

**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 ID</u><br>S25         | <u>PROCEDURE NAME</u><br>RNAV (GPS) RWY 12 | <u>ORIGINAL/AMENDMENT</u><br>1                 | <u>CITY</u><br>WATFORD CITY                  | <u>STATE</u><br>ND         |                      |                           |
| <u>AIRPORT ELEVATION</u><br>2135 | <u>TDZE</u><br>2114                        | <u>SUPERSEDED</u><br>RNAV (GPS) RWY 12         | <u>ORIGINAL/AMENDMENT</u><br>ORIG-D          | <u>DATED</u><br>07/16/2020 | <u>MAG VAR</u><br>7E | <u>EPOCH YEAR</u><br>2025 |
| <u>FACILITY</u><br>RNAV          | <u>COORDINATES OF FACILITIES</u>           | <u>ACTUAL EFFECTIVE DATE</u><br>7 OCTOBER 2021 | <u>REQUIRED EFFECTIVE DATE</u><br>10/07/2021 | <u>CANCEL/SUSPEND</u>      |                      |                           |

**TERMINAL ROUTES**

| <u><b>FROM</b></u>    | <u><b>FIX TYPE</b></u> | <u><b>TO</b></u>      | <u><b>FIX TYPE</b></u> | <u><b>LEG TYPE</b></u> | <u><b>FO/FB</b></u> | <u><b>RNP</b></u> | <u><b>COURSE</b></u> | <u><b>DISTANCE</b></u> | <u><b>ALTITUDE</b></u> |
|-----------------------|------------------------|-----------------------|------------------------|------------------------|---------------------|-------------------|----------------------|------------------------|------------------------|
| ALOPE                 |                        | HOOPR                 |                        | TF                     | FB                  | 1.00              | 073.97               | 18.20                  | 4500                   |
| HOOPR                 | IAF                    | GERHE                 | NOPT                   | TF                     | FB                  | 1.00              | 039.60               | 7.00                   | 4500                   |
| SAKIE                 | IAF                    | GERHE                 | NOPT                   | TF                     | FB                  | 1.00              | 199.27               | 11.86                  | 4500                   |
| GERHE                 | IF/IAF                 | WILSN                 |                        | TF                     | FB                  | 1.00              | 115.54               | 5.27                   | 4100                   |
| WILSN                 | FAF                    | WATLI/2.67 NM TO RW12 |                        | TF                     | FB                  | 0.30              | 115.63               | 3.58                   |                        |
| WATLI/2.67 NM TO RW12 |                        | RW12                  | MAP                    | TF                     | FO                  | 0.30              | 115.63               | 2.67                   |                        |
| RW12                  | MAP                    | 2364 MSL              |                        | CA                     |                     |                   | 115.63               |                        |                        |
| 2364 MSL              |                        | CIPGO                 |                        | DF                     | FO                  | 1.00              |                      |                        | 4300                   |

**MISSED APPROACH**

**MAP:**

LPV: DA  
LNAV: RW12

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 4300 DIRECT CIPGO AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. HOLD NW GERHE, RT, 115.54 INBOUND, 4500 FT. IN LIEU OF PT (IF/IAF), MAX 6000.

3. FAC: 115.63FAF: WILSNDIST FAF TO MAP: 6.25DIST FAF TO THLD: 6.25

4. MIN ALT: GERHE 4500, WILSN 4100, WATLI/2.67 NM TO RW12 2960

5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.80GS ANT:

6. MIN GP INCPT: 4100GP ALT AT PFAF : WILSN 4100OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 40.0

8. MSA FROM: RW12 4700

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: RWY 12 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ALOPE ON V545 SOUTHWEST BOUND AND ARRIVALS AT SAKIE ON V71 NORTHWEST BOUND..  
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WILLISTON ALTIMETER SETTING AND INCREASE LPV DA TO 2474 FEET; INCREASE ALL MDAS 120 FEET AND LNAV VISIBILITY CAT C/D 3/8 SM, AND CIRCLING VISIBILITY CAT C/D 1/2 SM.

