

U.S. Department
of Transportation

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

**Federal Aviation
Administration**

Transmittal Letter 19-07

FEBRUARY 8, 2019

**PREPARED BY AERONAUTICAL INFORMATION SERVICES, AJV-A41
(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. [31238](#); Amdt. No. [3839](#)]

**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 Procedures and Airspace Group, Flight Technologies and Procedures Division, Flight Standards Service, Federal Aviation Administration. Mailing Address: FAA Mike Monroney Aeronautical Center, Flight Procedures and Airspace Group, 6500 South MacArthur Blvd, Registry Bldg 29 Room 104, Oklahoma City, OK 73125. Telephone: (405) 954-4164.

SUPPLEMENTARY INFORMATION: This rule amends Title 14 of the Code of Federal Regulations, Part 97 (14 CFR part 97), by establishing, amending, suspending, or removes SIAPS, Takeoff Minimums and/or ODPS. The complete regulatory description of each SIAP and its associated Takeoff Minimums or ODP for an identified airport is listed on FAA form documents which are incorporated by reference in this amendment under 5 U.S.C. 552(a), 1 CFR part 51, and 14 CFR part 97.20. The applicable FAA forms are FAA Forms 8260-3, 8260-4, 8260-5, 8260-15A, and 8260-15B when required by an entry on 8260-15A.

The large number of SIAPs, Takeoff Minimums and ODPs, their complex nature, and the need for a special format make publication in the **Federal Register** expensive and impractical. Further, airmen do not use the regulatory text of the SIAPs, Takeoff Minimums or ODPs, but instead refer to their graphic depiction on charts printed by publishers of aeronautical materials. Thus, the advantages of incorporation by reference are realized and publication of the complete description of each

SIAP, Takeoff Minimums and ODP listed on FAA form documents is unnecessary. This amendment provides the affected CFR sections and specifies the types of SIAPs, Takeoff Minimums and ODPs with their applicable effective dates. This amendment also identifies the airport and its location, the procedure, and the amendment number.

Availability and Summary of Material Incorporated by Reference

The material incorporated by reference is publicly available as listed in the ADDRESSES section.

The material incorporated by reference describes SIAPS, Takeoff Minimums and/or ODPS as identified in the amendatory language for part 97 of this final rule.

The Rule

This amendment to 14 CFR part 97 is effective upon publication of each separate SIAP, Takeoff Minimums and ODP as Amended in the transmittal. Some SIAP and Takeoff Minimums and textual ODP amendments may have been issued previously by the FAA in a Flight Data Center (FDC) Notice to Airmen (NOTAM) as an emergency action of immediate flight safety relating directly to published aeronautical charts.

The circumstances that created the need for some SIAP and Takeoff Minimums and ODP amendments may require making them effective in less than 30 days. For the remaining SIAPs and Takeoff Minimums and ODPs, an effective date at least 30 days after publication is provided.

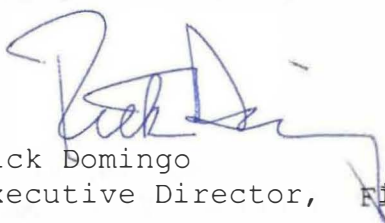
Further, the SIAPs and Takeoff Minimums and ODPs contained in this amendment are based on the criteria contained in the U.S. Standard for Terminal Instrument Procedures (TERPS). In developing these SIAPs and Takeoff Minimums and ODPs, the TERPS criteria were applied to the conditions existing or anticipated at the affected airports. Because of the close and immediate relationship between these SIAPs, Takeoff Minimums and ODPs, and safety in air commerce, I find that notice and public procedure under 5 U.S.C. 553(b) are impracticable and contrary to the public interest and, where applicable, under 5 U.S.C 553(d), good cause exists for making some SIAPs effective in less than 30 days.

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore--(1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979) ; and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. For the same reason, the FAA certifies that this amendment will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR part 97:

Air Traffic Control, Airports, Incorporation by reference, Navigation (Air).

Issued in Washington, DC on **FEBRUARY 8, 2019.**



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 28 March 2019

Lewisport, KY, Hancock Co-Ron Lewis Field, RNAV (GPS) RWY 5, Amdt 1B
Pittsfield, ME, Pittsfield Muni, NDB RWY 36, Amdt 4E

Effective 25 April 2019

Homer, AK, Homer, Takeoff Minimums and Obstacle DP, Amdt 3A
Kiana, AK, Bob Baker Memorial, RNAV (GPS) RWY 6, Orig-D
Kiana, AK, Bob Baker Memorial, RNAV (GPS) RWY 24, Orig-B
Kotlik, AK, Kotlik, RNAV (GPS) RWY 2, Orig-E
Oneonta, AL, Robbins Field, RNAV (GPS) RWY 6, Orig-C
Oneonta, AL, Robbins Field, RNAV (GPS) RWY 24, Orig-A
Oneonta, AL, Robbins Field, Takeoff Minimums and Obstacle DP, Orig-B
Russellville, AL, Bill Pugh Field, RNAV (GPS) RWY 2, Orig-C
Carlisle, AR, Carlisle Muni, RNAV (GPS) RWY 9, Amdt 1A
Carlisle, AR, Carlisle Muni, RNAV (GPS) RWY 27, Orig-A
Carlisle, AR, Carlisle Muni, VOR RWY 9, Amdt 2D
Crossett, AR, Z M Jack Stell Field, RNAV (GPS) RWY 23, Orig-B
Walnut Ridge, AR, Walnut Ridge Rgnl, LOC RWY 18, Amdt 3C
Jacksonville, FL, Jacksonville Intl, ILS OR LOC RWY 26, Amdt 2B
Key West, FL, Key West Intl, Takeoff Minimums and Obstacle DP, Amdt 2
Miami, FL, Miami Executive, ILS OR LOC RWY 9R, Amdt 11D
Miami, FL, Miami Executive, RNAV (GPS) RWY 9R, Amdt 2D
Miami, FL, Miami Executive, RNAV (GPS) RWY 27L, Amdt 2D
Jesup, GA, Jesup-Wayne County, NDB RWY 11, Amdt 2, CANCELED
Jesup, GA, Jesup-Wayne County, NDB RWY 29, Amdt 3, CANCELED
Macon, GA, Middle Georgia Rgnl, ILS OR LOC RWY 5, ILS RWY 5 SA CAT I, ILS RWY 5 SA CAT II, Amdt 3A
Macon, GA, Middle Georgia Rgnl, RNAV (GPS) RWY 5, Amdt 3A
Macon, GA, Middle Georgia Rgnl, RNAV (GPS) RWY 23, Amdt 2E
Shenandoah, IA, Shenandoah Muni, NDB RWY 4, Orig-D
Shenandoah, IA, Shenandoah Muni, RNAV (GPS) RWY 4, Orig-B
Sioux Center, IA, Sioux Center Muni, NDB RWY 18, Amdt 5, CANCELED
Waterloo, IA, Waterloo Rgnl, ILS OR LOC RWY 12, Amdt 10A
Peru, IL, Illinois Valley Rgnl-Walter A Duncan Field, LOC RWY 36, Amdt 4, CANCELED
Griffith, IN, Griffith-Merrillville, Takeoff Minimums and Obstacle DP, Amdt 4A
New Castle, IN, New Castle Henry County Marlatt Field, NDB RWY 10, Orig-B
New Castle, IN, New Castle Henry County Marlatt Field, RNAV (GPS) RWY 10, Orig-A
New Castle, IN, New Castle Henry County Marlatt Field, RNAV (GPS) RWY 28, Orig-A

New Castle, IN, New Castle Henry County Marlatt Field, Takeoff Minimums and Obstacle DP, Amdt 1A
 South Bend, IN, South Bend Intl, RNAV (GPS) RWY 9R, Amdt 1A
 Kingman, KS, Kingman Airport - Clyde Cessna Field, Takeoff Minimums and Obstacle DP, Orig-A
 Rayville, LA, John H Hooks Jr Memorial, RNAV (GPS) RWY 18, Amdt 1B
 Rayville, LA, John H Hooks Jr Memorial, RNAV (GPS) RWY 36, Amdt 2B
 Shreveport, LA, Shreveport Downtown, RNAV (GPS) RWY 32, Orig-A
 Falmouth, MA, Cape Cod Coast Guard Air Station, COPTER ILS Y OR LOC Y RWY 23, Amdt 2
 Falmouth, MA, Cape Cod Coast Guard Air Station, ILS Z OR LOC Z RWY 23, Amdt 2
 Falmouth, MA, Cape Cod Coast Guard Air Station, NDB RWY 23, Orig-A, CANCELED
 Frederick, MD, Frederick Muni, VOR-A, Amdt 2D, CANCELED
 Detroit, MI, Detroit Metropolitan Wayne County, ILS PRM Y RWY 22R (CLOSE PARALLEL), Amdt 1A
 Detroit, MI, Detroit Metropolitan Wayne County, ILS PRM Z RWY 22R (CLOSE PARALLEL), ILS PRM Z RWY 22R (CLOSE PARALLEL) SA CAT I, ILS PRM Z RWY 22R (CLOSE PARALLEL) SA CAT II, Orig-A
 Detroit, MI, Detroit Metropolitan Wayne County, ILS Y RWY 22R, Amdt 1A
 Detroit, MI, Detroit Metropolitan Wayne County, ILS Z OR LOC RWY 22R, ILS Z RWY 22R SA CAT I, ILS Z RWY 22R SA CAT II, Amdt 4A
 Drummond Island, MI, Drummond Island, RNAV (GPS) RWY 8, Orig-A
 Drummond Island, MI, Drummond Island, RNAV (GPS) RWY 26, Orig-A
 Sparta, MI, Paul C Miller-Sparta, RNAV (GPS) RWY 7, Orig-A
 Sparta, MI, Paul C Miller-Sparta, RNAV (GPS) RWY 25, Orig-A
 Sparta, MI, Paul C Miller-Sparta, VOR-A, Amdt 4A, CANCELED
 International Falls, MN, Falls Intl-Einarson Field, ILS OR LOC RWY 31, Amdt 10C
 New Ulm, MN, New Ulm Muni, RNAV (GPS) RWY 15, Orig-C
 New Ulm, MN, New Ulm Muni, RNAV (GPS) RWY 33, Orig-B
 Thief River Falls, MN, Thief River Falls Rgnl, ILS OR LOC RWY 31, Amdt 5A
 Thief River Falls, MN, Thief River Falls Rgnl, VOR Y RWY 13, Amdt 9B
 Thief River Falls, MN, Thief River Falls Rgnl, VOR Z RWY 13, Amdt 2D
 Gideon, MO, Gideon Memorial, VOR RWY 15, Amdt 3A, CANCELED
 Fayetteville, NC, Fayetteville Rgnl/Grannis Field, VOR RWY 4, Amdt 16C
 Fayetteville, NC, Fayetteville Rgnl/Grannis Field, VOR RWY 22, Amdt 7C
 Fayetteville, NC, Fayetteville Rgnl/Grannis Field, VOR RWY 28, Amdt 8C
 Greensboro, NC, Piedmont Triad Intl, ILS OR LOC RWY 5L, ILS RWY 5L CAT II, ILS RWY 5L CAT III, Orig-C
 Creighton, NE, Creighton Muni, RNAV (GPS) RWY 13, Orig-C
 Creighton, NE, Creighton Muni, RNAV (GPS) RWY 31, Orig-C
 McCook, NE, Mc Cook Ben Nelson Rgnl, VOR RWY 30, Amdt 11C
 North Platte, NE, North Platte Rgnl Airport Lee Bird Field, RNAV (GPS) RWY 12, Amdt 1B
 North Platte, NE, North Platte Rgnl Airport Lee Bird Field, RNAV (GPS) RWY 30, Amdt 2B
 North Platte, NE, North Platte Rgnl Airport Lee Bird Field, RNAV (GPS) RWY 35, Amdt 1B
 Seward, NE, Seward Muni, Takeoff Minimums and Obstacle DP, Orig-B
 Vincentown, NJ, Red Lion, RNAV (GPS) RWY 5, Orig-A, CANCELED

Vincentown, NJ, Red Lion, Takeoff Minimums and Obstacle DP, Amdt 1, CANCELED
 Vincentown, NJ, Red Lion, VOR-A, Amdt 6A, CANCELED
 Truth or Consequences, NM, Truth or Consequences Muni, Takeoff Minimums and Obstacle DP, Amdt 2
 Lockport, NY, North Buffalo Suburban, RNAV (GPS) RWY 28, Orig, CANCELED
 Lockport, NY, North Buffalo Suburban, Takeoff Minimums and Obstacle DP, Orig, CANCELED
 New York, NY, John F Kennedy Intl, VOR RWY 4L, Amdt 1A
 New York, NY, John F Kennedy Intl, VOR RWY 4R, Orig-A
 New York, NY, LaGuardia, VOR-H, Amdt 3C, CANCELED
 Schenectady, NY, Schenectady County, Takeoff Minimums and Obstacle DP, Amdt 6
 Akron, OH, Akron Fulton Intl, NDB RWY 25, Amdt 15A
 Cleveland, OH, Cuyahoga County, ILS OR LOC RWY 24, Amdt 16A
 Columbus, OH, Rickenbacker Intl, NDB RWY 5R, Amdt 2A, CANCELED
 Columbus, OH, Rickenbacker Intl, NDB RWY 23L, Amdt 2A, CANCELED
 Youngstown-Warren, OH, Youngstown-Warren Rgnl, RADAR 1, Amdt 14
 Tulsa, OK, Tulsa Intl, ILS OR LOC RWY 18L, Amdt 16A
 Tulsa, OK, Tulsa Intl, RNAV (GPS) RWY 8, Amdt 2B
 Clarion, PA, Clarion County, VOR-A, Amdt 3A, CANCELED
 Corry, PA, Corry-Lawrence, NDB RWY 14, Amdt 5, CANCELED
 Franklin, PA, Venango Rgnl, VOR RWY 3, Amdt 5B, CANCELED
 Harrisburg, PA, Harrisburg Intl, ILS OR LOC RWY 31, Amdt 1E
 Hazleton, PA, Hazleton Rgnl, Takeoff Minimums and Obstacle DP, Amdt 3
 West Chester, PA, Brandywine Rgnl, RNAV (GPS) RWY 9, Amdt 1A
 West Chester, PA, Brandywine Rgnl, RNAV (GPS) RWY 27, Amdt 1A
 West Chester, PA, Brandywine Rgnl, Takeoff Minimums and Obstacle DP, Amdt 1A
 West Chester, PA, Brandywine Rgnl, VOR-A, Amdt 4A
 York, PA, York, RNAV (GPS) RWY 17, Amdt 2C
 York, PA, York, RNAV (GPS) RWY 35, Amdt 1C
 Greenville, SC, Greenville Downtown, ILS Y OR LOC Y RWY 1, Orig-B
 Greenville, SC, Greenville Downtown, ILS Z OR LOC Z RWY 1, Amdt 30B
 Orangeburg, SC, Orangeburg Muni, Takeoff Minimums and Obstacle DP, Amdt 4
 Pierre, SD, Pierre Rgnl, ILS OR LOC RWY 31, Amdt 12D
 Albany, TX, Albany Muni, RNAV (GPS) RWY 17, Amdt 1C
 Albany, TX, Albany Muni, RNAV (GPS) RWY 35, Amdt 1C
 Baytown, TX, RWJ Airpark, Takeoff Minimums and Obstacle DP, Amdt 1A
 Borger, TX, Hutchinson County, VOR RWY 17, Amdt 9, CANCELED
 Borger, TX, Hutchinson County, VOR/DME RWY 35, Amdt 4A, CANCELED
 Fredericksburg, TX, Gillespie County, Takeoff Minimums and Obstacle DP, Amdt 2
 Galveston, TX, Scholes Intl at Galveston, ILS OR LOC RWY 14, Amdt 12C
 Galveston, TX, Scholes Intl at Galveston, VOR RWY 14, Amdt 4C
 Haskell, TX, Haskell Muni, RNAV (GPS)-A, Orig-A
 Houston, TX, Conroe-North Houston Rgnl, ILS OR LOC RWY 14, Amdt 3C
 Houston, TX, Conroe-North Houston Rgnl, NDB RWY 14, Amdt 3C
 Houston, TX, George Bush Intercontinental/Houston, ILS OR LOC RWY 8L, ILS RWY 8L SA CAT I, ILS RWY 8L CAT II, ILS RWY 8L CAT III, Amdt 4D

Houston, TX, George Bush Intercontinental/Houston, ILS OR LOC RWY 9, ILS RWY 9 SA CAT I, ILS RWY 9 SA CAT II, Amdt 10B
 Houston, TX, George Bush Intercontinental/Houston, ILS OR LOC RWY 26L, ILS RWY 26L SA CAT I, ILS RWY 26L CAT II, ILS RWY 26L CAT III, Amdt 21D
 Houston, TX, George Bush Intercontinental/Houston, ILS OR LOC RWY 26R, ILS RWY 26R SA CAT I, ILS RWY 26R CAT II, ILS RWY 26R CAT III, Amdt 4B
 Houston, TX, George Bush Intercontinental/Houston, ILS OR LOC RWY 27, ILS RWY 27 SA CAT I, ILS RWY 27 CAT II, ILS RWY 27 CAT III, Amdt 11A
 Houston, TX, Pearland Rgnl, VOR-B, Amdt 1A, CANCELED
 Houston, TX, William P Hobby, ILS OR LOC RWY 4, ILS RWY 4 SA CAT I, ILS RWY 4 CAT II, ILS RWY 4 CAT III, Amdt 43A
 Houston, TX, William P Hobby, ILS OR LOC RWY 13R, Amdt 12D
 Houston, TX, William P Hobby, ILS OR LOC RWY 31L, Amdt 6D
 La Porte, TX, La Porte Muni, VOR-A, Orig-B, CANCELED
 Olney, TX, Olney Muni, RNAV (GPS) RWY 17, Amdt 1
 Olney, TX, Olney Muni, RNAV (GPS) RWY 35, Amdt 1
 Brookneal, VA, Brookneal/Campbell County, RNAV (GPS) RWY 24, Amdt 1B
 Brookneal, VA, Brookneal/Campbell County, VOR-A, Amdt 2A
 Norfolk, VA, Chesapeake Rgnl, VOR/DME RWY 23, Amdt 1A, CANCELED
 Petersburg, VA, Dinwiddie County, Takeoff Minimums and Obstacle DP, Amdt 1
 Burlington, WI, Burlington Muni, RNAV (GPS) RWY 11, Orig-C
 Burlington, WI, Burlington Muni, RNAV (GPS) RWY 29, Amdt 1C
 Park Falls, WI, Park Falls Muni, NDB RWY 36, Amdt 1A, CANCELED
 Platteville, WI, Platteville Muni, RNAV (GPS) RWY 7, Orig-C
 Platteville, WI, Platteville Muni, RNAV (GPS) RWY 25, Orig-A
 Bluefield, WV, Mercer County, ILS OR LOC RWY 23, Amdt 15D

RESCINDED: On February 7, 2019 (84 FR 2441), the FAA published an Amendment in Docket No. 31229, Amdt No. 3831, to Part 97 of the Federal Aviation Regulations under section 97.33. The following entry for College Station, TX, effective February 28, 2019, is hereby rescinded in its entirety:

College Station, TX, Easterwood Field, RNAV (GPS) RWY 29, Amdt 1B

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>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
HANCOCK CO-RON LEWIS FIELD	KY8	RNAV (GPS) RWY 5	1B	LEWISPORT	KY	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
412	411	RNAV (GPS) RWY 5	1A	12/11/2014	3W	2010
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
RNAV		28 MARCH 2019	ROUTINE			

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 315/30 CW 135/30	NOPT	SUCVO	IF/IAF	3000
2. 135/30 CW 315/30		SUCVO	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>
SUCVO	IF/IAF	AKVEH		TF	FB	1.00	045.40	6.80	2100
AKVEH	FAF	RW05	MAP	TF	FO	0.30	045.45	5.20	
RW05	MAP	812 MSL		CA			045.45		
812 MSL		MCKVR		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LP: RW05
 LNAV: RW05

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT MCKVR AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



AIRPORT

HANCOCK CO-RON LEWIS FIELD

AIRPORT ID

KY8

PROCEDURE NAME

RNAV (GPS) RWY 5

ORIGINAL/AMENDMENT

1B

CITY

LEWISPORT

STATE

KY

PROFILE:

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

2. HOLD SW SUCVO, RT, 045.40 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 045.45 FAF: AKVEH DIST FAF TO MAP: 5.20 DIST FAF TO THLD: 5.20

4. MIN ALT: SUCVO 3000, AKVEH 2100

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

6. MIN GP INCPT: GP ALT AT FAF :

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 5 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OWENSBORO ALTIMETER SETTING AND INCREASE ALL MDAS 60 FEET; INCREASE LP AND LNAV CAT C VISIBILITY 1/8 SM AND CIRCLING CAT C VISIBILITY 1/4 SM.

ADDITIONAL FLIGHT DATA:

CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.

WAAS CHANNEL #42824

REFERENCE PATH ID: W05A

CHART FAS OBST: 770 TOWER 375546N/0865240W.

HOLD NE, RT, 225.62 INBOUND

LTP HAE: 93.1 M

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>
LP MDA	1020	1	609	1020	1	609	1020	1 3/4	609		NA				
LNAV MDA	1020	1	609	1020	1	609	1020	1 3/4	609		NA				
CIRCLING	1020	1	608	1080	1	668	1080	1 3/4	668		NA				



CHANGES - REASONS

DELETED AKVEH TO RW05: 3.00/35, PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT AND ADDED PROFILE NOTE: VISUAL SEGMENT - OBSTACLES - FLIGHT INSPECTION RESULTS DO NOT WARRANT A VDA.
DELETED NOTE: WHEN VGSI INOP, CIRCLING RWY 23 NA AT NIGHT - NO 20:1 PENETRATION, VERIFIED WITH TARGETS BUILD.
DELETED NOTE: WHEN VGSI INOP, STRAIGHT-IN/CIRCLING RWY 5 PROCEDURE NA AT NIGHT - NO 20:1 PENETRATION, VERIFIED WITH TARGETS BUILD.
UPDATED HELICOPTER VISIBILITY REDUCTION FROM 1 NM TO 3/4 NM - NO 20:1 PENETRATION, VERIFIED WITH TARGETS BUILD.
UPDATED BACKUP ALTIMETER NOTES, CHANGED MDA TO MDAS AND MILE TO SM - CURRENT CRITERIA WORDING.
DELETED DME/DME RNP-0.3 NA REPLACED WITH RNP APCH.

FAS DATA CHANGES:
LTP/FTP LATITUDE/ LONGITUDE CHANGED FROM 375656.9325N/ 0865142.6425W TO 375656.9290N/ 0865142.6450W - CURRENT AIRNAV.
THRESHOLD CROSSING HEIGHT (TCH) CHANGED FROM 00035.0 TO 00000.0 - FLIGHT INSPECTION RESULTS DO NOT WARRANT A VDA.
GLIDEPATH ANGLE (GPA) FROM 03.00 TO 00.00 - FLIGHT INSPECTION RESULTS DO NOT WARRANT A VDA.
CRC REMAINDER CHANGED FROM 7EE558C9 TO B2A59CE4 - RESULT OF FAS DATA BLOCK INFORMATION CHANGES.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: EVV APP CON, ZID, AMGR

<u>FLIGHT CHECKED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
KEVIN RIESE	DAVID DANNER Jan 07, 2019	FICO	1/3/19	
<u>DEVELOPED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
DEANNA M. FIELDS	DEANNA M FIELDS Nov 19, 2018	AJV-5421	10/22/2018	
<u>APPROVED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
JULIE MORGAN	DAVID DANNER Jan 07, 2019	AJV-5420		MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KY8
RUNWAY	RW05
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W05A
LTP/FTP LATITUDE	375656.9290N
LTP/FTP LONGITUDE	0865142.6450W
LTP/FTP ELLIPSOIDAL HEIGHT	+00931
FPAP LATITUDE	375802.6900N
FPAP LONGITUDE	0865026.5200W
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	1528
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	B2A59CE4

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01248
FPAP ORTHOMETRIC HEIGHT	+01248



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> PITTSFIELD MUNI	<u>AIRPORT ID</u> 2B7	<u>PROCEDURE NAME</u> NDB RWY 36	<u>ORIGINAL/AMENDMENT</u> 4E	<u>CITY</u> PITTSFIELD	<u>STATE</u> ME	
<u>AIRPORT ELEVATION</u> 197	<u>TDZE</u> 194	<u>SUPERSEDED</u> NDB RWY 36	<u>ORIGINAL/AMENDMENT</u> 4D	<u>DATED</u> 03/03/2016	<u>MAG VAR</u> 18W	<u>EPOCH YEAR</u> 1980
<u>FACILITY</u> BUP	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 28 MARCH 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>
BGR VORTAC		BUP NDB					266.42	22.43	2800
SUH NDB		BUP NDB					002.44	40.32	2800
AUG VOR/DME		BUP NDB					057.61	29.45	2600

MISSED APPROACH

MAP:

4.00 NM AFTER BUP NDB

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 2600 DIRECT BUP NDB AND HOLD, CONTINUE CLIMB-IN-HOLD TO 2600.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L **SIDE OF COURSE** 188.83 **OUTBOUND** 2600 **FT WITHIN** 10 **MILES OF** BUP NDB (IAF)
- 2.
3. **FAC:** 008.83 **FAF:** BUP NDB **DIST FAF TO MAP:** 4.00 **DIST FAF TO THLD:** 4.00
4. **MIN ALT:** BUP NDB 1700
8. **MSA FROM:** BUP NDB 135-315 2500, 315-135 3100

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: RWY 36 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 BANGOR ASOS
519 AAO 444233N/0692314W
CHART CIRCLING ICON.
BUP NDB TO RW36: 3.52/40.
CHART FAS OBST: 399 TREE 444252N/0692319W.
HOLD S, RT, 008.83 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-36	760	1	566	760	1	566		NA			NA				
CIRCLING	800	1	603	800	1	603		NA			NA				

CHANGES - REASONS

1. RAISED MSA FROM 3000 TO 3100 IN SECTOR 315-135 - NEW OBSTACLE.
2. THIS INCORPORATES P NOTAM FDC 6/2519 1601051844-PERM.
3. HELICOPTER NOTE CHANGED FROM VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED TO RWY 36 HELICOPTER VISIBILITY BELOW 3/4 SM NOT AUTHORIZED - UPDATE TO CURRENT CRITERIA.
4. HAT CHANGED FROM 584 TO 566 - CHANGE FROM THRE TO TDZE.
5. REMOVED WHEN KBGR ALTIMETER NOT AVAILABLE PROCEDURE NA - KBGR ON WMSCR.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: BGR APCH, ZBW, AMGR

FLIGHT CHECKED BY
PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY
JULIE A. MORGAN (JOSHUA DUGAN)

APPROVED BY
JULIE MORGAN

OFFICE

OFFICE
AJV-5420

OFFICE
AJV-5420

DATE

DATE
10/24/2018

DATE

Digitally signed by
ROBERT G HAMILTON
Nov 16, 2018

Digitally signed by
ROBERT G HAMILTON
Nov 16, 2018

Digitally signed by
ROBERT G HAMILTON
Nov 16, 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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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
HOMER, AK	HOMER	25 APRIL 2019	3A

TAKEOFF MINIMUMS:

RWY 6W, 24W: NA - ENVIRONMENTAL.

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

RWY 22, STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

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

RWY 22: CLIMBING RIGHT TURN HEADING 245 TO INTERCEPT HOM VOR/DME R-210 THENCE ...

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

...SOUTHWEST THROUGH NORTHEAST BOUND. (211 CW 019) CLIMB TO 2600 ON HOM VOR/DME R-210 OUTBOUND THEN CLIMB ON COURSE.

VISUAL CLIMB OVER AIRPORT:

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

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 04, TERRAIN 7 FT FROM DER, 421 FT RIGHT OF CENTERLINE, 91 FT MSL.

VEGETATION, LIGHTING, TERRAIN BEGINNING 9 FT FROM DER, 4 FT RIGHT OF CENTERLINE, UP TO 95 FT MSL.

LIGHTING 11 FT FROM DER, 5 FT LEFT OF CENTERLINE, 2 FT AGL/75 FT MSL.

WIND INDICATOR 223 FT FROM DER, 329 FT RIGHT OF CENTERLINE, 19 FT AGL/108 FT MSL.

POLE, NAVAID BEGINNING 224 FT FROM DER, 196 FT RIGHT OF CENTERLINE, UP TO 20 FT AGL/109 FT MSL.

TREE 1381 FT FROM DER, 527 FT RIGHT OF CENTERLINE, 128 FT MSL.

TREE 1939 FT FROM DER, 599 FT RIGHT OF CENTERLINE, 131 FT MSL.

TREES BEGINNING 1965 FT FROM DER, 347 FT RIGHT OF CENTERLINE, UP TO 136 FT MSL.

TREES BEGINNING 2170 FT FROM DER, 335 FT RIGHT OF CENTERLINE, UP TO 142 FT MSL.

TREES BEGINNING 2246 FT FROM DER, 418 FT RIGHT OF CENTERLINE, UP TO 149 FT MSL.

TREES BEGINNING 2376 FT FROM DER, 907 FT RIGHT OF CENTERLINE, UP TO 166 FT MSL.

TREES BEGINNING 2528 FT FROM DER, 767 FT RIGHT OF CENTERLINE, UP TO 188 FT MSL.

NOTE: RWY 22, FENCE, LIGHTING, SIGN BEGINNING 3 FT FROM DER, 5 FT LEFT OF CENTERLINE, UP TO 9 FT AGL/80 FT MSL.

LIGHTING 10 FT FROM DER, 5 FT RIGHT OF CENTERLINE, 2 FT AGL/72 FT MSL.

TREE 307 FT FROM DER, 532 FT LEFT OF CENTERLINE, 126 FT MSL.

NAVAID, POLE BEGINNING 522 FT FROM DER, 518 FT RIGHT OF CENTERLINE, UP TO 36 FT AGL/104 FT MSL.

TOWER 1035 FT FROM DER, 702 FT RIGHT OF CENTERLINE, 62 FT AGL/130 FT MSL.

CONTROLLING OBSTACLES:

RWY 4: 1200 FT MSL AAO 594232.61N/1512137.96W

OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: 4196 FT MSL AAO 593757.00N/1505936.00W.

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

RWY 4 (VCOA): 1598 FT MSL AAO 594227.00N/1512736.00W (VCA), 5597 FT MSL AAO 593403.00N/1505154.00W (VCOA DIVERSE)

REMARKS:

100 FT VEGETATION, 200 FT SHIP.

Digitally signed by

ROBERT G HAMILTON

Dec 04, 2018

OFFICE SYMBOL:

DATE:

FLIGHT INSPECTED BY:

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED.

DEVELOPED BY:

JULIE MORGAN
(DAVID ZAHN)

Digitally signed by

ROBERT G HAMILTON

Dec 04, 2018

OFFICE SYMBOL:

AJV-5420

DATE:

11/20/2018

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>
HOMER, AK	HOMER	25 APRIL 2019	3A

APPROVED BY:

JULIE MORGAN

Digitally signed by

ROBERT G HAMILTON

Dec 04, 2018

OFFICE SYMBOL:

AJV-5420

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A

ALPA

AOPA

APA

HAI

NBAA

☐☒☒☐☐☒

OTHER:

ZAN, AMGR

CHANGES - REASONS:

ADDED RWY 6W, 24W: NA - ENVIRONMENTAL TO TAKEOFF MINIMUMS - CANCELS NOTAM.



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> BOB BAKER MEMORIAL	<u>AIRPORT ID</u> PAIK	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 6	<u>ORIGINAL/AMENDMENT</u> ORIG-D	<u>CITY</u> KIANA	<u>STATE</u> AK
<u>AIRPORT ELEVATION</u> 171	<u>TDZE</u> 171	<u>SUPERSEDED</u> RNAV (GPS) RWY 6	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>DATED</u> 07/21/2016	<u>MAG VAR</u> 18E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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. 333/30 CW 153/30	NOPT	KURCE	IF/IAF	4700
2. 153/30 CW 244/30		153/15 CW 244/15		6200
3. 153/15 CW 244/15		HELKI	IAF	4700
4. 244/30 CW 333/30		CIDAY	IAF	4700

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>
HELKI	IAF	KURCE	NOPT	TF	FB	1.00	153.35	5.00	4700
CIDAY	IAF	KURCE	NOPT	TF	FB	1.00	333.41	5.00	4700
KURCE	IF/IAF	UKOBE		TF	FB	1.00	063.38	7.00	2500
UKOBE	FAF	RW06	MAP	TF	FO	0.30	063.65	7.20	
RW06	MAP	571 MSL		CA			063.65		
571 MSL		KURCE		DF	FO	1.00			4700

MISSED APPROACH

MAP:

LNAV: RW06

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 4700 DIRECT KURCE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SW KURCE, RT, 063.38 INBOUND, 4700 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 063.65

FAF: UKOBE

DIST FAF TO MAP: 7.20

DIST FAF TO THLD: 7.20

4. MIN ALT: KURCE 4700, UKOBE 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:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: RWY 6 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: WHEN LOCAL ALTIMETER NOT RECEIVED, USE SELAWIK ALTIMETER SETTING.

ADDITIONAL FLIGHT DATA:

CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES
CHART FAS OBST: 1093 TREE 665904N/1603400W.

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	1400	1 1/4	1229	1400	1 1/2	1229	1400	3	1229		NA				
CIRCLING	1400	1 1/4	1229	1400	1 1/2	1229	1400	3	1229		NA				

CHANGES - REASONS

1. CHANGED ALTIMETER SETTING NOTE FROM USE SELAWIK ALTIMETER SETTING TO WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SELAWIK ALTIMETER SETTING - ADDED LOCAL ALTIMETER SOURCE.
2. REMOVED DME/DME RNP-0.3 NA CHART NOTE AND REPLACED WITH RNP APCH IN PBN REQUIREMENTS NOTE SECTION - IAW FAAO 8260.19H, PARA 8-6-8.
3. UPDATED CHART NOTE: "HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" TO "RWY 6 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED." - IAW 8260.19H, PARA 8-6-11 K(3).
4. UPDATED CHART NOTE: "NIGHT LANDING: RWY 6 NA" TO "PROCEDURE NA AT NIGHT" - IAW 8260.19H, PARA 8-6-11O(2A).
5. INCORPORATED CHANGES FROM ORIG-A, ORIG-B, AND ORIG-C - IAW FAAO 8260.19H, PARA 8-3-4C(2).



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ST AERO, AMNGR

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

Digitally signed by

DONALD H LANIER

Jan 09, 2019

OFFICE

AJV-5431

DATE

12/03/2018

DEVELOPED BY

DONALD H. LANIER (VALDRIE L BUFORD JR.)

Digitally signed by

DONALD H LANIER

Jan 09, 2019

OFFICE

AJV-5430

DATE

TITLE

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

DONALD H LANIER

Jan 09, 2019



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> BOB BAKER MEMORIAL	<u>AIRPORT ID</u> PAIK	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 24	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> KIANA	<u>STATE</u> AK
<u>AIRPORT ELEVATION</u> 171	<u>TDZE</u> 169	<u>SUPERSEDED</u> RNAV (GPS) RWY 24	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 12/10/2015	<u>MAG VAR</u> 18E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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. 155/30 CW 335/30	NOPT	155/15 CW 335/15		6100
2. 155/15 CW 335/15		RELOC	IF/IAF	4100
3. 335/30 CW 064/30		RAYKO	IAF	4100
4. 064/30 CW 155/30		064/9 CW 155/9		6200
5. 064/9 CW 155/9		LEYSE	IAF	4700

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>
RAYKO	IAF	RELOC	NOPT	TF	FB	1.00	334.58	5.00	4100
LEYSE	IAF	RELOC	NOPT	TF	FB	1.00	154.53	5.00	4100
RELOC	IF/IAF	UCANE		TF	FB	1.00	244.55	7.13	2900
UCANE	FAF	RW24	MAP	TF	FO	0.30	244.28	8.40	
RW24	MAP	571 MSL		CA			244.28		
571 MSL		RELOC		DF	FO	1.00			4100



MISSED APPROACH

MAP:
LNAV: RW24

MISSED APPROACH INSTRUCTIONS:
CLIMBING LEFT TURN TO 4100 DIRECT RELOC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)												
2.	HOLD NE RELOC, RT, 244.55 INBOUND, 4100 FT. IN LIEU OF PT (IAF), MAX 6000.															
3. FAC:	244.28	FAC: UCANE	DIST FAF TO MAP: 8.40	DIST FAF TO THLD: 8.40												
4. MIN ALT:	RELOC 4100, UCANE 2900															
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 NOTE: PROCEDURE NA AT NIGHT.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SELAWIK ALTIMETER SETTING.

ADDITIONAL FLIGHT DATA:

UCANE TO RW24: 3.05/40.
CHART VDP AT 5.64 NM TO RW24
CHART FAS OBST: 1549 TREE 670028N/1600647W.
CHART: 1649 TREE 670049N/1600621W.

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	2000	1 1/4	1831	2000	1 1/2	1831	2000	3	1831		NA				
CIRCLING	2000	1 1/4	1829	2000	1 1/2	1829	2000	3	1829		NA				



CHANGES - REASONS

1. CHANGED ALTIMETER SETTING NOTE FROM USE SELAWIK ALTIMETER SETTING TO WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SELAWIK ALTIMETER SETTING - ADDED LOCAL ALTIMETER SOURCE.
2. AMENDED 34:1 IS NOT CLEAR TO READ 34:1 IS CLEAR - NEW OBSTACLE STUDY, VISUAL SURFACES CLEAR OF PENETRATIONS.
3. ADDED PROFILE NOTE VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH{FEET} - PROCEDURE TCH (40) AND VGSI TCH (29) NOT WITHIN COINCIDENCE TOLERANCE.
4. ADDED VDP AT 5.64 NM TO RW24 - IAW FAAO 8260.3D, PARA 2-6-5.
5. DELETED NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED - NO LONGER REQUIRED, VISUAL SURFACES CLEAR OF PENETRATIONS.
6. INCORPORATED CHANGES FROM ORIG-A - IAW FAAO 8260.19H, PARA 8-3-4C(2).

COORDINATED WITH:

A4A ☐ **ALPA** ☐ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ST AERO, AMNGR

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE**DATE**

Digitally signed by

DONALD H LANIER

Jan 09, 2019

OFFICE

AJV-5431

DATE

12/03/2018

DEVELOPED BY

DONALD H. LANIER (VALDRIE L BUFORD JR.)

Digitally signed by

DONALD H LANIER

Jan 09, 2019

OFFICE

AJV-5430

DATE**TITLE****APPROVED BY**

PATRICK MULQUEEN

Digitally signed by

DONALD H LANIER

Jan 09, 2019

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> KOTLIK	<u>AIRPORT ID</u> PFKO	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 2	<u>ORIGINAL/AMENDMENT</u> ORIG-E	<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-D	<u>DATED</u> 01/03/2019	<u>MAG VAR</u> 15E	<u>EPOCH YEAR</u> 2005
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
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 PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PICNI ON V385 SOUTHWEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT GOYWI ON V488 SOUTHWEST BOUND AND V506 SOUTHEAST BOUND.
CHART PLANVIEW 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. CHART "PROFILE" NOTE: PROCEDURE NA FOR ARRIVALS AT PICNI ON V385 SOUTHWEST BOUND. CHANGED TO CHART "PLANVIEW" NOTE: PROCEDURE NA FOR ARRIVALS AT PICNI ON V385 SOUTHWEST BOUND. - THIS IS A PLANVIEW NOTE.
2. CHART "PROFILE" NOTE: PROCEDURE NA FOR ARRIVALS AT GOYWI ON V488 SOUTHWEST BOUND AND V506 SOUTHEAST BOUND. CHANGED TO CHART "PLANVIEW" NOTE: PROCEDURE NA FOR ARRIVALS AT GOYWI ON V488 SOUTHWEST BOUND AND V506 SOUTHEAST BOUND. - THIS IS A PLANVIEW NOTE.
3. CHART "PROFILE" NOTE: PROCEDURE NA FOR ARRIVAL ON ENM VOR/DME AIRWAY RADIALS 335 CW 133. CHANGED TO CHART "PLANVIEW" NOTE: PROCEDURE NA FOR ARRIVAL ON ENM VOR/DME AIRWAY RADIALS 335 CW 133. - THIS IS A PLANVIEW NOTE.



COORDINATED WITH:

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

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

Digitally signed by
MARK D ADAMS

DEVELOPED BY

COLTON CROWDER

Digitally signed by

COLTON CROWDER

OFFICE

AJV-A412

DATE

12/20/2018

Jan 08, 2019

APPROVED BY

LONNIE EVERHART

Dec 20, 2018

OFFICE

AJV-A41

DATE

Digitally signed by
MARK D ADAMS
Jan 08, 2019

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> ROBBINS FIELD	<u>AIRPORT ID</u> K20A	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 6	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> ONEONTA	<u>STATE</u> AL
<u>AIRPORT ELEVATION</u> 1125	<u>TDZE</u> 1121	<u>SUPERSEDED</u> RNAV (GPS) RWY 5	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<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> 25 APRIL 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>
GAD VOR/DME		HEVOG		TF	FO	2.00	255.83	26.94	4000
VUZ VORTAC	IAF	HEVOG	NOPT	TF	FB	1.00	058.51	18.27	4000
HEVOG	IF/IAF	ZINOG		TF	FB	1.00	057.64	7.24	3000
ZINOG	FAF	RW06	MAP	TF	FO	0.30	057.71	5.76	
RW06	MAP	1525 MSL		CA			057.71		
1525 MSL		CEPET		DF	FO	1.00			4000

MISSED APPROACH

MAP:

LNAV: RW06

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4000 DIRECT CEPET AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
2. HOLD SW HEVOG, RT, 057.64 INBOUND, 4000 FT. IN LIEU OF PT (IAF), MAX 6000.
3. **FAC:** 057.71 **FAF:** ZINOG **DIST FAF TO MAP:** 5.76 **DIST FAF TO THLD:** 5.76
4. **MIN ALT:** HEVOG 4000, ZINOG 3000
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:** RW06 3100



PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON GADSDEN VOR/DME AIRWAY RADIALS 300 CW 040.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON VUZ VORTAC AIRWAY RADIALS 333 CW 137.
CHART NOTE: USE ALBERTVILLE RGNL ALTIMETER SETTING, WHEN NOT RECEIVED, USE NORTHEAST ALABAMA RGNL ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET AND INCREASE CAT C VISIBILITY 1/8 SM.
CHART NOTE: RWY 6 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.

ADDITIONAL FLIGHT DATA:

CHART: ALBERTVILLE RGNL AWOS-3.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
FAS OBST: 1440 AAO 335558N/0862638W.
HOLD NE, RT, 237.88 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	1760	1	639	1760	1	639	1760	1 7/8	639		NA				
CIRCLING	1760	1	635	1760	1	635	1760	1 7/8	635		NA				

CHANGES - REASONS

UPDATED RWY 5 TO RWY 6-RUNWAY RENUMBERING.
UPDATED FINAL TERMINAL ROUTE FROM ZINOG FAF RW05 TO ZINOG FAF RW06-RUNWAY RENUMBERING.
UPDATED MISSED APPROACH 'FROM' TERMINAL ROUTE DESCRIPTION FROM RW05 (MAP) TO RW06 (MAP)-RUNWAY RENUMBERING.
UPDATED MISSED APPROACH 'TO' TERMINAL ROUTE DESCRIPTION FROM CEPET (FO) TO CEPET (DF) (FO) (RNP 1.00)-RUNWAY RENUMBERING.
ADDED LINE 7 NOTE 20:1 IS NOT CLEAR-IWA 8260.19H 8-6-7 G(3).
UPDATED LINE 8 MSA FROM; FROM RW05 3100 TO RW06 3100-RUNWAY RENUMBERING.
UPDATED MISSED APPROACH MAP FROM LNAV: RWY05 TO LNAV: RWY06-RUNWAY RENUMBERING.
DELETED CHART NOTE: DME/DME RNP-0.3 NA ADDED PBN EQUIPMENT REQUIREMENT NOTE RNP APCH-IWA 8260.19H 8-6-8 B(1).
UPDATED CHART NOTE FROM HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA TO RWY 6 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED-IAW 8260.19H 8-6-11 K(3).



COORDINATED WITH:

A4A ☐ ALPA ☐ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZTL, BHM APP CON, 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
Jun 29, 2018

DATE

DEVELOPED BY

JOHN HAZELTON

Digitally signed by
JOHN HAZELTON
Jun 26, 2018

OFFICE

AJV-5421

DATE

05/18/2018

APPROVED BY

JULIE MORGAN

Digitally signed by
DEZ SILAGYI
Jun 29, 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> ROBBINS FIELD	<u>AIRPORT ID</u> K20A	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 24	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> ONEONTA	<u>STATE</u> AL
<u>AIRPORT ELEVATION</u> 1125	<u>TDZE</u> 1125	<u>SUPERSEDED</u> RNAV (GPS) RWY 23	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 05/31/2012	<u>MAG VAR</u> 3W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
GAD VOR/DME		CEPET		TF	FO	2.00	335.10	8.34	4000
GESTS	IAF	CEPET	NOPT	TF	FB	1.00	204.89	12.47	4000
CEPET	IF/IAF	ZOPAR		TF	FB	1.00	237.88	7.25	3000
ZOPAR	FAF	RW24	MAP	TF	FO	0.30	237.81	5.75	
RW24	MAP	1525 MSL		CA			237.81		
1525 MSL		HEVOG		DF	FO	1.00			4000

MISSED APPROACH

MAP:

LNAV: RW24

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4000 DIRECT HEVOG AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
2. HOLD NE CEPET, RT, 237.88 INBOUND, 4000 FT. IN LIEU OF PT (IAF), MAX 6000.
3. **FAC:** 237.81 **FAF:** ZOPAR **DIST FAF TO MAP:** 5.75 **DIST FAF TO THLD:** 5.75
4. **MIN ALT:** CEPET 4000, ZOPAR 3000
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:** RW24 3100



PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON GAD VOR/DME AIRWAY RADIALS 300 CW 040 AND GESTS ON V115 NORTHEAST BOUND.
CHART NOTE: USE ALBERTVILLE RGNL ALTIMETER SETTING, WHEN NOT RECEIVED, USE NORTHEAST ALABAMA RGNL ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET AND INCREASE LNAV CAT B VISIBILITY 1/4 SM, CAT C CIRCLING VISIBILITY 1/4 SM.
CHART NOTE: RWY 24 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.

ADDITIONAL FLIGHT DATA:

ZOPAR TO RW24: 3.00/45
CHART: ALBERTVILLE RGNL AWOS-3.
FAS OBST: 1500 AAO 340043N/0861934W.
HOLD SW, RT, 057.64 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	1820	1	695	1820	1	695	1820	2	695		NA				
CIRCLING	1820	1	695	1820	1	695	1820	2	695		NA				

CHANGES - REASONS

UPDATED RWY 23 TO RWY 24-RUNWAY RENUMBERING.
UPDATED FINAL TERMINAL ROUTE FROM ZOPAR FAF RW23 TO ZOPAR FAF RW24-RUNWAY RENUMBERING.
UPDATED MISSED APPROACH 'FROM' DESCRIPTION FROM RW23(MAP) TO RW24 (MAP)-RUNWAY RENUMBERING.
UPDATED MISSED APPROACH 'TO' TERMINAL ROUTE DESCRIPTION FROM HEVOG (FO) TO HOVOG (DF) (FO) (RNP 1.00)-RUNWAY RENUMBERING.
ADDED LINE 7 NOTE 20:1 IS NOT CLEAR-IWA 8260.19H 8-6-7 G(3).
UPDATED LINE 8 MSA FROM; FROM RW23 3100 TO RW24 3100-RUNWAY RENUMBERING.
UPDATED MISSED APPROACH MAP FROM LNAV: RWY23 TO RWY24-RUNWAY RENUMBERING.
DELETED CHART NOTE: DME/DME RNP-0.3 NA ADDED PBN EQUIPMENT REQUIREMENT NOTE RNP APCH-IWA 8260.19H 8-6-8 B(1).
ADDED CHART NOTE: RWY 24 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED-IAW 8260.19H 8-6-11 K(3).
UPDATED CHART PROFILE NOTE: FROM VGSI AND DESCENT ANGLES NOT COINCIDENT TO VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET})-IAW 8260.19H 8-6-9 M(1).
UPDATED ADDITIONAL FLIGHT DATA: FROM ZOPAR TO RW23: 3.00/45 TO; ZOPAR TO RW24: 3.00/45-RUNWAY RENUMBERING.



COORDINATED WITH:

A4A ☐ ALPA ☐ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZTL, BHM APP CON, AMGR.

FLIGHT CHECKED BY

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, DEC 22, 2017.
Digitally signed by **DEZ SILAGYI**
Jun 29, 2018

DEVELOPED BY	Digitally signed by	OFFICE	DATE
JOHN HAZELTON	JOHN HAZELTON	AJV-5421	05/22/2018
	Jun 26, 2018		

APPROVED BY	Digitally signed by	OFFICE	DATE	TITLE
JULIE MORGAN	DEZ SILAGYI	AJV-5420		MANAGER
	Jun 29, 2018			



**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>
ONEONTA, AL	ROBBINS FIELD	25 APRIL 2019	ORIG-B

TAKEOFF MINIMUMS:

RWY 6 STANDARD.

RWY 24 300-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 206 TO 1400.

TEXTUAL DEPARTURE PROCEDURES:

RWY 6-CLIMB HEADING 057.76 TO 2000 BEFORE TURNING.

RWY 24- CLIMB HEADING 250.00 TO 2400 BEFORE TURNING.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 05, TREES, BEGINNING 162 FT FROM DER, 169 FT LEFT OF CENTERLINE, UP TO 133 FT AGL/1199 FT MSL. TREE 366 FT FROM DER, 569 FT RIGHT OF CENTERLINE, 76 FT AGL/1169 FT MSL. TREES, BEGINNING 3184 FT FROM DER, 92 FT LEFT OF CENTERLINE, UP TO 129 FT AGL/1211 FT MSL. TREE 3639 FT FROM DER, 86 FT LEFT OF CENTERLINE, 147 FT AGL/1222 FT MSL. TREE 4205 FT FROM DER, 372 FT LEFT OF CENTERLINE, 107 FT AGL/1231 FT MSL. TREE 4499 FT FROM DER, 623 FT LEFT OF CENTERLINE, 152 FT AGL/1239 FT MSL.

NOTE: RWY 23, TREE, TRAVERSE WAY, BEGINNING 145 FT FROM DER, 304 FT LEFT OF CENTERLINE, UP TO 135 FT AGL/1215 FT MSL TRAVERSE WAY 222 FT FROM DER, 463 FT RIGHT OF CENTERLINE, 1147 FT MSL. TREES, BEGINNING 255 FT FROM DER, 9 FT LEFT OF CENTERLINE, UP TO 137 FT AGL/1217 FT MSL. TREE 281 FT FROM DER, 214 FT RIGHT OF CENTERLINE, 109 FT AGL/1188 FT MSL. TREE 412 FT FROM DER, 449 FT RIGHT OF CENTERLINE, 151 FT AGL/1230 FT MSL. TREES, BEGINNING 736 FT FROM DER, 8 FT RIGHT OF CENTERLINE, UP TO 157 FT AGL/1236 FT MSL. TREE 5381 FT FROM DER, 1917 FT RIGHT OF CENTERLINE, 60 FT AGL/1243 FT MSL. TREE 1 NM FROM DER, 1684 FT RIGHT OF CENTERLINE, 97 FT AGL/1270 FT MSL.

CONTROLLING OBSTACLES:

RWY 24 1270FT MSL TREE 335742.20N-08692422.52W (CLIMB GRADIENT).

OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 24-2049FT MSL TOWER 335327.00N-0862813.00W.

REMARKS:

FLIGHT INSPECTED BY:

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

Digitally signed by

OFFICE SYMBOL:

DATE:

DEZ SILAGYI

Jun 29, 2018

DEVELOPED BY:

JOHN HAZELTON

JOHN E HAZELTON

Digitally signed by JOHN E HAZELTON
Date: 2018.05.23 10:09:47 -05'00'

OFFICE SYMBOL:

AJV-5421

DATE:

05/21/2018

APPROVED BY:

JULIE MORGAN

Digitally signed by

DEZ SILAGYI

Jun 29, 2018

OFFICE SYMBOL:

AJV-5420

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA



OTHER:

ZTL, BHM APP CON, AMGR

CHANGES - REASONS:

RUNWAYS 5/23 RENUMBERED TO 6/24.

INCORPORATED TAKEOFF MINIMUMS, CLIMB GRADIENT AND CG OBSTACLE IAW P-NOTAM 8/3757.

UPDATED LOW CLOSE IN OBSTACLES.



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> BILL PUGH FIELD	<u>AIRPORT ID</u> M22	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 2	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> RUSSELLVILLE	<u>STATE</u> AL	
<u>AIRPORT ELEVATION</u> 718	<u>TDZE</u> 696	<u>SUPERSEDED</u> RNAV (GPS) RWY 2	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 05/28/2015	<u>MAG VAR</u> 2W	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
LANER		DALEC		TF	FO	1.00	234.28	22.54	2700
FOGUM	IAF	DALEC	NOPT	TF	FB	1.00	032.05	10.12	2700
DALEC	IF/IAF	BACAL		TF	FB	1.00	003.21	6.12	2300
BACAL	FAF	KENCE	MAP	TF	FO	0.30	003.22	4.46	
KENCE	MAP	1118 MSL		CA			003.22		
1118 MSL		DALEC		DF	FO	1.00			2700

MISSED APPROACH

MAP:

LNAV: KENCE

MISSED APPROACH INSTRUCTIONS:

CLIMBING LEFT TURN TO 2700 DIRECT DALEC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S DALEC, RT, 003.21 INBOUND, 2700 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 003.22

FAF: BACAL

DIST FAF TO MAP: 4.46

DIST FAF TO THLD: 4.94

4. MIN ALT: DALEC 2700, BACAL 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 CLEAR

20:1: IS NOT CLEAR

TCH:

8. MSA FROM: KENCE 2700

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: RWY 2 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: USE MUSCLE SHOALS ALTIMETER SETTING; WHEN NOT RECEIVED, USE DECATUR ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET.

ADDITIONAL FLIGHT DATA:

CHART MUSCLE SHOALS ASOS.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART COLUMBUS 2 MOA
CHART FAS OBST: 1340 TOWER 342351N/0874416W.
FAC CROSSES RWY C/L EXTENDED 2977 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	1660	1 1/4	964	1660	1 1/2	964	1660	3	964	1660	3	964			
CIRCLING	1660	1 1/4	942	1660	1 1/2	942	1660	3	942	1660	3	942			

CHANGES - REASONS

1. REMOVED DME/DME RNP-0.3 NA. - NOTE IS NO LONGER APPLICABLE.
2. ADDED PROFILE NOTE: VISUAL SEGMENT-OBSTACLE - OBSTACLES EXIST IN VISUAL AREA PER FLIGHT CHECK.
3. REMOVED DESCENT ANGLE/TCH NOTE FROM PROFILE VIEW - PER FLIGHT CHECK REQUEST.
4. ADDED RNP APCH TO PBN REQUIREMENTS SECTION - UPDATED TO CURRENT CRITERIA.
5. CIRCLING HAA CHANGED FROM 937 TO 942 ALL CATS - APT ELEV CHANGED FROM 723 TO 718.
6. REMOVED VDA FROM ADDITIONAL FLIGHT DATA IAW VDA REMOVAL WORKSHEET - VISUAL SEGMENT OBSTACLES EXIST.



COORDINATED WITH:

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

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

Digitally signed by

ROBERT G HAMILTON

Dec 13, 2018

DEVELOPED BY

ROBERT G HAMILTON (KEITH CTR JONES)

OFFICE

AJV-5420

DATE

10/31/2019

Digitally signed by

ROBERT G HAMILTON

Dec 13, 2018

APPROVED BY

ROBERT HAMILTON

OFFICE

AJV-5420

DATE

TITLE

MANAGER

Digitally signed by

ROBERT G HAMILTON

Dec 13, 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> CARLISLE MUNI	<u>AIRPORT ID</u> K4M3	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 9	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> CARLISLE	<u>STATE</u> AR
<u>AIRPORT ELEVATION</u> 241	<u>TDZE</u> 240	<u>SUPERSEDED</u> RNAV (GPS) RWY 9	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 07/29/2010	<u>MAG VAR</u> 3E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 2019	<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>
DUMPI	IAF	CIVAY	NOPT	TF	FB	1.00	174.75	7.72	2500
QITXO	IAF	CIVAY	NOPT	TF	FB	1.00	351.72	8.84	2500
CIVAY	IF/IAF	TAXJU		TF	FB	1.00	087.97	6.20	2000
TAXJU	FAF	RW09	MAP	TF	FO	0.30	088.04	5.30	
RW09	MAP	526 MSL		CA			088.04		
526 MSL		NOLRE		DF	FO	1.00			2500

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW09

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2500 DIRECT NOLRE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD W CIVAY, RT, 087.97 INBOUND, 2500 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 088.04 FAF: TAXJU DIST FAF TO MAP: 5.30 DIST FAF TO THLD: 5.30

4. MIN ALT: CIVAY 2500, TAXJU 2000

5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 286 HAT: 0.75 GS ANT:

6. MIN GP INCPT: 2000 GP ALT AT FAF : TAXJU 2000 OM: MM: IM:

7. GP ANGLE: 3.00 34:1: IS CLEAR 20:1: IS CLEAR TCH: 48.4

8. MSA FROM: RW09 2500

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: BARO-VNAV NA.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DUMPI ON V305 NORTHEAST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT QITXO ON V54 EASTBOUND.
CHART NOTE: CIRCLING RWY 18, 27, 36 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.54 NM TO RW09*
*LNAV ONLY
WAAS CHANNEL #93918
REFERENCE PATH ID: W09A
FAS OBST: 449 AAO 344926N/0914917W.
HOLD E, RT, 268.22 INBOUND
LTP HAE: 46 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	526	1	286	526	1	286		NA			NA				
LNAV/VNAV DA	788	2	548	788	2	548		NA			NA				
LNAV MDA	780	1	540	780	1	540		NA			NA				
CIRCLING	800	1	559	800	1	559		NA			NA				



CHANGES - REASONS

1. DELETED CHART NOTE: DME/DME RNP 0.3 NA-NO LONGER NEEDED.
2. ADDED PBN EQUIPMENT REQUIREMENT NOTE RNP APCH-CURRENT DOCUMENTATION.
3. ADDED LOCAL PRIMARY ALTIMETER NOTE AND MOVED CONTINGENCY ALTIMETER NOTE TO 8260-9 -AIRPORT ADDING WMSCR ALTIMETER.
4. ADDED LEG TYPE AND RNP INFORMATION TO TERMINAL ROUTES AND ADDED CA LEG FOR MISSED APPROACH-UPDATED DOCUMENTATION CRITERIA.
5. DELETED 34:1 IS NOT CLEAR AND ADDED 20:1 AND 34:1 IS CLEAR TO LINE 7-VISUAL AREA CLEAR.
6. DELETED CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA-VISUAL AREA CLEAR.
7. DELETED ADDITIONAL FLIGHT DATA NOTE: CHART STUTTGART AWOS-3-AIRPORT ADDING WMSCR ALTIMETER.
8. UPDATED ALTERNATE MINIMUMS FEROM NA TO STANDARD-AIRPORT ADDING WMSCR ALTIMETER.
9. ADDED ADDITIONAL FLIGHT DATA NOTE: CHART VDP AT 1.54 NM TO RW09* AND *LNAV ONLY-VISUAL AREA CLEAR.
10. UPDATED CIRCLING CAT A/B MDA/HAT FROM 840/599 TO 800/559-CONTROLLING OBSTACLE AS CURRENT PROCEDURE, MDA TO MATCH EXISTING CIRCLING MDA RNAV (GPS) RWY 27 ORIG.
11. ADDED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT QITXO ON V54 EASTBOUND-FEEDER ROUTE DOES NOT MEET THE ALIGNMENT CRITERIA.
12. UPDATED FPAP LATITUDE/LONGITUDE FROM 344820.0500N/0914132.8200W TO 344820.0485N/0914132.8215W-UPDATED SURVEY INFORMATION
13. UPDATED LENGTH OFFSET FROM 1376 TO 1384-UPDATED SURVEY INFORMATION.
14. UPDATED CRC REMAINDER FROM BB10098B TO C7EA2C42-UPDATED SURVEY INFORMATION.
15. ADDED CHART NOTE: CIRCLING RWY 18, 27, 36 NA AT NIGHT- NO SURVEY, VISUAL SURFACES ASSUMED PENETRATED.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZME, LIT APP CON, ARPT MGR

FLIGHT CHECKED BY*Digitally signed by***OFFICE****DATE**

GARY BELL

ROBERT G HAMILTON

FICO

11/10/18

Nov 14, 2018

DEVELOPED BY*Digitally signed by***OFFICE****DATE**

JOHN HAZELTON

JOHN HAZELTON

AJV-5421

06/05/2018

APPROVED BY

Oct 03, 2018

*Digitally signed by***OFFICE****DATE****TITLE**

JULIE MORGAN

ROBERT G HAMILTON

AJV-5420

MANAGER

Nov 14, 2018

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	4M3
RUNWAY	RW09
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W09A
LTP/FTP LATITUDE	344821.7770N
LTP/FTP LONGITUDE	0914321.0020W
LTP/FTP ELLIPSOIDAL HEIGHT	+00460
FPAP LATITUDE	344820.0485N
FPAP LONGITUDE	0914132.8215W
THRESHOLD CROSSING HEIGHT (TCH)	00048.4
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1384
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	C7EA2C42

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+00728
FPAP ORTHOMETRIC HEIGHT	+00728

FEDERAL AVIATION ADMINISTRATION
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TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> CARLISLE MUNI	<u>AIRPORT ID</u> K4M3	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 27	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> CARLISLE	<u>STATE</u> AR
<u>AIRPORT ELEVATION</u> 241	<u>TDZE</u> 241	<u>SUPERSEDED</u> RNAV (GPS) RWY 27	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 06/05/2008	<u>MAG VAR</u> 3E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 2019	<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>
DRAST	IAF	NOLRE	NOPT	TF	FB	1.00	344.97	10.60	2500
SIBOE	IAF	NOLRE	NOPT	TF	FB	1.00	172.85	9.14	2500
NOLRE	IF/IAF	CIVKI		TF	FB	1.00	268.22	6.20	2000
CIVKI	FAF	WOXON/2.00 NM TO RW27		TF	FB	0.30	268.15	3.30	
WOXON/2.00 NM TO RW27		RW27	MAP	TF	FO	0.30	268.15	2.00	
RW27	MAP	640 MSL		CA			268.15		
640 MSL		CIVAY		DF	FO	1.00			2500

MISSED APPROACH

MAP:

LNAV: RW27

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2500 DIRECT CIVAY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD E NOLRE, RT, 268.22 INBOUND, 2500 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 268.15 FAF: CIVKI DIST FAF TO MAP: 5.30 DIST FAF TO THLD: 5.30
4. MIN ALT: NOLRE 2500, CIVKI 2000, WOXON/2.00 NM TO RW27 920
5. DIST TO THLD FROM OM: MM: IM: 150 HAT: GS ANT: OM: MM: IM:
6. MIN GP INCPT: GP ALT AT FAF :
7. GP ANGLE: 34:1: IS NOT CLEAR 20:1: IS NOT CLEAR TCH:
8. MSA FROM: RW27 2500

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: RWY 27 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SIBOE ON V124 NORTHEAST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DRAST ON V54 EASTBOUND.

ADDITIONAL FLIGHT DATA:

482 TOWER 344910N/0913616W
CIVKI TO RW27: 2.98/47.
CHART FAS OBST: 344 TREE 344809N/0914216W.
HOLD W, RT, 087.97 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	640	1	399	640	1	399		NA			NA				
CIRCLING	800	1	559	800	1	559		NA			NA				

CHANGES - REASONS

1. DELETED CHART NOTE: DME/DME RNP 0.3NA-NO LONGER REQUIRED.
2. ADDED LOCAL PRIMARY ALTIMETER AND MOVED CONTINGENCY ALTIMETER NOTE TO 8260-9 -AIRPORT ADDING WMSCR ALTIMETER.
3. ADDED LEG TYPE AND RNP INFORMATION TO TERMINAL ROUTES AND ADDED CA LEG FOR MISSED APPROACH-UPDATED DOCUMENTATION CRITERIA.
4. ADDED PBN EQUIPMENT REQUIREMENT NOTE RNP APCH-UPDATED DOCUMENTATION CRITERIA.
5. ADDED CHART NOTE: PROCEDURE NA AT NIGHT- NO SURVEY, VISUAL SURFACES ASSUMED PENETRATED.
6. ADDED CHART NOTE: RWY 27 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED-NO SURVEY, VISUAL SURFACES ASSUMED PENETRATED.
7. ADDED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SIBOE ON V124 NORTHEAST BOUND-UPDATED CRITERIA.
8. ADDED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DRAST ON V54 EASTBOUND-UPDATED CRITERIA.
9. UPDATED ADDITIONAL FLIGHT DATE NOTE FROM CIVKI TO RW27: 3.05/47 TO CIVKI TO RW27: 2.98/47-UPDATED SURVEY INFORMATION.
10. UPDATED 34:1 FROM IS CLEAR TO IS NOT CLEAR AND ADDED 20:1 IS NOT CLEAR- NO SURVEY, VISUAL SURFACES ASSUMED PENETRATED.



COORDINATED WITH:

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

FLIGHT CHECKED BY

GARY BELL

Digitally signed by

ROBERT G HAMILTON

OFFICE

FICO

DATE

11/10/18

DEVELOPED BY

JOHN HAZELTON

Digitally signed by

JOHN HAZELTON

Sep 06, 2018

OFFICE

AJV-5421

DATE

06/05/2018

APPROVED BY

JULIE MORGAN

Digitally signed by

ROBERT G HAMILTON

Nov 14, 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> CARLISLE MUNI	<u>AIRPORT ID</u> K4M3	<u>PROCEDURE NAME</u> VOR RWY 9	<u>ORIGINAL/AMENDMENT</u> 2D	<u>CITY</u> CARLISLE	<u>STATE</u> AR
<u>AIRPORT ELEVATION</u> 241	<u>TDZE</u> 240	<u>SUPERSEDED</u> VOR/DME RWY 9	<u>ORIGINAL/AMENDMENT</u> 2C	<u>DATED</u> 06/08/2006	<u>MAG VAR</u> 5E
<u>FACILITY</u> LIT	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
LIT VORTAC	IAF	ZAVAV/8.00 DME					066.12	8.00 (LIT R-066)	2000
ZAVAV/8.00 DME	IF	YOCVU/19.00 DME					066.12	11.00 (LIT R-066)	1800

MISSED APPROACH

MAP:

JATUL/23.92 DME

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 4000 ON HEADING 140 AND ON LIT R-089 TO BILLI INT/LIT 30.99 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
2. PROFILE STARTS AT ZAVAV
3. **FAC:** 066.12 **FAF:** YOCVU/19.00 DME **DIST FAF TO MAP:** **DIST FAF TO THLD:** 4.92
4. **MIN ALT:** ZAVAV/8.00 DME 2000, YOCVU/19.00 DME 1800
8. **MSA FROM:** LIT VORTAC 3300

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED

NOTES:

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON LIT VORTAC AIRWAY RADIALS 030 CW 149.
CHART NOTE: CIRCLING RWY 18, 27, 36 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

FAC IS A FLIGHT CHECK VALUE
YACVU TO RW09: 2.90/48
CHART FAS OBST: 410 GRAIN ELEVATOR 344711N/0914324W.
CHART 390 TOWER 344756N/0914309W.
HOLD W, RT, 089.28 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-09	900	1	660		NA			NA			NA				
CIRCLING	900	1	659	900	1 1/4	659		NA			NA				

CHANGES - REASONS

1. UPDATED PROCEDURE NAME FROM VOR/DME RWY 9 TO VOR RWY 9 AND ADDED EQUIPMENT REQUIREMENT NOTE DME REQUIRED-UPDATED CRITERIA.
2. ADDED LOCAL PRIMARY ALTIMETER AND MOVED CONTINGENCY ALTIMETER NOTE TO 8260-9 -AIRPORT ADDING WMSCR ALTIMETER.
3. UPDATED TERMINAL ROUTE FROM LIT VORTAC IAF AND LIT R-066/8.00 DME TO LIT VORTAC IAF AND ZAVAV/8.00 DME AND UPDATED COURSE FROM 066.00 TO 066.12- UPDATED CRITERIA AND MAG COURSE FLIGHT CHECK VALUE.
4. UPDATED TERMINAL ROUTE FROM LIT R-066/8.00 DME IF AND LIT R-066/19.00 DME TO ZAVAV/8.00 DME IF AND YOCVU/19.00 DME AND UPDATED COURSE FROM 066.00 TO 066.12- UPDATED CRITERIA AND MAG COURSE FLIGHT CHECK VALUE.
5. UPDATED MAP FROM LIT R-066/23.92 DME TO JATUL/23.92 DME- UPDATED CRITERIA.
6. UPDATED MISSED APPROACH INSTRUCTIONS FROM CLIMBING RIGHT TURN TO 4000 VIA HEADING 140 AND LIT R-089 TO BILLI INT AND HOLD TO CLIMBING RIGHT TURN TO 4000 ON HEADING 140 AND ON LIT R-089 TO BILLI INT/LIT 30.99 DME AND HOLD-UPDATED CRITERIA.
7. UPDATED LINE 2 FROM PROFILE STARTS AT LIT TO PROFILE STARTS AT ZAVAV-UPDATED CRITERIA.
8. UPDATED LINE 3 FAC FROM 066.00 TO 066.12- MAG BRG IS A FLIGHT CHECK VALUE.
9. UPDATED LINE 3 FAF FROM LIT R-066/19.00 DME TO YOCVU/19.00 DME-UPDATED CRITERIA.
10. ADDED LINE 4 MIN ALT: ZAVAV/8.00 DME 2000, YOCVU/19.00 DME 1800-UPDATED CRITERIA.
11. ADDED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON LIT VORTAC AIRWAY RADIALS 030 CW 149-UPDATED CRITERIA.
12. UPDATED ALTERNATE NA TO STANDARD--AIRPORT ADDING WMSCR ALTIMETER.
13. ADDED CHART NOTE: CIRCLING RWY 18, 27, 36 NA AT NIGHT- NO SURVEY, VISUAL SURFACES ASSUMED PENETRATED.

COORDINATED WITH:A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: LIT ATCT, ZME, APT MGRFLIGHT CHECKED BY

Digitally signed by

ROBERT G HAMILTON

GARY BELL

Nov 14, 2018

OFFICE

FICO

DATE

11/10/18

DEVELOPED BY

Digitally signed by

JOHN HAZELTON

JOHN HAZELTON

OFFICE

AJV-5421

DATE

06/08/2018

APPROVED BY

Oct 03, 2018

Digitally signed by

ROBERT G HAMILTON

JULIE MORGAN

Nov 14, 2018

OFFICE

AJV-5420

DATETITLE

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> Z M JACK STELL FIELD	<u>AIRPORT ID</u> KCRT	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 23	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> CROSSETT	<u>STATE</u> AR	
<u>AIRPORT ELEVATION</u> 184	<u>TDZE</u> 184	<u>SUPERSEDED</u> RNAV (GPS) RWY 23	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 08/17/2017	<u>MAG VAR</u> 2E	<u>EPOCH YEAR</u> 2005
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
HAMPT		TUPOY		TF	FB	1.00	104.16	39.10	2000
AVONS		ZIGAS		TF	FB	1.00	262.26	19.21	2000
MON VOR/DME	IAF	PEVOY	NOPT	TF	FB	1.00	174.04	15.65	2000
ZIGAS	IAF	PEVOY	NOPT	TF	FB	1.00	319.88	5.00	2000
TUPOY	IAF	PEVOY	NOPT	TF	FB	1.00	139.82	5.00	2000
PEVOY	IF/IAF	LOCIK		TF	FB	1.00	229.85	6.01	2000
LOCIK	FAF	RW23	MAP	TF	FO	0.30	229.80	5.49	
RW23	MAP	584 MSL		CA			229.80		
584 MSL		PEVOY		DF	FO	1.00			2000

MISSED APPROACH

MAP:

LNAV: RW23

MISSED APPROACH INSTRUCTIONS:

CLIMBING LEFT TURN TO 2000 DIRECT PEVOY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD NE PEVOY, RT, 229.85 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 8000.
3. FAC: 229.80FAF: LOCIKDIST FAF TO MAP: 5.49DIST FAF TO THLD: 5.49
4. MIN ALT: PEVOY 2000, LOCIK 2000
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: RW23 3200

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HAMPT ON V69 SOUTHWEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT AVONS ON V94 NORTHEAST BOUND.
CHART NOTE: STRAIGHT-IN AND CIRCLING RWY 23 NA AT NIGHT.
CHART NOTE: USE MONROE, LA. ALTIMETER SETTING; WHEN NOT RECEIVED, USE EL DORADO ALTIMETER SETTING AND INCREASE ALL MDA'S 20 FEET AND INCREASE LNAV AND CIRCLING CAT C VISIBILITIES 1/8 SM.

