

**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
RNAV (RNP) 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 ID</u><br>KRNO        | <u>PROCEDURE NAME</u><br>RNAV (RNP) Z RWY 35L | <u>ORIGINAL/AMENDMENT</u><br>1                  | <u>CITY</u><br>RENO                          | <u>STATE</u><br>NV         |                           |
| <u>AIRPORT ELEVATION</u><br>4415 | <u>TDZE</u><br>4410                           | <u>SUPERSEDED</u><br>RNAV (RNP) Z RWY 34L       | <u>ORIGINAL/AMENDMENT</u><br>ORIG-A          | <u>DATED</u><br>02/09/2012 | <u>MAG VAR</u><br>13E     |
| <u>FACILITY</u><br>RNAV          | <u>COORDINATES OF FACILITIES</u>              | <u>ACTUAL EFFECTIVE DATE</u><br>3 NOVEMBER 2022 | <u>REQUIRED EFFECTIVE DATE</u><br>11/03/2022 | <u>CANCEL/SUSPEND</u>      | <u>EPOCH YEAR</u><br>2020 |

**TERMINAL ROUTES**

| FROM  | FIX TYPE | TO    | FIX TYPE | LEG TYPE | FO/FB | RNP  | COURSE | DISTANCE | ALTITUDE |
|-------|----------|-------|----------|----------|-------|------|--------|----------|----------|
| TARVR | IAF      | SPOON |          | TF       | FB    | 1.00 | 347.09 | 17.49    | 11000    |
| SPOON |          | MASUE |          | TF       | FB    | 1.00 | 347.15 | 5.72     | 8200     |
| SPOON | IAF      | MASUE |          | TF       | FB    | 1.00 | 347.15 | 5.72     | 8200     |
| MASUE | IF       | LANBE |          | TF       | FB    | 0.30 | 347.10 | 7.70     | 7000     |
| LANBE |          | GUKCE | PFAF     | TF       | FB    | 0.30 | 347.14 | 2.80     | 6900     |
| GUKCE | PFAF     | RW35L | MAP      | TF       | FO    | 0.30 | 347.11 | 6.50     |          |
| RW35L | MAP      | TAKLE |          | TF       | FO    | 1.00 | 347.12 | 12.63    | 11000    |

**MISSED APPROACH**

**MAP:**  
RNP: DA

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 11000 ON TRACK 347.12 TO TAKLE AND HOLD, CONTINUE CLIMB-IN-HOLD TO 11000.  
\*MISSED APPROACH REQUIRES MINIMUM CLIMB OF 300 FEET PER NM TO 7140.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**





