

**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.

| | | | | |
|--------------------------------|--|--|---|---------------------------|
| AIRPORT ID ORS | PROCEDURE NAME RNAV (GPS) RWY 16 | ORIGINAL/AMENDMENT 3 | CITY EASTSOUND | STATE WA |
| AIRPORT ELEVATION 35 | TDZE 35 | SUPERSEDED RNAV (GPS) RWY 16 | DATED 07/19/2018 | MAG VAR 17E |
| FACILITY RNAV | COORDINATES OF FACILITIES | ACTUAL EFFECTIVE DATE | REQUIRED EFFECTIVE DATE ROUTINE | EPOCH YEAR 2010 |
| | | | | CANCEL/SUSPEND |

TERMINAL ROUTES

| FROM | FIX TYPE | TO | FIX TYPE | LEG TYPE | FO/FB | RNP | COURSE | DISTANCE | ALTITUDE |
|------------------------|----------|------------------------|----------|----------|-------|------|--------|----------|----------|
| CANDL | | EASTD | | TF | FB | 1.00 | 320.92 | 6.22 | 2500 |
| EASTD | | APDON | | TF | FO | 1.00 | 320.88 | 6.22 | 2000 |
| SQURL | IAF | APDON | NOPT | TF | FB | 1.00 | 234.32 | 7.37 | 2000 |
| APDON | IF/IAF | CALBI | | TF | FB | 1.00 | 194.42 | 8.42 | 1900 |
| CALBI | FAF | ZEKIS/1.20 NM TO TALCS | | TF | FB | 0.30 | 193.24 | 3.08 | |
| ZEKIS/1.20 NM TO TALCS | | TALCS | MAP | TF | FO | 0.30 | 193.24 | 1.20 | |
| TALCS | MAP | 440 MSL | | CA | | | 193.24 | | 440 |
| 440 MSL | | APDON | | DF | FO | 1.00 | | | 2000 |

MISSED APPROACH

MAP:

LP: TALCS
LNAV: TALCS

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 440 THEN CLIMBING RIGHT TURN TO 2000 DIRECT APDON AND HOLD.
*MISSED APPROACH REQUIRES MINIMUM CLIMB OF 228 FEET PER NM TO 700.
**MISSED APPROACH REQUIRES MINIMUM CLIMB OF 290 FEET PER NM TO 880.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- HOLD N APDON, RT, 194.42 INBOUND, 2000 IN LIEU OF PT (IAF), MAX 6000.
- FAC: 193.24 FAF: CALBI DIST FAF TO MAP: 4.28 DIST FAF TO THLD: 5.02
- MIN ALT: APDON 2000, CALBI 1900, ZEKIS/1.20 NM TO TALCS 760
- DIST TO THLD FROM OM: MM: IM: 150 HAT: GS ANT: MM: IM:
- MIN GP INCPT: GP ALT AT FAF: TCH: OM: MM: IM:
- GP ANGLE: 34:1: IS NOT CLEAR 20:1: IS CLEAR
- MSA FROM: TALCS 4600



PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: RWY 16 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
 CHART NOTE: CIRCLING RWY 34 NA AT NIGHT.
 CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FHR ALTIMETER SETTING AND INCREASE ALL MDAS 40 FT.
 CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT SQURL ON T355 NORTHBOUND.

ADDITIONAL FLIGHT DATA:

FICTITIOUS THRESHOLD POINT (CFRPS) DO NOT CHART.
 CHART PLANVIEW NOTE: FINAL APPROACH COURSE OFFSET 30.00 DEGREES.
 CALBI TO RW16: 3.48/35
 CHART FAS OBST: 249 TREE (53-121487) 484230N/1225507W, 125 TREE (53-120696) 484247N/1225503W.
 WAAS CHANNEL # 40038
 REFERENCE PATH ID: W16A
 FAC CROSSES RWY C/L EXTENDED 4500 FT FROM THLD.
 FTP HAE: -18.2 M

MINIMUMS:

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

ALTERNATE: NA CAT A 1100-2, CAT B 1900-2, NA WHEN LOCAL WEATHER NOT AVAILABLE.

| <u>CATEGORY:</u> | <u>A</u> | | | <u>B</u> | | | <u>C</u> | | | <u>D</u> | | | <u>E</u> | | |
|--------------------------|----------------------|-------------------|-----------------------|----------------------|-------------------|-----------------------|----------------------|-------------------|-----------------------|----------------------|-------------------|-----------------------|----------------------|-------------------|-----------------------|
| <u>FINAL TYPE</u> | <u>DA/MDA</u> | <u>VIS</u> | <u>HAT/HAA</u> |
| LP MDA* | 380 | 1 | 345 | 380 | 1 | 345 | | NA | | | NA | | | | |
| LP MDA | 440 | 1 | 405 | 440 | 1 | 405 | | NA | | | NA | | | | |
| LNAV MDA** | 500 | 1 | 465 | 500 | 1 | 465 | | NA | | | NA | | | | |
| LNAV MDA | 600 | 1 | 565 | 600 | 1 | 565 | | NA | | | NA | | | | |
| CIRCLING | 1060 | 1 1/4 | 1025 | 1840 | 1 1/2 | 1805 | | NA | | | NA | | | | |



