

**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.

|   |   |   |  |                                   |                                  |
|---|---|---|--|-----------------------------------|----------------------------------|
| <b><u>AIRPORT</u></b><br>RED OAK MUNI   | <b><u>AIRPORT ID</u></b><br>KRDK        | <b><u>PROCEDURE NAME</u></b><br>RNAV (GPS) RWY 5    | <b><u>ORIGINAL/AMENDMENT</u></b><br>1B           | <b><u>CITY</u></b><br>RED OAK     | <b><u>STATE</u></b><br>IA        |
| <b><u>AIRPORT ELEVATION</u></b><br>1045 | <b><u>TDZE</u></b><br>1043              | <b><u>SUPERSEDED</u></b><br>RNAV (GPS) RWY 5        | <b><u>ORIGINAL/AMENDMENT</u></b><br>1A           | <b><u>DATED</u></b><br>02/05/2015 | <b><u>MAG VAR</u></b><br>4E      |
| <b><u>FACILITY</u></b><br>RNAV          | <b><u>COORDINATES OF FACILITIES</u></b> | <b><u>ACTUAL EFFECTIVE DATE</u></b><br>19 JULY 2018 | <b><u>REQUIRED EFFECTIVE DATE</u></b><br>ROUTINE | <b><u>CANCEL SUSPEND</u></b>      | <b><u>EPOCH YEAR</u></b><br>2000 |

**TERMINAL ROUTES**

| <b><u>FROM</u></b>    | <b><u>FIX TYPE</u></b> | <b><u>TO</u></b>      | <b><u>FIX TYPE</u></b> | <b><u>LEG TYPE</u></b> | <b><u>FO/FB</u></b> | <b><u>RNP</u></b> | <b><u>COURSE</u></b> | <b><u>DISTANCE</u></b> | <b><u>ALTITUDE</u></b> |
|-----------------------|------------------------|-----------------------|------------------------|------------------------|---------------------|-------------------|----------------------|------------------------|------------------------|
| OVR VORTAC            |                        | EKEGE                 |                        | TF                     | FB                  | 2.00              | 135.35               | 13.65                  | 3400                   |
| VIKKI                 |                        | ZISOR                 |                        | TF                     | FB                  | 2.00              | 000.43               | 7.94                   | 3000                   |
| SAJHO                 |                        | ZISOR                 |                        | TF                     | FB                  | 2.00              | 236.30               | 16.48                  | 3000                   |
| EKEGE                 | IAF                    | INIH                  | NOPT                   | TF                     | FB                  | 1.00              | 143.70               | 6.00                   | 3000                   |
| ZISOR                 | IAF                    | INIH                  | NOPT                   | TF                     | FB                  | 1.00              | 323.80               | 6.00                   | 3000                   |
| INIH                  | IF/IAF                 | KUWFY                 |                        | TF                     | FB                  | 1.00              | 053.75               | 6.03                   | 2700                   |
| KUWFY                 | PFAF                   | ZELAG/2.10 NM TO RW05 |                        | TF                     | FB                  | 0.30              | 053.83               | 2.99                   |                        |
| ZELAG/2.10 NM TO RW05 |                        | RW05                  | MAP                    | TF                     | FO                  | 0.30              | 053.83               | 2.10                   |                        |
| RW05                  | MAP                    | 1363 MSL              |                        | CA                     |                     |                   | 053.83               |                        |                        |
| 1363 MSL              |                        | HOBEG                 |                        | DF                     | FB                  | 1.00              |                      |                        |                        |
| HOBEG                 |                        | SAJHO                 |                        | TF                     | FO                  | 1.00              | 143.96               | 6.70                   | 3000                   |

**MISSED APPROACH**

**MAP:**

LPV: DA  
 LNAV/VNAV: DA  
 LNAV: RW05

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 3000 DIRECT HOBEG AND RIGHT TURN ON TRACK 143.96 TO SAJHO AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SW INIHI, RT, 053.75 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 053.83