**CHANGES - REASONS**

1. PROCEDURE NAME CHANGED FROM RNAV (RNP) Z RWY 34L TO RWY 35L - MAGVAR UPDATE.
2. ALL REFERENCE TO RWY 34L CHANGED TO RWY 35L - MAGVAR UPDATE
3. TERMINAL ROUTES: REMOVED INITIAL SEGMENT FMG TO TIPYO, TIPYO TO JOPKO, COLOM TO JOPKO, JOPKO TO JIVOR, SPOOK TO JIVOR, JIVOR TO SPOON - PER FPT/ATC REQUEST.
4. TERMINAL ROUTES: ADDED INITIAL SEGMENT TARVR TO SPOON - PER FPT/ATC REQUEST.
5. TERMINAL ROUTES: SPOON TO MASUE COURSE CHANGED FROM 344.15 TO 347.15 AND ALTITUDE CHANGED FROM 8100 TO 8200 - DUE TO MAGVAR UPDATE AND FPT/ACT REQUEST.
6. TERMINAL ROUTES: CHANGED INTERMEDIATE SEGMENT COURSE MASUE TO LANBE FROM 344.09 TO 347.10 AND DISTANCE FROM 7.43 TO 7.70 AND ALTITUDE FROM 7400 TO 7000 AND RNP VALUE CHANGED FROM 0.50 TO 0.30 - MAGVAR UPDATE AND PER ATC/FPT REQUEST.
7. TERMINAL ROUTES: CHANGED INTERMEDIATE SEGMENT COURSE LANBE TO GUKCE FROM 344.12 TO 347.14, CHANGED DISTANCE FROM 2.35 TO 2.80 AND CHANGED ALTITUDE FROM 6800 TO 6900 - MAGVAR UPDATE AND PER ATC/FPT REQUEST.
8. TERMINAL ROUTES: CHANGED FINAL SEGMENT GUKCE TO RW35L COURSE/DISTANCE FROM 344.12/7.22 TO 347.11/6.50 - MAGVAR UPDATE/MOVED FIX GUCKE PER ATC/FPT REQUEST.
9. TERMINAL ROUTES: CHANGED RW35L TO TAKLE COURSE FROM 344.11 TO 347.12 AND ALTITUDE CHANGED FROM 10000 TO 11000 - MAGVAR UPDATE AND PER FPT/ACT REQUEST.
10. MISSED APPROACH INSTRUCTIONS CHANGED FROM CLIMB TO 10000 VIA 344.11 TRACK TO TAKLE AND HOLD, CONTINUE CLIMB-IN-HOLD TO 10000 TO CLIMB TO 11000 ON TRACK 347.12 TO TAKLE AND HOLD, CONTINUE CLIMB-IN-HOLD TO 11000 - PER MAGVAR UPDATE AND ATC/FPT REQUEST.
11. MISSED APPROACH INSTRUCTIONS: CHANGED MISSED APPROACH REQUIRES MINIMUM CLIMB OF 243 FEET PER NM TO 7200 TO MISSED APPROACH REQUIRES MINIMUM CLIMB OF 300 FEET PER NM TO 7140 - PER ATC/FPT REQUEST TO PROVIDE LOWER LINE OF MINIMUMS ON RNP VALUE OF 0.10
12. PROFILE LINE 3: FAC CHANGED FROM 344.12 TO 347.11 AND ADDED PFAF: GUKCE - MAGVAR UPDATE.
13. PROFILE LINE 4: MASUE ALTITUDE CHANGED FROM 8100 TO 8200, LANBE ALTITUDE CHANGED FROM 7400 TO 7000 AND ADDED GUKCE AT 6900 - PER ATC/FPT UPDATES AND CURRENT CRITERIA.
14. PROFILE LINE 5: CHANGED DIST TO THLD FROM 7.22 TO 6.50 AND HAT/DISTANCE CHANGED FROM 361 HAT/0.99 NM TO 326 HAT/0.68 NM - NEW RNP 0.11 WITH HAT OF 326.
15. PROFILE LINE 6: MIN INCPALT CHANGED FROM 6800 TO 6900 AND ALT AT GUKCE CHANGED FROM 6800 TO 6900 - PER ATC/FPT REQUEST.
16. PROFILE LINE 7: ANGLE/TCH CHANGED FROM 3.00/44.8# TO 3.50/72.2 - MATCH VGSI AT ATC/FPT REQUEST AND # NO LONGER REQUIRED.
17. PROFILE LINE 7: 34:1 IS NOT CLEAR CHANGED TO IS CLEAR AND ADDED 20:1 IS CLEAR - NO 34:1'S OR 20:1'S.
18. PBN REQUIREMENT NOTES: REMOVED GPS REQUIRED AND ADDED RNP AR APCH- GPS - PER CURRENT CRITERIA.
19. NOTES: CHANGED FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -13C (8F) OR ABOVE 40C (104F). TO CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -9°C OR ABOVE 35°C - NEW 5 YEAR CRITICAL LOW DATA AND UPDATED TO CURRENT CRITERIA.
20. NOTES: DELETED FOR INOPERATIVE MALSR INCREASE VISIBILITY RNP 0.12 TO 1 1/4 MILE AND RNP 0.30 TO 4 MILES - PER UPDATED MINIMUMS AND CURRENT CRITERIA.
21. NOTES: REMOVED PROCEDURE NA FOR ARRIVALS AT COLOM VIA V6 SOUTHWEST BOUND AND V332 NORTHWEST BOUND. PROCEDURE NA FOR ARRIVALS ON FMG VORTAC AIRWAY RADIALS 167 CW 241 - COLOM AND FMG REMOVED FROM PROCEDURE.
22. NOTES: REMOVED CHART PLANVIEW NOTE AT FMG VORTAC, COLOM AND SPOOK RF REQUIRED - FMG, COLOM AND SPOOK REMOVED FROM PROCEDURE.
23. NOTES: REMOVED CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT - VGSI IS NOW COINCIDENT.
24. NOTES: REMOVED VISIBILITY REDUCTION BY HELICOPTERS NA - 34:1'S CLEAR.
25. REMOVED RNP 0.12 LINE OF MIN AND ADDED RNP 0.10 LINE OF MIN - PER ATC/FPT REQUEST.
26. RNP 0.30 LINE OF MIN DA/HAT CHANGED FROM 5342/932 TO 5349/939 AND VIS CHANGED FROM 2 3/4 SM TO 2 SM - NEW CONTROLLING OBSTACLE ON FINAL/UPDATE TO CURRENT CRITERIA.
27. ADDITIONAL FLIGHT DATA: HOLDING COURSE CHANGED FROM 164.12 TO 167.12 - MAGVAR UPDATE.
28. CHART FAS OBSTACLES REMOVED - APV FINALS DO NOT REQUIRE FAS OBSTACLES.
29. ADDED CHART MANDATORY 14000 AT TARVR - PER ATC/FPT REQUEST.
30. ADDED PLANVIEW NOTE AT TARVR: (RNP 0.30) AND PLANVIEW NOTE AT SPOON: (RNP 0.30) - PER CURRENT CRITERIA.
31. ADDED CHART SPEED ICON IN PLANVIEW AT SPOON; MAX 230- KIAS - PER ATC/FPT REQUEST.
32. ALTERNATE MINIMUMS CHANGED FROM NA TO CAT A, B, C, D 1000-2 1/2 - PER CURRENT CRITERIA.
33. ADDITIONAL FLIGHT DATA: REMOVED ROUTE TYPE: A, R AND ROUTE TYPE QUALIFIER 1: P AND ROUTE TYPE QUALIFIER 2: S AND #TCH 4455.1 MSL (DO NOT CHART) ENTRIES- NO LONGER REQUIRED.
34. APT MAG VAR CHANGED FROM 16E/1985 TO 13E/2020 - MAG VAR UPDATED.

**COORDINATED WITH:**

**AAA**  **ALPA**  **AOPA**  **APA**  **HAI**  **NBAA**  **OTHER:** ZOA, RNO APP CON, ATCT, AMGR

**FLIGHT CHECKED BY**

PENDING

**OFFICE**

**DATE**

*Digitally signed by*  
**CASIMIR L TABAKA**  
Sep 07, 2022

**DEVELOPED BY**

TARA MARTINELLI

*Digitally signed by*  
**TYLER D MITCHELL**  
Aug 18, 2022

**OFFICE**

AJV-A431

**DATE**

08/01/2022

**APPROVED BY**

JOHNNIE BAKER

*Digitally signed by*  
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Sep 07, 2022

**OFFICE**

AJV-A430

**DATE**

**TITLE**  
MANAGER