ADDITIONAL FLIGHT DATA:

HOLD SE, RT, 295.90 INBOUND.  
CHART FAS OBST: 2379 TOWER (38-000340) 474816N/1031729W.  
2580 AAO 475040N/1032347W.  
CHART VDP AT 1.67 NM TO RW12.  
WAAS CHANNEL # 70717  
REFERENCE PATH ID: W12A  
CHART CIRCLING ICON.  
LTP HAE: 612.8 M

MINIMUMS:

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT

ALTERNATE: NA ☒

| 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     | 2364   | 1   | 250     | 2364   | 1   | 250     | 2364   | 1     | 250     | 2364   | 1     | 250     |        |     |         |
| LNAV MDA   | 2640   | 1   | 526     | 2640   | 1   | 526     | 2640   | 1 1/2 | 526     | 2640   | 1 1/2 | 526     |        |     |         |
| CIRCLING   | 2700   | 1   | 565     | 2760   | 1   | 625     | 2760   | 1 3/4 | 625     | 2960   | 2 3/4 | 825     |        |     |         |



**CHANGES - REASONS**

1. UPDATED AIRPORT MAGVAR FROM "EPOCH 2010 9E" TO "EPOCH 2025 7E". - REQUEST OF FPT TO RETAIN RWY NUMBERING.
2. UPDATED AIRPORT ELEVATION AND TDZE FROM "2111/2090" TO "2135/2114". - NEW SURVEY,
3. REMOVED FEEDER HASOS TO HOOPR. - FPT REQUEST.
4. ADDED FEEDER ALOPE TO HOOPR, COURSE 074.02, DISTANCE 18.18 AND ALTITUDE 4500. - FPT REQUESTED.
5. UPDATED HOOPR TO GERHE COURSE, DISTANCE AND ALTITUDE FROM "035.54/5.00/4100" TO "039.60/7.00/4500". - NEW FIX LOCATION FOR HOOPR AND GERHE.
6. REMOVED IAF LEG FORBI TO GERHE. - FPT REQUEST.
7. ADDED IAF LEG SAKIE TO GERHE, COURSE 199.30, DISTANCE 11.78 AND ALTITUDE 4500. - FPT REQUESTED.
8. UPDATED GERHE TO WILSN COURSE AND DISTANCE FROM "125.60/6.34" TO "115.54/5.27". - NEW FIX LOCATIONS.
9. ADDED WILSN TO WATLI/2.67 NM TO RW12 COURSE 115.63 AND DISTANCE 3.58. - ADDED LNAV LINE OF MINIMA.
10. ADDED WATLI/2.67 NM TO RW12 TO RW12 COURSE 115.63 AND DISTANCE 2.67. - ADDED LNAV LINE OF MINIMA.
11. UPDATED CA ALTITUDE FROM "2424 MSL" TO "2364 MSL" AND COURSE FROM "125.68" TO "115.63" - NEW EVALUATION.
12. UPDATED MISSED APPROACH INSTRUCTIONS FROM "CLIMB TO 4200 DIRECT CIPGO AND HOLD." TO "CLIMB TO 4300 DIRECT CIPGO AND HOLD." - FPT REQUESTED HIGHER HOLDING ALTITUDE.
13. PROFILE LINE 2: UPDATED HOLDING INFORMATION FROM "HOLD NW GERHE, RT, 125.60 INBOUND, 4100 FT. IN LIEU OF PT (IAF), MAX 6000." TO "HOLD NW GERHE, RT, 122.54 INBOUND, 4500 FT. IN LIEU OF PT (IAF), MAX 6000." - FPT REQUESTED NEW INBOUND COURSE AND HIGHER HOLDING ALTITUDE.
14. PROFILE LINE 3: UPDATED FAC FROM "125.68" TO "115.63" AND ADDED DIST PFAF TO MAP: 6.25 AND DIST PFAF TO THLD: 6.25. - NEW EVALUATION AND LNAV LINE MINIMA ADDED.
15. PROFILE LINE 4: UPDATED FROM "GERHE 4100, WILSN 4100" TO "GERHE 4500, WILSN 4100, WATLI/2.67 NM TO RW12 2960" - NEW REQUESTED ALTITUDE FOR GERHE AND ADDED SDF FOR THE LNAV.
16. PROFILE LINE 5: REMOVED DIST TO THLD FROM PFAF: 4.66 AND UPDATED HAT FROM "334 HAT: 0.76" TO "250 HAT: 0.80". - ADDED LNAV LINE MINIMA AND NEW CONTROLLING OBSTACLE FOR LPV.
17. PROFILE LINE 7: UPDATED GP ANGLE FROM "4.00" TO "3.00" AND 20:1 FROM "IS NOT CLEAR" TO "IS CLEAR". - NEW EVALUATION WITH LOWER GPA AND NEW SURVEY.
