Flight Procedure Tracking Form	Action: NEW	Task Type: IAP	Date Open: 03/09/2011	Task #: 2011030931402501001	Request #: 20110309314025
Procedure: RNAV (RNP) Z RWY 16 R ORIG		Airport ID: KSEA	Airport: SEATTLE-TACOMA INTL		Reimbursable #:
City: SEATTLE	ST: WA	GPS #:		Estimated Chart Date: 03/07/2013	FICO #: 1097819
Fac ID:	Fac. Type: RNP	Specialist: JON DENTON			

Procedure Review

	Rec'd	Rel'd	Full Name	Comments
Lead:				
QA:				
Liaison:				

Procedure Comments: ENROUTE **Remark Type:** INFORMATION

SEATTLE, WA SEATTLE-TACOMA INTL (KSEA) RNAV (RNP) Z RWY 16R, ORIG (RNP) ENROUTE-YES FC: 1.8.13 PUB: 3.7.13

ATTACHED FORMS: 8260-3; 8260-10; 8260-9; 8260-2(S): AGANE-INT, REV 2; BUGNE-INT, REV 2; CFBRH, ORIG; CFBRK, ORIG; CELAK-INT, REV 2; COPEX, ORIG; DLTNN, REV 1; FERIE, REV 1; FINKA-INT, REV 1; GRIFY, REV 1; HEGEM, REV 1; MOONZ, ORIG; PINTR, REV 1; PPAUL, REV 1; RAYUU, REV 1; SEGAW, REV 1; VASHN, ORIG; WOTIK, REV 1; ZERLI-INT, REV 1; (INFO ONLY) PAINE (PAE) VTAC, REV 7.

CONTACT: PETE GETZ/LONNIE EVERHART-AVN-130 LEADS, 405.954.2079/ 405.954.4576.

RNAV (RNP) Z RWY 16R
SEATTLE-TACOMA INTL (SEA)

APP CRS	Rwy Idg	8500
163°	THRE	415
	Apt Elev	433

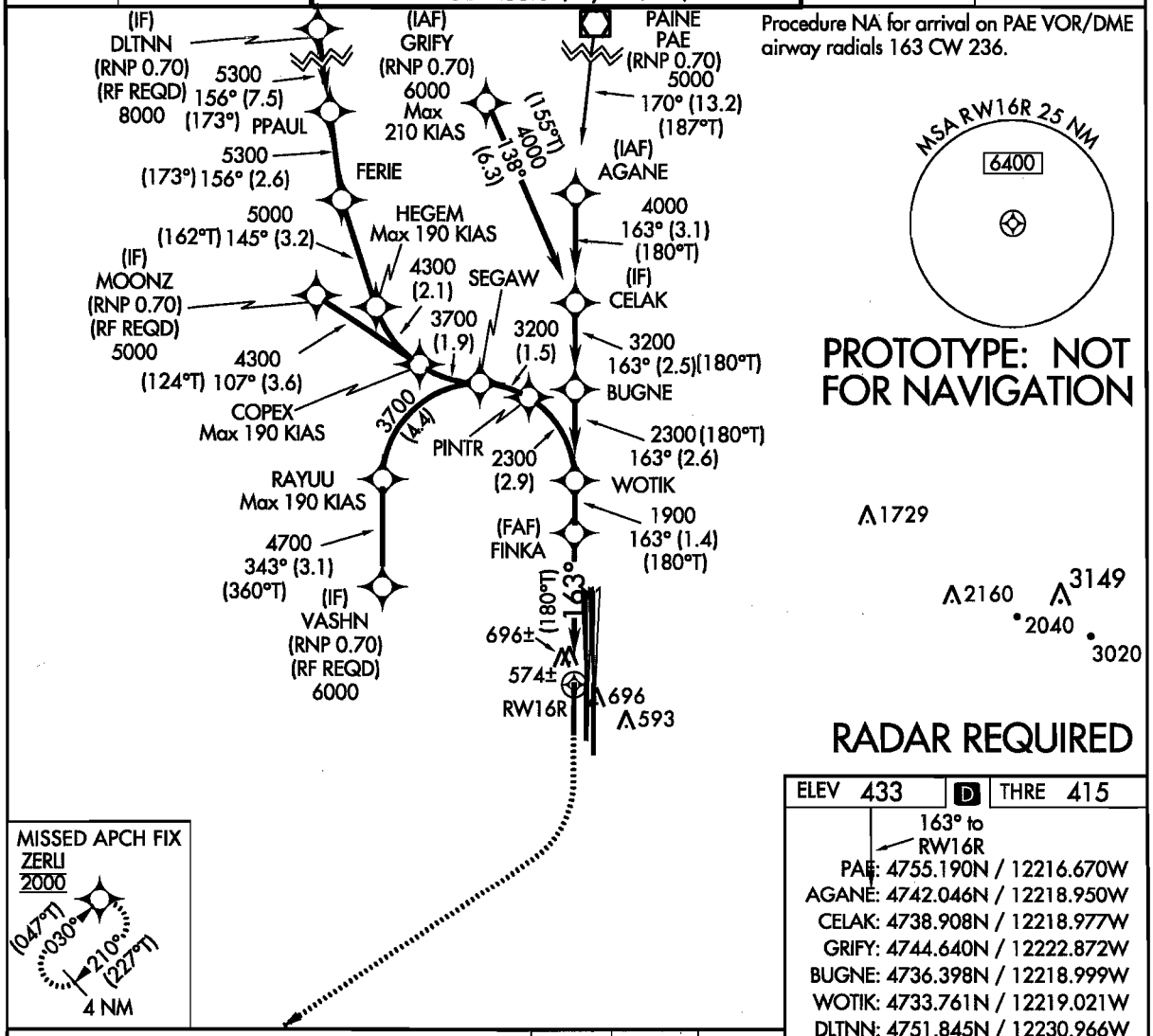
For uncompensated Baro-VNAV systems, procedure NA below -8°C (18°F) or above 54°C (130°F). When VGSI inop, procedure NA at night. For inoperative ALSF, increase RNP 0.30 all Cats visibility to 1½. Simultaneous approach authorized with Rwy 16C/L, except for arrivals at DLTNN, MOONZ and VASHN. GPS required. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

