

**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
GRAPHIC DEPARTURE PROCEDURES (DP)**

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.

| DP NAME | NUMBER | DP COMPUTER CODE | SUPERSEDED NUMBER | DATED      | ACTUAL EFFECTIVE DATE |
|---------|--------|------------------|-------------------|------------|-----------------------|
| ZEFFR   | NINE   | ZEFFR9.ZEFFR     | EIGHT             | 06/15/2023 | 11JULY2024            |

| TYPE: | OBSTACLE                 | COPTER                   | SID                                 | SPECIAL                  | RNAV                                |
|-------|--------------------------|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
|       | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**DP ROUTE DESCRIPTION:****TAKEOFF RWY 17L:** CLIMB ON HEADING 167.12 TO 4920, THEN DIRECT ZEFFR, THEN ON DEPICTED ROUTE, THENCE ...**TAKEOFF RWY 17R:** CLIMB ON HEADING 167.11 TO 4920, THEN DIRECT ZEFFR, THEN ON DEPICTED ROUTE, THENCE ...

...MAINTAIN FL190 OR ASSIGNED ALTITUDE. EXPECT FILED ALTITUDE 5 MINUTES AFTER DEPARTURE.

**TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):**

| TRANSITION NAME | TRANSITION<br>COMPUTER CODE | FROM<br>FIX/NAVAID | TO<br>FIX/NAVAID | COURSE       | DISTANCE | MEA   | MOCA  | CROSSING<br>ALTITUDE/FIXES |
|-----------------|-----------------------------|--------------------|------------------|--------------|----------|-------|-------|----------------------------|
| BLKJK           | ZEFFR8.BLKJK                | EPOSE              | HITME            | TRACK 106.43 | 2.76     | 9500  | 9500  | AT/ABOVE 10000             |
|                 |                             | HITME              | WITTT            | TRACK 105.85 | 3.16     | 10100 | 10100 | AT/ABOVE 11000             |
|                 |                             | WITTT              | DATTT            | TRACK 041.89 | 8.57     | 10100 | 10100 | AT/ABOVE 14000             |
|                 |                             | DATTT              | BLKJK            | TRACK 029.89 | 11.91    | 10100 | 9600  |                            |
| DARBI           | ZEFFR8.DARBI                | EPOSE              | KSINO            | TRACK 165.31 | 20.03    | 9300  | 9300  | AT/ABOVE 11400             |
|                 |                             | KSINO              | DARBI            | TRACK 165.32 | 41.21    | 13700 | 13700 |                            |
| MRLET           | ZEFFR8.MRLET                | EPOSE              | JCKPT            | TRACK 179.59 | 5.78     | 8600  | 8600  | AT/ABOVE 10700             |
|                 |                             | JCKPT              | MRLET            | TRACK 179.63 | 6.10     | 11100 | 11100 | AT/ABOVE 13000             |
| PESKE           | ZEFFR8.PESKE                | EPOSE              | FOLDD            | TRACK 119.34 | 2.20     | 9200  | 9200  | AT/ABOVE 9600              |
|                 |                             | FOLDD              | ODLEE            | TRACK 118.70 | 12.68    | 9800  | 9800  | AT/ABOVE 10800             |
|                 |                             | ODLEE              | PESKE            | TRACK 122.87 | 31.70    | 11000 | 11000 |                            |

**PBN REQUIREMENT NOTES:**

RNAV 1 - GPS

**EQUIPMENT REQUIREMENT NOTES:****PROCEDURAL DATA NOTES:****TAKEOFF MINIMUMS:****RWY 8:** NA - OBSTACLES.

QUALITY  
12  
CHECKED

NFDD NO. 079

04/23/2024

23

|                |               |                         |                          |              |                              |
|----------------|---------------|-------------------------|--------------------------|--------------|------------------------------|
| <u>DP NAME</u> | <u>NUMBER</u> | <u>DP COMPUTER CODE</u> | <u>SUPERSEDED NUMBER</u> | <u>DATED</u> | <u>ACTUAL EFFECTIVE DATE</u> |
| ZEFFR          | NINE          | ZEFFR9.ZEFFR            | EIGHT                    | 06/15/2023   | 11JULY2024                   |

**RWY 17L:** 600-2 1/4 WITH MINIMUM CLIMB OF 500 FT PER NM TO 9200.

**RWY 17R:** STANDARD WITH MINIMUM CLIMB OF 370 FT PER NM TO 7000.

**TAKEOFF OBSTACLES NOTES:**

SEE FORM 8260-15A, TAKEOFF MINIMUMS AND OBSTACLES DEPARTURE PROCEDURES (ODP).

