED APPROACH

MAP:

MISSED APPROACH INSTRUCTIONS:

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)
2.				
3. FAC:	FAF:	DIST FAF TO MAP:	DIST FAF TO THLD:	
4. MIN ALT:				
8. MSA FROM:				

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

MINIMUMS:



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

ALTERNATE: NA ☐

<u>CATEGORY:</u>	<u>A</u>			<u>B</u>			<u>C</u>			<u>D</u>			<u>E</u>		
<u>FINAL TYPE</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>

CHANGES - REASONS

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ **OTHER:** ZMA, RSW APP CON, AMGR, EASTERN FPO

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY

LONNIE EVERHART (THERON CYRUS)

Digitally signed by
DONALD H LANIER
Sep 27, 2018

OFFICE

AJV-5400

DATE

08/24/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by
DONALD H LANIER
Sep 27, 2018

OFFICE

AJV-5400

DATE

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
ILS STANDARD INSTRUMENT APPROACH PROCEDURE

TITLE 14 CFR PART 97.29

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

<u>AIRPORT</u> MIAMI INTL	<u>AIRPORT ID</u> KMIA	<u>PROCEDURE NAME</u> ILS OR LOC RWY 9	<u>ORIGINAL/AMENDMENT</u> 10B	<u>CITY</u> MIAMI	<u>STATE</u> FL
<u>AIRPORT ELEVATION</u> 9	<u>TDZE</u> 7	<u>SUPERSEDED</u> ILS OR LOC RWY 9	<u>ORIGINAL/AMENDMENT</u> 10A	<u>DATED</u> 03/30/2017	<u>MAG VAR</u> 5W
<u>FACILITY</u> I-BUL	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
GRITT/I-BUL 11.11 DME/RADAR	IF	INESS/I-BUL 6.12 DME/RADAR					092.38	4.99 (I-BUL)	1500

MISSED APPROACH

MAP:

ILS: DA

LOC: 3.99 NM AFTER INESS/I-BUL 6.12 DME/RADAR OR AT I-BUL 2.13 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 800 THEN CLIMBING RIGHT TURN TO 3000 DIRECT VKZ VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 800 THEN CLIMBING RIGHT TURN TO 3000 ON DHP VORTAC R-109 TO ZOMGU/DHP 10.90 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000. (DME REQUIRED)

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- PROFILE STARTS AT GRITT
- 3. FAC:** 092.38 **FAF:** INESS/I-BUL 6.12 DME/RADAR **DIST FAF TO MAP:** 3.99 **DIST FAF TO THLD:** 3.99
- 4. MIN ALT:** GRITT/I-BUL 11.11 DME/RADAR 3000, INESS/I-BUL 6.12 DME/RADAR 1500
- 5. DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **GS ANT:** 1071
- 6. MIN GS INCPT:** 1500 **GS ALT AT FAF :** **OM:** **MM:** **IM:**
- 7. GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 56.0
- 8. MSA FROM:** DHP VORTAC 090-270 2900, 270-090 2100

EQUIPMENT REQUIREMENTS NOTES:

RADAR REQUIRED FOR PROCEDURE ENTRY.
DME REQUIRED FOR LOC ONLY.



NOTES:

CHART NOTE: AUTOPILOT COUPLED APPROACH NA.
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: CAUTION: LIGHTS ON HIGHWAY 1/4 MILE SOUTH OF FINAL APPROACH COURSE MAY BE MISTAKEN FOR RUNWAY.
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.
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 3/8 SM.
CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.

ADDITIONAL FLIGHT DATA:

CHART IN PLANVIEW: ZOMGU/DHP 10.90 DME
CHART VDP AT 3.38 DME*
DISTANCE VDP TO THLD 1.25 NM
* LOC ONLY
FAS OBST: 214 AAO 254700N/0802233W.
CHART 271 TOWER 254623N/0802513W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD E ZOMGU/DHP 10.90 DME, LT, 289.22 INBOUND.
HOLD SE, LT, 300.00 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-ILS 09**	207	2400	200	207	2400	200	207	2400	200	207	2400	200	207	2400	200
S-LOC 09	480	2400	473	480	2400	473	480	5000	473	480	5000	473	480	5000	473

CHANGES - REASONS

1. REMOVED ALL REFERNCES TO INESS OM AND REPLACED WITH INESS. - INESS OM BEING DECOMMISSIONED.
2. ADDED EQUIPMENT REQUIREMENTS NOTE - REQUIRMENT AS PER 8260-19H PARA 8-6-8.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZMA, MIA ATCT, MIA AMGR

FLIGHT CHECKED BY

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

DEVELOPED BY

LONNIE EVERHART (JOSHUA DUGAN)

APPROVED BY

LONNIE EVERHART

OFFICE

AJV-5400

OFFICE

AJV-5400

DATE

DATE

08/29/2018

DATE

Digitally signed by
ROBERT G HAMILTON
Oct 11, 2018

Digitally signed by
ROBERT G HAMILTON
Oct 11, 2018

Digitally signed by
ROBERT G HAMILTON
Oct 11, 2018

TITLE
MANAGER



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

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
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CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
NEW SMYRNA BEACH, FL	NEW SMYRNA BEACH MUNI	3 JANUARY 2019	3

TAKEOFF MINIMUMS:

RWY 2, 7, 11, 20, 25 29: STANDARD

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 2, SIGN 55 FT FROM DER, 494 FT LEFT OF CENTERLINE, 3 FT AGL/12 FT MSL.

SIGN 70 FT FROM DER, 289 FT RIGHT OF CENTERLINE, 3 FT AGL/11 FT MSL.

TREES BEGINNING 462 FT FROM DER, 429 FT LEFT OF CENTERLINE, UP TO 42 FT MSL.

TREES BEGINNING 572 FT FROM DER, 232 FT LEFT OF CENTERLINE, UP TO 44 FT MSL.

TREES BEGINNING 952 FT FROM DER, 256 FT LEFT OF CENTERLINE, UP TO 72 FT MSL.

TREES BEGINNING 1067 FT FROM DER, 282 FT LEFT OF CENTERLINE, UP TO 72 FT MSL.

TREE 1250 FT FROM DER, 607 FT LEFT OF CENTERLINE, 79 FT MSL.

TREES AND POLES BEGINNING 1270 FT FROM DER, 22 FT LEFT OF CENTERLINE, UP TO 91 FT MSL.

NOTE: RWY 7, TREES, FENCE AND TRAVERSE WAYS BEGINNING 38 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 45 FT MSL.

TRANSMISSION LINE AND TREE BEGINNING 348 FT FROM DER, 17 FT LEFT OF CENTERLINE, UP TO 45 FT AGL/51 FT MSL.

TREES BEGINNING 793 FT FROM DER, 497 FT LEFT OF CENTERLINE, UP TO 56 FT MSL.

TRANSMISSION LINES AND TREES BEGINNING 890 FT FROM DER, 54 FT LEFT OF CENTERLINE, UP TO 56 FT AGL/58 FT MSL.

TRANSMISSION LINES AND POLES BEGINNING 1480 FT FROM DER, 145 FT LEFT OF CENTERLINE, UP TO 58 FT AGL/61 FT MSL.

NOTE: RWY 11, TRAVERSE WAY 408 FT FROM DER, 400 FT LEFT OF CENTERLINE, 27 FT MSL.

TREES, POLE AND TRAVERSE WAY BEGINNING 508 FT FROM DER, 222 FT LEFT OF CENTERLINE, UP TO 61 FT MSL.

TREES BEGINNING 634 FT FROM DER, 350 FT LEFT OF CENTERLINE, UP TO 68 FT MSL.

POLE AND TREES 1671 FT FROM DER, 804 FT RIGHT OF CENTERLINE, 70 FT AGL/75 FT MSL.

NOTE: RWY 20, TREES BEGINNING 12 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 75 FT MSL.

TREES BEGINNING 542 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 80 FT MSL.

TREES BEGINNING 1826 FT FROM DER, 479 FT RIGHT OF CENTERLINE, UP TO 85 FT MSL.

NOTE: RWY 25, TREES BEGINNING 30 FT FROM DER, 302 FT RIGHT OF CENTERLINE, UP TO 28 FT MSL.

TREES AND FENCE BEGINNING 76 FT FROM DER, 334 FT RIGHT OF CENTERLINE, UP TO 44 FT MSL.

TREES AND POLE BEGINNING 108 FT FROM DER, 22 FT LEFT OF CENTERLINE, UP TO 43 FT MSL.

TREES BEGINNING 160 FT FROM DER, 84 FT RIGHT OF CENTERLINE, UP TO 53 FT MSL.

TREES BEGINNING 354 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 66 FT MSL.

POLE AND TREES BEGINNING 1376 FT FROM DER, 35 FT LEFT OF CENTERLINE, UP TO 72 FT AGL/77 FT MSL.

TREES BEGINNING 1641 FT FROM DER, 24 FT LEFT OF CENTERLINE, UP TO 100 FT MSL.

NOTE: RWY 29, TREES BEGINNING 4 FT FROM DER, 408 FT LEFT OF CENTERLINE, UP TO 30 FT MSL.

TREES BEGINNING 452 FT FROM DER, 462 FT RIGHT OF CENTERLINE, UP TO 49 FT MSL.

TREE 491 FT FROM DER, 596 FT RIGHT OF CENTERLINE, 62 FT MSL.

TREES BEGINNING 560 FT FROM DER, 292 FT RIGHT OF CENTERLINE, UP TO 69 FT MSL.

TREES BEGINNING 1289 FT FROM DER, 107 FT RIGHT OF CENTERLINE, UP TO 77 FT MSL.

TREES BEGINNING 1315 FT FROM DER, 17 FT RIGHT OF CENTERLINE, UP TO 86 FT MSL.

TREES BEGINNING 1788 FT FROM DER, 72 FT LEFT OF CENTERLINE, UP TO 100 FT MSL.

CONTROLLING OBSTACLES:

QUALITY
41
CHECKED

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

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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
NEW SMYRNA BEACH, FL	NEW SMYRNA BEACH MUNI	3 JANUARY 2019	3

REMARKS:

FLIGHT INSPECTED BY:

Digitally signed by
MARK D ADAMS
Oct 03, 2018

OFFICE SYMBOL:

FICO

DATE:

9/23/18

JAMES L REINEBOLD JR

DEVELOPED BY:

Digitally signed by
ROBERT G ABBOTT
Jul 30, 2018

OFFICE SYMBOL:

AJV-5412

DATE:

07/30/2018

ROBERT ABBOTT

APPROVED BY:

Digitally signed by
MARK D ADAMS
Oct 01, 2018

OFFICE SYMBOL:

AJV-5410

DATE:

GEORGE DAVIS

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:

ZJX, DAB ATCT, AMGR

CHANGES - REASONS:

NEW TAKEOFF OBSTACLES FOR ALL RUNWAYS - 05/26/2016 VG OIS SURVEY.

QUALITY
41
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.

CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
ORMOND BEACH, FL	ORMOND BEACH MUNI	3 JANUARY 2019	ORIG-A

TAKEOFF MINIMUMS:

RWY 17, 26, 35 STANDARD.

RWY 8, 300-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 239 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 2000 FEET PRIOR TO DER.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 08, TREE 60 FT FROM DER, 370 FT LEFT OF CENTERLINE, 67 FT MSL.

TREE 188 FT FROM DER, 448 FT LEFT OF CENTERLINE, 86 FT MSL.

TREES BEGINNING 254 FT FROM DER, 1 FT LEFT OF CENTERLINE, UP TO 93 FT MSL.

TREE 431 FT FROM DER, 544 FT RIGHT OF CENTERLINE, 65 FT MSL.

TREES BEGINNING 457 FT FROM DER, 390 FT RIGHT OF CENTERLINE, UP TO 66 FT MSL.

TREES BEGINNING 773 FT FROM DER, 333 FT RIGHT OF CENTERLINE, UP TO 73 FT MSL.

TREES BEGINNING 932 FT FROM DER, 340 FT RIGHT OF CENTERLINE, UP TO 80 FT MSL.

TREES BEGINNING 1023 FT FROM DER, 16 FT RIGHT OF CENTERLINE, UP TO 88 FT MSL.

TREES BEGINNING 1883 FT FROM DER, ON CENTERLINE, UP TO 92 FT MSL.

TREES BEGINNING 2365 FT FROM DER, 254 FT LEFT OF CENTERLINE, UP TO 108 FT MSL.

POLE 5855 FT FROM DER, 1589 FT LEFT OF CENTERLINE, 195 FT MSL.

NOTE: RWY 17, TREES BEGINNING 40 FT FROM DER, 334 FT LEFT OF CENTERLINE, UP TO 72 FT MSL.

TREES BEGINNING 46 FT FROM DER, 328 FT RIGHT OF CENTERLINE, UP TO 94 FT MSL.

TREES BEGINNING 185 FT FROM DER, 49 FT LEFT OF CENTERLINE, UP TO 85 FT MSL.

TREES, POLES, BUILDING BEGINNING 232 FT FROM DER, 104 FT RIGHT OF CENTERLINE, UP TO 97 FT MSL.

TREES BEGINNING 1090 FT FROM DER, 6 FT LEFT OF CENTERLINE, UP TO 86 FT MSL.

TREES BEGINNING 1459 FT FROM DER, 7 FT LEFT OF CENTERLINE, UP TO 95 FT MSL.

TREES BEGINNING 1724 FT FROM DER, 286 FT RIGHT OF CENTERLINE, UP TO 99 FT MSL.

TREES BEGINNING 1828 FT FROM DER, 668 FT LEFT OF CENTERLINE, UP TO 96 FT MSL.

TREES BEGINNING 1835 FT FROM DER, 32 FT LEFT OF CENTERLINE, UP TO 105 FT MSL.

TREES BEGINNING 1965 FT FROM DER, 98 FT RIGHT OF CENTERLINE, UP TO 100 FT MSL.

TREES BEGINNING 2051 FT FROM DER, 85 FT LEFT OF CENTERLINE, UP TO 111 FT MSL.

TREES BEGINNING 2095 FT FROM DER, 160 FT RIGHT OF CENTERLINE, UP TO 101 FT MSL.

TREES BEGINNING 2136 FT FROM DER, 45 FT LEFT OF CENTERLINE, UP TO 113 FT MSL.

TREES BEGINNING 2188 FT FROM DER, 16 FT RIGHT OF CENTERLINE, 110 FT MSL.

NOTE: RWY 26, VEGETATION BEGINNING 7 FT FROM DER, 269 FT RIGHT OF CENTERLINE, UP TO 39 FT MSL.

TREE 48 FT FROM DER, 387 FT RIGHT OF CENTERLINE, 47 FT MSL.

TREES BEGINNING 58 FT FROM DER, 10 FT LEFT OF CENTERLINE, UP TO 99 FT MSL.

TREE, VEGETATION BEGINNING 83 FT FROM DER, 163 FT RIGHT OF CENTERLINE, UP TO 90 FT MSL.

TREE, VEGETATION BEGINNING 312 FT FROM DER, 155 FT RIGHT OF CENTERLINE, UP TO 103 FT MSL.

TREES BEGINNING 812 FT FROM DER, 307 FT RIGHT OF CENTERLINE, UP TO 108 FT MSL.

TREES BEGINNING 1277 FT FROM DER, 14 FT LEFT OF CENTERLINE, UP TO 104 FT MSL.

TREES BEGINNING 1280 FT FROM DER, 11 FT RIGHT OF CENTERLINE, UP TO 109 FT MSL.

TREES BEGINNING 2315 FT FROM DER, 381 FT LEFT OF CENTERLINE, UP TO 111 FT MSL.

NOTE: RWY 35, TREES BEGINNING 48 FT FROM DER, 264 FT RIGHT OF CENTERLINE, UP TO 47 FT MSL.

POLE, TREE BEGINNING 242 FT FROM DER, 380 FT RIGHT OF CENTERLINE, UP TO 54 FT MSL.

VEGETATION 266 FT FROM DER, 395 FT LEFT OF CENTERLINE, UP TO 35 FT MSL.

VEGETATION BEGINNING 279 FT FROM DER, 272 FT LEFT OF CENTERLINE, UP TO 40 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>
ORMOND BEACH, FL	ORMOND BEACH MUNI	3 JANUARY 2019	ORIG-A

TREES, POLES BEGINNING 379 FT FROM DER, 17 FT RIGHT OF CENTERLINE, UP TO 101 FT MSL.
TREES, POLES BEGINNING 602 FT FROM DER, 17 FT LEFT OF CENTERLINE, UP TO 99 FT MSL.
TREE, POLE BEGINNING 1735 FT FROM DER, 17 FT LEFT OF CENTERLINE, UP TO 99 FT MSL.

CONTROLLING OBSTACLES:

RWY 8: 195 FEET MSL POLE 291836.88N/0810526.81W.

REMARKS:

FLIGHT INSPECTED BY:

JAMES L REINEBOLD JR

Digitally signed by
DAVID TEFFETELLER
Sep 27, 2018

OFFICE SYMBOL:

FICO

DATE:

9/23/18

DEVELOPED BY:

CARLOS ESCALANTE

Digitally signed by
CARLOS J ESCALANTE
Aug 16, 2018

OFFICE SYMBOL:

AJV-5433

DATE:

8/6/2018

APPROVED BY:

PATRICK MULQUEEN

Digitally signed by
DAVID TEFFETELLER
Sep 27, 2018

OFFICE SYMBOL:

AJV-5430

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

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

OTHER:

CHANGES - REASONS:

1. UPDATED TAKEOFF MINIMUMS FOR RUNWAY 8 - PERIODIC REVIEW FOUND PENETRATION 195 MSL POLE (12-044658) (AC 1A) 291836.88N/0810526.81W, INCORPORATED INTO T-NOTAM 8/5662.
2. UPDATED TAKEOFF OBSTACLE NOTES - RE-EVALUATION OF RUNWAYS WITH TARGETS.

QUALITY
24
CHECKED

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.23

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<u>AIRPORT</u> ORMOND BEACH MUNI	<u>AIRPORT ID</u> KOMN	<u>PROCEDURE NAME</u> VOR RWY 17	<u>ORIGINAL/AMENDMENT</u> 2B	<u>CITY</u> ORMOND BEACH	<u>STATE</u> FL	
<u>AIRPORT ELEVATION</u> 28	<u>TDZE</u> 27	<u>SUPERSEDED</u> VOR RWY 17	<u>ORIGINAL/AMENDMENT</u> 2A	<u>DATED</u> 03/06/2014	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u> CANCEL		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>

PROCEDURE CANCELLED EFFECTIVE 01/03/2019

MISSED APPROACH

MAP:

MISSED APPROACH INSTRUCTIONS:

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)
2.				
3. FAC:	FAF:	DIST FAF TO MAP:	DIST FAF TO THLD:	
4. MIN ALT:				
8. MSA FROM:				

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

MINIMUMS:



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

ALTERNATE: NA ☐

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA

CHANGES - REASONS

COORDINATED WITH:

A4A ☐ ALPA ☐ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZJX, DAB APP CON, ARPT MGR

FLIGHT CHECKED BY

DEVELOPED BY

LONNIE EVERHART (DEAN GRACEY)

APPROVED BY

LONNIE EVERHART

	<u>OFFICE</u>	<u>DATE</u>	
Digitally signed by			
BEV L BORDY			
Aug 27, 2018	<u>OFFICE</u>	<u>DATE</u>	
	AJV-5400	07/31/2018	
Digitally signed by			
BEV L BORDY	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
Aug 27, 2018	AJV-5400		MANAGER

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> SEBRING RGNL	<u>AIRPORT ID</u> KSEF	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 32	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> SEBRING	<u>STATE</u> FL
<u>AIRPORT ELEVATION</u> 62	<u>TDZE</u> 60	<u>SUPERSEDED</u> RNAV (GPS) RWY 32	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 05/28/2015	<u>MAG VAR</u> 5W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
YOHOR	IF/IAF	LUGEY		TF	FB	1.00	319.91	6.66	1700
LUGEY	FAF	RW32	MAP	TF	FO	0.30	319.87	5.03	
RW32	MAP	420 MSL		CA			319.87		
420 MSL		CUNSI		DF	FO	1.00			2000

MISSED APPROACH

MAP:

LP: RW32
LNAV: RW32

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 DIRECT CUNSI AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. HOLD SE YOHOR, RT, 319.91 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 319.87 FAF: LUGEY DIST FAF TO MAP: 5.03 DIST FAF TO THLD: 5.03
4. MIN ALT: YOHOR 2000, LUGEY 1700
5. DIST TO THLD FROM OM: MM: IM: 150 HAT: GS ANT: MM: IM:
6. MIN GP INCPT: GP ALT AT FAF : OM: MM: IM:
7. GP ANGLE: 34:1: IS CLEAR 20:1: IS CLEAR TCH:
8. MSA FROM: RW32 1900

PBN REQUIREMENTS NOTE:



RNP APCH.

NOTES:

CHART NOTE: CIRCLING RWY 14 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

LUGEY TO RW32: 3.00/40
CHART: R-2901 A, B, H, I, G, F
CHART CIRCLING ICON.
CHART VDP AT 1.01 NM TO RW32
WAAS CHANNEL #48925
REFERENCE PATH ID: W32A
CHART FAS OBST: 171 TOWER 272618N/0811829W.
HOLD NW, RT, 139.76 INBOUND
LTP HAE: -8.5 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 900-2 3/4

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LP MDA	420	1	360	420	1	360	420	1	360	420	1	360			
LNAV MDA	480	1	420	480	1	420	480	1 1/8	420	480	1 1/8	420			
CIRCLING	600	1	538	600	1	538	600	1 1/2	538	880	2 3/4	818			

CHANGES - REASONS

1. P-NOTAM 5/8366 INCORPORATED. T-NOTAM ISSUED PER PERIODIC REVIEW. NOTAM 8/3545 RESOLUTION TO CHANGE LNAV MDA/HAT FROM 420/360 TO 480/420; LNAV CAT C AND D VISIBILTIES FROM 1 TO 1 1/8 MILE - IAW 8260.19H 8-3-4C(3), LNAV CONTROLLING OBSTACLE CHANGED FROM "159 TREE 272604N/08118850W" TO "171 TOWER (12-096090) 272618N/0811829W.
2. CIRCLING CAT D MDA/HAA/VIS CHANGED FROM 620/558/2 TO 880/818/2 3/4 - CAT D CONTROLLING OBSTACLE CHANGED FROM "244 TANK (12-002665) 272721.00N/0812048.00W" TO "527 TOWER (12-001984) 272715.00N/0812422.00W".
3. ADDED PBN EQUIPMENT REQUIREMENTS NOTE: RNP APCH - NEW EQUIPMENT NOTE REQUIREMENT PER 8260.19H.
4. DELETED CHART NOTE: DME/DME RNP-0.3 NA - NEW NOTES FORMATTING PER 8260.19H.
5. CHANGED LINE 7 NOTE FROM "34:1 IS NOT CLEAR" TO "20:1 IS CLEAR, 34:1 IS CLEAR"- NO LONGER LIST 20:1 PENETRATIONS FOR CAT C/D IAW 8260.19H PARA 8-5-7G(3). 20:1 AND 34:1 SURFACES HAVE NO PENETRATIONS.
6. REMOVED CHART NOTE: "HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED" - IAW 8260.19H PARA 8-6-5I(3). 20:1 IS CLEAR, 34:1 IS CLEAR.
7. ADDITIONAL FLIGHT DATA: CHANGED CHART FAS OBST FROM "159 TREE 272604N/08118850W" TO "171 TOWER (12-096090) 272618N/0811829W - LNAV CONTROLLING OBSTACLE UPDATE.
8. CHANGED CIRCLING ICON - IAW 8260.19H PARA 8-7-1D(12).
9. REMOVED "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE VERO BEACH ALTIMETER SETTING AND INCREASE ALL MDA 140 FEET; INCREASE LP CATS C AND D VISIBLITIIES 3/8 MILE; LNAV CATS C AND D VISIBILITIES 1/2 MILE AND CIRCLING CATS C VISIBILITY 1/4 MILE" - PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.
10. REMOVED "NA WHEN LOCAL WEATHER NOT AVAILABLE" - PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.
11. REMOVED CHART NOTE "NIGHT LANDING: RWY 14, 32 NA". ADDED "CHART NOTE: CIRCLING RWY 14 NA AT NIGHT" - RWY 14 20:1 PENETRATION (CAT A/B). RWY 32 HAS NO 20:1 PENETRATIONS FOR CAT A/B. NO LONGER LIST 20:1 PENETRATIONS BASED ON CAT C/D - NOTE REVISED. IAW 8260.19H PARA 8-6-11O(2)(G).
12. ADDED MAX 6000 TO LINE 2 - IAW 8260.19H PARA 8-6-7B(2)A.
13. ADDED "CHART VDP AT 1.01 NM TO RW32" TO ADDITIONAL FLIGHT DATA - IAW 8260.19H PARA 8-6-9E(9).



<u>AIRPORT</u> SEBRING RGNL	<u>AIRPORT ID</u> KSEF	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 32	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> SEBRING	<u>STATE</u> FL
<u>COORDINATED WITH:</u>					
A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZMA, AMGR					
<u>FLIGHT CHECKED BY</u> JAMES L REINEBOLD JR		Digitally signed by DAVID TEFFETELLER Oct 04, 2018	<u>OFFICE</u> FICO	<u>DATE</u> 10/3/18	
<u>DEVELOPED BY</u> KWEKU DONKOR	Digitally signed by KWEKU DONKOR Aug 29, 2018		<u>OFFICE</u> AJV-5433	<u>DATE</u> 06/11/2018	
<u>APPROVED BY</u> PATRICK MULQUEEN		Digitally signed by DAVID TEFFETELLER Oct 04, 2018	<u>OFFICE</u> AJV-5430	<u>DATE</u>	<u>TITLE</u> MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSEF
RUNWAY	RW32
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W32A
LTP/FTP LATITUDE	272709.1820N
LTP/FTP LONGITUDE	0812010.4865W
LTP/FTP ELLIPSOIDAL HEIGHT	-00085
FPAP LATITUDE	272812.1800N
FPAP LONGITUDE	0812121.5200W
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	1232
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0

CRC REMAINDER	F3F063B6

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00174
FPAP ORTHOMETRIC HEIGHT	+00174



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> ALBERT WHITTED	<u>AIRPORT ID</u> KSPG	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 18	<u>ORIGINAL/AMENDMENT</u> ORIG-E	<u>CITY</u> ST PETERSBURG	<u>STATE</u> FL	
<u>AIRPORT ELEVATION</u> 7	<u>TDZE</u> 6	<u>SUPERSEDED</u> RNAV (GPS) RWY 18	<u>ORIGINAL/AMENDMENT</u> ORIG-D	<u>DATED</u> 04/28/2016	<u>MAG VAR</u> 5W	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
PIE VORTAC	IF/IAF	KENVE		TF	FB	1.00	157.97	5.39	1200
KENVE	FAF	PICOL	MAP	TF	FO	0.30	171.90	3.12	
PICOL	MAP	407 MSL		CA			171.90		
407 MSL		PIE VORTAC		DF	FO	1.00			2000

MISSED APPROACH

MAP:

LNAV: PICOL

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 2000 DIRECT PIE VORTAC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- HOLD N ST PETERSBURG VORTAC, RT, 157.97 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 6000.
- FAC: 171.90 FAF: KENVE DIST FAF TO MAP: 3.12 DIST FAF TO THLD: 3.60
- MIN ALT: PIE VORTAC 2000, KENVE 1200
- DIST TO THLD FROM OM: MM: IM: 150 HAT: GS ANT:
- MIN GP INCPT: GP ALT AT FAF : OM: MM: IM:
- GP ANGLE: 34:1: IS NOT CLEAR 20:1: IS CLEAR TCH:
- MSA FROM: PICOL 2700

PBN REQUIREMENTS NOTE:

RNP APCH



NOTES:

CHART NOTE: CIRCLING RWY 36 NA AT NIGHT.
CHART NOTE: RWY 18 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: NOPT FOR ARRIVAL ON PIE VORTAC AIRWAY RADIALS 336 CW 067.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART FAS OBST: 491 BUILDING 274617N/0823803W.
FAC CROSSES RWY C/L EXTENDED 2999 FT FROM THLD.

MINIMUMS:

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

ALTERNATE: NA ☐ CAT A, B 900-2, NA WHEN LOCAL WEATHER NOT AVAILABLE.

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	800	1	794	800	1 1/4	794		NA			NA				
CIRCLING	860	1 1/4	853	860	1 1/4	853		NA			NA				

CHANGES - REASONS

1. REMOVED VDA/TCH: UPDATED DATA TO SHOW GPA 0, TCH 0 - IAW VDA REMOVAL MEMO AND REMOVED "KENVE TO PICOL: 3.03/37" FROM ADDITIONAL FLIGHT DATA BLOCK. ADDED CHART PROFILE NOTE: "VISUAL SEGMENT - OBSTACLES". - INCORPORATED NOTAM FDC 8/5463.
2. CHANGED NIGHT LANDING: RWY 36 NA TO CHART NOTE: CIRCLING RWY 36 NA AT NIGHT - IAW 8260.19 (CURRENT PRESCRIBED WORDING FOR 20:1 PENETRATIONS).
3. REMOVED CHART NOTE: DME/DME RNP-0.3 NA, ADDED PBN NAVSPEC REQUIREMENT NOTE: RNP APCH - IAW 8260.19.
4. CHANGED CHART FAS OBST: 365 BLDG 274631N/0823759W TO CHART FAS OBST: 491 BLDG 274617N/0823803W - NEW LNAV FINAL CONTROLLING OBSTACLE (491 BLDG 12-103913).
5. CHANGED LNAV MDA/HAT ALL CATS FROM 680/674 TO 800/794 - NEW LNAV FINAL CONTROLLING OBSTACLE (491 BLDG 12-103913).
6. CHANGED CIRCLING MDA/HAA ALL CATS FROM 720/713 TO 860/853 - NEW CIRCLING CONTROLLING OBSTACLE (491 BLDG 12-103913).
7. CHANGED CHART NOTE: FROM HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA TO RWY 18 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - IAW 8260.19 8-6-11.
8. CHANGED HMAS FROM 430 TO 550 - NEW LNAV FINAL CONTROLLING OBSTACLE (491 BLDG 12-103913).
9. VDP REMOVED IAW VDA REMOVAL MEMO.
10. REMOVED CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE TAMPA INTL ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET, AND CHART NOTE: VDP NA WHEN USING TAMPA INTL ALTIMETER SETTING. - PLACED ON BACK OF 8260-9 FOR CONTINGENCY PURPOSES, BOTH SOURCES ON WMSCR.
11. ADDED 34:1 IS NOT CLEAR AND PENETRATIONS (INCLUDING CIRCLING RWY 36 PENETRATIONS) DOCUMENTED - IAW 8260.19 8-6-7 G.
12. ADDED: CHART CIRCLING ICON - NEW CIRCLING CRITERIA APPLIED TO BE CONSISTENT WITH VOR 18 AND PENDING RNAV RWY 36 (NO CHANGE TO CMDA).
13. PDF EDIT: ADDED PIE VORTAC 2000 TO 8260-3, LINE 4, MIN ALT - NECESSARY EDIT TO SHOW ALL FIXES AND MINIMUM ALTITUDES REQUIRED.



<u>AIRPORT</u> ALBERT WHITTED	<u>AIRPORT ID</u> KSPG	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 18	<u>ORIGINAL/AMENDMENT</u> ORIG-E	<u>CITY</u> ST PETERSBURG	<u>STATE</u> FL
<u>COORDINATED WITH:</u>					
A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ <u>OTHER:</u> TPA APPCON, AMGR, EASTERN FPO, ATCT, ATA					
<u>FLIGHT CHECKED BY</u> JAMES L REINEBOLD JR		Digitally signed by WARDELL HENNING Oct 05, 2018	<u>OFFICE</u> FICO	<u>DATE</u> 10/3/18	
<u>DEVELOPED BY</u> LONNIE EVERHART (DANIEL WEDEKIND)		Digitally signed by WARDELL HENNING Oct 05, 2018	<u>OFFICE</u> AJV-5400	<u>DATE</u> 06/29/2018	
<u>APPROVED BY</u> LONNIE EVERHART		Digitally signed by WARDELL HENNING Oct 05, 2018	<u>OFFICE</u> AJV-5400	<u>DATE</u>	<u>TITLE</u> MANAGER



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

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

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
ST PETERSBURG, FL	ALBERT WHITTED	3 JANUARY 2019	3

TAKEOFF MINIMUMS:

RWY 7, 18, 25: STANDARD
RWY 36: 300-1 OR STANDARD WITH A MINIMUM CLIMB OF 289 FT PER NM UNTIL 700 FT

TEXTUAL DEPARTURE PROCEDURES:

RWY 7: CLIMB HEADING 67.10 TO 600 BEFORE TURNING RIGHT.
RWY 18: CLIMB HEADING 184.64 TO 600 BEFORE TURNING RIGHT.
RWY 25: CLIMB HEADING 247.10 TO 700 BEFORE TURNING RIGHT.
RWY 36: CLIMB HEADING 004.64 TO 700 BEFORE TURNING LEFT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 7: SHIPS BEGINING 243 FT FROM DER, ON CENTERLINE, UP TO 100 FT MSL.

NOTE: RWY 18: TREES BEGINING 147 FT FROM DER, 227 FT RIGHT OF CENTERLINE, 35 FT MSL. SHIPS BEGINNING 227 FT FROM DER, ON CENTERLINE, UP TO 100 FT AGL/100 FT MSL.

NOTE: RWY 25: FENCE 10 FT FROM DER, ON CENTERLINE, 15 FT AGL/19 FT MSL. TREES BEGINNING 30 FT FROM DER, 9 FT LEFT OF CENTERLINE, UP TO 50 FT AGL/57 FT MSL. TREES, BUILDING BEGINNING 127 FT FROM DER, 70 FT RIGHT OF CENTERLINE, UP TO 50 FT AGL/57 FT MSL. BLDG, TREES BEGINNING 299 FT FROM DER, 9 FT LEFT OF CENTERLINE, UP TO 102 FT AGL/106 FT MSL. BUILDING, BEGINNING 457 FT FROM DER, 116 FT RIGHT OF CENTERLINE, UP TO 73 FT AGL/81 FT MSL. BUILDINGS BEGINNING 1169 FT FROM DER, 85 FT RIGHT OF CENTERLINE, UP TO 73 FT AGL/86 FT MSL. TREE 2123 FT FROM DER, 182 FT LEFT OF CENTERLINE, 50 FT AGL/60 FT MSL. POLE 3187 FT FROM DER, 159 FT RIGHT OF CENTERLINE, 77 FT AGL/103 FT MSL.

NOTE: RWY 36: NOTE: RWY , SIGN 33 FT FROM DER, 248 FT LEFT OF CENTERLINE, 6 FT AGL/10 FT MSL. SIGN 41 FT FROM DER, 238 FT RIGHT OF CENTERLINE, 7 FT AGL/11 FT MSL. BUILDING 1818 FT FROM DER, 859 FT RIGHT OF CENTERLINE, 88 FT AGL/94 FT MSL. BUILDING 3582 FT FROM DER, 1263 FT LEFT OF CENTERLINE, 104 FT AGL/109 FT MSL. BUILDING 4460 FT FROM DER, 1279 FT LEFT OF CENTERLINE, 153 FT AGL/166 FT MSL.

CONTROLLING OBSTACLES:

RWY 36: 166 FEET MSL BUILDING 274650.69N/0823744.24W

OBSTACLE MANDATING ROUTE DEVELOPMENT: ALL RUNWAYS- 491 FEET MSL BUILDING 274616.86N/0823802.94W.

REMARKS:

FLIGHT INSPECTED BY: *Digitally signed by*
JAMES L REINEBOLD JR **DAVID DANNER**
Oct 04, 2018

OFFICE SYMBOL: **DATE:**
FICO 10/3/18

DEVELOPED BY: *Digitally signed by*
LEO PALMER **LEO PALMER**
Sep 10, 2018

OFFICE SYMBOL: **DATE:**
AJV-5421 06/11/2018

APPROVED BY: *Digitally signed by*
JULIE MORGAN **DAVID DANNER**
Oct 04, 2018

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

REQUIRED EFFECTIVE DATE:
ROUTINE



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

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
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CITY, STATE
ST PETERSBURG, FL

AIRPORT
ALBERT WHITTED

EFFECTIVE DATE **AMDT NO**
3 JANUARY 2019 3

COORDINATED WITH:

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

OTHER:

TPA ATCT, SPG ATCT, SPF MGR

CHANGES - REASONS:

- RWY 36 TAKEOFF MINS CHANGED FROM 300-1 OR STD WITH A MIN CLIMB OF 320 FT PER NM UNTIL 500, TO 300-1 OR STANDARD WITH A MINIMUM CLIMB OF 289 FT PER NM UNTIL 700 FT. - NEW CONTROLLING OBS.
- DEPARTURE PROCEDURES UPDATED BY RUNWAY, AND CLMIB-TO ALTITUDE CHANGED FROM 500 TO 600 (RWY 7) AND 700 (RWY 25,36). - IAW 8260.46 APP. D (7), NEW CONTROLLING OBS.
- UPDATED TAKE OFF, CONTROLLING, OBS MANDATING ROUTE DEVELOPMENT. - NEW CONTROLLING OBS.
- ADDED RWY 18: 300-1 TO TAKE OFF MINS

09/10/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 06/11/18.

1. RWY 18 TAKEOFF MINIMUMS CHANGED FROM 300-1 TO STANDARD, UPDATED TAKEOFF OBSTACLE NOTES, REMOVED 200 FT SHIP FROM CONTROLLING OBSTACLE. - PER AFS, AND RESULTS OF PRB FOR APPROVAL, FOR GREATER THAN 500 FT CLIMB GRADIENT, IT WAS DETERMINED THAT ONLY 100 FT SHIPS ARE TO BE USED FOR OBSTACLE EVALUATION IN RWY 18 ICA.
2. UPDATED RWY 25 TAKEOFF OBSTACLE NOTES TO INCLUDE 106 FT MSL BUILDING (12-026177). - PER AFS, BUILDING APPEARS TO BE INSIDE THE ICA (SURVEY POINT REMAINS OUTSIDE), AND THEREFORE SHOULD BE EVALUATED. NO CHANGES TO DEPARTURE PROCEDURE OR MINIMUMS.
3. REMOVED REMARK INDICATED NEED TO AFS APPROVAL FOR EXCESSIVE CLIMB. - 100 FT SHIP EVALUATED, NO APPROVAL NEEDED.
4. ADDED RWY 18: CLIMB HEADING 184.64 TO 600 BEFORE TURNING RIGHT. - CEILING/VIS NO LONGER REQUIRED WITH EVALUATION OF 100 FT SHIP.

QUALITY
35
CHECKED

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.23

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
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<u>AIRPORT</u> LAGRANGE-CALLAWAY	<u>AIRPORT ID</u> KLGC	<u>PROCEDURE NAME</u> VOR RWY 13	<u>ORIGINAL/AMENDMENT</u> 16A	<u>CITY</u> LAGRANGE	<u>STATE</u> GA
<u>AIRPORT ELEVATION</u> 694	<u>TDZE</u> 681	<u>SUPERSEDED</u> VOR RWY 13	<u>ORIGINAL/AMENDMENT</u> 16	<u>DATED</u> 04/08/2010	<u>MAG VAR</u> 1E
<u>FACILITY</u> LGC	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1965

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>

MISSED APPROACH

MAP:

6.79 NM AFTER LGC VORTAC OR AT 6.79 DME

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 2900 DIRECT LGC VORTAC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L **SIDE OF COURSE** 288.13 **OUTBOUND** 2900 **FT WITHIN** 10 **MILES OF** LGC VORTAC (IAF)

2.

3. **FAC:** 108.13 **FAF:** LGC VORTAC **DIST FAF TO MAP:** 6.79 **DIST FAF TO THLD:** 6.79

4. **MIN ALT:** LGC VORTAC 2900

8. **MSA FROM:** LGC VORTAC 3500

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: CIRCLING TO RWY 21 NA AT NIGHT.
CHART NOTE: RWY 13 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO CATS A/B. FOR INOPERATIVE ALS, INCREASE CAT C/D VISIBILITY TO 1 5/8 SM.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: VDP NA WHEN USING COLUMBUS ALTIMETER SETTING.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE COLUMBUS ALTIMETER SETTING AND INCREASE ALL MDAS 120 FEET, INCREASE S-13 CAT C/D VISIBILITY 1/4 SM, CIRCLING CAT C VISIBILITY 3/8 SM, CIRCLING CAT D VISIBILITY 1/4 SM.





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

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<u>AIRPORT</u> MOUNT PLEASANT MUNI	<u>AIRPORT ID</u> KMPZ	<u>PROCEDURE NAME</u> NDB RWY 33	<u>ORIGINAL/AMENDMENT</u> 6B	<u>CITY</u> MOUNT PLEASANT	<u>STATE</u> IA	
<u>AIRPORT ELEVATION</u> 730	<u>TDZE</u> 730	<u>SUPERSEDED</u> NDB RWY 33	<u>ORIGINAL/AMENDMENT</u> 6A	<u>DATED</u> 04/30/2015	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u> CANCEL		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>

PROCEDURE CANCELLED EFFECTIVE 3 JANUARY 2019

MISSED APPROACH

MAP:

MISSED APPROACH INSTRUCTIONS:

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)

2.

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

4. MIN ALT:

8. MSA FROM:

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

MINIMUMS:

QUALITY
24
CHECKED

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

ALTERNATE: NA ☐

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA

CHANGES - REASONS

COORDINATED WITH:

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

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY

LONNIE EVERHART (CHARLES CTR THIBODEAUX)

Digitally signed by

DONALD H LANIER

Sep 27, 2018

Digitally signed by

DONALD H LANIER

Sep 27, 2018

OFFICE

AJV-5400

DATE

08/01/2018

APPROVED BY

LONNIE EVERHART

OFFICE

AJV-5400

DATE

TITLE

MANAGER



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

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<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
KARPS	TWO	KARPS2.KARPS	ONE	7/29/2010	3 JANUARY 2019

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

DP ROUTE DESCRIPTION:

TAKEOFF RWY 20: CLIMB HEADING 202.35 TO 2840, THEN DIRECT ZAKNI, THEN ON DEPICTED ROUTE TO KARPS, CROSS KARPS AT OR ABOVE MEA FOR ASSIGNED ROUTE OF FLIGHT.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

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

PROCEDURAL DATA NOTES:

NOTE: RNAV 1.

NOTE: GPS REQUIRED.

TAKEOFF MINIMUMS:

RWY 2: NA - TERRAIN.

RWY 20: STANDARD WITH MINIMUMS CLIMB OF 245 FEET PER NM TO 5500.

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 20: TREES AND POLE BEGINNING 741 FEET FROM DER, 684 FEET LEFT OF CENTERLINE, UP TO 111 FEET AGL/2417 FEET MSL.

TERRAIN 138 FEET FROM DER, 357 FEET RIGHT OF CENTERLINE, 2324 FEET MSL.

BUILDING 583 FEET FROM DER, 523 FEET RIGHT OF CENTERLINE, 52 FEET AGL/2362 FEET MSL.

CRANE 855 FEET FROM DER, 586 FEET RIGHT OF CENTERLINE, 61 FEET AGL/2368 FEET MSL.

CRANE 861 FEET FROM DER, 713 FEET RIGHT OF CENTERLINE, 72 FEET AGL/2377 FEET MSL.

TREE 931 FEET FROM DER, 460 FEET RIGHT OF CENTERLINE, 92 FEET AGL/2397 FEET MSL.

TREE 2024 FEET FROM DER, 2 FEET RIGHT OF CENTERLINE, 107 FEET AGL/2399 FEET MSL.

TREE 2175 FEET FROM DER, 182 FEET RIGHT OF CENTERLINE, 113 FEET AGL/2403 FEET MSL.

CONTROLLING OBSTACLES:

RWY 20: 4639 FEET MSL AAO 483108.03N/1162249.98W.

OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 20 - 7909 FEET MSL AAO 485048.40N/1163250.10W.

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

REFERENCE MAG VAR: K65S 16E EPOCH YR: 2010.

DME/DME ASSESSMENT: NOT CONDUCTED.

AIRPORTS SERVED:

<u>AIRPORT NAME</u>	<u>CITY</u>	<u>STATE</u>
BOUNDARY COUNTY (K65S)	BONNERS FERRY	ID

COMMUNICATIONS:

CTAF, ZSE



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

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<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
KARPS	TWO	KARPS2.KARPS	ONE	7/29/2010	3 JANUARY 2019

FIXES AND/OR NAVAIDS:

REMARKS:

ABBREVIATED AMENDMENT

Digitally signed by

DEZ SILAGYI

Sep 10, 2018

OFFICE SYMBOL:

DATE:

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

DEVELOPED BY:

RUSS ROSLEWSKI

Digitally signed by

RUSSELL ROSLEWSKI

Aug 06, 2018

OFFICE SYMBOL:

AJV-5421

08/06/2018

APPROVED BY:

JULIE MORGAN

Digitally signed by

DEZ SILAGYI

Sep 10, 2018

OFFICE SYMBOL:

AJV-5420

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A

ALPA

AOPA

APA

HAI

NBAA



OTHER:

ZSE, AIRPORT MANAGER

CHANGES - REASONS:

1. UPDATED TAKEOFF OBSTACLE NOTES - UPDATED SURVEY DATA.



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
DEPARTURE (DATA RECORD)**

<u>DP NAME</u>		<u>NUMBER</u>		<u>DP COMPUTER CODE</u>		<u>SUPERSEDED NUMBER</u>		<u>DATED</u>	<u>EFFECTIVE DATE</u>
KARPS		TWO		KARPS2.KARPS		ONE		7/29/2010	3 JANUARY 2019
<u>FIX/NAVAID</u>	<u>LAT/LONG</u>	<u>C</u>	<u>FO/FB</u>	<u>LEG TYPE</u>	<u>TC</u>	<u>DIST (NM)</u>	<u>ALTITUDE</u>	<u>SPEED</u>	<u>REMARKS</u>
RW20 (AER)	484348.99N/1161724.04W	N	-	-	-	-			
2840 MSL			-	VA	218.35	-			CG 245 FT PER NM TO 5500
ZAKNI	484056.94N/1162049.61W	Y	FB	DF	-	-			
HEROX	483323.51N/1162412.96W	Y	FB	TF	196.58	7.89			
HITOT	481545.40N/1163435.01W	Y	FB	TF	201.44	18.95			
KARPS	474426.78N/1164509.90W	Y	FB	TF	192.84	32.13			



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
ILS STANDARD INSTRUMENT APPROACH PROCEDURE

TITLE 14 CFR PART 97.29

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

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
GIBNS	IAF	JHONN/I-SAJ 26.04 DME/RADAR		TF	FB	1.00	079.03	20.67	9000
JHONN/I-SAJ 26.04 DME/RADAR		ESSSS/I-SAJ 22.90 DME/RADAR					092.99	3.14 (I-SAJ)	8000
ESSSS/I-SAJ 22.90 DME/RADAR		VNDER/I-SAJ 19.76 DME/RADAR					092.99	3.14 (I-SAJ)	7000
VNDER/I-SAJ 19.76 DME/RADAR		ILIMUM/I-SAJ 16.62 DME/RADAR					092.99	3.14 (I-SAJ)	6000
ILIMUM/I-SAJ 16.62 DME/RADAR		TRYXI INT/I-SAJ 13.49 DME/RADAR					092.99	3.13 (I-SAJ)	5000
TRYXI INT/I-SAJ 13.49 DME/RADAR	IF	DOOGY INT/I-SAJ 10.34 DME/RADAR					092.99	3.14 (I-SAJ)	4000
DOOGY INT/I-SAJ 10.34 DME/RADAR		ZENAH INT/I-SAJ 4.80 DME/RADAR					092.99	5.54 (I-SAJ)	2300

MISSED APPROACH

MAP:

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

MISSED APPROACH INSTRUCTIONS:

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

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

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



8. MSA FROM: ARP (KORD) 3400

CHART NOTE: RWY 9L HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED

HOLD W. RT. 092.00 INBOUND

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-ILS 09L	868	1800	200	868	1800	200	868	1800	200	868	1800	200			
S-LOC 09L	1080	2400	412	1080	2400	412	1080	4000	412	1080	4000	412			



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

CHANGES - REASONS

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



AIRPORT
CHICAGO O'HARE INTL

AIRPORT ID
KORD

PROCEDURE NAME
ILS OR LOC RWY 9L
ILS RWY 9L SA CAT I,
ILS RWY 9L CAT II,
ILS RWY 9L CAT III

ORIGINAL/AMENDMENT
4A

CITY
CHICAGO

STATE
IL

COORDINATED WITH:

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

FLIGHT CHECKED BY

JOHN D JEFFERS

Digitally signed by
WARDELL HENNING
Oct 12, 2018

OFFICE

FICO

DATE

10/10/18

DEVELOPED BY

IVAN BLANCO

Digitally signed by
IVAN BLANCO
Aug 14, 2018

OFFICE

AJV-5432

DATE

08/14/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
WARDELL HENNING
Oct 12, 2018

OFFICE

AJV-5430

DATE

TITLE

MANAGER

QUALITY
22
CHECKED

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

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

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

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
VOGLR	IAF	VINYY/I-ABU 28.13 DME/RADAR		TF	FB	1.00	284.27	17.46	9000
VINYY/I-ABU 28.13 DME/RADAR		JOKKR/I-ABU 24.99 DME/RADAR					273.01	3.14 (I-ABU)	8000
JOKKR/I-ABU 24.99 DME/RADAR		IYLEK/I-ABU 21.85 DME/RADAR					273.01	3.14 (I-ABU)	7000
IYLEK/I-ABU 21.85 DME/RADAR		WELEV/I-ABU 18.71 DME/RADAR					273.01	3.14 (I-ABU)	6000
WELEV/I-ABU 18.71 DME/RADAR		HAREE INT/I-ABU 18.57 DME/RADAR					273.01	3.14 (I-ABU)	5000
HAREE INT/I-ABU 15.57 DME/RADAR	IF	BONZO INT/I-ABU 12.42 DME/RADAR					273.01	3.14 (I-ABU)	4000
BONZO INT/I-ABU 12.42 DME/RADAR		SIBLY INT/I-ABU 6.04 DME/RADAR					273.01	6.39 (I-ABU)	2200

MISSED APPROACH

MAP:

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

MISSED APPROACH INSTRUCTIONS:

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

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

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



8. MSA FROM: APR (KORD) 3400

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-ILS 27R	864	1800	200	864	1800	200	864	1800	200	864	1800	200			
S-LOC 27R	1120	2400	456	1120	2400	456	1120	4500	456	1120	4500	456			

1. MSA CHANGED FROM ORD VOR/DME TO KORD - ORD VOR DECOMMISSIONING.
2. ADDED CHART NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT - VGSI ADDED TO RWY.
3. VDP CHANGED FROM 2.64 DME TO 2.60 DME, DISTANCE VDP TO THLD CHANGED FROM 1.26 NM TO 1.21 NM - IAW 8260-3D, 2-6-5B.(1).
4. DELETED CHART NOTE: DME OR RADAR REQUIRED - ADDED EQUIPMENT REQUIRED NOTE: DME OR RADAR REQUIRED.
5. DELETED PLANVIEW NOTE: GPS OR RADAR REQUIRED - ADDED EQUIPMENT REQUIRED NOTE: RNAV-1 GPS OR RADAR REQUIRED FOR PROCEDURE ENTRY.



AIRPORT
CHICAGO O'HARE INTL

AIRPORT ID
KORD

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

ORIGINAL/AMENDMENT
4A

CITY
CHICAGO

STATE
IL

COORDINATED WITH:

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

FLIGHT CHECKED BY

JOHN D JEFFERS

Digitally signed by
WARDELL HENNING

Oct 12, 2018

OFFICE

FICO

DATE

10/10/18

DEVELOPED BY

IVAN BLANCO

Digitally signed by
IVAN BLANCO
Aug 14, 2018

OFFICE

AJV-5432

DATE

08/14/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
WARDELL HENNING
Oct 12, 2018

OFFICE

AJV-5430

DATE

TITLE
MANAGER

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

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

TERMINAL ROUTES

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

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW09L

MISSED APPROACH INSTRUCTIONS:

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

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. PROFILE STARTS AT JHONN
3. FAC:

092.93

FAF: ZENAH

DIST FAF TO MAP: 4.95

DIST FAF TO THLD: 4.95
4. MIN ALT: JHONN 9000, ESSSS 8000, VNDR 7000, ILIUM 6000, TRYXI 5000, DOOGY 4000, ZENAH 2300, OGSIE/3.30 NM TO RW09L 1760*
5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

200 HAT: 0.45

GS ANT:
6. MIN GP INCPT:

2300

GP ALT AT FAF : ZENAH 2300

OM:

MM:

IM:
7. GP ANGLE:

3.00

34:1: IS NOT CLEAR

20:1: IS CLEAR

TCH: 55.0
8. MSA FROM: RW09L 3400

PBN REQUIREMENTS NOTE:

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

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -19C OR ABOVE 54C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: RWY 9L HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.
CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.
CHART NOTE: USE OF FD OR AP PROVIDING RNAV TRACK GUIDANCE REQUIRED DURING SIMULTANEOUS OPERATIONS.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 5000 AND LNAV CATS C/D VISIBILITY TO RVR 6000

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.07 NM TO RW09L*
*LNAV ONLY
WAAS CHANNEL #99508
REFERENCE PATH ID: W09B
CHART FAS OBST: 830 TANK 415950N/0875838W.
CHART 1468 TOWER 420042N/0880207W.
919 AAO 420017N/0880023W.
HOLD NE, RT, 219.06 INBOUND
LTP HAE: 170 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	868	1800	200	868	1800	200	868	1800	200	868	1800	200			
LNAV/VNAV DA	989	3000	321	989	3000	321	989	3000	321	989	3000	321			
LNAV MDA	1080	2400	412	1080	2400	412	1080	4000	412	1080	4000	412			



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>
CHICAGO O'HARE INTL	KORD	RNAV (GPS) RWY 9L	3B	CHICAGO	IL

CHANGES - REASONS

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



COORDINATED WITH:

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

FLIGHT CHECKED BY

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

OFFICE
Digitally signed by
WARDELL HENNING

DEVELOPED BY

IVAN BLANCO
Digitally signed by
IVAN BLANCO
Aug 14, 2018

Oct 03, 2018 OFFICE
AJV-5432

DATE

08/14/2018

APPROVED BY

PATRICK MULQUEEN
Digitally signed by
WARDELL HENNING
Oct 03, 2018

OFFICE

AJV-5430

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KORD
RUNWAY	RW09L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W09B
LTP/FTP LATITUDE	420010.1950N
LTP/FTP LONGITUDE	0875536.0335W
LTP/FTP ELLIPSOIDAL HEIGHT	+01700
FPAP LATITUDE	420010.1780N
FPAP LONGITUDE	0875336.5275W
THRESHOLD CROSSING HEIGHT (TCH)	00055.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0464
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER	ABBF9E31

ADDITIONAL PATH POINT RECORD INFORMATION

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



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

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

TERMINAL ROUTES

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

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW27R

MISSED APPROACH INSTRUCTIONS:

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

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. PROFILE STARTS AT VINYY
3. FAC: 273.09

FAF: SIBLY

DIST FAF TO MAP: 4.65

DIST FAF TO THLD: 4.65
4. MIN ALT: VINYY 9000, JOKKR 8000, IYLEK 7000, WELEV 6000, HAREE 5000, SIBLY 2200
5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

200 HAT: 0.46

GS ANT:
6. MIN GP INCPT: 2200

GP ALT AT FAF : SIBLY 2200

OM:

MM:

IM:
7. GP ANGLE: 3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 54.8
8. MSA FROM: RW27R 3400

PBN REQUIREMENTS NOTE:

RNP APCH.

EQUIPMENT REQUIREMENTS NOTE:

RADAR REQUIRED FOR PROCEDURE ENTRY.

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

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.21 NM TO RW27R*
*LNAV ONLY
WAAS CHANNEL #69508
REFERENCE PATH ID: W27B
FAS OBST: 864 AAO 420037N/0874926W.
HOLD N, RT, 176.22 INBOUND
LTP HAE: 168.6 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	864	1800	200	864	1800	200	864	1800	200	864	1800	200			
LNAV/VNAV DA	961	2400	297	961	2400	297	961	2400	297	961	2400	297			
LNAV MDA	1120	2400	456	1120	2400	456	1120	4500	456	1120	4500	456			



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>
CHICAGO O'HARE INTL	KORD	RNAV (GPS) RWY 27R	3B	CHICAGO	IL

CHANGES - REASONS

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



COORDINATED WITH:

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

FLIGHT CHECKED BY

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

	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>
	WARDELL HENNING		

DEVELOPED BY

IVAN BLANCO	<i>Digitally signed by</i>	Oct 03, 2018	<u>OFFICE</u>	<u>DATE</u>
	IVAN BLANCO		AJV-5432	08/14/2018
	Aug 14, 2018			

APPROVED BY

PATRICK MULQUEEN	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
	WARDELL HENNING	AJV-5430		MANAGER
	Oct 03, 2018			



FAS DATA BLOCK INFORMATION

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



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

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

<u>AIRPORT</u> DECATUR	<u>AIRPORT ID</u> KDEC	<u>PROCEDURE NAME</u> ILS OR LOC RWY 6	<u>ORIGINAL/AMENDMENT</u> 14	<u>CITY</u> DECATUR	<u>STATE</u> IL	
<u>AIRPORT ELEVATION</u> 682	<u>TDZE</u> 677	<u>SUPERSEDED</u> ILS OR LOC RWY 6	<u>ORIGINAL/AMENDMENT</u> 13G	<u>DATED</u> 07/19/2018	<u>MAG VAR</u> 1W	<u>EPOCH YEAR</u> 2000
<u>FACILITY</u> I-DEC	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
VLA VORTAC		PANAE INT/VLA 23.61 DME					359.98	23.61	2300
PANAE INT/VLA 23.61 DME	IAF	FOSTT INT/I-DEC 14.04 DME	NOPT				359.98	14.02 (VLA R-360)	2200
FOSTT INT/I-DEC 14.04 DME	IF	ELWIN LOM/I-DEC 5.84 DME					060.12	8.20 (I-DEC)	2200

MISSED APPROACH

MAP:

ILS: DA
LOC: 4.27 NM AFTER ELWIN LOM OR AT I-DEC 1.56 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2200 THEN CLIMBING LEFT TURN TO 3100 ON HEADING 270 AND AXC VORTAC R-348 TO MAROA INT/AXC 14.32 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 2300 ON I-DEC LOCALIZER NE COURSE (060) TO UNITI/I-DEC 10.37 DME AND HOLD. (DME REQUIRED)

PROFILE:

1. PT L SIDE OF COURSE 240.12 OUTBOUND 2200 FT WITHIN 10 MILES OF ELWIN LOM (IAF)
- 2.
3. FAC: 060.12 FAF: ELWIN LOM/I-DEC 5.84 DME DIST FAF TO MAP: 4.27 DIST FAF TO THLD: 4.27
4. MIN ALT: ELWIN LOM/I-DEC 5.84 DME 2200
5. DIST TO THLD FROM OM: 4.27 MM: IM: 150 HAT: GS ANT: 1049
6. MIN GS INCPT: 2200 GS ALT AT FAF : OM: 2107 MM: IM:
7. GP ANGLE: 3.00 34:1: 20:1: TCH: 57.3
8. MSA FROM: DE LOM 080-260 2300, 260-080 3100

EQUIPMENT REQUIREMENTS NOTES:



NOTES:

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

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

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED USE LINCOLN ALTIMETER SETTING AND INCREASE ALL DA/MDA 80 FT, INCREASE S-LOC 6 CAT C/D VISIBILITY TO RVR 6000 AND CIRCLING CAT C/D VISIBILITY 1/4 SM.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 6 CAT C/D VISIBLTY TO 1 3/8 SM.

CHART NOTE: FOR INOPERATIVE ALS WHEN USING LINCOLN ALTIMETER SETTING INCREASE S-ILS 6 ALL CATS VISIBILITY TO RVR 4500.

CHART NOTE: VDP NA WITH LINCOLN ALTIMETER SETTING.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PANAE ON V191 SOUTHWEST BOUND.

ADDITIONAL FLIGHT DATA:

CHART IN PLANVIEW ONLY: VLA 37.63 DME AT FOSTT

CHART CIRCLING ICON.

CHART IN PLANVIEW: UNITI/I-DEC 10.37 DME

CHART VDP AT 2.75 DME*

DISTANCE VDP TO THLD 1.19 NM

* LOC ONLY

FAS OBST: 875 AAO 394722N/0885615W.

920 AAO 394735N/0885733W.

CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NE UNITI/I-DEC 10.37 DME, RT, 240.14 INBOUND.

HOLD N, RT, 168.00 INBOUND

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

ALTERNATE: NA ☐ ILS: STANDARD - NA WHEN CONTROL TOWER CLOSED, NA WHEN LOCAL WEATHER NOT AVAILABLE, EXCEPT FOR OPERATORS WITH APPROVED WEATHER REPORTING SERVICES. LOC: NA

<u>CATEGORY:</u>	<u>A</u>			<u>B</u>			<u>C</u>			<u>D</u>			<u>E</u>		
<u>FINAL TYPE</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>
S-ILS 06**	877	2400	200	877	2400	200	877	2400	200	877	2400	200			
S-LOC 06	1140	2400	463	1140	2400	463	1140	5000	463	1140	5000	463			
CIRCLING	1140	1	458	1240	1	558	1360	2	678	1360	2 1/4	678			

CHANGES - REASONS

1. INCREASED MISSED APPROACH CLIMB TO ALTITUDE FROM 2000 TO 2200 - INCORPORATE FDC 8/5181.
2. INCREASED S-LOC 06 MDA FROM 1100 TO 1140, CHANGED CONTROLLING OBST FROM 838 TWR TO 875 AAO - NEW IAPA EVALUATION, AAO NOT PREVIOUSLY USED.
3. CHANGED CHART FAS OBST 838 TOWER 394823N/0885532W TO FAS OBST 875 AAO 394721.87N/0885615.49W - NEW IAPA EVALUATION, AAO NOT PREVIOUSLY USED.
4. ADDED REMARK ORDER 8260.3 CHAPTER 2 APPLIED TO 920 AAO 394735.00N/0885733.00W - NEW IAPA EVALUATION.
5. CHANGED VDP FROM 2.73 DME/ 1.16 MILES TO THLD, TO 2.75 DME/1.19 MILES TO THLD - NEW IAPA EVALUATION.
6. INCREASE S-LOC 6 CAT C/D FROM RVR 4000 TO RVR 5000 - NEW VISCHECK.
7. LOWERED CIRCLING CAT A MDA FROM 1200/HAA 518 TO 1140/HAA 463 - NEW CNTL OBST 822 TWR.
8. RAISED CIRCLING CAT B MDA FROM 1200/HAA 518 TO 1240/HAA 558 - NEW CNTL OBST 939 CRANE.
9. RAISED CIRCLING CAT C MDA FROM 1240/HAA 558 VIS 1 1/2 TO 1360/HAA 678 VIS 2 - NEW CNTL OBST 1008 STACK.
10. RAISED CIRCLING CAT D MDA FROM 1320/HAA 638 VIS 2 TO 1360/HAA 678 VIS 2 2/14 - NEW CNTL OBST 1008 STACK.
11. ADDED CHART NOTE: CHART CIRCLING ICON - IAW 8260.19H PARA 8-6-10
12. UPDATED CIRCLING RADII - IAW 8260.3C
13. CHANGED BACK-UP ALTIMETER VISIBILITY FOR S-LOC 6 FROM RVR 5000 TO RVR 6000 - NEW VISCHECK.
14. CHANGED ILS CAT D ALT MIN FROM 700-2 TO 700-2 ¾.
15. CHANGED INOP NOTE FROM CHART NOTE: FOR INOPERATIVE MALSR WHEN USING LOGAN COUNTY ALTIMETER SETTING INCREASE S-ILS 6 ALL CATS VISIBILITY TO RVR 5000 TO CHART NOTE: FOR INOPERATIVE ALS WHEN USING LINCOLN ALTIMETER SETTING INCREASE S-ILS 6 ALL CATS VISIBILITY TO RVR 4500.
16. ADDED "DME REQUIRED" FOR ALT MISSED HOLDING AT UNITI - MTO VORTAC DECOMMISSIONED.
17. LOWERED 080-260 SECTOR MSA FROM 2400 TO 2300 - NEW CNTL OBST 1008 TOWER
18. REMOVED CIRCLING RWY 14 NA AT NIGHT NOTE - NO 20:1 PENETRATIONS.
19. ADDED CHART NOTE: FOR INOPERATIVE ALS WHEN USING LINCOLN ALTIMETER SETTING INCREASE S-ILS 6 ALL CATS VISIBILITY TO RVR 4500 - NEW VISCHECK.
20. CHANGED TCH FROM 57.2 TO 57.3 - ACTUAL TCH 57.276.
21. CHANGED ALTERNATE MINS FROM ILS; CATEGORY D, 700-2, LOC: CATEGORY D, 800-2¾, NA WHEN LOCAL WEATHER NOT AVAILABLE TO ILS: STANDARD; NA WHEN LOCAL WEATHER NOT AVAILABLE, NA WHEN CONTROL TOWER CLOSED EXCEPT EXCEPT FOR OPERATORS WITH APPROVED WEATHER REPORTING SERVICE, LOC: NA - UPDATED VISCHECK, ELWIN LOM UNMONITORED.



COORDINATED WITH:

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

FLIGHT CHECKED BY

SCOTT WIEBE
*Digitally signed by
WARDELL HENNING
Oct 09, 2018*

OFFICE

FICO

DATE

10/2/18

DEVELOPED BY

LONNIE EVERHART (STEVEN SCHUTRUM)
*Digitally signed by
WARDELL HENNING
Oct 09, 2018*

OFFICE

AJV-5400

DATE

06/12/2018

APPROVED BY

LONNIE EVERHART
*Digitally signed by
WARDELL HENNING
Oct 09, 2018*

OFFICE

AJV-5400

DATE

TITLE

MANAGER



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
LOC BC STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.25

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

<u>AIRPORT</u> DECATUR	<u>AIRPORT ID</u> KDEC	<u>PROCEDURE NAME</u> LOC BC RWY 24	<u>ORIGINAL/AMENDMENT</u> 11	<u>CITY</u> DECATUR	<u>STATE</u> IL
<u>AIRPORT ELEVATION</u> 682	<u>TDZE</u> 682	<u>SUPERSEDED</u> LOC BC RWY 24	<u>ORIGINAL/AMENDMENT</u> 10D	<u>DATED</u> 06/27/2013	<u>MAG VAR</u> 1W
<u>FACILITY</u> I-DEC	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
CMI VORTAC	IAF	UNITI/I-DEC 10.37 DME					247.11	18.48	2300
UNITI/I-DEC 10.37 DME	IF	AKLEY/I-DEC 4.31 DME					240.14	6.06	2200

MISSED APPROACH

MAP:

LOC: SADGY/I-DEC 0.50 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 THEN CLIMBING RIGHT TURN TO 3100 ON HEADING 050 AND AXC VORTAC R-348 TO MAROA INT/AXC 14.32 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. PROFILE STARTS AT UNITI
3. FAC: 240.14 FAF: AKLEY/I-DEC 4.31 DME DIST FAF TO MAP: 3.82 DIST FAF TO THLD: 4.48
4. MIN ALT: UNITI/I-DEC 10.37 DME 2300, AKLEY/I-DEC 4.31 DME 2200, ZINOB/I-DEC 2.24 DME 1500
8. MSA FROM: AXC VORTAC 080-260 2400, 260-080 3100

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED

NOTES:

CHART PROFILE NOTE: DISREGARD GS INDICATIONS.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED USE LINCOLN ALTIMETER SETTING AND INCREASE ALL MDA 80 FT, INCREASE S-LOC 24 CAT C/D VISIBILITY 1/8 SM AND CIRCLING CAT C/D VISIBILITY 1/4 SM.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON CMI VORTAC AIRWAY RADIALS 234 CW 297.

ADDITIONAL FLIGHT DATA:



ACKLEY TO RWY24: 3.08/52.4
CHART IN PROFILE VIEW: I-DEC DME ANTENNA
CHART IN PLANVIEW: FAN MARKER AT AKLEY/I-DEC 4.31 DME
CHART CIRCLING ICON.
CHART FAS OBST: 764 TREE 395101N/0884917W.
HOLD N, RT, 168.00 INBOUND

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

ALTERNATE: NA ☐ LOC: STANDARD - CAT D 800-2 1/4, NA WHEN CONTROL TOWER CLOSED, NA WHEN LOCAL WEATHER NOT AVAILABLE, EXCEPT FOR OPERATORS WITH APPROVED WEATHER REPORTING SERVICES.

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-LOC 24	1020	1	338	1020	1	338	1020	1	338	1020	1	338			
CIRCLING	1140	1	458	1240	1	558	1360	2	678	1360	2 1/4	678			

CHANGES - REASONS

1. LOWERED S-24 MDA FROM 1060/HAT 378 TO 1020/HAT 338 AND CAT D VIS FROM 1 1/4 TO 1 MILE - NEW CONTROLLING OBST 764 TREE (17-036561).
2. CHANGED CHART FAS OBST 838 TOWER 394823N/0885532W TO CHART FAS OBST 764 TREE 395101.06N/0884917.41W - NEW IAPA EVALUATION
3. UPDATED INTERMEDIATE CNTL OBST FROM 883 TANK TO 990 TOWER - NEW IAPA EVALUATION
4. REMOVED NOTE CIRCLING RWY 12 NA AT NIGHT - NO 20:1 PENETRATIONS.
5. LOWERED CIRCLING CAT A MDA FROM 1200/HAA 518 TO 1140/HAA 463 - NEW CNTL OBST 822 TWR.
6. RAISED CIRCLING CAT B MDA FROM 1200/HAA 518 TO 1240/HAA 558 - NEW CNTL OBST 939 CRANE.
7. RAISED CIRCLING CAT C MDA FROM 1240/HAA 558 VIS 1 1/2 TO 1360/HAA 678 VIS 2 - NEW CNTL OBST 1008 STACK.
8. RAISED CIRCLING CAT D MDA FROM 1320/HAA 638 VIS 2 TO 1360/HAA 678 VIS 2 2/14 - NEW CNTL OBST 1008 STACK.
9. ADDED CHART NOTE: CHART CIRCLING ICON - IAW 8260.19H PARA 8-6-10
10. UPDATED CIRCLING RADII - IAW 8260.3C
11. CHANGED CHART NOTE FROM: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LOGAN COUNTY ALTIMETER SETTING AND INCREASE ALL MDAS 80 FEET. INCREASE CAT C/D VISIBILITY 1/4 MILE TO CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED USE LINCOLN ALTIMETER SETTING AND INCREASE ALL MDA 80 FT, INCREASE S-LOC 24 CAT C/D VISIBILITY 1/8 SM AND CIRCLING CAT C/D VISIBILITY 1/4 SM - NEW VISCHECK.
12. CHANGED INITIAL CNTL OBST FROM 1015 TWR TO 1017 TWR - UPDATED DATABASE
13. ADDED STEPDOWN FIX AT ZINOB - TO MAINTAIN PUBLISHED MDA BASED ON APPLICATION OF AAO IN FINAL.
14. CHANGED ALTERNATE MINIMUMS FROM STANDARD EXCEPT NA WHEN CONTROL TOWER CLOSED TO LOC: STANDARD - CAT D 800-2 1/4, NA WHEN CONTROL TOWER CLOSED EXCEPT FOR OPERATORS WITH APPROVED WEATHER REPORTING SERVICE, NA WHEN LOCAL WEATHER NOT AVAILABLE - LOC MONITORED BY ATC PER FPT, CONTRACT WEATHER WHEN TOWER CLOSED.
15. ADDED NAMED FIX (SADGY) FOR MAP - IAW 8260.19H 2-10-5A
16. CHANGE FAC FROM 240.12M TO 240.14M - LOCALIZER BACK COURSE ALIGNMENT (240.142M)

COORDINATED WITH:

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

FLIGHT CHECKED BY*Digitally signed by*

SCOTT WIEBE

WARDELL HENNING

Oct 10, 2018

OFFICE

FICO

DATE

10/2/18

DEVELOPED BY*Digitally signed by*

LONNIE EVERHART (STEVEN SCHUTRUM)

WARDELL HENNING

Oct 10, 2018

OFFICE

AJV-5400

DATE

06/13/2018

APPROVED BY*Digitally signed by*

LONNIE EVERHART

WARDELL HENNING

Oct 10, 2018

OFFICE

AJV-5400

DATE**TITLE**

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> DECATUR	<u>AIRPORT ID</u> KDEC	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 30	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> DECATUR	<u>STATE</u> IL
<u>AIRPORT ELEVATION</u> 682	<u>TDZE</u> 679	<u>SUPERSEDED</u> RNAV (GPS) RWY 30	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 04/30/2015	<u>MAG VAR</u> 1W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
CMI VORTAC		FABKO		TF	FB	2.00	226.43	18.58	3000
AXC VORTAC		ZOBSE		TF	FO	2.00	087.74	9.37	3000
FABKO	IAF	ZOBSE	NOPT	TF	FB	1.00	226.25	6.00	3000
BAUDS	IAF	ZOBSE	NOPT	TF	FB	1.00	312.50	5.00	3000
ZOBSE	IF/IAF	AKTIF		TF	FB	1.00	300.26	5.94	2200
AKTIF	FAF	SUBUE/2.00 NM TO RW30		TF	FB	0.30	300.20	2.62	
SUBUE/2.00 NM TO RW30		RW30	MAP	TF	FO	0.30	300.20	2.00	
RW30	MAP	879 MSL		CA			300.20		
879 MSL		YENVU		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW30

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT YENVU AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)	
2.	HOLD SE ZOBSE, RT, 300.26 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.				
3. FAC:	300.20	FAF: AKTIF	DIST FAF TO MAP: 4.62	DIST FAF TO THLD: 4.62	
4. MIN ALT:	ZOBSE 3000, AKTIF 2200, SUBUE/2.00 NM TO RW30 1360*				
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	200 HAT: 0.47	GS ANT:
6. MIN GP INCPT: 2200	GP ALT AT FAF : AKTIF 2200			OM:	MM: IM:
7. GP ANGLE: 3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 51.3		
8. MSA FROM:	RW30 3100				

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -19C OR ABOVE 54C.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LINCOLN ALTIMETER SETTING AND INCREASE ALL DA/MDA 80 FT, INCREASE LNAV CAT C/D AND CIRCLING CAT C/D VISIBILITY 1/4 SM.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON CMI VORTAC AIRWAY RADIALS 178 CW 297.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON AXC VORTAC AIRWAY RADIALS 002 CW 029.
CHART NOTE: BARO-VNAV AND VDP NA WHEN USING LINCOLN ALTIMETER SETTING.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.04 NM TO RW30*
*LNAV ONLY
WAAS CHANNEL #49127
REFERENCE PATH ID: W30A
FAS OBST: 809 TREE 394824N/0884913W.
HOLD NW, RT, 119.98 INBOUND
LTP HAE: 174.3 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/4, NA WHEN LOCAL WEATHER NOT AVAILABLE, EXCEPT FOR OPERATORS WITH APPROVED WEATHER REPORTING SERVICES.

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	879	1	200	879	1	200	879	1	200	879	1	200			
LNAV/VNAV DA	929	1	250	929	1	250	929	1	250	929	1	250			
LNAV MDA	1060	1	381	1060	1	381	1060	1 1/8	381	1060	1 1/8	381			
CIRCLING	1140	1	458	1240	1	558	1360	2	678	1360	2 1/4	678			



CHANGES - REASONS

1. REMOVED NOTE CIRCLING RWY 12 NA AT NIGHT - NO 20:1 PENETRATIONS.
2. CHANGED ACT FROM -18C TO -19C - NEW 5 YEAR HISTORY (2013-2017).
3. REMOVED FEEDER FROM MTO VOR/DME TO LUSLY - MTO DECOMMISSIONED.
4. ADDED FEEDER FROM AXC VORTAC TO ZOBSE AT 3000 - FPT CHECKLIST
5. LOWERED LNAV MDA FROM 1080 VIS 3/4 TO 1060 VIS 1, CHANGED FAS OBST FROM 814 TREE TO 809 TREE - NEW IPDS EVALUATION AND VISCHECK.
6. INCREASED LPV AND LNAV/VNAV VISIBILITY FROM 3/4 TO 1 - NEW VISCHECK.
7. LOWERED CIRCLING CAT A MDA FROM 1200/HAA 518 TO 1140/HAA 458 - NEW CNTL OBST 822 TWR.
8. RAISED CIRCLING CAT B MDA FROM 1200/HAA 518 TO 1240/HAA 558 - NEW CNTL OBST 939 CRANE.
9. RAISED CIRCLING CAT C MDA FROM 1240/HAA 558 VIS 1 1/2 TO 1360/HAA 678 VIS 2 - NEW CNTL OBST 1008 STACK.
10. RAISED CIRCLING CAT D MDA FROM 1320/HAA 638 VIS 2 TO 1360/HAA 678 VIS 2 2/14 - NEW CNTL OBST 1008 STACK.
11. ADDED CHART NOTE: CHART CIRCLING ICON - IAW 8260.19H PARA 8-6-10
12. UPDATED CIRCLING RADII - IAW 8260.3C
13. CHANGED BACKUP ALTIMETER FROM CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LINCOLN ALTIMETER SETTING AND INCREASE ALL DA/MDA 80 FT, INCREASE LPV ALL CATS VISIBILITY 1/8 MILE, LNAV/VNAV ALL CATS VISIBILITY 3/8 MILE AND LNAV AND CIRCLING CAT C AND D VISIBILITY 1/4 MILE TO CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LINCOLN ALTIMETER SETTING AND INCREASE ALL DA/MDA 80 FT, INCREASE LNAV CAT C/D AND CIRCLING CAT C/D VISIBILITY 1/4 SM. - CHANGED BASED ON NEW VISCHECK.
14. ADDED NOTE: PROCEDURE NA FOR ARRIVAL AT AXC VORTAC AIRWAY RADIALS 002 CW 029.
15. CRC REMAINDER CHANGED FROM 8AA9066B TO FD5938D4. FPAP LOCATION CHANGED FROM 395039.2000N/0885254.1900W TO 395039.2010N/0885254.1890W - NEW EVALUATION.
16. CHANGED VDP DISTANCED FROM 1.10 TO 1.04 - UPDATED CALCULATIONS.
17. REMOVED ARRIVAL RESTRICTION NOTE AT MTO - SEGMENT REMOVED.
18. REPLACED CHART NOTE: DME/DME RNP-0.3 NA WITH CHART PBN NAVSPEC REQUIREMENT NOTE: RNP APCH. - IAW 8260.19H PARA 8-6-8.
19. REPLACED FIX OVEVE WITH FABKO - SIMILAR FIX NAME (OKEVE) USED FOR RNAV (GPS) RWY 36.
20. REPLACED FIX LUSLY WITH BAUDS - EXTENDED INITIAL SEGMENT BY .5 NM TO ALLOW FOR ATC VECTORS AT THE IAF (LUSLY NOT MOVED BECAUSE IT IS USED FOR THE RNAV (GPS) RWY 24 AT KMTO AND V50).
21. REMOVED ARRIVAL RESTRICTION NOTE AT LUSLY - IAF MOVED, NO LONGER APPLICABLE.
22. ADDED "EXCEPT FOR OPERATORS WITH APPROVED WEATHER REPORTING SERVICE" TO ALTERNATE MINS - CONTRACT WEATHER WHEN TOWER CLOSED.



