

**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><b>AIRPORT ID</b></u> S25	<u><b>PROCEDURE NAME</b></u> RNAV (GPS) RWY 30	<u><b>ORIGINAL/AMENDMENT</b></u> 1	<u><b>CITY</b></u> WATFORD CITY	<u><b>STATE</b></u> ND		
<u><b>AIRPORT ELEVATION</b></u> 2135	<u><b>TDZE</b></u> 2131	<u><b>SUPERSEDED</b></u> RNAV (GPS) RWY 30	<u><b>ORIGINAL/AMENDMENT</b></u> ORIG-C	<u><b>DATED</b></u> 07/16/2020	<u><b>MAG VAR</b></u> 7E	<u><b>EPOCH YEAR</b></u> 2025
<u><b>FACILITY</b></u> RNAV	<u><b>COORDINATES OF FACILITIES</b></u>	<u><b>ACTUAL EFFECTIVE DATE</b></u> 7 OCTOBER 2021	<u><b>REQUIRED EFFECTIVE DATE</b></u> 10/07/2021	<u><b>CANCEL/SUSPEND</b></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>
HASOS	IAF	CIPGO	NOPT	TF	FB	1.00	025.57	13.98	4300
POVNY	IAF	CIPGO	NOPT	TF	FB	1.00	206.69	10.95	4300
CIPGO	IF/IAF	BOWIS		TF	FB	1.00	295.90	4.07	4100
BOWIS	FAF	RW30	MAP	TF	FO	0.30	295.83	6.06	
RW30	MAP	2381 MSL		CA			295.83		
2381 MSL		GERHE		DF	FO	1.00			4500

**MISSED APPROACH**

**MAP:**

LPV: DA  
LNAV: RW30

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 4500 DIRECT GERHE AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



PROFILE:

1. PT                      SIDE OF COURSE                      OUTBOUND                      FT WITHIN                      MILES OF                      (IAF)

2. HOLD SE CIPGO, RT, 295.90 INBOUND, 4300 FT. IN LIEU OF PT (IF/IAF), MAX 6000.

3. FAF: 295.83                      FAF: BOWIS                      DIST FAF TO MAP: 6.06                      DIST FAF TO THLD: 6.06

4. MIN ALT: CIPGO 4300, BOWIS 4100

5. DIST TO THLD FROM OM:                      MM:                      IM:                      150 HAT:                      250 HAT: 0.66                      GS ANT:

6. MIN GP INCPT: 4100                      GP ALT AT FAF : BOWIS 4100                      OM:                      MM:                      IM:

7. GP ANGLE: 3.00                      34:1: IS CLEAR                      20:1: IS CLEAR                      TCH: 40.0

8. MSA FROM: RW30 4700

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HASOS ON V439 SOUTHEAST BOUND AND ARRIVALS AT POVNY ON V71 NORTHWEST BOUND..  
CHART NOTE: VDP NA WHEN USING WILLISTON ALTIMETER SETTING.  
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WILLISTON ALTIMETER SETTING AND INCREASE LPV DA TO 2491 FEET; INCREASE ALL MDAS 120 FEET AND LNAV VISIBILITY CAT C/D 1/4 SM, AND CIRCLING VISIBILITY CAT C/D 1/2 SM.

ADDITIONAL FLIGHT DATA:

HOLD NW, RT, 115.54 INBOUND.  
FAS OBST: 2410 AAO 474437N/1030831W.  
2460 AAO 474358N/1030754W.  
CHART VDP AT 1.59 NM TO RW30.  
WAAS CHANNEL # 69318  
REFERENCE PATH ID: W30A  
CHART CIRCLING ICON.  
LTP HAE: 631.8 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	2381	1	250	2381	1	250	2381	1	250	2381	1	250			
LNAV MDA	2680	1	549	2680	1	549	2680	1 5/8	549	2680	1 5/8	549			
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 "2111/2111" TO "2135/2131". - NEW SURVEY
3. UPDATED HASOS TO CIPGO COURSE, DISTANCE AND ALTITUDE FROM "024.81/11.68/4200" TO "025.57/13.98/4300". - NEW FIX LOCATIONS.
4. UPDATED POVNY TO CIPGO COURSE, DISTANCE AND ALTITUDE FROM "203.44/13.26/4200" TO "206.69/10.95/4300". - NEW FIX LOCATIONS
5. UPDATED CIPGO TO BOWIS COURSE, DISTANCE AND ALTITUDE FROM "305.89/6.01/4100" TO "295.90/4.07/4300". - NEW FIX LOCATIONS
6. REMOVED STEPDOWN LEG BOWIS TO FIBEN/2.40 NM TO RW30. - NO LONGER REQUIRED DUE TO NEW EVALUATION
7. ADDED FINAL LEG BOWIS TO RW30 COURSE 295.83 AND DISTANCE 6.06. - THERE IS NO STEP DOWN ON FINAL.
8. UPDATED CA ALTITUDE FROM "2511 MSL" TO "2381 MSL" AND COURSE FROM "305.81" TO "295.83" - NEW EVALUATION.
9. UPDATED MISSED APPROACH INSTRUCTIONS FROM "CLIMB TO 4100 DIRECT GERHE AND HOLD." TO "CLIMB TO 4500 DIRECT GERHE AND HOLD." - FPT REQUESTED HIGHER HOLDING ALTITUDE.
10. PROFILE LINE 2: UPDATED HOLDING INFORMATION FROM "HOLD NW CIPGO, RT, 305.89 INBOUND, 4200 FT. IN LIEU OF PT (IAF), MAX 6000." TO "HOLD NW CIPGO, RT, 295.90 INBOUND, 4300 FT. IN LIEU OF PT (IAF), MAX 6000." - FPT REQUESTED NEW INBOUND COURSE AND HIGHER HOLDING ALTITUDE.
11. PROFILE LINE 3: UPDATED FAC FROM "305.81" TO "295.83" AND UPDATED DIST PFAF TO MAP: AND DIST PFAF TO THLD: FROM "4.91" TO "6.06". - NEW EVALUATION/ RUNWAY CONSTRUCTION
12. PROFILE LINE 4: UPDATED FROM "CIPGO 4200, BOWIS 4100, FIBEN/2.40 NM TO RW30 3100\*" TO "CIPGO 5600, BOWIS 4300\*" - NEW REQUESTED ALTITUDE FOR CIPGO AND NO SDF FOR THE LNAV.
13. PROFILE LINE 5: UPDATED HAT FROM "456 HAT: 1.06" TO "250 HAT: 0.66". - NEW EVALUATION COMPLETED.
14. PROFILE LINE 7: UPDATED GP ANGLE FROM "3.70" TO "3.00" AND UPDATED 34:1 FROM "IS NOT CLEAR" TO "IS CLEAR". - NEW EVALUATION WITH LOWER GPA AND NEW SURVEY.
15. UPDATED PBN REQUIREMENT NOTE: FROM "RNP APCH" TO "RNP APCH - GPS". IAW 8260.19I 8-6-8 B (2).
16. REMOVED CHART NOTE: CIRCLING NA TO RWYS 18 AND 36. - TURF RUNWAYS NO LONGER USED.
17. REMOVED CHART NOTE: CIRCLING RWY 12 NA AT NIGHT. - NEW EVALUATION AND SURVEY.
18. REMOVED CHART NOTE: RWY 30 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. - NO 34:1 PENETRATION.
19. REMOVED CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). - COINCIDENT AFTER NEW EVALUATION.
20. ADDED CHART NOTE: VDP NA WHEN USING WILLISTON ALTIMETER SETTING. - NOW MEET CRITERIA FOR VDP USE ON LOCAL ALTIMETER SOURCE.
21. UPDATED CHART PLANVIEW NOTE: FROM "PROCEDURE NA FOR ARRIVALS AT HASOS ON V439 SOUTHEAST BOUND." TO "PROCEDURE NA FOR ARRIVALS AT HASOS ON V439 SOUTHEAST BOUND AND ARRIVALS AT POVNY ON V71 NORTHWEST BOUND." - TURN FROM POVNY DOES NOT ACCOMMODATE A 90 DEGREE TURN.
22. UPDATED CHART NOTE: FROM "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WILLISTON BASIN INTL ALTIMETER SETTING AND INCREASE DA TO 2680 AND ALL MDA 120 FEET, INCREASE LPV VISIBILITY ALL CATS 1/4 SM." TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WILLISTON ALTIMETER SETTING AND INCREASE LPV DA TO 2491 FEET; INCREASE ALL MDAS 120 FEET AND LNAV VISIBILITY CAT C/D 1/4 SM, AND CIRCLING VISIBILITY CAT C/D 1/2 SM." - NEW EVALUATION.