**CONTROLLING OBSTACLES:**

**RWY 17L:** 6360 FT MSL AAO 392201.27N/1194724.04W (CLIMB GRADIENT, CLIMB-TO ALTITUDE), 4953 FT MSL TERRAIN (32-054713) 392822.79N/1194534.55W (CEILING), 4829 FT MSL TERRAIN (32-055356)

392734.97N/1194521.02W (VISIBILITY)

**RWY 17R:** 6360 FT MSL AAO 392201.27N/1194724.04W

**MSA:**

MSA FROM KRNO, 12000

**LOST COMMUNICATIONS PROCEDURES:**

**ADDITIONAL FLIGHT DATA:**

AIRPORT MV: RNO 13E/2020.

CHART SPEED ICON MAXIMUM SPEED 250 KIAS AT WITTT

CHART: MINIMUM CROSSING AT EPOSE - 9200.

CHART: TOP ALTITUDE: FL190.

DME/DME ASSESSMENT: UNSAT.

**AIRPORTS SERVED:**

|                   |             |              |
|-------------------|-------------|--------------|
| <u>AIRPORT ID</u> | <u>CITY</u> | <u>STATE</u> |
| KRNO              | RENO        | NV           |

**COMMUNICATIONS:**

CHART: ATIS, CLNC DEL, GND CON, RENO TOWER.

**FIXES AND/OR NAVAIDS:**

**REMARKS:**

ABBREVIATED AMENDMENT.

RWY 17L CLIMB GRADIENT DUE TO OBSTACLES IS 350 FT PER NM TO 7000, 500 FT PER NM TO 9200 USED TO ENSURE AIRCRAFT WERE ABOVE THE AT/ABOVE RESTRICTION AT EPOSE.

DO NOT CHART MOCA: FROM EPOSE TO HITME, HITME TO WITTT, WITTT TO DATTT, EPOSE TO KSINO, KSINO TO DARBI, EPOSE TO JCKPT, JCKPT TO MRLET, EPOSE TO FOLDD, FOLDD TO ODLEE, ODLEE TO PESKE.

|                                                                                                                                                        |                  |               |             |                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------|-------------|----------------------------|
| <u>FLIGHT INSPECTED BY</u>                                                                                                                             | <u>SIGNATURE</u> | <u>OFFICE</u> | <u>DATE</u> | <i>Digitally signed by</i> |
| PROCESSED IAW TECHNICAL SUPPORT GROUP (AJF-17) MEMO DATED 07/07/2021, SUBJECT: GUIDANCE FOR PROCEDURAL CHANGES REQUIRING FLIGHT INSPECTION VALIDATION. |                  |               |             | <b>ALLAN WILL</b>          |
|                                                                                                                                                        |                  |               |             | Jan 29, 2024               |

|                     |                                                        |               |             |
|---------------------|--------------------------------------------------------|---------------|-------------|
| <u>DEVELOPED BY</u> | <u>SIGNATURE</u>                                       | <u>OFFICE</u> | <u>DATE</u> |
| RAYMOND JOHNSON     | <i>Digitally signed by</i><br><b>RAYMOND R JOHNSON</b> | AJV-A423      | 10/02/2023  |
|                     | Jan 04, 2024                                           |               |             |

|                    |                                                 |               |             |              |
|--------------------|-------------------------------------------------|---------------|-------------|--------------|
| <u>APPROVED BY</u> | <u>SIGNATURE</u>                                | <u>OFFICE</u> | <u>DATE</u> | <u>TITLE</u> |
| MIKE GARRITY       | <i>Digitally signed by</i><br><b>ALLAN WILL</b> | AJV-A423      |             | MANAGER      |
|                    | Jan 29, 2024                                    |               |             |              |

|                                |  |
|--------------------------------|--|
| <u>REQUIRED EFFECTIVE DATE</u> |  |
| ROUTINE                        |  |