CHANGES - REASONS

1. TERMINAL ROUTES: CHANGED FROM HUH VORTAC TO APDON TO SQURL TO APDON, COURSE/DISTANCE CHANGED FROM 233.28/7.00 TO 234.32/7.37 – VOR MON: HUH VORTAC BEING REPLACED WITH SQURL WP.
2. TERMINAL ROUTES: APDON TO CALBI COURSE DISTANCE CHANGED FROM 194.44/8.33 TO 194.42/8.42 – NEW EVALUATION, CALBI MOVED SOUTHWEST 515 FT TO ALIGN WITH GS/TCH.
3. TERMINAL ROUTES: CALBI TO SEKIS DISTANCE CHANGED FROM 3.16 TO 3.08 – CALBI MOVED 515 FT SOUTHWEST.
4. MISSED APPROACH INSTRUCTIONS: CHANGED FROM “CLIMB TO 440 THEN CLIMBING RIGHT TURN TO 2000 DIRECT APDON AND HOLD. **MISSED APPROACH REQUIRES MINIMUM CLIMB OF 385 FEET PER NM TO 980.” TO “CLIMB TO 440 THEN CLIMBING RIGHT TURN TO 2000 DIRECT APDON AND HOLD. *MISSED APPROACH REQUIRES MINIMUM CLIMB OF 228 FT PER NM TO 700. **MISSED APPROACH REQUIRES MINIMUM CLIMB OF 290 FT PER NM TO 880.” – NEW OBSTACLE EVALUATION/FPT REQUEST TO MAINTAIN LOWER CEILINGS.
5. PROFILE: LINE 2 CHANGED FROM “194.44 INBOUND” TO “194.42 INBOUND” – HOLDING COURSE UPDATED TO ALIGN WITH SEGMENT COURSE.
6. PROFILE: LINE 3 DIST FAF TO MAP: CHANGED FROM 4.36 TO 4.28 – FAF CALBI WP MOVED 515 FT SOUTHWEST.
7. PROFILE: LINE 4 CHANGED FROM “APDON 2000, CALBI 1900, ZEKIS/1.20 NM TO TALCS 720” TO “APDON 2000, CALBI 1900, ZEKIS/1.20 NM TO TALCS 760” – NEW EVALUATION, STEPDOWN ALTITUDE RAISED TO ALIGN WITH FINAL VAA.
8. PBN REQUIREMENTS NOTE: CHANGED “RNP APCH.” TO “RNP APCH – GPS.” – IAW 8260.19J, 8-6-8.B (2).
9. NOTES: DELETED CHART PLANVIEW NOTE “PROCEDURE NA FOR ARRIVAL ON HUH VORTAC AIRWAY RADIALS 149 CW 270.” AND ADDED “CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT SQURL ON T355 NORTHBOUND.” – HUH VORTAC BEING DECOMMISSIONED AND SQURL TO BE PUBLISHED ON T355, IAW 8260.19J, 8-2-5 E (2).
10. NOTES: CHART NOTE CHANGED FROM “WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FRIDAY HARBOR ALTIMETER SETTING AND INCREASE ALL MDA 40 FT.” TO “WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FHR ALTIMETER SETTING AND INCREASE ALL MDAS 40 FT.” – UPDATED TO NASR ID AND IAW 8260.19J, 8-6-12.N.(1)(A)1.
11. NOTES: CHART NOTE CHANGED FROM “CIRCLING TO RWY 34 NA AT NIGHT.” TO “CIRCLING RWY 34 NA AT NIGHT.” – IAW 8260.19J, 8-6-12.O.(2)(G).
12. ADDITIONAL FLIGHT DATA: CHANGED CHART FAS OBST FROM “173 TREE (53-038433) 484238N/1225500W, 86 SHIP 484413N/1225424W.” TO “CHART FAS OBST: 249 TREE (53-121487) 484230N/1225507W, 125 TREE (53-120696) 484247N/1225503W.” – NEW OBSTACLE EVALUATION.
13. ADDITIONAL FLIGHT DATA: DELETED “CHART CIRCLING ICON” – NO LONGER REQUIRED AND IAW FAA MEMO “REVISED CIRCLING MANEUVERING AREA CRITERIA IMPLEMENTATION PLAN” DATED 09/30/2021.
14. ALTERNATE: CHANGED FROM “CAT A 1100-2, CAT B 1800-2, NA WHEN LOCAL WEATHER NOT AVAILABLE.” TO “CAT A 1100-2, CAT B 1900-2, NA WHEN LOCAL WEATHER NOT AVAILABLE. – UPDATED IAW 8260.3F, 3-4-1.
15. MINIMUMS: LP MDA* MDA/HAT ALL CATS INCREASED FROM 340/305 TO LPA MDA* 380/345 – NEW OBSTACLE EVALUATION.
16. MINIMUMS: LP MDA/HAT ALL CATS INCREASED FROM 400/365 TO 440/405 – NEW OBSTACLE EVALUATION.
17. MINIMUMS: LNAV MDA** MDA/HAT ALL CATS INCREASED FROM 440/405 TO 500/465 – NEW OBSTACLE EVALUATION.
18. MINIMUMS: LNAV MDA/HAT DECREASED ALL CATS FROM 700/665 TO 600/565 – NEW OBSTACLE EVALUATION.
19. MINIMUMS: CIRCLING MDA/HAA CAT A DECREASED FROM 1120/1085 TO 1060/1025 AND CAT B INCREASED FROM 1820/1785 TO 1840/1805 – NEW OBSTACLE EVALUATION.
20. FAS DATA: CRC REMAINDER CHANGED FROM DE994E60 TO 003EFAAB – LTP/FTP LATITUDE/LONGITUDE CHANGED FROM 484254.7780N/1225507.6830W TO 484250.3485N/1225511.5885W AND FPAF LATITUDE/LONGITUDE CHANGED FROM 484137.8560N/ 1225615.4135W TO 484133.3890N/ 1225619.2220W.