ADDITIONAL FLIGHT DATA:

CHART MONROE RGNL ASOS.
LOCIK TO RW23: 3.05/40.
CHART FAS OBST: 340 TOWER 331330N/0914830W.
CHART 489 TOWER 331353N/0914715W.

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	760	1	576	760	1	576	760	1 5/8	576		NA				
CIRCLING	760	1	576	760	1	576	760	1 5/8	576		NA				



CHANGES - REASONS

1. UPDATED 34:1 AND 20:1 AS NOT CLEAR - CURRENT EVALUATION SHOWS 34:1 AND 20:1 PENETRATIONS EXIST AND INCORPORATING !FDC 7/3273.
2. REMOVED NOTE "DME/DME RNP-0.3 NA."AND ADDED "RNP APCH" TO PBN REQUIREMENT NOTE SECTION - IAW 8260.19H 8-608.B.(1).
3. ADDED NOTE "RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" - IAW 8260.19H 8-6-11.K.)3) AND INCORPORATING FDC 7/3273.
4. UPDATED PLANVIEW NOTE FROM "PROCEDURE NA FOR ARRIVALS AT AVONS VIA V94 NORTHEAST BOUND." TO "PROCEDURE NA FOR ARRIVALS AT AVONS ON V94 NORTHEAST BOUND."- IAW 8260.19H 8-2-5.E. AND INCORPORATING FDC 7/3273.
5. DELETED PROILE NOTE "VGSI AND DESCENT ANGLES NOT COINCIDENT" - ANGLES ARE WITHIN 0.20 DEGREES AND TCH VALUES ARE WITHIN THREE FEET.
6. ADDED "CHART MONROE RGNL ASOS" IN ADDITIONAL FLIGHT DATA - PRIMARY ALTIMETER IS OBTAINED FROM A REMOTE SOURCE.
7. ADDED "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HAMPT ON V69 SOUTHWEST BOUND" - TURN EXCEEDS 90 DEGREES.
8. ADDED "MAX 8000" TO HOLD-IN-LIEU ON LINE 2 - PER .19H PARA 8-6-7B (2).
9. RAISED LNAV AND CIRCLING CAT C VISIBILITY FROM 1 1/2 SM TO 1 5/8 SM - PER VISCHECK TOOL.
10. ADDED "AND INCREASE LNAV AND CIRCLING CAT C VISIBILITIES 1/8 SM" TO BACKUP ALTIMETER NOTE - PER VISCHECK TOOL.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZME, AMGR, ST AV DIR

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

Digitally signed by

ROBERT G HAMILTON

Jan 07, 2019

DEVELOPED BY

ROBERT G HAMILTON (EDUARDO LIMA)

OFFICE

AJV-5422

DATE

11/20/2018

Digitally signed by

ROBERT G HAMILTON

Jan 07, 2019

APPROVED BY

ROBERT HAMILTON

OFFICE

AJV-5422

DATE _____

Digitally signed by

ROBERT G HAMILTON

Jan 07, 2019

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
LOC STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.25

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<u>AIRPORT</u> WALNUT RIDGE RGNL	<u>AIRPORT ID</u> KARG	<u>PROCEDURE NAME</u> LOC RWY 18	<u>ORIGINAL/AMENDMENT</u> 3C	<u>CITY</u> WALNUT RIDGE	<u>STATE</u> AR	
<u>AIRPORT ELEVATION</u> 279	<u>TDZE</u> 275	<u>SUPERSEDED</u> LOC RWY 18	<u>ORIGINAL/AMENDMENT</u> 3B	<u>DATED</u> 04/02/2015	<u>MAG VAR</u> 1E	<u>EPOCH YEAR</u> 2000
<u>FACILITY</u> I-ARG	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
ARG VORTAC		TNZ NDB					010.49	5.92	3000

MISSED APPROACH

MAP:

4.37 NM AFTER TNZ NDB

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 900 THEN CLIMBING LEFT TURN TO 1700 DIRECT TNZ NDB AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT R **SIDE OF COURSE** 359.06 **OUTBOUND** 3000 **FT WITHIN** 10 **MILES OF** TNZ NDB (IAF)
- 2.
3. **FAC:** 179.06 **FAF:** TNZ NDB **DIST FAF TO MAP:** 4.37 **DIST FAF TO THLD:** 4.37
4. **MIN ALT:** TNZ NDB 1700
8. **MSA FROM:** TNZ NDB 120-210 3100, 210-120 2300

EQUIPMENT REQUIREMENTS NOTES:

ADF REQUIRED.

NOTES:

CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-18 CAT D.

ADDITIONAL FLIGHT DATA:

TNZ NDB TO RW18: 2.98/45.
CHART FAS OBST: 366 TREE 361015N/0905455W.
HOLD N, LT, 179.06 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-18	620	3/4	345	620	3/4	345	620	7/8	345	620	1 1/4	345			
CIRCLING	760	1	481	760	1	481	760	1 1/2	481	840	2	561			

CHANGES - REASONS

1. CHANGED MSA SECTOR 210-120 MIN ALTITUDE FROM 2200 FT TO 2300 FT - NEW CONTROLLING OBSTACLE AND CLEAR NOTAM 8/7477.
2. REMOVED "CHART PLANVIEW NOTE: ADF REQUIRED" FROM ADDITIONAL FLIGHT DATA AND ADDED "EQUIPMENT REQUIREMENTS NOTE: ADF REQUIRED" TO EQUIPMENT REQUIREMENT NOTES - UPDATE TO CURRENT CRITERIA IAW 8260.19H 8-6-8.A.
3. CHANGED S-18 CAT C VIS FROM 3/4 TO 7/8; CAT D VIS HAS NOT BEEN LOWERED DUE TO ABRV AMDT CONSTRAINTS - UPDATE TO CURRENT CRITERIA IAW 8260.3D TABLE 3-3-1.
4. ADDED CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-18 CAT D - PER 8260.3D TABLE 3-3-1, NALS VIS IS LOWER THAN PUBLISHED 1-1/4 VIS.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZME, AMGR, STATE AVIATION DIRECTOR

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

Digitally signed by
ROBERT G HAMILTON
Dec 18, 2018

DEVELOPED BY

JULIE A. MORGAN (MADELINE CLARK)

OFFICE

AJV-5422

DATE

11/19/2018

Digitally signed by
ROBERT G HAMILTON

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5420

DATE

Dec 18, 2018

TITLE
MANAGER

Digitally signed by
ROBERT G HAMILTON
Dec 18, 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.
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<u>AIRPORT</u> JACKSONVILLE INTL	<u>AIRPORT ID</u> KJAX	<u>PROCEDURE NAME</u> ILS OR LOC RWY 26	<u>ORIGINAL/AMENDMENT</u> 2B	<u>CITY</u> JACKSONVILLE	<u>STATE</u> FL
<u>AIRPORT ELEVATION</u> 29	<u>TDZE</u> 27	<u>SUPERSEDED</u> ILS OR LOC RWY 26	<u>ORIGINAL/AMENDMENT</u> 2A	<u>DATED</u> 12/11/2014	<u>MAG VAR</u> 6W
<u>FACILITY</u> I-PEK	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
TIKRY INT/RADAR	IF	DALTN OM/INT/RADAR					256.56	5.35 (I-PEK)	1600

MISSED APPROACH

MAP:

ILS: DA
LOC: 4.15 NM AFTER DALTN OM/INT/RADAR

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT DINNS LOM AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 3000 ON HEADING 256.56. EXPECT RADAR VECTORS (RADAR REQUIRED).

PROFILE:

1. PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
2. PROFILE STARTS AT TIKRY
3. **FAC:** 256.56 **FAF:** DALTN OM/INT/RADAR **DIST FAF TO MAP:** 4.15 **DIST FAF TO THLD:** 4.15
4. **MIN ALT:** TIKRY INT/RADAR 2000, DALTN OM/INT/RADAR 1600, ZETRI INT/RADAR 520*
5. **DIST TO THLD FROM OM:** 4.15 **MM:** **IM:** **150 HAT:** **GS ANT:** 1050
6. **MIN GS INCPT:** 1600 **GS ALT AT FAF :** **OM:** 1417 **MM:** **IM:**
7. **GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 48.7
8. **MSA FROM:** CRG VORTAC 2100

EQUIPMENT REQUIREMENTS NOTES:

ADF REQUIRED
RADAR REQUIRED FOR PROCEDURE ENTRY

NOTES:

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

*LOC ONLY

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 26 CATS C/D VISIBILITY TO 1 3/8 SM. ZETRI FIX MINIMUMS: INCREASE S-LOC 26 CATS C/D VISIBILITY TO RVR 5500.



ADDITIONAL FLIGHT DATA:

CHART MAYPORT HIGH/LOW MOA
CHART FAS OBST: 138 TREE 303103N/0813843W.
CHART: 149 POLE 303059N/0813804W.
HOLD W, LT, 076.00 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 26	227	1800	200	227	1800	200	227	1800	200	227	1800	200			
S-LOC 26	520	2400	493	520	2400	493	520	5000	493	520	5000	493			
CIRCLING	520	1	491	520	1	491	520	1 1/2	491	640	2	611			
ZETRI FIX MINIMUMS (DUAL VOR RECEIVERS REQUIRED)															
S-LOC 26	400	2400	373	400	2400	373	400	3500	373	400	3500	373			
CIRCLING	520	1	491	520	1	491	520	1 1/2	491	640	2	611			

CHANGES - REASONS

1. CHANGES FROM P-NOTAM FOR AMDT 2A INCORPORATED INTO FOR - IAW 8260.19H PARA 8-3-4C(3).
2. UPDATED FAS OBST FROM "118 TREE 303019N/0813939W" TO "138 TREE 303103N/0813843W" - NEW CONTROLLING OBSTACLE.
3. ADDED "CHART 149 POLE 303059N/0813804W" TO ADDITIONAL FLIGHT DATA - NEW STEPDOWN 7:1 OBSTACLE.
4. UPDATED GS ALT AT OM FROM 1419 TO 1417 - 1417 BASED ON AIRNAV DATA.
5. MOVED "ADF REQUIRED" AND "RADAR REQUIRED" NOTES FROM NOTES SECTION TO EQUIPMENT REQUIREMENT NOTES AND CHANGED "RADAR REQUIRED" TO "RADAR REQUIRED FOR PROCEDURE ENTRY" - IAW 8260.19H 8-6-8.
6. REMOVED ILS ALTERNATE MINIMUM NOTES - IAW 8260.3C 3-4-1.A.
7. RAISED ZETRI S-LOC 26 MDA/HAT ALL CATS FROM 380/353 TO 400/373 AND CAT C/D VISIBILITY FROM 3000 TO 3500 - NEW CONTROLLING OBSTACLE.
8. UPDATED VGSI COINCIDENT NOTE FROM "VGSI AND ILS GLIDEPATH NOT COINCIDENT" TO "VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET})" - IAW 8260.19H 8-6-9. M.(1).
9. UPDATED INOP NOTE FROM "FOR INOPERATIVE MALSR, INCREASE S-LOC 26 CATS C/D VISIBILITY TO 1 3/8 MILES. DME FIX MINIMUMS: INCREASE S-LOC 26 CATS C/D VISIBILITY TO RVR 5000" TO "FOR INOPERATIVE ALS, INCREASE S-LOC 26 CATS C/D VISIBILITY TO 1 3/8 SM. ZETRI FIX MINIMUMS: INCREASE S-LOC 26 CATS C/D VISIBILITY TO RVR 5500" - NEW CONTROLLING OBSTACLE.



COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZJX, JAX ATCT, JAX APP CON, JAX AMGR, ANG

FLIGHT CHECKED BY

JAMES HAWLEY

Digitally signed by
DONALD H LANIER
Jan 25, 2019

OFFICE

FIOG

DATE

11/05/2018

DEVELOPED BY

DONALD H. LANIER (JACOB MAXFIELD)

Digitally signed by
DONALD H LANIER
Jan 25, 2019

OFFICE

AJV-5431

DATE

08/14/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
DONALD H LANIER
Jan 25, 2019

OFFICE

AJV-5430

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.

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
KEY WEST, FL	KEY WEST INTL	25 APRIL 2019	2

TAKEOFF MINIMUMS:
RWY 9, 27: STANDARD

TEXTUAL DEPARTURE PROCEDURES:

RWY 9: CLIMBING LEFT TURN ON A HEADING BETWEEN 273.40 CW TO 020.00 FROM DEPARTURE END OF RUNWAY OR CLIMBING RIGHT TURN ON A HEADING BETWEEN 093.40 CW TO 273.40 FROM DEPARTURE END OF RUNWAY.

RWY 27: CLIMB ON A HEADING BETWEEN 093.40 CW TO 033.00 FROM DEPARTURE END OF RUNWAY.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 09, TREES BEGINNING 2 FT FROM DER, 317 FT LEFT OF CENTERLINE, UP TO 26 FT MSL. TREE 5 FT FROM DER, 497 FT RIGHT OF CENTERLINE, 17 FT MSL. BUILDING 37 FT FROM DER, 383 FT RIGHT OF CENTERLINE, 34 FT AGL/36 FT MSL. TOWER, POLE, TREE BEGINNING 84 FT FROM DER, 5 FT RIGHT OF CENTERLINE, UP TO 48 FT AGL/49 FT MSL. TREE, BUILDING BEGINNING 94 FT FROM DER, 35 FT LEFT OF CENTERLINE, UP TO 38 FT MSL. TREE, POLE BEGINNING 530 FT FROM DER, 313 FT LEFT OF CENTERLINE, UP TO 44 FT MSL. TREE, POLE BEGINNING 557 FT FROM DER, 14 FT RIGHT OF CENTERLINE, UP TO 91 FT MSL.

NOTE: RWY 27, TREES BEGINNING 16 FT FROM DER, 211 FT LEFT OF CENTERLINE, UP TO 12 FT MSL. VEGETATION 59 FT FROM DER, 450 FT LEFT OF CENTERLINE, 13 FT MSL. TREES BEGINNING 75 FT FROM DER, 154 FT LEFT OF CENTERLINE, UP TO 18 FT MSL. TREES BEGINNING 194 FT FROM DER, 279 FT RIGHT OF CENTERLINE, UP TO 32 FT MSL. TREE 511 FT FROM DER, 500 FT RIGHT OF CENTERLINE, 36 FT MSL. TREE, POLE BEGINNING 546 FT FROM DER, 4 FT RIGHT OF CENTERLINE, UP TO 38 FT MSL. TREES BEGINNING 570 FT FROM DER, 7 FT LEFT OF CENTERLINE, UP TO 21 FT MSL.

CONTROLLING OBSTACLES:

OBSTACLES MANDATING ROUTE DEVELOPMENT: RWY 9, 27 - 14,000 MSL BALLOON (12-001373) 244205.00N/0813031.00W.

REMARKS:

<u>FLIGHT INSPECTED BY:</u>	<i>Digitally signed by</i> ROBERT G HAMILTON	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
JEFFREY ECKMAN	Dec 13, 2018	FICO	12/12/18
<u>DEVELOPED BY:</u>	<i>Digitally signed by</i> ROBERT G HAMILTON	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
DAVID DANNER (JOHN ROBERT LINDSEY)	Dec 13, 2018	AJV-5421	11/21/2018
<u>APPROVED BY:</u>	<i>Digitally signed by</i> ROBERT G HAMILTON	<u>OFFICE SYMBOL:</u>	<u>DATE:</u>
JULIE A. MORGAN	Dec 13, 2018	AJV-542	

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:

ZMA, AMGR, EYW ATCT, NQX APP CON

CHANGES - REASONS:

1. UPDATED TAKEOFF OBSTACLE NOTES - NEW SURVEY DATA.
2. CHANGED RWY 9 DEPARTURE PROCEDURE FROM "CLIMB ON A HEADING BETWEEN 087 CW 033 FROM DEPARTURE END OF RUNWAY TO AVOID R-2916 AND UNMARKED TETHERED BALLOON UP TO 14000 MSL." TO READ "CLIMBING LEFT TURN ON A HEADING BETWEEN 273.40 CW TO 020.00 FROM DEPARTURE END OF RUNWAY OR CLIMBING RIGHT TURN ON A HEADING BETWEEN 093.40 CW TO 273.40 FROM DEPARTURE END OF RUNWAY." - IAW 8260.3D PARA 14-2-3 FOR MAXIMUM TURN IN ANY ONE DIRECTION AND FOR LEFT TURNS TO REMAIN CLEAR OF R-2916.
3. CHANGED RWY 27 DEPARTURE PROCEDURE FROM "CLIMB ON A HEADING BETWEEN 087 CW 033 FROM DEPARTURE END OF RUNWAY TO AVOID R-2916 AND UNMARKED TETHERED BALLOON UP TO 14000 MSL." TO READ "CLIMB ON A HEADING BETWEEN 093.40 CW TO 033.00 FROM

QUALITY
22
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>
KEY WEST, FL	KEY WEST INTL	25 APRIL 2019	2

DEPARTURE END OF RUNWAY." - IAW 8260.3D PARA 14-2-3 FOR MAXIMUM TURN IN ANY ONE DIRECTION.
4. UPDATED COORDINATED WITH "OTHER" BLOCK TO MATCH IAP PROCEDURE DOCUMENTATION - IAW 8260.19H CHAPTER 8.



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 EXECUTIVE	<u>AIRPORT ID</u> KTMB	<u>PROCEDURE NAME</u> ILS OR LOC RWY 9R	<u>ORIGINAL/AMENDMENT</u> 11D	<u>CITY</u> MIAMI	<u>STATE</u> FL
<u>AIRPORT ELEVATION</u> 10	<u>TDZE</u> 10	<u>SUPERSEDED</u> ILS OR LOC RWY 9R	<u>ORIGINAL/AMENDMENT</u> 11C	<u>DATED</u> 08/17/2017	<u>MAG VAR</u> 6W
<u>FACILITY</u> I-TMB	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
VKZ VOR/DME		LAYDN INT					255.52	21.15	2500

MISSED APPROACH

MAP:

ILS: DA
 LOC: 4.52 NM AFTER LAYDN INT

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 THEN LEFT TURN ON HEADING 088 AND DHP VORTAC R-130 TO LUVLY INT/DHP 14.05 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 2000 THEN CLIMBING LEFT TURN TO 3000 DIRECT VKZ VOR/DME AND HOLD.

PROFILE:

- PT R SIDE OF COURSE 273.31 OUTBOUND 2000 FT WITHIN 10 MILES OF LAYDN INT (IAF)
-
- FAC: 093.31 FAF: LAYDN INT DIST FAF TO MAP: 4.52 DIST FAF TO THLD: 4.52
- MIN ALT: LAYDN INT 1500
- DIST TO THLD FROM OM: MM: IM: 150 HAT: 200 HAT: 0.47 GS ANT: 1048
- MIN GS INCPT: 1500 GS ALT AT FAF : LAYDN INT 1500 OM: MM: IM:
- GP ANGLE: 3.00 34:1: 20:1: TCH: 50.3
- MSA FROM: DHP VORTAC 2900

EQUIPMENT REQUIREMENTS NOTES:



NOTES:

CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: CIRCLING RWY 13, 31 NA AT NIGHT.
CHART NOTE: FOR INOPERATIVE ALS WHEN USING MIAMI INTL ALTIMETER SETTING, INCREASE CAT C/D VISIBILITY TO 1 3/8 SM
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MIAMI INTL ALTIMETER SETTING AND INCREASE S-ILS 09R DA TO 237 FEET AND ALL MDA 40 FEET, INCREASE S-LOC 09R CAT C/D VISIBILITY 1/8 SM

ADDITIONAL FLIGHT DATA:

CHART IN PLANVIEW: (CFDXW) AT 253804.27N/0803805.59W
CHART 2500 PRIOR TO LAYDN IN PROFILE.
CHART A-291D
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE VKZ VOR/DME. LT. 300.00 INBOUND.
HOLD SE, RT, 309.80 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 - 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 09R	210	1/2	200	210	1/2	200	210	1/2	200	210	1/2	200			
S-LOC 09R	460	1/2	450	460	1/2	450	460	7/8	450	460	7/8	450			
CIRCLING	460	1	450	460	1	450	460	1 1/2	450	640	2	630			

CHANGES - REASONS

1. INCORPORATED P-NOTAMS 5/4457, 6/3008 AND 7/3767 - 8260.19H PARA 8-3-4 C.
2. ADDED RWY 31 TO CIRCLING NA NOTE - RUNWAY DOES NOT HAVE PROPER SURVEY.
3. ADDED INOPERATIVE ALS CHART NOTE AND REMOVED CAT D CIRCLING VISIBILITY INCREASE - NEW VISIBILITY TABLE VALUES APPLIED.

COORDINATED WITH:

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

FLIGHT CHECKED BY
PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY
ROBERT G HAMILTON (STEVEN WINNER)

APPROVED BY
JULIE MORGAN

OFFICE

OFFICE
AJV-5422

OFFICE
AJV-5420

DATE

DATE
11/08/2018

DATE

Digitally signed by
ROBERT G HAMILTON
Dec 11, 2018

Digitally signed by
ROBERT G HAMILTON
Dec 11, 2018

Digitally signed by
ROBERT G HAMILTON
Dec 11, 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> MIAMI EXECUTIVE	<u>AIRPORT ID</u> KTMB	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 9R	<u>ORIGINAL/AMENDMENT</u> 2D	<u>CITY</u> MIAMI	<u>STATE</u> FL
<u>AIRPORT ELEVATION</u> 10	<u>TDZE</u> 10	<u>SUPERSEDED</u> RNAV (GPS) RWY 9R	<u>ORIGINAL/AMENDMENT</u> 2C	<u>DATED</u> 08/17/2017	<u>MAG VAR</u> 6W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
DHP VORTAC		HAXAM		TF	FO	1.00	243.64	18.47	2000
VKZ VOR/DME		HAXAM		TF	FO	1.00	261.06	27.07	2100
FOGSO	IAF	HAXAM	NOPT	TF	FB	1.00	093.37	5.43	2000
HAXAM	IF/IAF	LAYDN		TF	FB	1.00	093.24	6.10	1500
LAYDN	FAF	RW09R	MAP	TF	FO	0.30	093.27	4.52	
RW09R	MAP	210 MSL		CA			093.27		
210 MSL		JURER		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW09R

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT JURER 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 W HAXAM, LT, 093.23 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 6000.								
3. FAC:	093.27	FAF: LAYDN	DIST FAF TO MAP: 4.52	DIST FAF TO THLD: 4.52					
4. MIN ALT:	HAXAM 2000, LAYDN 1500								
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	200 HAT: 0.47	GS ANT:				
6. MIN GP INCPT: 1500	GP ALT AT FAF : LAYDN 1500			OM:	MM:		IM:		
7. GP ANGLE: 3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 50.3						
8. MSA FROM:	RW09R 2900								

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING RWY 13, 31 NA AT NIGHT.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15°C OR ABOVE 43°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON DHP VORTAC AIRWAY RADIALS 195 CW 322.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT VKZ VOR/DME ON V159 SOUTHBOUND.
CHART NOTE: BARO-VNAV AND VDP NA WHEN USING MIAMI INTL ALTIMETER SETTING.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MIAMI INTL ALTIMETER SETTING AND INCREASE ALL DA BY 27 FT AND ALL MDA 40 FT, INCREASE LNAV CATS C/D VISIBILITY 1/8 SM.
CHART NOTE: FOR INOPERATIVE ALS WHEN USING MIAMI INTL, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 7/8 SM, AND LNAV CAT C/D VISIBILITY TO 1 3/8 SM.

ADDITIONAL FLIGHT DATA:

CHART: 234 TOWER 253736N/0803115W
CHART FAS OBST: 110 TOWER 253819N/0802648W
CHART A-291D
CHART VDP AT 1.24 NM TO RW09R*
*LNAV ONLY
WAAS CHANNEL #72900
REFERENCE PATH ID: W09A
HOLD W, RT, 087.28 INBOUND
LTP HAE: -21.8 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	210	1/2	200	210	1/2	200	210	1/2	200	210	1/2	200			
LNAV/VNAV DA	302	1/2	292	302	1/2	292	302	1/2	292	302	1/2	292			
LNAV MDA	460	1/2	450	460	1/2	450	460	7/8	450	460	7/8	450			
CIRCLING	460	1	450	460	1	450	460	1 1/2	450	640	2	630			

CHANGES - REASONS

1. INCORPORATED P-NOTAMS 5/4464, 6/3012 AND 7/3768 - 8260.19H PARA 8-3-4 C.
2. ADDED RWY 31 TO CIRCLING NA NOTE - RUNWAY DOES NOT HAVE PROPER SURVEY.
3. ADDED INOPERATIVE ALS CHART NOTE AND REMOVED CAT C CIRCLING VISIBILITY INCREASE - NEW VISIBILITY TABLE VALUES APPLIED.
4. REMOVED DME/DME RNP-0.3 NA AND ADDED PBN REQUIREMENT NOTE: RNP APCH - 8260.19H 8-6-8 B AND 8260.58A TABLE 1-2-1.
5. CHANGED FEEDER RNP VALUES FROM 2.00 TO 1.00 - 8260.58A TABLE 1-2-1
6. CORRECTED CAT C CIRCLING VISIBILITY FROM 1 1/8 TO 1 1/2 - 8260.3D TABLE 3-3-7.
7. ADDED 20:1 IS CLEAR TO LINE 7 - 8260.19H 8-6-7 G.3
8. REMOVED FAHRENHEIT TEMPS FROM BARO-VNAV SYSTEMS NOTE - NO LONGER REQUIRED.

COORDINATED WITH:**A4A** ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZMA, MIA APP CON, AMGR, ATCT, FL AERO**FLIGHT CHECKED BY**PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED**DEVELOPED BY**

ROBERT G HAMILTON (STEVEN WINNER)

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5422

OFFICE

AJV-5420

DATE

11/09/2018

DATE*Digitally signed by*
ROBERT G HAMILTON
Dec 11, 2018*Digitally signed by*
ROBERT G HAMILTON
Dec 11, 2018*Digitally signed by*
ROBERT G HAMILTON
Dec 11, 2018**TITLE**
MANAGERQUALITY
41
CHECKED

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KTMB
RUNWAY	RW09R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W09A
LTP/FTP LATITUDE	253834.4430N
LTP/FTP LONGITUDE	0802627.9430W
LTP/FTP ELLIPSOIDAL HEIGHT	-00218
FPAP LATITUDE	253838.6400N
FPAP LONGITUDE	0802449.4500W
THRESHOLD CROSSING HEIGHT (TCH)	00050.3
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0920
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	B4E7EAC1

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00030
FPAP ORTHOMETRIC HEIGHT	+00030



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> MIAMI EXECUTIVE	<u>AIRPORT ID</u> KTMB	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 27L	<u>ORIGINAL/AMENDMENT</u> 2D	<u>CITY</u> MIAMI	<u>STATE</u> FL	
<u>AIRPORT ELEVATION</u> 10	<u>TDZE</u> 8	<u>SUPERSEDED</u> RNAV (GPS) RWY 27L	<u>ORIGINAL/AMENDMENT</u> 2C	<u>DATED</u> 08/17/2017	<u>MAG VAR</u> 6W	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
LUVLY	IAF	CACSA	NOPT	TF	FB	1.00	266.36	3.36	2000
CACSA	IF	ZAGUN		TF	FB	1.00	273.42	6.00	2000
ZAGUN	FAF	JINGI/1.70 NM TO RW27L		TF	FB	0.30	273.37	4.40	
JINGI/1.70 NM TO RW27L		RW27L	MAP	TF	FO	0.30	273.33	1.70	
RW27L	MAP	208 MSL		CA			273.33		
208 MSL		HAXAM		DF	FO	1.00			2000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW27L

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 DIRECT HAXAM AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2. PROFILE STARTS AT CACSA					
3. FAC:	273.37	FAF: ZAGUN	DIST FAF TO MAP: 6.10	DIST FAF TO THLD: 6.10	
4. MIN ALT:	CACSA 2000, ZAGUN 2000, JINGI/1.70 NM TO RW27L 580*				
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	200 HAT: 0.47	GS ANT:
6. MIN GP INCPT: 2000	GP ALT AT FAF : ZAGUN 2000			OM:	MM: IM:
7. GP ANGLE: 3.00	34:1: IS NOT CLEAR	20:1: IS CLEAR	TCH: 50.0		
8. MSA FROM:	RW27L 2900				

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING RWY 13, 31 NA AT NIGHT.
CHART NOTE: RWY 27L HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15°C OR ABOVE 43°C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT LUVLY ON BR49V SOUTHEAST BOUND.
CHART NOTE: VDP AND BARO-VNAV NA WHEN USING MIAMI INTL ALTIMETER SETTING.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MIAMI INTL ALTIMETER SETTING AND INCREASE LPV DA TO 235 FEET LNAV/VNAV DA TO 368 AND ALL MDA 40 FEET, INCREASE LNAV CATS C/D VISIBILITY 1/4 SM.

ADDITIONAL FLIGHT DATA:

CHART A-291D
CHART VDP AT 1.13 NM TO RW27L*
*LNAV ONLY
WAAS CHANNEL #56400
REFERENCE PATH ID: W27A
CHART FAS OBST: 158 TOWER 253859N/0802353W.
HOLD W, LT, 093.23 INBOUND
LTP HAE: -22.5 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	208	3/4	200	208	3/4	200	208	3/4	200	208	3/4	200			
LNAV/VNAV DA	341	1 1/8	333	341	1 1/8	333	341	1 1/8	333	341	1 1/8	333			
LNAV MDA	420	1	412	420	1	412	420	1 1/8	412	420	1 1/8	412			QUALITY
CIRCLING	460	1	450	460	1	450	460	1 1/2	450	640	2	630			41 CHECKED

CHANGES - REASONS

- 1. INCORPORATED P-NOTAMS 5/4460, 6/3009 AND 7/3769 - 8260.19H PARA 8-3-4 C.
- 2. ADDED RWY 31 TO CIRCLING NA NOTE - RUNWAY DOES NOT HAVE PROPER SURVEY.
- 3. ADDED INOPERATIVE ALS CHART NOTE AND REMOVED CAT C CIRCLING VISIBILITY INCREASE - NEW VISIBILITY TABLE VALUES APPLIED.
- 4. REMOVED DME/DME RNP-0.3 NA AND ADDED PBN REQUIREMENT NOTE: RNP APCH - 8260.19H 8-6-8 B AND 8260.58A TABLE 1-2-1.
- 5. CHANGED FEEDER RNP VALUES FROM 2.00 TO 1.00 - 8260.58A TABLE 1-2-1
- 6. REMOVED FAHRENHEIT TEMPS FROM BARO-VNAV NOTE - NO LONGER REQUIRED.
- 7. ADDED 20:1 IS CLEAR TO LINE 7 - 8260.19H 8-6-7 G.3

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZMA, MIA APP CON, AMGR, ATCT, FL AERO.

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

Digitally signed by

ROBERT G HAMILTON

Dec 11, 2018

DEVELOPED BY

ROBERT G HAMILTON (STEVEN WINNER)

OFFICE

AJV-5422

DATE

11/09/2018

Digitally signed by

ROBERT G HAMILTON

Dec 11, 2018

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5420

DATE

Digitally signed by

ROBERT G HAMILTON

Dec 11, 2018

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KTMB
RUNWAY	RW27L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W27A
LTP/FTP LATITUDE	253837.2255N
LTP/FTP LONGITUDE	0802522.4640W
LTP/FTP ELLIPSOIDAL HEIGHT	-00225
FPAP LATITUDE	253833.0400N
FPAP LONGITUDE	0802700.9500W
THRESHOLD CROSSING HEIGHT (TCH)	00050.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0920
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER	161E8AE9

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00024
FPAP ORTHOMETRIC HEIGHT	+00024



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> JESUP-WAYNE COUNTY	<u>AIRPORT ID</u> KJES	<u>PROCEDURE NAME</u> NDB RWY 11	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> JESUP	<u>STATE</u> GA
<u>AIRPORT ELEVATION</u> 107	<u>TDZE</u> 107	<u>SUPERSEDED</u> NDB OR GPS RWY 11	<u>ORIGINAL/AMENDMENT</u> 1C	<u>DATED</u> 07/03/2008	<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 25 APRIL 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: JAX APP CON, AMGR, ZJX

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY

JULIE A. MORGAN (STEVEN WINNER)

Digitally signed by
ROBERT G HAMILTON
Nov 08, 2018

OFFICE

AJV-5420

DATE

10/29/2018

APPROVED BY

JULIE A. MORGAN

Digitally signed by
ROBERT G HAMILTON
Nov 08, 2018

OFFICE

AJV-5420

DATE

TITLE



**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> JESUP-WAYNE COUNTY	<u>AIRPORT ID</u> KJES	<u>PROCEDURE NAME</u> NDB RWY 29	<u>ORIGINAL/AMENDMENT</u> 3	<u>CITY</u> JESUP	<u>STATE</u> GA
<u>AIRPORT ELEVATION</u> 107	<u>TDZE</u> 96	<u>SUPERSEDED</u> NDB OR GPS RWY 29	<u>ORIGINAL/AMENDMENT</u> 2C	<u>DATED</u> 07/03/2008	<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

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

PROCEDURE CANCELLED EFFECTIVE 25 APRIL 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: JAX APP CON, AMGR, ZJX

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY

JULIE A. MORGAN (STEVEN WINNER)

Digitally signed by
ROBERT G HAMILTON
Nov 08, 2018

OFFICE

AJV-5420

DATE

10/29/2018

APPROVED BY

JULIE A. MORGAN

Digitally signed by
ROBERT G HAMILTON
Nov 08, 2018

OFFICE

AJV-5420

DATE

TITLE



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> MIDDLE GEORGIA RGNL	<u>AIRPORT ID</u> KMCN	<u>PROCEDURE NAME</u> ILS OR LOC RWY 5 ILS RWY 5 SA CAT I, ILS RWY 5 SA CAT II	<u>ORIGINAL/AMENDMENT</u> 3A	<u>CITY</u> MACON	<u>STATE</u> GA	
<u>AIRPORT ELEVATION</u> 354	<u>TDZE</u> 344	<u>SUPERSEDED</u> ILS OR LOC RWY 5 ILS RWY 5 SA CAT I, ILS RWY 5 SA CAT II	<u>ORIGINAL/AMENDMENT</u> 3	<u>DATED</u> 08/17/2017	<u>MAG VAR</u> 6W	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> I-MCN	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
VNA VORTAC		TECUS/VNA 22.08 DME					320.90	22.08	2100
MCN VORTAC		BLSKY INT/MCN VORTAC 11.70 DME					228.06	11.70	2100
TECUS/VNA 22.08 DME	IAF	BLSKY INT/MCN VORTAC 11.70 DME	NOPT				320.90	4.56 (VNA R-321)	2100
TOYOT INT	IAF	BLSKY INT/MCN VORTAC 11.70 DME	NOPT				053.95	10.20 (I-MCN)	2100
BLSKY INT/MCN VORTAC 11.70 DME	IF/IAF	ALLMN/MCN VORTAC 5.78 DME					053.95	5.91 (I-MCN)	2000

MISSED APPROACH

MAP:

ILS: DA
 LOC: MCN VORTAC 0.75 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 800 THEN CLIMBING LEFT TURN TO 2300 ON MCN VORTAC R-028 TO MURVE INT/MCN 17.00 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 800 THEN CLIMBING RIGHT TURN TO 2300 HEADING 120 AND DBN VORTAC R-286 TO CARYS INT/DBN 24.94 DME AND HOLD.



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SW BLSKY, RT, 053.95 INBOUND, 2100 FT. IN LIEU OF PT (IAF), MAX 4800.

3. FAC:

053.95

FAF: ALLMN/MCN VORTAC

DIST FAF TO MAP:

DIST FAF TO THLD: 5.07

5.78 DME

4. MIN ALT: BLSKY INT/MCN VORTAC 11.70 DME 2100, ALLMN/MCN VORTAC 5.78 DME 2000, BRROS/MCN 2.92 DME 1080*

5. DIST TO THLD FROM OM: 5.07

MM:

IM:

100 HAT: 1093

150 HAT:

GS ANT: 951

6. MIN GS INCPT: 2000

GS ALT AT FAF : ALLMN/MCN VORTAC 5.78 DME 2000

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1:

20:1:

TCH: 55.7

8. MSA FROM: MCN VORTAC 135-270 2100, 270-135 2600

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED.

NOTES:

SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 5: CAT A, B, C, D RA 216, RVR 1400, HAT 150, DA 494 MSL.
SA CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 5: CAT A, B, C, D RA 151, RVR 1200, HAT 100, DA 444 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.
CHART NOTE: DME FROM MCN VORTAC. SIMULTANEOUS RECEPTION OF I-MCN AND MCN DME REQUIRED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT VNA VORTAC ON V243 NORTHWEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON MCN VORTAC AIRWAY RADIALS 207 CW 239.
SA CAT I/II CHART NOTE: PROCEDURE NA WHEN TOWER CLOSED.
CHART NOTE: ** RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 5 CAT E VISIBILITY TO RVR 4000 AND S-LOC 5 CATS C/D/E VISIBILITY TO 1 3/8 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART IN PLANVIEW: CARYS INT/DBN 24.94 DME
CHART VDP AT 2.15 DME*
DISTANCE VDP TO THLD 1.42 NM
* LOC ONLY
CHART FAS OBST: 576 TREE 323954N/0834116W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD W CARYS INT/DBN 24.94 DME, RT, 105.68 INBOUND.
HOLD NE, RT, 208.00 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD - NA WHEN CONTROL TOWER CLOSED.; LOC: STANDARD - CAT D 800-2 1/2, CAT E 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 05**	544	2400	200	544	2400	200	544	2400	200	544	2400	200	544	2400	200
S-LOC 05	840	2400	496	840	2400	496	840	5000	496	840	5000	496	840	5000	496
CIRCLING	900	1	546	900	1	546	920	1 1/2	566	1120	2 1/2	766	1180	3	826

AIRPORT

MIDDLE GEORGIA RGNL

AIRPORT ID

KMCN

PROCEDURE NAME

ILS OR LOC RWY 5
ILS RWY 5 SA CAT I,
ILS RWY 5 SA CAT II

ORIGINAL/AMENDMENT

3A

CITY

MACON

STATE

GA

CHANGES - REASONS

1. RENAMED IF FIX NAME FROM IJBW TO BLSKY, COORDINATES STAY THE SAME. - ATC REQUESTED CHANGED FIX NAME DUE TO OLD FIX NAME HARD TO PRONOUNCE.
2. RENAMED FAF FIX NAME FROM EHVEZ TO ALLMN, COORDINATES STAY THE SAME. - ATC REQUESTED CHANGED FIX NAME DUE TO OLD FIX NAME HARD TO PRONOUNCE.
3. RENAMED FINAL STEP DOWN FIX NAME FROM YOLGU TO BRROS, COORDINATES STAY THE SAME. - ATC REQUESTED CHANGED FIX NAME DUE TO OLD FIX NAME HARD TO PRONOUNCE.
4. ADDED PLANVIEW CHART NOTE: PROCEDURE NA FOR ARRIVALS AT VNA VORTAC ON V243 NORTHWEST BOUND. - REFLECT CURRENT CRITERIA.
5. ADDED PLANVIEW CHART NOTE: PROCEDURE NA FOR ARRIVALS ON MCN VORTAC AIRWAY RADIALS 207 CW 239. - REFLECT CURRENT CRITERIA.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZTL, ATL APP CON, MCN ATCT, STATE AERO, MCN AMGR

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE **ROBERT G HAMILTON**

Dec 11, 2018

Digitally signed by

DEVELOPED BY

JULIE A. MORGAN (ANDRE TUCKER)

OFFICE

AJV-5422

DATE *Digitally signed by*
11/06/2018 **ROBERT G HAMILTON**

Dec 11, 2018

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5420

DATE *Digitally signed by*
ROBERT G HAMILTON

Dec 11, 2018

TITLE
MANAGER

QUALITY
41
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> MIDDLE GEORGIA RGNL	<u>AIRPORT ID</u> KMCN	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 5	<u>ORIGINAL/AMENDMENT</u> 3A	<u>CITY</u> MACON	<u>STATE</u> GA	
<u>AIRPORT ELEVATION</u> 354	<u>TDZE</u> 344	<u>SUPERSEDED</u> RNAV (GPS) RWY 5	<u>ORIGINAL/AMENDMENT</u> 3	<u>DATED</u> 08/17/2017	<u>MAG VAR</u> 6W	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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. 354/30 CW 114/30	NOPT	BLSKY	IF/IAF	2600
2. 114/30 CW 354/30	PT	BLSKY	IAF	2600

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>
BLSKY	IF/IAF	ALLMN		TF	FB	1.00	053.85	5.91	2000
ALLMN	FAF	BRROS/2.20 NM TO RW05		TF	FB	0.30	053.91	2.87	
BRROS/2.20 NM TO RW05		RW05	MAP	TF	FO	0.30	053.91	2.20	
RW05	MAP	544 MSL		CA			053.91		
544 MSL		IPJOM		DF	FO	1.00			2600

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW05

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2600 DIRECT IPJOM AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD SW BLSKY, LT, 053.85 INBOUND, 2600 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 053.91FAF: ALLMNDIST FAF TO MAP: 5.07DIST FAF TO THLD: 5.07
4. MIN ALT: BLSKY 2600, ALLMN 2000, BRROS/2.20 NM TO RW05 1080*
5. DIST TO THLD FROM OM:MM:IM:150 HAT:200 HAT: 0.49GS ANT:
6. MIN GP INCPT: 2000GP ALT AT FAF : ALLMN 2000OM:MM:IM:
7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 55.7
8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -8°C OR ABOVE 54°C.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.48 NM TO RW05*
*LNAV ONLY
WAAS CHANNEL #97315
REFERENCE PATH ID: W05A
CHART FAS OBST: 599 TREE 323933N/0834104W.
HOLD NE, RT, 234.05 INBOUND
LTP HAE: 73.9 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	544	2400	200	544	2400	200	544	2400	200	544	2400	200			
LNAV/VNAV DA	863	1 3/8	519	863	1 3/8	519	863	1 3/8	519	863	1 3/8	519			
LNAV MDA	860	2400	516	860	2400	516	860	5500	516	860	5500	516			
CIRCLING	900	1	546	900	1	546	920	1 1/2	566	1120	2 1/2	766			

CHANGES - REASONS

1. RENAMED IF FIX NAME FROM IJBEW TO BLSKY, COORDINATES STAY THE SAME. - ATC REQUESTED CHANGED FIX NAME DUE TO OLD FIX NAME HARD TO PRONOUNCE.
2. RENAMED FAF FIX NAME FROM EHVEZ TO ALLMN, COORDINATES STAY THE SAME. - ATC REQUESTED CHANGED FIX NAME DUE TO OLD FIX NAME HARD TO PRONOUNCE.
3. RENAMED FINAL STEP DOWN FIX NAME FROM YOLGU TO BRROS, COORDINATES STAY THE SAME. - ATC REQUESTED CHANGED FIX NAME DUE TO OLD FIX NAME HARD TO PRONOUNCE.
4. REMOVED CHART NOTE: CHART NOTE: DME/DME RNP-0.3 NA. AND ADDED PBN EQUIPMENT REQUIREMENT: RNP APCH. - REFLECT CURRENT CRITERIA.
5. REMOVED FAHRENHEIT FROM BARO-VNAV NOTE - NO LONGER REQUIRED.

QUALITY
41
CHECKED

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZTL, ATL APP CON, MCN ATCT, STATE AERO, MCN AMGR

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

Digitally signed by

ROBERT G HAMILTON

Dec 11, 2018

DEVELOPED BY

JULIE A. MORGAN (ANDRE TUCKER)

OFFICE

AJV-5422

DATE

11/06/2018

Digitally signed by

ROBERT G HAMILTON

Dec 11, 2018

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5420

DATE

Digitally signed by

ROBERT G HAMILTON

Dec 11, 2018

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMCN
RUNWAY	RW05
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W05A
LTP/FTP LATITUDE	324109.6675N
LTP/FTP LONGITUDE	0833938.2825W
LTP/FTP ELLIPSOIDAL HEIGHT	+00739
FPAP LATITUDE	324209.4565N
FPAP LONGITUDE	0833819.8745W
THRESHOLD CROSSING HEIGHT (TCH)	00055.7
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0768
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	CFAF1FC6

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+01009
FPAP ORTHOMETRIC HEIGHT	+01009



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> MIDDLE GEORGIA RGNL	<u>AIRPORT ID</u> KMCN	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 23	<u>ORIGINAL/AMENDMENT</u> 2E	<u>CITY</u> MACON	<u>STATE</u> GA	
<u>AIRPORT ELEVATION</u> 354	<u>TDZE</u> 354	<u>SUPERSEDED</u> RNAV (GPS) RWY 23	<u>ORIGINAL/AMENDMENT</u> 2D	<u>DATED</u> 11/10/2016	<u>MAG VAR</u> 6W	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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. 174/30 CW 294/30	NOPT	IPJOM	IF/IAF	2600
2. 294/30 CW 174/30	PT	IPJOM	IAF	2600

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>
IPJOM	IF/IAF	JOHGY		TF	FB	1.00	234.05	6.09	2100
JOHGY	FAF	RW23	MAP	TF	FO	0.30	234.00	5.32	
RW23	MAP	635 MSL		CA			234.00		
635 MSL		BLSKY		DF	FO	1.00			2600

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW23

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2600 DIRECT BLSKY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD NE IPJOM, RT, 234.05 INBOUND, 2600 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 234.00FAF: JOHGYDIST FAF TO MAP: 5.32DIST FAF TO THLD: 5.32

4. MIN ALT: IPJOM 2600, JOHGY 2100

5. DIST TO THLD FROM OM:MM:IM:150 HAT:281 HAT: 0.69GS ANT:

6. MIN GP INCPT: 2100GP ALT AT FAF : JOHGY 2100OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 52.4

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -8°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.11 NM TO RW23*
*LNAV ONLY
WAAS CHANNEL #40419
REFERENCE PATH ID: W23A
FAS OBST: 495 AAO 324444N/0833545W.
CHART 1212 TOWER 324504N/0833327W.
HOLD SW, LT, 053.85 INBOUND
LTP HAE: 80.9 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	635	1	281	635	1	281	635	1	281	635	1	281			
LNAV/VNAV DA	726	1 1/4	372	726	1 1/4	372	726	1 1/4	372	726	1 1/4	372			
LNAV MDA	760	1	406	760	1	406	760	1 1/8	406	760	1 1/8	406			
CIRCLING	900	1	546	900	1	546	920	1 1/2	566	1120	2 1/2	766			

QUALITY
41
CHECKED

FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMCN
RUNWAY	RW23
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W23A
LTP/FTP LATITUDE	324152.7370N
LTP/FTP LONGITUDE	0833841.7995W
LTP/FTP ELLIPSOIDAL HEIGHT	+00809
FPAP LATITUDE	324052.9500N
FPAP LONGITUDE	0834000.2000W
THRESHOLD CROSSING HEIGHT (TCH)	00052.4
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0769
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER	EC120BCE

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+01080
FPAP ORTHOMETRIC HEIGHT	+01080



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> SHENANDOAH MUNI	<u>AIRPORT ID</u> KSDA	<u>PROCEDURE NAME</u> NDB RWY 4	<u>ORIGINAL/AMENDMENT</u> ORIG-D	<u>CITY</u> SHENANDOAH	<u>STATE</u> IA	
<u>AIRPORT ELEVATION</u> 971	<u>TDZE</u> 967	<u>SUPERSEDED</u> NDB RWY 4	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>DATED</u> 05/24/2018	<u>MAG VAR</u> 5E	<u>EPOCH YEAR</u> 1995
<u>FACILITY</u> SDA	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
OVR VORTAC		SDA NDB					140.90	29.07	2800

MISSED APPROACH

MAP:

SDA NDB

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2800 THEN LEFT TURN DIRECT SDA NDB AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L **SIDE OF COURSE** 220.00 **OUTBOUND** 2800 **FT WITHIN** 10 **MILES OF** SDA NDB (IAF)
- 2.
3. **FAC:** 040.00 **FAF:** **DIST FAF TO MAP:** **DIST FAF TO THLD:**
4. **MIN ALT:**
8. **MSA FROM:** SDA NDB 3200

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: CIRCLING RWY 30 NA AT NIGHT.
CHART NOTE: RWY 4 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CLARINDA ALTIMETER SETTING AND INCREASE ALL MDAS 60 FT.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON OVR VORTAC AIRWAY RADIALS 104 CW 192.

ADDITIONAL FLIGHT DATA:

CHART FAS OBST: 1269 TREE (BTL-7889) 403910N/0952900W.
FAC 449 FT R OF RWY C/L EXTENDED 3000 FT FROM THLD.
HOLD SW, RT, 040.00 INBOUND



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
S-04	1620	1	653	1620	1	653		NA			NA				
CIRCLING	1620	1	649	1620	1	649		NA			NA				

CHANGES - REASONS

1. CHANGED MSA MDA FROM 2700 MSL TO 3200 MSL. - TO INCORPORATE NOTAM FDC 8/9243.
2. REMOVED CHART NOTE: AIRPORT ELEV 971, TDZE 967. - DATA PULLED BY AIRNAV.
3. ADDED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON OVR VORTAC AIRWAY RADIALS 104 CW 192 - IAW 8260.3D PARA 2-3-1(A)(1) AND 8260.19H PARA 8-2-5(E).
4. ADDED CHANGES FROM P-NOTAM FOR ORIG-C INCORPORATED INTO FORM - IAW 8260.19H PARA 8-3-4C(3).
5. CHANGED CHART NOTE: "CIRCLING TO RWY 30 NA AT NIGHT" TO "CIRCLING RWY 30 NA AT NIGHT" - IAW 8260.19H PARA 8-6-11(O)(2)(G).

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: OMAHA APP CON, ZMP, ARPT MNGR

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

Digitally signed by

DONALD H LANIER

Jan 02, 2019

OFFICE

OFFICE

AJV-5432

OFFICE

AJV-5430

DATE

DATE

11/29/2018

DATE

TITLE

MANAGER

DEVELOPED BY

WARDELL HENNING (THOR CORNELL)

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
DONALD H LANIER

Jan 02, 2019



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> SHENANDOAH MUNI	<u>AIRPORT ID</u> KSDA	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 4	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> SHENANDOAH	<u>STATE</u> IA
<u>AIRPORT ELEVATION</u> 971	<u>TDZE</u> 967	<u>SUPERSEDED</u> RNAV (GPS) RWY 4	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 05/24/2018	<u>MAG VAR</u> 5E <u>EPOCH YEAR</u> 1995
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
COVUT		CUVEM		TF	FB	1.00	030.22	19.87	3000
VIKKI		WUVIS		TF	FO	1.00	232.85	9.15	3000
TRAIG		CUVEM		TF	FB	1.00	302.07	17.07	3000
CUVEM	IAF	WUVIS	NOPT	TF	FB	1.00	308.21	5.00	3000
WUVIS	IF/IAF	YUBPU		TF	FB	1.00	038.16	5.44	2800
YUBPU	FAF	RW04	MAP	TF	FO	0.30	038.22	5.56	
RW04	MAP	1230 MSL		CA			038.22		
1230 MSL		ZILSO		DF	FB	1.00			
ZILSO		OBREC		TF	FO	1.00	039.93	8.12	3000

MISSED APPROACH

MAP:

LPV: DA
LNAV: RW04

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT ZILSO AND ON TRACK 039.93 TO OBREC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SW WUVIS, RT, 038.16 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 038.22

FAF: YUBPU

DIST FAF TO MAP: 5.56

DIST FAF TO THLD: 5.56

4. MIN ALT: WUVIS 3000, YUBPU 2800

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

263 HAT: 0.72

GS ANT:

6. MIN GP INCPT: 2800

GP ALT AT FAF : YUBPU

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1: IS NOT CLEAR

20:1: IS CLEAR

TCH: 40.0

8. MSA FROM: RW04 3200

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: CIRCLING RWY 30 NA AT NIGHT.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
VDP NA WHEN USING CLARINDA ALTIMETER SETTING.
CHART NOTE: RWY 4 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CLARINDA ALTIMETER SETTING: INCREASE DA TO 1275 FEET; INCREASE ALL MDAS 60 FEET.

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.44 NM TO RW04*
*LNAV ONLY
WAAS CHANNEL #63101
REFERENCE PATH ID: W04A
CHART FAS OBST: 1209 TREE 404148N/0952716W.
HOLD NE, RT, 234.08 INBOUND
FTP HAE: 262.4 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	1230	1	263	1230	1	263		NA			NA				
LNAV MDA	1460	1	493	1460	1	493		NA			NA				
CIRCLING	1520	1	549	1520	1	549		NA			NA				



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSDA
RUNWAY	RW04
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W04A
LTP/FTP LATITUDE	404443.6010N
LTP/FTP LONGITUDE	0952506.4105W
LTP/FTP ELLIPSOIDAL HEIGHT	+02624
FPAP LATITUDE	404548.5100N
FPAP LONGITUDE	0952346.0400W
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	58C9AE05

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+02928
FPAP ORTHOMETRIC HEIGHT	+02928



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

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<u>AIRPORT</u> SIOUX CENTER MUNI	<u>AIRPORT ID</u> KSOY	<u>PROCEDURE NAME</u> NDB RWY 18	<u>ORIGINAL/AMENDMENT</u> 5	<u>CITY</u> SIOUX CENTER	<u>STATE</u> IA
<u>AIRPORT ELEVATION</u> 1448	<u>TDZE</u> 1448	<u>SUPERSEDED</u> NDB OR GPS RWY 18	<u>ORIGINAL/AMENDMENT</u> 4A	<u>DATED</u> 01/18/2007	<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> 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 25 APRIL 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: ZMP, AMGR

FLIGHT CHECKED BY		OFFICE	DATE	
DEVELOPED BY	Digitally signed by	OFFICE	DATE	
JOHN HAZELTON	DAVID DANNER	AJV-5421	10/10/2018	
APPROVED BY	Digitally signed by	OFFICE	DATE	TITLE
JULIE A. MORGAN	DAVID DANNER	AJV-5420		
	Nov 20, 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.
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<u>AIRPORT</u> WATERLOO RGNL	<u>AIRPORT ID</u> KALO	<u>PROCEDURE NAME</u> ILS OR LOC RWY 12	<u>ORIGINAL/AMENDMENT</u> 10A	<u>CITY</u> WATERLOO	<u>STATE</u> IA
<u>AIRPORT ELEVATION</u> 873	<u>TDZE</u> 873	<u>SUPERSEDED</u> ILS OR LOC RWY 12	<u>ORIGINAL/AMENDMENT</u> 10	<u>DATED</u> 09/13/2018	<u>MAG VAR</u> 0E
<u>FACILITY</u> I-ALO	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
ALO VOR/DME		EYUCE/I-ALO 14.00 DME/RADAR					308.22	13.09	3400
MCW VOR/DME	IAF	EYUCE/I-ALO 14.00 DME/RADAR	NOPT				121.91	39.18	3400
EYUCE/I-ALO 14.00 DME/RADAR	IF/IAF	CULCA/I-ALO 7.59 DME/RADAR					127.78	6.40 (I-ALO)	2800

MISSED APPROACH

MAP:

ILS: DA
LOC: 5.88 NM AFTER CULCA/I-ALO 7.59 DME/RADAR OR AT I-ALO 1.72 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1400 THEN CLIMBING LEFT TURN TO 3300 ON ALO VOR/DME R-096 TO DEWAR INT/ALO VOR/DME 10.76 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1400 THEN CLIMBING RIGHT TURN TO 3300 ON CID VOR/DME R-321 TO LYERS/CID 36.85 DME AND HOLD. (DME REQUIRED)

PROFILE:

- PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
- HOLD NW EYUCE, RT, 127.78 INBOUND, 3400 FT. IN LIEU OF PT (IF/IAF), MAX 5000.
- FAC:** 127.78 **FAF:** CULCA/I-ALO 7.59 DME/RADAR **DIST FAF TO MAP:** 5.88 **DIST FAF TO THLD:** 5.88
- MIN ALT:** EYUCE/I-ALO 14.00 DME/RADAR 3400, CULCA/I-ALO 7.59 DME/RADAR 2800, ZESOP/I-ALO 3.32 DME 1420*
- DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **GS ANT:** 1059
- MIN GS INCPT:** 2800 **GS ALT AT FAF :** CULCA/I-ALO 7.59 DME/RADAR 2800 **OM:** **MM:** **IM:**
- GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 55.0
- MSA FROM:** ALO VOR/DME 360-090 3200, 090-180 4000, 180-360 2600

EQUIPMENT REQUIREMENTS NOTES:

DME OR RADAR REQUIRED.



NOTES:

CHART PROFILE NOTE: USE I-ALO DME WHEN ON THE LOCALIZER COURSE.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON ALO VOR/DME AIRWAY RADIALS 267 CW 347.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON MCW VOR/DME AIRWAY RADIALS 075 CW 100.
CHART NOTE: **RVR 1800 AUTHORIZED WITH THE USE OF FD OR AP OR HUD TO DA.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 12 ZESOP FIX MINIMUMS CAT C/D VISIBILITY TO RVR 5500.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART IN PLANVIEW: LYERS/CID 36.85 DME
CHART VDP AT 2.69 DME*
DISTANCE VDP TO THLD 0.97 NM
* LOC ONLY
CHART FAS OBST: 990 TREE 423441N/0922532W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE LYERS/CID 36.85 DME, LT, 320.94 INBOUND.
HOLD E, RT, 276.49 INBOUND

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

ALTERNATE: NA ☐ ILS: STANDARD - NA WHEN CONTROL TOWER CLOSED.; LOC: STANDARD - CAT D 800-2 1/4, 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 12**	1073	2400	200	1073	2400	200	1073	2400	200	1073	2400	200			
S-LOC 12	1420	2400	547	1420	2400	547	1420	6000	547	1420	6000	547			
CIRCLING	1420	1	547	1420	1	547	1480	1 3/4	607	1600	2 1/4	727			
ZESOP FIX MINIMUMS (DME REQUIRED)															
S-LOC 12	1240	2400	367	1240	2400	367	1240	3500	367	1240	3500	367			
CIRCLING	1360	1	487	1400	1	527	1480	1 3/4	607	1600	2 1/4	727			

CHANGES - REASONS

1. CHANGED ALT MISS FROM "CLIMB TO 1400 THEN CLIMBING RIGHT TURN TO 3300 ON CID VOR/DME R-321 TO LYERS INT/CID 36.85 DME AND HOLD" TO "CLIMB TO 1400 THEN CLIMBING RIGHT TURN TO 3300 ON CID VOR/DME R-321 TO LYERS CID 36.85 DME AND HOLD (DME REQUIRED)" - REMOVED CROSSING RADIAL FROM TNU VOR/DME DUE TO MRA.
2. UPDATED ALL REFERENCES OF LYERS FIX FROM "LYERS INT/CID 36.85 DME" TO "LYERS/CID 36.85 DME" - REMOVED CROSSING RADIAL FROM TNU VOR/DME DUE TO MRA.



COORDINATED WITH:

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

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED

Digitally signed by
WARDELL HENNING

OFFICE

DATE

DEVELOPED BY

DONALD H. LANIER (JACOB MAXFIELD)

Digitally signed by

WARDELL HENNING

Dec 11, 2018

OFFICE

AJV-5431

DATE

11/16/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

WARDELL HENNING

Dec 11, 2018

OFFICE

AJV-5430

DATE

TITLE

MANAGER

Dec 11, 2018

QUALITY
41
CHECKED

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
LOC 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> ILLINOIS VALLEY RGNL-WALTER A DUNCAN FIELD	<u>AIRPORT ID</u> KVYS	<u>PROCEDURE NAME</u> LOC RWY 36	<u>ORIGINAL/AMENDMENT</u> 4	<u>CITY</u> PERU	<u>STATE</u> IL
<u>AIRPORT ELEVATION</u> 654	<u>TDZE</u> 650	<u>SUPERSEDED</u> LOC RWY 36	<u>ORIGINAL/AMENDMENT</u> 3C	<u>DATED</u> 11/13/2014	<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

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

PROCEDURE CANCELLED EFFECTIVE 25 APRIL 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



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

JULIE MORGAN (MICHAEL WALLACE)

Digitally signed by
ROBERT G HAMILTON
Nov 16, 2018

OFFICE

AJV-5420

DATE

10/30/18

APPROVED BY

JULIE MORGAN

Digitally signed by
ROBERT G HAMILTON
Nov 16, 2018

OFFICE

AJV-5420

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>
GRIFFITH, IN	GRIFFITH-MERRILLVILLE	25 APRIL 2019	4A

TAKEOFF MINIMUMS:

RWY 26, STANDARD
RWY 8, 300-1 OR STANDARD WITH MINIMUM CLIMB OF 510 FEET PER NM TO 1000.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 26, VEGETATION 164 FT FROM DER, 471 FT LEFT OF CENTERLINE, 653 FT MSL.
BUILDING BEGINNING 192 FT FROM DER, 156 FT RIGHT OF CENTERLINE, UP TO 672 FT MSL.
POLE BEGINNING 1247 FT FROM DER, 199 FT RIGHT OF CENTERLINE, UP TO 40 FT AGL/675 FT MSL.
TREE 1286 FT FROM DER, 285 FT LEFT OF CENTERLINE, 667 FT MSL.
TREE, POLE BEGINNING 1298 FT FROM DER, 58 FT RIGHT OF CENTERLINE, UP TO 693 FT MSL.
TREE, POLE BEGINNING 1380 FT FROM DER, 25 FT LEFT OF CENTERLINE, UP TO 703 FT MSL.
TREE 1498 FT FROM DER, 80 FT RIGHT OF CENTERLINE, 703 FT MSL.
TREE 1523 FT FROM DER, 271 FT LEFT OF CENTERLINE, 709 FT MSL.
POLE, TREE BEGINNING 1590 FT FROM DER, 21 FT LEFT OF CENTERLINE, UP TO 75 FT AGL/713 FT MSL.
TREES BEGINNING 1613 FT FROM DER, 93 FT RIGHT OF CENTERLINE, UP TO 710 FT MSL.
TREES BEGINNING 1739 FT FROM DER, 25 FT LEFT OF CENTERLINE, UP TO 723 FT MSL.
TREES BEGINNING 1826 FT FROM DER, 60 FT RIGHT OF CENTERLINE, UP TO 716 FT MSL.
TREES BEGINNING 1920 FT FROM DER, 68 FT RIGHT OF CENTERLINE, UP TO 717 FT MSL.
TREES BEGINNING 2144 FT FROM DER, 12 FT RIGHT OF CENTERLINE, UP TO 739 FT MSL.
TREE 3205 FT FROM DER, 716 FT LEFT OF CENTERLINE, 725 FT MSL.

NOTE: RWY 8, TREE, POLE, VEHICLE ON ROAD BEGINNING 164 FT FROM DER, 135 FT RIGHT OF CENTERLINE, UP TO 703 FT MSL.
POLE 307 FT FROM DER, 514 FT LEFT OF CENTERLINE, 44 FT AGL/675 FT MSL.
TREE, VEHICLE ON ROAD BEGINNING 432 FT FROM DER, 169 FT LEFT OF CENTERLINE, UP TO 695 FT MSL.
TREES BEGINNING 444 FT FROM DER, 6 FT RIGHT OF CENTERLINE, UP TO 708 FT MSL.
POLE, BUILDING BEGINNING 454 FT FROM DER, 191 FT LEFT OF CENTERLINE, UP TO 75 FT AGL/704 FT MSL.
TREE, POLE BEGINNING 831 FT FROM DER, 7 FT LEFT OF CENTERLINE, UP TO 712 FT MSL.
TREES BEGINNING 1055 FT FROM DER, 5 FT RIGHT OF CENTERLINE, UP TO 709 FT MSL.
TREES BEGINNING 1980 FT FROM DER, 58 FT LEFT OF CENTERLINE, UP TO 717 FT MSL.
TREE 2967 FT FROM DER, 388 FT RIGHT OF CENTERLINE, 714 FT MSL.
TREES BEGINNING 3166 FT FROM DER, 259 FT LEFT OF CENTERLINE, UP TO 718 FT MSL.
TREES BEGINNING 3288 FT FROM DER, 153 FT LEFT OF CENTERLINE, UP TO 724 FT MSL.
TREE 3747 FT FROM DER, 284 FT LEFT OF CENTERLINE, 726 FT MSL.
TOWER 4136 FT FROM DER, 1383 FT LEFT OF CENTERLINE, 257 FT AGL/896 FT MSL.

CONTROLLING OBSTACLES:

RWY 8: 896 FT MSL TOWER 413136.14N/0872236.11W

REMARKS:

QUALITY
3
CHECKED

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

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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
GRIFFITH, IN	GRIFFITH-MERRILLVILLE	25 APRIL 2019	4A

FLIGHT INSPECTED BY:

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE SYMBOL:

Digitally signed by

WARDELL HENNING

DATE:

DEVELOPED BY:

WARDELL HENNING (STEVEN SCHUTRUM)

Digitally signed by

WARDELL HENNING

Dec 14, 2018

Dec 14, 2018

OFFICE SYMBOL:

AJV-5432

DATE:

11/09/2018

APPROVED BY:

PATRICK MULQUEEN

Digitally signed by

WARDELL HENNING

Dec 14, 2018

OFFICE SYMBOL:

AJV-5430

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA

☐☒☒☐☐☒

OTHER:

ZAU, AMGR

CHANGES - REASONS:

1. CHANGED RWY 8 CG FROM 502 FT PER NM TO 510 FT PER NM - UPDATED TARGETS EVALUATION AND CONTROLLING OBST DATA FROM PERIODIC REVIEW, NEW SURVEY DATED 10/22/2009.
2. UPDATED TAKEOFF OBSTACLE NOTES FOR RWY 8/26 - NEW TARGETS EVALUATION, NEW SURVEY DATED 10/22/2009..

QUALITY
3
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> NEW CASTLE HENRY COUNTY MARLATT FIELD	<u>AIRPORT ID</u> KUWL	<u>PROCEDURE NAME</u> NDB RWY 10	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> NEW CASTLE	<u>STATE</u> IN
<u>AIRPORT ELEVATION</u> 1090	<u>TDZE</u> 1089	<u>SUPERSEDED</u> NDB RWY 10	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 11/08/2018	<u>MAG VAR</u> 6W
<u>FACILITY</u> UWL	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>

MISSED APPROACH

MAP:

UWL NDB

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2700 THEN RIGHT TURN DIRECT UWL NDB AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L SIDE OF COURSE 266.62 OUTBOUND 2700 FT WITHIN 10 MILES OF UWL NDB (IAF)
- 2.
3. FAC: 086.62 FAF: DIST FAF TO MAP: DIST FAF TO THLD:
4. MIN ALT:
8. MSA FROM: UWL NDB 2900

EQUIPMENT REQUIREMENTS NOTES:

RADAR REQUIRED FOR PROCEDURE ENTRY.

NOTES:

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

CHART NOTE: USE ANDERSON ALTIMETER SETTING; WHEN NOT RECEIVED, USE MUNCIE ALTIMETER SETTING AND INCREASE ALL MDA 20 FEET; INCREASE S-10 CAT C/D VISIBILITY 1/8 SM.

ADDITIONAL FLIGHT DATA:

CHART ANDERSON MUNI-DARLINGTON FIELD AWOS-3.
CHART CIRCLING ICON.
CHART FAS OBST: 1330 AAO 395027N/0852511W.
FAC CROSSES RWY C/L EXTENDED 3002 FT FROM THLD.
HOLD W, RT, 086.62 INBOUND



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>
S-10	1760	1	671	1760	1	671	1760	1 7/8	671	1760	1 7/8	671			
CIRCLING	1760	1	670	1760	1	670	1780	2	690	1780	2 1/4	690			

CHANGES - REASONS

- ORIG-A:
- 1. DELETED FEEDER RID VORTAC TO UWL NDB - RID ON DISCONTINUANCE LIST FOR VOR MON.
 - 2. DELETED PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON RID VORTAC AIRWAY RADIALS 264 CW 322 - DELETED FEEDER RID VORTAC TO UWL NDB.
 - 3. ADDED CHART NOTE: RADAR REQUIRED FOR PROCEDURE ENTRY - REQUIRED FOR PROCEDURE ENTRY.
- ORIG-B:
- 1. CHANGED AIRPORT NAME FROM "NEW CASTLE-HENRY CO MUNI" TO "NEW CASTLE HENRY COUNTY MARLATT FIELD".
 - 2. MOVED RADAR REQUIRED FOR PROCEDURE ENTRY FROM A CHART NOTE TO AN EQUIPMENT REQUIREMENTS NOTE.
 - 3. LOWERED ALL S-10 HATS FROM 672 TO 671 - TDZE CHANGED FROM 1088 TO 1089.
 - 4. CHARTED ANDERSON'S AWOS-3 - REMOTE PRIMARY ALTIMETER.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZID, IND APP CON, AMGR

FLIGHT CHECKED BY

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCT 3, 2018.

DEVELOPED BY

JOHN THORNTON

APPROVED BY

JULIE MORGAN

Digitally signed by

JOHN R THORNTON

Oct 26, 2018

Digitally signed by

MARK D ADAMS

Dec 31, 2018

OFFICE

Digitally signed by

MARK D ADAMS

Dec 31, 2018

OFFICE

AJV-5421

OFFICE

AJV-5420

DATE

DATE

09/07/2018

DATE



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> NEW CASTLE HENRY COUNTY MARLATT FIELD	<u>AIRPORT ID</u> KUWL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 10	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> NEW CASTLE	<u>STATE</u> IN
<u>AIRPORT ELEVATION</u> 1090	<u>TDZE</u> 1089	<u>SUPERSEDED</u> RNAV (GPS) RWY 10	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 03/29/2018	<u>MAG VAR</u> 6W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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. 006/30 CW 186/30	NOPT	HAFHU	IF/IAF	3000
2. 186/30 CW 006/30		HAFHU	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>
HAFHU	IF/IAF	KOGDE		TF	FB	1.00	096.23	7.58	2600
KOGDE	FAF	SADSE/1.80 NM TO RW10		TF	FB	0.30	096.34	2.83	
SADSE/1.80 NM TO RW10		RW10	MAP	TF	FO	0.30	096.34	1.80	
RW10	MAP	1407 MSL		CA			096.34		
1407 MSL		TASUY		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW10

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT TASUY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD W HAFHU, RT, 096.23 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 096.34FAF: KOGDEDIST FAF TO MAP: 4.63DIST FAF TO THLD: 4.63
4. MIN ALT: HAFHU 3000, KOGDE 2600, SADSE/1.80 NM TO RW10 1680*
5. DIST TO THLD FROM OM:MM:IM:150 HAT:319 HAT: 0.88GS ANT:
6. MIN GP INCPT: 2600GP ALT AT FAF : KOGDE 2600OM:MM:IM:
7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 45.8
8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 10 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: BARO-VNAV NA.
*LNAV ONLY
CHART NOTE: USE ANDERSON ALTIMETER SETTING; WHEN NOT RECEIVED, USE MUNCIE ALTIMETER SETTING AND INCREASE LPV DA TO 1412, LNAV/VNAV DA TO 1437, AND ALL MDA 20 FEET;
INCREASE LNAV CAT C/D VISIBILITY 1/8 SM.