QUALITY  
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FAA Form 8260-15B (03/23) Supersedes Previous Edition

Electronic Version

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| <u>DP NAME</u> | <u>NUMBER</u> | <u>DP COMPUTER CODE</u> | <u>SUPERSEDED NUMBER</u> | <u>DATED</u> | <u>ACTUAL EFFECTIVE DATE</u> |
|----------------|---------------|-------------------------|--------------------------|--------------|------------------------------|
| ZEFFR          | NINE          | ZEFFR9.ZEFFR            | EIGHT                    | 06/15/2023   | 11JULY2024                   |

**COORDINATED WITH:**

**A4A** ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZOA, RNO ATCT, AMGR

**CHANGES - REASONS:**

1. TRANSITION ROUTES: ADMINISTRATIVE CHANGE PESKE TRANSITION: CORRECTED SPELLING FROM OLDEE TO ODLEE.
2. EQUIPMENT REQUIREMENT NOTES: REMOVED RADAR REQUIRED - NO LONGER REQUIRED.
3. TAKEOFF MINIMUMS: CHANGED RWY 8: NA - ATC TO RWY 8 - OBSTACLES - 8260.46J, APPENDIX D, SECTION 2.H(1).
4. ADDITIONAL FLIGHT DATA: ADDED CHART: MINIMUM CROSSING ALTITUDE AT EPOSE - 9200 - 8260.46J, APPENDIX E.2.M(3).
5. REMARKS ADDED ABBREVIATED AMENDMENT - 8260.46J, APPENDIX D.
6. REMARKS: ADDED DO NOT CHART MOCA: FROM EPOSE TO HITME, HITME TO WITTT, WITTT TO DATTT, EPOSE TO KSINO, KSINO TO DARBI, EPOSE TO JCKPT, JCKPT TO MRLET, EPOSE TO FOLDD, FOLDD TO ODLEE, ODLEE TO PESKE - PER FPT REQUEST AND 8260.46J