ALSF-2

MISSED APPROACH: Climb to 900 then climbing right turn direct ZERLI to cross ZERLI at 2000 and hold. When authorized by ATC, climb-in-hold to 5000

ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON	CLNC DEL
118.0	133.65 273.45	119.9 239.3 (Rwys 16C/34C, 16L/34R) 120.95 239.3 (Rwy 16R/34L)	121.7	128.0

Procedure NA for arrival on PAE VOR/DME airway radials 163 CW 236.



PROTOTYPE: NOT FOR NAVIGATION

1729
2160
3149
2040
3020

RADAR REQUIRED

ELEV 433	D	THRE 415

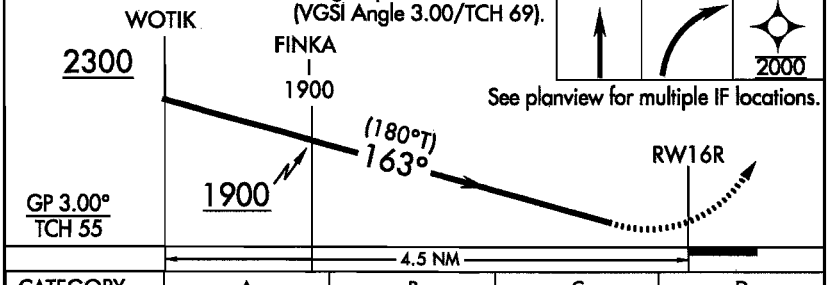
163° to RW16R

PAE: 4755.190N / 12216.670W
AGANE: 4742.046N / 12218.950W
CELAK: 4738.908N / 12218.977W
GRIFY: 4744.640N / 12222.872W
BUGNE: 4736.398N / 12218.999W
WOTIK: 4733.761N / 12219.021W
DLTNN: 4751.845N / 12230.966W
PPAUL: 4744.373N / 12229.528W
FERIE: 4741.834N / 12229.037W
HEGEM: 4738.766N / 12227.580W
COPEX: 4737.113N / 12225.736W
MOONZ: 4739.095N / 12230.115W
SEGAW: 4736.579N / 12223.152W
VASHN: 4730.690N / 12227.322W
RAYUU: 4733.786N / 12227.304W
PINTR: 4736.178N / 12221.027W
FINKA: 4732.318N / 12219.033W
RW16R: 4727.830N / 12219.071W
ZERLI: 4716.266N / 12235.201W

HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

MISSED APCH FIX
ZERLI
2000
047°T
030°
210°
227°T
4 NM

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 69).



See planview for multiple IF locations.

CATEGORY	A	B	C	D
RNP 0.30 DA	858/50 443 (500-1)			

AUTHORIZATION REQUIRED

US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, TITLE 14 CFR PART 97.33

Bearings, headings, courses, 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 in feet RVR.

TERMINAL ROUTES

FROM	TO	COURSE AND DISTANCE	ALTITUDE
PAE VOR/DME	AGANE (TF) (FB) (RNP 1.00)	169.68 / 13.24	5000
AGANE (IAF)	CELAK (TF) (FB) (RNP 1.00)	163.33 / 3.14	4000
GRIFY (IAF)	CELAK (TF) (FB) (RNP 1.00)	138.33 / 6.31	4000
CELAK (IF)	BUGNE (TF) (FB) (RNP 0.70)	163.33 / 2.51	3200
BUGNE	WOTIK (TF) (FB) (RNP 0.70)	163.33 / 2.64	2300
(SEE FORM 8260-10)			

MISSED APPROACH

RNP: DA

CLIMB TO 900 THEN CLIMBING RIGHT DIRECT ZERLI TO CROSS ZERLI AT 2000 AND HOLD. WHEN AUTHORIZED BY ATC, CONTINUE CLIMB IN HOLD TO 5000.

