# 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.

**AIRPORT PROCEDURE NAME ORIGINAL/AMENDMENT CITY STATE** AIRPORT ID RNAV (GPS) RWY 16 **CLEVELAND CLEVELAND MUNI** 6R3 ORIG-C TX

**AIRPORT ELEVATION TDZE** SUPERSEDED ORIGINAL/AMENDMENT DATED MAG VAR **EPOCH YEAR** 5E 150 RNAV (GPS) RWY 16 ORIG-B 10/15/2015 1995 150

**FACILITY COORDINATES OF FACILITIES ACTUAL EFFECTIVE DATE REQUIRED EFFECTIVE DATE CANCEL/SUSPEND** 

**RNAV** ROUTINE 20 JUNE 2019

#### **TERMINAL ROUTES**

FROM	FIX TYPE	<u>TO</u>	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
EAKES	IAF	HAWXE		TF	FB	1.00	086.50	11.73	3000
HAWXE	IF	DUUPO		TF	FB	1.00	156.71	5.50	2200
DUUPO	FAF	ANLIC/2.20 NM TO RW16		TF	FB	0.30	156.73	4.07	
ANLIC/2.20 NM TO RW16		RW16	MAP	TF	FO	0.30	156.73	2.20	
RW16	MAP	620 MSL		CA			156.73		620
620 MSL		KENNN		DF	FO	1.00			2000

#### **MISSED APPROACH**

MAP: LPV: DA

LNAV/VNAV: DA

LNAV: RW16

# **MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 620 THEN CLIMBING LEFT TURN TO 2000 DIRECT KENNN AND HOLD.

#### **ALTERNATE MISSED APPROACH INSTRUCTIONS:**

**AIRPORT** AIRPORT ID **PROCEDURE NAME** ORIGINAL/AMENDMENT **CITY** STATE **CLEVELAND MUNI** 6R3 RNAV (GPS) RWY 16 ORIG-C **CLEVELAND** TX

PROFILE:

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

2. PROFILE STARTS AT HAWXE

3. FAC: 156.73 FAF: DUUPO **DIST FAF TO MAP: 6.27 DIST FAF TO THLD: 6.27** 

4. MIN ALT: HAWXE 3000, DUUPO 2200, ANLIC/2.20 NM TO RW16 900\*

5. DIST TO THLD FROM OM: MM: IM: 150 HAT: **250 HAT**: 0.62 GS ANT:

6. MIN GP INCPT: 2200 GP ALT AT FAF: DUUPO 2200 OM: MM: IM:

7. GP ANGLE: 3.00 34:1: IS NOT CLEAR 20:1: IS CLEAR TCH: 52.0

8. MSA FROM: RW16 3100

#### **PBN REQUIREMENTS NOTE:**

RNP APCH.

#### NOTES:

CHART NOTE: CIRCLING TO RWY 34 NA AT NIGHT.

CHART NOTE: RWY 16 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15°C OR ABOVE 54°C.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT EAKES ON T254 WESTBOUND.

# **ADDITIONAL FLIGHT DATA:**

CHART VDP AT 1.06 NM TO RW16\* \*LNAV ONLY WAAS CHANNEL #65724 REFERENCE PATH ID: W16A CHART FAS OBST: 273 TREE 302234N/0950052W. HOLD SE, RT, 294,34 INBOUND

LTP HAE: 18.3 M

# MINIMUMS:

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

**STANDARD** ALTERNATE: NA

CATEGORY:	A		В			С			D			Е			
FINAL TYPE	DA/MDA	<u>VIS</u>	HAT/HAA												
LPV DA	400	1	250	400	1	250	400	1	250		NA				
LNAV/VNAV DA	433	1	283	433	1	283	433	1	283		NA				
LNAV MDA	540	1	390	540	1	390	540	1 1/8	390		NA				
CIRCLING	600	1	450	600	1	450	600	1 1/2	450		NA				
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#### **CHANGES - REASONS**