COORDINATED WITH:

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

FLIGHT CHECKED BY

SCOTT WIEBE
WARDELL HENNING

OFFICE

FICO

DATE

10/2/18

DEVELOPED BY

LONNIE EVERHART (STEVEN SCHUTRUM)

Oct 10, 2018

Digitally signed by

WARDELL HENNING

OFFICE

AJV-5400

DATE

06/20/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by

WARDELL HENNING

Oct 10, 2018

OFFICE

AJV-5400

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KDEC
RUNWAY	RW30
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W30A
LTP/FTP LATITUDE	394955.7930N
LTP/FTP LONGITUDE	0885113.1495W
LTP/FTP ELLIPSOIDAL HEIGHT	+01743
FPAP LATITUDE	395039.2010N
FPAP LONGITUDE	0885254.1890W
THRESHOLD CROSSING HEIGHT (TCH)	00051.3
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0680
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER	FD5938D4

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02067
FPAP ORTHOMETRIC HEIGHT	+02067



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> DECATUR	<u>AIRPORT ID</u> KDEC	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> DECATUR	<u>STATE</u> IL
<u>AIRPORT ELEVATION</u> 682	<u>TDZE</u> 678	<u>SUPERSEDED</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 03/31/2016	<u>MAG VAR</u> 1W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
AXC VORTAC		OKEVE		TF	FO	2.00	187.55	5.68	2300
ARCOL		WUBTA		TF	FB	2.00	241.98	12.10	2300
WUBTA	IAF	OKEVE	NOPT	TF	FB	1.00	289.05	17.52	2300
PANAE	IAF	OKEVE	NOPT	TF	FB	1.00	052.65	15.17	2300
OKEVE	IF/IAF	HELIS		TF	FB	1.00	000.10	6.07	2300
HELIS	FAF	RW36	MAP	TF	FO	0.30	000.12	4.93	
RW36	MAP	984 MSL		CA			000.12		
984 MSL		HEPAX		DF	FO	1.00			3100

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW36

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3100 DIRECT HEPAX AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S OKEVE, RT, 000.10 INBOUND, 2300 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 000.12

FAF: HELIS

DIST FAF TO MAP: 4.93

DIST FAF TO THLD: 4.93

4. MIN ALT: OKEVE 2300, HELIS 2300

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

306 HAT: 0.80

GS ANT:

6. MIN GP INCPT: 2300

GP ALT AT FAF : HELIS 2300

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 58.1

8. MSA FROM: RW36 3100

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING LINCOLN ALTIMETER SETTING.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -19C OR ABOVE 54C.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LINCOLN ALTIMETER SETTING AND INCREASE ALL DA/MDA 80 FT, INCREASE LPV ALL CATS VISIBILITY 1/4 SM, LNAV/VNAV ALL CATS VISIBILITY 1/4 SM, LNAV CAT C/D AND CIRCLING CAT C/D VISIBILITY 3/8 SM.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT AXC VORTAC ON V313 NORTHBOUND.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.41 NM TO RW36*
*LNAV ONLY
WAAS CHANNEL #45738
REFERENCE PATH ID: W36A
FAS OBST: 909 AAO 394551N/0885221W.
HOLD N, RT, 180.12 INBOUND
LTP HAE: 172.6 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/4, NA WHEN LOCAL WEATHER NOT AVAILABLE, EXCEPT FOR OPERATORS WITH APPROVED WEATHER REPORTING SERVICES.

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	984	7/8	306	984	7/8	306	984	7/8	306	984	7/8	306			
LNAV/VNAV DA	1082	1 1/8	404	1082	1 1/8	404	1082	1 1/8	404	1082	1 1/8	404			
LNAV MDA	1180	1	502	1180	1	502	1180	1 3/8	502	1180	1 3/8	502			
CIRCLING	1180	1	498	1240	1	558	1360	2	678	1360	2 1/4	678			



CHANGES - REASONS

1. REMOVED NOTE; NIGHT LANDING: RWY 12 NA - NO 20:1 PENETRATIONS.
2. DELETED INITIAL FROM MTO TO OKEVE - MTO DECOMMISSIONED.
3. UPDATED FAS OBST LOCATION FROM 394554N/0885221W TO 394551N/0885221W - DATABASE UPDATE.
4. ADDED INITAL ROUTE FROM WUBTA TO OKEVE - FPT REQUEST.
5. ADDED FEEDER ROUTE FROM ARCOL TO WUBTA - FPT REQUEST.
6. LOWERED CIRCLING CAT A MDA FROM 1240/HAA 558 TO 1180/HAA 502 AND UPDATED OBST ID - LOWER LNAV MDA.
7. CHANGED LPV DA FROM 985/ 307 HAT VIS 1 MILE TO 984/ 306 HAT VIS 7/8 MILE - NEW IPDS EVALUATION/VISCHECK.
8. CHANGED LNAV/VNAV DA FROM 1114/ 436 HAT VIS 1 1/2 MILE TO 1082/ 404 HAT VIS 1 1/8 MILE - NEW IPDS EVALUATION/VISCHECK.
9. LOWERED LNAV MDA FROM 1240 TO 1180 AND CAT C/D VISIBILITIES FROM 1 5/8 TO 1 3/8 MILE - NEW IPDS EVALUATION/VISCHECK.
10. CHANGED VDP FROM 1.6 TO 1.41 MILES TO RWY 36 - LOWER LNAV MDA
11. CHANGED CHART NOTE FROM WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LOGAN COUNTY ALTIMETER SETTING; INCREASE LPV DA TO 1065 AND VISIBILITY ALL CATS 1/4 MILE, LNAV/VNAV DA TO 1194 AND VISIBILITY ALL CATS 1/4 MILE; INCREASE ALL MDA 80 FEET AND LNAV CAT C/D AND CIRCLING CAT C/D VISIBILITY 1/4 MILE TO CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LINCOLN ALTIMETER SETTING AND INCREASE ALL DA/MDA 80 FT, INCREASE LPV ALL CATS VISIBILITY 1/4 SM, LNAV/VNAV ALL CATS VISIBILITY 1/4 SM, LNAV CAT C/D AND CIRCLING CAT C/D VISIBILITY 3/8 SM - NEW VISCHECK.
12. REPLACED CHART NOTE: DME/DME RNP-0.3 NA WITH CHART PBN NAVSPEC REQUIREMENT NOTE: RNP APCH. - IAW 8260.19H PARA 8-6-8.
13. CHANGED ACT FROM -18C TO -19C - NEW 5 YEAR HISTORY (2013-2017).
14. UPDATED CIRCLING CAT B CNTL OBST FROM 936 CRANE TO 939 CRANE- NEW IPDS EVALUATION.
15. ADDED "EXCEPT FOR OPERATORS WITH APPROVED WEATHER REPORTING SERVICE" TO ALTERNATE MINS - CONTRACT WEATHER WHEN TOWER CLOSED.



COORDINATED WITH:

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

FLIGHT CHECKED BY

SCOTT WIEBE
Digitally signed by
WARDELL HENNING

OFFICE

FICO

DATE

10/2/18

DEVELOPED BY

Oct 10, 2018
Digitally signed by
WARDELL HENNING

OFFICE

AJV-5400

DATE

06/19/2018

APPROVED BY

LONNIE EVERHART
Digitally signed by
WARDELL HENNING
Oct 10, 2018

OFFICE

AJV-5400

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KDEC
RUNWAY	RW36
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W36A
LTP/FTP LATITUDE	394936.8720N
LTP/FTP LONGITUDE	0885226.7000W
LTP/FTP ELLIPSOIDAL HEIGHT	+01726
FPAP LATITUDE	395106.0325N
FPAP LONGITUDE	0885228.4770W
THRESHOLD CROSSING HEIGHT (TCH)	00058.1
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1136
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER	EDF4FD2B

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02049
FPAP ORTHOMETRIC HEIGHT	+02049



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.23

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

<u>AIRPORT</u> DECATUR	<u>AIRPORT ID</u> KDEC	<u>PROCEDURE NAME</u> VOR RWY 36	<u>ORIGINAL/AMENDMENT</u> 17	<u>CITY</u> DECATUR	<u>STATE</u> IL
<u>AIRPORT ELEVATION</u> 682	<u>TDZE</u> 678	<u>SUPERSEDED</u> VOR RWY 36	<u>ORIGINAL/AMENDMENT</u> 16A	<u>DATED</u> 05/02/2013	<u>MAG VAR</u> 3E
<u>FACILITY</u> AXC	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1965

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
AQUAS/AXC 16.44 DME	IAF	JABTU/AXC 9.80 DME	NOPT				007.24	6.64	2500
JABTU/AXC 9.80 DME	IF	AXC VORTAC					007.24	9.80	2500

MISSED APPROACH

MAP:

AXC VORTAC 5.42 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3100 ON AXC VORTAC R-348 TO MAROA INT/AXC 14.32 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L **SIDE OF COURSE** 168.34 **OUTBOUND** 2500 **FT WITHIN** 10 **MILES OF** AXC VORTAC

2.

3. **FAC:** 348.34 **FAF:** AXC VORTAC **DIST FAF TO MAP:** 5.42 **DIST FAF TO THLD:** 5.42

4. **MIN ALT:** AXC VORTAC 2500

8. **MSA FROM:** AXC VORTAC 080-260 2400, 260-080 3100

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED

NOTES:

CHART NOTE: RWY 36 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 NOT AUTHORIZED.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LINCOLN ALTIMETER SETTING AND INCREASE ALL MDA 80 FT, INCREASE S-36 CAT C/D AND CIRCLING CAT C/D VISIBILITY 1/4 SM.

CHART NOTE: VDP NA WHEN USING LINCOLN ALTIMETER SETTING.

CHART PLANVIEW NOTE: NOPT FOR ARRIVAL ON AXC VORTAC AIRWAY RADIALS 053 CW 276.

ADDITIONAL FLIGHT DATA:



AXC VORTAC TO RW36: 3.08/58
CHART CIRCLING ICON.
CHART VDP AT 4.08 DME
DISTANCE VDP TO THLD 1.34 NM
FAS OBST: 909 AAO 394554N/0885221W.
HOLD N, RT, 168.00 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/4, NA WHEN LOCAL WEATHER NOT AVAILABLE, EXCEPT FOR OPERATORS WITH APPROVED WEATHER REPORTING SERVICES.

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-36	1160	1	482	1160	1	482	1160	1 3/8	482	1160	1 3/8	482			
CIRCLING	1160	1	478	1240	1	558	1360	2	678	1360	2 1/4	678			

CHANGES - REASONS

1. REMOVED NOTE CIRCLING RWY 12 NA AT NIGHT - NO 20:1 PENETRATIONS.
2. CHANGED CAT C VIS FROM 1 1/4 AND CAT D VIS FROM 1 1/2 TO 1 3/8 - NEW VISCHECK.
3. REMOVED INITIAL SEGMENT FROM AQUAS TO JISOK - FPT CHECKLIST
4. REMOVED INTERMEDIATE SEGMENT FROM JISOK TO AXC VORTAC - FPT CHECKLIST
5. ADDED INITIAL SEGMENT FROM AQUAS TO JABTU AT 2500 - FPT CHECKLIST
6. ADDED INTERMEDIATE SEGMENT FROM JABTU TO AXC VORTAC AT 2500 - FPT CHECKLIST
7. LOWERED CIRCLING CAT A MDA FROM 1200/HAA 518 TO 1160/HAA 463 - NEW CNTL OBST 822 TWR.
8. RAISED CIRCLING CAT B MDA FROM 1200/HAA 518 TO 1240/HAA 558 - NEW CNTL OBST 939 CRANE.
9. RAISED CIRCLING CAT C MDA FROM 1240/HAA 558 VIS 1 1/2 TO 1360/HAA 678 VIS 2 - NEW CNTL OBST 1008 STACK.
10. RAISED CIRCLING CAT D MDA FROM 1320/HAA 638 VIS 2 TO 1360/HAA 678 VIS 2 1/4 - NEW CNTL OBST 1008 STACK.
11. ADDED CHART NOTE: CHART CIRCLING ICON - IAW 8260.19H PARA 8-6-10
12. UPDATED CIRCLING RADII - IAW 8260.3C
13. RAISED MIN FAF ALTITUDE FROM 2300 TO 2500 - INCREASE VDA AT OR ABOVE VGSI IAW 8260.3C 2-6-2B.
14. INCREASED PROCEDURE TURN ALTITUDE FROM 2300 TO 2500 - FAF ALTITUDE RAISED TO 2500.
15. REMOVED PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT - ANGLES COINCIDENT.
16. ADDED PLANVIEW NOTE "DME REQUIRED" - FPT CHECKLIST.
17. REMOVED CHART NOTE REFERENCING (ZUBTA) - SEGMENT REMOVED
18. CHANGED FAC FROM 348.32M TO 348.34M - UPDATED IAPA EVALUATION.
19. CHANGED PT OUTBOUND COURSE FROM 168.32M TO 168.34M - NEW FAC.
20. ADDED "NA WHEN CONTROL TOWER CLOSED, EXCEPT FOR OPERATORS WITH APPROVED WEATHER REPORTING SERVICES" TO ALTERNATE MINS - CONTRACT WEATHER WHEN TOWER CLOSED.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: CHAMPAIGN APP CON, DECATUR ATCT, AMGR

FLIGHT CHECKED BY

SCOTT WIEBE
Digitally signed by
WARDELL HENNING

DEVELOPED BY
Oct 10, 2018
LONNIE EVERHART (STEVEN SCHUTRUM)
Digitally signed by
WARDELL HENNING
Oct 10, 2018

APPROVED BY
LONNIE EVERHART
Digitally signed by
WARDELL HENNING
Oct 10, 2018

OFFICE
FICO
DATE
10/2/18

OFFICE
AJV-5400
DATE
06/27/2018

OFFICE
AJV-5400
TITLE
MANAGER



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

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

CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
FAIRFIELD, IL	FAIRFIELD MUNI	3 JANUARY 2019	3

TAKEOFF MINIMUMS:

RWY 18, 27, 36: STANDARD.

RWY 09, 400-1 5/8 OR STANDARD WITH MINIMUM CLIMB OF 370 FT PER NM TO 900.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 09, SIGN 16 FT FROM DER, 125 FT LEFT OF CENTERLINE, 414 FT MSL.

VEHICLES BEGINNING 341 FT FROM DER, 270 FT RIGHT OF CENTERLINE, UP TO 427 FT MSL.

POLE, VEHICLES BEGINNING 498 FT FROM DER, 122 FT RIGHT OF CENTERLINE, UP TO 22 FT AGL/432 FT MSL.

POLE 504 FT FROM DER, 569 FT LEFT OF CENTERLINE, 17 FT AGL/429 FT MSL.

POLES BEGINNING 673 FT FROM DER, 380 FT LEFT OF CENTERLINE, UP TO 36 FT AGL/446 FT MSL.

POLE 801 FT FROM DER, 212 FT RIGHT OF CENTERLINE, 32 FT AGL/442 FT MSL.

TREE, POLE BEGINNING 803 FT FROM DER, 180 FT LEFT OF CENTERLINE, UP TO 452 FT MSL.

POLES BEGINNING 864 FT FROM DER, 26 FT RIGHT OF CENTERLINE, UP TO 36 FT AGL/444 FT MSL.

TREES BEGINNING 1350 FT FROM DER, 296 FT LEFT OF CENTERLINE, UP TO 465 FT MSL.

TREES BEGINNING 1558 FT FROM DER, 241 FT RIGHT OF CENTERLINE, UP TO 468 FT MSL.

TREES BEGINNING 1599 FT FROM DER, 608 FT RIGHT OF CENTERLINE, UP TO 478 FT MSL.

TREE 1702 FT FROM DER, 859 FT RIGHT OF CENTERLINE, 483 FT MSL.

TREE 2113 FT FROM DER, 853 FT LEFT OF CENTERLINE, 467 FT MSL.

TREES BEGINNING 2206 FT FROM DER, 175 FT RIGHT OF CENTERLINE, UP TO 496 FT MSL.

TREE 2270 FT FROM DER, 578 FT LEFT OF CENTERLINE, 474 FT MSL.

TREES BEGINNING 2454 FT FROM DER, 163 FT RIGHT OF CENTERLINE, UP TO 504 FT MSL.

TREES BEGINNING 3393 FT FROM DER, 150 FT RIGHT OF CENTERLINE, UP TO 507 FT MSL.

TERRAIN 4501 FT FROM DER, 1704 FT LEFT OF CENTERLINE, 534 FT MSL.

TERRAIN 4740 FT FROM DER, 1706 FT LEFT OF CENTERLINE, 540 FT MSL.

TOWER, TREES, TANK BEGINNING 4792 FT FROM DER, 511 FT LEFT OF CENTERLINE, UP TO 166 FT AGL/598 FT MSL.

TOWER 1.1 NM FROM DER, 999 FT LEFT OF CENTERLINE, 281 FT AGL/732 FT MSL.

TOWER 1.2 NM FROM DER, 2435 FT LEFT OF CENTERLINE, 243 FT AGL/703 FT MSL.

NOTE: RWY 18, TERRAIN ABEAM DER, 278 FT RIGHT OF CENTERLINE, 414 FT MSL.

VEHICLES BEGINNING 32 FT FROM DER, 198 FT LEFT OF CENTERLINE, UP TO 427 FT MSL.

TREE, FENCE BEGINNING 97 FT FROM DER, 198 FT RIGHT OF CENTERLINE, UP TO 424 FT MSL.

POLE 223 FT FROM DER, 400 FT LEFT OF CENTERLINE, 21 FT AGL/431 FT MSL.

POLE, VEHICLES BEGINNING 336 FT FROM DER, 144 FT LEFT OF CENTERLINE, UP TO 22 FT AGL/432 FT MSL.

NAVAID 418 FT FROM DER, 446 FT RIGHT OF CENTERLINE, 13 FT AGL/425 FT MSL.

POLE, VEHICLES BEGINNING 453 FT FROM DER, 66 FT LEFT OF CENTERLINE, UP TO 23 FT AGL/433 FT MSL.

NOTE: RWY 27, FENCE 92 FT FROM DER, 319 FT LEFT OF CENTERLINE, 3 FT AGL/438 FT MSL.

VEHICLES 120 FT FROM DER, 297 FT RIGHT OF CENTERLINE, 15 FT AGL/445 FT MSL.

VEHICLES 208 FT FROM DER, 296 FT RIGHT OF CENTERLINE, 448 FT MSL.

VEHICLES BEGINNING 320 FT FROM DER, 296 FT RIGHT OF CENTERLINE, UP TO 450 FT MSL.

BUILDING 519 FT FROM DER, 593 FT LEFT OF CENTERLINE, 26 FT AGL/455 FT MSL.

VEHICLES 536 FT FROM DER, 440 FT RIGHT OF CENTERLINE, 451 FT MSL.

VEHICLES BEGINNING 538 FT FROM DER, 17 FT RIGHT OF CENTERLINE, UP TO 452 FT MSL.

TREE 609 FT FROM DER, 580 FT LEFT OF CENTERLINE, 491 FT MSL.

TREE 764 FT FROM DER, 666 FT LEFT OF CENTERLINE, 500 FT MSL.

TREES BEGINNING 811 FT FROM DER, 495 FT LEFT OF CENTERLINE, UP TO 83 FT AGL/511 FT MSL.

TREES BEGINNING 1069 FT FROM DER, 476 FT LEFT OF CENTERLINE, UP TO 512 FT MSL.

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.

CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
FAIRFIELD, IL	FAIRFIELD MUNI	3 JANUARY 2019	3

TREE 1178 FT FROM DER, 469 FT LEFT OF CENTERLINE, 513 FT MSL.
BUILDING 1198 FT FROM DER, 605 FT RIGHT OF CENTERLINE, 19 FT AGL/465 FT MSL.
TREES BEGINNING 1291 FT FROM DER, 325 FT LEFT OF CENTERLINE, UP TO 514 FT MSL.
TREES BEGINNING 1885 FT FROM DER, 283 FT LEFT OF CENTERLINE, UP TO 530 FT MSL.
TREES BEGINNING 2303 FT FROM DER, 2 FT LEFT OF CENTERLINE, UP TO 83 FT AGL/531 FT MSL.
TREES BEGINNING 2514 FT FROM DER, 492 FT RIGHT OF CENTERLINE, UP TO 529 FT MSL.
TREES BEGINNING 2588 FT FROM DER, 23 FT RIGHT OF CENTERLINE, UP TO 534 FT MSL.
TREE 2624 FT FROM DER, 869 FT RIGHT OF CENTERLINE, 541 FT MSL.
TREES BEGINNING 2627 FT FROM DER, 154 FT RIGHT OF CENTERLINE, UP TO 543 FT MSL.
TREES BEGINNING 2788 FT FROM DER, 13 FT RIGHT OF CENTERLINE, UP TO 545 FT MSL.
TREES BEGINNING 4003 FT FROM DER, 597 FT RIGHT OF CENTERLINE, UP TO 546 FT MSL.
TREES 4615 FT FROM DER, 1724 FT LEFT OF CENTERLINE, 100 FT AGL/553 FT MSL.
TREES 4854 FT FROM DER, 1726 FT LEFT OF CENTERLINE, 100 FT AGL/557 FT MSL.

CONTROLLING OBSTACLES:

RWY 09: 732 FT MSL TOWER 382249.83N/0882258.27W (CG/CGTA/CEILING), 703 FT MSL TOWER 382304.00N/0882254.00W (VISIBILITY).



**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>
FAIRFIELD, IL	FAIRFIELD MUNI	3 JANUARY 2019	3

REMARKS:

FLIGHT INSPECTED BY:

SCOTT WIEBE

Digitally signed by
MARK D ADAMS
Oct 13, 2018

OFFICE SYMBOL:

FICO

DATE:

9/29/18

DEVELOPED BY:

JOHN THORNTON

Digitally signed by
JOHN R THORNTON
Sep 10, 2018

OFFICE SYMBOL:

AJV-5421

DATE:

08/17/2018

APPROVED BY:

JULIE MORGAN

Digitally signed by
MARK D ADAMS
Oct 13, 2018

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:

ZKC, ARPT MGR

CHANGES - REASONS:

1. RWY 09 TAKEOFF MINIMUMS VISIBILITY INCREASED FROM 1 TO 1 5/8 - NEW CONTROLLING OBSTRUCTION.
2. CHANGED RWY 27 TAKEOFF MINIMUMS FROM "300-1 OR STANDARD WITH MINIMUM CLIMB OF 320 FT PER NM TO 600" TO "STANDARD" - RWY 27 CG/CGTA NO LONGER REQUIRED; RWY 27 ONLY HAS LOW, CLOSE-IN PENETRATIONS.
3. UPDATED RWY 09 CONTROLLING OBSTACLE FROM 730 FT MSL TOWER TO 732 FT MSL TOWER FOR CG/CGTA/CEILING AND ADDED 703 FT MSL TOWER FOR VISIBILITY - CURRENT OBSTACLE DATA.
4. DELETED RWY 27 CONTROLLING OBSTACLE (518 TREES 382238N/0882520W) - ALL RWY 27 OBSTACLES ARE LOW, CLOSE-IN OBSTACLES.
5. UPDATED RWY 09 AND ADDED RWY 18, 27 TAKEOFF OBSTACLE NOTES - CURRENT OBSTACLE DATA.

QUALITY
3
CHECKED

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> EDGAR COUNTY	<u>AIRPORT ID</u> KPRG	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 9	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> PARIS	<u>STATE</u> IL
<u>AIRPORT ELEVATION</u> 654	<u>TDZE</u> 654	<u>SUPERSEDED</u> RNAV (GPS) RWY 9	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 07/21/2016	<u>MAG VAR</u> 4W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
GAULS	IAF	EKOYA		TF	FB	1.00	021.03	5.69	2300
NEWMY	IAF	EKOYA		TF	FB	1.00	182.11	9.81	2300
EKOYA	IF	COSMI		TF	FB	1.00	092.12	6.76	2300
COSMI	FAF	CAMVO/2.50 NM TO RW09		TF	FB	0.30	092.21	2.51	
CAMVO/2.50 NM TO RW09		RW09	MAP	TF	FO	0.30	092.21	2.50	
RW09	MAP	904 MSL		CA			092.21		
904 MSL		FINED		DF	FO	1.00			2300

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW09

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2300 DIRECT FINED AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. PROFILE STARTS AT EKOYA
3. FAC: 092.21 FAF: COSMI DIST FAF TO MAP: 5.01 DIST FAF TO THLD: 5.01
4. MIN ALT: EKOYA 2300, COSMI 2300, CAMVO/2.50 NM TO RW09 1500*
5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 250 HAT: 0.62 GS ANT: MM: IM:
6. MIN GP INCPT: 2300 GP ALT AT FAF : COSMI 2300 OM:
7. GP ANGLE: 3.00 34:1: IS NOT CLEAR 20:1: IS CLEAR TCH: 40.0
8. MSA FROM: RW09 3000

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 54C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
*LNAV ONLY
CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: CIRCLING RWY 18 NA AT NIGHT.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT NEWMY ON V192 NORTHWEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT GAULS ON V50 WESTBOUND.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.05 NM TO RW09*
*LNAV ONLY
WAAS CHANNEL #50439
REFERENCE PATH ID: W09A
CHART FAS OBST: 757 BUILDING 394122N/0874208W.
HOLD E, RT, 272.44 INBOUND
LTP HAE: 167.2 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	904	1	250	904	1	250	904	1	250	904	1	250			
LNAV/VNAV DA	904	1	250	904	1	250	904	1	250	904	1	250			
LNAV MDA	1020	1	366	1020	1	366	1020	1	366	1020	1	366			
CIRCLING	1080	1	426	1120	1	466	1180	1 1/2	526	1320	2	666			



CHANGES - REASONS

- 1. AMENDED CIRCLING CAT C MDA/HAT FROM 1120/466 TO 1180/526 - NEW CONTROLLING OBSTACLE 816 MSL ELEVATOR IDENTIFIED AND TO CLEAR FDC 8/3863.
- 2. AMENDED CHART NOTE FROM STRAIGHT-IN RWY 9 NA AT NIGHT, CIRCLING RWY 9, 18 NA AT NIGHT TO CIRCLING RWY 18 NA AT NIGHT - NO 20:1 PENETRATIONS TO RWY 9 IDENTIFIED.
- 3. DELETED CHART NOTE DME/DME RNP-0.3 NA - ADDED PBN REQUIREMENTS NOTE: RNP APCH.
- 4. ADDED 20:1 IS CLEAR TO PROFILE LINE 7 - IAW 8260.19H, 8-6-7G.
- 5. MOVED BACK-UP ALTIMETER NOTES TO BACK OF 8260-9 AS CONTINGENCY NOTES - ARPT IS ON WMSCR NETWORK.
- 6. DELETED ALTERNATE MINIMUMS NOTE: @ NA WHEN LOCAL WEATHER NOT AVAILABLE - ASOS BACK-UP ALTIMETER SOURCE IS AVAILABLE.
- 7. ADDED VDP AT 1.05 NM TO RW9 - NO 20:1 PENETRATIONS.
- 8. AMENDED CHART NOTE FROM RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED TO RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - 20:1 PENETRATIONS REMOVED.
- 9. MOVED ALSTG NOTE AND ASSOCIATED NOTES TO BACK OF -9 - ARPT ON WMSCR NETWORK.



COORDINATED WITH:

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

FLIGHT CHECKED BY

SCOTT WIEBE
Digitally signed by
WARDELL HENNING

OFFICE

FICO

DATE

10/2/18

DEVELOPED BY

IVAN BLANCO
Digitally signed by
IVAN BLANCO

OFFICE

AJV-5432

DATE

07/24/2018

APPROVED BY

PATRICK MULQUEEN
Digitally signed by
WARDELL HENNING

OFFICE

AJV-5430

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KPRG
RUNWAY	RW09
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W09A
LTP/FTP LATITUDE	394159.9060N
LTP/FTP LONGITUDE	0874039.4415W
LTP/FTP ELLIPSOIDAL HEIGHT	+01672
FPAP LATITUDE	394202.5690N
FPAP LONGITUDE	0873844.0535W
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	1376
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	A2B8276F

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01993
FPAP ORTHOMETRIC HEIGHT	+01993



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> EDGAR COUNTY	<u>AIRPORT ID</u> KPRG	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 18	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> PARIS	<u>STATE</u> IL
<u>AIRPORT ELEVATION</u> 654	<u>TDZE</u> 654	<u>SUPERSEDED</u> RNAV (GPS) RWY 18	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 07/21/2016	<u>MAG VAR</u> 4W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
JAZZY	IAF	HAVIS	NOPT	TF	FB	1.00	260.14	12.32	3000
JAGER	IAF	HAVIS	NOPT	TF	FB	1.00	134.01	8.87	3000
HAVIS	IF/IAF	CAROD		TF	FB	1.00	182.27	6.16	2300
CAROD	FAF	RW18	MAP	TF	FO	0.30	182.27	5.07	
RW18	MAP	980 MSL		CA			182.27		
980 MSL		ATISE		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LP: RW18
 LNAV: RW18

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT ATISE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD N HAVIS, RT, 182.27 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 182.27FAF: CARODDIST FAF TO MAP: 5.07DIST FAF TO THLD: 5.07
4. MIN ALT: HAVIS 3000, CAROD 2300
5. DIST TO THLD FROM OM:MM:IM:150 HAT:GS ANT:
6. MIN GP INCPT:GP ALT AT FAF :OM:MM:IM:
7. GP ANGLE:34:1: IS NOT CLEAR20:1: IS NOT CLEARTCH:
8. MSA FROM: RW18 3000

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: RWY 18 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT JAZZY ON V171 SOUTHBOUND.
CHART NOTE: STRAIGHT-IN RWY 18 NA AT NIGHT, CIRCLING RWY 18 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CAROD TO RW18: 3.00/40.
WAAS CHANNEL #82639
REFERENCE PATH ID: W18A
CHART FAS OBST: 727 TREE 394218N/0874013W, 742 TREE 394214N/0874004W.
HOLD S, RT, 002.27 INBOUND
LTP HAE: 164.5 M

MINIMUMS:

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

ALTERNATE: NA

☐

 STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LP MDA	980	1	326	980	1	326	980	1	326	980	1	326			
LNAV MDA	1000	1	346	1000	1	346	1000	1	346	1000	1	346			
CIRCLING	1080	1	426	1120	1	466	1180	1 1/2	526	1320	2	666			

CHANGES - REASONS

1. AMENDED CIRCLING CAT C MDA/HAT FROM 1120/466 TO 1180/526 - NEW CONTROLLING OBSTACLE 816 MSL ELEVATOR IDENTIFIED AND TO CLEAR FDC 8/3863.
2. AMENDED CHART NOTE FROM STRAIGHT-IN RWY 18 NA AT NIGHT, CIRCLING RWY 9, 18 NA AT NIGHT TO CHART NOTE: STRAIGHT-IN RWY 18 NA AT NIGHT, CIRCLING RWY 18 NA AT NIGHT - NO 20:1 PENETRATIONS TO RWY 9 IDENTIFIED.
3. DELETED CHART NOTE DME/DME RNP-0.3 NA - ADDED PBN REQUIREMENTS NOTE: RNP APCH.
4. ADDED 20:1 IS NOT CLEAR TO PROFILE LINE 7 - IAW 8260.19H, 8-6-7G.
5. MOVED BACK-UP ALTIMETER NOTES TO BACK OF 8260-9 AS CONTINGENCY NOTES - ARPT IS ON WMSCR NETWORK.
6. DELETED ALTERNATE MINIMUMS NOTE: @ NA WHEN LOCAL WEATHER NOT AVAILABLE - ASOS BACK-UP ALTIMETER SOURCE IS AVAILABLE.



COORDINATED WITH:

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

FLIGHT CHECKED BY

SCOTT WIEBE
Digitally signed by
WARDELL HENNING

OFFICE

FICO

DATE

10/2/18

DEVELOPED BY

IVAN BLANCO
Digitally signed by
IVAN BLANCO
Jul 24, 2018

OFFICE

AJV-5432

DATE

07/24/2018

APPROVED BY

PATRICK MULQUEEN
Digitally signed by
WARDELL HENNING
Oct 05, 2018

OFFICE

AJV-5430

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KPRG
RUNWAY	RW18
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W18A
LTP/FTP LATITUDE	394212.1860N
LTP/FTP LONGITUDE	0874021.1185W
LTP/FTP ELLIPSOIDAL HEIGHT	+01645
FPAP LATITUDE	394043.0535N
FPAP LONGITUDE	0874017.6345W
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	1776
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	3B385B7D
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01967
FPAP ORTHOMETRIC HEIGHT	+01967



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> EDGAR COUNTY	<u>AIRPORT ID</u> KPRG	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 27	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> PARIS	<u>STATE</u> IL
<u>AIRPORT ELEVATION</u> 654	<u>TDZE</u> 651	<u>SUPERSEDED</u> RNAV (GPS) RWY 27	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 01/05/2017	<u>MAG VAR</u> 4W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
JAZZY	IAF	FINED	NOPT	TF	FB	1.00	184.37	14.06	2300
TTH VORTAC	IAF	FINED	NOPT	TF	FB	1.00	332.23	15.29	2300
WAVEL	IAF	FINED	NOPT	TF	FB	1.00	240.55	12.73	2300
FINED	IF/IAF	DECPA		TF	FB	1.00	272.44	6.01	2300
DECPA	FAF	RW27	MAP	TF	FO	0.30	272.36	5.05	
RW27	MAP	1100 MSL		CA			272.36		1100
1100 MSL		FINED		DF	FO	1.00			2300

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW27

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 2300 DIRECT FINED AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD E FINED, RT, 272.44 INBOUND, 2300 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 272.36FAF: DECPADIST FAF TO MAP: 5.05DIST FAF TO THLD: 5.05
4. MIN ALT: FINED 2300, DECPA 2300
5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.66GS ANT:
6. MIN GP INCPT: 2300GP ALT AT FAF : DECPA 2300OM:MM:IM:
7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 40.0
8. MSA FROM: RW27 3000

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING RWY 18 NA AT NIGHT.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 54C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: RWY 27 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON TTH VORTAC AIRWAY RADIALS 254 CW 303.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.20 NM TO RW27*
*LNAV ONLY
WAAS CHANNEL #61239
REFERENCE PATH ID: W27A
FAS OBST: 815 AAO 394139N/0873435W.
LTP HAE: 166.2 M

MINIMUMS:

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

ALTERNATE: NA

☐

 STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	901	1	250	901	1	250	901	1	250	901	1	250			
LNAV/VNAV DA	925	1	274	925	1	274	925	1	274	925	1	274			
LNAV MDA	1080	1	429	1080	1	429	1080	1 1/4	429	1080	1 1/4	429			
CIRCLING	1080	1	426	1120	1	466	1180	1 1/2	526	1320	2	666			



CHANGES - REASONS

- 1. AMENDED CIRCLING CAT C MDA/HAT FROM 1120/466 TO 1180/526 - NEW CONTROLLING OBSTACLE 816 MSL ELEVATOR IDENTIFIED AND TO CLEAR FDC 8/3863.
- 2. AMENDED CHART NOTE FROM CIRCLING RWY 9, 18 NA AT NIGHT TO CIRCLING RWY 18 NA AT NIGHT - NO 20:1 PENETRATIONS TO RWY 9 IDENTIFIED.
- 3. DELETED CHART NOTE DME/DME RNP-0.3 NA - ADDED PBN REQUIREMENTS NOTE: RNP APCH.
- 4. ADDED 20:1 IS CLEAR TO PROFILE LINE 7 - IAW 8260.19H, 8-6-7G.
- 5. MOVED BACK-UP ALTIMETER NOTES TO BACK OF 8260-9 AS CONTINGENCY NOTES - ARPT IS ON WMSCR NETWORK.
- 6. DELETED ALTERNATE MINIMUMS NOTE: @ NA WHEN LOCAL WEATHER NOT AVAILABLE - ASOS BACK-UP ALTIMETER SOURCE IS AVAILABLE.
- 7. VDP CHANGED FROM 1.03 NM TO RW27 TO 1.20 TO RW27 - NEW CALCULATION BASED ON VGSI.



COORDINATED WITH:

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

FLIGHT CHECKED BY

SCOTT WIEBE
Digitally signed by
WARDELL HENNING

DEVELOPED BY

IVAN BLANCO
Oct 05, 2018
Digitally signed by
IVAN BLANCO
Jul 24, 2018

APPROVED BY

PATRICK MULQUEEN
Digitally signed by
WARDELL HENNING
Oct 05, 2018

OFFICE

FICO

OFFICE

AJV-5432

OFFICE

DATE

10/2/18

DATE

07/23/2018

DATE

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> EDGAR COUNTY	<u>AIRPORT ID</u> KPRG	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> PARIS	<u>STATE</u> IL
<u>AIRPORT ELEVATION</u> 654	<u>TDZE</u> 654	<u>SUPERSEDED</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 07/21/2016	<u>MAG VAR</u> 4W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
DELCO	IAF	ATISE	NOPT	TF	FB	1.00	055.46	14.61	3000
KOCUJ	IAF	ATISE	NOPT	TF	FB	1.00	294.62	10.29	3000
ATISE	IF/IAF	JARUD		TF	FB	1.00	002.27	6.16	2300
JARUD	FAF	NORKE/2.60 NM TO RW36		TF	FB	0.30	002.27	2.44	
NORKE/2.60 NM TO RW36		RW36	MAP	TF	FO	0.30	002.27	2.60	
RW36	MAP	904 MSL		CA			002.27		
904 MSL		HAVIS		DF	FO				3000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW36

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT HAVIS AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD S ATISE, RT, 002.27 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 002.27FAF: JARUDDIST FAF TO MAP: 5.04DIST FAF TO THLD: 5.04
4. MIN ALT: ATISE 3000, JARUD 2300, NORKE/2.60 NM TO RW36 1500*
5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.66GS ANT:
6. MIN GP INCPT: 2300GP ALT AT FAF : JARUD 2300OM:MM:IM:
7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 40.0
8. MSA FROM: RW36 3000

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -16C OR ABOVE 54C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: CIRCLING RWY 18 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART 773 TREE 393854N/0873956W
CHART CIRCLING ICON.
CHART VDP AT 1.08 NM TO RW36*
*LNAV ONLY
WAAS CHANNEL #78339
REFERENCE PATH ID: W36A
CHART FAS OBST: 764 BLD 394124N/0873946W.
HOLD N, RT, 182.27 INBOUND
LTP HAE: 167.2 M

MINIMUMS:

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

ALTERNATE: NA

☐

 STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	904	1	250	904	1	250	904	1	250	904	1	250			
LNAV/VNAV DA	904	1	250	904	1	250	904	1	250	904	1	250			
LNAV MDA	1020	1	366	1020	1	366	1020	1	366	1020	1	366			
CIRCLING	1080	1	426	1120	1	466	1180	1 1/2	526	1320	2	666			



CHANGES - REASONS

- 1. AMENDED CIRCLING CAT C MDA/HAT FROM 1120/466 TO 1180/526 - NEW CONTROLLING OBSTACLE 816 MSL ELEVATOR IDENTIFIED AND TO CLEAR FDC 8/3863.
- 2. AMENDED CHART NOTE FROM CIRCLING RWY 9, 18 NA AT NIGHT TO CIRCLING RWY 18 NA AT NIGHT - NO 20:1 PENETRATIONS TO RWY 9 IDENTIFIED.
- 3. DELETED CHART NOTE DME/DME RNP-0.3 NA - ADDED PBN REQUIREMENTS NOTE: RNP APCH.
- 4. ADDED 20:1 IS CLEAR TO PROFILE LINE 7 AND CHANGED 34:1 IS NOT CLEAR TO 34:1 IS CLEAR - IAW 8260.19H, 8-6-7G, NO VISUAL SURFACE PENETRATORS.
- 5. MOVED BACK-UP ALTIMETER NOTES TO BACK OF 8260-9 AS CONTINGENCY NOTES - ARPT IS ON WMSCR NETWORK.
- 6. DELETED ALTERNATE MINIMUMS NOTE: @ NA WHEN LOCAL WEATHER NOT AVAILABLE - ASOS BACK-UP ALTIMETER SOURCE IS AVAILABLE.



COORDINATED WITH:

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

FLIGHT CHECKED BY

SCOTT WIEBE
Digitally signed by
WARDELL HENNING

OFFICE

FICO

DATE

10/2/18

DEVELOPED BY

IVAN BLANCO
Digitally signed by
IVAN BLANCO

OFFICE

AJV-5432

DATE

08/03/2018

APPROVED BY

PATRICK MULQUEEN
Digitally signed by
WARDELL HENNING

OFFICE

AJV-5430

DATE

Oct 05, 2018

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KPRG
RUNWAY	RW36
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W36A
LTP/FTP LATITUDE	394140.5775N
LTP/FTP LONGITUDE	0874019.8845W
LTP/FTP ELLIPSOIDAL HEIGHT	+01672
FPAP LATITUDE	394309.7095N
FPAP LONGITUDE	0874023.3705W
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	1776
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	4F3465E0
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01993
FPAP ORTHOMETRIC HEIGHT	+01993



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

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
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<u>AIRPORT</u> COLUMBUS MUNI	<u>AIRPORT ID</u> KBAK	<u>PROCEDURE NAME</u> ILS OR LOC RWY 23	<u>ORIGINAL/AMENDMENT</u> 8	<u>CITY</u> COLUMBUS	<u>STATE</u> IN	
<u>AIRPORT ELEVATION</u> 656	<u>TDZE</u> 656	<u>SUPERSEDED</u> ILS RWY 23	<u>ORIGINAL/AMENDMENT</u> 7B	<u>DATED</u> 02/01/2018	<u>MAG VAR</u> 3W	<u>EPOCH YEAR</u> 1995
<u>FACILITY</u> I-BAK	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
SHB VOR/DME		CLIFS LOM/RADAR	IAF				178.18	18.61	2400

MISSED APPROACH

MAP:

ILS: DA
LOC: 4.63 NM AFTER CLIFS LOM/RADAR

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1500 THEN CLIMBING LEFT TURN TO 2300 DIRECT CLIFS LOM AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L SIDE OF COURSE 048.04 OUTBOUND 2300 FT WITHIN 10 MILES OF CLIFS LOM (IAF)
2.
3. FAC: 228.04 FAF: CLIFS LOM/RADAR DIST FAF TO MAP: 4.63 DIST FAF TO THLD: 4.63
4. MIN ALT: CLIFS LOM/RADAR 2300
5. DIST TO THLD FROM OM: 4.63 MM: IM: 150 HAT: GS ANT: 1000
6. MIN GS INCPT: 2300 GS ALT AT FAF : OM: 2201 MM: IM:
7. GP ANGLE: 3.00 34:1: 20:1: TCH: 51.2
8. MSA FROM: BA LOM 090-270 2500, 270-090 3100

EQUIPMENT REQUIREMENTS NOTES:

ADF OR RADAR REQUIRED.

NOTES:

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON SHB VOR/DME AIRWAY RADIALS 124 CW 231.



ADDITIONAL FLIGHT DATA:

HOLD NE, RT, 228.04 INBOUND.
CHART IN PLANVIEW: (CFDWH) AT 392334.23N/0854337.85W.
CHART FAS OBST: 785 TRANSMISSION TWR 391657N/0855145W.
CHART CIRCLING ICON.
CHART R-3401 A/B

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-ILS 23	856	1/2	200	856	1/2	200	856	1/2	200	856	1/2	200			
S-LOC 23	1040	1/2	384	1040	1/2	384	1040	5/8	384	1040	5/8	384			
CIRCLING	1140	1	484	1140	1	484	1160	1 1/2	504	1400	2 1/2	744			

CHANGES - REASONS

1. CHANGED PROCEDURE NAME FROM "ILS RWY 23" TO "ILS OR LOC RWY 23" - 8260.3, CH 1, PARA 1-6-4.
2. LOWERED S-ILS 23 DA FROM 250 TO 200 - NEW CONTROLLING OBSTACLE.
3. LOWERED LOC MDA FROM 1060 TO 1040 ALL CATS - INCORPORATED P-NOTAM 7/4167.
4. LOWERED LOC CATS C/D VISIBILITIES FROM 3/4 SM TO 5/8 SM - INCORPERATED P-NOTAM 7/4167.
5. ADDED CNF FIX CFDWH FOR ARINC CODING -ARINC PROGRAMMING REQUIREMENT.
6. LOWERED CIRCLING MDA CATS A/B FROM 1160 TO 1140 - INCORPERATED P-NOTAM.
7. MOVED ALSTG AND ASSOCIATED NOTES TO BACK OF -9 - NEW CRITERIA.
8. CHANGED LINE 3 FAC FROM 228.15 TO 228.04 - GEODETIC RECALCULATION.
9. REMOVED INOP ALS NOTES FOR LOCAL ALTIMETER SETTING - NO LONGER NECESSARY PER CURRENT CRITERIA.
10. CHANGED ALTERNATE MINIMUMS TO N/A - NAVAID UNMONITORED.
11. ADDED ADF OR RADAR REQUIRED TO EQUIPMENT REQUIREMENTS NOTES - UPDATED TO CURRENT CRITERIA.



<u>AIRPORT</u> COLUMBUS MUNI	<u>AIRPORT ID</u> KBAK	<u>PROCEDURE NAME</u> ILS OR LOC RWY 23	<u>ORIGINAL/AMENDMENT</u> 8	<u>CITY</u> COLUMBUS	<u>STATE</u> IN
<u>COORDINATED WITH:</u>					
A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ <u>OTHER:</u> AVN-220, AGL-220, ZID ARTCC, IND ATCT, IND APP CON, AMGR					
<u>FLIGHT CHECKED BY</u>		<u>OFFICE</u>	<u>DATE</u>		
SCOTT WIEBE		FICO	10/2/18		
<u>DEVELOPED BY</u>		<u>OFFICE</u>	<u>DATE</u>		
LONNIE EVERHART (KELLY CARLSON)		AJV-5400	07/09/2018		
<u>APPROVED BY</u>		<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>	
LONNIE EVERHART		AJV-5400		MANAGER	



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> METTEL FIELD	<u>AIRPORT ID</u> KCEV	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 18	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> CONNERSVILLE	<u>STATE</u> IN
<u>AIRPORT ELEVATION</u> 866	<u>TDZE</u> 866	<u>SUPERSEDED</u> RNAV (GPS) RWY 18	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 04/02/2015	<u>MAG VAR</u> 4W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1995

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 095/30 CW 275/30	NOPT	095/10 CW 275/10		2900
095/10 CW 275/10		RULSE	IF/IAF	2800
2. 275/30 CW 095/30		RULSE	IF/IAF	2800

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
RULSE	IF/IAF	LOTAC		TF	FB	1.00	184.53	6.00	2600
LOTAC	FAF	JIVLO/3.41 NM TO RW18		TF	FB	0.30	184.53	1.89	
JIVLO/3.41 NM TO RW18		RW18	MAP	TF	FO	0.30	184.53	3.41	
RW18	MAP	1116 MSL		CA			184.53		
1116 MSL		WALAG		DF	FO	1.00			2800

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW18

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2800 DIRECT WALAG AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N RULSE, RT, 184.53 INBOUND, 2800 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 184.53FAF: LOTACDIST FAF TO MAP: 5.30DIST FAF TO THLD: 5.30

4. MIN ALT: RULSE 2800, LOTAC 2600, JIVLO/3.41 NM TO RW18 2000*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.64GS ANT:

6. MIN GP INCPT: 2600GP ALT AT FAF : LOTAC 2600OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 45.9

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 54C.
CHART NOTE: VDP AND BARO-VNAV NA WHEN USING JAMES M. COX DAYTON INTL ALTIMETER SETTING.
CHART NOTE: CIRCLING RWY 4, 22 NA AT NIGHT.
CHART NOTE: FOR INOPERATIVE ALS INCREASE LPV ALL CATS VISIBILITY TO 1 SM, LNAV/VNAV ALL CATS VISIBILITY TO 1 3/8 SM, AND LNAV CATS A/B VISIBILITY TO 1 SM.
CHART NOTE: FOR INOPERATIVE ALS WHEN USING JAMES M. COX DAYTON INTL ALTIMETER SETTING, INCREASE LPV ALL CATS VISIBILITY TO 1 SM, LNAV/VNAV ALL CATS VISIBILITY TO 1 3/4 SM.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE JAMES M. COX DAYTON INTL ALTIMETER SETTING AND INCREASE ALL DA 121 FT AND ALL MDA 140 FEET: INCREASE LPV AND LNAV/VNAV ALL CATS AND LNAV CAT C/D VISIBILITY 3/8 SM, AND CIRCLING CAT C/D VISIBILITY 1/2 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.27 NM TO RW18*
*LNAV ONLY
WAAS CHANNEL #93699
REFERENCE PATH ID: W18A
CHART FAS OBST: 1067 TREE 394328N/0850837W.
HOLD S, RT, 004.53 INBOUND
LTP HAE: 230 M

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	1116	1/2	250	1116	1/2	250	1116	1/2	250	1116	1/2	250			
LNAV/VNAV DA	1385	1	519	1385	1	519	1385	1	519	1385	1	519			
LNAV MDA	1320	1/2	454	1320	1/2	454	1320	7/8	454	1320	7/8	454			
CIRCLING	1440	1	574	1540	1	674	1620	2 1/4	754	1620	2 1/2	754			

QUALITY
41
CHECKED

CHANGES - REASONS

- 1. REPLACED TERMINAL ROUTE FEEDERS NEWTO AND ARBAS, INITIALS ILJAY AND PEDIE WITH MODIFIED STRAIGHT-IN TAA - IAW ATC OPERATIONAL REQUEST.
- 2. MOVED PFAF LOTAC FROM 394740.23N/0850746.83W TO 394740.73N/0850746.68W - TO MAINTAIN 3.0 GPA.
- 3. MOVED IF/IAF RULSE FROM 395340.50N/0850742.58W TO 395345.000N/0850742.34W - TO MAINTAIN SI GEOMETRY WITH PFAF MOVE.
- 4. HOLDING IN-LIEU INBOUND COURSE AND FAC CHANGED FROM 184.52 TO 184.53 AND DIST FAF TO MAP CHANGED FROM 5.22 TO 5.30 - RESULT OF PFAF MOVE.
- 5. ADDED SDF JIVLO TO LNAV FINAL AT 3.41 NM TO RW18 - TO OBTAIN LOWER MDA.
- 6. VDP MOVED FROM 1.40 NM TO RW18 TO 1.27NM TO RWW18 - RESULT OF MINIMA CHANGE.
- 7. FAS OBS CHANGED FROM CHART FAS OBST: 1099 TREE 394312N/0850836W TO CHART FAS OBST: 1067 TREE 394328N/0850837W - OBS DATA CHANGE.
- 8. AMENDED MA FROM: CLIMB TO 2600 DIRECT HUSIN AND ON TRACK 169 TO SACYO AND HOLD TO: CLIMB TO 2800 DIRECT WALAG AND HOLD - IAW ATC OPERATIONAL REQUEST.
- 9. LOWERED LNAV/VNAV DA/HAT FROM 1426/560 TO 1385/519 - RESULT OF NEW OBS EVAL WITH FPT CONCURRENCE.
- 10. LOWERED LNAV MDA/HAT FROM 1360/494 TO 1320/454 - SDF ADDED WITH FPT CONCURRENCE.
- 11. AMENDED CIRCLING MDA/HAA FROM: CAT A-C 1440/574, CAT D 1680/814 TO: CAT A 1460/594, CAT B 1540/674, CAT C-D 1620/754 - APPLICATION OF EXPANDED CIRCLING AREA.
- 12. REMOVED "DME/DME RNP-0.3 NA." AND ADDED PBN REQUIREMENTS NOTE "RNP APCH".
- 13. UPDATED PROFILE LINE 7 TO SHOW 20:1 IS CLEAR. - IAW 8260.19H, 8-6-7G.
- 14. UPDATED RNP VALUE FOR INTERMEDIATE SEGMENT FROM 0.5 TO 1.00 - IAW WITH CURRENT CRITERIA.
- 15. DELETED CHART NOTE PROCEDURE NA FOR ARRIVALS AT ARBAS ON V340 NORTHBOUND - ARBAS DELETED.
- 16. CHANGED CHART NOTE FROM: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED USE JAMES M. COX DAYTON INTL, OH ALTIMETER SETTING AND INCREASE LPV DA TO 1237 FEET AND VISIBILITY ALL CATS TO 3/4 MILE, LNAV/VNAV DA TO 1547 FEET AND VISIBILITY TO 1 7/8 MILE, INCREASE ALL MDA 140 FEET AND LNAV CAT C/D VISIBILITY TO 1 3/8 MILE, INCREASE CIRCLING CAT C VISIBILITY TO 2 MILES AND CAT D VISIBILITY TO 3 MILES TO: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED USE JAMES M. COX DAYTON INTL, OH ALTIMETER SETTING AND INCREASE LPV DA TO 1237 FEET, LNAV/VNAV DA TO 1506 FEET AND ALL MDA 140 FEET AND LNAV CAT C/D VISIBILITY TO 1 1/4 SM, INCREASE CIRCLING CAT C/D VISIBILITY 1/4 SM - NEW EVALUATION RESULT.
- 17. UPDATED BARO-VNAV NOTE FROM: FOR UNCOMPENSATED BARO/VNAV SYSTEMS, LNAV/VNAV NA BELOW -21C (-5F) OR ABOVE 54C TO: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 54C - NEW EVALUATION RESULT.
- 18. FAS DATA CHANGED: FPAP FROM 394057.5900N/0850751.5600W TO 394057.5885N/0850751.5570W, TCH FROM 45.0 TO 45.9, CRC REMAINDER FROM 709FCFD7 TO 95B7E366- PROCEDURE DATA CHANGES.



COORDINATED WITH:

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

FLIGHT CHECKED BY

SCOTT WIEBE
Digitally signed by
ADOLFO D URRUTIA

DEVELOPED BY

IVAN BLANCO
Digitally signed by
IVAN BLANCO
Sep 26, 2018
Jul 19, 2018

APPROVED BY

PATRICK MULQUEEN
Digitally signed by
ADOLFO D URRUTIA
Sep 26, 2018

OFFICE

FICO

OFFICE

AJV-5432

OFFICE

AJV-5430

DATE

9/16/18

DATE

07/12/2018

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCEV
RUNWAY	RW18
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W18A
LTP/FTP LATITUDE	394226.7575N
LTP/FTP LONGITUDE	0850750.4890W
LTP/FTP ELLIPSOIDAL HEIGHT	+02300
FPAP LATITUDE	394057.5885N
FPAP LONGITUDE	0850751.5570W
THRESHOLD CROSSING HEIGHT (TCH)	00045.9
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0768
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	95B7E366
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02640
FPAP ORTHOMETRIC HEIGHT	+02640



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

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

TAA

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

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
WALAG	IF/IAF	YOSKU		TF	FB	1.00	004.53	6.01	2600
YOSKU	FAF	JULKO/2.50 NM TO RW36		TF	FB	0.30	004.53	2.82	
JULKO/2.50 NM TO RW36		RW36	MAP	TF	FO	0.30	004.53	2.50	
RW36	MAP	1132 MSL		CA			004.53		
1132 MSL		RULSE		DF	FO	1.00			2800

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW36

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2800 DIRECT RULSE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

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

3. FAC: 004.53

FAF: YOSKU

DIST FAF TO MAP: 5.32

DIST FAF TO THLD: 5.32

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

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

270 HAT: 0.71

GS ANT:

6. MIN GP INCPT: 2600

GP ALT AT FAF : YOSKU 2600

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1: IS NOT CLEAR

20:1: IS CLEAR

TCH: 45.0

8. MSA FROM: RW36 3000

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

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

ADDITIONAL FLIGHT DATA:

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

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	1132	7/8	270	1132	7/8	270	1132	7/8	270	1132	7/8	270			
LNAV/VNAV DA	1351	1 3/8	489	1351	1 3/8	489	1351	1 3/8	489	1351	1 3/8	489			
LNAV MDA	1400	1	538	1400	1	538	1400	1 1/2	538	1400	1 1/2	538			
CIRCLING	1440	1	574	1540	1	674	1620	2 1/4	754	1620	2 1/2	754			



AIRPORT	AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	CITY	STATE
METTEL FIELD	KCEV	RNAV (GPS) RWY 36	3	CONNERSVILLE	IN

CHANGES - REASONS

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



<u>AIRPORT</u> METTEL FIELD	<u>AIRPORT ID</u> KCEV	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> 3	<u>CITY</u> CONNERSVILLE	<u>STATE</u> IN
<u>COORDINATED WITH:</u>					
A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ <u>OTHER:</u> AMGR, ZID, CMH APP CON					
<u>FLIGHT CHECKED BY</u>		<u>OFFICE</u>	<u>DATE</u>		
SCOTT WIEBE		FICO	9/16/18		
<u>DEVELOPED BY</u>		<u>OFFICE</u>	<u>DATE</u>		
IVAN BLANCO		AJV-5432	07/18/2018		
<u>APPROVED BY</u>		<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>	
PATRICK MULQUEEN		AJV-5430		MANAGER	



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCEV
RUNWAY	RW36
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W36A
LTP/FTP LATITUDE	394122.4945N
LTP/FTP LONGITUDE	0850751.2555W
LTP/FTP ELLIPSOIDAL HEIGHT	+02288
FPAP LATITUDE	394251.6635N
FPAP LONGITUDE	0850750.1860W
THRESHOLD CROSSING HEIGHT (TCH)	00045.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0768
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 CRC REMAINDER	 17A16626

ADDITIONAL PATH POINT RECORD INFORMATION

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



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> HUTCHINSON RGNL	<u>AIRPORT ID</u> KHUT	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 4	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> HUTCHINSON	<u>STATE</u> KS
<u>AIRPORT ELEVATION</u> 1543	<u>TDZE</u> 1522	<u>SUPERSEDED</u> RNAV (GPS) RWY 4	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 12/07/2017	<u>MAG VAR</u> 4E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
HUT VOR/DME		IZAGI		TF	FO	2.00	218.54	7.16	3400
ICT VORTAC		KUHCU		TF	FB	2.00	252.49	16.00	3600
HARAN	IAF	IZAGI	NOPT	TF	FB	1.00	123.89	33.50	3400
WIPET	IAF	IZAGI	NOPT	TF	FB	1.00	055.40	14.36	3400
KUHCU	IAF	IZAGI	NOPT	TF	FB	1.00	332.29	14.83	3400
IZAGI	IF/IAF	ETISE		TF	FB	1.00	038.31	7.25	3200
ETISE	FAF	RW04	MAP	TF	FO	0.30	038.38	5.15	
RW04	MAP	1722 MSL		CA			038.38		
1722 MSL		SAYAN		DF	FO	1.00			3200

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW04

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3200 DIRECT SAYAN AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD SW IZAGI, RT, 038.31 INBOUND, 3400 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 038.38FAF: ETISEDIST FAF TO MAP: 5.15DIST FAF TO THLD: 5.15
4. MIN ALT: IZAGI 3400, ETISE 3200
5. DIST TO THLD FROM OM:MM:IM:150 HAT:200 HAT: 0.50GS ANT:
6. MIN GP INCPT: 3200GP ALT AT FAF : ETISE 3200OM:MM:IM:
7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 45.0
8. MSA FROM: RW04 4000

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C OR ABOVE 54C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON HUT VOR/DME AIRWAY RADIALS 128 CW 292.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON ICT VORTAC AIRWAY RADIALS 212 CW 305.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.37 NM TO RW04*
*LNAV ONLY
WAAS CHANNEL #56420
REFERENCE PATH ID: W04A
CHART FAS OBST: 1743 ELEVATOR 380309N/0975311W.
HOLD NE, RT, 218.54 INBOUND
LTP HAE: 434.2 M

MINIMUMS:

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

ALTERNATE: NA

☐

 STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	1722	1	200	1722	1	200	1722	1	200		NA				
LNAV/VNAV DA	2064	1 5/8	542	2064	1 5/8	542	2064	1 5/8	542		NA				
LNAV MDA	2000	1	478	2000	1	478	2000	1 3/8	478		NA				
CIRCLING	2080	1	537	2080	1	537	2200	1 3/4	657		NA				



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>
HUTCHINSON RGNL	KHUT	RNAV (GPS) RWY 4	1A	HUTCHINSON	KS

CHANGES - REASONS

1. LPV VISIBILITY INCREASED FROM 3/4 TO 1 ALL CATS - PER ACE AIRPORTS DIVISION REQUEST. (CANCELS FDC 8/1204)
2. LINE 2: ADDED "MAX 6000" - MAXIMUM HOLDING ALTITUDE REQUIRED IAW 8260.19H 8-6-7.
3. ADDED "20:1 IS CLEAR" - IAW CURRENT DOCUMENTATION POLICY.
4. CHANGED NOTE FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C (0F) OR ABOVE 54C (130F)" TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C OR ABOVE 54C" - IAW 8260.19H 8-6-9, FAHRENHEIT IS NO LONGER REQUIRED ON THIS NOTE.
5. ADDED PBN REQUIREMENTS NOTE: "RNP APCH" AND DELETED NOTE "DME/DME RNP-0.3 NA." - IAW 8260.19H 8-6-8.
6. DELETED "CIRCLING TO RWY 22 NA AT NIGHT" NOTE. - RWY 22 CIRCLING 20:1 SURFACE IS CLEAR.



COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZKC, ICT APCH CON, HUT ATCT, AMGR

FLIGHT CHECKED BY

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

DEVELOPED BY

LEO PALMER
Digitally signed by
LEO PALMER
Sep 12, 2018

APPROVED BY

JULIE MORGAN

OFFICE

OFFICE

AJV-5421

OFFICE

AJV-5420

DATE

DATE

09/10/2018

DATE

Digitally signed by
ROBERT G HAMILTON
Sep 14, 2018

Digitally signed by
ROBERT G HAMILTON
Sep 14, 2018

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KHUT
RUNWAY	RW04
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W04A
LTP/FTP LATITUDE	380342.2740N
LTP/FTP LONGITUDE	0975135.6670W
LTP/FTP ELLIPSOIDAL HEIGHT	+04342
FPAP LATITUDE	380448.1065N
FPAP LONGITUDE	0975019.5340W
THRESHOLD CROSSING HEIGHT (TCH)	00045.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1408
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	AC3BF258
<u>ADDITIONAL PATH POINT RECORD INFORMATION</u>	
ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04622
FPAP ORTHOMETRIC HEIGHT	+04622



FEDERAL AVIATION ADMINISTRATION
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 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> HUTCHINSON RGNL	<u>AIRPORT ID</u> KHUT	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> HUTCHINSON	<u>STATE</u> KS
<u>AIRPORT ELEVATION</u> 1543	<u>TDZE</u> 1521	<u>SUPERSEDED</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 12/07/2017	<u>MAG VAR</u> 4E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2020

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
WIPET		DEEZE		TF	FB	2.00	082.87	17.38	3600
ICT VORTAC		AHRJY		TF	FB	2.00	293.81	9.25	3600
HUT VOR/DME		ARLTT		TF	FO	2.00	150.73	9.40	3600
DEEZE	IAF	ARLTT	NOPT	TF	FB	1.00	046.95	5.00	3600
AHRJY	IAF	ARLTT	NOPT	TF	FB	1.00	293.06	5.00	3600
ARLTT	IF/IAF	GGRAF		TF	FB	1.00	353.24	7.10	3200
GGRAF	FAF	RW35	MAP	TF	FO	0.30	353.25	5.14	
RW35	MAP	1721 MSL		CA			353.25		
1721 MSL		DDOEE		DF	FO	1.00			3600

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW35

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3600 DIRECT DDOEE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S ARLTT, RT, 353.24 INBOUND, 3600 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 353.25FAF: GGRAFDIST FAF TO MAP: 5.14DIST FAF TO THLD: 5.14

4. MIN ALT: ARLTT 3600, GGRAF 3200

5. DIST TO THLD FROM OM:MM:IM:150 HAT:200 HAT: 0.50GS ANT:

6. MIN GP INCPT: 3200GP ALT AT FAF : GGRAF 3200OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 45.0

8. MSA FROM: RW35 4000

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C OR ABOVE 54C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON ICT VORTAC AIRWAY RADIALS 212 CW 007.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON HUT VOR/DME AIRWAY RADIALS 074 CW 230.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.37 NM TO RW35*
*LNAV ONLY
WAAS CHANNEL #65741
REFERENCE PATH ID: W35A
FAS OBST: 1735 AAO 375812N/0975226W.
HOLD N, RT, 173.24 INBOUND
LTP HAE: 434.6 M

MINIMUMS:

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

ALTERNATE: NA

☐

 STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	1721	1	200	1721	1	200	1721	1	200		NA				
LNAV/VNAV DA	1887	1	366	1887	1	366	1887	1	366		NA				
LNAV MDA	2000	1	479	2000	1	479	2000	1 3/8	479		NA				
CIRCLING	2080	1	537	2080	1	537	2200	1 3/4	657		NA				



CHANGES - REASONS

- 1. LPV VISIBILITY INCREASED FROM 3/4 TO 1 ALL CATS - PER ACE AIRPORTS DIVISION REQUEST. (CANCELS FDC 8/1204)
- 2. LINE 2: ADDED "MAX 6000" - MAXIMUM HOLDING ALTITUDE REQUIRED IAW 8260.19H 8-6-7.
- 3. ADDED "20:1 IS CLEAR" - IAW CURRENT DOCUMENTATION POLICY.
- 4. CHANGED NOTE FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C (0F) OR ABOVE 54C (130F)." TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C OR ABOVE 54C." - IAW 8260.19H 8-6-9, FAHRENHEIT IS NO LONGER REQUIRED ON THIS NOTE.
- 5. ADDED PBN REQUIREMENTS NOTE: "RNP APCH" AND DELETED NOTE "DME/DME RNP-0.3 NA." - IAW 8260.19H 8-6-8.
- 6. DELETED "CIRCLING TO RWY 22 NA AT NIGHT" NOTE - RWY 22 CIRCLING 20:1 SURFACE IS CLEAR.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: KC, ICT APP CON, HUT ATCT, AMGR

FLIGHT CHECKED BY

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

DEVELOPED BY

LEO PALMER
Digitally signed by
LEO PALMER
Sep 10, 2018

APPROVED BY

JULIE MORGAN

OFFICE

OFFICE

AJV-5421

OFFICE

AJV-5420

DATE

DATE

09/10/2018

DATE

Digitally signed by
ROBERT G HAMILTON
Sep 14, 2018

Digitally signed by
ROBERT G HAMILTON **TITLE**
MANAGER
Sep 14, 2018



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KHUT
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	380332.6670N
LTP/FTP LONGITUDE	0975143.5270W
LTP/FTP ELLIPSOIDAL HEIGHT	+04346
FPAP LATITUDE	380501.7620N
FPAP LONGITUDE	0975148.9395W
THRESHOLD CROSSING HEIGHT (TCH)	00045.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1528
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	07E086A3

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04627
FPAP ORTHOMETRIC HEIGHT	+04627



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> KINGMAN AIRPORT - CLYDE CESSNA FIELD	<u>AIRPORT ID</u> K9K8	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 18	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> KINGMAN	<u>STATE</u> KS
<u>AIRPORT ELEVATION</u> 1607	<u>TDZE</u> 1599	<u>SUPERSEDED</u> RNAV (GPS) RWY 18	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 09/13/2018	<u>MAG VAR</u> 6E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2005

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
HUT VOR/DME		UGAWU		TF	FO	2.00	213.67	11.59	4000
ICT VORTAC		CALOR		TF	FB	2.00	280.23	19.33	4000
WIPET		DACEF		TF	FB	2.00	038.27	6.19	4000
CALOR	IAF	UGAWU	NOPT	TF	FB	1.00	272.26	5.55	3300
DACEF	IAF	UGAWU	NOPT	TF	FB	1.00	092.12	5.55	3300
UGAWU	IF/IAF	UNIKY		TF	FB	1.00	182.19	5.94	3100
UNIKY	FAF	WOBEB/1.65 NM TO RW18		TF	FB	0.30	182.18	2.95	
WOBEB/1.65 NM TO RW18		RW18	MAP	TF	FO	0.30	182.18	1.65	
RW18	MAP	1920 MSL		CA			182.18		
1920 MSL		BIRCA		DF	FO	1.00			3600

MISSED APPROACH

MAP:

LP: RW18
 LNAV: RW18

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3600 DIRECT BIRCA AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N UGAWU, RT, 182.19 INBOUND, 3300 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 182.18FAF: UNIKYDIST FAF TO MAP: 4.60DIST FAF TO THLD: 4.60

4. MIN ALT:UGAWU 3300, UNIKY 3100, WOBEB/1.65 NM TO RW18 2160

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

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

7. GP ANGLE:34:1: IS NOT CLEAR20:1: IS CLEARTCH:

8. MSA FROM:RW18 4000

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 18 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON HUT VOR/DME AIRWAY RADIALS 149 CW 292.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON ICT VORTAC AIRWAY RADIALS 212 CW 007.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT WIPET ON V280 SOUTHWEST BOUND.
CHART NOTE: CIRCLING RWY 11, 29 NA AT NIGHT.
CHART SPEED ICON IN PLANVIEW AT CALOR: MAX 210 KIAS.
CHART SPEED ICON IN PLANVIEW AT DACEF: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
UNIKY TO RW18: 3.00/36.
CHART VDP AT 0.89 NM TO RW18
WAAS CHANNEL #77742
REFERENCE PATH ID: W18A
CHART FAS OBST: 1667 TREE 374102N/0980707W, 1719 TREE 374021N/0980644W.
HOLD S, RT, 002.16 INBOUND
LTP HAE: 459.2 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LP MDA	1920	1	321	1920	1	321	1920	1	321		NA				
LNAV MDA	1980	1	381	1980	1	381	1980	1 1/8	381		NA				
CIRCLING	2040	1	433	2060	1	453	2160	1 1/2	553		NA				

CHANGES - REASONS

1. CHANGED TERMINAL ROUTE UNIKY TO WOBEB/1.65 NM TO RWY18 PATH TERMINATOR CODE FROM "FO" TO "FB" - PREVIOUS AMENDMENT CODED INCORRECTLY AS A FLY OVER FIX.
2. CHANGED TERMIAL ROUTE WOBEB/1.65 NM TO RW18 TO RW18 PATH TERMINATOR CODE FROM "FB" TO "FO" - PREVIOUS AMENDMENT CODED INCORRECTLY AS A FLY BY FIX.



AIRPORT

KINGMAN AIRPORT - CLYDE CESSNA
FIELD

AIRPORT ID

K9K8

PROCEDURE NAME

RNAV (GPS) RWY 18

ORIGINAL/AMENDMENT

1A

CITY

KINGMAN

STATE

KS

COORDINATED WITH:

A4A ☐ **ALPA** ☐ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZKC, ICT APCH CON, ICT FSS, ARPT MGR, KS STATE AERO

FLIGHT CHECKED BY

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

DEVELOPED BY

DEZ SILAGYI (DARREN HOOPER)

Digitally signed by
JULIE A MORGAN
Sep 17, 2018

OFFICE

Digitally signed by
JULIE A MORGAN
Sep 17, 2018

DATE

OFFICE

AJV-5421

DATE

08/24/2018

APPROVED BY

JULIE MORGAN

Digitally signed by
JULIE A MORGAN
Sep 17, 2018

OFFICE

AJV-5420

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	9K8
RUNWAY	RW18
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W18A
LTP/FTP LATITUDE	374026.1210N
LTP/FTP LONGITUDE	0980716.7575W
LTP/FTP ELLIPSOIDAL HEIGHT	+04592
FPAP LATITUDE	373857.8240N
FPAP LONGITUDE	0980732.7130W
THRESHOLD CROSSING HEIGHT (TCH)	00036.4
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)	0.0
CRC REMAINDER	ACC93D35
<u>ADDITIONAL PATH POINT RECORD INFORMATION</u>	
ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04873
FPAP ORTHOMETRIC HEIGHT	+04873



**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>
NEODESHA, KS	NEODESHA MUNI	3 JANUARY 2019	ORIG

TAKEOFF MINIMUMS:
STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:
NOTE: RWY 02, TREE 87 FT FROM DER, 147 FT RIGHT OF CENTERLINE, 60 FT AGL/844 FT MSL.
TERRAIN 87 FT FROM DER, 147 FT RIGHT OF CENTERLINE, 847 FT MSL.
TREES BEGINNING 305 FT FROM DER, 501 FT RIGHT OF CENTERLINE, UP TO 60 FT AGL/900 FT MSL.
TREES BEGINNING 465 FT FROM DER, 408 FT RIGHT OF CENTERLINE, UP TO 60 FT AGL/904 FT MSL.
TREES, TRANSMISSION LINES BEGINNING 1477 FT FROM DER, 21 FT LEFT OF CENTERLINE, UP TO 60 FT AGL/908 FT MSL.
TREES BEGINNING 2749 FT FROM DER, 834 FT LEFT OF CENTERLINE, UP TO 60 FT AGL/910 FT MSL.

NOTE: RWY 20, TREES BEGINNING 282 FT FROM DER, 17 FT RIGHT OF CENTERLINE, UP TO 60 FT AGL/880 FT MSL.
TREES BEGINNING 387 FT FROM DER, 58 FT LEFT OF CENTERLINE, UP TO 60 FT AGL/880 FT MSL.
TRANSMISSION LINE 1402 FT FROM DER, 213 FT RIGHT OF CENTERLINE, 60 FT AGL/890 FT MSL.

CONTROLLING OBSTACLES:

REMARKS:
NON-SURVEYED VEGETATION: 60 FT PER FPT.

FLIGHT INSPECTED BY: *Digitally signed by*
JOEL LAPLANTE **ROBERT G HAMILTON**
Sep 21, 2018

OFFICE SYMBOL: **DATE:**
FICO 9/17/18

DEVELOPED BY: *Digitally signed by*
JOSHUA LEETE **ROBERT G HAMILTON**
Sep 21, 2018

OFFICE SYMBOL: **DATE:**
AJV-5422 07/19/2018

APPROVED BY: *Digitally signed by*
JULIE MORGAN **ROBERT G HAMILTON**
Sep 21, 2018

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:
CENTRAL FPT, KZKC, AMGR

CHANGES - REASONS:



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
NDB STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.27

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

<u>AIRPORT</u> SCOTT CITY MUNI	<u>AIRPORT ID</u> KTQK	<u>PROCEDURE NAME</u> NDB RWY 35	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> SCOTT CITY	<u>STATE</u> KS
<u>AIRPORT ELEVATION</u> 2963	<u>TDZE</u> 2963	<u>SUPERSEDED</u> NDB RWY 35	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 09/28/2006	<u>MAG VAR</u> <u>EPOCH YEAR</u>
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u> CANCEL	

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>

PROCEDURE CANCELLED EFFECTIVE 3 JANUARY 2019

MISSED APPROACH

MAP:

MISSED APPROACH INSTRUCTIONS:

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)

2.

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

4. MIN ALT:

8. MSA FROM:

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

MINIMUMS:

QUALITY
41
CHECKED

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

ALTERNATE: NA ☐

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA

CHANGES - REASONS

COORDINATED WITH:

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

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY

LONNIE EVERHART (STEVEN DOUGHERTY)

Digitally signed by

ROBERT G HAMILTON

Sep 25, 2018

OFFICE

AJV-5400

DATE

08/29/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by

ROBERT G HAMILTON

Sep 25, 2018

OFFICE

AJV-5400

DATE

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

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

TAA

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

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
ELOSE	IF/IAF	DAPKE		TF	FB	1.00	172.82	5.00	5200
DAPKE	FAF	RW17	MAP	TF	FO	0.30	172.82	4.89	
RW17	MAP	4010 MSL		CA			172.82		
4010 MSL		CESTO		DF	FO				6000

MISSED APPROACH

MAP:

LNAV: RW17

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 6000 DIRECT CESTO AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

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

3. FAC: 172.82

FAF: DAPKE

DIST FAF TO MAP: 4.89

DIST FAF TO THLD: 4.89

4. MIN ALT: ELOSE 6000, DAPKE 5200

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:

6. MIN GP INCPT:

GP ALT AT FAF :

OM:

MM:

IM:

7. GP ANGLE:

34:1: IS NOT CLEAR

20:1: IS NOT CLEAR

TCH:

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

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

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART FAS OBST: 3991 TWR 382837N/1014455W.
HOLD S, RT, 352.82 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	4260	1	654	4260	1	654	4260	1 7/8	654		NA				
CIRCLING	4300	1	690	4300	1	690	4300	2	690		NA				

CHANGES - REASONS

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



COORDINATED WITH:

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

FLIGHT CHECKED BY

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

DEVELOPED BY

JAMES ROGERS

Digitally signed by
JAMES ROGERS
Sep 20, 2018

APPROVED BY

JULIE MORGAN

Digitally signed by
DAVID DANNER
Sep 21, 2018

Digitally signed by
DAVID DANNER
Sep 21, 2018

OFFICE
DATE

OFFICE
AJV-5421
DATE
08/28/2018

OFFICE
AJV-5420
DATE
TITLE
MANAGER



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.23

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<u>AIRPORT</u> OWENSBORO-DAVISS COUNTY RGNL	<u>AIRPORT ID</u> KOWB	<u>PROCEDURE NAME</u> VOR RWY 36	<u>ORIGINAL/AMENDMENT</u> 19B	<u>CITY</u> OWENSBORO	<u>STATE</u> KY
<u>AIRPORT ELEVATION</u> 407	<u>TDZE</u> 401	<u>SUPERSEDED</u> VOR RWY 36	<u>ORIGINAL/AMENDMENT</u> 19A	<u>DATED</u> 03/29/2018	<u>MAG VAR</u> 4W
<u>FACILITY</u> OWB	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2015

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
PXV VORTAC		OWB VOR/DME					108.15	30.44	2500
CCT VORTAC		OWB VOR/DME					013.13	22.14	2500

MISSED APPROACH

MAP:

OWB VOR/DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2500 THEN LEFT TURN DIRECT OWB VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT R **SIDE OF COURSE** 184.58 **OUTBOUND** 2100 **FT WITHIN** 10 **MILES OF** OWB VOR/DME (IAF)

2.

3. **FAC:** 004.58 **FAF:** **DIST FAF TO MAP:** **DIST FAF TO THLD:**

4. **MIN ALT:** BIYAC/OWB 3.10 DME 1140*

8. **MSA FROM:** OWB VOR/DME 2600

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-36 CAT C AND D VISIBILITY TO 2 SM AND BIYAC FIX MINIMUMS S-36 CAT C AND D VISIBILITY TO 1 1/8 SM.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:



CHART MAXIMUM 6000 AT OWB VOR/DME.
BIYAC TO RW36: 3.06/56.
CHART VDP AT 2.14 DME
DISTANCE VDP TO THLD 1.15 NM
CHART FAS OBST: 555 TOWER 374430N/0870846W.
FAC CROSSES RWY C/L EXTENDED 3009 FT FROM THLD.
HOLD N, RT, 184.58 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/4

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-36	1140	1/2	739	1140	1/2	739	1140	1 5/8	739	1140	1 5/8	739			
CIRCLING	1140	1	733	1140	1	733	1140	2	733	1140	2 1/4	733			
BIYAC FIX MINIMUMS															
S-36	820	1/2	419	820	1/2	419	820	3/4	419	820	3/4	419			
CIRCLING	860	1	453	880	1	473	1120	2	713	1140	2 1/4	733			

CHANGES - REASONS

1. CHANGED BIYAC FIX MINIMUMS: S-36 MDA 780/379 HAT TO 820/419 HAT ALL CATS. - NEW CONTROLLING OBSTACLE IN STEP-DOWN FINAL.
2. CHANGED VDP FROM 2.02 TO 2.14. - NEW MINIMUMS IN THE STEP-DOWN FINAL SEGMENT.
3. CHANGED VDP DISTANCE TO THLD FROM 1.03 MILES TO 1.15 NM. - NEW MINIMUMS IN THE STEP-DOWN FINAL SEGMENT.
4. CHARTED FAS OBST CHANGED FROM 519 ELEV 374229N/0870932W TO 555 TOWER 374430N/0870846W. - NEW OBSTACLE DATA. ORDER 8260.3C 2-6-4. A.
5. CHANGED CHART NOTE FROM "FOR INOPERATIVE MALSR, INCREASE S-36 CATS C AND D VISIBILITY TO 2 MILE AND BIYAC FIX MINIMUMS S-36 CATS C AND D TO 1 1/8 MILE" TO "FOR INOPERATIVE ALS, INCREASE S-36 CAT C AND D VISIBILITY TO 2 SM AND BIYAC FIX MINIMUMS S-36 CAT C AND D VISIBILITY TO 1 1/8 SM". - AJV VALIDATED VIS CHECK (NEW INOP TABLE).
6. REMOVED CHART NOTE FROM "FOR INOPERATIVE MALSR WITH EVANSVILLE ALTIMETER SETTING, INCREASE S-36 CAT B VISIBILITY TO 1 1/4 MILE AND CATS C AND D VISIBILITY - TO 2 1/2 MILE; INCREASE BIYAC FIX MINIMUMS S-36 CATS C AND D VISIBILITY 1/8 MILE" - NOTE NO LONGER REQUIRED NEW DATA MOVED TO CONTINGENCY NOTE.
7. ADDED CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). - ORDER 8260.19H 8-6-9. M. (2).
8. CHANGED S-36 MDA/HAT FROM 1100/699 TO 1140/739 ALL CATS - DESIGN VDA AT OR ABOVE THE VGSI. ORDER 8260.3C 2-6-4. A.
9. CHANGED CIRCLING MDA/HAA CHANGED FROM 1100/693 TO 1140/733 ALL CATS. - CHANGES TO S-36 MDA.
10. CHANGED S-36 BIYAC FIX MINIMUMS MDA/HAT FROM 780/379 TO 820/419. - NEW CONTROLLING OBSTACLE.