ADDITIONAL FLIGHT DATA:

CHART ANDERSON MUNI-DARLINGTON FIELD AWOS-3.
CHART CIRCLING ICON.
WAAS CHANNEL #82041
REFERENCE PATH ID: W10A
HOLD E, RT, 276.58 INBOUND
LTP HAE: 295.4 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	1408	1	319	1408	1	319	1408	1	319	1408	1	319			
LNAV/VNAV DA	1433	1	344	1433	1	344	1433	1	344	1433	1	344			
LNAV MDA	1520	1	431	1520	1	431	1520	1 1/4	431	1520	1 1/4	431			
CIRCLING	1580	1	490	1600	1	510	1780	2	690	1780	2 1/4	690			



CHANGES - REASONS

- 1. CHANGED AIRPORT NAME FROM "NEW CASTLE-HENRY CO MUNI" TO "NEW CASTLE HENRY COUNTY MARLATT FIELD" - AIRPORT NAME CHANGED.
- 2. PROFILE LINE 7: ADDED "20:1 IS CLEAR" - IAW CURRENT CRITERIA.
- 3. DELETED "DME/DME 0.3-NA" NOTE AND ADDED PBN REQUIREMENTS NOTE "RNP APCH" - IAW CURRENT CRITERIA.
- 4. CHANGED SECONDARY ALTIMETER SETTING NOTE VALUES FOR LPV DA FROM 1411 TO 1412 AND LNAV/VNAV DA FROM 1436 TO 1437 - LPV AND LNAV/VNAV DA'S CHANGED DUE TO TDZE CHANGE FROM 1088 TO 1089.
- 5. LPV MINIMUMS: CHANGED DA FROM 1407 TO 1408 - TDZE CHANGED FROM 1088 TO 1089.
- 6. LNAV/VNAV MINIMUMS: CHANGED DA FROM 1432 TO 1433 - TDZE CHANGED FROM 1088 TO 1089.
- 7. LNAV MINIMUMS: CHANGED HAT FROM 432 TO 431 - TDZE CHANGED FROM 1088 TO 1089.
- 8. FAS DATA BLOCK INFORMATION: LTP/FTP LATITUDE / LONGITUDE CHANGED FROM 395236.3820N / 0851957.9706W TO 395236.3790N / 0851957.9745W - CURRENT DATA.
- 9. FAS DATA BLOCK INFORMATION: FPAP LATITUDE / LONGITUDE CHANGED FROM 395235.7440N / 0851802.2395W TO 395235.7395N / 0851802.2430W - CURRENT DATA.
- 10. FAS DATA BLOCK INFORMATION: LTP/FTP ELLIPSOIDAL HEIGHT CHANGED FROM "+02953" TO "+02954" - CURRENT DATA.
- 11. FAS DATA BLOCK INFORMATION: CRC REMAINDER CHANGED FROM "D6ABFE21" TO "89D95608" - NEW DATA RESULTS IN NEW CRC REMAINDER.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZID, IND APP CON, AMGR

FLIGHT CHECKED BY

JOHN R CLOUGH

Digitally signed by
MARK D ADAMS
Dec 31, 2018

OFFICE

FICO

DATE

12/19/2018

DEVELOPED BY

JOHN THORNTON

Digitally signed by
JOHN R THORNTON

Oct 26, 2018

OFFICE

AJV-5421

DATE

09/07/2018

APPROVED BY

JULIE MORGAN

Digitally signed by
MARK D ADAMS
Dec 31, 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	KUWL
RUNWAY	RW10
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W10A
LTP/FTP LATITUDE	395236.3790N
LTP/FTP LONGITUDE	0851957.9745W
LTP/FTP ELLIPSOIDAL HEIGHT	+02954
FPAP LATITUDE	395235.7395N
FPAP LONGITUDE	0851802.2430W
THRESHOLD CROSSING HEIGHT (TCH)	00045.8
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1472
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER	89D95608

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+03292
FPAP ORTHOMETRIC HEIGHT	+03292



FEDERAL AVIATION ADMINISTRATION
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TITLE 14 CFR PART 97.33

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<u>AIRPORT</u> NEW CASTLE HENRY COUNTY MARLATT FIELD	<u>AIRPORT ID</u> KUWL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 28	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> NEW CASTLE	<u>STATE</u> IN
<u>AIRPORT ELEVATION</u> 1090	<u>TDZE</u> 1090	<u>SUPERSEDED</u> RNAV (GPS) RWY 28	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 03/29/2018	<u>MAG VAR</u> 6W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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. 187/30 CW 007/30	NOPT	TASUY	IF/IAF	3000
2. 007/30 CW 187/30		TASUY	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>
TASUY	IF/IAF	CIBSO		TF	FB	1.00	276.58	7.65	2600
CIBSO	FAF	TEYOB/1.80 NM TO RW28		TF	FB	0.30	276.47	2.80	
TEYOB/1.80 NM TO RW28		RW28	MAP	TF	FO	0.30	276.47	1.80	
RW28	MAP	1412 MSL		CA			276.47		
1412 MSL		HAFHU		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW28

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT HAFHU AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD E TASUY, RT, 276.58 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 276.47FAF: CIBSODIST FAF TO MAP: 4.60DIST FAF TO THLD: 4.60

4. MIN ALT: TASUY 3000, CIBSO 2600, TEYOB/1.80 NM TO RW28 1700*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:322 HAT: 0.87GS ANT:

6. MIN GP INCPT: 2600GP ALT AT FAF : CIBSO 2600OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 43.9

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 28 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: BARO-VNAV NA.
*LNAV ONLY
CHART NOTE: USE ANDERSON ALTIMETER SETTING; WHEN NOT RECEIVED, USE MUNCIE ALTIMETER SETTING AND INCREASE LPV DA TO 1416, LNAV/VNAV DA TO 1441, AND ALL MDA 20 FEET.

ADDITIONAL FLIGHT DATA:

CHART ANDERSON MUNI-DARLINGTON FIELD AWOS-3.
CHART CIRCLING ICON.
WAAS CHANNEL #70541
REFERENCE PATH ID: W28A
CHART FAS OBST: 1213 TREE 395307N/0851622W.
HOLD W, RT, 096.23 INBOUND
LTP HAE: 298.4 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	1412	1	322	1412	1	322	1412	1	322	1412	1	322			
LNAV/VNAV DA	1437	1	347	1437	1	347	1437	1	347	1437	1	347			
LNAV MDA	1540	1	450	1540	1	450	1540	1 3/8	450	1540	1 3/8	450			
CIRCLING	1580	1	490	1600	1	510	1780	2	690	1780	2 1/4	690			



AIRPORT	AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	CITY	STATE
NEW CASTLE HENRY COUNTY MARLATT FIELD	KUWL	RNAV (GPS) RWY 28	ORIG-A	NEW CASTLE	IN

CHANGES - REASONS

- 1. CHANGED AIRPORT NAME FROM "NEW CASTLE-HENRY CO MUNI" TO "NEW CASTLE HENRY COUNTY MARLATT FIELD" - AIRPORT NAME CHANGED.
- 2. PROFILE LINE 7: ADDED "20:1 IS CLEAR" - IAW CURRENT CRITERIA.
- 3. DELETED "DME/DME 0.3-NA" NOTE AND ADDED PBN REQUIREMENTS NOTE "RNP APCH" - IAW CURRENT CRITERIA.
- 4. FAS DATA BLOCK INFORMATION: LTP/FTP LATITUDE / LONGITUDE CHANGED FROM 395336.0890N / 0851904.0860W TO 395236.0875N / 0851904.0885W - CURRENT DATA.
- 5. FAS DATA BLOCK INFORMATION: FPAP LATITUDE / LONGITUDE CHANGED FROM 395236.7096N / 0852059.8180W TO 395236.7075N / 0852059.8200W - CURRENT DATA.
- 6. FAS DATA BLOCK INFORMATION: CRC REMAINDER CHANGED FROM CDB9599B TO B6008F04 - NEW DATA RESULTS IN NEW CRC REMAINDER.
- 7. FAS DATA BLOCK INFORMATION: LTP ORTHOMETRIC HEIGHT CHANGED FROM "+03322" TO "+03323" - CURRENT DATA.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZID, IND APP CON, AMGR

FLIGHT CHECKED BY

JOHN R CLOUGH

Digitally signed by

MARK D ADAMS

Dec 31, 2018

OFFICE

FICO

DATE

12/19/2018

DEVELOPED BY

JOHN THORNTON

Digitally signed by

JOHN R THORNTON

Oct 26, 2018

OFFICE

AJV-5421

DATE

09/06/2018

APPROVED BY

JULIE MORGAN

Digitally signed by

MARK D ADAMS

Dec 31, 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	KUWL
RUNWAY	RW28
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W28A
LTP/FTP LATITUDE	395236.0875N
LTP/FTP LONGITUDE	0851904.0885W
LTP/FTP ELLIPSOIDAL HEIGHT	+02984
FPAP LATITUDE	395236.7075N
FPAP LONGITUDE	0852059.8200W
THRESHOLD CROSSING HEIGHT (TCH)	00043.9
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1472
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	B6008F04

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+03323
FPAP ORTHOMETRIC HEIGHT	+03323



**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>
NEW CASTLE, IN	NEW CASTLE HENRY COUNTY MARLATT FIELD	25 APRIL 2019	1A

TAKEOFF MINIMUMS:
RWY 10, 28: STANDARD

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 10: TREES BEGINNING 1657 FT FROM DER, 156 FT RIGHT OF CENTERLINE, UP TO 1142 FT MSL.

TREE 1821 FT FROM DER, 92 FT LEFT OF CENTERLINE, 65 FT AGL/1146 FT MSL.

TREES BEGINNING 1865 FT FROM DER, 22 FT RIGHT OF CENTERLINE, UP TO 69 FT AGL/1153 FT MSL.

TREE 1931 FT FROM DER, 697 FT RIGHT OF CENTERLINE, 1154 FT MSL.

TREE 1932 FT FROM DER, 817 FT RIGHT OF CENTERLINE, 91 FT AGL/1176 FT MSL.

TREES BEGINNING 1951 FT FROM DER, 571 FT RIGHT OF CENTERLINE, UP TO 93 FT AGL/1179 FT MSL.

TREES BEGINNING 2029 FT FROM DER, 530 FT RIGHT OF CENTERLINE, UP TO 103 FT AGL/1190 FT MSL.

NOTE: RWY 28: POLE, TRAVERSE WAY BEGINNING 160 FT FROM DER, 464 FT RIGHT OF CENTERLINE, UP TO 30 FT AGL/1101 FT MSL.

POLE BEGINNING 346 FT FROM DER, 461 FT RIGHT OF CENTERLINE, UP TO 32 FT AGL/1105 FT MSL.

POLE 444 FT FROM DER, 462 FT RIGHT OF CENTERLINE, 35 FT AGL/1107 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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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>
NEW CASTLE, IN	NEW CASTLE HENRY COUNTY MARLATT FIELD	25 APRIL 2019	1A

REMARKS:
ABBREVIATED AMENDMENT.

FLIGHT INSPECTED BY:

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW
AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCT 3, 2018.

Digitally signed by

MARK D ADAMS

Dec 27, 2018

OFFICE SYMBOL:

DATE:

DEVELOPED BY:

JOHN THORNTON

Digitally signed by

JOHN R THORNTON

Oct 26, 2018

OFFICE SYMBOL:

AJV-5421

DATE:

09/06/2018

APPROVED BY:

JULIE MORGAN

Digitally signed by

MARK D ADAMS

Dec 27, 2018

OFFICE SYMBOL:

AJV-5420

DATE:

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

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



OTHER:

ZID, IND APP CON, AMGR

CHANGES - REASONS:

1. CHANGED AIRPORT NAME FROM "NEW CASTLE-HENRY CO MUNI" TO "NEW CASTLE HENRY COUNTY MARLATT FIELD" - ABBREVIATED AMENDMENT TO CHANGE AIRPORT NAME; FLIGHT INSPECTION REVIEW NOT REQUIRED.
2. ADDED REMARK "ABBREVIATED AMENDMENT" - AMENDMENT TO CHANGE AIRPORT NAME.



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> SOUTH BEND INTL	<u>AIRPORT ID</u> KSBN	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 9R	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> SOUTH BEND	<u>STATE</u> IN
<u>AIRPORT ELEVATION</u> 798	<u>TDZE</u> 790	<u>SUPERSEDED</u> RNAV (GPS) RWY 9R	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 11/08/2018	<u>MAG VAR</u> 3W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 2019	<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>
MAPER		AROYA		TF	FB	1.00	157.93	15.58	2600
NOMES		YIBUC		TF	FB	1.00	326.94	6.24	2600
AROYA	IAF	ZAPPY	NOPT	TF	FB	1.00	181.70	5.60	2600
YIBUC	IAF	ZAPPY	NOPT	TF	FB	1.00	001.70	5.60	2600
ZAPPY	IF/IAF	ANUCO		TF	FB	1.00	091.70	6.01	2600
ANUCO	FAF	RW09R	MAP	TF	FO	0.30	091.71	5.51	
RW09R	MAP	990 MSL		CA			091.71		
990 MSL		ISUYO		DF	FO	1.00			2600

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW09R

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2600 DIRECT ISUYO AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD W ZAPPY, RT, 091.70 INBOUND, 2600 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 091.71FAF: ANUCODIST FAF TO MAP: 5.51DIST FAF TO THLD: 5.51

4. MIN ALT: ZAPPY 2600, ANUCO 2600

5. DIST TO THLD FROM OM:MM:IM:150 HAT:200 HAT: 0.46GS ANT:

6. MIN GP INCPT: 2600GP ALT AT FAF : ANUCOOM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 54.8

8. MSA FROM: RW09R 3000

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 9R HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO LPV ALL CATS.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -19°C OR ABOVE 54°C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MAPER ON V526 NORTHWEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT NOMES ON V8-92-126 EASTBOUND AND V156 SOUTHWEST BOUND.
FOR INOPERATIVE ALS, INCREASE LNAV CAT A/B VISIBILITY TO RVR 5500 AND CAT C/D TO RVR 6000.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.12 NM TO RW09R*
*LNAV ONLY
WAAS CHANNEL #60908
REFERENCE PATH ID: W09B
CHART FAS OBST: 936 TREE 414213N/0862116W.
HOLD E, RT, 271.96 INBOUND
LTP HAE: 207 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	990	4000	200	990	4000	200	990	4000	200	990	4000	200			
LNAV/VNAV DA	1222	4000	432	1222	4000	432	1222	4000	432	1222	4000	432			
LNAV MDA	1200	4000	410	1200	4000	410	1200	4000	410	1200	4000	410			
CIRCLING	1280	1	482	1280	1	482	1440	1 3/4	642	1500	2 1/4	702			

QUALITY
6
CHECKED

CHANGES - REASONS

1. CHANGED REFERENCE PATH IDENTIFIER FROM W09A TO W09B. - RNAV (GPS) RWY 9L ALREADY UTILIZES REFERENCE PATH IDENTIFIER OF W09A, AND A REFERENCE PATH IDENTIFIER MAY NOT BE DUPLICATED FOR TWO SEPARATE APPROACHES AT THE SAME AIRPORT IAW 8260.19H.
2. CRC REMAINDER CHANGED FROM 25DF8A26 TO 1B559C47. - ADJUSTMENT OF REFERENCE PATH IDENTIFIER REQUIRES NEW CRC REMAINDER.
3. CHANGED FEEDER RNP FROM 2.00 TO 1.00. - IMPLEMENTATION OF CURRENT CRITERIA.

COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZAU ARTCC, SBN ATCT, AMGR, ATA

FLIGHT CHECKED BY

SHAWN D MAXWELL

DEVELOPED BY

JOSHUA LEETE

APPROVED BY

JULIE MORGAN

Digitally signed by
ROBERT G HAMILTON
Dec 17, 2018

Digitally signed by
JOSHUA LEETE
Nov 19, 2018

Digitally signed by
ROBERT G HAMILTON
Dec 17, 2018

<u>OFFICE</u>	<u>DATE</u>
FICO	12/13/18
<u>OFFICE</u>	<u>DATE</u>
AJV-5422	10/29/2018
<u>OFFICE</u>	<u>DATE</u>
AJV-5420	

TITLE
MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSBN
RUNWAY	RW09R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W09B
LTP/FTP LATITUDE	414215.5805N
LTP/FTP LONGITUDE	0861945.8975W
LTP/FTP ELLIPSOIDAL HEIGHT	+02070
FPAP LATITUDE	414217.4465N
FPAP LONGITUDE	0861746.9715W
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	0192
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	1B559C47
<u>ADDITIONAL PATH POINT RECORD INFORMATION</u>	
ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02407
FPAP ORTHOMETRIC HEIGHT	+02407



**FEDERAL AVIATION ADMINISTRATION
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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>
KINGMAN, KS	KINGMAN AIRPORT - CLYDE CESSNA FIELD	25 APRIL 2019	ORIG-A

TAKEOFF MINIMUMS:
STANDARD

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 11, TREE 73 FT FROM DER, 486 FT LEFT OF CENTERLINE, 32 FT AGL/1621 FT MSL. TREE 124 FT FROM DER, 519 FT RIGHT OF CENTERLINE, 33 FT AGL/1622 FT MSL. TREE 166 FT FROM DER, 435 FT RIGHT OF CENTERLINE, 40 FT AGL/1628 FT MSL. TREES BEGINNING 279 FT FROM DER, 154 FT LEFT OF CENTERLINE, UP TO 37 FT AGL/1627 FT MSL. TREE 331 FT FROM DER, 421 FT RIGHT OF CENTERLINE, 45 FT AGL/1632 FT MSL. TREE, POLE BEGINNING 452 FT FROM DER, 24 FT LEFT OF CENTERLINE, UP TO 53 FT AGL/1642 FT MSL. TREES BEGINNING 531 FT FROM DER, 12 FT RIGHT OF CENTERLINE, UP TO 90 FT AGL/1675 FT MSL. TREE 1015 FT FROM DER, 698 FT LEFT OF CENTERLINE, 58 FT AGL/1647 FT MSL. TREES BEGINNING 1308 FT FROM DER, 301 FT RIGHT OF CENTERLINE, UP TO 94 FT AGL/1678 FT MSL. TREES BEGINNING 1483 FT FROM DER, 321 FT RIGHT OF CENTERLINE, UP TO 96 FT AGL/1680 FT MSL.

NOTE: RWY 18: POLE, VERTICAL STRUCTURE, LIGHTING, AND BUILDING BEGINNING 26 FT FROM DER, 72 FT LEFT OF CENTERLINE, UP TO 35 FT AGL/1624 FT MSL. LIGHTING 37 FT FROM DER, 74 FT RIGHT OF CENTERLINE, 4 FT AGL/1599 FT MSL. TREE 443 FT FROM DER, 568 FT RIGHT OF CENTERLINE, 35 FT AGL/1619 FT MSL. TREES BEGINNING 679 FT FROM DER, 66 FT RIGHT OF CENTERLINE, UP TO 83 FT AGL/1660 FT MSL. TREE 1076 FT FROM DER, 595 FT LEFT OF CENTERLINE, 68 FT AGL/1648 FT MSL. TREES BEGINNING 1131 FT FROM DER, 30 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/1658 FT MSL.

NOTE: RWY 36: LIGHTING 36 FT FROM DER, 72 FT LEFT OF CENTERLINE, 4 FT AGL/1602 FT MSL. LIGHTING 37 FT FROM DER, 74 FT RIGHT OF CENTERLINE, 4 FT AGL/1600 FT MSL. VEHICLES ON ROAD BEGINNING 537 FT FROM DER, 190 FT LEFT OF CENTERLINE, UP TO 1615 FT MSL.

CONTROLLING OBSTACLES:

REMARKS:

FLIGHT INSPECTED BY: *Digitally signed by*
GARY BELL **DONALD H LANIER**
Jan 07, 2019

OFFICE SYMBOL: **DATE:**
FICO 11/3/19

DEVELOPED BY: *Digitally signed by*
DONALD LANIER **DONALD H LANIER**
(EBONY HAMILTON) Jan 07, 2019

OFFICE SYMBOL: **DATE:**
AJV-5430 11/06/2018

APPROVED BY: *Digitally signed by*
PATRICK MULQUEEN **DONALD H LANIER**
Jan 07, 2019

OFFICE SYMBOL: **DATE:**
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:
ZKC, ICT APCH CON, ICT FSS, AMGR, KS STATE AERO

QUALITY
3
CHECKED

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

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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
KINGMAN, KS	KINGMAN AIRPORT - CLYDE CESSNA FIELD	25 APRIL 2019	ORIG-A

CHANGES - REASONS:

UPDATED TAKEOFF OBSTACLE NOTES FOR RWY 11 - INCORPORATED NOTAM IFDC 8/8776

UPDATED TAKEOFF OBSTACLE NOTES FOR RWY 18, 29, AND 36 - NEW OBSTACLE EVALUATION.



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> JOHN H HOOKS JR MEMORIAL	<u>AIRPORT ID</u> KM79	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 18	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> RAYVILLE	<u>STATE</u> LA
<u>AIRPORT ELEVATION</u> 83	<u>TDZE</u> 83	<u>SUPERSEDED</u> RNAV (GPS) RWY 18	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 07/24/2014	<u>MAG VAR</u> 2E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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. 090/30 CW 270/30	NOPT	090/9 CW 270/9		2200
2. 090/9 CW 270/9		OGELS	IF/IAF	1700
3. 270/30 CW 090/30		270/9 CW 090/9		2200
4. 270/9 CW 090/9		OGELS	IAF	1700

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>
OGELS	IF/IAF	YIGLU		TF	FB	1.00	179.87	6.87	1600
YIGLU	FAF	ZAPOR/1.30 NM TO RW18		TF	FB	0.30	179.87	2.52	
ZAPOR/1.30 NM TO RW18		RW18	MAP	TF	FO	0.30	179.87	1.30	
RW18	MAP	448 MSL		CA			179.87		
448 MSL		APERE		DF	FO	1.00			1600

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW18

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1600 DIRECT APERE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N OGELS, RT, 179.87 INBOUND, 1700 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 179.87

FAF: YIGLU

DIST FAF TO MAP: 3.82

DIST FAF TO THLD: 3.82

4. MIN ALT: OGELS 1700, YIGLU 1600, ZAPOR/1.30 NM TO RW18 620*

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

365 HAT: 0.80

GS ANT:

6. MIN GP INCPT: 1600

GP ALT AT FAF : YIGLU 1600

OM:

MM:

IM:

7. GP ANGLE: 3.60

34:1: IS NOT CLEAR

20:1: IS NOT CLEAR

TCH: 59.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 18 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
*LNAV ONLY
CHART NOTE: STRAIGHT-IN AND CIRCLING RWY 18 NA AT NIGHT.
USE MONROE ALTIMETER SETTING, WHEN NOT RECEIVED, USE BASTROP ALTIMETER SETTING AND INCREASE ALL DA/MDA 20 FEET; INCREASE LPV ALL CATS VISIBILITY 1/8 SM.
CHART NOTE: BARO-VNAV NA

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON
CHART MONROE ASOS
WAAS CHANNEL #58011
REFERENCE PATH ID: W18A
CHART FAS OBST: 187 TREE 323028N/0914604W.
286 AAO 323315N/0914542W.
HOLD S, RT, 359.88 INBOUND
LTP HAE: -0.9 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	448	1	365	448	1	365		NA			NA				
LNAV/VNAV DA	559	1 3/8	476	559	1 3/8	476		NA			NA				
LNAV MDA	480	1	397	480	1	397		NA			NA				
CIRCLING	600	1	517	600	1	517		NA			NA				



CHANGES - REASONS

1. T-NOTAM ISSUED PER PERIODIC REVIEW. NOTAM 8/0697 RESOLUTION TO CHANGE LPV DA/HAT FROM 415/332 TO 448/365 - DUE TO LPV MISSED APPROACH PENETRATION AT 172 MSL TREE (22-023556) 322950.70N/0914623.10W.
2. 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).
3. NOTE DELETED: DME/DME RNP-0.3 NA - PER MEMO 257.
4. ADDED PBN REQUIREMENTS NOTE: RNP APCH - PER MEMO 257.
5. TERMINAL ROUTE: CA LEG CHANGED FROM "RW18 TO 414 MSL" TO "RW18 TO 448 MSL" - IAW 8260.19H PARA 4-6-5D.
6. TERMINAL ROUTE: CHANGED DF LEG FROM "414 MSL - APERE (FO)" TO "448 MSL - APERE (DF) (FO) (RNP 1.00)" - IAW 8260.19H PARA 4-6-5E.
7. 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.
8. ADDITIONAL FLIGHT DATA: CHANGED "DISTANCE TO THLD FROM 332 HATH: 0.71" TO "DISTANCE TO THLD FROM 365 HAT: 0.80" - NEW VISCHECK UPDATED.
9. CHANGED CHART NOTE FROM "RWY 18 STRAIGHT-IN AND CIRCLING MINIMUMS NA AT NIGHT" TO "STRAIGHT-IN AND CIRCLING RWY 18 NA AT NIGHT" - 20:1 PENETRATIONS. NOTE REWORDED UPDATE IAW 8260.19H PARA 8-6-11(G).
10. ADDITIONAL FLIGHT DATA: ADDED "286 MSL AAO 323315.00N/0914542.00W" - 7:1 OBSTACLE, IAW 8260.19H PARA 8-6-10E(1).
11. 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).
12. ADDED MAX 6000 TO LINE 2 - IAW 8260.19H PARA 8-6-7B(2)A.
13. ADDITIONAL FLIGHT DATA: CHANGED FROM "CHART FAS OBST: 189 MSL TREE 323014N/0914609W" TO "CHART FAS OBST: 187 MSL TREE 323028N/0914604W" - NEW OBSTACLE EVALUATION.
14. CHANGES FROM P-NOTAM FOR AMDT 1A INCORPORATED INTO FORM - IAW 8260.19H PARA 8-3-4C(3).
15. CHANGED CHART NOTE "USE MONROE ALTIMETER SETTING, WHEN NOT RECEIVED, USE BASTROP ALTIMETER SETTING AND INCREASE ALL DA/MDA 20 FEET" TO "USE MONROE ALTIMETER SETTING, WHEN NOT RECEIVED, USE BASTROP ALTIMETER SETTING AND INCREASE ALL DA/MDA 20 FEET; INCREASE LPV ALL CATS VISIBILITY 1/8 SM" - NOTE UPDATE IAW 8260.19H PARA 8-6-11N(1)A, VISIBILITY UPDATE PER VISCHECK TOOL.

COORDINATED WITH:

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

FLIGHT CHECKED BY

ANTHONY D VALLERA

Digitally signed by
DAVID TEFFETELLER
Nov 08, 2018

OFFICE

FICO

DATE

11/6/18

DEVELOPED BY

KWEKU DONKOR

Digitally signed by
KWEKU DONKOR
Oct 04, 2018

OFFICE

AJV-5433

DATE

08/31/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
DAVID TEFFETELLER
Nov 08, 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	M79
RUNWAY	RW18
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W18A
LTP/FTP LATITUDE	322926.9630N
LTP/FTP LONGITUDE	0914619.7320W
LTP/FTP ELLIPSOIDAL HEIGHT	-00009
FPAP LATITUDE	322757.7300N
FPAP LONGITUDE	0914623.1700W
THRESHOLD CROSSING HEIGHT (TCH)	00059.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.60
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1528
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	96C7B408
<u>ADDITIONAL PATH POINT RECORD INFORMATION</u>	
ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+00251
FPAP ORTHOMETRIC HEIGHT	+00251



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> JOHN H HOOKS JR MEMORIAL	<u>AIRPORT ID</u> KM79	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> 2B	<u>CITY</u> RAYVILLE	<u>STATE</u> LA	
<u>AIRPORT ELEVATION</u> 83	<u>TDZE</u> 83	<u>SUPERSEDED</u> RNAV (GPS) RWY 36	<u>ORIGINAL/AMENDMENT</u> 2A	<u>DATED</u> 07/24/2014	<u>MAG VAR</u> 2E	<u>EPOCH YEAR</u> 2000
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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. 270/30 CW 090/30	NOPT	270/11 CW 090/11		3100
2. 270/11 CW 090/11		APERE	IF/IAF	1600
3. 090/30 CW 270/30		090/11 CW 270/11		2200
4. 090/11 CW 270/11		APERE	IAF	1600

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>
APERE	IF/IAF	HIGER		TF	FB	1.00	359.88	6.07	1600
HIGER	FAF	CATAD/2.00 NM TO RW36		TF	FB	0.30	359.88	2.61	
CATAD/2.00 NM TO RW36		RW36	MAP	TF	FO	0.30	359.88	2.00	
RW36	MAP	424 MSL		CA			359.88		
424 MSL		OGELS		DF	FO	1.00			1700

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW36

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1700 DIRECT OGELS AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S APERE, RT, 359.88 INBOUND, 1600 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 359.88FAF: HIGERDIST FAF TO MAP: 4.61DIST FAF TO THLD: 4.61

4. MIN ALT: APERE 1600, HIGER 1600, CATAD/2.00 NM TO RW36 760*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:341 HAT: 0.91GS ANT:

6. MIN GP INCPT: 1600GP ALT AT FAF : HIGER 1600OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 50.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 36 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
*LNAV ONLY
USE MONROE ALTIMETER SETTING; WHEN NOT RECEIVED USE BASTROP ALTIMETER SETTING AND INCREASE ALL DA/MDA 20 FEET AND INCREASE LNAV/VNAV ALL CATS VISIBILITY 1/8 SM.
BARO-VNAV NA.

ADDITIONAL FLIGHT DATA:

CHART MONROE ASOS
CHART CIRCLING ICON.
WAAS CHANNEL #78111
REFERENCE PATH ID: W36A
CHART FAS OBST: 260 TOWER 322711N/0914541W.
HOLD N, RT, 179.87 INBOUND
LTP HAE: -1.2 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
LPV DA	424	1	341	424	1	341		NA			NA				
LNAV/VNAV DA	516	1 1/2	433	516	1 1/2	433		NA			NA				
LNAV MDA	540	1	457	540	1	457		NA			NA				
CIRCLING	600	1	517	600	1	517		NA			NA				



CHANGES - REASONS

1. T-NOTAM ISSUED PER PERIODIC REVIEW. NOTAM 8/5312 RESOLUTION TO CHANGE LPV DA/HAT FROM 392/309 TO 424/341 - DUE TO LPV MISSED APPROACH PENETRATION AT 174 MSL TREE (22-023565) 322821.30N/0914619.18W.
2. 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).
3. CHANGED CHART NOTE FROM "USE CAPE GIRARDEAU ALTIMETER SETTING; WHEN NOT RECEIVED USE BASTRP ALTIMETER SETTING AND INCREASE ALL DA/MDA 20 FEET AND INCREASE LPV ALL CATS VISIBILITY 1/8 MILE" TO "USE MONROE ALTIMETER SETTING; WHEN NOT RECEIVED USE BASTROP ALTIMETER SETTING AND INCREASE ALL DA/MDA 20 FEET AND INCREASE LNAV/VNAV ALL CATS VISIBILITY 1/8 SM" - NEW EVALUATION. VISCHECK UPDATED.
4. NOTE DELETED: DME/DME RNP-0.3 NA - PER MEMO 257.
5. ADDED PBN REQUIREMENTS NOTE: RNP APCH - PER MEMO 257.
6. TERMINAL ROUTE: CHANGED CA LEG FROM "RW36 TO 390 MSL" TO "RW36 TO 424 MSL" - IAW 8260.19H PARA 4-6-5D.
7. TERMINAL ROUTE: CHANGED DF LEG FROM "390 MSL - OGELS" TO "RW36 - OGELS (DF) (FO)" TO "424 MSL - OGELS (DF) (FO)" (RNP 1.00)" - IAW 8260.19H PARA 4-6-5E.
8. CHANGED CHART NOTE FROM "VISIBILITY REDUCTION BY HELICOPTERS NA" TO "RWY36 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED" - WORDING UPDATED IAW 8260.19H PARA 8-6-5I(3). 20:1 IS CLEAR, 34:1 NOT CLEAR.
9. ADDITIONAL FLIGHT DATA: CHANGED "DISTANCE TO THLD FROM 309 HATH: 0.81" TO "DISTANCE TO THLD FROM 341 HAT: 0.91" - NEW VISCHECK UPDATED.
10. ADDED MAX 6000 TO LINE 2 - IAW 8260.19H PARA 8-6-7B(2)A.
11. REMOVED NOTE: CIRCLING TO RWY 18 NA AT NIGHT - NO 20:1 PENETRATION IN CIRCLING VISUAL AREA.
12. CHANGES FROM P-NOTAM FOR AMDT 2A INCORPORATED INTO FORM - IAW 8260.19H PARA 8-3-4C(3).

COORDINATED WITH:

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

FLIGHT CHECKED BY

ANTHONY D VALLERA

Digitally signed by

DAVID TEFFETELLER

Nov 08, 2018

OFFICE

FICO

DATE

11/6/18

DEVELOPED BY

KWEKU DONKOR

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Oct 04, 2018

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DATE

09/17/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

DAVID TEFFETELLER

Nov 08, 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	M79
RUNWAY	RW36
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W36A
LTP/FTP LATITUDE	322850.3095N
LTP/FTP LONGITUDE	0914621.1480W
LTP/FTP ELLIPSOIDAL HEIGHT	-00012
FPAP LATITUDE	323019.5400N
FPAP LONGITUDE	0914617.6900W
THRESHOLD CROSSING HEIGHT (TCH)	00050.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1624
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER	B4D9792C

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+00248
FPAP ORTHOMETRIC HEIGHT	+00248



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> SHREVEPORT DOWNTOWN	<u>AIRPORT ID</u> KDTN	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 32	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> SHREVEPORT	<u>STATE</u> LA
<u>AIRPORT ELEVATION</u> 179	<u>TDZE</u> 179	<u>SUPERSEDED</u> RNAV (GPS) RWY 32	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 06/22/2017	<u>MAG VAR</u> 1E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
JENNA		SHOED		TF	FB	1.00	282.92	9.29	3100
MOKPE		CREPY		TF	FB	1.00	034.09	9.53	4000
SHOED	IAF	PEPOE		TF	FB	1.00	229.48	8.00	3100
CREPY	IAF	PEPOE		TF	FB	1.00	049.36	8.00	3100
PEPOE	IF	WEGON		TF	FB	1.00	319.42	7.02	1900
WEGON	FAF	RW32	MAP	TF	FO	0.30	319.38	5.28	
RW32	MAP	579 MSL		CA			319.38		
579 MSL		ZOROD		DF	FO	1.00			3100

MISSED APPROACH

MAP:

LP: RW32
 LNAV: RW32

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3100 DIRECT ZOROD AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT PEPOE

3. FAC: 319.38

FAF: WEGON

DIST FAF TO MAP: 5.28

DIST FAF TO THLD: 5.28

4. MIN ALT: PEPOE 3100, WEGON 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 CLEAR

20:1 IS NOT CLEAR

TCH:

8. MSA FROM: RW32 3100

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 32 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT JENNA ON V94 EAST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MOKPE ON V407 SOUTHWEST BOUND.
CHART NOTE: STRAIGHT-IN RWY 32 NA AT NIGHT. CIRCLING RWY 5, 23, 32 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
WAAS CHANNEL #58140
REFERENCE PATH ID: W32A
CHART FAS OBST: 358 TOWER 322913N/0934205W, 436 POLE 323129N/0934248W.
HOLD NW, LT, 139.25 INBOUND
LTP HAE: 28.7 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	620	1	441	620	1	441	620	1 3/8	441	620	1 3/8	441			
LNAV MDA	740	1	561	740	1	561	740	1 5/8	561	740	1 5/8	561			
CIRCLING	800	1	621	920	1	741	1100	2 3/4	921	1100	3	921			



CHANGES - REASONS

- 1. LP CAT C/D VISIBILITY CHANGED FROM 1 1/8 TO 1 3/8. - IAW 8260.3 TABLE 3-3-1.
- 2. TERMINAL ROUTES: JENNA AND MOKPE FEEDER ROUTES RNP CODES CHANGED FROM 2.00 TO 1.00. - IAW 8260.58 TABLE 1-2-1.
- 3. PROFILE: ADDED 20:1 IS NOT CLEAR. - DOCUMENTED 20:1'S. FPT HAS BEEN NOTIFIED VIA 20:1 TRACKER.
- 4. ADDED PBN REQUIREMENTS NOT: RNP APCH, REMOVED CHART NOTE: DME/DME RNP-O.3 NA. - IAW 8260.19 8-6-8.
- 5. ADDITIONAL FLIGHT DATA: REMOVED VDA. - FLIGHT INSPECTION RESULTS DO NOT WARRANT A VDA.
- 6. ADDITIONAL FLIGHT DATA: LP FAS OBS CHANGED FROM 330 TOWER 323005N/0934244W TO 358 TOWER 322913N/0934205W. - NEW FINAL CONTROLLING OBS.
- 7. LP MDA/HAT CHANGED FROM 580/401 TO 620/441 ALL CATS. - NEW CONTROLLING OBS.
- 8. FAS DATA: CRC REMAINDER CHANGED FROM 67619A66 TO 57A172F2. - REMOVAL OF TCH AND GPA DUE TO FLIGHT CHECK REPORT OF VISUAL SEGMENT OBSTACLES.
- 9. ADDITIONAL FLIGHT DATA: ADD CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES. - FLIGHT CHECK REPORT.
- 10. TERMINAL ROUTES: PEPOE TO WEGON INTERMEDIATE FB CHANGED TO FO. - FLIGHTOVER NOT REQUIRED.
- 11. NOTES: REMOVED CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). - REMOVAL OF VDA.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZFW ARTCC, SHV APP CON, DTN ATCT, AIRPORT MANAGER

FLIGHT CHECKED BY

KENNETH E JACK

Digitally signed by
ROBERT G HAMILTON
Dec 11, 2018

OFFICE

FICO

DATE

12/10/18

DEVELOPED BY

LEO PALMER

Digitally signed by
LEO PALMER
Nov 20, 2018

OFFICE

AJV-5421

DATE

11/19/2018

APPROVED BY

JULIE MORGAN

Digitally signed by
ROBERT G HAMILTON
Dec 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	KDTN
RUNWAY	RW32
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W32A
LTP/FTP LATITUDE	323207.2455N
LTP/FTP LONGITUDE	0934424.1365W
LTP/FTP ELLIPSOIDAL HEIGHT	+00287
FPAP LATITUDE	323315.9725N
FPAP LONGITUDE	0934531.4155W
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	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	57A172F2

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+00546
FPAP ORTHOMETRIC HEIGHT	+00546



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
COPTER ILS STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.35

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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>HELIPORT</u> CAPE COD COAST GUARD AIR STATION	<u>HELIPORT ID</u> KFMH	<u>PROCEDURE NAME</u> COPTER ILS Y OR LOC Y RWY 23	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> FALMOUTH	<u>STATE</u> MA
<u>SURFACE ELEVATION</u> 130	<u>TDZE</u> 126	<u>SUPERSEDED</u> COPTER ILS OR LOC RWY 23	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 09/18/2014	<u>MAG VAR</u> 15W
<u>FACILITY</u> I-FMH	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1980

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>
LFV VOR/DME		REDSX INT/I-FMH 21.21 DME					253.41	10.51	3500
MVY VOR/DME		JAYHA/I-FMH 6.58 DME	FAF/IAF				035.95	21.65	2500
GAILS INT/BOS 39.32 DME	IAF	HUDOP INT/I-FMH 13.37 DME	NOPT				153.96	3.84 (BOS R-154)	2500
REDSX INT/I-FMH 21.21 DME	IAF	HUDOP INT/I-FMH 13.37 DME	NOPT				233.94	7.84 (I-FMH)	2500
HUDOP INT/I-FMH 13.37 DME	IF	JAYHA/I-FMH 6.58 DME					233.94	6.86 (I-FMH)	1800

MISSED APPROACH

MAP:

ILS: DA
LOC: DEMBE/I-FMH 2.10 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1400 THEN CLIMBING LEFT TURN HEADING 050 AND MVY VOR/DME R-036 TO 3000 DIRECT JAYHA AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 3000 DIRECT GLESO AND HOLD. (GPS REQUIRED)

PROFILE:

- PT R **SIDE OF COURSE** 053.94 **OUTBOUND** 1800 **FT WITHIN** 5 **MILES OF** JAYHA/I-FMH 6.58 DME (IAF)
-
- FAC:** 233.94 **FAF:** JAYHA/I-FMH 6.58 DME **DIST FAF TO MAP:** **DIST FAF TO THLD:** 5.09
- MIN ALT:** JAYHA/I-FMH 6.58 DME 1800
- DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **GS ANT:** 1051
- MIN GS INCPT:** 1800 **GS ALT AT FAF :** JAYHA/I-FMH 6.58 DME 1800 **OM:** **MM:** **IM:**
- GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 53.4
- MSA FROM:** MVY VOR/DME 090-270 1500, 270-090 2100



EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED

NOTES:

CHART PLANVIEW NOTE: NOT FOR CIVIL USE
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT GAILS ON V141 NORTHBOUND.
CHART NOTE: FOR INOPERATIVE ALS INCREASE H-ILS 23 AND H-LOC 23 VISIBILITY TO RVR 2400.
CHART NOTE: UNITED STATES COAST GUARD ONLY

ADDITIONAL FLIGHT DATA:

CHART R-4101.
CHART LfV 10.51 DME AND ACK R-001 AT REDSX.
CHART BOS 43.16 DME AND LfV R-246 AT HUDOP.
CHART LfV R-258 AT GAILS.
CHART OM IN HALF-TONE.
CHART FAS OBST: 228 TREE 414032N/0703006W.
CHART MVY 21.65 DME AT JAYHA.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SW GLESO, RT, 053.84 INBOUND.
HOLD NE, LT, 233.94 INBOUND (DO NOT CHART)

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD

<u>CATEGORY:</u>	<u>COPTER</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>
H-ILS 23	226	1200	100		NA			NA			NA				
H-LOC 23	480	1200	354		NA			NA			NA				

CHANGES - REASONS

1. ADDED CHART NOTE: DME REQUIRED - NDB BEING DECOMMISSIONED.,
2. UPDATED PFAF/FAF TO JAYHA/I-FMH 6.58 DME - NDB BEING DECOMMISSIONED.
3. ADDED MAP DEMBE/I-FMH 2.10 DME - USCG REQUEST.
4. DELETED FALMOUTH LOM/BOMDE FROM APPROACH - NDB BEING DECOMMISSIONED.
5. REMOVED CHART NOTE: ADF REQUIRED - NDB BEING DECOMMISSIONED.
6. CHANGED ALT MA FROM "CLIMB TO 1400 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 032 AND I-FMH NE COURSE TO BOMDE LOM/I-FMH 6.51 DME AND HOLD. (DME REQUIRED)" TO "CLIMB TO 3000 DIRECT GLESO AND HOLD, GPS REQUIRED" - BOMDE LOM BEING DECOMISSIONED.
7. UPDATED LOC MAP FROM 4.41 MILES AFTER BOMDE LOM/I-FMH 6.51 DME OR AT DEMBE/I-FMH 2.10 DME FIX TO DEMBE/IFMH 2.10 DME - BOMDE LOM BEING DECOMISSIONED.
8. UPDATED ADDITIONAL FLIGHT DATA HOLD INSTRUCTIONS FROM HOLD NE, LT, 234.01 INBOUND TO HOLD NE, LT, 233.94 INBOUND - UPDATED GEODETIC CALCULATION.
9. AMENDED FINAL APPROACH DISTANCE FROM 5.02 NM TO 5.09 NM - UPDATED GEODETIC CALCULATION.
10. UPDATED MSA FROM FM LOM 360-360 AT 1900 WITIN 25 NM TO MVY VOR/DME 090-270 AT 1500 AND 270-090 AT 2100 - NDB BEING DECOMISSIONED.
11. REMOVED BUYLA SD MINIMUMS FROM PROCEDURE - DME REQUIRED TO FLY PROCEDURE, STEPDOWN NOT NECESSARY.
12. PROCEDURE NAME CHANGED FROM COPTER ILS OR LOC RWY 23 TO COPTER ILS Y OR LOC Y RWY 23 - IAW 8260.3D SECTION 1-6.

11/16/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 06/13/2018.

1. CHANGED UNITED STATES COAST GUARD TO FEDERAL AVIATION ADMINISTRATION ON TOP LINE OF 8260-3

2. CHANGED PFAF TO FAF ON LINE 3

3. CHANGED JAYHA 1800 ON LINE 6 TO JAYHA/I-FMH 6.58 DME 1800



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: USCG, CAPE APP CON, FMH ATCT

<u>FLIGHT CHECKED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>
ROBERT STEPHEN PRESSLER	DAVID DANNER	FIOG	11/07/2018
	Nov 23, 2018		

<u>DEVELOPED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>
LONNIE EVERHART (KELLY CARLSON)	DAVID DANNER	AJV-5400	06/13/2018
	Nov 23, 2018		

<u>APPROVED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
LONNIE EVERHART	DAVID DANNER	AJV-5400		MANAGER
	Nov 23, 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> CAPE COD COAST GUARD AIR STATION	<u>AIRPORT ID</u> KFMH	<u>PROCEDURE NAME</u> ILS Z OR LOC Z RWY 23	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> FALMOUTH	<u>STATE</u> MA
<u>AIRPORT ELEVATION</u> 130	<u>TDZE</u> 126	<u>SUPERSEDED</u> ILS OR LOC RWY 23	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 12/11/2014	<u>MAG VAR</u> 15W
<u>FACILITY</u> I-FMH	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1980

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>
LFV VOR/DME		REDSX INT/I-FMH 21.21 DME					253.41	10.51	3500
MVY VOR/DME		JAYHA/I-FMH 6.58 DME	FAF/IAF				035.95	21.65	2500
GAILS INT/BOS 39.32 DME	IAF	HUDOP INT/I-FMH 13.37 DME	NOPT				153.96	3.84 (BOS R-154)	2500
REDSX INT/I-FMH 21.21 DME	IAF	HUDOP INT/I-FMH 13.37 DME	NOPT				233.94	7.84 (I-FMH)	2500
HUDOP INT/I-FMH 13.37 DME	IF	JAYHA/I-FMH 6.58 DME					233.94	6.86 (I-FMH)	1800

MISSED APPROACH

MAP:

ILS: DA
LOC: DEMBE/I-FMH 2.10 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1400 THEN CLIMBING LEFT TURN HEADING 050 AND MVY VOR/DME R-036 TO 3000 DIRECT JAYHA AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 3000 DIRECT GLESO AND HOLD. (GPS REQUIRED)

PROFILE:

- PT R SIDE OF COURSE 053.94 OUTBOUND 1800 FT WITHIN 10 MILES OF JAYHA/I-FMH 6.58 DME (IAF)
-
- FAC: 233.94 FAF: JAYHA/I-FMH 6.58 DME DIST FAF TO MAP: DIST FAF TO THLD: 5.09
- MIN ALT: JAYHA/I-FMH 6.58 DME 1800, BUYLA/I-FMH 3.19 DME 720*
- DIST TO THLD FROM OM: MM: IM: 150 HAT: GS ANT: 1051
- MIN GS INCPT: 1800 GS ALT AT FAF : JAYHA/I-FMH 6.58 DME 1800 OM: MM: IM:
- GP ANGLE: 3.00 34:1: 20:1: TCH: 53.4
- MSA FROM: MVY VOR/DME 090-270 1500, 270-090 2100



EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED

NOTES:

CHART NOTE: CIRCLING NA NE OF RWY 14 AND NW OF RWY 23.
*LOC ONLY
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT GAILS ON V141 NORTHBOUND.
CHART NOTE: FOR INOP ALS, INCREASE S-LOC 23 CATS C/D VISIBILITY TO RVR 5500.
CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.

ADDITIONAL FLIGHT DATA:

CHART LfV 10.51 DME AND ACK R-001 AT REDSX.
CHART BOS 43.16 DME AND LfV R-246 AT HUDOP.
CHART LfV R-258 AT GAILS.
CHART OM IN HALF-TONE.
CHART FAS OBST: 228 TREE 414032N/0703006W.
CHART MVY 21.65 DME AT JAYHA.
CHART CIRCLING ICON.
CHART R-4101
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SW GLESO, RT, 053.84 INBOUND.
HOLD NE, LT, 233.94 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD - CAT C 800-2 1/4, CAT D 800-2 1/2

<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 23**	326	2400	200	326	2400	200	326	2400	200	326	2400	200			
S-LOC 23	480	2400	354	480	2400	354	480	3000	354	480	3000	354			
CIRCLING	580	1	450	640	1	510	900	2 1/4	770	900	2 1/2	770			



CHANGES - REASONS

1. ADDED CHART NOTE: DME REQUIRED - NDB BEING DECOMMISSIONED.
2. UPDATED PFAF/FAF TO JAYHA/I-FMH 6.58 DME - NDB BEING DECOMMISSIONED.
3. ADDED MAP DEMBE/I-FMH 2.10 DME - USCG REQUEST.
4. DELETED FALMOUTH LOM/BOMDE FROM APPROACH - NDB BEING DECOMMISSIONED.
5. REMOVED CHART NOTE: ADF REQUIRED - NDB BEING DECOMMISSIONED.
6. CHANGED THRE 125 TO TDZE 126 - INCORPORATED PNOTAM 4/2190.
7. CHANGED S-LOC 23 HAT FROM 355 TO 354 - INCORPORATED PNOTAM 4/2190.
8. CHANGED CIRC CAT C/D HAA FROM 690FT TO 770 FT - EXPANDED CIRCLING CRITERIA.
9. CHANGED ALT MA FROM "CLIMB TO 1400 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 032 AND I-FMH NE COURSE TO BOMDE LOM/I-FMH 6.51 DME AND HOLD. (DME REQUIRED)" TO "CLIMB TO 3000 DIRECT GLESO AND HOLD." - BOMDE LOM BEING DECOMMISSIONED.
10. UPDATED LOC MAP FROM 4.41 MILES AFTER BOMDE LOM/I-FMH 6.51 DME OR AT DEMBE/I-FMH 2.10 DME FIX TO DEMBE/IFMH 2.10 DME - BOMDE LOM BEING DECOMMISSIONED.
11. UPDATED ADDITIONAL FLIGHT DATA HOLD INSTRUCTIONS FROM HOLD NE, LT, 2334.01 INBOUND TO HOLD NE, LT, 233.94 INBOUND - UPDATED GEODETIC CALCULATION.
12. UPDATED CHARTED FAS OBST FROM 189 TREE 414015N/1713039W TO 228 TREE 414032N/0703006W - NEW OBSTACLE DATA.
13. AMENDED FINAL APPROACH DISTANCE FROM 5.02 NM TO 5.09 NM - UPDATED GEODETIC CALCULATION.
14. UPDATED MSA FROM FM LOM 360-360 AT 1900 WITIN 25 NM TO MVY VOR/DME 090-270 AT 1500 AND 270-090 AT 2100 - NDB BEING DECOMMISSIONED.
15. REMOVED BUYLA SD MINIMUMS FROM PROCEDURE - UPDATED CRITERIA.
16. CHANGED ILS DA AT RWY THLD FROM 325 TO 326 - UPDATED BUILD.
17. CHANGED CIRCLING CAT A FROM 720 TO 580 - NEW CONTROLLING OBSTACLE INFORMATION.
18. CHANGED CIRCLING CAT B FROM 720 TO 640 - NEW CONTROLLING OBSTACLE INFORMATION.
19. CHANGED CIRCLING CAT C FROM 720 TO 900 - NEW CONTROLLING OBSTACLE INFORMATION.
20. CHANGED CIRCLING CAT D FROM 720 TO 900 - NEW CONTROLLING OBSTACLE INFORMATION.
21. PROCEDURE NAME CHANGED FROM ILS OR LOC RWY 23 TO ILS Z OR LOC Z RWY 23 - IAW 8260.3D SECTION 1-6.

11/21/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 06/07/2018/

1. CHANGED UNITED STATES COAST GUARD TO FEDERAL AVIATION ADMINISTRATION ON TOP LINE OF 8360-3
2. CHANGED JAYHA 1800 TO JAYHA/I-FMH 6.58 DME 1800 ON LINE 6
3. CHANGED **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA TO CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA IN NOTES SECTION

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** FMH ATCT, CAPE APP CON, AIRFIELD MANAGEMENT/U.S.C.G.

FLIGHT CHECKED BY	<i>Digitally signed by</i>	OFFICE	DATE
ROBERT STEPHEN PRESSLER	DAVID DANNER	FIOG	11/07/2018
	Nov 23, 2018		

DEVELOPED BY	<i>Digitally signed by</i>	OFFICE	DATE
LONNIE EVERHART (KELLY CARLSON)	DAVID DANNER	AJV-5400	06/07/2018
	Nov 23, 2018		

APPROVED BY	<i>Digitally signed by</i>	OFFICE	DATE	TITLE
LONNIE EVERHART	DAVID DANNER	AJV-5400		MANAGER
	Nov 23, 2018			



**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> CAPE COD COAST GUARD AIR STATION	<u>AIRPORT ID</u> KFMH	<u>PROCEDURE NAME</u> NDB RWY 23	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> FALMOUTH	<u>STATE</u> MA	
<u>AIRPORT ELEVATION</u> 130	<u>TDZE</u> 125	<u>SUPERSEDED</u> NDB RWY 23	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 11/20/2008	<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 25 APRIL 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
11/27/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 06/13/2018.
1. CHANGED HEADER FROM UNITED STATES COAST GUARD TO FEDERAL AVIATION ADMINISTRATION.
2. REMOVED DATE FROM PROCEDURE CANCELLED EFFECTIVE LINE.
3. REMOVED RECOMMENDED BY IN SIGNATURES BLOCK AND FILLED IN APPROVED BY BLOCK.

COORDINATED WITH:
A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: FMH ATCT, CAPE APP CON, AIRPORT MGR, USCG.

FLIGHT CHECKED BY

OFFICE DATE

DEVELOPED BY
LONNIE EVERHART (KELLY CARLSON)
Digitally signed by
DAVID DANNER
Nov 28, 2018

OFFICE DATE
AJV-5400 06/13/2018

APPROVED BY
LONNIE EVERHART
Digitally signed by
DAVID DANNER
Nov 28, 2018

OFFICE DATE TITLE
AJV-5400
MANAGER



**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> FREDERICK MUNI	<u>AIRPORT ID</u> KFDK	<u>PROCEDURE NAME</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> 2D	<u>CITY</u> FREDERICK	<u>STATE</u> MD	
<u>AIRPORT ELEVATION</u> 303	<u>TDZE</u>	<u>SUPERSEDED</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> 2C	<u>DATED</u> 05/02/2013	<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>	<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 25 APRIL 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: BWI APP CON, NYC FPO, MD DEP OF AVIA, APT MGR

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY
ANDREA CHANEY
*Digitally signed by
ANDREA J CHANEY
Dec 10, 2018*

*Digitally signed by
DAVID TEFFETELLER
Dec 13, 2018*

OFFICE
AJV-A433
OFFICE
AJV-A43
DATE
12/09/2018

TITLE



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
ILS PRM 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>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
DETROIT METROPOLITAN WAYNE COUNTY	KDTW	ILS PRM Y RWY 22R (CLOSE PARALLEL)	1A	DETROIT	MI	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
645	642	ILS PRM Y RWY 22R (CLOSE PARALLEL)	1	11/10/2016	7W	2020
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
I-BZB		25 APRIL 2019	ROUTINE			

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>
HRRON	IAF	KLIER		TF	FB	1.00	131.32	6.60	4000
VALLI	IAF	KLIER		TF	FB	1.00	097.09	7.56	4000
KLIER		GRDCY		TF	FB	1.00	184.04	3.61	4000
PYRET/23.63 DME/RADAR	IAF	GRDCY/20.50 DME/RADAR					213.19	3.14 (I-BZB)	4000
GRDCY/20.50 DME/RADAR		MMOTR/18.50 DME/RADAR					213.19	2.00 (I-BZB)	4000
MMOTR/18.50 DME/RADAR		TAYUL/15.35 DME/RADAR					213.19	3.14 (I-BZB)	4000
TAYUL/15.35 DME/RADAR		EMINN/12.21 DME/RADAR					213.19	3.14 (I-BZB)	3000
EMINN/12.21 DME/RADAR		WONDR/9.06 DME/RADAR					213.19	3.14 (I-BZB)	3000
WONDR/9.06 DME/RADAR	IF	ANGGL/5.92 DME/RADAR	PFAF				213.19	3.14 (I-BZB)	2000

MISSED APPROACH

MAP:

ILS: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1100 THEN CLIMBING RIGHT TURN TO 4000 ON DXO VOR/DME R-297 TO DOHNT INT/DXO 15.47 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1100 THEN CLIMBING RIGHT TURN TO 4000 ON HEADING 315 AND JXN VOR/DME R-090 TO DOHNT INT/JXN 34.25 DME AND HOLD.



AIRPORTDETROIT METROPOLITAN WAYNE
COUNTYAIRPORT ID

KDTW

PROCEDURE NAMEILS PRM Y RWY 22R
(CLOSE PARALLEL)ORIGINAL/AMENDMENT

1A

CITY

DETROIT

STATE

MI

PROFILE:

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

2. PROFILE STARTS AT GRDCY

3. FAC: 213.19 PFAF: ANGGL/5.92 DIST PFAF TO MAP: DIST PFAF TO THLD:
DME/RADAR

4. MIN ALT: GRDCY/20.50 DME/RADAR 4000, MMOTR/18.50 DME/RADAR 4000, TAYUL/15.35 DME/RADAR 4000, EMINN/12.21 DME/RADAR 3000, WONDR/9.06 DME/RADAR 3000, ANGGL/5.92 DME/RADAR 2000

5. DIST TO THLD FROM OM: 4.09 MM: IM: 150 HAT: GS ANT: 1055

6. MIN GS INCPT: 2000 GS ALT AT PFAF : ANGGL/5.92 DME/RADAR 2000 OM: MM: IM:

7. GP ANGLE: 3.00 34:1: 20:1: TCH: 55.0

8. MSA FROM: DXO VOR/DME 2800

EQUIPMENT REQUIREMENTS NOTES:

RNAV 1-GPS.
HRRON AND VALLI: RNAV 1-DME/DME/IRU OR GPS REQUIRED. AIRCRAFT NOT DME/DME/IRU OR GPS EQUIPPED - RADAR REQUIRED FOR PROCEDURE ENTRY.

NOTES:

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. PROCEDURE NOT AUTHORIZED WHEN GLIDE SLOPE NOT AVAILABLE (ILS PROCEDURES ONLY). DUAL VHF COMM REQUIRED. SEE ADDITIONAL REQUIREMENTS ON AAUP.
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART SPEED ICON IN PLANVIEW AT VALLI: MAX 210 KIAS.
CHART SPEED ICON IN PLANVIEW AT HRRON: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

CHART MANDATORY 6000 AT HRRON.
CHART MANDATORY 6000 AT VALLI.
CHART MANDATORY 4000 AT KLIER.
FICTITIOUS THRESHOLD POINT (CFBJN) DO NOT CHART.
CHART PLANVIEW NOTE: LOC OFFSET 2.50 DEGREES.
CHART IN PLANVIEW: DOHNT INT/JXN 34.25 DME
FAC CROSSES RWY C/L EXTENDED 2608 FT FROM THLD.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD W DOHNT INT/JXN 34.25 DME, RT, 090.30 INBOUND.
HOLD NW, RT, 116.62 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD

<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 22R	892	2400	250	892	2400	250	892	2400	250	892	2400	250			

CHANGES - REASONS

- ADDED EQUIPMENT REQUIREMENTS NOTES: "RNAV 1-GPS." AND "HRRON AND VALLI: RNAV 1-DME/DME/IRU OR GPS REQUIRED. AIRCRAFT NOT DME/DME/IRU OR GPS EQUIPPED - RADAR REQUIRED FOR PROCEDURE ENTRY." - 8260.19H 8-6-8B.
- IN ADDITIONAL FLIGHT DATA, REMOVED CHART LOC RWY 21L/22L - NO LONGER REQUIRED.

QUALITY
41
CHECKED

AIRPORT

DETROIT METROPOLITAN WAYNE
COUNTY

AIRPORT ID

KDTW

PROCEDURE NAME

ILS PRM Y RWY 22R
(CLOSE PARALLEL)

ORIGINAL/AMENDMENT

1A

CITY

DETROIT

STATE

MI

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZOB, DTW APP CON, METRO TOWER, ATA

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

Digitally signed by

ROBERT G HAMILTON

Dec 07, 2018

DEVELOPED BY

JIMMY S. HUGHES

Digitally signed by

JIMMY S HUGHES

Nov 30, 2018

OFFICE

AJV-5422

DATE

10/09/2018

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5420

DATE

Digitally signed by

ROBERT G HAMILTON

TITLE

MANAGER

Dec 07, 2018



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
ILS PRM 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>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
DETROIT METROPOLITAN WAYNE COUNTY	KDTW	ILS PRM Z RWY 22R (CLOSE PARALLEL) ILS PRM Z RWY 22R (CLOSE PARALLEL) SA CAT I, ILS PRM Z RWY 22R (CLOSE PARALLEL) SA CAT II	ORIG-A	DETROIT	MI	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
645	642	ILS PRM Z RWY 22R (CLOSE PARALLEL) ILS PRM Z RWY 22R (CLOSE PARALLEL) SA CAT I, ILS PRM Z RWY 22R (CLOSE PARALLEL) SA CAT II	ORIG	05/24/2018	7W	2020
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
I-JKI		25 APRIL 2019	ROUTINE			

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>
HRRON	IAF	PRYDE		TF	FB	1.00	112.61	6.91	4000
PRYDE		FUDDJ		TF	FB	1.00	189.52	5.71	4000
VALLI	IAF	KLIER		TF	FB	1.00	097.09	7.56	4000
KLIER		FUDDJ		TF	FB	1.00	172.97	3.96	4000
INKSR/20.03 DME/RADAR	IAF	FUDDJ/18.65 DME/RADAR					215.69	1.39 (I-JKI)	4000
FUDDJ/18.65 DME/RADAR		TARAH/16.50 DME/RADAR					215.69	2.14 (I-JKI)	4000
TARAH/16.50 DME/RADAR		GUYVE/13.36 DME/RADAR					215.69	3.14 (I-JKI)	4000
GUYVE/13.36 DME/RADAR		JOYDD/10.21 DME/RADAR					215.69	3.14 (I-JKI)	3000
JOYDD/10.21 DME/RADAR		NUJNT/7.07 DME/RADAR					215.69	3.14 (I-JKI)	3000
NUJNT/7.07 DME/RADAR	IF	GEETR/3.92 DME/RADAR	PFAF				215.69	3.14 (I-JKI)	2000

MISSED APPROACH

MAP:

ILS: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1100 THEN CLIMBING RIGHT TURN TO 4000 ON DXO VOR/DME R-297 TO DOHNT INT/DXO 15.47 DME/RADAR AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1100 THEN CLIMBING RIGHT TURN TO 4000 ON HEADING 315 AND JXN VOR/DME R-090 TO DOHNT INT/JXN 34.25 DME/RADAR AND HOLD.



PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2. PROFILE STARTS AT FUDDJ					
3. FAC:	215.69	PFAF: GEETR/3.92 DME/RADAR	DIST PFAF TO MAP:	DIST PFAF TO THLD:	
4. MIN ALT:	FUDDJ/18.65 DME/RADAR 4000, TARAH/16.50 DME/RADAR 4000, GUYVE/13.36 DME/RADAR 4000, JOYDD/10.21 DME/RADAR 3000, NUJNT/7.07 DME/RADAR 3000, GEETR/3.92 DME/RADAR 2000				
5. DIST TO THLD FROM OM:	4.09	MM:	IM:	100 HAT: 855	100 HAT: 855
				150 HAT: 1809	150 HAT: 1809
					GS ANT: 1056
6. MIN GS INCPT:	GS ALT AT PFAF : GEETR/3.92 DME/RADAR			OM:	MM:
					IM:
7. GP ANGLE:	3.00	34:1:	20:1:	TCH: 55.0	
8. MSA FROM:	DXO VOR/DME 2800				

EQUIPMENT REQUIREMENTS NOTES:

RNAV 1-GPS.
HRRON AND VALLI: RNAV 1-DME/DME/IRU OR GPS REQUIRED. AIRCRAFT NOT DME/DME/IRU OR GPS EQUIPPED - RADAR REQUIRED FOR PROCEDURE ENTRY.

NOTES:

SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 22R: CAT A, B, C, D RA 148, RVR 1400, HAT 150, DA 792 MSL.
SA CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 22R: CAT A, B, C, D RA 98, RVR 1200, HAT 100, DA 742 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.
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS. DUAL VHF COMM REQUIRED. SEE ADDITIONAL REQUIREMENTS ON AAUP.
CHART SPEED ICON IN PLANVIEW AT VALLI: MAX 210 KIAS.
CHART SPEED ICON IN PLANVIEW AT HRRON: MAX 210 KIAS.
CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.

ADDITIONAL FLIGHT DATA:

CHART IHN PROFILE VIEW: I-JKI DME ANTENNA.
CHART MANDATORY 6000 AT VALLI
CHART MANDATORY 4000 AT PRYDE
CHART MANDATORY 4000 AT KLIER
CHART MANDATORY 6000 AT HRRON
CHART IN PLANVIEW: DOHNT INT/JXN 34.25 DME/RADAR
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD W DOHNT INT/JXN 34.25 DME/RADAR, RT, 090.30 INBOUND.
HOLD NW, RT, 116.62 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: 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 22R**	842	2400	200	842	2400	200	842	2400	200	842	2400	200			



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>
DETROIT METROPOLITAN WAYNE COUNTY	KDTW	ILS PRM Z RWY 22R (CLOSE PARALLEL) ILS PRM Z RWY 22R (CLOSE PARALLEL) SA CAT I, ILS PRM Z RWY 22R (CLOSE PARALLEL) SA CAT II	ORIG-A	DETROIT	MI

CHANGES - REASONS

1. CHANGED EQUIPEMENT REQUIREMENTS NOTE FROM "RADAR REQUIRED FOR PROCEDURE ENTRY, DME OR RADAR REQUIRED, RNAV 1-DME/DME/IRU OR GPS REQUIRED FOR PROCEDURE ENTRY AT HRRON AND VALLI." TO "RNAV 1-GPS. HRRON AND VALLI: RNAV 1-DME/DME/IRU OR GPS REQUIRED. AIRCRAFT NOT DME/DME/IRU OR GPS EQUIPPED - RADAR REQUIRED FOR PROCEDURE ENTRY." - CONSISTENT WITH OTHER RWY 22R PROCEDURES.
2. IN ADDITIONAL FLIGHT DATA, REMOVED CHART LOC RWY 21L/22L - NO LONGER REQUIRED.

COORDINATED WITH:

A4A ☐ **ALPA** ☐ **AOPA** ☐ **APA** ☐ **HAI** ☐ **NBAA** ☐ **OTHER:**

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY

JIMMY S. HUGHES

APPROVED BY

JULIE MORGAN

Digitally signed by

JIMMY S HUGHES

Nov 30, 2018

OFFICE

OFFICE

AJV-5422

OFFICE

AJV-5420

DATE

DATE

10/10/2018

DATE

Digitally signed by

ROBERT G HAMILTON

Dec 07, 2018

Digitally signed by

ROBERT G HAMILTON

Dec 07, 2018

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>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
DETROIT METROPOLITAN WAYNE COUNTY	KDTW	ILS Y RWY 22R	1A	DETROIT	MI	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
645	642	ILS Y RWY 22R	1	11/10/2016	7W	2020
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
I-BZB		25 APRIL 2019	ROUTINE			

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>
HRRON	IAF	KLIER		TF	FB	1.00	131.32	6.60	4000
VALLI	IAF	KLIER		TF	FB	1.00	097.09	7.56	4000
KLIER		GRDCY		TF	FB	1.00	184.04	3.61	4000
PYRET/23.63 DME/RADAR	IAF	GRDCY/20.50 DME/RADAR					213.19	3.14 (I-BZB)	4000
GRDCY/20.50 DME/RADAR		MMOTR/18.50 DME/RADAR					213.19	2.00 (I-BZB)	4000
MMOTR/18.50 DME/RADAR		TAYUL/15.35 DME/RADAR					213.19	3.14 (I-BZB)	4000
TAYUL/15.35 DME/RADAR		EMINN/12.21 DME/RADAR					213.19	3.14 (I-BZB)	3000
EMINN/12.21 DME/RADAR		WONDR/9.06 DME/RADAR					213.19	3.14 (I-BZB)	3000
WONDR/9.06 DME/RADAR	IF	ANGGL/5.92 DME/RADAR	PFAF				213.19	3.14 (I-BZB)	2000

MISSED APPROACH

MAP:

ILS: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1100 THEN CLIMBING RIGHT TURN TO 4000 ON DXO VOR/DME R-297 TO DOHNT INT/DXO 15.47 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1100 THEN CLIMBING RIGHT TURN TO 4000 ON HEADING 315 AND JXN VOR/DME R-090 TO DOHNT INT/JXN 34.25 DME AND HOLD.



PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)			
2. PROFILE STARTS AT GRDCY							
3. FAC:	213.19	PFAF: ANGGL/5.92 DME/RADAR	DIST PFAF TO MAP:	DIST PFAF TO THLD:			
4. MIN ALT:	GRDCY/20.50 DME/RADAR 4000, MMOTR/18.50 DME/RADAR 4000, TAYUL/15.35 DME/RADAR 4000, EMINN/12.21 DME/RADAR 3000, WONDR/9.06 DME/RADAR 3000, ANGGL/5.92 DME/RADAR 2000						
5. DIST TO THLD FROM OM:	4.09	MM:	IM:	150 HAT:	GS ANT: 1055		
6. MIN GS INCPT:	2000	GS ALT AT PFAF : ANGGL/5.92 DME/RADAR 2000			OM:	MM:	IM:
7. GP ANGLE:	3.00	34:1:	20:1:	TCH:	55.0		
8. MSA FROM:	DXO VOR/DME 2800						

EQUIPMENT REQUIREMENTS NOTES:

RNAV 1-GPS.
HRRON AND VALLI: RNAV 1-DME/DME/IRU OR GPS REQUIRED. AIRCRAFT NOT DME/DME/IRU OR GPS EQUIPPED - RADAR REQUIRED FOR PROCEDURE ENTRY.

NOTES:

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: ** RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA
CHART SPEED ICON IN PLANVIEW AT HRRON: MAX 210 KIAS.
CHART SPEED ICON IN PLANVIEW AT VALLI: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

CHART MANDATORY 6000 AT HRRON.
CHART MANDATORY 6000 AT VALLI.
CHART MANDATORY 4000 AT KLIER.
FICTITIOUS THRESHOLD POINT (CFBJN) DO NOT CHART.
CHART PLANVIEW NOTE: LOC OFFSET 2.50 DEGREES.
CHART IN PLANVIEW: DOHNT INT/JXN 34.25 DME
FAC CROSSES RWY C/L EXTENDED 2608 FT FROM THLD.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD W DOHNT INT/JXN 34.25 DME, RT, 090.30 INBOUND.
HOLD NW, RT, 116.62 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: 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 22R**	892	2400	250	892	2400	250	892	2400	250	892	2400	250			

CHANGES - REASONS

1. ADDED EQUIPEMENT REQUIREMENTS NOTES: "RNAV 1-GPS." AND "HRRON AND VALLI: RNAV 1-DME/DME/IRU OR GPS REQUIRED. AIRCRAFT NOT DME/DME/IRU OR GPS EQUIPPED - RADAR REQUIRED FOR PROCEDURE ENTRY." - 8260.19H 8-6-8B.
2. IN ADDITIONAL FLIGHT DATA, REMOVED CHART LOC RWY 21L/22L - NO LONGER REQUIRED.
3. REMOVED RNAV 1-GPS REQUIRED FROM HRRON AND VALLI. - NOTE MOVED TO EQUIPEMENT REQUIREMENTS.



AIRPORT

DETROIT METROPOLITAN WAYNE
COUNTY

AIRPORT ID

KDTW

PROCEDURE NAME

ILS Y RWY 22R

ORIGINAL/AMENDMENT

1A

CITY

DETROIT

STATE

MI

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZOB, DTW APP CON, METRO TOWER, ATA

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

Digitally signed by

ROBERT G HAMILTON

Dec 07, 2018

DEVELOPED BY

JIMMY S. HUGHES

Digitally signed by

JIMMY S HUGHES

Nov 30, 2018

OFFICE

AJV-5422

DATE

10/10/2018

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5420

DATE

Digitally signed by

ROBERT G HAMILTON

Dec 07, 2018

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>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
DETROIT METROPOLITAN WAYNE COUNTY	KDTW	ILS Z OR LOC RWY 22R ILS Z RWY 22R SA CAT I, ILS Z RWY 22R SA CAT II	4A	DETROIT	MI	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
645	642	ILS Z OR LOC RWY 22R ILS Z RWY 22R SA CAT I, ILS Z RWY 22R SA CAT II	4	11/10/2016	7W	2020
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
I-JKI		25 APRIL 2019	ROUTINE			

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>
HRRON	IAF	PRYDE		TF	FB	1.00	112.61	6.91	4000
PRYDE		FUDDJ		TF	FB	1.00	189.52	5.71	4000
VALLI	IAF	KLIER		TF	FB	1.00	097.09	7.56	4000
KLIER		FUDDJ		TF	FB	1.00	172.97	3.96	4000
INKSR/20.03 DME/RADAR	IAF	FUDDJ/18.65 DME/RADAR					215.69	1.39 (I-JKI)	4000
FUDDJ/18.65 DME/RADAR		TARAH/16.50 DME/RADAR					215.69	2.14 (I-JKI)	4000
TARAH/16.50 DME/RADAR		GUYVE/13.36 DME/RADAR					215.69	3.14 (I-JKI)	4000
GUYVE/13.36 DME/RADAR		JOYDD/10.21 DME/RADAR					215.69	3.14 (I-JKI)	3000
JOYDD/10.21 DME/RADAR		NUJNT/7.07 DME/RADAR					215.69	3.14 (I-JKI)	3000
NUJNT/7.07 DME/RADAR	IF	GEETR/3.92 DME/RADAR					215.69	3.14 (I-JKI)	2000

MISSED APPROACH

MAP:

ILS: DA
 LOC: 4.09 NM AFTER GEETR/I-JKI 3.92 DME/RADAR OR AT I-JKI 0.17 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1100 THEN CLIMBING RIGHT TURN TO 4000 ON DXO VOR/DME R-297 TO DOHNT INT/DXO 15.47 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1100 THEN CLIMBING RIGHT TURN TO 4000 ON HEADING 315 AND JXN VOR/DME R-090 TO DOHNT INT/JXN 34.25 DME AND HOLD.