COORDINATED WITH:

A4A
 ALPA
 AOPA
 APA
 HAI
 NBAA

OTHER: VICTORIA APP CON, NUW APP CON, SEA FSS, ZSE, AMGR

FLIGHT CHECKED BY

JAMES L REINEBOLD

Digitally signed by

CASIMIR L TABAKA

Sep 29, 2025

OFFICE

AJF

DATE

09/25/2025

DEVELOPED BY

CASIMIR L. TABAKA (CHRISTOPHER D. WILKINSON)

Digitally signed by

CASIMIR L TABAKA

Aug 12, 2025

OFFICE

AJV-A432

DATE

04/16/2025

APPROVED BY

CASIMIR L. TABAKA

Digitally signed by

CASIMIR L TABAKA

Aug 12, 2025

OFFICE

AJV-A432

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

| <u>DATA FIELD</u> | <u>DATA</u> |
|--|---------------|
| OPERATION TYPE | 0 |
| SBAS SERVICE PROVIDER IDENTIFIER | 0 |
| AIRPORT IDENTIFIER | KORS |
| RUNWAY | RW16 |
| APPROACH PERFORMANCE DESIGNATOR | 0 |
| ROUTE INDICATOR | |
| REFERENCE PATH DATA SELECTOR | 0 |
| REFERENCE PATH IDENTIFIER (APPROACH ID) | W16A |
| LTP/FTP LATITUDE | 484250.3485N |
| LTP/FTP LONGITUDE | 1225511.5885W |
| LTP/FTP ELLIPSOIDAL HEIGHT | -00182 |
| FPAP LATITUDE | 484133.3890N |
| FPAP LONGITUDE | 1225619.2220W |
| THRESHOLD CROSSING HEIGHT (TCH) | 00035.0 |
| TCH UNITS SELECTOR (METERS OR FEET USED) | F |
| GLIDEPATH ANGLE (GPA) | 03.48 |
| COURSE WIDTH AT THRESHOLD | 106.75 |
| LENGTH OFFSET | 0000 |
| HORIZONTAL ALERT LIMIT (HAL) | 40.0 |
| VERTICAL ALERT LIMIT (VAL) | 00.0 |

CRC REMAINDER 003EFAAB

ADDITIONAL PATH POINT RECORD INFORMATION

| | |
|-------------------------|--------|
| ICAO CODE | K1 |
| LTP ORTHOMETRIC HEIGHT | +00034 |
| FPAP ORTHOMETRIC HEIGHT | +00034 |



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD**

| | | | | | | |
|--------------------------|--|----------------------|--------------------------|--------------------|--------------------------------|-------------------------|
| <u>AIRPORT ID</u> ORS | <u>PROCEDURE NAME</u> RNAV (GPS) RWY 16 | <u>AMDT NO.</u> 3 | <u>CITY</u> EASTSOUND | <u>STATE</u> WA | <u>AIRPORT ELEVATION</u> 35 | <u>FACILITY</u> RNAV |
|--------------------------|--|----------------------|--------------------------|--------------------|--------------------------------|-------------------------|

PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

| | |
|----------------------|--------------------|
| <u>FROM</u> CANDL | <u>TO</u> EASTD |
|----------------------|--------------------|

| | | | | | |
|--------------------|-------------------------|------------|------------|------------|-------------|
| <u>RNP</u> 1.00 | <u>DISTANCE</u> 6.22 | <u>PAT</u> | <u>MAP</u> | <u>HAT</u> | <u>HMAS</u> |
|--------------------|-------------------------|------------|------------|------------|-------------|

| OBSTRUCTION | COORDINATES | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
|-------------|------------------------|-----------|------|------|----|------|-----|----|------|-------------|---------|
| AAO | 484112.00N/1223945.00W | 1254 | 215 | 8 | 4B | 1000 | | | | AT246 | 2500 |
| TERRAIN | 484206.00N/1224027.00W | 272 (300) | | | | | | | | AS1500 | 1800 |