ADDITIONAL FLIGHT DATA:
HOLD SW, RT, 030.00 INBOUND.
CHART FAS OBST: 574 TREE 472828N/1221936W
CHART LOC RWY 16C/L.
DISTANCE TO THLD FROM 443 HATH: 1.22 NM.
#TCH 469.9 MSL (DO NOT CHART).
CHART MANDATORY 2000 AT ZERLI.
ROUTE TYPE: A, H
ROUTE TYPE QUALIFIER 1: F
ROUTE TYPE QUALIFIER 2: S
CHART AT OR ABOVE 6000 AT VASHN.
CHART AT OR ABOVE 6000 AT GRIFY.
CHART AT OR ABOVE 5000 AT MOONZ.
CHART AT OR ABOVE 8000 AT DLTNN.

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. PROFILE STARTS AT WOTIK
3. FAC: 163.33 FAF: ____ DIST FAF TO MAP: ____ THLD: ____
4. MIN. ALT: WOTIK 2300, FINKA 1900
5. DIST TO THLD FROM OM: 4.49 MM: ____ IM: ____ 150 HAT: ____ 100 HAT: ____ GS ANT: ____
6. MIN GS INCPT: 1900 GS ALT AT: FINKA 1900 OM: ____ MM: ____ IM: ____
7. GS ANGLE: 3.00 TCH: 54.9# 34:1 IS CLEAR
8. MSA FROM: RW16R 6400

MAG VAR: 17E EPOCH YEAR: 2010

MINIMUMS

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

CATEGORY =====>	A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
AUTHORIZATION REQUIRED															
RNP 0.30 DA	858	5000	443	858	5000	443	858	5000	443	858	5000	443			

NOTES:
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -8C (18F) OR ABOVE 54C (130F).
CHART NOTE: FOR INOPERATIVE ALSF, INCREASE RNP 0.30 ALL CATS VISIBILITY TO 1 1/2.
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 16C/L, EXCEPT FOR ARRIVALS AT DLTNN, MOONZ
(SEE FORM 8260-10)

QUALITY 4 CHECKED

CITY AND STATE	ELEVATION: 433 THRE: 415 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
SEATTLE, WA	SEATTLE-TACOMA INTL	RNAV	RNAV (RNP) Z RWY 16R, ORIG	AMDT: NONE
				DATED

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
[ ] YES [X] NO		**ROUTINE**

COORDINATED WITH:

ATA	AAT	ALPA	APA	AOPA	NBAA	OTHER (specify)
[X]	[ ]	[X]	[X]	[X]	[X]	[X] **ZSE, SEA APP CON, SEA ATCT, AMGR**

FLIGHT CHECKED BY

NAME:	FIFO	DATE:
JAMES MICHAEL MEEK	**FIOG**	**12/27/2012**

DEVELOPED BY

NAME:	FIFO	DATE:
JON DENTON	**AJV-354**	**10/17/2012**

APPROVED BY

NAME:		FIFO	DATE:
DEZ SILAGYI	**MANAGER**	**AJV-354**	

CHANGES:

ORIGINAL.

REASONS:

ATC AND FPT REQUEST.

12/12/2012: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 10/17/2012.
CHANGED MISSED APPROACH INSTRUCTIONS TO READ: CLIMB TO 900 THEN CLIMBING RIGHT DIRECT ZERLI TO CROSS ZERLI AT 2000 AND HOLD. WHEN AUTHORIZED BY ATC, CONTINUE CLIMB IN HOLD TO 5000.

01/02/2013: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 10/17/2012.
1. REMOVED NOTE, WHEN VGSI INOP, PROCEDURE NA AT NIGHT; 20:1 PENETRATION REMOVED BY AIRPORT MGMT.
2. CHANGED 34:1 IS NOT CLEAR TO 34:1 IS CLEAR ON LINE 7.

SEE 8260-10

QUALITY CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (RNP) - STANDARD,
INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
DLTNN (IF)	PPAUL (TF) (FB) (RNP 1.00)	155.60 / 7.54	5900
PPAUL	FERIE (TF) (FB) (RNP 1.00)	155.57 / 2.56	5300
FERIE	HEGEM (TF) (FB) (RNP 1.00)	145.21 / 3.22	5000
HEGEM	COPEX (RF) (FB) (RNP 1.00)	(3.15 NM RADIUS CCW (CFBRK) / 2.11	4300
MOONZ (IF)	COPEX (TF) (FB) (RNP 1.00)	106.79 / 3.56	4300
COPEX	SEGAW (RF) (FB) (RNP 0.90)	(3.15 NM RADIUS CCW (CFBRK) / 1.85	3700
VASHN (IF)	RAYUU (TF) (FB) (RNP 1.00)	343.23 / 3.10	4700
RAYUU	SEGAW (RF) (FB) (RNP 1.00)	(2.80 NM RADIUS CW (CFBRH) / 4.40	3700
SEGAW	PINTR (RF) (FB) (RNP 0.70)	(2.80 NM RADIUS CW (CFBRH) / 1.51	3200
PINTR	WOTIK (RF) (FB) (RNP 0.70)	(2.80 NM RADIUS CW (CFBRH) / 2.90	2300
WOTIK	FINKA (TF) (FB) (RNP 0.70)	163.33 / 1.44	1900
FINKA (FAF)	RW16R (MAP) (TF) (FO)	163.33 / 4.49	
RW16R (MAP)	900 MSL (CA)	163.33	900
900 MSL	ZERLI (DF) (FO)		2000