NOTE: ALL CHANGES FROM FDC P-NOTAM 8/0025 HAVE BEEN INCORPORATED INTO THIS AMENDMENT.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZID, EVV APP CON, OWB ATCT, OWB AMGR
Digitally signed by

FLIGHT CHECKED BY ADOLFO D URRUTIA
JEFFREY ECKMAN Sep 26, 2018

DEVELOPED BY
ADOLFO URRUTIA (BRETT E. CANNON)
Digitally signed by
WARDELL HENNING
Aug 23, 2018

APPROVED BY
PATRICK MULQUEEN
Digitally signed by
ADOLFO D URRUTIA
Sep 26, 2018

OFFICE DATE
FICO 9/20/18

OFFICE DATE
AJV-5432 07/11/2018

OFFICE DATE
AJV-5430

TITLE
MANAGER
QUALITY
24
CHECKED

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
NDB STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.27

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
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<u>AIRPORT</u> ALLEN PARISH	<u>AIRPORT ID</u> KACP	<u>PROCEDURE NAME</u> NDB RWY 36	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> OAKDALE	<u>STATE</u> LA	
<u>AIRPORT ELEVATION</u> 107	<u>TDZE</u> 107	<u>SUPERSEDED</u> NDB RWY 36	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>DATED</u> 01/18/2001	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u> CANCEL		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>

PROCEDURE CANCELLED EFFECTIVE 01/03/2019

MISSED APPROACH

MAP:

MISSED APPROACH INSTRUCTIONS:

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)

2.

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

4. MIN ALT:

8. MSA FROM:

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

MINIMUMS:



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

ALTERNATE: NA ☐

<u>CATEGORY:</u>	<u>A</u>			<u>B</u>			<u>C</u>			<u>D</u>			<u>E</u>		
<u>FINAL TYPE</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>

CHANGES - REASONS

COORDINATED WITH:

A4A ☐ ALPA ☐ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZHU, FTW FPO, POE APP CON, AMGR

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY

LONNIE EVERHART (DEAN GRACEY)

Digitally signed by

DEZ SILAGYI

Sep 11, 2018

OFFICE

AJV-5400

DATE

08/14/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by

DEZ SILAGYI

Sep 11, 2018

OFFICE

AJV-5400

DATE

TITLE

MANAGER



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

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
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CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
BALDWIN, MI	BALDWIN MUNI	3 JANUARY 2019	1

TAKEOFF MINIMUMS:

RWY 5, 23, NA-ENVIRONMENTAL.

RWY 9, 27, STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 9: VEHICLES ON ROAD BEGINNING ABEAM DER, 99 FT LEFT OF CENTERLINE, UP TO 15 FT AGL/844 FT MSL. TREES BEGINNING ABEAM DER, 392 FT LEFT OF CENTERLINE, UP TO 60 FT AGL/889 FT MSL. TREES BEGINNING ABEAM DER, 390 FT RIGHT OF CENTERLINE, UP TO 60 FT AGL/879 FT MSL. TREES BEGINNING 519 FT FROM DER, 343 FEET LEFT OF CENTERLINE, UP TO 60 FT AGL/899 FT MSL. TREES BEGINNING 1187 FT FROM DER, ON CENTERLINE AND LEFT AND RIGHT OF CENTERLINE, UP TO 60 FT AGL/899 FT MSL.

NOTE: RWY 27: VEHICLES ON ROAD BEGINNING 194 FT FROM DER, 372 FT LEFT OF CENTERLINE, UP TO 15 FT AGL/844 FT MSL. VEHICLES ON ROAD BEGINNING 757 FT FROM DER, 619 FT RIGHT OF CENTERLINE, UP TO 15 FT AGL/844 FT MSL. TREES BEGINNING 1569 FT FROM DER, ON CENTERLINE AND LEFT AND RIGHT OF CENTERLINE, UP TO 60 FT AGL/879 FT MSL. TREES BEGINNING 3078 FT FROM DER, ON CENTERLINE, AND LEFT AND RIGHT OF CENTERLINE, UP TO 60 FT AGL/899 FT MSL.

CONTROLLING OBSTACLES:



**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>
BALDWIN, MI	BALDWIN MUNI	3 JANUARY 2019	1

REMARKS:

1. OBSTACLE SURVEY DOES NOT EXIST FOR RWY 9 AND RWY 27. 60 FT WORST CASE VEGETATION USED TO STANDARDIZE WITH RNAV (GPS)-A PUBLISHED AT AIRPORT.
3. RWY 9 AND RWY 27 TAKEOFF OBSTACLES NOTES COMPILED MANUALLY (AJV DEPARTURE GROUPER TOOL NOT USED).

FLIGHT INSPECTED BY:	<i>Digitally signed by</i>	OFFICE SYMBOL:	DATE:
JEFFREY W HARING	ROBERT G HAMILTON	FICO	09/11/2018
	Sep 20, 2018		

DEVELOPED BY:	<i>Digitally signed by</i>	OFFICE SYMBOL:	DATE:
PETER GUIMOND	PETER R GUIMOND	AJV-5422	08/15/2018
	Aug 15, 2018		

APPROVED BY:	<i>Digitally signed by</i>	OFFICE SYMBOL:	DATE:
JULIE MORGAN	ROBERT G HAMILTON	AJV-5420	
	Sep 20, 2018		

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

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

OTHER:

ZMP, AMGR.

CHANGES - REASONS:

1. AMENDED RWY 5 AND RWY 23 TAKEOFF MINIMUMS FROM 300-1 TO NA - ENVIRONMENTAL - IN ACCORDANCE WITH UNPAVED RUNWAYS SOP (1.2), TURF RUNWAY DOES NOT HAVE RAPT APPROVAL FOR IFR OPERATIONS.
2. AMENDED RWY 9 AND RWY 27 TAKEOFF MINIMUMS FROM 300-1 TO STANDARD - 40:1 SURFACE CLEAR OF PENETRATIONS EXCEPT THOSE IDENTIFIED AS LOW, CLOSE-IN.
3. DELETED ALL TAKEOFF CONTROLLING OBSTACLES - NO LONGER REQUIRED, 40:1 SURFACE CLEAR OF PENETRATIONS EXCEPT THOSE IDENTIFIED AS LOW, CLOSE-IN.
4. ADDED TAKEOFF OBSTACLE NOTES FOR RWY 9 AND RWY 27 - IN ACCORDANCE WITH FAAO 8260.46F, APPENDIX D, PARA 9.

QUALITY
3
CHECKED

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

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<u>AIRPORT</u> BEAVER ISLAND	<u>AIRPORT ID</u> KSJX	<u>PROCEDURE NAME</u> NDB RWY 27	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> BEAVER ISLAND	<u>STATE</u> MI	
<u>AIRPORT ELEVATION</u> 669	<u>TDZE</u> 669	<u>SUPERSEDED</u> NDB RWY 27	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 07/31/2008	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u> CANCEL		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>

PROCEDURE CANCELLED EFFECTIVE 01/03/2019

MISSED APPROACH

MAP:

MISSED APPROACH INSTRUCTIONS:

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)

2.

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

4. MIN ALT:

8. MSA FROM:

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

MINIMUMS:



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

ALTERNATE: NA ☐

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA

CHANGES - REASONS

COORDINATED WITH:

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

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY
LONNIE EVERHART (KELLY CARLSON)

Digitally signed by
ROBERT G HAMILTON
Aug 23, 2018

OFFICE
AJV-5400

DATE
07/26/2018

APPROVED BY
LONNIE EVERHART

Digitally signed by
ROBERT G HAMILTON
Aug 23, 2018

OFFICE
AJV-5400

DATE

TITLE
MANAGER



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR/DME STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.23

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<u>AIRPORT</u> FRANKFORT DOW MEMORIAL FIELD	<u>AIRPORT ID</u> KFKS	<u>PROCEDURE NAME</u> VOR/DME-A	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> FRANKFORT	<u>STATE</u> MI	
<u>AIRPORT ELEVATION</u> 633	<u>TDZE</u>	<u>SUPERSEDED</u> VOR/DME-A	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 10/25/2007	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> 04/30/2015	<u>CANCEL/SUSPEND</u> CANCEL		

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE

PROCEDURE CANCELLED EFFECTIVE 3 JANUARY 2019

MISSED APPROACH

MAP:

MISSED APPROACH INSTRUCTIONS:

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)
2.				
3. FAC:	FAF:	DIST FAF TO MAP:	DIST FAF TO THLD:	
4. MIN ALT:				
8. MSA FROM:				

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

MINIMUMS:

QUALITY
31
CHECKED

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

ALTERNATE: NA ☐

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA

CHANGES - REASONS

COORDINATED WITH:

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

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY

JASON KRETSCHMER

Digitally signed by
ROBERT G HAMILTON
Sep 11, 2018

OFFICE

AJV-5422

DATE

08/16/2018

APPROVED BY

JULIE A. MORGAN

Digitally signed by
ROBERT G HAMILTON
Sep 11, 2018

OFFICE

AJV-5420

DATE

TITLE
MANAGER



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.23

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<u>AIRPORT</u> SCHOOLCRAFT COUNTY	<u>AIRPORT ID</u> KISQ	<u>PROCEDURE NAME</u> VOR RWY 28	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> MANISTIQUE	<u>STATE</u> MI	
<u>AIRPORT ELEVATION</u> 684	<u>TDZE</u> 682	<u>SUPERSEDED</u> VOR RWY 28	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 05/03/2012	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> 05/28/2015	<u>CANCEL/SUSPEND</u> CANCEL		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>

PROCEDURE CANCELLED EFFECTIVE 3 JANUARY 2019

MISSED APPROACH

MAP:

MISSED APPROACH INSTRUCTIONS:

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)

2.

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

4. MIN ALT:

8. MSA FROM:

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

MINIMUMS:

QUALITY
41
CHECKED

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

ALTERNATE: NA ☐

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA

CHANGES - REASONS

COORDINATED WITH:

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

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY
LONNIE EVERHART (KELLY CARLSON)

Digitally signed by
DAVID DANNER
Sep 26, 2018

OFFICE
AJV-5400

DATE
07/26/2018

APPROVED BY
LONNIE EVERHART

Digitally signed by
DAVID DANNER
Sep 26, 2018

OFFICE
AJV-5400

DATE

TITLE
MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
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<u>AIRPORT</u> JERRY TYLER MEMORIAL	<u>AIRPORT ID</u> K3TR	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 33	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> NILES	<u>STATE</u> MI	
<u>AIRPORT ELEVATION</u> 750	<u>TDZE</u> 750	<u>SUPERSEDED</u> RNAV (GPS) RWY 33	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 04/02/2015	<u>MAG VAR</u> 5W	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
JJANN		FEVAX		TF	FO	1.00	197.80	18.70	3500
GIJ VORTAC		FEVAX		TF	FO	1.00	123.29	12.37	3500
AYUYI	IAF	FEVAX	NOPT	TF	FB	1.00	262.39	13.72	3500
FEVAX	IF/IAF	HEGUD		TF	FB	1.00	331.03	6.22	2500
HEGUD	FAF	RW33	MAP	TF	FO	0.30	330.97	5.37	
RW33	MAP	1150 MSL		CA			330.97		
1150 MSL		JJANN		DF	FO				3000

MISSED APPROACH

MAP:

LNAV: RW33

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 3000 DIRECT JJANN AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SE FEVAX, RT, 331.03 INBOUND, 3500 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 330.97

FAF: HEGUD

DIST FAF TO MAP: 5.37

DIST FAF TO THLD: 5.37

4. MIN ALT: FEVAX 3500, HEGUD 2500

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:

6. MIN GP INCPT:

GP ALT AT FAF :

OM:

MM:

IM:

7. GP ANGLE:

34:1: IS NOT CLEAR

20:1: IS NOT CLEAR

TCH:

8. MSA FROM: RW33 3000

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT JJANN ON V277 NORTHWEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON GIJ VORTAC AIRWAY RADIALS 075 CW 209.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT AYUYI ON V277 SOUTHEAST BOUND.
CHART NOTE: RWY 33 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: USE SOUTH BEND ALTIMETER SETTING; WHEN NOT RECEIVED, USE ELKHART ALTIMETER SETTING AND INCREASE ALL MDA 20 FEET AND ALL CAT C VISIBILITY 1/8 SM.

ADDITIONAL FLIGHT DATA:

CHART SOUTH BEND ASOS.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
FAS OBST: 1030 AAO 414601N/0861036W.
HOLD SW, RT, 050.37 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	1320	1	570	1320	1	570	1320	1 5/8	570		NA				
CIRCLING	1320	1	570	1320	1	570	1320	1 5/8	570		NA				

CHANGES - REASONS

1. ADD PBN REQUIREMENT NOTE: RNP APCH. - IAW 8260.19H PARA 8-6-8B(1)
2. DELETED DME /DME RNP-0.3 NOTE-NO LONGER REQUIRED.
3. REMOVED VDA - OBSTACLES
4. ADDED CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES - REMOVED VDA
5. REMOVED NOTE HEGUD TO RW33: 3.00/40 - REMOVED VDA
6. CHANGED PROCEDURE ENTRY RESTRICTION RADIALS FOR ARRIVALS AT GIJ VORTAC FROM "075 CW 138" TO "075 CW 209" - TURNS EXCEED 90 DEGREES.
8. RAISED INTERMEDIATE RNP FROM .5 TO 1 - NEW RNP REQUIREMENTS



<u>AIRPORT</u> JERRY TYLER MEMORIAL	<u>AIRPORT ID</u> K3TR	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 33	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> NILES	<u>STATE</u> MI

COORDINATED WITH:

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

FLIGHT CHECKED BY

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

<u>DEVELOPED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>
ROSE BOONE	ROSE BOONE	DAVID DANNER	
	Sep 12, 2018	Sep 21, 2018	
<u>APPROVED BY</u>		<u>OFFICE</u>	<u>DATE</u>
JULIE MORGAN		AJV-5421	07/30/2018
		<i>Digitally signed by</i>	<u>TITLE</u>
		DAVID DANNER	MANAGER
		Sep 21, 2018	



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> PELLSTON RGNL AIRPORT OF EMMET COUNTY	<u>AIRPORT ID</u> KPLN	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 5	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> PELLSTON	<u>STATE</u> MI	
<u>AIRPORT ELEVATION</u> 721	<u>TDZE</u> 716	<u>SUPERSEDED</u> RNAV (GPS) RWY 5	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 09/15/2016	<u>MAG VAR</u> 6W	<u>EPOCH YEAR</u> 1985
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
GLR VOR/DME		LORIW		TF	FB	2.00	341.47	22.41	3200
LORIW	IAF	BAVDY	NOPT	TF	FB	1.00	324.79	5.45	3000
CIBDE	IAF	BAVDY	NOPT	TF	FB	1.00	140.48	5.00	3000
BAVDY	IF/IAF	DODAC		TF	FB	1.00	050.54	6.10	2800
DODAC	FAF	JILEL/3.00 NM TO RW05		TF	FB	0.30	050.61	3.30	
JILEL/3.00 NM TO RW05		RW05	MAP	TF	FO	0.30	050.61	3.00	
RW05	MAP	1121 MSL		CA			050.61		
1121 MSL		FUBUP		DF	FO	1.00			2400

MISSED APPROACH

MAP:

LNAV: RW05

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2400 DIRECT FUBUP AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD SW BAVDY, RT, 050.54 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 050.61FAF: DODACDIST FAF TO MAP: 6.30DIST FAF TO THLD: 6.30
4. MIN ALT:BAVDY 3000, DODAC 2800, JILEL/3.00 NM TO RW05 1720
5. DIST TO THLD FROM OM:MM:IM:150 HAT:GS ANT:
6. MIN GP INCPT:GP ALT AT FAF :OM:MM:IM:
7. GP ANGLE:34:1: IS NOT CLEAR20:1: IS NOT CLEARTCH:
8. MSA FROM:RW05 3200

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS A GLR VOR/DME ON V233 SOUTHBOUND.
CHART NOTE: STRAIGHT-IN AND CIRLING RWY 5 NA AT NIGHT.
CHART NOTE: RWY 5 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE HARBOR SPRINGS ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET, INCREASE LNAV CAT A VISIBILITY 1/4 SM.

ADDITIONAL FLIGHT DATA:

DODAC TO RW05: 3.05/48.
CHART FAS OBST: 1297 TREE 453214N/0845133W.
HOLD NE, RT, 230.83 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ CAT A, B 900-2, CAT C 900-2 1/2, CAT D 900-2 3/4, NA WHEN LOCAL WEATHER NOT AVAILABLE.

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	1560	1	844	1560	1 1/4	844	1560	2 1/2	844	1560	2 3/4	844			
CIRCLING	1560	11/4	839	1560	1 1/4	839	1560	2 1/2	839	1560	2 3/4	839			

CHANGES - REASONS

1. REMOVED FEEDER FROM DIPLE TO CIBDE - ISQ VOR MON PROJECT.
2. ADDED RNP APCH TO PBN EQUIPMENT REQUIRMENTS - 8260.19H, 8-6-9n.
3. REMOVED CHART NOTE: DME/DME RNP-0.3 NA - 8260.19H, 8-6-9n .
4. REMOVED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DIPLE VIA V74 NORTHWEST BOUND - ISQ VOR MON PROJECT.
5. ADDED MAX HOLDING ALTITUDE AT BAVDY TO LINE 2 OF 8260-3 - UPDATED TO CURRENT CRITERIA.



COORDINATED WITH:

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

FLIGHT CHECKED BY

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

DEVELOPED BY

LONNIE EVERHART (KELLY CARLSON)

APPROVED BY

LONNIE EVERHART

Digitally signed by

DAVID DANNER

Sep 28, 2018

Digitally signed by

DAVID DANNER

Sep 28, 2018

Digitally signed by
OFFICE
DAVID DANNER
Sep 28, 2018

OFFICE

AJV-5400

OFFICE

AJV-5400

DATE

DATE

07/30/2018

DATE

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> CHIPPEWA COUNTY INTL	<u>AIRPORT ID</u> KCIU	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 16	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> SAULT STE MARIE	<u>STATE</u> MI
<u>AIRPORT ELEVATION</u> 799	<u>TDZE</u> 799	<u>SUPERSEDED</u> RNAV (GPS) RWY 16	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 03/05/2015	<u>MAG VAR</u> 7W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2015

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
HITAL	IAF	JENOT		TF	FB	1.00	066.81	5.16	3000
CATGA	IAF	JENOT		TF	FB	1.00	250.71	6.89	3000
JENOT	IF	FATPA		TF	FB	1.00	156.89	6.04	2600
FATPA	FAF	RW16	MAP	TF	FO	0.30	156.94	5.39	
RW16	MAP	1068 MSL		CA			156.94		
1068 MSL		CAKRU		DF	FB				
CAKRU		PINES		TF	FO	1.00	209.15	8.99	3000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW16

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT CAKRU AND ON TRACK 209.15 TO PINES AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT JENOT

3. FAC: 156.94 FAF: FATPA DIST FAF TO MAP: 5.39 DIST FAF TO THLD: 5.39

4. MIN ALT: JENOT 3000, FATPA 2600

5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 269 HAT: 0.66 GS ANT:

6. MIN GP INCPT: 2600 GP ALT AT FAF : FATPA 2600 OM: MM: IM:

7. GP ANGLE: 3.00 34:1: IS CLEAR 20:1: IS CLEAR TCH: 58.0

8. MSA FROM: RW16 4000

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 54C.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV ALL CATS, LNAV/VNAV ALL CATS AND LNAV CATS A/B/C 1/2 MILE; INCREASE LNAV CAT D 1/4 MILE.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CATGA ON V300 SOUTHEAST BOUND.

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.14 NM TO RW16*
*LNAV ONLY
WAAS CHANNEL #69215
REFERENCE PATH ID: W16A
CHART FAS OBST: 959 TANK 461547N/0842805W.
HOLD SW, RT, 024.30 INBOUND
LTP HAE: 207.1 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	1068	1/2	269	1068	1/2	269	1068	1/2	269	1068	1/2	269			
LNAV/VNAV DA	1204	1	405	1204	1	405	1204	1	405	1204	1	405			
LNAV MDA	1220	1/2	421	1220	1/2	421	1220	3/4	421	1220	1	421			
CIRCLING	1260	1	461	1260	1	461	1260	1 1/2	461	1360	2	561			



CHANGES - REASONS

- 1. REMOVED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT HITAL VIA V316 WEST BOUND - AIRWAY NO LONGER EXISTS.
- 2. REINSTATED LPV MINIMUMS/FAS DATA - CALCULATIONS BROUGHT UP TO CRITERIA.
- 3. MOVED ALL BACKUP ALTIMETER SETTING NOTES TO BACK OF -9 - AWOS ON SERVICE A.
- 4. ADDED PBN REQUIREMENT NOTE: RNP APCH - IAW 8260.19H PARA 8-6-8B(1)
- 5. REMOVED NOTE DME/DME RNP-0.3 NOTE - NO LONGER REQUIRED.
- 6. UPDATED THE FPAP FROM 461405.7370N-0842736.9480W TO 461405.7360N-0842736.9485W AND CHANGED THE LENGTH OFFSET FROM 0522 TO 0560 IN FAS DATA - CORRECT LAT/LONGS AND CALCULATION
- 7. UPDATED LNAV/VNAV, LNAV AND CIRCLING ALL CATS CONTROLLING OBS TANK (26-000743) FROM 954 MSL TO 959 MSL PER DATABASE CHANGE. NO DA/MDA INCREASE.
- 8. REMOVED FAHRENHEIT TEMEPERATURE VALUES FROM THE "UNCOMPENSATED BARO-VNAV SYSTEMS" CHART NOTE.
- 9. UPDATED PLANVIEW NOTE FROM PROCEDURE NA FOR ARRIVAL AT CATGA VIA V300 SOUTHEAST BOUND TO PROCEDURE NA FOR ARRIVALS AT CATGA ON V300 SOUTHEAST BOUND IAW 8260.19H 8-2-5E.



<u>AIRPORT</u> CHIPPEWA COUNTY INTL	<u>AIRPORT ID</u> KCIU	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 16	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> SAULT STE MARIE	<u>STATE</u> MI
<u>COORDINATED WITH:</u>					
A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ <u>OTHER:</u> TORONTO CTR, ZMP, AMGR, ATA					
<u>FLIGHT CHECKED BY</u> ANTHONY D VALERA		Digitally signed by DAVID DANNER Oct 04, 2018	<u>OFFICE</u> FICO	<u>DATE</u> 9/29/18	
<u>DEVELOPED BY</u> ROSE BOONE		Digitally signed by ROSE BOONE Aug 29, 2018	<u>OFFICE</u> AJV-5421	<u>DATE</u> 07/12/2018	
<u>APPROVED BY</u> JULIE MORGAN		Digitally signed by DAVID DANNER Oct 04, 2018	<u>OFFICE</u> AJV-5420	<u>DATE</u>	<u>TITLE</u> MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCIU
RUNWAY	RW16
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W16A
LTP/FTP LATITUDE	461522.8700N
LTP/FTP LONGITUDE	0842841.1470W
LTP/FTP ELLIPSOIDAL HEIGHT	+02071
FPAP LATITUDE	461405.7360N
FPAP LONGITUDE	0842736.9485W
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	0560
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	063CD91C
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02434
FPAP ORTHOMETRIC HEIGHT	+02434



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
COPTER ILS STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.35

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

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
RST VOR/DME		MINGO INT/RST 9.16 DME					057.64	9.16	2900
EMORE INT	IF/IAF	MINGO INT/RST 9.16 DME	NOPT				311.14	13.14 (I-RST)	2800

MISSED APPROACH

MAP:

ILS: DA

LOC: 4.52 NM AFTER MINGO INT/RST 9.16 DME

MISSED APPROACH INSTRUCTIONS:

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

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

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

PROFILE:

1. PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
2. HOLD SE MINGO INT/RST 9.16 DME, RT, 311.14 INBOUND, 2800 FT. IN LIEU OF PT (IAF), MAX 5000.
3. **FAC:** 311.14 **PFAF:** MINGO INT/RST 9.16 DME **DIST PFAF TO MAP:** **DIST PFAF TO THLD:** 4.52
4. **MIN ALT:**
5. **DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **GS ANT:** 1129
6. **MIN GS INCPT:** 2800 **GS ALT AT PFAF :** MINGO INT/RST 9.16 DME 2800 **OM:** **MM:** **IM:**
7. **GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 56.1
8. **MSA FROM:** RST VOR/DME 090-270 3900, 270-090 3300

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT RST VOR/DME ON V82-170 WESTBOUND.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE VISIBILITY TO RVR 2400.



ADDITIONAL FLIGHT DATA:

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

MINIMUMS:

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

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

CATEGORY:	COPTER														
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
H-ILS 31	1504	1200	200		NA			NA			NA				
H-LOC 31	1620	1200	316		NA			NA			NA				

CHANGES - REASONS

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



<u>HELIPORT</u> ROCHESTER INTL	<u>HELIPORT ID</u> KRST	<u>PROCEDURE NAME</u> COPTER ILS Y OR LOC Y RWY 31	<u>ORIGINAL/AMENDMENT</u> 3	<u>CITY</u> ROCHESTER	<u>STATE</u> MN
<u>COORDINATED WITH:</u>					
A4A ☒ ALPA ☒ AOPA ☒ APA ☐ HAI ☒ NBAA ☒ OTHER:					
<u>FLIGHT CHECKED BY</u> PENDING		Digitally signed by DONALD H LANIER Oct 10, 2018	<u>OFFICE</u>	<u>DATE</u>	
<u>DEVELOPED BY</u> ROBERT GRIM		Digitally signed by ROBERT GRIM Sep 21, 2018	<u>OFFICE</u> AJV-5431	<u>DATE</u> 09/04/2018	
<u>APPROVED BY</u> PATRICK MULQUEEN		Digitally signed by DONALD H LANIER Oct 10, 2018	<u>OFFICE</u> AJV-5430	<u>DATE</u>	<u>TITLE</u> MANAGER



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

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

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

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
RST VOR/DME		MINGO INT/RST 9.16 DME					057.64	9.16	2900
YESUR/RST 13.00 DME CCW	IAF	EGACE/RST 13.00 DME	NOPT				13.00 DME ARC		3700
EGACE/RST 13.00 DME CCW		TECUY INT					13.00 DME ARC (RST LR-095)		2900
EMORE INT	IAF	TECUY INT	NOPT				311.14	6.59 (I-RST)	2900
TECUY INT	IF	MINGO INT/RST 9.16 DME					311.14	6.55 (I-RST)	2800

MISSED APPROACH

MAP:

ILS: DA
 LOC: 4.52 NM AFTER MINGO INT

MISSED APPROACH INSTRUCTIONS:

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

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

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



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD SE MINGO INT/RST 9.16 DME, RT, 311.14 INBOUND, 2800 FT. IN LIEU OF PT (IAF), MAX 5000.
3. FAC:

311.14

FAC: MINGO INT/RST 9.16 DME

DIST FAF TO MAP:

DIST FAF TO THLD: 4.52
4. MIN ALT: MINGO INT/RST 9.16 DME 2800
5. DIST TO THLD FROM OM:

1032.00

MM:

IM:

100 HAT: 836.00

150 HAT: 1792.00

GS ANT: 1129
6. MIN GS INCPT:

2800

GS ALT AT FAF : MINGO INT/RST 9.16 DME 2800

OM:

MM:

IM:
7. GP ANGLE:

3.00

34:1:

20:1:

TCH: 56.1
8. MSA FROM: RST VOR/DME 090-270 3900, 270-090 3300

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 31: CAT A, B, C, D RA 204, RVR 1400, HAT 150, DA 1454 MSL.
SA CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 31: CAT A, B, C, D RA 104, RVR 1600, HAT 100, DA 1404 MSL.
SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF HUD TO DH.
SA CAT II CHART NOTE: REDUCED LIGHTING: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF AUTOLAND OR HUD TO TOUCHDOWN.
SA CAT I/II CHART NOTE: PROCEDURE NA WHEN TOWER CLOSED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT RST VOR/DME ON V82-170 WESTBOUND.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 31 CAT C/D VISIBILITY TO RVR 5500.

ADDITIONAL FLIGHT DATA:

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

MINIMUMS:

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

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

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-ILS 31	1504	1800	200	1504	1800	200	1504	1800	200	1504	1800	200			
S-LOC 31	1620	2400	316	1620	2400	316	1620	2400	316	1620	2400	316			
CIRCLING	1720	1	403	1780	1	463	1900	1 1/2	583	1900	2	583			

QUALITY
10
CHECKED

AIRPORT	AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	CITY	STATE
ROCHESTER INTL	KRST	ILS Z OR LOC Z RWY 31 ILS RWY 31 SA CAT I, ILS RWY 31 SA CAT II	23	ROCHESTER	MN

CHANGES - REASONS

ADDED SA CAT I AND SA CAT II ILS LINES OF MINIMA AND ASSOCIATE NOTES TO PROCEDURE - IAW FPT/ATC REQUEST. AIRPORT HAS REQUIRED EQUIPMENT IAW 8400.13.

FEEDER SEGMENT FROM RST VOR/DME TO MINGO INT COURSE/DISTANCE CHANGED FROM 057.41/9.15 TO 057.64/9.16 - UPDATED COURSE/DISTANCE FORMULA CALCULATIONS.

INITIAL SEGMENT FROM EMORE INT TO TECUY INT COURSE/DISTANCE CHANGED FROM311.11/6.60 TO 311.14/6.59 - UPDATED COURSE/DISTANCE FORMULA CALCULATIONS.

INTERMEDIATE SEGMENT FROM TECUY INT TO MINGO INT DISTANCE CHANGED FROM 6.59 TO 6.55 - MINGO INT MOVED 224 FT.

FINAL SEGMENT MINGO INT TO RWY 31 THLD DISTANCE CHANGED FROM 4.48 TO 4.52 - MINGO INT MOVED 224 FT.

RST TCH CHANGED FROM 50.1 TO 56.068 - TO MATCH AIRNAV DATA.

ADDED CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 31 CAT C/D VISIBILITY TO RVR 5500 - IAW 8260.19H 8-6-11 O. (3)(D)

ADDED CHART NOTE: CHART CIRCLING ICON - NEW CIRCLING AREA RADIUS APPLIED TO PROCEDURE.

FAS OBSTACLE CHANGED FROM 1389 TREE TO 1365 TREE - IAW CURRENT IAPA PROCEDURE BUILD RESULTS.

S-LOC 31 MDA /HAT CHANGED FROM 1660/356 TO 1620/316 - LOWER CONTROLLING OBSTACLE.

CIRCLING MDA/HAA CAT C AND CAT D CHANGED FROM 1780/463 CAT C TO 1900/583 AND 1880/563 CAT D TO 1900/583 - NEW CONTROLLING OBSTACLES.

7:1 OBSTACLE IN ADDITIONAL FLIGHT DATA CHANGED FROM 1519 AAO TO 1510 AAO - PER IAPA BUILD.

PROCEDURE NAME CHANGED FROM ILS OR LOC RWY 31 TO ILS Z OR LOC Z RWY 31 - IAW 8260.3D 1-6-2 D.



COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZMP, RST ATCT, RST APP CON, STATE AERO, APT MGR

FLIGHT CHECKED BY

PENDING	<i>Digitally signed by</i> DONALD H LANIER	<u>OFFICE</u>	<u>DATE</u>
	Oct 10, 2018		

DEVELOPED BY

ROBERT GRIM	<i>Digitally signed by</i> ROBERT GRIM	<u>OFFICE</u>	<u>DATE</u>
	Sep 20, 2018	AJV-5431	08/23/2018

APPROVED BY

PATRICK MULQUEEN	<i>Digitally signed by</i> DONALD H LANIER	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
	Oct 10, 2018	AJV-5430		MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> ROCHESTER INTL	<u>AIRPORT ID</u> KRST	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> ROCHESTER	<u>STATE</u> MN
<u>AIRPORT ELEVATION</u> 1317	<u>TDZE</u> 1304	<u>SUPERSEDED</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 10/12/2017	<u>MAG VAR</u> 1E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> 01/03/2019	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2005

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
DLANY	IAF	ZUTEL		TF	FB	1.00	247.14	10.34	2900
GABDE	IAF	ZUTEL		TF	FB	1.00	001.97	7.95	2900
EMORE	IAF	ZUTEL		TF	FB	1.00	311.35	6.59	2900
ZUTEL	IF	MINGO		TF	FB	1.00	311.27	6.55	2800
MINGO	FAF	JEDUG/2.33 NM TO RW31		TF	FB	0.30	311.20	2.19	
JEDUG/2.33 NM TO RW31		RW31	MAP	TF	FO	0.30	311.20	2.33	
RW31	MAP	1504 MSL		CA			311.20		
1504 MSL		CORDY		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW31

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT CORDY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. PROFILE STARTS AT ZUTEL
3. FAC:

311.20

FAF: MINGO

DIST FAF TO MAP: 4.52

DIST FAF TO THLD: 4.52
4. MIN ALT: ZUTEL 2900, MINGO 2800, JEDUG/2.33 NM TO RW31 2100*
5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

200 HAT: 0.45

GS ANT:
6. MIN GP INCPT:

2800

GP ALT AT FAF : MINGO 2800

OM:

MM:

IM:
7. GP ANGLE:

3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 56.1
8. MSA FROM: RW31 3900

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20C OR ABOVE 54C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DLANY ON V82-170 EASTBOUND AND V218 SOUTHEAST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT GABDE ON V398-411 SOUTHEAST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT EMORE ON V24 EASTBOUND.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 4500, INCREASE LNAV CAT C/D VISIBILITY TO RVR 5500.

ADDITIONAL FLIGHT DATA:

CHART: ASR.
CHART CIRCLING ICON.
CHART VDP AT 1.01 NM TO RW31*
*LNAV ONLY
WAAS CHANNEL #49028
REFERENCE PATH ID: W31A
CHART FAS OBST: 1373 ANT 435447N/0922902W.
1512 AAO 435036N/0922521W.
HOLD SE, RT, 332.78 INBOUND
LTP HAE: 367.5 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	1504	1800	200	1504	1800	200	1504	1800	200	1504	1800	200			
LNAV/VNAV DA	1554	2400	250	1554	2400	250	1554	2400	250	1554	2400	250			
LNAV MDA	1640	2400	336	1640	2400	336	1640	3500	336	1640	3500	336			
CIRCLING	1720	1	403	1780	1	463	1900	1 1/2	583	1900	2	583			



CHANGES - REASONS

FIX CERAK (PFAF) REPLACED WITH FIX MINGO - IAW 8260.19H 4-6-2 B. (1)(2)
INTERMEDIATE SEGMENT DISTANCE CHANGED FROM 6.53 TO 6.55 - FIX CERAK (PFAF) REPLACED WITH FIX MINGO .
FINAL SEGMENT DISTANCE TO MAP/THLD DISTANCE CHANGED FROM 4.54 TO 4.52 - FIX CERAK (PFAF) REPLACED WITH FIX MINGO .
STEPDOWN FIX JEDUG DISTANCE TO RWY 31 CHANGED FROM 1.30 NM TO 2.32 NM AND MINIMUM ALTITUDE CHANGED FROM 1760 TO 2100 - IAW 8260.3D 2-6-4 C. (3)
FINAL APPROACH COURSE CHANGED FROM 311.19 TO 311.20 - UPDATED IPDS COURSE/DISTANCE FORMULA CALCULATIONS.
ADDED CHART VDP AT 1.01 NM TO RW31* TO ADDITIONAL FLIGHT DATA - IAW 8260.19H 8-6-10 N. (2)
ADDED RNP VALUE (1.00) TO MISSED APPROACH DIRECT-TO-FIX LEG IN TERMINAL ROUTES - IAW 8260.19H 4-6-10 F.
CHANGED MISSED APPROACH FROM "CLIMB TO 3000 DIRECT UTAKE AND ON TRACK 311 TO CORDY" TO " CLIMB TO 3000 DIRECT CORDY AND HOLD" - FIX UTAKE NO LONGER REQUIRED FOR MISSED APPROACH.
ADDED 20:1 IS CLEAR TO LINE 7 ON 8260-3 - IAW 8260.19H 8-6-7 G. (3)
ADDED CHART CIRCLING ICON TO ADDITIONAL FLIGHT DATA - IAW 8260.19H 8-6-10 T.
LNAV/VNAV DA/HAT CHANGED FROM 1620/316 TO 1554/250 - LOWER CONTROLLING OBSTACLE.
LNAV MDA/HAT CHANGED FROM 1680/376 TO 1640/336 - LOWER CONTROLLING OBSTACLE.
LNAV/VNAV VISIBILITY CHANGED FROM RVR 3200 ALL CATS TO RVR 2400 ALL CATS - IAW 8260.3D TABLE 3-3-1 AND AJV VIS CHK CALCULATOR.
CIRCLING MDA/HAA CHANGED FROM 1780/463 CAT C, 1880/563 CAT D TO 1900/583 CAT C/D - NEW CONTROLLING OBSTACLE (27-000694) CAT C/D.
DELETED CHART NOTE: DME/DME RNP-0.3 NA - NO LONGER REQUIRED BY CRITERIA.
ADDED PBN REQUIREMENTS NOTE: RNP APCH - IAW 8260.19H 8-6-8 B. (1)
CRC REMAINDER CHANGED FROM 3C020C1A TO C179B077 - CHANGE IN THRESHOLD COORDINATES.
CHANGED "DIST TO THLD FROM 200 HATH: 0.47" TO "DIST TO THLD FROM 200 HAT: 0.45" - UPDATED CALCULATION.
PROCEDURE TCH CHANGED FROM 51 TO 56.1 - PER AIRNAV DATA.
BARO-VNAV NOTE CHANGED FROM FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -28C (-18F) OR ABOVE 35C (95F) TO FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20C OR ABOVE 54C - PER 8260.19H 8-6-9 S AND UPDATED WEATHER HISTORY DATA.



COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZMP, PNM FSS, RST ATCT, STATE AERO

FLIGHT CHECKED BY

PENDING

Digitally signed by
DONALD H LANIER
Oct 10, 2018

OFFICE

DATE

DEVELOPED BY

ROBERT GRIM

Digitally signed by
ROBERT GRIM
Sep 25, 2018

OFFICE

DATE

AJV-5431

09/07/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
DONALD H LANIER
Oct 10, 2018

OFFICE

DATE

AJV-5430

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KRST
RUNWAY	RW31
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	435412.6945N
LTP/FTP LONGITUDE	0922912.1470W
LTP/FTP ELLIPSOIDAL HEIGHT	+03675
FPAP LATITUDE	435512.5400N
FPAP LONGITUDE	0923043.6600W
THRESHOLD CROSSING HEIGHT (TCH)	00056.1
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	C179B077

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03975
FPAP ORTHOMETRIC HEIGHT	+03975



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> CAMERON MEMORIAL	<u>AIRPORT ID</u> KEZZ	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> CAMERON	<u>STATE</u> MO
<u>AIRPORT ELEVATION</u> 1040	<u>TDZE</u> 1040	<u>SUPERSEDED</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 04/08/2010	<u>MAG VAR</u> 3E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 081/30 CW 262/30	NOPT	EDUWU	IF/IAF	3000
2. 262/30 CW 352/30		PUVOZ	IAF	3000
3. 352/30 CW 081/30		FEGZI	IAF	3100

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
FEGZI	IAF	EDUWU	NOPT	TF	FB	1.00	081.45	5.00	3000
PUVOZ	IAF	EDUWU	NOPT	TF	FB	1.00	261.59	5.00	3000
EDUWU	IF/IAF	APVIW		TF	FB	1.00	171.52	5.00	2700
APVIW	FAF	RW17	MAP	TF	FO	0.30	171.52	5.02	
RW17	MAP	1290 MSL		CA			171.52		
1290 MSL		VANHI		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW17

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT VANHI AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N EDUWU, RT, 171.52 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 171.52FAF: APVIWDIST FAF TO MAP: 5.02DIST FAF TO THLD: 5.02

4. MIN ALT: EDUWU 3000, APVIW 2700

5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.66GS ANT:

6. MIN GP INCPT: 2700GP ALT AT FAF : APVIW 2700OM:MM:IM:

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

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C OR ABOVE 54C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.31 NM TO RW17*
*LNAV ONLY
WAAS CHANNEL #82017
REFERENCE PATH ID: W17A
CHART FAS OBST: 1225 TOWER 394518N/0941655W.
HOLD S, RT, 351.54 INBOUND
LTP HAE: 284.5 M

MINIMUMS:

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

ALTERNATE: NA☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	1290	3/4	250	1290	3/4	250		NA			NA				
LNAV/VNAV DA	1518	1 3/8	478	1518	1 3/8	478		NA			NA				
LNAV MDA	1480	1	440	1480	1	440		NA			NA				
CIRCLING	1660	1	620	1660	1	620		NA			NA				



CHANGES - REASONS

- 1. LPV DA/HAT AND VIS ALL CATS DECREASED FROM 1368/328/1 1/4 TO 1290/250/3/4 - AIRPORT HAS OWN WEATHER SOURCE PER AIRNAV DATA AND DELETED REMOTE ALTIMETER ADJUSTMENT.
- 2. LNAV/VNAV DA/HAT AND VIS ALL CATS DECREASED FROM 1621/581/2 TO ALL CATS 1518/1/478/1 3/8 - AIRPORT HAS OWN WEATHER SOURCE PER AIRNAV DATA AND DELETED REMOTE ALTIMETER ADJUSTMENT.
- 3. LNAV MDA/HAT ALL CATS DECREASED FROM 1560/520 TO 1480/440 - AIRPORT HAS OWN WEATHER SOURCE PER AIRNAV DATA AND DELETED REMOTE ALTIMETER ADJUSTMENT.
- 4. CIRCLING MDA/HAA ALL CATS DECREASED FROM 1740/700 TO 1660/620 - AIRPORT HAS OWN WEATHER SOURCE PER AIRNAV DATA ON WMSCR, BACK-UP DATA ALTIMETER MOVED TO 8260-9 FOR CONTINGENCY USE.
- 5. CHANGED NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA TO CHART NOTE: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - 34:1 PENETRATION.
- 6. ADDED PBN REQUIREMENTS NOTE: RNP APCH - NAVSPEC REQUIREMENT.
- 7. REMOVED CHART NOTE: USE KANSAS CITY INTL ALTIMETER SETTING - AIRPORT HAS OWN WEATHER SOURCE PER AIRNAV DATA ON WMSCR, BACK-UP DATA ALTIMETER MOVED TO 8260-9 FOR CONTINGENCY USE.
- 8. BARO-VNAV NA WHEN USING KANSAS CITY INTL ALTIMETER SETTING NOTE MOVED TO BACK OF 8260-9. - ALL REFERENCE TO THE BACKUP ALTIMETER MOVED TO BACK OF 8260-9 PER CRITERIA.
- 9. REMOVED "CHART NOTE: DME/DME RNP -0.3 NA" - PBN PROCEDURE.
- 10. CHANGED CHART PROFILE NOTE FROM VGSI AND RNAV GLIDEPATH NOT COINCIDENT TO VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}) - IAW 8260.19H PARA 8-6-9 M (1).
- 11. DELETED DISTANCE TO THLD FROM 328 HAT: 0.90 NM FROM FLIGHT DATA AND ADDED 250 HAT: 0.66 TO LINE 5.
- 12. ADDED VDP AT 1.31 NM TO RWY 17 AND LNAV ONLY - AIRPORT ADDED LOCAL WEATHER IAW 8260.3C PARA 2-6-5.
- 13. ADDED 20:1 IS CLEAR TO LINE 7 - IAW 8260.19H PARA 8-6-7 G (3).
- 14. ADDED MAXIMUM ALTITUDE 6000 TO HOLDING PATTERN IN LIEU-OF-PT ON LINE 2 - IAW 8260.19H PARA 8-6-7 B (2).
- 15. ADDD CHART NOTE FOR UNCOMPENSATED BARO-VNAV SYSTEM, LNAV/VNAV NA BELOW -17C OR ABOVE 54C - AIRPORT ADDED LOCAL WEATHER AND IAW 8260.19H PARA 8-6-9 S.
- 16. ADDED ALTERNATE MINIMUMS - LOCAL ALTIMETER SCOURCE IS ON WMSCR.

PDF EDIT CRITICAL TEMP REMARKS: CHANGED AVERAGE COLD TEMPERATURE DERIVED FROM ISA STANDARD 12C TO AVERAGE COLD TEMPERATURE DERIVED FROM STANDARD -30C ISADEVIATION.

PDF EDIT: DELETED NEW CIRCLING CRITERIA APPLIED.



<u>AIRPORT</u> CAMERON MEMORIAL	<u>AIRPORT ID</u> KEZZ	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> CAMERON	<u>STATE</u> MO
<u>COORDINATED WITH:</u>					
A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZKC, MCI APP CON, AMGR					
<u>FLIGHT CHECKED BY</u> JOHN E PHILLABAUM	Digitally signed by ADOLFO D URRUTIA Sep 21, 2018		<u>OFFICE</u> FICO	<u>DATE</u> 9/19/18	
<u>DEVELOPED BY</u> ADOLFO URRUTIA (ANTHONY KACZKA)	Digitally signed by ADOLFO D URRUTIA Sep 21, 2018		<u>OFFICE</u> AJV-5432	<u>DATE</u> 07/18/2018	
<u>APPROVED BY</u> PATRICK MULQUEEN	Digitally signed by ADOLFO D URRUTIA Sep 21, 2018		<u>OFFICE</u> AJV-5430	<u>DATE</u>	<u>TITLE</u> MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KEZZ
RUNWAY	RW17
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W17A
LTP/FTP LATITUDE	394358.8910N
LTP/FTP LONGITUDE	0941637.4030W
LTP/FTP ELLIPSOIDAL HEIGHT	+02845
FPAP LATITUDE	394230.1200N
FPAP LONGITUDE	0941626.3900W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1528
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	B81F25F5
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+00317
FPAP ORTHOMETRIC HEIGHT	+00317



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> CAMERON MEMORIAL	<u>AIRPORT ID</u> KEZZ	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> CAMERON	<u>STATE</u> MO
<u>AIRPORT ELEVATION</u> 1040	<u>TDZE</u> 1035	<u>SUPERSEDED</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 04/08/2010	<u>MAG VAR</u> 3E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 262/30 CW 081/30	NOPT	262/24 CW 081/24		3100
1. 262/24 CW 081/24		VANHI	IF/IAF	3000
2. 081/30 CW 172/30		IGITE	IAF	3100
3. 172/30 CW 262/30		AKZUB	IAF	3000

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
AKZUB	IAF	VANHI	NOPT	TF	FB	1.00	261.61	5.00	3000
IGITE	IAF	VANHI	NOPT	TF	FB	1.00	081.47	5.00	3000
VANHI	IF/IAF	OXIBE		TF	FB	1.00	351.54	5.00	2700
OXIBE	FAF	RW35	MAP	TF	FO	0.30	351.54	5.07	
RW35	MAP	1285 MSL		CA			351.54		
1285 MSL		EDUWU		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW35

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT EDUWU AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD S VANHI, RT, 351.54 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 351.54FAF: OXIBE
- DIST FAF TO MAP: 5.07
- DIST FAF TO THLD: 5.07
4. MIN ALT: VANHI 3000, OXIBE 2700
5. DIST TO THLD FROM OM:
- MM:
- IM:
- 150 HAT:
- 250 HAT: 1.03
- GS ANT:
6. MIN GP INCPT: 2700
- GP ALT AT FAF : OXIBE 2700
- OM:
- MM:
- IM:
7. GP ANGLE: 3.00
- 34:1: IS NOT CLEAR
- 20:1: IS CLEAR
- TCH: 40.0
8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C OR ABOVE 54C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.30 NM TO RW35*
*LNAV ONLY
WAAS CHANNEL #77717
REFERENCE PATH ID: W35A
CHART FAS OBST: 1142 TOWER 394150N/0941618W.
HOLD N, RT, 171.52 INBOUND
LTP HAE: 279.3 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	1285	3/4	250	1285	3/4	250		NA			NA				
LNAV/VNAV DA	1310	7/8	275	1310	7/8	275		NA			NA				
LNAV MDA	1460	1	425	1460	1	425		NA			NA				
CIRCLING	1660	1	620	1660	1	620		NA			NA				



AIRPORT	AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	CITY	STATE
CAMERON MEMORIAL	KEZZ	RNAV (GPS) RWY 35	1A	CAMERON	MO

CHANGES - REASONS

1. LPV DA/HAT AND VIS ALL CATS DECREASED FROM 1368/328, VIS 1 1/4 TO 1285/250, VIS 3/4 - AIRPORT HAS OWN WEATHER SOURCE PER AIRNAV DATA AND DELETED REMOTE ALTIMETER ADJUSTMENT.
2. LNAV/VNAV DA/HAT AND VIS ALL CATS DECREASED FROM 1515/480, VIS 1 3/4 TO 1310/275, VIS 7/8 - AIRPORT HAS OWN WEATHER SOURCE PER AIRNAV DATA AND DELETED REMOTE ALTIMETER ADJUSTMENT.
3. LNAV MDA/HAT ALL CATS DECREASED FROM 1520/485 TO 1460/425 - AIRPORT HAS OWN WEATHER SOURCE PER AIRNAV DATA AND DELETED REMOTE ALTIMETER ADJUSTMENT.
4. CIRCLING MDA/HAA ALL CATS DECREASED FROM 1740/700 TO 1660/620 - AIRPORT HAS OWN WEATHER SOURCE PER AIRNAV DATA AND DELETED REMOTE ALTIMETER ADJUSTMENT.
5. CHANGED CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA TO CHART NOTE: RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - 34:1 PENETRATION.
6. ADDED PBN REQUIREMENTS NOTE: RNP APCH - NAVSPEC REQUIREMENT.
7. REMOVED CHART NOTE: USE KANSAS CITY INTL ALTIMETER SETTING - AIRPORT HAS OWN WEATHER SOURCE PER AIRNAV DATA ON WMSCR, BACK-UP ALTIMETER ADJUSTMENT MOVED TO 8260-9 FOR CONTINGENCY USE.
8. BARO-VNAV NA WHEN USING KANSAS CITY INTL ALTIMETER SETTING NOTE MOVED TO BACK OF 8260-9. - ALL REFERENCE TO THE BACKUP ALTIMETER MOVED TO BACK OF 8260-9 PER CRITERIA.
9. NOTES: "CHART NOTE: DME/DME RNP -0.3 NA" REMOVED. - ADDED RNP APCH, CRITERIA CHANGED.
10. CHANGED CHART PROFILE NOTE FROM VGSI AND RNAV GLIDEPATH NOT COINCIDENT TO VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}) - IAW 8260.19H PARA 8-6-9 M (1).
11. DELETED DISTANCE TO THLD FROM 328 HAT: 1.03 NM FROM FLIGHT DATA AND ADDED 250 HAT: 1.03 TO LINE 5 - IAW 8260.19H PARA 8-6-7 E (3).
12. ADDED VDP AT 1.30 NM TO RWY 35 AND LNAV ONLY - AIRPORT ADDED LOCAL WEATHER IAW 8260.3C PARA 2-6-5.
13. ADDED 20:1 IS CLEAR TO LINE 7 - IAW 8260.19H PARA 8-6-7 G (3).
14. ADDED MAXIMUM ALTITUDE 6000 TO HOLDING PATTERN IN LIEU-OF-PT ON LINE 2 - IAW 8260.19H PARA 8-6-7 B (2).
15. ADDD CHART NOTE FOR UNCOMPENSATED BARO-VNAV SYSTEM, LNAV/VNAV NA BELOW -17C OR ABOVE 54C - AIRPORT ADDED LOCAL WEATHER AND IAW 8260.19H PARA 8-6-9 S.
16. DELETED CHART NOTE BARO-VNAV NA - AIRPORT ADDED LOCAL WEATHER.
17. CHANGED FAS OBSTACLE FROM 1136 TREE TO 1142 TOWER - UPDATED OBSTACLE DATABASE.
18. ADDED ALTERNATE MINIMUMS - LOCAL ALTIMETER IS ON WMSCR.



<u>AIRPORT</u> CAMERON MEMORIAL	<u>AIRPORT ID</u> KEZZ	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> CAMERON	<u>STATE</u> MO
<u>COORDINATED WITH:</u>					
A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZKC, MCI APP CON, AMGR					
<u>FLIGHT CHECKED BY</u> JOHN E PHILLABAUM		Digitally signed by DAVID TEFFETELLER Oct 01, 2018	<u>OFFICE</u> FICO	<u>DATE</u> 9/19/18	
<u>DEVELOPED BY</u> ADOLFO URRUTIA (ANTHONY KACZKA)		Digitally signed by DAVID TEFFETELLER Oct 01, 2018	<u>OFFICE</u> AJV-5432	<u>DATE</u> 07/18/2018	
<u>APPROVED BY</u> PATRICK MULQUEEN		Digitally signed by DAVID TEFFETELLER Oct 01, 2018	<u>OFFICE</u> AJV-5430	<u>DATE</u>	<u>TITLE</u> MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KEZZ
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	394319.5375N
LTP/FTP LONGITUDE	0941632.5215W
LTP/FTP ELLIPSOIDAL HEIGHT	+02793
FPAP LATITUDE	394448.3100N
FPAP LONGITUDE	0941643.5300W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1528
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	4F14F494
<u>ADDITIONAL PATH POINT RECORD INFORMATION</u>	
ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03118
FPAP ORTHOMETRIC HEIGHT	+03118



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> POPLAR BLUFF MUNI	<u>AIRPORT ID</u> KPOF	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 18	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> POPLAR BLUFF	<u>STATE</u> MO	
<u>AIRPORT ELEVATION</u> 331	<u>TDZE</u> 331	<u>SUPERSEDED</u> RNAV (GPS) RWY 18	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 08/30/2007	<u>MAG VAR</u> 0W	<u>EPOCH YEAR</u> 2005
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
SOBAW		ACIWA		TF	FB	2.00	270.00	11.99	3000
LEPER	IAF	ETBUW	NOPT	TF	FB	1.00	125.12	10.94	2300
ACIWA	IAF	ETBUW	NOPT	TF	FB	1.00	181.41	6.24	2300
ETBUW	IF/IAF	CUFGO		TF	FB	1.00	181.40	6.50	2300
CUFGO	FAF	NUCIL/2.90 NM TO RW18		TF	FB	0.30	181.40	3.06	
NUCIL/2.90 NM TO RW18		RW18	MAP	TF	FO	0.30	181.40	2.90	
RW18	MAP	634 MSL		CA			181.40		
634 MSL		EKRUF		DF	FO	1.00			2300

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW18

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2300 DIRECT EKRUF AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N ETBUW, RT, 181.40 INBOUND, 2300 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 181.40FAF: CUFGODIST FAF TO MAP: 5.96DIST FAF TO THLD: 5.96

4. MIN ALT: ETBUW 2300, CUFGO 2300, NUCIL/2.90 NM TO RW18 1300*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:303 HAT: 0.81GS ANT:

6. MIN GP INCPT: 2300GP ALT AT FAF : CUFGOOM:MM:IM:

7. GP ANGLE: 3.0534:1: IS NOT CLEAR20:1: IS NOT CLEARTCH: 40.0

8. MSA FROM: RW18 2200

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 18 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -23C OR ABOVE 54C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
*LNAV ONLY
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SOBAW ON V9 SOUTHBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT LEPER ON V69 NORTHBOUND AND ON V175 NORTHWEST BOUND..
CHART NOTE: STRAIGHT-IN AND CIRCLING RWY 18 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

WAAS CHANNEL #97499
REFERENCE PATH ID: W18A
CHART FAS OBST: 519 TREE 364849N/0901909W.
HOLD S, RT, 001.40 INBOUND
LTP HAE: 71.7 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	634	1	303	634	1	303	634	1	303	634	1	303			
LNAV/VNAV DA	675	1 1/4	344	675	1 1/4	344	675	1 1/4	344	675	1 1/4	344			
LNAV MDA	800	1	469	800	1	469	800	1 3/8	469	800	1 1/2	469			
CIRCLING	840	1	509	920	1	589	920	1 1/2	589	980	2	649			



CHANGES - REASONS

- 1. GLIDE PATH ANGLE CHANGED FROM 3.00 TO 3.05 - SYSTEM RE-CALCULATION UPDATE.
- 2. CIRCLING CATS B/C MDA/HAA CHANGED FROM 840/509 TO 920/589. CIRCLING CAT D CHANGED FROM 900/569 TO 980/649 - NEW CONTROLLING OBSTACLES.
- 3. CHANGED LINE 7 NOTE FROM "34:1 IS NOT CLEAR" TO "20:1 IS NOT CLEAR, 34:1 IS NOT CLEAR"- IAW 8260.19H PARA 8-5-7G(3).
- 4. REMOVED "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CAPE GIRARDEAU ALTIMETER SETTING AND INCREASE ALL MDAS 120 FEET - PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.
- 5. REMOVED "CHART NOTE: BARO-VNAV AND VDP NA WHEN USING HUNTSVILLE INTL-CARL T. JONES FIELD ALTIMETER SETTING - PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.
- 6. REMOVED "NA WHEN LOCAL WEATHER NOT AVAILABLE"- PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.
- 7. NOTE DELETED: DME/DME RNP-0.3 NA - PER MEMO 257.
- 8. ADDED PBN REQUIREMENTS NOTE: RNP APCH - PER MEMO 257.
- 9. ADDITIONAL FLIGHT DATA: REMOVED "CHART FAS OBST: 404 TREE 364714N/0901929W" - NOT REQUIRED, IAW 8260.19H PARA 8-6-10C.
- 10. TERMINAL ROUTE: ADDED CA LEG "RW18 TO 634 MSL", COURSE/181.40 - IAW 8260.19H PARA 4-6-5D.
- 11. TERMINAL ROUTE: CHANGED DF LEG FROM "RW18 - EKRUF (DF) (FO)" TO "634 MSL - EKRUF (DF) (FO) (RNP 1.00)" - IAW 8260.19H PARA 4-6-5E.
- 12. CHANGED CHART NOTE FROM "VISIBILITY REDUCTION BY HELICOPTERS NA" TO "RWY18 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" - WORDING UPDATED IAW 8260.19H PARA 8-6-5I(3). 20:1 IS NOT CLEAR, 34:1 NOT CLEAR.
- 13. CHANGED PROFILE NOTE "VGSI AND RNAV GLIDEPATH NOT COINCIDENT" TO "VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET})" - WORDING UPDATED IAW 8260.19H PARA 8-6-8M(2).
- 14. ADDITIONAL FLIGHT DATA: CHANGED "DISTANCE TO THLD FROM 303 HAT: 0.83" TO "DISTANCE TO THLD FROM 303 HAT: 0.81" - NEW VISCHECK UPDATED.
- 15. REMOVED "CHART 569 TREE 364930N/0901929W" FROM ADDITIONAL FLIGHT DATA - NO LONGER 7:1 PENETRATION.
- 16. TERMINAL ROUTE: CHANGED FROM CUFGO TO "NUCIL/2.90 NM TO RW18" DISTANCE FROM 3.16 NM TO 3.06 NM - GS ANGLE CHANGED FROM 3.00 TO 3.05. DISTANCE RECALCULATED.
- 17. CRC REMINDER CHANGED FROM 00162A57 TO 7BEDDE32 - GPA CHANGED FROM 3.00 TO 3.05.
- 18. ADDED "CHART NOTE: STRAIGHT-IN AND CIRCLING RWY 18 NA AT NIGHT" - 20:1 PENETRATIONS.
- 19. RAISED LNAV CAT C VISIBILITY FROM 1 1/4 SM TO 1 3/8 SM - PER VISCHECK TOOL.
- 20. ADDED "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT SOBAW ON V9 SOUTHBOUND" - TURN EXCEEDS 90 DEGREES.
- 21. ADDED "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT LEPER ON V69 NORTHEAST BOUND AND ON V175 NORTHWEST BOUND" - TURNS EXCEED 90 DEGREES.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZME, AMGR, MO STATE AERO

FLIGHT CHECKED BY

GREGORY MILLS

Digitally signed by
DAVID TEFFETELLER
Oct 10, 2018

OFFICE

FICO

DATE

10/4/18

DEVELOPED BY

KWEKU DONKOR

Digitally signed by
DAVID TEFFETELLER
Aug 29, 2018

OFFICE

AJV-5433

DATE

08/02/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
DAVID TEFFETELLER
Oct 10, 2018

OFFICE

AJV-5430

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KPOF
RUNWAY	RW18
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W18A
LTP/FTP LATITUDE	364650.9155N
LTP/FTP LONGITUDE	0901928.7285W
LTP/FTP ELLIPSOIDAL HEIGHT	+00717
FPAP LATITUDE	364521.7300N
FPAP LONGITUDE	0901931.4400W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.05
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	7BEDDE32

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+01008
FPAP ORTHOMETRIC HEIGHT	+01008



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

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

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
MAW VORTAC		MADZU		TF	FB	2.00	272.56	15.30	2300
UMWIX	IAF	EKRUF	NOPT	TF	FB	1.00	061.74	28.36	2300
MADZU	IAF	EKRUF		TF	FB	1.00	271.46	5.00	2300
EKRUF	IF/IAF	ZEDIP		TF	FB	1.00	001.40	6.01	2300
ZEDIP	FAF	RW36	MAP	TF	FO	0.30	001.40	5.96	
RW36	MAP	669 MSL		CA			001.40		
669 MSL		ETBUW		DF	FO	1.00			2300

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW36

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2300 DIRECT ETBUW AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S EKRUFG, RT, 001.40 INBOUND, 2300 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 001.40FAF: ZEDIPDIST FAF TO MAP: 5.96DIST FAF TO THLD: 5.96

4. MIN ALT: EKRUFG 2300, ZEDIP 2300

5. DIST TO THLD FROM OM:MM:IM:150 HAT:338 HAT: 0.93GS ANT:

6. MIN GP INCPT: 2300GP ALT AT FAF : ZEDIPOM:MM:IM:

7. GP ANGLE: 3.0534:1: IS NOT CLEAR20:1: IS CLEARTCH: 40.0

8. MSA FROM: RW36 2200

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

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

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.29 NM TO RW36*
*LNAV ONLY
WAAS CHANNEL #56399
REFERENCE PATH ID: W36A
FAS OBST: 525 AAO 364242N/0902010W.
HOLD N, RT, 181.40 INBOUND
LTP HAE: 71 M

MINIMUMS:

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

ALTERNATE: NA

☐

 STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	669	1 1/4	338	669	1 1/4	338	669	1 1/4	338	669	1 1/4	338			
LNAV/VNAV DA	773	1 1/2	442	773	1 1/2	442	773	1 1/2	442	773	1 1/2	442			
LNAV MDA	780	1	449	780	1	449	780	1 3/8	449	780	1 1/2	449			
CIRCLING	840	1	509	920	1	589	920	1 1/2	589	980	2	649			



CHANGES - REASONS

- 1. GLIDE PATH ANGLE CHANGED FROM 3.00 TO 3.05 - GS ANGLE RE-CALCULATED.
- 2. CIRCLING CATS B/C MDA/HAA CHANGED FROM 840/509 TO 920/589. CIRCLING CAT D CHANGED FROM 900/569 TO 980/649 - NEW CONTROLLING OBSTACLES.
- 3. CHANGED LINE 7 NOTE FROM "34:1 IS NOT CLEAR" TO "20:1 IS CLEAR, 34:1 IS NOT CLEAR"- IAW 8260.19H PARA 8-5-7G(3).
- 4. REMOVED "CHART NOTE: IF LOCAL ALTIMETER SETTING NOT RECEIVED, USE CAPE GIRARDEAU ALTIMETER SETTING AND INCREASE ALL DAS 106 FEET/MDAS 120 FEET - PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.
- 5. REMOVED "CHART NOTE: BARO-VNAV AND VDP NA WHEN USING HUNTSVILLE INTL-CARL T. JONES FIELD ALTIMETER SETTING" - PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.
- 6. REMOVED "NA WHEN LOCAL WEATHER NOT AVAILABLE"- PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.
- 7. NOTE DELETED: DME/DME RNP-0.3 NA - PER MEMO 257.
- 8. ADDED PBN REQUIREMENTS NOTE: RNP APCH - PER MEMO 257.
- 9. ADDITIONAL FLIGHT DATA: REMOVED "CHART FAS OBST: 473 ELEVATOR 364547N/0901904W AND 529 200' AAO 364209N/0902027W". ADDED FAS OBST: 525 AAO 364242N/0902010W - IAW 8260.19H PARAR 8-6-10(C).
- 10. ADDITIONAL FLIGHT DATA: REMOVED CHART TDZE:331 - NOT REQUIRED.
- 11. TERMINAL ROUTE: ADDED CA LEG "RW36 TO 669 MSL", COURSE/001.40 - IAW 8260.19H PARA 4-6-5D.
- 12. TERMINAL ROUTE: CHANGED DF LEG FROM "RW36 - ETBUW (DF) (FO)" TO "669 MSL - ETBUW (DF) (FO) (RNP 1.00)" - IAW 8260.19H PARA 4-6-5E.
- 13. CRC REMINDER CHANGED FROM 5A910187 TO 216AF5E2 - GPA CHANGED FROM 3.00 TO 3.05.
- 14. CHANGED PROCEDURE ENTRY RESTRICTION RADIALS FOR ARRIVALS AT MAW VORTAC FROM "239 CW 316" TO "198 CW 344" - TURNS EXCEED 90 DEGREES.
- 15. RAISED LNAV CAT C VISIBILITY FROM 1 1/4 SM TO 1 3/8 SM - PER VISCHECK TOOL.
- 16. ADDITIONAL FLIGHT DATA UPDATE: CHANGED FROM "DISTANCE TO THLD FROM 338 HAT: 0.94" TO "DISTANCE TO THLD FROM 338 HAT: 0.93" - DISTANCE TO THLD RECALCULATED UPDATE.
- 17. ADDITIONAL FLIGHT DATA UPDATE: REMOVED "CHART 428 TREE 364523N/0901926W" - NO LONGER REQUIRED.



<u>AIRPORT</u> POPLAR BLUFF MUNI	<u>AIRPORT ID</u> KPOF	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> POPLAR BLUFF	<u>STATE</u> MO
<u>COORDINATED WITH:</u>					
A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZME, AMGR, MO STATE AERO					
<u>FLIGHT CHECKED BY</u> GREGORY MILLS		Digitally signed by DAVID TEFFETELLER Oct 10, 2018	<u>OFFICE</u> FICO	<u>DATE</u> 10/4/18	
<u>DEVELOPED BY</u> KWEKU DONKOR		Digitally signed by DAVID TEFFETELLER Aug 29, 2018	<u>OFFICE</u> AJV-5433	<u>DATE</u> 07/31/2018	
<u>APPROVED BY</u> PATRICK MULQUEEN		Digitally signed by DAVID TEFFETELLER Oct 10, 2018	<u>OFFICE</u> AJV-5430	<u>DATE</u>	<u>TITLE</u> MANAGER



FAS DATA BLOCK INFORMATION

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

ADDITIONAL PATH POINT RECORD INFORMATION

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



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
NDB STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.27

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<u>AIRPORT</u> SULLIVAN REGIONAL	<u>AIRPORT ID</u> KUUV	<u>PROCEDURE NAME</u> NDB RWY 24	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> SULLIVAN	<u>STATE</u> MO
<u>AIRPORT ELEVATION</u> 933	<u>TDZE</u> 930	<u>SUPERSEDED</u> NDB RWY 24	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 02/11/2010	<u>MAG VAR</u>
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> 04/03/2014	<u>CANCEL/SUSPEND</u> CANCEL	<u>EPOCH YEAR</u>

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>

PROCEDURE CANCELLED EFFECTIVE 01/03/2019

MISSED APPROACH

MAP:

MISSED APPROACH INSTRUCTIONS:

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)

2.

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

4. MIN ALT:

8. MSA FROM:

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

MINIMUMS:

QUALITY
41
CHECKED

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

ALTERNATE: NA ☐

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA

CHANGES - REASONS

COORDINATED WITH:

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

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY

LONNIE EVERHART (STEVEN DOUGHERTY)

Digitally signed by
ROBERT G HAMILTON
Sep 26, 2018

OFFICE

AJV-5400

DATE

08/29/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by
ROBERT G HAMILTON
Sep 26, 2018

OFFICE

AJV-5400

DATE

TITLE
MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> GRENADA MUNI	<u>AIRPORT ID</u> KGNF	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 4	<u>ORIGINAL/AMENDMENT</u> 1C	<u>CITY</u> GRENADA	<u>STATE</u> MS
<u>AIRPORT ELEVATION</u> 208	<u>TDZE</u> 197	<u>SUPERSEDED</u> RNAV (GPS) RWY 4	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 10/12/2017	<u>MAG VAR</u> 1E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1995

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 321/30 CW 141/30	NOPT	YIDGE	IF/IAF	3000
2. 141/30 CW 321/30	PT	YIDGE	IF/IAF	3000

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
YIDGE	IF/IAF	AZMAY		TF	FB	1.00	050.74	6.00	1900
AZMAY	FAF	OWHIN/2.50 NM TO RW04		TF	FB	0.30	050.79	2.74	
OWHIN/2.50 NM TO RW04		RW04	MAP	TF	FO	0.30	050.79	2.50	
RW04	MAP	608 MSL		CA			050.79		
608 MSL		EPGAF		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LNAV: RW04

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT EPGAF AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
41
CHECKED

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SW YIDGE, RT, 050.74 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 050.79

FAF: AZMAY

DIST FAF TO MAP: 5.24

DIST FAF TO THLD: 5.24

4. MIN ALT: YIDGE 2200, AZMAY 1900, OWHIN/2.50 NM TO RW04 1020

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:

6. MIN GP INCPT:

GP ALT AT FAF :

OM:

MM:

IM:

7. GP ANGLE:

34:1: IS NOT CLEAR

20:1: IS NOT CLEAR

TCH:

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 4 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: STRAIGHT-IN MINIMUMS NA AT NIGHT.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GREENWOOD ALTIMETER SETTING: INCREASE ALL MDAS 80 FEET AND VISIBILITY LNAV CATS C AND D AND CIRCLING ALL CATS 1/4 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART FAS OBST: 346 OL WTR TWR 334958N/0894834W.
CHART: 451 TWR 334719N/0895018W.
HOLD NE, RT, 230.94 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	680	1	483	680	1	483	680	1 3/8	483	680	1 3/8	483			
CIRCLING	1000	1	792	1000	1	792	1000	2 1/4	792	1060	2 3/4	852			



CHANGES - REASONS

- 1. TERMINAL ARRIVAL AREA MINIMUM ALTITUDES INCREASED FROM 2200 TO 3000 - ATC RADIO COMMUNICATIONS UNSATISFACTORY BELOW 3000.
- 2. CA LEG ALTITUDE INCREASED FROM 600 TO 608 - 400 FEET ABOVE AIRPORT ELEVATION.
- 3. MISSED APPROACH ALTITUDE INCREASED FROM 2100 TO 3000 - ATC RADIO COMMUNICATIONS UNSATISFACTORY BELOW 3000.
- 4. PROFILE SECTION, LINE 2, COURSE REVERSAL MINIMUM ALTITUDE INCREASED FROM 2200 TO 3000 - ATC RADIO COMMUNICATIONS UNSATISFACTORY BELOW 3000.
- 5. PROFILE SECTION, LINE 2, ADDED MAXIMUM HOLDING ALTITUDE - CURRENT DOCUMENTATION POLICY.
- 6. PROFILE SECTION, LINE 7, ADDED "20:1 IS NOT CLEAR" - CURRENT DOCUMENTATION POLICY.
- 7. REPLACED DME/DME NOTE WITH PBN REQUIREMENTS NOTE - CURRENT DOCUMENTATION POLICY.
- 8. REPLACED NOTE "NIGHT LANDING: RWY 4, 22 NA" WITH "STRAIGHT-IN MINIMUMS NA AT NIGHT" - CIRCLING TO RWY 13/31 ALLOWED AT NIGHT, RWY 22 IS NOT LIT AND THEREFORE DOES NOT REQUIRE A NOTE.
- 9. ADDED RUNWAY NUMBER TO HELICOPTER VISIBILITY NOTE - CURRENT DOCUMENTATION POLICY.
- 10. ADDED CIRCLING ICON - EXPANDED CIRCLING AREAS EVALUATED.
- 11. CIRCLING CAT D MDA - VIS - HAA INCREASED FROM 1000 - 2 1/2 - 792 TO 1060 - 2 3/4 - 852 - NEW CONTROLLING OBSTACLE.
- 12. CHANGED BACKUP ALTIMETER NOTE FROM "...INCREASE ALL MDA 80 FT, AND INCREASE LNAV VISIBILITY CATS C AND D 1/4 MILE, INCREASE CIRCLING VISIBILITY ALL CATS 1/4 MILE" TO "...INCREASE ALL MDAS 80 FEET AND VISIBILITY LNAV CATS C AND D AND CIRCLING ALL CATS 1/4 SM." - UPDATED WORDING TO CURRENT POLICY.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZME, AIRPORT MANAGER

FLIGHT CHECKED BY

JAMES L REINEBOLD JR

Digitally signed by

DAVID DANNER

Sep 27, 2018

OFFICE

FICO

DATE

9/22/18

DEVELOPED BY

RUSS ROSLEWSKI

Digitally signed by

RUSSELL ROSLEWSKI

Aug 29, 2018

OFFICE

AJV-5421

DATE

08/16/2018

APPROVED BY

JULIE MORGAN

Digitally signed by

DAVID DANNER

Sep 27, 2018

OFFICE

AJV-5420

DATE

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> GRENADA MUNI	<u>AIRPORT ID</u> KGNF	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 13	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> GRENADA	<u>STATE</u> MS	
<u>AIRPORT ELEVATION</u> 208	<u>TDZE</u> 208	<u>SUPERSEDED</u> RNAV (GPS) RWY 13	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 09/17/2015	<u>MAG VAR</u> 1E	<u>EPOCH YEAR</u> 1995
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 041/30 CW 221/30	NOPT	WUKNA	IF/IAF	3000
2. 221/30 CW 041/30	PT	WUKNA	IF/IAF	3000

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
WUKNA	IF/IAF	ODNOW		TF	FB	1.00	130.72	6.00	1900
ODNOW	FAF	CUVID/2.50 NM TO RW13		TF	FB	0.30	130.77	2.64	
CUVID/2.50 NM TO RW13		RW13	MAP	TF	FO	0.30	130.77	2.50	
RW13	MAP	453 MSL		CA			130.77		
453 MSL		ODPOF		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW13

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT ODPOF AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
41
CHECKED

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD NW WUKNA, RT, 130.72 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 130.77

FAF: ODNOW

DIST FAF TO MAP: 5.14

DIST FAF TO THLD: 5.14

4. MIN ALT: WUKNA 3000, ODNOW 1900, CUVID/2.50 NM TO RW13 1040*

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

245 HAT: 0.60

GS ANT:

6. MIN GP INCPT: 1900

GP ALT AT FAF : ODNOW 1900

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 55.3

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -9C OR ABOVE 54C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: BARO-VNAV AND VDP NA WHEN USING GREENWOOD ALTIMETER SETTING.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS AND LNAV CAT C/D VISIBILITY TO 1 3/8 SM.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GREENWOOD ALTIMETER SETTING: INCREASE ALL DAS 65 FEET; INCREASE ALL MDAS 80 FEET AND VISIBILITY LNAV CATS C AND D AND CIRCLING ALL CATS 1/4 SM.
CHART NOTE: FOR INOPERATIVE ALS WHEN USING GREENWOOD ALTIMETER SETTING, INCREASE LPV ALL CATS VISIBILITY TO 7/8 SM AND LNAV/VNAV ALL CATS VISIBILITY TO 1 1/2 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.32 NM TO RW13*
*LNAV ONLY
WAAS CHANNEL #97328
REFERENCE PATH ID: W13A
CHART FAS OBST: 381 TREE 335121N/0894859W.
CHART: 428 TREE 335224N/0895045W, 406 TREE 335203N/0895115W.
HOLD SE, RT, 310.94 INBOUND
LTP HAE: 36.7 M

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	453	1/2	245	453	1/2	245	453	1/2	245	453	1/2	245			
LNAV/VNAV DA	666	1 1/8	458	666	1 1/8	458	666	1 1/8	458	666	1 1/8	458			
LNAV MDA	680	1/2	472	680	1/2	472	680	1	472	680	1	472			
CIRCLING	1000	1	792	1000	1	792	1000	2 1/4	792	1060	2 3/4	852			

QUALITY
41
CHECKED

CHANGES - REASONS

- 1. MISSED APPROACH ALTITUDE CHANGED FROM 2100 TO 3000 - ATC RADIO COMMUNICATIONS UNSATISFACTORY BELOW 3000.
- 2. PROFILE SECTION, LINE 2, ADDED MAXIMUM HOLDING ALTITUDE - CURRENT DOCUMENTATION POLICY.
- 3. PROFILE SECTION, LINE 7, ADDED "20:1 IS CLEAR" - CURRENT DOCUMENTATION POLICY.
- 4. REMOVED FAHRENHEIT VALUES FROM BARO-VNAV NOTE - CURRENT DOCUMENTATION POLICY.
- 5. REPLACED DME/DME NOTE WITH PBN REQUIREMENTS NOTE - CURRENT DOCUMENTATION POLICY.
- 6. INOP NOTE, CHANGED FROM "FOR INOPERATIVE MALSR, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 1/2 MILES, AND LNAV CAT C/D VISIBILITY TO 1 3/8 MILES" TO "FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS AND LNAV CAT C/D VISIBILITY TO 1 3/8 SM" - RECALCULATION.
- 7. BACKUP ALTIMETER NOTE, CHANGED FROM "...INCREASE ALL DA/MDA 80 FT, AND ALL VISIBILITIES 1/4 MILE" TO "...INCREASE ALL DAS 65 FEET; INCREASE ALL MDAS 80 FEET AND VISIBILITY LNAV CATS C AND D AND CIRCLING ALL CATS 1/4 SM" - RECALCULATION.
- 8. ADDED INOP NOTE WITH BACKUP ALTIMETER SETTING - NON-STANDARD INCREASES.
- 9. REMOVED NIGHT LANDING NA NOTE - RUNWAY 4/22 IS UNLIT AND THEREFORE DOES NOT REQUIRE A NOTE.
- 10. ADDED CIRCLING ICON - UPDATED CIRCLING AREAS TO CURRENT SIZES.
- 11. CIRCLING CAT D MDA-VIS-HAA CHANGED FROM 1000 - 2 1/2 - 792 TO 1060 - 2 3/4 - 852 - NEW CONTROLLING OBSTACLE.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZME, AIRPORT MANAGER

FLIGHT CHECKED BY

JAMES L REINBOLD JR

Digitally signed by

DAVID DANNER

Oct 03, 2018

OFFICE

FICO

DATE

9/22/18

DEVELOPED BY

RUSS ROSLEWSKI

Digitally signed by

RUSSELL ROSLEWSKI

Aug 29, 2018

OFFICE

AJV-5421

DATE

08/07/2018

APPROVED BY

JULIE MORGAN

Digitally signed by

DAVID DANNER

Oct 03, 2018

OFFICE

AJV-5420

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGNF
RUNWAY	RW13
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W13A
LTP/FTP LATITUDE	335029.1450N
LTP/FTP LONGITUDE	0894830.7065W
LTP/FTP ELLIPSOIDAL HEIGHT	+00367
FPAP LATITUDE	334929.6315N
FPAP LONGITUDE	0894710.9900W
THRESHOLD CROSSING HEIGHT (TCH)	00055.3
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0616
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	63952573

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00633
FPAP ORTHOMETRIC HEIGHT	+00633



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> GRENADA MUNI	<u>AIRPORT ID</u> KGNF	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 22	<u>ORIGINAL/AMENDMENT</u> 1C	<u>CITY</u> GRENADA	<u>STATE</u> MS
<u>AIRPORT ELEVATION</u> 208	<u>TDZE</u> 201	<u>SUPERSEDED</u> RNAV (GPS) RWY 22	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 10/12/2017	<u>MAG VAR</u> 1E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1995

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 141/30 CW 321/30	NOPT	141/18 CW 321/18		3200
1. 141/18 CW 321/18		EPGAF	IF/IAF	3000
2. 321/30 CW 141/30	PT	EPGAF	IF/IAF	3000

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
EPGAF	IF/IAF	RELOF		TF	FB	1.00	230.94	6.00	1900
RELOF	FAF	RW22	MAP	TF	FO	0.30	230.89	5.21	
RW22	MAP	608 MSL		CA			230.89		
608 MSL		YIDGE		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LNAV: RW22

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT YIDGE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
41
CHECKED

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD NE EPGAF, RT, 230.94 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 230.89FAF: RELOFDIST FAF TO MAP: 5.21DIST FAF TO THLD: 5.21
4. MIN ALT: EPGAF 2100, RELOF 1900
5. DIST TO THLD FROM OM:MM:IM:150 HAT:GS ANT:
6. MIN GP INCPT:GP ALT AT FAF :OM:MM:IM:
7. GP ANGLE:34:1: IS NOT CLEAR20:1: IS NOT CLEARTCH:
8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 22 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: STRAIGHT-IN MINIMUMS NA AT NIGHT.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GREENWOOD ALTIMETER SETTING: INCREASE ALL MDAS 80 FEET AND VISIBILITY LNAV CATS C AND D AND CIRCLING ALL CATS 1/4 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART FAS OBST: 484 TREE 335123N/0894526W.
502 AAO 335224N/0894118W.
HOLD SW, RT, 050.74 INBOUND

MINIMUMS:

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

ALTERNATE: NA☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	740	1	539	740	1	539	740	1 1/2	539	740	1 1/2	539			
CIRCLING	1000	1	792	1000	1	792	1000	2 1/4	792	1060	2 3/4	852			

CHANGES - REASONS

1. TERMINAL ARRIVAL AREA MINIMUM ALTITUDES INCREASED FROM 2100 TO 3000 - ATC RADIO COMMUNICATIONS UNSATISFACTORY BELOW 3000.
2. MISSED APPROACH ALTITUDE INCREASED FROM 2200 TO 3000 - ATC RADIO COMMUNICATIONS UNSATISFACTORY BELOW 3000.
3. PROFILE SECTION, LINE 2, COURSE REVERSAL MINIMUM ALTITUDE INCREASED FROM 2200 TO 3000 - ATC RADIO COMMUNICATIONS UNSATISFACTORY BELOW 3000.
4. PROFILE SECTION, LINE 2, ADDED MAXIMUM HOLDING ALTITUDE - CURRENT DOCUMENTATION POLICY.
5. PROFILE SECTION, LINE 7, ADDED "20:1 IS NOT CLEAR" - CURRENT DOCUMENTATION POLICY.
6. REPLACED DME/DME NOTE WITH PBN REQUIREMENTS NOTE - CURRENT DOCUMENTATION POLICY.
7. REPLACED NOTE "NIGHT LANDING: RWY 4, 22 NA" WITH "STRAIGHT-IN MINIMUMS NA AT NIGHT" - CIRCLING TO RWY 13/31 ALLOWED AT NIGHT, RWY 22 IS NOT LIT AND THEREFORE DOES NOT REQUIRE A NOTE.
8. ADDED RUNWAY NUMBER TO HELICOPTER VISIBILITY NOTE - CURRENT DOCUMENTATION POLICY.
9. CHANGED BACKUP ALTIMETER NOTE FROM "... INCREASE ALL MDA 80 FT, AND ALL VISIBILITIES 1/4 MILE" TO "INCREASE ALL MDAS 80 FEET AND VISIBILITY LNAV CATS C AND D AND CIRCLING ALL CATS 1/4 SM" - RECALCULATION.
10. ADDED CIRCLING ICON - EXPANDED CIRCLING AREAS EVALUATED.
11. CIRCLING CAT D MDA - VIS - HAA INCREASED FROM 1000 - 2 1/2 - 792 TO 1060 - 2 3/4 - 852 - NEW CONTROLLING OBSTACLE.