18. UPDATED PBN REQUIREMENT NOTE: FROM "RNP APCH" TO "RNP APCH - GPS". IAW 8260.19I 8-6-8 B (2).
19. ADDED CHART PLANVIEW NOTE PROCEDURE NA FOR ARRIVALS AT ALOPE ON V545 SOUTHWEST BOUND AND ARRIVALS AT SAKIE NORTHWEST BOUND. - TURN EXCEEDS 120 DEGREES.
20. REMOVED CHART NOTE: PROCEDURE NA AT NIGHT. - NEW EVALUATION AND SURVEY.
21. UPDATED CHART NOTE FOR HELICOPTER VISIBILITY FROM "CHART NOTE: RWY 12 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED." TO "CHART NOTE: RWY 12 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED." - 20:1 IS CLEAR.
22. REMOVED CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). - GLIDEPATH AND TCH NOW MEET CRITERIA.
23. UPDATED CHART NOTE: FROM "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WILLISTON BASIN INTL ALTIMETER SETTING AND INCREASE DA TO 2537 FEET AND INCREASE ALL VISIBILITIES 3/8 SM." TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WILLISTON ALTIMETER SETTING AND INCREASE LPV DA TO 2474 FEET; INCREASE ALL MDAS 120 FEET AND LNAV VISIBILITY CAT C/D 3/8 SM, AND CIRCLING VISIBILITY CAT C/D 1/2 SM." - NEW EVALUATION.
24. ADDITIONAL FLIGHT DATA: UPDATED FROM "HOLD SE, RT, 305.89 INBOUND." TO "HOLD SE, RT, 302.89 INBOUND." - RUNWAY CONSTRUCTION, NEW SURVEY DATA AND NEW FIX LOCATIONS.
25. ADDITIONAL FLIGHT DATA: ADDED "CHART FAS OBST: 2379 TOWER (38-000340) 474816N/1031729W." - LNAV LINE MINIMA ADDED.
26. ADDITIONAL FLIGHT DATA: ADDED "2580 AAO 475040N/1032347W." - NEW EVALUATION.
27. ADDITIONAL FLIGHT DATA: ADDED "CHART VDP AT 1.67 NM TO RW12\*." - LNAV LINE OF MINIMA ADDED ALONG WITH NEW EVALUATION AND SURVEY.
28. ADDITIONAL FLIGHT DATA: ADDED "CHART CIRCLING ICON" - NEW CIRCLING CRITERIA HAS BEEN APPLIED.
29. ADDITIONAL FLIGHT DATA: UPDATED LTP HAE FROM "609.8 M" TO "612.8 M". - NEW SURVEY.
30. DECREASED LPV DA/HAT FOR CAT A/B FROM "2424/334" TO "2364/250 FOR CAT A-D" - NEW CONTROLLING OBSTACLE AND EVALUATION.
31. ADDED LNAV LINE MINIMA MDA/HAT 2640/526 AND VISIBILITY FOR CAT A/B 1 SM AND CAT C/D 1 1/2 SM. - FPT REQUESTED NPA ADDED TO PROCEDURE.
32. ADDED CIRCLING LINE MINIMA CMDA/HAA CAT A 2700/565, CAT B/C 2760/625 AND CAT D 2960/825. VISIBILITY CAT A/B 1 SM, CAT C 1 3/4 SM AND CAT D 2 3/4 SM. - FPT REQUESTED CIRCLING TO BE ADDED TO PROCEDURE.
33. CHANGED FAS DATA LTP/FTP LATITUDE FROM "474759.8030N" TO "474746.6690N" - NEW SURVEY DATA.
34. CHANGED FAS DATA LTP/FTP LONGITUDE FROM "1031536.2125W" TO "1031525.0830W" - NEW SURVEY DATA.
35. CHANGED FAS DATA ELLIPSOIDAL HEIGHT FROM "+06098" TO "+06128" - NEW SURVEY DATA.
36. CHANGED FAS DATA FPAP LATITUDE FROM "474657.1200N" TO "474658.5155N" - NEW SURVEY DATA.
37. CHANGED FAS DATA FPAP LONGITUDE FROM "1031402.3700W" TO "1031333.9335W" - NEW SURVEY DATA.
38. CHANGED FAS DATA GLIDEPATH ANGLE (GPA) FROM "04.00" TO "03.00" - NEW REQUESTED GPA.
39. CHANGED FAS DATA LENGTH OFFSET FROM "1408" TO "1072" - NEW EVALUATION.
40. CHANGED FAS DATA LTP/FPAP ORTHOMETRIC HEIGHT FROM "+06276" TO "+06306" - NEW SURVEY DATA.
41. CRC REMAINDER CHANGED FROM "B7CE5FA1" TO "A70EBEE3" - UPDATED FAS DATA BLOCK INFORMATION.