NOTES, (CONT.):
AND VASHN.
CHART NOTE: GPS REQUIRED.
CHART PLANVIEW NOTE AT COPEX : MAX 190 KIAS.
CHART PLANVIEW NOTE AT GRIFY : MAX 210 KIAS.
CHART PLANVIEW NOTE AT HEGEM : MAX 190 KIAS.
CHART PLANVIEW NOTE AT RAYUU : MAX 190 KIAS.
CHART PLANVIEW NOTE: RADAR REQUIRED.

QUALITY A CHECKED

CITY AND STATE	ELEVATION: 433 THRE: 415	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
SEATTLE, WA	AIRPORT NAME: SEATTLE-TACOMA INTL	RNAV	RNAV (RNP) Z RWY 16R, ORIG	AMDT: NONE
				DATED:

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY

NAME:	FIFO	DATE:

DEVELOPED BY

NAME:	FIFO	DATE:

APPROVED BY

NAME:	FIFO	DATE:

CHANGES:

REASONS:

REASONS CONT.
01/10/2013: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 10/17/2012.
1. ADDED PLANVIEW NOTE MAX 210 KTS AT GRIFY.
2. CORRECTED MIS-SPELLED VASN TO VASHN ON PAGE 3.

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (RNP) - STANDARD,
INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33

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CHART PLANVIEW NOTE ADJACENT TO DLTNN IF: RF REQUIRED.
CHART PLANVIEW NOTE ADJACENT TO MOONZ IF: RF REQUIRED.
CHART PLANVIEW NOTE ADJACENT TO VASHN IF: RF REQUIRED.
CHART PLANVIEW NOTE AT PAE VOR/DME: (RNP 0.70).
CHART PLANVIEW NOTE AT GRIFY: (RNP 0.70).
CHART PLANVIEW NOTE AT DLTNN: (RNP 0.70).
CHART PLANVIEW NOTE AT MOONZ: (RNP 0.70).
CHART PLANVIEW NOTE AT VASHN: (RNP 0.70).
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT.
CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON PAE VOR/DME AIRWAY RADIALS 163 CW 236.
CHART NOTE: USE OF FD OR AP PROVIDING RNAV TRACK GUIDANCE REQUIRED DURING SIMULTANEOUS OPERATIONS.

QUALITY
&
CHECKED

CITY AND STATE	ELEVATION: 433 THRE: 415	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
SEATTLE, WA	AIRPORT NAME: SEATTLE-TACOMA INTL	RNAV	RNAV (RNP) Z RWY 16R, ORIG	AMDT: NONE
				DATED:

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV (RNP) STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICES - FAR PART 97.33

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ARINC PACKET - 424-18 - RNAV (RNP)

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAD        PAE   K1011060VDLW N47551140W122164020    N47551210W122164180E0200006741     NARPAINE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   AGANE K10    C     N47420277W122185701                    E0165     NAR          AGANE
        SUSAEAENRT   BUGNE K10    C     N47362388W122185991                    E0164     NAR          BUGNE
        SUSAEAENRT   CELAK K10    C     N47385450W122185863                    E0165     NAR          CELAK
        SUSAEAENRT   CFBRH K10    W     N47334657W122230975                    E0164     NAR          CNF(CFBRH)
        SUSAEAENRT   CFBRK K10    W     N47394385W122230840                    E0165     NAR          CNF(CFBRK)
        SUSAEAENRT   COPEX K10    W     N47370676W122254413                    E0165     NAR          COPEX
        SUSAEAENRT   DLTNN K10    W     N47515071W122305797                    E0166     NAR          DLTNN
        SUSAEAENRT   FERIE K10    W     N47415006W122290224                    E0165     NAR          FERIE
        SUSAEAENRT   FINKA K10    C     N47321910W122190200                    E0164     NAR          FINKA
        SUSAEAENRT   GRIFY K10    W     N47443841W122225233                    E0165     NAR          GRIFY
        SUSAEAENRT   HEGEM K10    W     N47384595W122273482                    E0165     NAR          HEGEM
        SUSAEAENRT   MOONZ K10    W     N47390571W122300688                    E0165     NAR          MOONZ
        SUSAEAENRT   PINTR K10    W     N47361070W122210162                    E0165     NAR          PINTR
        SUSAEAENRT   PPAUL K10    W     N47442240W122293166                    E0165     NAR          PPAUL
        SUSAEAENRT   RAYUU K10    W     N47334717W122271824                    E0165     NAR          RAYUU
        SUSAEAENRT   SEGAW K10    W     N47363476W122230911                    E0165     NAR          SEGAW
        SUSAEAENRT   VASHN K10    W     N47304141W122271932                    E0164     NAR          VASHN
        SUSAEAENRT   WOTIK K10    W     N47334567W122190126                    E0164     NAR          WOTIK
        SUSAEAENRT   ZERLI K10    C     N47161599W122351206                    E0164     NAR          ZERLI

