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 AIRPORT ID ASTORIA RGNL KAST | | | PROCEDURE NAME RNAV (GPS) RWY 8 | | | RIGINAL/ | AMENDMENT 1 | <u>CITY</u> ASTORIA | <u>STATE</u> OR |
|---|-------------------------------|---|------------------------------------|----------|----------------|----------------------------------|----------------|------------------------|--------------------|
| AIRPORT ELEVATION 14 | TDZESUPERSEDED14RNAV (GPS) RW | | 8 | | | NAL/AMENDMENTDATEDORIG-A12/11/20 | | <u>MAG VAR</u> 15E | EPOCH YEAR 2020 |
| FACILITY RNAV | COORDINATES OF I | FACILITIES ACTUAL EFFEC 19 JULY 2018 | | | <u>SUSPEND</u> | | | | |
| TERMINAL ROUTES | | | | | | | | | |
| FROM | FIX TYPE | <u>T0</u> | FIX TYPE | LEG TYPE | FO/FB | <u>RNP</u> | COURSE | DISTANCE | ALTITUDE |
| ILWAC | IAF | SEAME | | TF | FB | 1.00 | 152.58 | 9.46 | 2000 |
| SEAME | IF | SAAND | | TF | FB | 1.00 | 080.30 | 5.00 | 1700 |
| SAAND | FAF | HISET/2.00 NM TO RW08 | | TF | FB | 0.30 | 080.39 | 3.18 | |
| HISET/2.00 NM TO RWO | 08 | RW08 | MAP | TF | FO | 0.30 | 080.39 | 2.00 | |
| RW08 | MAP | 500 MSL | | CA | | | 080.39 | | 500 |
| 500 MSL | | SEAME | | DF | FO | 1.00 | | | 2000 |

MISSED APPROACH

MAP:

LP: RW08 LNAV: RW08

MISSED APPROACH INSTRUCTIONS:

(DO NOT EXCEED 225 KIAS UNTIL SEAME) CLIMB TO 500, THEN CLIMBING RIGHT TURN TO 2000 DIRECT SEAME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

| <u>AIRPORT</u> ASTORIA RGNL | AIRPORT KAST | ID | PROCEDUR RNAV (GPS | | ORIGINAL/AMENDMENT 1 | <u>CITY</u> ASTORIA | STATE OR |
|--|---------------------------|----------------------|-----------------------|---------------------|-------------------------|------------------------|-------------|
| | | | | | | | |
| PROFILE: | | | | | | | |
| 1. PT SIDE OF COURSE | OUTBOUND | FT WITHI | N MILES | OF (IAF) | | | |
| 2. PROFILE STARTS AT SEAME | | | | | | | |
| 3. FAC: 080.39 FAF: SAAN | D D | IST FAF TO MAP: 5.18 | 3 | DIST FAF TO THLD: 5 | 5.18 | | |
| 4. MIN ALT: SEAME 2000, SAAN | ND 1700, HISET/2.00 NM TC | D RW08 680 | | | | | |
| 5. DIST TO THLD FROM OM: | MM: | IM: | 150 HAT: | HAT: | | | |
| 6. MIN GP INCPT: | GP ALT AT FAF : | | | OM: | MM: | IM: | |
| 7. GP ANGLE: | 34:1: IS NOT CLEAR | 20:1: IS CLEAR | TCH: | | | | |
| 8. MSA FROM: RW08 4500 | | | | | | | |

PBN EQUIPMENT REQUIREMENTS NOTES

PBN REQUIREMENTS NOTE: RNP APCH.

NOTES:

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ILWAC ON V112 WESTBOUND AND ON T257 NORTHBOUND. CHART NOTE: RWY 8 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: CIRCLING RWY 32 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON. SAAND TO RW08: 3.00/37.9. CHART W-570 CHART VDP AT 1.16 NM TO RW08 WAAS CHANNEL #40032 REFERENCE PATH ID: W08A CHART FAS OBST: 164 TREE 460929N/1235433W. CHART FAS OBST: 200 TREE 460909N/1235422W. HOLD NW, LT, 152.58 INBOUND LTP HAE: -19.8M

MINIMUMS:

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



CAT C 1100-3, CAT D 1200-3

| CATEGORY: | A | | В | | С | | 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 |
| LP MDA | 420 | 1 | 406 | 420 | 1 | 406 | 420 | 1 1/8 | 406 | 420 | 1 1/8 | 406 | | | |
| LNAV MDA | 460 | 1 | 446 | 460 | 1 | 446 | 460 | 1 3/8 | 446 | 460 | 1 3/8 | 446 | | | |
| CIRCLING | 660 | 1 | 646 | 800 | 1 | 786 | 1080 | 3 | 1066 | 1160 | 3 | 1146 | | | |