<u>AIRPORT</u> GRENADA MUNI	<u>AIRPORT ID</u> KGNF	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 22	<u>ORIGINAL/AMENDMENT</u> 1C	<u>CITY</u> GRENADA	<u>STATE</u> MS
<u>COORDINATED WITH:</u>					
A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZME, AIRPORT MANAGER					
<u>FLIGHT CHECKED BY</u> JAMES L REINEBOLD JR		Digitally signed by DAVID DANNER Sep 27, 2018	<u>OFFICE</u> FICO	<u>DATE</u> 9/22/18	
<u>DEVELOPED BY</u> RUSS ROSLEWSKI		Digitally signed by RUSSELL ROSLEWSKI Aug 29, 2018	<u>OFFICE</u> AJV-5421	<u>DATE</u> 08/17/2018	
<u>APPROVED BY</u> JULIE MORGAN		Digitally signed by DAVID DANNER Sep 27, 2018	<u>OFFICE</u> AJV-5420	<u>DATE</u>	<u>TITLE</u> MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> GRENADA MUNI	<u>AIRPORT ID</u> KGNF	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> GRENADA	<u>STATE</u> MS
<u>AIRPORT ELEVATION</u> 208	<u>TDZE</u> 202	<u>SUPERSEDED</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 09/17/2015	<u>MAG VAR</u> 1E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1995

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 221/30 CW 041/30	NOPT	221/14 CW 041/14		3200
1. 221/14 CW 041/14		ODPOF	IF/IAF	3000
2. 041/30 CW 221/30	PT	ODPOF	IF/IAF	3000

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
ODPOF	IF/IAF	PAKMY		TF	FB	1.00	310.94	9.70	2000
PAKMY	FAF	HUPIR/2.50 NM TO RW31		TF	FB	0.30	310.86	2.80	
HUPIR/2.50 NM TO RW31		RW31	MAP	TF	FO	0.30	310.86	2.50	
RW31	MAP	513 MSL		CA			310.86		
513 MSL		WUKNA		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW31

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT WUKNA AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SE ODPOF, RT, 310.94 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 310.86FAF: PAKMYDIST FAF TO MAP: 5.30DIST FAF TO THLD: 5.30

4. MIN ALT: ODPOF 2100, PAKMY 2000, HUPIR/2.50 NM TO RW31 1080*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:311 HAT: 0.78GS ANT:

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

7. GP ANGLE: 3.1034:1: IS NOT CLEAR20:1: IS CLEARTCH: 59.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING GREENWOOD ALTIMETER SETTING.
CHART NOTE: RWY 31 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -9C OR ABOVE 46C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED USE GREENWOOD ALTIMETER SETTING: INCREASE ALL DAS 65 FEET AND VISIBILITY LNAV/VNAV CAT C AND D 1/8 SM;
INCREASE ALL MDAS 80 FEET AND VISIBILITY LNAV CATS C AND D AND CIRCLING ALL CATS 3/8 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.46 NM TO RW31*
*LNAV ONLY
WAAS CHANNEL #40029
REFERENCE PATH ID: W31A
CHART FAS OBST: 438 TREE 334757N/0894603W.
HOLD NW, RT, 130.72 INBOUND
LTP HAE: 33.7 M

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	513	1	311	513	1	311	513	1	311	513	1	311			
LNAV/VNAV DA	679	1 1/2	477	679	1 1/2	477	679	1 1/2	477	679	1 1/2	477			
LNAV MDA	720	1	518	720	1	518	720	1 1/4	518	720	1 1/4	518			
CIRCLING	1000	1	792	1000	1	792	1000	2 1/4	792	1060	2 3/4	852			



CHANGES - REASONS

- 1. TAA ALTITUDES CHANGED FROM 2100 TO 3000 - ATC RADIO COMMUNICATIONS UNSATISFACTORY BELOW 3000.
- 2. MISSED APPROACH CA LEG CHANGED FROM 509 MSL TO 513 MSL - HATH TO HAT CHANGE.
- 3. PROFILE SECTION, LINE 2, ADDED MAXIMUM HOLDING ALTITUDE - CURRENT DOCUMENTATION POLICY.
- 4. PROFILE SECTION, LINE 5, CHANGED 311 HATH TO 311 HAT AND DISTANCE FROM 0.76 TO 0.78 - HATH TO HAT CHANGE.
- 5. PROFILE SECTION, LINE 7, ADDED "20:1 IS CLEAR" - CURRENT DOCUMENTATION POLICY.
- 6. REMOVED FAHRENHEIT VALUES FROM BARO-VNAV NOTE - CURRENT DOCUMENTATION POLICY.
- 7. REPLACED DME/DME NOTE WITH PBN REQUIREMENTS NOTE - CURRENT DOCUMENTATION POLICY.
- 8. ADDED RUNWAY NUMBER TO HELICOPTER NOTE - CURRENT DOCUMENTATION POLICY.
- 9. ADDED VDP NA NOTE WHEN USING REMOTE ALTIMETER SETTING - VDP ESTABLISHED.
- 10. CHANGED BACKUP ALTIMETER NOTE FROM "...INCREASE LPV DA TO 574, LNAV/VNAV DA TO 740 FT AND ALL VISIBILITIES 1/4 MILE; INCREASE ALL MDA 80 FT AND LNAV VISIBILITY CATS C AND D 1/4 MILE, CIRCLING VISIBILITY ALL CATS 1/4 MILE" TO "...INCREASE ALL DAS 65 FEET AND VISIBILITY LNAV/VNAV CAT C AND D 1/8 SM; INCREASE ALL MDAS 80 FEET AND VISIBILITY LNAV CATS C AND D AND CIRCLING ALL CATS 3/8 SM" - RECALCULATION.
- 11. REMOVED NIGHT LANDING NA NOTE - RUNWAY 4/22 IS UNLIT AND THEREFORE DOES NOT REQUIRE A NOTE.
- 12. ADDED CIRCLING ICON - UPDATED CIRCLING AREAS TO CURRENT SIZES.
- 13. ADDED VDP - 20:1 IS CLEAR.
- 14. LNAV CAT C AND D VIS CHANGED FROM 1 1/4 TO 1 3/8 - RECALCULATION.
- 15. CIRCLING CAT D MDA-VIS-HAA CHANGED FROM 1000 - 2 1/2 - 792 TO 1060 - 2 3/4 - 852 - NEW CONTROLLING OBSTACLE.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZME, AIRPORT MANAGER

FLIGHT CHECKED BY

JAMES L REINBOLD JR

Digitally signed by
DAVID DANNER
Sep 27, 2018

OFFICE

FICO

DATE

9/22/18

DEVELOPED BY

RUSS ROSLEWSKI

Digitally signed by
RUSSELL ROSLEWSKI
Aug 29, 2018

OFFICE

AJV-5421

DATE

08/08/2018

APPROVED BY

JULIE MORGAN

Digitally signed by
DAVID DANNER
Sep 27, 2018

OFFICE

AJV-5420

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGNF
RUNWAY	RW31
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	334942.9715N
LTP/FTP LONGITUDE	0894728.8595W
LTP/FTP ELLIPSOIDAL HEIGHT	+00337
FPAP LATITUDE	335042.4830N
FPAP LONGITUDE	0894848.5820W
THRESHOLD CROSSING HEIGHT (TCH)	00059.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.10
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0616
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	CAC4F903
<u>ADDITIONAL PATH POINT RECORD INFORMATION</u>	
ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00603
FPAP ORTHOMETRIC HEIGHT	+00603



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

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Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> BILLINGS LOGAN INTL	<u>AIRPORT ID</u> KBIL	<u>PROCEDURE NAME</u> ILS Y OR LOC Y RWY 10L	<u>ORIGINAL/AMENDMENT</u> 26A	<u>CITY</u> BILLINGS	<u>STATE</u> MT	
<u>AIRPORT ELEVATION</u> 3662	<u>TDZE</u> 3585	<u>SUPERSEDED</u> ILS Y OR LOC Y RWY 10L	<u>ORIGINAL/AMENDMENT</u> 26	<u>DATED</u> 02/01/2018	<u>MAG VAR</u> 10E	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> I-BIL	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
BIL VORTAC		HEXOS/I-BIL LOC/DME 5.04 DME	FAF/IAF				304.52	2.91	6200
BEARE	IAF	WIBON	NOPT	TF	FB	1.00	064.40	5.68	6000
LRSUN	IAF	WIBON	NOPT	TF	FB	1.00	111.11	6.62	6000
WIBON/I-BIL LOC/DME 11.04 DME	IF	HEXOS/I-BIL LOC/DME 5.04 DME					101.71	6.00 (I-BIL)	5300

MISSED APPROACH

MAP:

ILS: DA
LOC: 5.23 NM AFTER HEXOS/I-BIL LOC 5.04 DME OR AT I-BIL 0.19 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4500 THEN CLIMBING RIGHT TURN TO 6000 ON BIL VORTAC R-122 TO BIL VORTAC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L **SIDE OF COURSE** 281.71 **OUTBOUND** 5800 **FT WITHIN** 10 **MILES OF** HEXOS/I-BIL LOC/DME 5.04 DME (IAF)

2.

3. **FAC:** 101.71 **FAF:** HEXOS/I-BIL LOC 5.04 DME **DIST FAF TO MAP:** 5.23 **DIST FAF TO THLD:** 5.23

4. **MIN ALT:** HEXOS/I-BIL LOC 5.04 DME 5300, ZOBUM/I-BIL LOC/DME 2.12 DME 4360*

5. **DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **200 HAT:** 0.47 **GS ANT:** 1135

6. **MIN GS INCPT:** 5300 **GS ALT AT FAF :** HEXOS/I-BIL LOC 5.04 DME 5300 **OM:** **MM:** **IM:**

7. **GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 50.6

8. **MSA FROM:** BIL VORTAC 130-220 8300, 220-130 6300

EQUIPMENT REQUIREMENTS NOTES:



DME REQUIRED

PBN REQUIREMENTS NOTE: FROM BEARE, LRSUN: RNAV 1-GPS REQUIRED.

NOTES:

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 10L CAT C/D VISIBILITY TO RVR 6000.
CHART SPEED ICON IN PLANVIEW AT BEARE: MAX 210 KIAS.
CHART SPEED ICON IN PLANVIEW AT LRSUN: MAX 230 KIAS.
CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.

ADDITIONAL FLIGHT DATA:

CHART IN PROFILE VIEW: I-BIL DME ANTENNA.
CHART IN PLANVIEW: HEXOS/BIL VORTAC 2.92 DME
CHART MANDATORY 8000 AT BEARE.
CHART MANDATORY 8000 AT LRSUN
CHART CIRCLING ICON.
CHART VDP AT 0.96 DME*
DISTANCE VDP TO THLD 1.14 NM
* LOC ONLY
CHART FAS OBST: 3732 TREE 454908N/1083544W.
HOLD SE, RT, 303.00 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD - CAT D 1000-3

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-ILS 10L**	3785	2400	200	3785	2400	200	3785	2400	200	3785	2400	200			
S-LOC 10L	4000	2400	415	4000	2400	415	4000	4000	415	4000	4000	415			
CIRCLING	4100	1	448	4160	1	508	4180	1 1/2	528	4580	3	928			

CHANGES - REASONS

1. TERMINAL ROUTES: ADDED "NOPT" TO BEARE AND LRSUN TRANSITIONS - NO PT REQUIRED FROM THESE IAF FIXES.
2. REMOVED EQUIPMENT REQUIREMENT NOTE "RNAV 1-GPS OR DME REQUIRED FOR PROCEDURE ENTRY - SUPERFLUOUS INFO, DME AND RNAV NOTES ALREADY ESTABLISHED.
3. REMOVED NOTE "CHART PBN NAVSPEC REQUIREMENT NOTE: RNAV 1 - SUPERFLUOUS INFO COVERED BY PBN REQUIREMENT NOTE.
4. REPLACED EQUIPMENT REQUIREMENTS NOTE WITH PBN REQUIREMENTS NOTE: FROM BEARE, LRSUN: RNAV 1-GPS REQUIRED - IAF WAYPOINTS ARE TIED TO RNAV ARRIVALS.
5. LINE 5, ADDED DIST TO THLD FROM 200 HAT: 0.47, AND FROM GS ANT: 1135 - PRECISION APPROACH.
6. ADDITIONAL FLIGHT DATA: ADDED "CHART IN PLANVIEW: HEXOS/BIL VORTAC 2.92 DME" - PER FLIGHT INSPECTION REQUEST TO ADD DME TO IAF FROM BILLINGS VORTAC.



COORDINATED WITH:

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

FLIGHT CHECKED BY

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

DEVELOPED BY

COLTON CROWDER

Digitally signed by
COLTON CROWDER
Sep 25, 2018

Digitally signed by
DONALD H LANIER
Oct 02, 2018

OFFICE

OFFICE

AJV-5431

OFFICE

AJV-5430

DATE

DATE

08/30/2018

DATE

TITLE

MANAGER

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
DONALD H LANIER
Oct 02, 2018



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

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

<u>AIRPORT</u> BOZEMAN YELLOWSTONE INTL	<u>AIRPORT ID</u> KBZN	<u>PROCEDURE NAME</u> ILS OR LOC RWY 12	<u>ORIGINAL/AMENDMENT</u> 9C	<u>CITY</u> BOZEMAN	<u>STATE</u> MT
<u>AIRPORT ELEVATION</u> 4473	<u>TDZE</u> 4443	<u>SUPERSEDED</u> ILS OR LOC RWY 12	<u>ORIGINAL/AMENDMENT</u> 9B	<u>DATED</u> 05/24/2018	<u>MAG VAR</u> 13E
<u>FACILITY</u> I-BZN	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2010

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
HIA VOR/DME		HEBIV/HIA 19.00 DME					060.36	19.00	9400
HEBIV/HIA 19.00 DME		THESE INT/HIA 26.87 DME					060.36	7.87 (HIA R-060)	8300
BZN VOR/DME		FALIA INT/BZN 15.00 DME					297.17	15.00	8100
THESE INT/HIA 26.87 DME	IAF	FALIA INT/BZN 15.00 DME	NOPT				041.72 & 122.76	4.46 (HDG) & 2.73 (I-BZN)	8000
BRIGR INT/BZN 15.00 DME CW	IAF	FALIA INT/BZN 15.00 DME	NOPT				15.00 DME ARC (BZN LR-289)		8000
KICDO/BZN 15.00 DME CCW	IAF	ZOPKA/BZN 15.00 DME	NOPT				15.00 DME ARC		8400
ZOPKA/BZN 15.00 DME CCW		FALIA INT/BZN 15.00 DME					15.00 DME ARC		8000
FALIA INT/BZN 15.00 DME	IF/IAF	MANNI LOM/BZN 7.60 DME					122.76	7.41 (I-BZN)	6800

MISSED APPROACH

MAP:

ILS: DA

LOC: 7.09 NM AFTER MANNI LOM OR AT BZN 0.53 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 5200 THEN CLIMBING RIGHT TURN TO 8000 ON HEADING 250 AND ON BZN VOR/DME R-223 TO BRIGR INT/BZN 15.00 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 5200 THEN CLIMBING RIGHT TURN TO 8400 DIRECT MANNI LOM AND HOLD, CONTINUE CLIMB-IN-HOLD TO 8400 (ADF REQUIRED).



PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)	
2.	HOLD NW FALIA, RT, 122.76 INBOUND, 8000 FT. IN LIEU OF PT (IAF), MAX 14000.				
3. FAC:	122.76	FAF: MANNI LOM/BZN 7.60 DME	DIST FAF TO MAP: 7.09	DIST FAF TO THLD: 7.09	
4. MIN ALT:	FALIA INT/BZN 15.00 DME 8000, MANNI LOM/BZN 7.60 DME 6800				
5. DIST TO THLD FROM OM:	7.09	MM:	IM:	150 HAT:	GS ANT: 905
6. MIN GS INCPT:	6800	GS ALT AT FAF :		OM: 6781	MM: IM:
7. GP ANGLE:	3.00	34:1:	20:1:	TCH: 52.5	
8. MSA FROM:	BZ LOM 360-090 10900, 090-180 11400, 180-270 10600, 270-360 9000				

EQUIPMENT REQUIREMENTS NOTES:

RADAR REQUIRED FOR PROCEDURE ENTRY AT BRIGR.

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 3-21 AND 11-29.

ADDITIONAL FLIGHT DATA:

CHART IN PLANVIEW: MANNI LOM
CHART CIRCLING ICON.
CHART BZN R-223 AT BRIGR.
CHART BZN R-320 AT KICDO.
CHART BZN R-306 AT ZOPKA.
CHART VDP AT 1.71 DME*
DISTANCE VDP TO THLD 1.20 NM
* LOC ONLY
FAS OBST: 4549 AAO 454919N/1111343W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NW MANNI LOM, RT, 122.76 INBOUND.
HOLD W, LT, 093.83 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD - CAT D 900-3

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-ILS 12	4643	1/2	200	4643	1/2	200	4643	1/2	200	4643	1/2	200			
S-LOC 12	4860	1/2	417	4860	1/2	417	4860	3/4	417	4860	3/4	417			
CIRCLING	4940	1	467	4940	1	467	5160	2	687	5360	3	887			



AIRPORT	AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	CITY	STATE
BOZEMAN YELLOWSTONE INTL	KBZN	ILS OR LOC RWY 12	9C	BOZEMAN	MT

CHANGES - REASONS

- 1. PROFILE SECTION, LINE 2, ADDED MAX HOLDING ALTITUDE OF 14000 - CURRENT DOCUMENTATION POLICY.
- 2. MOVED AND REWORDED PLANVIEW NOTE "RADAR REQUIRED FOR ARRIVALS AT BRIGR" TO EQUIPMENT REQUIREMENTS NOTE BOX - CURRENT DOCUMENTATION POLICY.
- 3. ADDED NOTE RESTRICTING CIRCLING TO RWYS 3/21 AND 11/29 - AS ADVISED BY AIRPORT AND FPT.
- 4. REMOVED CNF (CFFFB) FROM CHART - NO LONGER REQUIRED BY CHARTING STANDARD.
- 5. TERMINAL ROUTES, KICDO TO FALIA LEG, ADDED "NOPT" - PROCEDURE TURN NOT REQUIRED.
- 6. TERMINAL ROUTES, FALIE TO MANNI LOM LEG, ADDED "BZN 7.60 DME" TO MANNI FIX DEFINITION - MANNI IS ALSO A DME FIX.
- 7. ADDED VDP - BZN VOR/DME IS USED ON THIS PROCEDURE AND CAN IDENTIFY THE VDP.

PDF EDIT:

- 1. TERMINAL ROUTE THESE TO FALIA, DISTANCE COLUMN, ADDED "(HDG)" AFTER 4.46.



COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZLC, BIG SKY APP CON, BZN ATCT, AMGR

FLIGHT CHECKED BY

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, DEC 22, 2017.
DEZ SILAGYI
Sep 13, 2018

DEVELOPED BY

Digitally signed by
RUSS ROSLEWSKI **RUSSELL ROSLEWSKI**
Sep 10, 2018

OFFICE DATE

OFFICE DATE
AJV-5421 08/01/2018
OFFICE DATE
AJV-5420

APPROVED BY

JULIE MORGAN *Digitally signed by*
DEZ SILAGYI
Sep 13, 2018

TITLE
MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> BOZEMAN YELLOWSTONE INTL	<u>AIRPORT ID</u> KBZN	<u>PROCEDURE NAME</u> RNAV (GPS)-A	<u>ORIGINAL/AMENDMENT</u> 2C	<u>CITY</u> BOZEMAN	<u>STATE</u> MT	
<u>AIRPORT ELEVATION</u> 4473	<u>TDZE</u>	<u>SUPERSEDED</u> RNAV (GPS)-A	<u>ORIGINAL/AMENDMENT</u> 2B	<u>DATED</u> 05/24/2018	<u>MAG VAR</u> 13E	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
BZN VOR/DME		SURPE		TF	FO	1.00	111.14	17.84	11000
WOMET		SURPE		TF	FO	1.00	076.47	19.33	11000
LVM VOR/DME	IAF	SURPE	NOPT	TF	FB	1.00	238.45	16.10	11000
SURPE	IF/IAF	ZIPGO		TF	FB	1.00	273.01	7.50	10000
ZIPGO	FAF	RW30	MAP	TF	FO	0.30	302.89	10.00	
RW30	MAP	4873 MSL		CA			302.89		
4873 MSL		FALIA		DF	FO	1.00			10000

MISSED APPROACH

MAP:

LNAV: RW30

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 10000 DIRECT FALIA AND HOLD, CONTINUE CLIMB-IN-HOLD TO 10000.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD E SURPE, RT, 259.00 INBOUND, 11000 FT. IN LIEU OF PT (IAF), MAX 14000.
3. FAC: 302.89FAF: ZIPGODIST FAF TO MAP: 10.00DIST FAF TO THLD: 10.00
4. MIN ALT: SURPE 11000, ZIPGO 10000
5. DIST TO THLD FROM OM:MM:IM:150 HAT:GS ANT:
6. MIN GP INCPT:GP ALT AT FAF :OM:MM:IM:
7. GP ANGLE:34:1: IS CLEAR20:1: IS CLEARTCH:
8. MSA FROM: RW30 12300

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 3-21 AND 11-29.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT LVM VOR/DME ON V2 SOUTHEAST BOUND.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
ZIPGO TO RW30: 5.17/45.
FAS OBST: 5486 AAO 454100N/1110003W.
5515 AAO 453812N/1105939W.
HOLD NW, RT, 122.74 INBOUND

MINIMUMS:

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

ALTERNATE: NA☐CAT A, B 1600-2, CAT C 1600-3, CAT D 1900-3

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
CIRCLING	6020	1 1/4	1547	6020	1 1/2	1547	6020	3	1547	6300	3	1827			

CHANGES - REASONS

1. CHANGED FEEDER RNP VALUES FROM 2.00 TO 1.00 - 8260.58A CHG 1 NAVSPEC TABLE.
2. PROFILE SECTION, LINE 2, ADDED MAX HOLDING ALTITUDE OF 14000 - CURRENT DOCUMENTATION POLICY.
3. PROFILE SECTION, LINE 7, ADDED "34:1 IS CLEAR" AND "20:1 IS CLEAR" - CURRENT DOCUMENTATION POLICY.
4. REPLACED RNAV-1 NOTE WITH PBN REQUIREMENTS NOTE - CURRENT DOCUMENTATION POLICY.
5. ADDED NOTE RESTRICTING CIRCLING TO RWYS 3/21 AND 11/29 - AS ADVISED BY AIRPORT AND FPT.
6. DELETED PLANVIEW NOTES "PROCEDURE NA FOR ARRIVALS..." AT BZN VOR/DME AND WOMET - DUE TO LAYOUT OF IAFS, AIRCRAFT WOULD HAVE TO ALREADY PASS ONE IAF TO GET TO THE ONE WITH A NOTE.
7. REWORDED PLANVIEW NOTE "PROCEDURE NA FOR ARRIVAL ON LVM VOR/DME AIRWAY RADIALS 149 CW 327" TO "PROCEDURE NA FOR ARRIVALS AT LVM VOR/DME ON C2 SOUTHEAST BOUND" - MORE ACCURATE WORDING.

PDF EDIT:

1. ALTERNATE MINIMUMS, REMOVED "STANDARD -".



COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZLC, BIG SKY APP CON, BZN ATCT, AMGR

FLIGHT CHECKED BY

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

DEVELOPED BY

RUSS ROSLEWSKI

Digitally signed by
RUSSELL ROSLEWSKI
Sep 10, 2018

APPROVED BY

JULIE MORGAN

Digitally signed by
DEZ SILAGYI
Sep 13, 2018

<i>Digitally signed by</i> DEZ SILAGYI Sep 13, 2018	<u>OFFICE</u> <u>OFFICE</u> AJV-5421 <u>OFFICE</u> AJV-5420	<u>DATE</u> <u>DATE</u> 07/31/2018 <u>DATE</u>	<u>TITLE</u> MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> BOZEMAN YELLOWSTONE INTL	<u>AIRPORT ID</u> KBZN	<u>PROCEDURE NAME</u> RNAV (GPS) Y RWY 12	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> BOZEMAN	<u>STATE</u> MT	
<u>AIRPORT ELEVATION</u> 4473	<u>TDZE</u> 4443	<u>SUPERSEDED</u> RNAV (GPS) Y RWY 12	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 05/24/2018	<u>MAG VAR</u> 13E	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
HIA VOR/DME		HEBIV		TF	FB	1.00	065.36	19.00	9500
HEBIV		THESE		TF	FB	1.00	065.66	7.87	8300
LVM VOR/DME		QIVHY		TF	FB	1.00	278.01	32.00	12300
QIVHY		FEVIM		TF	FO	1.00	277.51	10.93	9000
RANEY		POPWI		TF	FB	1.00	340.34	14.00	10000
POPWI		FEVIM		TF	FO	1.00	340.31	12.50	8000
THESE	IAF	FEVIM	NOPT	TF	FB	1.00	074.31	5.91	8000
GODFE	IAF	FEVIM	NOPT	TF	FB	1.00	162.51	18.51	8000
FEVIM	IF/IAF	HAYCI		TF	FB	1.00	122.59	4.80	7300
HAYCI		OLENY		TF	FB	1.00	122.65	2.05	6800
OLENY	FAF	RW12	MAP	TF	FO	0.30	122.67	7.15	
RW12	MAP	4693 MSL		CA			122.67		
4693 MSL		WOLAT		DF	FB	1.00			
WOLAT		CISED		TF	FB	1.00	228.51	10.00	8300
CISED		THESE		TF	FO	1.00	316.88	21.29	8300



MISSED APPROACH

MAP:
LPV: DA
LNAV/VNAV: DA
LNAV: RW12

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 8300 DIRECT WOLAT AND RIGHT TURN ON TRACK 228.51 TO CISED AND ON TRACK 316.88 TO THESE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)					
2.	HOLD NW FEVIM, RT, 122.59 INBOUND, 8000 FT. IN LIEU OF PT (IAF), MAX 17500.								
3. FAC:	122.67	FAF: OLENY	DIST FAF TO MAP: 7.15	DIST FAF TO THLD: 7.15					
4. MIN ALT:	FEVIM 8000, HAYCI 7300, OLENY 6800								
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	250 HAT: 0.68	GS ANT:				
6. MIN GP INCPT: 6800	GP ALT AT FAF : OLENY 6800			OM:		MM:		IM:	
7. GP ANGLE: 3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 52.5						
8. MSA FROM:	RW12 12300								

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 3-21 AND 11-29.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -23C OR ABOVE 49C.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV VISIBILITY TO 1 7/8 SM AND LNAV VISIBILITY CATS C AND D TO 1 3/8 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.51 NM TO RW12*
*LNAV ONLY
WAAS CHANNEL #72816
REFERENCE PATH ID: W12A
FAS OBST: 4539 AAO 454933N/1111336W.
HOLD W, RT, 074.31 INBOUND
LTP HAE: 1337.3 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 900-3



CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	4693	1/2	250	4693	1/2	250	4693	1/2	250	4693	1/2	250			
LNAV/VNAV DA	5094	1 3/4	651	5094	1 3/4	651	5094	1 3/4	651	5094	1 3/4	651			
LNAV MDA	4960	1/2	517	4960	1/2	517	4960	1	517	4960	1 1/4	517			
CIRCLING	4960	1	487	4960	1	487	5160	2	687	5360	3	887			

CHANGES - REASONS

1. CHANGED FEEDER RNP VALUES FROM 2.00 TO 1.00 - 8260.58A CHG 1 NAVSPEC TABLE.
2. ADDED COURSE FOR MISSED APPROACH CA LEG - CURRENT DOCUMENTATION POLICY.
3. PROFILE SECTION, LINE 2, ADDED MAX HOLDING ALTITUDE OF 17500 - CURRENT DOCUMENTATION POLICY.
4. PROFILE SECTION, LINE 7, ADDED "20:1 IS CLEAR" - CURRENT DOCUMENTATION POLICY.
5. REPLACED RNAV-1 NOTE WITH PBN REQUIREMENTS NOTE - CURRENT DOCUMENTATION POLICY.
6. REMOVED FAHRENHEIT VALUES FROM BARO-VNAV NOTE - CURRENT DOCUMENTATION POLICY.
7. ADDED NOTE RESTRICTING CIRCLING TO RWYS 3/21 AND 11/29 - AS ADVISED BY AIRPORT AND FPT.
8. DELETED PLANVIEW NOTES "PROCEDURE NA FOR ARRIVALS..." - DUE TO LAYOUT OF IAFS, AIRCRAFT WOULD HAVE TO ALREADY PASS ONE IAF TO GET TO THE ONE WITH A NOTE.
9. ADDED INOPERATIVE ALS NOTE - RECALCULATION.

PDF EDIT:

1. PROFILE SECTION, LINE 2, CHANGED MAX HOLDING ALTITUDE FROM 17500 TO 10000.



COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZLC, BIG SKY APP CON, BZN ATCT, AMGR

FLIGHT CHECKED BY

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

DEVELOPED BY

RUSS ROSLEWSKI

APPROVED BY

JULIE MORGAN

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RUSSELL ROSLEWSKI
Sep 10, 2018

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Sep 13, 2018

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Sep 13, 2018

<u>OFFICE</u>	<u>DATE</u>
AJV-5421	08/01/2018
<u>OFFICE</u>	<u>DATE</u>
AJV-5420	

TITLE
MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KBZN
RUNWAY	RW12
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W12A
LTP/FTP LATITUDE	454717.1070N
LTP/FTP LONGITUDE	1110959.3340W
LTP/FTP ELLIPSOIDAL HEIGHT	+13373
FPAP LATITUDE	454613.2800N
FPAP LONGITUDE	1110830.5310W
THRESHOLD CROSSING HEIGHT (TCH)	00052.5
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)	50.0
CRC REMAINDER	238D1187
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+13487
FPAP ORTHOMETRIC HEIGHT	+13487



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

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

<u>AIRPORT</u> BOZEMAN YELLOWSTONE INTL	<u>AIRPORT ID</u> KBZN	<u>PROCEDURE NAME</u> VOR RWY 12	<u>ORIGINAL/AMENDMENT</u> 15C	<u>CITY</u> BOZEMAN	<u>STATE</u> MT
<u>AIRPORT ELEVATION</u> 4473	<u>TDZE</u> 4443	<u>SUPERSEDED</u> VOR RWY 12	<u>ORIGINAL/AMENDMENT</u> 15B	<u>DATED</u> 05/24/2018	<u>MAG VAR</u> 18E
<u>FACILITY</u> BZN	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1965

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>

MISSED APPROACH

MAP:

BZN VOR/DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 5500 THEN CLIMBING RIGHT TURN TO 8000 ON HEADING 250 AND BZN VOR/DME R-223 TO BRIGR INT/15.00 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L SIDE OF COURSE 283.88 OUTBOUND 6700 FT WITHIN 10 MILES OF BZN VOR/DME (IAF)
2.
3. FAC: 103.88 FAF: DIST FAF TO MAP: DIST FAF TO THLD:
4. MIN ALT:
8. MSA FROM: BZN VOR/DME 350-080 10900, 080-260 12300, 260-350 9900

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 3-21 AND 11-29.
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY.

ADDITIONAL FLIGHT DATA:



MINIMUMS:

ALTERNATE: NA ☐ CAT A, B 1000-2, CAT C, D 1000-3

<u>CATEGORY:</u>	<u>A</u>			<u>B</u>			<u>C</u>			<u>D</u>			<u>E</u>		
<u>FINAL TYPE</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>
S-12	5440	1 1/4	997	5440	1 1/2	997	5440	3	997	5440	3	997			
CIRCLING	5440	1 1/4	967	5440	1 1/2	967	5440	3	967	5440	3	967			

1. ADDED NOTE RESTRICTING CIRCLING TO RWYS 3/21 AND 11/29 - AS ADVISED BY AIRPORT AND FPT.

1. ALTERNATE MINIMUMS, REMOVED "STANDARD -".

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZLC, BIG SKY APP CON, BZN ATCT, AMGR

DATE

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

Sep 13, 2018

OFFICE

RUSSELL ROSLEWSKI

AJV-5421

08/02/2018

OFFICE

JULIE MORGAN

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AJV-5420

DATE

TITLE
MANAGER



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

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

<u>AIRPORT</u> CONCORD-PADGETT RGNL	<u>AIRPORT ID</u> KJQF	<u>PROCEDURE NAME</u> ILS OR LOC RWY 20	<u>ORIGINAL/AMENDMENT</u> 2A	<u>CITY</u> CONCORD	<u>STATE</u> NC	
<u>AIRPORT ELEVATION</u> 705	<u>TDZE</u> 705	<u>SUPERSEDED</u> ILS OR LOC RWY 20	<u>ORIGINAL/AMENDMENT</u> 2	<u>DATED</u> 12/22/2005	<u>MAG VAR</u> 6W	<u>EPOCH YEAR</u> 1995
<u>FACILITY</u> I-JQF	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
BZM VOR/DME	IAF	LEEMO INT/I-JQF 12.34 DME/RADAR					127.60	33.01	3400
GSO VORTAC	IAF	LEEMO INT/I-JQF 12.34 DME/RADAR					233.46	43.76	3400
LEEMO INT/I-JQF 12.34 DME/RADAR	IF	GLISS/I-JQF 6.33 DME/RADAR					196.46	6.01 (I-JQF)	2400

MISSED APPROACH

MAP:

ILS: DA
LOC: 5.12 NM AFTER GLISS/I-JQF 6.33 DME/RADAR OR AT I-JQF 1.21 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 3400 ON HEADING 020 AND CLT VOR/DME R-036 TO LEEMO INT/I-JQF 12.34 DME/RADAR AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 4000 ON HEADING 300 AND BZM VOR/DME R-148 TO BZM VOR/DME AND HOLD N, LT, 183.00 INBOUND.

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)		
2. PROFILE STARTS AT LEEMO						
3. FAC:	196.46	PFAF: GLISS/I-JQF 6.33 DME/RADAR	DIST PFAF TO MAP: 5.12	DIST PFAF TO THLD: 5.12		
4. MIN ALT: LEEMO INT/I-JQF 12.34 DME/RADAR 3400, GLISS/I-JQF 6.33 DME/RADAR 2400						
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	GS ANT: 1002		
6. MIN GS INCPT: 2400	GS ALT AT PFAF : GLISS/I-JQF 6.33 DME/RADAR 2400			OM:	MM:	IM:
7. GP ANGLE: 3.00	34:1:	20:1:	TCH: 44.4			
8. MSA FROM: CLT VOR/DME 3800						

EQUIPMENT REQUIREMENTS NOTES:

DME OR RADAR REQUIRED FOR LOC ONLY.



NOTES:

CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON BZM VOR/DME AIRWAY RADIALS 071 CW 143.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON GSO VORTAC AIRWAY RADIALS 193 CW 283.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 20 CAT D VISIBILITY TO 1 3/8 SM.

ADDITIONAL FLIGHT DATA:

CHART PLANVIEW NOTE: USE BZM R-128 AND CLT R-036 TO LOCATE LEEMO INT PRIOR TO INTERCEPTING LOCALIZER
DO NOT CHART ALTERNATE MISSED APPROACH HOLDING AT BZM VOR/DME.
CHART CIRCLING ICON.
CHART VDP AT 2.53 DME*
DISTANCE VDP TO THLD 1.32 NM
* LOC ONLY
CHART FAS OBST: 909 TREE 352825N/0804134W.
CHART: 919 TREE 352926N/0804123W.
HOLD NE, RT, 215.99 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-ILS 20	905	1/2	200	905	1/2	200	905	1/2	200	905	1/2	200			
S-LOC 20	1160	1/2	455	1160	1/2	455	1160	7/8	455	1160	1	455			
CIRCLING	1300	1	595	1300	1	595	1480	2 1/4	775	1480	2 1/2	775			

CHANGES - REASONS

1. CHANGED AIRPORT NAME FROM CONCORD RGNL TO CONCORD-PADGETT RGNL - MATCH PENDING AIRNAV DATA RECORD.
2. AMENDED VDP FROM 2.51 DME/DISTANCE TO THLD 1.31 MILES TO THLD TO READ 2.53 DME/1.32 MILES TO THLD - RECOMPUTED USING CURRENT VGSI ANGLE/TCH.
3. CHANGED THE WORD "VIA" TO READ "ON" IN PRIMARY AND ALTERNATE MISSED APPROACH INSTRUCTIONS - FORMATTED IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-6.
4. AMENDED S-LOC 20 CAT C VISIBILITY FROM 3/4 TO 7/8 - COMPUTED IN ACCORDANCE WITH FAAO 8260.3C, TABLE 3-3-1.
5. ADDED CHART CIRCLING ICON IN ADDITIONAL FLIGHT DATA - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-10T. THE RNAV (GPS) RWY 2 HAS A CIRCLING ICON PUBLISHED.
6. AMENDED CAT C CIRCLING MDA/HAA FROM 1300/595 TO 1480/775 AND VISIBILITY FROM 1 3/4 TO 2 1/4 - MATCH CAT C CIRCLING MINIMUMS ON THE RNAV (GPS) RWY 2.
7. DELETED NOTE: IF LOCAL ALTIMETER SETTING NOT RECEIVED, USE CHARLOTTE ALTIMETER SETTING AND INCREASE ALL DAS/MDAS 60 FEET - LOCAL AWOS IS ON WMSCR. BACK-UP ALTIMETER ADJUSTMENTS AND NOTES MOVED TO FAA FORM 8260-9 FOR CONTINGENCY USE DURING KJQF AWOS OUTAGES.
8. DELETED NOTE: VDP NA WHEN USING CHARLOTTE ALTIMETER SETTING - LOCAL AWOS IS ON WMSCR. BACK-UP ALTIMETER ADJUSTMENTS AND NOTES MOVED TO FAA FORM 8260-9 FOR CONTINGENCY USE DURING KJQF AWOS OUTAGES.
9. ADDED NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 20 CAT D VISIBILITY TO 1 3/8 SM - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-11O(3)(D).
10. DELETED NOTE: RADAR OR DME REQUIRED - REPLACED BY EQUIPMENT REQUIREMENT NOTE.
11. ADDED EQUIPMENT REQUIREMENT NOTE: DME OR RADAR REQUIRED FOR LOC ONLY - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-8.
12. ADDED PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}) - VGSI TCH (37.5) AND PROCEDURE TCH (44.4) NOT WITHIN 3 FOOT COINCIDENCE TOLERANCE.
13. AMENDED ALTERNATE MINIMUMS TO READ NA - I-JQF LOCALIZER IS UNMONITORED (SEE AIRPORT ENTRY IN CHART SUPPLEMENT).



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZTL, CLT APP CON, JQF ATCT, ARPT MGR

FLIGHT CHECKED BY

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

Digitally signed by

OFFICE

DEZ SILAGYI

Aug 30, 2018

DATE

DEVELOPED BY

PETER R. GUIMOND

Digitally signed by

PETER R GUIMOND

Jul 27, 2018

OFFICE

AJV-5422

DATE

07/27/2018

APPROVED BY

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Aug 30, 2018

OFFICE

AJV-5420

DATE

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> CONCORD-PADGETT RGNL	<u>AIRPORT ID</u> KJQF	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 2	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> CONCORD	<u>STATE</u> NC	
<u>AIRPORT ELEVATION</u> 705	<u>TDZE</u> 667	<u>SUPERSEDED</u> RNAV (GPS) RWY 2	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 12/10/2015	<u>MAG VAR</u> 6W	<u>EPOCH YEAR</u> 1995
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
LOCAS		LALEC		TF	FB	2.00	250.29	9.75	2900
LALEC	IAF	DOCEC		TF	FB	1.00	296.08	7.00	2900
HUSTN	IAF	DOCEC		TF	FB	1.00	337.59	19.21	2900
DOCEC	IF	ECEGA		TF	FB	1.00	016.43	5.92	2900
ECEGA	FAF	COKBA/4.30 NM TO RW02		TF	FB	0.30	016.45	2.39	
COKBA/4.30 NM TO RW02		RW02	MAP	TF	FO	0.30	016.45	4.30	
RW02	MAP	986 MSL		CA			016.45		
986 MSL		LEEMO		DF	FO	1.00			4000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW02

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4000 DIRECT LEEMO AND HOLD, CONTINUE CLIMB IN HOLD TO 4000.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. PROFILE STARTS AT DOCEC
3. FAC: 016.45 FAF: ECEGA DIST FAF TO MAP: 6.69 DIST FAF TO THLD: 6.69
4. MIN ALT: DOCEC 2900, ECEGA 2900, COKBA/4.30 NM TO RW02 2100*
5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 319 HAT: 0.87 GS ANT:
6. MIN GP INCPT: 2900 GP ALT AT FAF : ECEGA 2900 OM: MM: IM:
7. GP ANGLE: 3.10 34:1: IS NOT CLEAR 20:1: IS CLEAR TCH: 60.0
8. MSA FROM: RW02 3800

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 2 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 45C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT LOCAS ON V54-509 EASTBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HUSTN ON T202 SOUTHWEST BOUND.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.42 NM TO RW02*
*LNAV ONLY
WAAS CHANNEL #93903
REFERENCE PATH ID: W02A
CHART FAS OBST: 940 TOWER 352225N/0804201W.
CHART: 1999 TOWER 351602N/0804404W.
HOLD NE, RT, 217.99 INBOUND
LTP HAE: 164.5 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 800-2 1/4, CAT D 800-2 1/2

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	986	1 1/8	319	986	1 1/8	319	986	1 1/8	319	986	1 1/8	319			
LNAV/VNAV DA	1220	1 7/8	553	1220	1 7/8	553	1220	1 7/8	553	1220	1 7/8	553			
LNAV MDA	1240	1	573	1240	1	573	1240	1 5/8	573	1240	1 5/8	573			
CIRCLING	1300	1	595	1300	1	595	1480	2 1/4	775	1480	2 1/2	775			



CHANGES - REASONS

- 1. CHANGED AIRPORT NAME FROM CONCORD RGNL TO CONCORD-PADGETT RGNL - MATCH PENDING AIRNAV DATA RECORD.
- 2. ADDED 20:1 IS CLEAR - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-7G(3).
- 3. AMENDED VDP FROM 1.74 NM TO RW02 TO 1.42 NM TO RW02 - RECOMPUTED USING CURRENT VGSI ANGLE/TCH.
- 4. DELETED NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CHARLOTTE ALTIMETER SETTING AND INCREASE ALL LPV DA TO 1029 FEET AND LNAV/VNAV DA TO 1263 FEET AND ALL MDA 60 FEET AND INCREASE LPV AND LNAV/VNAV VISIBILITY ALL CATS 1/8 MILE AND LNAV VISIBILITY CAT C AND D 1/8 MILE AND CIRCLING CATS C AND D 1/4 MILE - LOCAL AWOS IS ON WMSCR. BACK-UP ALTIMETER ADJUSTMENTS AND NOTES MOVED TO FAA FORM 8260-9 FOR CONTINGENCY USE DURING KJQF AWOS OUTAGES.
- 5. DELETED NOTE: BARO-VNAV AND VDP NA WHEN USING CHARLOTTE ALTIMETER SETTING - LOCAL AWOS IS ON WMSCR. BACK-UP ALTIMETER ADJUSTMENTS AND NOTES MOVED TO FAA FORM 8260-9 FOR CONTINGENCY USE DURING KJQF AWOS OUTAGES.
- 6. DELETED NOTE: DME/DME RNP-0.3 NA - REPLACED BY EQUIPMENT REQUIREMENT NOTE.
- 7. ADDED PBN REQUIREMENTS NOTE: RNP APCH - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-8.
- 8. REMOVED FAHRENHEIT VALUES FROM UNCOMPENSATED BARO-VNAV TEMPERATURE LIMITS AND AMENDED HIGH LIMIT FROM 54C TO 45C - FORMATTED IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-9S. HIGH TEMP CALCULATED USING AFS LOW/HIGH TEMPERATURE LIMIT CALCULATOR.
- 9. DELETED NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA - REPLACED BY UPDATED NOTE.
- 10. ADDED NOTE: RWY 2 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - FORMATTED IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-11K(3).
- 11. ADDED PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HUSTN ON T202 SOUTHWEST BOUND - TURN EXCEEDS 90 DEGREE MAXIMUM.
- 12. DELETED ALTERNATE MINIMUMS RESTRICTION NA WHEN LOCAL WEATHER NOT AVAILABLE - NO LONGER REQUIRED, LOCAL AWOS IS ON WMCSR.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZTL, CLT APP CON, JQF TOWER, AMGR

FLIGHT CHECKED BY

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

DEVELOPED BY

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Jul 27, 2018

APPROVED BY

JULIE MORGAN

Digitally signed by
DEZ SILAGYI
Aug 30, 2018

OFFICE

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Aug 30, 2018

OFFICE

AJV-5422

OFFICE

AJV-5420

DATE

DATE

07/27/2018

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KJQF
RUNWAY	RW02
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W02A
LTP/FTP LATITUDE	352239.9930N
LTP/FTP LONGITUDE	0804240.9990W
LTP/FTP ELLIPSOIDAL HEIGHT	+01645
FPAP LATITUDE	352407.7425N
FPAP LONGITUDE	0804221.2120W
THRESHOLD CROSSING HEIGHT (TCH)	00060.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.10
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0496
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	7BD3D057
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00195
FPAP ORTHOMETRIC HEIGHT	+00195



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> CONCORD-PADGETT RGNL	<u>AIRPORT ID</u> KJQF	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 20	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> CONCORD	<u>STATE</u> NC	
<u>AIRPORT ELEVATION</u> 705	<u>TDZE</u> 705	<u>SUPERSEDED</u> RNAV (GPS) RWY 20	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 06/08/2006	<u>MAG VAR</u> 6W	<u>EPOCH YEAR</u> 1995
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
NASCR		MEATT		TF	FB	2.00	354.50	6.60	3000
PONTI		MEATT		TF	FB	2.00	249.32	11.58	3000
MEATT	IAF	LEEMO		TF	FB	1.00	286.52	5.00	3000
LEEMO	IF	GLISS		TF	FB	1.00	196.48	6.01	2400
GLISS	FAF	RW20	MAP	TF	FO	0.30	196.47	5.12	
RW20	MAP	955 MSL		CA			196.47		
955 MSL		WEGTI		DF	FB	1.00			
WEGTI		LOCAS		TF	FO	1.00	126.93	15.75	3000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW20

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT WEGTI AND ON TRACK 126.93 TO LOCAS AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. PROFILE STARTS AT LEEMO
3. FAC: 196.47 FAF: GLISS DIST FAF TO MAP: 5.12 DIST FAF TO THLD: 5.12
4. MIN ALT: LEEMO 3000, GLISS 2400
5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 250 HAT: 0.66 GS ANT:
6. MIN GP INCPT: 2400 GP ALT AT FAF : GLISS 2400 OM: MM: IM:
7. GP ANGLE: 3.00 34:1: IS CLEAR 20:1: IS CLEAR TCH: 44.4
8. MSA FROM: RW20 3800

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 54C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV VISIBILITY ALL CATS TO 1 3/8 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.76 NM TO RW20*
*LNAV ONLY
WAAS CHANNEL #56499
REFERENCE PATH ID: W20A
CHART FAS OBST: 909 TREE 352826N/0804134W.
HOLD W, RT, 093.32 INBOUND
LTP HAE: 182.6 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 800-2 1/4, CAT D 800-2 1/2

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	955	1/2	250	955	1/2	250	955	1/2	250	955	1/2	250			
LNAV/VNAV DA	1222	1 1/4	517	1222	1 1/4	517	1222	1 1/4	517	1222	1 1/4	517			
LNAV MDA	1300	1/2	595	1300	1/2	595	1300	1 1/4	595	1300	1 1/4	595			
CIRCLING	1300	1	595	1300	1	595	1480	2 1/4	775	1480	2 1/2	775			



CHANGES - REASONS

- 1. CHANGED AIRPORT NAME FROM CONCORD RGNL TO CONCORD-PADGETT RGNL - MATCH PENDING AIRNAV DATA RECORD.
- 2. ADDED 20:1 IS CLEAR - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-7G(3).
- 3. AMENDED VDP FROM 1.75 NM TO RW20 TO 1.76 NM TO RW20 - RECOMPUTED USING CURRENT VGSI ANGLE/TCH.
- 4. AMENDED MISSED APPROACH FROM CLIMB TO 3000 DIRECT WEGTI AND VIA 126.93 TRACK TO LOCAS AND HOLD TO READ CLIMB TO 3000 DIRECT WEGTI AND ON TRACK 126.93 TO LOCAS AND HOLD - FORMATTED IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-6D.
- 5. AMENDED LNAV CAT C VISIBILITY FROM 1 TO 1 1/4 - COMPUTED USING FAAO 8260.3C, TABLE 3-3-1.
- 6. AMENDED CATS A/B CIRCLING VISIBILITY FROM 1 3/4 TO 1 - CIRCLING VISIBILITY NO LONGER COMPARED TO VERTICALLY GUIDED NO LIGHT VISIBILITIES WHEN COMPUTING MINIMUM VALUE.
- 7. DELETED CHART FAS OBST: 739 TREE 352426N/0804259W FROM ADDITIONAL FLIGHT DATA - LNAV/VNAV CONTROLLING OBSTACLE NO LONGER CHARTED.
- 8. ADDED CHART CIRCLING ICON IN ADDITIONAL FLIGHT DATA - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-10T. THE RNAV (GPS) RWY 2 HAS A CIRCLING ICON PUBLISHED.
- 9. AMENDED CAT C CIRCLING MDA/HAA FROM 1300/595 TO 1480/775 AND VISIBILITY FROM 1 3/4 TO 2 1/4 - MATCH CAT C CIRCLING MINIMUMS ON THE RNAV (GPS) RWY 2.
- 10. DELETED NOTE: IF LOCAL ALTIMETER SETTING NOT RECEIVED, USE CHARLOTTE ALTIMETER SETTING AND INCREASE ALL DAS/MDAS 60 FEET - LOCAL AWOS IS ON WMSCR. BACK-UP ALTIMETER ADJUSTMENTS AND NOTES MOVED TO FAA FORM 8260-9 FOR CONTINGENCY USE DURING KJQF AWOS OUTAGES.
- 11. DELETED NOTE: VDP AND BARO-VNAV NA WHEN USING CHARLOTTE ALTIMETER SETTING - LOCAL AWOS IS ON WMSCR. BACK-UP ALTIMETER ADJUSTMENTS AND NOTES MOVED TO FAA FORM 8260-9 FOR CONTINGENCY USE DURING KJQF AWOS OUTAGES.
- 12. DELETED NOTE: FOR INOPERATIVE MALSR INCREASE LPV VISIBILITY TO 1 - NOT REQUIRED, LPV ADJUSTMENTS ARE IN ACCORDANCE WITH THE INOPERATIVE TABLE.
- 13. ADDED NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV VISIBILITY ALL CATS TO 1 3/8 SM - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-11O(3)(D).
- 14. DELETED NOTE: BARO-VNAV NA BELOW -16C (4F) - REPLACED BY UPDATED NOTE.
- 15. ADDED NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 54C - FORMATTED IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-9S.
- 16. DELETED NOTE: DME/DME RNP-0.3 NA - REPLACED BY EQUIPMENT REQUIREMENT NOTE.
- 17. ADDED PBN REQUIREMENTS NOTE: RNP APCH - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-8.
- 18. ADDED PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}) - VGSI TCH (37.5) AND PROCEDURE TCH (44.4) NOT WITHIN 3 FOOT COINCIDENCE TOLERANCE.
- 19. DELETED ALTERNATE MINIMUMS RESTRICTION NA WHEN LOCAL WEATHER NOT AVAILABLE - NO LONGER REQUIRED, LOCAL AWOS IS ON WMCSR.
- 20. AMENDED CAT C ALTERNATE MINIMUMS FROM STANDARD TO 800-2 1/4 - COMPUTED USING HIGHER CAT C CIRCLING VISIBILITY.
- 21. FAS DATA: AMENDED FPAP FROM 352239.9930N/0804240.9990W TO 352217.9035/0804245.9785W - COMPUTED USING AFS FPAP CALCULATOR.
- 22. FAS DATA: AMENDED LENGTH OFFSET FROM 0000 TO 0696 - COMPUTED USING AFS FPAP CALCULATOR.
- 23. FAS DATA: AMENDED CRC REMAINDER FROM 61CC7834 TO CAE90580 - COMPUTED USING AMENDED FPAP LAT/LONG AND LENGTH OFFSET PARAMETERS.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZTL, CLT APP CON, JQF TOWER, AMGR

FLIGHT CHECKED BY

JOHN D JEFFERS

DEVELOPED BY

PETER R. GUIMOND

APPROVED BY

JULIE MORGAN

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Sep 10, 2018

Digitally signed by
PETER R GUIMOND
Jul 26, 2018

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Sep 10, 2018

OFFICE

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AJV-5422

OFFICE

AJV-5420

DATE

9/7/18

DATE

07/26/2018

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KJQF
RUNWAY	RW20
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W20A
LTP/FTP LATITUDE	352345.6580N
LTP/FTP LONGITUDE	0804226.1910W
LTP/FTP ELLIPSOIDAL HEIGHT	+01826
FPAP LATITUDE	352217.9035N
FPAP LONGITUDE	0804245.9785W
THRESHOLD CROSSING HEIGHT (TCH)	00044.4
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0696
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	CAE90580
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+02132
FPAP ORTHOMETRIC HEIGHT	+02132



**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>
CONCORD, NC	CONCORD-PADGETT RGNL	3 JANUARY 2019	3A

TAKEOFF MINIMUMS:

RWY 2: STANDARD.

RWY 20: 300-1 3/4 OR STANDARD WITH MINIMUM CLIMB OF 204 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 1200 FT PRIOR TO DER.

TEXTUAL DEPARTURE PROCEDURES:

RWY 2: CLIMB HEADING 016.46 TO 2200 BEFORE PROCEEDING ON COURSE.

RWY 20: CLIMBING RIGHT TURN HEADING 290.00 TO INTERCEPT CLT VOR/DME R-039 OUTBOUND TO 2100 BEFORE PROCEEDING ON COURSE.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 2, POLES AND TREES BEGINNING 2624 FEET FROM DER, 688 FEET LEFT OF CENTERLINE, UP TO 45 FEET AGL/784 FEET MSL.
TREES BEGINNING 2107 FEET FROM DER, 787 FEET RIGHT OF CENTERLINE, UP TO 24 FEET AGL/783 FEET MSL.

NOTE: RWY 20, STREET LIGHTS BEGINNING 3047 FEET FROM DER, 196 FEET RIGHT OF CENTERLINE, UP TO 105 FEET AGL/744 FEET MSL.
TREES 1.3 NM FROM DER, 1544 FEET RIGHT OF CENTERLINE, UP TO 100 FEET AGL/849 FEET MSL.

CONTROLLING OBSTACLES:

RWY 20: 849 FEET MSL TREES 352123.50N/0804317.20W.

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT:

RWY 2: 2349 FEET MSL TOWER 353157.00N/0804746.00W.

RWY 20: 2000 FEET MSL TOWER 351602.00N/0804404.00W.

REMARKS:

FLIGHT INSPECTED BY:

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

Digitally signed by

DAVID DANNER

Oct 02, 2018

OFFICE SYMBOL:

DATE:

DEVELOPED BY:

RUSS ROSLEWSKI

Digitally signed by

RUSSELL ROSLEWSKI

Jul 24, 2018

OFFICE SYMBOL:

AJV-5421

DATE:

07/24/2018

APPROVED BY:

JULIE MORGAN

Digitally signed by

DAVID DANNER

Oct 02, 2018

OFFICE SYMBOL:

AJV-5420

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA



OTHER:

ZTL, CLT APP CON, JQF ATCT, AIRPORT MANAGER

CHANGES - REASONS:

1. AIRPORT NAME CHANGED FROM CONCORD RGNL TO CONCORD-PADGETT RGNL.
2. IDENTIFIED OBSTACLES MANDATING ODP ROUTE DEVELOPMENT - CURRENT DOCUMENTATION POLICY.



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> MONTGOMERY COUNTY	<u>AIRPORT ID</u> K43A	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 21	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> STAR	<u>STATE</u> NC	
<u>AIRPORT ELEVATION</u> 632	<u>TDZE</u> 626	<u>SUPERSEDED</u> RNAV (GPS) RWY 21	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 06/22/2017	<u>MAG VAR</u> 6W	<u>EPOCH YEAR</u> 1985
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
GANTS		JEGUD		TF	FO	2.00	077.81	20.52	3000
LIB VORTAC	IAF	JEGUD	NOPT	TF	FB	1.00	202.88	15.78	3000
JEGUD	IF/IAF	ZOGMI		TF	FB	1.00	207.49	5.84	2300
ZOGMI	FAF	WAVMA/2.00 NM TO RW21		TF	FB	0.30	207.46	3.16	
WAVMA/2.00 NM TO RW21		RW21	MAP	TF	FO	0.30	207.46	2.00	
RW21	MAP	1032 MSL		CA			207.46		
1032 MSL		ZIVOS		DF	FB	1.00			
ZIVOS		PEKNN		TF	FO	1.00	207.24	6.55	3000

MISSED APPROACH

MAP:

LP: RW21
LNAV: RW21

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT ZIVOS AND ON TRACK 207.24 TO PEKNN AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD NE JEGUD, RT, 207.49 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 207.46FAF: ZOGMIDIST FAF TO MAP: 5.16DIST FAF TO THLD: 5.16

4. MIN ALT: JEGUD 3000, ZOGMI 2300, WAVMA/2.00 NM TO RW21 1280

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

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

7. GP ANGLE:34:1: IS NOT CLEAR20:1: IS NOT CLEARTCH:

8. MSA FROM: RW21 3700

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 21 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT LIB VORTAC ON V454 EASTBOUND.
CHART NOTE: USE ASHEBORO ALTIMETER SETTING; WHEN NOT RECEIVED, USE ALBEMARLE ALTIMETER SETTING.
CHART NOTE: PROCEDURE NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART ASHEBORO AWOS-3
CHART CIRCLING ICON.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
WAAS CHANNEL #72935
REFERENCE PATH ID: W21A
CHART FAS OBST: 759 TREE 352412N/0794660W, 793 TANK 352426N/0794707W.
HOLD SW, RT, 027.22 INBOUND
LTP HAE: 160.1 M

MINIMUMS:

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

ALTERNATE: NA☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LP MDA	1060	1	434	1060	1	434		NA			NA				
LNAV MDA	1100	1	474	1100	1	474		NA			NA				
CIRCLING	1240	1	608	1340	1	708		NA			NA				



CHANGES - REASONS

- 1. PROFILE SECTION, LINE 2, ADDED MAXIMUM HOLDING ALTITUDE - CURRENT DOCUMENTATION POLICY.
- 2. PROFILE SECTION, LINE 7, ADDED "20:1 IS NOT CLEAR" - CURRENT DOCUMENTATION POLICY.
- 3. REPLACED DME/DME NOTE WITH PBN REQUIREMENTS NOTE - CURRENT DOCUMENTATION POLICY.
- 4. REMOVED RWY 3 FROM HELICOPTER NOTE - HELICOPTER NOTE ONLY FOR STRAIGHT-IN ALIGNED RUNWAY.
- 5. REMOVED NON-COINCIDENT NOTE - VDA REMOVED BY FLIGHT INSPECTION.
- 6. ADDED PROFILE NOTE: "VISUAL SEGMENT - OBSTACLES" - VDA REMOVED BY FLIGHT INSPECTION.
- 7. REMOVED VDA - VISUAL OBSTACLES DETERMINED BY FLIGHT INSPECTION.
- 8. CRC REMAINDER CHANGED FROM A5439585 TO 333708A9 - RECALCULATION WITH GPA/TCH SET TO 0.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: FAY APP CON, AIRPORT MANAGER

FLIGHT CHECKED BY

JOHN D JEFFERS

Digitally signed by

DEZ SILAGYI

Sep 11, 2018

OFFICE

FICO

DATE

9/7/18

DEVELOPED BY

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Aug 20, 2018

OFFICE

AJV-5421

DATE

08/10/2018

APPROVED BY

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Sep 11, 2018

OFFICE

AJV-5420

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	43A
RUNWAY	RW21
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W21A
LTP/FTP LATITUDE	352318.9415N
LTP/FTP LONGITUDE	0794718.1495W
LTP/FTP ELLIPSOIDAL HEIGHT	+01601
FPAP LATITUDE	352155.8800N
FPAP LONGITUDE	0794757.9700W
THRESHOLD CROSSING HEIGHT (TCH)	00000.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	00.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1672
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	333708A9

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+01907
FPAP ORTHOMETRIC HEIGHT	+01907



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

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
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CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
ANDOVER, NJ	AEROFLEX-ANDOVER	3 JANUARY 2019	2

TAKEOFF MINIMUMS:

RWY 3: 400-2 1/4.

RWY 21: 500-3 WITH MINIMUM CLIMB OF 220 FT PER NM TO 900 OR 1400-1 1/2 FOR VCOA.

TEXTUAL DEPARTURE PROCEDURES:

RWY 3: CLIMB HEADING 034.36 TO 1200 BEFORE PROCEEDING ON COURSE.

RWY 21: CLIMBING RIGHT TURN ON A HEADING BETWEEN 270 CW TO 030 FROM DEPARTURE END OF RUNWAY TO 1700 BEFORE PROCEEDING ON COURSE. DO NOT EXCEED 150 KIAS UNTIL REACHING 1700 FT MSL.

VISUAL CLIMB OVER AIRPORT:

RWY 21: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS AEROFLEX-ANDOVER AIRPORT AT OR ABOVE 1800 BEFORE PROCEEDING ON COURSE. DO NOT EXCEED 180 KIAS UNTIL REACHING 1800 FT MSL.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 03: TREES BEGINNING 13 FT FROM DER, 267 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/678 FT MSL.

TREES BEGINNING 379 FT FROM DER, 163 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/688 FT MSL.

TREES BEGINNING 432 FT FROM DER, 582 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/681 FT MSL.

TREES BEGINNING 662 FT FROM DER, 59 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/704 FT MSL.

TREES BEGINNING 945 FT FROM DER, 170 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/724 FT MSL.

TREE 1228 FT FROM DER, 709 FT LEFT OF CENTERLINE, 100 FT AGL/737 FT MSL.

TREES BEGINNING 1311 FT FROM DER, 66 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/698 FT MSL.

TREES BEGINNING 1510 FT FROM DER, 391 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/744 FT MSL.

TREES BEGINNING 1531 FT FROM DER, 575 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/707 FT MSL.

TREES BEGINNING 1793 FT FROM DER, 502 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/753 FT MSL.

TREES BEGINNING 1898 FT FROM DER, 568 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/730 FT MSL.

TREES BEGINNING 3291 FT FROM DER, 626 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/770 FT MSL.

TREES BEGINNING 3574 FT FROM DER, 198 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/793 FT MSL.

TREES BEGINNING 3856 FT FROM DER, 95 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/819 FT MSL.

POWER LINES AND TRANSMISSION LINES BEGINNING 4555 FT FROM DER, RIGHT AND LEFT OF CENTERLINE, UP TO 184 FT AGL/828 FT MSL.

TREES BEGINNING 5029 FT FROM DER, 90 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/770 FT AGL.

TREES BEGINNING 5123 FT FROM DER, 5 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/792 FT MSL.

NOTE: RWY 21: TREE 68 FT FROM DER, 78 FT LEFT OF CENTERLINE, 100 FT AGL/639 FT MSL.

TREE 152 FT FROM DER, 135 FT RIGHT OF CENTERLINE, 100 FT AGL/668 FT MSL.

TREE 236 FT FROM DER, 349 FT RIGHT OF CENTERLINE, 100 FT AGL/711 FT MSL.

TREES BEGINNING 267 FT FROM DER, 189 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/645 FT MSL.

TREES BEGINNING 320 FT FROM DER, 25 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/740 FT MSL.

TREES BEGINNING 550 FT FROM DER, 85 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/648 FT MSL.

TREE 602 FT FROM DER, 453 FT RIGHT OF CENTERLINE, 100 FT AGL/744 FT MSL.

TREES BEGINNING 686 FT FROM DER, 4 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/767 FT MSL.

TREES BEGINNING 1116 FT FROM DER, 92 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/658 FT MSL.

TREES BEGINNING 1398 FT FROM DER, 99 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/668 FT MSL.

TREES BEGINNING 2048 FT FROM DER, 210 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/675 FT MSL.

TREE 3514 FT FROM DER, 438 FT LEFT OF CENTERLINE, 100 FT AGL/678 FT MSL.

TREE 3598 FT FROM DER, 223 FT LEFT OF CENTERLINE, 100 FT AGL/681 FT MSL.

TREES BEGINNING 3681 FT FROM DER, 9 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/684 FT MSL.

TREE 3964 FT FROM DER, 120 FT LEFT OF CENTERLINE, 100 FT AGL/688 FT MSL.

TREE 4614 FT FROM DER, 127 FT LEFT OF CENTERLINE, 100 FT AGL/704 FT MSL.

TREE 4813 FT FROM DER, 451 FT LEFT OF CENTERLINE, 100 FT AGL/714 FT MSL.

TREES BEGINNING 4896 FT FROM DER, 23 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/730 FT MSL.

TREE 5095 FT FROM DER, 562 FT LEFT OF CENTERLINE, 100 FT AGL/737 FT MSL.

TREE 5179 FT FROM DER, 348 FT LEFT OF CENTERLINE, 100 FT AGL/763 FT MSL.

TREES BEGINNING 5263 FT FROM DER, 133 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/770 FT MSL.

TREE 5462 FT FROM DER, 458 FT LEFT OF CENTERLINE, 100 FT AGL/786 FT MSL.

TREES BEGINNING 5546 FT FROM DER, 30 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/799 FT MSL.

TREE 5745 FT FROM DER, 569 FT LEFT OF CENTERLINE, 100 FT AGL/806 FT MSL.

TREES BEGINNING 5828 FT FROM DER, 140 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/822 FT MSL.

TREES BEGINNING 5996 FT FROM DER, 73 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/780 FT MSL.

TREES BEGINNING 1 NM FROM DER, 37 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/835 FT MSL.

TREES BEGINNING 1 NM FROM DER, 177 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/783 FT MSL.

TREES BEGINNING 1 NM FROM DER, 44 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/839 FT MSL.

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>
ANDOVER, NJ	AEROFLEX-ANDOVER	3 JANUARY 2019	2

TREES BEGINNING 1 NM FROM DER, 66 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/803 FT MSL.
TREES BEGINNING 1.1 NM FROM DER, 59 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/819 FT MSL.
TREE 1.1 NM FROM DER, 907 FT LEFT OF CENTERLINE, 100 FT AGL/842 FT MSL.
TREES BEGINNING 1.2 NM FROM DER, 50 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/852 FT MSL.
TREE 1.2 NM FROM DER, 1027 FT RIGHT OF CENTERLINE, 100 FT AGL/826 FT MSL.
TREES BEGINNING 1.2 NM FROM DER, 488 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/832 FT MSL.
TREES BEGINNING 1.2 NM FROM DER, 370 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/849 FT MSL.

CONTROLLING OBSTACLES:

RWY 3: 893 FT MSL AAO 410224.00N/0744342.00W (CEILING), 876 FT MSL AAO 410230.00N/0744336.00W (VISIBILITY)

RWY 21: 1033 FT MSL AAO 405745.00N/0744500.00W (CLIMB GRADIENT, CLIMB-TO ALTITUDE); 1027 FT MSL AAO 405803.00N/0744457.00W (CEILING); 981 FT MSL AAO 405754.00N/0744500.00W (VISIBILITY); 1359 FT MSL AAO 405939.00N/0744133.00W (VCA); 1382 FT MSL AAO 405939.00N/0744130.00W (VCOA DIVERSE)

OBSTACLES MANDATING ROUTE DEVELOPMENT:

RWY 3: 983 FT MSL TREE 410045.00N/0744336.00W

RWY 21: 1139 FT MSL AAO 405845.00N/0744336.00W.

REMARKS:

DEPARTURE SERVES AIRPORT WITH CAT A MINIMUMS ONLY.

RWY 21 DEPARTURE PROCEDURE DEVELOPED USING 150 KIAS SPEED RESTRICTION TO REDUCE INITIAL TURN RADIUS AND MINIMIZE REQUIRED CLIMB GRADIENT.

VCOA DEVELOPED USING 180 KIAS SPEED RESTRICTION TO MINIMIZE VCOA FOOTPRINT.

LETTER OF APPROVAL FOR EXCESSIVE CLIMB GRADIENT FOR RWY 3 DISAPPROVED - AFS APPROVED CEILING AND VISIBILITY MINIMUMS ONLY FOR RWY 3 DEPARTURES.

FLIGHT INSPECTED BY:

Digitally signed by

ROBERT G HAMILTON

Sep 25, 2018

OFFICE SYMBOL:

FICO

DATE:

9/15/18

DEVELOPED BY:

Digitally signed by

ROBERT G HAMILTON

Sep 25, 2018

OFFICE SYMBOL:

AJV-5421

DATE:

06/01/2018

APPROVED BY:

Digitally signed by

ROBERT G HAMILTON

Sep 25, 2018

OFFICE SYMBOL:

AJV-5420

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

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

☐☒☒☐☐☒

OTHER:

NY APP CON, APT MGR



CHANGES - REASONS:

1. RWY 3 TAKEOFF MINIMUMS CHANGED FROM "500-2 OR STANDARD WITH MINIMUM CLIMB RATE 310 FEET PER NM TO 900" TO "400-2 1/4" - REEVALUATED OEAS APPLYING ADVERSE VEGETATION AND AAO PER 8260.19H; EXCESSIVE CLIMB GRADIENT DUE TO ADVERSE VEGETATION IN THE ICA NECESSITATE USE OF NON-STANDARD/SEE-AND-AVOID TAKEOFF MINIMUMS.
2. RWY 21 TAKEOFF MINIMUMS CHANGED FROM "600-2 OR STANDARD WITH MINIMUM CLIMB RATE 256 FEET PER NM TO 1000" TO "500-3 WITH MINIMUM CLIMB OF 220 FT PER NM TO 900 OR 1400-1 1/2 FOR VCOA" - REEVALUATED OEAS APPLYING ADVERSE VEGETATION AND AAO PER 8260.19H; EXCESSIVE CLIMB GRADIENT DUE TO ADVERSE VEGETATION IN THE ICA NECESSITATE USE OF NON-STANDARD/SEE-AND-AVOID TAKEOFF MINIMUMS WITH A CLIMB GRADIENT AND/OR A VCOA.
3. RWY 21 TEXTUAL DEPARTURE PROCEDURE CHANGED FROM "CLIMB RUNWAY HEADING TO 1400 BEFORE PROCEEDING ON COURSE" TO "CLIMB ON A HEADING BETWEEN 270 CW TO 030 FROM DEPARTURE END OF RUNWAY TO 1700 BEFORE PROCEEDING ON COURSE. DO NOT EXCEED 150 KIAS UNTIL REACHING 1700 FT MSL" - TURN REQUIRED TO ACHIEVE LEAST ONEROUS CLIMB GRADIENT WHILE AVOIDING HIGH TERRAIN/AAO SOUTH AND EAST OF THE AIRPORT.
4. ADDED VCOA DATA/INSTRUCTIONS - FACILITATE DEPARTURE FROM RWY 21 USING STANDARD CLIMB GRADIENT.
5. UPDATED TAKEOFF OBSTACLES NOTES - TO REFLECT NEW OEA EVALUATION RESULTS; APPLIED AJV OBSTACLE GROUPER METHODOLOGY.
6. UPDATED CONTROLLING OBSTACLE DATA - TO REFLECT NEW OEA EVALUATION RESULTS; APPLIED 8260.46F DOCUMENTATION CRITERIA.

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> SKY MANOR	<u>AIRPORT ID</u> KN40	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 7	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> PITTSBOWN	<u>STATE</u> NJ
<u>AIRPORT ELEVATION</u> 560	<u>TDZE</u> 558	<u>SUPERSEDED</u> RNAV (GPS) RWY 7	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 01/07/2016	<u>MAG VAR</u> 13W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2010

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
JILUB	IF/IAF	ZOPDU		TF	FB	1.00	067.14	4.85	1800
ZOPDU	FAF	RW07	MAP	TF	FO	0.30	067.20	3.81	
RW07	MAP	1100 MSL		CA			067.20		1100
1100 MSL		LIZZI		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LNAV: RW07

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 3000 DIRECT LIZZI AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
- HOLD SW JILUB, RT, 067.14 INBOUND, 2500 FT. IN LIEU OF PT (IAF), MAX 6000.
- FAC:** 067.20 **FAF:** ZOPDU **DIST FAF TO MAP:** 3.81 **DIST FAF TO THLD:** 3.81
- MIN ALT:** JILUB 2500, ZOPDU 1800
- DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **GS ANT:**
- MIN GP INCPT:** **GP ALT AT FAF :** **OM:** **MM:** **IM:**
- GP ANGLE:** **34:1:** IS NOT CLEAR **20:1:** IS NOT CLEAR **TCH:**
- MSA FROM:** RW07 3100

PBN REQUIREMENTS NOTE:

RNP APCH.



NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: USE LEHIGH VALLEY ALTIMETER SETTING; WHEN NOT RECEIVED USE TRENTON ALTIMETER SETTING AND INCREASE ALL MDA 20 FEET.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART NOTE: RWY 7 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: RADAR REQUIRED.

ADDITIONAL FLIGHT DATA:

CHART LEHIGH VALLEY INTL ASOS.
CHART CIRCLING ICON.
FAS OBST: 739 AAO 403231N/0750021W.
HOLD NW, RT, 118.05 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	1080	1	522		NA			NA			NA				
CIRCLING	1140	1	580		NA			NA			NA				

CHANGES - REASONS

- 1. DELETED DESCENT ANGLE 3.00/TCH 40 AND CHARTED PROFILE NOTE: VISUAL SEGMENT - OBSTACLES. - FLIGHT INSPECTION RESULTS AND TO CLEAR FDC 8/1845.
- 2. DELETED CHART NOTE DME/DME RNP-0.3 NA - ADDED PBN REQUIREMENTS NOTE: RNP APCH.
- 3. ADDED 20:1 IS NOT CLEAR TO PROFILE LINE 7 - RWY HAS NO SURVEY, OBSTACLES ARE ASSUMED.
- 4. CHANGED INTERMEDIATE SEGMENT RNP VALUE FROM 0.50 TO 1.00 - RNP 1.0 IS NOW STANDARD.
- 5. REMOVED VGSI AND DESCENT ANGLES NOT COINCIDENT NOTE - IAW AFS 400 MEMO, VDA CHARTING.



COORDINATED WITH:

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

FLIGHT CHECKED BY

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

DEVELOPED BY

IVAN BLANCO

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
ADOLFO D URRUTIA
Sep 17, 2018

Digitally signed by
IVAN BLANCO
Aug 15, 2018

Digitally signed by
ADOLFO D URRUTIA
Sep 17, 2018

OFFICE	DATE
AJV-5432	08/15/2018
OFFICE	DATE
AJV-5432	

TITLE
MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> SKY MANOR	<u>AIRPORT ID</u> KN40	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 25	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> PITTSBOWN	<u>STATE</u> NJ
<u>AIRPORT ELEVATION</u> 560	<u>TDZE</u> 558	<u>SUPERSEDED</u> RNAV (GPS) RWY 25	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 12/11/2014	<u>MAG VAR</u> 13W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2010

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
ZIBEK	IF/IAF	GETPE		TF	FB	1.00	247.35	5.00	1900
GETPE	FAF	RW25	MAP	TF	FO	0.30	247.29	4.09	
RW25	MAP	1200 MSL		CA			247.29		1200
1200 MSL		LIZZI		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LP: RW25
 LNAV: RW25

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 3000 DIRECT LIZZI AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- HOLD NE ZIBEK, RT, 247.35 INBOUND, 2500 FT. IN LIEU OF PT (IAF), MAX 6000.
- FAC:** 247.29 **FAF:** GETPE **DIST FAF TO MAP:** 4.09 **DIST FAF TO THLD:** 4.09
- MIN ALT:** ZIBEK 2500, GETPE 1900
- DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **GS ANT:**
- MIN GP INCPT:** **GP ALT AT FAF :** **OM:** **MM:** **IM:**
- GP ANGLE:** **34:1:** IS NOT CLEAR **20:1:** IS NOT CLEAR **TCH:**
- MSA FROM:** RW25 3100

PBN REQUIREMENTS NOTE:



RNP APCH.

NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: USE LEHIGH VALLEY INTL ALTIMETER SETTING, WHEN NOT RECEIVED, USE TRENTON ALTIMETER SETTING AND INCREASE ALL MDA 20 FEET.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART NOTE: RWY 25 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: RADAR REQUIRED.