QUALITY
41
CHECKED

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2.	PROFILE STARTS AT FUDDJ				
3. FAC:	215.69	FAF: GEETR/3.92 DME/RADAR	DIST FAF TO MAP: 4.09	DIST FAF TO THLD: 4.09	
4. MIN ALT:	FUDDJ/18.65 DME/RADAR 4000, TARAH/16.50 DME/RADAR 4000, GUYVE/13.36 DME/RADAR 4000, JOYDD/10.21 DME/RADAR 3000, NUJNT/7.07 DME/RADAR 3000, GEETR/3.92 DME/RADAR 2000				
5. DIST TO THLD FROM OM:	MM:	IM:	100 HAT: 855	150 HAT: 1809	GS ANT: 1056
6. MIN GS INCPT:	2000	GS ALT AT FAF :	GEETR/3.92 DME/RADAR 2000	OM:	MM: IM:
7. GP ANGLE:	3.00	34:1:	20:1:	TCH: 55.0	
8. MSA FROM:	DXO VOR/DME 2800				

EQUIPMENT REQUIREMENTS NOTES:

RNAV 1-GPS.
HRRON AND VALLI: RNAV 1-DME/DME/IRU OR GPS REQUIRED. AIRCRAFT NOT DME/DME/IRU OR GPS EQUIPPED - RADAR REQUIRED FOR PROCEDURE ENTRY.

NOTES:

SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 22R: CAT A, B, C, D RA 148, RVR 1400, HAT 150, DA 792 MSL.
SA CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 22R: CAT A, B, C, D RA 98, RVR 1200, HAT 100, DA 742 MSL.
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.
SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF HUD TO DH.
SA CAT II CHART NOTE: REDUCED LIGHTING: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF AUTOLAND OR HUD TO TOUCHDOWN.
CHART PROFILE NOTE: VGSi AND ILS GLIDEPATH NOT COINCIDENT (VGSi ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE ADJACENT TO HRRON: RNAV 1-GPS REQUIRED.
CHART SPEED ICON IN PLANVIEW AT HRRON: MAX 210 KIAS.
CHART SPEED ICON IN PLANVIEW AT VALLI: MAX 210 KIAS.
CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.

ADDITIONAL FLIGHT DATA:

CHART MANDATORY 4000 AT PRYDE
CHART MANDATORY 4000 AT Klier
CHART MANDATORY 6000 AT HRRON
CHART MANDATORY 6000 AT VALLI
CHART CIRCLING ICON.
CHART IN PROFILE VIEW: I-JKI DME ANTENNA.
CHART IN PLANVIEW: DOHNT INT/JXN 34.25 DME
CHART VDP AT 0.92 DME*
DISTANCE VDP TO THLD 1.09 NM
* LOC ONLY
CHART FAS OBST: 771 BLDG 421448N/0832057W.
845 AAO 421706N/0832003W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD W DOHNT INT/JXN 34.25 DME, RT, 090.30 INBOUND.
HOLD NW, RT, 116.62 INBOUND



AIRPORTDETROIT METROPOLITAN WAYNE
COUNTYAIRPORT ID

KDTW

PROCEDURE NAMEILS Z OR LOC RWY 22R
ILS Z RWY 22R SA CAT I,
ILS Z RWY 22R SA CAT IIORIGINAL/AMENDMENT

4A

CITY

DETROIT

STATE

MI

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD

<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 22R**	842	2400	200	842	2400	200	842	2400	200	842	2400	200			
S-LOC 22R	1060	2400	418	1060	2400	418	1060	4000	418	1060	4000	418			
CIRCLING	1180	1	535	1180	1	535	1180	1 1/2	535	1240	2	595			

CHANGES - REASONS

1. ADDED EQUIPEMENT REQUIREMENTS NOTES: "RNAV 1-GPS." AND "HRRON AND VALLI: RNAV 1-DME/DME/IRU OR GPS REQUIRED. AIRCRAFT NOT DME/DME/IRU OR GPS EQUIPPED - RADAR REQUIRED FOR PROCEDURE ENTRY." - 8260.19H 8-6-8B.
2. REMOVED RNAV 1-GPS REQUIRED FROM HRRON AND VALLI. - NOTE MOVED TO EQUIPEMENT REQUIREMENTS.
3. ADDITIONAL FLIGHT DATA, REMOVED CHART LOC RWY 21L/22L - NO LONGER REQUIRED.

COORDINATED WITH:A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZOB, DTW APP CON, ATAFLIGHT CHECKED BYPROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIREDOFFICEDATE

Digitally signed by

ROBERT G HAMILTON

Dec 07, 2018

DEVELOPED BY

JIMMY S. HUGHES

Digitally signed by

JIMMY S HUGHES

Nov 30, 2018

OFFICE

AJV-5422

DATE

10/10/2018

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5420

DATE

Digitally signed by

ROBERT G HAMILTON

Dec 07, 2018

TITLE

MANAGER

QUALITY
41
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> DRUMMOND ISLAND	<u>AIRPORT ID</u> KDRM	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 8	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> DRUMMOND ISLAND	<u>STATE</u> MI	
<u>AIRPORT ELEVATION</u> 668	<u>TDZE</u> 661	<u>SUPERSEDED</u> RNAV (GPS) RWY 8	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 07/29/2010	<u>MAG VAR</u> 7W	<u>EPOCH YEAR</u> 1995
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
REEFY	IAF	OKBIW	NOPT	TF	FB	1.00	352.17	9.82	3000
OKBIW	IF/IAF	JIIYIB		TF	FB	1.00	078.91	6.01	2500
JIIYIB	FAF	RW08	MAP	TF	FO	0.30	079.01	5.59	
RW08	MAP	1068 MSL		CA			079.01		
1068 MSL		VUNPY		DF	FO	1.00			2500

MISSED APPROACH

MAP:

LNAV: RW08

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2500 DIRECT VUNPY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- HOLD W OKBIW, RT, 078.91 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.
- FAC: 079.01 FAF: JIIYIB DIST FAF TO MAP: 5.59 DIST FAF TO THLD: 5.59
- MIN ALT: OKBIW 3000, JIIYIB 2500
- 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: RW08 2900



PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: RWY 8 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: CIRCLING TO RWY 1-19 NA.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT REEFY ON V45 SOUTHBOUND.

ADDITIONAL FLIGHT DATA:

JYIB TO RW08 3.05/35
FAS OBST: 869 AAO 455833N/0834951W.
HOLD E, RT, 259.27 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	1120	1	459	1120	1	459	1120	1 1/4	459		NA				
CIRCLING	1160	1	492	1160	1	492	1160	1 1/2	492		NA				

CHANGES - REASONS

1. TERMINAL ROUTES: INTERMEDIATE RNP UPDATED FROM 0.50 TO 1.00. - IAW 8260.19H PARA 4-6-10 F.
2. LINE 2: HOLD-IN-LIEU MAX ALTITUDE 6000 ADDED. - UPDATED FORMS.
3. LINE 7: 20:1 IS NOT CLEAR ADDED. - 20:1 PENETRATIONS PRESENT.
4. CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA UPDATED TO RWY 8 HELICOPTER VISIBILITY BELOW 1 SM NOT AUTHORIZED. - IAW 8260.19H 8-6-11 K.3.
5. CHART NOTE: DME/DME RNP-0.3 NA REMOVED. PBN REQUIREMENTS NOTE: RNP APCH ADDED. - IAW 8260.19H.
6. CHART NOTE: CIRCLING TO RWY 18-36 NA UPDATED TO CIRCLING TO RWY 1-19 NA. - RWY NUMBERING UPDATED.
7. CHART NOTE: PROCEDURE NA AT NIGHT ADDED. - KDRM HAS NO SURVEY.
8. CHART NOTE: MOVED ALTERNATE ALTIMETER NOTE TO 8260-9 PART C - REMARKS. - IAW 8260.19H 8-6-9 F(3).

COORDINATED WITH:

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

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE
Digitally signed by
WARDELL HENNING

DATE

DEVELOPED BY

WARDELL HENNING (BARBARA GORMAN)

Digitally signed by
WARDELL HENNING

Dec 07, 2018
OFFICE
AJV-5432

DATE
11/08/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
WARDELL HENNING
Dec 07, 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

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<u>AIRPORT</u> DRUMMOND ISLAND	<u>AIRPORT ID</u> KDRM	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 26	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> DRUMMOND ISLAND	<u>STATE</u> MI	
<u>AIRPORT ELEVATION</u> 668	<u>TDZE</u> 661	<u>SUPERSEDED</u> RNAV (GPS) RWY 26	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 07/29/2010	<u>MAG VAR</u> 7W	<u>EPOCH YEAR</u> 1995
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
REEFY		EFVEV		TF	FB	1.00	066.57	22.42	3000
EFVEV	IAF	VUNPY	NOPT	TF	FB	1.00	349.30	5.00	2500
VUNPY	IF/IAF	JUNBU		TF	FB	1.00	259.27	6.10	1700
JUNBU	FAF	RW26	MAP	TF	FO	0.30	259.17	3.12	
RW26	MAP	1068 MSL		CA			259.17		
1068 MSL		OKBIW		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LNAV: RW26

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT OKBIW AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD E VUNPY, RT, 259.27 INBOUND, 2500 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 259.17

FAF: JUNBU

DIST FAF TO MAP: 3.12

DIST FAF TO THLD: 3.12

4. MIN ALT: VUNPY 2500, JUNBU 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: RW26 2900

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: RWY 26 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: CIRCLING TO RWY 1-19 NA.

ADDITIONAL FLIGHT DATA:

JUNBU TO RW26 3.03/40
CHART FAS OBST: 879 TOWER 460050N/0834127W.
HOLD W, RT, 078.91 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	1180	1	519	1180	1	519	1180	1 1/2	519		NA				
CIRCLING	1180	1	512	1180	1	512	1180	1 1/2	512		NA				

CHANGES - REASONS

1. TERMINAL ROUTES: INTERMEDIATE RNP UPDATED FROM 0.50 TO 1.00. - IAW 8260.19H PARA 4-6-10 F.
2. LINE 2: HOLD-IN-LIEU MAX ALTITUDE 6000 ADDED. - UPDATED FORMS.
3. LINE 7: 20:1 IS NOT CLEAR ADDED. - 20:1 PENETRATIONS PRESENT.
4. CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA UPDATED TO RWY 26 HELICOPTER VISIBILITY BELOW 1 SM NOT AUTHORIZED. - IAW 8260.19H 8-6-11 K.3.
5. CHART NOTE: DME/DME RNP-0.3 NA REMOVED. PBN REQUIREMENTS NOTE: RNP APCH ADDED. - IAW 8260.19H.
6. CHART NOTE: CIRCLING TO RWY 18-36 NA UPDATED TO CIRCLING TO RWY 1-19 NA. - RWY NUMBERING UPDATED.
7. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). - IAW 8260.19H 8-6-9 M(2).
8. CHART NOTE: PROCEDURE NA AT NIGHT ADDED. - KDRM HAS NO SURVEY.
9. CHART NOTE: MOVED ALTERNATE ALTIMETER NOTE TO 8260-9 PART C - REMARKS. - IAW 8260.19H 8-6-9 F(3).



COORDINATED WITH:

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

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE
Digitally signed by

WARDELL HENNING

DATE

DEVELOPED BY

WARDELL HENNING (BARBARA GORMAN)

Digitally signed by

WARDELL HENNING

Dec 07, 2018

OFFICE

AJV-5432

DATE

11/08/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

WARDELL HENNING

Dec 07, 2018

OFFICE

AJV-5430

DATE

TITLE

MANAGER

Dec 07, 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> PAUL C MILLER-SPARTA	<u>AIRPORT ID</u> K8D4	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 7	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> SPARTA	<u>STATE</u> MI	
<u>AIRPORT ELEVATION</u> 775	<u>TDZE</u> 775	<u>SUPERSEDED</u> RNAV (GPS) RWY 7	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 07/02/2009	<u>MAG VAR</u> 4W	<u>EPOCH YEAR</u> 1980
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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. 336/30 CW 156/30	NOPT	HUUNT	IF/IAF	3000
2. 156/30 CW 246/30		EZAYE	IAF	3000
3. 246/30 CW 336/30		JUBAD	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>
EZAYE	IAF	HUUNT	NOPT	TF	FB	1.00	156.26	5.00	3000
JUBAD	IAF	HUUNT	NOPT	TF	FB	1.00	336.34	5.00	3000
HUUNT	IF/IAF	FELYN		TF	FB	1.00	066.30	6.10	2500
FELYN	FAF	RW07	MAP	TF	FO	0.30	066.41	5.22	
RW07	MAP	1175 MSL		CA			066.41		
1175 MSL		WAGIT		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LNAV: RW07

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT WAGIT AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SW HUUNT, RT, 066.30 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 066.41

FAF: FELYN

DIST FAF TO MAP: 5.22

DIST FAF TO THLD: 5.22

4. MIN ALT: HUUNT 3000, FELYN 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 CLEAR

TCH:

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 7 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: USE GRAND RAPIDS ALTIMETER SETTING, WHEN NOT RECEIVED, USE FREMONT ALTIMETER SETTING AND INCREASE ALL MDA 20 FEET.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
FAS OBST: 1079 AAO 430521N/0854514W.
HOLD NE, RT, 246.63 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	1380	1	605	1380	1	605		NA			NA				
CIRCLING	1380	1	605	1380	1	605		NA			NA				



CHANGES - REASONS

1. CHANGED RNP VALUE FROM 0.50 TO 1.00 IN TERMINAL ROUTE HUUNT TO FELYN. - INTERMEDIATE SEGMENTS NOW RNP 1.00 PER 8260.58 NAVSPEC GUIDANCE.
2. CHANGED FAC FROM 066.39 TO 066.41. - MOST CURRENT CALCULATION CRITERIA CALCULATED 0.02 DEGREE DIFFERENCE.
3. ADDED 20:1: IS CLEAR TO LINE 7. - 34:1 AND 20:1 VISUAL SEGMENT CONDITION REQUIRED ENTRY PER 8260.19 GUIDANCE.
4. CHANGED CHART NOTE FROM VISIBILITY REDUCTION BY HELICOPTERS NA TO RWY 7 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. - NOTE FORMATTING ADJUSTED TO COMPLY WITH 8260.19H; VISIBILITY REDUCTION LIMIT ADJUSTED TO REFLECT LACK OF 20:1/PRESENCE OF 34:1 VISUAL SURFACE PENETRATIONS.
5. REPLACED CHART NOTE: DME/DME RNP-0.3 NA WITH PBN REQUIREMENTS NOTE: RNP APCH. - ALIGNED WITH REQUIRED NOTES/FORMATTING IN ACCORDANCE WITH 8260.19H AND MEMO 257.
6. CHANGED CHART NOTE FROM "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GRAND RAPIDS ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET" TO "USE GRAND RAPIDS ALTIMETER SETTING, WHEN NOT RECEIVED, USE FREMONT ALTIMETER SETTING AND INCREASE ALL MDA 20 FEET." - LOCAL ALTIMETER SOURCE NO LONGER AVAILABLE, GERALD R FORD INTL ALTIMETER SETTING IS NOW THE PRIMARY, AND FREMONT MUNICIPAL IS THE SECONDARY ALTIMETER.
7. DELETED FELYN TO RW07: 3.04/40 FROM ADDITIONAL FLIGHT DATA. - FLIGHT CHECK DETERMINED VDA NA.
8. ADDED CHART CIRCLING ICON TO ADDITIONAL FLIGHT DATA. - ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.
9. RAISED LNAV MDA/HAT ALL CATS FROM 1340/565 TO 1380/605. - ON FIELD ALTIMETER NO LONGER AVAILABLE; NEW VALUES REFLECT REQUIRED RASS ADJUSTMENT.
10. RAISED CIRC MDA/HAA ALL CATS FROM 1340/565 TO 1380/605. - MATCHES STRAIGHT-IN MINIMA.

COORDINATED WITH:

A4A☐ALPA☒AOPA☒APA☐HAI☐NBAA☒OTHER: ZAU, GRR APP CON, ARPT MGR.

<u>FLIGHT CHECKED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
SCOTT WIEBE	ROBERT G HAMILTON	FICO	12/8/18	
	Dec 10, 2018			
<u>DEVELOPED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
JOSHUA LEETE	ROBERT G HAMILTON	AJV-5422	07/31/2018	
	Dec 10, 2018			
<u>APPROVED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
JULIE MORGAN	ROBERT G HAMILTON	AJV-5420		MANAGER
	Dec 10, 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> PAUL C MILLER-SPARTA	<u>AIRPORT ID</u> K8D4	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 25	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> SPARTA	<u>STATE</u> MI
<u>AIRPORT ELEVATION</u> 775	<u>TDZE</u> 764	<u>SUPERSEDED</u> RNAV (GPS) RWY 25	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 07/02/2009	<u>MAG VAR</u> 4W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1980

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 157/30 CW 337/30	NOPT	WAGIT	IF/IAF	3000
2. 337/30 CW 067/30		NEWWT	IAF	3000
3. 067/30 CW 157/30		JEBIS	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>
NEWWT	IAF	WAGIT	NOPT	TF	FB	1.00	336.67	5.00	3000
JEBIS	IAF	WAGIT	NOPT	TF	FB	1.00	156.59	5.00	3000
WAGIT	IF/IAF	DADFY		TF	FB	1.00	246.63	6.10	2500
DADFY	FAF	SINGS/2.65 NM TO RW25		TF	FB	0.30	246.53	2.66	
SINGS/2.65 NM TO RW25		RW25	MAP	TF	FO	0.30	246.53	2.65	
RW25	MAP	1175 MSL		CA			246.53		
1175 MSL		HUUNT		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LNAV: RW25

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT HUUNT AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD NE WAGIT, RT, 246.63 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 246.53FAF: DADFYDIST FAF TO MAP: 5.31DIST FAF TO THLD: 5.31

4. MIN ALT: WAGIT 3000, DADFY 2500, SINGS/2.65 NM TO RW25 1640

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

6. MIN GP INCPT:GP ALT AT FAF :

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

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 25 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: USE GRAND RAPIDS ALTIMETER SETTING, WHEN NOT RECEIVED, USE FREMONT ALTIMETER SETTING AND INCREASE ALL MDA 20 FEET.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART FAS OBST: 944 TWR 430907N/0853653W.
HOLD SW, RT, 066.30 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
LNAV MDA	1240	1	476	1240	1	476		NA			NA				
CIRCLING	1300	1	525	1340	1	565		NA			NA				



CHANGES - REASONS

1. CHANGED TERMINAL ROUTE WAGIT TO DADFY RNP FROM 0.50 TO 1.00. - INTERMEDIATE SEGMENTS NOW RNP 1.00 PER 8260.58.
2. CHANGED FINAL APPROACH COURSE FROM 246.54 TO 246.53. - MOST CURRENT CALCULATION CRITERIA CALCULATED 0.01 DEGREE DIFFERENCE.
3. IN TERMINAL ROUTES, CHANGED DADFY TO SINGS/2.65 NM TO RW25 COURSE FROM 246.54 TO 246.53. - MOST CURRENT CALCULATION CRITERIA CALCULATED 0.01 DEGREE DIFFERENCE.
4. IN TERMINAL ROUTES, CHANGED SINGS/2.65 NM TO RW25 COURSE FROM 246.54 TO 246.53. - MOST CURRENT CALCULATION CRITERIA CALCULATED 0.01 DEGREE DIFFERENCE.
5. CHANGED ALTITUDE AT SINGS/2.65 NM TO RW25 FROM 1620 TO 1640. - NEW ALTITUDE MAXIMIZES STABILITY OF DESCENT.
6. CHANGED CHART NOTE FROM VISIBILITY REDUCTION BY HELICOPTERS NA TO RWY 25 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. - NOTE FORMATTING ADJUSTED TO COMPLY WITH 8260.19H; VISIBILITY REDUCTION LIMIT ADJUSTED TO REFLECT LACK OF 20:1/PRESENCE OF 34:1 VISUAL SURFACE PENETRATIONS.
7. REPLACED CHART NOTE: DME/DME RNP-0.3 NA WITH PBN REQUIREMENTS NOTE: RNP APCH. - ALIGNED WITH REQUIRED NOTES/FORMATTING IN ACCORDANCE WITH 8260.19H AND MEMO 257.
8. CHANGED CHART NOTE FROM, "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GRAND RAPIDS ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET" TO "USE GRAND RAPIDS ALTIMETER SETTING, WHEN NOT RECEIVED, USE FREMONT ALTIMETER SETTING AND INCREASE ALL MDA 20 FEET." - LOCAL ALTIMETER NO LONGER AVAILABLE; NEW VALUES COINCIDE WITH GRAND RAPIDS ALTIMETER BEING CHANGED FROM SECONDARY TO PRIMARY ALTIMETER SOURCE AND ESTABLISHMENT OF FREMONT ALTIMETER SETTING AS NEW SECONDARY ALTIMETER SOURCE.
9. REMOVED DADFY TO RW25: 3.04/40 NOTE FROM ADDITIONAL FLIGHT DATA. - FLIGHT CHECK DETERMINED VDA NA.
10. ADDED CHART CIRCLING ICON TO ADDITIONAL FLIGHT DATA. - ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.
11. CHANGED LNAV CONTROLLING OBSTACLES AND ADDITIONAL FLIGHT DATA NOTE FROM CHART FAS OBST: 920 TOWER 430838N/0853940W TO CHART FAS OBST: 944 TOWER 431021N/0853525W. - NEW FINAL APPROACH CONTROLLING OBSTRUCTION.
12. ADDED 20:1 IS CLEAR TO LINE 7 OF 8260-3. - CONDITION OF VISUAL SURFACES REQUIRED TO BE DOCUMENTED PER 8260.19H.
13. CHANGED LNAV MDA/HAT FROM 1220/445 TO 1240/476. - NEW CONTROLLING OBSTRUCTIONS AND REQUIRED RASS ADJUSTMENTS INCREASED MDA.
14. CHANGED CAT A CIRCLING MDA/HAA FROM 1280/505 TO 1300/525. - NEW CONTROLLING OBSTRUCTIONS AND REQUIRED RASS ADJUSTMENTS INCREASED MDA.
15. CHANGED CAT B CIRCLING MDA/HAA FROM 1320/545 TO 1340/565. - NEW CONTROLLING OBSTRUCTIONS AND REQUIRED RASS ADJUSTMENTS INCREASED MDA.

COORDINATED WITH:

A4A☐ALPA☒AOPA☒APA☐HAI☐NBAA☒OTHER: ZAU, GRR APP CON, ARPT MGR.

FLIGHT CHECKED BY SCOTT WIEBE	Digitally signed by ROBERT G HAMILTON Dec 10, 2018	OFFICE FICO	DATE 12/8/18	
DEVELOPED BY JOSHUA LEETE	Digitally signed by ROBERT G HAMILTON Dec 10, 2018	OFFICE AJV-5422	DATE 08/03/2018	
APPROVED BY JULIE MORGAN	Digitally signed by ROBERT G HAMILTON Dec 10, 2018	OFFICE AJV-5420	DATE	TITLE MANAGER



**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> PAUL C MILLER-SPARTA	<u>AIRPORT ID</u> K8D4	<u>PROCEDURE NAME</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> 4A	<u>CITY</u> SPARTA	<u>STATE</u> MI	
<u>AIRPORT ELEVATION</u> 775	<u>TDZE</u>	<u>SUPERSEDED</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> 4	<u>DATED</u> 06/30/2011	<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 25 APRIL 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
25
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, GRR APP CON, ARPT MGR

FLIGHT CHECKED BY

DEVELOPED BY

JOSHUA LEETE

APPROVED BY

JULIE A. MORGAN

Digitally signed by

JOSHUA LEETE

Oct 02, 2018

Digitally signed by

ROBERT G HAMILTON

Dec 10, 2018

OFFICE

DATE

OFFICE

AJV-5422

OFFICE

AJV-5420

DATE

07/30/2018

DATE

TITLE



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> FALLS INTL-EINARSON FIELD	<u>AIRPORT ID</u> KINL	<u>PROCEDURE NAME</u> ILS OR LOC RWY 31	<u>ORIGINAL/AMENDMENT</u> 10C	<u>CITY</u> INTERNATIONAL FALLS	<u>STATE</u> MN	
<u>AIRPORT ELEVATION</u> 1185	<u>TDZE</u> 1166	<u>SUPERSEDED</u> ILS OR LOC RWY 31	<u>ORIGINAL/AMENDMENT</u> 10B	<u>DATED</u> 01/08/2015	<u>MAG VAR</u> 3E	<u>EPOCH YEAR</u> 1985
<u>FACILITY</u> I-INL	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
INL VOR/DME		RAIZE LOM/INL 7.18 DME					129.14	7.18	3400
WANRI/INL 14.00 DME CCW	IAF	ZAVBA/INL 14.00 DME	NOPT				14.00 DME ARC (INL LR-138)		3400
CIVLU/INL 14.00 DME CW	IAF	ZAVBA/INL 14.00 DME	NOPT				14.00 DME ARC (INL LR-121)		3400
ZAVBA/INL 14.00 DME	IF	RAIZE LOM/INL 7.18 DME					312.91	6.82 (I-INL)	3400

MISSED APPROACH

MAP:

ILS: DA

LOC: 6.26 NM AFTER RAIZE LOM OR AT EKOJO/0.93 DME FIX

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2500 THEN CLIMBING LEFT TURN TO 3400 DIRECT RAIZE LOM/INL 7.18 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 3300 ON INL VOR/DME R-310 TO HODEV/INL 14.00 DME AND HOLD NW, RT, 130.30 INBOUND.

PROFILE:

- PT L SIDE OF COURSE 132.91 OUTBOUND 3400 FT WITHIN 10 MILES OF RAIZE LOM (IAF)
-
- FAC: 312.91 FAF: RAIZE LOM/INL 7.18 DME DIST FAF TO MAP: 6.26 DIST FAF TO THLD: 6.46
- MIN ALT: RAIZE LOM/INL 7.18 DME 3400, ALETE/INL 2.22 DME 1620*
- DIST TO THLD FROM OM: 6.46 MM: IM: 150 HAT: GS ANT: 904
- MIN GS INCPT: 3400 GS ALT AT FAF : OM: 3307 MM: IM:
- GP ANGLE: 3.00 34:1 20:1 TCH: 45.1
- MSA FROM: IN LOM 2800



EQUIPMENT REQUIREMENTS NOTES:

ADF REQUIRED.

NOTES:

CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 1731 FEET.
*LOC ONLY
CHART NOTE: CIRCLING RWY 4, 22 NA AT NIGHT.
CHART NOTE: CAUTION OPPOSING ILS CONTINUOUSLY ON.

ADDITIONAL FLIGHT DATA:

#DME FROM INL VOR/DME.
CHART INL R-176 AT WANRI.
CHART INL R-071 AT CIVLU.
CHART IN PLANVIEW: HODEV/INL 14.00 DME
CHART FAS OBST: 1233 TREE 483321N/0932260W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NW HODEV/INL 14.00 DME, RT, 130.30 INBOUND.
HOLD SE, RT, 312.91 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 31	1366	1/2	200	1366	1/2	200	1366	1/2	200	1366	1/2	200			
S-LOC 31	1620	1/2	454	1620	1/2	454	1620	3/4	454	1620	1	454			
CIRCLING	1620	1	435	1680	1	495	1680	1 1/2	495	1780	2	595			
ALETE FIX MINIMUMS#															
S-LOC 31	1520	1/2	354	1520	1/2	354	1520	1/2	354	1520	3/4	354			
CIRCLING	1620	1	435	1680	1	495	1680	1 1/2	495	1780	2	595			

CHANGES - REASONS

1. CHANGED PROCEDURE NOTE FOR AUTOPILOT COUPLED APPROACH FROM: NA BELOW 2250 TO: NA BELOW 1731 - TO REMOVE NOTAM FDC: 8/5955, PER BATTLE CREEK FICO JEFF RANDALL, 269.967.1595.
2. TERMINAL ROUTE FIXES CHANGED FROM INL VORTAC TO INL VOR/DME, FROM: RAIZE LOM/INL VORTAC 7.18 DME TO: RAIZE LOM/INL 7.18 DME, FROM: WANRI/INL VORTAC 14.00 DME CCW TO: WANRI/INL 14.00 DME CCW, FROM: CIVLU/INL VORTAC 14.00 DME CW TO: CIVLU/INL 14.00 DME CW FROM: ZAVBA/INL VORTAC 14.00 DME TO: ZAVBA/INL 14.00 DME, FROM: EKOJO/INL VORTAC 0.93 DME TO: EKOJO/INL 0.93 DME, FROM: HODEV/INL VORTAC 14.00 DME TO: HODEV/INL 14.00 DME FROM: ALETE/INL VORTAC 2.22 DME TO: ALETE/INL 2.22 DME - PER 8260.19H, PARA 8-2-6, C(2).
3. MOVED BACK-UP ALTIMETER NOTE TO THE 8260-9 FOR CONTINGENCY PURPOSES. NO LONGER REQUIRED ON THE 8260-3.
4. ALTERNATE MINIMUMS NOW STANDARD. MOVED BACK-UP ALTIMETER DATA TO 8260-9 FOR CONTINGENCY OUTAGES.
5. UPDATED ALETE FIX MINIMUMS TO SHOW THE DME SOURCE IN ADDITIONAL FLIGHT DATA. ILS FREQUENCY IS NOT PAIRED TO THE DME CHANNEL.



COORDINATED WITH:

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

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT *Digitally signed by*
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

WARDELL HENNING

DEVELOPED BY

WARDELL HENNING (TODD BOWLING)

Digitally signed by Dec 07, 2018

OFFICE

DATE

WARDELL HENNING

AJV-5432

11/07/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

WARDELL HENNING

Dec 07, 2018

OFFICE

DATE

AJV-5430

TITLE

MANAGER

Dec 07, 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> NEW ULM MUNI	<u>AIRPORT ID</u> KULM	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 15	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> NEW ULM	<u>STATE</u> MN
<u>AIRPORT ELEVATION</u> 1011	<u>TDZE</u> 1011	<u>SUPERSEDED</u> RNAV (GPS) RWY 15	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 08/20/2015	<u>MAG VAR</u> 1E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
BEEGR		KADPE		TF	FO	1.00	255.54	15.54	3000
OSHOF	IAF	KADPE	NOPT	TF	FB	1.00	096.02	7.37	3000
WIDIS	IAF	KADPE	NOPT	TF	FB	1.00	213.47	21.14	3000
KADPE	IF/IAF	WOTVO		TF	FB	1.00	149.67	6.30	2500
WOTVO	FAF	ZARMO/2.30 NM TO RW15		TF	FB	0.30	149.72	2.27	
ZARMO/2.30 NM TO RW15		RW15	MAP	TF	FO	0.30	149.72	2.30	
RW15	MAP	1261 MSL		CA			149.72		
1261 MSL		YEBUY		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW15

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT YEBUY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD NW KADPE, RT, 149.67 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 149.72FAF: WOTVODIST FAF TO MAP: 4.57DIST FAF TO THLD: 4.57
4. MIN ALT: KADPE 3000, WOTVO 2500, ZARMO/2.30 NM TO RW15 1760*
5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.68GS ANT:
6. MIN GP INCPT: 2500GP ALT AT FAF : WOTVO 2500OM:MM:IM:
7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 40.0
8. MSA FROM: RW15 3200

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 4 AND 22.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT WIDIS ON V148 NORTHEAST BOUND.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.16 NM TO RW15*
*LNAV ONLY
WAAS CHANNEL #87131
REFERENCE PATH ID: W15A
CHART FAS OBST: 1131 WATER_TOWER 441933N/0942957W.
HOLD SE, RT, 329.86 INBOUND
LTP HAE: 278.3 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	1261	7/8	250	1261	7/8	250	1261	7/8	250	1261	7/8	250			
LNAV/VNAV DA	1298	1	287	1298	1	287	1298	1	287	1298	1	287			
LNAV MDA	1400	1	389	1400	1	389	1400	1 1/8	389	1400	1 1/8	389			
CIRCLING	1440	1	429	1500	1	489	1620	1 3/4	609	1620	2	609			



CHANGES - REASONS

1. DELETED CHART NOTE: DME/DME RNP-0.3 NA - IAW 8260.19H 8-6-8. B(1) PBN NAVSPEC.
2. ADDED PBN REQUIREMENTS NOTE: RNP APCH - IAW 8260.19H 8-6-8. B(1) PBN NAVSPEC.
3. DELETED CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ST JAMES ALTIMETER SETTING AND INCREASE ALL DA 55 FT AND ALL MDA 60 FT: INCREASE LNAV CATS C AND D VISIBILITY 1/8 MILE. - MOVED TO BACK OF -9 AND MADE INTO CONTINGENCY REMOTE ALTIMETER NOTE.
4. DELETED CHART NOTE: BARO-VNAV NA WHEN USING ST. JAMES ALTIMETER SETTING - MOVED TO BACK OF -9 AND MADE INTO CONTINGENCY REMOTE ALTIMETER NOTE.
5. CHANGED CHART NOTE FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F)" TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C OR ABOVE 54C" - REVISED NOTE FORMAT ELIMINATES REQUIREMENTS FOR FAHRENHEIT VALUES.
6. ADDED 20:1 CLEAR TO LINE 7 - IAW 8260.19H 8-6-7.G(3) TO DOCUMENT WHETHER SURFACE IS CLEAR OR NOT.
7. MAXIMUM ALTITUDE OF "6000" ADDED TO HOLD-IN-LIEU FIX KADPE - NEW REPORTS FORMAT NOW INCLUDES MAXIMUM HOLDING ALTITUDES AT THE HOLD-IN-LIEU FIX.
8. CHANGED CIRCLING CAT B MDA/HAA AND CAT C MDA/HAA/VIS FROM CAT B "1480/469" TO "1500/489" FROM CAT C "1480/469/1 1/2 TO 1620/609/1 3/4" - IMPLEMENTED NEW CIRCLING DIMENSIONS INTO PROCEDURE.
9. ADDED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT WIDIS ON V148 NORTHEAST BOUND - TURN OVER 90 DEGREES REQUIRED.
10. CRC REMAINDER CHANGED FROM "EA2B40D4" TO "102F0E1D" - LENGTH OFFSET CHANGED FROM "1104" TO "1112", LTP/FPAP ORTHOMETRIC HEIGHT CHANGED FROM "+03061/+03064" TO "+03063".

P-NOTAMS 4/8487, 5/2781 FOR ORIGA AND ORIGB INCORPORATED INTO THIS FORM.

COORDINATED WITH:

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

FLIGHT CHECKED BY

BROC STARRETT

Digitally signed by
DAVID TEFFETELLER
Nov 28, 2018

OFFICE

FICO

DATE

11/20/18

DEVELOPED BY

JAMES LAFFERTY

Digitally signed by
JAMES LAFFERTY
Oct 19, 2018

OFFICE

AJV-5433

DATE

10/09/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
DAVID TEFFETELLER
Nov 28, 2018

OFFICE

AJV-5430

DATE

TITLE
MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KULM
RUNWAY	RW15
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W15A
LTP/FTP LATITUDE	441926.6070N
LTP/FTP LONGITUDE	0943023.0995W
LTP/FTP ELLIPSOIDAL HEIGHT	+02783
FPAP LATITUDE	441808.8600N
FPAP LONGITUDE	0942922.4900W
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	1112
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	102F0E1D

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03063
FPAP ORTHOMETRIC HEIGHT	+03063



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> NEW ULM MUNI	<u>AIRPORT ID</u> KULM	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 33	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> NEW ULM	<u>STATE</u> MN
<u>AIRPORT ELEVATION</u> 1011	<u>TDZE</u> 1011	<u>SUPERSEDED</u> RNAV (GPS) RWY 33	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 02/05/2015	<u>MAG VAR</u> 1E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
BEEGR		YEBUY		TF	FO	1.00	188.79	23.86	3000
OSHO		YEBUY		TF	FO	1.00	137.23	27.78	3000
TUPBU	IAF	YEBUY	NOPT	TF	FB	1.00	269.51	10.78	3000
WAGIK	IAF	YEBUY	NOPT	TF	FB	1.00	034.49	9.48	3000
YEBUY	IF/IAF	CETOT		TF	FB	1.00	329.86	6.43	2500
CETOT	FAF	ZUDIL/2.50 NM TO RW33		TF	FB	0.30	329.81	2.07	
ZUDIL/2.50 NM TO RW33		RW33	MAP	TF	FO	0.30	329.81	2.50	
RW33	MAP	1211 MSL		CA			329.81		
1211 MSL		KADPE		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW33

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT KADPE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SE YEBUY, RT, 329.86 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 329.81

FAF: CETOT

DIST FAF TO MAP: 4.57

DIST FAF TO THLD: 4.57

4. MIN ALT: YEBUY 3000, CETOT 2500, ZUDIL/2.50 NM TO RW33 1840*

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

200 HAT: 0.50

GS ANT:

6. MIN GP INCPT: 2500

GP ALT AT FAF : CETOT 2500

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 40.0

8. MSA FROM: RW33 3200

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 4 AND 22.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO LPV ALL CATS. FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 7/8 SM, LNAV CAT D TO 1 1/8 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.09 NM TO RW33*
*LNAV ONLY
WAAS CHANNEL #56631
REFERENCE PATH ID: W33A
CHART FAS OBST: 1093 POLE 441853N/0942927W.
HOLD NW, RT, 149.67 INBOUND
LTP HAE: 277.8 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	1211	3/4	200	1211	3/4	200	1211	3/4	200	1211	3/4	200			
LNAV/VNAV DA	1312	3/4	301	1312	3/4	301	1312	3/4	301	1312	3/4	301			
LNAV MDA	1400	3/4	389	1400	3/4	389	1400	7/8	389	1400	7/8	389			
CIRCLING	1440	1	429	1500	1	489	1620	1 3/4	609	1620	2	609			



CHANGES - REASONS

- 1. DELETED CHART NOTE "VDP AND BARO-VNAV NA WHEN USING ST JAMES ALTIMETER SETTING" - NOTE MOVED TO BACK OF -9 AS CONTINGENCY NOTE.
- 2. DELETED CHART NOTE: "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ST JAMES ALTIMETER SETTING AND INCREASE ALL DA 55 FEET AND ALL MDA 60 FEET: INCREASE LNAV/VNAV ALL CATS VISIBILITY 1/8 MILE AND LNAV CATS C AND D VISIBILITY 1/4 MILE" - NOTE MOVED TO BACK OF -9 AS CONTINGENCY NOTE.
- 3. DELETED CHART NOTE; DME/DME RNP-0.3 NA - IAW 8260.19H, PARA 1-1-5F(14), REMOVED THE REQUIREMENT FOR THIS NOTE.
- 4. ADDED PBN EQUIPMENT REQUIREMENTS NOTE; "RNP APCH" - EQUIPMENT REQUIREMENTS NOTE APPLIED PER 8260.58A, CHANGE 1.
- 5. LNAV/VNAV DA/HAT CHANGED FROM "1298/287" TO "1312/301" - CHANGE TO CONTROLLING OBSTACLE.
- 6. LNAV MDA/HAT CHANGED FROM "1380/369" TO "1400/389" - CHANGE TO CONTROLLING OBSTACLE.
- 7. CIRCLING CAT A MDA/HAA CHANGED FROM "1420/409" TO "1440/429", CAT B MDA/HAA FROM "1480/469" TO "1500/489", AND CAT C FROM "1480/469" TO "1620/609" - CHANGE TO CIRCLING AREA DIMENSIONS ADJUSTED MINIMA.
- 8. ADDED MAX ALTITUDE AT IF/IAF YEBUY 6000 - NEW FORMS REPORT NOW SHOWS MAXIMUM ALTITUDE AT HOLD-IN-LIEU FIX.
- 9. VDP LOCATION CHANGED FROM "1.06NM" TO "1.09NM" - ADJUSTMENT TO LNAV MDA/HAT MOVED VDP LOCATION.
- 10. ADDED 20:1 CLEAR TO LINE 7 - NEW CRITERIA REQUIRES STATUS OF BOTH 20:1 AND 34:1 SURFACES MUST NOW BE SHOWN.
- 11. CHANGE CHART NOTE FROM "INOP TABLE DOES NOT APPLY TO LPV ALL CATS. FOR INOP MALSF, INCREASE LNAV/VNAV AND LNAV CAT D VISIBILITY 1/4 MILE" TO "INOPERATIVE TABLE DOES NOT APPLY TO LPV ALL CATS. FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 7/8 SM, LNAV CAT D TO 1 1/8 SM. - UPDATED VIS-CHECK WORKSHEET PROVIDED CHANGE TO MINIMA.
- 12. DELETED CHART NOTE "FOR INOP ALS, WHEN USING ST. JAMES ALTIMETER SETTING, INCREASE LPV ALL CATS VISIBILITY TO 1/8 MILE, LNAV/VNAV ALL CATS AND LNAV CAT D VISIBILITY 1/4 MILE - MOVED TO BACK OF -9 FORM AS CONTINGENCY NOTE.
- 13. CHANGED FAS OBST FROM "1110 TREE 441859N/0942942W, 1129 TREE 441627N/0942853W" TO "1093 POLE 441853N/0942927W" - NEW CONTROLLING OBSTACLE FOUND FROM SDF TO MAP.
- 14. CHANGED CRC REMAINDER FROM "17DFBB8" TO "CA32337F" - DUE TO LENGTH OFFSET CHANGED FROM "1104" TO "1112", AND LTP/FRAP ORTHOMETRIC HEIGHT FROM "03075/03059" TO "03058".

THIS AMENDMENT CANCELS NOTAM IFDC 8/4062.

INCORPORATED ORIGA P-NOTAM 4/8489 INTO THIS AMENDMENT.

COORDINATED WITH:

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

FLIGHT CHECKED BY

BROC STARRETT

Digitally signed by
DAVID TEFFETELLER
Nov 28, 2018

OFFICE
FICO
DATE
11/20/18

DEVELOPED BY

JAMES LAFFERTY

Digitally signed by
JAMES LAFFERTY
Oct 19, 2018

OFFICE
AJV-5433
DATE
07/23/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
DAVID TEFFETELLER
Nov 28, 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	KULM
RUNWAY	RW33
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W33A
LTP/FTP LATITUDE	441840.0660N
LTP/FTP LONGITUDE	0942946.8215W
LTP/FTP ELLIPSOIDAL HEIGHT	+02778
FPAP LATITUDE	441957.8165N
FPAP LONGITUDE	0943047.4415W
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	1112
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER	CA32337F

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03058
FPAP ORTHOMETRIC HEIGHT	+03058



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> THIEF RIVER FALLS RGNL	<u>AIRPORT ID</u> KTVF	<u>PROCEDURE NAME</u> ILS OR LOC RWY 31	<u>ORIGINAL/AMENDMENT</u> 5A	<u>CITY</u> THIEF RIVER FALLS	<u>STATE</u> MN	
<u>AIRPORT ELEVATION</u> 1119	<u>TDZE</u> 1114	<u>SUPERSEDED</u> ILS OR LOC RWY 31	<u>ORIGINAL/AMENDMENT</u> 5	<u>DATED</u> 11/08/2018	<u>MAG VAR</u> 2E	<u>EPOCH YEAR</u> 2015
<u>FACILITY</u> I-HYZ	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
TVF VOR/DME		JOLPA/TVF 5.61 DME	FAF/IAF				128.05	5.61	2700
UGACU/TVF 12.00 DME CCW	IAF	WEMUP/TVF 12.00 DME	NOPT				12.00 DME ARC (TVF LR-137)		2700
ZALSO/TVF 12.00 DME CW	IAF	WEMUP/TVF 12.00 DME	NOPT				12.00 DME ARC (TVF LR-117)		2700
WEMUP/TVF 12.00 DME	IF	JOLPA/TVF 5.61 DME					312.78	6.39	2700

MISSED APPROACH

MAP:

ILS: DA
LOC: TVF 0.81 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2700 THEN LEFT TURN DIRECT TVF VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
2. HOLD SE JOLPA, RT, 312.78 INBOUND, 2700 FT. IN LIEU OF PT (IAF), MAX 4700.
3. **FAC:** 312.78 **FAF:** JOLPA/TVF 5.61 DME **DIST FAF TO MAP:** **DIST FAF TO THLD:** 4.81
4. **MIN ALT:** JOLPA/TVF 5.61 DME 2700, VERST/TVF 2.42 DME 1680*
5. **DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **GS ANT:** 1048
6. **MIN GS INCPT:** 2700 **GS ALT AT FAF :** JOLPA/TVF 5.61 DME 2700 **OM:** **MM:** **IM:**
7. **GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 55.2
8. **MSA FROM:** TVF VOR/DME 2700



EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED FOR PROCEDURE ENTRY.
DME REQUIRED.

NOTES:

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 31 CAT C/D VISIBILITY TO 1 SM.
CHART NOTE: DME FROM TVF VOR/DME. SIMULTANEOUS RECEPTION OF I-HYZ AND TVF DME REQUIRED.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART TVF R-253 AT UGACU.
CHART TVF R-114 AT ZALSO.
CHART VDP AT 1.72 DME*
DISTANCE VDP TO THLD 0.91 NM
* LOC ONLY
CHART FAS OBST: 1206 TREE 480205N/0960826W.
HOLD NW, RT, 117.00 INBOUND

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: 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
S-ILS 31	1314	1/2	200	1314	1/2	200	1314	1/2	200	1314	1/2	200			
S-LOC 31	1460	1/2	346	1460	1/2	346	1460	5/8	346	1460	5/8	346			
CIRCLING	1540	1	421	1580	1	461	1820	2	701	1980	2 3/4	861			

CHANGES - REASONS

1. ADDED NOPT TO BOTH INITIAL ARC SEGMENTS IN TERMINAL ROUTES. - INITIAL ARC SEGMENTS DO NOT REQUIRE A PROCEDURE TURN.
2. ADDED A * TO 1680 IN LINE 4 OF PROFILE VIEW. - DESIGNATE AS LOC ONLY.

COORDINATED WITH:

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

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY

LIAM DONAHUE
LIAM DONAHUE
Nov 16, 2018

APPROVED BY

PATRICK MULQUEEN
DONALD H LANIER
Dec 18, 2018

OFFICE

OFFICE

OFFICE

DATE

DATE

DATE

TITLE
MANAGER



**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> THIEF RIVER FALLS RGNL	<u>AIRPORT ID</u> KTVF	<u>PROCEDURE NAME</u> VOR Y RWY 13	<u>ORIGINAL/AMENDMENT</u> 9B	<u>CITY</u> THIEF RIVER FALLS	<u>STATE</u> MN
<u>AIRPORT ELEVATION</u> 1119	<u>TDZE</u> 1115	<u>SUPERSEDED</u> VOR RWY 13	<u>ORIGINAL/AMENDMENT</u> 9A	<u>DATED</u> 09/15/2016	<u>MAG VAR</u> 8E
<u>FACILITY</u> TVF	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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:
TVF VOR/DME

MISSED APPROACH INSTRUCTIONS:
CLIMB TO 2700 THEN RIGHT TURN DIRECT TVF VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L **SIDE OF COURSE** 297.35 **OUTBOUND** 2700 **FT WITHIN** 10 **MILES OF** TVF VOR/DME (IAF)
- 2.
3. **FAC:** 117.35 **FAF:** **DIST FAF TO MAP:** **DIST FAF TO THLD:**
4. **MIN ALT:**
8. **MSA FROM:** TVF VOR/DME 2700

EQUIPMENT REQUIREMENTS NOTES:

NOTES:
CHART NOTE: CIRCLING TO RWY 4/22 NA AT NIGHT.



ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 2.12 DME
DISTANCE VDP TO THLD 1.84 NM
CHART FAS OBST: 1505 TOWER 480806N/0961411W.
FAC CROSSES RWY C/L EXTENDED 3017 FT FROM THLD.
HOLD NW, RT, 117.00 INBOUND

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
S-13	1740	1	625	1740	1	625	1740	1 3/4	625	1740	2	625			
CIRCLING	1740	1	621	1740	1	621	1820	2	701	1980	2 3/4	861			

CHANGES - REASONS

1. INCORPORATES CHANGES IN AMDT 9A. - P-NOTAM 6/3883.
2. CHANGE PROCEDURE NAME FROM VOR RWY 13 TO VOR Y RWY 13. - DIFFERENTIATE BETWEEN THIS PROCEDURE AND VOR Z RWY 13. (FORMERLY VOR/DME RWY 13.)
3. RAISED CATS C/D CIRCLING FROM 1740-1 3/4 AND 1740-2 TO 1820-2 AND 1980-2 3/4 AND ADDED CHART CIRCLING ICON TO ADDITIONAL FLIGHT DATA. - NEW CIRCLING CRITERIA FLIGHT CHECKED WITH ILS OR LOC RWY 31 AMDT 5 THIS AIRPORT.
4. MOVED ALL BACKUP ALTIMETER DATA FROM NOTES TO GENERAL REMARKS ON THE 8260-9. - FOR CONTINGENCY PURPOSES.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: EASTERN FPO, ZMP ARTCC, AMGR, ATA

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY

LIAM DONAHUE

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

LIAM DONAHUE

Dec 12, 2018

Digitally signed by

DONALD H LANIER

Dec 18, 2018

OFFICE

OFFICE

AJV-5431

OFFICE

AJV-5431

DATE

DATE

11/16/2018

DATE

TITLE
MANAGER



**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> THIEF RIVER FALLS RGNL	<u>AIRPORT ID</u> KTVF	<u>PROCEDURE NAME</u> VOR Z RWY 13	<u>ORIGINAL/AMENDMENT</u> 2D	<u>CITY</u> THIEF RIVER FALLS	<u>STATE</u> MN	
<u>AIRPORT ELEVATION</u> 1119	<u>TDZE</u> 1115	<u>SUPERSEDED</u> VOR/DME RWY 13	<u>ORIGINAL/AMENDMENT</u> 2C	<u>DATED</u> 09/15/2016	<u>MAG VAR</u> 8E	<u>EPOCH YEAR</u> 1965
<u>FACILITY</u> TVF	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
TVF VOR/DME		KATTO/6.00 DME					297.00	6.00	2700
TVF VOR/DME R-253/12.00 DME CW	IAF	JITOB/TVF VOR/DME 12.00 DME	NOPT						2700
JITOB/TVF VOR/DME 12.00 DME	IF	KATTO/6.00 DME	NOPT				117.00	6.00 (TVF R-297)	2700

MISSED APPROACH

MAP:

ZASEG/TVF 0.30 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2700 THEN RIGHT TURN DIRECT TVF VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. HOLD NW KATTO, RT, 117.00 INBOUND, 2700 FT. IN LIEU OF PT (IAF), MAX 8000.
3. FAC: 117.00 FAF: KATTO/6.00 DME DIST FAF TO MAP: DIST FAF TO THLD:
4. MIN ALT: KATTO/6.00 DME 2700
8. MSA FROM: TVF VOR/DME 2700

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED.

NOTES:



ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.50 DME
DISTANCE VDP TO THLD 1.20 NM
CHART FAS OBST: 1254 TREES 480740N/0961540W.
FAC CROSSES RWY C/L EXTENDED 2800 FT FROM THLD.
HOLD NW, RT, 117.00 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
S-13	1520	1	405	1520	1	405	1520	1 1/4	405	1520	1 1/4	405			

CHANGES - REASONS

1. DELETED CIRCLING MINIMUMS. - NPA CANCELATION. (SUPERSEDES AMDTS 2B AND 2C).
2. INCORPORATES AMDT 2A. - P-NOTAM 03/1600.
3. CHANGED PROCEDURE NAME FROM VOR/DME RWY 13 TO VOR Z RWY 13. - FAAO 8260.19H PROCEDURE NAMING CONVENTIONS AND TO DIFFERENTIATE FROM VOR Y RWY 13.
4. DELETED CHART NOTE: CIRCLING TO RWY 3/21 NA. - STRAIGHT - IN ONLY PROCEDURE.
5. ASSIGNED A NAME (JITOB) TO INTERMEDIATE FIX. - FAAO 8260.19H PARAGRAPH 2-10-5.
6. ADDED DME REQUIRED TO EQUIPMENT REQUIREMENTS NOTES - DME REQUIRED.
7. ASSIGNED NAME (ZASEG) TO MAP. - FAAO 8260.19H PARAGRAPH 2-10-5.

COORDINATED WITH:

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

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY
LIAM DONAHUE
Digitally signed by
LIAM DONAHUE
Dec 13, 2018

APPROVED BY
PATRICK MULQUEEN
Digitally signed by
DONALD H LANIER
Dec 18, 2018

OFFICE

OFFICE
AJV-5431

OFFICE
AJV-5430

DATE

DATE
11/16/2018

DATE

TITLE
MANAGER



**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> GIDEON MEMORIAL	<u>AIRPORT ID</u> KM85	<u>PROCEDURE NAME</u> VOR RWY 15	<u>ORIGINAL/AMENDMENT</u> 3A	<u>CITY</u> GIDEON	<u>STATE</u> MO
<u>AIRPORT ELEVATION</u> 269	<u>TDZE</u> 268	<u>SUPERSEDED</u> VOR RWY 15	<u>ORIGINAL/AMENDMENT</u> 3	<u>DATED</u> 05/02/2013	<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

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

PROCEDURE CANCELLED EFFECTIVE 25 APRIL 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, APT MGR.

FLIGHT CHECKED BY

DEVELOPED BY

DONALD H. LANIER (MICAH HILLEY)

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
DONALD H LANIER
Nov 30, 2018

Digitally signed by
DONALD H LANIER
Nov 30, 2018

OFFICE

OFFICE

AJV-5430

OFFICE

AVJ-5430

DATE

DATE

11/7/2018

DATE

TITLE



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> FAYETTEVILLE RGNL/GRANNIS FIELD	<u>AIRPORT ID</u> KFAY	<u>PROCEDURE NAME</u> VOR RWY 4	<u>ORIGINAL/AMENDMENT</u> 16C	<u>CITY</u> FAYETTEVILLE	<u>STATE</u> NC
<u>AIRPORT ELEVATION</u> 189	<u>TDZE</u> 189	<u>SUPERSEDED</u> VOR RWY 4	<u>ORIGINAL/AMENDMENT</u> 16B	<u>DATED</u> 11/08/2018	<u>MAG VAR</u> 4W
<u>FACILITY</u> FAY	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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:

FAY VOR/DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1100 THEN CLIMBING RIGHT TURN TO 3000 ON FAY R-131 TO GANDS INT/FAY 14.59 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT R **SIDE OF COURSE** 237.43 **OUTBOUND** 2100 **FT WITHIN** 10 **MILES OF** FAY VOR/DME (IAF)

2.

3. **FAC:** 057.43 **FAF:** **DIST FAF TO MAP:** **DIST FAF TO THLD:**

4. **MIN ALT:**

8. **MSA FROM:** FAY VOR/DME 2300

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

FOR INOPERATIVE ALS, INCREASE S-4 CAT A/B VISIBILITY TO RVR 5500 AND CAT C/D TO 1 3/8SM.

ADDITIONAL FLIGHT DATA:

CHART MAXIMUM 4700 AT FAY VOR/DME.
CHART CIRCLING ICON.
CHART VDP AT 1.64 DME
DISTANCE VDP TO THLD 1.24 NM
CHART FAS OBST: 340 TOWER 345641N/0785739W.
FAC CROSSES RWY C/L EXTENDED 5200 FT FROM THLD.
HOLD SE, RT, 311.19 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
S-04	640	4000	451	640	4000	451	640	4500	451	640	5000	451			
CIRCLING	640	1	451	660	1	471	860	2	671	860	2 1/4	671			

CHANGES - REASONS

1. CORRECTED PROCEDURE MAG VAR FROM 7W TO 4W - 7W MAG VAR WAS POPULATED IN ERROR DUE TO SIAP DISCREPANCY.

COORDINATED WITH:

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

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018,
SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED.

DEVELOPED BY

JULIE A. MORGAN (MADELINE CLARK)

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5422

OFFICE

AJV-5420

DATE

11/01/2018

DATE

Nov 27, 2018

Digitally signed by

ROBERT G HAMILTON

Nov 27, 2018

Digitally signed by

ROBERT G HAMILTON

Nov 27, 2018

Digitally signed by

ROBERT G HAMILTON

Nov 27, 2018

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> FAYETTEVILLE RGNL/GRANNIS FIELD	<u>AIRPORT ID</u> KFAY	<u>PROCEDURE NAME</u> VOR RWY 22	<u>ORIGINAL/AMENDMENT</u> 7C	<u>CITY</u> FAYETTEVILLE	<u>STATE</u> NC
<u>AIRPORT ELEVATION</u> 189	<u>TDZE</u> 180	<u>SUPERSEDED</u> VOR RWY 22	<u>ORIGINAL/AMENDMENT</u> 7B	<u>DATED</u> 11/08/2018	<u>MAG VAR</u> 4W
<u>FACILITY</u> FAY	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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:

FAY VOR/DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 100 AND FAY VOR/DME R-131 TO GANDS INT/FAY 14.59 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT R **SIDE OF COURSE** 018.00 **OUTBOUND** 2100 **FT WITHIN** 10 **MILES OF** FAY VOR/DME (IAF)

2.

3. **FAC:** 198.00 **FAF:** **DIST FAF TO MAP:** **DIST FAF TO THLD:**

4. **MIN ALT:**

8. **MSA FROM:** FAY VOR/DME 2300

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 3.10 DME
DISTANCE VDP TO THLD 2.20 NM
CHART FAS OBST: 549 TOWER 350423N/0785326W.
FAC CROSSES RWY C/L EXTENDED 3984 FT FROM THLD.
HOLD SE, RT, 311.19 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-22	900	1	720	900	1	720	900	2	720	900	2	720			
CIRCLING	900	1	711	900	1	711	900	2	711	900	2 1/4	711			

CHANGES - REASONS

1. CORRECTED PROCEDURE MAG VAR FROM 7W TO 4W - 7W MAG VAR WAS POPULATED IN ERROR DUE TO SIAP DISCREPANCY.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ **OTHER:** FAY APP CON, FAY ATCT, AMGR, ATA

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018,
SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED.

DEVELOPED BY

JULIE A. MORGAN (MADELINE CLARK)

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5422

OFFICE

AJV-5420

DATE

11/01/2018

DATE

Nov 27, 2018

DATE

Nov 27, 2018

Digitally signed by
ROBERT G HAMILTON
Nov 27, 2018

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ROBERT G HAMILTON
Nov 27, 2018

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ROBERT G HAMILTON
Nov 27, 2018

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> FAYETTEVILLE RGNL/GRANNIS FIELD	<u>AIRPORT ID</u> KFAY	<u>PROCEDURE NAME</u> VOR RWY 28	<u>ORIGINAL/AMENDMENT</u> 8C	<u>CITY</u> FAYETTEVILLE	<u>STATE</u> NC
<u>AIRPORT ELEVATION</u> 189	<u>TDZE</u> 188	<u>SUPERSEDED</u> VOR RWY 28	<u>ORIGINAL/AMENDMENT</u> 8B	<u>DATED</u> 11/08/2018	<u>MAG VAR</u> 4W
<u>FACILITY</u> FAY	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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:

FAY VOR/DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 3000 ON FAY R-131 TO GANDS INT/FAY 14.59 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT R SIDE OF COURSE 084.20 OUTBOUND 2000 FT WITHIN 10 MILES OF FAY VOR/DME (IAF)
- 2.
3. FAC: 264.20 FAF: DIST FAF TO MAP: DIST FAF TO THLD:
4. MIN ALT:
8. MSA FROM: FAY VOR/DME 2300

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.66 DME
DISTANCE VDP TO THLD 1.50 NM
CHART FAS OBST: 381 TOWER 350323N/0784208W.
FAC CROSSES RWY C/L EXTENDED 3001 FT FROM THLD.
HOLD SE, RT, 311.19 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
S-28	700	1	512	700	1	512	700	1 3/8	512	700	1 3/8	512			
CIRCLING	700	1	511	700	1	511	860	2	671	860	2 1/4	671			

CHANGES - REASONS

1. CORRECTED PROCEDURE MAG VAR FROM 7W TO 4W - 7W MAG VAR WAS POPULATED IN ERROR DUE TO SIAP DISCREPANCY.

COORDINATED WITH:

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

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018,
SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED.

DEVELOPED BY

JULIE A. MORGAN (MADELINE CLARK)

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5422

OFFICE

AJV-5420

DATE

11/01/2018

DATE

Nov 27, 2018

Digitally signed by

ROBERT G HAMILTON

Digitally signed by

ROBERT G HAMILTON

Nov 27, 2018

Nov 27, 2018

Digitally signed by

ROBERT G HAMILTON

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.
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<u>AIRPORT</u> PIEDMONT TRIAD INTL	<u>AIRPORT ID</u> KGSO	<u>PROCEDURE NAME</u> ILS OR LOC RWY 5L ILS RWY 5L CAT II, ILS RWY 5L CAT III	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> GREENSBORO	<u>STATE</u> NC	
<u>AIRPORT ELEVATION</u> 926	<u>TDZE</u> 916	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 04/05/2012	<u>MAG VAR</u> 8W	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> I-LLG	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
GSO VORTAC		JEVEN INT/I-LLG 12.48 DME					241.11	8.19	2600
LIB VORTAC		JEVEN INT/I-LLG 12.48 DME					294.58	26.53	3700
JEVEN INT/I-LLG 12.48 DME	IF/IAF	CIVES INT/I-LLG 6.37 DME					053.98	6.10 (I-LLG)	2500

MISSED APPROACH

MAP:

ILS: DA
LOC: 4.74 NM AFTER CIVES INT/I-LLG 6.37 DME OR AT I-LLG 1.64 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1400 THEN CLIMBING LEFT TURN TO 3100 ON HEADING 330 AND GSO VORTAC R-360 TO MAYOS INT/GSO 16.86 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1400 THEN CLIMBING LEFT TURN TO 3100 ON HEADING 360 AND ON LIB VORTAC R-332 TO MAYOS INT/LIB 36.06 DME AND HOLD.

PROFILE:

- PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
- HOLD SW JEVEN, RT, 053.98 INBOUND, 2500 FT. IN LIEU OF PT (IAF), MAX 4500.
- FAC:** 053.98 **FAF:** CIVES INT/I-LLG 6.37 DME **DIST FAF TO MAP:** 4.74 **DIST FAF TO THLD:** 4.74
- MIN ALT:** JEVEN INT/I-LLG 12.48 DME 2500, CIVES INT/I-LLG 6.37 DME 2500
- DIST TO THLD FROM OM:** **MM:** **IM:** 860 **100 HAT:** 851 **150 HAT:** **GS ANT:** 1186
- MIN GS INCPT:** 2500 **GS ALT AT FAF :** CIVES INT/I-LLG 6.37 DME 2500 **OM:** **MM:** **IM:** 1017
- GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 55.0
- MSA FROM:** GSO VORTAC 4100



EQUIPMENT REQUIREMENTS NOTES:

DME OR RADAR REQUIRED FOR PROCEDURE ENTRY AT LIB VORTAC.

NOTES:

CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 5L: CAT A, B, C, D RA 113, RVR 1200, HAT 100, DA 1016 MSL.
CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 5L: CAT A, B, C, D RVR 600
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 5R.
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 5L CAT C/D VISIBILITY TO RVR 5500.

ADDITIONAL FLIGHT DATA:

CHART IN PLANVIEW: LIB VORTAC R-332.
CHART CIRCLING ICON.
CHART IN PLANVIEW: MAYOS INT/LIB 36.06 DME
CHART VDP AT 2.53 DME*
DISTANCE VDP TO THLD 0.89 NM
* LOC ONLY
CHART FAS OBST: 1013 BUILDING 360507N/0795819W.
CHART: 1051 TOWER 360233N/0800108W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NW MAYOS INT/LIB 36.06 DME, RT, 151.93 INBOUND.
HOLD N, LT, 179.69 INBOUND

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: 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
S-ILS 05L	1116	1800	200	1116	1800	200	1116	1800	200	1116	1800	200			
S-LOC 05L	1280	2400	364	1280	2400	364	1280	3500	364	1280	4000	364			
CIRCLING	1440	1	514	1440	1	514	1700	2 1/4	774	1700	2 1/2	774			

CHANGES - REASONS

1. ADDED INNER MARKER (IM) AND ASSOCIATED DATA TO PROCEDURE - PER FPT REQUEST AND LLG FACILITY DATA SHEET DOCUMENTATION.
2. CHANGED VDP DISTANCE FROM THRESHOLD FROM 0.97 NM TO 0.89 NM - COMPUTED IAW FAAO 8260.3D, FORMULA 2-6-5.
3. CHANGED VDP DME FROM LLG FROM 2.60 DME TO 2.53 DME - COMPUTED IAW FAAO 8260.3D, FORMULA 2-6-5.
4. ADDED NOTE: FOR INOPERATIVE ALS INCREASE S-LOC CAT C/D VISIBILITY TO RVR 5500 - IAW FAAO 8260.19H, PARA 8-6-11O(3)(D).
5. AMENDED S-LOC 5L CAT C RVR FROM 2400 TO 3500 - IAW FAAO 8260.3D, TABLE 3-3-1.
6. ADDED CIRCLING ICON - NEW CIRCLING CRITERIA APPLIED. MINIMUMS AND CONTROLLING OBSTACLES MATCH FLIGHT INSPECTED ILS Y OR LOC Y RWY 32.
7. AMENDED CAT C CIRCLING MDA/HAA FROM 1440/514 TO 1700/774 AND VISIBILITY FROM 1 1/2 TO 2 1/4 - NEW CONTROLLING OBSTACLE IDENTIFIED IN LARGER CIRCLING AREA. VISIBILITY RECOMPUTED USING HIGHER HAA.
8. AMENDED CAT D CIRCLING MDA/HAA FROM 1480/554 TO 1700/774 AND VISIBILITY FROM 2 TO 2 1/2 - NEW CONTROLLING OBSTACLE IDENTIFIED IN LARGER CIRCLING AREA. VISIBILITY RECOMPUTED USING HIGHER HAA.
9. AMENDED S-LOC 5L CAT C ALTERNATE MINIMUMS FROM STANDARD TO 800-2 1/4 AND CAT D FROM STANDARD TO 800-2 1/2 - COMPUTED USING UPDATED CAT C/D CIRCLING MINIMUMS.
10. UPDATED DIST FROM THLD TO 100 FT HAT FROM 868 TO 851 - COMPUTED IN ACCORDANCE WITH FAAO 8260.3D, FORMULA 10-1-5.
11. DELETED PLANVIEW NOTE: USE OF GSO R-241 AND LIB R-295 MAY BE NECESSARY TO LOCATE JEVEN INT - NO LONGER REQUIRED.
12. INCORPORATED CHANGES FROM ORIG-A AND ORIG-B - IAW FAAO 8260.19H, PARA 8-3-4C(2).



AIRPORT

PIEDMONT TRIAD INTL

AIRPORT ID

KGSO

PROCEDURE NAME

ILS OR LOC RWY 5L
ILS RWY 5L CAT II,
ILS RWY 5L CAT III

ORIGINAL/AMENDMENT

ORIG-C

CITY

GREENSBORO

STATE

NC

COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** GSO APP CON, GSO ATCT, ZTL, ZDC

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

Digitally signed by

DATE

WARDELL HENNING

Jan 25, 2019

DEVELOPED BY

WARDELL HENNING (ANDRE MARSH)

Digitally signed by

WARDELL HENNING

Jan 25, 2019

OFFICE

AJV-5432

DATE

12/03/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

WARDELL HENNING

Jan 25, 2019

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> CREIGHTON MUNI	<u>AIRPORT ID</u> 6K3	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 13	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> CREIGHTON	<u>STATE</u> NE
<u>AIRPORT ELEVATION</u> 1653	<u>TDZE</u> 1647	<u>SUPERSEDED</u> RNAV (GPS) RWY 13	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 09/17/2015	<u>MAG VAR</u> 5E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
ONL VORTAC		WABEX		TF	FB	1.00	062.07	25.85	4000
TYNDA		WABEX		TF	FB	1.00	207.44	26.61	4000
WABEX	IAF	JIPEV		TF	FB	1.00	125.13	5.00	4000
JIPEV	IF	AKUBE		TF	FB	1.00	125.19	4.98	3300
AKUBE	FAF	HISUV/3.07 NM TO RW13		TF	FB	0.30	125.25	2.01	
HISUV/3.07 NM TO RW13		RW13	MAP	TF	FO	0.30	125.25	3.07	
RW13	MAP	1976 MSL		CA			125.25		
1976 MSL		KUCKE		DF	FO	1.00			4000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW13

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4000 DIRECT KUCKE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT WABEX

3. FAC:

125.25

FAF:

AKUBE

DIST FAF TO MAP:

5.08

DIST FAF TO THLD:

5.08

4. MIN ALT: WABEX 4000, JIPEV 4000, AKUBE 3300, HISUV/3.07 NM TO RW13 2640*

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

329 HAT:

0.91

GS ANT:

6. MIN GP INCPT:

3300

GP ALT AT FAF :

AKUBE 3300

OM:

MM:

IM:

7. GP ANGLE:

3.00

34:1:

IS CLEAR

20:1:

IS CLEAR

TCH:

40.0

8. MSA FROM: RW13 3600

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 18 AND 36.
CHART NOTE: BARO-VNAV NA.
*LNAV ONLY
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON ONL VORTAC AIRWAY RADIALS 039 CW 125.
CHART NOTE: USE YANKTON ALTIMETER SETTING; WHEN NOT RECEIVED, USE O'NEILL ALTIMETER SETTING: INCREASE LPV DA TO 1983 FEET; INCREASE LNAV/VNAV DA TO 2033 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE ALL MDA 20 FEET.

ADDITIONAL FLIGHT DATA:

1851 AAO 423027N/0975700W
CHART YANKTON AWOS-3
CHART ARRIVAL HOLDING AT WABEX: HOLD NW, RT, 125.13 INBOUND, 4000.
WAAS CHANNEL #86521
REFERENCE PATH ID: W13A
CHART FAS OBST: 1731 TREE 422832N/0975308W.
HOLD SE, RT, 305.49 INBOUND
LTP HAE: 475.1 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
LPV DA	1976	1 1/8	329	1976	1 1/8	329		NA			NA				
LNAV/VNAV DA	2026	1 1/4	379	2026	1 1/4	379		NA			NA				
LNAV MDA	2120	1	473	2120	1	473		NA			NA				
CIRCLING	2160	1	507	2500	1 1/4	847		NA			NA				

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	6K3
RUNWAY	RW13
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W13A
LTP/FTP LATITUDE	422830.0495N
LTP/FTP LONGITUDE	0975324.4930W
LTP/FTP ELLIPSOIDAL HEIGHT	+04751
FPAP LATITUDE	422732.3800N
FPAP LONGITUDE	0975152.7000W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1624
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	59964955

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+05004
FPAP ORTHOMETRIC HEIGHT	+05004



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> CREIGHTON MUNI	<u>AIRPORT ID</u> 6K3	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> CREIGHTON	<u>STATE</u> NE	
<u>AIRPORT ELEVATION</u> 1653	<u>TDZE</u> 1647	<u>SUPERSEDED</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 09/17/2015	<u>MAG VAR</u> 5E	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
SAHIW		KUCKE		TF	FB	1.00	357.22	28.28	4000
PENDE		KUCKE		TF	FB	1.00	277.41	35.66	4000
KUCKE	IAF	DIGCE		TF	FB	1.00	305.49	5.00	4000
DIGCE	IF	FIRAG		TF	FB	1.00	305.44	4.98	3300
FIRAG	FAF	JONEV/2.20 NM TO RW31		TF	FB	0.30	305.38	2.87	
JONEV/2.20 NM TO RW31		RW31	MAP	TF	FO	0.30	305.38	2.20	
RW31	MAP	2026 MSL		CA			305.38		
2026 MSL		WABEX		DF	FO	1.00			4000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW31

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4000 DIRECT WABEX AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. PROFILE STARTS AT KUCKE
3. FAC: 305.38FAF: FIRAGDIST FAF TO MAP: 5.07DIST FAF TO THLD: 5.07
4. MIN ALT: KUCKE 4000, DIGCE 4000, FIRAG 3300, JONEV/2.20 NM TO RW31 2380*
5. DIST TO THLD FROM OM:MM:IM:150 HAT:379 HAT: 1.06GS ANT:
6. MIN GP INCPT: 3300GP ALT AT FAF : FIRAG 3300OM:MM:IM:
7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 40.0
8. MSA FROM: RW31 3600

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 18 AND 36.
CHART NOTE: BARO-VNAV NA.
*LNAV ONLY
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PENDE ON V219 NORTHEAST BOUND.
CHART NOTE: USE YANKTON ALTIMETER SETTING; WHEN NOT RECEIVED, USE O'NEILL ALTIMETER SETTING: INCREASE DA TO 2033 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE ALL MDA 20 FEET.

