

**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><br>DENISON MUNI   | <u>AIRPORT ID</u><br>KDNS        | <u>PROCEDURE NAME</u><br>RNAV (GPS) RWY 12      | <u>ORIGINAL/AMENDMENT</u><br>1B           | <u>CITY</u><br>DENISON     | <u>STATE</u><br>IA        |
| <u>AIRPORT ELEVATION</u><br>1274 | <u>TDZE</u><br>1274              | <u>SUPERSEDED</u><br>RNAV (GPS) RWY 12          | <u>ORIGINAL/AMENDMENT</u><br>1A           | <u>DATED</u><br>05/24/2018 | <u>MAG VAR</u><br>4E      |
| <u>FACILITY</u><br>RNAV          | <u>COORDINATES OF FACILITIES</u> | <u>ACTUAL EFFECTIVE DATE</u><br>30 JANUARY 2020 | <u>REQUIRED EFFECTIVE DATE</u><br>ROUTINE | <u>CANCEL/SUSPEND</u>      | <u>EPOCH YEAR</u><br>2000 |

**TAA**

| FROM                | FIX TYPE | TO    | FIX TYPE | ALTITUDE |
|---------------------|----------|-------|----------|----------|
| 1. 030/30 CW 210/30 | NOPT     | GECNU | IF/IAF   | 3300     |
| 2. 210/30 CW 300/30 |          | NEVPE | IAF      | 3300     |
| 3. 300/30 CW 030/30 |          | IHKAW | IAF      | 3300     |

**TERMINAL ROUTES**

| FROM     | FIX TYPE | TO       | FIX TYPE | LEG TYPE | FO/FB | RNP  | COURSE | DISTANCE | ALTITUDE |
|----------|----------|----------|----------|----------|-------|------|--------|----------|----------|
| IHKAW    | IAF      | GECNU    | NOPT     | TF       | FB    | 1.00 | 030.11 | 5.00     | 3300     |
| NEVPE    | IAF      | GECNU    | NOPT     | TF       | FB    | 1.00 | 210.18 | 5.00     | 3300     |
| GECNU    | IF/IAF   | OTKAH    |          | TF       | FB    | 1.00 | 120.14 | 6.09     | 2900     |
| OTKAH    | FAF      | RW12     | MAP      | TF       | FO    | 0.30 | 120.22 | 4.91     |          |
| RW12     | MAP      | 1524 MSL |          | CA       |       |      | 120.22 |          |          |
| 1524 MSL |          | OTLAZ    |          | DF       | FO    | 1.00 |        |          | 3900     |

**MISSED APPROACH**

**MAP:**

LPV: DA  
 LNAV/VNAV: DA  
 LNAV: RW12

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 3900 DIRECT OTLAZ AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



**PROFILE:**

- 1. **PT**      **SIDE OF COURSE**                      **OUTBOUND**                      **FT WITHIN**                      **MILES OF (IAF)**
- 2. HOLD NW GECNU, RT, 120.14 INBOUND, 3300 FT. IN LIEU OF PT (IAF), MAX 6000.
- 3. **FAC:** 120.22      **FAF:** OTKAH                      **DIST FAF TO MAP:** 4.91                      **DIST FAF TO THLD:** 4.91
- 4. **MIN ALT:** GECNU 3300, OTKAH 2900
- 5. **DIST TO THLD FROM OM:**                      **MM:**                      **IM:**                      **150 HAT:**                      **250 HAT:** 0.66                      **GS ANT:**
- 6. **MIN GP INCPT:** 2900                      **GP ALT AT FAF :** OTKAH 2900                      **OM:**                      **MM:**                      **IM:**
- 7. **GP ANGLE:** 3.00                      **34:1:** IS CLEAR                      **20:1:** IS CLEAR                      **TCH:** 40.0
- 8. **MSA FROM:**

**PBN REQUIREMENTS NOTE:**

RNP APCH.

**NOTES:**

CHART NOTE: CIRCLING NA TO RWYS 18 AND 36.  
 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: BARO-VNAV AND VDP NA WHEN USING CARROLL ALTIMETER SETTING.  
 CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CARROLL ALTIMETER SETTING: INCREASE LPV DA 1596 FEET, LNAV/VNAV DA TO 1626 FEET; INCREASE ALL MDAS 80 FEET AND VISIBILITY LNAV CAT C 1/8 SM AND CIRCLING CAT C 1/4 SM.

**ADDITIONAL FLIGHT DATA:**

CHART VDP AT 1.76 NM TO RWY12\*  
 \*LNAV ONLY  
 WAAS CHANNEL #90409  
 REFERENCE PATH ID: W12A  
 CHART FAS OBST: 1599 TREE 420130N/0952615W.  
 CHART 1285 BLDG 415925N/0952348W.  
 HOLD SE, RT, 300.43 INBOUND  
 LTP HAE: 359.1 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 |
| LPV DA       | 1524       | 1      | 250 | 1524    | 1      | 250 | 1524    | 1      | 250 |         | NA     |     |         |        |     |         |
| LNAV/VNAV DA | 1554       | 1      | 280 | 1554    | 1      | 280 | 1554    | 1      | 280 |         | NA     |     |         |        |     |         |
| LNAV MDA     | 1860       | 1      | 586 | 1860    | 1      | 586 | 1860    | 1 3/4  | 586 |         | NA     |     |         |        |     |         |
| CIRCLING     | 1860       | 1      | 586 | 1880    | 1      | 606 | 1880    | 1 3/4  | 606 |         | NA     |     |         |        |     |         |