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KSEAK1ASEA     0     119YHN47265960W122184240E017000433        1800018000C    MNAR    SEATTLE-TACOMA INTL

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KSEAK1FH16RZ ADLTNN 010DLTNNK1EA0E  B    IF                                  + 08000     18000                A FS
        SUSAP KSEAK1FH16RZ ADLTNN 020PPAULK1EA0E    010TF                                  + 05900                          A FS
        SUSAP KSEAK1FH16RZ ADLTNN 030FERIEK1EA0E    010TF                                  + 05300                          A FS
        SUSAP KSEAK1FH16RZ ADLTNN 040HEGEMK1EA0E    010TF                                  + 05000          190             A-FS
        SUSAP KSEAK1FH16RZ ADLTNN 050COPEXK1EA0E   L010RF       0031501452    10680021    + 04300          190    CFBRK K1EAA-FS
        SUSAP KSEAK1FH16RZ ADLTNN 060SEGAWK1EA0E   L091RF       0031501068    07320019    + 03700                 CFBRK K1EAA FS
        SUSAP KSEAK1FH16RZ ADLTNN 070PINTRK1EA0E   R071RF       0028000732    10400015    + 03200                 CFBRH K1EAA FS
        SUSAP KSEAK1FH16RZ ADLTNN 080WOTIKK1EA0E   R071RF       0028001040    16330029    + 02300                 CFBRH K1EAA FS
```

QUALITY CHECKED

CITY AND STATE	ELEVATION: 433 THRE: 415	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
SEATTLE, WA	AIRPORT NAME: SEATTLE-TACOMA INTL	RNAV	RNAV (RNP) Z RWY 16R, ORIG	AMDT: NONE
				DATED:

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER ☐ (specify) _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

Bearings, headings, courses, 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 in feet RVR.

```
SUSAP KSEAK1FH16RZ ADLTNN 090FINKAK1EA0EE   071TF                                  + 01900                          A FS
SUSAP KSEAK1FH16RZ AGRIFY 010GRIFYK1EA0E  A    IF                                  + 06000     18000210             A-FS
SUSAP KSEAK1FH16RZ AGRIFY 020CELAKK1EA0E  B 010TF                                  + 04000                          A FS
SUSAP KSEAK1FH16RZ AGRIFY 030BUGNEK1EA0E    071TF                                  + 03200                          A FS
SUSAP KSEAK1FH16RZ AGRIFY 040WOTIKK1EA0E    071TF                                  + 02300                          A FS
SUSAP KSEAK1FH16RZ AGRIFY 050FINKAK1EA0EE   071TF                                  + 01900                          A FS
SUSAP KSEAK1FH16RZ AMOONZ 010MOONZK1EA0E  B    IF                                  + 05000     18000                A FS
SUSAP KSEAK1FH16RZ AMOONZ 020COPEXK1EA0E    010TF                                  + 04300          190             A-FS
SUSAP KSEAK1FH16RZ AMOONZ 030SEGAWK1EA0E   L091RF      0031501068    07320019      + 03700                CFBRK K1EAA FS
SUSAP KSEAK1FH16RZ AMOONZ 040PINTRK1EA0E   R071RF      0028000732    10400015      + 03200                CFBRH K1EAA FS
SUSAP KSEAK1FH16RZ AMOONZ 050WOTIKK1EA0E   R071RF      0028001040    16330029      + 02300                CFBRH K1EAA FS
SUSAP KSEAK1FH16RZ AMOONZ 060FINKAK1EA0EE   071TF                                  + 01900                          A FS
SUSAP KSEAK1FH16RZ APAE   010PAE  K1D 0V       IF                                              18000                A FS
SUSAP KSEAK1FH16RZ APAE   020AGANEK1EA0E  A 010TF                                  + 05000                          A FS
SUSAP KSEAK1FH16RZ APAE   030CELAKK1EA0E  B 010TF                                  + 04000                          A FS
SUSAP KSEAK1FH16RZ APAE   040BUGNEK1EA0E    071TF                                  + 03200                          A FS
SUSAP KSEAK1FH16RZ APAE   050WOTIKK1EA0E    071TF                                  + 02300                          A FS
SUSAP KSEAK1FH16RZ APAE   060FINKAK1EA0EE   071TF                                  + 01900                          A FS
SUSAP KSEAK1FH16RZ AVASHN 010VASHNK1EA0E  B    IF                                  + 06000     18000                A FS
SUSAP KSEAK1FH16RZ AVASHN 020RAYUUK1EA0E    010TF                                  + 04700          190             A-FS
SUSAP KSEAK1FH16RZ AVASHN 030SEGAWK1EA0E   R010RF      0028003432    07320044      + 03700                CFBRH K1EAA FS
SUSAP KSEAK1FH16RZ AVASHN 040PINTRK1EA0E   R071RF      0028000732    10400015      + 03200                CFBRH K1EAA FS
SUSAP KSEAK1FH16RZ AVASHN 050WOTIKK1EA0E   R071RF      0028001040    16330029      + 02300                CFBRH K1EAA FS
SUSAP KSEAK1FH16RZ AVASHN 060FINKAK1EA0EE   071TF                                  + 01900                          A FS
SUSAP KSEAK1FH16RZ H      020FINKAK1EA1E  F    IF                                  + 01900     18000       RW16R K1PGA FS
SUSAP KSEAK1FH16RZ H      020FINKAK1EA2W                                                 A031                         FS
SUSAP KSEAK1FH16RZ H      030RW16RK1PG0GY M 031TF                                    00470            -300            A FS
SUSAP KSEAK1FH16RZ H      040         0  M     CA                     1633         + 00900                          A FS
SUSAP KSEAK1FH16RZ H      050ZERLIK1EA0EY      DF                                    02000                          A FS
SUSAP KSEAK1FH16RZ H      060ZERLIK1EA0EE  R   HM                     03000040       02000                          A FS
```