ADDITIONAL FLIGHT DATA:

CHART: 2205 TWR 422422N/0974751W
CHART YANKTON AWOS-3
CHART ARRIVAL HOLDING AT KUCKE: HOLD SE, RT, 305.49 INBOUND, 4000.
WAAS CHANNEL #45821
REFERENCE PATH ID: W31A
CHART FAS OBST: 1740 TREE 422659N/0975038W.
HOLD NW, RT, 125.13 INBOUND
LTP HAE: 475.7 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	2026	1 1/4	379	2026	1 1/4	379		NA			NA				
LNAV/VNAV DA	2026	1 1/4	379	2026	1 1/4	379		NA			NA				
LNAV MDA	2120	1	473	2120	1	473		NA			NA				
CIRCLING	2160	1	507	2500	1 1/4	847		NA			NA				

CHANGES - REASONS

1. CHANGED MSA FROM 3500 TO 3600 - NEW OBSTACLE DATA.
2. CHANGED LOCAL ATIMETER NOTE FROM "USE YANKTON ALTIMETER SETTING, WHEN NOT RECEIVED, USE O'NEILL ALTIMETER SETTING, INCREASE ALL DA 7 FEET AND ALL MDA 20 FEET, INCREASE LNAV/VNAV VISIBILITY 1/8 MILE ALL CATS." TO " USE YANKTON ALTIMETER SETTING; WHEN NOT RECEIVED, USE O'NEILL ALTIMETER SETTING: INCREASE DA TO 2033 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE ALL MDA 20 FEET" - INCORPORATED P-NOTAM 5/8351, ORIG-B.
3. REPLACED "CHART NOTE: DME/DME RNP-0.3" WITH "PBN REQUIREMENTS NOTE: RNP APCH". - CHANGED PER NAVSPEC REQUIREMENT IAW 8260.19H PARA 8-6-8.
4. ADDED NOTE CIRCLING TO NA RWYS 18 AND 36. - INCORPORATED P-NOTAM 5/8351.
5. INCREASED RNP VALUE FROM 0.50 TO 1.00 IN TERMINAL ROUTES INTERMEDIATE SEGMENT - IAW FAAO 8260.58A CHG 1 NAV SPEC TABLE.
6. CHANGED FEEDER RNP VALUES FROM 2.00 TO 1.00 - IAW FAAO 8260.58A CHG 1 NAVSPEC TABLE.
7. TERMINAL ROUTES: CHANGED CA FROM 2023 TO 2026 - DUE TO CHANGE IN LPV DA BASED ON USING TDZE; INCORPORATES P-NOTAM 4/1651, ORIG-A.
8. PROFILE LINE 7: ADDED 20:1 IS CLEAR - IAW 8260.19H DOCUMENTATION CRITERIA.
9. ADDITIONAL FLIGHT DATA: ADDED "CHART YANKTON AWOS-3 - INCORPORATED P-NOTAM 5/8351, ORIG-B.
10. REMOVED CHART PLANVIEW NOTE: RADAR REQUIRED FOR ARRIVALS AT SAHIW - NOTE NO LONGER REQUIRED.
11. LPV AND LNAV/LNAV DA CHANGED FROM 2023 TO 2026 AND LNAV HAT CHANGED FROM 476 TO 473 - INCORPORATES P-NOTAM 4/1651, ORIG-A. CHANGED THRE 1642 TO TDZE 1647.

COORDINATED WITH:

A4A ☐

ALPA ☒

AOPA ☒

APA ☐

HAI ☐

NBAA ☒

OTHER: ZMP, AMGR

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY

JULIE A. MORGAN (JOSHUA DUGAN)

APPROVED BY

JULIE MORGAN

OFFICE

OFFICE

OFFICE

DATE

DATE

DATE

Digitally signed by

ROBERT G HAMILTON

Jan 24, 2019

Digitally signed by

ROBERT G HAMILTON

Jan 24, 2019

Digitally signed by

ROBERT G HAMILTON

Jan 24, 2019

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	6K3
RUNWAY	RW31
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	422806.4020N
LTP/FTP LONGITUDE	0975246.8375W
LTP/FTP ELLIPSOIDAL HEIGHT	+04757
FPAP LATITUDE	422904.0600N
FPAP LONGITUDE	0975418.6500W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1624
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	C6F2F094

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+05011
FPAP ORTHOMETRIC HEIGHT	+05011



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>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
MC COOK BEN NELSON RGNL	KMCK	VOR RWY 30	11C	MCCOOK	NE	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
2583	2558	VOR RWY 30	11B	05/26/2016	8E	1995
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
MCK		25 APRIL 2019	ROUTINE			

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:

MCK VOR/DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4500 THEN CLIMBING RIGHT TURN TO 5000 DIRECT MCK VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L **SIDE OF COURSE** 113.85 **OUTBOUND** 4200 **FT WITHIN** 10 **MILES OF** MCK VOR/DME (IAF)
- 2.
3. **FAC:** 293.85 **FAF:** **DIST FAF TO MAP:** **DIST FAF TO THLD:**
4. **MIN ALT:** ETUYE/MCK 2.70 DME 3160*
8. **MSA FROM:** MCK VOR/DME 360-160 4200, 160-360 4900

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

*3380 WHEN USING IMPERIAL MUNI ALTIMETER SETTING.
VDP NA WHEN USING IMPERIAL MUNI ALTIMETER SETTING.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE IMPERIAL MUNI ALTIMETER SETTING AND INCREASE ALL MDA 220 FT, AND CAT B VISIBILITY 1/4 MILE, CAT C 3/4 AND ETUYE FIX MINIMUMS CAT C 1/2 MILE.

CHART NOTE: CIRCLING NA TO RWYS 17 AND 35.



ADDITIONAL FLIGHT DATA:

FAC 500 FEET L OF RWY C/L EXTENDED 3000 FEET FROM THLD
CHART VDP AT 1.74 DME
DISTANCE VDP TO THLD 1.29 NM
CHART FAS OBST: 2749 TREE 401018N/1003337W.
HOLD SE, RT, 294.00 INBOUND

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
S-30	3160	1	602	3160	1	602	3160	1 3/4	602		NA				
CIRCLING	3160	1	577	3160	1	577	3160	1 3/4	577		NA				
ETUYE FIX MINIMUMS (DME OR FM REQUIRED)															
S-30	3000	1	442	3000	1	442	3000	1 3/8	442		NA				
CIRCLING	3020	1	437	3040	1	457	3040	1 1/2	457		NA				

CHANGES - REASONS

1. INCORPORATED NOTAM 8/5835. CHANGED CHART NOTE FROM WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE IMPERIAL MUNI ALTIMETER SETTING AND INCREASE ALL MDA 220 FT, AND CAT B VISIBILITY 1/4 MILE, CAT C 3/4 AND EYUTE FIX MINIMUMS CAT C 1/2 MILE. TO WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE IMPERIAL MUNI ALTIMETER SETTING AND INCREASE ALL MDA 220 FT, AND CAT B VISIBILITY 1/4 MILE, CAT C 3/4 AND ETUYE FIX MINIMUMS CAT C 1/2 MILE. - CORRECTED SPELLING FOR ETUYE.
2. ADDED CHART NOTE "CIRCLING NA TO RWYS 17 AND 35" - INCORPORATED P NOTAM FDC 6/2581.

COORDINATED WITH:

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

FLIGHT CHECKED BY
PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY
JULIE A. MORGAN (KEITH CTR JONES)

APPROVED BY
JULIE MORGAN

OFFICE

OFFICE
AJV-5420

OFFICE
AJV-5420

DATE

DATE

DATE
11/19/2018

Digitally signed by
ROBERT G HAMILTON
Dec 14, 2018

Digitally signed by
ROBERT G HAMILTON
Dec 14, 2018

TITLE
MANAGER
Digitally signed by
ROBERT G HAMILTON
Dec 14, 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> NORTH PLATTE RGNL AIRPORT LEE BIRD FIELD	<u>AIRPORT ID</u> KLBF	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 12	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> NORTH PLATTE	<u>STATE</u> NE
<u>AIRPORT ELEVATION</u> 2777	<u>TDZE</u> 2777	<u>SUPERSEDED</u> RNAV (GPS) RWY 12	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 02/05/2015	<u>MAG VAR</u> 6E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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. 030/30 CW 210/30	NOPT	030/15 CW 210/15		5300
2. 030/15 CW 210/15		AGHAN	IF/IAF	4900
3. 210/30 CW 030/30		210/10 CW 030/10		5300
4. 210/10 CW 030/10		AGHAN	IF/IAF	4900

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>
AGHAN	IF/IAF	FIGDU		TF	FB	1.00	119.75	6.00	4700
FIGDU	FAF	AYOLE/1.80 NM TO RW12		TF	FB	0.30	119.82	4.07	
AYOLE/1.80 NM TO RW12		RW12	MAP	TF	FO	0.30	119.82	1.80	
RW12	MAP	2977 MSL		CA			119.82		
2977 MSL		AJCIZ		DF	FO	1.00			4700

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW12

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4700 DIRECT AJCIZ AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
13
CHECKED

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD NW AGHAN, RT, 119.75 INBOUND, 4900 FT. IN LIEU OF PT (IAF), MAX 10000.

3. FAC: 119.82 FAF: FIGDU DIST FAF TO MAP: 5.87 DIST FAF TO THLD: 5.87

4. MIN ALT: AGHAN 4900, FIGDU 4700, AYOLE/1.80 NM TO RW12 3400*

5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 200 HAT: 0.45 GS ANT: MM: IM:

6. MIN GP INCPT: 4700 GP ALT AT FAF : FIGDU 4700 OM:

7. GP ANGLE: 3.00 34:1: IS CLEAR 20:1: IS CLEAR TCH: 55.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -23°C OR ABOVE 52°C.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 0.90 NM TO RW12*
*LNAV ONLY
WAAS CHANNEL #50434
REFERENCE PATH ID: W12A
CHART FAS OBST: 2852 TREE 410815N/1004260W.
HOLD SE, RT, 300.04 INBOUND
LTP HAE: 824.2 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	2977	3/4	200	2977	3/4	200	2977	3/4	200	2977	3/4	200			
LNAV/VNAV DA	3027	3/4	250	3027	3/4	250	3027	3/4	250	3027	3/4	250			
LNAV MDA	3120	1	343	3120	1	343	3120	1	343	3120	1	343			
CIRCLING	3280	1	503	3320	1	543	3420	1 3/4	643	3560	2 1/2	783			



CHANGES - REASONS

- 1. TERMINAL ROUTES: INTERMEDIATE RNP UPDATED FROM 0.50 TO 1.00. - IAW 8260.19H PARA 4-6-10 F.
- 2. LINE 2: HOLD-IN-LIEU MAX ALTITUDE 10000 ADDED. - IAW 8260.19H 8-6-7 B(2).
- 3. LINE 7: 20:1 IS CLEAR ADDED. - 20:1 PENETRATIONS REMOVED.
- 4. ADDITIONAL FLIGHT DATA: CHART FAS OBST LAT/LONG UPDATED FROM 410815N/1004300W TO 410815N/1004260W. - LNAV OBSTACLE UPDATED.
- 5. CHART NOTE: DME/DME RNP-0.3 NA REMOVED. PBN REQUIREMENTS NOTE: RNP APCH ADDED. - IAW 8260.19H
- 6. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -23C (-9F) OR ABOVE 52C (126F) UPDATED TO -23C TO 52C. - FAHRENHEIT REMOVED IAW 8260.19H.
- 7. CHART NOTE: CIRCLING TO RWY 17 NA AT NIGHT REMOVED. - 20:1 PENETRATIONS REMOVED.
- 8. COORDINATION WITH: A4A ADDED. - IAW 8260.19H 8-6-13A.
- 9. INCORPORATED CHANGES FROM AMDT 1A - IAW FAAO 8260.19H, PARA 8-3-4 C(2).

COORDINATED WITH:

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

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE Digitally signed by
WARDELL HENNING

DEVELOPED BY

WARDELL HENNING (BARBARA GORMAN)

Digitally signed by
WARDELL HENNING
Jan 25, 2019

OFFICE
AJV-5432

DATE
11/01/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
WARDELL HENNING
Jan 25, 2019

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	KLBF
RUNWAY	RW12
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W12A
LTP/FTP LATITUDE	410756.0710N
LTP/FTP LONGITUDE	1004124.8045W
LTP/FTP ELLIPSOIDAL HEIGHT	+08242
FPAP LATITUDE	410703.7975N
FPAP LONGITUDE	1003949.2995W
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	0312
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	9213F064
<u>ADDITIONAL PATH POINT RECORD INFORMATION</u>	
ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+08464
FPAP ORTHOMETRIC HEIGHT	+08464



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 PLATTE RGNL AIRPORT LEE BIRD FIELD	<u>AIRPORT ID</u> KLBF	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 30	<u>ORIGINAL/AMENDMENT</u> 2B	<u>CITY</u> NORTH PLATTE	<u>STATE</u> NE
<u>AIRPORT ELEVATION</u> 2777	<u>TDZE</u> 2771	<u>SUPERSEDED</u> RNAV (GPS) RWY 30	<u>ORIGINAL/AMENDMENT</u> 2A	<u>DATED</u> 02/05/2015	<u>MAG VAR</u> 6E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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. 210/30 CW 030/30	NOPT	AJCIZ	IF/IAF	4700
2. 030/30 CW 210/30		030/15 CW 210/15		5300
3. 030/15 CW 210/15		AJCIZ	IF/IAF	4700

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>
AJCIZ	IF/IAF	BEMXI		TF	FB	1.00	300.04	6.00	4600
BEMXI	FAF	WIVGO/2.00 NM TO RW30		TF	FB	0.30	299.97	3.58	
WIVGO/2.00 NM TO RW30		RW30	MAP	TF	FO	0.30	299.97	2.00	
RW30	MAP	2971 MSL		CA			299.97		
2971 MSL		AGHAN		DF	FO	1.00			4900

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW30

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4900 DIRECT AGHAN AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SE AJCIZ, RT, 300.04 INBOUND, 4700 FT. IN LIEU OF PT (IAF), MAX 10000.

3. FAC: 299.97FAF: BEMXIDIST FAF TO MAP: 5.58DIST FAF TO THLD: 5.58

4. MIN ALT: AJCIZ 4700, BEMXI 4600, WIVGO/2.00 NM TO RW30 3460*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:200 HAT: 0.45GS ANT:

6. MIN GP INCPT: 4600GP ALT AT FAF : BEMXI 4600OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 55.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -23°C OR ABOVE 52°C.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 0.93 NM TO RW30*
*LNAV ONLY
WAAS CHANNEL #60915
REFERENCE PATH ID: W30A
CHART FAS OBST: 2855 TREE 410638N/1004022W.
CHART: 2938 TOWER 410538N/1003805W.
HOLD NW, RT, 119.75 INBOUND
LTP HAE: 821.7 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	2971	1/2	200	2971	1/2	200	2971	1/2	200	2971	1/2	200			
LNAV/VNAV DA	3021	1/2	250	3021	1/2	250	3021	1/2	250	3021	1/2	250			
LNAV MDA	3120	1/2	349	3120	1/2	349	3120	5/8	349	3120	5/8	349			
CIRCLING	3280	1	503	3320	1	543	3420	1 3/4	643	3560	2 1/2	783			



CHANGES - REASONS

- 1. TERMINAL ROUTES: INTERMEDIATE RNP UPDATED FROM 0.50 TO 1.00. - IAW 8260.19H PARA 4-6-10 F.
- 2. LINE 2: HOLD-IN-LIEU MAX ALTITUDE 10000 ADDED. - IAW 8260.19H 8-6-7 B(2)..
- 3. LINE 7: 20:1 IS CLEAR ADDED. - 20:1 PENETRATIONS REMOVED.
- 4. CHART NOTE: DME/DME RNP-0.3 NA REMOVED. PBN REQUIREMENTS NOTE: RNP APCH ADDED. - IAW 8260.19H
- 5. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -23C (-9F) OR ABOVE 52C (126F) UPDATED TO -23C TO 52C. - FAHRENHEIT REMOVED IAW 8260.19H.
- 6. CHART NOTE: CIRCLING TO RWY 17 NA AT NIGHT REMOVED. - 20:1 PENETRATIONS REMOVED.
- 7. COORDINATION WITH: A4A ADDED. - IAW 8260.19H 8-6-13A.
- 8. INCORPORATED CHANGES FROM AMDT 2A. - IAW FAAO 8260.19H, PARA 8-3-4 C(2).

COORDINATED WITH:

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

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

Digitally signed by

DATE

WARDELL HENNING

Jan 25, 2019

DEVELOPED BY

WARDELL HENNING (BARBARA GORMAN)

Digitally signed by

WARDELL HENNING

Jan 25, 2019

OFFICE

AJV-5432

DATE

11/02/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

WARDELL HENNING

Jan 25, 2019

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	KLBF
RUNWAY	RW30
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W30A
LTP/FTP LATITUDE	410709.7300N
LTP/FTP LONGITUDE	1004000.1280W
LTP/FTP ELLIPSOIDAL HEIGHT	+08217
FPAP LATITUDE	410801.9945N
FPAP LONGITUDE	1004135.6445W
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	0312
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER	844409C6

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+08440
FPAP ORTHOMETRIC HEIGHT	+08440



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>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
NORTH PLATTE RGNL AIRPORT LEE BIRD FIELD	KLBF	RNAV (GPS) RWY 35	1B	NORTH PLATTE	NE	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
2777	2776	RNAV (GPS) RWY 35	1A	02/05/2015	6E	2015
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
RNAV		25 APRIL 2019	ROUTINE			

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 265/30 CW 085/30	NOPT	MUYDO	IF/IAF	5000
2. 085/30 CW 265/30		085/15 CW 265/15		5300
3. 085/15 CW 265/15		MUYDO	IF/IAF	5000

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>
MUYDO	IF/IAF	GUHYY		TF	FB	1.00	355.10	6.00	4300
GUHYY	FAF	LIMGE/2.60 NM TO RW35		TF	FB	0.30	355.10	2.07	
LIMGE/2.60 NM TO RW35		RW35	MAP	TF	FO	0.30	355.10	2.60	
RW35	MAP	3140 MSL		CA			355.10		
3140 MSL		COLIV		DF	FO	1.00			5000

MISSED APPROACH

MAP:

LP: RW35
 LNAV: RW35

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 5000 DIRECT COLIV AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S MUYDO, RT, 355.10 INBOUND, 5000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 355.10FAF: GUHYYDIST FAF TO MAP: 4.67DIST FAF TO THLD: 4.67

4. MIN ALT: MUYDO 5000, GUHYY 4300, LIMGE/2.60 NM TO RW35 3640

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:

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: RWY 35 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:

GUHYY TO RW35: 3.00/40.
CHART CIRCLING ICON.
CHART VDP AT 1.06 NM TO RW35
WAAS CHANNEL #56634
REFERENCE PATH ID: W35A
CHART FAS OBST: 2896 TREE 410528N/1004203W.
CHART: 2993 ANT 410425N/1004220W.
HOLD N, RT, 175.10 INBOUND
LTP HAE: 823 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
LP MDA	3140	1	364	3140	1	364	3140	1	364	3140	1	364			
LNAV MDA	3160	1	384	3160	1	384	3160	1 1/8	384	3160	1 1/8	384			
CIRCLING	3280	1	503	3320	1	543	3420	1 3/4	643	3560	2 1/2	783			



CHANGES - REASONS

- 1. TERMINAL ROUTES: INTERMEDIATE RNP UPDATED FROM 0.50 TO 1.00. - IAW 8260.19H PARA 4-6-10 F.
- 2. LINE 2: HOLD-IN-LIEU MAX ALTITUDE 6000 ADDED. - UPDATED FORMS.
- 3. LINE 7: 20:1 IS CLEAR ADDED. - 20:1 PENETRATIONS REMOVED.
- 4. CHART NOTE: DME/DME RNP-0.3 NA REMOVED. PBN REQUIREMENTS NOTE: RNP APCH ADDED. - IAW 8260.19H
- 5. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT UPDATED TO VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). - IAW 8260.19H 8-6-9 M (2).
- 6. CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED UPDATED TO RWY 35 HELICOPTER VISIBILITY BELOW 3/4 SM NOT AUTHORIZED. - IAW FAAO 8260.19H, PARA 8-6-11K(3).
- 7. CHART NOTE: CIRCLING TO RWY 17 NA AT NIGHT REMOVED. - 20:1 PENETRATIONS REMOVED.
- 8. COORDINATION WITH: A4A ADDED. - IAW 8260.19H 8-6-13A.
- 9. INCORPORATED CHANGES FROM AMDT 1A. - IAW FAAO 8260.19H, PARA 8-3-4C(2).

COORDINATED WITH:

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

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY

WARDELL HENNING (BARBARA GORMAN)

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

WARDELL HENNING

Jan 25, 2019

OFFICE

Digitally signed by

DATE

WARDELL HENNING

Jan 25, 2019

OFFICE

AJV-5432

DATE

11/05/2018

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	KLBF
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	410718.0710N
LTP/FTP LONGITUDE	1004135.3425W
LTP/FTP ELLIPSOIDAL HEIGHT	+08230
FPAP LATITUDE	410847.2055N
FPAP LONGITUDE	1004133.0785W
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	1488
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	B6F3F60B
<u>ADDITIONAL PATH POINT RECORD INFORMATION</u>	
ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+08453
FPAP ORTHOMETRIC HEIGHT	+08453



**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>
SEWARD, NE	SEWARD MUNI	25 APRIL 2019	ORIG-B

TAKEOFF MINIMUMS:

RWY 4, 22: NA - ENVIRONMENTAL

RWY 16, 34: STANDARD

TEXTUAL DEPARTURE PROCEDURES:

RWY 16: CLIMB HEADING 168.45 TO 3500 BEFORE TURNING RIGHT.

RWY 34: CLIMB HEADING 348.45 TO 3000 BEFORE TURNING LEFT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 16, SIGN 10 FT FROM DER, 482 FT RIGHT OF CENTERLINE, 10 FT AGL/1513 FT MSL.

FENCE, SIGN BEGINNING 22 FT FROM DER, 342 FT RIGHT OF CENTERLINE, UP TO 11 FT AGL/1514 FT MSL.

NOTE: RWY 34, FENCE BEGINNING 58 FT FROM DER, 449 FT LEFT OF CENTERLINE, UP TO 4 FT AGL/1506 FT MSL.

TREES BEGINNING 474 FT FROM DER, 395 FT LEFT OF CENTERLINE, UP TO 33 FT AGL/1526 FT MSL.

POLE 1281 FT FROM DER, 676 FT LEFT OF CENTERLINE, 29 FT AGL/1530 FT MSL.

CONTROLLING OBSTACLES:

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 16, 34: 3031 FEET MSL TOWER 404810.00N/0971053.00W.

REMARKS:

FLIGHT INSPECTED BY:

THOMAS CONKLIN

Digitally signed by
DAVID TEFFETELLER
Dec 10, 2018

OFFICE SYMBOL:

FICO

DATE:

12/4/18

DEVELOPED BY:

CARLOS ESCALANTE

Digitally signed by
CARLOS J ESCALANTE
Oct 15, 2018

OFFICE SYMBOL:
AJV-5433

DATE:
08/22/2018

APPROVED BY:

PATRICK MULQUEEN

Digitally signed by
DAVID TEFFETELLER
Dec 10, 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:

CFPT, ZMP ARTCC, NE STATE AERO, AMGR

CHANGES - REASONS:

ADDED TAKEOFF OBSTACLE NOTES FOR RWYS 16 AND 34 - NEW OBSTACLE DATA AND EVALUATION IDENTIFYING LOW CLOSE IN'S.



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>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
RED LION	N73	RNAV (GPS) RWY 5	ORIG-A	VINCENTOWN	NJ	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
54	54	RNAV (GPS) RWY 5	ORIG	03/12/2009		
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
			ROUTINE	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 25 APRIL 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:				
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:	20:1:	TCH:	
8. MSA FROM:				

PBN REQUIREMENTS NOTE:



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: ZNY, WRI ATC, ARPT MANAGER

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY
JOHN THORNTON

Digitally signed by
MARK D ADAMS
Jan 29, 2019

OFFICE
AJV-A412

DATE
12/13/2018

APPROVED BY
LONNIE EVERHART

Digitally signed by
MARK D ADAMS
Jan 09, 2019

OFFICE
AJV-A41

DATE

TITLE



**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>
VINCENTOWN, NJ	RED LION	12 MAR 2009	1

TAKEOFF MINIMUMS:

Procedure Canceled Effective

25 APRIL 2019

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

CONTROLLING OBSTACLES:

REMARKS:

FLIGHT INSPECTED BY:

OFFICE SYMBOL:

DATE:

DEVELOPED BY:

JOHN THORNTON

Digitally signed by

MARK D ADAMS

Jan 29, 2019

OFFICE SYMBOL:

AJV-A412

DATE:

12/13/2018

APPROVED BY:

LONNIE EVERHART

Digitally signed by

MARK D ADAMS

Jan 09, 2019

OFFICE SYMBOL:

AJV-A41

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A

ALPA

AOPA

APA

HAI

NBAA



OTHER:

ZNY, WRI ATCT, WRI APP CON

CHANGES - REASONS:

PROCEDURE CANCELLED - AIRPORT CHANGING FROM PUBLIC TO PRIVATE.

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

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<u>AIRPORT</u> RED LION	<u>AIRPORT ID</u> N73	<u>PROCEDURE NAME</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> 6A	<u>CITY</u> VINCENTOWN	<u>STATE</u> NJ	
<u>AIRPORT ELEVATION</u> 54	<u>TDZE</u>	<u>SUPERSEDED</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> 6	<u>DATED</u> 03/12/2009	<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 25 APRIL 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:



AIRPORT
RED LION

AIRPORT ID
N73

PROCEDURE NAME
VOR-A

ORIGINAL/AMENDMENT
6A

CITY
VINCENTOWN

STATE
NJ

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: ZNY, WRI ATCT, ARPT MGR

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY
JOHN THORNTON

Digitally signed by
MARK D ADAMS
Jan 29, 2019

OFFICE
AJV-A412

DATE
12/13/2018

APPROVED BY
LONNIE EVERHART

Digitally signed by
MARK D ADAMS
Jan 09, 2019

OFFICE
AJV-A41

DATE

TITLE



**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>
TRUTH OR CONSEQUENCES, NM	TRUTH OR CONSEQUENCES MUNI	25 APRIL 2019	2

TAKEOFF MINIMUMS:

RWY 1, 7, 11, 13, 15, 19, 25 29, 31, 33, STANDARD WITH MINIMUM CLIMB OF 370 FT PER NM TO 13000 OR 3700-3 FOR VCOA.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

RWY 1, 7, 11, 13, 15, 19, 25 29, 31, 33, OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS TRUTH OR CONSEQUENCES MUNI AIRPORT AT OR ABOVE 8400 BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 7, TREE 196 FT FROM DER, 47 FT LEFT OF CENTERLINE, 4823 FT MSL.
NOTE: RWY 13, FENCE 39 FT FROM DER, 342 FT LEFT OF CENTERLINE, 7 FT AGL/4796 FT MSL.
VEGETATION 65 FT FROM DER, 115 FT LEFT OF CENTERLINE, 4809 FT MSL.
NOTE: RWY 31, VEGETATION 57 FT FROM DER, 399 FT LEFT OF CENTERLINE, 4861 FT MSL.
VEGETATION 170 FT FROM DER, 519 FT LEFT OF CENTERLINE, 4866 FT MSL.
NOTE: RWY 33, TOWER 527 FT FROM DER, 553 FT LEFT OF CENTERLINE, 66 FT AGL/4895 FT MSL.

CONTROLLING OBSTACLES:

RWY 1, 7, 11, 13, 15, 19, 25 29, 31, 33, 10453 FT MSL AAO 333309.00N/1072606.00W.

RWY 1, 7, 11, 13, 15, 19, 25 29, 31, 33, 10453 FT MSL AAO 333309.00N/1072606.00W (VCOA DIVERSE EVAL), 5686 FT MSL AAO 330951.00N/1071809.00W (VCA).

REMARKS:

FLIGHT INSPECTED BY: *Digitally signed by*
BRIAN VEIT **DAVID DANNER**
Jan 17, 2019

OFFICE SYMBOL: **DATE:**
FICO 1/15/2019

DEVELOPED BY: *Digitally signed by*
DEANNA M. FIELDS **DEANNA M FIELDS**
Dec 31, 2018

OFFICE SYMBOL: **DATE:**
AJV-5421 12/03/2018

APPROVED BY: *Digitally signed by*
JULIE A. MORGAN **DAVID DANNER**
Jan 17, 2019

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:
AIRPORT MANAGER, ZAB CENTER

CHANGES - REASONS:

DELETED TAKEOFF MINIMUMS: 1500-3 OR STANDARD WITH MINIMUM CLIMB OF 500' PER NM TO 8000' - NO LONGER MEET CRITERIA.
ADDED TAKEOFF MINIMUMS: RWY 1, 7, 11, 13, 15, 19, 25 29, 31, 33, STANDARD WITH MINIMUM CLIMB OF 370 FT PER NM TO 13000 OR 3700-3 FOR VCOA - MEET CURRENT CRITERIA.
DELETED IFR DEPARTURE PROCEDURE: RWYS 19, 25, 29, 31: TURN RIGHT; RWYS 1,7, 11, 13, 15, 33: TURN LEFT, CLIMB DIRECT TCS, CONTINUE CLIMB IN HOLDING PATTERN (HOLD N, LEFT TURN, 180 INBOUND) TO CROSS TCS VORTAC AT OR ABOVE THE MEA FOR DIRECTION OF FLIGHT- NO LONGER MEET CRITERIA.
ADDED VCOA - TO AVOID CONTROLLING OBSTACLE GREATER THAN THREE STATUTE MILES FROM THE DEPARTURE END OF THE RUNWAY WITH

QUALITY
3
CHECKED

**FEDERAL AVIATION ADMINISTRATION
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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
TRUTH OR CONSEQUENCES, NM	TRUTH OR CONSEQUENCES MUNI	25 APRIL 2019	2

A CLIMB GRADIENT GREATER THAN 200 FT PER NM.

UPDATED RWY TAKEOFF OBSTACLE NOTES - EVALUATED USING UPDATED OBSTACLE SURVEY SINCE LAST AMENDMENT, GROUPED AND FORMATTED IN ACCORDANCE WITH THE DEPARTURE OBSTACLE GROUPER SOP (1.0).



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

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<u>AIRPORT</u> NORTH BUFFALO SUBURBAN	<u>AIRPORT ID</u> K0G0	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 28	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> LOCKPORT	<u>STATE</u> NY	
<u>AIRPORT ELEVATION</u> 588	<u>TDZE</u> 588	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<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 25 APRIL 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:

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: 20:1: TCH:

8. MSA FROM:

PBN REQUIREMENTS NOTE:

NOTES:



FEDERAL AVIATION ADMINISTRATION
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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
LOCKPORT, NY	NORTH BUFFALO SUBURBAN	22 MAY 1997	ORIG

TAKEOFF MINIMUMS:

Procedure Canceled Effective 25 APRIL 2019

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

CONTROLLING OBSTACLES:

REMARKS:

FLIGHT INSPECTED BY:

OFFICE SYMBOL:

DATE:

DEVELOPED BY:

DEANNA.M.FIELD5

Digitally signed by
DEANNA M FIELD5
Oct 22, 2018

OFFICE SYMBOL:

AJV-5421

DATE:

10/22/2018

APPROVED BY:

JULIE A. MORGAN

Digitally signed by
DAVID DANNER
Oct 29, 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:

ZOB, BUF APP CON, K0G0 AIRPORT MANAGER

CHANGES - REASONS:



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

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<u>AIRPORT</u> JOHN F KENNEDY INTL	<u>AIRPORT ID</u> KJFK	<u>PROCEDURE NAME</u> VOR RWY 4L	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> NEW YORK	<u>STATE</u> NY	
<u>AIRPORT ELEVATION</u> 13	<u>TDZE</u> 13	<u>SUPERSEDED</u> VOR RWY 4L	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 10/15/2015	<u>MAG VAR</u> 12W	<u>EPOCH YEAR</u> 1980
<u>FACILITY</u> JFK	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
JFK VOR/DME		KTAIT/JFK 5.30 DME/RADAR					231.94	5.30	1500

MISSED APPROACH

MAP:

4.46 NM AFTER KTAIT/JFK 5.30 DME/RADAR OR AT JFK 0.84 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 THEN CLIMBING RIGHT TURN TO 3000 ON JFK VOR/DME R-062 TO DUFFY INT/JFK 14.79 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- 1. PT** **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
2. HOLD SW KTAIT, RT, 051.94 INBOUND, 1500 FT. IN LIEU OF PT (IAF), MAX 6000.
- 3. FAC:** 051.94 **FAF:** KTAIT/JFK 5.30 DME/RADAR **DIST FAF TO MAP:** 4.46 **DIST FAF TO THLD:** 4.46
- 4. MIN ALT:** KTAIT/JFK 5.30 DME/RADAR 1500
- 8. MSA FROM:** JFK VOR/DME 360-270 2000, 270-360 2900

EQUIPMENT REQUIREMENTS NOTES:

DME OR RADAR REQUIRED FOR PROCEDURE ENTRY.

NOTES:

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



ADDITIONAL FLIGHT DATA:

KTAIT TO RW04L: 3.02/57
CHART CIRCLING ICON.
CHART VDP AT 2.07 DME
DISTANCE VDP TO THLD 1.23 NM
FAS OBST: 214 AAO 403450N/0734959W.
FAC CROSSES RWY C/L EXTENDED 3599 FT FROM THLD.
HOLD NE, LT, 242.03 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
S-04L	480	5500	467	480	5500	467	480	1 3/8	467	480	1 3/8	467			
CIRCLING	640	1	627	640	1	627	640	1 3/4	627	660	2	647			

CHANGES - REASONS

1. REMOVED ALL REFERENCE OF KTAIT INT AND ADDED EQUIPEMENT REQUIREMENTS NOTE: DME OR RADAR REQUIRED FOR PROCEDURE ENTRY - CRI RADIALS 047-175 ARE UNUSABLE.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: AMGR, NY TRACON, ZNY, NY DEPT OF AVIA, JFK ATCT, ATA

FLIGHT CHECKED BY
PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

Digitally signed by
ROBERT G HAMILTON
Dec 13, 2018

DEVELOPED BY
JIMMY S. HUGHES
Digitally signed by
JIMMY S HUGHES
Dec 12, 2018

OFFICE
AJV-5422

DATE
11/28/2018

APPROVED BY
JULIE MORGAN

OFFICE
AJV-5420

DATE

TITLE
MANAGER
Digitally signed by
ROBERT G HAMILTON
Dec 13, 2018



**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> JOHN F KENNEDY INTL	<u>AIRPORT ID</u> KJFK	<u>PROCEDURE NAME</u> VOR RWY 4R	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> NEW YORK	<u>STATE</u> NY	
<u>AIRPORT ELEVATION</u> 13	<u>TDZE</u> 12	<u>SUPERSEDED</u> VOR RWY 4R	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 01/18/2007	<u>MAG VAR</u> 12W	<u>EPOCH YEAR</u> 1980
<u>FACILITY</u> JFK	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
JFK VOR/DME		BEBKE/JFK 4.86 DME					208.18	4.86	1500

MISSED APPROACH

MAP:

4.44 NM AFTER BEBKE/JFK 4.86 DME OR AT JFK 0.42 DME

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 4000 VIA HEADING 100 AND V44 TO DPK VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- 1. PT** **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
- 2.** HOLD SW BEBKE, RT, 028.18 INBOUND, 1500 FT. IN LIEU OF PT (IAF), MAX 4000.
- 3. FAC:** 028.18 **FAF:** BEBKE/JFK 4.86 DME **DIST FAF TO MAP:** 4.44 **DIST FAF TO THLD:** 4.44
- 4. MIN ALT:** BEBKE/JFK 4.86 DME 1500
- 8. MSA FROM:** JFK VOR/DME 360-270 2000, 270-360 2900

EQUIPMENT REQUIREMENTS NOTES:

DME OR RADAR REQUIRED FOR PROCEDURE ENTRY.

NOTES:



ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
BEBKE TO RW04R: 3.04/53.
CHART VDP AT 1.88 DME
DISTANCE VDP TO THLD 1.47 NM
CHART FAS OBST: 277 STACK (33-0563) 403638N/0734540W.
FAC CROSSES RWY C/L EXTENDED 4113 FT FROM THLD.
HOLD E, LT, 258.09 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
S-04R	540	2400	528	540	2400	528	540	5000	528	540	6000	528			
CIRCLING	640	1	627	640	1	627	640	1 3/4	627	660	2	647			

CHANGES - REASONS

1. REMOVED ALL REFERENCE OF BEBKE AS AN INT AND ADDED EQUIPEMENT REQUIREMENTS NOTE: DME OR RADAR REQUIRED FOR PROCEDURE ENTRY - CRI RADIALS 047-175 ARE UNUSABLE.
2. CHANGED CAT D CIRCLING MDA/HAA FROM 640/627 TO 660/647 AND ADDED CHART CIRCLING ICON - TO MATCH ALL OTHER RUNWAY 4 PROCEDURES.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: APT MGR, NY TRACON, JFK ATCT, ZNY, NYC FPO, NY DIV OF AVIA, ATA

FLIGHT CHECKED BY
PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE
DATE
Digitally signed by
ROBERT G HAMILTON
Dec 13, 2018

DEVELOPED BY
JIMMY S. HUGHES
Digitally signed by
JIMMY S HUGHES

OFFICE
AJV-5422
DATE
11/28/2018

APPROVED BY
JULIE MORGAN
Dec 12, 2018

OFFICE
AJV-5420
DATE
Digitally signed by
ROBERT G HAMILTON
Dec 13, 2018
TITLE
MANAGER



**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> LAGUARDIA	<u>AIRPORT ID</u> KLGA	<u>PROCEDURE NAME</u> VOR-H	<u>ORIGINAL/AMENDMENT</u> 3C	<u>CITY</u> NEW YORK	<u>STATE</u> NY	
<u>AIRPORT ELEVATION</u> 21	<u>TDZE</u>	<u>SUPERSEDED</u> VOR/DME-H	<u>ORIGINAL/AMENDMENT</u> 3B	<u>DATED</u> 02/06/2014	<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 25 APRIL 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: ZNY, NYC APP CON, NY/NJ PORT AUTHORITY, ARPT MGR.

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY *Digitally signed by*
ANDREA CHANEY **ANDREA J CHANEY**

Digitally signed by
WARDELL HENNING
Jan 03, 2019

OFFICE
AJV-A433

DATE
12/10/2018

APPROVED BY
PATRICK MULQUEEN

Dec 12, 2018

Digitally signed by
WARDELL HENNING
Jan 03, 2019

OFFICE
AJV-A43

DATE

TITLE



**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
SCHENECTADY, NY	SCHENECTADY COUNTY	25 APRIL 2019	6

TAKEOFF MINIMUMS:

RWY 4, 10, 22: STANDARD.

RWY 28, STANDARD WITH MINIMUM CLIMB OF 288 FT PER NM TO 1900, OR 1200-2 1/2 FOR VCOA.

TEXTUAL DEPARTURE PROCEDURES:

RWY 22: CLIMB ON HEADING 234.99 TO 1300 BEFORE TURNING RIGHT.

VISUAL CLIMB OVER AIRPORT:

RWY 28: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS SCHENECTADY COUNTY AIRPORT AT OR ABOVE 1400 BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 4, VEGETATION 101 FT FROM DER, 498 FT LEFT OF CENTERLINE, 2 FT AGL/401 FT MSL.

TANK, VEGETATION, TREE BEGINNING 133 FT FROM DER, 191 FT LEFT OF CENTERLINE, UP TO 130 FT AGL/505 FT MSL.

TREES BEGINNING 1053 FT FROM DER, 481 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/433 FT MSL.

TREE 1257 FT FROM DER, 559 FT RIGHT OF CENTERLINE, 100 FT AGL/433 FT MSL.

TREES BEGINNING 1725 FT FROM DER, ON CENTERLINE AND 530 FT RIGHT OF CENTERLINE, UP TO 84 FT AGL/436 FT MSL.

NOTE: RWY 10, POLE 2 FT FROM DER, 81 FT LEFT OF CENTERLINE, 322 FT MSL.

POLE 3 FT FROM DER, 78 FT RIGHT OF CENTERLINE, 321 FT MSL.

TREES BEGINNING 41 FT FROM DER, 259 FT RIGHT OF CENTERLINE, UP TO 343 FT MSL.

TREE 57 FT FROM DER, 410 FT LEFT OF CENTERLINE, 332 FT MSL.

TREE, FENCE BEGINNING 68 FT FROM DER, 431 FT LEFT OF CENTERLINE, UP TO 33 FT AGL/352 FT MSL.

TREE, BUILDING BEGINNING 807 FT FROM DER, 218 FT LEFT OF CENTERLINE, UP TO 357 FT MSL.

TREE 1015 FT FROM DER, 712 FT LEFT OF CENTERLINE, 358 FT MSL.

BUILDINGS BEGINNING 1019 FT FROM DER, 574 FT LEFT OF CENTERLINE, UP TO 57 FT AGL/366 FT MSL.

TREES BEGINNING 1176 FT FROM DER, 400 FT LEFT OF CENTERLINE, UP TO 369 FT MSL.

NOTE: RWY 22, TREES BEGINNING 486 FT FROM DER, 789 FT RIGHT OF CENTERLINE, UP TO 101 AGL/413 MSL.

TREE 1156 FT FROM DER, 292 FT LEFT OF CENTERLINE, 59 FT AGL/349 FT MSL.

TREE 1215 FT FROM DER, 679 FT LEFT OF CENTERLINE, 80 FT AGL/366 FT MSL.

TREE 2187 FT FROM DER, 850 FT RIGHT OF CENTERLINE, 104 AGL/403 MSL.

NOTE: RWY 28, TREE 3 FT FROM DER, 460 FT LEFT OF CENTERLINE, 92 FT AGL/410 FT MSL.

TREES, POLES, BUILDINGS, TRAVERSE WAY BEGINNING 18 FT FROM DER, 430 FT LEFT AND 53 FT RIGHT OF CENTERLINE, UP TO 420 FT MSL.

TREES BEGINNING 1484 FT FROM DER, 250 FT RIGHT OF CENTERLINE, UP TO 94 FT AGL/415 FT MSL.

TREES BEGINNING 1496 FT FROM DER, 3 FT RIGHT OF CENTERLINE, UP TO 422 FT MSL.

TREES BEGINNING 3699 FT FROM DER, 670 FT RIGHT OF CENTERLINE, UP TO 461 FT MSL.

TREE 5450 FT FROM DER, 1958 FT RIGHT OF CENTERLINE, UP TO 466 FT MSL.

TREE 5763 FT FROM DER, 2004 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/471 FT MSL.

CONTROLLING OBSTACLES:

RWY 28: 1533 FEET MSL AAO 425125.05N/0740401.60W (CGTA). 1490 FEET MSL AAO 425118.64N/0740342.68W (CG).

RWY 28 (VCOA): 1533 FEET MSL AAO 425125.05N/0740401.60W (VCOA DIVERSE). 950 FEET MSL AAO 425324.47N/0735927.25W (VCA).

OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 22 - 1500 FEET MSL AAO 425045.36N/0740400.51W.



**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>
SCHENECTADY, NY	SCHENECTADY COUNTY	25 APRIL 2019	6

REMARKS:

FLIGHT INSPECTED BY:

BOB S PRESSLER

Digitally signed by

DAVID TEFFETELLER

Jan 25, 2019

OFFICE SYMBOL:

FICO

DATE:

1/2/19

DEVELOPED BY:

CARLOS ESCALANTE

Digitally signed by

CARLOS J ESCALANTE

Nov 08, 2018

OFFICE SYMBOL:

AJV-5433

DATE:

08/08/2018

APPROVED BY:

PATRICK MULQUEEN

Digitally signed by

DAVID TEFFETELLER

Jan 25, 2019

OFFICE SYMBOL:

AJV-5430

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A

ALPA

AOPA

APA

HAI

NBAA



OTHER:

EST FPT, ZBW, ALB ATCT, SCH ATCT, SCH AMGR

CHANGES - REASONS:

1. UPDATED CONTROLLING OBSTACLES FOR RWY 28 AND OBSTACLE MANDATING ROUTE DEVELOPMENT FOR RWY 22, FROM 1449 FT MSL TOWER 425024.26N/0740351.58W TO 1500 FT MSL AAO 425045.36N/0740400.51W - NEW MAP STUDY AND TARGETS EVALUATION.
2. UPDATED RWY 22 DEPARTURE PROCEDURE FROM CLIMB ON HEADING 235.00 TO 1300 BEFORE TURNING RIGHT TO CLIMB ON HEADING 234.99 TO 1300 BEFORE TURNING RIGHT - THE MAXIMUM ALLOWABLE OFFSET WITHOUT A WAIVER IS 15 DEGREES EITHER SIDE OF RUNWAY HEADING. THE MAXIMUM ALLOWABLE OFFSET FOR RUNWAY 22 IS 234.99.
3. UPDATED RWY 28 TAKEOFF MINIMUMS FROM STANDARD WITH MINIMUM CLIMB OF 275 FT PER NM TO 1900 TO STANDARD WITH MINIMUM CLIMB OF 288 FT PER NM TO 1900, OR 1200-2 1/2 FOR VCOA - NEW MAP STUDY AND TARGETS EVALUATION BASED OFF PENETRATIONS OUTSIDE SEE AND AVOID AREA.
4. UPDATED TAKEOFF OBSTACLE NOTES - NEW TARGETS EVALUATION.
5. ADDED CONTROLLING OBSTACLE FOR RWY 22 - MAP STUDY AND NEW TARGETS EVALUATION.

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

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<u>AIRPORT</u> AKRON FULTON INTL	<u>AIRPORT ID</u> KAKR	<u>PROCEDURE NAME</u> NDB RWY 25	<u>ORIGINAL/AMENDMENT</u> 15A	<u>CITY</u> AKRON	<u>STATE</u> OH	
<u>AIRPORT ELEVATION</u> 1068	<u>TDZE</u> 1059	<u>SUPERSEDED</u> NDB RWY 25	<u>ORIGINAL/AMENDMENT</u> 15	<u>DATED</u> 05/24/2018	<u>MAG VAR</u> 7W	<u>EPOCH YEAR</u> 1990
<u>FACILITY</u> AK	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
BSV VOR/DME		AKRON LOM					009.88	19.83	3000

MISSED APPROACH

MAP:

3.65 NM AFTER AKRON LOM

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3100 ON HEADING 249 AND BSV VOR/DME R-322 TO RITZS INT/BSV 21.23 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1800 THEN CLIMBING RIGHT TURN TO 3000 DIRECT AKRON LOM AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000.

PROFILE:

1. PT R **SIDE OF COURSE** 069.04 **OUTBOUND** 3000 **FT WITHIN** 10 **MILES OF** AKRON LOM (IAF)
- 2.
3. **FAC:** 249.04 **FAF:** AKRON LOM **DIST FAF TO MAP:** 3.65 **DIST FAF TO THLD:** 3.65
4. **MIN ALT:** AKRON LOM 2300
8. **MSA FROM:** AKRON LOM 3100

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.

CHART NOTE: RWY 25 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.



ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART FAS OBST: 1307 TOWER 410429N/0812439W.
1400 AAO 410446N/0812414W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD E AKRON LOM, RT, 249.04 INBOUND.
HOLD SE, LT, 322.41 INBOUND

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
S-25	1620	1	561	1620	1	561	1620	1 5/8	561	1620	1 5/8	561			
CIRCLING	1620	1	552	1680	1	612	1800	2	732	1840	2 1/2	772			

CHANGES - REASONS

1.CHANGED ALL REFERENCES OF AKR NDB TO AKRON LOM - CORRECT ERROR FROM PREVIOUS AMENDMENT.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZOB ARTCC, CAK APP CON, AMGR

FLIGHT CHECKED BY
PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY
DAVID DANNER (JOSEPH HILLEY)

APPROVED BY
JULIE MORGAN

OFFICE

OFFICE
AJV-5421

OFFICE
AJV-5420

DATE

DATE
11/12/2018

DATE

Digitally signed by
ROBERT G HAMILTON
Dec 13, 2018

Digitally signed by
ROBERT G HAMILTON
Dec 13, 2018

Digitally signed by
ROBERT G HAMILTON
Dec 13, 2018

TITLE
MANAGER



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> CUYAHOGA COUNTY	<u>AIRPORT ID</u> KCGF	<u>PROCEDURE NAME</u> ILS OR LOC RWY 24	<u>ORIGINAL/AMENDMENT</u> 16A	<u>CITY</u> CLEVELAND	<u>STATE</u> OH	
<u>AIRPORT ELEVATION</u> 876	<u>TDZE</u> 873	<u>SUPERSEDED</u> ILS OR LOC RWY 24	<u>ORIGINAL/AMENDMENT</u> 16	<u>DATED</u> 11/08/2018	<u>MAG VAR</u> 8W	<u>EPOCH YEAR</u> 1995
<u>FACILITY</u> I-CGF	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
WEIDS	IAF	EBLIS		TF	FB	1.00	269.73	7.11	3000
EBLIS INT/I-CGF 13.43 DME	IF	IMUSY INT/I-CGF 9.00 DME					237.48	4.43 (I-CGF)	3000
IMUSY INT/I-CGF 9.00 DME		KROOK INT/I-CGF 5.25 DME					237.48	3.75 (I-CGF)	2300

MISSED APPROACH

MAP:

ILS: DA
 LOC: 4.34 NM AFTER KROOK INT/I-CGF 5.25 DME OR AT I-CGF 0.91 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1600 THEN CLIMBING LEFT TURN TO 3100 ON CXR VOR/DME R-286 TO CXR VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1600 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 180 AND ON DJB VOR/DME R-096 TO WEXER INT/DJB 35.52 DME AND HOLD.

PROFILE:

- PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
- PROFILE STARTS AT EBLIS
- FAC:** 237.48 **FAF:** KROOK INT/I-CGF 5.25 DME **DIST FAF TO MAP:** 4.34 **DIST FAF TO THLD:** 4.34
- MIN ALT:** EBLIS INT/I-CGF 13.43 DME 3000, IMUSY INT/I-CGF 9.00 DME 3000, KROOK INT/I-CGF 5.25 DME 2300
- DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **GS ANT:** 925
- MIN GS INCPT:** 2300 **GS ALT AT FAF :** KROOK INT/I-CGF 5.25 DME 2300 **OM:** **MM:** **IM:**
- GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 44.0
- MSA FROM:** CXR VOR/DME 3100

QUALITY
41
CHECKED

EQUIPMENT REQUIREMENTS NOTES:

RNAV 1-GPS OR RADAR REQUIRED FOR PROCEDURE ENTRY.
AIRCRAFT NOT GPS EQUIPPED - RADAR REQUIRED FOR PROCEDURE ENTRY.

NOTES:

CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 2020.
CHART NOTE: RWY 24 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR INOPERATIVE ALS INCREASE S-LOC CATS C/D VISIBILITY TO 1 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART IN PLANVIEW: WEXER INT/DJB 35.52 DME
CHART VDP AT 1.92 DME*
DISTANCE VDP TO THLD 1.01 NM
* LOC ONLY
FAS OBST: 989 AAO 413602N/0812522W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD E WEXER INT/DJB 35.52 DME, RT, 275.89 INBOUND.
HOLD W, RT, 106.00 INBOUND

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: 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
S-ILS 24	1073	1/2	200	1073	1/2	200	1073	1/2	200	1073	1/2	200			
S-LOC 24	1240	1/2	367	1240	1/2	367	1240	5/8	367	1240	5/8	367			
CIRCLING	1400	1	524	1500	1	624	1560	2	684	1620	2 1/2	744			

CHANGES - REASONS

1. CHANGED WEIDS TO EBLIS TRACK FROM 267.01 TO 269.73 - TO CORRECT A DOCUMENTATION ERROR.
2. REMOVED PBN REQUIREMENTS NOTE: RNAV 1 - REDUNDANT.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZOB ARTCC, CLE ATCT, CGF ATCT, AMGR

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY

MIKE MELSEN
*Digitally signed by
MIKE MELSEN
Dec 20, 2018*

APPROVED BY

PATRICK MULQUEEN
*Digitally signed by
WARDELL HENNING
Jan 03, 2019*

OFFICE
*Digitally signed by
WARDELL HENNING*

Jan 03, 2019
OFFICE
AJV-A432

OFFICE
AJV-A43

DATE

DATE
12/10/2018

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> RICKENBACKER INTL	<u>AIRPORT ID</u> KLCK	<u>PROCEDURE NAME</u> NDB RWY 5R	<u>ORIGINAL/AMENDMENT</u> 2A	<u>CITY</u> COLUMBUS	<u>STATE</u> OH	
<u>AIRPORT ELEVATION</u> 744	<u>TDZE</u> 736	<u>SUPERSEDED</u> NDB RWY 5R	<u>ORIGINAL/AMENDMENT</u> 2	<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 25 APRIL 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: ZID, CMH APP CON, LCK ATCT, AMGR, ATA

FLIGHT CHECKED BY

DEVELOPED BY

APPROVED BY

Mike Melssen

Dec 04, 2018

Mike Melssen

Dec 04, 2018

Patrick Mulqueen

Jan 03, 2019

OFFICE

OFFICE

OFFICE

DATE

DATE

DATE

TITLE



**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> RICKENBACKER INTL	<u>AIRPORT ID</u> KLCK	<u>PROCEDURE NAME</u> NDB RWY 23L	<u>ORIGINAL/AMENDMENT</u> 2A	<u>CITY</u> COLUMBUS	<u>STATE</u> OH	
<u>AIRPORT ELEVATION</u> 744	<u>TDZE</u> 740	<u>SUPERSEDED</u> NDB RWY 23L	<u>ORIGINAL/AMENDMENT</u> 2	<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 25 APRIL 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: ZID, CMH APP CON, CMH ATCT, LCK ATCT, AMGR, ATA

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY *Digitally signed by*
MIKE MELSEN **MIKE MELSEN**
Dec 04, 2018

OFFICE
AJV-5432

DATE
12/04/2018

APPROVED BY
PATRICK MULQUEEN

Digitally signed by
WARDELL HENNING
Jan 03, 2019

OFFICE
AJV-5430

DATE

TITLE
MANAGER



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

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

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

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

RADAR TERMINAL AREA MANEUVERING SECTORS AND ALTITUDES <i>(Sectors and distances measured from radar antenna)</i>												MISSED APPROACH		
FROM	T O	DISTANCE	ALTITUDE	DISTANCE	ALTITUDE	DISTANCE	ALTITUDE	DISTANCE	ALTITUDE	DISTANCE	ALTITUDE	MAP:		
												MAP: RWY 5, 14, 23, 32: 0.5 NM FROM THLD		
As established by the current YOUNGSTOWN-WARREN ASR Minimum Vectoring Altitude Chart.												SEE FAA 8260-10 CONTINUATION FORM.		

MINIMUMS

TAKEOFF:		STANDARD	☒	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	V I S	HAT/HAA	DH/MDA	V I S	HAT/HAA	DH/MDA	V I S	HAT/HAA	DH/MDA	V I S	HAT/HAA	
ASR-5	1540	1	376	1540	1	376	1540	1	376	1540	1	376				
ASR-14	1520	1/2	386	1520	1/2	386	1520	5/8	386	1520	5/8	386				
ASR-23	1580	1	388	1580	1	388	1580	1 1/8	388	1580	1 1/8	388				
ASR-32	1600	2400	414	1600	2400	414	1600	4000	414	1600	4000	414				
CIRCLING	1640	1	448	1660	1	468	1740	1 1/2	548	1760	2	568				

NOTES:

SEE FAA 8260-10 CONTINUATION FORM.

ADDITIONAL FLIGHT DATA

TDZE: 1164 RWY: 5 TDZE: 1192 RWY: 23

TDZE: 1134 RWY: 14 TDZE: 1186 RWY: 32

RWY 5: FAS OBST:1272 TOWER 411445N/0804209W.
RWY 14: FAS OBST:1259 TREE 411727N/0804047W
RWY 23: FAS OBST:1328 TANK 411608N/0804037W
RWY 32: FAS OBST:1332 TOWER 411404N/0803953W

CHART CIRCLING ICON

MAG VAR: 8W EPOCH YEAR: 1990



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

CITY AND STATE	ELEVATION: 1192 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP
YOUNGSTOWN-WARREN, OH	YOUNGSTOWN-WARREN RGNL	YNG ASR	RADAR 1, AMDT 14 25 APRIL 2019	AMDT: 13B
				DATED: 08/20/15

INSTRUMENT APPROACH PROCEDURE

NOTES:

@ WHEN YOUNGSTOWN APPROACH CLOSED ALTERNATE MINIMUMS NA.

CHART NOTE: STRAIGHT-IN/CIRCLING RWY 5 NA AT NIGHT.

CHART NOTE: RWY 5 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.

CHART NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

CHART NOTE: FOR INOPERATIVE ALS INCREASE ASR-32 CAT C/D VISIBILITY TO RVR 6000.

MISSED APPROACH INSTRUCTIONS:

RWY 5: CLIMB TO 3000 THEN LEFT TURN DIRECT YNG VORTAC AND HOLD N, LT, 183.00 INBOUND.

RWY 14: CLIMB TO 1600 THEN CLIMBING LEFT TURN TO 3000 DIRECT YNG VORTAC AND HOLD N, LT, 183.00 INBOUND.

RWY 23: CLIMB TO 1600 THEN CLIMBING RIGHT TURN TO 3000 DIRECT YNG VORTAC AND HOLD N, LT, 183.00 INBOUND.

RWY 32: CLIMB TO 3000 THEN RIGHT TURN DIRECT YNG VORTAC AND HOLD N, LT, 183.00 INBOUND.

RWY 5: FAF 5 MILES FROM THRESHOLD, MINIMUM ALTITUDE 2800, FINAL APPROACH COURSE 052.96, RECOMMENDED ALTITUDES: 4 MILES 2480, 3 MILES 2160, 2 MILES 1820.

RWY 14: FAF 5.1 MILES FROM THRESHOLD (AT MOSKI OM), MINIMUM ALTITUDE 2800, FINAL APPROACH COURSE 142.95, RECOMMENDED ALTITUDES: 4 MILES 2440, 3 MILES 2120, 2 MILES 1800.

RWY 23: FAF 6 MILES FROM THRESHOLD, MINIMUM ALTITUDE 2800, MINIMUM ALTITUDE 2 MILE FIX 1680, FINAL APPROACH COURSE 232.97, RECOMMENDED ALTITUDES: 5 MILES 2540, 4 MILES 2280, 3 MILES 2020, 2 MILES 1760.

RWY 32: FAF 4.7 MILES FROM THRESHOLD (AT FETCH OM), MINIMUM ALTITUDE 2800, MINIMUM ALTITUDE 2 MILE FIX 1660, FINAL APPROACH COURSE 322.97,
RECOMMENDED ALTITUDES: 4 MILES 2560, 3 MILES 2240. 2 MILES 1900.

QUALITY
50
CHECKED

CITY AND STATE	ELEVATION: 1192 TDZE:	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
YOUNGSTOWN-WARREN, OH	AIRPORT NAME: YOUNGSTOWN-WARREN RGNL	YNG ASR	RADAR 1 AMDT 14 25 APRIL 2019	AMDT: 13B DATED: 08/20/15

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

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<u>AIRPORT</u> TULSA INTL	<u>AIRPORT ID</u> KTUL	<u>PROCEDURE NAME</u> ILS OR LOC RWY 18L	<u>ORIGINAL/AMENDMENT</u> 16A	<u>CITY</u> TULSA	<u>STATE</u> OK	
<u>AIRPORT ELEVATION</u> 678	<u>TDZE</u> 641	<u>SUPERSEDED</u> ILS OR LOC RWY 18L	<u>ORIGINAL/AMENDMENT</u> 16	<u>DATED</u> 03/31/2016	<u>MAG VAR</u> 3E	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> I-DWE	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
TUL VORTAC		OWASO/I-DWE 7.70 DME/RADAR					320.79	8.11	2500

MISSED APPROACH

MAP:

ILS: DA

LOC: 5.89 NM AFTER OWASO/I-DWE 7.70 DME/RADAR OR AT 1.82 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 THEN CLIMBING LEFT TURN TO 2500 DIRECT TUL VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO 2500.

(TACAN AIRCRAFT CLIMB TO 1800 THEN CLIMBING LEFT TURN TO 3500 ON TUL VORTAC R-079 TO INOLA INT/17.93 DME AND HOLD E, RT, 259.38 INBOUND).

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 2500 DIRECT OILLR LOM AND HOLD (ADF REQUIRED).

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- HOLD N OWASO, RT, 180.09 INBOUND, 2400 FT. IN LIEU OF PT (IAF), MAX 5100.
- 3. FAC:** 180.09 **FAF:** OWASO/7.70 DME/RADAR **DIST FAF TO MAP:** 5.89 **DIST FAF TO THLD:** 5.89
- 4. MIN ALT:** OWASO/7.70 DME/RADAR 2400, PALIY/4.50 DME 1200*
- 5. DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **GS ANT:** 1056
- 6. MIN GS INCPT:** 2400 **GS ALT AT FAF :** OWASO/7.70 DME/RADAR 2400 **OM:** **MM:** **IM:**
- 7. GP ANGLE:** 2.75 **34:1:** **20:1:** **TCH:** 55.6
- 8. MSA FROM:** TUL VORTAC 100-280 3600, 280-100 3100

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED FOR LOC ONLY.

DME OR RADAR REQUIRED FOR PROCEDURE ENTRY.



NOTES:

CHART NOTE: CIRCLING NA FOR CAT E SOUTH OF RWY 8-26.
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 18R.
CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 813 FT.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 18L CAT E VISIBILITY TO RVR 4000, S-LOC 18L CAT E VISIBILITY TO 1 5/8 SM, AND PALIY FIX MINIMUMS S-LOC 18L CAT E VISIBILITY TO RVR 4500.
CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.

ADDITIONAL FLIGHT DATA:

CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD S, OILLR LOM, RT, 000.09 INBOUND.
CHART: ASR
CHART IN PLANVIEW (CFCDK) AT 362243.23N/0955213.10W
CHART IN PLANVIEW ADJACENT OWASO: TUL 8.11 DME.
CHART CIRCLING ICON.
CHART IN PLANVIEW: OILLR LOM
CHART VDP AT 2.78 DME*
DISTANCE VDP TO THLD 0.96 NM
* LOC ONLY
CHART FAS OBST: 703 TREE 361409N/0955244W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD S OILLR LOM, RT, 000.09 INBOUND.
HOLD E, RT, 261.00 INBOUND

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD - CAT C 900-2 1/2, 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-ILS 18L**	841	2400	200	841	2400	200	841	2400	200	841	2400	200	841	2400	200
S-LOC 18L	1200	2400	559	1200	2400	559	1200	6000	559	1200	6000	559	1200	6000	559
CIRCLING	1200	1	522	1200	1	522	1520	2 1/2	842	1520	2 3/4	842	1520	3	842
PALIY FIX MINIMUMS (DME REQUIRED)															
S-LOC 18L	960	2400	319	960	2400	319	960	4000	319	960	4000	319	960	3000	319
CIRCLING	1120	1	442	1160	1	482	1520	2 1/2	842	1520	2 3/4	842	1520	3	842

CHANGES - REASONS

1. ADDED CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 813 FT. - INCORPORATED NOTAM FDC 8/6737 AND IAW 8260.19H 8-6-11.O.(6)(D).
2. REMOVED PLANVIEW NOTE "DME OR RADAR REQUIRED" ADDED "DME OR RADAR REQUIRED FOR PROCEDURE ENTRY AND DME REQUIRED FOR LOC ONLY" TO EQUIPMENT REQUIREMENT NOTES SECTION - IAW 8260.19H 8-6-8.A.(1).
3. CHANGED INOPERATIVE MALSR TO INOPERATIVE ALS AND 1 5/8 MILE TO 1 5/8 SM - 8260.19H 8-6-11.

PDF EDIT: 8260-3 PAGE 1 OF 3, MISSED APPROACH INSTRUCTIONS - MOVED TACAN INSTRUCTIONS BELOW PRIMARY INSTRUCTIONS.



AIRPORT
TULSA INTL

AIRPORT ID
KTUL

PROCEDURE NAME
ILS OR LOC RWY 18L

ORIGINAL/AMENDMENT
16A

CITY
TULSA

STATE
OK

COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZKC, TUL APP CON, ST. AV. DIR., AMGR, ATA

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

DEVELOPED BY

DONALD H. LANIER (ARTHUR ULVESTAD)

Digitally signed by
DONALD H LANIER

DONALD H LANIER

Dec 13, 2018

OFFICE

AJV-5431

DATE

11/27/2018

APPROVED BY

PATRICK MULQUEEN

Dec 13, 2018
Digitally signed by
DONALD H LANIER

Dec 13, 2018

OFFICE

AJV-5430

DATE

TITLE
MANAGER

QUALITY
41
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> TULSA INTL	<u>AIRPORT ID</u> KTUL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 8	<u>ORIGINAL/AMENDMENT</u> 2B	<u>CITY</u> TULSA	<u>STATE</u> OK	
<u>AIRPORT ELEVATION</u> 678	<u>TDZE</u> 671	<u>SUPERSEDED</u> RNAV (GPS) RWY 8	<u>ORIGINAL/AMENDMENT</u> 2A	<u>DATED</u> 03/31/2016	<u>MAG VAR</u> 3E	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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. 356/30 CW 176/30	NOPT	HAGIL	IF/IAF	3500
2. 176/30 CW 356/30		HAGIL	IF/IAF	3600

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>
HAGIL	IF/IAF	CEBIP		TF	FB	1.00	086.27	6.09	2800
CEBIP	FAF	WIGOX/2.10 NM TO RW08		TF	FB	0.30	086.34	4.42	
WIGOX/2.10 NM TO RW08		RW08	MAP	TF	FO	0.30	086.34	2.10	
RW08	MAP	921 MSL		CA			086.34		
921 MSL		JESON		DF	FO	1.00			3600

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW08

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3600 DIRECT JESON AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD W HAGIL, RT, 086.27 INBOUND, 3500 FT. IN LIEU OF PT (IAF), MAX 14000.

3. FAC: 086.34FAF: CEBIPDIST FAF TO MAP: 6.52DIST FAF TO THLD: 6.52

4. MIN ALT: HAGIL 3500, CEBIP 2800, WIGOX/2.10 NM TO RW08 1380*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.62GS ANT:

6. MIN GP INCPT: 2800GP ALT AT FAF : CEBIP 2800OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 52.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA FOR CAT E SOUTH OF RWY 8-26.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -13°C OR ABOVE 54°C.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON
CHART: ASR
CHART VDP AT 1.06 NM TO RW08*
*LNAV ONLY
WAAS CHANNEL #63131
REFERENCE PATH ID: W08A
CHART FAS OBST: 793 POLE 361125N/0955623W.
CHART: 1123 TOWER 361144N/0960220W, 843 TOWER 361129N/0955651W.
HOLD E, RT, 266.58 INBOUND
LTP HAE: 175.5 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 900-2 1/2, 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
LPV DA	921	3/4	250	921	3/4	250	921	3/4	250	921	3/4	250	921	3/4	250
LNAV/VNAV DA	985	1	314	985	1	314	985	1	314	985	1	314	985	1	314
LNAV MDA	1060	1	389	1060	1	389	1060	1 1/8	389	1060	1 1/8	389	1060	1 1/8	389
CIRCLING	1120	1	442	1160	1	482	1520	2 1/2	842	1520	2 3/4	842	1520	3	842



CHANGES - REASONS

- 1. CHANGED LNAV MINIMUMS FROM: MDA 1040/HAT 369 ALL CATS TO MDA 1060/HAT 389 ALL CATS. - UPDATED LNAV CONTROLLING OBSTACLE.
- 2. REMOVED CHART NOTE: DME/DME RNP-0.3 NA. ADDED PBN REQUIREMENT NOTE: RNP APCH. - IAW 8260.19H.
- 3. CRC REMAINDER CHANGED FROM BF38A5B9 TO 72FDD5FA. - LTP/FTP ELLIPSOIDAL HEIGHT CHANGED FROM 01756 TO 01755.
- 4. REMOVED FAHRENHEIT TEMPS FROM BARO-VNAV NOTE - NO LONGER REQUIRED.
- 5. CHANGED VDP DISTANCE FROM 0.99 NM TO 1.06 NM - LNAV MDA CHANGED FROM 1040 TO 1060.
- 6. INCREASED LNAV CATS C-E VISIBILITY FROM 1 TO 1 1/8 - IAW 8260.3D TABLE 3-3-1.
- 7. REMOVED CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). - PROCEDURE GPA/TCH MATCH VGSI ANGLE AND TCH.
- 8. FAS OBST CHANGED FROM 790 POLE TO 793 POLE - NEW CONTROLLING OBSTACLE.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZKC, ZFW, ZME, TUL APP CON, AMGR, ATA

FLIGHT CHECKED BY
GARY BELL
Digitally signed by
DONALD H LANIER
Jan 07, 2019

DEVELOPED BY
DONALD H. LANIER (ARTHUR ULVESTAD)
Digitally signed by
DONALD H LANIER
Jan 07, 2019

APPROVED BY
PATRICK MULQUEEN
Digitally signed by
DONALD H LANIER
Jan 07, 2019

<u>OFFICE</u>	<u>DATE</u>
FICO	1/3/19
<u>OFFICE</u>	<u>DATE</u>
AJV-5431	11/27/2018
<u>OFFICE</u>	<u>DATE</u>
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	KTUL
RUNWAY	RW08
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W08A
LTP/FTP LATITUDE	361143.5540N
LTP/FTP LONGITUDE	0955356.5095W
LTP/FTP ELLIPSOIDAL HEIGHT	+01755
FPAP LATITUDE	361144.4425N
FPAP LONGITUDE	0955206.4340W
THRESHOLD CROSSING HEIGHT (TCH)	00052.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0504
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	72FDD5FA

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+02046
FPAP ORTHOMETRIC HEIGHT	+02046



**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> CLARION COUNTY	<u>AIRPORT ID</u> KAXQ	<u>PROCEDURE NAME</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> 3A	<u>CITY</u> CLARION	<u>STATE</u> PA	
<u>AIRPORT ELEVATION</u> 1458	<u>TDZE</u>	<u>SUPERSEDED</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> 3	<u>DATED</u> 03/13/2008	<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 25 APRIL 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: ZOB

FLIGHT CHECKED BY

OFFICE DATE

DEVELOPED BY
JAMES ROGERS

Digitally signed by

JAMES ROGERS

Nov 20, 2018

OFFICE
AJV-5421

DATE
11/20/2018

APPROVED BY
JULIE A. MORGAN

Digitally signed by

DAVID DANNER

Nov 27, 2018

OFFICE DATE TITLE

AJV-5420



**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> CORY-LAWRENCE	<u>AIRPORT ID</u> 8G2	<u>PROCEDURE NAME</u> NDB RWY 14	<u>ORIGINAL/AMENDMENT</u> 5	<u>CITY</u> CORY	<u>STATE</u> PA	
<u>AIRPORT ELEVATION</u> 1766	<u>TDZE</u> 1747	<u>SUPERSEDED</u> NDB RWY 14	<u>ORIGINAL/AMENDMENT</u> 4A	<u>DATED</u> 12-9-93	<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 25 APRIL 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: ZOB, ERI APP CON, AIRPORT MANAGER

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY Digitally signed by
ANDREA CHANEY **ANDREA J CHANEY**
Jan 07, 2019

APPROVED BY
PATRICK MULQUEEN Digitally signed by
 DONALD H LANIER
Jan 08, 2019

OFFICE DATE
AJV-A433 12/09/2018

OFFICE DATE
AJV-A43

TITLE
MANAGER



**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> VENANGO RGNL	<u>AIRPORT ID</u> KFKL	<u>PROCEDURE NAME</u> VOR RWY 3	<u>ORIGINAL/AMENDMENT</u> 5B	<u>CITY</u> FRANKLIN	<u>STATE</u> PA	
<u>AIRPORT ELEVATION</u> 1540	<u>TDZE</u> 1539	<u>SUPERSEDED</u> VOR RWY 3	<u>ORIGINAL/AMENDMENT</u> 5A	<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 25 APRIL 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: ZOB, YNG APP CON, AMGR

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY
ANDREA CHANEY
*Digitally signed by ANDREA J CHANEY
Jan 07, 2019*

APPROVED BY
PATRICK MULQUEEN
*Digitally signed by DONALD H LANIER
Jan 08, 2019*

OFFICE
AJV-A433

DATE
12/10/2018

OFFICE
AJV-A43

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> HARRISBURG INTL	<u>AIRPORT ID</u> KMDT	<u>PROCEDURE NAME</u> ILS OR LOC RWY 31	<u>ORIGINAL/AMENDMENT</u> 1E	<u>CITY</u> HARRISBURG	<u>STATE</u> PA	
<u>AIRPORT ELEVATION</u> 310	<u>TDZE</u> 308	<u>SUPERSEDED</u> ILS OR LOC RWY 31	<u>ORIGINAL/AMENDMENT</u> 1D	<u>DATED</u> 08/16/2018	<u>MAG VAR</u> 11W	<u>EPOCH YEAR</u> 2005
<u>FACILITY</u> HQA	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
LRP VOR/DME	IAF	MTJOY INT/RADAR					269.21	9.85	3000
MTJOY INT/RADAR	IF	HINTO OM/RADAR					307.79	7.22 (I-HQA)	2200

MISSED APPROACH

MAP:

ILS: DA
LOC: 5.56 NM AFTER HINTO OM/RADAR

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 800 THEN CLIMBING RIGHT TURN TO 3000 ON HEADING 090 AND RAV VORTAC R-193 TO BAARN INT/LRP 17.95 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 2800 DIRECT ENOLA LOM AND HOLD (ADF REQUIRED).