ADDITIONAL FLIGHT DATA:

CHART LEHIGH VALLEY INTL ASOS.
CHART CIRCLING ICON.
WAAS CHANNEL #50427
REFERENCE PATH ID: W25A
FAS OBST: 739 AAO 403521N/0745528W, 819 AAO 403431N/0745624W.
HOLD NW, RT, 118.05 INBOUND
LTP HAE: 136.2 M

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LP MDA	1080	1	522		NA			NA			NA				
LNAV MDA	1160	1	602		NA			NA			NA				
CIRCLING	1160	1	600		NA			NA			NA				

CHANGES - REASONS

1. DELETED DESCENT ANGLE 3.00/TCH 40 AND CHARTED PROFILE NOTE: VISUAL SEGMENT - OBSTACLES. - FLIGHT INSPECTION RESULT AND TO CLEAR FDC 8/1844.
2. DELETED CHART NOTE DME/DME RNP-0.3 NA - ADDED PBN REQUIREMENTS NOTE: RNP APCH.
3. ADDED 20:1 IS NOT CLEAR TO PROFILE LINE 7 - RWY HAS NO SURVEY OBSTACLES ARE ASSUMED.
4. CHANGED INTERMEDIATE SEGMENT RNP VALUE FROM 0.50 TO 1.00 - RNP 1.0 IS NOW STANDARD.
5. CHARTED CIRCLING ICON - TO MATCH RNAV (GPS) RWY 7, THIS SIAP IDENTIFIES THE SAME OBSTACLE AND RADIUS AS USED ON THAT SIAP.
6. REMOVED VGSI AND DESCENT ANGLES NOT COINCIDENT NOTE - IAW AFS 400 MEMO, VDA CHARTING.
7. CRC REMAINDER CHANGED FROM 72DB8CD3 TO 421B6447



COORDINATED WITH:

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

FLIGHT CHECKED BY

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

DEVELOPED BY

IVAN BLANCO

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

ADOLFO D URRUTIA

Sep 17, 2018

OFFICE

AJV-5432

OFFICE

AJV-5430

DATE

08/15/2018

DATE

Digitally signed by

IVAN BLANCO

Aug 15, 2018

Digitally signed by

ADOLFO D URRUTIA

Sep 17, 2018

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	N40
RUNWAY	RW25
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W25A
LTP/FTP LATITUDE	403405.5520N
LTP/FTP LONGITUDE	0745830.2580W
LTP/FTP ELLIPSOIDAL HEIGHT	+01362
FPAP LATITUDE	403313.4400N
FPAP LONGITUDE	0750005.1100W
THRESHOLD CROSSING HEIGHT (TCH)	00000.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	00.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1864
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	421B6447

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+01701
FPAP ORTHOMETRIC HEIGHT	+01701



**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
LOVELOCK, NV	DERBY FIELD	3 JANUARY 2019	1

TAKEOFF MINIMUMS:

RWY 2, STANDARD WITH MINIMUM CLIMB OF 415 FT PER NM TO 8200 OR 3200-3 FOR CLIMB IN VISUAL CONDITIONS.
RWY 8, 20, STANDARD WITH MINIMUM CLIMB OF 340 FT PER NM TO 8200 OR 3200-3 FOR CLIMB IN VISUAL CONDITIONS.
RWY 26, STANDARD WITH MINIMUM CLIMB OF 400 FT PER NM TO 8200 OR 3200-3 FOR CLIMB IN VISUAL CONDITIONS.

TEXTUAL DEPARTURE PROCEDURES:

RWY 2: CLIMB TO 6500 THEN CLIMBING LEFT TURN DIRECT LLC VORTAC, THENCE...
RWY 8, 20, 26: CLIMB TO 5700 THEN CLIMBING LEFT TURN DIRECT LLC VORTAC, THENCE...

...CLIMB IN LLC VORTAC HOLDING PATTERN (N, LT, 169 INBOUND) TO DEPART LLC VORTAC AT OR ABOVE 8800, CONTINUE CLIMB ON COURSE TO MEA OR ASSIGNED ALTITUDE.

VISUAL CLIMB OVER AIRPORT:

OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS DERBY FIELD AIRPORT AT OR ABOVE 7000 BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 2: VEGETATION 13 FT FROM DER, 141 FT RIGHT OF CENTERLINE, 3908 FT MSL. SIGN 17 FT FROM DER, 199 FT LEFT OF CENTERLINE, 2 FT AGL/3909 FT MSL. VEGETATION 54 FT FROM DER, 155 FT RIGHT OF CENTERLINE, 3909 FT MSL. TREE 80 FT FROM DER, 347 FT RIGHT OF CENTERLINE, 3912 FT MSL.

NOTE: RWY 8: VEGETATION BEGINNING 56 FT FROM DER, 172 FT LEFT OF CENTERLINE, UP TO 3910 FT MSL. VEGETATION 147 FT FROM DER, 376 FT LEFT OF CENTERLINE, 3911 FT MSL.

NOTE: RWY 20: VEGETATION BEGINNING 47 FT FROM DER, 112 FT LEFT OF CENTERLINE, UP TO 3910 FT MSL.

NOTE: RWY 26: TERRAIN 15 FT FROM DER, 170 FT RIGHT OF CENTERLINE, 3905 FT MSL. VEGETATION 67 FT FROM DER, 239 FT LEFT OF CENTERLINE, 3906 FT MSL. TREE 258 FT FROM DER, 531 FT LEFT OF CENTERLINE, 3917 FT MSL

CONTROLLING OBSTACLES:

RWY 2: 4964 FT MSL AAO 400742.00N/1183448.00W.
RWY 8: 5960 FT MSL AAO 400328.82N/1182230.55W.
RWY 20: 5260 FT MSL AAO 395901.89N/1182934.31W.
RWY 26: 6434 FT MSL AAO 400210.80N/1184532.81W.

ALL RWYS (VCOA): 7212 FT MSL AAO 400630.00N/1184430.00W (CLIMB-TO ALTITUDE), 4878 FT MSL AAO 400836.00N/1183524.00W (VCA).

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 2, 20, 26: 7212 FT MSL AAO 400630.00N/1184430.00W, RWY 8: 6273 FT MSL AAO 400312.00N/1182227.00W.

REMARKS:

THE CLIMB GRADIENT TERMINATION ALTITUDE WAS RAISED TO MEET THE NECESSARY OCS ALTITUDE AT LLC VORTAC TO ELIMINATE THE PENETRATING CLIMB-IN-HOLD PENETRATIONS.

FLIGHT INSPECTED BY:

THOMAS E MOLOKIE
Digitally signed by
DONALD H LANIER

OFFICE SYMBOL:

FICO

DATE:

9/24/18

DEVELOPED BY:

Sep 27, 2018
Digitally signed by
ADOLFO URRITIA (CHRISTINE BAYSE) **DONALD H LANIER**
Sep 27, 2018

OFFICE SYMBOL:

AJV-5432

DATE:

08/16/2018

APPROVED BY:

PATRICK MULQUEEN
Digitally signed by
DONALD H LANIER
Sep 27, 2018

OFFICE SYMBOL:

AJV-5430

DATE:

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

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

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.

CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
LOVELOCK, NV	DERBY FIELD	3 JANUARY 2019	1

OTHER:
RNO FSS, ZOA, ARPT MGR.

CHANGES - REASONS:

1. UPDATED TAKEOFF MINIMUMS RWY 2 FROM "2300-2 OR STANDARD WITH A MINIMUM CLIMB OF 300 FT PER NM TO 6200" TO "STANDARD WITH MINIMUM CLIMB OF 415 FT PER NM TO 8200 OR 3200-3 FOR CLIMB IN VISUAL CONDITIONS".- NEW CONTROLLING OBSTACLES.
2. UPDATED TAKEOFF MINIMUMS RWY 8 FROM "1100-1 OR STANDARD WITH MINIMUM CLIMB OF 250 FT PER NM TO 6200" TO "STANDARD WITH MINIMUM CLIMB OF 340 FT PER NM TO 8200 OR 3200-3 FOR CLIMB IN VISUAL CONDITIONS".- NEW CONTROLLING OBSTACLES.
3. UPDATED TAKEOFF MINIMUMS RWY 20 FROM "2300-2 OR STANDARD WITH MINIMUM CLIMB OF 260 FT PER NM TO 6200" TO "STANDARD WITH MINIMUM CLIMB OF 340 FT PER NM TO 8200 OR 3200-3 FOR CLIMB IN VISUAL CONDITIONS".- NEW CONTROLLING OBSTACLES.
4. UPDATED TAKEOFF MINIMUMS RWY 26 FROM "2300-2 OR STANDARD WITH MINIMUM CLIMB OF 260 FT PER NM TO 6200" TO "STANDARD WITH MINIMUM CLIMB OF 400 FT PER NM TO 8200 OR 3200-3 FOR CLIMB IN VISUAL CONDITIONS".- NEW CONTROLLING OBSTACLES.
5. UPDATED DEPARTURE PROCEDURE INSTRUCTIONS FROM "RWY 2, TURN RIGHT. RWY 8, 20, 26 TURN LEFT, CLIMB DIRECT VIA LLC R-333 TO ROBUD INT; 360 CW 089 CLIMB IN LLC VORTAC HOLDING PATTERN (HOLD NW, LT, 153 INBOUND) TO DEPART LLC VORTAC AT OR ABOVE 8600; 90 CW 219 CLIMB ON COURSE; 220 CW 329 CLIMB IN LLC VORTAC HOLDING PATTERN TO DEPART LLC VORTAC AT OR ABOVE 8600. CONTINUE CLIMB ON COURSE TO MEA OR ASSIGNED ALTITUDE" TO "RWY 2 CLIMB TO 6500 THEN CLIMBING LEFT TURN DIRECT LLC VORTAC, THENCE... RWY 8, 20, 26: CLIMB TO 5700 THEN CLIMBING LEFT TURN DIRECT LLC VORTAC THENCE... CLIMB IN LLC VORTAC HOLDING PATTERN (N, LT, 169 INBOUND) TO DEPART LLC VORTAC AT OR ABOVE 8800. CONTINUE CLIMB ON COURSE TO MEA OR ASSIGNED ALTITUDE". - PER FPT REQUEST FOR SIMPLIFICATION.
6. ADDED VCOA. - PER 8260.3D 14-4 AND 8260.46F 2-1-1 AND FPT REQUEST.
7. UPDATED TAKEOFF OBSTACLE NOTES. - NEW OBSTACLES.
8. UPDATED CONTROLLING OBSTACLES ALL RUNWAYS. - NEW OBSTACLES.
9. ADDED REMARK "THE CLIMB GRADIENT TERMINATION ALTITUDE WAS RAISED TO MEET THE NECESSARY OCS ALTITUDE AT LLC VORTAC TO ELIMINATE THE PENETRATING CLIMB-IN-HOLD PENETRATIONS". - TO EXPLAIN THE INCREASE IN THE CLIMB-TO ALTITUDE.



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> RANDALL	<u>AIRPORT ID</u> K06N	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 8	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> MIDDLETOWN	<u>STATE</u> NY
<u>AIRPORT ELEVATION</u> 523	<u>TDZE</u> 523	<u>SUPERSEDED</u> RNAV (GPS) RWY 8	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 06/22/2017	<u>MAG VAR</u> 13W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
CAMMO		EVAMY		TF	FB	2.00	215.34	12.05	4000
SAX VORTAC		IMZIS		TF	FB	2.00	010.71	12.27	4000
IMZIS	IAF	DOCYU		TF	FB	1.00	350.78	5.30	3100
EVAMY	IAF	DOCYU		TF	FB	1.00	165.68	5.80	3100
HOPCE	IAF	DOCYU		TF	FB	1.00	078.72	6.12	3100
DOCYU	IF	DUMKY		TF	FB	1.00	075.72	2.91	2600
DUMKY		BETFY		TF	FB	1.00	075.75	2.30	2100
BETFY	FAF	WETKA/2.40 NM TO RW08		TF	FB	0.30	075.79	2.50	
WETKA/2.40 NM TO RW08		RW08	MAP	TF	FO	0.30	075.79	2.40	
RW08	MAP	1200 MSL		CA			075.79		1200
1200 MSL		HUO VOR/DME		DF	FO	1.00			3500

MISSED APPROACH

MAP:

LNAV: RW08

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1200 THEN CLIMBING LEFT TURN TO 3500 DIRECT HUO VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3500.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
22
CHECKED

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT DOCYU

3. FAC: 075.79

FAF: BETFY

DIST FAF TO MAP: 4.90

DIST FAF TO THLD: 4.90

4. MIN ALT: DOCYU 3100, DUMKY 2600, BETFY 2100, WETKA/2.40 NM TO RW08 1300

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:

6. MIN GP INCPT:

GP ALT AT FAF :

OM:

MM:

IM:

7. GP ANGLE:

34:1: IS NOT CLEAR

20:1: IS NOT CLEAR

TCH:

8. MSA FROM: RW08 4300

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: USE NEWBURGH ALTIMETER SETTING, WHEN NOT RECEIVED, USE MONTGOMERY ALTIMETER SETTING.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HOPCE ON V36 NORTHWEST BOUND AND ON V162 SOUTHWEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON SAX VORTAC AIRWAY RADIALS 311 CW 093.
CHART NOTE: RWY 08 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: PROCEDURE NA FOR ARRIVALS AT CAMMO ON V489 NORTHBOUND AND T216 WESTBOUND.

ADDITIONAL FLIGHT DATA:

1036 AAO 412403N/0742949W
879 AAO 412512N/0742705W
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
FAS OBST: 839 AAO 412516N/0742655W.
HOLD W, RT, 092.82 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	1140	1	617		NA			NA			NA				
CIRCLING	1140	1	617		NA			NA			NA				



CHANGES - REASONS

1. CHANGED NAME OF FEEDER FIX: RUBER TO: CAMMO - REQUEST OF BOSTON ARTCC. (ZBW)
2. REMOVED "CHART NOTE: DME/DME RNP-0.3 NA" - TO REFLECT CURRENT CRITERIA AND ADDED RNP APCH TO PBN REQUIREMENTS NOTE.
3. REMOVED "CHART NOTE: WHEN VGSI INOP, CIRCLING RWY 26 NA AT NIGHT" AND REPLACED WITH "CHART NOTE: PROCEDURES NA AT NIGHT" - TO REFLECT CURRENT CRITERIA CHANGE IN USE OF VGSI TO MITIGATE 20:1 PENETRATIONS.
4. REMOVED "CHART NOTE: WHEN VGSI INOP, STRAIGHT-IN/CIRCLING RWY 8 NA AT NIGHT" AND REPLACED WITH "CHART NOTE: PROCEDURES NA AT NIGHT - TO REFLECT CURRENT CRITERIA CHANGE IN USE OF VGSI TO MITIGATE 20:1 PENETRATIONS.
5. CHANGED NOTE: PROCEDURE NA FOR ARRIVALS AT RUBER ON V58-193 EASTBOUND AND ON V205-489 NORTHBOUND TO: PROCEDURE NA FOR ARRIVALS AT CAMMO ON V489 NORTHBOUND AND T216 WESTBOUND - FIX NAME CHANGE, AIRWAYS CANCELED AND NEW T ROUTE.
6. INCORPORATED P NOTAMS: LNAV HAT CAT A 617, THRE 501 TO TDZE 523, CHART NOTE: RWY 8 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
7. REMOVED ADDITIONAL FLIGHT DATA NOTE: "BETFY TO RW08: 3.00/40" AND REPLACED WITH "CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES" - INCORPORATE T-NOTAM 8/9683.
8. REMOVED PROFILE CHART NOTE: "VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET})" - NO DECENT ANGLE NEEDED WHEN VISUAL SEGMENT OBSTACLES USED.



COORDINATED WITH:

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

FLIGHT CHECKED BY

JOHN D JEFFERS

Digitally signed by

ROBERT G HAMILTON

Sep 18, 2018

OFFICE

FICO

DATE

9/14/18

DEVELOPED BY

LONNIE EVERHART (DAVID ZAHN)

Digitally signed by

ROBERT G HAMILTON

Sep 18, 2018

OFFICE

AJV-5400

DATE

04/25/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by

ROBERT G HAMILTON

Sep 18, 2018

OFFICE

AJV-5400

DATE

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> RANDALL	<u>AIRPORT ID</u> K06N	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 26	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> MIDDLETOWN	<u>STATE</u> NY
<u>AIRPORT ELEVATION</u> 523	<u>TDZE</u> 523	<u>SUPERSEDED</u> RNAV (GPS) RWY 26	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 06/22/2017	<u>MAG VAR</u> 13W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
HELON		HOLZZ		TF	FB	2.00	170.45	5.32	4200
VOLLU		CLAKE		TF	FB	2.00	347.29	16.31	3400
CLAKE	IAF	EMVOC		TF	FB	1.00	344.81	4.89	3000
HOLZZ	IAF	EMVOC		TF	FB	1.00	170.48	5.00	3000
IGN VOR/DME	IAF	EMVOC		TF	FB	1.00	253.69	19.15	3000
EMVOC	IF	APOFA		TF	FB	1.00	255.95	5.00	2100
APOFA	FAF	RW26	MAP	TF	FO	0.30	255.89	4.85	
RW26	MAP	923 MSL		CA			255.89		
923 MSL		WIKMO		DF	FB	1.00			
WIKMO		HUO VOR/DME		TF	FO	1.00	280.50	7.05	3500

MISSED APPROACH

MAP:

LP: RW26
 LNAV: RW26

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3500 DIRECT WIKMO AND ON TRACK 280.50 TO HUO VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3500.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. PROFILE STARTS AT EMVOC
3. FAC: 255.89

FAF: APOFA

DIST FAF TO MAP: 4.85

DIST FAF TO THLD: 4.85
4. MIN ALT: EMVOC 3000, APOFA 2100
5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:
6. MIN GP INCPT:

GP ALT AT FAF :

OM:

MM:

IM:
7. GP ANGLE:

34:1: IS NOT CLEAR

20:1: IS NOT CLEAR

TCH:
8. MSA FROM: RW26 4300

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT VOLLU ON V374 SOUTHEAST BOUND AND V39 EAST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HELON ON V213-249 NORTHEAST BOUND AND T216 WESTBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON IGN VOR/DME AIRWAY RADIALS 203 CW 316.
CHART NOTE: RWY 26 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: USE NEWBURGH ALTIMETER SETTING; WHEN NOT RECEIVED, USE MONTGOMERY ALTIMETER SETTING.

ADDITIONAL FLIGHT DATA:

CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
WAAS CHANNEL #40030
REFERENCE PATH ID: W26A
FAS OBST: 719 AAO 412809N/0741857W, 759 AAO 412637N/0742016W.
HOLD W, RT, 092.82 INBOUND
LTP HAE: 126.6 M

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LP MDA	1020	1	497		NA			NA			NA				
LNAV MDA	1060	1	537		NA			NA			NA				
CIRCLING	1080	1	557		NA			NA			NA				



CHANGES - REASONS

- 1. REMOVED "CHART NOTE: WHEN VGSI INOP, CIRCLING RWY 26 NA AT NIGHT" AND REPLACED WITH "CHART NOTE: PROCEDURES NA AT NIGHT" - TO REFLECT CURRENT CRITERIA CHANGE IN USE OF VGSI TO MITIGATE 20:1 PENETRATIONS.
- 2. REMOVED "CHART NOTE: DME/DME RNP-0.3 NA" - TO REFLECT CURRENT CRITERIA AND ADDED RNP APCH TO PBN REQUIREMENTS NOTE.
- 3. REMOVED ADDITIONAL FLIGHT DATA NOTE: "APOFA TO RW26: 3.00/36" AND REPLACED WITH "CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES" - INCORPORATE T-NOTAM 8/9682.
- 4. REMOVED CHART PROFILE NOTE: "VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET})" - NO DECENT ANGLE NEEDED WHEN VISUAL SEGMENT OBSTACLES USED.
- 5. CHANGED FAS DATA: TCH FROM 36 TO 0 AND GPA FROM 3.00 TO 0 - NO DECENT ANGLE NEEDED WHEN VISUAL SEGMENT OBSTACLES USED.
- 6. CHANGED CRC REMAINDER FROM "E84A4D52" TO "DB5B21D5" - FAS DATA CHANGED WITH REMOVAL OF TCH AND GPA VALUES.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: AMGR, ZBW, ZNY, NY APP CON.

FLIGHT CHECKED BY

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

DEVELOPED BY

LONNIE EVERHART (DAVID ZAHN)

APPROVED BY

LONNIE EVERHART

OFFICE

OFFICE

AJV-5400

OFFICE

AJV-5400

DATE

DATE

05/08/2018

DATE

Digitally signed by
ROBERT G HAMILTON
Sep 18, 2018

Digitally signed by
ROBERT G HAMILTON
Sep 18, 2018

TITLE

Digitally signed by
ROBERT G HAMILTON
Sep 18, 2018



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	06N
RUNWAY	RW26
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W26A
LTP/FTP LATITUDE	412601.2235N
LTP/FTP LONGITUDE	0742313.2080W
LTP/FTP ELLIPSOIDAL HEIGHT	+01266
FPAP LATITUDE	412520.5000N
FPAP LONGITUDE	0742458.5800W
THRESHOLD CROSSING HEIGHT (TCH)	00000.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	00.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1896
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	DB5B21D5

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+01587
FPAP ORTHOMETRIC HEIGHT	+01587



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

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Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> RANDALL	<u>AIRPORT ID</u> K06N	<u>PROCEDURE NAME</u> VOR RWY 8	<u>ORIGINAL/AMENDMENT</u> 7B	<u>CITY</u> MIDDLETOWN	<u>STATE</u> NY
<u>AIRPORT ELEVATION</u> 523	<u>TDZE</u> 523	<u>SUPERSEDED</u> VOR RWY 8	<u>ORIGINAL/AMENDMENT</u> 7A	<u>DATED</u> 06/22/2017	<u>MAG VAR</u> 11W
<u>FACILITY</u> HUO	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1970

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>

MISSED APPROACH

MAP:

9.00 NM AFTER HUO VOR/DME OR AT HUO 9.00 DME

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 3500 DIRECT HUO VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L **SIDE OF COURSE** 272.82 **OUTBOUND** 3500 **FT WITHIN** 5 **MILES OF** HUO VOR/DME (IAF)
2.
3. **FAC:** 092.82 **FAF:** HUO VOR/DME **DIST FAF TO MAP:** 9.00 **DIST FAF TO THLD:** 9.00
4. **MIN ALT:** HUO VOR/DME 3400, ZETIN/5.31 DME 1700
8. **MSA FROM:** HUO VOR/DME 045-315 3500, 315-045 3900

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: USE NEWBURGH ALTIMETER SETTING, WHEN NOT RECEIVED, USE MONTGOMERY ALTIMETER SETTING.
CHART NOTE: RWY 8 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.

ADDITIONAL FLIGHT DATA:

QUALITY
22
CHECKED

HUO VOR/DME TO RW08: 2.99/44.
FAS OBST: 1259 AAO 412625N/0742847W.
1513 AAO 412437N/0743528W.
HOLD W, RT, 092.82 INBOUND

MINIMUMS:**TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT****ALTERNATE: NA** ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-08	1700	1 1/4	1199		NA			NA			NA				
CIRCLING	1700	1 1/4	1177		NA			NA			NA				
ZETIN FIX MINIMUMS															
S-08	1560	1 1/4	1037		NA			NA			NA				
CIRCLING	1560	1 1/4	1037		NA			NA			NA				

CHANGES - REASONS

1. REMOVED "CHART NOTE: WHEN VGSI INOP, STRAIGHT-IN/CIRCLING RWY 8 PROCEDURE NA AT NIGHT" AND REPLACED WITH "CHART NOTE: PROCEDURES NA AT NIGHT - TO REFLECT CURRENT CRITERIA CHANGE IN USE OF VGSI TO MITIGATE 20:1 PENETRATIONS.
2. CHANGED HELICOPTER VISIBILITY REDUCTION NOTE FROM: " VISIBILITY REDUCTION BY HELICOPTERS NA" TO: "RWY 8 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" - TO REFLECT CURRENT HELICOPTER VISIBILITY REDUCTION CRITERIA.
3. CHANGED THLD ELEVATION TO TDZE - P -NOTAM AMDT 7A.
4. REMOVED "CHART NOTE: WHEN VGSI INOP, CIRCLING RWY 26 NA AT NIGHT" AND REPLACED WITH "CHART NOTE: PROCEDURES NA AT NIGHT - TO REFLECT CURRENT CRITERIA CHANGE IN USE OF VGSI TO MITIGATE 20:1 PENETRATIONS.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZNY, NY APCH, AMGR

FLIGHT CHECKED BY

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

DEVELOPED BY

LONNIE EVERHART (DAVID ZAHN)

APPROVED BY

LONNIE EVERHART

OFFICE

AJV-5400

OFFICE

AJV-5400

DATE

05/08/2018

DATE

Digitally signed by
ROBERT G HAMILTON
Sep 18, 2018

Digitally signed by
ROBERT G HAMILTON
Sep 18, 2018

Digitally signed by
ROBERT G HAMILTON
Sep 18, 2018

TITLE
MANAGER

QUALITY
22
CHECKED

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> GREATER ROCHESTER INTL	<u>AIRPORT ID</u> KROC	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 10	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> ROCHESTER	<u>STATE</u> NY	
<u>AIRPORT ELEVATION</u> 559	<u>TDZE</u> 556	<u>SUPERSEDED</u> RNAV (GPS) RWY 10	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 03/05/2015	<u>MAG VAR</u> 12W	<u>EPOCH YEAR</u> 2015
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
GEE VOR/DME		WIGEG		TF	FB	2.00	331.75	11.63	3400
CLUNG	IAF	ZOFEB		TF	FB	1.00	060.07	5.46	2500
WIGEG	IAF	ZOFEB		TF	FB	1.00	009.50	8.00	2500
ZOFEB	IF	BIBAY		TF	FB	1.00	099.49	6.90	1700
BIBAY	FAF	RW10	MAP	TF	FO	0.30	099.60	3.43	
RW10	MAP	959 MSL		CA			099.60		
959 MSL		BILAW		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LP: RW10
 LNAV: RW10

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT BILAW AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. PROFILE STARTS AT ZOFEB
3. FAC: 099.60

FAF: BIBAY

DIST FAF TO MAP: 3.43

DIST FAF TO THLD: 3.43
4. MIN ALT: ZOFEB 2500, BIBAY 1700
5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:
6. MIN GP INCPT:

GP ALT AT FAF :

OM:

MM:

IM:
7. GP ANGLE:

34:1: IS NOT CLEAR

20:1: IS NOT CLEAR

TCH:
8. MSA FROM: RW10 3600

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 10 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CLUNG ON V2 SOUTHWEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON GEE VOR/DME AIRWAY RADIALS 263 CW 018.

ADDITIONAL FLIGHT DATA:

784 AAO 430748N/0774541W
709 TREE 430726N/0774446W
CHART CIRCLING ICON.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
WAAS CHANNEL #70734
REFERENCE PATH ID: W10A
CHART FAS OBST: 704 TREE 430713N/0774349W, 704 TOWER 430745N/0774420W.
HOLD E, RT, 279.84 INBOUND
LTP HAE: 133.5 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 1000-2 3/4, CAT D 1000-3

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LP MDA	960	5500	404	960	5500	404	960	6000	404	960	6000	404			
LNAV MDA	960	5500	404	960	5500	404	960	6000	404	960	6000	404			
CIRCLING	1060	1	501	1060	1	501	1500	2 3/4	941	1500	3	941			



AIRPORT	AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	CITY	STATE
GREATER ROCHESTER INTL	KROC	RNAV (GPS) RWY 10	1B	ROCHESTER	NY

CHANGES - REASONS

1. CHANGES FROM P-NOTAM FOR AMDT 1A, FDC 5/2525, INCORPORATED INTO FORM - IAW 8260.19H PARA 8-3-4C(3).
2. VDA/TCH VALUES REMOVED FROM PROFILE VIEW - FLIGHT CHECK FINDING OF VISUAL SURFACE OBSTACLES.
3. ADDED ADDITIONAL FLIGHT DATA CHART NOTE: "VISUAL SEGMENT - OBSTACLES," - PER 8260.19H, PARA 8-6-10P.
4. REMOVED CHART NOTE: "DME/DME RNP-0.3 NA," - PER 8260.19H, PARA 4-6-10E.
5. ADDED PBN REQUIREMENTS NOTE: "RNP APCH," - PER 8260.19H, PARA .8-6-8(B)1.
6. LINE 7: POPULATED 20:1 BLOCK - PER 8260.19H, PARA 8-6-7.G3.
7. REPLACED LP FAS OBSTACLE 632 TREE (430726N/0774100W) WITH 704 TREE (430713N/0774349W) - EFFECT DOCUMENTED IN P-NOTAM 5/2525 WITH INCREASED MINIMUMS PUBLISHED IN RNAV (GPS) RWY 10, AMDT 1A.
8. FAS DATA: CHANGED THRESHOLD CROSSING HEIGHT (TCH) FROM 53.6 TO 0 AND GLIDEPATH ANGLE (GPA) FROM 3.00 TO 0 - VDA REMOVAL, PER FLIGHT CHECK.
9. MADE MINOR TEXTUAL CHANGES TO TWO CHART PLANVIEW NOTES FOR PROCEDURE NA ON V2 AND GEE VOR/DME AIRWAY RADIALS - TYPOGRAPHICAL STANDARDIZATION.
10. CHANGED CRC REMAINDER FROM 4B5F7860 TO 33A546B5 - FAS DATA CHANGED.



<u>AIRPORT</u> GREATER ROCHESTER INTL	<u>AIRPORT ID</u> KROC	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 10	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> ROCHESTER	<u>STATE</u> NY
<u>COORDINATED WITH:</u>					
A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ <u>OTHER:</u> ZOB, ROC APP CON, AMGR					
<u>FLIGHT CHECKED BY</u> THOMAS CONKLIN	<i>Digitally signed by</i> DAVID DANNER Oct 12, 2018		<u>OFFICE</u> FICO	<u>DATE</u> 10/10/18	
<u>DEVELOPED BY</u> DAVID A. DOWLING	<i>Digitally signed by</i> DAVID A DOWLING Aug 15, 2018		<u>OFFICE</u> AJV-5422	<u>DATE</u> 06/20/2018	
<u>APPROVED BY</u> JULIE MORGAN	<i>Digitally signed by</i> DAVID DANNER Oct 12, 2018		<u>OFFICE</u> AJV-5420	<u>DATE</u>	<u>TITLE</u> MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KROC
RUNWAY	RW10
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W10A
LTP/FTP LATITUDE	430722.1255N
LTP/FTP LONGITUDE	0774035.4065W
LTP/FTP ELLIPSOIDAL HEIGHT	+01335
FPAP LATITUDE	430725.7605N
FPAP LONGITUDE	0773833.8435W
THRESHOLD CROSSING HEIGHT (TCH)	00000.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	00.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0888
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	33A546B5
<u>ADDITIONAL PATH POINT RECORD INFORMATION</u>	
ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+01691
FPAP ORTHOMETRIC HEIGHT	+01691



**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>
ROME, NY	GRIFFISS INTL	3 JANUARY 2019	1A

TAKEOFF MINIMUMS:
RWY 15, 33, STANDARD.

TEXTUAL DEPARTURE PROCEDURES:
RWY 15: CLIMB HEADING 147.05 TO 1000 BEFORE TURNING LEFT.
RWY 33: CLIMB HEADING 327.07 TO 1500 BEFORE TURNING RIGHT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:
NOTE: RWY 15: POLE 9 FT FROM DER, 4 FT RIGHT OF CENTERLINE, 1 FT AGL/499 FT MSL. TREE 1991 FT FROM DER, 966 FT LEFT OF CENTERLINE, 573 FT MSL. TREES BEGINNING 2068 FT FROM DER, 934 FT LEFT OF CENTERLINE, UP TO 587 FT MSL. TREES BEGINNING 2223 FT FROM DER, 358 FT LEFT OF CENTERLINE, UP TO 591 FT MSL. TREE 5558 FT FROM DER, 1957 FT LEFT OF CENTERLINE, 640 FT MSL.

NOTE: RWY 33: NAVAID 39 FT FROM DER, 260 FT RIGHT OF CENTERLINE, 4 FT AGL/505 FT MSL. TREE 2860 FT FROM DER, 1140 FT RIGHT OF CENTERLINE, 580 FT MSL. TREE 3002 FT FROM DER, 1266 FT RIGHT OF CENTERLINE, 588 FT MSL.

CONTROLLING OBSTACLES:
OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 15: 1424 FT MSL AAO 431615.00N/0751939.00W, RWY 33: 1420 FT MSL AAO 431947.12N/0752703.16W.

REMARKS:

<u>FLIGHT INSPECTED BY:</u>	<i>Digitally signed by</i> ADOLFO D URRUTIA Sep 14, 2018	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
RUSSELL P ELLIOTT		FICO	9/12/18
<u>DEVELOPED BY:</u>	<i>Digitally signed by</i> ADOLFO D URRUTIA Sep 14, 2018	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
ADOLFO URRUTIA (CHRISTINE BAYSE)		AJV-5432	08/23/2018
<u>APPROVED BY:</u>	<i>Digitally signed by</i> ADOLFO D URRUTIA Sep 14, 2018	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
PATRICK MULQUEEN		AJV-5430	

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

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

OTHER:
ZBW, RME APP & ATCT, AMGR.

CHANGES - REASONS:
1. UPDATED RWY 33 TEXTUAL DEPARTURE PROCEDURE FROM "CLIMB HEADING 327.07 TO 1400 BEFORE TURNING RIGHT" TO "CLIMB HEADING 327.07 TO 1500 BEFORE TURNING RIGHT". - NEW CONTROLLING OBSTACLE.
2. UPDATED TAKEOFF OBSTACLE NOTES FOR BOTH RUNWAYS. - NEW SURVEYED OBSTACLES.
3. UPDATED CONTROLLING OBSTACLES TO OBSTACLES MANDATING ODP ROUTE DEVELOPMENT AND OBSTACLES UPDATED. - NEW OBSTACLES MANDATING ROUTE.

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

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<u>AIRPORT</u> CINCINNATI MUNI AIRPORT LUNKEN FIELD	<u>AIRPORT ID</u> KLUK	<u>PROCEDURE NAME</u> ILS OR LOC RWY 21L	<u>ORIGINAL/AMENDMENT</u> 20	<u>CITY</u> CINCINNATI	<u>STATE</u> OH
<u>AIRPORT ELEVATION</u> 483	<u>TDZE</u> 475	<u>SUPERSEDED</u> ILS OR LOC RWY 21L	<u>ORIGINAL/AMENDMENT</u> 19A	<u>DATED</u> 06/25/2015	<u>MAG VAR</u> 4W
<u>FACILITY</u> I-LUK	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1990

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
FLM VOR/DME		KUYEY/I-LUK 12.69 DME					003.12	38.25	3000
KUYEY/I-LUK 12.69 DME	IF/IAF	SIYOR/I-LUK 5.86 DME					205.01	6.83 (I-LUK)	2000

MISSED APPROACH

MAP:

ILS: DA
LOC: I-LUK 1.19 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 THEN CLIMBING LEFT TURN TO 2600 ON HEADING 140 AND CVG VORTAC R-109 TO CALIF/19.02 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 2000 THEN CLIMBING LEFT TURN TO 3000 DIRECT FLM VOR/DME AND HOLD NW, RT, 143.91 INBOUND.

PROFILE:

- 1. PT** **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
- 2.** HOLD NE KUYEY, RT, 205.01 INBOUND, 3000 FT. IN LIEU OF PT (IF/IAF), MAX 6000.
- 3. FAC:** 205.01 **FAF:** SIYOR/I-LUK 5.86 DME **DIST FAF TO MAP:** **DIST FAF TO THLD:** 4.67
- 4. MIN ALT:** KUYEY/I-LUK 12.69 DME 3000, SIYOR/I-LUK 5.86 DME 2000, YACUK/4.19 DME 1460*
- 5. DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **GS ANT:** 750
- 6. MIN GS INCPT:** 2000 **GS ALT AT FAF :** SIYOR/I-LUK 5.86 DME 2000 **OM:** **MM:** **IM:**
- 7. GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 38.5
- 8. MSA FROM:** CVG VORTAC 2900

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED.

NOTES:

CHART NOTE: CIRCLING NA FOR CAT D NW OF RWYS 7 AND 21R.



CHART NOTE: RWY 21L HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

CHART NOTE: VDP NA WHEN USING CINCINNATI/NORTHERN KENTUCKY INTL ALTIMETER SETTING.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CINCINNATI/ NORTH KENTUCKY INTL ALTIMETER SETTING AND INCREASE ALL DA 86 FEET AND ALL MDA 100 FEET; INCREASE S-LOC 21L CAT A/B VISIBILITY TO RVR 5500 AND CAT C/D TO 2 SM.

CHART NOTE: FOR INOPERATIVE ALS WHEN USING CINCINNATI/ NORTH KENTUCKY INTL ALTIMETER SETTING AND INCREASE S-ILS 21L ALL CATS VISIBILITY TO RVR 6000 AND S-LOC 21L CAT A TO RVR 5500 AND CAT C/D TO 2 1/2 SM.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 21L CAT A/B VISIBILITY TO RVR 5500, AND CAT C/D TO 2 SM.

CHART NOTE: CIRCLING RWY 3L, 7, 21R NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART IN PLANVIEW: FLM 38.25 DME AT KUYEY.

CHART CIRCLING ICON.

CHART VDP AT 3.33 DME*

DISTANCE VDP TO THLD 2.14 NM

* LOC ONLY

CHART FAS OBST: 905 TREE 390922N/0842224W.

CHART 986 BUILDING 391001N/0842317W.

CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NW FLM VOR/DME, RT, 143.91 INBOUND.

HOLD E, RT, 288.87 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE., NA WHEN CONTROL TOWER CLOSED.; LOC: STANDARD - CAT B 900-2, CAT C 900-2 1/2, CAT D 1000-3, NA WHEN LOCAL WEATHER NOT AVAILABLE., NA WHEN CONTROL TOWER CLOSED.

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-ILS 21L	798	4000	323	798	4000	323	798	4000	323	798	4000	323			
S-LOC 21L	1200	4000	725	1200	4000	725	1200	1 5/8	725	1200	1 5/8	725			
CIRCLING	1260	1	777	1360	1 1/4	877	1360	2 1/2	877	1400	3	917			



CHANGES - REASONS

- 1. ADDED CROSSING NAVAID TO KUYEY FIX DESCRIPTION - AS PRIMARY FIX DESCRIPTION FROM CVG VORTAC 8260-2.
- 2. CHANGED MSA NAVAID FROM MADEIRA NDB (MDE) TO CINCINNATI VORTAC (CVG) - PER INSTRUCTION FROM FPT AND THE DECOMMISSIONING OF MDE.
- 3. REPLACE KEELY OM WITH FIX YACUK DME FIX AS SDF AND MINIMUM ALTITUDE FROM 1600 MSL TO 1460 MSL- PER INSTRUCTION FROM FPT TO MATCH THE RNAV 21L PROCEDURE.
- 4. REMOVED MADEIRA NDB - PER REQUEST OF FPT AND MADEIRA NDB (MDE) DECOMMISSIONING.
- 5. ADDED SIYOR AS FAF AT 2000 MSL - PER INSTRUCTION FROM FPT TO MATCH THE RNAV 21L PROCEDURE.
- 6. REMOVED PROCEDURE TURN - PER INSTRUCTION FROM FPT TO MATCH THE RNAV 21L PROCEDURE.
- 7. REMOVED COMPUTER GENERATED FIX CFLSM - NOT NEEDED WITH THE ESTABLISHMENT OF THE INTERMEDIATE KUYEY AND PER INSTRUCTION FROM FPT TO MATCH THE RNAV 21L PROCEDURE.
- 8. REMOVED IAF MOAKS - NO ALONG TRACK NAVAID TO DEFINE IF/IAF FIX AT KUYEY FROM MOAKS (ALTERNATE DEAD RECKONING NOT POSSIBLE SEGMENT TOO SHORT) - PER FPT REQUEST/CHECKLIST.
- 9. ADDED HOLD IN LIEU AT KUYEY - PER INSTRUCTION FROM FPT TO MATCH THE RNAV 21L PROCEDURE.
- 10. CHANGE FALMOUTH VOR/DME FEEDER ROUTE TO FIX IF/IAF (KUYEY) COURSE AND DISTANCE FROM 001M/34.4 NM TO 003M/38.25 NM.
- 11. REMOVED THE CLIMB IN HOLD FROM MISSED APPROACH HOLDING - NOT REQUIRED BASED ON IAPA BUILD RESULTS AND PER EMAIL APPROVAL TO REMOVE FROM FPT.
- 12. ADDED CIRCLING RESTRICTION: CIRCLING NA FOR CAT D NW OF RWY 7 AND RWY 21R - PER INSTRUCTION FROM FPT.
- 13. INCREASED THE S-ILS DA/HAT ALL CATS FROM 750/275 TO 798/323. - MISSED APPROACH ADJUSTMENT AND TO CANCEL NOTAM: 7/8241.
- 14. CHANGE THE S-LOC MDA/HAT ALL CATS FROM 1600/1125 TO 1200/725 AND CHANGE VISIBILITY CAT A FROM 1 ¼ SM TO RVR 4000, CAT B FROM 1 ½ SM TO RVR 4000, CAT C-D FROM 3 SM TO 1 5/8 SM - PER FPT REQUEST/CHECKLIST AND PER VISI CHECK CALCULATION.
- 15. CHANGE CIRCLING MDA/HAA CAT A FROM 1600 TO 1260, CAT B-C FROM 1600 TO 1360 AND CAT D FROM 1600 TO 1400 AND CHANGE VISIBILITY CAT A FROM 1 ¼ SM TO 1 SM, CAT B FROM 1 ½ SM TO 1 ¼ SM, CAT C-D FROM 3 SM TO CAT C 2 ½ SM AND CAT D 3 SM - PER FPT REQUEST/CHECKLIST AND PER VISI CHECK CALCULATION.
- 16. REMOVE KEELY OM MINIMUMS - NOT REQUIRED WITH DME AND PER FPT REQUEST/CHECKLIST.
- 17. CHANGE CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CINCINNATI/ NORTHERN KENTUCKY INTL ALTIMETER SETTING AND INCREASE ALL DA 86 FEET AND ALL MDA 100 FEET; KEELY OM MINIMUMS, INCREASE S-LOC 21L CAT C/D VISIBILITY 1/8 MILE, CIRCLING CATS B AND D VISIBILITY TO 1/4 MILE AND CIRCLING CAT C VISIBILITY 1/2 MILE TO WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CINCINNATI/ NORTH KENTUCKY INTL ALTIMETER SETTING AND INCREASE ALL DA 86 FEET AND ALL MDA 100 FEET; INCREASE S-LOC 21L CAT A-B VISIBILITY ¼ SM AND CAT C ½ SM. - PER FPT REQUEST/CHECKLIST .
- 18. ADDED NOTE FOR INOPERATIVE ALS, WHEN USING CINCINNATI/ NORTH KENTUCKY INTL ALTIMETER SETTING INCREASE S-ILS 21L, ALL VISIBILITY TO RVR 6000 AND INCREASE S-LOC 21L CAT A VISIBILITY TO RVR 5500, AND CAT C/D TO 2 1/2 SM. - PER VISI CHECK CALCULATION.
- 19. CHANGED NOTE FOR INOPERATIVE MALSR, INCREASE S-ILS-21L VISIBILITY TO 7/8 MILES ALL CATS; KEELY OM MINIMUMS, INCREASE S-LOC-21L CAT A VISIBILITY TO 1MILE AND CATS C/D VISIBILITY TO 2 ½ MILE TO FOR INOPERATIVE ALS INCREASE CAT A/B VISIBILITY TO RVR 5500 AND CAT C/D TO 2 SM - PER NEW VISCHECK CALCULATION RESULTS.
- 20. CHANGE ALTERNATE MINIMUMS FOR ILS OR LOC RWY 21L FROM CATEGORIES A, B, 1200-2; CATEGORIES C, D, 1200-3. TO CAT B 900-2, CAT C 900-2 ½ AND, CAT D 1000-3. - PER SIAP SIAP MINIMUMS CALCULATION.
- 21. ADDED NEW CIRCLING CRITERIA - PER INSTRUCTION FROM FPT.
- 22. CHANGE NOTE: NIGHT LANDING: RWY 3L, 7, 25 NA TO CIRCLING RWY 3L, 7, 21R NA AT NIGHT - 20:1 PENETRATIONS.
- 23. ADDED CHART IN PLANVIEW FLM 38.25 DME AT KUYEY - TO IDENTIFY KUYEY AND ENABLE CAPTURE OF THE LOCALIZER.
- 24. DELETED DIST TO FAF ON LINE 4. - DME IS REQUIRED SO THE MAP IS A DME FIX AND TIME/DISTANCE TABLE IS NOT REQUIRED.



COORDINATED WITH:

A4A☐

ALPA☒

AOPA☒

APA☒

HAI☐

NBAA☒

OTHER: ZID, CVG APP CON, LUK ATCT, AMGR, ATA

FLIGHT CHECKED BY

SCOTT WIEBE

Digitally signed by

DONALD H LANIER

Oct 02, 2018

OFFICE

FICO

DATE

9/30/18

DEVELOPED BY

LONNIE EVERHART (ANDRE MARSH)

Digitally signed by

DONALD H LANIER

OFFICE

AJV-5400

DATE

04/12/2018

APPROVED BY

LONNIE EVERHART

Oct 02, 2018

Digitally signed by

DONALD H LANIER

Oct 02, 2018

OFFICE

AJV-5400

DATE

TITLE

MANAGER



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
LOC BC STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.25

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Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> CINCINNATI MUNI AIRPORT LUNKEN FIELD	<u>AIRPORT ID</u> KLUK	<u>PROCEDURE NAME</u> LOC BC RWY 3R	<u>ORIGINAL/AMENDMENT</u> 9	<u>CITY</u> CINCINNATI	<u>STATE</u> OH
<u>AIRPORT ELEVATION</u> 483	<u>TDZE</u> 481	<u>SUPERSEDED</u> LOC BC RWY 3R	<u>ORIGINAL/AMENDMENT</u> 8E	<u>DATED</u> 06/25/2015	<u>MAG VAR</u> 4W
<u>FACILITY</u> I-LUK	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1990

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
FLM VOR/DME	IF/IAF	SHILA/I-LUK 9.61 DME/RADAR					337.71	19.44	2500
SHILA/I-LUK 9.61 DME/RADAR	IF	DEFTS/4.61 DME					025.01	5.00 (I-LUK)	2100

MISSED APPROACH

MAP:

LOC: 4.13 NM AFTER DEFTS OR AT LVERT/0.50 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 3000 ON CVG VORTAC R-059 TO WUSPU/CVG 24.70 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 3000 DIRECT MAJUG AND HOLD NE, RT, 205.01 INBOUND.

PROFILE:

1. PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
2. PROFILE STARTS AT SHILA
3. **FAC:** 025.01 **FAF:** DEFTS/4.61 DME **DIST FAF TO MAP:** 4.13 **DIST FAF TO THLD:** 4.80
4. **MIN ALT:** SHILA/I-LUK 9.61 DME/RADAR 2500, DEFTS/4.61 DME 2100
8. **MSA FROM:** CVG VORTAC 2900

EQUIPMENT REQUIREMENTS NOTES:

DME OR RADAR REQUIRED FOR PROCEDURE ENTRY.
DME REQUIRED.

NOTES:

CHART NOTE: CIRCLING NA FOR CAT D NW OF RWY 7-21R.
CHART NOTE: CIRCLING RWY 3L, 7, 21R NA AT NIGHT.
CHART PROFILE NOTE: DISREGARD GS INDICATIONS.



CHART NOTE: VDP NA WITH CINCINNATI/NORTHERN KENTUCKY INTL ALTIMETER SETTING.
CHART: CVG VORTAC.
RWY 3R HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CINCINNATI/NORTHERN KENTUCKY INTL ALTIMETER SETTING INCREASE ALL MDA 100 FEET; INCREASE CIRCLING CAT B VISIBILITY ¼ MILE, INCREASE CIRCLING CAT C VISIBILITY ½ MILE.

ADDITIONAL FLIGHT DATA:

CHART FAS OBST: 998 TOWER 390132.50N-0842702.80W
CHART CIRCLING ICON.
DEFTS TO RW03R: 3.09/45.
CHART IN PLANVIEW: MAJUG
CHART VDP AT 2.23 DME
DISTANCE VDP TO THLD 2.42 NM
CHART: 1154 TOWER 390033N/0842654W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NE MAJUG, RT, 205.01 INBOUND.
HOLD SW, RT, 058.59 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - NA WHEN TOWER CLOSED.; LOC: CAT A, B 900-2, CAT C 900-2 1/2, CAT D 1000-3, NA WHEN LOCAL WEATHER NOT AVAILABLE.

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-LOC 03R	1300	1	819	1300	1 1/4	819	1300	2 1/2	819	1300	2 1/2	819			
CIRCLING	1300	1 1/4	817	1360	1 1/4	877	1360	2 1/2	877	1400	3	917			

CHANGES - REASONS

1. CHANGED LOC BC S-3R MDA/HAT FROM 1240/759 MSL TO 1300/819 MSL ALL CATS. CAT C VIS FROM 2¼ TO 2 ½ - NEW FINAL CONTROLLING OBSTACLE (21-0556655).
2. CHANGED THE CMDA/HAA FOR CAT D FROM 1360/876 TO 1400/917- NEW CONTROLLING OBSTACLE FROM THE APPLICATION OF NEW CIRCLING CRITERIA.
3. ADDED CIRCLING RESTRICTION NOTE FOR CAT D AIRCRAFT - CIRCLING CAT D NA NW OF RWY 7-21R - PER THE REQUEST OF THE FPT TO MITIGATE HIGHER MINIMUMS NW OF THE AIRPORT.
4. CHANGE BACK UP ALTIMETER NOTE FROM WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CINCINNATI/NORTHERN KENTUCKY INTL ALTIMETER SETTING AND INCREASE ALL MDA 100 FEET, INCREASE S-3R CAT C AND CIRCLING A/B/D VISIBILITY ¼ MILE, INCREASE CIRCLING CAT C VISIBILITY ½ MILE TO WHEN LOCAL ALTIMETER SETTING NOTE RECEIVED, USE CINCINNATI/NORTHERN KENTUCKY INTL ALTIMETER SETTING AND INCREASE ALL MDA 100 FEET; INCREASE CIRCLING CAT B VISIBILITY ¼ SM, CAT C VISIBILITY ½ SM.- VISI CHECK CALCULATED.
5. CHANGED ALTERNATE MINIMUMS FOR LOC BC RWY 3R FROM CATEGORIES A,B, 900-2; CATEGORY C, 900-2 1/2; CATEGORY D, 900-2 3/4. TO LOC BC RWY 3R CATEGORIES A, B 900-2, CAT C 900-2 ½, CAT D 1000-3 - NEW CIRCLING CAT D CONTROLLING OBSTACLE DUE TO LARGER RADII WITH NEW CIRCLING CRITERIA INCREASED CIR CAT D MDA TO 1400. - PER SIAP SIAP MINIMUMS CALCULATION.
6. REMOVED NOTE NIGHT LANDING: 3L, 7, 25 NA - TO CANCEL NOTAM 8/2920.
7. ADDED NOTE CIRCLING RWY 3L, 7, 21R NA AT NIGHT - 20:1 PENETRATIONS .
8. CHANGED CHART OBST FROM CHART 1185 TOWERS 390031/842637W TO CHART 1154 TOWER 390033N/0842654W - NEW 7:1 OBSTACLE AND PER FAAO 8260.19, PARA 8-6-10, E2.
9. CHANGED FAS OBST FROM 990 ANTENNA 390348.00N/0842630.00W TO 998 TOWER 390132.50N-0842702.80W - ANTENNA REPLACED WITH TOWER.
10. CHANGED MISSED APPROACH CLEARANCE LIMIT AND HOLDING FROM CINCINNATI NDB TO WUSPU. PER THE REQUEST OF THE FPT.
11. CHANGED MISSED APPROACH INSTRUCTIONS FROM CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 2800 DIRECT LUK NDB AND HOLD, TO CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 3000 ON CVG VORTAC R-059 TO WUSPU/CVG 24.70 DME AND HOLD. - PER FPT REQUEST.
12. ADDED WAYPOINT MAJUG OVER LOCATION OF LOC /AZ CENTERLINE ABEAM THE NDB (ACTUAL COORDINATES 391321.86N-0842119.32W) - PER THE REQUEST OF THE FPT.
13. ADDED ALTERNATE MISSED APPROACH HOLDING AT WAYPOINT (GPS REQUIRED) MAJUG- PER THE REQUEST OF THE FPT.
14. ADDED ALTERNATE MISSED INSTRUCTIONS WAYPOINT MAJUG, CLIMB TO 3000 DIRECT MAJUG AND HOLD NE, RT, 205.01 INBOUND - PER THE REQUEST OF THE FPT.
15. CHANGED MSA FROM MDE NDB TO CVG VORTAC - MADEIRA NDB DECOMMISSIONING.
16. ADDED VDP - PER IAPA BUILD RESULTS AS FINAL FACILITY HAS ASSOCIATED DME.
17. ADDED CIRCLING ICON - PER CRITERIA FAAO 8260.19, PARA8-6-10T.



COORDINATED WITH:

A4A

☐

ALPA

☒

AOPA

☒

APA

☒

HAI

☐

NBAA

☒

OTHER:

CVG, ATCT, LUK ATCT, AMGR ZID

FLIGHT CHECKED BY

SCOTT WIEBE

Digitally signed by

DONALD H LANIER

Oct 02, 2018

OFFICE

FICO

DATE

9/30/18

DEVELOPED BY

LONNIE EVERHART (ANDRE MARSH)

Digitally signed by

DONALD H LANIER

Oct 02, 2018

OFFICE

AJV-5400

DATE

04/11/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by

DONALD H LANIER

Oct 02, 2018

OFFICE

AJV-5400

DATE

TITLE

MANAGER



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

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<u>AIRPORT</u> CINCINNATI MUNI AIRPORT LUNKEN FIELD	<u>AIRPORT ID</u> KLUK	<u>PROCEDURE NAME</u> NDB RWY 25	<u>ORIGINAL/AMENDMENT</u> 12B	<u>CITY</u> CINCINNATI	<u>STATE</u> OH	
<u>AIRPORT ELEVATION</u> 483	<u>TDZE</u> 479	<u>SUPERSEDED</u> NDB RWY 25	<u>ORIGINAL/AMENDMENT</u> 12A	<u>DATED</u> 04/02/2015	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u> CANCEL		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>

PROCEDURE CANCELLED EFFECTIVE 3 JANUARY 2019

MISSED APPROACH

MAP:

MISSED APPROACH INSTRUCTIONS:

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)
2.				
3. FAC:	FAF:	DIST FAF TO MAP:	DIST FAF TO THLD:	
4. MIN ALT:				
8. MSA FROM:				

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

MINIMUMS:

QUALITY
5
CHECKED

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

ALTERNATE: NA ☐

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA

CHANGES - REASONS

COORDINATED WITH:

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

FLIGHT CHECKED BY

OFFICE DATE

DEVELOPED BY

LONNIE EVERHART (ANDRE MARSH)

Digitally signed by
DONALD H LANIER
Oct 03, 2018

OFFICE DATE
AJV-5400 04/17/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by
DONALD H LANIER
Oct 03, 2018

OFFICE DATE TITLE
AJV-5400 MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> DEFIANCE MEMORIAL	<u>AIRPORT ID</u> KDFI	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 12	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> DEFIANCE	<u>STATE</u> OH
<u>AIRPORT ELEVATION</u> 707	<u>TDZE</u> 707	<u>SUPERSEDED</u> RNAV (GPS) RWY 12	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 05/24/2018	<u>MAG VAR</u> 5W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
KLOEE		GASXI		TF	FO	2.00	298.92	24.04	3000
PIONS		JOLRI		TF	FB	2.00	225.72	10.65	3000
JOLRI	IAF	GASXI	NOPT	TF	FB	1.00	204.71	6.00	3000
ILTON	IAF	GASXI	NOPT	TF	FB	1.00	112.75	14.50	3000
GASXI	IF/IAF	DAFKE		TF	FB	1.00	119.68	7.00	2400
DAFKE	FAF	HUMOP/2.70 NM TO RW12		TF	FB	0.30	119.77	2.49	
HUMOP/2.70 NM TO RW12		RW12	MAP	TF	FO	0.30	119.77	2.70	
RW12	MAP	1100 MSL		CA			119.77		
1100 MSL		JUTLI		DF	FB	1.00			
JUTLI		KLOEE		TF	FO	1.00	116.70	8.17	3000

MISSED APPROACH

MAP:

LNAV: RW12

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT JUTLI AND ON TRACK 116.70 TO KLOEE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD NW GASXI, RT, 119.68 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 119.77

FAF: DAFKE

DIST FAF TO MAP: 5.19

DIST FAF TO THLD: 5.19

4. MIN ALT: GASXI 3000, DAFKE 2400, HUMOP/2.70 NM TO RW12 1600

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:

6. MIN GP INCPT:

GP ALT AT FAF :

OM:

MM:

IM:

7. GP ANGLE:

34:1: IS NOT CLEAR

20:1: IS CLEAR

TCH:

8. MSA FROM: RW12 2900

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: CIRCLING RWY 30 NA AT NIGHT.
CHART NOTE: RWY 12 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

DAFKE TO RW12: 3.00/40
CHART VDP AT 1.15 NM TO RW12.
CHART CIRCLING ICON.
CHART FAS OBST: 811 TREE 412047N/0842531W.
HOLD SE, RT, 298.92 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/4

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	1100	1	393	1100	1	393	1100	1 1/8	393	1100	1 1/8	393			
CIRCLING	1140	1	433	1160	1	453	1380	2	673	1380	2 1/4	673			

CHANGES - REASONS

1. DELETED PLANVIEW NOTE "PROCEDURE NA FOR ARRIVALS AT PIONS ON V11 NORTHEAST BOUND, V6 EASTBOUND AND V98 NORTHBOUND - AIRSPACE DOCKET (16-AGL-2) ELIMINATES THE INTERSECTION (PIONS) FROM AIRWAYS V6, V11, AND V98.
2. DELETED PLANVIEW NOTE "PROCEDURE NA FOR ARRIVALS AT ILTON ON V221 NORTHBOUND AND V92-126 WESTBOUND" - AIRSPACE DOCKET (16-AGL-2) ELIMINATES THE INTERSECTION (ILTON) FROM AIRWAYS V92-126 AND V221.
3. DELETED CHART NOTE "DME/DME RNP-0.3 NA" - IAW 8260.19H 8-6-8 (B(1)) PBN NAVSPEC.
4. ADDED PBN REQUIREMENTS NOTE: RNP APCH - IAW 8260.19H 8-6-8 (B(1)) PBN NAVSPEC.
5. MAX ALTITUDE "6000" ADDED TO HOLD-IN-LIEU FIX GASXI - NEW REPORT FORMAT INCLUDES MAXIMUM ALTITUDES AT HOLD-IN-LIEU FIXES.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZOB, AMGR, TOL APP CON

FLIGHT CHECKED BY

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

DEVELOPED BY

JAMES LAFFERTY

APPROVED BY

PATRICK MULQUEEN

	<u>OFFICE</u>	<i>Digitally signed by</i>	<u>DATE</u>	
		DAVID TEFFETELLER		
		Aug 29, 2018		
	<u>OFFICE</u>		<u>DATE</u>	
	DAVID TEFFETELLER		08/21/2018	
		Aug 29, 2018		
	<u>OFFICE</u>		<u>DATE</u>	<u>TITLE</u>
	DAVID TEFFETELLER			MANAGER
		Aug 29, 2018		



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
NDB STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.27

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<u>AIRPORT</u> HIGHLAND COUNTY	<u>AIRPORT ID</u> KHOC	<u>PROCEDURE NAME</u> NDB RWY 23	<u>ORIGINAL/AMENDMENT</u> 5A	<u>CITY</u> HILLSBORO	<u>STATE</u> OH	
<u>AIRPORT ELEVATION</u> 977	<u>TDZE</u> 969	<u>SUPERSEDED</u> NDB RWY 23	<u>ORIGINAL/AMENDMENT</u> 5	<u>DATED</u> 02/07/2013	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u> CANCEL		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>

PROCEDURE CANCELLED EFFECTIVE 3 JANUARY 2019

MISSED APPROACH

MAP:

MISSED APPROACH INSTRUCTIONS:

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)
2.				
3. FAC:	FAF:	DIST FAF TO MAP:	DIST FAF TO THLD:	
4. MIN ALT:				
8. MSA FROM:				

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

MINIMUMS:

QUALITY
24
CHECKED

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

ALTERNATE: NA ☐

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA

CHANGES - REASONS

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZID ARTCC, AMGR, ATA

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY
LONNIE EVERHART (DEAN GRACEY)

Digitally signed by
ROBERT G HAMILTON

OFFICE
AJV-5400

DATE
08/01/2018

APPROVED BY
LONNIE EVERHART

Sep 14, 2018
Digitally signed by
ROBERT G HAMILTON
Sep 14, 2018

OFFICE
AJV-5400

DATE

TITLE
MANAGER



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR/DME STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.23

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<u>AIRPORT</u> WADSWORTH MUNI	<u>AIRPORT ID</u> K3G3	<u>PROCEDURE NAME</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> 2A	<u>CITY</u> WADSWORTH	<u>STATE</u> OH	
<u>AIRPORT ELEVATION</u> 974	<u>TDZE</u>	<u>SUPERSEDED</u> VOR/DME-A	<u>ORIGINAL/AMENDMENT</u> 2	<u>DATED</u> 03/13/2008	<u>MAG VAR</u> 4W	<u>EPOCH YEAR</u> 1965
<u>FACILITY</u> BSV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
DUNDY/33.00 DME/RADAR	IF	LEBJA/27.00 DME/RADAR					141.00	6.00	2700

MISSED APPROACH

MAP:

ZEMIS/BSV 21.87 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT BSV VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. PROFILE STARTS AT DUNDY
3. FAC: 141.00 FAF: LEBJA/27.00 DME/RADAR DIST FAF TO MAP: DIST FAF TO THLD:
4. MIN ALT: DUNDY/33.00 DME/RADAR 3000, LEBJA/27.00 DME/RADAR 2700, CAKYA/24.00 DME 2500
8. MSA FROM: BSV VOR/DME 3100

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED.
RADAR REQUIRED FOR PROCEDURE ENTRY.

NOTES:

CHART NOTE: CIRCLING NA WEST OF RWYS 2 AND 20.
CHART NOTE: PROCEDURE NA AT NIGHT.

ADDITIONAL FLIGHT DATA:



CHART WAYNE COUNTY ASOS-3
FAC CROSSES INTERSECTION OF RWYS 10-28 AND 2-20.
CHART CIRCLING ICON.
CHART K15G IN PLAN AND PROFILE VIEWS.
CHART FAS OBST: 1368 TOWER 410208N/0814526W.
HOLD SE, RT, 321.00 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
CIRCLING	1720	1	746	1760	1	786	1980	3	1006		NA				

CHANGES - REASONS

1. CHANGED PROCEDURE NAME FROM VOR/DME-A TO VOR-A - IAW 8260.19H PARA 8-3-4 B (1)
2. CHANGED CHART WELTZIEN SKYPARK TO CHART K15G IN PROFILE VIEWS - IAW 8260.19H PAR 8-6-10 U.
3. ADDED TO ADDITIONAL FLIGHT DATA: FAC CROSSES INTERSECTION OF RWYS 10-28 AND 2-20 - IAW 8260.19H PARA 8-6-10 G (3).
4. ADDED CHART CIRCLING ICON - NEW CIRCLING CRITERIA PUBLISHED ON RNAV (GPS) 2/20 AND IAW 8260.3, CHAPT 2 AND 8260.19H, 8-6-10 T.
5. ADDED EQUIPMENT REQUIREMENTS NOTES: RADAR REQUIRED FOR PROCEDURE ENTRY AND DME REQUIRED - IAW 8260.19H PARA, 8-6-8 & 8-6-9 G (2).
6. REMOVED NOTE "WHEN VGSI INOP PROCEDURE NA AT NIGHT" - NO AFS APPROVAL FOR VGSI USE TO MITIGATE 20:1 PENETRATIONS.
7. CIRCLING MDA/HAT CHANGED: CAT A: FROM 1820/846 TO 1720/746. CAT B: FROM 1820/846 TO 1760/786 CAT C: FROM 1820/846 TO 1980/1006 - NEW OBSTACLE DATA.
8. CIRCLING VISIBILITY CHANGED: CAT B: FROM 1 1/4 TO 1 CAT C: FROM 2 1/2 TO 3.
9. AMENDED AND MOVED BACKUP ALTIMETER NOTES TO BACK OF THE 8260-9 - IAW 8260.19H, PARA 8-6-9 F (3) & FPT APPROVAL AND NEW VISIBILITY MINIMUMS.
10. ADDITIONAL FLIGHT DATA BLOCK: CHART FAS OBST CHANGED FROM 1460 TOWER 410209N/0814528W TO 1368 TOWER 410208N/0814526W.
11. ADDED CHART NOTE: CIRCLING NA AT NIGHT - 20:1 PENETRATIONS ASSUMED FOR RWYS WITH NO SURVEY RWYS 10, 20, 28 (RWY 28 ALSO HAS IDENTIFIED DATABASE 20:1 PENETRATIONS) AND IDENTIFIED DATABASE PENETRATIONS TO RWY 2. IAW 8260.19H PARA 8-6-11 O2 (G).

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZOB, CAK APP CON, OHIO AERO, AMGR

FLIGHT CHECKED BY

JAMES ONIEAL
Digitally signed by
WARDELL HENNING
Oct 15, 2018

OFFICE

FICO

DATE

10/10/18

DEVELOPED BY

ADOLFO URRUTIA (ANTHONY KACZKA)
Digitally signed by
WARDELL HENNING
Oct 15, 2018

OFFICE

AJV-5432

DATE

07/20/2018

APPROVED BY

PATRICK MULQUEEN
Digitally signed by
WARDELL HENNING
Oct 15, 2018

OFFICE

AJV-5430

DATE

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> MC CURTAIN COUNTY RGNL	<u>AIRPORT ID</u> K4O4	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 2	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> IDABEL	<u>STATE</u> OK
<u>AIRPORT ELEVATION</u> 472	<u>TDZE</u> 472	<u>SUPERSEDED</u> RNAV (GPS) RWY 2	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 06/10/2004	<u>MAG VAR</u> 3E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2005

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 290/30 CW 110/30	NOPT	RUVOC	IF/IAF	2500
2. 110/30 CW 200/30		110/20 CW 200/20		2800
3. 110/20 CW 200/20		TIPUC	IAF	2500
4. 200/30 CW 290/30		200/20 CW 290/20		2600
5. 200/20 CW 290/20		PIVIE	IAF	2500

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
TIPUC	IAF	RUVOC	NOPT	TF	FB	1.00	110.06	5.00	2500
PIVIE	IAF	RUVOC	NOPT	TF	FB	1.00	290.16	5.00	2500
RUVOC	IF/IAF	WOSAT		TF	FB	1.00	020.11	6.01	2100
WOSAT	FAF	FANOD/1.60 NM TO RW02		TF	FB	0.30	020.14	3.40	
FANOD/1.60 NM TO RW02		RW02	MAP	TF	FO	0.30	020.14	1.60	
RW02	MAP	800 MSL		CA			020.14		
800 MSL		ZUTEM		DF	FO	1.00			3000



MISSED APPROACH

MAP:

LP: RW02
LNAV: RW02

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT ZUTEM AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)				
2.	HOLD S RUVOC, RT, 020.11 INBOUND, 2500 FT. IN LIEU OF PT (IAF), MAX 6000.							
3. FAC:	020.14	FAF: WOSAT	DIST FAF TO MAP: 4.99	DIST FAF TO THLD: 4.99				
4. MIN ALT:	RUVOC 2500, WOSAT 2100, FANOD/1.60 NM TO RW02 1020							
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	GS ANT:				
6. MIN GP INCPT:	GP ALT AT FAF :			OM:	MM:	IM:		
7. GP ANGLE:	34:1: IS CLEAR	20:1: IS CLEAR	TCH:					
8. MSA FROM:								

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART PLANVIEW NOTE AT PIVIE: MAX 200 KIAS.
CHART PLANVIEW NOTE AT TIPUC: MAX 200 KIAS.
CHART PLANVIEW NOTE AT RUVOC: MAX 180 KIAS.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
WOSAT TO RW02: 3.00/40.
CHART VDP AT 0.90 NM TO RW02
WAAS CHANNEL #63042
REFERENCE PATH ID: W02A
CHART FAS OBST: 534 TREE 335408N/0945157W, 565 TREE 335405N/0945112W.
HOLD N, RT, 200.22 INBOUND
LTP HAE: 116.1 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD



CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LP MDA	800	1	328	800	1	328	800	1	328		NA				
LNAV MDA	820	1	348	820	1	348	820	1	348		NA				
CIRCLING	1020	1	548	1020	1	548	1100	1 3/4	628		NA				

CHANGES - REASONS

1. ADDED 20:1 SURFACE CLEAR NOTE - IAW 8260.19H 8-6-7 (G(3)). RNAV PROCEDURES WILL STATE WHETHER THE 34:1/20:1 SURFACES ARE CLEAR.
2. MISSED APPROACH CLEARANCE LIMIT ALTITUDE WAS RAISED FROM 2900 TO 3000 - APPROACH TO RUNWAY 20 RAISED THE HOLD-IN-LIEU ALTITUDE AND CAUSED THE MISSED APPROACH TO RISE TOO.
3. ADDED WAAS CHANNEL/REFERENCE PATH ID IN ADDITIONAL DATA - IAW 8260.19H 8-6-10 (J(2)) REQUIRED RNAV DATA FOR LPV/LP PROCEDURES.
4. ADDED CHART CIRCLING ICON - IAW 8260.19H 8-6-10 (T) DOCUMENTATION FOR CHARTING THE NEW CIRCLING CRITERIA IN 8260.3C.
5. CHANGED VDP DISTANCE FROM 1.16NM TO 0.90NM - UPDATED CALCULATION.
6. CHANGED INTERMEDIATE RNP VALUE FROM 0.5 TO 1.0 - IAW 8260.58A TABLE 1-2-1 NAVIGATION ACCURACY BY PHASE OF FLIGHT.
7. ADDED STEPDOWN SEGMENT IN FINAL - IAW 8260.3C 2-9-9 (C(4B)) STEPDOWN FIX USED TO ACHIEVE A DECREASE IN MDA OF AT LEAST 60 FT.
8. ADDED CHART PLANVIEW NOTES FOR SPEED RESTRICTIONS AT THE WPS PIVIE, TIPUC AND RUVOC - PREVENT THE NEED FOR AN ENVIRONMENTAL STUDY AT AN AIRPORT REMAINING CAT A-C ONLY.
9. CHANGED LNAV CAT A/B MINS FROM 880 MDA / 408 HAT TO 820 MDA / 348 HAT, LNAV CAT C FROM 880 MDA /1 1/4 SM / 408 HAT TO 820 MDA /1 SM / 348 HAT - IMPROVED AIRPORT OBSTACLE SURVEY.
10. CHANGED CIRCLING CAT C MINS FROM 1020 CMDA/ 1 1/2 VIS TO 1100 CMDA/ 1 3/4 VIS - INCREASED CIRCLING RADIUS APPLIED.
11. DELETED CHART NOTES: "GPS OR RNP-0.3 REQUIRED" AND "DME/DME RNP-0.3 NA" - IAW 8260.19H 8-6-8 (A).
12. ADDED PBN REQUIREMENTS NOTE "RNP APCH" - IAW 8260.19H 8-6-8 (B(1)).
13. ADDED ALTERNATE MINIMUMS - AIRPORT INFORMATION UPDATED WITH A WMSCR WEATHER SOURCE.
14. ADDED LP LINE OF MINIMA - PER AIRPORT REQUEST FOR WAAS CABABILITY.
15. DELETED BACK-UP ALTIMETER NOTE AND VDP NA NOTE - IAW 8260.19H 8-6-9 (E(9)) & (F(3))
16. CHANGED FAS OBSTACLE FROM 609 TREE TO 534 AND 565 TREE - NEW OBSTACLE EVALUATION/IMPROVED OBSTACLE SURVEY/LP MINIMUMS ADDED.

09/05/2018: THIS IS AN UPDATE COPY OF THE FORM DEVELOPED ON 06/08/2018

1. UPDATED FPAP COORDINATES FROM 335333.0175N-0945103.2655W TO 335533.0165N-0945103.2630W

2. CRC REMAINDER UPDATED FROM 1BD90076 TO 37A8A80A



<u>AIRPORT</u> MC CURTAIN COUNTY RGNL	<u>AIRPORT ID</u> K4O4	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 2	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> IDABEL	<u>STATE</u> OK
<u>COORDINATED WITH:</u>					
A4A ☐ ALPA ☐ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZFW, ST. AV. DIR., AMGR					
<u>FLIGHT CHECKED BY</u> GREGORY MILLS		Digitally signed by DAVID TEFFETELLER Sep 05, 2018	<u>OFFICE</u> FICO	<u>DATE</u> 10/2/18	
<u>DEVELOPED BY</u> SCOTT BAGENSIE		Digitally signed by DAVID TEFFETELLER Sep 05, 2018	<u>OFFICE</u> AJV-5433	<u>DATE</u> 06/08/2018	
<u>APPROVED BY</u> PATRICK MULQUEEN		Digitally signed by DAVID TEFFETELLER Sep 05, 2018	<u>OFFICE</u> AJV-5430	<u>DATE</u>	<u>TITLE</u> MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	4O4
RUNWAY	RW02
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W02A
LTP/FTP LATITUDE	335410.9530N
LTP/FTP LONGITUDE	0945145.3780W
LTP/FTP ELLIPSOIDAL HEIGHT	+01161
FPAP LATITUDE	335533.0165N
FPAP LONGITUDE	0945103.2630W
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	1232
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	37A8A80A
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+01437
FPAP ORTHOMETRIC HEIGHT	+01437



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> MC CURTAIN COUNTY RGNL	<u>AIRPORT ID</u> K4O4	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 20	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> IDABEL	<u>STATE</u> OK
<u>AIRPORT ELEVATION</u> 472	<u>TDZE</u> 463	<u>SUPERSEDED</u> RNAV (GPS) RWY 20	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 10/13/2016	<u>MAG VAR</u> 3E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2005

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 110/30 CW 290/30	NOPT	110/15 CW 290/15		3800
2. 110/15 CW 290/15		ZUTEM	IF/IAF	3000
3. 290/30 CW 020/30		WANIL	IAF	3000
4. 020/30 CW 110/30		YIDNU	IAF	3000

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
WANIL	IAF	ZUTEM	NOPT	TF	FB	1.00	290.27	5.00	3000
YIDNU	IAF	ZUTEM	NOPT	TF	FB	1.00	110.17	5.00	3000
ZUTEM	IF/IAF	WIRED		TF	FB	1.00	200.22	6.00	2300
WIRED	FAF	GRECO/3.20 NM TO RW20		TF	FB	0.30	200.20	2.44	
GRECO/3.20 NM TO RW20		RW20	MAP	TF	FO	0.30	200.20	3.20	
RW20	MAP	820 MSL		CA	FO		200.20		
820 MSL		RUVOC		DF	FO	1.00			2500

MISSED APPROACH

MAP:

LP: RW20
 LNAV: RW20

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2500 DIRECT RUVOC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N ZUTEM, RT, 200.22 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 200.20

FAF: WIRED

DIST FAF TO MAP: 5.64

DIST FAF TO THLD: 5.64

4. MIN ALT: ZUTEM 3000, WIRED 2300, GRECO/3.20 NM TO RW20 1520

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:

6. MIN GP INCPT:

GP ALT AT FAF :

OM:

MM:

IM:

7. GP ANGLE:

34:1: IS NOT CLEAR

20:1: IS CLEAR

TCH:

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 20 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE AT YIDNU: MAX 200 KIAS.
CHART PLANVIEW NOTE AT WANIL: MAX 200 KIAS.
CHART PLANVIEW NOTE AT ZUTEM: MAX 180 KIAS.

ADDITIONAL FLIGHT DATA:

CHART 750 TOWER 335957N/0944727W
CHART CIRCLING ICON.
WIRED TO RW20: 3.00/41.
CHART VDP AT 1.00 NM TO RW20
WAAS CHANNEL #69442
REFERENCE PATH ID: W20A
CHART FAS OBST: 564 PWR LINE 335530N/0945053W, 582 TREE 335528N/0945031W.
HOLD S, RT, 020.11 INBOUND
LTP HAE: 112.6 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LP MDA	820	1	357	820	1	357	820	1	357		NA				
LNAV MDA	840	1	377	840	1	377	840	1	377		NA				
CIRCLING	1020	1	548	1020	1	548	1100	1 3/4	628		NA				



CHANGES - REASONS

- 1. ADDED 20:1 SURFACE CLEAR NOTE - IAW 8260.19H 8-6-7 (G(3)) RNAV PROCEDURES WILL STATE WHETHER THE 34:1/20:1 SURFACES ARE CLEAR.
- 2. CHANGED HOLD-IN-LIEU AND INITIALS ALTITUDE FROM 2900 TO 3000 - IAW 8260.19H 3-3-2 (B-NOTE) THE ROUNDING PROCESS FOR ROC WILL NOT BE LESS THAN THE REQUIRED.
- 3. ADDED WAAS CHANNEL AND REFERENCE PATH ID IN ADDITIONAL DATA - IAW 8260.19H 8-6-10 (J(2)) REQUIRED RNAV DATA FOR LPV/LP PROCEDURES.
- 4. CHANGED FINAL APPROACH COURSE FROM 200.19 TO 200.20 - UPDATED AIRPORT SURVEY.
- 5. ADDED CHART CIRCLING ICON NOTE - IAW 8260.19H 8-6-10 (T) DOCUMENTATION FOR CHARTING THE NEW CIRCLING CRITERIA IN 8260.3C.
- 6. CHANGED INTERMEDIATE RNP VALUE FROM 0.5 TO 1.0 - IAW 8260.58A TABLE 1-2-1 NAVIGATION ACCURACY BY PHASE OF FLIGHT.
- 7. ADDED STEPDOWN SEGMENT IN FINAL - IAW 8260.3C 2-9-9 (C(4B)) STEPDOWN FIX USED TO ACHIEVE A DECREASE IN MDA OF AT LEAST 60 FT.
- 8. ADDED CHART PLANVIEW NOTES FOR SPEED RESTRICTIONS AT THE WPS YIDNU, WANIL AND ZUTEM - PREVENT THE NEED FOR AN ENVIRONMENTAL STUDY AT AN AIRPORT REMAINING CAT A-C ONLY.
- 9. CHANGED LNAV CAT A/B MINS FROM 960 MDA /496 HAT TO 840 MDA /377 HAT, LNAV CAT C FROM 960 MDA /1 1/4 SM/ 496HAT TO 840 MDA/ 1 SM/ 377HAT - IMPROVED AIRPORT OBSTACLE SURVEY.
- 10. CHANGED CIRCLING CAT C MINS FROM 1020 CMDA/ 1 1/2 VIS TO 1100 CMDA/ 1 3/4 VIS - INCREASED CIRCLING RADIUS APPLIED.
- 11. ADDED PBN REQUIREMENTS NOTE "RNP APCH" - IAW 8260.19H 8-6-8 (B(1)).
- 12. ADDED HELICOPTER VISIBILITY REDUCTION NA NOTE - UPDATED AIRPORT SURVEY IDENTIFIED 34:1 PENETRATIONS.
- 13. ADDED ALTERNATE MINIMUMS - AIRPORT INFORMATION UPDATED WITH WMSCR WEATHER SOURCE.
- 14. DELETED BACK-UP ALTIMETER AND VDP NA NOTES - IAW 8260.19H 8-6-9 (E(9)) & (F(4)) CONTINGENCY NOTES FOR WMSCR IDENTIFIED WEATHER REPORTING STATIONS.
- 15. ADDED LP LINE OF MINIMA - PER AIRPORT REQUEST TO ADD WAAS CAPABILITY.
- 16. CHANGED VDP FROM 1.44NM TO 1.00NM - UPDATED CALCULATIONS FROM LOWER MINIMUM.
- 17. CHANGED FAS OBSTACLES FROM 619 TREE TO 564 PWR LINE AND 582 TREE - NEW CONTROLLING OBSTACLES FROM UPDATED AIRPORT SURVEY AND ADDED LP LINE OF MINIMA.