FAF: KUWFY

DIST FAF TO MAP: 5.09

DIST FAF TO THLD: 5.09

4. MIN ALT: INIHI 3000, KUWFY 2700, ZELAG/2.10 NM TO RW05 1740\*

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

320 HAT: 0.89

6. MIN GP INCPT: 2700

GP ALT AT FAF : KUWFY 2700

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 40.0

8. MSA FROM: RW05 3900

PBN EQUIPMENT REQUIREMENTS NOTES

RNP APCH

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 13 AND 31.  
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C OR ABOVE 54C.  
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE (ANGLE)/TCH (FEET)).  
\*LNAV ONLY  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON OVR VORTAC AIRWAY RADIALS 058 CW 192.

ADDITIONAL FLIGHT DATA:

WAAS CHANNEL #42927  
REFERENCE PATH ID: W05A  
CHART FAS OBST: 1319 TREE 410001N/0951750W.  
HOLD S, RT, 340.66 INBOUND  
LTP HAE: 287.8 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       | 1363   | 1     | 320     | 1363   | 1     | 320     |        | NA  |         |        | NA  |         |        |     |         |
| LNAV/VNAV DA | 1660   | 2 1/4 | 617     | 1660   | 2 1/4 | 617     |        | NA  |         |        | NA  |         |        |     |         |
| LNAV MDA     | 1600   | 1     | 557     | 1600   | 1     | 557     |        | NA  |         |        | NA  |         |        |     |         |
| CIRCLING     | 1620   | 1     | 575     | 1740   | 1     | 695     |        | NA  |         |        | NA  |         |        |     |         |



**CHANGES - REASONS**

1. INCREASED LPV DA/HAT FROM 1293/250 TO 1363/320. - NEW LPV FINAL/MISSED APPROACH SECTION 1 CONTROLLING OBSTACLE.
2. LINE 7: ADDED 20:1 IS CLEAR AND CHANGED 34:1 FROM NOT CLEAR TO CLEAR - NO 20:1/34:1 PENETRATIONS PRESENT.
3. REMOVED CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. - NO 20:1/34:1 PENETRATIONS PRESENT.
4. ADDED CHART NOTE: CIRCLING NA TO RWYS 13 AND 31. - RWY 13/31 IS TURF AND HAS NO OIS SURVEY ON FILE.
5. MOVED ALTERNATE ALTIMETER CHART NOTE TO 8260-9 PART C - REMARKS. - IAW 8260.19H 8.6.9 F.(3)
6. MOVED CHART NOTE: BARO-VNAV NA WHEN USING SHENANDOAH ALTIMETER SETTING TO 8260-9 PART C - REMARKS. - IAW 8260.19H 8.6.9 F.(3).
7. REMOVED CHART NOTE: DME/DME RNP-0.3 NA. ADDED PBN REQUIREMENTS NOTE: RNP APCH. - IAW 8260.19H.
8. CHANGED DISTANCE TO THLD FROM 250 HATH: 0.66 NM TO 320 HAT: 0.89 NM - INCREASE IN LPV DA.
9. REMOVED "NA WHEN LOCAL WEATHER NOT AVAILABLE" FROM ALTERNATE MINIMUMS - ALTERNATE MINIMUMS ARE AUTHORIZED FOR RNAV (GPS) PROCEDURES.
10. REMOVED DEGREES FAHRENHEIT FROM BARO-VNAV NOTE - FAHRENHEIT NO LONGER REQUIRED IAW 8260.19H.
11. FAS DATA: FPAP LAT/LONG CHANGED FROM 410117.9600N/0951409.4400W TO 410117.9590N/0951409.4425W. - UPDATED FPAP COORDINATES.
12. FAS DATA: LENGTH OFFSET CHANGED FROM 1504 TO 1192. - UPDATED IAW AFS-420 FPAP CALCULATOR.
13. FAS DATA: CRC REMAINDER CHANGED FROM E863CA23 TO 4B1AC0DB. - DUE TO CHANGE IN FPAP COORDINATES AND LENGTH OFFSET.
14. TERMINAL ROUTES: CHANGED INTERMEDIATE RNP FROM 0.50 TO 1.00. - IAW 8260.19H, PARA, 4-6-10.F.
15. TERMINAL ROUTES: CHANGED MISSED APPROACH CA ALTITUDE FROM 1291 TO 1363. - INCREASE IN LPV DA.
16. INCORPORATED P-NOTAM AMDT 1A (LNAV/VNAV DA1660, LNAV HAT 557 CAT A/B, CHART TDZE 1043 DELETE THRE 1041). - IAW 8260.19H, PARA, 8-3-4.C.(2)