**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
DEPARTURE (DATA RECORD)**

| DP NAME      |                         | NUMBER |       | DP COMPUTER CODE |        | SUPERSEDED NUMBER |                | DATED         |                          | ACTUAL EFFECTIVE DATE |  |
|--------------|-------------------------|--------|-------|------------------|--------|-------------------|----------------|---------------|--------------------------|-----------------------|--|
| ZEFFR        |                         | NINE   |       | ZEFFR9.ZEFFR     |        | EIGHT             |                | 06/15/2023    |                          | 11JULY2024            |  |
| FIX/NAVAID   | LAT/LONG                | C      | FO/FB | LEG TYPE         | TC     | DIST (NM)         | ALTITUDE       | SPEED         | REMARKS                  |                       |  |
| RW17L (AER)  | 393049.83N/1194600.27W  | N      |       |                  |        |                   |                |               |                          |                       |  |
| 4920 MSL     | -                       | -      | -     | VA               | 180.12 | -                 | AT/ABOVE 4920  |               | CG 500 FT PER NM TO 9200 |                       |  |
| ZEFFR        | 392549.66N/1194609.60W  | Y      | FB    | DF               | -      | -                 |                |               |                          |                       |  |
| EPOSE        | 391913.83N/1194610.96W  | Y      | FB    | TF               | 180.16 | 6.59              | AT/ABOVE 9200  |               |                          |                       |  |
|              |                         |        |       |                  |        |                   |                |               |                          |                       |  |
| RW17R (AER)* | 393039.96N/1194609.22W* | N      | -     | -                | -      | -                 |                |               | *DISPL THLD (1000.00 FT) |                       |  |
| 4920 MSL     | -                       | -      | -     | VA               | 180.11 | -                 | AT/ABOVE 4920  |               | CG 370 FT PER NM TO 7000 |                       |  |
| ZEFFR        | 392549.66N/1194609.60W  | Y      | FB    | DF               | -      | -                 |                |               |                          |                       |  |
| EPOSE        | 391913.83N/1194610.96W  | Y      | FB    | TF               | 180.16 | 6.59              | AT/ABOVE 9200  |               |                          |                       |  |
|              |                         |        |       |                  |        |                   |                |               |                          |                       |  |
|              |                         |        |       |                  |        |                   |                |               |                          |                       |  |
| EPOSE        | 391913.83N/1194610.96W  | Y      | -     | IF               | -      | -                 | AT/ABOVE 9200  |               | ZEFFR9.BLKJK             |                       |  |
| HITME        | 391752.19N/1194304.84W  | Y      | FB    | TF               | 119.43 | 2.76              | AT/ABOVE 10000 |               |                          |                       |  |
| WITTT        | 391620.56N/1193930.93W  | Y      | FB    | TF               | 118.85 | 3.16              | AT/ABOVE 11000 | AT/BELOW 250K |                          |                       |  |
| DATTT        | 392116.39N/1193028.38W  | Y      | FB    | TF               | 054.89 | 8.57              | AT/ABOVE 14000 |               |                          |                       |  |
| BLKJK        | 393000.00N/1192000.00W  | Y      | FB    | TF               | 042.89 | 11.91             |                |               |                          |                       |  |
|              |                         |        |       |                  |        |                   |                |               |                          |                       |  |
| EPOSE        | 391913.83N/1194610.96W  | Y      | -     | IF               | -      | -                 | AT/ABOVE 9200  |               | ZEFFR9.DARBI             |                       |  |
| KSINO        | 385911.25N/1194525.62W  | Y      | FB    | TF               | 178.31 | 20.03             | AT/ABOVE 11400 |               |                          |                       |  |
| DARBI        | 381757.03N/1194353.66W  | Y      | FB    | TF               | 178.32 | 41.21             |                |               |                          |                       |  |
|              |                         |        |       |                  |        |                   |                |               |                          |                       |  |
| EPOSE        | 391913.83N/1194610.96W  | Y      | -     | IF               | -      | -                 | AT/ABOVE 9200  |               | ZEFFR9.MRLET             |                       |  |

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| <u>DP NAME</u>    |                        | <u>NUMBER</u> |              | <u>DP COMPUTER CODE</u> |           | <u>SUPERSEDED NUMBER</u> |                 | <u>DATED</u> | <u>ACTUAL EFFECTIVE DATE</u> |
|-------------------|------------------------|---------------|--------------|-------------------------|-----------|--------------------------|-----------------|--------------|------------------------------|
| ZEFFR             |                        | NINE          |              | ZEFFR9.ZEFFR            |           | EIGHT                    |                 | 06/15/2023   | 11JULY2024                   |
| <u>FIX/NAVAID</u> | <u>LAT/LONG</u>        | <u>C</u>      | <u>FO/FB</u> | <u>LEG TYPE</u>         | <u>TC</u> | <u>DIST (NM)</u>         | <u>ALTITUDE</u> | <u>SPEED</u> | <u>REMARKS</u>               |
| JCKPT             | 391334.89N/1194748.29W | Y             | FB           | TF                      | 192.59    | 5.78                     | AT/ABOVE 10700  |              |                              |
| MRLET             | 390737.20N/1194931.20W | Y             | FB           | TF                      | 192.63    | 6.10                     | AT/ABOVE 13000  |              |                              |
| EPOSE             | 391913.83N/1194610.96W | Y             | -            | IF                      | -         | -                        | AT/ABOVE 9200   |              | ZEFFR9.PESKE                 |
| FOLDD             | 391743.96N/1194404.08W | Y             | FB           | TF                      | 132.34    | 2.20                     | AT/ABOVE 9600   |              |                              |
| ODLEE             | 390916.76N/1193153.93W | Y             | FB           | TF                      | 131.70    | 12.68                    | AT/ABOVE 10800  |              |                              |
| PESKE             | 384626.81N/1190340.37W | Y             | FB           | TF                      | 135.87    | 31.70                    |                 |              |                              |

