

**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> 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SUPERSEDED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>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> 1995

TERMINAL ROUTES

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



CHANGES - REASONS

1. CHANGED MSA MDA FROM 2700 MSL TO 3200 MSL. - TO INCORPORATE NOTAM FDC 8/9243.
2. ADDED MAX HOLDING 6000 AT WUVIS - IAW 8260.19H PARA 8-6-7B(2)(A).
3. ADDED PROFILE NOTE "20:1 IS CLEAR". - UPDATE TO CURRENT CRITERIA.
4. ADDED CHANGES FROM P-NOTAM FOR ORIG-A INCORPORATED INTO FORM - IAW 8260.19H PARA 8-3-4C(3).
5. ADDED MAX HOLDING 6000 AT WUVIS - IAW 8260.19H PARA 8-6-7B(2)(A).
6. CHANGED CHART NOTE; FROM "IF LOCAL ALTIMETER SETTING NOT RECEIVED, USE CLARINDA ALTIMETER SETTING AND INCREASE ALL DAS/MDAS 60 FEET" TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CLARINDA ALTIMETER SETTING: INCREASE DA TO 1275 FEET; INCREASE ALL MDAS 60 FEET." - FORMAT CHANGE PER 8260.19H PARA 8-6-11N(1)(A)2.
7. ADDED VGS1 AND RNAV GLIDEPATH NOT COINCIDENT (VGS1 ANGLE {ANGLE}/TCH {FEET}) - VGS1, TCH IS GREATER THAN 3 FEET DIFFERENCE.
8. CHANGED MISSED APPROACH INSTRUCTIONS FROM "CLIMB TO 3000 DIRECT ZILSO AND VIA 040° TRACK TO OBREC AND HOLD" TO "CLIMB TO 3000 DIRECT ZILSO AND ON TRACK 039.93 TO OBREC AND HOLD" - IAW 8260.19H, PARA 8-6-6(D)(5).
9. LNAV/VNAV LINE OF MINIMA REMOVED - LNAV/VNAV NOT DEVELOPED PER PREVIOUS AMDT.

COORDINATED WITH:

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

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

DEVELOPED BY

WARDELL HENNING (THOR CORNELL) **DONALD H LANIER**

Jan 02, 2019

OFFICE

DATE

AJV-5432

11/30/2018

APPROVED BY

PATRICK MULQUEEN **DONALD H LANIER**

Jan 02, 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	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