6/27/18: D. TEFFETELLER - PDF EDIT IN ADDITIONAL FLIGHT DATA CHANGING VDP DISTANCE FROM 1 NM TO 1.00 NM



COORDINATED WITH:

A4A ☐ ALPA ☐ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZFW, ST. AV. DIR., AMGR

FLIGHT CHECKED BY

GREGORY MILLS

DEVELOPED BY

SCOTT BAGENSIE

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

SCOTT BAGENSIE

Jun 25, 2018

Digitally signed by

DAVID TEFFETELLER

Oct 10, 2018

Digitally signed by

DAVID TEFFETELLER

Oct 10, 2018

OFFICE

DAVID TEFFETELLER

FICO

Oct 10, 2018

10/2/18

OFFICE

AJV-5433

AJV-5430

06/08/2018

DATE

06/08/2018

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	4O4
RUNWAY	RW20
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W20A
LTP/FTP LATITUDE	335456.4495N
LTP/FTP LONGITUDE	0945122.0325W
LTP/FTP ELLIPSOIDAL HEIGHT	+01126
FPAP LATITUDE	335334.3880N
FPAP LONGITUDE	0945204.1475W
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	1232
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	473AF0BA
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+01403
FPAP ORTHOMETRIC HEIGHT	+01403



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

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Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> TAHLEQUAH MUNI	<u>AIRPORT ID</u> KTQH	<u>PROCEDURE NAME</u> NDB RWY 17	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> TAHLEQUAH	<u>STATE</u> OK	
<u>AIRPORT ELEVATION</u> 873	<u>TDZE</u> 873	<u>SUPERSEDED</u> NDB RWY 17	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 12/5/96	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u> CANCEL		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>

PROCEDURE CANCELLED EFFECTIVE 01/03/2019

MISSED APPROACH

MAP:

MISSED APPROACH INSTRUCTIONS:

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)

2.

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

4. MIN ALT:

8. MSA FROM:

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

MINIMUMS:



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

ALTERNATE: NA ☐

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA

CHANGES - REASONS

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZME, ST. AV. DIR., AIRPORT MANAGER, ATA

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY

LONNIE EVERHART (JOSEPH HILLEY)

Digitally signed by
DEZ SILAGYI
Sep 06, 2018

OFFICE

AJV-5400

DATE

07/26/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by
DEZ SILAGYI
Sep 06, 2018

OFFICE

AJV-5400

DATE

TITLE
MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> KELLER BROTHERS	<u>AIRPORT ID</u> K08N	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 7	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> LEBANON	<u>STATE</u> PA	
<u>AIRPORT ELEVATION</u> 550	<u>TDZE</u> 547	<u>SUPERSEDED</u> RNAV (GPS) RWY 7	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 06/22/2017	<u>MAG VAR</u> 12W	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
WILEN	IF/IAF	ZIKMO		TF	FB	1.00	059.18	6.11	2200
ZIKMO	FAF	RW07	MAP	TF	FO	0.30	068.02	5.06	
RW07	MAP	950 MSL		CA			068.02		
950 MSL		BAARN		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LNAV: RW07

MISSED APPROACH INSTRUCTIONS:

CLIMBING LEFT TURN TO 3000 DIRECT BAARN AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
- PROFILE STARTS AT WILEN
- FAC:** 068.02 **FAF:** ZIKMO **DIST FAF TO MAP:** 5.06 **DIST FAF TO THLD:** 5.06
- MIN ALT:** WILEN 3000, ZIKMO 2200
- DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **GS ANT:**
- MIN GP INCPT:** **GP ALT AT FAF :** **OM:** **MM:** **IM:**
- GP ANGLE:** **34:1:** IS NOT CLEAR **20:1:** IS NOT CLEAR **TCH:**
- MSA FROM:** RW07 3100

PBN REQUIREMENTS NOTE:

RNP APCH.



NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: RWY 7 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT WILEN ON V210 NORTHWEST BOUND.
CHART NOTE: USE LANCASTER ALTIMETER SETTING; WHEN NOT RECEIVED, USE READING ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET.

ADDITIONAL FLIGHT DATA:

CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART LANCASTER ASOS FREQUENCY.
FAS OBST: 1339 AAO 401550N/0762234W.
HOLD E, LT, 256.02 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	1640	1 1/4	1093	1640	1 1/2	1093		NA			NA				
CIRCLING	1640	1 1/4	1090	1640	1 1/2	1090		NA			NA				

CHANGES - REASONS

1. ADDED 20:1 IS NOT CLEAR ON LINE 7 - IAW CURRENT 8260.19 CRITERIA.
2. REMOVED CHART NOTE "DME/DME RNP - 0.3 NA" - CHANGED TO PBN REQUIREMENT NOTE "RNP APCH" IAW CURRENT 8260.19 CRITERIA.
3. ADDED PBN REQUIREMENT NOTE "RNP APCH" - IAW CURRENT 8260.19 CRITERIA.
4. REMOVED "ZIKMO TO RW07: 3.00/40" FROM ADDITIONAL FLIGHT DATA - PER FLIGHT CHECK REQUEST
5. ADDED CHART PROFILE NOTE "VISUAL SEGMENT - OBSTACLES" TO ADDITIONAL FLIGHT DATA - IAW CURRENT 8260.19 CRITERIA: VDA REMOVED.
6. CHANGED CHART NOTE FROM "RWY 7, 25 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" TO "RWY 7 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" - NOTE ONLY APPLIES TO STRAIGHT-IN PORTION IAW CURRENT 8260.19 CRITERIA.



COORDINATED WITH:

A4A ☐ **ALPA** ☐ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** MDT APP CON, ZNY, AIRPORT MANAGER.

FLIGHT CHECKED BY

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

DEVELOPED BY

DUSTIN DAVIDSON

Digitally signed by
DUSTIN DAVIDSON
Sep 14, 2018

APPROVED BY

JULIE MORGAN

OFFICE

OFFICE

AJV-5422

OFFICE

AJV-5420

DATE

Digitally signed by
ROBERT G HAMILTON
Sep 21, 2018

DATE

07/20/2018

DATE

Digitally signed by
ROBERT G HAMILTON
Sep 21, 2018

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
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<u>AIRPORT</u> KELLER BROTHERS	<u>AIRPORT ID</u> K08N	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 25	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> LEBANON	<u>STATE</u> PA	
<u>AIRPORT ELEVATION</u> 550	<u>TDZE</u> 547	<u>SUPERSEDED</u> RNAV (GPS) RWY 25	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 06/22/2017	<u>MAG VAR</u> 12W	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
DUMMR	IF/IAF	YAPSU		TF	FB	1.00	228.13	9.63	2200
YAPSU	FAF	RW25	MAP	TF	FO	0.30	248.11	5.10	
RW25	MAP	950 MSL		CA			248.11		
950 MSL		BAARN		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LNAV: RW25

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 3000 DIRECT BAARN AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- PROFILE STARTS AT DUMMR
- FAC: 248.11 FAF: YAPSU DIST FAF TO MAP: 5.10 DIST FAF TO THLD: 5.10
- MIN ALT: DUMMR 4000, YAPSU 2200
- DIST TO THLD FROM OM: MM: IM: 150 HAT: GS ANT: OM: MM: IM:
- MIN GP INCPT: GP ALT AT FAF :
- GP ANGLE: 34:1: IS NOT CLEAR 20:1: IS NOT CLEAR TCH:
- MSA FROM: RW25 3100

PBN REQUIREMENTS NOTE:

RNP APCH.



NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: RWY 7 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DUMMR ON V93 NORTHEAST BOUND, V162 EASTBOUND AND V276 SOUTHEAST BOUND.
CHART NOTE: USE LANCASTER ALTIMETER SETTING; WHEN NOT RECEIVED, USE READING ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET AND CIRCLING CAT B VISIBILITY 1/4 MILE.

ADDITIONAL FLIGHT DATA:

CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART LANCASTER ASOS FREQUENCY.
FAS OBST: 1019 AAO 401831N/0761622W.
HOLD E, LT, 256.02 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	1320	1	773	1320	1 1/4	773		NA			NA				
CIRCLING	1440	1 1/4	890	1480	1 1/4	930		NA			NA				

CHANGES - REASONS

- 1. ADDED 20:1 IS NOT CLEAR ON LINE 7 - IAW CURRENT 8260.19 CRITERIA.
- 2. REMOVED CHART NOTE "DME/DME RNP - 0.3 NA" - CHANGED TO PBN REQUIREMENT NOTE "RNP APCH" IAW CURRENT 8260.19 CRITERIA.
- 3. ADDED PBN REQUIREMENT NOTE "RNP APCH" - IAW CURRENT 8260.19 CRITERIA.
- 4. REMOVED "YAPSU TO RW25: 3.00/40" FROM ADDITIONAL FLIGHT DATA - PER FLIGHT CHECK REQUEST
- 5. ADDED CHART PROFILE NOTE "VISUAL SEGMENT - OBSTACLES" TO ADDITIONAL FLIGHT DATA - IAW CURRENT 8260.19 CRITERIA: VDA REMOVED.
- 6. CHANGED CHART NOTE FROM "RWY 7, 25 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" TO "RWY 7 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" - NOTE ONLY APPLIES TO STRAIGHT-IN PORTION IAW CURRENT 8260.19 CRITERIA.



COORDINATED WITH:

A4A ☐ **ALPA** ☐ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** MDT APP CON, ZNY, AIRPORT MANAGER.

FLIGHT CHECKED BY

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

DEVELOPED BY

DUSTIN DAVIDSON

APPROVED BY

JULIE MORGAN

Digitally signed by
DUSTIN DAVIDSON
Sep 14, 2018

OFFICE

AJV-5422

OFFICE

AJV-5420

DATE

07/20/2018

DATE

Digitally signed by
ROBERT G HAMILTON
Sep 21, 2018

Digitally signed by
ROBERT G HAMILTON
Sep 21, 2018

TITLE

MANAGER



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
NDB STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.27

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
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<u>AIRPORT</u> PICKENS COUNTY	<u>AIRPORT ID</u> KLQK	<u>PROCEDURE NAME</u> NDB RWY 5	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> PICKENS	<u>STATE</u> SC	
<u>AIRPORT ELEVATION</u> 1013	<u>TDZE</u> 996	<u>SUPERSEDED</u> NDB OR GPS RWY 5	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 03/17/2005	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u> CANCEL		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>

PROCEDURE CANCELLED EFFECTIVE 01/03/2019

MISSED APPROACH

MAP:

MISSED APPROACH INSTRUCTIONS:

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)
2.				
3. FAC:	FAF:	DIST FAF TO MAP:	DIST FAF TO THLD:	
4. MIN ALT:				
8. MSA FROM:				

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

MINIMUMS:



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

ALTERNATE: NA ☐

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA

CHANGES - REASONS

COORDINATED WITH:

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

FLIGHT CHECKED BY

DEVELOPED BY

LONNIE EVERHART (LORRI DOWNEY)

APPROVED BY

LONNIE EVERHART

OFFICE

DATE

Digitally signed by

BEV L BORDY

Aug 27, 2018

OFFICE

AJV-5400

DATE

07/26/2018

Digitally signed by

BEV L BORDY

Aug 27, 2018

OFFICE

AJV-5400

DATE

TITLE
MANAGER



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

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<u>AIRPORT</u> LOVELL FIELD	<u>AIRPORT ID</u> KCHA	<u>PROCEDURE NAME</u> ILS OR LOC RWY 2	<u>ORIGINAL/AMENDMENT</u> 7D	<u>CITY</u> CHATTANOOGA	<u>STATE</u> TN	
<u>AIRPORT ELEVATION</u> 683	<u>TDZE</u> 683	<u>SUPERSEDED</u> ILS OR LOC RWY 2	<u>ORIGINAL/AMENDMENT</u> 7C	<u>DATED</u> 06/25/2015	<u>MAG VAR</u> 5W	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> I-CGW	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
CQN NDB		MORRT OM INT/RADAR					198.22	13.60	3900
ZIROB/GQO 12.00 DME CW	IAF	QUIDS/GQO 12.00 DME/RADAR	NOPT				12.00 DME ARC		3900
QUIDS/GQO 12.00 DME/RADAR	IF	MORRT OM INT/RADAR	NOPT				021.70	9.54 (I-CGW)	2300*

MISSED APPROACH

MAP:

ILS: DA
LOC: 4.63 NM AFTER MORRT OM/INT/RADAR

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3600 DIRECT CQN NDB AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3600.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1300 THEN CLIMBING RIGHT TURN TO 3000 TO GQO VORTAC AND HOLD.

PROFILE:

1. PT L **SIDE OF COURSE** 201.70 **OUTBOUND** 3000 **FT WITHIN** 10 **MILES OF** MORRT OM (IAF)
- 2.
3. **FAC:** 021.70 **FAF:** MORRT OM/INT/RADAR **DIST FAF TO MAP:** 4.63 **DIST FAF TO THLD:** 4.63
4. **MIN ALT:** MORRT OM/INT/RADAR 2300*
5. **DIST TO THLD FROM OM:** 4.63 **MM:** **IM:** **150 HAT:** **GS ANT:** 1125
6. **MIN GS INCPT:** 2500 **GS ALT AT FAF :** **OM:** 2227 **MM:** **IM:**
7. **GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 52.0
8. **MSA FROM:** GQO VORTAC 060-150 5400, 150-060 3600

EQUIPMENT REQUIREMENTS NOTES:

ADF REQUIRED.



NOTES:

CHART NOTE: CIRCLING RWY 15, 33 NA AT NIGHT.
CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 945 MSL.
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
*LOC ONLY
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 2 CATS C AND D VISIBILITY TO 1 3/8 SM.

ADDITIONAL FLIGHT DATA:

CHART 901 TREE 345657N/0851409W.
CHART FAS OBST: 889 TOWER 345800N/0841358W.
CHART CIRCLING ICON.
CHART GQO R-126 AT ZIROB.
CHART IN PLANVIEW: GQO VORTAC
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE GQO VORTAC, RT, 332.00 INBOUND.
HOLD N, LT, 199.00 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD - NA WHEN CONTROL TOWER CLOSED.; LOC: STANDARD - CAT C 800-2 1/4, CAT D 900-3, NA WHEN CONTROL TOWER CLOSED.

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-ILS 02	883	2400	200	883	2400	200	883	2400	200	883	2400	200			
S-LOC 02	1200	2400	517	1200	2400	517	1200	5500	517	1200	6000	517			
CIRCLING	1300	1	617	1340	1	657	1480	2 1/4	797	1580	3	897			



CHANGES - REASONS

1. AMDT 7A ADDED CHART PLANVIEW NOTE: RADAR OR DME OR ADF REQUIRED - FOR PROCEDURE ENTRY.
2. AMDT 7A RAISED MISSED APPROACH ALTITUDE FROM 3000 TO 3200 AND ADDED CLIMB-IN-HOLD - OBSTACLE EVALUATION.
3. AMDT 7B DELETED TERMINAL ROUTE HOGIR TO QUIDS - DME FACILITY RESTRICTIONS.
4. AMDT 7B CHANGED BACKUP ALTIMETER NOTE - REEVALUATION.
5. AMDT 7B ADDED INOPERATIVE MALSР NOTE - POLICY.
6. AMDT 7C RAISED MISSED APPROACH AND CLIMB-IN-HOLD ALTITUDE FROM 3200 TO 3600 - OBSTACLE EVALUATION.
7. INCREASED ALL COURSES BASED ON THE ILS BY 3 DEGREES - MAGNETIC VARIATION UPDATE.
8. DELETED DISTANCE AND ALTITUDES AT MIDDLE MARKER - MM DECOMMISSIONED.
9. CHANGED ALTITUDE AT OUTER MARKER FROM 2233 TO 2227 - UPDATED AIRNAV DATA.
10. CHANGED TCH FROM 53.8 TO 52.0 - UPDATED SURVEY DATA.
11. REMOVED "CHART ASR" - ASR APPROACHES NO LONGER AVAILABLE.
12. ADDED CIRCLING ICON - NEW CIRCLING AREAS IN USE.
13. UPDATED MAGNETIC VARIATION FROM 2W/85 TO 5W/2020 - CURRENT EPOCH YEAR VALUE.
14. UPDATED ALTERNATE MINIMUMS - CURRENT POLICY.
15. INCREASED S-ILS 2 DA FROM 882 TO 883 - NEW SURVEY OF RUNWAY TDZE.
16. DECREASED S-LOC 2 HAT FROM 518 TO 517 - NEW SURVEY OF RUNWAY TDZE.
17. INCREASED S-LOC 2 VISIBILITY CAT C FROM 5000 TO 5500 - CURRENT CALCULATIONS.
18. DECREASED CIRCLING HAA CAT A FROM 618 TO 617 AND CAT B FROM 658 TO 657 - NEW SURVEY OF AIRPORT ELEVATION.
19. INCREASED CIRCLING MDA/VIS/HAA CAT C FROM 1340/1 3/4/658 TO 1480/2 1/4/797 AND CAT D FROM 1460/2 3/4/778 TO 1580/3/897 - NEW CIRCLING AREAS AND CONTROLLING OBSTACLES.
20. DELETED BACKUP ALTIMETER NOTES - AIRPORT HAS MULTIPLE REDUNDANT ALTIMETER SOURCES.
21. DELETED GLIDESLOPE UNUSABLE NOTE - NOT NECESSARY ON PROCEDURE.
22. DELETED NOTE REGARDING CIRCLING TO RUNWAY 15/33 WHEN CONTROL TOWER CLOSED - RESTRICTION WAS BASED ON TOWER-CONTROLLED LIGHTS THAT ARE NOW PILOT-CONTROLLED WHEN TOWER IS CLOSED.
23. ADDED NOTE: CIRCLING RWY 15/33 NA AT NIGHT - UNLIT 20:1 PENETRATIONS.
24. ADDED INOPERATIVE ALS NOTE - POLICY.
25. REMOVED "ADF REQUIRED" NOTE AND "RADAR OR DME OR ADF REQUIRED" NOTE - REPLACED BY EQUIPMENT REQUIREMENTS NOTE: ADF REQUIRED.
26. INCREASED AIRPORT ELEVATION AND TDZE FROM 682 TO 683 - NEW SURVEY DATA.

06/06/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 03/13/2018. HS

1. ADDED CHART PROFILE NOTE : VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE} / TCH {FEET}) - UPDATED VGSI TCH VALUE.

10/1/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 3/13/2018.

1. REMOVED RVR 1800 NOTE - PRB DISAPPROVAL BASED ON GLIDESLOPE RESTRICTIONS.

2. TERMINAL ROUTES, QUIDS TO MORT, ADDED "" AFTER 2300 - ALTITUDE FOR LOC ONLY.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZTL, CHA APP CON, AMGR

FLIGHT CHECKED BY

OFFICE

DATE

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-333) MEMO, DEC 22, 2017.

Digitally signed by

DAVID DANNER

Oct 02, 2018

OFFICE

AJV-5423

DATE

03/13/2018

DEVELOPED BY

Digitally signed by

RUSSELL ROSLEWSKI

RUSS ROSLEWSKI

APPROVED BY

Oct 02, 2018

Digitally signed by

DAVID DANNER

Oct 02, 2018

OFFICE

AJV-5420

DATE

TITLE

MANAGER



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

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

<u>AIRPORT</u> LOVELL FIELD	<u>AIRPORT ID</u> KCHA	<u>PROCEDURE NAME</u> ILS OR LOC RWY 20 ILS RWY 20 CAT II	<u>ORIGINAL/AMENDMENT</u> 36C	<u>CITY</u> CHATTANOOGA	<u>STATE</u> TN	
<u>AIRPORT ELEVATION</u> 683	<u>TDZE</u> 673	<u>SUPERSEDED</u> ILS OR LOC RWY 20 ILS RWY 20 CAT II	<u>ORIGINAL/AMENDMENT</u> 36B	<u>DATED</u> 02/06/2014	<u>MAG VAR</u> 5W	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> I-CHA	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
COMAR		CQN NDB/RADAR					059.02	28.15	3900
PALER		CQN NDB/RADAR					125.28	11.42	3900
BOOPS		CQN NDB/RADAR					201.16	14.23	3600
DUBBS		CQN NDB/RADAR					255.14	20.87	3300
CRAND		CQN NDB/RADAR					311.97	19.41	3300
GQO VORTAC		CQN NDB/RADAR					358.09	12.30	3100
CQN NDB/RADAR		HIXON OM/RADAR					201.71	3.62 (I-CHA)	2500

MISSED APPROACH

MAP:

ILS: DA
 LOC: 4.13 NM AFTER HIXON OM/RADAR

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 3100 DIRECT GQO VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3100.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 3100 DIRECT CQN NDB/RADAR AND HOLD.



PROFILE:

1. PT R SIDE OF COURSE 021.71 OUTBOUND 3000 FT WITHIN 10 MILES OF CQN NDB (IAF)

2.

3. FAF: 201.71 FAF: HIXON OM PFAF: CFDTJ DIST FAF TO MAP: 4.13 DIST FAF TO THLD: 4.13

4. MIN ALT: CQN NDB/RADAR 3000, HIXON OM/RADAR 2100*

5. DIST TO THLD FROM OM: 4.13 MM: 0.49 IM: 150 HAT: 100 HAT: 954.00 GS ANT: 1104

6. MIN GS INCPT: 2500 GS ALT AT : CFDTJ 2500 OM: 2055 MM: 894 IM:

7. GP ANGLE: 3.00 34:1: IS CLEAR 20:1: IS CLEAR TCH: 56.2

8. MSA FROM: CQN NDB 3900

EQUIPMENT REQUIREMENTS NOTES

ADF OR RADAR REQUIRED FOR PROCEDURE ENTRY.

NOTES:

CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 20: CAT A, B, C, D, RA 103, RVR 1200, HAT 100, DA 773 MSL.
CHART NOTE: CIRCLING TO RWY 15, 33 NA AT NIGHT.
*LOC ONLY
CHART NOTE: WHEN CONTROL TOWER CLSD, CAT II ILS NA.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 20 CAT A/B RVR TO 5500 AND CAT C/D VISIBILITY TO 1 5/8 SM.
CHART NOTE: DISREGARD INNER MARKER INDICATION.

ADDITIONAL FLIGHT DATA:

CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD N, LT, 199.00 INBOUND.
CHART CIRCLING ICON.
CHART FAS OBST: 973 ANTENNA 350540N/0851101W.
CHART: 1080 TANK 350638N/0850944W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD N CQN NDB/RADAR, LT, 199.00 INBOUND.
HOLD SE, RT, 332.00 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD - NA WHEN CONTROL TOWER CLOSED.; LOC: STANDARD - CAT C 800-2 1/4, CAT D 900-3, NA WHEN CONTROL TOWER CLOSED.

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-ILS 20	873	1800	200	873	1800	200	873	1800	200	873	1800	200			
S-LOC 20	1240	2400	567	1240	2400	567	1240	1 1/4	567	1240	1 1/4	567			
CIRCLING	1300	1	617	1340	1	657	1480	2 1/4	797	1580	3	897			



CHANGES - REASONS

1. TERMINAL ROUTES: CHANGED CQN NDB/RADAR TO GP INTCP COURSE FROM 200.70 TO 201.71 - NEW ILS DATA AND MAGVAR CHANGED FROM 4W TO 5W.
2. TERMINAL ROUTES: CHANGED CQN NDB/RADAR TO HIXON OM COURSE FROM 200.70 TO 201.71 - NEW ILS DATA AND MAGVAR CHANGED FROM 4W TO 5W.
3. LINE 1: CHANGED COURSE FROM 020.70 TO 021.71 - NEW ILS DATA AND MAGVAR CHANGED FROM 4W TO 5W.
4. LINE 3: CHANGED FAC FROM 200.70 TO 201.71 - NEW ILS DATA AND MAGVAR CHANGED FROM 4W TO 5W.
5. MINIMUMS: CHANGED S-LOC 20 MDA/HAT ALL CATS FROM 1100/427 TO 1240/567, VISIBILITY CAT C FROM RVR 4000 TO 1 1/4 SM, VISIBILITY CAT D FROM RVR 5000 TO 1 1/4 SM - NEW FINAL CONTROLLER/FAS OBST 973 ANTENNA (47-073540) CANCELS T NOTAM 8-4691.
6. MINIMUMS: CHANGED CIRCLING HAA CAT A FROM 618 TO 617, CAT B HAA FROM 658 TO 657, MDA/HAA CAT C FROM 1340/658 TO 1480/797, CAT D FROM 1460/778 TO 1580/897, VISIBILITY CAT C FROM 1 3/4 SM TO 2 1/4 SM, VISIBILITY CAT D FROM 2 1/2 SM TO 3 SM - NEW CIRCLING EVALUATION FLIGHT CHECKED WITH RNAV RWY 15/33, VISCHECK EVALUATION, AND AIRPORT DATA.
7. ADDITIONAL FLIGHT DATA: ADDED CHART CIRCLING ICON - CRITERIA: 8260.19H, PARA 8-6-10 T.
8. LINE 7: ADDED 34:1 CLEAR AND 20:1 CLEAR - CRITERIA: 8260.19H, PARA 8-6-7 G(3).
9. NOTES: DELETED CHART NOTE: CIRCLING TO RWY 15/33 NA WHEN CONTROL TOWER CLOSED - DUE TO 20:1 PENS, THE CIRCLING IS NA AT NIGHT AND NOTE ADDED.
10. NOTES: ADDED CHART NOTE: CIRCLING TO RWY 15 AND 33 NA AT NIGHT - 20:1 PENETRATIONS.
11. NOTES: ADDED CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 20 CAT A/B RVR TO 5500 AND CAT C/D VISIBILITY TO 1 5/8 SM - NEW VISCHECK EVALUATION.
12. NOTES: DELETED CHART NOTE: CAT II ILS NA WHEN USING DALTON ALTIMETER SETTING - AIRPORT HAS REDUNDANT WEATHER SOURCE.
13. LINE 1: CHANGED COURSE FROM 018.71 TO 021.71 - CORRECTED ADMINISTRATIVE ERROR AND MAG VAR RAISED FROM 4W TO 5W.
14. ALTERNATE MISSED APPROACH: DELETED ; OR WHEN DIRECTED BY ATC, AND DELETED HOLDING INSTRUCTIONS - CRITERIA: 8260.19H, PARA 8-6-6 H(1).
15. ADDITIONAL FLIGHT DATA: ADDED CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD N, LT, 199.00 INBOUND - CRITERIA: 8260.19H, PARA 8-6-6 H(2).
16. NOTES: DELETED CHART PLANVIEW NOTE: ADF OR RADAR REQUIRED - NO LONGER REQUIRED.
17. NOTES: ADDED EQUIPMENT REQUIREMENTS NOTE: ADF OR RADAR REQUIRED FOR PROCEDURE ENTRY - CRITERIA: 8260.19H, PARA 8-6-8 WORKFLOW LINK.
18. ADDED CHART NOTE: DISREGARD INNER MARKER INDICATION - DIRECTED BY FLIGHT CHECK CLEARS T NOTAM 8-4869.
19. CHANGED ALL REFERENCES OF GS INTCP TO (CFDTJ) - CRITERIA: 8260.19H, PARA 8-6-7 A(2A).



AIRPORT
LOVELL FIELD

AIRPORT ID
KCHA

PROCEDURE NAME
ILS OR LOC RWY 20
ILS RWY 20 CAT II

ORIGINAL/AMENDMENT
36C

CITY
CHATTANOOGA

STATE
TN

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZTL, CHA APP CON, CHA ATCT, AMGR

FLIGHT CHECKED BY

JEFFREY ECKMAN
Digitally signed by
ROBERT G HAMILTON
Jun 07, 2018

OFFICE
FICO

DATE
06/05/2018

DEVELOPED BY

JAMES ROGERS
Digitally signed by
JAMES ROGERS
Apr 12, 2018

OFFICE
AJV-5421

DATE
03/13/2018

APPROVED BY

JULIE MORGAN
Digitally signed by
ROBERT G HAMILTON
Jun 07, 2018

OFFICE
AJV-5420

DATE

TITLE
MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> LOVELL FIELD	<u>AIRPORT ID</u> KCHA	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 2	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> CHATTANOOGA	<u>STATE</u> TN
<u>AIRPORT ELEVATION</u> 683	<u>TDZE</u> 683	<u>SUPERSEDED</u> RNAV (GPS) RWY 2	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 01/13/2011	<u>MAG VAR</u> 5W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL SUSPEND</u>	<u>EPOCH YEAR</u> 2020

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
ADMIT	IAF	FIDGO	NOPT	TF	FB	1.00	066.28	13.65	3800
DUMBB	IAF	FIDGO	NOPT	TF	FB	1.00	337.21	16.31	3800
FIDGO	IF/IAF	CECAY		TF	FB	1.00	021.65	8.70	2500
CECAY	FAF	RW02	MAP	TF	FO	0.30	021.68	5.47	
RW02	MAP	883 MSL		CA			021.68		
883 MSL		HETIP		DF	FO	1.00			3800

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW02

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3800 DIRECT HETIP AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD S FIDGO, RT, 021.65 INBOUND, 3800 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 021.68FAF: CECAYDIST FAF TO MAP: 5.47DIST FAF TO THLD: 5.47
4. MIN ALT: FIDGO 3800, CECAY 2500
5. DIST TO THLD FROM OM:MM:IM:150 HAT:200 HAT: 0.47
6. MIN GP INCPT: 2500GP ALT AT FAF : CECAY 2500OM:MM:IM:
7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 50.7
8. MSA FROM: RW02 4900

PBN EQUIPMENT REQUIREMENTS NOTES

RNP APCH.

NOTES:

CHART NOTE: CIRCLING RWY 15, 33 NA AT NIGHT.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 54C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ADMIT ON V115 SOUTHWEST BOUND.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 3/8 SM.
CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE} / TCH {FEET}) .

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.45 NM TO RW02*
*LNAV ONLY
WAAS CHANNEL #65605
REFERENCE PATH ID: W02A
FAS OBST: 1149 AAO 345727N/0851603W.
HOLD N, RT, 201.74 INBOUND
LTP HAE: 177.8 M

MINIMUMS:

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

ALTERNATE: NA

☐

STANDARD - CAT C 800-2 1/4, CAT D 900-3

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA**	883	2400	200	883	2400	200	883	2400	200	883	2400	200			
LNAV/VNAV DA	1197	6000	514	1197	6000	514	1197	6000	514	1197	6000	514			
LNAV MDA	1200	2400	517	1200	2400	517	1200	5500	517	1200	6000	517			
CIRCLING	1300	1	617	1340	1	657	1480	2 1/4	797	1580	3	897			



CHANGES - REASONS

1. ALL COURSES INCREASED BY 3 DEGREES - MAGNETIC VARIATION UPDATE.
2. ADDED "20:1 IS CLEAR" - CURRENT DOCUMENTATION POLICY.
3. ADDED CIRCLING ICON.
4. REMOVED "CHART: ASR" - ASR APPROACHES NO LONGER AVAILABLE.
5. UPDATED MAG VARIATION FROM 2W/1985 TO 5W/2020 - MAG VAR CHANGE.
6. LPV DA INCREASED FROM 882 TO 883 - TDZE INCREASED 1 FT.
7. LNAV/VNAV DA INCREASED FROM 1196 TO 1197 - TDZE INCREASED 1 FT.
8. LNAV HAT DECREASED FROM 518 TO 517 - TDZE INCREASED 1 FT.
9. CIRCLING HAA DECREASED FROM 618 TO 617 (CAT A) AND 658 TO 657 (CAT B) - APT ELEV INCREASED 1 FT.
10. CIRCLING MDA/VIS/HAT INCREASED FROM 1340-1 3/4-658 TO 1480-2 1/4-797 (CAT C) AND 1460-2 1/2-778 TO 1580-3-897 (CAT D) - NEW CIRCLING AREAS AND CONTROLLING OBSTACLES.
11. CORRECTED BARO-VNAV NOTE FROM 16C TO -16C, RAISED HIGH TEMPERATURE FROM 47C TO 54C, REMOVED FAHRENHEIT VALUES - CURRENT DOCUMENTATION POLICY, CORRECTED ADMINISTRATIVE ERROR.
12. ADDED RVR 1800 NOTE - PERMITTED BY 8400.13D.
13. REPLACED DME/DME RNP-0.3 NOTE WITH PBN REQUIREMENT NOTE - CURRENT DOCUMENTATION POLICY.
14. UPDATED ALTERNATE MINIMUMS - NEW CIRCLING MDA AND VIS.
15. REMOVED VGSI NON-COINCIDENCE NOTE - VGSI AND GLIDEPATH ARE COINCIDENT.
16. REMOVED NOTE: "CIRCLING TO RWY 15/33 NA WHEN CONTROL TOWER CLOSED - NOTE WAS BASED ON TOWER-CONTROLLED LIGHTING TO RWY 15/33 WHICH IS NOW PILOT-CONTROLLED.
17. ADDED NOTE: CIRCLING RWY 15, 33 NA AT NIGHT - UNLIT 20:1 PENETRATIONS.
18. ADDED INOPERATIVE ALS NOTE - ADJUSTMENTS NOT STANDARD.
19. REMOVED NOTE "PROCEDURE NA FOR ARRIVALS AT DUMBB ON V133 SOUTH BOUND" - DUMBB NO LONGER DEPICTED ON LOW ENROUTE CHART.
20. AIRPORT ELEVATION AND TDZE CHANGED FROM 682 TO 683 - UPDATED AIRPORT SURVEY.
21. CRC REMAINDER CHANGED FROM CDF785EF TO E228022C - NEW ELLIPSOIDAL AND ORTHOMETRIC HEIGHTS, THRESHOLD COORDINATES, FPAP AND LENGTH OFFSET.

06/06/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 03/16/2018. HS

1. ADDED CHART PROFILE NOTE : VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE} / TCH {FEET}) - UPDATED VGSI TCH VALUE.



COORDINATED WITH:

A4A

☒

ALPA

☒

AOPA

☒

APA

☒

HAI

☐

NBAA

☒

OTHER:

ZTL, CHA APP CON, AMGR

FLIGHT CHECKED BY

Digitally signed by

ROBERT G HAMILTON

Jun 07, 2018

OFFICE

DATE

DEVELOPED BY

RUSS ROSLEWSKI

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RUSSELL ROSLEWSKI

Mar 26, 2018

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AJV-5423

DATE

03/16/2018

APPROVED BY

JULIE MORGAN

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ROBERT G HAMILTON

Jun 07, 2018

OFFICE

AJV-5420

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCHA
RUNWAY	RW02
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W02A
LTP/FTP LATITUDE	350121.5460N
LTP/FTP LONGITUDE	0851227.0140W
LTP/FTP ELLIPSOIDAL HEIGHT	+01778
FPAP LATITUDE	350247.0240N
FPAP LONGITUDE	0851155.8305W
THRESHOLD CROSSING HEIGHT (TCH)	00050.7
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0496
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	E228022C
<u>ADDITIONAL PATH POINT RECORD INFORMATION</u>	
ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+02077
FPAP ORTHOMETRIC HEIGHT	+02077



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> LOVELL FIELD	<u>AIRPORT ID</u> KCHA	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 15	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> CHATTANOOGA	<u>STATE</u> TN
<u>AIRPORT ELEVATION</u> 683	<u>TDZE</u> 671	<u>SUPERSEDED</u> RNAV (GPS) RWY 15	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 07/21/2016	<u>MAG VAR</u> 5W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL SUSPEND</u>	<u>EPOCH YEAR</u> 2020

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
GQO VORTAC		HEXEX		TF	FO	2.00	332.31	19.69	4600
TOBAY		ZOLOT		TF	FB	2.00	110.21	7.16	4400
BOOPS		LIBKE		TF	FB	2.00	246.48	9.70	4200
ZOLOT	IAF	HEXEX		TF	FB	1.00	060.31	8.00	4100
LIBKE	IAF	HEXEX	NOPT	TF	FB	1.00	240.47	8.00	4100
HEXEX	IF/IAF	CIKSA		TF	FB	1.00	150.39	4.23	3500
CIKSA		SUCOR		TF	FB	1.00	150.41	1.99	3200
SUCOR	FAF	ICEKE/3.90 NM TO RW15		TF	FB	0.30	150.43	3.90	
ICEKE/3.90 NM TO RW15		RW15	MAP	TF	FO	0.30	150.43	3.90	
RW15	MAP	1083 MSL		CA		1.00	150.43		
1083 MSL		IYODA		DF	FO				3300

MISSED APPROACH

MAP:

LNAV: RW15

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3300 DIRECT IYODA AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD NW HEXEX, RT, 150.39 INBOUND, 4100 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 150.43FAF: SUCORDIST FAF TO MAP: 7.80DIST FAF TO THLD: 7.80
4. MIN ALT:HEXEX 4100, CIKSA 3500, SUCOR 3200, ICEKE/3.90 NM TO RW15 1960
5. DIST TO THLD FROM OM:MM:IM:150 HAT:HAT:
6. MIN GP INCPT:GP ALT AT FAF :OM:MM:IM:
7. GP ANGLE:34:1: IS NOT CLEAR20:1: IS NOT CLEARTCH:
8. MSA FROM:RW15 4900

PBN EQUIPMENT REQUIREMENTS NOTES

RNP APCH.

NOTES:

CHART NOTE: STRAIGHT-IN RWY 15 NA AT NIGHT, CIRCLING RWY 15, 33 NA AT NIGHT.
CHART NOTE: RWY 15 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.

ADDITIONAL FLIGHT DATA:

SUCOR TO RW15: 3.00/45
CHART CIRCLING ICON
CHART: 2549 TOWER 350806N/0851925W
CHART FAS OBST: 1126 TREE 350440N/0851431W.
CHART 1518 TOWER 350734N/0851725W.
HOLD SE, RT, 330.54 INBOUND

MINIMUMS:

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

ALTERNATE: NA

☐

STANDARD - CAT C 800-2 1/4, CAT D 900-3

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	1380	1	709	1380	1	709	1380	2	709	1380	2	709			
CIRCLING	1380	1	697	1380	1	697	1480	2 1/4	797	1580	3	897			



AIRPORT	AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	CITY	STATE
LOVELL FIELD	KCHA	RNAV (GPS) RWY 15	1	CHATTANOOGA	TN

CHANGES - REASONS

- 1. TERMINAL ROUTE (GQO VORTAC - HEXEX) CHANGED FROM 329.34/18.99 TO 332.31/19.69 - HEXEX RELOCATED (0.70 NM).
- 2. TERMINAL ROUTE (BOOPS - LIBKE) CHANGED FROM 238.95/12.66 TO 246.48/9.70 - AIRPORT MAGVAR UPDATED FROM 2W TO 5W.
- 3. TERMINAL ROUTE (TOBAY - ZOLOT) CHANGED FROM 096.40/9.80 TO 110.21/7.16 - AIRPORT MAGVAR UPDATED FROM 2W TO 5W.
- 4. TERMINAL ROUTE (LIBKE - HEXEX) CHANGED FROM 237.39/5.00 TO 240.47/8.00 - AIRPORT MAGVAR UPDATED FROM 2W TO 5W.
- 5. TERMINAL ROUTE (ZOLOT - HEXEX) CHANGED FROM 057.29/5.00 TO 060.31/8.00 - AIRPORT MAGVAR UPDATED FROM 2W TO 5W.
- 6. TERMINAL ROUTE (GQO VORTAC - HEXEX) MINIMUM ALTITUDE INCREASED FROM 4100 TO 4600 - REDUCED ROC NA DUE TO PRECIPITOUS TERRAIN.
- 7. INTERMEDIATE SEGMENT CHANGED FROM 147.34/4.10 TO 150.39/4.23 - PROCEDURE EVALUATION AND MAGVAR UPDATE.
- 8. INTERMEDIATE STEPDOWN CHANGED FROM 147.34/1.90 TO 150.41/2.00 - PROCEDURE EVALUATION AND MAGVAR UPDATE.
- 9. INTERMEDIATE STEPDOWN FIX (CIKSA) CHANGED FROM 3600 TO 3500 - DESCENT GRADIENT.
- 10. FAF ALTITUDE INCREASED FROM 3100 TO 3200 - PR ADJUSTMENT IN INTERMEDIATE SEGMENT.
- 11. FINAL SEGMENT CHANGED FROM 147.38/3.50 TO 150.43/3.89 - PROCEDURE EVALUATION AND MAGVAR UPDATE.
- 12. FINAL STEPDOWN SEGMENT CHANGED FROM 147.38/ 3.80 TO 150.43/3.90 - PROCEDURE EVALUATION AND MAGVAR UPDATE.
- 13. LNAV MDA CHANGED FROM 1420/749 TO 1380/709 ALL CATS - PROCEDURE EVALUATION.
- 14. CIRCLING MDA CATS A/B CHANGED FROM 1420/738 TO 1380/698 - PROCEDURE EVALUATION.
- 15. CIRCLING MDA CAT C CHANGED FROM 1420/738 TO 1480/798 - NEW CONTROLLING OBSTACLES (NEW CRITERIA APPLIED).
- 16. CIRCLING MDA CAT D INCREASED FROM 1460/778 TO 1580/897 - NEW CONTROLLING OBSTACLES (NEW CRITERIA APPLIED).
- 17. MISSED APCH CHANGED FROM "CLIMB TO 3300 DIRECT LONYI AND VIA 147.52 TRACK TO IYODA AND HOLD." TO "CLIMB TO 3300 DIRECT IYODA AND HOLD." - PROCEDURE EVALUATION.
- 18. MISSED APCH HOLDING CHANGED FROM 147.57 INBOUND TO 150.57 INBOUND.
- 19. HOLD IN LIEU CHANGED FROM 145.34 INBOUND TO 150.39 INBOUND.
- 20. INTERMEDIATE SEGMENT RNP VALUE CHANGED FROM 0.50 TO 1.00 - CRITERIA.
- 21. REMOVED BACKUP ALTIMETER NOTE - AIRPORT HAS REDUNDANT WEATHER SOURCES AVAILABLE INCLUDING NWS.
- 22. REMOVED "CHART NOTE: DME/DME RNP-0.3 NA." NOTE - REPLACED IT WITH "PBN REQUIREMENTS NOTE: RNP APCH."
- 23. ADDED "CHART NOTE: RWY 15 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED." NOTE.
- 24. ADDED "CHART CIRCLING ICON" - NEW CIRCLING CRITERIA USED.
- 25. ADDED CHART NOTE: STRAIGHT-IN RWY 15 NA AT NIGHT, CIRCLING RWY 15/33 NA AT NIGHT. - 20:1 PENETRATIONS.
- 26. MOVED PFAF TO MATCH VGSI ANGLE/TCH FROM 3.06/50 TO 3.00/45.
- 27. DELETED VGSI NON COINCEDENT NOTE- MOVED PFAF.



COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZTL, CHA APP CON, AMGR, ATA

FLIGHT CHECKED BY

JEFFREY ECKMAN

Digitally signed by
ROBERT G HAMILTON
Jun 07, 2018

OFFICE

FICO

DATE

06/05/2018

DEVELOPED BY

CHRIS O'BRIEN

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Apr 08, 2018

OFFICE

AJV-5423

DATE

04/04/2018

APPROVED BY

JULIE MORGAN

Digitally signed by
ROBERT G HAMILTON
Jun 07, 2018

OFFICE

AJV-5420

DATE

TITLE

MANAGER



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: RW20 CLIMB TO 3800 DIRECT FIDGO AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT, 021.65 INBOUND. CHART FAS OBST: 999 TREE 350533N/0851212W. DISTANCE TO THLD FROM 200 HAT: 0.48 NM. CHART VDP AT 1.95 NM TO RW20* *LNAV ONLY. WAAS CHANNEL # 70305 REFERENCE PATH ID: W20A CHART CIRCLING ICON. LTP HAE: 173.5 M									
COMAR		HETIP (TF) (FO) (RNP 2.00)		055.87 / 32.40				3800											
PALER		HETIP (TF) (FO) (RNP 2.00)		101.33 / 11.24				4000											
DUBBS		HETIP (TF) (FO) (RNP 2.00)		271.97 / 18.38				3800											
CRAND		HETIP (TF) (FO) (RNP 2.00)		328.00 / 21.93				3800											
GQO VORTAC		HETIP (TF) (FO) (RNP 2.00)		009.72 / 17.36				3800											
(SEE FORM 8260-10)																			
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N HETIP, RT, 201.74 INBOUND, 3800 FT. IN LIEU OF PT (IAF) 3. FAC: 201.72 FAF: ZUBAN DIST FAF TO MAP: 5.51 THLD: 5.51 4. MIN. ALT: HETIP 3800, JOXAT 3200, ZUBAN 2500, COKIT/2.60 NM TO RW20 1540* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2500 GS ALT AT: ZUBAN 2500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 53.0 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW20 4900																MAG VAR: 5W		EPOCH YEAR: 2020	
MINIMUMS																			
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		STANDARD @									
CATEGORY =====>		A		B		C		D		E									
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA				
LPV DA	873	1800	200	873	1800	200	873	1800	200	873	1800	200							
LNAV/VNAV DA	1281	1 3/4	608	1281	1 3/4	608	1281	1 3/4	608	1281	1 3/4	608							
LNAV MDA	1340	1	667	1340	1	667	1340	1 1/2	667	1340	1 1/2	667							
CIRCLING	1340	1	657	1340	1	657	1480	2 1/4	797	1580	3	897							
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 47C (116F). @ CAT C 800-2 1/4, CAT D 900-3 CHART NOTE: CIRCLING RWY 15, 33 NA AT NIGHT. CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO LNAV/VNAV ALL CATS AND LNAV CAT A/B. CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV CAT C/D VISIBILITY TO 1 7/8 SM. PBN REQUIREMENTS NOTE: RNP APCH.																			
CITY AND STATE		ELEVATION: 683 TDZE: 673		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:									
CHATTANOOGA, TN		AIRPORT NAME: LOVELL FIELD				RNAV (GPS) RWY 20, AMDT 1A 3 JANUARY 2019				AMDT: 1									
										DATED 01/13/2011									



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
BOOPS (IAF)	HETIP (NOPT) (TF) (FB) (RNP 1.00)	204.92 / 8.97	3800
HETIP (IF/IAF)	JOXAT (TF) (FB) (RNP 1.00)	201.74 / 3.76	3200
JOXAT	ZUBAN (TF) (FB) (RNP 1.00)	201.73 / 3.74	2500
ZUBAN (FAF)	COKIT/2.60 NM TO RW20 (TF) (FB) (RNP 0.30)	201.72 / 2.91	
COKIT/2.60 NM TO RW20	RW20 (MAP) (TF) (FO) (RNP 0.30)	201.72 / 2.60	
RW20 (MAP)	873 MSL (CA)	201.72	
873 MSL	FIDGO (DF) (FO) (RNP 1.00)		3800

QUALITY
16
CHECKED

CITY AND STATE

CHATTANOOGA, TN

ELEVATION: 683

TDZE: 673

AIRPORT NAME:

LOVELL FIELD

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 20, AMDT 1A

3 JANUARY 2019

SUP:

AMDT: 1

DATED: 01/13/2011

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

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

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCHA
RUNWAY	RW20
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W20A
LTP/FTP LATITUDE	350231.6455N
LTP/FTP LONGITUDE	0851201.4370W
LTP/FTP ELLIPSOIDAL HEIGHT	+01735
FPAP LATITUDE	350106.1655N
FPAP LONGITUDE	0851232.6095W
THRESHOLD CROSSING HEIGHT (TCH)	00053.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0496
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
 <u>CRC REMAINDER</u>	 95486B22

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+02033
FPAP ORTHOMETRIC HEIGHT	+02033

QUALITY
16
CHECKED

CITY AND STATE CHATTANOOGA, TN	ELEVATION: 683 AIRPORT NAME: LOVELL FIELD	TDZE: 673 RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 20, AMDT 1A 3 JANUARY 2019	SUP:
				AMDT: 1
				DATED: 01/13/2011

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> LOVELL FIELD	<u>AIRPORT ID</u> KCHA	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 33	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> CHATTANOOGA	<u>STATE</u> TN	
<u>AIRPORT ELEVATION</u> 683	<u>TDZE</u> 672	<u>SUPERSEDED</u> RNAV (GPS) RWY 33	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 07/21/2016	<u>MAG VAR</u> 5W	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
GQO VORTAC		IYODA		TF	FO	2.00	143.76	5.28	3300
CRAND	IAF	IYODA		TF	FB	1.00	256.46	11.83	3300
UZOVO	IAF	WOXIX		TF	FB	1.00	029.22	6.50	3900
WOXIX		IYODA		TF	FB	1.00	029.29	9.25	3300
IYODA	IF/IAF	JILIS		TF	FB	1.00	330.54	4.48	2500
JILIS	FAF	FOGVI/2.80 NM TO RW33		TF	FB	0.30	330.51	2.82	
FOGIV/2.80 NM TO RW33		RW33	MAP	TF	FO	0.30	330.51	2.80	
RW33	MAP	1083 MSL		CA			330.51		
1083 MSL		HEXEX		DF	FO	1.00			4100

MISSED APPROACH

MAP:

LNAV: RW33

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4100 DIRECT HEXEX AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD SE IYODA, RT, 330.54 INBOUND, 3300 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 330.51 FAF: JILIS DIST FAF TO MAP: 5.62 DIST FAF TO THLD: 5.62
4. MIN ALT: IYODA 3300, JILIS 2500, FOGVI/2.80 NM TO RW33 1600
5. DIST TO THLD FROM OM: MM: IM: 150 HAT: HAT:
6. MIN GP INCPT: GP ALT AT FAF : OM: MM: IM:
7. GP ANGLE: 34:1: IS NOT CLEAR 20:1: IS NOT CLEAR TCH:
8. MSA FROM: RW33 4900

PBN EQUIPMENT REQUIREMENTS NOTES

RNP APCH.

NOTES:

CHART NOTE: STRAIGHT-IN RWY 33 NA AT NIGHT, CIRCLING RWY 15, 33 NA AT NIGHT.
CHART NOTE: RWY 33 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON
JILIS TO RW33: 3.00/40.
CHART FAS OBST: 1008 TREE 345930N/0851042W.
HOLD NW, RT, 150.39 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT A, B 900-2, CAT C 900-2 1/2, CAT D 900-3

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	1520	1	848	1520	1 1/4	848	1520	2 1/2	848	1520	2 1/2	848			
CIRCLING	1520	1 1/4	837	1520	1 1/4	837	1520	2 1/2	837	1580	3	897			



CHANGES - REASONS

1. TERMINAL ROUTE (GQO VORTAC - IYODA) CHANGED FROM 142.58/7.17 TO 143.76/5.28 - IYODA RELOCATED (1.19 NM).
2. TERMINAL ROUTE (CRAND - IYODA) CHANGED FROM 244.25/11.46 TO 256.46/11.83 - AIRPORT MAGVAR CHANGED FROM 2W TO 5W; IYODA RELOCATED.
3. ADDED SDF (WOXIX) TO TERMINAL ROUTE (UZOVO - IYODA) - (9I) OBSTACLE LOCATED IN INITIAL SEGMENT.
4. TERMINAL ROUTE (UZOVO - IYODA) CHANGED FROM 032.53/14.84 TO (UZOVO - WOXIX - IYODA) 029.22/6.50 THEN 029.29/9.25 - PROCEDURE EVALUATION.
5. INTERMEDIATE SEGMENT CHANGED FROM 327.57/6.49 TO 330.54/4.59 - DESCENT GRADIENT.
6. INTERMEDIATE STEPDOWN SEGMENT DELETED - NOT REQUIRED.
7. FINAL SEMENT CHANGED FROM 327.53/5.51 TO 330.51/5.62- MAGVAR UPDATED FROM 2W TO 5W AND MATCHED VGSI ANGLE.
8. LNAV MDA CHANGED FROM 1240/569 ALL CATS TO 1520/848 ALL CATS - SECTION 2 MA PENETRATION (47-000022).
9. CIRCLING MDA CAT A CHANGED FROM 1300/618 TO 1520/837 - STRAIGHT-IN MDA.
10. CIRCLING MDA CATS B/C CHANGED FROM 1340/658 TO 1540/837 - STRAIGHT-IN MDA.
11. CIRCLING MDA CAT D CHANGED FROM 1460/778 TO 1580/897 - NEW CONTROLLING OBSTACLE (NEW CRITERIA APPLIED).
12. MISSED APCH CHANGED FROM "CLIMB TO 3300 DIRECT KOSEY AND VIA 045 TRACK TO CQN NDB AND HOLD." TO "CLIMB TO 3300 DIRECT HEXEX AND HOLD."
13. HOLD-IN-LIEU CHANGED FROM 327.57 INBOUND TO 330.54 INBOUND - MAGVAR CHANGED FROM 2W TO 5W.
14. REMOVED BACKUP ALTIMETER NOTE - AIRPORT HAS REDUNDANT WEATHER SOURCES AVAILABLE INCLUDING NWS.
15. REMOVED "CHART NOTE: DME/DME RNP-0.3 NA - REPLACED IT WITH "PBN REQUIREMENTS NOTE: RNP APCH."
16. ADDED "CHART NOTE: RWY 33 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED." NOTE.
17. ADDED "CHART CIRCLING ICON" - NEW CIRCLING CRITERIA USED.
18. MOVED PFAF TO MATCH VGSI ANGLE/TCH FROM 3.05/47 TO 3.00/40
19. DELETED VGSI NON COINCEDENT NOTE- MOVED PFAF



COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZTL, CHA APP CON, AMGR, ATA

FLIGHT CHECKED BY

JEFFREY ECKMAN

Digitally signed by
ROBERT G HAMILTON
Jun 07, 2018

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AJV-5420

DATE

TITLE

MANAGER



**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
CHATTANOOGA, TN	LOVELL FIELD	3 JANUARY 2019	12

TAKEOFF MINIMUMS:
RWY 2, 20: STANDARD.

RWY 15: 300-2 1/4 OR STANDARD WITH MINIMUM CLIMB OF 375 FEET PER NM TO 1100.

RWY 33: 500-3 OR STANDARD WITH MINIMUM CLIMB OF 330 FEET PER NM TO 1300.

TEXTUAL DEPARTURE PROCEDURES:
RWY 2: CLIMB HEADING 021.70 TO 2400 BEFORE TURNING.

RWY 15: CLIMB HEADING 150.48 TO 1400 BEFORE TURNING.

RWY 20: CLIMB HEADING 201.71 TO 2200 BEFORE TURNING.

RWY 33: CLIMBING RIGHT TURN HEADING 020.00 TO 2600 BEFORE PROCEEDING ON COURSE.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 02: VEGETATION 279 FT FROM DER, 555 FT LEFT OF CENTERLINE, 676 FT MSL. VEHICLES ON ROAD 812 FT FROM DER, 644 FT RIGHT OF CENTERLINE, 695 FT MSL. TREE 869 FT FROM DER, 600 FT LEFT OF CENTERLINE, 720 FT MSL. TREE 918 FT FROM DER, 623 FT RIGHT OF CENTERLINE, 718 FT MSL. TREES BEGINNING 938 FT FROM DER, 503 FT RIGHT OF CENTERLINE, UP TO 733 FT MSL. TREES BEGINNING 968 FT FROM DER, 646 FT LEFT OF CENTERLINE, UP TO 731 FT MSL. TREES BEGINNING 1075 FT FROM DER, 520 FT LEFT OF CENTERLINE, UP TO 94 FT AGL/748 FT MSL. TREE 2045 FT FROM DER, 915 FT RIGHT OF CENTERLINE, 742 FT MSL. TREES BEGINNING 2054 FT FROM DER, 203 FT RIGHT OF CENTERLINE, UP TO 748 FT MSL.

NOTE: RWY 15: POLE AND TANK BEGINNING 61 FT FROM DER, 410 FT RIGHT OF CENTERLINE, UP TO 32 FT AGL/705 FT MSL. TANK 164 FT FROM DER, 489 FT LEFT OF CENTERLINE, 687 FT MSL. POLES BEGINNING 241 FT FROM DER, 287 FT RIGHT OF CENTERLINE, UP TO 713 FT MSL. TREE AND VEHICLES ON ROAD BEGINNING 351 FT FROM DER, 181 FT RIGHT OF CENTERLINE, UP TO 733 FT MSL. POLE AND VEHICLES ON ROAD BEGINNING 376 FT FROM DER, 5 FT LEFT OF CENTERLINE, UP TO 690 FT MSL. TERRAIN, VEHICLES ON ROAD, AND TREES BEGINNING 424 FT FROM DER, 40 FT RIGHT OF CENTERLINE, UP TO 764 FT MSL. TREE AND VEHICLES ON ROAD BEGINNING 578 FT FROM DER, 43 FT LEFT OF CENTERLINE, UP TO 717 FT MSL. POLE AND TREES BEGINNING 630 FT FROM DER, 68 FT LEFT OF CENTERLINE, UP TO 739 FT MSL. TREE 745 FT FROM DER, 618 FT RIGHT OF CENTERLINE, 771 FT MSL. TRANSMISSION LINE, VEHICLES ON ROAD, POLES, AND TREES BEGINNING 826 FT FROM DER, 14 FT RIGHT OF CENTERLINE, UP TO 774 FT MSL. TREES BEGINNING 1052 FT FROM DER, 401 FT LEFT OF CENTERLINE, UP TO 755 FT MSL. POLE AND TREES BEGINNING 1164 FT FROM DER, 211 FT LEFT OF CENTERLINE, UP TO 758 FT MSL. POLE AND TREES BEGINNING 1256 FT FROM DER, 33 FT LEFT OF CENTERLINE, UP TO 764 FT MSL. TREES BEGINNING 1542 FT FROM DER, 7 FT LEFT OF CENTERLINE, UP TO 91 FT AGL/765 FT MSL. TREES BEGINNING 1905 FT FROM DER, 102 FT LEFT OF CENTERLINE, UP TO 766 FT MSL. SIGNS, POLES, AND TREES BEGINNING 2634 FT FROM DER, 2 FT LEFT OF CENTERLINE, UP TO 770 FT MSL. POLE 3005 FT FROM DER, 899 FT RIGHT OF CENTERLINE, 798 FT MSL. POLE AND TREES BEGINNING 3009 FT FROM DER, 12 FT RIGHT OF CENTERLINE, UP TO 130 FT AGL/809 FT MSL. TREES BEGINNING 3179 FT FROM DER, 836 FT LEFT OF CENTERLINE, UP TO 772 FT MSL. TREE 3439 FT FROM DER, 1408 FT LEFT OF CENTERLINE, 781 FT MSL. TREES BEGINNING 3485 FT FROM DER, 908 FT LEFT OF CENTERLINE, UP TO 786 FT MSL. TREES BEGINNING 3572 FT FROM DER, 770 FT LEFT OF CENTERLINE, UP TO 790 FT MSL. TREE 3764 FT FROM DER, 1357 FT LEFT OF CENTERLINE, 797 FT MSL. TREES BEGINNING 3768 FT FROM DER, 172 FT LEFT OF CENTERLINE, UP TO 810 FT MSL. TREES BEGINNING 3997 FT FROM DER, 37 FT LEFT OF CENTERLINE, UP TO 815 FT MSL. TREES BEGINNING 4268 FT FROM DER, 1446 FT LEFT OF CENTERLINE, UP TO 832 FT MSL. TREES BEGINNING 4393 FT FROM DER, 213 FT LEFT OF CENTERLINE, UP TO 864 FT MSL. TREES BEGINNING 4494 FT FROM DER, 1190 FT LEFT OF CENTERLINE, UP TO 865 FT MSL. TREES BEGINNING 4544 FT FROM DER, 371 FT LEFT OF CENTERLINE, UP TO 876 FT MSL. TREES BEGINNING 4633 FT FROM DER, 790 FT LEFT OF CENTERLINE, UP TO 891 FT MSL. TREES BEGINNING 4753 FT FROM DER, 1165 FT LEFT OF CENTERLINE, UP TO 892 FT MSL. TREES BEGINNING 4798 FT FROM DER, 445 FT LEFT OF CENTERLINE, UP TO 899 FT MSL. VEHICLES ON ROAD, POLES, BUILDINGS, AND TREES BEGINNING 4912 FT FROM DER, 124 FT LEFT OF CENTERLINE, UP TO 904 FT MSL. TREE 5276 FT FROM DER, 207 FT RIGHT OF CENTERLINE, 77 FT AGL/810 FT MSL. TREE 5301 FT FROM DER, 185 FT RIGHT OF CENTERLINE, 84 FT AGL/820 FT MSL. TREES BEGINNING 5338 FT FROM DER, 63 FT RIGHT OF CENTERLINE, UP TO 82 FT AGL/826 FT MSL. POLE, VEHICLES ON ROAD, BUILDINGS, AND TREES BEGINNING 5455 FT FROM DER, 181 FT LEFT OF CENTERLINE, UP TO 925 FT MSL. BUILDING 1.0 NM FROM DER, 25 FT RIGHT OF CENTERLINE, 831 FT MSL. POLES AND TREES BEGINNING 1.0 NM FROM DER, 4 FT LEFT OF CENTERLINE, UP TO 86 FT AGL/946 FT MSL. TREES BEGINNING 1.0 NM FROM DER, 410 FT RIGHT OF CENTERLINE, UP TO 845 FT MSL. TREES BEGINNING 1.0 NM FROM DER, 487 FT RIGHT OF CENTERLINE, UP TO 847 FT MSL. TREES BEGINNING 1.0 NM FROM DER, 315 FT RIGHT OF CENTERLINE, UP TO 864 FT MSL. TREES BEGINNING 1.0 NM FROM DER, 113 FT RIGHT OF CENTERLINE, UP TO 865 FT MSL. TREES BEGINNING 1.0 NM FROM DER, 315 FT RIGHT OF CENTERLINE, UP TO 866 FT MSL. TREES AND POLES BEGINNING 1.0 NM FROM DER, 37 FT RIGHT OF CENTERLINE, UP TO 869 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 340 FT RIGHT OF CENTERLINE, UP TO 877 FT MSL. TREE 1.1 NM FROM DER, 231 FT RIGHT OF CENTERLINE, 892 FT MSL. TREE 1.1 NM FROM DER, 644 FT RIGHT OF CENTERLINE, 900 FT MSL. TREE 1.1 NM FROM DER, 440 FT RIGHT OF CENTERLINE, 906 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 545 FT RIGHT OF CENTERLINE, UP TO 921 FT MSL. POLE AND TREES BEGINNING 1.1 NM FROM DER, 83 FT RIGHT OF CENTERLINE, UP TO 936 FT MSL. TREES, BUILDINGS, TOWERS, AND ANTENNAS BEGINNING 1.1 NM FROM DER, 14 FT RIGHT OF CENTERLINE, UP TO 88 FT AGL/940 FT MSL. TREE 1.8 NM FROM DER, 1924 FT LEFT OF CENTERLINE, 73 FT AGL/957 FT MSL.

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

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

CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
CHATTANOOGA, TN	LOVELL FIELD	3 JANUARY 2019	12

NOTE: RWY 20: LIGHTING 9 FT FROM DER, 55 FT LEFT OF CENTERLINE, 2 FT AGL/682 FT MSL. TREE 611 FT FROM DER, 585 FT LEFT OF CENTERLINE, 735 FT MSL. TREES BEGINNING 816 FT FROM DER, 698 FT RIGHT OF CENTERLINE, UP TO 719 FT MSL. TREES BEGINNING 1062 FT FROM DER, 688 FT RIGHT OF CENTERLINE, UP TO 736 FT MSL. TREE 2714 FT FROM DER, 1047 FT RIGHT OF CENTERLINE, 758 FT MSL. TREES BEGINNING 2724 FT FROM DER, 1156 FT RIGHT OF CENTERLINE, UP TO 763 FT MSL. TREES BEGINNING 2905 FT FROM DER, 791 FT RIGHT OF CENTERLINE, UP TO 771 FT MSL. TREES BEGINNING 3618 FT FROM DER, 938 FT RIGHT OF CENTERLINE, UP TO 118 FT AGL/786 FT MSL.

NOTE: RWY 33: TREE, VEHICLES ON ROAD, AND TREES BEGINNING 15 FT FROM DER, 20 FT LEFT OF CENTERLINE, UP TO 68 FT AGL/738 FT MSL. TERRAIN 67 FT FROM DER, 377 FT RIGHT OF CENTERLINE, 677 FT MSL. TERRAIN AND TREE BEGINNING 151 FT FROM DER, 324 FT RIGHT OF CENTERLINE, UP TO 725 FT MSL. TREES BEGINNING 263 FT FROM DER, 431 FT RIGHT OF CENTERLINE, UP TO 727 FT MSL. TREES BEGINNING 411 FT FROM DER, 9 FT RIGHT OF CENTERLINE, UP TO 751 FT MSL. POLE AND TREES BEGINNING 1682 FT FROM DER, 25 FT LEFT OF CENTERLINE, UP TO 87 FT AGL/746 FT MSL. TREES BEGINNING 1928 FT FROM DER, 57 FT LEFT OF CENTERLINE, UP TO 101 FT AGL/749 FT MSL. TREES BEGINNING 2014 FT FROM DER, 18 FT LEFT OF CENTERLINE, UP TO 93 FT AGL/750 FT MSL. TREES BEGINNING 2130 FT FROM DER, 195 FT LEFT OF CENTERLINE, UP TO 106 FT AGL/755 FT MSL. TREES BEGINNING 2136 FT FROM DER, 54 FT LEFT OF CENTERLINE, UP TO 108 FT AGL/759 FT MSL. TREES BEGINNING 2256 FT FROM DER, 261 FT RIGHT OF CENTERLINE, UP TO 760 FT MSL. TREE 2295 FT FROM DER, 588 FT RIGHT OF CENTERLINE, 766 FT MSL. TREE 2327 FT FROM DER, 464 FT RIGHT OF CENTERLINE, 768 FT MSL. TREES BEGINNING 2364 FT FROM DER, 219 FT RIGHT OF CENTERLINE, UP TO 92 FT AGL/777 FT MSL. TREE 2403 FT FROM DER, 622 FT RIGHT OF CENTERLINE, 782 FT MSL. TREE 2411 FT FROM DER, 389 FT RIGHT OF CENTERLINE, 784 FT MSL. TOWER, POLES, AND TREES BEGINNING 2414 FT FROM DER, 8 FT RIGHT OF CENTERLINE, UP TO 790 FT MSL. TREE 2999 FT FROM DER, 127 FT LEFT OF CENTERLINE, 62 FT AGL/763 FT MSL. TREES BEGINNING 3153 FT FROM DER, 1229 FT LEFT OF CENTERLINE, UP TO 769 FT MSL. TREES BEGINNING 3254 FT FROM DER, 62 FT LEFT OF CENTERLINE, UP TO 90 FT AGL/781 FT MSL. TREES BEGINNING 3548 FT FROM DER, 7 FT RIGHT OF CENTERLINE, UP TO 85 FT AGL/796 FT MSL. TREES BEGINNING 3699 FT FROM DER, 30 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/795 FT MSL. ELECTRICAL SYSTEM AND TREES BEGINNING 3996 FT FROM DER, 8 FT LEFT OF CENTERLINE, UP TO 119 FT AGL/817 FT MSL. TREES BEGINNING 4842 FT FROM DER, 51 FT RIGHT OF CENTERLINE, UP TO 826 FT MSL. ELECTRICAL SYSTEM AND TREES BEGINNING 5227 FT FROM DER, 3 FT RIGHT OF CENTERLINE, UP TO 86 FT AGL/838 FT MSL. TRANSMISSION LINE 5583 FT FROM DER, 15 FT LEFT OF CENTERLINE, 90 FT AGL/823 FT MSL. TREES BEGINNING 5626 FT FROM DER, 31 FT LEFT OF CENTERLINE, UP TO 836 FT MSL. TREES BEGINNING 5707 FT FROM DER, 153 FT LEFT OF CENTERLINE, UP TO 840 FT MSL. TREES BEGINNING 5902 FT FROM DER, 1339 FT LEFT OF CENTERLINE, UP TO 857 FT MSL. TREES BEGINNING 1.0 NM FROM DER, 2 FT LEFT OF CENTERLINE, UP TO 858 FT MSL. TREE 1.1 NM FROM DER, 292 FT RIGHT OF CENTERLINE, 846 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 45 FT RIGHT OF CENTERLINE, UP TO 862 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 86 FT RIGHT OF CENTERLINE, UP TO 888 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 6 FT RIGHT OF CENTERLINE, UP TO 914 FT MSL. TREES BEGINNING 1.2 NM FROM DER, 81 FT LEFT OF CENTERLINE, UP TO 875 FT MSL. TREES BEGINNING 1.2 NM FROM DER, 65 FT LEFT OF CENTERLINE, UP TO 876 FT MSL. TREE 1.2 NM FROM DER, 915 FT RIGHT OF CENTERLINE, 918 FT MSL. TREES BEGINNING 1.2 NM FROM DER, 407 FT RIGHT OF CENTERLINE, UP TO 920 FT MSL. TREE 1.2 NM FROM DER, 1149 FT RIGHT OF CENTERLINE, 923 FT MSL. TREES BEGINNING 1.2 NM FROM DER, 284 FT RIGHT OF CENTERLINE, UP TO 926 FT MSL. TREES BEGINNING 1.2 NM FROM DER, 812 FT RIGHT OF CENTERLINE, UP TO 929 FT MSL. TREE 1.2 NM FROM DER, 1412 FT RIGHT OF CENTERLINE, 931 FT MSL. TREES BEGINNING 1.2 NM FROM DER, 480 FT RIGHT OF CENTERLINE, UP TO 932 FT MSL. TREES BEGINNING 1.2 NM FROM DER, 1292 FT RIGHT OF CENTERLINE, UP TO 936 FT MSL. POLE AND TREES BEGINNING 1.2 NM FROM DER, 659 FT RIGHT OF CENTERLINE, UP TO 90 FT AGL/990 FT MSL. TREES BEGINNING 1.7 NM FROM DER, 1629 FT LEFT OF CENTERLINE, UP TO 974 FT MSL. TREES BEGINNING 1.9 NM FROM DER, 2446 FT LEFT OF CENTERLINE, UP TO 1002 FT MSL. TREE 1.9 NM FROM DER, 3461 FT LEFT OF CENTERLINE, 1022 FT MSL. POLE AND TREES BEGINNING 2.0 NM FROM DER, 241 FT LEFT OF CENTERLINE, UP TO 92 FT AGL/1099 FT MSL. TREE 2.3 NM FROM DER, 60 FT RIGHT OF CENTERLINE, 84 FT AGL/1033 FT MSL. TREE 2.5 NM FROM DER, 1570 FT LEFT OF CENTERLINE, 105 FT AGL/1126 FT MSL. TREE 2.5 NM FROM DER, 1088 FT LEFT OF CENTERLINE, 1085 FT MSL.

CONTROLLING OBSTACLES:

RWY 15: 899 FT MSL TREE 350126.79N/0851104.18W (CLIMB GRADIENT). 946 FT MSL POLE 350113.00N/0851100.00W (CLIMB-TO ALTITUDE). 957 FT MSL TREE 350037.52N/0851017.03W (CEILING, VISIBILITY).

RWY 33: 990 FT MSL POLE 350352.37N/0851312.45W (CLIMB GRADIENT, CLIMB-TO ALTITUDE). 1126 FT MSL TREE 350440.21N/0851431.06W (CEILING). 1085 FT MSL TREE 350444.50N/0851427.61W (VISIBILITY).

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT:

RWY 2, 15, 33: 2549 FT MSL TOWER 350806.00N/0851925.00W.

RWY 20: 2313 FT MSL AAO 350024.00W/0852039.00W.



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

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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
CHATTANOOGA, TN	LOVELL FIELD	3 JANUARY 2019	12

REMARKS:

1. RWY 15 CLIMB GRADIENT ROUNDED TO 375 FT PER NM FOR PUBLICATION (COMPUTED VALUE 373.62 FT PER NM).
2. RWY 33 CLIMB GRADIENT ROUNDED TO 330 FT PER NM FOR PUBLICATION (COMPUTED VALUE 327.66 FT PER NM).

FLIGHT INSPECTED BY:	<i>Digitally signed by</i> ROBERT G HAMILTON	OFFICE SYMBOL:	DATE:
CLINT PALMER	Jun 07, 2018	FICO	4/24/18
DEVELOPED BY:	<i>Digitally signed by</i> PETER R GUIMOND	OFFICE SYMBOL:	DATE:
PETER GUIMOND	Mar 12, 2018	AJV-5422	03/12/2018
APPROVED BY:	<i>Digitally signed by</i> ROBERT G HAMILTON	OFFICE SYMBOL:	DATE:
JULIE MORGAN	Jun 07, 2018	AJV-5420	

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

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

OTHER:

ZTL, CHA APP CON, CHA ATCT, AMGR

CHANGES - REASONS:

1. AMENDED RWY 15 CLIMB GRADIENT FROM 360 FT PER NM TO 375 FT PER NM - NEW CONTROLLING OBSTACLE IDENTIFIED.
2. AMENDED RWY 2 DEPARTURE COURSE FROM 018.70 TO 021.70 - COMPUTED USING PENDING AIRPORT MAGVAR UPDATE TO 5W.
3. AMENDED RWY 15 DEPARTURE COURSE FROM 147.47 TO 150.48 - COMPUTED USING PENDING AIRPORT MAGVAR UPDATE TO 5W.
4. AMENDED RWY 20 DEPARTURE COURSE FROM 198.70 TO 201.71 - COMPUTED USING PENDING AIRPORT MAGVAR UPDATE TO 5W.
5. AMENDED RWY 33 DEPARTURE PROCEDURE CLIMB-TO ALTITUDE FROM 2900 TO 2600 - NEW OBSTACLE STUDY.
6. AMENDED ALL RUNWAYS TAKEOFF OBSTACLE NOTES - NEW OBSTACLE SURVEY ADDED SINCE LAST AMENDMENT. GROUPED AND FORMATTED IN ACCORDANCE WITH AJV OBSTACLE GROUPER APPLICATION.
7. ADDED OBSTACLES MANDATING ODP ROUTE DEVELOPMENT FOR ALL RUNWAYS - FORMATTED IN ACCORDANCE WITH FAAO 8260.46F, APPENDIX D, PARA 10C.
8. AMENDED RWY 15 AND RWY 33 CONTROLLING OBSTACLES - NEW OBSTACLE STUDY. FORMATTED IN ACCORDANCE WITH FAAO 8260.46F, APPENDIX D, PARA 10A.



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.23

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<u>AIRPORT</u> LOVELL FIELD	<u>AIRPORT ID</u> KCHA	<u>PROCEDURE NAME</u> VOR RWY 33	<u>ORIGINAL/AMENDMENT</u> 17B	<u>CITY</u> CHATTANOOGA	<u>STATE</u> TN	
<u>AIRPORT ELEVATION</u> 683	<u>TDZE</u> 672	<u>SUPERSEDED</u> VOR RWY 33	<u>ORIGINAL/AMENDMENT</u> 17A	<u>DATED</u> 09/23/2010	<u>MAG VAR</u> 1E	<u>EPOCH YEAR</u> 1965
<u>FACILITY</u> GQO	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
OSILY/GQO 7.00 DME CW	IAF	OCAYO/7.00 DME	NOPT				7.00 DME ARC		3200
OCAYO/7.00 DME	IF	GQO VORTAC					331.76	7.00 (GQO)	2500

MISSED APPROACH

MAP:

4.89 NM AFTER GQO VORTAC OR AT GQO 4.89 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 THEN CLIMBING RIGHT TURN TO 3000 DIRECT CQN NDB AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L **SIDE OF COURSE** 151.76 **OUTBOUND** 3300 **FT WITHIN** 10 **MILES OF** GQO (IAF)
- 2.
3. **FAC:** 331.76 **FAF:** GQO VORTAC **DIST FAF TO MAP:** 4.89 **DIST FAF TO THLD:** 4.89
4. **MIN ALT:** GQO VORTAC 2500
8. **MSA FROM:** GQO VORTAC 060-150 5400, 150-060 3600

EQUIPMENT REQUIREMENTS NOTES:

ADF REQUIRED.

NOTES:

CHART NOTE: RWY 33 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: STRAIGHT-IN RWY 33 NA AT NIGHT, CIRCLING RWY 15, 33 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:



CHART 1163 TREE 345815N/0850836W.
CHART CIRCLING ICON.
GQO VORTAC TO RW33: 3.43/47.
CHART GQO R-090 AT OSILY.
CHART FAS OBST: 1079 TREE 345844N/0851059W.
HOLD N, LT, 199.00 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 800-2 1/4, CAT D 900-3

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-33	1340	1	668	1340	1	668	1340	1 3/4	668	1340	2	668			
CIRCLING	1340	1	657	1340	1	657	1480	2 1/4	797	1580	3	897			

CHANGES - REASONS

1. AMDT 17A DELETED TERMINAL ROUTE OSLEW TO OCAYO - DME FACILITY RESTRICTIONS.
2. AMDT 17A CHANGED BACKUP ALTIMETER SETTING NOTE - UPDATED CALCULATIONS.
3. REMOVED "CHART ASR" NOTE - ASR APPROACHES NO LONGER AVAILABLE.
4. ADDED CIRCLING ICON - NEW CIRCLING AREAS APPLIED.
5. S-33 HAT LOWERED FROM 669 TO 668 - TDZE UPDATED.
6. CIRCLING CATS A AND B HAA LOWERED FROM 658 TO 657 - AIRPORT ELEVATION UPDATED.
7. INCREASED CIRCLING MDA/VIS/HAA CAT C FROM 1340-1 3/4-658 TO 1480-2 1/4-797 AND CAT D FROM 1460-2 1/2-778 TO 1580-3-897 - NEW CIRCLING RADIUS AND CONTROLLING OBSTACLES.
8. UPDATED ALTERNATE MINIMUMS - NEW HAA AND CURRENT POLICY.
9. REPLACED "CHART NOTE: ADF REQUIRED" WITH EQUIPMENT REQUIREMENTS NOTE - CURRENT POLICY.
10. REMOVED "WHEN CONTROL TOWER CLOSED" NOTE - WAS BASED ON TOWER-CONTROLLED RUNWAY LIGHTS THAT ARE NOW PILOT-CONTROLLED.
11. ADDED NIGHT RESTRICTIONS TO RWY 15 AND 33 AND HELICOPTER NOTES - 20:1 PENETRATIONS.
12. INCREASED AIRPORT ELEVATION FROM 682 TO 683 AND TDZE FROM 671 TO 672 - UPDATED AIRPORT SURVEY.
13. REMOVED BACKUP ALTIMETER NOTES - REDUNDANT WEATHER SOURCES AVAILABLE.

PDF EDITS:
1. MAG VAR CHANGED FROM 5W/2020 TO 1E/1965.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZTL, CHA APP CON, AMGR

FLIGHT CHECKED BY

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-333) MEMO, DEC 22, 2017.

DEVELOPED BY

RUSS ROSLEWSKI
Mar 26, 2018

APPROVED BY

JULIE MORGAN
Digitally signed by
DEZ SILAGYI
Apr 03, 2018

OFFICE

OFFICE

AJV-5423

OFFICE

AJV-5420

DATE

DATE

03/12/2018

DATE

Digitally signed by
ROBERT G HAMILTON
Jun 07, 2018

TITLE
MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> JOHNSON COUNTY	<u>AIRPORT ID</u> K6A4	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 6	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> MOUNTAIN CITY	<u>STATE</u> TN
<u>AIRPORT ELEVATION</u> 2240	<u>TDZE</u> 2240	<u>SUPERSEDED</u> RNAV (GPS) RWY 6	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 07/02/2009	<u>MAG VAR</u> 7W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2010

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
ROANS	IAF	POGGO	NOPT	TF	FB	1.00	045.50	9.01	6100
HMV VORTAC	IAF	POGGO	NOPT	TF	FB	1.00	160.24	8.80	6100
POGGO	IF/IAF	RITCI		TF	FB	1.00	065.06	4.10	4800
RITCI		SOCKZ		TF	FB	1.00	065.10	2.00	4300
SOCKZ	FAF	RW06	MAP	TF	FO	0.30	065.13	6.24	
RW06	MAP	2640 MSL		CA			065.13		
2640 MSL		POGGO		DF	FO	1.00			6100

MISSED APPROACH

MAP:

LNAV: RW06

MISSED APPROACH INSTRUCTIONS:

CLIMBING LEFT TURN TO 6100 DIRECT POGGO AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD SW POGGO, LT, 065.06 INBOUND, 6100 FT. IN LIEU OF PT (IAF), MAX 10000.
3. FAC: 065.13FAF: SOCKZDIST FAF TO MAP: 6.24DIST FAF TO THLD: 6.24
4. MIN ALT:POGGO 6100, RITCI 4800, SOCKZ 4300
5. DIST TO THLD FROM OM:MM:IM:150 HAT:GS ANT:
6. MIN GP INCPT:GP ALT AT FAF :OM:MM:IM:
7. GP ANGLE:34:1: IS NOT CLEAR20:1: IS NOT CLEARTCH:
8. MSA FROM:RW06 7500

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA FOR CAT D SE OF RWY 6-24.
CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: RWY 6 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON HNV VORTAC AIRWAY RADIALS 108 CW 207.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ABINGDON ALTIMETER SETTING AND INCREASE ALL MDA 80 FEET.