COMPUTATIONS

| | | | | | | | | | | | |
|------------|-------------|-------------|------------|-------------|-----------|-----------|------------|----------------------|-------------|----------------|-------------------------------|
| <u>ALT</u> | <u>KIAS</u> | <u>KTAS</u> | <u>HAA</u> | <u>VKTW</u> | <u>TR</u> | <u>BA</u> | <u>DTA</u> | <u>COURSE CHANGE</u> | <u>DVEB</u> | <u>VEB OCS</u> | <u>RF CENTER FIX/DISTANCE</u> |
|------------|-------------|-------------|------------|-------------|-----------|-----------|------------|----------------------|-------------|----------------|-------------------------------|

SEGMENT REMARKS:

FEEDER: STEPDOWN

| | |
|----------------------|--------------------|
| <u>FROM</u> EASTD | <u>TO</u> APDON |
|----------------------|--------------------|

| | | | | | |
|--------------------|-------------------------|------------|------------|------------|-------------|
| <u>RNP</u> 1.00 | <u>DISTANCE</u> 6.22 | <u>PAT</u> | <u>MAP</u> | <u>HAT</u> | <u>HMAS</u> |
|--------------------|-------------------------|------------|------------|------------|-------------|

| OBSTRUCTION | COORDINATES | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
|-------------|------------------------|-----------|------|------|----|------|-----|----|------|-------------|---------|
| AAO | 485230.00N/1224024.00W | 502 | 215 | 8 | 4B | 1000 | | | | AT498 | 2000 |
| TERRAIN | 485230.00N/1224024.00W | 301 (300) | | | | | | | | AS1500 | 1800 |

COMPUTATIONS

| | | | | | | | | | | | |
|------------|-------------|-------------|------------|-------------|-----------|-----------|------------|----------------------|-------------|----------------|-------------------------------|
| <u>ALT</u> | <u>KIAS</u> | <u>KTAS</u> | <u>HAA</u> | <u>VKTW</u> | <u>TR</u> | <u>BA</u> | <u>DTA</u> | <u>COURSE CHANGE</u> | <u>DVEB</u> | <u>VEB OCS</u> | <u>RF CENTER FIX/DISTANCE</u> |
|------------|-------------|-------------|------------|-------------|-----------|-----------|------------|----------------------|-------------|----------------|-------------------------------|

SEGMENT REMARKS:



AIRPORT ID
ORS

PROCEDURE NAME
RNAV (GPS) RWY 16

AMDT NO.
3

CITY
EASTSOUND

STATE
WA

AIRPORT ELEVATION
35

FACILITY
RNAV

INITIAL

FROM
SQURL

TO
APDON

RNP
1.00

DISTANCE
7.37

PAT

MAP

HAT

HMAS

| OBSTRUCTION | COORDINATES | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|------------|-----------|-------------|--------------------|----------------|
| AAO | 485330.00N/1223918.00W | 535 | 215 | 8 | 4B | 1000 | | | | AT465 | 2000 |
| TERRAIN | 485330.00N/1223918.00W | 334 (300) | | | | | | | | AS1500 | 1800 |

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE

FROM
APDON (IF/IAF)

TO
CALBI

RNP
1.00

DISTANCE
8.42

PAT

MAP

HAT

HMAS

| OBSTRUCTION | COORDINATES | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|------------|-----------|-------------|--------------------|----------------|
| AAO | 485309.00N/1224121.00W | 447 | 215 | 8 | 4B | 500 | | | | AT953 | 1900 |
| TERRAIN | 485312.00N/1224218.00W | 206 (200) | | | | | | | | AS1500 | 1700 |

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



AIRPORT ID
ORS

PROCEDURE NAME
RNAV (GPS) RWY 16

AMDT NO.
3

CITY
EASTSOUND

STATE
WA

AIRPORT ELEVATION
35

FACILITY
RNAV

FINAL: LP

FROM
CALBI

TO
ZEKIS/1.20 NM TO TALCS

RNP
0.30

DISTANCE
3.08

PAT

MAP

HAT

HMAS

| OBSTRUCTION | COORDINATES | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|------------|-----------|-------------|--------------------|----------------|
| AAO | 484451.00N/1225400.00W | 332 | 215 | 8 | 4B | 250 | | | | RA40 DG138 | 760 |

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LP STEPDOWN

FROM
ZEKIS/1.20 NM TO TALCS

TO
TALCS

RNP
0.30

DISTANCE
1.20

PAT

MAP
TALCS

HAT
345

HMAS

| OBSTRUCTION | COORDINATES | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|------------|-----------|-------------|--------------------|----------------|
| TREE (53-120696) | 484246.93N/1225502.90W | 125 | 20 | 3 | 1A | 250 | | | | | 380 |

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LP

FROM
CALBI

TO
ZEKIS/1.20 NM TO TALCS

RNP
0.30

DISTANCE
3.08

PAT

MAP

HAT

HMAS

| OBSTRUCTION | COORDINATES | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|------------|-----------|-------------|--------------------|----------------|
| AAO | 484451.00N/1225400.00W | 332 | | | | 250 | | | | RA40 DG138 | 760 |