```
                1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KSEAK1GRW16R   0085001633 N47274981W122190429-0700    +0103500415000055150IICJL3
```

```
                1         2         3         4         5         6         7         8         9         0         1         2         3
MSA     123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KSEAK1SRW16RK1PG                0   18018006425                                                                    M
```

QUALITY CHECKED

CITY AND STATE	ELEVATION: 433 THRE: 415	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
SEATTLE, WA	AIRPORT NAME: SEATTLE-TACOMA INTL	RNAV	RNAV (RNP) Z RWY 16R, ORIG	AMDT: NONE
				DATED:

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (RNP) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

Bearings, headings, courses, 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 in feet RVR.

ARINC SUMMARY - 424-18 - RNAV (RNP)

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	DLTNN	DLTNN	010		IF		FB				AA 08000	
	DLTNN	PPAUL	020		TF		FB	1.0			AA 05900	
	DLTNN	FERIE	030		TF		FB	1.0			AA 05300	
	DLTNN	HEGEM	040		TF		FB	1.0			AA 05000	AB 190
	DLTNN	COPEX	050		RF	L	FB	1.0		002.1	AA 04300	AB 190
	DLTNN	SEGAW	060		RF	L	FB	0.9		001.9	AA 03700	
	DLTNN	PINTR	070		RF	R	FB	0.7		001.5	AA 03200	
	DLTNN	WOTIK	080		RF	R	FB	0.7		002.9	AA 02300	
	DLTNN	FINKA	090		TF		FB	0.7			AA 01900	
	GRIFY	GRIFY	010	IAF	IF		FB				AA 06000	AB 210
	GRIFY	CELAK	020		TF		FB	1.0			AA 04000	
	GRIFY	BUGNE	030		TF		FB	0.7			AA 03200	
	GRIFY	WOTIK	040		TF		FB	0.7			AA 02300	
	GRIFY	FINKA	050		TF		FB	0.7			AA 01900	
	MOONZ	MOONZ	010		IF		FB				AA 05000	
	MOONZ	COPEX	020		TF		FB	1.0			AA 04300	AB 190
	MOONZ	SEGAW	030		RF	L	FB	0.9		001.9	AA 03700	
	MOONZ	PINTR	040		RF	R	FB	0.7		001.5	AA 03200	
	MOONZ	WOTIK	050		RF	R	FB	0.7		002.9	AA 02300	
	MOONZ	FINKA	060		TF		FB	0.7			AA 01900	
	PAE	PAE	010		IF		FB					
	PAE	AGANE	020	IAF	TF		FB	1.0			AA 05000	
	PAE	CELAK	030		TF		FB	1.0			AA 04000	
	PAE	BUGNE	040		TF		FB	0.7			AA 03200	
	PAE	WOTIK	050		TF		FB	0.7			AA 02300	
	PAE	FINKA	060		TF		FB	0.7			AA 01900	
	VASHN	VASHN	010		IF		FB				AA 06000	
	VASHN	RAYUU	020		TF		FB	1.0			AA 04700	AB 190
	VASHN	SEGAW	030		RF	R	FB	1.0		004.4	AA 03700	
	VASHN	PINTR	040		RF	R	FB	0.7		001.5	AA 03200	
	VASHN	WOTIK	050		RF	R	FB	0.7		002.9	AA 02300	
	VASHN	FINKA	060		TF		FB	0.7			AA 01900	
		FINKA	020	FAF	IF		FB				AA 01900	
		RW16R	030	MAP	TF		FO	0.3			AT 00470	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		163.3(180.3T)		AA 00900	
	ZERLI	050		DF		FO				AT 02000	
	ZERLI	060		HM	R	FO		030.0(047.0T)	004.0	AT 02000	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS

QUALITY CHECKED

CITY AND STATE	ELEVATION: 433 THRE: 415	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
SEATTLE, WA	AIRPORT NAME: **SEATTLE-TACOMA INTL**	**RNAV**	**RNAV (RNP) Z RWY 16R, ORIG**	AMDT: **NONE**
				DATED:

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

Bearings, headings, courses, 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 in feet RVR.

PAE	N475511.40	W1221640.20	N4755.190	W12216.670