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- PROFILE STARTS AT MTJOY
- FAC: 307.79 FAF: HINTO OM/RADAR DIST FAF TO MAP: 5.56 DIST FAF TO THLD: 5.56
- MIN ALT: MTJOY INT/RADAR 3000, HINTO OM/RADAR 2200
- DIST TO THLD FROM OM: 5.56 MM: IM: 150 HAT: GS ANT: 1009
- MIN GS INCPT: 2200 GS ALT AT FAF : HINTO OM/RADAR 2200 OM: 2158 MM: IM:
- GP ANGLE: 3.00 34:1: 20:1: TCH: 51.0
- MSA FROM: MD LOM 3400

EQUIPMENT REQUIREMENTS NOTES:



NOTES:

CHART NOTE: CIRCLING NA S OF RWY 13-31.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON LRP VOR/DME AIRWAY RADIALS 223 CW 296.

ADDITIONAL FLIGHT DATA:

CHART IN PLANVIEW: ENOLA LOM
CHART KCXY IN PLANVIEW AND PROFILE VIEW
CHART FAS OBST: 662 TREES 400912N/0763912W.
CHART 796 TREES 400827N/0763842W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NW ENOLA LOM, RT, 127.77 INBOUND.
HOLD SE, RT, 314.06 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 31	558	5000	250	558	5000	250	558	5000	250	558	5000	250			
S-LOC 31	920	5000	612	920	5000	612	920	1 3/4	612	920	2	612			
CIRCLING	920	1	610	920	1	610	940	1 3/4	630	1000	2 1/4	690			

CHANGES - REASONS

- AMDT 1D:
- 1. CHANGED AUTOPILOT COUPLED APPROACH NA BELOW ALTITUDE FROM 1325 TO 1360 - PER FLIGHT CHECK CRIS RICE DATED 3/7/16.
 - 2. CIRC CAT C MDA/HAA CHANGED FROM 920/610 TO 940/630 - REF 42-074933, 628 MSL TREE FLIGHT CHECKED SAT FROM ILS OR LOC RWY 13, AMDT 2A ON 10/5/18.
 - 3. CIRC CAT D MDA/HAA CHANGED FROM 980/670 TO 1000/690 - REF 42-070858, 683 MSL TREE FLIGHT CHECKED SAT FROM ILS OR LOC RWY 13, AMDT 2A ON 10/5/18.
 - 4. CIRC CAT D VIS CHANGED FROM 2 TO 2 1/4 - REF HAA INCREASE FROM 670 TO 690.
 - 5. ADDED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON LRP VOR/DME AIRWAY RADIALS 223 CW 296 - REVISED CRITERIA.
 - 6. MSA FACILITY CHANGED FROM ENOLA LOM 3200 TO HINTO OM 3300 - REF 42-002834 MSL TOWER.
- AMDT 1E:
- 1. LINE 5 DISTANCE GS ANT CHANGED FROM 1006 TO 1009 - CURRENT AIRNAV DATA.
 - 2. CHANGED NOTE FROM CIRCLING NOT AUTHORIZED SOUTH OF RWY 13-31 - REVISED CRITERIA.
 - 3. ALTERNATE MINIMUMS CHANGED FROM ILS 700-2 TO STANDARD AND LOC CHANGED TO STANDARD EXCEPT CAT D 800-2 ¼ - REVISED ILS CRITERIA AND LOC VIS INCREASE.
 - 4. CHANGED NOTE FROM CHART CAPITAL CITY AIRPORT TO CHART KCXY IN PLAN AND PROFILE VIEW - REVISED CRITERIA.
 - 5. CHANGED MSA FROM 3300 TO 3400 - REF 2374 MSL AAO FROM ILS OR LOC RWY 13, AMDT 2A.
 - 6. CHANGED MSA NAVAID FROM HINTO OM TO MD LOM - AMDT 1D DOCUMENTED HINTO OM, SHOULD HAVE BEEN MD LOM.
 - 7. DELETED NOTE AUTOPILOT COUPLED APPROACH NA BELOW 1360 - PER FLIGHT CHECK PILOT BOB PRESSLER, REASON NO COURSE REVERSAL/NO LONGER EXISTS 9/25/18.
 - 8. LINE 6 GS ALT AT FAF CHANGED FROM BLANK TO HINTO OM/RADAR 2200 - RIVISED CRITERIA.
 - 9. CHANGED PRIMARY MISSED APPROACH WORD FROM VIA TO ON - REVISED CRITERIA.
- PDF EDIT:
- 1. LINE 8 MSA CHANGED FROM MD NDB TO MD LOM - CURRENT DATA.
 - 2. MSA CENTER CHANGED FROM MD NDB TO MD LOM - CURRENT DATA.
 - 3. 8260-9 REMOVED GENERAL REMARK: ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZNY, MDT APCH CON, KMDT AMGR

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

Digitally signed by

DAVID DANNER

Dec 18, 2018

OFFICE

AJV-5421

DATE

11/09/2018

DEVELOPED BY

DAVID DANNER (DEAN GRACEY)

Digitally signed by

DAVID DANNER

Dec 18, 2018

Digitally signed by

DAVID DANNER

Dec 18, 2018

OFFICE

AJV-5420

DATE

TITLE

MANAGER

APPROVED BY

JULIE MORGAN

**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
HAZLETON, PA	HAZLETON RGNL	04/25/2019	3

TAKEOFF MINIMUMS:

RWY 10: STANDARD WITH A MINIMUM CLIMB GRADIENT OF 378 FT PER NM TO 2300, OR 1000-3 FOR VCOA.
RWY 28: 200-1 3/8 OR STANDARD WITH A MINIMUM CLIMB GRADIENT OF 329 FT PER NM TO 1900.

TEXTUAL DEPARTURE PROCEDURES:

RWY 10: CLIMB HEADING 104.12 TO 2300 BEFORE PROCEEDING ON COURSE.

VISUAL CLIMB OVER AIRPORT:

RWY 10: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS HAZLETON RGNL AIRPORT AT OR ABOVE 2500 BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 10, TREE 1 FT FROM DER, 435 FT LEFT OF CENTERLINE, 1606 FT MSL.
TREE 2 FT FROM DER, 176 FT RIGHT OF CENTERLINE, 15 FT AGL/1601 FT MSL.
TREE, POLE BEGINNING 27 FT FROM DER, 0 FT OF CENTERLINE, UP TO 1613 FT MSL.
TREE 58 FT FROM DER, 438 FT LEFT OF CENTERLINE, 1655 FT MSL.
TREES BEGINNING 92 FT FROM DER, 386 FT LEFT OF CENTERLINE, UP TO 74 FT AGL/1670 FT MSL.
TREE 263 FT FROM DER, 520 FT LEFT OF CENTERLINE, 79 FT AGL/1675 FT MSL.
TREE, POLE, VEHICLES ON TRAVERSE WAY, FENCE BEGINNING 271 FT FROM DER, 0 FT LEFT OF CENTERLINE, UP TO 84 FT AGL/1680 FT MSL.
TREE 292 FT FROM DER, 527 FT RIGHT OF CENTERLINE, 1636 FT MSL.
TREES BEGINNING 394 FT FROM DER, 467 FT RIGHT OF CENTERLINE, UP TO 1644 FT MSL.
TREES BEGINNING 554 FT FROM DER, 414 FT RIGHT OF CENTERLINE, UP TO 1649 FT MSL.
TREE, POLE BEGINNING 667 FT FROM DER, 0 FT OF CENTERLINE, UP TO 1654 FT MSL.
TREE, BUILDING BEGINNING 1004 FT FROM DER, 41 FT LEFT OF CENTERLINE, UP TO 1681 FT MSL.
TREE, BUILDING, TERRAIN BEGINNING 1199 FT FROM DER, 92 FT LEFT OF CENTERLINE, UP TO 1686 FT MSL.
TREES BEGINNING 1383 FT FROM DER, 137 FT LEFT OF CENTERLINE, UP TO 1687 FT MSL.
TREES BEGINNING 1421 FT FROM DER, 502 FT LEFT OF CENTERLINE, UP TO 1697 FT MSL.
TREES BEGINNING 1513 FT FROM DER, 133 FT LEFT OF CENTERLINE, UP TO 1704 FT MSL.
TREES BEGINNING 1603 FT FROM DER, 1 FT LEFT OF CENTERLINE, UP TO 1705 FT MSL.
TREES BEGINNING 2397 FT FROM DER, 37 FT RIGHT OF CENTERLINE, UP TO 83 FT AGL/1657 FT MSL.
TREES BEGINNING 2436 FT FROM DER, 28 FT RIGHT OF CENTERLINE, UP TO 1661 FT MSL.
TREES BEGINNING 2469 FT FROM DER, 338 FT RIGHT OF CENTERLINE, UP TO 83 FT AGL/1665 FT MSL.
TREES BEGINNING 2485 FT FROM DER, 139 FT RIGHT OF CENTERLINE, UP TO 91 FT AGL/1671 FT MSL.
TREES BEGINNING 2485 FT FROM DER, 21 FT RIGHT OF CENTERLINE, UP TO 90 FT AGL/1672 FT MSL.
TREES BEGINNING 2512 FT FROM DER, 8 FT RIGHT OF CENTERLINE, UP TO 95 FT AGL/1676 FT MSL.
TREES BEGINNING 2582 FT FROM DER, 11 FT RIGHT OF CENTERLINE, UP TO 88 FT AGL/1683 FT MSL.
TREE 2795 FT FROM DER, 485 FT RIGHT OF CENTERLINE, 1685 FT MSL.
TREES BEGINNING 2815 FT FROM DER, 4 FT RIGHT OF CENTERLINE, UP TO 1687 FT MSL.
TREE 2915 FT FROM DER, 189 FT RIGHT OF CENTERLINE, 81 FT AGL/1688 FT MSL.
TREES BEGINNING 2924 FT FROM DER, 61 FT RIGHT OF CENTERLINE, UP TO 85 FT AGL/1692 FT MSL.
TREES BEGINNING 2987 FT FROM DER, 7 FT RIGHT OF CENTERLINE, UP TO 84 FT AGL/1694 FT MSL.
TREES BEGINNING 3043 FT FROM DER, 21 FT RIGHT OF CENTERLINE, UP TO 84 FT AGL/1695 FT MSL.
TREES BEGINNING 3053 FT FROM DER, 14 FT RIGHT OF CENTERLINE, UP TO 84 FT AGL/1698 FT MSL.
TREES BEGINNING 3168 FT FROM DER, 157 FT LEFT OF CENTERLINE, UP TO 1708 FT MSL.
TREES BEGINNING 3175 FT FROM DER, 109 FT LEFT OF CENTERLINE, UP TO 1712 FT MSL.
TREES BEGINNING 3247 FT FROM DER, 149 FT LEFT OF CENTERLINE, UP TO 1713 FT MSL.
TREES BEGINNING 3271 FT FROM DER, 127 FT LEFT OF CENTERLINE, UP TO 1718 FT MSL.
TREE, BUILDING BEGINNING 3396 FT FROM DER, 50 FT LEFT OF CENTERLINE, UP TO 1727 FT MSL.
TREES BEGINNING 3431 FT FROM DER, 15 FT RIGHT OF CENTERLINE, UP TO 69 FT AGL/1699 FT MSL.
TREES BEGINNING 3467 FT FROM DER, 102 FT RIGHT OF CENTERLINE, UP TO 70 FT AGL/1701 FT MSL.
TREES BEGINNING 3543 FT FROM DER, 70 FT RIGHT OF CENTERLINE, UP TO 70 FT AGL/1704 FT MSL.
TREES BEGINNING 3563 FT FROM DER, 19 FT RIGHT OF CENTERLINE, UP TO 77 FT AGL/1710 FT MSL.
TREE, BUILDING, VEHICLES ON TRAVERSE WAY BEGINNING 3701 FT FROM DER, 70 FT LEFT OF CENTERLINE, UP TO 1743 FT MSL.
TREE, BUILDING, VEGETATION BEGINNING 3869 FT FROM DER, 4 FT LEFT OF CENTERLINE, UP TO 1744 FT MSL.
TREES BEGINNING 3903 FT FROM DER, 9 FT RIGHT OF CENTERLINE, UP TO 77 FT AGL/1711 FT MSL.
TREES BEGINNING 4607 FT FROM DER, 55 FT RIGHT OF CENTERLINE, UP TO 68 FT AGL/1712 FT MSL.
TREE, BUILDING BEGINNING 4920 FT FROM DER, 216 FT LEFT OF CENTERLINE, UP TO 1746 FT MSL.

NOTE: RWY 28, TREE 2 FT FROM DER, 217 FT LEFT OF CENTERLINE, 1597 FT MSL.
VEGETATION 7 FT FROM DER, 210 FT RIGHT OF CENTERLINE, 1596 FT MSL.
TREES BEGINNING 83 FT FROM DER, 371 FT RIGHT OF CENTERLINE, UP TO 71 FT AGL/1618 FT MSL.
TREES BEGINNING 150 FT FROM DER, 453 FT RIGHT OF CENTERLINE, UP TO 1629 FT MSL.
TREE 160 FT FROM DER, 359 FT LEFT OF CENTERLINE, 1600 FT MSL.
TREE 227 FT FROM DER, 281 FT LEFT OF CENTERLINE, 1604 FT MSL.
TREES BEGINNING 346 FT FROM DER, 376 FT RIGHT OF CENTERLINE, UP TO 1639 FT MSL.
TREE 594 FT FROM DER, 607 FT LEFT OF CENTERLINE, 1614 FT MSL.



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

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CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
HAZLETON, PA	HAZLETON RGNL	04/25/2019	3

TREE 658 FT FROM DER, 383 FT LEFT OF CENTERLINE, 1616 FT MSL.
TREE 783 FT FROM DER, 613 FT LEFT OF CENTERLINE, 1619 FT MSL.
TREE 1568 FT FROM DER, 897 FT RIGHT OF CENTERLINE, 1659 FT MSL.
TREE 1716 FT FROM DER, 691 FT RIGHT OF CENTERLINE, 1662 FT MSL.
TREES BEGINNING 1725 FT FROM DER, 898 FT RIGHT OF CENTERLINE, UP TO 1666 FT MSL.
TREE 1748 FT FROM DER, 742 FT RIGHT OF CENTERLINE, 1674 FT MSL.
TREES BEGINNING 1807 FT FROM DER, 655 FT RIGHT OF CENTERLINE, UP TO 1677 FT MSL.
TREE 1817 FT FROM DER, 535 FT LEFT OF CENTERLINE, 1643 FT MSL.
TREE, POLE BEGINNING 1839 FT FROM DER, 558 FT LEFT OF CENTERLINE, UP TO 1654 FT MSL.
POLE 2049 FT FROM DER, 579 FT LEFT OF CENTERLINE, 39 FT AGL/1657 FT MSL.
POLE 2146 FT FROM DER, 952 FT LEFT OF CENTERLINE, UP TO 42 FT AGL/1658 FT MSL.
TREES BEGINNING 2453 FT FROM DER, 1064 FT RIGHT OF CENTERLINE, UP TO 1678 FT MSL.
TREE, SIGN, POLE, VEGETATION BEGINNING 2556 FT FROM DER, 38 FT RIGHT OF CENTERLINE, UP TO 1681 FT MSL.
POLE 2599 FT FROM DER, 313 FT LEFT OF CENTERLINE, 43 FT AGL/1663 FT MSL.
TREE, POLE BEGINNING 2717 FT FROM DER, 364 FT LEFT OF CENTERLINE, UP TO 1670 FT MSL.
TREE, POLE BEGINNING 2832 FT FROM DER, 311 FT LEFT OF CENTERLINE, UP TO 1674 FT MSL.
TREE, POLE, SIGN BEGINNING 2892 FT FROM DER, 5 FT RIGHT OF CENTERLINE, UP TO 40 FT AGL/1685 FT MSL.
TREE, POLE, SIGN BEGINNING 2895 FT FROM DER, 44 FT LEFT OF CENTERLINE, UP TO 1682 FT MSL.
TREE 3017 FT FROM DER, 233 FT RIGHT OF CENTERLINE, 36 FT AGL/1686 FT MSL.
TREE, POLE BEGINNING 3025 FT FROM DER, 146 FT RIGHT OF CENTERLINE, UP TO 41 FT AGL/1692 FT MSL.
TREES BEGINNING 3175 FT FROM DER, 116 FT RIGHT OF CENTERLINE, UP TO 1693 FT MSL.
TREE 3208 FT FROM DER, 616 FT LEFT OF CENTERLINE, 1684 FT MSL.
TREE, POLE BEGINNING 3285 FT FROM DER, 138 FT LEFT OF CENTERLINE, UP TO 1694 FT MSL.
TREE, POLE BEGINNING 3302 FT FROM DER, 156 FT RIGHT OF CENTERLINE, UP TO 1704 FT MSL.
TREE, POLE BEGINNING 3453 FT FROM DER, 51 FT RIGHT OF CENTERLINE, UP TO 1707 FT MSL.
TREES BEGINNING 3484 FT FROM DER, 183 FT LEFT OF CENTERLINE, UP TO 43 FT AGL/1696 FT MSL.
TREE, POLE BEGINNING 3520 FT FROM DER, 207 FT LEFT OF CENTERLINE, UP TO 47 FT AGL/1703 FT MSL.
TREE, POLE BEGINNING 3560 FT FROM DER, 83 FT RIGHT OF CENTERLINE, UP TO 37 FT AGL/1708 FT MSL.
TREE 3646 FT FROM DER, 1339 FT RIGHT OF CENTERLINE, 1709 FT MSL.
TREE, POLE BEGINNING 3651 FT FROM DER, 220 FT RIGHT OF CENTERLINE, UP TO 1712 FT MSL.
TREE, BUILDING BEGINNING 3692 FT FROM DER, 48 FT RIGHT OF CENTERLINE, UP TO 1718 FT MSL.
TREE, POLE BEGINNING 3761 FT FROM DER, 105 FT RIGHT OF CENTERLINE, UP TO 1721 FT MSL.
TREE 3815 FT FROM DER, 37 FT LEFT OF CENTERLINE, 49 FT AGL/1716 FT MSL.
TREES BEGINNING 3826 FT FROM DER, 16 FT LEFT OF CENTERLINE, UP TO 53 FT AGL/1724 FT MSL.
TREE 3862 FT FROM DER, 73 FT LEFT OF CENTERLINE, 59 FT AGL/1725 FT MSL.
TREES BEGINNING 3865 FT FROM DER, 2 FT LEFT OF CENTERLINE, UP TO 49 FT AGL/1727 FT MSL.
TREE, POLE BEGINNING 3873 FT FROM DER, 3 FT RIGHT OF CENTERLINE, UP TO 1734 FT MSL.
TREE, POLE BEGINNING 3886 FT FROM DER, 0 FT LEFT OF CENTERLINE, UP TO 53 FT AGL/1730 FT MSL.
TREE, POLE BEGINNING 3958 FT FROM DER, 63 FT RIGHT OF CENTERLINE, UP TO 1740 FT MSL.
TREE, POLE BEGINNING 4005 FT FROM DER, 55 FT RIGHT OF CENTERLINE, UP TO 45 FT AGL/1741 FT MSL.
TREES BEGINNING 4049 FT FROM DER, 192 FT RIGHT OF CENTERLINE, UP TO 49 FT AGL/1743 FT MSL.
TREE, POLE BEGINNING 4063 FT FROM DER, 29 FT RIGHT OF CENTERLINE, UP TO 48 FT AGL/1745 FT MSL.
TREE, POLE, BUILDING BEGINNING 4097 FT FROM DER, 8 FT RIGHT OF CENTERLINE, UP TO 1747 FT MSL.
TREE, POLE, BUILDING, VEHICLES ON TRAVERSE WAY, FENCE BEGINNING 4327 FT FROM DER, 0 FT RIGHT OF CENTERLINE, UP TO 57 FT AGL/1773 FT MSL.
TREES BEGINNING 4337 FT FROM DER, 35 FT LEFT OF CENTERLINE, UP TO 53 FT AGL/1732 FT MSL.
TREES BEGINNING 4361 FT FROM DER, 123 FT LEFT OF CENTERLINE, UP TO 52 FT AGL/1733 FT MSL.
TREES BEGINNING 4367 FT FROM DER, 53 FT LEFT OF CENTERLINE, UP TO 54 FT AGL/1735 FT MSL.
TREE, TANK BEGINNING 4382 FT FROM DER, 4 FT LEFT OF CENTERLINE, UP TO 66 FT AGL/1746 FT MSL.
TREE, BUILDING BEGINNING 4591 FT FROM DER, 9 FT LEFT OF CENTERLINE, UP TO 60 FT AGL/1747 FT MSL.

CONTROLLING OBSTACLES:

RWY 10: 2081 FT MSL ANTENNA 405808.81N-0755727.16W (CLIMB GRADIENT/CLIMB TO ALTITUDE).
RWY 28: 1773 FT MSL TREE 405927.40N-0760108.77W (CLIMB GRADIENT/CLIMB TO ALTITUDE), 1791 FT MSL TANK 405908.41N-0760144.77W (CEILING), 1782 FT MSL TREE 405908.36N-0760147.34W (VISIBILITY).
VCOA: 2159 FT MSL AAO 410057.10N-0755527.15W (VCA), 2219 FT MSL AAO 410100.85N-0755443.64W (CLIMB TO ALTITUDE).

OBSTACLES MANDATING ODP DEVELOPMENT: RWY 10: 2081 FT MSL ANTENNA 405808.81N-0755727.16W.

REMARKS:



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

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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
HAZLETON, PA	HAZLETON RGNL	04/25/2019	3

FLIGHT INSPECTED BY:	<i>Digitally signed by</i> ROBERT G HAMILTON Dec 19, 2018	OFFICE SYMBOL:	DATE:
PENDING			

DEVELOPED BY:	<i>Digitally signed by</i> ROBERT G HAMILTON Dec 19, 2018	OFFICE SYMBOL: AJV-5421	DATE: 10/17/2018
DAVID DANNER (DARREN HOOPER)			

APPROVED BY:	<i>Digitally signed by</i> ROBERT G HAMILTON Dec 19, 2018	OFFICE SYMBOL: AJV-5420	DATE:
JULIE MORGAN			

REQUIRED EFFECTIVE DATE:
4/25/2019

COORDINATED WITH:

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

OTHER:
ZNY, ZVP APP CON, ARPT MNGR

CHANGES - REASONS:

1. CHANGED TAKEOFF MINIMUMS RWY 10 FROM "500-1 3/4 OR STANDARD WITH MINIMUM CLIMB OF 243 FT PER NM TO 2000" TO "STANDARD WITH A MINIMUM CLIMB GRADIENT OF 378 FT PER NM TO 2300, OR 1000-3 FOR VCOA" - NEW VERTICAL GUIDED SURVEY DATA AND NEW OBSTACLES IDENTIFIED DUE TO RWY EXTENSION.
2. CHANGED TAKEOFF MINIMUMS RWY 28 FROM "500-1 OR STANDARD WITH MINIMUM CLIMB OF 317 FT PER NM TO 1900" TO "200-1 3/8 OR STANDARD WITH A MINIMUM CLIMB GRADIENT OF 329 FT PER NM TO 1900" - NEW VERTICAL GUIDED SURVEY DATA AND NEW OBSTACLES IDENTIFIED DUE TO RWY EXTENSION.
3. CHANGED TESTUAL DEPARTURE PROCEDURES FROM "RWY 10 - CLIMB ON HEADING 104.12 TO 2200 BEFORE PROCEEDING ON COURSE" TO "RWY 10: CLIMB ON HEADING 104.12 TO 2300 BEFORE PROCEEDING ON COURSE" - NEW VERTICAL GUIDED SURVEY DATA AND NEW OBSTACLES IDENTIFIED DUE TO RWY EXTENSION.
4. ADDED VISUAL CLIMB OVER AIRPORT "OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS HAZLETON RGNL AIRPORT AT OF ABOVE 2500 BEFORE PROCEEDING ON COURSE" - NEW VERTICAL GUIDED SURVEY DATA AND NEW OBSTACLES IDENTIFIED DUE TO RWY EXTENSION.
5. UPDATED TAKEOFF NOTES AND CONTROLLING OBSTACLES FOR ALL RUNWAYS - RWY 10 THRESHOLD DISPLACED 200 FT AND RWY 28 THRESHOLD EXTENDED 103 FT CHANGED TAKEOFF MINIMUMS AND TEXTUAL DEPARTURE PROCEDURES. NEW OBSTACLES IDENTIFIED DUE TO RWY EXTENSION AFFECTING ALL RUNWAYS DEPARTURE PROCEDURES.
6. UPDATED RWY 10 CONTROLLING OBSTACLE FROM 1829 FT MSL BLDG 405924.23N/0755729.39W TO 2081 FT MSL ANTENNA 405808.81N-0755727.16W (CLIMB GRADIENT/CLIMB TO ALTITUDE) - NEW VERTICAL GUIDED SURVEY DATA AND NEW OBSTACLES IDENTIFIED DUE TO RWY EXTENSION.
7. UPDATED RWY 28 CONTROLLING OBSTACLES FROM 1771 FT MSL TREE 405928.51N/0760109.44W TO 1773 FT MSL TREE 405927.40N-0760108.77W (CLIMB GRADIENT/CLIMB TO ALTITUDE), 1791 FT MSL TANK 405908.41N-0760144.77W (CEILING), 1782 FT MSL TREE 405908.36N-0760147.34W (VISIBILITY) - NEW VERTICAL GUIDED SURVEY DATA AND NEW OBSTACLES IDENTIFIED DUE TO RWY EXTENSION.
8. UPDATED RWY 10 OBSTACLE MANDATING ODP ROUTE DEVELOPMENT FROM 2069 FT MSL TOWER 405808.90N/0755728.10W TO 2081 FT MSL ANTENNA 405808.81N-0755727.16W - NEW VERTICAL GUIDED SURVEY DATA AND NEW OBSTACLES IDENTIFIED DUE TO RWY EXTENSION.
9. ADDED VCOA CONTROLLING OBSTACLES - PENETRATING OBSTACLES INSIDE AND OUTSIDE 3 SM ICA WITH HIGHEST PENETRATING OBSTACLE CLIMB GRADIENT OUTSIDE 3 SM ICA.

QUALITY
10
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> BRANDYWINE RGNL	<u>AIRPORT ID</u> KOQN	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 9	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> WEST CHESTER	<u>STATE</u> PA
<u>AIRPORT ELEVATION</u> 463	<u>TDZE</u> 463	<u>SUPERSEDED</u> RNAV (GPS) RWY 9	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 08/20/2015	<u>MAG VAR</u> 12W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
PTW VORTAC		ECZEL		TF	FB	1.00	238.63	16.64	4000
ECZEL	IAF	CEFSY		TF	FB	1.00	178.39	5.00	2900
GLOMO	IAF	CEFSY		TF	FB	1.00	070.68	9.83	2900
CEFSY	IF	WACCY		TF	FB	1.00	088.41	4.94	2100
WACCY	FAF	LYTTA/1.60 NM TO RW09		TF	FB	0.30	088.48	3.43	
LYTTA/1.60 NM TO RW09		RW09	MAP	TF	FO	0.30	088.48	1.60	
RW09	MAP	900 MSL		CA			088.48		900
900 MSL		CEFSY		DF	FO	1.00			2900

MISSED APPROACH

MAP:

LNAV: RW09

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 900 THEN CLIMBING RIGHT TURN TO 2900 DIRECT CEFSY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT CEFSY

3. FAC: 088.48

FAF: WACCY

DIST FAF TO MAP: 5.03

DIST FAF TO THLD: 5.03

4. MIN ALT: CEFYSY 2900, WACCY 2100, LYTTA/1.60 NM TO RW09 1000

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: RW09 2600

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PTW VORTAC ON AIRWAY RADIALS 205 CW 287.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT GLOMO ON V403-405 SOUTHWEST BOUND, AND ON V3-408 WESTBOUND.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE COATESVILLE ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET.
CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: PROCEDURE NA AT NIGHT.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE} TCH {FEET}).

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
750 AAO 395841N/0754150W.
WACCY TO RW09: 3.00/40.
CHART FAS OBST: 623 TREE 395916N/0753600W.
HOLD W, RT, 088.41 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	880	1	417	880	1	417		NA			NA				
CIRCLING	1080	1	617	1080	1	617		NA			NA				



CHANGES - REASONS

- 1. UPDATED AIRPORT NAME FROM "BRANDYWINE" TO "BRANDYWINE RGNL" - TO REFLECT AIRPORT NAME CHANGE.
- 2. CHANGED CHART NOTE FROM: "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE COATESVILLE/CHESTER COUNTY G.O. CARLSON ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET" TO: "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE COATESVILLE ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET" - CONTINUITY BETWEEN APPROACHES TO REFLECT CORRECT NAME OF ALTIMETER SOURCE.
- 3. ADDED "20:1: IS NOT CLEAR" TO PROFILE VIEW - NO SURVEY DATA.
- 4. UPDATED TERMINAL ROUTES RNP VALUES FROM PTW VORTAC TO ECZEL FROM: "2.00" TO: "1.00" AND FROM: CEFSY TO WACKY FROM: "0.50" TO: "1.0" - IAW 8260.58A TABLE 1-2-1.
- 5. ADDED RNP VALUE OF "1.0" TO MISSED APPROACH SEGMENT - IAW 8260.58A TABLE 1-2-1.
- 6. REMOVED CHART NOTE: "DME/DME RNP -0.3 NA" FROM NOTES AND ADDED "RNP APCH" TO PBN REQUIREMENTS NOTE - IAW 8260.19H 8-6-8.
- 7. UPDATED CHART NOTE FROM: "HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" TO: "RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" - IAW 8260.19H 8-6-11.K.(3).
- 8. UPDATED COORDINATED FROM: "ATA" TO: "A4A" AND CHANGED "AIRPORT MANAGER" TO "AMGR" - IAW 8260.19H 8-6-13.
- 9. UPDATED ADDITIONAL FLIGHT DATA FAS OBSTACLE FROM "610 TREE 395945N/0753621W" TO "623 TREE 395916N/0753600W" - NEW CONTROLLING OBSTACLE.
- 10. UPDATED LNAV MDA/HAT FROM "860/397" TO "880/417" - NEW CONTROLLING OBSTACLE.

COORDINATED WITH:

A4A ☒ ALPA ☐ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZNY, PHL APP CON, AMGR

Digitally signed by
ROBERT G HAMILTON

FLIGHT CHECKED BY

OFFICE

DATE

Jan 08, 2019

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED.

DEVELOPED BY

JULIE A. MORGAN (CASEY HILL)

Digitally signed by
ROBERT G HAMILTON
Jan 08, 2019

OFFICE

AJV-5420

DATE

11/06/2018

APPROVED BY

JULIE MORGAN

Digitally signed by
ROBERT G HAMILTON
Jan 08, 2019

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> BRANDYWINE RGNL	<u>AIRPORT ID</u> KOQN	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 27	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> WEST CHESTER	<u>STATE</u> PA
<u>AIRPORT ELEVATION</u> 463	<u>TDZE</u> 463	<u>SUPERSEDED</u> RNAV (GPS) RWY 27	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 08/20/2015	<u>MAG VAR</u> 12W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
MXE VORTAC		GONVE		TF	FO	1.00	076.47	15.57	2900
DASDE	IAF	GONVE	NOPT	TF	FB	1.00	178.68	5.49	2900
GONVE	IF/IAF	CELPA		TF	FB	1.00	268.70	4.98	2100
CELPA	FAF	GEEKS/1.70 NM TO RW27		TF	FB	0.30	268.63	3.32	
GEEKS/1.70 NM TO RW27		RW27	MAP	TF	FO	0.30	268.63	1.70	
RW27	MAP	1500 MSL		CA			268.63		1500
1500 MSL		GONVE		DF	FO	1.00			2900

MISSED APPROACH

MAP:

LP: RW27

LNAV: RW27

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 2900 DIRECT GONVE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD E GONVE, RT, 268.70 INBOUND, 2900 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 268.63FAF: CELPADIST FAF TO MAP: 5.01DIST FAF TO THLD: 5.01

4. MIN ALT: GONVE 2900, CELPA 2100, GEEKS/1.70 NM TO RW27 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: RW27 2600

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DASDE ON V3-419 NORTHEAST BOUND.
CHART PLANVEIW NOTE: PROCEDURE NA FOR ARRIVALS ON MXE VORTAC AIRWAY RADIALS 025 CW 129.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE COATESVILLE ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET.
CHART NOTE: RWY 27 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: PROCEDURE NA AT NIGHT.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE} TCH {FEET}).

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CELPA TO RW27: 3.00/45.
WAAS CHANNEL #86637
REFERENCE PATH ID: W27A
CHART FAS OBST: 555 TREE 395935N/0753327W, 625 TREE 400003N/0753500W.
LTP HAE: 106.9 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	820	1	357	820	1	357		NA			NA				
LNAV MDA	860	1	397	860	1	397		NA			NA				
CIRCLING	1080	1	617	1080	1	617		NA			NA				



CHANGES - REASONS

- 1. UPDATED AIRPORT NAME FROM "BRANDYWINE" TO "BRANDYWINE RGNL" - TO REFLECT AIRPORT NAME CHANGE.
- 2. ADDED "20:1: IS NOT CLEAR" TO PROFILE VIEW - NO SURVEY DATA.
- 3. UPDATED TERMINAL ROUTES RNP VALUES FOR MXE VORTAC TO GONVE FROM: "2.00" TO "1.00" AND GONVE TO CELPA FROM: "0.50" TO "1.00" - IAW 8260.58A TABLE 1-2-1.
- 4. REMOVED CHART NOTE: "DME/DME RNP -0.3 NA" FROM NOTES AND ADDED "RNP APCH" TO PBN REQUIREMENTS NOTE - IAW 8260.19H 8-6-8.
- 5. UPDATED CHART NOTE FROM: "HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" TO: "RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" - IAW 8260.19H 8-6-11.K.(3).
- 6. UPDATED COORDINATED FROM: "ATA" TO: "A4A" AND CHANGED "AIRPORT MANAGER" TO "AMGR" - IAW 8260.19H 8-6-13.
- 7. ADDED "MAX 6000" TO HOLD-IN-LIEU ON LINE 2 INSTRUCTIONS - IAW 82.60.19H 8-6-7.B.(2).
- 8. UPDATED CHART FAS OBSTACLE IN ADDITIONAL FLIGHT DATA FROM "590 TREE 395954N/0753507W" TO "625 TREE 400003N/0753500W" - NEW CONTROLLING OBSTACLE.
- 9. UPDATED LNAV MDA/HAT FROM "840/377" TO "860/397" - NEW CONTROLLING OBSTACLE.

COORDINATED WITH:

A4A ☒ **ALPA** ☐ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZNY, PHL APP CON, AMGR

FLIGHT CHECKED BY

OFFICE

DATE

Digitally signed by
ROBERT G HAMILTON

Jan 08, 2019

Digitally signed by

ROBERT G HAMILTON

Jan 08, 2019

DEVELOPED BY

JULIE A. MORGAN (CASEY HILL)

OFFICE

AJV-5420

DATE

11/06/2018

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5420

DATE

Digitally signed by

ROBERT G HAMILTON

Jan 08, 2019

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KOQN
RUNWAY	RW27
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W27A
LTP/FTP LATITUDE	395927.7000N
LTP/FTP LONGITUDE	0753437.0700W
LTP/FTP ELLIPSOIDAL HEIGHT	+01069
FPAP LATITUDE	395906.9595N
FPAP LONGITUDE	0753629.8130W
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	1808
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	7336376A

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+01405
FPAP ORTHOMETRIC HEIGHT	+01405



**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
WEST CHESTER, PA	BRANDYWINE RGNL	25 APRIL 2019	1A

TAKEOFF MINIMUMS:

RWY 9, 27: STANDARD

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 09: VEHICLES ON ROAD 29 FT FROM DER, 282 FT LEFT OF CENTERLINE, 15 FT AGL/475 FT MSL. TREES BEGINNING 42 FT FROM DER, 142 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/530 FT MSL. TREES BEGINNING 113 FT FROM DER, 153 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/550 FT MSL. TREES BEGINNING 183 FT FROM DER, 98 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/557 FT MSL. TREES BEGINNING 410 FT FROM DER, 44 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/560 FT MSL. TREES BEGINNING 794 FT FROM DER, 9 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/534 FT MSL. TREES BEGINNING 3786 FT FROM DER, 1460 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/563 FT MSL. TREES BEGINNING 4310 FT FROM DER, 1647 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/573 FT MSL.

NOTE: RWY 27: TREES BEGINNING 2 FT FROM DER, 105 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/520 FT MSL. TREES BEGINNING 88 FT FROM DER, 81 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/527 FT MSL. VEHICLES ON ROAD BEGINNING 131 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 17 FT AGL/487 FT MSL. TREES BEGINNING 753 FT FROM DER, 400 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/524 FT MSL. TREES BEGINNING 824 FT FROM DER, 50 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/534 FT MSL. TREES BEGINNING 981 FT FROM DER, 346 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/540 FT MSL. TREES BEGINNING 996 FT FROM DER, 593 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/534 FT MSL. TREES BEGINNING 1051 FT FROM DER, 641 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/547 FT MSL. TREES BEGINNING 1067 FT FROM DER, 298 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/537 FT MSL. TREES BEGINNING 1137 FT FROM DER, 3 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/543 FT MSL. TREES BEGINNING 1208 FT FROM DER, 291 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/550 FT MSL. TREES BEGINNING 1278 FT FROM DER, 237 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/563 FT MSL. TREES BEGINNING 1364 FT FROM DER, 57 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/547 FT MSL. TREES BEGINNING 1450 FT FROM DER, 112 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/557 FT MSL. TREES BEGINNING 1576 FT FROM DER, 183 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/573 FT MSL. TREES BEGINNING 1677 FT FROM DER, 166 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/570 FT MSL. TREES BEGINNING 1803 FT FROM DER, 128 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/576 FT MSL. TREES BEGINNING 1904 FT FROM DER, 220 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/589 FT MSL. TREES BEGINNING 2030 FT FROM DER, 719 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/583 FT MSL. TREES BEGINNING 2101 FT FROM DER, 74 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/586 FT MSL. TREES BEGINNING 2131 FT FROM DER, 33 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/599 FT MSL. TREES BEGINNING 2328 FT FROM DER, 20 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/593 FT MSL. TREES BEGINNING 2656 FT FROM DER, 88 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/602 FT MSL. TREES BEGINNING 3408 FT FROM DER, 10 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/606 FT MSL.

CONTROLLING OBSTACLES:

REMARKS:

Digitally signed by
ROBERT G HAMILTON

Nov 14, 2018

FLIGHT INSPECTED BY:

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP
(AJW-33) MEMO, OCT 3, 2018

OFFICE SYMBOL:

DATE:

DEVELOPED BY:

JULIE MORGAN (JOSHUA DUGAN)

Digitally signed by
ROBERT G HAMILTON

Nov 14, 2018

OFFICE SYMBOL:

AJV-5420

DATE:

10/31/2018

APPROVED BY:

JULIE MORGAN

Digitally signed by
ROBERT G HAMILTON

Nov 14, 2018

OFFICE SYMBOL:

AJV-5420

DATE:

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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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
WEST CHESTER, PA	BRANDYWINE RGNL	25 APRIL 2019	1A

COORDINATED WITH:

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

OTHER:

ZNY, PHL APP CON, AMGR

CHANGES - REASONS:

1. CHANGED ALL REFERENCE TO BRANDYWINE TO BRANDYWINE RGNL - AIRPORT NAME CHANGE EFFECTIVE 4/25/2019.
2. UPDATED TAKEOFF OBSTACLES ALL RUNWAYS - NEW OBSTACLE DATA.



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> BRANDYWINE RGNL	<u>AIRPORT ID</u> KOQN	<u>PROCEDURE NAME</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> 4A	<u>CITY</u> WEST CHESTER	<u>STATE</u> PA	
<u>AIRPORT ELEVATION</u> 463	<u>TDZE</u>	<u>SUPERSEDED</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> 4	<u>DATED</u> 08/20/2015	<u>MAG VAR</u> 9W	<u>EPOCH YEAR</u> 1965
<u>FACILITY</u> MXE	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>

MISSED APPROACH

MAP:

5.73 NM AFTER MXE VORTAC OR AT AVAYU/5.73 DME FIX

MISSED APPROACH INSTRUCTIONS:

CLIMBING LEFT TURN TO 2000 DIRECT MXE VORTAC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
2. HOLD SW MXE VORTAC, RT, 054.00 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 7000.
3. **FAC:** 052.49 **FAF:** MXE VORTAC **DIST FAF TO MAP:** 5.73 **DIST FAF TO THLD:**
4. **MIN ALT:** MXE VORTAC 2000
8. **MSA FROM:** MXE VORTAC 090-180 2100, 180-090 2600

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE COATESVILLE ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET.

ADDITIONAL FLIGHT DATA:

FAC INTERSECTS THE MIDPOINT OF RWY 9-27.
CHART CIRCLING ICON.
FAS OBST: 674 AAO 395505N/0754015W.



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	1080	1	617	1080	1	617		NA			NA				

CHANGES - REASONS

1. UPDATED AIRPORT NAME FROM "BRANDYWINE" TO "BRANDYWINE RGNL" - TO REFLECT AIRPORT NAME CHANGE.
2. UPDATED CHART NOTE FROM: "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE COATESVILLE ALTIMETER SETTING AND INCREASE ALL DA 60 FEET" TO: "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE COATESVILLE ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET" - INCORPORATE NOTAM 8/4786.
3. REMOVED CHART NOTE: "HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" - IAW 8260.19H 8-6-11.K.(3), NOTE DOES NOT APPLY TO NON STRAIGHT-IN PROCEDURES.
4. UPDATED COORDINATED FROM: "ATA" TO: "A4A" AND CHANGED "AIRPORT MANAGER" TO "AMGR" - IAW 8260.19H 8-6-13.
5. ADDED "MAX 7000" TO HOLD-IN-LIEU ON LINE 2 INSTRUCTIONS - IAW 82.60.19H 8-6-7.B.(2).

COORDINATED WITH:

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

FLIGHT CHECKED BY
PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY
JULIE A. MORGAN (CASEY HILL)

APPROVED BY
JULIE MORGAN

OFFICE

OFFICE
AJV-5420

OFFICE
AJV-5420

DATE

DATE
11/01/2018

DATE

Digitally signed by
ROBERT G HAMILTON
Jan 08, 2019

Digitally signed by
ROBERT G HAMILTON
Jan 08, 2019

Digitally signed by
ROBERT G HAMILTON
Jan 08, 2019

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> YORK	<u>AIRPORT ID</u> KTHV	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> 2C	<u>CITY</u> YORK	<u>STATE</u> PA	
<u>AIRPORT ELEVATION</u> 495	<u>TDZE</u> 478	<u>SUPERSEDED</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> 2B	<u>DATED</u> 07/24/2014	<u>MAG VAR</u> 11W	<u>EPOCH YEAR</u> 2000
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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. 096/30 CW 236/30	NOPT	096/10 CW 236/10		4000
2. 096/10 CW 236/10		WABEP	IF/IAF	3300
3. 236/30 CW 346/30		ETUVY	IAF	4000
4. 346/30 CW 096/30		JEKBI	IAF	4600

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>
JEKBI	IAF	WABEP	NOPT	TF	FB	1.00	096.15	8.60	3300
ETUVY	IAF	WABEP	NOPT	TF	FB	1.00	236.36	8.60	3300
WABEP	IF/IAF	AZBIC		TF	FB	1.00	166.27	6.04	2400
AZBIC	FAF	JAYSO/1.90 NM TO RW17		TF	FB	0.30	166.31	4.02	
JAYSO/1.90 NM TO RW17		RW17	MAP	TF	FO	0.30	166.31	1.90	
RW17	MAP	895 MSL		CA			166.31		
895 MSL		WABEP		DF	FO	1.00			3300



MISSED APPROACH

MAP:
LP: RW17
LNAV: RW17

MISSED APPROACH INSTRUCTIONS:
CLIMBING LEFT TURN TO 3300 DIRECT WABEP AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)	
2.	HOLD N WABEP, RT, 166.27 INBOUND, 3300 FT. IN LIEU OF PT (IAF), MAX 6000.				
3. FAC:	166.31	FAF: AZBIC	DIST FAF TO MAP: 5.92	DIST FAF TO THLD: 5.92	
4. MIN ALT:	WABEP 3300, AZBIC 2400, JAYSO/1.90 NM TO RW17 1120				
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: STRAIGHT-IN RWY 17 NA AT NIGHT, CIRCLING RWY 17 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

839 AAO 400035N/0765431W
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
WAAS CHANNEL #69321
REFERENCE PATH ID: W17A
CHART FAS OBST: 660 TREE 395554N/0765309W, 679 TREE 395548N/0765318W.
LTP HAE: 109.7 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
LP MDA	920	1	442	920	1	442	920	1 3/8	442	920	1 3/8	442			
LNAV MDA	940	1	462	940	1	462	940	1 3/8	462	940	1 3/8	462			QUALITY 6 CHECKED
CIRCLING	1220	1	725	1240	1	745	1260	2 1/4	765	1260	2 1/2	765			

CHANGES - REASONS

1. INCORPORATED P-NOTAM 4/7937, CHANGED LP HAT TO 442 FROM 450, CHANGED LNAV HAT TO 462 FROM 470, CHARTED TDZE 478 AND DELETED THREE 470. CHANGED NIGHT LANDING RWY 17 NA TO STRAIGHT-IN RWY 17 NA AT NIGHT, CIRCLING RWY 17 NA AT NIGHT - 8260.19H, 8-3-4 C.(2).
2. INCORPORATED P-NOTAM 3/5534, CHANGED HELICOPTER VISIBILITY NOTE TO READ RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED FROM HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED - 8260.19H, 8-3-4 C.(2).
3. REMOVED VDA AZBIC TO RW06 3.06/35 AND VGSI NON-COINCIDENT NOTE, ADDED PROFILE NOTE "VISUAL SEGMENT - OBSTACLES" - PER FLIGHT CHECK.
4. REMOVED DME/DME RNP-0.3 NA AND ADDED PBN REQUIREMENTS NOTE: RNP APCH - 8260.58A TABLE 1-2-1
5. ADDED MAX HOLDING 6000 IN PROFILE VIEW - PER CRITERIA.
6. CHANGED TCH FROM 45 TO 0 - VDA REMOVED.
7. CHANGED GLIDEPATH ANGLE FROM 3 TO 0 - VDA REMOVED.
8. CHANGED CRC REMAINDER FROM BB6EC66B TO 92813790 - DUE TO CHANGES IN TCH AND GLIDEPATH ANGLE.

COORDINATED WITH:

A4A☐

ALPA☒

AOPA☒

APA☐

HAI☐

NBAA☒

OTHER: ZNY, HAR APP CON, AMGR

FLIGHT CHECKED BY

BOB S PRESSLER

Digitally signed by

ROBERT G HAMILTON

Jan 11, 2019

OFFICE

FICO

DATE

1/9/19

DEVELOPED BY

JULIE A. MORGAN (STEVEN DOUGHERTY)

Digitally signed by

ROBERT G HAMILTON

Jan 11, 2019

OFFICE

AJV-5420

DATE

11/16/2018

APPROVED BY

JULIE MORGAN

Digitally signed by

ROBERT G HAMILTON

Jan 11, 2019

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	KTHV
RUNWAY	RW17
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W17A
LTP/FTP LATITUDE	395517.3570N
LTP/FTP LONGITUDE	0765232.5255W
LTP/FTP ELLIPSOIDAL HEIGHT	+01097
FPAP LATITUDE	395356.3200N
FPAP LONGITUDE	0765144.2300W
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	1408
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	92813790

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+01432
FPAP ORTHOMETRIC HEIGHT	+01432



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> YORK	<u>AIRPORT ID</u> KTHV	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> 1C	<u>CITY</u> YORK	<u>STATE</u> PA	
<u>AIRPORT ELEVATION</u> 495	<u>TDZE</u> 485	<u>SUPERSEDED</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 07/24/2014	<u>MAG VAR</u> 11W	<u>EPOCH YEAR</u> 2000
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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. 276/30 CW 056/30	NOPT	XOPPA	IF/IAF	2800
2. 056/30 CW 166/30		LACES	IAF	3800
3. 166/30 CW 276/30		PAYCO	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>
LACES	IAF	XOPPA	NOPT	TF	FB	1.00	056.32	8.75	2800
PAYCO	IAF	XOPPA	NOPT	TF	FB	1.00	276.47	8.75	2800
XOPPA	IF/IAF	EZUMO		TF	FB	1.00	346.42	3.77	2500
EZUMO		YOKRI		TF	FB	1.00	346.39	3.33	2000
YOKRI	FAF	HODET/2.90 NM TO RW35		TF	FB	0.30	346.38	1.72	
HODET/2.90 NM TO RW35		RW35	MAP	TF	FO	0.30	346.38	2.90	
RW35	MAP	895 MSL		CA			346.38		
895 MSL		WABEP		DF	FO	1.00			3300

QUALITY
6
CHECKED

MISSED APPROACH

MAP:
LP: RW35
LNAV: RW35

MISSED APPROACH INSTRUCTIONS:
CLIMB TO 3300 DIRECT WABEP AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)				
2.	HOLD S XOPPA, RT, 346.42 INBOUND, 2800 FT. IN LIEU OF PT (IAF), MAX 6000.							
3. FAC:	346.38	FAF: YOKRI	DIST FAF TO MAP: 4.62	DIST FAF TO THLD: 4.62				
4. MIN ALT:	XOPPA 2800, EZUMO 2500, YOKRI 2000, HODET/2.90 NM TO RW35 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 NOT CLEAR	20:1:	IS CLEAR	TCH:			
8. MSA FROM:								

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING RWY 17 NA AT NIGHT.
CHART NOTE: RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

ADDITIONAL FLIGHT DATA:

1118 AAO 395110N/0764854W
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART VDP AT 1.30 NM TO RW35
WAAS CHANNEL #72821
REFERENCE PATH ID: W35A
FAS OBST: 759 TREE 395337N/0765149W, 815 TREE 395204N/0765113W.
HOLD N, RT, 166.27 INBOUND
LTP HAE: 114.3 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
LP MDA	1020	1	535	1020	1	535	1020	1 1/2	535	1020	1 1/2	535			
LNAV MDA	1080	1	595	1080	1	595	1080	1 3/4	595	1080	1 3/4	595			
CIRCLING	1220	1	725	1240	1	745	1260	2 1/4	765	1260	2 1/2	765			

CHANGES - REASONS

1. INCORPORATED P-NOTAM 4/7936, CHANGED PROCEDURE NOTE TO CIRCLING RWY 17 NA AT NIGHT FROM NIGHT LANDING: RWY 17 NA, CHARTED TDZE 485 AND DELETED THRE 485 -8260.19H, 8-3-4 C.(2)
2. INCORPORATED P-NOTAM 3/5532, CHANGED HELICOPTER VISIBILITY NOT TO READ: RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - 8260.19H, 8-3-4 C.(2)
3. REMOVED VDA YOKRI TO RW35 3.00/45 AND VGSI NON-COINCIDENT NOTE, ADDED PROFILE NOTE "VISUAL SEGMENT - OBSTACLES" - PER FLIGHT INSPECTION.
4. REMOVED DME/DME RNP-0.3 NA AND ADDED PBN REQUIREMENTS NOTE: RNP APCH - 8260.58A TABLE 1-2-1
5. ADDED VDP - NO OBSTACLES PENETRATE THE 20:1 SURFACE.
6. ADDED MAX HOLDING 6000 IN PROFILE VIEW - PER CRITERIA.
7. CHANGED TCH FROM 45 TO 0 - PER FLIGHT CHECK.
8. CHANGED GLIDEPATH ANGLE FROM 3 TO 0 - PER FLIGHT CHECK.
9. CHANGED CRC REMAINDER FROM E7417DB5 TO CEAE8C4E - DUE TO CHANGES IN TCH AND GLIDEPATH ANGLE.

COORDINATED WITH:**A4A** ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZNY, HAR APP CON, AMGR**FLIGHT CHECKED BY**

BOB S PRESSLER

*Digitally signed by***ROBERT G HAMILTON**

Jan 11, 2019

OFFICE

FICO

DATE

1/9/19

DEVELOPED BY

JULIE A. MORGAN (STEVEN DOUGHERTY)

*Digitally signed by***ROBERT G HAMILTON**

Jan 11, 2019

OFFICE

AJV-5420

DATE

11/16/2018

APPROVED BY

JULIE MORGAN

*Digitally signed by***ROBERT G HAMILTON**

Jan 11, 2019

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	KTHV
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	395444.5265N
LTP/FTP LONGITUDE	0765212.9635W
LTP/FTP ELLIPSOIDAL HEIGHT	+01143
FPAP LATITUDE	395605.5700N
FPAP LONGITUDE	0765301.2700W
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	1392
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	CEAE8C4E

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+01477
FPAP ORTHOMETRIC HEIGHT	+01477



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
ILS STANDARD INSTRUMENT APPROACH PROCEDURE

TITLE 14 CFR PART 97.29

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<u>AIRPORT</u> GREENVILLE DOWNTOWN	<u>AIRPORT ID</u> KGMU	<u>PROCEDURE NAME</u> ILS Y OR LOC Y RWY 1	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> GREENVILLE	<u>STATE</u> SC
<u>AIRPORT ELEVATION</u> 1048	<u>TDZE</u> 1015	<u>SUPERSEDED</u> ILS Y OR LOC Y RWY 1	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 08/20/2015	<u>MAG VAR</u> 5W
<u>FACILITY</u> I-GMU	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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. 276/30 CW 096/30	NOPT	SPRKI INT	IF/IAF	3000
2. 096/30 CW 276/30	PT	096/12 CW 276/12		4600
2. 096/12 CW 276/12		SPRKI INT	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>
SPRKI INT	IF/IAF	JUDKY LOM					006.20	12.35 (I-GMU)	2300

MISSED APPROACH

MAP:

ILS: DA
LOC: 3.61 NM AFTER JUDKY LOM

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 2900 DIRECT JUDKY LOM AND HOLD, CONTINUE CLIMB-IN-HOLD TO 2900.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 2000 THEN CLIMBING RIGHT TURN TO 3000 ON SPA VORTAC R-256 TO PELAM INT/SPA 15.26 DME AND HOLD.



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD S SPRKI, RT, 006.20 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 006.20FAF: JUDKY LOMDIST FAF TO MAP: 3.61DIST FAF TO THLD: 3.61

4. MIN ALT: SPRKI INT 3000, JUDKY LOM 2300

5. DIST TO THLD FROM OM: 3.61MM:IM:150 HAT:GS ANT: 849

6. MIN GS INCPT: 2300GS ALT AT FAF :OM: 2187MM:IM:

7. GP ANGLE: 3.0034:1:20:1:TCH: 35.1

8. MSA FROM:

EQUIPMENT REQUIREMENTS NOTES:

RNAV-1 GPS REQUIRED FOR PROCEDURE ENTRY.
ADF REQUIRED.

NOTES:

CHART PROFILE NOTE: GS UNUSABLE BELOW 1216.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GREER ALTIMETER SETTING AND INCREASE S-ILS 1 DA TO 1245, INCREASE ALL MDAS 40 FEET AND VISIBILITY S-LOC 1 CAT C AND D 1/8 SM AND CIRCLING CAT C VISIBILITY 1/4 SM.
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-ILS 1.

ADDITIONAL FLIGHT DATA:

CHART IN PLANVIEW: KGYH
CHART: ASR.
CHART CIRCLING ICON.
CHART IN PLANVIEW: PELAM INT/SPA 15.26 DME
CHART FAS OBST: 1167 TOWER 344722N/0822116W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD E PELAM INT/SPA 15.26 DME, RT, 255.75 INBOUND.
HOLD S, RT, 006.20 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD - NA WHEN TOWER CLOSED.; LOC: STANDARD - CAT D 900-2 3/4, NA WHEN 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 01	1216	3/4	201	1216	3/4	201	1216	3/4	201	1216	3/4	201			
S-LOC 01	1540	3/4	525	1540	3/4	525	1540	1 1/4	525	1540	1 1/4	525			
CIRCLING	1620	1	572	1620	1	572	1780	2	732	1860	2 3/4	812			



CHANGES - REASONS

- 1. CHANGED REMOTE ALTIMETER NOTE FROM "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GREER ALTIMETER SETTING AND INCREASE ALL DA 29 FEET AND ALL MDA 40 FEET; INCREASE CIRCLING CAT C VISIBILITY 1/4 MILE" TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GREER ALTIMETER SETTING AND INCREASE S-ILS 1 DA TO 1245, INCREASE ALL MDAS 40 FEET AND VISIBILITY S-LOC 1 CAT C AND D 1/8 SM AND CIRCLING CAT C VISIBILITY 1/4 SM" - IAW 8260.19H FORMAT.
- 2. DELETED NOTE "FOR INOPERATIVE MALSF, INCREASE S-LOC 1 CATS A/B VISIBILITY TO 1 MILE AND CATS C/D VISIBILITY TO 1 1/8 MILE" - SUPPORTS NEW INOP TABLE.
- 3. DELETED NOTE "FOR INOPERATIVE MALSF WHEN USING GREER ALTIMETER SETTING, INCREASE S-LOC 1 CATS A/B VISIBILITY TO 1 MILE AND CATS C/D VISIBILITY TO 1 3/8 MILE" SUPPORTS NEW INOP TABLE.
- 4. DELETED PLANVIEW NOTE "GPS REQUIRED FOR TAA" - ADD EQUIPMENT REQUIREMENTS NOTE " RNAV-1 GPS REQUIRED FOR PROCEDURE ENTRY."
- 5. S-LOC 1 MDA/HAT CHANGED FROM 1420/405 TO 1540/525 - ADDED 112 FT ADJUSTMENT DUE TO MA PENETRATION.
- 6. S-LOC 1 CAT C AND D VISIBILITY CHANGED FROM 1 SM TO 1 1/4 SM - IAW 8260-3C TABLE 3-3-1.
- 7. DELETED REQUIREMENT TO "CHART 4 NM ON OUTBOUND LEG OF HOLDING AT SPRKI" IN ADDITIONAL FLIGHT DATA - NOT REQUIRED FOR CONVENTIONAL HOLDING.
- 8. DELETED ALTERNATE MINIMUMS FOR ILS CAT C 800-2 AND CAT D 900-2 3/4 - IAW 8260.3C PARA 3-4-1 (2).
- 9. DELETED "NA WHEN LOCAL WEATHER NOT AVAILABLE" FROM ILS AND LOC ALTERNATE MINIMUMS - KGMU HAS ASOS ON WMSCR. NOTE NOT REQUIRED.
- 10. DELETED NOTE "ADF REQUIRED" - ADDED AS EQUIPMENT REQUIREMENTS NOTE.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZTL, GSP APP CON, KGMU ATCT, APT MGR

FLIGHT CHECKED BY

JEFFREY ECKMAN

DEVELOPED BY

GEORGETTE P. BARNETT

APPROVED BY

JULIE MORGAN

Digitally signed by

ROBERT G HAMILTON

Oct 29, 2018

Digitally signed by

GEORGETTE P BARNETT

Sep 21, 2018

Digitally signed by

ROBERT G HAMILTON

Oct 29, 2018

OFFICE

FICO

OFFICE

AJV-5422

OFFICE

AJV-5420

DATE

10/25/18

DATE

08/29/2018

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> GREENVILLE DOWNTOWN	<u>AIRPORT ID</u> KGMU	<u>PROCEDURE NAME</u> ILS Z OR LOC Z RWY 1	<u>ORIGINAL/AMENDMENT</u> 30B	<u>CITY</u> GREENVILLE	<u>STATE</u> SC	
<u>AIRPORT ELEVATION</u> 1048	<u>TDZE</u> 1015	<u>SUPERSEDED</u> ILS Z OR LOC Z RWY 1	<u>ORIGINAL/AMENDMENT</u> 30A	<u>DATED</u> 08/20/2015	<u>MAG VAR</u> 5W	<u>EPOCH YEAR</u> 2000
<u>FACILITY</u> I-GMU	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
PEDAL INT		JUDKY LOM				2.00	128.11	11.41	3000
DUNKE INT		JUDKY LOM				2.00	250.66	7.51	2900
PETON INT		JUDKY LOM				2.00	320.98	11.18	2900
SPRKI INT/RADAR	IF	JUDKY LOM				1.00	006.20	12.35 (I-GMU)	2300

MISSED APPROACH

MAP:

ILS: DA
LOC: 3.61 NM AFTER JUDKY LOM

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 2900 DIRECT JUDKY LOM AND HOLD, CONTINUE CLIMB-IN-HOLD TO 2900.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 2000 THEN CLIMBING RIGHT TURN TO 3000 ON SPA VORTAC R-256 TO PELAM INT/SPA 15.26 DME AND HOLD.

PROFILE:

1. PT L **SIDE OF COURSE** 186.20 **OUTBOUND** 2900 **FT WITHIN** 10 **MILES OF** JUDKY LOM (IAF)
- 2.
3. **FAC:** 006.20 **FAF:** JUDKY LOM **DIST FAF TO MAP:** 3.61 **DIST FAF TO THLD:** 3.61
4. **MIN ALT:** JUDKY LOM 2300*
5. **DIST TO THLD FROM OM:** 3.61 **MM:** **IM:** **150 HAT:** **GS ANT:** 849
6. **MIN GS INCPT:** 2400 **GS ALT AT FAF :** **OM:** 2187 **MM:** **IM:**
7. **GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 35.1
8. **MSA FROM:** GM LOM 030-210 3000, 210-030 5300



EQUIPMENT REQUIREMENTS NOTES:

ADF REQUIRED.

NOTES:

*LOC ONLY
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GREER ALTIMETER SETTING AND INCREASE DA TO 1245, INCREASE ALL MDAS 40 FEET AND VISIBILITY S-LOC 1 CAT C AND D 1/8 SM AND CIRCLING CAT C VISIBILITY 1/4 SM.
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-ILS 1.
CHART PLANVIEW NOTE ADJACENT SPRKI: RADAR REQUIRED.
CHART PROFILE NOTE: GS UNUSABLE BELOW 1216.

ADDITIONAL FLIGHT DATA:

CHART: ASR
CHART IN PLANVIEW: KGYH
CHART CIRCLING ICON
CHART IN PLANVIEW: PELAM INT/SPA 15.26 DME
CHART FAS OBST: 1167 TOWER 344722N/0822116W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD E PELAM INT/SPA 15.26 DME, RT, 255.75 INBOUND.
HOLD S, RT, 006.20 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD - NA WHEN TOWER CLOSED.; LOC: STANDARD - CAT D 900-2 3/4, NA WHEN 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 01	1216	3/4	201	1216	3/4	201	1216	3/4	201	1216	3/4	201			
S-LOC 01	1540	3/4	525	1540	3/4	525	1540	1 1/4	525	1540	1 1/4	525			
CIRCLING	1620	1	572	1620	1	572	1780	2	732	1860	2 3/4	812			

CHANGES - REASONS

1. CHANGED REMOTE ALTIMETER NOTE FROM "WHEN LOCAL ALTIMETER NOT RECEIVED, USE GREER ALTIMETER SETTING AND INCREASE ALL DA 29 FEET AND ALL MDA 40 FEET; INCREASE CIRCLING CAT C VISIBILITY 1/4 MILE" TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GREER ALTIMETER SETTING AND INCREASE DA TO 1245, INCREASE ALL MDAS 40 FEET AND VISIBILITY S-LOC 1 CAT C AND D 1/8 SM AND CIRCLING CAT C VISIBILITY 1/4 SM" - IAW 8260.19H FORMAT.
2. DELETED NOTE "FOR INOPERATIVE MALSF, INCREASE S-LOC 1 CATS A/B VISIBILITY TO 1 MILE AND CATS C/D VISIBILITY TO 1 1/8 MILE" - SUPPORTS NEW INOP TABLE.
3. DELETED NOTE "FOR INOPERATIVE MALSF WHEN USING GREER ALTIMETER SETTING, INCREASE S-LOC 1 CATS A/B VISIBILITY TO 1 MILE AND CATS C/D VISIBILITY TO 1 3/8 MILE" SUPPORTS NEW INOP TABLE.
4. S-LOC 1 MDA/HAT CHANGED FROM 1420/405 TO 1540/525 - ADDED 112 FT ADJUSTMENT DUE TO MA PENETRATION.
5. S-LOC 1 CAT C AND D VISIBILITY CHANGED FROM 1 SM TO 1 1/4 SM - IAW 8260.3D TABLE 3-3-1.
6. DELETED ALTERNATE MINIMUMS FOR ILS CAT C 800-2 AND CAT D 900-2 3/4 - IAW 8260.3D PARA 3-4-1 (2).
7. DELETED "NA WHEN LOCAL WEATHER NOT AVAILABLE" FROM ILS AND LOC ALTERNATE MINIMUMS - KGMU HAS ASOS ON WMSCR. NOTE NOT REQUIRED.
8. DELETED NOTE "ADF REQUIRED" - ADDED AS EQUIPMENT REQUIREMENTS NOTE.



COORDINATED WITH:

A4A☐

ALPA☒

AOPA☒

APA☐

HAI☐

NBAA☒

OTHER: ZTL, GSP APP CON, GMU TOWER, APT MAN, ATL FPO

FLIGHT CHECKED BY

JEFFREY ECKMAN

Digitally signed by

ROBERT G HAMILTON

Oct 29, 2018

OFFICE

FICO

DATE

10/25/18

DEVELOPED BY

GEORGETTE P. BARNETT

Digitally signed by

GEORGETTE P BARNETT

Sep 21, 2018

OFFICE

AJV-5422

DATE

08/29/2018

APPROVED BY

JULIE MORGAN

Digitally signed by

ROBERT G HAMILTON

Oct 29, 2018

OFFICE

AJV-5420

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>
ORANGEBURG, SC	ORANGEBURG MUNI	25 APRIL 2019	4

TAKEOFF MINIMUMS:

RWY 5, 17, 23: STANDARD.

RWY 35: 300-2 1/2 OR STANDARD WITH MINIMUM CLIMB OF 240 FT PER NM TO 600.

TEXTUAL DEPARTURE PROCEDURES:

RWY 5: CLIMB HEADING 049.31 TO 1000 BEFORE TURNING LEFT.

RWY 35: CLIMB HEADING 354.29 TO 800 BEFORE TURNING RIGHT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 5: TREE 190 FT FROM DER, 474 FT LEFT OF CENTERLINE, 279 FT MSL.

TREE 302 FT FROM DER, 384 FT LEFT OF CENTERLINE, 286 FT MSL.

TREES BEGINNING 421 FT FROM DER, 386 FT LEFT OF CENTERLINE, UP TO 289 FT MSL.

TRAVERSE WAY 769 FT FROM DER, 406 FT RIGHT OF CENTERLINE, 220 FT MSL.

NOTE: RWY 23: TREE 32 FT FROM DER, 477 FT LEFT OF CENTERLINE, 186 FT MSL.

TREE 870 FT FROM DER, 684 FT RIGHT OF CENTERLINE, 253 FT MSL.

POLE 1260 FT FROM DER, 127 FT LEFT OF CENTERLINE, 52 FT AGL/202 FT MSL.

TREES BEGINNING 1647 FT FROM DER, 420 FT RIGHT OF CENTERLINE, UP TO 259 FT MSL.

TREE 2195 FT FROM DER, 45 FT LEFT OF CENTERLINE, 250 FT MSL.

TREE 2529 FT FROM DER, 118 FT LEFT OF CENTERLINE, 251 FT MSL.

NOTE: RWY 35: TREE 798 FT FROM DER, 231 FT LEFT OF CENTERLINE, 277 FT MSL.

TREES BEGINNING 1538 FT FROM DER, 241 FT RIGHT OF CENTERLINE, UP TO 272 FT MSL.

TRANSMISSION LINE 3374 FT FROM DER, 663 FT RIGHT OF CENTERLINE, 97 FT AGL/296 FT MSL.

TREES BEGINNING 3663 FT FROM DER, 1239 FT RIGHT OF CENTERLINE, UP TO 301 FT MSL.

TOWER 1.9 NM FROM DER, 2830 FT RIGHT OF CENTERLINE, 268 FT AGL/477 FT MSL.

CONTROLLING OBSTACLES:

RWY 35: 477 FT MSL TOWER 332941.00N/0805141.00W.

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT:

RWY 5, 35: 873 FT MSL TOWER 333136.86N/0804942.95W.