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

QUALITY
39
39

AIRPORT ID
ORS

PROCEDURE NAME
RNAV (GPS) RWY 16

AMDT NO.
3

CITY
EASTSOUND

STATE
WA

AIRPORT ELEVATION
35

FACILITY
RNAV

FINAL: LP STEPDOWN

FROM
ZEKIS/1.20 NM TO TALCS

TO
TALCS

RNP
0.30

DISTANCE
1.20

PAT

MAP
TALCS

HAT
405

HMAS

| OBSTRUCTION | COORDINATES | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|------------|-----------|-------------|--------------------|----------------|
| TREE (53-120696) | 484246.93N/1225502.90W | 125 | 20 | 3 | 1A | 250 | | | | MA65 | 440 |

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV

FROM
CALBI

TO
ZEKIS/1.20 NM TO TALCS

RNP
0.30

DISTANCE
3.08

PAT

MAP

HAT

HMAS

| OBSTRUCTION | COORDINATES | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|------------|-----------|-------------|--------------------|----------------|
| AAO | 484454.00N/1225406.00W | 348 | 215 | 8 | 4B | 250 | | | | RA40 DG122 | 760 |

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV STEPDOWN

FROM
ZEKIS/1.20 NM TO TALCS

TO
TALCS

RNP
0.30

DISTANCE
1.20

PAT

MAP
TALCS

HAT
465

HMAS

| OBSTRUCTION | COORDINATES | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|------------|-----------|-------------|--------------------|----------------|
| TREE (53-121487) | 484230.05N/1225506.62W | 249 | 20 | 3 | 1A | 250 | | | | | 500 |

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

QUALITY
39
39

AIRPORT ID
ORS

PROCEDURE NAME
RNAV (GPS) RWY 16

AMDT NO.
3

CITY
EASTSOUND

STATE
WA

AIRPORT ELEVATION
35

FACILITY
RNAV

FINAL: LNAV

FROM
CALBI

TO
ZEKIS/1.20 NM TO TALCS

RNP
0.30

DISTANCE
3.08

PAT

MAP

HAT

HMAS

| <u>OBSTRUCTION</u> | <u>COORDINATES</u> | <u>ELEV MSL</u> | <u>HORZ</u> | <u>VERT</u> | <u>AC</u> | <u>ROC</u> | <u>OCS</u> | <u>CG</u> | <u>CGTA</u> | <u>ADJUSTMENTS</u> | <u>MIN ALT</u> |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|------------|-----------|-------------|--------------------|----------------|
| AAO | 484454.00N/1225406.00W | 348 | 215 | 8 | 4B | 250 | | | | RA40 DG122 | 760 |

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV STEPDOWN

FROM
ZEKIS/1.20 NM TO TALCS

TO
TALCS

RNP
0.30

DISTANCE
1.20

PAT

MAP
TALCS

HAT
565

HMAS

| <u>OBSTRUCTION</u> | <u>COORDINATES</u> | <u>ELEV MSL</u> | <u>HORZ</u> | <u>VERT</u> | <u>AC</u> | <u>ROC</u> | <u>OCS</u> | <u>CG</u> | <u>CGTA</u> | <u>ADJUSTMENTS</u> | <u>MIN ALT</u> |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|------------|-----------|-------------|--------------------|----------------|
| TREE (53-121487) | 484230.05N/1225506.62W | 249 | 20 | 3 | 1A | 250 | | | | MA101 | 600 |

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



AIRPORT ID
ORS

PROCEDURE NAME
RNAV (GPS) RWY 16

AMDT NO.
3

CITY
EASTSOUND

STATE
WA

AIRPORT ELEVATION
35

FACILITY
RNAV

MISSED APPROACH: LP

FROM
TALCS **TO**
APDON

RNP 0.30 **DISTANCE** **PAT** **MAP** **HAT** **HMAS** 340

| OBSTRUCTION | COORDINATES | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
|------------------|------------------------|-----------|------|------|----|------|-----|----|------|-------------|---------|
| TREE (53-120538) | 484146.55N/1225534.40W | 498 | 20 | 3 | 1A | | ASC | | | | 2000 |
| TREE (53-120877) | 484137.24N/1225527.62W | 669 | 20 | 3 | 1A | 1000 | | | | | 1700 |
| TERRAIN | 484139.00N/1225527.00W | 567 (600) | | | | | | | | AS1000 | 1600 |

COMPUTATIONS

ALT **KIAS** **KTAS** **HAA** **VKTW** **TR** **BA** **DTA** **COURSE CHANGE** **DVEB** **VEB OCS** **RF CENTER FIX/DISTANCE**

SEGMENT REMARKS:

MISSED APPROACH: LNAV

FROM
TALCS **TO**
APDON

RNP 0.30**-1.00 **DISTANCE** **PAT** **MAP** **HAT** **HMAS** 399

| OBSTRUCTION | COORDINATES | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
|------------------|------------------------|-----------|------|------|----|------|-----|-----|------|-------------|---------|
| | | | | | | | ASC | 290 | 880 | | 2000 |
| TREE (53-120877) | 484137.24N/1225527.62W | 669 | 20 | 3 | 1A | 1000 | | | | | 1700 |
| TERRAIN | 484139.00N/1225527.00W | 567 (600) | | | | | | | | AS1000 | 1600 |