AGANE	N474202.77	W1221857.01	N4742.046	W12218.950
BUGNE	N473623.88	W1221859.91	N4736.398	W12218.999
CELAK	N473854.50	W1221858.63	N4738.908	W12218.977
CFBRH	N473346.57	W1222309.75	N4733.776	W12223.163
CFBRK	N473943.85	W1222308.40	N4739.731	W12223.140
COPEX	N473706.76	W1222544.13	N4737.113	W12225.736
DLTNN	N475150.71	W1223057.97	N4751.845	W12230.966
FERIE	N474150.06	W1222902.24	N4741.834	W12229.037
FINKA	N473219.10	W1221902.00	N4732.318	W12219.033
GRIFY	N474438.41	W1222252.33	N4744.640	W12222.872
HEGEM	N473845.95	W1222734.82	N4738.766	W12227.580
MOONZ	N473905.71	W1223006.88	N4739.095	W12230.115
PINTR	N473610.70	W1222101.62	N4736.178	W12221.027
PPAUL	N474422.40	W1222931.66	N4744.373	W12229.528
RAYUU	N473347.17	W1222718.24	N4733.786	W12227.304
SEGAW	N473634.76	W1222309.11	N4736.579	W12223.152
VASHN	N473041.41	W1222719.32	N4730.690	W12227.322
WOTIK	N473345.67	W1221901.26	N4733.761	W12219.021
ZERLI	N471615.99	W1223512.06	N4716.267	W12235.201
RW16R	N472749.81	W1221904.29	N4727.830	W12219.072

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW16R	00415	55

QUALITY CHECKED

CITY AND STATE	ELEVATION: 433 THRE: 415	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
SEATTLE, WA	AIRPORT NAME: SEATTLE-TACOMA INTL	RNAV	RNAV (RNP) Z RWY 16R, ORIG	AMDT: NONE
				DATED:

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
FEEDER	PAE VOR/DME	AGANE	1. TOWER (53-000084)	474605.00N/1222110.00W	920 (1D)	1000	AC50 AT3030	5000
(RNP 1.00)			2. TERRAIN	475138.00N/1221657.00W	635 (600)		AS1500	2100
INITIAL	AGANE	CELAK	3. TOWER (53-000053)	473755.00N/1222114.00W	1015 (2A)	1000	AC3 AT1982	4000
(RNP 1.00)			4. TERRAIN	474142.00N/1221909.00W	483 (500)		AS1500	2000
INITIAL	GRIFY	CELAK	3. TOWER (53-000053)	473755.00N/1222114.00W	1015 (2A)	1000	AC3 AT1982	4000
(RNP 1.00)			5. TERRAIN	474427.00N/1222133.00W	548 (500)		AS1500	2000
INTERMEDIATE:	CELAK	BUGNE	6. TOWER (53-000500)	473656.35N/1221830.45W	1092 (4D)	500	AC50 AT1558	3200
(RNP 0.70)			7. TERRAIN	473733.00N/1221851.00W	453 (500)		AS1500	2000
INTERMEDIATE: STEPDOWN	BUGNE	WOTIK	6. TOWER (53-000500)	473656.35N/1221830.45W	1092 (4D)	500	AC50 AT658	2300
(RNP 0.70)			8. TERRAIN	473357.00N/1221824.00W	365 (400)		AS1500	1900
INTERMEDIATE	DLTNN	PPAUL	9. TOWER (53-001007)	474535.10N/1223103.60W	725 (5E)	500	AC125 AT4550	5900
(RNP 1.00)			10. TERRAIN	474915.00N/1223030.00W	417 (400)		AS1500	1900
INTERMEDIATE: STEPDOWN	PPAUL	FERIE	11. AAO	474027.00N/1223115.00W	581 (4E)	500	AC98 AT4121	5300
(RNP 1.00)			12. TERRAIN	474127.00N/1223131.00W	227 (200)		AS1500	1700
2. PROCEDURE TURN								
3. MISSED APPROACH MAP:								
ELEV:								

4. CIRCLING AREA	DISTANCE		HT. ABV. ARPT.		
CATEGORY A	1.3 NM	REQUIRED	350	ACTUAL	
CATEGORY B	1.5 NM		450		
CATEGORY C	1.7 NM		450		
CATEGORY D	2.3 NM		550		
CATEGORY E	4.5 NM		550		

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID: **RW16R**

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
360-360	AAO	080/ 28.6	5362 (6C)	6400					

CITY AND STATE		FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
SEATTLE, WA	ELEVATION: 433 AIRPORT NAME: SEATTLE-TACOMA INTL	RNAV	RNAV (RNP) Z RWY 16R, ORIG	ANM