REMARKS:

FLIGHT INSPECTED BY:

MARC J HINCK

Digitally signed by

ALLAN WILL

Jan 10, 2019

OFFICE SYMBOL:

FICO

DATE:

01/08/2019

DEVELOPED BY:

ALLAN WILL (SHANE FOWLER)

Digitally signed by

ALLAN WILL

Jan 10, 2019

OFFICE SYMBOL:

AJV-A423

DATE:

11/29/2018

APPROVED BY:

JULIE MORGAN

Digitally signed by

ALLAN WILL

Jan 10, 2019

OFFICE SYMBOL:

AJV-A42

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A

ALPA

AOPA

APA

HAI

NBAA



OTHER:

ZJX, ARPT MNGR



**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>
ORANGEBURG, SC	ORANGEBURG MUNI	25 APRIL 2019	4

CHANGES - REASONS:

1. RWY 35 CHANGED FROM "STANDARD" TO "300-2 2/1 OR STANDARD WITH MINIMUM CLIMB OF 240 FT PER NM TO 600" - NEW OBSTACLE IDENTIFIED.
2. RWY 5 CLIMB HEADING CHANGED FROM "049.46" TO "049.31" - UPDATED SURVEY.
3. UPDATED TAKEOFF OBSTACLE NOTES FOR RWY 5, 23, 35 - NEW TAKEOFF OBSTACLES IDENTIFIED.
4. ADDED CONTROLLING OBSTACLE TO RWY 35: 477 FT MSL TOWER 332941.00N/0805141.00W - NEW OBSTACLE IDENTIFIED.
5. ADDED OBSTACLE MANDATING ODP ROUTE DEVELOPMENT:
RWY 5, 35: 873 FEET MSL TOWER 333136.86N/0804942.95W - NEW OBSTACLE IDENTIFIED.
6. ADDED RWY 35 TEXTUAL DP PROCEDURE - CREATED A 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> PIERRE RGNL	<u>AIRPORT ID</u> KPIR	<u>PROCEDURE NAME</u> ILS OR LOC RWY 31	<u>ORIGINAL/AMENDMENT</u> 12D	<u>CITY</u> PIERRE	<u>STATE</u> SD	
<u>AIRPORT ELEVATION</u> 1744	<u>TDZE</u> 1720	<u>SUPERSEDED</u> ILS OR LOC RWY 31	<u>ORIGINAL/AMENDMENT</u> 12C	<u>DATED</u> 07/21/2016	<u>MAG VAR</u> 8E	<u>EPOCH YEAR</u> 2000
<u>FACILITY</u> I-PIR	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
PIR VOR/DME		BRULE INT					181.99	6.03	4000
CABKU/PIR 14.00 DME CCW	IAF	FILTA/I-PIR 16.64 DME					14.00 DME ARC (PIR LR-158)		4000
HATKA/PIR 14.00 DME CW	IAF	FILTA/I-PIR 16.64 DME					14.00 DME ARC (PIR LR-141)		4000
FILTA/I-PIR 16.64 DME	IF	BRULE INT/I-PIR 7.21 DME					312.65	9.43 (I-PIR)	3600

MISSED APPROACH

MAP:

ILS: DA

LOC: 5.74 NM AFTER BRULE INT OR AT I-PIR 1.47 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2400 THEN CLIMBING RIGHT TURN TO 4000 DIRECT PIR VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- HOLD SE BRULE, RT, 312.65 INBOUND, 3600 FT. IN LIEU OF PT (IAF), MAX 6000.
- FAC: 312.65 FAF: BRULE/I-PIR 7.21 DME DIST FAF TO MAP: 5.74 DIST FAF TO THLD: 5.74
- MIN ALT: BRULE/I-PIR 7.21 DME 3600
- DIST TO THLD FROM OM: 5.74 MM: IM: 150 HAT: GS ANT: 1060
- MIN GS INCPT: 3600 GS ALT AT FAF: BRULE INT/I-PIR 7.21 DME 3600 OM: MM: 1933 IM:
- GP ANGLE: 3.00 34:1: 20:1: TCH: 55.6
- MSA FROM: PIR VOR/DME 4200



EQUIPMENT REQUIREMENTS NOTES:

NOTES:

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

ADDITIONAL FLIGHT DATA:

CHART PIR R-242 AT CABKU.
CHART PIR R-040 AT HATKA.
HOLD E, RT, 256.00 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 31	1920	1/2	200	1920	1/2	200	1920	1/2	200	1920	1/2	200			
S-LOC 31	2140	1/2	420	2140	1/2	420	2140	3/4	420	2140	3/4	420			
CIRCLING	2240	1	496	2240	1	496	2260	1 1/2	516	2300	2	556			

CHANGES - REASONS

1. REMOVED PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE 3.00/TCH 52) - PER FPT AND NEW SURVEY.
2. UPDATE MISSED APPROACH INSTRUCTIONS FROM: CLIMB TO 2400 THEN CLIMBING RIGHT TURN TO 4000 DIRECT PIR VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000 TO: CLIMB TO 2400 THEN CLIMBING RIGHT TURN TO 4000 DIRECT PIR VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000 - PIR VORTAC CHANGED FROM VORTAC TO VOR/DME PER FPT.
3. DELETED CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 2255 - PER NOTAM FDC 6/3272.
4. INTERMEDIATE SEGMENT COURSE CHANGED IN PREVIOUS AMENDMENT FROM 312.66 TO 312.65 - FAF COORDINATES UPDATE.
5. HOLD-IN-LIEU SEGMENT INBOUND COURSE CHANGED IN PREVIOUS AMENDMENT FROM 312.66 TO 312.65 - PER FAF COORDINATES UPDATE.
6. TCH CHANGED IAW AIRNAV FROM 56.1 TO 55.7 - RECOMPUTED FROM PREVIOUS AMENDMENT.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: CHI-FPO, ZMP

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE
Digitally signed by

WARDELL HENNING

DATE

DEVELOPED BY

WARDELL HENNING (TODD BOWLING)

Digitally signed by
WARDELL HENNING

Jan 03, 2019

Jan 03, 2019
OFFICE

AJV-5432

DATE

11/19/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

WARDELL HENNING

Jan 03, 2019

OFFICE

AJV-5430

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> ALBANY MUNI	<u>AIRPORT ID</u> T23	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> 1C	<u>CITY</u> ALBANY	<u>STATE</u> TX	
<u>AIRPORT ELEVATION</u> 1415	<u>TDZE</u> 1414	<u>SUPERSEDED</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 12/06/2018	<u>MAG VAR</u> 5E	<u>EPOCH YEAR</u> 2015
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
BEKLE		OPGUE		TF	FB	1.00	064.33	23.99	3500
CIYAL		YEKCA		TF	FB	1.00	252.27	18.72	3500
WAPEV		JAMKU		TF	FO	1.00	317.10	23.57	3500
OPGUE	IAF	JAMKU		TF	FB	1.00	113.31	6.50	3500
YEKCA	IAF	JAMKU		TF	FB	1.00	233.43	6.50	3500
JAMKU	IF/IAF	CEVEB		TF	FB	1.00	173.37	5.96	3000
CEVEB	FAF	FEGTI/2.50 NM TO RW17		TF	FB	0.30	173.35	2.44	
FEGTI/2.50 NM TO RW17		RW17	MAP	TF	FO	0.30	173.35	2.50	
RW17	MAP	1727 MSL		CA			173.35		
1727 MSL		HAVPU		DF	FO	1.00			3500

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW17

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3500 DIRECT HAVPU AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
41
CHECKED

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N JAMKU, RT, 173.37 INBOUND, 3500 FT. IN LIEU OF PT (IF/IAF), MAX 6000.

3. FAC: 173.35 FAF: CEVEB DIST FAF TO MAP: 4.94 DIST FAF TO THLD: 4.94

4. MIN ALT: JAMKU 3500, CEVEB 3000, FEGTI/2.50 NM TO RW17 2220*

5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 313 HAT: 0.94 GS ANT: MM: IM:

6. MIN GP INCPT: 3000 GP ALT AT FAF : CEVEB 3000 OM:

7. GP ANGLE: 3.00 34:1: IS NOT CLEAR 20:1: IS CLEAR TCH: 40.0

8. MSA FROM: RW17 3500

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: BARO-VNAV NA.
*LNAV ONLY
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CIYAL ON V16 NORTHEAST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT WAPEV ON V66 EASTBOUND.
CHART NOTE: USE BRECKENRIDGE ALTIMETER SETTING.

ADDITIONAL FLIGHT DATA:

CHART BRECKENRIDGE AWOS.
CHART CIRCLING ICON.
WAAS CHANNEL #90435
REFERENCE PATH ID: W17A
CHART FAS OBST: 1544 TREE 324603N/0991652W.
HOLD S, RT, 353.36 INBOUND
LTP HAE: 393.3 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	1727	1	313	1727	1	313	1727	1	313		NA				
LNAV/VNAV DA	1872	1 5/8	458	1872	1 5/8	458	1872	1 5/8	458		NA				
LNAV MDA	1860	1	446	1860	1	446	1860	1 3/8	446		NA				
CIRCLING	2000	1	585	2000	1	585	2360	2 3/4	945		NA				



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	T23
RUNWAY	RW17
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W17A
LTP/FTP LATITUDE	324341.6920N
LTP/FTP LONGITUDE	0991604.1345W
LTP/FTP ELLIPSOIDAL HEIGHT	+03933
FPAP LATITUDE	324212.4520N
FPAP LONGITUDE	0991601.0935W
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	BDB9C12C

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+04225
FPAP ORTHOMETRIC HEIGHT	+04225



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> ALBANY MUNI	<u>AIRPORT ID</u> T23	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> 1C	<u>CITY</u> ALBANY	<u>STATE</u> TX	
<u>AIRPORT ELEVATION</u> 1415	<u>TDZE</u> 1415	<u>SUPERSEDED</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 12/06/2018	<u>MAG VAR</u> 5E	<u>EPOCH YEAR</u> 2015
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
BEKLE		UTOSY		TF	FB	1.00	126.31	29.90	3500
CIYAL		ZURER		TF	FB	1.00	202.25	36.31	3500
WAPEV		HAVPU		TF	FO	1.00	249.19	14.44	3500
UTOSY	IAF	HAVPU	NOPT	TF	FB	1.00	063.29	7.00	3500
ZURER	IAF	HAVPU	NOPT	TF	FB	1.00	283.43	7.00	3500
HAVPU	IF/IAF	ANQIJ		TF	FB	1.00	353.36	5.96	3000
ANQIJ	FAF	GIHYO/1.80 NM TO RW35		TF	FB	0.30	353.36	3.06	
GIHYO/1.80 NM TO RW35		RW35	MAP	TF	FO	0.30	353.36	1.80	
RW35	MAP	1728 MSL		CA			353.36		
1728 MSL		JAMKU		DF	FO	1.00			3500

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW35

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3500 DIRECT JAMKU AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD S HAVPU, RT, 353.36 INBOUND, 3500 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 353.36FAF: ANQIJDIST FAF TO MAP: 4.86DIST FAF TO THLD: 4.86
4. MIN ALT: HAVPU 3500, ANQIJ 3000, GIHYO/1.80 NM TO RW35 2020*
5. DIST TO THLD FROM OM:MM:IM:150 HAT:313 HAT: 0.86GS ANT:
6. MIN GP INCPT: 3000GP ALT AT FAF : ANQIJ 3000OM:MM:IM:
7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 40.0
8. MSA FROM: RW35 3500

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: BARO-VNAV NA.
*LNAV ONLY
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CIYAL ON V16 NORTHEAST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT WAPEV ON V66 EASTBOUND.
CHART NOTE: USE BRECKENRIDGE ALTIMETER SETTING.

ADDITIONAL FLIGHT DATA:

CHART BRECKENRIDGE AWOS-3.
CHART CIRCLING ICON.
WAAS CHANNEL #65935
REFERENCE PATH ID: W35A
CHART FAS OBST: 1484 TREE 324306N/0991633W.
HOLD N, RT, 173.37 INBOUND
LTP HAE: 401.4 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	1728	1	313	1728	1	313	1728	1	313		NA				
LNAV/VNAV DA	1728	1	313	1728	1	313	1728	1	313		NA				
LNAV MDA	1800	1	385	1800	1	385	1800	1 1/8	385		NA				
CIRCLING	2000	1	585	2000	1	585	2360	2 3/4	945		NA				





FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	T23
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	324252.2405N
LTP/FTP LONGITUDE	0991602.4475W
LTP/FTP ELLIPSOIDAL HEIGHT	+04014
FPAP LATITUDE	324421.4805N
FPAP LONGITUDE	0991605.4700W
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	9AFB7EAB

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+04305
FPAP ORTHOMETRIC HEIGHT	+04305



**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>
BAYTOWN, TX	RWJ AIRPARK	25 APRIL 2019	1A

TAKEOFF MINIMUMS:

RWY 14, 32: NA - ENVIRONMENTAL.
RWY 8, 26: STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 8: TREES BEGINNING 21 FEET FROM DER, 152 FEET LEFT OF CENTERLINE, UP TO 100 FEET AGL/129 FEET MSL. VEHICLE ON ROAD BEGINNING 100 FEET FROM DER, CROSSING CENTERLINE, UP TO 15 FEET AGL/44 FEET MSL. FENCE BEGINNING ABEAM DER, 115 FEET RIGHT OF CENTERLINE, UP TO 6 FEET AGL/35 FEET MSL. TREES BEGINNING 133 FEET FROM DER, 333 FEET RIGHT OF CENTERLINE, UP TO 100 FEET AGL/129 FEET MSL. BUILDINGS BEGINNING 266 FEET FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 30 FEET AGL/59 FEET MSL. POWER LINES BEGINNING 356 FEET FROM DER, 460 FEET LEFT OF CENTERLINE, UP TO 32 FEET AGL/61 FEET MSL. POLE 663 FEET FROM DER, 188 FEET RIGHT OF CENTERLINE, 100 FEET AGL/129 FEET MSL.

NOTE: RWY 26: BUILDINGS BEGINNING 47 FEET FROM DER, 118 FEET RIGHT OF CENTERLINE, UP TO 30 FEET AGL/64 FEET MSL. BUILDINGS BEGINNING 187 FEET FROM DER, 85 FEET LEFT OF CENTERLINE, UP TO 30 FEET AGL/64 FEET MSL. POWER LINES BEGINNING 407 FEET FROM DER, CROSSING CENTERLINE, UP TO 32 FEET AGL/66 FEET MSL. VEHICLE ON ROAD BEGINNING 448 FEET FROM DER, CROSSING CENTERLINE, UP TO 15 FEET AGL/49 FEET MSL. TREES BEGINNING 619 FEET FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 100 FEET AGL/134 FEET MSL. QUARRY EQUIPMENT 2800 FEET FROM DER, 193 FEET RIGHT OF CENTERLINE, UP TO 100 FEET AGL/134 FEET MSL.

CONTROLLING OBSTACLES:

QUALITY
3
CHECKED

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

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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>
BAYTOWN, TX	RWJ AIRPARK	25 APRIL 2019	1A

REMARKS:

100 FT VEGETATION USED PER FPT.

ABBREVIATED AMENDMENT; DOES NOT QUALIFY AS PERIODIC REVIEW.

Digitally signed by
DONALD H LANIER

FLIGHT INSPECTED BY:

Dec 10, 2018

OFFICE SYMBOL:

DATE:

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED.

DEVELOPED BY:

ROBERT GRIM

Digitally signed by
ROBERT GRIM
Nov 27, 2018

OFFICE SYMBOL:
AJV-5431

DATE:
11/09/2018

APPROVED BY:

PATRICK MULQUEEN

Digitally signed by
DONALD H LANIER
Dec 10, 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:

ZHU, AMGR

CHANGES - REASONS:

1. REPLACED THE TAKEOFF MINIMUMS FOR RWJ AIRPARK (K54T) FOR RWY 14 AND 32 WITH NA - ENVIRONMENTAL. - TURF RUNWAYS.
2. DELETED TAKEOFF OBSTACLE NOTES FOR RWY 14, 32 - RWY 14, 32 - NA ENVIRONMENTAL.
3. DELETED REMARKS REGARDING RUNWAY 8-26 (TURF) PROCEDURES - RUNWAY IS NOW ASPHALT.

QUALITY
3
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> HUTCHINSON COUNTY	<u>AIRPORT ID</u> KBGD	<u>PROCEDURE NAME</u> VOR RWY 17	<u>ORIGINAL/AMENDMENT</u> 9	<u>CITY</u> BORGER	<u>STATE</u> TX	
<u>AIRPORT ELEVATION</u> 3055	<u>TDZE</u> 3013	<u>SUPERSEDED</u> VOR OR GPS RWY 17	<u>ORIGINAL/AMENDMENT</u> 8A	<u>DATED</u> 04/17/2004	<u>MAG VAR</u> 11E	<u>EPOCH YEAR</u> 1965
<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 25 APRIL 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:

QUALITY
41
CHECKED

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: AMA APP CON, ZAB, AMGR

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY
MIKE MELSEN
Digitally signed by
MIKE MELSEN
Dec 07, 2018

OFFICE
AJV-A432

DATE
12/07/2018

APPROVED BY
PATRICK MULQUEEN

Digitally signed by
WARDELL HENNING
Dec 14, 2018

OFFICE
AJV-A43

DATE

TITLE
MANAGER



**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> HUTCHINSON COUNTY	<u>AIRPORT ID</u> KBDG	<u>PROCEDURE NAME</u> VOR/DME RWY 35	<u>ORIGINAL/AMENDMENT</u> 4A	<u>CITY</u> BORGER	<u>STATE</u> TX	
<u>AIRPORT ELEVATION</u> 3055	<u>TDZE</u> 3055	<u>SUPERSEDED</u> VOR/DME RWY 35	<u>ORIGINAL/AMENDMENT</u> 4	<u>DATED</u> 06/05/2008	<u>MAG VAR</u> 11E	<u>EPOCH YEAR</u> 1965
<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 25 APRIL 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: AMA APP CON, ZAB ARTCC, ARPT MGR

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY
MIKE MELSEN

Digitally signed by
MIKE MELSEN
Dec 07, 2018

OFFICE
AJV-A432

DATE
12/07/2018

APPROVED BY
PATRICK MULQUEEN

Digitally signed by
WARDELL HENNING
Dec 14, 2018

OFFICE
AJV-A43

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>
FREDERICKSBURG, TX	GILLESPIE COUNTY	25 APRIL 2019	2

TAKEOFF MINIMUMS:

RWY 14, 32: STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

RWY 14: CLIMB HEADING 140.73 TO 2400 BEFORE TURNING RIGHT.

RWY 32: CLIMB HEADING 320.74 TO 2400 BEFORE PROCEEDING ON COURSE.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 14, TREES BEGINNING 32 FT FROM DER, 310 FT RIGHT OF CENTERLINE, UP TO 1685 FT MSL.

POLE 202 FT FROM DER, 515 FT LEFT OF CENTERLINE, 30 FT AGL/1708 FT MSL.

TREE 325 FT FROM DER, 298 FT RIGHT OF CENTERLINE, 1688 FT MSL.

TREES BEGINNING 336 FT FROM DER, 439 FT LEFT OF CENTERLINE, UP TO 1715 FT MSL.

TREES BEGINNING 437 FT FROM DER, 297 FT LEFT OF CENTERLINE, UP TO 1718 FT MSL.

TREES BEGINNING 517 FT FROM DER, 323 FT LEFT OF CENTERLINE, UP TO 1723 FT MSL.

TREE 531 FT FROM DER, 328 FT RIGHT OF CENTERLINE, 1694 FT MSL.

NOTE: RWY 32, BUILDING, TREES BEGINNING 9 FT FROM DER, 22 FT RIGHT OF CENTERLINE, UP TO 31 FT AGL/1719 FT MSL.

TREES BEGINNING 84 FT FROM DER, 7 FT LEFT OF CENTERLINE, UP TO 1726 FT MSL.

TREE 943 FT FROM DER, 490 FT RIGHT OF CENTERLINE, 1720 FT MSL.

POLE 1028 FT FROM DER, 713 FT RIGHT OF CENTERLINE, 45 FT AGL/1733 FT MSL.

TREES, POLES BEGINNING 1038 FT FROM DER, 113 FT RIGHT OF CENTERLINE, UP TO 1735 FT MSL.

TREES BEGINNING 1108 FT FROM DER, 117 FT LEFT OF CENTERLINE, UP TO 1731 FT MSL.

TREES, POLES BEGINNING 1201 FT FROM DER, 39 FT RIGHT OF CENTERLINE, UP TO 1737 FT MSL.

TREE 1883 FT FROM DER, 432 FT RIGHT OF CENTERLINE, 1742 FT MSL.

CONTROLLING OBSTACLES:

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 14: 2221 MSL TOWER 301057.00N/0985340.00W. RWY 32: 2208 FT MSL TOWER 301551.00N/0985659.00W.

REMARKS:

FLIGHT INSPECTED BY:

JOHN E PHILLABAUM

Digitally signed by
DAVID TEFFETELLER
Nov 07, 2018

OFFICE SYMBOL:

FICO

DATE:

11/2/18

DEVELOPED BY:

FRANK MOORE

Digitally signed by
FRANK MOORE
Oct 05, 2018

OFFICE SYMBOL:
AJV-5433

DATE:
07/31/2018

APPROVED BY:

PAT MULQUEEN

Digitally signed by
DAVID TEFFETELLER
Nov 07, 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>
☐	☒	☒	☐	☐	☒



**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>
FREDERICKSBURG, TX	GILLESPIE COUNTY	25 APRIL 2019	2

OTHER:

ZHU, AIRPORT MANAGER

CHANGES - REASONS:

1. UPDATED TEXTUAL DEPARTURE PROCEDURE RWY 14 TO CLIMB HEADING CHANGED FROM 138.74 TO 140.73 AND CHANGED "BEFORE PROCEEDING ON COURSE" TO "BEFORE TURNING RIGHT- HEADING CORRECTION (CANCELS NOTAM 8/6908) AND UPDATED EVALUATION.
2. UPDATED TEXTUAL DEPARTURE PROCEDURE RWY 32 TO CLIMB HEADING CHANGED FROM 318.75 TO 320.74 - HEADING CORRECTION (CANCELS NOTAM 8/6908).
3. NEW TAKEOFF OBSTACLES - NEW SURVEY DATA.



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>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
SCHOLES INTL AT GALVESTON	KGLS	ILS OR LOC RWY 14	12C	GALVESTON	TX	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
6	5	ILS OR LOC RWY 14	12B	09/15/2016	2E	2015
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
I-GLS		25 APRIL 2019	ROUTINE			

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>
VUH VOR/DME		SWANE INT/VUH 5.58 DME					315.08	5.58	1800
UCENU INT/VUH 12.58 DME	IF	SWANE INT/VUH 5.58 DME					138.11	7.00 (I-GLS)	1800

MISSED APPROACH

MAP:

ILS: DA
LOC: VUH 0.14 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 3000 ON HEADING 284 AND VUH VOR/DME R-243 TO DELVE/22.05 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1200 THEN CLIMBING RIGHT TURN 2400 ON HEADING 360 I-GLS LOCALIZER COURSE NW (318) TO SWANE INT/VUH 5.58 DME AND HOLD.

PROFILE:

1. PT R **SIDE OF COURSE** 318.11 **OUTBOUND** 1800 **FT WITHIN** 10 **MILES OF** SWANE INT (IAF)
- 2.
3. **FAC:** 138.11 **FAF:** SWANE INT/VUH 5.58 DME **DIST FAF TO MAP:** **DIST FAF TO THLD:** 5.47
4. **MIN ALT:** SWANE INT/VUH 5.58 DME 1800
5. **DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **200 HAT:** 0.46 **GS ANT:** 1029
6. **MIN GS INCPT:** 1800 **GS ALT AT FAF :** SWANE INT/VUH 5.58 DME 1800 **OM:** **MM:** **IM:**
7. **GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 52.6
8. **MSA FROM:** VUH VOR/DME 180-360 3100, 360-180 1600

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED
RADAR REQUIRED FOR PROCEDURE ENTRY AT UCENU.



NOTES:
CHART NOTE: CIRCLING NA E OF RWY 18 AND NE OF RWY 32.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT VUH VOR/DME ON V556 EASTBOUND.
CHART NOTE: DME FROM VUH VOR/DME. SIMULTANEOUS RECEPTION OF I-GLS AND VUH DME REQUIRED.
CHART PROFILE AND PLANVIEW NOTE: PROCEDURE TURN NA FOR CAT E AIRCRAFT.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 14 CAT E VISIBILITY TO 3/4 SM AND S-LOC 14 CAT E VISIBILITY TO 1 3/8 SM.

ADDITIONAL FLIGHT DATA:
CHART VDP AT 1.40 DME*
DISTANCE VDP TO THLD 1.26 NM
* LOC ONLY
FAS OBST: 207 AAO 291903N/0945409W.
CHART: 284 STACK 292139N/0945558W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NW SWANE INT/VUH 5.58 DME, RT, 138.11 INBOUND.
HOLD SW, RT, 062.58 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 14	205	1/2	200	205	1/2	200	205	1/2	200	205	1/2	200	205	1/2	200
S-LOC 14	460	1/2	455	460	1/2	455	460	7/8	455	460	7/8	455	460	7/8	455
CIRCLING	500	1	494	500	1	494	500	1 1/2	494	560	2	554	620	2 1/4	614

- CHANGES - REASONS**
1. TERMINAL ROUTES: REMOVED HUB VOR/DME INITIAL. - HUB VOR/DME DECOMMISSIONING.
 2. BACK UP ALTIMETER NOTES PLACED ON BACK OF 8260-9 FOR CONTINGENCY PURPOSES. - BOTH ALTIMETER SOURCES ON WMSCR.
 3. EQUIPMENT REQUIREMENTS NOTES: ADDED "DME REQUIRED". - MISSED APPROACH CLEARANCE LIMIT IS NOW DME FIX, HUB VOR/DME DECOM.
 4. NOTES: REMOVED "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HUB VOR/DME ON V194-198 WESTBOUND". - HUB VOR/DME DECOM.
 5. ALTERNATE MISSED APPROACH: FIX SWANE INT CHANGED TO SWANE INT/VUH 5.58 DME. - TO MATCH FIX MAKE-UP ON 8260-2.
 6. MISSED APPROACH: LOC MAP CHANGED FROM 5.47 NM AFTER SWANE IN TO VUH 0.14 DME. DME NOW REQUIRED, TIMING TABLE NOT REQUIRED.
 7. MISSED APPROACH INSTRUCTIONS CHANGED FROM CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 3000 ON HEADING 284 AND ON VUH VOR/DME R-243 TO DELVE INT/VUH 22.05 DME AND HOLD TO CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 3000 ON HEADING 284 AND VUH VOR/DME R-243 TO DELVE/ 22.05 DME AND HOLD. - IAW 8260.19H 8-6-6.
 8. PROFILE: DISTANCE FAF TO MAP REMOVED. - PROCEDURE IS DME REQUIRED, TIME TABLE NO LONGER REQUIRED.
 9. PROFILE: TCH CHANGED FROM 52.7 TO 52.6. - UPDATED AIRNAV DATA. PROCEDURE WAS BUILT TO 52.6. NO CHANGE IN PROCEDURE DESIGN OR MINS.
 10. NOTES: ADDED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT VUH VOR/DME ON V556 EASTBOUND. - AIRWAY TURN MORE THAN 120 DEGREES.
 11. NOTES: ADDED CHART NOTE: DME FROM VUH VOR/DME. SIMULTANEOUS RECEPTION OF I-GLS AND VUH DME REQUIRED. - IAW 8260.19H 8-6-9.
 12. ADDED EQUIPMENT REQUIREMENT NOTE: RADAR REQUIRED FOR PROCEDURE ENTRY AT UCENU - HUB VOR/DME INITIAL REMOVED, BUT UCENU INTERMEDIATE IS RQD FOR CAT E AIRCRAFT PER ATC, AND RADAR VECTORS ARE RQD TO GET TO UCENU.
 13. ADDITIONAL FLIGHT DATA: ADDED CHART VDP AT 1.40 DME*, DISTANCE VDP TO THLD 1.26 NM, * LOC ONLY. - IAW 8260.3D 2-6-5.



COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZHU, AMGR, ST. AV. DIR, HOU APP CON, GLS ATCT

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

Digitally signed by

DAVID DANNER

Dec 07, 2018

DATE

DEVELOPED BY

LEO PALMER

Digitally signed by

LEO PALMER

Dec 03, 2018

OFFICE

AJV-5421

DATE

10/29/2018

APPROVED BY

JULIE MORGAN

Digitally signed by

DAVID DANNER

Dec 07, 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> SCHOLES INTL AT GALVESTON	<u>AIRPORT ID</u> KGLS	<u>PROCEDURE NAME</u> VOR RWY 14	<u>ORIGINAL/AMENDMENT</u> 4C	<u>CITY</u> GALVESTON	<u>STATE</u> TX	
<u>AIRPORT ELEVATION</u> 6	<u>TDZE</u> 5	<u>SUPERSEDED</u> VOR RWY 14	<u>ORIGINAL/AMENDMENT</u> 4B	<u>DATED</u> 09/15/2016	<u>MAG VAR</u> 6E	<u>EPOCH YEAR</u> 1985
<u>FACILITY</u> VUH	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
VUH VOR/DME		ZELDA INT					323.06	5.00	2000

MISSED APPROACH

MAP:

XUDDU/0.61 DME FIX

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 3000 ON HEADING 284 AND VUH VOR/DME R-243 TO DELVE/22.05 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT R **SIDE OF COURSE** 323.06 **OUTBOUND** 2000 **FT WITHIN** 15 **MILES OF** ZELDA INT (IAF)
- 2.
3. **FAC:** 143.06 **FAF:** ZELDA INT **DIST FAF TO MAP:** **DIST FAF TO THLD:** 4.88
4. **MIN ALT:** ZELDA INT 1600
8. **MSA FROM:** VUH VOR/DME 180-360 3100, 360-180 1600

EQUIPMENT REQUIREMENTS NOTES:

DME AND RADAR REQUIRED

NOTES:

CHART NOTE: CIRCLING NA E OF RWY 18 AND NE OF RWY 32.



ADDITIONAL FLIGHT DATA:

ZELDA TO RW14: 2.98/52.
CHART VDP AT 1.38 DME
DISTANCE VDP TO THLD 1.26 NM
FAS OBST: 207 AAO 291854N/0945424W.
FAC CROSSES RWY C/L EXTENDED 3005 FT FROM THLD.
HOLD SW, RT, 062.58 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-14	460	1/2	455	460	1/2	455	460	7/8	455	460	7/8	455	460	7/8	455
CIRCLING	500	1	494	500	1	494	500	1 1/2	494	560	2	554	620	2 1/4	614

CHANGES - REASONS

- MAP: REMOVED "4.39 NM AFTER ZELDA INT/VUH 5.00 DME OR AT". - TIME/DISTANCE TABLE NOT REQUIRED. PROCEDURE IS DME ONLY.
- MISSED APPROACH INSTRUCTIONS: CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 3000 ON HEADING 284 AND ON VUH VOR/DME R-243 TO DELVE INT/VUH 22.05 DME AND HOLD CHANGED TO CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 3000 ON HEADING 284 AND VUH VOR/DME R-243 TO DELVE/22.05 DME AND HOLD. - DELVE IS NO LONGER AN INT FIX DUE TO HUB DECOMMISSION
- ALL REFERENCES TO WILLIAM P. HOBBY ALTIMETER USE, MOVED TO BACK OF THE 8260-9 FOR CONTINGENCY PURPOSES. - IAW 8260.19 8-6-8, , PRIMARY LOCAL ALTIMETER IS WMSCR
- ADDED EQUIPMENT REQUIREMENTS NOTES: DME AND RADAR REQUIRED - MISSED APPROACH CLEARANCE LIMIT DEFINED AS DME FIX ONLY (HUB VOR/DME DECOMMISSIONING), RADAR RQD PER ATC REQUIREMENT.
- REMOVED 'CHART PLANVIEW NOTE: RADAR REQUIRED' - REPLACED WITH EQUIPMENT REQUIREMENT NOTE.
- REMOVED DISTANCE FAF TO MAP: 4.39. - PROCEDURE IS DME REQUIRED, TIME/DISTANCE TABLE NO LONGER REQUIRED.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZHU, HOU APP CON, GLS ATCT, AMGR, ST AV DIRECTOR

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY

LEO PALMER
Digitally signed by LEO PALMER
Dec 03, 2018

APPROVED BY
JULIE MORGAN
Digitally signed by DAVID DANNER
Dec 07, 2018

OFFICE
Digitally signed by DAVID DANNER
Dec 07, 2018

OFFICE
AJV-5421

OFFICE
AJV-5420

DATE

DATE
11/27/2018

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> HASKELL MUNI	<u>AIRPORT ID</u> 15F	<u>PROCEDURE NAME</u> RNAV (GPS)-A	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> HASKELL	<u>STATE</u> TX	
<u>AIRPORT ELEVATION</u> 1625	<u>TDZE</u>	<u>SUPERSEDED</u> RNAV (GPS)-A	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 09/15/2016	<u>MAG VAR</u> 5E	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
WAGUN		WALIT		TF	FO	1.00	083.53	41.43	4400
BEKLE		WALIT		TF	FO	1.00	007.15	35.23	4400
WALIT	IF/IAF	STOWP		TF	FB	1.00	182.82	7.20	3200
STOWP	FAF	RW18	MAP	TF	FO	0.30	182.81	4.92	
RW18	MAP	2025 MSL		CA			182.81		
2025 MSL		WALIT		DF	FO	1.00			4400

MISSED APPROACH

MAP:

LNAV: RW18

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 4400 DIRECT WALIT AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N WALIT, RT, 182.82 INBOUND, 4400 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 182.81

FAF: STOWP

DIST FAF TO MAP: 4.92

DIST FAF TO THLD: 4.92

4. MIN ALT: WALIT 4400, STOWP 3200

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: 15F 3400

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: PROCEDURE NA AT NIGHT.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT WAGUN ON V385 NORTHWEST BOUND.
CHART NOTE: USE ABILENE RGNL ALTIMETER SETTING.

ADDITIONAL FLIGHT DATA:

CHART ABILENE RGNL ASOS
CHART CIRCLING ICON.
STOWP TO RW18: 3.00/40.
FAS OBST: 1760 AAO 331632N/0994103W.

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	2200	1	575	2200	1	575		NA			NA				

CHANGES - REASONS

1. PROFILE LINE 7, ADDED "34:1 IS NOT CLEAR", "20:1 IS NOT CLEAR" - IAW 8260.19H, PARA 8-6-7G(3).
2. ADDED "CHART ABILENE RGNL ASOS" TO ADDITIONAL FLIGHT DATA - IAW 8260.19H, PARA 8-2-4B(3).
3. REMOVED "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BEKLE ON V18 SOUTHEAST BOUND" - V18 SEGMENT REMOVED BETWEEN GTH AND MQP DUE TO GTH DECOMMISSIONING.
4. DELETED "CHART NOTE: DME/DME RNP-0.3 NA" - IAW 8260.19H, PARA 4-6-10E AND MEMO 266 DATED 7/18/2018.
5. ADDED "RNP APCH" TO PBN REQUIREMENTS NOTES - IAW 8260.19H, PARA 8-6-8B(1) AND MEMO 266 DATED 7/18/2018.
6. ADDED MAX 6000 AT WALIT HOLDING PATTERN TO LINE 2 - IAW 8260.19H PARA 8-6-7B(2).
7. DELETED "CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA" - IAW 8260.19H, PARA 8-6-11K(3), NOTE IS UTILIZED FOR STRAIGHT-IN PROCEDURES ONLY.
8. CHANGED MSA CENTER POINT FROM RW18 TO K15F ARP - IAW 8260.3D, PARA 2-3-2B(2).
9. MOVED BACK UP ALTIMETER NOTE "WHEN ABILENE RGNL ALTIMETER SETTING NOT RECEIVED, USE BRECKENRIDGE ALTIMETER SETTING AND INCREASE ALL MDAS 40 FEET" TO THE BACK OF THE 8260-9 - REMOTE ALTIMETER ABI WEATHER TRANSMITTED ON ASOS (WMSCR).



<u>AIRPORT</u> HASKELL MUNI	<u>AIRPORT ID</u> 15F	<u>PROCEDURE NAME</u> RNAV (GPS)-A	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> HASKELL	<u>STATE</u> TX

COORDINATED WITH:

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

FLIGHT CHECKED BY
PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY DIANE S LAIR	<i>Digitally signed by</i> DIANE S LAIR Jan 03, 2019	OFFICE AJV-A433	<i>Digitally signed by</i> DAVID TEFFETELLER Jan 08, 2019	DATE 11/06/2018

APPROVED BY PATRICK MULQUEEN	<i>Digitally signed by</i> DAVID TEFFETELLER Jan 08, 2019	OFFICE AJV-A43	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.
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<u>AIRPORT</u> CONROE-NORTH HOUSTON RGNL	<u>AIRPORT ID</u> KCXO	<u>PROCEDURE NAME</u> ILS OR LOC RWY 14	<u>ORIGINAL/AMENDMENT</u> 3C	<u>CITY</u> HOUSTON	<u>STATE</u> TX
<u>AIRPORT ELEVATION</u> 245	<u>TDZE</u> 236	<u>SUPERSEDED</u> ILS OR LOC RWY 14	<u>ORIGINAL/AMENDMENT</u> 3B	<u>DATED</u> 06/22/2017	<u>MAG VAR</u> 5E
<u>FACILITY</u> I-CXO	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
DAS VORTAC		ALIBI LOM/I-CXO 6.43 DME					283.78	45.55	3000
TNV VOR/DME		ALIBI LOM/I-CXO 6.43 DME					065.98	31.41	2100

MISSED APPROACH

MAP:

ILS: DA
LOC: 5.06 NM AFTER ALIBI LOM/CX 6.43 DME OR AT I-CXO 1.37 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1000 THEN CLIMBING LEFT TURN TO 2100 DIRECT ALIBI LOM/I-CXO 6.43 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L **SIDE OF COURSE** 320.48 **OUTBOUND** 2100 **FT WITHIN** 10 **MILES OF** ALIBI LOM/I-CXO 6.43 DME (IAF)
- 2.
3. **FAC:** 140.48 **FAF:** ALIBI LOM/I-CXO 6.43 DME **DIST FAF TO MAP:** 5.06 **DIST FAF TO THLD:** 5.06
4. **MIN ALT:** ALIBI LOM/I-CXO 6.43 DME 2100, ZUDOP/I-CXO 3.20 DME 840*
5. **DIST TO THLD FROM OM:** 5.06 **MM:** **IM:** **150 HAT:** **GS ANT:** 941
6. **MIN GS INCPT:** 2100 **GS ALT AT FAF :** **OM:** 1915 **MM:** **IM:**
7. **GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 47.0
8. **MSA FROM:** CX NDB 3100

EQUIPMENT REQUIREMENTS NOTES:

ADF REQUIRED.



NOTES:

*LOC ONLY

ADDITIONAL FLIGHT DATA:

CHART IN PLANVIEW: (CFBQR) AT 303053.47N/0953229.03W
CHART CIRCLING ICON.
CHART FAS OBST: 325 TREE 302159N/0952510W.
FAS OBST: 589 AAO 302520N/0952831W.
HOLD NW, RT, 140.48 INBOUND
LTP HAE: 43.8 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
S-ILS 14	436	1/2	200	436	1/2	200	436	1/2	200	436	1/2	200			
S-LOC 14	840	1/2	604	840	1/2	604	840	1 3/8	604	840	1 3/8	604			
CIRCLING	840	1	595	840	1	595	880	1 3/4	635	960	2 1/4	715			
ZUDOP FIX MINIMUMS															
S-LOC 14	640	1/2	404	640	1/2	404	640	3/4	404	640	2	404			
CIRCLING	700	1	455	700	1	455	880	1 3/4	635	960	2 1/4	715			

CHANGES - REASONS

1. HOBBY VOR/DME FEEDER WAS REMOVED FROM THE PROCEDURE.- HOBBY VOR/DME IS TO BE DECOMMISSIONED 4/25/19.
2. ADDED EQUIPMENT REQUIRED NOTE: ADF REQUIRED. - IAW 8260.19H PARA 8-6-8 1 (C) EQUIPMENT NOTES.
3. REMOVED CHART NOTE: ADF REQUIRED. - ADF REQUIRED IS NOW REQUIRED IN EQUIPMENT NOTES.
4. REMOVED CHART PLANVIEW NOTE: ADF REQUIRED. - ADF REQUIRED IS NOW REQUIRED IN EQUIPMENT NOTES.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZHU, IAH APP CON, CXO ATCT, AMGR

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY

JULIE A. MORGAN (MARSHALL SCOTT)

APPROVED BY

JULIE MORGAN

OFFICE

OFFICE

AJV-5420

OFFICE

AJV-5420

DATE

DATE

11/01/2018

DATE

Digitally signed by
ROBERT G HAMILTON
Nov 29, 2018

Digitally signed by
ROBERT G HAMILTON
Nov 29, 2018

Digitally signed by
ROBERT G HAMILTON
Nov 29, 2018

TITLE
MANAGER

QUALITY
41
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>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
CONROE-NORTH HOUSTON RGNL	KCXO	NDB RWY 14	3C	HOUSTON	TX	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
245	236	NDB RWY 14	3B	06/22/2017	5E	2000
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
CX		25 APRIL 2019	ROUTINE			

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>
DAS VORTAC		ALIBI LOM					283.78	45.54	3000
TNV VOR/DME		ALIBI LOM					065.98	31.41	2100

MISSED APPROACH

MAP:
RW14

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1000 THEN CLIMBING LEFT TURN TO 2100 DIRECT ALIBI LOM AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L **SIDE OF COURSE** 320.09 **OUTBOUND** 2100 **FT WITHIN** 10 **MILES OF** ALIBI LOM (IAF)
2.
3. **FAC:** 140.09 **FAF:** ALIBI LOM **DIST FAF TO MAP:** 5.06 **DIST FAF TO THLD:** 5.06
4. **MIN ALT:** ALIBI LOM 2100
8. **MSA FROM:** CX NDB 3100

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

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



ADDITIONAL FLIGHT DATA:
599 AAO 302537N/0952857W
CHART CIRCLING ICON.
ALIBI LOM TO RW14: 3.39/47.
FAS OBST: 569 AAO 302505N/0952726W.
HOLD NW, RT, 140.48 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
S-14	880	3/4	644	880	3/4	644	880	1 3/8	644	880	1 3/8	644			
CIRCLING	880	1	635	880	1	635	880	1 7/8	635	960	2	715			

CHANGES - REASONS
1. HOBBY VOR/DME FEEDER WAS REMOVED FROM THE PROCEDURE. - HOBBY VOR/DME IS TO BE DECOMMISSIONED 4/25/19.

COORDINATED WITH:
A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZHU, HOU APP CON, CXO ATCT, AMGR

FLIGHT CHECKED BY
PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY
JULIE A. MORGAN (MARSHALL SCOTT)

APPROVED BY
JULIE MORGAN

OFFICE

OFFICE
AJV-5420

OFFICE
AJV-5420

DATE

DATE

DATE

Digitally signed by
ROBERT G HAMILTON
Nov 29, 2018

Digitally signed by
ROBERT G HAMILTON
Nov 29, 2018

Digitally signed by
ROBERT G HAMILTON
Nov 29, 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> GEORGE BUSH INTERCONTINENTAL/HOUSTON	<u>AIRPORT ID</u> KIAH	<u>PROCEDURE NAME</u> ILS OR LOC RWY 8L ILS RWY 8L SA CAT I, ILS RWY 8L CAT II, ILS RWY 8L CAT III	<u>ORIGINAL/AMENDMENT</u> 4D	<u>CITY</u> HOUSTON	<u>STATE</u> TX
<u>AIRPORT ELEVATION</u> 96	<u>TDZE</u> 94	<u>SUPERSEDED</u> ILS OR LOC RWY 8L ILS RWY 8L SA CAT I, ILS RWY 8L CAT II, ILS RWY 8L CAT III	<u>ORIGINAL/AMENDMENT</u> 4C	<u>DATED</u> 08/17/2017	<u>MAG VAR</u> 3E
<u>FACILITY</u> I-BZU	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
GUSHR	IAF	BEPEA		TF	FB	1.00	171.24	7.96	4000
BEPEA		LIMEE		TF	FB	1.00	171.36	2.97	3000
LIMEE		KABBY		TF	FB	1.00	123.01	3.57	3000
MAAKO INT/I-BZU 25.96 DME	IAF	KABBY/I-BZU 20.97 DME					086.94	4.99 (I-BZU)	3000
KABBY/I-BZU 20.97 DME		KICKM/I-BZU 16.73 DME					086.94	4.24 (I-BZU)	3000
KICKM/I-BZU 16.73 DME	IF	FLIBZ/I-BZU 8.90 DME/RADAR					086.94	7.84 (I-BZU)	3000
FLIBZ/I-BZU 8.90 DME/RADAR		JACEN/I-BZU 5.63 DME/RADAR					086.94	3.27 (I-BZU)	2000

MISSED APPROACH

MAP:

ILS: DA
 LOC: 5.81 NM AFTER JACEN/I-BZU 5.63 DME/RADAR OR AT I-BZU 0.19 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 600 THEN CLIMBING LEFT TURN TO 4000 ON IAH VORTAC R-019 TO CLEEP INT/IAH 22.13 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



8. MSA FROM: IAH VORTAC 015-230 3100, 230-015 2400

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

CHART MANDATORY 6000 AT GUSHR.
CHART IN PROFILE VIEW: I-BZU DME ANTENNA.
CHART VDP AT 1.23 DME*
DISTANCE VDP TO THLD 1.41 NM

* LOC ONLY
FAS OBST: 325 AAO 300046N/0952626W.
CHART: 636 TOWER 295934N/0952824W.
HOLD N. RT. 199.13 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 08L	294	1800	200	294	1800	200	294	1800	200	294	1800	200	294	1800	200
S-LOC 08L	600	2400	506	600	2400	506	600	5500	506	600	5500	506	600	5500	506

00 QUALITY
41
CHECKER

<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>
GEORGE BUSH INTERCONTINENTAL/HOUSTON	KIAH	ILS OR LOC RWY 8L ILS RWY 8L SA CAT I, ILS RWY 8L CAT II, ILS RWY 8L CAT III	4D	HOUSTON	TX

CHANGES - REASONS

1. REMOVED CHART PLANVIEW NOTE: GPS OR RADAR REQUIRED - IAW WITH .19H CH 8
2. ADDED EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED. AND EQUIPMENT REQUIREMENTS NOTE: FROM GUSHR: RNAV 1-GPS REQUIRED. IAW..19H CH 8.
3. REMOVED ALTERNATE MISSED APPROACH - HUB DECOMMISSIONING.
4. UPDATED IF FIX KICKM, REMOVED INT - HUB DECOMMISSIONING.
5. UPDATED S-ILS 08L DA FROM 295 TO 294, SA CAT I ILS DA FROM 245 TO 244, CAT II ILS DA FROM 195 TO 194 - AIRNAV DATA, TDZE CHANGED FROM 95 TO 94.
6. UPDATED SA CAT I ILS RA FROM 156 TO 158 , CAT II ILS RA FROM 104 TO 108 - RECALCULATED USING FORMULA 3-2-1.
7. DELETED CHART PLANVIEW NOTE AT GUSHR: MAX 210 KIAS - DUPLICATE NOTE.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZHU, IAH APP CON, IAH TOWER, AMGR, ATA

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

Digitally signed by
ROBERT G HAMILTON
Dec 12, 2018

DEVELOPED BY

HEIDI SNIDER
Digitally signed by
HEIDI SNIDER
Dec 07, 2018

OFFICE

AJV-5422

DATE

10/30/2018

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5420

DATE

Digitally signed by
ROBERT G HAMILTON
Dec 12, 2018

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> GEORGE BUSH INTERCONTINENTAL/HOUSTON	<u>AIRPORT ID</u> KIAH	<u>PROCEDURE NAME</u> ILS OR LOC RWY 9 ILS RWY 9 SA CAT I, ILS RWY 9 SA CAT II	<u>ORIGINAL/AMENDMENT</u> 10B	<u>CITY</u> HOUSTON	<u>STATE</u> TX	
<u>AIRPORT ELEVATION</u> 96	<u>TDZE</u> 90	<u>SUPERSEDED</u> ILS OR LOC RWY 9 ILS RWY 9 CAT II	<u>ORIGINAL/AMENDMENT</u> 10A	<u>DATED</u> 07/21/2016	<u>MAG VAR</u> 3E	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> I-UYO	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
URANG INT/I-UYO 27.30 DME	IAF	CHILT INT/I-UYO 22.28 DME					086.95	5.02 (I-UYO)	5000
CHILT INT/I-UYO 22.28 DME		MEDIC/I-UYO 18.04 DME					086.95	4.25 (I-UYO)	4000
MEDIC/I-UYO 18.04 DME	IF	DOHNN/I-UYO 14.27 DME					086.95	3.77 (I-UYO)	4000
DOHNN/I-UYO 14.27 DME		SAYNO/I-UYO 10.35 DME					086.95	3.92 (I-UYO)	3000
SAYNO/I-UYO 10.35 DME		HYWAY/I-UYO 5.68 DME					086.95	4.67 (I-UYO)	2000

MISSED APPROACH

MAP:

ILS: DA
LOC: 5.84 NM AFTER HYWAY/I-UYO 5.68 DME OR AT I-UYO 0.17 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 580 THEN CLIMBING RIGHT TURN TO 3000 ON IAH VORTAC R-130 TO JEBOX/IAH 18.33 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 580 THEN CLIMBING RIGHT TURN TO 3000 ON MHF VOR/DME R-296 TO JEBOX/MHF 21.66 DME AND HOLD.

QUALITY
41
CHECKED

8. MSA FROM: IAH VORTAC 015-230 3100, 230-015 2400

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**	290	2400	200	290	2400	200	290	2400	200	290	2400	200	290	2400	200
S-LOC 09	580	2400	490	580	2400	490	580	5000	490	580	5000	490	580	5000	490

QUALITY
41
CHECKED

<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>
GEORGE BUSH INTERCONTINENTAL/HOUSTON	KIAH	ILS OR LOC RWY 9 ILS RWY 9 SA CAT I, ILS RWY 9 SA CAT II	10B	HOUSTON	TX

CHANGES - REASONS

- 1. REMOVED PLANVIEW NOTE RADAR REQUIRED, ADDED EQUIPMENT REQUIREMENT NOTE: RADAR REQUIRED FOR PROCEDURE ENTRY - IAW 8260.19H.
- 2. ADDED EQUIPMENT REQUIREMENT NOTE: DME REQUIRED - HUB VOR/DME DECOMMISSIONING.
- 3. REMOVED INT FROM FIXES: MEDIC, DOHNN, SAYNO, JEBOX AND HYWAY - HUB VOR/DME DECOMMISSIONING
- 4. UPDATED DA S-ILS LOC FROM 291 TO 290, SA CAT I FROM 241 TO 240, SA CAT II FROM 191 TO 190 - AIRNAV DATA, TDZE 90.1.
- 5. UPDATED SA CAT I RA FROM 149 TO 148, SA CAT II RA FROM 99 TO 98, RECALCULATED USING 8260.3D FORMULA 3-2-1.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZHU, HOUSTON APP CON, IAH TOWER, AMGR. ST. AV. DIR, ATA

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

Digitally signed by
ROBERT G HAMILTON
Dec 12, 2018

DEVELOPED BY

HEIDI SNIDER
Digitally signed by
HEIDI SNIDER
Dec 07, 2018

OFFICE

AJV-5422

DATE

10/25/2018

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5420

DATE

Digitally signed by
ROBERT G HAMILTON
Dec 12, 2018

TITLE
MANAGER



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> GEORGE BUSH INTERCONTINENTAL/HOUSTON	<u>AIRPORT ID</u> KIAH	<u>PROCEDURE NAME</u> ILS OR LOC RWY 26L ILS RWY 26L SA CAT I, ILS RWY 26L CAT II, ILS RWY 26L CAT III	<u>ORIGINAL/AMENDMENT</u> 21D	<u>CITY</u> HOUSTON	<u>STATE</u> TX
<u>AIRPORT ELEVATION</u> 96	<u>TDZE</u> 95	<u>SUPERSEDED</u> ILS OR LOC RWY 26L ILS RWY 26L CAT II, ILS RWY 26L CAT III	<u>ORIGINAL/AMENDMENT</u> 21C	<u>DATED</u> 04/30/2015	<u>MAG VAR</u> 3E
<u>FACILITY</u> I-JYV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
BOZZZ	IAF	VANNN		TF	FB	1.00	247.53	2.89	7000
GARRR	IAF	VANNN		TF	FB	1.00	287.14	3.00	7000
VANNN INT/I-JYV 28.10 DME	IAF	MKAYE INT/I-JYV 23.10 DME					266.96	5.00 (I-JYV)	7000
MKAYE INT/I-JYV 23.10 DME		GRIEG/I-JYV 18.86 DME					266.96	4.25 (I-JYV)	5000
GRIEG/I-JYV 18.86 DME	IF	KERNS/I-JYV 11.63 DME					266.96	7.22 (I-JYV)	3000
KERNS/I-JYV 11.63 DME		JEPNI/I-JYV 7.56 DME					266.96	4.08 (I-JYV)	2000

MISSED APPROACH

MAP:

ILS: DA
 LOC: 5.81 NM AFTER JEPNI/I-JYV 7.56 DME OR AT I-JYV 1.74 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 THEN LEFT TURN HEADING 240 AND IAH VORTAC R-270 TO LUCEP INT/IAH 22.93 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
41
CHECKED

8. MSA FROM: IAH VORTAC 015-230 3100, 230-015 2400

SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 26L: CAT A, B, C, D RA 152, RVR 1400, HAT 150, DA 245 MSL.
CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 26L: CAT A, B, C, D RA 100, RVR 1200, HAT 100, DA 195 MSL.
CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 26L: CAT A, B, C, D RVR 600
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 26R AND RWY 27.
SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF HUD TO DH.
CAT II RVR 1000 CHART NOTE: RVR 1000 AUTHORIZED WITH SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF AUTOLAND OR HUD TO TOUCHDOWN.
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE AT BOZZZ: MAX 210 KIAS.
CHART PLANVIEW NOTE AT VANNN: MAX 210 KIAS.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 26L CAT E VISIBILITY TO RVR 4000. S-LOC 26L CAT C/D/E VISIBILITY TO RVR 5000.

CHART MANDATORY 7000 AT GARRR
CHART MANDATORY 8000 AT BOZZZ
CHART VDP AT 2.67 DME*
DISTANCE VDP TO THLD 0.93 NM
* LOC ONLY
CHART FAS OBST: 201 TREE 295946N/0951656W.
CHART: 235 FLGPL 295923N/0951630W.
HOLD W. RT. 090.41 INBOUND

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD

QUALITY
41
CHECKER

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 26L	295	1800	200	295	1800	200	295	1800	200	295	1800	200	295	1800	200
S-LOC 26L	460	2400	365	460	2400	365	460	3500	365	460	3500	365	460	3500	365

<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>
GEORGE BUSH INTERCONTINENTAL/HOUSTON	KIAH	ILS OR LOC RWY 26L ILS RWY 26L SA CAT I, ILS RWY 26L CAT II, ILS RWY 26L CAT III	21D	HOUSTON	TX

CHANGES - REASONS

1. REMOVED HUB AS INT FIXES FOR JEPNI, KERNS, GRIEG AND MKAYE- HUB DECOMMISSIONING.
2. REMOVED SOROY FIX MINIMUMS (DME REQUIRED) - DME REQUIRED FOR PROCEDURE.
3. UPDATED CHART NOTE FOR INOP ALS - NO LONGER TWO SETS OF LOC MINIMUMS.
3. ADDED EQUIPMENT REQUIREMENT NOTE: DME REQUIRED. - IAW .19H 8-6-8; DME REQUIRED FOR INTERMEDIATE AND MISSED SEGMENT.
4. ADDED EQUIPMENT REQUIREMENT NOTE: FROM BOZZZ, GARRR RNAV 1-GPS REQUIRED - IAW .19H 8-6-8 RNAV SEGMENT.
5. REMOVED ALTERNATE MISSED APPROACH - BVP (NIXIN) NDB DECOMMISSIONING.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZHU, HOUSTON APP CON, IAH TOWER, AMGR, ST AV DIR, ATA

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

Digitally signed by

ROBERT G HAMILTON

Dec 12, 2018

DEVELOPED BY

HEIDI SNIDER

Digitally signed by

HEIDI SNIDER

Dec 10, 2018

OFFICE

AJV-5422

DATE

11/06/2018

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5420

DATE

Digitally signed by

ROBERT G HAMILTON

Dec 12, 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> GEORGE BUSH INTERCONTINENTAL/HOUSTON	<u>AIRPORT ID</u> KIAH	<u>PROCEDURE NAME</u> ILS OR LOC RWY 26R ILS RWY 26R SA CAT I, ILS RWY 26R CAT II, ILS RWY 26R CAT III	<u>ORIGINAL/AMENDMENT</u> 4B	<u>CITY</u> HOUSTON	<u>STATE</u> TX	
<u>AIRPORT ELEVATION</u> 96	<u>TDZE</u> 95	<u>SUPERSEDED</u> ILS OR LOC RWY 26R ILS RWY 26R CAT II, ILS RWY 26R CAT III	<u>ORIGINAL/AMENDMENT</u> 4A	<u>DATED</u> 04/30/2015	<u>MAG VAR</u> 3E	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> I-OND	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
HOOTI	IAF	GRIZL		TF	FB	1.00	200.42	5.17	6000
GRIZL		ZAPPO		TF	FB	1.00	235.44	3.04	5000
ZAPPO/I-OND 28.30 DME	IAF	NEWLY INT/I-OND 23.26 DME					266.96	5.04 (I-OND)	5000
NEWLY INT/I-OND 23.26 DME		RAIDS/I-OND 19.04 DME					266.96	4.22 (I-OND)	4000
RAIDS/I-OND 19.04 DME	IF	CHUBS/I-OND 11.82 DME					266.96	7.22 (I-OND)	3000
CHUBS/I-OND 11.82 DME		OWELL/I-OND 7.46 DME/RADAR					266.96	4.36 (I-OND)	2000

MISSED APPROACH

MAP:

ILS: DA
 LOC: 5.80 NM AFTER OWELL/I-OND 7.46 DME/RADAR OR AT I-OND 1.66 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 600 THEN CLIMBING RIGHT TURN TO 3000 ON IAH VORTAC R-344 TO PEPBI INT/IAH 20.00 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



8. MSA FROM: IAH VORTAC 015-230 3100, 230-015 2400

SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 26R: CAT A, B, C, D RA 157, RVR 1400, HAT 150, DA 245 MSL.
CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 26R: CAT A, B, C, D RA 99, RVR 1200, HAT 100, DA 195 MSL.
CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 26R: CAT A, B, C, D RVR 600
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 26L AND RWY 27.
SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC OR LOA APPROVAL AND USE OF HUD TO DH.
CAT II RVR 1000 NOTE: RVR 1000 AUTHORIZED WITH SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF AUTOLAND OR HUD TO TOUCHDOWN.
CHART SPEED ICON IN PLANVIEW AT HOOTI: MAX 210 KIAS.

CHART MANDATORY 6000 AT HOOTI.
CHART VDP AT 2.94 DME*
DISTANCE VDP TO THLD 1.27 NM
* LOC ONLY
CHART: 563 TOWER 300020N/0951260W.
HOLD N. RT. 164.17 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 26R	295	1800	200	295	1800	200	295	1800	200	295	1800	200	295	1800	200
S-LOC 26R	580	2400	485	580	2400	485	580	5000	485	580	5000	485	580	5000	485



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>
GEORGE BUSH INTERCONTINENTAL/HOUSTON	KIAH	ILS OR LOC RWY 26R ILS RWY 26R SA CAT I, ILS RWY 26R CAT II, ILS RWY 26R CAT III	4B	HOUSTON	TX

CHANGES - REASONS

1. REPLACED CHART NOTE: DME OR RADAR REQUIRED WITH EQUIPMENT REQUIREMENT NOTE: DME REQUIRED - IAW 8260.19H 8-6-8, DME REQUIRED FOR INTERMEDIATE AND MISSED APPROACH SEGEMENT.
2. REPLACED CHART PLANVIEW NOTE: GPS OR RADAR REQUIRED WITH EQUIPMENT REQUIRED NOTE: FROM HOOTI: RNAV 1-GPS REQUIRED - IAW 8260.19H 8-6-8, RNAV SEGMENT.
3. REMOVED ALTERNATE MISSED APPROACH FROM CLIMB TO 600 THEN CLIMBING RIGHT TURN TO 3000 ON HUB VOR/DME R-344 TO PEPBI INT/HUB 38.39 DME AND HOLD N, RT, 163.97 INBOUND - HUB DECOMISSIONING.
4. ADDITIONAL FLIGHT DATA, REMOVED HUB HOLDING - HUB DECOMISSIONING.
5. UPDATED CATEGORY III ILS TO CURRENT NAV SPEC REQUIREMENT CAT III, REMOVED CAT IIIA, CATIIIB, CAT IIIC - 8400.13D
6. REMOVED HUB RADIALS AND INT FIXES AT CHUBS, RAIDS AND PEPBI - HUB DECOMISSIONING
7. DELETED CHART PLANVIEW NOTE AT HOOTI: 210 KIAS MAX - DUPLICATE NOTE.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZHU, HOUSTON APP CON, IAH TOWER, ARPT MGR, ST AV DIR, ATA

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

Digitally signed by
ROBERT G HAMILTON
Dec 12, 2018

DEVELOPED BY

HEIDI SNIDER *Digitally signed by*
HEIDI SNIDER
Dec 10, 2018

OFFICE

AJV-5422

DATE

11/05/2018

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5420

DATE

Digitally signed by
ROBERT G HAMILTON
Dec 12, 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> GEORGE BUSH INTERCONTINENTAL/HOUSTON	<u>AIRPORT ID</u> KIAH	<u>PROCEDURE NAME</u> ILS OR LOC RWY 27 ILS RWY 27 SA CAT I, ILS RWY 27 CAT II, ILS RWY 27 CAT III	<u>ORIGINAL/AMENDMENT</u> 11A	<u>CITY</u> HOUSTON	<u>STATE</u> TX
<u>AIRPORT ELEVATION</u> 96	<u>TDZE</u> 86	<u>SUPERSEDED</u> ILS OR LOC RWY 27 ILS RWY 27 SA CAT I, ILS RWY 27 CAT II, ILS RWY 27 CAT III	<u>ORIGINAL/AMENDMENT</u> 11	<u>DATED</u> 09/15/2016	<u>MAG VAR</u> 3E
<u>FACILITY</u> I-GHI	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
RDFSH	IAF	GEYGR		TF	FB	1.00	312.89	7.00	4000
GEYGR		SYKYO		TF	FB	1.00	314.47	4.00	3000
SYKYO		TRANN		TF	FB	1.00	287.02	3.00	3000
CLSIK	IAF	GRUNG		TF	FB	1.00	245.63	4.11	4000
GRUNG		SILLS		TF	FB	1.00	267.24	6.21	4000
SILLS/I-GHI 27.00 DME	IAF	TRANN/I-GHI 21.96 DME					266.97	5.04 (I-GHI)	3000
TRANN/I-GHI 21.96 DME		DENTO/I-GHI 17.73 DME					266.97	4.23 (I-GHI)	2000
DENTO/I-GHI 17.73 DME	IF	FESTA/I-GHI 10.51 DME					266.97	7.22 (I-GHI)	2000
FESTA/I-GHI 10.51 DME		REDOC/I-GHI 6.07 DME					266.97	4.44 (I-GHI)	1500

MISSED APPROACH

MAP:

ILS: DA
 LOC: 4.27 NM AFTER REDOC/I-GHI 6.07 DME OR AT I-GHI 1.80 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 560 THEN CLIMBING LEFT TURN TO 3000 ON IAH VORTAC R-215 TO TICoy/IAH 20.00 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>
GEORGE BUSH INTERCONTINENTAL/HOUSTON	KIAH	ILS OR LOC RWY 27 ILS RWY 27 SA CAT I, ILS RWY 27 CAT II, ILS RWY 27 CAT III	11A	HOUSTON	TX

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2.	PROFILE STARTS AT TRANN				
3. FAC:	266.97	FAF: REDOC/I-GHI 6.07 DME	DIST FAF TO MAP: 4.27	DIST FAF TO THLD: 4.27	
4. MIN ALT:	TRANN 3000, DENTO/I-GHI 17.73 DME 2000, FESTA/I-GHI 10.51 DME 2000, REDOC/I-GHI 6.07 DME 1500				
5. DIST TO THLD FROM OM:	MM:	IM:	100 HAT: 859	150 HAT:	GS ANT: 1035
6. MIN GS INCPT: 1500	GS ALT AT FAF : REDOC/I-GHI 6.07 DME 1500			OM:	MM: IM:
7. GP ANGLE: 3.00	34:1:	20:1:	TCH: 55.0		
8. MSA FROM:	IAH VORTAC 015-230 3100, 230-015 2400				

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED.

FROM CLSIK, RDFSH: RNAV 1-GPS REQUIRED.

RNAV 1-GPS AND RADAR REQUIRED FOR PROCEDURE ENTRY.

NOTES:

SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 27: CAT A, B, C, D RA 104, RVR 1400, HAT 150, DA 236 MSL.

CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 27: CAT A, B, C, D RA 101, RVR 1200, HAT 100, DA 186 MSL.

CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 27: CAT A, B, C, D RVR 700

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 26L/R.

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

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

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

CHART NOTE: FOR INOPERATIVE ALSF, INCREASE S-ILS 27 CAT E VISIBILITY TO RVR 4000 AND S-LOC 27 CAT C-E VISIBILITY TO 1 3/8.

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

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

ADDITIONAL FLIGHT DATA:

CHART IN PLANVIEW: MANDATORY 4000 AT CLSIK.

CHART IN PLANVIEW: MANDATORY 4000 AT GEYGR.

CHART IN PLANVIEW: MANDATORY 3000 AT SYYKO.

CHART IN PLANVIEW: MANDATORY 6000 AT RDFSH.

CHART VDP AT 3.07 DME*

DISTANCE VDP TO THLD 1.27 NM

* LOC ONLY

FAS OBST: 294 AAO 295910N/0951352W.

HOLD SW, RT, 034.90 INBOUND



AIRPORTGEORGE BUSH
INTERCONTINENTAL/HOUSTONAIRPORT ID

KIAH

PROCEDURE NAMEILS OR LOC RWY 27
ILS RWY 27 SA CAT I,
ILS RWY 27 CAT II,
ILS RWY 27 CAT IIIORIGINAL/AMENDMENT

11A

CITY

HOUSTON

STATE

TX

MINIMUMS:

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

ALTERNATE: NA☐

ILS: STANDARD; LOC: STANDARD

<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 27	286	1800	200	286	1800	200	286	1800	200	286	1800	200	286	1800	200
S-LOC 27	560	2400	474	560	2400	474	560	5000	474	560	5000	474	560	5000	474

CHANGES - REASONS

1. REMOVED INT FROM REDOC, FESTA, DENTO AND TICOY - INT MADE UP BY HUB RADIALS, FACILITY DECOMMISSIONING.
2. ADDED EQUIPMENT REQUIREMENT NOTE: DME REQUIRED - IAW .19H 8-6-8A
3. ADDED FROM CLSIK, RDFSH RNAV 1 -GPS - RNAV PROCEDURE ENTRY.
4. REMOVED CHART PLANVIEW NOTE; GPS AND RADAR REQUIRED, ADDED RNAV 1 -GPS AND RADAR REQUIRED FOR PROCEDURE ENTRY - UPDATED PREV NOTE REQUESTED FROM I90, HOUSTON APPROACH TO CURRENT FORMAT.
5. REMOVED ALT MISSED APPROACH INSTRUCTIONS AND ASSOCIATED HOLDING DATA - HUB DECOMMISSIONING.
6. UPDATED S-ILS 27 DA FROM 287 TO 286, SA CAT I FROM 237 TO 236, CAT II FROM 187 TO 186 - AIRNAV DATA/ TDZE FROM 87 TO 86.

COORDINATED WITH:A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZHU, IAH APP CON, AMGR, ATAFLIGHT CHECKED BYPROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIREDOFFICEDATE

Digitally signed by

ROBERT G HAMILTON

Dec 12, 2018

DEVELOPED BY Digitally signed byHEIDI SNIDER **HEIDI SNIDER**

Dec 10, 2018

OFFICE

AJV-5422

DATE

11/02/2018

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5420

DATE

Digitally signed by

ROBERT G HAMILTONTITLE

MANAGER

Dec 12, 2018

QUALITY
9
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> PEARLAND RGNL	<u>AIRPORT ID</u> KLVJ	<u>PROCEDURE NAME</u> VOR-B	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> HOUSTON	<u>STATE</u> TX	
<u>AIRPORT ELEVATION</u> 44	<u>TDZE</u>	<u>SUPERSEDED</u> VOR-B	<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> 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 25 APRIL 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: ZHU, AMGR, STATE AVIATION DIRECTOR.

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY
DEANNA M. FIELDS

Digitally signed by
DEANNA M FIELDS
Nov 13, 2018

OFFICE
AJV-5421

DATE
11/13/2018

APPROVED BY
JULIE A. MORGAN

Digitally signed by
DAVID DANNER
Nov 20, 2018

OFFICE
AJV-5420

TITLE



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> WILLIAM P HOBBY	<u>AIRPORT ID</u> KHOU	<u>PROCEDURE NAME</u> ILS OR LOC RWY 4 ILS RWY 4 SA CAT I, ILS RWY 4 CAT II, ILS RWY 4 CAT III	<u>ORIGINAL/AMENDMENT</u> 43A	<u>CITY</u> HOUSTON	<u>STATE</u> TX
<u>AIRPORT ELEVATION</u> 46	<u>TDZE</u> 44	<u>SUPERSEDED</u> ILS OR LOC RWY 4, ILS RWY 4 (SA CAT I) ILS RWY 4 CAT II, ILS RWY 4 CAT III	<u>ORIGINAL/AMENDMENT</u> 43	<u>DATED</u> 12/10/2015	<u>MAG VAR</u> 3E
<u>FACILITY</u> I-HUB	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
GEEEO	IAF	CARCO		TF	FB	1.00	091.92	9.16	4000
CARCO INT/I-HUB 15.71 DME	IF	ELREN/I-HUB 8.71 DME/RADAR					040.95	7.00 (I-HUB)	2000
ELREN/I-HUB 8.71 DME/RADAR		ESAAY INT/I-HUB 5.82 DME					040.95	2.89 (I-HUB)	1500

MISSED APPROACH

MAP:

ILS: DA
 LOC: 4.40 NM AFTER ESAAY INT/I-HUB 5.82 DME OR AT I-HUB 1.42 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 3000 ON MHF VOR/DME R-290 TO MHF VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
2. PROFILE STARTS AT CARCO
3. **FAC:** 040.95 **FAF:** ESAAY INT/I-HUB 5.82 DME **DIST FAF TO MAP:** 4.40 **DIST FAF TO THLD:** 4.40
4. **MIN ALT:** CARCO INT/I-HUB 15.71 DME 4000, ELREN/I-HUB 8.71 DME/RADAR 2000, ESAAY INT/I-HUB 5.82 DME 1500
5. **DIST TO THLD FROM OM:** **MM:** **IM:** 829 **100 HAT:** 862 **150 HAT:** 1817 **GS ANT:** 1081
6. **MIN GS INCPT:** 1500 **GS ALT AT FAF :** ESAAY INT/I-HUB 5.82 DME 1500 **OM:** **MM:** **IM:** 142
7. **GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 56.8
8. **MSA FROM:** MHF VOR/DME 3100 (29NM)



EQUIPMENT REQUIREMENTS NOTES:

FROM GEEEO: RNAV 1-GPS REQUIRED.
AIRCRAFT NOT GPS EQUIPPED - RADAR REQUIRED FOR PROCEDURE ENTRY.

NOTES:

SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 4: CAT A, B, C, D RA 146, RVR 1400, HAT 150, DA 194 MSL.
CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 4: CAT A, B, C, D RA 100, RVR 1200, HAT 100, DA 144 MSL.
CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 4: CAT A, B, C, D RVR 600
SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF HUD TO DH.
CAT II RVR 1000 CHART NOTE: RVR 1000 AUTHORIZED WITH SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF AUTOLAND OR HUD TO TOUCHDOWN.
CHART NOTE: FOR INOPERATIVE ALSF-2, INCREASE S-ILS 4 CAT E VISIBILITY TO RVR 4000; S-LOC 4 CAT C/D/E VISIBILITY TO 1 3/8.

ADDITIONAL FLIGHT DATA:

CHART MANDATORY 210 KIAS AT GEEEO.
CHART MANDATORY 6000 AT GEEEO.
CHART CIRCLING ICON
CHART VDP AT 2.74 DME*
DISTANCE VDP TO THLD 1.32 NM
* LOC ONLY
FAS OBST: 259 AAO 293445N/0952051W.
HOLD W, RT, 110.00 INBOUND

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD - CAT C, D 800-2 1/4, 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-ILS 04	244	1800	200	244	1800	200	244	1800	200	244	1800	200	244	1800	200
S-LOC 04	520	2400	476	520	2400	476	520	5000	476	520	5000	476	520	5000	476
CIRCLING	520	1	474	520	1	474	740	2 1/4	694	740	2 1/4	694	860	3	814

CHANGES - REASONS

1. REMOVED PRIMARY MISSED APPROACH PROCEDURE, REPLACED WITH ALTERNATE MISSED APPROACH PROCEDURE - VOR MON DECOMMISSIONING OF HUB VOR/DME.
2. PROFILE SECTION, LINE 5, DIST TO THLD FROM GS ANT CHANGED FROM 1080 TO 1081 - UPDATED SURVEY DATA.
3. REPLACED NOTE "GPS OR RADAR REQUIRED" WITH EQUIPMENT REQUIREMENTS NOTES - CURRENT DOCUMENTATION POLICY.
4. ADDITIONAL FLIGHT DATA, HOLDING PATTERN CHANGED FROM "HOLD NE, RT, 220.35 INBOUND" TO "HOLD W, RT, 110.00 INBOUND" - NEW HOLDING PATTERN LOCATION.
5. ADDITIONAL FLIGHT DATA, REMOVED REFERENCE TO ALTERNATE MA HOLDING PATTERN - ALTERNATE MISSED APPROACH IS NOW THE PRIMARY MISSED APPROACH.
6. ALTERNATE MINIMUMS, REMOVED NON-STANDARD ILS ALTERNATE MINIMUMS - ILS ALTERNATE MINIMUMS ARE STANDARD UNDER CURRENT POLICY.
7. MSA CHANGED FROM HUB VOR/DME TO MHF VOR/DME - HUB VOR/DME DECOMMISSIONED.

PDF EDITS:
1. SUPERSEDED, ADDED "ILS RWY 4 (SA CAT I)" AFTER ILS OR LOC RWY 4.
2. TERMINAL ROUTES, GEEEO TO CARCO, REMOVED "INT/I-HUB 15.71 DME".