OVALIT_ 10 CHECKED

| AIRPORT | AIRPORT ID | PROCEDURE NAME | ORIGINAL/AMENDMENT | <u>CITY</u> | <u>STATE</u> |
|--------------|------------|------------------|--------------------|-------------|--------------|
| ASTORIA RGNL | KAST | RNAV (GPS) RWY 8 | 1 | ASTORIA | OR |
| | | | | | |

CHANGES - REASONS

1. TERMINAL ROUTES, PROFILE LINE 3 - FAC AND ADDITIONAL FLIGHT DATA - HOLDING: ALL HEADINGS/COURSES CHANGED 4 DEGREES - MAG VAR UPDATED FROM 19E, EPOCH YEAR 1990 TO 15E, EPOCH YEAR 2020.

2. TERMINAL ROUTES, SEAME TO SAAND, RNP VALUE CHANGED FROM 0.50 TO 1.00.

3. PROFILE, LINE 7, 20:1 IS CLEAR ADDED - IAW 8260.19H PARA 8-6-7G(3).

4. LP MINIMA: CATS A-D CHANGED FROM 380 MDA/367 HATH TO 420 MDA/406 HAT. CATS C-D VISIBILITY CHANGED FROM 1 TO 1 1/8 - UPDATED CONTROLLING OBSTACLE.

5. LNAV MINIMA: CATS A-D, 447 HATH CHANGED TO 446 HAT - PROCEDURES WITH CHARTED THRE TO BE AMENDED TO USE TDZE PER MEMO 203 DATED FEB 21, 2014.

6. CIRCLING MINIMA: CAT A CHANGED FROM 700 MDA/685 HAA TO 660 MDA/646 HAA, CAT B CHANGED FROM 760 MDA/745 HAA TO 800 MDA/786 HAA, CAT C CHANGED FROM 800 MDA/785 HAA/2 1/4 VIS TO 1080 MDA/1066 HAA/3 VIS AND CAT D CHANGED FROM 900 MDA/885 HAA TO 1160 MDA/1146 HAA - NEW CIRCLING CRITERIA APPLIED.

7. ADDITIONAL FLIGHT DATA, FAS OBST DELETED: 129 TREE 460947N/1235422W AND FAS OBST ADDED: 164 TREE

460929N/1235433W - UPDATED FAS OBSTACLE.

8. ADDITIONAL FLIGHT DATA, NOTE CHANGED FROM 'CHART VDP AT 1.03 NM TO RW08' TO 'CHART VDP AT 1.16 NM TO RW08' - UPDATED EVALUATION.

9. ADDITIONAL FLIGHT DATA, NOTE ADDED: CHART CIRCLING ICON - NEW CIRCLING CRITERIA APPLIED.

10. ADDITIONAL FLIGHT DATA, MAG VAR CHANGED FROM 19E 1990 TO 15E 2020.

11. NOTE ADDED: PBN REQUIREMENTS NOTE: RNP APCH - PER MEMO 257.

12. NOTE DELETED: DME/DME RNP-0.3 NA - PER MEMO 257.

13. NOTE DELETED: VDP NA WITH KELSO ALTIMETER SETTING - PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.

14. NOTE DELETED: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE KELSO ALTIMETER SETTING AND INCREASE ALL MDA 100 FEET, INCREASE LNAV CATS C AND D AND CIRCLING CAT B VISIBILITY 1/4 MILE, LP CATS C AND D VISIBILITY 3/8 MILE, AND CIRCLING CAT C VISIBILITY 1/2 MILE - PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.

15. NOTE DELETED: LIMIT MISSED APPROACH TO 225 KIAS AND ADDED TO MISSED APPROACH INSTRUCTIONS - IAW .19H PARA 8-6-6D (11).

16. NOTE DELETED: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - 34:1 PENETRATIONS PUBLISHED IAW 8260.19H PARA 8-6-11K(3).

17. NOTE ADDED: RWY 8 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - 34:1 PENETRATIONS PUBLISHED IAW 8260.19H PARA 8-6-11K(3).

18. NOTE ADDED: CIRCLING RWY 32 NA AT NIGHT - 20:1 CIRCLING PENETRATIONS - PUBLISHED IAW 8260.19H PARA 8-6-11O(2)(G).

19. NOTE DELETED: ALTERNATE MINIMUMS NA WHEN LOCAL WEATHER NOT AVAILABLE - PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.