23. ADDITIONAL FLIGHT DATA: UPDATED FROM "HOLD SE, RT, 125.60 INBOUND." TO "HOLD SE, RT, 115.54 INBOUND." - FPT REQUESTED NEW INBOUND COURSE.
24. ADDITIONAL FLIGHT DATA: REMOVED CHART FAS OBST: 2439 TREE 474638N/1031412W. AND ADDED FAS OBST: 2410 AAO 474437N/1030831W. - NEW CONTROLLER AND EVALUATION.
25. ADDITIONAL FLIGHT DATA: REMOVED CHART 2539 TREE 474420N/1031112W. AND ADDED 2460 AAO 474358N/1030754W. - NEW MAP STUDY AND EVALUATION.
26. ADDITIONAL FLIGHT DATA: ADDED "CHART VDP AT 1.59 NM TO RW30\*." - LNAV LINE OF MINIMA DECREASED ALONG WITH NEW EVALUATION AND SURVEY.
27. ADDITIONAL FLIGHT DATA: ADDED "CHART CIRCLING ICON" - NEW CIRCLING CRITERIA HAS BEEN APPLIED.
28. ADDITIONAL FLIGHT DATA: UPDATED LTP HAE FROM "625.7 M" TO "631.8 M". - NEW SURVEY.
29. DECREASED LPV DA/HAT FOR CAT A/B FROM "2567/456" TO "2381/250 FOR CAT A-D" - NEW CONTROLLING OBSTACLE AND EVALUATION.
30. DECREASED LPV VISIBILITY FOR CAT A/B FROM "1 3/8 SM" TO "1 SM FOR CAT A-D" - NEW VISCHECK CALCULATIONS.
31. DECREASED LNAV MDA/HAT FOR CAT A/B FROM "2700/589" TO "2680/549 FOR CAT A-D" - NEW CONTROLLING OBSTACLE AND EVALUATION.
32. ADDED LNAV VISIBILITY 1 SM FOR CAT C/D. - FPT REQUESTED CAT C/D TO BE ADDED
33. DECREASED CIRCLING CMDA/HAA FOR CAT A FROM "2740/629" TO "2700/565 CAT A - NEW CONTROLLER.
34. INCREASED CIRCLING CMDA/HAA FOR CAT B FROM "2740/629" TO CAT B/C "2760/625" AND "2960/825" FOR CAT D. - NEW CONTROLLER AND ADDED CAT C/D PER FPT.
35. ADDED CIRCLING VISIBILITY 1 5/8 SM CAT C AND 2 3/4 SM FOR CAT D. - FPT AND AIRPORT IS REQUESTING CAT C/D TO BE ADDED TO PROCEDURE.
36. CHANGED FAS DATA LTP/FTP LATITUDE FROM "474729.2370N" TO "474721.3220N" - NEW SURVEY DATA.
37. CHANGED FAS DATA LTP/FTP LONGITUDE FROM "1031450.4335W" TO "1031426.5605W" - NEW SURVEY DATA.
38. CHANGED FAS DATA ELLIPSOIDAL HEIGHT FROM "+06257" TO "+06318" - NEW SURVEY DATA.
39. CHANGED FAS DATA FPAP LATITUDE FROM "474831.9200N" TO "474809.4615N" - NEW SURVEY DATA.
40. CHANGED FAS DATA FPAP LONGITUDE FROM "1031624.3100W" TO "1031617.7365W" - NEW SURVEY DATA.
41. CHANGED FAS DATA GLIDEPATH ANGLE (GPA) FROM "03.70" TO "03.00" - NEW REQUESTED GPA.
42. CHANGED FAS DATA LENGTH OFFSET FROM "1408" TO "0984" - NEW EVALUATION.
43. CHANGED FAS DATA LTP/FPAP ORTHOMETRIC HEIGHT FROM "+06435" TO "+06495" - NEW SURVEY DATA.
44. CRC REMAINDER CHANGED FROM "7CE1C4FA" TO "F7647038" - UPDATED FAS DATA BLOCK INFORMATION.



COORDINATED WITH:

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

FLIGHT CHECKED BY

PENDING

*Digitally signed by*  
**DONALD H LANIER**

OFFICE

FICO

DATE

DEVELOPED BY

DONALD H. LANIER (CHRISTOPHER SCHONES)

Jun 02, 2021

*Digitally signed by*

**DONALD H LANIER**

OFFICE

AJV-A431

DATE

04/23/2021

APPROVED BY

LONNIE EVERHART

Jun 02, 2021

OFFICE

AJV-A430

DATE

TITLE  
MANAGER

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

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	S25
RUNWAY	RW30
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W30A
LTP/FTP LATITUDE	474721.3220N
LTP/FTP LONGITUDE	1031426.5605W
LTP/FTP ELLIPSOIDAL HEIGHT	+06318
FPAP LATITUDE	474809.4615N
FPAP LONGITUDE	1031617.7365W
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	0984
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	F7647038

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+06495
FPAP ORTHOMETRIC HEIGHT	+06495