AIRPORT ID  
S25

PROCEDURE NAME  
RNAV (GPS) RWY 12

ORIGINAL/AMENDMENT  
1

CITY  
WATFORD CITY

STATE  
ND

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZLC, AMGR

FLIGHT CHECKED BY  
PENDING

*Digitally signed by*  
**DONALD H LANIER**  
Jun 02, 2021

OFFICE  
FICO

DATE

DEVELOPED BY  
DONALD H. LANIER (CHRISTOPHER SCHONES)

*Digitally signed by*  
**DONALD H LANIER**  
Jun 02, 2021

OFFICE  
AJV-A431

DATE  
04/23/2021

APPROVED BY  
LONNIE EVERHART

*Digitally signed by*  
**DONALD H LANIER**  
Jun 02, 2021

OFFICE  
AJV-A430

DATE

TITLE  
MANAGER

QUALITY  
19  
CHECKED

**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                       | S25                |
| RUNWAY                                   | RW12               |
| APPROACH PERFORMANCE DESIGNATOR          | 0                  |
| ROUTE INDICATOR                          |                    |
| REFERENCE PATH DATA SELECTOR             | 0                  |
| REFERENCE PATH IDENTIFIER (APPROACH ID)  | W12A               |
| LTP/FTP LATITUDE                         | 474746.6690N       |
| LTP/FTP LONGITUDE                        | 1031525.0830W      |
| LTP/FTP ELLIPSOIDAL HEIGHT               | +06128             |
| FPAP LATITUDE                            | 474658.5155N       |
| FPAP LONGITUDE                           | 1031333.9335W      |
| 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                            | 1072               |
| HORIZONTAL ALERT LIMIT (HAL)             | 40.0               |
| VERTICAL ALERT LIMIT (VAL)               | 50.0               |
| <br>                                     |                    |
| CRC REMAINDER                            | A70EBEE3           |

**ADDITIONAL PATH POINT RECORD INFORMATION**

|                         |        |
|-------------------------|--------|
| ICAO CODE               | K3     |
| LTP ORTHOMETRIC HEIGHT  | +06306 |
| FPAP ORTHOMETRIC HEIGHT | +06306 |