20. ALTERNATE MINS NOTE UPDATED FROM '@ CAT C 800-2 1/4, CAT D 900-3' TO '@ CAT C 1100-3, CAT D 1200-3' - CIRCLING CAT C/D MDAS ABOVE STANDARD.

21. AIRPORT ELEV CHANGED FROM 15 TO 14 AND THRE 13 CHANGED TO TDZE 14 - NEW SURVEY DATA.

22. CRC REMAINDER CHANGED FROM D3095417 TO 8F56284B - LTP/FPAP COORDINATES AND LTP/FTP ELLIPSOIDAL HEIGHT UPDATED.

8260-3 PDF EDITED:

1. ADDITIONAL FLIGHT DATA, ADDED 'CHART FAS OBST:' BEFORE 200 TREE 460909N/1235422W.

2. ADDITIONAL FLIGHT DATA, LTP HAE: -19.8.

3. ALTERNATE, 'STANDARD' DELETED.

4. FAS DATA BLOCK, LTP/FTP ELLIPSOIDAL HEIGHT, CHANGED TO -00198.

8260-9 PDF EDITED:

1. CIRCLING CAT C ADJUSTMENTS, DELETED DUPLICATE AC50.

2. AIRSPACE FORM, RUNWAY APCH END AND DIST FURTHEST FROM ARP.

| AIRPORT ASTORIA RGNL | | | ORIGINAL/AMENDMENT 1 | <u>CITY</u> ASTORIA | <u>STATE</u> OR |
|---|---|---------------------------|-------------------------|-------------------------|--------------------|
| <u>coordinated with:</u> a4a X alpa X aopa X | apa 🗌 hai 🗌 nbaa 🗶 | OTHER: ZSE, AMGR | | | |
| <u>FLIGHT CHECKED BY</u> PENDING | Digitally signed by DONALD H LANIER | <u>OFFICE</u> FIOG | DATE | | |
| DEVELOPED BY Digitally signed by | Jun 12, 2018 | OFFICE | DATE | | |
| ANDREA CHANEY ANDREA J CHANEY | Ŷ | AJV-5433 | 04/05/2018 | | |
| PATRICK MULQUEEN | <i>tally signed by</i> ALD H LANIER un 12, 2018 | <u>OFFICE</u> AJV-5430 | DATE | <u>TITLE</u> MANAGER | |

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| <u>AIRPORT</u> ASTORIA RGNL | AIRPORT ID KAST | PROCEDURE NAME RNAV (GPS) RWY 8 | ORIGINAL/AMENDMENT 1 | <u>CITY</u> ASTORIA | <u>STATE</u> OR |
|--|--------------------|------------------------------------|-------------------------|------------------------|--------------------|
| | | | | | |
| FAS DATA BLOCK INFORMATION | | | | | |
| DATA FIELD | DATA | | | | |
| OPERATION TYPE | 0 | | | | |
| SBAS SERVICE PROVIDER IDENTIFIER | 0 | | | | |
| AIRPORT IDENTIFIER | KAST | | | | |
| RUNWAY | RW08 | | | | |
| APPROACH PERFORMANCE DESIGNATOR | 0 | | | | |
| ROUTE INDICATOR | | | | | |
| REFERENCE PATH DATA SELECTOR | 0 | | | | |
| REFERENCE PATH IDENTIFIER (APPROACH | ID) W08A | | | | |
| LTP/FTP LATITUDE | 460935.2 | 205N | | | |
| LTP/FTP LONGITUDE | 1235318 | .8335W | | | |
| LTP/FTP ELLIPSOIDAL HEIGHT | -00198 | | | | |
| FPAP LATITUDE | 460926.5 | 5970N | | | |
| FPAP LONGITUDE | 1235111 | .2430W | | | |
| THRESHOLD CROSSING HEIGHT (TCH) | 00038.0 | | | | |
| TCH UNITS SELECTOR (METERS OR FEET US | SED) 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) | 0.0 | | | | |
| CRC REMAINDER | 8F56284 | ŀΒ | | | |
| ADDITIONAL PATH POINT RECORD INFORM | ATION | | | | |
| ICAO CODE | K1 | | | | |
| LTP ORTHOMETRIC HEIGHT | +00038 | | | | |

FPAP ORTHOMETRIC HEIGHT

+00038

0^{NAL/}72 10 CHECKED