COMPUTATIONS

ALT **KIAS** **KTAS** **HAA** **VKTW** **TR** **BA** **DTA** **COURSE CHANGE** **DVEB** **VEB OCS** **RF CENTER FIX/DISTANCE**

SEGMENT REMARKS:



AIRPORT ID
ORS

PROCEDURE NAME
RNAV (GPS) RWY 16

AMDT NO.
3

CITY
EASTSOUND

STATE
WA

AIRPORT ELEVATION
35

FACILITY
RNAV

MISSED APPROACH: LNAV

FROM
TALCS **TO**
APDON

RNP
0.30-1.00

DISTANCE

PAT

MAP

HAT

HMAS
500

| OBSTRUCTION | COORDINATES | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|------------|-----------|-------------|--------------------|----------------|
| TREE (53-120877) | 484137.24N/1225527.62W | 669 | 20 | 3 | 1A | | ASC | | | | 2000 |
| TREE (53-120877) | 484137.24N/1225527.62W | 669 | 20 | 3 | 1A | 1000 | | | | | 1700 |
| TERRAIN | 484139.00N/1225527.00W | 567 (600) | | | | | | | | AS1000 | 1600 |

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

CIRCLING ALL CATS CAT A CAT B CAT C CAT D CAT E NOT AUTHORIZED

| OBSTRUCTION | COORDINATES | RADIUS | HAA | ELEV MSL | HORZ | VERT | AC | ROC | OCS | ADJUSTMENTS | MIN ALT |
|--------------------|------------------------|---------------|------------|-----------------|-------------|-------------|-----------|------------|------------|--------------------|----------------|
| CATEGORY A | | | | | | | | | | | |
| TREE (53-119661) | 484124.32N/1225541.12W | 1.30 | 1025 | 754 | 20 | 10 | 1B | 300 | | | 1060 |
| CATEGORY B | | | | | | | | | | | |
| AAO | 484154.00N/1225157.00W | 1.83 | 1805 | 1536 | 215 | 8 | 4B | 300 | | | 1840 |

CIRCLING REMARKS:

MSA

CENTER **RADIUS**
TALCS 25

| SECTOR | OBSTRUCTION | COORDINATES | BEARING | DISTANCE | ELEV MSL | HORZ | VERT | AC | ROC | OCS | ADJUSTMENTS | MIN ALT |
|---------------|--------------------|------------------------|----------------|-----------------|-----------------|-------------|-------------|-----------|------------|------------|--------------------|----------------|
| 360-360 | AAO | 483824.00N/1221527.00W | 084 | 26.5 | 3566 | 215 | 8 | 4B | 1000 | | | 4600 |

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



AIRPORT ID
ORS

PROCEDURE NAME
RNAV (GPS) RWY 16

AMDT NO.
3

CITY
EASTSOUND

STATE
WA

AIRPORT ELEVATION
35

FACILITY
RNAV

PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

SEA FSS, NUW APP CON, VICTORIA APP CON

WX SERVICE
AWOS-3P

LOCATION
ORS

HRS OPERATION
24

ALTIMETER SOURCE
ORS

DISTANCE

WMSCR
Y

ADJUSTMENTS
0

BACK-UP WX SERVICE
ASOS

LOCATION
FHR

HRS OPERATION
24

ALTIMETER SOURCE
FHR

DISTANCE
12.07

WMSCR
Y

ADJUSTMENTS
39

WX REMARKS:

RASS PRESSURE PATTERNS THE SAME
ORS 35, FHR 113
RA = 38.7.

PRIMARY NAVAID

MONITOR POINT

HRS OPERATION

CAT

| APPROACH AND RUNWAY LIGHTING SYSTEM | RUNWAY MARKINGS | RUNWAY VISUAL RANGE |
|--|------------------------|----------------------------|
| RW16 - REIL (PCL), MIRL (PCL), PAPI-4R (PCL) | NPI-P | |
| RW34 - MIRL (PCL), REIL (PCL), PAPI-2L | NPI-P | |

GLIDESLOPE ANGLE

ELEV RWY THRESHOLD

TCH

ELEV GS ANTENNA

DISTANCE FROM RWY

VGSI ANGLE
3.48

TCH
35.0

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD
ON CENTERLINE

4500 FT FROM THRESHOLD
FT FROM CENTERLINE

DISPLACED THRESHOLD DISTANCE

CRITICAL TEMPERATURES

CRITICAL LOW

CRITICAL HIGH

ACT

APT ISA

CRITICAL TEMPERATURE REMARKS:

"VISUAL PORTION OF FINAL" PENETRATIONS

| FINAL TYPE | CIRCLING RWY 34: |
|--|--|
| 20:1 | |
| 307 TREE (53-037414) 484144.69N/1225447.76W (125.03) | 320 TREE (53-037428) 484141.59N/1225447.88W (122.32) |
| 315 TREE (53-119705) 484141.43N/1225446.88W (116.52) | 316 TREE (53-037429) 484140.48N/1225447.92W (112.7) |
| 291 TREE (53-037413) 484145.41N/1225446.41W (112.7) | 314 TREE (53-119826) 484140.10N/1225448.80W (108.76) |
| 284 TREE (53-063086) 484142.39N/1225445.95W (90.4) | 258 TREE (53-038098) 484146.46N/1225447.01W (85.01) |
| 267 TREE (53-063026) 484144.25N/1225445.53W (82.83) | 259 TREE (53-037418) 484144.97N/1225443.84W (78.5) |



| <u>AIRPORT ID</u> ORS | <u>PROCEDURE NAME</u> RNAV (GPS) RWY 16 | <u>AMDT NO.</u> 3 | <u>CITY</u> EASTSOUND | <u>STATE</u> WA | <u>AIRPORT ELEVATION</u> 35 | <u>FACILITY</u> RNAV |
|--|--|----------------------|---|--------------------|--------------------------------|-------------------------|
| 290 TREE (53-036362) 484138.76N/1225447.19W (77.99) | | | 266 TREE (53-037415) 484143.25N/1225446.79W (76.75) | | | |
| 211 TREE (53-063020) 484151.47N/1225445.55W (63.41) | | | 237 TREE (53-118621) 484145.95N/1225444.04W (61.46) | | | |
| 220 TREE (53-063023) 484149.27N/1225446.07W (61.26) | | | 241 TREE (53-119434) 484144.73N/1225444.34W (59.28) | | | |
| 98 TREE (53-037461) 484212.53N/1225441.29W (57.18) | | | 207 TREE (53-119511) 484150.28N/1225444.25W (53.4) | | | |
| 268 TREE (53-063092) 484138.15N/1225449.04W (52.88) | | | 251 TREE (53-036193) 484141.19N/1225445.36W (51.33) | | | |
| 267 TREE (53-121534) 484137.58N/1225446.75W (49.02) | | | 263 TREE (53-036211) 484137.85N/1225444.28W (46.41) | | | |
| 98 TREE (53-038463) 484209.76N/1225434.76W (43.22) | | | 250 TREE (53-118188) 484139.60N/1225443.70W (42.29) | | | |
| 98 TREE (53-121290) 484209.23N/1225434.92W (40.53) | | | 192 TREE (53-038093) 484150.61N/1225444.80W (40.07) | | | |
| 218 TREE (53-119669) 484145.24N/1225442.82W (38.88) | | | 253 TREE (53-036364) 484137.96N/1225445.97W (36.95) | | | |
| 226 TREE (53-037416) 484143.13N/1225444.51W (36.17) | | | 193 TREE (53-038095) 484149.62N/1225443.77W (36.06) | | | |
| 183 TREE (53-036194) 484151.41N/1225443.62W (35.13) | | | 116 TREE (53-038528) 484204.50N/1225442.82W (34.47) | | | |
| 188 TREE (53-120137) 484150.28N/1225443.62W (34.41) | | | 170 TREE (53-062958) 484153.64N/1225444.88W (33.42) | | | |
| 97 TREE (53-120106) 484207.69N/1225434.92W (31.73) | | | 251 TREE (53-036365) 484137.09N/1225446.72W (30.53) | | | |
| 240 TREE (53-036363) 484138.91N/1225444.37W (28.78) | | | 104 TREE (53-038483) 484205.58N/1225433.85W (28.05) | | | |
| 176 TREE (53-121143) 484151.38N/1225443.00W (27.99) | | | 249 TREE (53-036216) 484136.25N/1225447.73W (24.27) | | | |
| 161 TREE (53-117955) 484153.58N/1225444.09W (24.12) | | | 88 TREE (53-038466) 484207.90N/1225434.63W (23.8) | | | |
| 98 TREE (53-038643) 484205.88N/1225442.61W (23.47) | | | 216 TREE (53-037427) 484142.23N/1225441.91W (21.64) | | | |
| 99 TREE (53-119911) 484205.19N/1225436.11W (21.05) | | | 121 TREE (53-036345) 484200.67N/1225444.22W (20.05) | | | |
| 164 TREE (53-036199) 484151.97N/1225441.48W (18.99) | | | 70 TREE (53-118448) 484210.43N/1225436.18W (18.6) | | | |
| 69 TREE (53-064353) 484210.62N/1225435.86W (18.56) | | | 155 TREE (53-119889) 484153.58N/1225442.92W (18.14) | | | |
| 183 TREE (53-120959) 484147.94N/1225441.40W (17.57) | | | 139 TREE (53-036200) 484156.48N/1225444.31W (16.82) | | | |
| 83 TREE (53-038488) 484207.42N/1225442.61W (16.27) | | | 91 TREE (53-038482) 484205.75N/1225435.56W (15.89) | | | |
| 85 TREE (53-038470) 484206.70N/1225436.82W (14.69) | | | 139 TREE (53-038383) 484156.05N/1225440.64W (14.68) | | | |
| 183 TREE (53-038096) 484147.30N/1225444.70W (14.29) | | | 180 TREE (53-063018) 484147.61N/1225441.12W (12.91) | | | |
| 111 TREE (53-038456) 484201.11N/1225441.05W (12.31) | | | 82 TREE (53-038469) 484206.70N/1225435.11W (11.71) | | | |
| 56 TRAVERSE_WAY (53-038481) 484211.54N/1225441.09W (10.16) | | | 92 TREE (53-064357) 484204.38N/1225433.27W (9.97) | | | |
| 168 TREE (53-036202) 484149.39N/1225441.51W (9.92) | | | 145 TREE (53-036195) 484153.78N/1225442.85W (9.15) | | | |
| 230 TREE (53-119470) 484136.82N/1225444.97W (8.19) | | | 215 TREE (53-036357) 484139.77N/1225442.91W (8.16) | | | |
| 73 TREE (53-038467) 484207.70N/1225436.42W (7.76) | | | 88 TREE (53-038353) 484204.72N/1225435.93W (7.67) | | | |
| 97 TREE (53-038529) 484202.95N/1225443.39W (7.61) | | | 91 TREE (53-121059) 484203.73N/1225434.53W (5.67) | | | |
| 170 BUILDING (53-038101) 484148.14N/1225445.59W (5.54) | | | 231 TREE (53-118380) 484136.09N/1225446.75W (5.47) | | | |
| 60 TREE (53-038464) 484209.68N/1225436.45W (4.79) | | | 64 TREE (53-038465) 484208.66N/1225435.76W (3.63) | | | |
| 201 TREE (53-120513) 484141.49N/1225441.99W (2.88) | | | 205 TREE (53-036356) 484140.62N/1225441.57W (2.48) | | | |
| 176 TREE (53-036204) 484146.22N/1225440.40W (1.87) | | | 190 BUILDING (53-119787) 484143.46N/1225444.27W (1.84) | | | |
| 53 TRAVERSE_WAY (53-062785) 484210.48N/1225441.37W (1.79) | | | 50 TRAVERSE_WAY (53-038447) 484210.86N/1225437.73W (0.76) | | | |