ADDITIONAL FLIGHT DATA:

CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART FAS OBST: 3662 TREE 362429N/0815346W.

MINIMUMS:

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

ALTERNATE: NA

X

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	3900	1 1/4	1660	3900	1 1/2	1660	3900	3	1660	3900	3	1660			
CIRCLING	3900	1 1/4	1660	3900	1 1/2	1660	4280	3	2040	4300	3	2060			

CHANGES - REASONS

1. DELETED SOCKZ TO RW06: 3.05/40 IN ADDITIONAL FLIGHT DATA - FLIGHT INSPECTION RESULTS, OBSTACLES PENETRATE THE VDA SURFACE.
2. ADDED CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-10P(1).
3. ADDED 20:1 IS NOT CLEAR - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-7G(3).
4. ADDED A CA LEG TO MISSED APPROACH SEGMENT - IN ACCORDANCE WITH CURRENT CODING POLICY.
5. DELETED NOTE: DME/DME RNP-0.3 NA - REPLACED BY EQUIPMENT REQUIREMENT NOTE.
6. ADDED PBN REQUIREMENTS NOTE: RNP APCH - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-8.
7. DELETED NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA - REPLACED BY UPDATED NOTE.
8. ADDED NOTE: RWY 6 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED - FORMATTED IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-11K(3).
9. DELETED PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HNV VORTAC AIRWAY RADIALS 108 CW 207 - REPLACED BY UPDATED NOTE.
10. ADDED PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON HNV VORTAC AIRWAY RADIALS 108 CW 207 - FORMATTED IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-2-5G.
11. DELETED NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE VIRGINIA HIGHLANDS ALTIMETER SETTING AND INCREASE ALL MDA 80 FEET - REPLACED BY UPDATED NOTE.
12. ADDED NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ABINGDON ALTIMETER SETTING AND INCREASE ALL MDA 80 FEET - FORMATTED WITH CITY NAME VICE AIRPORT NAME IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-11O(4)(B).



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZTL, TRI APP CON, AMGR

FLIGHT CHECKED BY

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

DEVELOPED BY

PETER R. GUIMOND
*Digitally signed by
PETER R GUIMOND
Aug 07, 2018*

APPROVED BY

JULIE MORGAN
*Digitally signed by
JULIE A MORGAN
Aug 29, 2018*

OFFICE

OFFICE

AJV-5420

OFFICE

AJV-5420

DATE ROBERT G HAMILTON

Aug 28, 2018

DATE

08/07/2018

DATE

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> JOHNSON COUNTY	<u>AIRPORT ID</u> K6A4	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 24	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> MOUNTAIN CITY	<u>STATE</u> TN
<u>AIRPORT ELEVATION</u> 2240	<u>TDZE</u> 2240	<u>SUPERSEDED</u> RNAV (GPS) RWY 24	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 07/02/2009	<u>MAG VAR</u> 7W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2010

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
HMV VORTAC		DETPY		TF	FB	2.00	074.69	26.94	7800
DETPY	IAF	CASIS	NOPT	TF	FB	1.00	162.82	6.00	6600
CASIS	IF/IAF	KIDZI		TF	FB	1.00	252.85	3.60	5700
KIDZI		AMAKY		TF	FB	1.00	252.81	2.50	5000
AMAKY	FAF	MILCO	MAP	TF	FO	0.30	252.78	7.01	
MILCO	MAP	2640 MSL		CA			252.78		
2640 MSL		CASIS		DF	FO	1.00			6600

MISSED APPROACH

MAP:

LNAV: MILCO

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 6600 DIRECT CASIS AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD E CASIS, LT, 252.85 INBOUND, 6600 FT. IN LIEU OF PT (IAF), MAX 10000.

3. FAC: 252.78

FAF: AMAKY

DIST FAF TO MAP: 7.01

DIST FAF TO THLD: 7.50

4. MIN ALT: CASIS 6600, KIDZI 5700, AMAKY 5000

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:

6. MIN GP INCPT:

GP ALT AT FAF :

OM:

MM:

IM:

7. GP ANGLE:

34:1: IS NOT CLEAR

20:1: IS NOT CLEAR

TCH:

8. MSA FROM: MILCO 7500

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: RWY 24 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON HMV VORTAC AIRWAY RADIALS 010 CW 132.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ABINGDON ALTIMETER SETTING AND INCREASE ALL MDA 80 FEET.

ADDITIONAL FLIGHT DATA:

CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART PLANVIEW NOTE: FINAL APPROACH COURSE OFFSET 7.58 DEGREES.
FAS OBST: 4549 AAO 362639N/0814317W.
FAC CROSSES RWY C/L EXTENDED 3000 FT FROM THLD.

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	4880	1 1/4	2640	4880	1 1/2	2640	4880	3	2640	4880	3	2640			
CIRCLING	4880	1 1/4	2640	4880	1 1/2	2640	4880	3	2640	4880	3	2640			



CHANGES - REASONS

- 1. DELETED AMAKY TO RW24: 3.42/40 IN ADDITIONAL FLIGHT DATA - FLIGHT INSPECTION RESULTS, OBSTACLES PENETRATE THE VDA SURFACE.
- 2. ADDED CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-10P(1).
- 3. ADDED 20:1 IS NOT CLEAR - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-7G(3).
- 4. ADDED A CA LEG TO MISSED APPROACH SEGMENT - IN ACCORDANCE WITH CURRENT CODING POLICY.
- 5. DELETED NOTE: DME/DME RNP-0.3 NA - REPLACED BY EQUIPMENT REQUIREMENT NOTE.
- 6. ADDED PBN REQUIREMENTS NOTE: RNP APCH - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-8.
- 7. DELETED NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA - REPLACED BY UPDATED NOTE.
- 8. ADDED NOTE: RWY 24 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED - FORMATTED IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-11K(3).
- 9. DELETED PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HNV VORTAC AIRWAY RADIALS 064 CW 108 - REPLACED BY UPDATED NOTE.
- 10. ADDED PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON HNV VORTAC AIRWAY RADIALS 010 CW 132 - TURNS EXCEED 90 DEGREES. FORMATTED IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-2-5G.
- 11. DELETED NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE VIRGINIA HIGHLANDS ALTIMETER SETTING AND INCREASE ALL MDA 80 FEET - REPLACED BY UPDATED NOTE.
- 12. ADDED NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ABINGDON ALTIMETER SETTING AND INCREASE ALL MDA 80 FEET - FORMATTED WITH CITY NAME VICE AIRPORT NAME IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-11O(4)(B).
- 13. ADDED PLANVIEW NOTE: PROCEDURE OFFSET 7.59 DEGREES IN ADDITIONAL FLIGHT DATA - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-10G(1).



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZTL, TRI APP CON, AMGR

FLIGHT CHECKED BY

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

DEVELOPED BY

PETER R. GUIMOND

Digitally signed by
PETER R GUIMOND
Aug 07, 2018

APPROVED BY

JULIE MORGAN

Digitally signed by
JULIE A MORGAN
Aug 29, 2018

OFFICE

OFFICE

AJV-5422

OFFICE

AJV-5420

DATE

Digitally signed by
JULIE A MORGAN
Aug 29, 2018

DATE

08/07/2018

DATE

TITLE

MANAGER



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

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

CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
BURNET, TX	BURNET MUNI KATE CRADDOCK FIELD	3 JANUARY 2019	2

TAKEOFF MINIMUMS:

RWY 1, 19: STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

RWY 1: CLIMB HEADING 009.14 TO 1700 BEFORE TURNING LEFT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 01: TREES BEGINNING 502 FT FROM DER, 28 FT LEFT OF CENTERLINE, UP TO 55 FT AGL/1355 FT MSL.
TREES BEGINNING 1160 FT FROM DER, 52 FT RIGHT OF CENTERLINE, UP TO 55 FT AGL/1335 FT MSL.
TREES BEGINNING 1502 FT FROM DER, 30 FT LEFT OF CENTERLINE, UP TO 55 FT AGL/1375 FT MSL.

NOTE: RWY 19: TREES BEGINNING 158 FT FROM DER, 63 FT LEFT OF CENTERLINE, UP TO 55 FT AGL/1286 FT MSL.
TREES BEGINNING 1194 FT FROM DER, 15 FT RIGHT OF CENTERLINE, UP TO 55 FT AGL/1315 FT MSL.

CONTROLLING OBSTACLES:

OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 1: 1636 MSL TOWER 304513.00N/0981434.00W

REMARKS:

FLIGHT INSPECTED BY:	<i>Digitally signed by</i> ROBERT G HAMILTON Oct 10, 2018	OFFICE SYMBOL:	DATE:
JAMES KRENEK		FICO	10/05/2018
DEVELOPED BY:	<i>Digitally signed by</i> HEIDI SNIDER Sep 10, 2018	OFFICE SYMBOL:	DATE:
HEIDI SNIDER		AJV-5423	08/20/2018
APPROVED BY:	<i>Digitally signed by</i> ROBERT G HAMILTON Oct 10, 2018	OFFICE SYMBOL:	DATE:
JULIE MORGAN		AJV-5420	

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

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

OTHER:

ZHU, SJT FSS, APT MGR, STATE AVIATION DIR

CHANGES - REASONS:

1. ADDED TEXTUAL DEPARTURE PROCEDURES RWY 1 - CONTROLLING OBSTRUCTION OUTSIDE ICA, MITIGATED IAW 8260.46F.
2. ADDED CONTROLLING OBSTACLE - DOCUMENTED IAW 8260.46F.
3. UPDATED TAKEOFF OBSTACLE NOTES - OBSTACLE EVALUATION.

QUALITY
16
CHECKED

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

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

<u>AIRPORT</u> EASTERWOOD FIELD	<u>AIRPORT ID</u> KCLL	<u>PROCEDURE NAME</u> VOR OR TACAN RWY 11	<u>ORIGINAL/AMENDMENT</u> 19E	<u>CITY</u> COLLEGE STATION	<u>STATE</u> TX	
<u>AIRPORT ELEVATION</u> 321	<u>TDZE</u> 319	<u>SUPERSEDED</u> VOR OR TACAN RWY 10	<u>ORIGINAL/AMENDMENT</u> 19D	<u>DATED</u> 02/01/2018	<u>MAG VAR</u> 8E	<u>EPOCH YEAR</u> 1965
<u>FACILITY</u> CLL	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
CIGSO/15.00 DME CW	IAF	ILLED/15.00 DME	NOPT				15.00 DME ARC		2000
GASEC/15.00 DME CCW	IAF	ILLED/15.00 DME	NOPT				15.00 DME ARC		2000
ILLED/15.00 DME	IF	OKIGE/5.00 DME					100.08	10.00 (CLL R-280)	2000
OKIGE/5.00 DME		CLL VORTAC					100.08	5.00	1300

MISSED APPROACH

MAP:

2.61 NM AFTER CLL VORTAC OR AT 2.61 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3100 ON CLL VORTAC R-101 TO JUDDY INT/CLL 15.00 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L **SIDE OF COURSE** 280.08 **OUTBOUND** 2100 **FT WITHIN** 10 **MILES OF** *CLL VORTAC (IAF)
- 2.
3. **FAC:** 100.08 **FAF:** CLL VORTAC **DIST FAF TO MAP:** 2.61 **DIST FAF TO THLD:** 2.61
4. **MIN ALT:** CLL VORTAC 1300
8. **MSA FROM:** CLL VORTAC 360-120 3000, 120-360 2300

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: *PROCEDURE TURN NA FOR CAT E
CHART NOTE: RWY 11 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.



ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CLL VORTAC TO RW10: 3.36/50.
CHART CLL R-232 AT CIGSO.
CHART CLL R-318 AT GASEC.
CHART VDP AT 1.45 DME
DISTANCE VDP TO THLD 1.16 NM
CHART FAS OBST: 475 TOWER 303613N/0962216W.
HOLD E, RT, 280.75 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE; CAT D 900-2 3/4, CAT E 900-3

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-11	740	1	421	740	1	421	740	1 1/4	421	740	1 1/4	421	740	1 1/4	421
CIRCLING	860	1	539	880	1	559	1000	2	679	1180	2 3/4	859	1180	3	859

CHANGES - REASONS

1. PROC NAME REFERENCE RWY FROM 10 TO 11, ALL RWY 10 REFERENCES FROM 10 TO 11 - PER MVAR UPDATE.

PDF EDITS: (PB) 9/10/19

1. ADDED ASTERIK TO LINE 1, "MILES OF *CLL VORTAC" PAGE 1, 8260-5.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZHU, IAH APP CON, CLL ATCT, AMGR, ST. AV. DIR., ATA

FLIGHT CHECKED BY

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

DEVELOPED BY

PHILLIP BRANDENBURG

APPROVED BY

GEORGE DAVIS

OFFICE

OFFICE

OFFICE

DATE

DATE

DATE

Digitally signed by

ALLAN WILL

Oct 01, 2018

Digitally signed by

ALLAN WILL

Oct 01, 2018

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> HOUSTON-SOUTHWEST	<u>AIRPORT ID</u> KAXH	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 9	<u>ORIGINAL/AMENDMENT</u> 2A	<u>CITY</u> HOUSTON	<u>STATE</u> TX	
<u>AIRPORT ELEVATION</u> 69	<u>TDZE</u> 69	<u>SUPERSEDED</u> RNAV (GPS) RWY 9	<u>ORIGINAL/AMENDMENT</u> 2	<u>DATED</u> 05/10/2007	<u>MAG VAR</u> 5E	<u>EPOCH YEAR</u> 2000
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
ZABRO	IAF	BEBAY		TF	FB	1.00	359.11	5.00	2000
BEBAY	IF	JIVIX		TF	FB	1.00	089.11	6.30	2000
JIVIX	FAF	RW09	MAP	TF	FO	0.30	089.17	5.82	
RW09	MAP	469 MSL		CA			089.17		
469 MSL		WENPI		DF	FB	1.00			
WENPI		HEBUR		TF	FB	1.00	179.20	8.40	
HEBUR		KEEDS		TF	FO	1.00	266.77	10.55	2700

MISSED APPROACH

MAP:

LNAV: RW09

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2700 DIRECT WENPI AND ON TRACK 179.20 TO HEBUR AND ON TRACK 266.77 TO KEEDS.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT BEBAY

3. FAC: 089.17

FAF: JIVIX

DIST FAF TO MAP: 5.82

DIST FAF TO THLD: 5.82

4. MIN ALT: BEBAY 2000, JIVIX 2000

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:

6. MIN GP INCPT:

GP ALT AT FAF :

OM:

MM:

IM:

7. GP ANGLE:

34:1: IS NOT CLEAR

20:1: IS CLEAR

TCH:

8. MSA FROM: RW09 3100

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: CIRCLING RWY 27 NA AT NIGHT.
CHART NOTE: RWY 09 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.24 NM TO RW09
FAS OBST: 269 AAO 293032N/0953434W.
HOLD S, RT, 360.00 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	580	1	511	580	1	511	580	1 1/2	511		NA				
CIRCLING	620	1	551	620	1	551	620	1 1/2	551		NA				

CHANGES - REASONS

- REMOVED LPV AND LNAV/VNAV LINES OF MINIMA AND ALL ASSOCIATED NOTES AND DATA. - GQS 126 FOOT TREE, OFF AIRPORT NOT GOING TO BE RESOLVED PER FPT.
- "VIA" CHANGED TO "ON" IN MISSED APPROACH INSTRUCTIONS.
- FAS OBS CHANGED FROM 205 TOWER 293037N/0953032W TO 269 AAO 293032N/0953434W. - APPLIED 200 FOOT AAO.
- ADDED "20:1 IS CLEAR". - NO 20:1'S IDENTIFIED.
- ADDED CHART NOTE: CIRCLING RWY 27 NA AT NIGHT. - MED RISK 20:1 IDENTIFIED IN CIRC VISUAL AREA. UPDATED NOTE.
- ALTERNATE MINIMUMS CHANGED FROM NA TO STANDARD. - BOTH ALTIMETER SOURCES ARE ON WMSCR.
- SECONDARY ALTIMETER SOURCE NOTED ADDED TO BACK OF 8260-9 FOR CONTINGENCY PURPOSES.
- LNAV HAT/CIRCLING HAA CHANGED FROM 512 TO 511 AND 552 TO 551. - NEW AIRNAV DATA. ELEVATION AND TDZE CHANGED FROM 68 TO 69 FT.
- CHANGED CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA TO CHART NOTE: RWY 09 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. - ONLY DOCUMENTED 34:1'S IDENTIFIED.
- REMOVED CHART NOTE: DME/DME RNP-0.3 NA, ADDED PBN REQUIREMENT NOTES: RNP APCH.
- CHANGED CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT TO VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). - REMOVAL OF PA'S.
- DELETED "CHART PLANVIEW NOTE: RADAR REQUIRED" - RADAR NO LONGER REQUIRED ON GPS PROCEDURES.
- REMOVED "DO NOT CHART" FROM MISSED HOLDING INSTRUCTIONS.
- ADDED CA LEG TO TERMINAL ROUTES FOR CODING.



<u>AIRPORT</u> HOUSTON-SOUTHWEST	<u>AIRPORT ID</u> KAXH	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 9	<u>ORIGINAL/AMENDMENT</u> 2A	<u>CITY</u> HOUSTON	<u>STATE</u> TX
<u>COORDINATED WITH:</u>					
A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ <u>OTHER:</u> ZHU, AIRPORT MANAGER, ST.AV.DIR					
<u>FLIGHT CHECKED BY</u> GREGORY MILLS	<i>Digitally signed by</i> DAVID DANNER Oct 10, 2018	<u>OFFICE</u> FICO	<u>DATE</u> 10/2/18		
<u>DEVELOPED BY</u> LEO PALMER	<i>Digitally signed by</i> LEO PALMER Sep 05, 2018	<u>OFFICE</u> AJV-5421	<u>DATE</u> 08/22/2018		
<u>APPROVED BY</u> JULIE MORGAN	<i>Digitally signed by</i> DAVID DANNER Oct 10, 2018	<u>OFFICE</u> AJV-5420	<u>DATE</u>	<u>TITLE</u> MANAGER	



**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
KERRVILLE, TX	KERRVILLE MUNI/LOUIS SCHREINER FIELD	3 JANUARY 2019	2

TAKEOFF MINIMUMS:

RWY 12, 21: STANDARD.

RWY 3: 500-3 WITH MINIMUM CLIMB OF 390 FT PER NM TO 2600, OR STANDARD WITH MINIMUM CLIMB OF 455 FT PER NM TO 2400 OR 1300-3 FOR VCOA.

RWY 30: STANDARD WITH MINIMUM CLIMB OF 215 FT PER NM TO 2300 OR 1300-3 FOR VCOA.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

RWY 3, 30: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS KERRVILLE MUNI/LOUIS SCHREINER FIELD AT OR ABOVE 2800 BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 03: TREE 23 FT FROM DER, 465 FT LEFT OF CENTERLINE, 41 FT AGL/1631 FT MSL. TERRAIN 25 FT FROM DER, 401 FT RIGHT OF CENTERLINE, 1635 FT MSL. TERRAIN 36 FT FROM DER, 505 FT RIGHT OF CENTERLINE, 1647 FT MSL. VEHICLES ON ROAD, TERRAIN BEGINNING 45 FT FROM DER, 310 FT RIGHT OF CENTERLINE, UP TO 1649 FT MSL. TREES BEGINNING 239 FT FROM DER, 445 FT LEFT OF CENTERLINE, UP TO 47 FT AGL/1640 FT MSL. VEHICLE ON ROAD, TERRAIN BEGINNING 296 FT FROM DER, 352 FT RIGHT OF CENTERLINE, UP TO 1650 FT MSL. TREES BEGINNING 436 FT FROM DER, 344 FT LEFT OF CENTERLINE, UP TO 66 FT AGL/1664 FT MSL. VEHICLES ON ROAD, TERRAIN BEGINNING 496 FT FROM DER, 311 FT RIGHT OF CENTERLINE, UP TO 1652 FT MSL. TREES, VEHICLES ON ROAD BEGINNING 853 FT FROM DER, 117 FT RIGHT OF CENTERLINE, UP TO 38 FT AGL/1673 FT MSL. TREES BEGINNING 895 FT FROM DER, 46 FT RIGHT OF CENTERLINE, UP TO 31 FT AGL/1675 FT MSL. TREES BEGINNING 985 FT FROM DER, 96 FT RIGHT OF CENTERLINE, UP TO 26 FT AGL/1678 FT MSL. TREES BEGINNING 1030 FT FROM DER, 198 FT RIGHT OF CENTERLINE, UP TO 41 FT AGL/1684 FT MSL. POLES, VEHICLES ON ROAD, TRANSMISSION LINE, TREES BEGINNING 1176 FT FROM DER, 11 FT RIGHT OF CENTERLINE, UP TO 55 FT AGL/1715 FT MSL. POLE 1434 FT FROM DER, 418 FT LEFT OF CENTERLINE, 58 FT AGL/1672 FT MSL. TRANSMISSION LINE, POLE BEGINNING 1440 FT FROM DER, 414 FT LEFT OF CENTERLINE, UP TO 59 FT AGL/1674 FT MSL. POLE 1523 FT FROM DER, 772 FT LEFT OF CENTERLINE, 63 FT AGL/1698 FT MSL. TRANSMISSION LINE, TREES, WINDMILL, POLE, VEHICLE ON ROAD BEGINNING 1525 FT FROM DER, 28 FT LEFT OF CENTERLINE, UP TO 64 FT AGL/1705 FT MSL. TREES, VEHICLES ON ROAD, FENCE BEGINNING 2019 FT FROM DER, 37 FT RIGHT OF CENTERLINE, UP TO 33 FT AGL/1742 FT MSL. TREES, TERRAIN BEGINNING 2581 FT FROM DER, 576 FT RIGHT OF CENTERLINE, UP TO 1743 FT MSL. TREES BEGINNING 2717 FT FROM DER, 540 FT LEFT OF CENTERLINE, UP TO 29 FT AGL/1708 FT MSL. TREES, FENCE BEGINNING 2978 FT FROM DER, 804 FT LEFT OF CENTERLINE, UP TO 37 FT AGL/1733 FT MSL. TREES BEGINNING 3253 FT FROM DER, 920 FT LEFT OF CENTERLINE, UP TO 30 FT AGL/1738 FT MSL. TREES, POLE BEGINNING 3636 FT FROM DER, 1190 FT LEFT OF CENTERLINE, UP TO 33 FT AGL/1742 FT MSL. TREE 3905 FT FROM DER, 1490 FT RIGHT OF CENTERLINE, 30 FT AGL/1751 FT MSL. TREES BEGINNING 4069 FT FROM DER, 920 FT RIGHT OF CENTERLINE, UP TO 16 FT AGL/1753 FT MSL. TREES BEGINNING 4108 FT FROM DER, 1199 FT RIGHT OF CENTERLINE, UP TO 27 FT AGL/1773 FT MSL. TREE 4291 FT FROM DER, 1344 FT RIGHT OF CENTERLINE, 23 FT AGL/1776 FT MSL. TREES BEGINNING 4312 FT FROM DER, 1120 FT RIGHT OF CENTERLINE, UP TO 23 FT AGL/1796 FT MSL. FENCE, TREE BEGINNING 4440 FT FROM DER, 1207 FT RIGHT OF CENTERLINE, UP TO 4 FT AGL/1824 FT MSL. FENCE, TREE BEGINNING 4504 FT FROM DER, 1136 FT RIGHT OF CENTERLINE, UP TO 6 FT AGL/1832 FT MSL. TERRAIN, FENCE, TREE BEGINNING 4610 FT FROM DER, 1475 FT RIGHT OF CENTERLINE, UP TO 1869 FT MSL. TREES, FENCE, TERRAIN BEGINNING 4656 FT FROM DER, 347 FT RIGHT OF CENTERLINE, UP TO 14 FT AGL/1879 FT MSL. POLES BEGINNING 4892 FT FROM DER, 1415 FT LEFT OF CENTERLINE, UP TO 40 FT AGL/1753 FT MSL. POLE, TREES BEGINNING 5066 FT FROM DER, 1275 FT LEFT OF CENTERLINE, UP TO 39 FT AGL/1758 FT MSL. POLE, TREE BEGINNING 5204 FT FROM DER, 1373 FT LEFT OF CENTERLINE, UP TO 37 FT AGL/1760 FT MSL. TREE 5259 FT FROM DER, 1498 FT LEFT OF CENTERLINE, 34 FT AGL/1764 FT MSL. TREES BEGINNING 5329 FT FROM DER, 1203 FT LEFT OF CENTERLINE, UP TO 41 FT AGL/1769 FT MSL. TREE 5365 FT FROM DER, 1718 FT LEFT OF CENTERLINE, 33 FT AGL/1772 FT MSL. TREES, VEHICLE ON ROAD, POLES BEGINNING 5366 FT FROM DER, 1159 FT LEFT OF CENTERLINE, UP TO 32 FT AGL/1773 FT MSL. TREE 5569 FT FROM DER, 1423 FT LEFT OF CENTERLINE, 34 FT AGL/1775 FT MSL. POLE 5579 FT FROM DER, 1525 FT LEFT OF CENTERLINE, 28 FT AGL/1778 FT MSL. POLE BEGINNING 5639 FT FROM DER, 1125 FT LEFT OF CENTERLINE, UP TO 27 FT AGL/1800 FT MSL. POLE, TERRAIN, TREES BEGINNING 5667 FT FROM DER, 1228 FT LEFT OF CENTERLINE, UP TO 36 FT AGL/1809 FT MSL. TREE 5885 FT FROM DER, 1970 FT LEFT OF CENTERLINE, 28 FT AGL/1850 FT MSL. TREES, TERRAIN BEGINNING 5931 FT FROM DER, 1356 FT LEFT OF CENTERLINE, UP TO 26 FT AGL/1874 FT MSL. TREE 6068 FT FROM DER, 1968 FT LEFT OF CENTERLINE, 21 FT AGL/1890 FT MSL. TREES BEGINNING 1 NM FROM DER, 1442 FT LEFT OF CENTERLINE, UP TO 21 FT AGL/1892 FT MSL. TREE, VEHICLE ON ROAD, TERRAIN, FENCE BEGINNING 1 NM FROM DER, 1349 FT LEFT OF CENTERLINE, UP TO 1924 FT MSL. VEHICLE ON ROAD, TREE BEGINNING 1 NM FROM DER, 914 FT RIGHT OF CENTERLINE, UP TO 1902 FT MSL. VEHICLES ON ROAD BEGINNING 1 NM FROM DER, 1170 FT RIGHT OF CENTERLINE, UP TO 1903 FT MSL. TREES BEGINNING 1 NM FROM DER, 991 FT RIGHT OF CENTERLINE, UP TO 22 FT AGL/1921 FT MSL. TREE, VEHICLES ON ROAD BEGINNING 1.1 NM FROM DER, 735 FT RIGHT OF CENTERLINE, UP TO 29 FT AGL/1923 FT MSL. TREE, TERRAIN BEGINNING 1.1 NM FROM DER, 524 FT RIGHT OF CENTERLINE, UP TO 1927 FT MSL. TREES, VEHICLES ON ROAD, TERRAIN, POLES BEGINNING 1.1 NM FROM DER, 416 FT RIGHT OF CENTERLINE, UP TO 36 FT AGL/1929 FT MSL. BUILDING, TREES, VEHICLE ON ROAD BEGINNING 1.2 NM FROM DER, 1213 FT RIGHT OF CENTERLINE, UP TO 32 FT AGL/1931 FT MSL. TREES, VEHICLES ON ROAD, POLES, BUILDING, TERRAIN, TANK BEGINNING 1.2 NM FROM DER, ON

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KERRVILLE, TX	KERRVILLE MUNI/LOUIS SCHREINER FIELD	3 JANUARY 2019	2

AND RIGHT OF CENTERLINE, UP TO 35 FT AGL/1934 FT MSL. FENCE, TREE BEGINNING 1.3 NM FROM DER, 1576 FT LEFT OF CENTERLINE, UP TO 6 FT AGL/1925 FT MSL. BUILDING 1.3 NM FROM DER, 2597 FT LEFT OF CENTERLINE, 14 FT AGL/1934 FT MSL. TREE 1.3 NM FROM DER, 2558 FT LEFT OF CENTERLINE, 23 FT AGL/1943 FT MSL. BUILDING, TREES, POLES, VEHICLES ON ROAD BEGINNING 1.3 NM FROM DER, 1543 FT LEFT OF CENTERLINE, UP TO 41 FT AGL/1962 FT MSL. BUILDINGS, POLES, VEHICLES ON ROAD, TREES, FENCE, TANK, TERRAIN BEGINNING 1.3 NM FROM DER, 18 FT LEFT OF CENTERLINE, UP TO 32 FT AGL/1963 FT MSL. TREES, POLE, VEHICLES ON ROAD BEGINNING 1.4 NM FROM DER, 160 FT RIGHT OF CENTERLINE, UP TO 31 FT AGL/1941 FT MSL. TREES, VEHICLES ON ROAD, FENCE BEGINNING 1.4 NM FROM DER, 233 FT RIGHT OF CENTERLINE, UP TO 25 FT AGL/1947 FT MSL. TREES, POLES, VEHICLES ON ROAD BEGINNING 1.5 NM FROM DER, 196 FT RIGHT OF CENTERLINE, UP TO 25 FT AGL/1950 FT MSL. POLES, TREES, VEHICLES ON ROAD, FENCE, TERRAIN BEGINNING 1.5 NM FROM DER, 179 FT RIGHT OF CENTERLINE, UP TO 44 FT AGL/1961 FT MSL. TREES, VEHICLES ON ROAD, TERRAIN BEGINNING 1.6 NM FROM DER, 37 FT LEFT OF CENTERLINE, UP TO 25 FT AGL/1967 FT MSL. TREES, VEHICLES ON ROAD, POLE BEGINNING 1.7 NM FROM DER, 133 FT RIGHT OF CENTERLINE, UP TO 28 FT AGL/1962 FT MSL. VEHICLE ON ROAD, TREE BEGINNING 1.7 NM FROM DER, 1457 FT RIGHT OF CENTERLINE, UP TO 1963 FT MSL. TREES, VEHICLES ON ROAD BEGINNING 1.7 NM FROM DER, 1588 FT LEFT OF CENTERLINE, UP TO 18 FT AGL/1968 FT MSL. TREES, FENCE, VEHICLES ON ROAD BEGINNING 1.7 NM FROM DER, 15 FT RIGHT OF CENTERLINE, UP TO 22 FT AGL/1978 FT MSL. POLES, TREES, VEHICLES ON ROAD, TERRAIN, BUILDING BEGINNING 1.7 NM FROM DER, 196 FT RIGHT OF CENTERLINE, UP TO 36 FT AGL/1982 FT MSL. VEHICLES ON ROAD, TREE BEGINNING 1.7 NM FROM DER, 2149 FT LEFT OF CENTERLINE, UP TO 1969 FT MSL. POLES, TREES, VEHICLES ON ROAD BEGINNING 1.7 NM FROM DER, 906 FT LEFT OF CENTERLINE, UP TO 39 FT AGL/1976 FT MSL. POLE, TREES, VEHICLES ON ROAD BEGINNING 1.7 NM FROM DER, 76 FT RIGHT OF CENTERLINE, UP TO 45 FT AGL/1994 FT MSL. POLE, TREE, VEHICLE ON ROAD, TERRAIN BEGINNING 1.7 NM FROM DER, 17 FT LEFT OF CENTERLINE, UP TO 40 FT AGL/1986 FT MSL. TREE, VEHICLE ON ROAD, TANK BEGINNING 1.8 NM FROM DER, 271 FT RIGHT OF CENTERLINE, UP TO 36 FT AGL/2000 FT MSL. TREES BEGINNING 1.8 NM FROM DER, 88 FT RIGHT OF CENTERLINE, UP TO 27 FT AGL/2010 FT MSL. POLES, FENCE, BUILDINGS, TREES, VEHICLES ON ROAD, TERRAIN BEGINNING 1.8 NM FROM DER, ON CENTERLINE, UP TO 43 FT AGL/2022 FT MSL. VEHICLES ON ROAD, TREES, POLE BEGINNING 1.8 NM FROM DER, 84 FT LEFT OF CENTERLINE, UP TO 1989 FT MSL. TREES, POLES, VEHICLES ON ROAD, BUILDING, TERRAIN BEGINNING 1.8 NM FROM DER, 173 FT LEFT OF CENTERLINE, UP TO 44 FT AGL/2003 FT MSL. TREE, TERRAIN, BUILDINGS, VEHICLES ON ROAD, POLE BEGINNING 1.9 NM FROM DER, 267 FT LEFT OF CENTERLINE, UP TO 34 FT AGL/2025 FT MSL. WINDMILL, BUILDINGS, TREES, TERRAIN, VEHICLES ON ROAD, POLES, TANK, TRANSMISSION LINE BEGINNING 1.9 NM FROM DER, 34 FT LEFT OF CENTERLINE, UP TO 52 FT AGL/2044 FT MSL. TRANSMISSION LINE, TREE BEGINNING 2.4 NM FROM DER, 1351 FT LEFT OF CENTERLINE, UP TO 116 FT AGL/2077 FT MSL. TRANSMISSION LINES, TREES BEGINNING 2.4 NM FROM DER, 524 FT LEFT OF CENTERLINE, UP TO 108 FT AGL/2078 FT MSL. TRANSMISSION LINES 2.5 NM FROM DER, 866 FT RIGHT OF CENTERLINE, 103 FT AGL/2042 FT MSL.

NOTE: RWY 12: TERRAIN BEGINNING 76 FT FROM DER, 189 FT LEFT OF CENTERLINE, UP TO 1593 FT MSL. TREE 289 FT FROM DER, 448 FT RIGHT OF CENTERLINE, 32 FT AGL/1605 FT MSL. VEHICLES ON ROAD BEGINNING 517 FT FROM DER, 617 FT LEFT OF CENTERLINE, UP TO 1608 FT MSL. TREE 625 FT FROM DER, 442 FT RIGHT OF CENTERLINE, 33 FT AGL/1607 FT MSL.

NOTE: RWY 21: FENCE, TERRAIN BEGINNING 1 FT FROM DER, 145 FT RIGHT OF CENTERLINE, UP TO 1583 FT MSL. VEHICLES ON ROAD, SIGN, TERRAIN BEGINNING 13 FT FROM DER, 125 FT LEFT OF CENTERLINE, UP TO 1576 FT MSL. POLE 838 FT FROM DER, 593 FT RIGHT OF CENTERLINE, 35 FT AGL/1595 FT MSL. POLE, TREES BEGINNING 893 FT FROM DER, 422 FT RIGHT OF CENTERLINE, UP TO 41 FT AGL/1602 FT MSL. TREES BEGINNING 975 FT FROM DER, 277 FT RIGHT OF CENTERLINE, UP TO 54 FT AGL/1608 FT MSL. TREES BEGINNING 1291 FT FROM DER, 284 FT RIGHT OF CENTERLINE, UP TO 80 FT AGL/1610 FT MSL. TREE 1439 FT FROM DER, 250 FT RIGHT OF CENTERLINE, 89 FT AGL/1619 FT MSL. ANTENNA 2904 FT FROM DER, 870 FT RIGHT OF CENTERLINE, 102 FT AGL/1655 FT MSL. TREE 4950 FT FROM DER, 1649 FT RIGHT OF CENTERLINE, 48 FT AGL/1704 FT MSL. TREE, BUILDING BEGINNING 4963 FT FROM DER, 1520 FT RIGHT OF CENTERLINE, UP TO 50 FT AGL/1710 FT MSL.

NOTE: RWY 30: VEHICLE ON ROAD 1 FT FROM DER, 477 FT LEFT OF CENTERLINE, 1577 FT MSL. TREE 190 FT FROM DER, 493 FT LEFT OF CENTERLINE, 28 FT AGL/1584 FT MSL. TREE 210 FT FROM DER, 514 FT LEFT OF CENTERLINE, 41 FT AGL/1592 FT MSL. POLE, TREE, BUILDING, LIGHTING BEGINNING 244 FT FROM DER, 208 FT LEFT OF CENTERLINE, UP TO 33 FT AGL/1594 FT MSL. FENCE BEGINNING 324 FT FROM DER, 330 FT RIGHT OF CENTERLINE, UP TO 11 FT AGL/1582 FT MSL. VEHICLES ON ROAD, FENCE BEGINNING 329 FT FROM DER, 271 FT RIGHT OF CENTERLINE, UP TO 1592 FT MSL. TREE 404 FT FROM DER, 521 FT RIGHT OF CENTERLINE, 35 FT AGL/1610 FT MSL. TREES, POLES BEGINNING 407 FT FROM DER, 412 FT LEFT OF CENTERLINE, UP TO 51 FT AGL/1598 FT MSL. POLES, BUILDING, TREES BEGINNING 443 FT FROM DER, 32 FT RIGHT OF CENTERLINE, UP TO 39 FT AGL/1615 FT MSL. TREE 599 FT FROM DER, 500 FT LEFT OF CENTERLINE, 51 FT AGL/1605 FT MSL. TREES BEGINNING 621 FT FROM DER, 19 FT LEFT OF CENTERLINE, UP TO 51 FT AGL/1606 FT MSL. TREES BEGINNING 874 FT FROM DER, 104 FT LEFT OF CENTERLINE, UP TO 83 FT AGL/1614 FT MSL. TREE 1748 FT FROM DER, 937 FT LEFT OF CENTERLINE, 93 FT AGL/1619 FT MSL.



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

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KERRVILLE, TX	KERRVILLE MUNI/LOUIS SCHREINER FIELD	3 JANUARY 2019	2

CONTROLLING OBSTACLES:

RWY 3: 1927 FT MSL BLDG 300017.22N/0990443.35W (CLIMB GRADIENT), 2504 FT MSL TOWER 300342.32N/0990344.17W (CLIMB TO ALTITUDE), 2078 FT MSL TRANSMISSION LINE 300126.05N/0990341.82W (CEILING), 2042 FT MSL TRANSMISSION LINE 300117.43N/0990316.00W (VISIBILITY). 1879 FT MSL TREE 295941.86N/0990416.42W (CLIMB GRADIENT).

RWY 30: 2100 FT MSL AAO 300000.95N/0990904.51W (CLIMB GRADIENT & CLIMB-TO ALTITUDE).

RWY 3, 30 (VCOA): 2208 FT MSL AAO 300224.00N/0990330.00W, 2504 FT MSL TOWER 300342.32N/0990344.17W.

REMARKS:

FLIGHT INSPECTED BY:

JAMES KRENEK

Digitally signed by

MARK D ADAMS

Oct 13, 2018

OFFICE SYMBOL:

FICO

DATE:

10/05/2018

DEVELOPED BY:

COLTON CROWDER

Digitally signed by

COLTON CROWDER

Aug 15, 2018

OFFICE SYMBOL:

AJV-5431

DATE:

07/25/2018

APPROVED BY:

PAT MULQUEEN

Digitally signed by

MARK D ADAMS

Oct 13, 2018

OFFICE SYMBOL:

AJV-5430

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

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

☐☒☒☐☐☒

OTHER:

ZHU, AMGR, STATE AVIATION DIRECTOR

CHANGES - REASONS:

1. RWY 3 MINIMUMS CHANGED FROM "STANDARD WITH MINIMUM CLIMB OF 377 FT PER NM TO 2800 OR 1000-3 FOR CLIMB IN VISUAL CONDITIONS" TO "500-3 WITH MINIMUM CLIMB OF 390 FT PER NM TO 2600, OR STANDARD WITH MINIMUM CLIMB OF 455 FT PER NM TO 2400 OR 1300-3 FOR VCOA" - NEW CONTROLLING OBSTACLE AND APPLICATION OF NEW CRITERIA IAW 8260.3C, 14-1-6 B(3) AND 8260.46F.
2. RWY 30 TAKEOFF MINIMUMS: CLIMB GRADIENT CHANGED FROM 216 FT PER NM TO 215 FT PER NM - NEW CONTROLLING OBSTACLE AND APPLICATION OF NEW CRITERIA IAW 8260.3C, AND 8260.46F.
3. RWY 30 TAKEOFF MINIMUMS: CLIMB GRADIENT TERMINATION ALTITUDE CHANGED FROM 2500 TO 2300 - NEW CONTROLLING OBSTACLE AND APPLICATION OF NEW CRITERIA IAW 8260.3C, AND 8260.46F.
4. INCREASED VCOA CEILING FROM 1000 TO 1300 - NEW CONTROLLING OBSTACLE AND APPLICATION OF NEW CRITERIA IAW 8260.3C, AND 8260.46F.
5. UPDATED ALL TAKEOFF OBSTACLE NOTES - NEW SURVEY AND RESULTS.
6. VCOA INSTRUCTIONS MOVED FROM TEXTUAL DEPARTURE PROCEDURES BLOCK AND CHANGED FROM "RWYS 3, 30, FOR CLIMB IN VISUAL CONDITIONS: CROSS KERRVILLE MUNI/LOUIS SCREINER FIELD AT OR ABOVE 2600 FT MSL BEFORE PROCEEDING ON COURSE" TO "RWY 3, 30: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS KERRVILLE MUNI/LOUIS SCHREINER FIELD AT OR ABOVE 2800 BEFORE PROCEEDING ON COURSE." - VERBIAGE CHANGED PER CRITERIA, ALTITUDE INCREASED BASED ON NEW CONTROLLING OBSTACLE; NEW 8260-15A FORM.
7. ADDED "ALPA" TO LIST OF "COORDINATED WITH" AGENCIES - NEW 8260-15A FORM.



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

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<u>AIRPORT</u> PORT ISABEL-CAMERON COUNTY	<u>AIRPORT ID</u> KPIL	<u>PROCEDURE NAME</u> VOR/DME-B	<u>ORIGINAL/AMENDMENT</u> 3A	<u>CITY</u> PORT ISABEL	<u>STATE</u> TX	
<u>AIRPORT ELEVATION</u> 19	<u>TDZE</u>	<u>SUPERSEDED</u> VOR/DME-B	<u>ORIGINAL/AMENDMENT</u> 3	<u>DATED</u> 10/30/2003	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u> CANCEL		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>

PROCEDURE CANCELLED EFFECTIVE 3 JANUARY 2019

MISSED APPROACH

MAP:

MISSED APPROACH INSTRUCTIONS:

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)
2.				
3. FAC:	FAF:	DIST FAF TO MAP:	DIST FAF TO THLD:	
4. MIN ALT:				
8. MSA FROM:				

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

MINIMUMS:

QUALITY
24
CHECKED

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

ALTERNATE: NA ☐

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA

CHANGES - REASONS

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZHU, VALLEY APP CON, AMGR

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY

Digitally signed by
ERIC N SUSKI
Sep 08, 2018

OFFICE

AJV-5411

DATE

08/14/2018

APPROVED BY

GEORGE DAVIS

Digitally signed by
BEV L BORDY
Sep 27, 2018

OFFICE

AJV-5410

DATE

TITLE
MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> BROOKNEAL/CAMPBELL COUNTY	<u>AIRPORT ID</u> K0V4	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 24	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> BROOKNEAL	<u>STATE</u> VA	
<u>AIRPORT ELEVATION</u> 597	<u>TDZE</u> 596	<u>SUPERSEDED</u> RNAV (GPS) RWY 24	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 06/22/2017	<u>MAG VAR</u> 9W	<u>EPOCH YEAR</u> 2000
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
LYH VOR/DME		IRAXE		TF	FB	1.00	083.33	8.10	3200
IRAXE	IAF	WUGAD	NOPT	TF	FB	1.00	109.92	6.80	3000
WUGAD	IF/IAF	MEHHO		TF	FB	1.00	197.56	3.72	2200
MEHHO	FAF	OVMUY/3.00 NM TO RW24		TF	FB	0.30	227.24	1.92	
OVMUY/3.00 NM TO RW24		SOZIY	MAP	TF	FO	0.30	227.24	3.00	
SOZIY	MAP	1000 MSL		CA			227.24		1000
1000 MSL		WUGAD		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LP: SOZIY
 LNAV: SOZIY

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1000 THEN CLIMBING RIGHT TURN TO 3000 DIRECT WUGAD AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N WUGAD, RT, 197.56 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 227.24FAF: MEHHODIST FAF TO MAP: 4.92DIST FAF TO THLD: 5.05

4. MIN ALT: WUGAD 3000, MEHHO 2200, OVMUY/3.00 NM TO RW24 1580

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

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

7. GP ANGLE:34:1: IS CLEAR20:1: IS CLEARTCH:

8. MSA FROM: SOZIY 4100

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON LYH VOR/DME AIRWAY RADIALS 014 CW 081.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LYNCHBURG RGNL/PRESTON GLENN FLD ALTIMETER SETTING AND INCREASE ALL MDA 100 FEET.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON
CHART PLANVIEW NOTE: FINAL APPROACH COURSE OFFSET 14.96 DEGREES
FICTITIOUS THRESHOLD POINT (CFFDD) 370836.6200N/0790032.4900W (DO NOT CHART)
MEHHO TO RW24: 3.00/45.
CHART FARMVILLE MOA
WAAS CHANNEL #97334
REFERENCE PATH ID: W24A
CHART FAS OBST: 675 TREE 371002N/0785857W, 695 TREE 370843N/0790043W.
856 AAO 371258N/0785838W.
FAC CROSSES RWY C/L EXTENDED 3073 FT FROM THLD.
FTP HAE: 148.1 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LP MDA	940	1	344	940	1	344		NA			NA				
LNAV MDA	960	1	364	960	1	364		NA			NA				
CIRCLING	1120	1	523	1180	1	583		NA			NA				

CHANGES - REASONS

1. CHANGED LYNCHBURG (LYH) VORTAC TO LYNCHBURG VOR/DME - VOR MON.
2. DELETED "CHART NOTE: DME/DME RNP-0.3 NA - ADDED PBN REQUIREMENTS NOTE: "RNP APCH".
3. INCORPORATED CHANGES FROM P-NOTAM FOR AMDT 1A INTO FORM - IAW 8260-19H PARA 8-3-4C(3).
4. ADDED MAX HOLDING 6000 FT AT WUGAD - MATCHED MAX HOLDING ALTITUDE ON WUGAD 8260-2.



COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZDC, ROA APP CON, AIRPORT MANAGER, VA DOT

FLIGHT CHECKED BY

OFFICE

DATE

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

Digitally signed by

DEVELOPED BY

DONALD H LANIER

OFFICE

DATE

LONNIE EVERHART (MICHAEL NOLAN)

Digitally signed by

DONALD H LANIER

Oct 12, 2018

AJV-5400

08/30/2018

APPROVED BY

Digitally signed by

Oct 12, 2018

OFFICE

DATE

TITLE

LONNIE EVERHART

DONALD H LANIER

Oct 12, 2018

AJV-5400

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	0V4
RUNWAY	RW24
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W24A
LTP/FTP LATITUDE	370836.6200N
LTP/FTP LONGITUDE	0790032.4900W
LTP/FTP ELLIPSOIDAL HEIGHT	+01481
FPAP LATITUDE	370726.4200N
FPAP LONGITUDE	0790141.4700W
THRESHOLD CROSSING HEIGHT (TCH)	00045.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	49429F5E

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+01795
FPAP ORTHOMETRIC HEIGHT	+01795



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

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
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<u>AIRPORT</u> LYNCHBURG RGNL/PRESTON GLENN FLD	<u>AIRPORT ID</u> KLYH	<u>PROCEDURE NAME</u> ILS OR LOC RWY 4	<u>ORIGINAL/AMENDMENT</u> 17B	<u>CITY</u> LYNCHBURG	<u>STATE</u> VA
<u>AIRPORT ELEVATION</u> 938	<u>TDZE</u> 905	<u>SUPERSEDED</u> ILS OR LOC RWY 4	<u>ORIGINAL/AMENDMENT</u> 17A	<u>DATED</u> 01/07/2016	<u>MAG VAR</u> 8W
<u>FACILITY</u> I-LYH	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1995

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
HEMEV/LYH VOR/DME 9.98 DME		BOJAR LOM	IAF				103.21	9.60	3000
SYCAM INT/LYH VOR/DME 14.31 DME	IAF	KILBE INT/LYH VOR/DME 9.98 DME	NOPT				334.00	6.56 (SBV R-334)	3000
HEMEV/LYH VOR/DME 9.98 DME CCW	IAF	KILBE INT/LYH VOR/DME 9.98 DME	NOPT				9.98 DME ARC (LYH LR-228)		3000
LOSEC/LYH VOR/DME 9.98 DME CW	IAF	KILBE INT/LYH VOR/DME 9.98 DME	NOPT				9.98 DME ARC (LYH LR-204)		3000
KILBE INT	IF	LELYE/LYH VOR/DME 3.76 DME					035.80	6.23 (I-LYH)	2900
LELYE/LYH VOR/DME 3.76 DME		BOJAR LOM					035.80	4.00	2100

MISSED APPROACH

MAP:

ILS: DA
 LOC: 3.56 NM AFTER BOJAR LOM

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1800 THEN CLIMBING RIGHT TURN TO 3500 ON HEADING 080 AND LYH VORTAC R-053 TO SWARM INT/LYH 20.01 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1800 THEN CLIMBING LEFT TURN TO 3000 DIRECT BOJAR LOM AND HOLD. (ADF REQUIRED)



PROFILE:

1. PT L SIDE OF COURSE 215.80 OUTBOUND 3000 FT WITHIN 10 MILES OF BOJAR LOM (IAF)

2.

3. FAC: 035.80 FAF: BOJAR LOM PFAF: (CFBLT) DIST FAF TO MAP: 3.56 DIST FAF TO THLD: 3.56

4. MIN ALT: LELYE/LYH VOR/DME 3.76 DME 2900, BOJAR LOM 2100*

5. DIST TO THLD FROM OM: MM: IM: 150 HAT: GS ANT: 983

6. MIN GS INCPT: 2900 GS ALT AT PFAF : (CFBLT) 2900 OM: 2092 MM: IM:

7. GP ANGLE: 3.00 34:1: 20:1: TCH: 54.9

8. MSA FROM: LYH VOR/DME 090-180 2700, 180-270 3300, 270-090 5500

EQUIPMENT REQUIREMENTS NOTES:

ADF REQUIRED FOR LOC ONLY.
DME REQUIRED.

NOTES:

*LOC ONLY.
CHART NOTE: CIRCLING RWY 17 NA AT NIGHT.
CHART NOTE: DME FROM LYH VOR/DME. SIMULTANEOUS RECEPTION OF I-LYH AND LYH DME REQUIRED.
CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART LYH R-283 AT HEMEV.
CHART LYH R-081 AT LOSEC.
CHART FAS OBST: 1079 TREE 371752N/0791332W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SW BOJAR LOM, RT, 035.80 INBOUND.
HOLD NE, LT, 233.28 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-ILS 04**	1105	2400	200	1105	2400	200	1105	2400	200	1105	2400	200			
S-LOC 04	1320	2400	415	1320	2400	415	1320	4000	415	1320	4000	415			
CIRCLING	1660	1	722	1780	1	842	1800	2 1/2	862	1800	2 3/4	862			

CHANGES - REASONS

1. ADDED CHART NOTE: CIRCLING RWY 17 NA AT NIGHT. - RWY 17 20:1 PENETRATORS (AIRPORT IDENTIFIED.)
2. CHANGED ALL REFERENCES TO LYH VORTAC TO LYH VOR/DME. - LYH VORTAC CHANGING TO VOR/DME.
3. INCORPORATED AMENDMENT 17A - P-NOTAM 5/4428.

PDF EDITS
1. ADD PFAF: (CFBLT) TO LINE 3 AND 6 OF PROFILE VIEW.
2. CHANGE PFAF TO PFAF IN LINE 6 OF PROFILE VIEW.
3. ADD IAF TO FIX TYPE FOR BOJAR LOM IN TERMINAL ROUTES.



COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZDC, ROA APP CON, LYH ATCT, LYH AMGR, ATA

FLIGHT CHECKED BY

OFFICE

DATE

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

DEVELOPED BY

Digitally signed by

DONALD H LANIER

OFFICE

DATE

LIAM DONAHUE **LIAM DONAHUE**

Sep 27, 2018

AJV-5431

08/09/2018

APPROVED BY

Sep 11, 2018

OFFICE

DATE

TITLE

PATRICK MULQUEEN *Digitally signed by*
DONALD H LANIER
Sep 27, 2018

AJV-5430

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> LYNCHBURG RGNL/PRESTON GLENN FLD	<u>AIRPORT ID</u> KLYH	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 4	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> LYNCHBURG	<u>STATE</u> VA
<u>AIRPORT ELEVATION</u> 938	<u>TDZE</u> 905	<u>SUPERSEDED</u> RNAV (GPS) RWY 4	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 01/07/2016	<u>MAG VAR</u> 8W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1995

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
LYH VOR/DME		KILBE		TF	FO	2.00	218.49	9.98	3000
AYARA	IAF	KILBE	NOPT	TF	FB	1.00	079.02	9.22	3000
SYCAM	IAF	KILBE	NOPT	TF	FB	1.00	336.85	6.56	3000
KILBE	IF/IAF	KOECK		TF	FB	1.00	035.71	7.77	2900
KOECK	FAF	CAPAB/3.00 NM TO RW04		TF	FB	0.30	035.77	3.02	
CAPAB		RW04	MAP	TF	FO	0.30	035.77	3.00	
RW04	MAP	1175 MSL		CA			035.77		
1175 MSL		JIXOX		DF	FB	1.00			
JIXOX		SWARM		TF	FO	1.00	075.37	11.76	3500

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW04

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3500 DIRECT JIXOX AND TRACK 075.37 TO SWARM AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2.	HOLD SW KILBE, RT, 035.71 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.				
3. FAC:	035.77	FAF: KOECK	DIST FAF TO MAP: 6.02	DIST FAF TO THLD: 6.02	
4. MIN ALT:	KILBE 3000, KOECK 2900, CAPAB/3.00 NM TO RW04 1900*				
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	270 HAT: 0.70	GS ANT:
6. MIN GP INCPT: 2900	GP ALT AT FAF : KOECK 2900			OM:	MM: IM:
7. GP ANGLE: 3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 57.8		
8. MSA FROM:	RW04 5500				

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 47C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT LYH VOR/DME ON V470 EAST BOUND.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV CAT A AND B VISIBILITY TO RVR 5000.
CHART NOTE: CIRCLING RWY 17 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.42 NM TO RW04*
*LNAV ONLY
WAAS CHANNEL #58205
REFERENCE PATH ID: W04A
CHART FAS OBST: 1088 TOWER 371850N/0791314W.
HOLD NE, LT, 237.30 INBOUND
LTP HAE: 240.4 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT B 900-2, CAT C 900-2 1/2, CAT D 900-2 3/4

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	1175	4000	270	1175	4000	270	1175	4000	270	1175	4000	270			
LNAV/VNAV DA	1394	6000	489	1394	6000	489	1394	6000	489	1394	6000	489			
LNAV MDA	1400	4000	495	1400	4000	495	1400	5000	495	1400	5000	495			
CIRCLING	1660	1	722	1780	1 1/4	842	1800	2 1/2	862	1800	2 3/4	862			



CHANGES - REASONS

- 1. CHANGED ALL REFERENCES TO LYH VORTAC TO LYH VOR/DME. - LYH VORTAC CHANGING TO VOR/DME.
- 2. LPV DA 1175 ALL CATS. LNAV/VNAV DA 1394 ALL CATS. LNAV HAT 495 ALL CATS AND VISIBILITY CAT C RVR 5000. TDZE 905. CIRCLING CAT A MDA 1660/HAA 722, CAT B MDA 1780/HAA 842. CHART CIRCLING ICON. ALTERNATE MINIMUMS STANDARD, EXCEPT CAT B 900-2, CAT C 900-2 1/2, CAT 0 900-2 3/4. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA, AND CHANGED 34:1 IS NOT CLEAR TO: CLEAR. - P-NOTAM 5/4424 (AMDT ORIG-A).
- 3. CHANGED MALSR TO ALS IN INOPERATIVE NOTE. - FAAO 8260.19H PAGE 8-78.
- 4. LTP COORDINATES CHANGED FROM 371852.9940N/0791228.7050W TO 371852.9795N/0791228.6885W, COURSE WIDTH AT THRESHOLD FROM 96.75 TO 106.75, LENGTH OFFSET FROM 0000 TO 0584, CRC REMAINDER FROM B6208A32 TO 59689D69 AND LTP/FPAP ORTHOMETRIC HEIGHTS FROM 02725 TO 02721 IN FAS DATA. - NEW FAS DATA PULL.
- 5. ADDED CHART NOTE: CIRCLING RWY 17 NA AT NIGHT. - RWY 17 20:1 PENETRATORS (AIRPORT IDENTIFIED.)
- 6. CHANGED VIA 075.37 TRACK TO SWARM TO TRACK 075.37 TO SWARM. - VIA NO LONGER USED.
- 7. CHANGED 'VIA' TO 'ON' IN NA FOR ARRIVALS AT LHY VORTAC NOTE. - VIA NO LONGER USED.
- 8. REMOVED DME/DME RNP-0.3 NA NOTE AND ADDED RNP APPROACH TO PBN REQUIREMENTS NOTE. - FAAO 8260.19H PARAGRAPH 1-1-5 F (14).
- 9. REMOVED FAHRENHEIT TEMPERATURES FROM THE BARO-VNAV RESTRICTIONS. - FAAO 8260.19H PARAGRAPH 8-6-9 S.
- 10. ADDED CA LEG TO MISSED APPROACH. - FOR CODING PURPOSES.

PDF EDITS:

- 1. REMOVED PENETRATING OBSTACLE FROM LPV AND LNAV MISSED APPROACH SECTIONS OF THE 8260-9.



COORDINATED WITH:

A4A

☐

ALPA

☒

AOPA

☒

APA

☐

HAI

☐

NBAA

☒

OTHER:

ROA APP CON, KLYH ATCT, KLYH APRT MGR., ATA

FLIGHT CHECKED BY

JOHN D JEFFERS

Digitally signed by

DONALD H LANIER

Oct 15, 2018

DEVELOPED BY

LIAM DONAHUE

Digitally signed by

LIAM DONAHUE

Sep 25, 2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

DONALD H LANIER

Oct 15, 2018

OFFICE

FICO

OFFICE

AJV-5431

OFFICE

AJV-5430

DATE

10/10/18

DATE

08/03/2018

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KLYH
RUNWAY	RW04
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W04A
LTP/FTP LATITUDE	371852.9795N
LTP/FTP LONGITUDE	0791228.6885W
LTP/FTP ELLIPSOIDAL HEIGHT	+02404
FPAP LATITUDE	371955.0800N
FPAP LONGITUDE	0791147.7000W
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	0584
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER	59689D69

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+02721
FPAP ORTHOMETRIC HEIGHT	+02721



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> LYNCHBURG RGNL/PRESTON GLENN FLD	<u>AIRPORT ID</u> KLYH	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 22	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> LYNCHBURG	<u>STATE</u> VA
<u>AIRPORT ELEVATION</u> 938	<u>TDZE</u> 938	<u>SUPERSEDED</u> RNAV (GPS) RWY 22	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 01/07/2016	<u>MAG VAR</u> 8W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1995

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
LYH VOR/DME		KUJUM		TF	FO	2.00	034.06	15.70	4400
CLYFF	IAF	KUJUM	NOPT	TF	FB	1.00	172.72	11.15	4400
RADIA	IAF	KUJUM	NOPT	TF	FB	1.00	128.28	13.60	4400
SWARM	IAF	KUJUM	NOPT	TF	FB	1.00	283.80	8.08	4400
KUJUM	IF/IAF	JIXOX		TF	FB	1.00	215.87	6.02	2500
JIXOX	FAF	RW22	MAP	TF	FO	0.30	215.84	4.68	
RW22	MAP	1250 MSL		CA			215.84		
1250 MSL		KUCEC		DF	FB	1.00			
KUCEC		LYH VOR/DME		TF	FO	1.00	206.83	3.03	3000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW22

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT KUCEC AND TRACK 206.83 TO LYH VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD NE KUJUM, RT, 215.87 INBOUND, 4400 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 215.84FAF: JIXOXDIST FAF TO MAP: 4.68DIST FAF TO THLD: 4.68
4. MIN ALT: KUJUM 4400, JIXOX 2500
5. DIST TO THLD FROM OM:MM:IM:150 HAT:312 HAT: 0.82GS ANT:
6. MIN GP INCPT: 2500GP ALT AT FAF : JIXOXOM:MM:IM:
7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 51.0
8. MSA FROM: RW22 5500

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 47C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT LYH VORTAC ON V16-260 WEST BOUND.
CHART NOTE: RWY 22 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PLANVIEW AND PROFILE NOTE: FOR LNAV/VNAV FLY VISUAL TO AIRPORT, 216.00 DEGREES- 3 MILES.
CHART NOTE: CIRCLING RWY 17 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
WAAS CHANNEL #97705
REFERENCE PATH ID: W22A
CHART FAS OBST: 1469 TWR 372057N/0791004W.
HOLD SW, RT, 030.41 INBOUND
LTP HAE: 254.1 M

MINIMUMS:

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

ALTERNATE: NA

☐

CAT A, B 1100-2, CAT C, D 1100-3

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	1250	1	312	1250	1	312	1250	1	312	1250	1	312			
LNAV/VNAV DA	1939	2	1001	1939	2	1001	1939	3	1001	1939	3	1001			
LNAV MDA	1720	1	782	1720	1 1/4	782	1720	2 1/4	782	1720	2 1/2	782			
CIRCLING	1720	1	782	1780	1 1/4	842	1800	2 1/2	862	1800	2 3/4	862			



CHANGES - REASONS

- 1. CHANGED ALL REFERENCES TO LYH VORTAC TO LYH VOR/DME. - LYH VORTAC CHANGING TO LYH VOR/DME.
- 2. CHANGED HELICOPTER VISIBILITY NOTE TO READ: RWY 22 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHANGED CIRCLING CAT B MDA 1780/HAA 842, CHARTED CIRCLING ICON - P-NOTAM 5/4426 (AMDT ORIG-A).
- 3. LTP COORDINATES CHANGED FROM 371955.0820N/0791147.6980W TO 371955.0680N/0791147.6875W, AND CRC REMAINDER FROM 190A9A5E TO 8B0D09EF IN FAS DATA. - NEW FAS DATA PULL.
- 4. ADDED CHART NOTE: CIRCLING RWY 17 NA AT NIGHT. - RWY 17 20:1 PENETRATORS (AIRPORT IDENTIFIED.)
- 5. REMOVED DME/DME RNP-0.3 NA NOTE AND ADDED RNP APPROACH TO PBN REQUIREMENTS NOTE. - FAAO 8260.19H PARAGRAPH 1-1-5 F (14).
- 6. CHANGED 'VIA' TO 'ON' IN NA FOR ARRIVALS AT LHY VORTAC NOTE. - VIA NO LONGER USED.
- 7. REMOVED FAHRENHEIT TEMPERATURES FROM THE BARO-VNAV RESTRICTIONS. - FAAO 8260.19H PARAGRAPH 8-6-9S.
- 8. IN MISSED APPROACH INSTRUCTIONS, CHANGED VIA 206.83 TRACK TO LYH TO TRACK 206.83 TO LYH. - VIA NO LONGER USED IN MISSED APPROACH INSTRUCTIONS.
- 9. ADDED CA LEG TO MISSED APPROACH. - FOR CODING PURPOSES.
- 10. CHANGED ALTERNATE MINS FROM: STANDARD-CAT B 900-2, CAT C 900-2 1/2, CAT D 900-2 3/4 TO : CAT A/B 1100-2, CAT C/D 1100-3 - BASED ON THE HIGHER LNAV/VNAV VISIBILTY MINIMUMS.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZDC, ROA APP CON, KLYH ATCT/ARPT MGR., ATA

FLIGHT CHECKED BY JOHN D JEFFERS	Digitally signed by DONALD H LANIER Oct 15, 2018	OFFICE FICO	DATE 10/10/18	
DEVELOPED BY LIAM DONAHUE	Digitally signed by LIAM DONAHUE Sep 20, 2018	OFFICE AJV-5431	DATE 08/03/2018	
APPROVED BY PATRICK MULQUEEN	Digitally signed by DONALD H LANIER Oct 15, 2018	OFFICE AJV-5430	DATE	TITLE MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KLYH
RUNWAY	RW22
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W22A
LTP/FTP LATITUDE	371955.0680N
LTP/FTP LONGITUDE	0791147.6875W
LTP/FTP ELLIPSOIDAL HEIGHT	+02541
FPAP LATITUDE	371836.1700N
FPAP LONGITUDE	0791239.8100W
THRESHOLD CROSSING HEIGHT (TCH)	00051.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0584
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	8B0D09EF

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+02859
FPAP ORTHOMETRIC HEIGHT	+02859



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.23

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

AIRPORT LYNCHBURG RGNL/PRESTON GLENN FLD	AIRPORT ID KLYH	PROCEDURE NAME VOR RWY 22	ORIGINAL/AMENDMENT 8D	CITY LYNCHBURG	STATE VA
AIRPORT ELEVATION 938	TDZE 938	SUPERSEDED VOR/DME RWY 22	ORIGINAL/AMENDMENT 8C	DATED 01/07/2016	MAG VAR 5W
EPOCH YEAR 1970	FACILITY LYH	COORDINATES OF FACILITIES	ACTUAL EFFECTIVE DATE 3 JANUARY 2019	REQUIRED EFFECTIVE DATE ROUTINE	CANCEL/SUSPEND

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
LYH VOR/DME		DOUGG/LYH VOR/DME 11.00 DME					027.39	11.00	4100
MOL VOR/DME	IAF	MONTY/LYH VOR/DME 21.00 DME					179.99	19.32	5600
MONTY/21.00 DME	IF	DOUGG/11.00 DME	NOPT				207.39	10.00 (LYH R-207)	2900

MISSED APPROACH

MAP:

WIVSO/LYH 5.10 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2900 DIRECT LYH VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT R SIDE OF COURSE 027.39 OUTBOUND 4100 FT WITHIN 10 MILES OF DOUGG (IAF)
- 2.
3. FAC: 207.39 FAF: DOUGG/11.00 DME DIST FAF TO MAP: DIST FAF TO THLD: 5.99
4. MIN ALT: DOUGG/11.00 DME 2900
8. MSA FROM: LYH VOR/DME 090-180 2700, 180-270 3300, 270-090 5500

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED.

NOTES:

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

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

CHART NOTE: CIRCLING RWY 17 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:



CHART CIRCLING ICON.
DOUGG/LYH 11.00 DME TO RW22: 3.02/39.
CHART FAS OBST: 1442 TOWER 372057N/0791006W.
HOLD SW, RT, 025.00 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ CAT A, B 900-2, CAT C 900-2 1/2, CAT D 900-2 3/4

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-22	1740	1	802	1740	1 1/4	802	1740	2 1/4	802	1740	2 1/2	802			
CIRCLING	1740	1	802	1780	1 1/4	842	1800	2 1/2	862	1800	2 3/4	862			

CHANGES - REASONS

1. CHANGED PROCEDURE NAME FROM VOR/DME RWY 22 TO VOR RWY 22. - FAAO 8260.19H PROCEDURE NAMING CONVENTION.
2. RAISED FEEDER FROM 4000 AND PROCEDURE TURN ENTRY ALTITUDE FROM 3300 TO 4100. - NEW PT ENTRY CONTROLLING OBSTACLE.
3. UPDATE FAS OBSTACLE LOCATION FROM 372059N/0791005W TO 372057N/0791006W. - NEW SURVEY.
4. ADDED DESCENT ANGLE/TCH. - P-NOTAM 9/6460. (AMDT 8A)
5. CHANGED RUNWAY FROM 3-21 TO 4-22. - PNOTAM 0/1139. (AMDT 8B)
6. ADDED CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED, CIRCLING CAT B MDA 1780/HAA 842. AND CHART CIRCLING ICON. - PNOTAM 5/4427. (AMDT 8C)
7. UPDATED MSA SECTOR FROM 180 -270 FROM 3200 TO 3300, AND 270-090 FROM 5400 TO 5500. - NEW SURVEY AND LYH VORTAC CHANGING TO LYH VOR/DME.
8. CHANGED ALL REFERENCES TO LYH VORTAC TO LYH VOR/DME. - LYH VORTAC CHANGING TO LYH VOR/DME.
9. NAMED MAP FIX WIVSO. - FAAO 8260.19H PARAGRAPH 2-10-5A.
10. ADDED CHART NOTE CIRCLING RWY 17 NA AT NIGHT - 20:1 PENETRATIONS.
11. ADDED NONCOINCIDENT PROFILE NOTE. - DESCENT ANGLE AND VGSI ARE NOT COINCIDENT.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZDC, LYH ATCT, LYH AMGR, VA DEPT OF AVIATION, ATA

FLIGHT CHECKED BY

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

DEVELOPED BY Digitally signed by

LIAM DONAHUE LIAM DONAHUE

Sep 11, 2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

DONALD H LANIER

Sep 27, 2018

OFFICE

OFFICE

AJV-5431

OFFICE

AJV-5430

DATE

DATE

08/09/2018

DATE

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> KENOSHA RGNL	<u>AIRPORT ID</u> KENW	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 15	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> KENOSHA	<u>STATE</u> WI
<u>AIRPORT ELEVATION</u> 742	<u>TDZE</u> 721	<u>SUPERSEDED</u> RNAV (GPS) RWY 15	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 08/27/2009	<u>MAG VAR</u> 2W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1990

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
PETTY		KILME		TF	FB	2.00	266.44	15.76	3000
KILME	IAF	IPIGY		TF	FB	1.00	235.69	5.00	3000
VEENA	IAF	IPIGY		TF	FB	1.00	076.00	10.29	3000
IPIGY	IF	KENUF		TF	FB	1.00	145.63	6.10	2400
KENUF	FAF	RW15	MAP	TF	FO	0.30	145.68	5.07	
RW15	MAP	1142 MSL		CA			145.68		
1142 MSL		VEENA		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LNAV: RW15

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 3000 DIRECT VEENA AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. PROFILE STARTS AT IPIGY
3. FAC: 145.68

FAF: KENUF

DIST FAF TO MAP: 5.07

DIST FAF TO THLD: 5.07
4. MIN ALT: IPIGY 3000, KENUF 2400
5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:
6. MIN GP INCPT:

GP ALT AT FAF :

OM:

MM:

IM:
7. GP ANGLE:

34:1: IS NOT CLEAR

20:1: IS NOT CLEAR

TCH:
8. MSA FROM: RW15 2600

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: STRAIGHT-IN AND CIRCLING RWY 15 NA AT NIGHT, CIRCLING RWY 7R NA AT NIGHT.
CHART NOTE: RWY 15 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PETTY ON V170 SOUTHEAST BOUND AND ON V7 SOUTHBOUND.

ADDITIONAL FLIGHT DATA:

KENUF TO RW15: 3.05/45.
CHART: 1095 TOWER 423954N/0880058W.
CHART FAS OBST: 894 TRMSN TWR 423710N/0875803W.
HOLD E, RT, 257.79 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	1200	1	479	1200	1	479	1200	1 3/8	479	1200	1 1/2	479			
CIRCLING	1200	1	458	1200	1	458	1200	1 1/2	458	1340	2	598			



CHANGES - REASONS

- 1. DELETED CHART NOTE: DME/DME RNP-0.3 NA AND ADDED PBN REQUIREMENTS NOTE: RNP APCH - PER 8260.19H NAVSPEC REQUIREMENT.
- 2. ADDED CHART NOTE: STRAIGHT-IN AND CIRCLING RWY 15 NA AT NIGHT, CIRCLING RWY 7R NA AT NIGHT - OBSTACLES PENETRATE THE VISUAL SURFACE AREAS.
- 3. UPDATED 8260-3 LINE 7 BY ADDING 20:1 IS NOT CLEAR - VISUAL SURFACE PENETRATIONS EXIST IN CATS A/B VISUAL AREAS AND DOCUMENTED ON THE 8260-9.
- 4. UPDATED CHART NOTE: FOR HELICOPTER VISIBILITY REDUCTION FROM VISIBILITY REDUCTION BY HELICOPTERS NA TO RWY 15 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED - PER CRITERIA LISTED IN THE 8260-19H.
- 5. UPDATED CHART PLANVIEW NOTE: FROM PROCEDURE NA FOR ARRIVAL AT PETTY VIA V170 SOUTHEAST BOUND TO PROCEDURE NA FOR ARRIVALS AT PETTY ON V170 SOUTHEAST BOUND AND ON V7 SOUTHBOUND - ADDED V7 SOUTHBOUND AND VIA NO LONGER USED.
- 6. UPDATED CHART PROFILE NOTE: FROM VGSI AND DESCENT ANGLES NOT COINCIDENT TO VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}) - UPDATED FORMAT PER 8260-19H.
- 7. UPDATED BACKUP ALTIMETER SETTING CHART NOTE AND MOVED IT FROM THE 8260-3 AND APPROACH PLATE TO BACK OF 8260-9: FROM WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WAUKEGAN REGIONAL ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET AND INCREASE LNAV CATS C/D VISIBILITY 1/4 MILE TO WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WAUKEGAN REGIONAL ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET - UPDATED FORMAT PER 8260-19H.
- 8. REMOVED STANDARD @ NA WHEN LOCAL WEATHER NOT AVAILABLE FROM 8260-3 - PER 8260.19H PARA 8-6-9 F(3).

PDF EDIT: 07/23/2018

- 1. ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED FROM PART C: GENERAL REMARKS - AUTOGENERATED NOTE AND NEW CIRCLING AREA NOT APPLIED.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZAU, MKE APP CON, ENW ATCT, WI AERO, AMGR

FLIGHT CHECKED BY

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

DEVELOPED BY

SYLVAN DRAKES

Digitally signed by

SYLVAN DRAKES

Jul 26, 2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

ADOLFO D URRUTIA

Sep 20, 2018

OFFICE
Digitally signed by
ADOLFO D URRUTIA
Sep 20, 2018

OFFICE

AJV-5433

OFFICE

AJV-5430

DATE

DATE

07/25/2018

DATE

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> KENOSHA RGNL	<u>AIRPORT ID</u> KENW	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 25R	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> KENOSHA	<u>STATE</u> WI
<u>AIRPORT ELEVATION</u> 742	<u>TDZE</u> 732	<u>SUPERSEDED</u> RNAV (GPS) RWY 25R	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 08/27/2009	<u>MAG VAR</u> 2W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1990

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
TALOR	IAF	GAVSE		TF	FB	1.00	330.42	6.39	3000
PETTY	IAF	GAVSE		TF	FB	1.00	200.00	9.21	3000
GAVSE	IF	BOCIJ		TF	FB	1.00	245.91	6.02	2400
BOCIJ	FAF	TALGE/1.70 NM TO RW25R		TF	FB	0.30	245.83	3.39	
TALGE/1.70 NM TO RW25R		RW25R	MAP	TF	FO	0.30	245.83	1.70	
RW25R	MAP	982 MSL		CA			245.83		
982 MSL		AHYOB		DF	FB	1.00			
AHYOB		VEENA		TF	FO	1.00	309.62	14.62	3000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW25R

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT AHYOB AND ON TRACK 309.62 TO VEENA AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. PROFILE STARTS AT GAVSE
3. FAC: 245.83

FAF: BOCIJ

DIST FAF TO MAP: 5.09

DIST FAF TO THLD: 5.09
4. MIN ALT: GAVSE 3000, BOCIJ 2400, TALGE/1.70 NM TO RW25R 1280*
5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

250 HAT: 0.70

GS ANT:
6. MIN GP INCPT: 2400

GP ALT AT FAF : BOCIJ

OM:

MM:

IM:
7. GP ANGLE: 3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 45.0
8. MSA FROM: RW25R 2600

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING RWY 7R, 15 NA AT NIGHT.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 47C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT PETTY ON V170 NORTHWEST BOUND.

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.07 NM TO RW25R*
*LNAV ONLY
WAAS CHANNEL #49014
REFERENCE PATH ID: W25A
CHART FAS OBST: 800 TREE 423622N/0875554W.
HOLD E, RT, 257.79 INBOUND
LTP HAE: 182.6 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	982	1	250	982	1	250	982	1	250	982	1	250			
LNAV/VNAV DA	1064	1 1/4	332	1064	1 1/4	332	1064	1 1/4	332	1064	1 1/4	332			
LNAV MDA	1100	1	368	1100	1	368	1100	1	368	1100	1 1/4	368			
CIRCLING	1200	1	458	1200	1	458	1200	1 1/2	458	1340	2	598			



CHANGES - REASONS

- 1. DELETED CHART NOTE: DME/DME RNP-0.3 NA AND ADDED PBN REQUIREMENTS NOTE: RNP APCH - PER 8260.19H NAVSPEC REQUIREMENT.
- 2. ADDED CHART NOTE: CIRCLING RWYS 7R, 15 NA AT NIGHT - OBSTACLES PENETRATE THE VISUAL SURFACE AREAS.
- 3. CHANGED VIA TO ON IN THE MISSED APPROACH SEGMENT - VIA NO LONGER USED.
- 4. UPDATED FOR UNCOMPENSATED BARO-VNAV SYSTEMS NOTE FROM FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 47C (116F) TO FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 47C - FAHRENHEIT NO LONGER REQUIRED.
- 5. UPDATED 8260-3 LINE 7 BY CHANGING 34:1 IS NOT CLEAR TO 34:1 IS CLEAR AND ADDING 20:1 IS CLEAR - REMOVED VISUAL SURFACE PENETRATION, NO PENETRATIONS EXIST IN CATS A/B VISUAL AREAS.
- 6. UPDATED BACKUP ALTIMETER SETTING CHART NOTES AND MOVED THEM FROM THE 8260-3 AND APPROACH PLATE TO BACK OF 8260-9: FROM WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WAUKEGAN REGIONAL ALTIMETER SETTING AND INCREASE ALL DA 27 FEET AND ALL MDA 40 FEET AND INCREASE LNAV CAT C VISIBILITY 1/4 MILE TO WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WAUKEGAN REGIONAL ALTIMETER SETTING AND INCREASE LPV DA TO 1009 FEET, INCREASE LNAV/VNAV DA TO 1091 FEET AND ALL MDAS 40 FEET AND INCREASE LNAV CAT C VISIBILITY 1/8 SM - PER 8260.19H PARA 8-6-11N (1)(A)2.
- 7. UPDATED CHART PLANVIEW NOTE: FROM PROCEDURE NA FOR ARRIVAL AT PETTY VIA V216 EAST BOUND TO PROCEDURE NA FOR ARRIVAL AT PETTY ON V170 EAST BOUND - V216 DOES NOT GO THROUGH PETTY; TURN EXCEEDS 90 DEGREES.
- 8. REMOVED STANDARD @ NA WHEN LOCAL WEATHER NOT AVAILABLE. FROM 8260-3 - PER 8260.19H PARA 8-6-9 F(3).
- 9. ADDED CHART VDP AT 1.07 NM TO RW25R* TO ADDITIONAL FLIGHT DATA - NO OBSTACLES PENETRATE THE 20:1 VISUAL SURFACE AREA.