AIRPORT

WILLIAM P HOBBY

AIRPORT ID

KHOU

PROCEDURE NAME

ILS OR LOC RWY 4
ILS RWY 4 SA CAT I,
ILS RWY 4 CAT II,
ILS RWY 4 CAT III

ORIGINAL/AMENDMENT

43A

CITY

HOUSTON

STATE

TX

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZHU, HOU ATCT, AIRPORT MANAGER, ST. AV. DIR

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY

RUSS ROSLEWSKI

Digitally signed by

RUSSELL ROSLEWSKI

Nov 20, 2018

APPROVED BY

JULIE MORGAN

Digitally signed by

DAVID DANNER

Jan 08, 2019

OFFICE

Digitally signed by

DAVID DANNER

Jan 08, 2019

OFFICE

AJV-5421

DATE

DATE

11/13/2018

OFFICE

AJV-5420

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> WILLIAM P HOBBY	<u>AIRPORT ID</u> KHOU	<u>PROCEDURE NAME</u> ILS OR LOC RWY 13R	<u>ORIGINAL/AMENDMENT</u> 12D	<u>CITY</u> HOUSTON	<u>STATE</u> TX	
<u>AIRPORT ELEVATION</u> 46	<u>TDZE</u> 46	<u>SUPERSEDED</u> ILS OR LOC RWY 13R	<u>ORIGINAL/AMENDMENT</u> 12C	<u>DATED</u> 11/10/2016	<u>MAG VAR</u> 3E	<u>EPOCH YEAR</u> 2015
<u>FACILITY</u> I-PRQ	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
JABBS INT/I-PRQ 14.80 DME/RADAR	IF	ROYCE/I-PRQ 7.14 DME/RADAR					130.95	7.66 (I-PRQ)	2000

MISSED APPROACH

MAP:

ILS: DA
LOC: 5.88 NM AFTER ROYCE/I-PRQ 7.14 DME/RADAR OR AT 1.26 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 800 THEN CLIMBING RIGHT TURN TO 2200 DIRECT VUH VOR/DME.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- PROFILE STARTS AT JABBS
- FAC: 130.95 FAF: ROYCE/I-PRQ 7.14 DME/RADAR DIST FAF TO MAP: 5.88 DIST FAF TO THLD: 5.88
- MIN ALT: JABBS INT/I-PRQ 14.80 DME/RADAR 2000, ROYCE/I-PRQ 7.14 DME/RADAR 2000
- DIST TO THLD FROM OM: 5.88 MM: IM: 150 HAT: GS ANT: 957
- MIN GS INCPT: 2000 GS ALT AT FAF : ROYCE/I-PRQ 7.14 DME/RADAR 2000 OM: MM: IM:
- GP ANGLE: 3.00 34:1: 20:1: TCH: 49.0
- MSA FROM: IAH VORTAC 015-230 3100, 230-015 2400

EQUIPMENT REQUIREMENTS NOTES:

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



CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-ILS RWY 13R.
CHART NOTE: RWY 13R HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 13R CATS A/B VISIBILITY TO RVR 5500, CATS C/D/E TO 1 3/8 SM.

CHART CIRCLING ICON.
CHART VDP AT 2.63 DME*
DISTANCE VDP TO THLD 1.37 NM
* LOC ONLY
CHART FAS OBST: 231 TOWER 294117N/0952018W.
CHART 345 TOWER 294326N/0952154W.

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

9

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 13R	296	4000	250	296	4000	250	296	4000	250	296	4000	250	296	4000	250
S-LOC 13R	540	4000	494	540	4000	494	540	5000	494	540	5000	494	540	6000	494
CIRCLING	540	1	494	540	1	494	740	2 1/4	694	740	2 1/4	694	860	3	814

1. REMOVED ALL REFERENCES TO ALTERNATE MISSED APPROACH - HUB VOR/DME DECOMMISSIONED.
2. REPLACED NOTES "DME OR RADAR REQUIRED" AND "RADAR REQUIRED" WITH EQUIPMENT REQUIREMENTS NOTES - CURRENT DOCUMENTATION POLICY.
3. ALTERNATE MINIMUMS, REMOVED NON-STANDARD ILS ALTERNATE MINIMUMS - ILS ALTERNATE MINIMUMS ARE STANDARD UNDER CURRENT POLICY.
4. INOPERATIVE ALS NOTE, CHANGED CAT E INCREASE FROM 1 3/4 TO 1 3/8 - RECALCULATION USING CURRENT CRITERIA.
5. MSA CHANGED FROM HUB VOR/DME TO IAH VORTAC - HUB VOR/DME DECOMMISSIONED.

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZHU, HOU ATCT, AIRPORT MANAGER, ST. AV. DIR.

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED

Digitally signed by **OFFICE**
CT: **DAVID DANNER**

DATE

DEVELOPED BY
RUSS ROSLEWSKI

Digitally signed by
RUSSELL ROSLEWSKI

Jan 08, 2019
OFFICE
AJV-5421

DATE
11/15/2018

APPROVED BY
JULIE MORGAN

Digitally signed by
DAVID DANNER
Jan 08, 2019

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> WILLIAM P HOBBY	<u>AIRPORT ID</u> KHOU	<u>PROCEDURE NAME</u> ILS OR LOC RWY 31L	<u>ORIGINAL/AMENDMENT</u> 6D	<u>CITY</u> HOUSTON	<u>STATE</u> TX
<u>AIRPORT ELEVATION</u> 46	<u>TDZE</u> 43	<u>SUPERSEDED</u> ILS OR LOC RWY 31L	<u>ORIGINAL/AMENDMENT</u> 6C	<u>DATED</u> 11/10/2016	<u>MAG VAR</u> 3E
<u>FACILITY</u> I-UPU	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
BUNER/I-UPU 16.20 DME/RADAR	IF	LESLO/I-UPU 6.11 DME/RADAR					310.96	10.09 (I-UPU)	2100

MISSED APPROACH

MAP:

ILS: DA
LOC: 6.28 NM AFTER LESLO/I-UPU 6.11 DME/RADAR

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1000 THEN CLIMBING LEFT TURN TO 3000 DIRECT VUH VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- PROFILE STARTS AT BUNER
- FAC:** 310.96 **FAF:** LESLO/I-UPU 6.11 DME/RADAR **DIST FAF TO MAP:** 6.28 **DIST FAF TO THLD:** 6.28
- MIN ALT:** BUNER/I-UPU 16.20 DME/RADAR 4000, LESLO/I-UPU 6.11 DME/RADAR 2100
- DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **GS ANT:** 1097
- MIN GS INCPT:** 2100 **GS ALT AT FAF :** LESLO/I-UPU 6.11 DME/RADAR 2100 **OM:** **MM:** **IM:**
- GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 57.9
- MSA FROM:** IAH VORTAC 015-230 3100, 230-015 2400

EQUIPMENT REQUIREMENTS NOTES:

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

NOTES:

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



ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.11 DME*
DISTANCE VDP TO THLD 1.28 NM
* LOC ONLY
FAS OBST: 239 AAO 293612N/0951303W.
HOLD SW, RT, 052.90 INBOUND

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD - CAT C, 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 31L	243	4000	200	243	4000	200	243	4000	200	243	4000	200			
S-LOC 31L	520	5500	477	520	5500	477	520	1 3/8	477	520	1 3/8	477			
CIRCLING	520	1	474	520	1	474	740	2 1/4	694	740	2 1/4	694			

CHANGES - REASONS

1. REMOVED PRIMARY MISSED APPROACH PROCEDURE, REPLACED WITH ALTERNATE MISSED APPROACH PROCEDURE - VOR MON DECOMMISSIONING OF HUB VOR/DME.
2. REPLACED NOTE "RADAR REQUIRED" WITH EQUIPMENT REQUIREMENTS NOTES - CURRENT DOCUMENTATION POLICY.
3. ADDITIONAL FLIGHT DATA, HOLDING PATTERN CHANGED FROM "HOLD W, RT, 104.02 INBOUND" TO "HOLD SW, RT, 052.90 INBOUND" - NEW HOLDING PATTERN LOCATION.
4. ADDITIONAL FLIGHT DATA, REMOVED REFERENCE TO ALTERNATE MA HOLDING PATTERN - ALTERNATE MISSED APPROACH IS NOW THE PRIMARY MISSED APPROACH.
5. ALTERNATE MINIMUMS, REMOVED NON-STANDARD ILS ALTERNATE MINIMUMS - ILS ALTERNATE MINIMUMS ARE STANDARD UNDER CURRENT POLICY.
6. MSA CHANGED FROM HUB VOR/DME TO IAH VORTAC - HUB VOR/DME DECOMMISSIONED.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZHU, HOU ATCT, AIRPORT MANAGER, ST. AV. DIR.

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY

RUSS ROSLEWSKI
Nov 21, 2018

APPROVED BY

JULIE MORGAN
DAVID DANNER
Jan 08, 2019

OFFICE
Digitally signed by
DAVID DANNER

Jan 08, 2019
OFFICE
AJV-5421

OFFICE
AJV-5420

DATE

DATE
11/16/2018

DATE

TITLE
MANAGER



**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> LA PORTE MUNI	<u>AIRPORT ID</u> T41	<u>PROCEDURE NAME</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> LA PORTE	<u>STATE</u> TX	
<u>AIRPORT ELEVATION</u> 25	<u>TDZE</u>	<u>SUPERSEDED</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 09/15/2016	<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 25 APRIL 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: ZHU, IAH ATCT, AIRPORT MANAGER, STATE AVIATION DIRECTOR

FLIGHT CHECKED BY

OFFICE DATE

DEVELOPED BY Digitally signed by
LEO PALMER LEO PALMER
Nov 06, 2018
APPROVED BY Digitally signed by
JULIE A. MORGAN DAVID DANNER
Nov 27, 2018

OFFICE DATE TITLE
AJV-5421 11/06/2018
OFFICE DATE
AJV-5420



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> OLNEY MUNI	<u>AIRPORT ID</u> KONY	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> OLNEY	<u>STATE</u> TX	
<u>AIRPORT ELEVATION</u> 1275	<u>TDZE</u> 1275	<u>SUPERSEDED</u> RNAV (GPS) RWY 17	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 06/23/2016	<u>MAG VAR</u> 5E	<u>EPOCH YEAR</u> 2015
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
CIYAL		OPEBY		TF	FO	1.00	353.43	29.98	4000
NIFDE	IAF	OPEBY	NOPT	TF	FB	1.00	117.01	14.05	4000
POSTE	IAF	OPEBY	NOPT	TF	FB	1.00	193.03	6.15	4000
KARYN	IAF	OPEBY	NOPT	TF	FB	1.00	255.22	20.97	4000
OPEBY	IF/IAF	LIEGE		TF	FB	1.00	175.30	6.06	2800
LIEGE	FAF	REGKO/1.90 NM TO RW17		TF	FB	0.30	175.30	2.76	
REGKO/1.90 NM TO RW17		RW17	MAP	TF	FO	0.30	175.30	1.90	
RW17	MAP	1800 MSL		CA			175.30		1800
1800 MSL		KARYN		DF	FO	1.00			5000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW17

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1800 THEN CLIMBING LEFT TURN TO 5000 DIRECT KARYN AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N OPEBY, LT, 175.30 INBOUND, 4000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC:

175.30

FAF: LIEGE

DIST FAF TO MAP: 4.66

DIST FAF TO THLD: 4.66

4. MIN ALT: OPEBY 4000, LIEGE 2800, REGKO/1.90 NM TO RW17 1920*

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

317 HAT: 0.87

GS ANT:

6. MIN GP INCPT:

2800

GP ALT AT FAF : LIEGE 2800

OM:

MM:

IM:

7. GP ANGLE:

3.00

34:1: IS NOT CLEAR

20:1: IS CLEAR

TCH: 40.0

8. MSA FROM: RW17 3000

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 17 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: BARO-VNAV NA.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
*LNAV ONLY
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CIYAL ON V16 SOUTHWEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT POSTE ON V77 NORTHBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT KARYN ON V568 SOUTHEAST BOUND.
CHART NOTE: USE GRAHAM ALTIMETER SETTING, WHEN NOT RECEIVED, USE KICKAPOO DOWNTOWN ALTIMETER SETTING AND INCREASE ALL DA 52 FEET AND ALL MDA 60 FEET; INCREASE LPV ALL CATS, LNAV/VNAV ALL CATS, AND LNAV CAT C VISIBILITY 1/8 SM.

ADDITIONAL FLIGHT DATA:

CHART GRAHAM AWOS-3
CHART CIRCLING ICON.
WAAS CHANNEL #97332
REFERENCE PATH ID: W17A
CHART FAS OBST: 1364 TREE 332226N/0984948W.
HOLD SE, LT, 333.20 INBOUND
LTP HAE: 360.2 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
LPV DA	1592	7/8	317	1592	7/8	317	1592	7/8	317		NA				
LNAV/VNAV DA	1592	7/8	317	1592	7/8	317	1592	7/8	317		NA				
LNAV MDA	1700	1	425	1700	1	425	1700	1 1/4	425		NA				
CIRCLING	1760	1	485	1760	1	485	1760	1 1/2	485		NA				



CHANGES - REASONS

1. CHANGED MISSED APPROACH CLIMB TO ALTITUDE FROM 1700 TO 1800 - TARGETS EVAL IDENTIFIED 1800 REQUIRED TO REACH END OF SECTION ONE.
2. ADDED 20:1 NOTE TO LINE 7 - NEW REQUIREMENT PER 8260.19H.
3. LPV AND LNAV/VNAV ALL CATS VISIBILITY CHANGED FROM 1 TO 7/8 - AJV VISIBILITY TOOL CALCULATION.
4. UPDATED HELICOPTER VIS REDUCTION NOTE - NEW FORMAT PER 8260.19H.
5. DELETED DME/DME RNP-0.3 NA NOTE - REPLACED BY RNP APCH NOTE.
6. ADDED RNP APCH NOTE - PBN REQUIREMENTS NOTE.
7. FAS DATA CRC REMAINDER CHANGED FROM 93F35C16 TO F531B220 - FPAP COORDINATES NOW CALCULATED TO THE 10,000TH DIGIT INSTEAD OF TO THE 100TH DIGIT ON OLD FORM.
8. UPDATED ALTIMETER SETTING NOTE TO REFLECT NEW ADJUSTMENTS - DA CHANGED FROM 51 TO 52 DUE TO ROUNDING; VISIBILITIES CHANGED TO CORRESPOND WITH NEW VALUES ON PRIMARY MINIMUMS.

COORDINATED WITH:

A4A☐

ALPA☒

AOPA☒

APA☐

HAI☐

NBAA☒

OTHER: ZFW, ST. AVI. DIR., AMGR

FLIGHT CHECKED BY

JOHN E PHILLABAUM

Digitally signed by

DONALD H LANIER

Jan 22, 2019

OFFICE

FICO

DATE

1/15/19

DEVELOPED BY

KELLY DEAN

Digitally signed by

KELLY D DEAN

Dec 12, 2018

OFFICE

AJV-5431

DATE

11/06/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

DONALD H LANIER

Jan 22, 2019

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	KONY
RUNWAY	RW17
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W17A
LTP/FTP LATITUDE	332128.4255N
LTP/FTP LONGITUDE	0984912.8365W
LTP/FTP ELLIPSOIDAL HEIGHT	+03602
FPAP LATITUDE	331959.1585N
FPAP LONGITUDE	0984913.3920W
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	1192
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER	F531B220

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+03887
FPAP ORTHOMETRIC HEIGHT	+03887



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> OLNEY MUNI	<u>AIRPORT ID</u> KONY	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> OLNEY	<u>STATE</u> TX	
<u>AIRPORT ELEVATION</u> 1275	<u>TDZE</u> 1267	<u>SUPERSEDED</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 06/23/2016	<u>MAG VAR</u> 5E	<u>EPOCH YEAR</u> 2015
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
POSTE		HIKTU		TF	FO	1.00	179.09	28.49	3800
GACEB	IAF	HIKTU	NOPT	TF	FB	1.00	323.55	6.81	3800
AJAHO	IAF	HIKTU	NOPT	TF	FB	1.00	071.41	12.14	3800
HIKTU	IF/IAF	BEGCA		TF	FB	1.00	355.30	6.30	2800
BEGCA	FAF	NIFYE/1.70 NM TO RW35		TF	FB	0.30	355.30	3.01	
NIFYE/1.70 NM TO RW35		RW35	MAP	TF	FO	0.30	355.30	1.70	
RW35	MAP	1800 MSL		CA			355.30		1800
1800 MSL		POSTE		DF	FO	1.00			5000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW35

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1800 THEN CLIMB TO 5000 DIRECT POSTE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD S HIKTU, LT, 355.30 INBOUND, 3800 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 355.30FAF: BEGCADIST FAF TO MAP: 4.71DIST FAF TO THLD: 4.71
4. MIN ALT:HIKTU 3800, BEGCA 2800, NIFYE/1.70 NM TO RW35 1840*
5. DIST TO THLD FROM OM:MM:IM:150 HAT:267 HAT: 0.73GS ANT:
6. MIN GP INCPT: 2800GP ALT AT FAF : BEGCA 2800OM:MM:IM:
7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 40.0
8. MSA FROM: RW35 3000

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: BARO-VNAV NA.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
*LNAV ONLY
CHART NOTE: USE GRAHAM ALTIMETER SETTING; WHEN NOT RECEIVED, USE KICKAPOO DOWNTOWN ALTIMETER SETTING AND INCREASE ALL DA 52 FEET AND ALL MDA 60 FEET; INCREASE LNAV/VNAV ALL CATS VISIBILITY 1/8 SM AND LNAV CAT C VISIBILITY 1/4 SM.

ADDITIONAL FLIGHT DATA:

CHART GRAHAM AWOS-3
CHART CIRCLING ICON.
WAAS CHANNEL #53331
REFERENCE PATH ID: W35A
CHART FAS OBST: 1344 TREE 332010N/0984943W.
HOLD W, RT, 092.27 INBOUND
LTP HAE: 355.8 M

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
LPV DA	1534	7/8	267	1534	7/8	267	1534	7/8	267		NA				
LNAV/VNAV DA	1584	7/8	317	1584	7/8	317	1584	7/8	317		NA				
LNAV MDA	1680	1	413	1680	1	413	1680	1 1/8	413		NA				
CIRCLING	1760	1	485	1760	1	485	1760	1 1/2	485		NA				



CHANGES - REASONS

1. FINAL SEGMENT FROM BEGCA TO NIFYE DISTANCE CHANGED FROM 3.11 TO 3.01 NM - NIFYE MOVED 0.10 NM SOUTH.
2. FINAL STEPDOWN SEGMENT FROM NIFYE TO THLD DISTANCE CHANGED FROM 1.60 TO 1.70 - NIFYE MOVED 0.10 NM SOUTH.
3. CA ALTITUDE CHANGED FROM 1528 TO 1800 - MISSED INSTRUCTIONS CHANGED TO CLIMB TO 1800.
4. ADDED 20:1 IS CLEAR NOTE TO LINE 7 - NO PENETRATION IDENTIFIED ON OBSTACLE EVAL.
5. MISSED APPROACH CHANGED TO FROM DIRECT LIEGE AND ON TRACK 004.22 TO POSTE TO CLIMB TO 1800 THEN CLIMB TO 5000 DIRECT TO POSTE - OLD CRITERIA PREVIOUSLY REQUIRED STRAIGHT TO A FIX, NEW CRITERIA ALLOWS TURN AT SECTION ONE END/ALTITUDE.
6. CHARTED CIRCLING ICON - APPLIED NEW CIRCLING CRITERIA.
7. LNAV/VNAV VISIBILITY CHANGED FROM 1 1/8 TO 7/8 FOR ALL CATS - AJV VIS TOOL CALCULATION.
8. DELETED DME/DME RNP-0.3 NA NOTE - REPLACED WITH RNP APCH PBN NOTE.
9. DELETED PROCEDURE NA NOTE FOR ARRIVALS AT POSTE ON V278 - V278 CANCELLED WITH VOR MON PROJECT.
10. CHARTED RNP APCH NOTE - PBN REQUIRED NOTE.
11. UPDATED BACKUP ALTIMETER SETTING NOTE - DA ADJ CHANGED FROM 51 TO 52 PER TARGETS CALCULATION; REMOVED LPV VISIBILITY ADJUSTMENT PER AJV VIS TOOL CALCULATION.
12. CRC REMAINDER CHANGED FROM 40D5AA45 TO 6DB0D0A3 - FPAP COORDINATES CARRIED OUT TO 10,000 DECIMAL.
13. FINAL STEPDOWN ALTITUDE RAISED FROM 1800 TO 1840 - TARGETS CALCULATION TO KEEP FIX UNDER VERTICAL ANGLE ALTITUDE.
14. NIFYE MOVED 0.10 NM SOUTH - LOCATE ON VERTICAL ANGLE AFTER TARGETS APPLIES NEW RA ADJUSTMENTS.

COORDINATED WITH:

A4A

☐

ALPA

☒

AOPA

☒

APA

☐

HAI

☐

NBAA

☒

OTHER:

ZFW, ST. AVI. DIR., AMGR

FLIGHT CHECKED BY JOHN E PHILLABAUM		Digitally signed by DONALD H LANIER	OFFICE FICO	DATE 1/15/19	
DEVELOPED BY KELLY DEAN		Digitally signed by KELLY D DEAN	OFFICE AJV-5431	DATE 11/26/2018	
APPROVED BY PATRICK MULQUEEN		Digitally signed by DONALD H LANIER	OFFICE AJV-5430	DATE	TITLE MANAGER
		Jan 22, 2019			



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KONY
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	332037.9615N
LTP/FTP LONGITUDE	0984913.1480W
LTP/FTP ELLIPSOIDAL HEIGHT	+03558
FPAP LATITUDE	332207.2280N
FPAP LONGITUDE	0984912.5915W
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	1192
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	6DB0D0A3

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+03843
FPAP ORTHOMETRIC HEIGHT	+03843



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>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
BROOKNEAL/CAMPBELL COUNTY	0V4	RNAV (GPS) RWY 24	1B	BROOKNEAL	VA	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
597	596	RNAV (GPS) RWY 24	1A	06/22/2017	9W	2000
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
RNAV		25 APRIL 2019	ROUTINE			

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/2.51 NM TO SOZIY		TF	FB	0.30	227.24	1.92	
OVMUY/2.51 NM TO SOZIY		SOZIY	MAP	TF	FO	0.30	227.24	3.02	
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: MEHHDIST FAF TO MAP: 4.43DIST FAF TO THLD: 4.93

4. MIN ALT: WUGAD 3000, MEHHD 2200, OVMUY/2.51 NM TO SOZIY 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) 370835.80N/0790033.29W (DO NOT CHART)
MEHHD 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				





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	370835.8030N
LTP/FTP LONGITUDE	0790033.2910W
LTP/FTP ELLIPSOIDAL HEIGHT	+01481
FPAP LATITUDE	370725.6895N
FPAP LONGITUDE	0790142.1880W
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	6DF7892A

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+01795
FPAP ORTHOMETRIC HEIGHT	+01795



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

TITLE 14 CFR PART 97.23

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<u>AIRPORT</u> BROOKNEAL/CAMPBELL COUNTY	<u>AIRPORT ID</u> K0V4	<u>PROCEDURE NAME</u> VOR-A	<u>ORIGINAL/AMENDMENT</u> 2A	<u>CITY</u> BROOKNEAL	<u>STATE</u> VA
<u>AIRPORT ELEVATION</u> 597	<u>TDZE</u>	<u>SUPERSEDED</u> VOR/DME-A	<u>ORIGINAL/AMENDMENT</u> 2	<u>DATED</u> 10/17/2013	<u>MAG VAR</u> 5W
<u>FACILITY</u> LYH	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
LYH VOR/DME	IF/IAF	USSEL/LYH 7.49 DME					127.99	7.49	2800

MISSED APPROACH

MAP:

NOBEE/LYH 12.42 DME

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 2800 ON LYH VOR/DME R-128 TO USSEL/LYH 7.49 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- 1. PT** **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
- 2.** HOLD NW LYH VOR/DME, LT, 127.99 INBOUND, 2800 FT. IN LIEU OF PT (IAF), MAX 5000.
- 3. FAC:** 127.99 **FAF:** USSEL/LYH 7.49 DME **DIST FAF TO MAP:** **DIST FAF TO THLD:**
- 4. MIN ALT:** LYH VOR/DME 2800, USSEL/LYH 7.49 DME 2800
- 8. MSA FROM:** LYH VOR/DME 090-180 2700, 180-270 3300, 270-090 5500

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED.

NOTES:

CHART PLANVIEW NOTE: NOPT FOR ARRIVAL ON LYH VOR/DME AIRWAY RADIALS 235 CW 014.
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:

1013 AAO 371150.00N/0790503.00W
FAC CROSSES MIDPOINT OF RWY 06, 24.
CHART CIRCLING ICON.
CHART FARMVILLE MOA
CHART FAS OBST: 930 TOWER 370927N/0790409W.
HOLD NW, RT, 127.99 INBOUND



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
CIRCLING	1240	1	643	1240	1	643		NA			NA				

CHANGES - REASONS

1. CHANGED FINAL OBSTACLE FROM 925 MSL TOWER (51-020317) (2C) TO 930 MSL TOWER (51-070384) (4D) - NEW CONTROLLING OBSTACLE.

2. ADDED NEW CIRCLING RADII - NEW CIRCLING CRITERIA IMPLEMENTED ON RNAV (GPS) RWY 24 PROCEDURE.

3. CHANGED PROCEDURE NAME FROM VOR/DME-A TO VOR-A - TO MEET CURRENT CRITERIA.

4. ADDED "DME REQUIRED" TO EQUIPMENT REQUIREMENTS NOTES.

5. ADDED MAX HOLDING 5000FT AT LYH VOR/DME - MATCHED MAX HOLDING ALTITUDE ON LYNCHBURG VOR/DME 8260-2.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZDC, ROA APP CON, AIRPORT MANAGER, VA DOT

FLIGHT CHECKED BY

STEPHEN BAUER

Digitally signed by

WARDELL HENNING

Jan 03, 2019

OFFICE

FICO

DATE

12/27/2018

DEVELOPED BY

LONNIE EVERHART (MICHAEL NOLAN)

Digitally signed by

WARDELL HENNING

Jan 03, 2019

OFFICE

AJV-5400

DATE

07/31/2018

APPROVED BY

LONNIE EVERHART

Digitally signed by

WARDELL HENNING

Jan 03, 2019

OFFICE

AJV-5400

DATE

TITLE

MANAGER



**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> CHESAPEAKE RGNL	<u>AIRPORT ID</u> KCPK	<u>PROCEDURE NAME</u> VOR/DME RWY 23	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> NORFOLK	<u>STATE</u> VA
<u>AIRPORT ELEVATION</u> 19	<u>THRE</u> 19	<u>SUPERSEDED</u> VOR/DME RWY 23	<u>ORIGINAL/AMENDMENT</u> 1	<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 25 APRIL 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: ZDC, ORF APP CON, CPK AMGR.

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY
DONALD H. LANIER (DEXTER SWEETING)

Digitally signed by
DONALD H LANIER
Nov 28, 2018

OFFICE
AJV-5430

DATE
11/02/2018

APPROVED BY
PATRICK MULQUEEN

Digitally signed by
DONALD H LANIER
Nov 28, 2018

OFFICE
AJV-5430

DATE

TITLE



**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>
PETERSBURG, VA	DINWIDDIE COUNTY	25 APRIL 2019	1

TAKEOFF MINIMUMS:
RWY 5, 23: STANDARD.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 05: FENCE 160 FT FROM DER, 472 FT RIGHT OF CENTERLINE, 13 FT AGL/196 FT MSL.
TREE 910 FT FROM DER, 705 FT LEFT OF CENTERLINE, 244 FT MSL.
TREE 1855 FT FROM DER, 551 FT LEFT OF CENTERLINE, 252 FT MSL.
TREE 2342 FT FROM DER, 600 FT LEFT OF CENTERLINE, 254 FT MSL.

NOTE: RWY 23: FENCE 10 FT FROM DER, 475 FT LEFT OF CENTERLINE, 10 FT AGL/199 FT MSL.
TREE 819 FT FROM DER, 658 FT LEFT OF CENTERLINE, 253 FT MSL.
TREE 1040 FT FROM DER, 643 FT LEFT OF CENTERLINE, 265 FT MSL.
TREE 1452 FT FROM DER, 802 FT LEFT OF CENTERLINE, 276 FT MSL.
TREES BEGINNING 2614 FT FROM DER, 534 FT RIGHT OF CENTERLINE, UP TO 276 FT MSL.
TREES BEGINNING 3145 FT FROM DER, 69 FT RIGHT OF CENTERLINE, UP TO 289 FT MSL.
TREE 3151 FT FROM DER, 527 FT LEFT OF CENTERLINE, 281 FT MSL.

CONTROLLING OBSTACLES:

REMARKS:

FLIGHT INSPECTED BY: *Digitally signed by*
DONALD H LANIER
BOB S PRESSLER Jan 08, 2019

OFFICE SYMBOL: **DATE:**
FICO 1/4/19

DEVELOPED BY: *Digitally signed by*
DONALD H LANIER
MATTHEW V. FULKS Jan 08, 2019

OFFICE SYMBOL: **DATE:**
AJV-5430 11/08/2018

APPROVED BY: *Digitally signed by*
DONALD H LANIER
PATRICK MULQUEEN Jan 08, 2019

OFFICE SYMBOL: **DATE:**
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:
ZDC, PCT APP CON, ARPT MGR, VA DOT

CHANGES - REASONS:

REMOVED RUNWAYS 14, 32 FROM TAKEOFF MINIMUMS - RUNWAYS ARE CLOSED
UPDATED TAKEOFF OBSTACLE NOTES - CURRENT DEPARTURE ASSESSMENT AND AJV OBSTACLE GROUPER TOOL



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> BURLINGTON MUNI	<u>AIRPORT ID</u> KBUU	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 11	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> BURLINGTON	<u>STATE</u> WI	
<u>AIRPORT ELEVATION</u> 780	<u>TDZE</u> 780	<u>SUPERSEDED</u> RNAV (GPS) RWY 11	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 08/17/2017	<u>MAG VAR</u> 3W	<u>EPOCH YEAR</u> 2015
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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. 022/30 CW 202/30	NOPT	022/10 CW 202/10		3100
2. 022/10 CW 202/10		JIGTA	IF/IAF	2600
3. 202/30 CW 022/30		JIGTA	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>
JIGTA	IF/IAF	LUCIP		TF	FB	1.00	111.59	7.00	2600
LUCIP	FAF	HEVEM/2.70 NM TO RW11		TF	FB	0.30	111.69	2.65	
HEVEM/2.70 NM TO RW11		RW11	MAP	TF	FO	0.30	111.69	2.70	
RW11	MAP	1180 MSL		CA			111.69		
1180 MSL		SONOY		DF	FO	1.00			2500

MISSED APPROACH

MAP:

LP: RW11
LNAV: RW11

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2500 DIRECT SONOY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD W JIGTA, RT, 111.59 INBOUND, 2600 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 111.69FAF: LUCIPDIST FAF TO MAP: 5.35DIST FAF TO THLD: 5.35

4. MIN ALT: JIGTA 2600, LUCIP 2600, HEVEM/2.70 NM TO RW11 1660

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:

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 1 AND 19.
CHART NOTE: CIRCLING RWY 29 NA AT NIGHT.
CHART NOTE: RWY 11 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART VDP AT 1.46 NM TO RW11
WAAS CHANNEL #90134
REFERENCE PATH ID: W11A
CHART FAS OBST: 1036 TREE 424244N/0882158W, 1059 TREE 424155N/0882208W.
HOLD E, RT, 291.94 INBOUND
LTP HAE: 202.7 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
LP MDA	1300	1	520	1300	1	520	1300	1 1/2	520	1300	1 1/2	520			
LNAV MDA	1320	1	540	1320	1	540	1320	1 5/8	540	1320	1 5/8	540			
CIRCLING	1320	1	540	1380	1	600	1380	1 5/8	600	1560	2 1/2	780			





FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KBUU
RUNWAY	RW11
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W11A
LTP/FTP LATITUDE	424136.7135N
LTP/FTP LONGITUDE	0881846.0105W
LTP/FTP ELLIPSOIDAL HEIGHT	+02027
FPAP LATITUDE	424108.0200N
FPAP LONGITUDE	0881651.6300W
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	1440
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0

CRC REMAINDER	DE518300

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02370
FPAP ORTHOMETRIC HEIGHT	+02370



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> BURLINGTON MUNI	<u>AIRPORT ID</u> KBUU	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 29	<u>ORIGINAL/AMENDMENT</u> 1C	<u>CITY</u> BURLINGTON	<u>STATE</u> WI	
<u>AIRPORT ELEVATION</u> 780	<u>TDZE</u> 780	<u>SUPERSEDED</u> RNAV (GPS) RWY 29	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 08/17/2017	<u>MAG VAR</u> 3W	<u>EPOCH YEAR</u> 2015
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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. 202/30 CW 022/30	NOPT	202/10 CW 022/10		2900
2. 202/10 CW 022/10		SONOY	IF/IAF	2500
3. 022/30 CW 202/30		SONOY	IF/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>
SONOY	IF/IAF	WABEL		TF	FB	1.00	291.94	6.10	2500
WABEL	FAF	FOBOR/3.20 NM TO RW29		TF	FB	0.30	291.86	2.10	
FOBOR/3.20 NM TO RW29		RW29	MAP	TF	FO	0.30	291.86	3.20	
RW29	MAP	1160 MSL		CA			291.86		
1160 MSL		JIGTA		DF	FO	1.00			2600

MISSED APPROACH

MAP:

LP: RW29
LNAV: RW29

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2600 DIRECT JIGTA AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD E SONOY, RT, 291.94 INBOUND, 2500 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 291.86FAF: WABELDIST FAF TO MAP: 5.30DIST FAF TO THLD: 5.30

4. MIN ALT: SONOY 2500, WABEL 2500, FOBOR/3.20 NM TO RW29 1820

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: CIRCLING NA TO RWYS 1 AND 19.
CHART NOTE: RWY 29 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: STRAIGHT-IN AND CIRCLING RWY 29 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
WAAS CHANNEL #82732
REFERENCE PATH ID: W29A
CHART FAS OBST: 900 TREE 424114N/0881630W.
FAS OBST: 1029 AAO 424049N/0881323W.
HOLD W, RT, 111.59 INBOUND
LTP HAE: 202.1 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
LP MDA	1160	1	380	1160	1	380	1160	1 1/8	380	1160	1 1/8	380			
LNAV MDA	1280	1	500	1280	1	500	1280	1 3/8	500	1280	1 3/8	500			
CIRCLING	1300	1	520	1380	1	600	1380	1 1/2	600	1560	2 1/2	780			



CHANGES - REASONS

- 1. TERMINAL ROUTES: INTERMEDIATE RNP UPDATED FROM 0.50 TO 1.00. - IAW 8260.19H PARA 4-6-10 F.
- 2. LINE 2: HOLD-IN-LIEU MAX ALTITUDE 6000 ADDED. - IAW 8260.19H PARA 8-6-7 B(2)
- 3. LINE 7: 20:1 IS NOT CLEAR ADDED. - 20:1 PENETRATIONS PRESENT.
- 4. CHART NOTE: DME/DME RNP-0.3 NA REMOVED. PBN REQUIREMENTS NOTE: RNP APCH ADDED. - IAW 8260.19H PARA 8-6-8 B(1).
- 5. UPDATED CHART NOTE: RWY 29 STRAIGHT-IN AND CIRCLING MINIMUMS NA AT NIGHT TO STRAIGHT-IN AND CIRCLING RWY 29 NA AT NIGHT. - IAW 8260.19H 8-6-11 PARA O.2(G).
- 6. CHART NOTE: CIRCLING NA TO RWYS 1 AND 19. - IFR OPS NA TO TURF RUNWAYS.
- 7. UPDATED CHART NOTE FROM HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED TO RWY 29 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. - IAW 8260.19H 8-6-11 K.3.
- 8. CHART NOTE: MOVED ALTERNATE ALTIMETER NOTE TO 8260-9 PART C - REMARKS. - IAW 8260.19H 8-6-9 F(4).
- 9. NA WHEN LOCAL WEATHER NOT AVAILABLE REMOVED. - IAW 8260.19H 8-6-11 B(4).

COORDINATED WITH:

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

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

Digitally signed by **DATE**

WARDELL HENNING

Jan 08, 2019

DEVELOPED BY

WARDELL HENNING (BARBARA GORMAN)

Digitally signed by

WARDELL HENNING

Jan 08, 2019

OFFICE

AJV-5432

DATE

11/29/2018

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

WARDELL HENNING

Jan 08, 2019

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	KBUU
RUNWAY	RW29
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W29A
LTP/FTP LATITUDE	424123.0390N
LTP/FTP LONGITUDE	0881751.4950W
LTP/FTP ELLIPSOIDAL HEIGHT	+02021
FPAP LATITUDE	424151.7200N
FPAP LONGITUDE	0881945.9000W
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	1440
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	88BD89DB

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02364
FPAP ORTHOMETRIC HEIGHT	+02364



**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> PARK FALLS MUNI	<u>AIRPORT ID</u> KPKF	<u>PROCEDURE NAME</u> NDB RWY 36	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> PARK FALLS	<u>STATE</u> WI	
<u>AIRPORT ELEVATION</u> 1500	<u>TDZE</u> 1500	<u>SUPERSEDED</u> NDB RWY 36	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 05/15/2003	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u> 455711.07N / 0902534.80W	<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 25 APRIL 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: ZMP, AMGR

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY
CHRISTINE BAYSE

Digitally signed by
CHRISTINE BAYSE
Nov 14, 2018

OFFICE
AJV-5432

DATE
11/14/2018

APPROVED BY
PATRICK MULQUEEN

Digitally signed by
WARDELL HENNING
Nov 20, 2018

OFFICE
AJV-5430

DATE

TITLE



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> PLATTEVILLE MUNI	<u>AIRPORT ID</u> KPVB	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 7	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> PLATTEVILLE	<u>STATE</u> WI	
<u>AIRPORT ELEVATION</u> 1025	<u>TDZE</u> 1016	<u>SUPERSEDED</u> RNAV (GPS) RWY 7	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 05/28/2015	<u>MAG VAR</u> 1W	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
DBQ VORTAC	IAF	TIREW		TF	FB	1.00	001.64	12.51	3000
SWAGG	IAF	TIREW		TF	FB	1.00	158.60	15.29	3000
TIREW	IF	SESPY		TF	FB	1.00	068.99	6.10	3000
SESPY	FAF	RW07	MAP	TF	FO	0.30	069.07	6.06	
RW07	MAP	1283 MSL		CA			069.07		
1283 MSL		CERIG		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW07

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT CERIG AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT TIREW

3. FAC:

069.07

FAF: SESPY

DIST FAF TO MAP: 6.06

DIST FAF TO THLD: 6.06

4. MIN ALT: TIREW 3000, SESPY 3000

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

267 HAT: 0.75

GS ANT:

6. MIN GP INCPT: 3000

GP ALT AT FAF : SESPY 3000

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 40.0

8. MSA FROM: RW07 2900

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT DBQ VORTAC ON AIRWAY RADIALS 274 CW 078.

ADDITIONAL FLIGHT DATA:

CHART: 1211 TOWER 423844N/0903350W
CHART VDP AT 1.13 NM TO RW07*
*LNAV ONLY
WAAS CHANNEL #82315
REFERENCE PATH ID: W07A
CHART FAS OBST: 1119 TREE 424136N/0902722W.
HOLD E, RT, 249.34 INBOUND
LTP HAE: 271.6 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	1283	1	267	1283	1	267	1283	1	267		NA				
LNAV/VNAV DA	1406	1 1/2	390	1406	1 1/2	390	1406	1 1/2	390		NA				
LNAV MDA	1380	1	364	1380	1	364	1380	1	364		NA				
CIRCLING	1440	1	415	1480	1	455	1480	1 1/2	455		NA				



1. TERMINAL ROUTES: INTERMEDIATE RNP UPDATED FROM 0.50 TO 1.00. - IAW 8260.19H PARA 4-6-10 F.
2. TERMINAL ROUTES: RW07 TO 1266 MSL (CA) UPDATED TO RW07 TO 1283 MSL; 1266 MSL TO CERIG (DF) UPDATED TO 1283 MSL TO CERIG. - INCORPORATE P-NOTAM AMENDMENT IAW 8260.19H 8-3-4 C.2
3. TERMINAL ROUTES: MISSED APPROACH: DF LEG RNP 1.00 ADDED. - IAW 8260.19H.
4. LINE 7: 34:1 IS NOT CLEAR UPDATED TO 34:1 IS CLEAR. 20:1 IS CLEAR ADDED. - NO PENETRATIONS EXIST.
5. LPV DA UPDATED FROM 1266 TO 1283, LNAV/VNAV DA UPDATED FROM 1389 TO 1406, AND LNAV HAT UPDPATED FROM 381 TO 364. - INCORPORATE P-NOTAM AMENDMENT IAW 8260.19H 8-3-4 C.2.
6. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (-2F) OR ABOVE 54C (130F) UPDATED TO -17C TO 54C. - FAHRENHEIT REMOVED IAW 8260.19H.
7. CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA REMOVED - NO PENETRATIONS EXIST.
8. CHART NOTE: DME/DME RNP-0.3 NA REMOVED. PBN REQUIREMENTS NOTE: RNP APCH ADDED. - IAW 8260.19H.
9. CHART NOTE: VGSi AND RNAV GLIDEPATH ANGLE NOT COINCIDENT (VGSi ANGLE {ANGLE}/TCH {FEET}). - IAW 8260.19H 8-6-9 M.
10. CHART NOTE: MOVED ALTERNATE ALTIMETER NOTE TO 8260-9 PART C - REMARKS. - IAW 8260.19H 8-6-9 F(4).
11. CHART NOTE: BARO-VNAV NA WHEN USING DUBUQUE ALTIMETER SETTING MOVED TO 8260-9 PART-C REMARKS. - IAW 8260.19H 8-6-9 F.2(3)E.
12. NA WHEN LOCAL WEATHER NOT AVAILABLE REMOVED. - ALL REFERENCES TO SECONDARY ALTIMETER REMOVED.
13. CHANGED PROCEDURE ENTRY RESTRICTION RADIALS FOR ARRIVALS AT DBQ VORTAC FROM "322 CW 078" TO "274 CW 078" - TURNS EXCEED 90 DEGREES.
14. CHANGED DISTANCE TO THLD FROM 250 HATH: 0.71 NM TO 267 HATH: 0.75 NM - PER TARGETS BUILD.
15. ADDITIONAL FLIGHT DATA: CHART VDP AT 1.13 NM TO RW07* ADDED. - NO 20:1 PENETRATIONS PRESENT.

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ **OTHER:**

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE Digitally signed by DATE
WARDELL HENNING
Jan 25, 2019

WARDELL HENNING (BARBARA GORMAN)

Digitally signed by
WARDELL HENNING
Jan 25, 2019

OFFICE
AJV-5432

DATE
11/29/2018

PATRICK MULQUEEN

Digitally signed by
WARDELL HENNING
Jan 25, 2019

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	KPVB
RUNWAY	RW07
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W07A
LTP/FTP LATITUDE	424108.8470N
LTP/FTP LONGITUDE	0902704.2050W
LTP/FTP ELLIPSOIDAL HEIGHT	+02716
FPAP LATITUDE	424141.9900N
FPAP LONGITUDE	0902512.0600W
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	1656
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	047F14EE

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+03044
FPAP ORTHOMETRIC HEIGHT	+03044



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> PLATTEVILLE MUNI	<u>AIRPORT ID</u> KPVV	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 25	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> PLATTEVILLE	<u>STATE</u> WI	
<u>AIRPORT ELEVATION</u> 1025	<u>TDZE</u> 1022	<u>SUPERSEDED</u> RNAV (GPS) RWY 25	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 08/27/2009	<u>MAG VAR</u> 1W	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
ISINY		IDUBE		TF	FB	1.00	103.56	22.74	3000
MADDY		SALDR		TF	FB	1.00	306.61	19.80	3000
DALEY	IAF	CERIG	NOPT	TF	FB	1.00	245.36	19.43	3000
IDUBE	IAF	CERIG	NOPT	TF	FB	1.00	159.31	5.00	3000
SALDR	IAF	CERIG	NOPT	TF	FB	1.00	339.37	5.00	3000
CERIG	IF	FEBEK		TF	FB	1.00	249.34	6.10	3000
FEBEK	FAF	OBOTE/2.60 NM TO RW25		TF	FB	0.30	249.25	3.39	
OBOTE/2.60 NM TO RW25		RW25	MAP	TF	FO	0.30	249.25	2.60	
RW25	MAP	1425 MSL		CA			249.25		
1425 MSL		CERIG		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LNAV: RW25

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 3000 DIRECT CERIG AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD E CERIG, RT, 249.34 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC:

249.25

FAF: FEBEK

DIST FAF TO MAP: 5.99

DIST FAF TO THLD: 5.99

4. MIN ALT: CERIG 3000, FEBEK 3000, OBOTE/2.60 NM TO RW25 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 CLEAR

20:1

IS NOT CLEAR

TCH:

8. MSA FROM: RW25 2900

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: RWY 25 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT DALEY ON V341 NORTHEAST BOUND AND ON V24-171 SOUTHEAST BOUND AND AT MADDY ON V246 EASTBOUND.

ADDITIONAL FLIGHT DATA:

FEBEK TO RW25: 3.05/40
CHART FAS OBST: 1169 TREE 424229N/0902342W.

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	1440	1	418	1440	1	418	1440	1 1/4	418		NA				
CIRCLING	1440	1	415	1480	1	455	1480	1 1/2	455		NA				

CHANGES - REASONS

1. TERMINLA ROUTES: ISINY TO IDUBE, MADDY TO SALDR RNP UPDATED FROM 2.00 TO 1.00. - IAW 8260.58A, CHG 1.
2. TERMINAL ROUTES: INTERMEDIATE RNP UPDATED FROM 0.50 TO 1.00. - IAW 8260.19H PARA 4-6-10 F.
3. TERMINLA ROUTES: MISSED APPROACH CA LEG ADDED. - 8260.58A 3-5-2.
4. LINE 2: HOLD-IN-LIEU MAX ALTITUDE 6000 ADDED. - IAW 8260.19H PARA 8-6-7 B(2).
5. LINE 7: 20:1 IS NOT CLEAR ADDED. - 20:1 PENETRATIONS PRESENT.
6. CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA UPDATED TO RWY 25 HELICOPTER VISIBILITY BELOW 1 SM NOT AUTHORIZED. - IAW 8260.19H 8-6-11 K.3.
7. CHART NOTE: DME/DME RNP-0.3 NA REMOVED. PBN REQUIREMENTS NOTE: RNP APCH ADDED. - IAW 8260.19H.
8. CHART NOTE: REMOVED ALTERNATE ALTIMETER NOTE. - IAW 8260.19H 8-6-9 F(4).
9. CHART NOTE: "PROCEDURE NA FOR ARRIVAL AT DALEY VIA V341 NORTHEAST BOUND AND AT MADDY VIA V246 EASTBOUND" UPDATED TO "PROCEDURE NA FOR ARRIVAL AT DALEY ON V341 NORTHEAST BOUND AND ON V24-171 SOUTHEAST BOUND AND AT MADDY ON V246 EASTBOUND." - VIA UPDATED TO ON IAW 8260.19H 8-2-5 E; ON V24-171 SOUTHEAST BOUND ADDED BECAUSE TURN EXCEEDS 90 DEGREES.
10. NA WHEN LOCAL WEATHER NOT AVAILABLE REMOVED. - ALL REFERENCES TO SECONDARY ALTIMETER REMOVED.



COORDINATED WITH:

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

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

Digitally signed by

DATE

WARDELL HENNING

Jan 25, 2019

DEVELOPED BY

WARDELL HENNING (BARBARA GORMAN)

Digitally signed by

OFFICE

DATE

WARDELL HENNING

AJV-5432

11/30/2018

Jan 25, 2019

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

OFFICE

DATE

TITLE

WARDELL HENNING

AJV-5430

MANAGER

Jan 25, 2019



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> MERCER COUNTY	<u>AIRPORT ID</u> KBLF	<u>PROCEDURE NAME</u> ILS OR LOC RWY 23	<u>ORIGINAL/AMENDMENT</u> 15D	<u>CITY</u> BLUEFIELD	<u>STATE</u> WV
<u>AIRPORT ELEVATION</u> 2857	<u>TDZE</u> 2857	<u>SUPERSEDED</u> ILS OR LOC RWY 23	<u>ORIGINAL/AMENDMENT</u> 15C	<u>DATED</u> 03/29/2018	<u>MAG VAR</u> 7W
<u>FACILITY</u> I-BLF	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 APRIL 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>
BKW VOR/DME	IAF	DROWE INT/BLF VDME 11.00 DME					175.00	20.55	5600
ESTEM INT/BLF 16.56 DME	IAF	DROWE INT/BLF VDME 11.00 DME					224.61	5.56 (BLF R-045)	5600
KEGLY/BLF 11.00 DME CW	IAF	DROWE INT/BLF VDME 11.00 DME					11.00 DME ARC (BLF LR-034)		5600
HECKE/BLF 11.00 DME CCW	IAF	DROWE INT/BLF VDME 11.00 DME					11.00 DME ARC (BLF LR-056)		5600
DROWE INT/BLF VDME 11.00 DME	IF	BLUEF OM/BLF VDME 4.47 DME					228.88	6.53	4600

MISSED APPROACH

MAP:

ILS: DA
LOC: 4.97 NM AFTER BLUEF OM/BLF VDME 4.47 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3800 THEN CLIMBING RIGHT TURN TO 6000 ON HEADING 020 AND BLF VOR/DME R-340 TO KEGLY INT/BLF 11.00 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)	
2.	PROFILE STARTS AT DROWE				
3. FAC:	228.88	FAF: BLUEF OM/BLF VDME 4.47 DME	DIST FAF TO MAP: 4.97	DIST FAF TO THLD: 4.97	
4. MIN ALT:	DROWE INT/BLF VDME 11.00 DME 5600, BLUEF OM/BLF VDME 4.47 DME 4600				
5. DIST TO THLD FROM OM:	4.97	MM:	IM:	150 HAT:	GS ANT: 1128
6. MIN GS INCPT:	4600	GS ALT AT FAF : GP INTCP 4600			OM: 4524
7. GP ANGLE:	3.00	34:1:	20:1:	TCH: 58.0	MM: IM:
8. MSA FROM:	BLF VOR/DME 6000				

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 3600 MSL.
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE BECKLEY ALTIMETER SETTING AND INCREASE ALL DA 443 FEET AND ALL MDA 460 FEET; INCREASE S-ILS 23 ALL CATS VISIBILITY 2 1/2 MILE AND S-LOC 23 CAT A VISIBILITY TO 1 1/4 MILE, CAT B TO 1 1/2 MILE AND CATS C AND D TO 3 MILES.
CHART NOTE: CIRCLING NA SE OF RWY 5-23.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BKW VOR/DME ON V258 NORTHWEST BOUND.

ADDITIONAL FLIGHT DATA:

CHART BKW 20.55 DME AT DROWE INT.
CHART NOTE IN PLANVIEW: USE OF BKW R-175 AND BLF R-045 MAYBE NECESSARY TO LOCATE DROWE INTERSECTION.
CHART BLF R-340 AT KEGLY.
CHART BLF R-122 AT HECKE.
CHART FAS OBST: 2970 TREE 371859N/0811050W.
HOLD S, LT, 339.54 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.; LOC: 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-ILS 23	3157	1	300	3157	1	300	3157	1	300	3157	7/8	300			
S-LOC 23	3520	1	663	3520	1	663	3520	1 3/4	663	3520	2	663			
CIRCLING	3520	1	663	3520	1	663	3560	2	703	3560	2 1/4	703			

CHANGES - REASONS

1. CHANGED CHART NOTE FROM "AUTOPILOT COUPLED APPROACH NA BELOW 3200 MSL." TO "AUTOPILOT COUPLED APPROACH NA BELOW 3600 MSL." - FLIGHT CHECK REVEALED AIRCRAFT COULD NOT MAINTAIN AUTO COUPLED APPROACH BELOW 3600 MSL.

COORDINATED WITH:

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

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY

WARDELL HENNING (CHARLES THIBODEAUX)

APPROVED BY

PATRICK MULQUEEN

Digitally signed by

WARDELL HENNING

Jan 08, 2019

OFFICE

Digitally signed by

WARDELL HENNING

Jan 08, 2019

DATE

OFFICE

AJV-5430

DATE

11/05/2018

OFFICE

AJV-5430

DATE

TITLE

MANAGER



[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. [31239](#); Amdt. No. [3840](#)

**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 Procedures and Airspace Group, Flight Technologies and Procedures Division, Flight Standards Service, Federal Aviation Administration. Mailing Address: FAA Mike Monroney Aeronautical Center, Flight Procedures and Airspace Group, 6500 South MacArthur Blvd, Registry Bldg 29 Room 104, Oklahoma City, OK 73125. Telephone: (405) 954-4164.

SUPPLEMENTARY INFORMATION:

This rule amends Title 14, Code of Federal Regulations, Part 97 (14 CFR part 97) by amending the referenced SIAPs. The complete regulatory description of each SIAP is listed on the appropriate FAA Form 8260, as modified by the National Flight Data Center (NFDC)/Permanent Notice to Airmen (P-NOTAM), and is incorporated by reference under 5 U.S.C. 552(a), 1 CFR part 51, and 14 CFR §97.20. The large number of SIAPs, their complex nature, and the need for a special format make their verbatim publication in the **Federal Register** expensive and impractical. Further, airmen do not use the regulatory text of the SIAPs, but refer to their graphic depiction on charts printed by publishers of aeronautical materials. Thus, the advantages of incorporation by reference are realized and publication of the complete description of each SIAP contained on FAA form documents is unnecessary.

This amendment provides the affected CFR sections, and specifies the SIAPs and Takeoff Minimums and ODPs with their applicable effective dates. This amendment also identifies the airport and its location, the procedure and the amendment number.

Availability and Summary of Material Incorporated by Reference

The material incorporated by reference is publicly available as listed in the ADDRESSES section.

The material incorporated by reference describes SIAPs, Takeoff Minimums and ODPs as identified in the amendatory language for part 97 of this final rule.

The Rule

This amendment to 14 CFR part 97 is effective upon publication of each separate SIAP and Takeoff Minimums and ODP as amended in the transmittal. For safety and timeliness of change considerations, this amendment incorporates only specific changes contained for each SIAP and Takeoff Minimums and ODP as modified by FDC permanent NOTAMs.

The SIAPs and Takeoff Minimums and ODPs, as modified by FDC permanent NOTAM, and contained in this amendment are based on the criteria contained in the U.S. Standard for Terminal Instrument Procedures (TERPS). In developing these changes to SIAPs and Takeoff Minimums and ODPs, the TERPS criteria were applied only to specific conditions existing at the affected

airports. All SIAP amendments in this rule have been previously issued by the FAA in a FDC NOTAM as an emergency action of immediate flight safety relating directly to published aeronautical charts.

The circumstances that created the need for these SIAP and Takeoff Minimums and ODP amendments require making them effective in less than 30 days.

Because of the close and immediate relationship between these SIAPs, Takeoff Minimums and ODPs, and safety in air commerce, I find that notice and public procedure under 5 U.S.C. 553(b) are impracticable and contrary to the public interest and, where applicable, under 5 U.S.C. 553(d), good cause exists for making these SIAPs effective in less than 30 days.

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore--(1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979) ; and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. For the same reason, the FAA certifies that this amendment will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR part 97:

Air Traffic Control, Airports, Incorporation by reference, Navigation (Air).

Issued in Washington, DC on **FEBRUARY 8, 2019.**



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
28-Mar-19	CA	Santa Rosa	Charles M Schulz - Sonoma County	8/0432	1/28/19	RNAV (GPS) RWY 32, Amdt 1D
28-Mar-19	CA	El Monte	San Gabriel Valley	8/2453	1/28/19	VOR-A, Orig
28-Mar-19	KY	Lewisport	Hancock Co-Ron Lewis Field	8/5973	1/28/19	RNAV (GPS) RWY 23, Amdt 1A
28-Mar-19	WY	Newcastle	Mondell Field	8/8536	1/28/19	RNAV (GPS) RWY 32, Amdt 1
28-Mar-19	WY	Newcastle	Mondell Field	8/8538	1/28/19	RNAV (GPS) RWY 14, Amdt 1
28-Mar-19	CA	Santa Rosa	Charles M Schulz - Sonoma County	8/8919	1/28/19	ILS OR LOC/DME RWY 32, Amdt 19A
28-Mar-19	CA	Santa Rosa	Charles M Schulz - Sonoma County	8/8932	1/28/19	RNAV (GPS) RWY 2, Orig-D
28-Mar-19	CA	Santa Rosa	Charles M Schulz - Sonoma County	8/8942	1/28/19	RNAV (GPS) RWY 14, Amdt 2A
28-Mar-19	TN	Knoxville	Knoxville Downtown Island	9/2426	1/28/19	RNAV (GPS) RWY 26, Orig-D
28-Mar-19	TN	Knoxville	Knoxville Downtown Island	9/2427	1/28/19	LOC RWY 26, Amdt 4B
28-Mar-19	NY	Farmingdale	Republic	9/3105	1/28/19	RNAV (RNP) Z RWY 14, Orig-A
28-Mar-19	NY	Farmingdale	Republic	9/3108	1/28/19	RNAV (GPS) RWY 32, Orig-A
28-Mar-19	NY	Farmingdale	Republic	9/3109	1/28/19	RNAV (GPS) RWY 19, Amdt 2D
28-Mar-19	NY	Farmingdale	Republic	9/3110	1/28/19	RNAV (GPS) RWY 1, Amdt 2C
28-Mar-19	NY	Farmingdale	Republic	9/3111	1/28/19	NDB RWY 1, Amdt 14C
28-Mar-19	NJ	Newark	Newark Liberty Intl	9/8682	2/1/19	RNAV (GPS) Z RWY 22L, Amdt 2B
28-Mar-19	NJ	Newark	Newark Liberty Intl	9/8690	2/1/19	RNAV (GPS) RWY 4L, Amdt 2D
28-Mar-19	FL	Wauchula	Wauchula Muni	9/8691	2/1/19	RNAV (GPS) RWY 18, Amdt 1B
28-Mar-19	FL	Wauchula	Wauchula Muni	9/8692	2/1/19	RNAV (GPS) RWY 36, Amdt 1B
28-Mar-19	ID	Blackfoot	Mccarley Fld	9/8913	2/5/19	RNAV (GPS)-B, Orig-A
28-Mar-19	ID	Blackfoot	Mccarley Fld	9/8914	2/5/19	RNAV (GPS)-A, Orig-A
28-Mar-19	ID	Blackfoot	Mccarley Fld	9/8915	2/5/19	VOR/DME-C, Orig-A

AIRAC Date: 28 MARCH 2019

FDC **8/0432** STS IAP CHARLES M SCHULZ - SONOMA COUNTY, Santa Rosa, CA. RNAV (GPS) RWY 32, AMDT 1D... DELETE NOTE: CIRCLING RWY 14, 20 NA AT NIGHT. 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 32, AMDT 1E. 1811261237-PERM

FDC **8/2453** EMT IAP SAN GABRIEL VALLEY, El Monte, CA. VOR-A, ORIG... ALTERNATE MINIMUMS: CAT A/B 1000-2, CAT C 1000-3, CAT D 1100-3; NA WHEN LOCAL WEATHER NOT AVAILABLE. THIS IS VOR-A, ORIG-A. 1812181644-PERM

FDC **8/5973** KY8 IAP HANCOCK CO-RON LEWIS FIELD, Lewisport, KY. RNAV (GPS) RWY 23, AMDT 1A... DELETE NOTE: WHEN VGSI INOP, CIRCLING RWY 5 NA AT NIGHT. DELETE NOTE: WHEN VGSI INOP, STRAIGHT-IN/CIRCLING RWY 23 PROCEDURE NA AT NIGHT. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. CHART NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. 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. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 23, AMDT 1B. 1812042050-PERM

FDC **8/8536** ECS IAP MONDELL FIELD, Newcastle, WY. RNAV (GPS) RWY 32, AMDT 1... DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: CIRCLING NA EAST OF RWY 14-32. CHART NOTE: CIRCLING NA NORTHEAST OF RWY 14-32. THIS IS RNAV (GPS) RWY 32, AMDT 1A. 1812102237-PERM

FDC **8/8538** ECS IAP MONDELL FIELD, Newcastle, WY. RNAV (GPS) RWY 14, AMDT 1... PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: PROCEDURE NA FOR CAT C AND D AIRCRAFT AT NIGHT. CHART NOTE: RWY 14 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: CIRCLING NA EAST OF RWY 14-32. CHART NOTE: CIRCLING NA NORTHEAST OF RWY 14-32. CHART VDP AT 2.22 NM TO RWY14* *LNAV ONLY. DELETE NOTE: DME/DME RNP-0.3 NA. THIS IS RNAV (GPS) RWY 14, AMDT 1A. 1812102239-PERM

FDC **8/8919** STS IAP CHARLES M SCHULZ - SONOMA COUNTY, Santa Rosa, CA. ILS OR LOC/DME RWY 32, AMDT 19A... DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PETALUMA ALTIMETER SETTING AND INCREASE ALL DA TO 423 FT AND ALL MDA 40 FT, AND S-LOC 32 VISIBILITY CATS C AND D 1/8 MILE. ALTERNATE MINIMUMS: DELETE NA WHEN LOCAL WEATHER NOT AVAILABLE. DELETE NOTE: DME REQUIRED. EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED. THIS IS ILS OR LOC/DME RWY 32, AMDT 19B. 1811191417-PERM

FDC **8/8932** STS IAP CHARLES M SCHULZ - SONOMA COUNTY, Santa Rosa, CA. RNAV (GPS) RWY 2, ORIG-D... DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PETALUMA ALTIMETER SETTING AND INCREASE ALL MDA 60 FT AND VISIBILITY LP AND LNAV CATS C AND D 1/4 MILE. ALTERNATE MINIMUMS: DELETE NA WHEN LOCAL WEATHER NOT AVAILABLE. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 2, ORIG-E. 1811191426-PERM

FDC **8/8942** STS IAP CHARLES M SCHULZ - SONOMA COUNTY, Santa Rosa, CA. RNAV (GPS) RWY 14, AMDT 2A... CHART NOTE: RWY 14 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PETALUMA ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET AND INCREASE LNAV VISIBILITY CAT C AND D 1/4 MILE. ALTERNATE MINIMUMS: DELETE NA WHEN LOCAL WEATHER NOT AVAILABLE. DELETE NOTE: DME/DME RNP-0.3 NA. PBN REQUIREMENTS NOTE: RNP APCH. THIS IS RNAV (GPS) RWY 14, AMDT 2B. 1811191436-PERM

FDC **9/2426** DKX IAP KNOXVILLE DOWNTOWN ISLAND, Knoxville, TN. RNAV (GPS) RWY 26, ORIG-D... CHART VDP AT 2.03 NM TO RWY 26 CHART NOTE VDP NA WHEN USING MCGHEE TYSON ALTIMETER SETTING. DELETE NOTE: PROCEDURE NA AT NIGHT. CHART NOTE: CIRCLING RWY 8 NA AT NIGHT. CHART NOTE: RWY 26 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA. DELETE NOTE: RWY 26 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. THIS IS RNAV (GPS) RWY 26, ORIG-E. 1901082055-PERM

FDC **9/2427** DKX IAP KNOXVILLE DOWNTOWN ISLAND, Knoxville, TN. LOC RWY 26, AMDT 4B... CHART NOTE: CIRCLING RWY 8 NA AT NIGHT. CHART NOTE: RWY 26 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. DELETE NOTE: PROCEDURE NA AT NIGHT. DELETE NOTE: RWY 26 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. THIS IS LOC RWY 26, AMDT 4C. 1901082055-PERM

FDC **9/3105** FRG IAP REPUBLIC, Farmingdale, NY. RNAV (RNP) Z RWY 14, ORIG-A... MSA RW14 25NM 2900. DELETE FIELD ELEV: 80. CHART FIELD ELEV: 81. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -12C (5F) OR ABOVE 48C (118F). CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -12C OR ABOVE 48C. DELETE NOTE: FOR INOPERATIVE MALSR, INCREASE ALL CATS VISIBILITY 1 3/8. CHART NOTE: FOR INOPERATIVE ALS, INCREASE ALL CATS VISIBILITY 1 3/8 SM. DELETE NOTE: GPS REQUIRED. PBN REQUIREMENTS NOTE: RNP AR APCH. DELETE PLANVIEW NOTE: ADJACENT TO HEREK (IAF): RF REQUIRED. PBN REQUIREMENTS NOTE: RF REQUIRED FROM HEREK. THIS IS RNAV (RNP) Z RWY 14, ORIG-B. 1901101835-PERM

FDC **9/3108** FRG IAP REPUBLIC, Farmingdale, NY. RNAV (GPS) RWY 32, ORIG-A... MSA RW32 25NM 2900. CHART APT ELEV: 81. DELETE APT ELEV: 80. CIRCLING CAT A, B HAA 599, CAT C , D HAA 639. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON JFK VOR/DME AIRWAY RADIALS 065 CW 150. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT JFK VOR/DME VIA AIRWAY RADIALS 065 CW 150. MISSED APPROACH: CLIMB TO 3000 DIRECT FAAYE AND ON TRACK 008 TO ODALE AND HOLD. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 38C (100F). CHART NOTE:FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C OR ABOVE 38C. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. CHART NOTE: RWY 32 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 32, ORIG-B. 1901101840-PERM

FDC **9/3109** FRG IAP REPUBLIC, Farmingdale, NY. RNAV (GPS) RWY 19, AMDT 2D... MSA RW19 25NM 2900. DELETE APT ELEV: 80. CHART APT ELEV: 81. DELETE TDZE: 78. CHART TDZE: 81. LPV DA 348 ALL CATS. LNAV/VNAV DA 560 ALL CATS. LNAV HAT 459 ALL CATS. CIRCLING CAT A HAA 479, CAT B HAA 519, CAT C, D HAA 639. DELETE PLANVIEW NOTE: RADAR REQUIRED FOR PROCEDURE ENTRY AT ZOSAB. PBN EQUIPMENT NOTE: RADAR REQUIRED FOR PROCEDURE ENTRY AT ZOSAB. DELETE NOTE: DME/DME RNP-0.3 NA. DELETE NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F). DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ISLIP ALTIMETER SETTING AND INCREASE ALL DA 37 FEET AND ALL MDA 40 FEET; INCREASE LNAV/VNAV ALL CATS VISIBILITY 1/8 MILE AND CIRCLING CATS C/D VISIBILITY 1/4 MILE. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ISLIP ALTIMETER SETTING AND INCREASE ALL DA 37 FEET AND ALL MDA 40 FEET; INCREASE LNAV/VNAV ALL CATS VISIBILITY 1/8 SM AND CIRCLING CATS C/D VISIBILITY 1/4 SM. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. CHART NOTE: RWY 19 HELICOPTER VISIBILITY REDUCTION BELOW 1SM NOT AUTHORIZED. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C OR ABOVE 54C. THIS IS RNAV (GPS) RWY 19, AMDT 2E. 1901101843-PERM

FDC **9/3110** FRG IAP REPUBLIC, Farmingdale, NY. RNAV (GPS) RWY 1, AMDT 2C... DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ISLIP ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET AND LNAV CATS C/D VISIBILITY 1/8 MILE AND CIRCLING CATS C/D VISIBILITY 1/4 MILE. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ISLIP ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET AND LNAV CATS C/D VISIBILITY 1/8 SM AND CIRCLING CATS C/D VISIBILITY 1/4 SM. DELETE PLANVIEW NOTE: LIMIT MISSED APPROACH TO 190 KIAS. MISSED APPROACH: (MAX 190 KIAS) CLIMB TO 2000 THEN CLIMBING RIGHT TURN TO 3000 DIRECT DPK VOR/DME AND HOLD. CHART SPEED ICON IN PLANVIEW AT BLAND: MAX 225 KIAS. DELETE PLANVIEW NOTE AT BLAND: MAX 225 KIAS. PBN REQUIREMENTS NOTE: RNP APCH. MSA RW01 25NM 2900. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. CHART NOTE: RWY 01 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: DME/DME RNP-0.3 NA. THIS IS RNAV (GPS) RWY 1, AMDT 2D. 1901101845-PERM

FDC **9/3111** FRG IAP REPUBLIC, Farmingdale, NY. NDB RWY 1, AMDT 14C... S-1 HAT 467 ALL CATS. CIRCLING CAT A HAA 479, CAT B HAA 519, CAT C, D HAA 639. DELETE APT ELEV 82, CHART APT ELEV 81. DELETE TDZE 72, CHART TDZE 73. MSA FROM BBN NDB 25 NM 125-215 1500, 215-305 2900, 305-125 1900. CHART NOTE: RWY 1 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA. THIS IS NDB RWY 1, AMDT 14D. 1901101848-PERM

FDC **9/8682** EWR IAP NEWARK LIBERTY INTL, Newark, NJ. RNAV (GPS) Z RWY 22L, AMDT 2B... LNAV/VNAV DA 462/HAT 451. LNAV MDA 560/HAT 549, VIS CAT C/D RVR 6000. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: DME/DME RNP-0.3 NA. THIS IS RNAV (GPS) Z RWY 22L, AMDT 2C. 1901302121-PERM

FDC **9/8690** EWR IAP NEWARK LIBERTY INTL, Newark, NJ. RNAV (GPS) RWY 4L, AMDT 2D... LPV DA 379/HAT 369. VIS RVR 3500 ALL CATS. LNAV/VNAV DA 470/HAT 460. CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV ALL CATS VISIBILITY TO RVR 5500. PBN REQUIREMENTS NOTE: RNP APCH. DELETE NOTE: FOR INOP MALSR, INCREASE LPV ALL CATS VISIBILITY TO RVR 4500. DELETE NOTE: DME/DME RNP-0.3 NA.. THIS IS RNAV (GPS) RWY 4L, AMDT 2E. 1901302131-PERM

FDC **9/8691** CHN IAP WAUCHULA MUNI, Wauchula, FL. RNAV (GPS) RWY 18, AMDT 1B... PBN REQUIREMENTS NOTE: RNP APCH. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE 4.00/TCH 47). CHART NOTE: RWY 18 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: DME/DME RNP-0.3 NA. THIS IS RNAV (GPS) RWY 18, AMDT 1C. 1901302134-PERM

FDC **9/8692** CHN IAP WAUCHULA MUNI, Wauchula, FL. RNAV (GPS) RWY 36, AMDT 1B... PBN REQUIREMENTS NOTE: RNP APCH. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE 3.00/TCH 47.7). CHART NOTE: RWY 36 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. DELETE NOTE: DME/DME RNP-0.3 NA. THIS IS RNAV (GPS) RWY 36, AMDT 1C. 1901302134-PERM

FDC **9/8913** U02 IAP MCCARLEY FLD, Blackfoot, ID. RNAV (GPS)-B, ORIG-A... CIRCLING HAA 888 ALL CATS. PBN REQUIREMENTS NOTE: RNP APCH. CHART PROFILE NOTE: VGSI AND DESCENT ANGLE NOT COINCIDENT (VGSI ANGLE 3.00/TCH 44.8). CHART NOTE: USE POCATELLO ALTIMETER SETTING, WHEN NOT RECEIVED USE IDAHO FALLS ALTIMETER SETTING. MISSED APPROACH: CLIMB TO 7000 DIRECT JASKI AND ON 020.00 TRACK TO IDA VOR/DME AND HOLD. DELETE APT ELEV 4488. CHART APT ELEV 4492. DELETE NOTE: USE POCATELLO REGIONAL ALTIMETER SETTING, WHEN NOT RECEIVED USE IDAHO FALLS REGIONAL ALTIMETER SETTING. DELETE NOTE: DME/DME RNP-0.3 NA. THIS IS RNAV (GPS)-B, ORIG-B. 1901311416-PERM

FDC **9/8914** U02 IAP MCCARLEY FLD, Blackfoot, ID. RNAV (GPS)-A, ORIG-A...
CIRCLING CATS A/B/C HAA 848, CAT D HAA 888. PBN REQUIREMENTS NOTE:
RNP APCH. CHART NOTE: USE POCATELLO ALTIMETER SETTING, WHEN NOT
RECEIVED USE IDAHO FALLS ALTIMETER SETTING. MISSED APPROACH:
CLIMB TO 8500 DIRECT NARBE AND ON 199.00 TRACK TO PIH VOR/DME AND
HOLD. DELETE APT ELEV 4488. CHART APT ELEV 4492. DELETE NOTE: USE
POCATELLO REGIONAL ALTIMETER SETTING, WHEN NOT RECEIVED USE
IDAHO FALLS REGIONAL ALTIMETER SETTING. DELETE NOTE: DME/DME RNP-
0.3 NA. THIS IS RNAV (GPS)-A, ORIG-B. 1901311417-PERM

FDC **9/8915** U02 IAP MCCARLEY FLD, Blackfoot, ID. VOR/DME-C, ORIG-A...
DELETE APT ELEV 4488. CHART APT ELEV 4492. CIRCLING HAA 968 ALL CATS.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLE NOT COINCIDENT (VGSI
ANGLE 3.00/TCH 44.8). DELETE NOTE: USE POCATELLO REGIONAL
ALTIMETER SETTING, WHEN NOT RECEIVED USE IDAHO FALLS REGIONAL
ALTIMETER SETTING. CHART NOTE: USE POCATELLO ALTIMETER SETTING,
WHEN NOT RECEIVED USE IDAHO FALLS ALTIMETER SETTING. THIS IS
VOR/DME-C, ORIG-B. 1901311418-PERM