QUALITY
39
CHECKED

AIRPORT ID
ORS

PROCEDURE NAME
RNAV (GPS) RWY 16

AMDT NO.
3

CITY
EASTSOUND

STATE
WA

AIRPORT ELEVATION
35

FACILITY
RNAV

214 TREE (53-063085) 484138.45N/1225443.03W (0.47)

FINAL TYPE LP/LNAV:

34:1

18 VEGETATION (53-119431) 484248.12N/1225436.00W (1.35)

16 GENERAL_UTILITY (53-119998) 484247.69N/1225438.47W (0.65)

PENETRATIONS REMARKS:

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PENETRATIONS REMARKS:

PART C: GENERAL REMARKS:

VDP NOT ESTABLISHED - VDP WITHIN 0.5 NM OF MAP.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

PER FPT E-MAIL MSG: 2_15_2018_FPT_ORS RNAV (GPS) RWY 16: 86 FT SHIP HEIGHT.

FAC OFFSET 30 DEGREES PER FPT

120 FT VEGETATION PER FPT.

TAA, LPV AND LNAV/VNAV NOT DEVELOPED PER FPT.

ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



AIRPORT ID
ORS

PROCEDURE NAME
RNAV (GPS) RWY 16

AMDT NO.
3

CITY
EASTSOUND

STATE
WA

AIRPORT ELEVATION
35

FACILITY
RNAV

PART D: AIRSPACE

DOCKET #

ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE

| | | | |
|------------------------|-------|--|--------|
| DISTANCE FROM | THLD | TO 1000FT POINT | 2.35 |
| WIDTH OF | FINAL | SEGMENT AT 1000FT POINT | 1.20 |
| TRUE COURSE OF | FINAL | SEGMENT CONTAINING 1000FT POINT | 210.24 |
| HIGH TERRAIN IN | FINAL | SEGMENT CONTAINING 1000FT POINT | 100 |
| DISTANCE FROM | THLD | TO 1500FT POINT | 4.42 |
| WIDTH OF | FINAL | SEGMENT AT 1500FT POINT | 1.57 |
| TRUE COURSE OF | FINAL | SEGMENT CONTAINING 1500FT POINT | 210.24 |
| HIGH TERRAIN IN | FINAL | SEGMENT CONTAINING 1500FT POINT | 100 |

THRESHOLD COORDINATES (IF STR-IN)

484244.32N/1225438.07W

ARP COORDINATES

484230.01N/1225438.14W

RUNWAY APCH END AND DIST FURTHEST FROM ARP

RUNWAY 16 DISTANCE 0.24 NM

FAF COORDINATES

484710.26N/1225122.68W

FIX NAME COORDINATES

REMARKS

PART E: PREPARED BY

NAME

CASIMIR L. TABAKA (CHRISTOPHER D. WILKINSON)

OFFICE

AJV-A432

DATE

04/16/2025

TITLE

AERONAUTICAL INFORMATION SPECIALIST