**CHANGES - REASONS**

1. ADDED 250 HAT: 0.66 TO PROFILE: 5 - DATA MOVED FROM ADDITIONAL FLIGHT DATA.
2. ADDED TO LINE 7: 20:1 IS CLEAR - IAW 8260.19H PARA 8-6-7 G(3).
3. ADDED RNP APCH TO PBN REQUIREMENTS NOTE - IAW 8260.19H PARA 8-6-8 B(1).
4. REMOVED CHART NOTE: DME/DME RNP-0.3 NA - IAW 8260.19H PARA 8-6-8 B(1).
5. CHANGED CHART NOTE FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C (2°F) OR ABOVE 54°C (130°F)" TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C" - IAW 8260.19H PARA 8-6-9 S.
6. CHANGED CHART PROFILE NOTE FROM "VGSI AND RNAV GLIDEPATH NOT COINCIDENT" TO "VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET})" - IAW 8260.19H PARA 8-6-9 M(1).
7. ADDED CHART NOTE CIRCLING NA TO RWYS 18 AND 36 - INCORPORATE NOTAM FDC 9/6975.
8. DELETED DISTANCE TO THLD FROM 250 HAT: 0.66NM FROM ADDITIONAL FLIGHT DATA - DATA MOVED TO PROFILE SECTION OF NEW FORMS.
9. DELETED CHART TDZE: 1274' FROM ADDITIONAL FLIGHT DATA - DATA CAPTURED IN NEW FORMS.
10. DELETED CHART AIRPORT ELEV 1274' FROM ADDITIONAL FLIGHT DATA - DATA CAPTURED IN NEW FORMS.
11. ADDED CA LEG TO TERMINAL ROUTES - IAW 8260.58A PARA 3-5-2.
12. LINE 2 ADDED MAX 6000 - REVISED CRITERIA.
13. ADDED STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE TO ALTERNATE - IAW 8260.19H PARA 8-6-11 B(4)/DNS ALTIMETER ON WMSCR.
14. LINE 3 CHANGED FAC FROM 120.28 TO 120.22 - NEITHER OTKAH (PFAF/FAF) OR MAP (THLD) CHANGED. JUST A DOCUMENTATION ERROR FROM AMDT 1.
15. CHANGED LNAV CAT C VIS FROM 1 1/2 TO 1 3/4 - PER REVISED CRITERIA.
16. LOWERED CIRCLING CAT A MDA/HAA FROM 1880/606 TO 1860/586 - PER .19H PARA 8-4-4(A7) AMDT 1A MDA/HAA INCREASE TEMPORARY CONDITION.
17. CHANGED NOTE FROM "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CARROLL ALTIMETER SETTING AND INCREASE ALL DA 72 FEET AND ALL MDA 80 FEET. INCREASE LPV VISIBILITY 1/4 MILE ALL CATS, LNAV/VNAV 1/4 MILE ALL CATS, LNAV CAT C 1/4 MILE, AND CIRCLING CAT C 1/4 MILE" TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CARROLL ALTIMETER SETTING: INCREASE LPV DA 1596 FEET, LNAV/VNAV DA TO 1626 FEET; INCREASE ALL MDAS 80 FEET AND VISIBILITY LNAV CAT C 1/8 SM AND CIRCLING CAT C 1/4 SM."

**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* **DATE**

**WARDELL HENNING**

Nov 15, 2019

**DEVELOPED BY**

WARDELL HENNING (KENO HARTSHORN)

*Digitally signed by*

**WARDELL HENNING**

Nov 15, 2019

**OFFICE**

AJV-A432

**DATE**

09/03/2019

**APPROVED BY**

LONNIE EVERHART

*Digitally signed by*

**WARDELL HENNING**

Nov 15, 2019

**OFFICE**

AJV-A430

**DATE**

**TITLE**  
MANAGER



FAS DATA BLOCK INFORMATION

| <u>DATA FIELD</u>                        | <u>DATA</u>   |
|--|---------------|
| OPERATION TYPE                           | 0             |
| SBAS SERVICE PROVIDER IDENTIFIER         | 0             |
| AIRPORT IDENTIFIER                       | KDNS          |
| RUNWAY                                   | RW12          |
| APPROACH PERFORMANCE DESIGNATOR          | 0             |
| ROUTE INDICATOR                          |               |
| REFERENCE PATH DATA SELECTOR             | 0             |
| REFERENCE PATH IDENTIFIER (APPROACH ID)  | W12A          |
| LTP/FTP LATITUDE                         | 415922.6075N  |
| LTP/FTP LONGITUDE                        | 0952313.6150W |
| LTP/FTP ELLIPSOIDAL HEIGHT               | +03591        |
| FPAP LATITUDE                            | 415832.3900N  |
| FPAP LONGITUDE                           | 0952134.9100W |
| 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          |
| <br>                                     |               |
| CRC REMAINDER                            | A8240A59      |

ADDITIONAL PATH POINT RECORD INFORMATION

|                         |        |
|-------------------------|--------|
| ICAO CODE               | K3     |
| LTP ORTHOMETRIC HEIGHT  | +03883 |
| FPAP ORTHOMETRIC HEIGHT | +03883 |