- 1. TERMINAL ROUTES, HAWXE TO DUUPO, RNP VALUE CHANGED FROM 0.50 TO 1.00 INTERMEDIATE RNP VALUE UPDATED TO NEW VALUE.
- 2. TERMINAL ROUTES, ANLIC TO RW16, COURSE CHANGED FROM 156.74 TO 156.73 CORRECTION TO FORM.
- 3. TERMINAL ROUTES, RW16 TO 620 MSL, COURSE CHANGED FROM 156.74 TO 156.73 CORRECTION TO FORM.
- 4. MISSED APPROACH CHANGED FROM 'CLIMB TO 2000 DIRECT LARCO AND HOLD' TO 'CLIMB TO 620 THEN CLIMBING LEFT TURN TO 2000 DIRECT KENNN AND HOLD' MISSED APPROACH REWORKED TO AVOID CIH EVALUATION AND LEVEL SURFACE HOLDING ALTITUDE INCREASE, REVISION MADE WITH FPT/ATC APPROVAL.
- 5. PROFILE LINE 7, 20:1 IS CLEAR ADDED IAW 8260.19H PARA 8-6-7G(3).
- 6. NOTE DELETED: DME/DME RNP-0.3 NA NOTE REPLACED WITH NEW PBN REQUIREMENTS NOTE.
- 7. PBN REQUIREMENTS NOTE ADDED: RNP APCH PER MEMO 257.
- 8. NOTE DELETED: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE HOUSTON/LONE STAR EXECUTIVE ALTIMETER SETTING AND INCREASE ALL DA 62 FEET AND ALL MDA 80 FT, INCREASE LNAV/VNAV ALL CATS VISIBILITY 1/8 MILE AND LNAV CAT C 1/4 MILE PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.
- 9. NOTE DELETED: BARO-VNAV NA WHEN USING HOUSTON/LONE STAR EXECUTIVE ALTIMETER SETTING PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.
- 10. NOTE DELETED: ALTERNATE MINIMUMS NA WHEN LOCAL WEATHER NOT AVAILABLE PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.
- 11. NOTE DELETED: WHEN VGSI INOP, PROCEDURE NA AT NIGHT PER .19H 8-6-11.O(2)(H). NIGHT LANDING RWY 16 NA WITHOUT FLIGHT STANDARDS APPROVAL.
- 12. NOTE ADDED: CIRCLING RWY 34 NA AT NIGHT NO SURVEY TO THIS RUNWAY; UNABLE TO VERIFY VISUAL SURFACE CLEAR.
- 13. NOTE CHARTED: RWY 16 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED' 34:1 PENETRATION PUBLISHED IAW 8260.19H PARA 8-6-11K(3).
- 14. FAHRENHEIT TEMPS DELETED FROM NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F) PER 8260.19H 8-6-9S.
- 15. ADDITIONAL FLIGHT DATA, FAS OBST DELETED: 274 TREE 302305N/0950125W NEW LNAV CONTROLLING OBSTACLE.
- 16. ADDITIONAL FLIGHT DATA, VDP NOTE ADDED 20:1 PENETRATIONS CLEARED.
- 17. CIRCLING CAT A MINIMA CHANGED FROM 580 MDA/430 HAA TO 600 MDA/450 HAA NEW CONTROLLING OBSTACLE.
- 18. CHANGES FROM P-NOTAMS FOR ORIG-A AND ORIG-B INCORPORATED INTO FORM REQUIRED IAW 8260.19H PARA 8-3-4C(3).

### **COORDINATED WITH:**

A4A ALPA X AOPA X APA HAI NBAA X	OTHER: ZHU, IAH APP CON, AMGR		
FLIGHT CHECKED BY	Digitally signed by  DAVID TEFFETELLER OFFICE	<u>DATE</u>	
ALEX KRAUSE	Apr 22, 2019 FICO	4/19/19	
DEVELOPED BY Digitally signed by	<u>OFFICE</u>	<u>DATE</u>	
ANDREA CHANEY ANDREA J CHANEY	AJV-A433	01/30/2019	
Feb 28, 2019	Digitally signed by		
APPROVED BY	DAVID TEFFETELLER OFFICE	<u>DATE</u>	<u>TITLE</u>
PATRICK MULQUEEN	Apr 22, 2019 AJV-A43		MANAGER



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#### **FAS DATA BLOCK INFORMATION**

DATA FIELD	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	6R3
RUNWAY	RW16
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W16A
LTP/FTP LATITUDE	302146.6630N
LTP/FTP LONGITUDE	0950037.8090W
LTP/FTP ELLIPSOIDAL HEIGHT	+00183
FPAP LATITUDE	302021.8400N

**FPAP LONGITUDE** 0950005.5700W THRESHOLD CROSSING HEIGHT (TCH) 00052.0 F TCH UNITS SELECTOR (METERS OR FEET USED) **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 2BD8D804

# ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE K4
LTP ORTHOMETRIC HEIGHT +00457
FPAP ORTHOMETRIC HEIGHT +00457