PDF EDIT: 07/23/2018

- 1. ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED FROM PART C: GENERAL REMARKS - AUTOGENERATED NOTE AND NEW CIRCLING AREA NOT APPLIED.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZAU, MKE APP CON, ENW ATCT, WI AERO, AMGR

FLIGHT CHECKED BY

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

DEVELOPED BY

SYLVAN DRAKES

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

SYLVAN DRAKES

Jul 26, 2018

Digitally signed by

ADOLFO D URRUTIA

Sep 20, 2018

Digitally signed by
ADOLFO D URRUTIA
Sep 20, 2018

OFFICE	DATE
AJV-5433	07/26/2018
OFFICE	DATE
AJV-5430	

TITLE
MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KENW
RUNWAY	RW25R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W25A
LTP/FTP LATITUDE	423558.8220N
LTP/FTP LONGITUDE	0875524.2395W
LTP/FTP ELLIPSOIDAL HEIGHT	+01826
FPAP LATITUDE	423519.4000N
FPAP LONGITUDE	0875712.4300W
THRESHOLD CROSSING HEIGHT (TCH)	00045.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1072
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	A91AD849
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02172
FPAP ORTHOMETRIC HEIGHT	+02172



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> KENOSHA RGNL	<u>AIRPORT ID</u> KENW	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 33	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> KENOSHA	<u>STATE</u> WI
<u>AIRPORT ELEVATION</u> 742	<u>TDZE</u> 721	<u>SUPERSEDED</u> RNAV (GPS) RWY 33	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 08/27/2009	<u>MAG VAR</u> 2W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1990

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
TALOR		KODOW		TF	FB	2.00	205.33	6.53	3000
KODOW	IAF	INSAW		TF	FB	1.00	235.90	5.00	3000
PAPPI	IAF	INSAW		TF	FB	1.00	326.60	12.62	3000
WARPI	IAF	INSAW		TF	FB	1.00	005.20	11.81	3000
INSAW	IF	KOKNE		TF	FB	1.00	325.84	6.11	2400
KOKNE	FAF	APPLR/2.20 NM TO RW33		TF	FB	0.30	325.79	2.89	
APPLR/2.20 NM TO RW33		RW33	MAP	TF	FO	0.30	325.79	2.20	
RW33	MAP	1160 MSL		CA			325.79		
1160 MSL		KENUF		DF	FB	1.00			
KENUF		VEENA		TF	FO	1.00	280.88	13.67	3000

MISSED APPROACH

MAP:

LNAV: RW33

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT KENUF AND ON TRACK 280.88 TO VEENA AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT INSAW

3. FAC:

325.79

FAF:

KOKNE

DIST FAF TO MAP:

5.09

DIST FAF TO THLD:

5.09

4. MIN ALT: INSAW 3000, KOKNE 2400, APPLR/2.20 NM TO RW33 1440

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:

6. MIN GP INCPT:

GP ALT AT FAF :

OM:

MM:

IM:

7. GP ANGLE:

34:1:

IS CLEAR

20:1:

IS CLEAR

TCH:

8. MSA FROM: RW33 2600

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING RWY 7R, 15 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

KOKNE TO RW33: 3.04/42.
CHART VDP AT 1.27 NM TO RW33
CHART FAS OBST: 851 ELEVATOR 423430N/0875400W.
CHART 1095 TOWER 423312N/0875340W.
HOLD E, RT, 257.79 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	1160	1	439	1160	1	439	1160	1 1/4	439	1160	1 1/2	439			
CIRCLING	1200	1	458	1200	1	458	1200	1 1/2	458	1340	2	598			

CHANGES - REASONS

1. DELETED CHART NOTE: DME/DME RNP-0.3 NA AND ADDED PBN REQUIREMENTS NOTE: RNP APCH - PER 8260.19H NAVSPEC REQUIREMENT.
2. ADDED CHART NOTE: CIRCLING RWYS 7R, 15 NA AT NIGHT - OBSTACLES PENETRATE THE VISUAL SURFACE AREAS.
3. UPDATED 8260-3 LINE 7 BY ADDING 20:1 IS CLEAR - NO VISUAL SURFACE PENETRATIONS EXIST IN CATS A/B VISUAL AREAS.
4. CHANGED VIA TO ON IN THE MISSED APPROACH SEGMENT - VIA NO LONGER USED.
5. UPDATED BACKUP ALTIMETER SETTING CHART NOTES AND MOVED THEM FROM THE 8260-3 AND APPROACH PLATE TO BACK OF 8260-9: FROM WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WAUKEGAN REGIONAL ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET TO WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WAUKEGAN REGIONAL ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET, INCREASE LNAV CAT C VISIBILITY 1/8 SM - UPDATED VISIBILITY MINIMUMS AND FORMAT PER 8260-19H.
6. REMOVED STANDARD @ NA WHEN LOCAL WEATHER NOT AVAILABLE FROM 8260-3 - PER 8260.19H PARA 8-6-9 F(3).

PDF EDIT: 07/23/2018

1. ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED FROM PART C: GENERAL REMARKS - AUTOGENERATED NOTE AND NEW CIRCLING AREA NOT APPLIED.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZAU, MKE APP CON, ENW ATCT, WI AERO, AMGR

FLIGHT CHECKED BY

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

DEVELOPED BY

SYLVAN DRAKES

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
SYLVAN DRAKES
Jul 26, 2018

Digitally signed by
ADOLFO D URRUTIA
Sep 20, 2018

Digitally signed by
ADOLFO D URRUTIA
Sep 20, 2018

OFFICE
DATE

OFFICE
AJV-5433
DATE
07/26/2018

OFFICE
AJV-5430
DATE
TITLE
MANAGER



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

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
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<u>AIRPORT</u> MARSHFIELD MUNI	<u>AIRPORT ID</u> KMFI	<u>PROCEDURE NAME</u> NDB RWY 16	<u>ORIGINAL/AMENDMENT</u> 11	<u>CITY</u> MARSHFIELD	<u>STATE</u> WI	
<u>AIRPORT ELEVATION</u> 1278	<u>TDZE</u> 1278	<u>SUPERSEDED</u> NDB RWY 16	<u>ORIGINAL/AMENDMENT</u> 10B	<u>DATED</u> 02/04/2016	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u> CANCEL		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>

PROCEDURE CANCELLED EFFECTIVE 3 JANUARY 2019

MISSED APPROACH

MAP:

MISSED APPROACH INSTRUCTIONS:

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- 2.
3. FAC: FAF: DIST FAF TO MAP: DIST FAF TO THLD:
4. MIN ALT:
8. MSA FROM:

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

MINIMUMS:

QUALITY
24
CHECKED

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

ALTERNATE: NA ☐

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA

CHANGES - REASONS

COORDINATED WITH:

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

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY

LONNIE EVERHART (CHARLES CTR THIBODEAUX)

Digitally signed by

DEZ SILAGYI

Sep 06, 2018

OFFICE

AJV-5400

DATE

07/30/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by

DEZ SILAGYI

Sep 06, 2018

OFFICE

AJV-5400

DATE

TITLE

MANAGER



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

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

CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
MIDDLETON, WI	MIDDLETON MUNI - MOREY FIELD	3 JANUARY 2019	2

TAKEOFF MINIMUMS:

RWY 1, 19, NA (TURF).
RWY 10, STANDARD.
RWY 28, 300-2 OR STANDARD WITH A MINIMUM CLIMB OF 293 FT PER NM TO 1400.

TEXTUAL DEPARTURE PROCEDURES:

RWY 10, CLIMB ON HEADING 100.63 TO 2600 BEFORE TURNING RIGHT.
RWY 28, CLIMB ON HEADING 280.64 TO 2600 BEFORE TURNING LEFT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 10, POLE 583 FT FROM DER, 516 FT RIGHT OF CENTERLINE, 32 FT AGL/953 FT MSL.
POLE 874 FT FROM DER, 461 FT RIGHT OF CENTERLINE, 33 FT AGL/954 FT MSL.
POLE BEGINNING 1148 FT FROM DER, 523 FT LEFT OF CENTERLINE, UP TO 30 FT AGL/973 FT MSL.
TREE 1168 FT FROM DER, 592 FT RIGHT OF CENTERLINE, 991 FT MSL.
BUILDING 1276 FT FROM DER, 437 FT LEFT OF CENTERLINE, 30 FT AGL/975 FT MSL.
TREE, POLE, TRANSMISSION LINE TWR BEGINNING 1299 FT FROM DER, 225 FT RIGHT OF CENTERLINE, UP TO 81 FT AGL/1002 FT MSL. TRANSMISSION LINE, POLE BEGINNING 2823 FT FROM DER, 27 FT RIGHT OF CENTERLINE, UP TO 79 FT AGL/1003 FT MSL.

NOTE: RWY 28, VEGETATION 36 FT FROM DER, 173 FT LEFT OF CENTERLINE, 930 FT MSL.
VEGETATION 198 FT FROM DER, 346 FT RIGHT OF CENTERLINE, 938 FT MSL.
TREE 524 FT FROM DER, 470 FT LEFT OF CENTERLINE, 944 FT MSL.
TREES BEGINNING 843 FT FROM DER, 647 FT LEFT OF CENTERLINE, UP TO 52 FT AGL/985 FT MSL.
TREES BEGINNING 1199 FT FROM DER, 574 FT LEFT OF CENTERLINE, UP TO 999 FT MSL.
TREES BEGINNING 2160 FT FROM DER, 425 FT LEFT OF CENTERLINE, UP TO 1023 FT MSL.
TREE, BUILDING BEGINNING 2416 FT FROM DER, 35 FT LEFT OF CENTERLINE, UP TO 1026 FT MSL.
TREE 2626 FT FROM DER, 17 FT RIGHT OF CENTERLINE, 1008 FT MSL.
TREES BEGINNING 2633 FT FROM DER, 109 FT LEFT OF CENTERLINE, UP TO 1031 FT MSL.
TREE 2708 FT FROM DER, 1 FT RIGHT OF CENTERLINE, 1019 FT MSL.
TREE 3081 FT FROM DER, 134 FT RIGHT OF CENTERLINE, 1022 FT MSL.
TREES BEGINNING 3088 FT FROM DER, 135 FT RIGHT OF CENTERLINE, UP TO 1037 FT MSL.
TREE 4291 FT FROM DER, 481 FT RIGHT OF CENTERLINE, 1038 FT MSL.
TREE 5015 FT FROM DER, 70 FT RIGHT OF CENTERLINE, 1071 FT MSL.
TREE 5145 FT FROM DER, 74 FT LEFT OF CENTERLINE, 1095 FT MSL.
TREES BEGINNING 5293 FT FROM DER, 24 FT RIGHT OF CENTERLINE, UP TO 1109 FT MSL.
TREES BEGINNING 5307 FT FROM DER, 112 FT LEFT OF CENTERLINE, UP TO 1098 FT MSL.
TREE, BUILDING BEGINNING 5458 FT FROM DER, 7 FT LEFT OF CENTERLINE, UP TO 1105 FT MSL.
TREE 1 NM FROM DER, 302 FT LEFT OF CENTERLINE, 1107 FT MSL.
TREE 1 NM FROM DER, 420 FT LEFT OF CENTERLINE, 1121 FT MSL.
TREE 1 NM FROM DER, 652 FT LEFT OF CENTERLINE, 1124 FT MSL.
TREE 1 NM FROM DER, 564 FT LEFT OF CENTERLINE, 1127 FT MSL.
TREE 1.3 NM FROM DER, 2609 FT LEFT OF CENTERLINE, 63 FT AGL/1139 FT MSL.
TRANSMISSION LINE BEGINNING 1.5 NM FROM DER, 214 FT LEFT OF CENTERLINE, UP TO 131 FT AGL/1206 FT MSL.
TRANSMISSION LINE 1.5 NM FROM DER, 579 FT RIGHT OF CENTERLINE, 123 FT AGL/1202 FT MSL.
TRANSMISSION LINE BEGINNING 1.6 NM FROM DER, 1294 FT RIGHT OF CENTERLINE, UP TO 141 FT AGL/1217 FT MSL.

CONTROLLING OBSTACLES:

RWY 28, 1217 FT MSL T-L TOWER 430722.26N/0893433.47W (CEILING) 1210 FT MSL T-L TOWER 430740.49N/0893433.56W (VIS) 1206 FT MSL T-L TOWER 430645.36N/0893434.14W (CG/CGTA).
OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: 2549 FT MSL FT TOWER 430320.54N/0893206.33W.

REMARKS:

QUALITY
3
CHECKED

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

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
MIDDLETON, WI	MIDDLETON MUNI - MOREY FIELD	3 JANUARY 2019	2

FLIGHT INSPECTED BY:	<i>Digitally signed by</i>	OFFICE SYMBOL:	DATE:
SCOTT WIEBE	ROBERT G HAMILTON	FICO	9/15/18
	Sep 28, 2018		
DEVELOPED BY: <i>Digitally signed by</i>		OFFICE SYMBOL:	DATE:
HEIDI SNIDER	HEIDI SNIDER	AJV-5423	08/20/2018
	Sep 05, 2018		
APPROVED BY:	<i>Digitally signed by</i>	OFFICE SYMBOL:	DATE:
JULIE MORGAN	ROBERT G HAMILTON	AJV-5420	
	Sep 28, 2018		
REQUIRED EFFECTIVE DATE:			
ROUTINE			

COORDINATED WITH:

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

OTHER:
ZAU, MSN ATCT, APT MGR

CHANGES - REASONS:

1. UPDATED TAKEOFF MINIMUMS RWY 28 FROM 300-1 OR STANDARD WITH MINIMUM CLIMB OF 468 FEET PER NM TO 1300. TO 300-2 OR STANDARD WITH A MINIMUM CLIMB OF 293 FT PER NM TO 1400. - OBSTACLE EVALUATION.
2. UPDATED DEPARTURE PROCEDURE INSTRUCTIONS RWY 10, FROM ..."BEFORE PROCEEDING ON COURSE" TO " BEFORE TURNING RIGHT" AND RWY 28, FROM ..."BEFORE PROCEEDING ON COURSE" TO "BEFORE TURNING LEFT". - IAW 8260.46F APP. D, TO BETTER DESCRIBE WHERE THE PENETRATIONS ARE LOCATED RELATIVE TO THE RUNWAY END.
3. UPDATED TAKEOFF OBSTACLE NOTES - UPDATED OBSTACLE EVALUATION.
4. UPDATED CONTROLLING OBSTACLES - UPDATED OBSTACLE SURVEY DATA.

QUALITY
3
CHECKED

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
LOC STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.25

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

AIRPORT GENERAL MITCHELL INTL	AIRPORT ID KMKE	PROCEDURE NAME LOC RWY 25L	ORIGINAL/AMENDMENT 6A	CITY MILWAUKEE	STATE WI
AIRPORT ELEVATION 729	TDZE 683	SUPERSEDED LOC RWY 25L	ORIGINAL/AMENDMENT 6	DATED 09/13/2018	MAG VAR 4W
EPOCH YEAR 2020	FACILITY I-PXY	COORDINATES OF FACILITIES	ACTUAL EFFECTIVE DATE 3 JANUARY 2019	REQUIRED EFFECTIVE DATE ROUTINE	CANCEL/SUSPEND

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
CITKI/I-PXY 13.99 DME/RADAR	IF/IAF	FAHEY/I-PXY 7.14 DME/RADAR					255.66	6.85 (I-PXY)	2500

MISSED APPROACH

MAP:

LOC: 5.60 NM AFTER FAHEY/I-PXY 7.14 DME/RADAR OR AT I-PXY 1.54 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2800 THEN RIGHT TURN DIRECT BAE VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. HOLD E CITKI, RT, 255.66 INBOUND, 2900 FT. IN LIEU OF PT (IAF), MAX 3100.
3. FAC: 255.66 FAF: FAHEY/I-PXY 7.14 DME/RADAR DIST FAF TO MAP: 5.60 DIST FAF TO THLD: 5.60
4. MIN ALT: CITKI/I-PXY 13.99 DME/RADAR 2900, FAHEY/I-PXY 7.14 DME/RADAR 2500
8. MSA FROM: BAE VOR/DME 2900

EQUIPMENT REQUIREMENTS NOTES:

RADAR REQUIRED FOR PROCEDURE ENTRY.
DME OR RADAR REQUIRED.

NOTES:

CHART NOTE: RWY 25L HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

ADDITIONAL FLIGHT DATA:



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> LOGAN COUNTY	<u>AIRPORT ID</u> K6L4	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 6	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> LOGAN	<u>STATE</u> WV
<u>AIRPORT ELEVATION</u> 1666	<u>TDZE</u> 1665	<u>SUPERSEDED</u> RNAV (GPS) RWY 6	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 07/20/2017	<u>MAG VAR</u> 7W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
CELLI		HUMOS		TF	FB	1.00	174.20	13.03	3800
SLINK		DRUGS		TF	FB	1.00	336.41	13.18	5000
HUMOS	IAF	MYNAS		TF	FB	1.00	134.71	6.00	3800
DRUGS	IAF	MYNAS		TF	FB	1.00	354.79	6.00	3800
MYNAS	IF	LOWAK		TF	FB	1.00	064.77	7.00	3000
LOWAK	FAF	VARNY/2.40 NM TO RW06		TF	FB	0.30	064.85	1.64	
VARNY/2.40 NM TO RW06		RW06	MAP	TF	FO	0.30	064.85	2.40	
RW06	MAP	1963 MSL		CA			064.85		
1963 MSL		LIENS		DF	FO	1.00			4500

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW06

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4500 DIRECT LIENS AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT MYNAS

3. FAC: 064.85

FAF: LOWAK

DIST FAF TO MAP: 4.04

DIST FAF TO THLD: 4.04

4. MIN ALT: MYNAS 3800, LOWAK 3000, VARNY/2.40 NM TO RW06 2460*

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

298 HAT: 0.79

GS ANT:

6. MIN GP INCPT: 3000

GP ALT AT FAF : LOWAK 3000

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1: IS NOT CLEAR

20:1: IS CLEAR

TCH: 58.0

8. MSA FROM: RW06 5000

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 06 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C (F) OR ABOVE 54C (F).
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CELLI ON V115 NORTHEAST BOUND AND ON V478 WEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SLINK ON V178 EASTBOUND AND ON V35 SOUTHBOUND.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PINEVILLE ALTIMETER SETTING: INCREASE LPV DA TO 2079 FEET AND LNAV/VNAV DA TO 2032 FEET AND LPV AND LNAV/VNAV ALL CATS VISIBILITIES 1/4 SM; INCREASE ALL MDA 80 FEET AND LNAV CAT C VISIBILITY AND CIRCLING CAT B VISIBILITY 1/4 SM.
CHART NOTE: VDP AND BARO-VNAV NA WHEN USING PINEVILLE ALTIMETER SETTING.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.56 NM TO RW06*
*LNAV ONLY
WAAS CHANNEL #40438
REFERENCE PATH ID: W06A
CHART FAS OBST: 1887 TREE 375004N/0815655W.
HOLD NE, RT, 245.02 INBOUND
LTP HAE: 472.4 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 1100-3, NA WHEN LOCAL WEATHER NOT AVAILABLE.

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	2010	1 1/8	345	2010	1 1/8	345	2010	1 1/8	345		NA				
LNAV/VNAV DA	1963	1	298	1963	1	298	1963	1	298		NA				
LNAV MDA	2200	1	535	2200	1	535	2200	1 1/2	535		NA				
CIRCLING	2360	1	694	2400	1	734	2720	3	1054		NA				



CHANGES - REASONS

- 1. REMOVED CHART NOTE: "DME/DME RNP-0.3 NA," - PER 8260.19H, PARA 4-6-10E.
- 2. ADDED PBN EQUIPMENT NOTE: "RNP APCH," - PER 8260.19H, PARA 8-6-8(B)1.
- 3. LINE 7: POPULATED 20:1 BLOCK - PER 8260.19H, PARA 8-6-7.G3.
- 4. REMOVED FAHRENHEIT FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS..." NOTE - PER 8260.19H, PARA 8-6-9.S.
- 5. ALTERNATE MINIMUMS: ADDED "NA WHEN LOCAL WEATHER NOT AVAILABLE" - PER 8260.19H, PARA 8-6-11.B.(4).



<u>AIRPORT</u> LOGAN COUNTY	<u>AIRPORT ID</u> K6L4	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 6	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> LOGAN	<u>STATE</u> WV

COORDINATED WITH:

A4A☐

ALPA☒

AOPA☒

APA☐

HAI☐

NBAA☒

OTHER: ZID, CRW APP CON, AMGR

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

OFFICE

DATE

Digitally signed by
ROBERT G HAMILTON
Sep 20, 2018

DEVELOPED BY
DAVID A. DOWLING

Digitally signed by
DAVID A DOWLING
Sep 13, 2018

OFFICE
AJV-5422

DATE
08/17/2018

APPROVED BY
JULIE MORGAN

OFFICE
AJV-5420

DATE

Digitally signed by
ROBERT G HAMILTON
Sep 20, 2018

TITLE
MANAGER

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

Electronic Version

Page 4 of 5

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	6L4
RUNWAY	RW06
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W06A
LTP/FTP LATITUDE	375110.9935N
LTP/FTP LONGITUDE	0815516.2555W
LTP/FTP ELLIPSOIDAL HEIGHT	+04724
FPAP LATITUDE	375158.3975N
FPAP LONGITUDE	0815340.9490W
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	1648
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	F6C7498E

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+05042
FPAP ORTHOMETRIC HEIGHT	+05042



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> ONA AIRPARK	<u>AIRPORT ID</u> K12V	<u>PROCEDURE NAME</u> RNAV (GPS)-A	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> MILTON	<u>STATE</u> WV
<u>AIRPORT ELEVATION</u> 572	<u>TDZE</u>	<u>SUPERSEDED</u> RNAV (GPS)-A	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 04/03/2014	<u>MAG VAR</u> 6W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
RODIC	IAF	KUDZU		TF	FB	1.00	354.82	6.30	2700
MILLK	IAF	KUDZU		TF	FB	1.00	147.30	7.31	2700
KUDZU	IF	OCHER		TF	FB	1.00	065.16	5.00	2200
OCHER	FAF	RW07	MAP	TF	FO	0.30	065.22	4.70	
RW07	MAP	972 MSL		CA			065.22		
972 MSL		RULEY		DF	FO	1.00			3200

MISSED APPROACH

MAP:

RW07

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 3200 DIRECT RULEY AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3200.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
- PROFILE STARTS AT KUDZU
- FAC:** 065.22 **FAF:** OCHER **DIST FAF TO MAP:** 4.68 **DIST FAF TO THLD:**
- MIN ALT:** KUDZU 2700, OCHER 2200
- DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **GS ANT:**
- MIN GP INCPT:** **GP ALT AT FAF :** **OM:** **MM:** **IM:**
- GP ANGLE:** **34:1:** **20:1:** **TCH:**
- MSA FROM:** RW07 3600



PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA NW OF RWY 07-25.
CHART NOTE: PROCEDURE NA AT NIGHT.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT RODIC ON V4 WEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MILLK ON V119 SOUTHWEST BOUND.
CHART NOTE: USE HUNTINGTON ALTIMETER SETTING; WHEN NOT RECEIVED, USE POINT PLEASANT ALTIMETER SETTING.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
FAS OBST: 1179 AAO 382403N/0821548W.
HOLD NW, LT, 113.60 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☒

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
CIRCLING	1520	1 1/4	948		NA			NA			NA				

CHANGES - REASONS

1. ADDED "CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES". - REMOVED PER FLIGHT INSPECTION RESULTS AND IAW 8260.19H PARA 8-6-10.P.(1).
2. REMOVED VDA/TCH "OCHER TO RW07: 3.19/TCH 40" IN ADDITIONAL FLIGHT DATA. - REMOVED PER FLIGHT INSPECTION RESULTS.
3. REPLACED NOTE "CHART NOTE DME/DME RNP-0.3 NA" WITH "PBN REQUIREMENTS NOTE: RNP APCH". - CHANGED PER NAVSPEC REQUIREMENT IAW 8260.19H, PARA 8-6-8.
4. DELETED "CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED". - CIRCLING ONLY PROC, CHART NOTE REQUIRED FOR STRAIGHT-IN PROCS IAW 8260.19H PARA 8-6-11.K.(3).
5. CHANGED TERMINAL ROUTE KUDZU TO OCHER RNP VALUE FROM 0.50 TO 1.00. - 0.50 VALUE NO LONGER AUTHORIZED.
6. CHANGED FAF TO MAP DISTANCE FROM 4.70 TO 4.68. - CORRECTED DATA ROUNDING ISSUE.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZID, HTS APCH, CRW APCH, APT MGR.

FLIGHT CHECKED BY

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

DEVELOPED BY

JASON KRETSCHMER

APPROVED BY

JULIE MORGAN

Digitally signed by
JASON KRETSCHMER
Aug 27, 2018

OFFICE

OFFICE

AJV-5422

OFFICE

AJV-5420

DATE

Digitally signed by
ROBERT G HAMILTON
Sep 13, 2018

DATE

07/18/2018

DATE

Digitally signed by
ROBERT G HAMILTON
Sep 13, 2018

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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

<u>AIRPORT</u> MORGANTOWN MUNI-WALTER L BILL HART FLD	<u>AIRPORT ID</u> KMGW	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> MORGANTOWN	<u>STATE</u> WV
<u>AIRPORT ELEVATION</u> 1244	<u>TDZE</u> 1244	<u>SUPERSEDED</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 06/25/2015	<u>MAG VAR</u> 9W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 JANUARY 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
TEDDS		CEBAY		TF	FB	2.00	162.05	12.40	4200
CEBAY	IAF	DOCAY	NOPT	TF	FB	1.00	090.04	7.00	4000
DOCAY	IF/IAF	DOUBT		TF	FB	1.00	046.13	4.00	3200
DOUBT		KIRGE		TF	FB	1.00	046.16	2.01	3000
KIRGE	FAF	FEGOV/2.33 NM TO GIVVE		TF	FB	0.30	016.77	2.27	
FEGOV/2.33 NM TO GIVVE		GIVVE	MAP	TF	FO	0.30	016.77	2.33	
GIVVE	MAP	1700 MSL		CA			016.77		1700
1700 MSL		TEDDS		DF	FO	1.00			4000

MISSED APPROACH

MAP:

LP: GIVVE
 LNAV: GIVVE

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1700 THEN CLIMBING LEFT TURN TO 4000 DIRECT TEDDS AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD SW DOCAV, LT, 046.13 INBOUND, 4000 FT. IN LIEU OF PT (IAF), MAX 10000.
3. FAC:

016.77

FAF: KIRGE

DIST FAF TO MAP: 4.60

DIST FAF TO THLD: 5.09
4. MIN ALT: DOCAV 4000, DOUBT 3200, KIRGE 3000, FEGOV/2.33 NM TO GIVVE 2240
5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:
6. MIN GP INCPT:

GP ALT AT FAF :

OM:

MM:

IM:
7. GP ANGLE:

34:1: IS NOT CLEAR

20:1: IS CLEAR

TCH:
8. MSA FROM: GIVVE 4500

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 36 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT TEDDS ON V144 WESTBOUND AND V37 NORTHBOUND.
CHART PLANVIEW NOTE: FINAL APPROACH COURSE OFFSET 15.39 DEGREES.

ADDITIONAL FLIGHT DATA:

FICITITIOUS THRESHOLD POINT (CFDWF) DO NOT CHART.
CHART CIRCLING ICON.
KIRGE TO RW36: 3.15/52.
CHART VDP AT 1.08 NM TO GIVVE
WAAS CHANNEL #53642
REFERENCE PATH ID: W36A
CHART FAS OBST: 1374 TREE 393711N/0795505W.
CHART 1459 TOWER 393623N/0795536W.
CHART: 1652 TREE 393519N/0795431W.
1840 AAO 393252N/0795453W, 2080 AAO 393254N/0795427W.
FAC CROSSES RWY C/L EXTENDED 3100 FT FROM THLD.
HOLD W, LT, 109.41 INBOUND
FTP HAE: 346.6 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 1000-2 3/4, CAT D 1400-3

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LP MDA	1640	1	396	1640	1	396	1640	1 1/8	396	1640	1 1/8	396			
LNAV MDA	1720	1	476	1720	1	476	1720	1 3/8	476	1720	1 3/8	476			
CIRCLING	1800	1	556	1800	1	556	2160	2 3/4	916	2640	3	1396			



CHANGES - REASONS

- 1. CHANGED MISSED APPROACH FROM CLIMB TO 4000 DIRECT YULKU AND LEFT TURN VIA 261 TRACK TO TEDDS AND HOLD TO CLIMBING LEFT TURN TO 4000 DIRECT TEDDS AND HOLD- PER FPT CHECKLIST.
 - 2. DELETED INITIAL LEG CKB- PER FPT CHECKLIST.
 - 3. INCREASED CEBAY LEG FROM 3400 TO 4000 FEET- PER FPT CHECKLIST.
 - 4. ADDED HILPT AT DOCAY- PER FPT CHECKLIST.
 - 5. APPLIED NEW CIRCLING CRITERIA- PER FPT CHECKLIST.
 - 6. ADDED LP LINE OF MINIMA- PER FPT CHECKLIST.
 - 7. ADDED STEPDOWN FIX FOR DOCAY SEGMENT-TO MAINTAIN CURRENT FAF ALTITUDE OF 3000 FEET.
 - 8. ADDED CHART NOTE: VDP NA WHEN USING CLARKSBURG ALTIMETER SETTING- 8260.19H 8.6.9 E(9).
 - 9. UPDATED VDP FROM 1.1 TO 1.08 NM TO GIVVE- NEW IPDS EVALUATION.
 - 10. UPDATED 34:1 OBSTACLES- NEW IPDS EVALUATION, 34: 1 IS NOT CLEAR.
 - 11. LOWERED AIRPORT ELEV FROM 1248 TO 1244- NEW AIRNAV DATA.
 - 12. CHART CIRCLING ICON - PER FPT CHECKLIST.
 - 13. ADDED CONTINGENCY ALTIMETER NOTE TO REMARKS- IAW 8260.19 PARA 8-6-9.
 - 14. UPDATED INTERMEDIATE AND FINAL OFFSETS FROM 14.98/29.98 TO 15.39/29.36- 8260.58 3-2-2.
 - 15. MOVED FIX GIVVE PER CURRENT CRITERIA-8260.58A 3-2-2.
 - 16. UPDATED FAC AIMING FROM 2005 TO 3100 FT- PER CURRENT CRITERIA 8260.58A 3-2-2.
 - 17. MOVED FIX FEGOV PER CURRENT CRITERIA- 8260.58A.
- 10/11/2018: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 07/12/2018:
- 1. ADDED "FICITITIOUS THRESHOLD POINT (CFDWF) DO NOT CHART." TO ADDITIONAL FLIGHT DATA.



AIRPORT

MORGANTOWN MUNI-WALTER L BILL
HART FLD

AIRPORT ID

KMGW

PROCEDURE NAME

RNAV (GPS) RWY 36

ORIGINAL/AMENDMENT

1

CITY

MORGANTOWN

STATE

WV

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZOB, CKB APCH, MGW ATCT, ARPT MGR

FLIGHT CHECKED BY

Digitally signed by

STEPHEN BAUER

WARDELL HENNING

Oct 11, 2018

DEVELOPED BY

LONNIE EVERHART (MICHAEL W HARRIS)

Digitally signed by

WARDELL HENNING

Oct 11, 2018

APPROVED BY

Digitally signed by

LONNIE EVERHART

WARDELL HENNING

Oct 11, 2018

OFFICE

FICO

DATE

09/20/2018

OFFICE

AJV-5400

DATE

07/12/2018

OFFICE

AJV-5400

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMGW
RUNWAY	RW36
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W36A
LTP/FTP LATITUDE	393810.3800N
LTP/FTP LONGITUDE	0795448.3490W
LTP/FTP ELLIPSOIDAL HEIGHT	+03466
FPAP LATITUDE	393938.7320N
FPAP LONGITUDE	0795432.7330W
THRESHOLD CROSSING HEIGHT (TCH)	00052.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.15
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	20F04E80

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+03790
FPAP ORTHOMETRIC HEIGHT	+03790



**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
SARATOGA, WY	SHIVELY FIELD	3 JANUARY 2019	ORIG-A

TAKEOFF MINIMUMS:

RWY 05: STANDARD.

RWY 23: 400-1 OR STANDARD WITH A MINIMUM CLIMB OF 220 FEET PER NM TO 7400.

TEXTUAL DEPARTURE PROCEDURES:

RWY 5: TURN LEFT HEADING 280, THENCE...

RWY 23: TURN RIGHT HEADING 340, THENCE...

...ALL AIRCRAFT CLIMB TO 9000 ON A 310 BEARING FROM SAA NDB THEN CONTINUE CLIMB ON COURSE.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

RWY 23: TREES 1700 FEET FROM DER, LEFT AND RIGHT OF CENTERLINE 7174 FEET MSL.

CONTROLLING OBSTACLES:

RWY 23: 7274 FEET MSL TREE 412521.00N/1065151.00W.

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 5, 23: 10043 FEET MSL PENNOCK PEAK 413120.00N/1063510.00W.

REMARKS:

ABBREVIATED AMENDMENT, DOES NOT SATISFY PERIODIC REVIEW REQUIREMENTS.

FLIGHT INSPECTED BY:

DANIEL C FAVORITE

Digitally signed by
DONALD H LANIER

Oct 05, 2018

OFFICE SYMBOL:
FICO

DATE:

10/4/18

DEVELOPED BY:

WARDELL A. HENNING

Digitally signed by
WARDELL HENNING

Aug 20, 2018

OFFICE SYMBOL:
AJV-5433

DATE:

08/02/2018

APPROVED BY:

PAT MULQUEEN

Digitally signed by
DONALD H LANIER

Oct 05, 2018

OFFICE SYMBOL:
AJV-5430

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

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



OTHER:

ZDV, SAA AMGR

CHANGES - REASONS:

1. EVALUATED RWY 5 TAKEOFF OBSTACLE NOTES - CLEAR NOTAM 8/3020 TAKEOFF OBSTACLES NO LONGER EXIST.
2. REMOVED CPR FSS FROM COORDINATED WITH - MATCH APPROACH PROCEDURE COORDINATION.
3. CHANGED TEXTUAL DEPARTURE PROCEDURE FROM "RWY 5: TURN LEFT HEADING 280. RWY 23: TURN RIGHT HEADING 340. ALL AIRCRAFT CLIMB TO 9000 VIA 310 BEARING FROM SAA NDB THEN CONTINUE CLIMB ON COURSE." TO "RWY 5: TURN LEFT HEADING 280, THENCE... RWY 23: TURN RIGHT HEADING 340, THENCE..., ...ALL AIRCRAFT CLIMB TO 9000 ON A 310 BEARING FROM SAA NDB THEN CONTINUE CLIMB ON COURSE - UPDATED DEPARTURE REFERENCE WORDING.



[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. [31221](#); Amdt. No. [3824](#)

**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 **OCTOBER 19, 2018**.



Rick Domingo
Executive Director, Flight Standards Service

ADOPTION OF THE AMENDMENT

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

PART 97 – STANDARD INSTRUMENT APPROACH PROCEDURES

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

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

2. Part 97 is amended to read as follows:

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

.....EFFECTIVE UPON PUBLICATION

AIRAC DATE	STATE	CITY	AIRPORT	FDC NUMBER	FDC DATE	SUBJECT
6-Dec-18	LA	Shreveport	Shreveport Rgnl	8/0269	10/3/18	ILS OR LOC RWY 14, Amdt 26
6-Dec-18	LA	Shreveport	Shreveport Rgnl	8/0270	10/3/18	ILS OR LOC RWY 32, Amdt 6
6-Dec-18	LA	Shreveport	Shreveport Rgnl	8/0271	10/3/18	LOC RWY 6, Amdt 3
6-Dec-18	LA	Shreveport	Shreveport Rgnl	8/0273	10/3/18	RNAV (GPS) RWY 6, Amdt 3
6-Dec-18	LA	Shreveport	Shreveport Rgnl	8/0274	10/3/18	RNAV (GPS) RWY 14, Amdt 2A
6-Dec-18	LA	Shreveport	Shreveport Rgnl	8/0276	10/3/18	RNAV (GPS) RWY 24, Amdt 2A
6-Dec-18	LA	Shreveport	Shreveport Rgnl	8/0278	10/3/18	RNAV (GPS) RWY 32, Amdt 2
6-Dec-18	OR	Portland	Portland Intl	8/0582	10/3/18	ILS OR LOC RWY 28L, Amdt 5
6-Dec-18	ME	Auburn/Lewiston	Auburn/Lewiston Muni	8/0586	10/15/18	Takeoff Minimums and Obstacle DP, Amdt 5
6-Dec-18	NJ	Woodbine	Woodbine Muni	8/0614	10/15/18	RNAV (GPS) RWY 1, Orig-B
6-Dec-18	ME	Rockland	Knox County Rgnl	8/0877	10/15/18	RNAV (GPS) RWY 3, Orig
6-Dec-18	ME	Rockland	Knox County Rgnl	8/0882	10/15/18	NDB RWY 31, Orig-D
6-Dec-18	ME	Rockland	Knox County Rgnl	8/0884	10/15/18	NDB RWY 3, Orig-A
6-Dec-18	ME	Rockland	Knox County Rgnl	8/0886	10/15/18	RNAV (GPS) RWY 31, Orig
6-Dec-18	VA	Melfa	Accomack County	8/0950	10/15/18	LOC RWY 3, Amdt 1
6-Dec-18	VA	Melfa	Accomack County	8/0951	10/15/18	VOR RWY 3, Amdt 2
6-Dec-18	VA	Melfa	Accomack County	8/0953	10/15/18	RNAV (GPS) RWY 3, Amdt 2
6-Dec-18	VA	Melfa	Accomack County	8/0955	10/15/18	RNAV (GPS) RWY 21, Amdt 1
6-Dec-18	CA	Riverside/ Rubidoux/	Flabob	8/0967	10/3/18	RNAV (GPS)-A, Orig
6-Dec-18	MA	Vineyard Haven	Martha's Vineyard	8/1397	10/15/18	VOR RWY 6, Amdt 2A
6-Dec-18	TN	Columbia/Mount Pleasant	Maury County	8/1408	10/15/18	RNAV (GPS) RWY 24, Orig
6-Dec-18	VA	Lynchburg	Lynchburg Rgnl/Preston Glenn Fld	8/1502	10/3/18	RNAV (GPS) RWY 17, Orig-A
6-Dec-18	VA	Lynchburg	Lynchburg Rgnl/Preston Glenn Fld	8/1507	10/3/18	RNAV (GPS) RWY 35, Orig-A
6-Dec-18	OH	Lancaster	Fairfield County	8/1510	10/3/18	RNAV (GPS) RWY 10, Orig

6-Dec-18	OH	Lancaster	Fairfield County	8/1511	10/3/18	RNAV (GPS) RWY 28, Amdt 1A
6-Dec-18	MA	Pittsfield	Pittsfield Muni	8/1677	10/15/18	RNAV (GPS) RWY 26, Amdt 1A
6-Dec-18	NJ	Lakewood	Lakewood	8/1699	10/15/18	RNAV (GPS) RWY 24, Amdt 1
6-Dec-18	WV	Martinsburg	Eastern WV Rgnl/Shepherd Fld	8/1716	10/10/18	RNAV (GPS) RWY 26, Orig-B
6-Dec-18	WV	Martinsburg	Eastern WV Rgnl/Shepherd Fld	8/1746	10/10/18	RNAV (GPS) RWY 8, Amdt 1A
6-Dec-18	WV	Martinsburg	Eastern WV Rgnl/Shepherd Fld	8/1747	10/10/18	ILS OR LOC RWY 26, Amdt 8B
6-Dec-18	NY	New York	John F Kennedy Intl	8/1878	10/15/18	VOR/DME RWY 22L, Amdt 4D
6-Dec-18	VA	Norfolk	Norfolk Intl	8/2277	10/15/18	ILS OR LOC RWY 5, Amdt 26C
6-Dec-18	SC	Mount Pleasant	Mt Pleasant Rgnl-Faison Field	8/2339	10/10/18	RNAV (GPS) RWY 35, Orig-D
6-Dec-18	GA	Washington	Washington-Wilkes County	8/2549	10/15/18	VOR/DME RWY 13, Amdt 3A
6-Dec-18	GA	Fort Stewart(Hinesville)	Wright AAF (Fort Stewart)/Midcoast Rgnl	8/3600	10/15/18	NDB RWY 33R, Orig-B
6-Dec-18	GA	Fort Stewart(Hinesville)	Wright AAF (Fort Stewart)/Midcoast Rgnl	8/3601	10/15/18	RNAV (GPS) RWY 33R, Amdt 1
6-Dec-18	MD	Gaithersburg	Montgomery County Airpark	8/3717	10/10/18	RNAV (GPS)-A, Orig-B
6-Dec-18	TX	Fort Stockton	Fort Stockton-Pecos County	8/3830	10/3/18	VOR/DME RWY 30, Orig-A
6-Dec-18	TX	Fort Stockton	Fort Stockton-Pecos County	8/3847	10/3/18	RNAV (GPS) RWY 12, Amdt 1
6-Dec-18	TX	Fort Stockton	Fort Stockton-Pecos County	8/3857	10/3/18	RNAV (GPS) RWY 30, Amdt 1
6-Dec-18	TX	Fort Stockton	Fort Stockton-Pecos County	8/3861	10/3/18	VOR RWY 12, Amdt 8A
6-Dec-18	MD	Salisbury	Salisbury-Ocean City Wicomico Rgnl	8/4345	10/3/18	RNAV (GPS) RWY 23, Amdt 1
6-Dec-18	MD	Salisbury	Salisbury-Ocean City Wicomico Rgnl	8/4548	10/3/18	RNAV (GPS) RWY 14, Amdt 1
6-Dec-18	MN	Willmar	Willmar Muni-John L Rice Field	8/4721	10/3/18	Takeoff Minimums and Obstacle DP, Orig
6-Dec-18	CA	Riverside	Riverside Muni	8/4852	10/3/18	Takeoff Minimums and Obstacle DP, Amdt 10
6-Dec-18	GA	Atlanta	Paulding Northwest Atlanta	8/4914	10/10/18	ILS OR LOC/DME RWY 31, Orig-B
6-Dec-18	CA	Daggett	Barstow-Daggett	8/6032	10/10/18	RNAV (GPS) RWY 26, Amdt 3
6-Dec-18	CA	Daggett	Barstow-Daggett	8/6036	10/10/18	RNAV (GPS) RWY 22, Amdt 2A

6-Dec-18	CA	Daggett	Barstow-Daggett	8/6037	10/10/18	VOR OR TACAN RWY 22, Amdt 10A
6-Dec-18	NY	Malone	Malone-Dufort	8/6647	10/15/18	RNAV (GPS) RWY 23, Orig-A
6-Dec-18	MS	Prentiss	Prentiss-Jefferson Davis County	8/6652	10/10/18	RNAV (GPS) RWY 12, Amdt 1A
6-Dec-18	CA	Oxnard	Oxnard	8/6674	10/10/18	VOR RWY 25, Amdt 10B
6-Dec-18	NJ	Morristown	Morristown Muni	8/6684	10/15/18	RNAV (GPS) RWY 5, Amdt 4
6-Dec-18	AL	Muscle Shoals	Northwest Alabama Rgnl	8/6698	10/15/18	RNAV (GPS) RWY 18, Amdt 1A
6-Dec-18	WA	Richland	Richland	8/6822	10/10/18	RNAV (GPS) RWY 26, Amdt 2A
6-Dec-18	GA	Metter	Metter Muni	8/6987	10/3/18	Takeoff Minimums and Obstacle DP, Orig
6-Dec-18	CO	Hayden	Yampa Valley	8/7534	10/10/18	RNAV (GPS) RWY 28, Amdt 3
6-Dec-18	FL	Hollywood	North Perry	8/7536	10/15/18	Takeoff Minimums and Obstacle DP, Amdt 5
6-Dec-18	GA	Mc Rae	Telfair-Wheeler	8/7648	10/10/18	RNAV (GPS) RWY 3, Orig
6-Dec-18	GA	Mc Rae	Telfair-Wheeler	8/7649	10/10/18	NDB RWY 21, Amdt 10
6-Dec-18	IA	Fort Dodge	Fort Dodge Rgnl	8/8749	10/3/18	RNAV (GPS) RWY 24, Amdt 1A
6-Dec-18	VA	Richmond/ Ashland	Hanover County Muni	8/8827	10/10/18	VOR RWY 16, Amdt 2D
6-Dec-18	VA	Richmond/ Ashland	Hanover County Muni	8/8832	10/10/18	RNAV (GPS) RWY 16, Orig-D
6-Dec-18	OH	Lebanon	Warren County/John Lane Field	8/9189	10/15/18	NDB-A, Amdt 6

AIRAC Date: 6 DECEMBER 2018

FDC **8/0269** SHV IAP SHREVEPORT RGNL, Shreveport, LA. ILS OR LOC RWY 14, AMDT 26... CIRCLING CAT A MDA 760/HAA 502. DELETE NOTE: FOR INOPERATIVE ALSF-2, INCREASE S-ILS 14 CAT E VISIBILITY TO RVR 4000 AND S-LOC 14 CAT E VISIBILITY TO 1 1/4 MILE. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 14 CAT E VISIBILITY TO RVR 4000 AND S-LOC 14 CAT E VISIBILITY TO 1 1/4 SM. THIS IS ILS OR LOC RWY 14, AMDT 26A. 1809281220-PERM

FDC **8/0270** SHV IAP SHREVEPORT RGNL, Shreveport, LA. ILS OR LOC RWY 32, AMDT 6... CIRCLING CAT A MDA 760/HAA 502. DELETE NOTE: FOR INOPERATIVE MALSR, INCREASE S-LOC 32 CAT A AND B VISIBILITY TO RVR 5500 AND CAT C AND D VISIBILITY TO 1 3/8 MILE. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 32 CAT A AND B VISIBILITY TO RVR 5500 AND CAT C AND D VISIBILITY TO 1 3/8 SM. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED. CHART NOTE: RWY 32, HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED. THIS IS ILS OR LOC RWY 32, AMDT 6A. 1809281220-PERM

FDC **8/0271** SHV IAP SHREVEPORT RGNL, Shreveport, LA. LOC RWY 6, AMDT 3... CIRCLING CAT A MDA 760/HAA 502. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: RWY 6, HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE CHART NOTE: DME OR RADAR REQUIRED. EQUIPMENT REQUIREMENTS NOTE: DME OR RADAR REQUIRED. THIS IS LOC RWY 6, AMDT 3A. 1809281220-PERM

FDC **8/0273** SHV IAP SHREVEPORT RGNL, Shreveport, LA. RNAV (GPS) RWY 6, AMDT 3... CIRCLING CAT A MDA 760/HAA 502. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: RWY 6, HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -6C (22F) OR ABOVE 54C (130F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -6C OR ABOVE 54C. THIS IS RNAV (GPS) RWY 6, AMDT 3A. 1809281220-PERM

FDC **8/0274** SHV IAP SHREVEPORT RGNL, Shreveport, LA. RNAV (GPS) RWY 14, AMDT 2A... CIRCLING CAT A MDA 760/HAA 502. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: FOR INOPERATIVE ALSF-2, INCREASE LNAV CAT C AND D VISIBILITY TO RVR 6000. CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV CAT C AND D VISIBILITY TO RVR 6000. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -6C (22F) OR ABOVE 54C (130F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -6C OR ABOVE 54C. THIS IS RNAV (GPS) RWY 14, AMDT 2B. 1809281220-PERM

FDC **8/0276** SHV IAP SHREVEPORT RGNL, Shreveport, LA. RNAV (GPS) RWY 24, AMDT 2A... CIRCLING CAT A MDA 760/HAA 502. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: RWY 24, HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -6C (22F) OR ABOVE 54C (130F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -6C OR ABOVE 54C. THIS IS RNAV (GPS) RWY 24, AMDT 2B. 1809281220-PERM

FDC **8/0278** SHV IAP SHREVEPORT RGNL, Shreveport, LA. RNAV (GPS) RWY 32, AMDT 2... CIRCLING CAT A MDA 760/HAA 502. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED. CHART NOTE: RWY 32, HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -6C (22F) OR ABOVE 54C (130F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -6C OR ABOVE 54C. DELETE NOTE: FOR INOPERATIVE MALSR, INCREASE LNAV CAT A AND B VISIBILITY TO RVR 5500. CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV CAT A AND B VISIBILITY TO RVR 5500. THIS IS RNAV (GPS) RWY 32, AMDT 2A. 1809281220-PERM

FDC **8/0582** PDX IAP PORTLAND INTL, Portland, OR. ILS OR LOC RWY 28L, AMDT 5... DELETE NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 580. CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 880. THIS IS ILS OR LOC RWY 28L, AMDT 5A. 1808301300-PERM

FDC **8/0586** LEW ODP AUBURN/LEWISTON MUNI, Auburn/Lewiston, ME. TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 5... TAKE-OFF MINIMUMS: RWY 17, 500- 2 1/4 OR STANDARD WITH A MINIMUM CLIMB OF 266 FEET PER NM TO 900. RWY 22, STANDARD WITH MINIMUM CLIMB OF 312 FEET PER NM TO 1500, OR 1200-2 1/2 FOR CLIMB IN VISUAL CONDITIONS. DEPARTURE PROCEDURE: RWY 17, CLIMB ON HEADING 165 TO 900 BEFORE TURNING NORTHEAST. RWY 22, CLIMB TO 1500 DIRECT LE LOM. CROSS LE LOM AT OR ABOVE 1500 BEFORE TURNING SOUTHWEST. VISUAL CLIMB OVER AIRPORT: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS AUBURN/LEWISTON MUNI AT OR ABOVE 1500 BEFORE PROCEEDING ON COURSE. ALL OTHER DATA REMAINS AS PUBLISHED. THIS IS TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5A. 1808301306-PERM

FDC **8/0614** OBI IAP WOODBINE MUNI, Woodbine, NJ. RNAV (GPS) RWY 1, ORIG-B... CHART: TDZE 40. DELETE: TDZE 41. CHART: APT ELEV 41. DELETE: APT ELEV 42. PBN EQUIPMENT REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: DME/DME RNP-0.3 NA. CHART 481 TWR 390748N/0744716W. DELETE: 476 TOWER 390750N/0744718W. CHART NOTE: CIRCLING RWY 13, 19, 31 NA AT NIGHT. DELETE NOTE: NIGHT LANDING: RWY 31 NA. CHART NOTE: RWY 1 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA. DELETE NOTE: MISSED APPROACH: CLIMB TO 2000 DIRECT JUDKO AND VIA TRACK 259 TO LEEAH AND HOLD. CHART NOTE: MISSED APPROACH: CLIMB TO 2000 DIRECT JUDKO AND ON TRACK 258.93 TO LEEAH AND HOLD. DELETE PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT TESTA VIA V308 SOUTHWEST BOUND. CHART NOTE: PROCEDURE NA FOR ARRIVALS AT TESTA ON V308 SOUTHWEST BOUND. CIRCLING HAA ALL CATS 579. LNAV HAT ALL CATS 400, CAT C VIS 1 1/8. THIS IS RNAV (GPS) RWY 1, ORIG-C. 1808031555-PERM

FDC **8/0877** RKD IAP KNOX COUNTY RGNL, Rockland, ME. RNAV (GPS) RWY 3, ORIG... LNAV MDA 560/HAT 506 ALL CATS. CIRCLING CAT C MDA 720/HAA 665, CAT D MDA 1140/HAA 1085, VISIBILITY CAT C 1 3/4, CAT D 3. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. CHART NOTE: RWY 3 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 49C (120F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C OR ABOVE 49C. CHART CIRCLING ICON. THIS IS RNAV (GPS) RWY 3, ORIG-A. 1810111222-PERM

FDC **8/0882** RKD IAP KNOX COUNTY RGNL, Rockland, ME. NDB RWY 31, ORIG-D... MSA FROM SUH NDB 25 NM, 090 - 270 1800, 270 - 090 2600. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA. CHART NOTE: RWY 31 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CIRCLING CAT C MDA 720/HAA 665, CAT D MDA 1140/HAA 1085, VISIBILITY CAT C 1 3/4, CAT D 3. CHART CIRCLING ICON. THIS IS NDB RWY 31, ORIG-E. 1810111226-PERM

FDC **8/0884** RKD IAP KNOX COUNTY RGNL, Rockland, ME. NDB RWY 3, ORIG-A... MSA FROM SUH NDB 25 NM, 090 - 270 1800, 270 - 090 2600. CIRCLING CAT C MDA 720/HAA 665, CAT D MDA 1140/HAA 1085, VISIBILITY CAT C 1 3/4, CAT D 3. CHART CIRCLING ICON. THIS IS NDB RWY 3, ORIG-B. 1810111230-PERM

FDC **8/0886** RKD IAP KNOX COUNTY RGNL, Rockland, ME. RNAV (GPS) RWY 31, ORIG... CIRCLING CAT C MDA 720/HAA 665, CAT D MDA 1140/HAA 1085, VISIBILITY CAT C 1 3/4, CAT D 3. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. CHART NOTE: RWY 31 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART CIRCLING ICON. THIS IS RNAV (GPS) RWY 31, ORIG-A. 1810111233-PERM

FDC **8/0950** MFV IAP ACCOMACK COUNTY, Melfa, VA. LOC RWY 3, AMDT 1... DELETE NOTE: CIRCLING TO RWY 21 NA AT NIGHT. THIS IS LOC RWY 3, AMDT 1A. 1808301812-PERM

FDC **8/0951** MFV IAP ACCOMACK COUNTY, Melfa, VA. VOR RWY 3, AMDT 2... DELETE NOTE: CIRCLING RWY 21 NA AT NIGHT. THIS IS VOR RWY 3, AMDT 2A. 1808301812-PERM

FDC **8/0953** MFV IAP ACCOMACK COUNTY, Melfa, VA. RNAV (GPS) RWY 3, AMDT 2... CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C OR ABOVE 54C. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F). DELETE NOTE: CIRCLING RWY 21 NA AT NIGHT. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 3, AMDT 2A. 1808301812-PERM

FDC **8/0955** MFV IAP ACCOMACK COUNTY, Melfa, VA. RNAV (GPS) RWY 21, AMDT 1... DELETE NOTE: NIGHT LANDING: RWY 21 NA. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 21, AMDT 1A. 1808301812-PERM

FDC **8/0967** RIR IAP FLABOB, Riverside/Rubidoux/, CA. RNAV (GPS)-A, ORIG...
DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. DELETE:
DESCENT ANGLE 3.05/TCH 30. CHART PROFILE NOTE: VISUAL SEGMENT -
OBSTACLES. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS
NOTE: RNP APCH. THIS IS RNAV (GPS)-A, ORIG-A. 1808301819-PERM

FDC **8/1397** MVY IAP MARTHA'S VINEYARD, Vineyard Haven, MA. VOR RWY 6,
AMDT 2A... CIRCLING CAT A MDA 500/HAA 433, CAT B MDA 540/HAA 473, CAT C
MDA 700/HAA 633, CAT D MDA 780/HAA 713. VISIBILITY CAT C 1 3/4, CAT D 2
1/4. CHART CIRCLING ICON. DELETE ALL REFERENCE TO RADAR AT JODLE.
DELETE NOTE: DME OR RADAR REQUIRED. CHART NOTE: DME REQUIRED.
DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA.
CHART NOTE: RWY 6 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT
AUTHORIZED. THIS IS VOR RWY 6, AMDT 2B. 1808061141-PERM

FDC **8/1408** MRC IAP MAURY COUNTY, Columbia/Mount Pleasant, TN. RNAV
(GPS) RWY 24, ORIG... LNAV MDA 1220/HAT 539 ALL CATS. VDP 1.6 NM TO
RWY 24. CIRCLING MDA 1320/HAA 639 CATS A/B, CIRCLING MDA 1420/HAA 739
CAT D. DELETE NOTE: DME/DME RNP-0.3 NA. ADD PBN EQUIPMENT
REQUIREMENT NOTE: RNP APCH. CHANGE NOTE: "FOR UNCOMPENSATED
BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 47C
(116F)" TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA
BELOW -16C OR ABOVE 47C". CHANGE NOTE: "VISIBILITY REDUCTION BY
HELICOPTERS NA" TO "RWY 24 HELICOPTER VISIBILITY REDUCTION BELOW
3/4 SM NOT AUTHORIZED. THIS IS RNAV (GPS) RWY 24, ORIG-A. 1808061241-
PERM

FDC **8/1502** LYH IAP LYNCHBURG RGNL/PRESTON GLENN FLD, Lynchburg, VA.
RNAV (GPS) RWY 17, ORIG-A... CHART NOTE: PROCEDURE NA AT NIGHT.
DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA.
CHART NOTE: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT
AUTHORIZED. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS
NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 17, ORIG-B. 1808311354-PERM

FDC **8/1507** LYH IAP LYNCHBURG RGNL/PRESTON GLENN FLD, Lynchburg, VA.
RNAV (GPS) RWY 35, ORIG-A... CHART NOTE: CIRCLING RWY 17 NA AT NIGHT.
DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH.
DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT
AUTHORIZED. CHART NOTE: RWY 35 HELICOPTER VISIBILITY REDUCTION
BELOW 3/4 SM NOT AUTHORIZED. THIS IS RNAV (GPS) RWY 35, ORIG-B.
1808311357-PERM

FDC **8/1510** LHQ IAP FAIRFIELD COUNTY, Lancaster, OH. RNAV (GPS) RWY 10, ORIG... PBN EQUIPMENT REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: DME/DME RNP-0.3 NA. DELETE PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NOT AUTHORIZED BELOW -16C OR ABOVE 54C. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. CHART NOTE: RWY 10 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: VDP AT 1.75 NM TO RW10*. DELETE NOTE: BARO-VNAV NA WHEN USING RICKENBACKER INTL ALTIMETER SETTING. CHART NOTE: BARO-VNAV AND VDP NA WHEN USING RICKENBACKER INTL ALTIMETER SETTING. THIS IS RNAV (GPS) RWY 10, ORIG-A. 1808311400-PERM

FDC **8/1511** LHQ IAP FAIRFIELD COUNTY, Lancaster, OH. RNAV (GPS) RWY 28, AMDT 1A... PBN EQUIPMENT REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: DME/DME RNP-0.3 NA. DELETE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NOT AUTHORIZED BELOW -24C OR ABOVE 54C. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -24C (11F) OR ABOVE 54C (130F). DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA. CHART NOTE: RWY 28 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. THIS IS RNAV (GPS) RWY 28, AMDT 1B. 1808311402-PERM

FDC **8/1677** PSF IAP PITTSFIELD MUNI, Pittsfield, MA. RNAV (GPS) RWY 26, AMDT 1A... DELETE NOTE: DME/DME RNP -0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: NIGHT LANDING RWY 8 NA. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA. DELETE NOTE: FOR INOPERATIVE MALS F WHEN USING NORTH ADAMS ALTIMETER SETTING, INCREASE LNAV CATS C AND D 1/2 MILE. DELETE NOTE: FOR INOPERATIVE MALS F WHEN USING NORTH ADAMS ALTIMETER SETTING, INOPERATIVE TABLE DOES NOT APPLY TO LPV. LNAV CAT A AND B VISIBILITY 1 1/4 SM. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -19C (-2F) OR ABOVE 54C (130F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -19C OR ABOVE 54C. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE NORTH ADAMS ALTIMETER SETTING AND INCREASE ALL DA 114 FEET AND ALL MDA 120 FEET, INCREASE LPV ALL CATS VISIBILITY 1 1/2 MILES, LNAV/VNAV ALL CATS VISIBILITY 1/2 MILE, AND LNAV CAT B VISIBILITY 1/4 MILE.. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE NORTH ADAMS ALTIMETER SETTING AND INCREASE LPV DA TO 2070 AND VISIBILITY ALL CATS 1 1/2 SM, LNAV/VNAV DA TO 2002 AND VISIBILITY ALL CATS 1/4 SM. INCREASE ALL MDAS 120 FEET AND LNAV VISIBILITY CAT B 1/4 SM, CATS C AND D 1/2 SM.. THIS IS RNAV (GPS) RWY 26, AMDT 1B. 1808311638-PERM

FDC **8/1699** N12 IAP LAKEWOOD, Lakewood, NJ. RNAV (GPS) RWY 24, AMDT 1... DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. CHART NOTE: RWY 24 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE PROFILE NOTE: DESCENT ANGLE 3.00/TCH 40. CHART PROFILE NOTE: VISUAL SEGMENT-OBSTACLES. DELETE PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {3.00}/TCH {24}). THIS IS RNAV (GPS) RWY 24, AMDT 1A. 1809141736-PERM

FDC **8/1716** MRB IAP EASTERN WV RGNL/SHEPHERD FLD, Martinsburg, WV. RNAV (GPS) RWY 26, ORIG-B... CIRCLING CAT A MDA 1100/HAA 535. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 26, ORIG-C. 1809141808-PERM

FDC **8/1746** MRB IAP EASTERN WV RGNL/SHEPHERD FLD, Martinsburg, WV. RNAV (GPS) RWY 8, AMDT 1A... CIRCLING CAT A MDA 1100/HAA 535. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 8, AMDT 1B. 1809141832-PERM

FDC **8/1747** MRB IAP EASTERN WV RGNL/SHEPHERD FLD, Martinsburg, WV. ILS OR LOC RWY 26, AMDT 8B... CIRCLING CAT A MDA 1100/HAA 535. THIS IS ILS OR LOC RWY 26, AMDT 8C. 1809141834-PERM

FDC **8/1878** JFK IAP JOHN F KENNEDY INTL, New York, NY. VOR/DME RWY 22L, AMDT 4D... S-22L VIS CATS A/B RVR 4000. CHART NOTE: RWY 22L HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-22L CAT A/B VISIBILITY TO RVR 5500. CIRCLING CAT D MDA 660/HAA 647. CHART CIRCLING ICON. MSA FROM JFK VOR/DME 270 TO 360 MINIMUM ALTITUDE 2900. THIS IS VOR/DME RWY 22L, AMDT 4E. 1807231707-PERM

FDC **8/2277** ORF IAP NORFOLK INTL, Norfolk, VA. ILS OR LOC RWY 5, AMDT 26C... S-LOC 5 VISIBILITY CAT C AND D RVR 4000. DELETE NOTE: DME OR RADAR REQUIRED. EQUIPMENT REQUIREMENTS NOTE: DME OR RADAR REQUIRED. DELETE PLANVIEW NOTE: RADAR REQUIRED. EQUIPMENT REQUIREMENTS NOTE: RADAR REQUIRED FOR PROCEDURE ENTRY. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 5 CAT C AND D VISIBILITY TO RVR 6000. ALTERNATE MINIMUMS: ILS STANDARD, LOC: CAT D 900-2 3/4. THIS IS ILS OR LOC RWY 5, AMDT 26D. 1807111345-PERM

FDC **8/2339** LRO IAP MT PLEASANT RGNL-FAISON FIELD, Mount Pleasant, SC. RNAV (GPS) RWY 35, ORIG-D... LNAV CATS A/B/C MDA 380/HAT 368. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 35, ORIG-E. 1807111425-PERM

FDC **8/2549** IYY IAP WASHINGTON-WILKES COUNTY, Washington, GA. VOR/DME RWY 13, AMDT 3A... S-13 MDA 1200/HAT 554 ALL CATS, VIS CAT C 1 5/8. CIRCLING MDA 1200/HAA 554 ALL CATS, VIS CAT C 1 5/8. CHART NOTE: RWY 13 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. THIS IS VOR/DME RWY 13, AMDT 3B. 1810021204-PERM

FDC **8/3600** LHW IAP WRIGHT AAF (FORT STEWART)/MIDCOAST RGNL, Fort Stewart(Hinesville), GA. NDB RWY 33R, ORIG-B... CHART NOTE: CIRCLING TO RWY 6L, 24R NA AT NIGHT. THIS IS NDB RWY 33R, ORIG-C. 1809051408-PERM

FDC **8/3601** LHW IAP WRIGHT AAF (FORT STEWART)/MIDCOAST RGNL, Fort Stewart(Hinesville), GA. RNAV (GPS) RWY 33R, AMDT 1... DELETE NOTE: CIRCLING TO RWY 6R, 24L, 15R, 33L NA AT NIGHT. CHART NOTE: CIRCLING TO RWY 6R, 24L, 15R, 33L, 6L, 24R NA AT NIGHT. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -6C (22F) OR ABOVE 54C (130F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -6C OR ABOVE 54C. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 33R, AMDT 1A. 1809051410-PERM

FDC **8/3717** GAI IAP MONTGOMERY COUNTY AIRPARK, Gaithersburg, MD. RNAV (GPS)-A, ORIG-B... ALTERNATE MINIMUMS STANDARD: EXCEPT, NA WHEN LOCAL WEATHER NOT AVAILABLE. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS)-A, ORIG-C. 1807251913-PERM

FDC **8/3830** FST IAP FORT STOCKTON-PECOS COUNTY, Fort Stockton, TX. VOR/DME RWY 30, ORIG-A... CIRCLING CAT C MDA 3600/HAA 589. MISSED APPROACH: CLIMB TO 5000 DIRECT FST VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO 5000. CHART NOTE: STRAIGHT-IN RWY 30 NA AT NIGHT, CIRCLING RWY 3, 21, 30 NA AT NIGHT. CHART NOTE: RWY 30 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {3.00}/TCH {40}). DELETE VDP AT 5.91 DME. DELETE DISTANCE VDP TO THLD 1.52 NM. ALTERNATE MINIMUMS: STANDARD EXCEPT CAT D 800-2 1/2. THIS IS VOR/DME RWY 30, ORIG-B. 1809051706-PERM

FDC **8/3847** FST IAP FORT STOCKTON-PECOS COUNTY, Fort Stockton, TX. RNAV (GPS) RWY 12, AMDT 1... DELETE NOTE: CIRCLING TO RWY 30 NA AT NIGHT. CHART NOTE: CIRCLING RWY 3, 21, 30 NA AT NIGHT. DELETE NOTE: CIRCLING TO RWY 11-29, 7-25, 16-34 NA. CHART NOTE: CIRCLING NA TO RWYS 7-25, 11-29 AND 16-34. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {3.00}/TCH {55}). DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 12, AMDT 1A. 1809051713-PERM

FDC **8/3857** FST IAP FORT STOCKTON-PECOS COUNTY, Fort Stockton, TX. RNAV (GPS) RWY 30, AMDT 1... DELETE NOTE: PROCEDURE NA AT NIGHT. CHART NOTE: STRAIGHT-IN RWY 30 NA AT NIGHT, CIRCLING RWY 3, 21, 30 NA AT NIGHT. DELETE NOTE: CIRCLING TO RWY 11-29, 7-25, 16-34 NA. CHART NOTE: CIRCLING NA TO RWYS 7-25, 11-29 AND 16-24. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. CHART NOTE: RWY 30 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 30, AMDT 1A. 1809051715-PERM

FDC **8/3861** FST IAP FORT STOCKTON-PECOS COUNTY, Fort Stockton, TX. VOR RWY 12, AMDT 8A... CIRCLING CAT C MDA 3600/HAA 589. CHART NOTE: CIRCLING RWY 3, 21, 30 NA AT NIGHT. CHART NOTE: CIRCLING NA TO RWYS 7-25, 11-29 AND 16-34. DELETE NOTE: CIRCLING NA TO RWYS 7-25, 11-29, 16-34. ALTERNATE MINIMUMS: STANDARD EXCEPT CAT D 800-2 1/2. THIS IS VOR RWY 12, AMDT 8B. 1809051717-PERM

FDC **8/4345** SBY IAP SALISBURY-OCEAN CITY WICOMICO RGNL, Salisbury, MD. RNAV (GPS) RWY 23, AMDT 1... LPV DA 374/HAT 325. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 43C (109F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C OR ABOVE 43C. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. CHART NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: DME/DME RNP-0.3 NA. THIS IS RNAV (GPS) RWY 23, AMDT 1A. 1808221357-PERM

FDC **8/4548** SBY IAP SALISBURY-OCEAN CITY WICOMICO RGNL, Salisbury, MD. RNAV (GPS) RWY 14, AMDT 1... LPV DA 363/HAT 314 ALL CATS. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. CHART NOTE: RWY 14 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 48C (118F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C OR ABOVE 48C. THIS IS RNAV (GPS) RWY 14, AMDT 1A. 1808221550-PERM

FDC **8/4721** BDH ODP WILLMAR MUNI-JOHN L RICE FIELD, Willmar, MN. TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES ORIG... TAKEOFF MINIMUMS: RWY 3, 21, NA - ENVIRONMENTAL. THIS IS TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, ORIG-A. 1809061210-PERM

FDC **8/4852** RAL ODP RIVERSIDE MUNI, Riverside, CA. TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 10... TEXTUAL DEPARTURE PROCEDURE RWY 34: CLIMB HEADING 344.54 TO 1800 THEN CLIMBING LEFT TURN HEADING 230 TO INTERCEPT PDZ VORTAC R-093 TO PDZ VORTAC, THENCE... ALL OTHER DATA REMAINS AS PUBLISHED. THIS IS TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 10A. 1809191759-PERM

FDC **8/4914** PUJ IAP PAULDING NORTHWEST ATLANTA, Atlanta, GA. ILS OR LOC/DME RWY 31, ORIG-B... CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 1680. THIS IS ILS OR LOC/DME RWY 31, ORIG-C. 1808091218-PERM

FDC **8/6032** DAG IAP BARSTOW-DAGGETT, Daggett, CA. RNAV (GPS) RWY 26, AMDT 3... DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SOUTHERN CALIFORNIA LOGISTICS ALTIMETER SETTING AND INCREASE LPV DA# TO 2433, VISIBILITY CATS A/B/C 1/4 MILE, CAT D 1/2 MILE. INCREASE LPV DA TO 2554 AND ALL CATS VISIBILITY 3/4 MILE, LNAV/VNAV DA TO 2600 AND ALL CATS VISIBILITY 7/8 MILE. INCREASE ALL MDA 220 FEET AND VISIBILITY LNAV CATS A/B 1/4 MILE, CAT C 3/4 MILE, CAT D 1/2 MILE, CIRCLING CAT A 1/4 MILE. DELETE NOTE: BARO-VNAV AND VDP NA WHEN USING SOUTHERN CALIFORNIA LOGISTICS ALTIMETER SETTING. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA. CHART NOTE: RWY 26 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -4C (25F) OR ABOVE 54C (130F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -4C OR ABOVE 54C. THIS IS RNAV (GPS) RWY 26, AMDT 3A. 1809082026-PERM

FDC **8/6036** DAG IAP BARSTOW-DAGGETT, Daggett, CA. RNAV (GPS) RWY 22, AMDT 2A... CIRCLING CAT B MDA 2860/HAA 930, CAT C/D MDA 3500/HAA 1570. CIRCLING CAT C VISIBILITY 3 SM. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE VICTORVILLE ALTIMETER SETTING AND INCREASE ALL MDA 220 FEET. INCREASE LNAV AND CIRCLING CAT B/C VISIBILITY 1/4 MILE. DELETE NOTE: VDP NA WHEN USING VICTORVILLE ALTIMETER SETTING. CHART CIRCLING ICON. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 22, AMDT 2B. 1809082028-PERM

FDC **8/6037** DAG IAP BARSTOW-DAGGETT, Daggett, CA. VOR OR TACAN RWY 22, AMDT 10A... CIRCLING CAT C MDA 3500/HAA 1570. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE VICTORVILLE ALTIMETER SETTING AND INCREASE ALL MDA 220 FEET. CHART CIRCLING ICON. THIS IS VOR OR TACAN RWY 22, AMDT 10B. 1809082030-PERM

FDC **8/6647** MAL IAP MALONE-DUFORT, Malone, NY. RNAV (GPS) RWY 23, ORIG-A... CIRCLING CAT A MDA 1460/HAA 670, CAT B/C MDA 1480/HAA 690. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. CHART NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. THIS IS RNAV (GPS) RWY 23, ORIG-B. 1807301211-PERM

FDC **8/6652** M43 IAP PRENTISS-JEFFERSON DAVIS COUNTY, Prentiss, MS. RNAV (GPS) RWY 12, AMDT 1A... CIRCLING CAT B MDA 1080/HAA 625. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: RWY 12 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. THIS IS RNAV (GPS) RWY 12, AMDT 1B. 1807301218-PERM

FDC **8/6674** OXR IAP OXNARD, Oxnard, CA. VOR RWY 25, AMDT 10B... DELETE ALL REFERENCE TO CMA 5.3 DME FIX. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA. CHART NOTE: RWY 25 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. THIS IS VOR RWY 25, AMDT 10C. 1808240516-PERM

FDC **8/6684** MMU IAP MORRISTOWN MUNI, Morristown, NJ. RNAV (GPS) RWY 5, AMDT 4... DELETE NOTE: PROCEDURE NA AT NIGHT.. DELETE NOTE: RWY 5 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. ADD NOTE: RWY 5 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. ADD NOTE: CIRCLING RWY 13, 31 NOT AUTHORIZED AT NIGHT. THIS IS RNAV (GPS) RWY 5, AMDT 4A. 1807301316-PERM

FDC **8/6698** MSL IAP NORTHWEST ALABAMA RGNL, Muscle Shoals, AL. RNAV (GPS) RWY 18, AMDT 1A... PBN EQUIPMENT REQUIREMENTS NOTE: RNP APCH. CHART NOTE: RWY 18 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA. CHART NOTE: CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE DECATUR ALTIMETER SETTING AND INCREASE LPV DA TO 880, LNAV/VNAV DA TO 1065 AND ALL MDA 100 FEET, INCREASE LNAV CAT C VISIBILITY 1/4 SM, INCREASE CIRCLING CAT C VISIBILITY 1/2 SM. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE DECATUR ALTIMETER SETTING AND INCREASE LPV DA TO 872, LNAV/VNAV DA TO 1057 AND ALL MDA 100 FEET, INCREASE LNAV/VNAV ALL CATS VISIBILITY AND LNAV CAT C VISIBILITY 1/4 MILE, INCREASE CIRCLING CAT C VISIBILITY 1/2 MILE. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. DELETE NOTE: DME/DME RNP-0.3 NA. DELETE NOTE: RWY 18 STRAIGHT-IN AND CIRCLING MINIMUMS NA AT NIGHT. THIS IS RNAV (GPS) RWY 18, AMDT 1B. 1807171454-PERM

FDC **8/6822** RLD IAP RICHLAND, Richland, WA. RNAV (GPS) RWY 26, AMDT 2A... CHART VDP AT 0.88 NM TO RW26* *LNAV ONLY. CHART NOTE: RWY 26 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA. DELETE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE 3.00/TCH 52). DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 26, AMDT 2B. 1807301442-PERM

FDC **8/6987** MHP ODP METTER MUNI, Metter, GA. TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES ORIG... NOTE: RWY 10, TREE 30 FT FROM DER, 359 FT LEFT OF CENTERLINE, 211 FT MSL. TREE, SIGN BEGINNING 48 FT FROM DER, 254 FT LEFT OF CENTERLINE, UP TO 217 FT MSL. TREE 165 FT FROM DER, 223 FT LEFT OF CENTERLINE, 224 FT MSL. TREE, POLE BEGINNING 706 FT FROM DER, 206 FT LEFT OF CENTERLINE, UP TO 259 FT MSL. POLE 844 FT FROM DER, 231 FT RIGHT OF CENTERLINE, 219 FT MSL. TREE, POLE BEGINNING 983 FT FROM DER, 48 FT LEFT OF CENTERLINE, UP TO 264 FT MSL. POLE BEGINNING 1335 FT FROM DER, 173 FT RIGHT OF CENTERLINE, UP TO 35 FT AGL/231 FT MSL. TREE 1357 FT FROM DER, 808 FT LEFT OF CENTERLINE, 265 FT MSL. POLE BEGINNING 1458 FT FROM DER, 77 FT RIGHT OF CENTERLINE, UP TO 33 FT AGL/234 FT MSL. TREE, POLE BEGINNING 1467 FT FROM DER, 91 FT LEFT OF CENTERLINE, UP TO 275 FT MSL. POLE 1696 FT FROM DER, 123 FT RIGHT OF CENTERLINE, 38 FT AGL/245 FT MSL. TREE 2406 FT FROM DER, 855 FT RIGHT OF CENTERLINE, 273 FT MSL. SIGN 3265 FT FROM DER, 802 FT LEFT OF CENTERLINE, 118 FT AGL/304 FT MSL. ALL OTHER DATA REMAINS AS PUBLISHED. THIS IS TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, ORIG-A. 1808131211-PERM

FDC **8/7534** HDN IAP YAMPA VALLEY, Hayden, CO. RNAV (GPS) RWY 28, AMDT 3... CHART PLANVIEW NOTE: FINAL APPROACH COURSE OFFSET 19.35 DEGREES. DELETE PLANVIEW NOTE: FINAL APPROACH COURSE OFFSET 19.46 DEGREES. CHART NOTE: RWY 28 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 28, AMDT 3A. 1808262220-PERM

FDC **8/7536** HWO ODP NORTH PERRY, Hollywood, FL. TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 5... TAKE-OFF MINIMUMS: RWY 19L/19R, 400-2 3/4 OR STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 500 . TEXTUAL DEPARTURE PROCEDURE: RWY 10L/10R, RIGHT TURN ON DEPARTURE NA. ALL OTHER DATA REMAINS AS PUBLISHED. THIS IS TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5A. 1808262222-PERM

FDC **8/7648** MQW IAP TELFAIR-WHEELER, Mc Rae, GA. RNAV (GPS) RWY 3, ORIG... DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. CHART NOTE: CIRCLING RWY 21 NA AT NIGHT. THIS IS RNAV (GPS) RWY 3, ORIG-A. 1807311152-PERM

FDC **8/7649** MQW IAP TELFAIR-WHEELER, Mc Rae, GA. NDB RWY 21, AMDT 10... DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. CHART NOTE: RWY 21 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: STRAIGHT-IN RWY 21 NA AT NIGHT, CIRCLING RWY 21 NA AT NIGHT. THIS IS NDB RWY 21, AMDT 10A. 1807311152-PERM

FDC **8/8749** FOD IAP FORT DODGE RGNL, Fort Dodge, IA. RNAV (GPS) RWY 24, AMDT 1A... LNAV MDA 1560/HAT 404 ALL CATS, VISIBILITY CAT C 1-1/8. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: BARO-VNAV NA WHEN USING WEBSTER CITY ALTIMETER SETTING. CHART NOTE: BARO-VNAV AND VDP NA WHEN USING WEBSTER CITY ALTIMETER SETTING. CHART PROFILE NOTE: ASTERISK, VDP AT 1.14 NM TO RW24. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 46C (114F).. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LANV/VNAV NA BELOW -17C OR ABOVE 46C.. CHART FAS OBST: 1291 TRANSMISSION LINE 423428N/0940710W. THIS IS RNAV (GPS) RWY 24, AMDT 1B. 1808281641-PERM

FDC **8/8827** OFP IAP HANOVER COUNTY MUNI, Richmond/Ashland, VA. VOR RWY 16, AMDT 2D... S-16 HAT 793 ALL CATS. CIRCLING CATS A, B, C HAA 793, CAT D MDA 1020/HAA 813, VIS CAT D 2 3/4 SM. BICAT FIX MINIMUMS (DME REQUIRED): S-16 MDA 820/HAT 613 ALL CATS, VIS CATS C, D 1 3/4 SM. BICAT FIX MINIMUMS (DME REQUIRED): CIRCLING CATS A, B MDA 820/HAA 613, CAT C MDA 900/HAA 693, CAT D MDA 1020/HAA 813, VIS CAT C 2 SM, CAT D 2 3/4 SM. ALTERNATE MINIMUMS CAT D, 900-2 3/4. CHART CIRCLING ICON. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: RWY 16 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: RWY 16, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD. DELETE PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT COATT VIA V155 NORTHEAST BOUND. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT COATT ON V155 NORTHEAST BOUND. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {3.00}/TCH {40}). THIS IS VOR RWY 16, AMDT 2E. 1808281754-PERM

FDC **8/8832** OFP IAP HANOVER COUNTY MUNI, Richmond/Ashland, VA. RNAV (GPS) RWY 16, ORIG-D... CIRCLING CAT C MDA 900/HAA 693, CAT D MDA 1020/HAA 813, VIS CAT C 2 SM, CAT D 2 3/4 SM. ALTERNATE MINIMUMS CAT D, 900-2 3/4. CHART CIRCLING ICON. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: RWY 16 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS LNAV/VNAV NA BELOW -15C OR ABOVE 54C. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {3.00}/TCH {40}). THIS IS RNAV (GPS) RWY 16, ORIG-E. 1808281756-PERM

FDC **8/9189** I68 IAP WARREN COUNTY/JOHN LANE FIELD, Lebanon, OH. NDB-A, AMDT 6... DELETE NOTE: CIRCLING TO RWY 19 NA AT NIGHT. CHART NOTE: WHEN CIRCLING TO RWY 19 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD. DELETE NOTE: RWY 19 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. THIS IS NDB-A, AMDT 6A. 1810101447-PERM