## PDF EDITS:

- 9, LNAV/VNAV AND LNAV MISSED APPROACHES, REMOVED #14 TREE (19-048084) PENETRATION, SHOULD BE ASC.
- 9, REMOVED EXTRA "AC50" FROM CIRCLING CAT B ADJUSTMENT.
- 9, REMOVED "ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED" FROM NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS.
- 9, FIXED AVERAGE COLD TEMPERATURE DERIVED DEVIATION REMARK FROM 12C TO -30C.
- 9, CHANGED "MAP" TO "ARP" IN AIRSPACE.



|  |                           |   |                                 |  |                         |
|--|---------------------------|---|---------------------------------|--|-------------------------|
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| <u>COORDINATED WITH:</u><br><u>A4A</u> <input type="checkbox"/> <u>ALPA</u> <input checked="" type="checkbox"/> <u>AOPA</u> <input checked="" type="checkbox"/> <u>APA</u> <input type="checkbox"/> <u>HAI</u> <input type="checkbox"/> <u>NBAA</u> <input checked="" type="checkbox"/> <u>OTHER:</u> ZMP, OMA APP CON, ARPT MGR |                           |   |                                 |  |                         |
| <u>FLIGHT CHECKED BY</u><br>ANTHONY D VALLERA  |                           | <u>OFFICE</u><br>FICO                     | <u>DATE</u><br>5/17/18          | <i>Digitally signed by</i><br><b>ROBERT G HAMILTON</b><br>May 21, 2018 |                         |
| <u>DEVELOPED BY</u><br>LONNIE EVERHART (BARBARA GORMAN)  |                           | <u>OFFICE</u><br>AJV-5400                 | <u>DATE</u><br>03/14/2018       | <i>Digitally signed by</i><br><b>ROBERT G HAMILTON</b><br>May 21, 2018 |                         |
| <u>APPROVED BY</u><br>LONNIE EVERHART  |                           | <u>OFFICE</u><br>AJV-5400                 | <u>DATE</u>                     | <i>Digitally signed by</i><br><b>ROBERT G HAMILTON</b><br>May 21, 2018 | <u>TITLE</u><br>MANAGER |



**FAS DATA BLOCK INFORMATION**

| <b><u>DATA FIELD</u></b>                 | <b><u>DATA</u></b> |
|--|--------------------|
| OPERATION TYPE                           | 0                  |
| SBAS SERVICE PROVIDER IDENTIFIER         | 0                  |
| AIRPORT IDENTIFIER                       | KRDK               |
| RUNWAY                                   | RW05               |
| APPROACH PERFORMANCE DESIGNATOR          | 0                  |
| ROUTE INDICATOR                          |                    |
| REFERENCE PATH DATA SELECTOR             | 0                  |
| REFERENCE PATH IDENTIFIER (APPROACH ID)  | W05A               |
| LTP/FTP LATITUDE                         | 410030.5825N       |
| LTP/FTP LONGITUDE                        | 0951549.1505W      |
| LTP/FTP ELLIPSOIDAL HEIGHT               | +02878             |
| FPAP LATITUDE                            | 410117.9590N       |
| FPAP LONGITUDE                           | 0951409.4425W      |
| 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 | 4B1AC0DB |
|---------------|----------|

**ADDITIONAL PATH POINT RECORD INFORMATION**

|                         |        |
|-------------------------|--------|
| ICAO CODE               | K3     |
| LTP ORTHOMETRIC HEIGHT  | +03171 |
| FPAP ORTHOMETRIC HEIGHT | +03171 |