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE	3. ALTIMETER SETTING
ZSE ARTCC SEA TOWER SEA APP CON	N W S / F A A / A / C — OTHER: ASOS	SOURCE: KSEA DISTANCE: HOURS REMOTE OPERATION:
SATISFACTORY ON:		
X V H F X U H F H F	LOCATION: KSEA	ADJUSTMENT: 0

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN:	CAT 1
		CAT 3
5. APPROACH & RUNWAY LIGHTING	X	ALSF-2 16C, 16L, 16R
		(S) SALS
	X	MALSR 34L, 34C, 34R
	X	HIRL 16C, 16L, 34L, 34C, 16R, 34R
		MIRL
		REIL
	X	TDZ 16C, 16L, 16R, 34R
	X	C/L 16C, 16L, 34L, 34C, 16R, 34R
	X	OTHER (SPECIFY) PAPI-4R 16R PAPI-4L 16C, 16L, 34L, 34C, 34R

6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER	PIR-G 16C, 16L, 34L, 34C, 16R, 34R
	INSTRUMENT	
7. RUNWAY VISUAL RANGE	APPROACH	16C, 16L, 34L, 34C, 16R, 34R
	MIDFIELD	16C, 16L, 34L, 34C, 16R, 34R
	ROLL OUT	16C, 16L, 34L, 34C, 16R, 34R
8. GLIDE PATH	GP ANGLE: 3.00	ELEV RWY THRESHOLD: 415.0
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT: 54.9

9. FINAL APPROACH COURSE AIMING	X	RUNWAY THRESHOLD	FT. FROM THRESHOLD
	X	ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS: NONE

PART D - PREPARED BY: JON DENTON	DATE: 10/17/2012
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-354

PART C - REMARKS:

MAX SPEED RAYUU TO SEGAW - 190 KIAS.

MAX SPEED HEGEM TO COPEX - 190 KIAS.

MAX SPEED COPEX TO SEGAW - 190 KIAS.

ISA DEVIATION USED: -22.1C (-7.8F)

VDP NOT ESTABLISHED - RNP PROCEDURE.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

RF SEGMENT RADIUS/BANK ANGLE COMUPTATIONS:

SEGMENT	ALT	KIAS	KTAS	HAA	*VKTW	TR	BA
HEGEM-COPEX	5000	190	209.00	4568	56.9	3.15	18.13
COPEX-SEGAW	4300	190	206.34	3968	55.51	3.15	17.66
SEGAW-PINTR	3700	190	204.06	3268	54.33	2.80	19.11
PINTR-WOTIK	3200	190	202.16	2768	50.00	2.80	18.30
RAYUU-SEGAW	4700	190	207.86	4268	56.31	2.80	19.91

*VKTW OBTAINED FROM .54A FORMULA 2-3B AND .52 TABLE 1-3.

TFTURNFIX	ALT	KIAS	KTAS	HAA	*VKTW	TR	BA
GRIFY-CELAK	6000	210	235.20	5568	58.88	3.90	18.00

PART B: SUPPLEMENTAL DATA
2. KSEA ASOS ON SERVICE A. HRS OPTN: 24.
3. BACKUP ALTIMETER SOURCE NOT REQUIRED DUE TO REDUNDANT LOCAL SOURCES.

VGSI DATA: 3.00/69.3

SEE ATTACHED AIRSPACE LETTER.

MULTIPLE INTERMEDIATE SEGMENTS DEVELOPED PER ATC REQUEST.

MISSED APPROACH: FAAO 8260.54A CRITERIA APPLIED.

AUTHORIZATION REQUIRED, FAA 8260.52 CRITERIA APPLIED.

VEB ROC APPLIED/USED.

AVERAGE COLD TEMPERATURE BASED ON A 5 YR HISTORY (2007-2011), ACT -8.

ALTITUDE CHARTED AT INITIAL FIXES AT ATC REQUEST.

CONT.

QUALITY A CHECKED

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
INTERMEDIATE: STEPDOWN	FERIE	HEGEM	13. AAO	474024.00N/1223115.00W	588 (4E)	500	AC98 AT3814	5000
(RNP 1.00)			14. TERRAIN	474024.00N/1223115.00W	388 (400)		AS1500	1900
INTERMEDIATE: STEPDOWN	HEGEM	COPEX	15. AAO	473930.00N/1222448.00W	568 (4E)	500	AC98 AT3134	4300
(RNP 1.00)			16. TERRAIN	473924.00N/1222448.00W	358 (400)		AS1500	1900
INTERMEDIATE	MOONZ	COPEX	17. AAO	473854.00N/1222427.00W	558 (4E)	500	AC98 AT3144	4300
(RNP 1.00)			18. TERRAIN	473854.00N/1222427.00W	358 (400)		AS1500	1900
INTERMEDIATE: STEPDOWN	COPEX	SEGAW	19. AAO	473448.00N/1222248.00W	568 (4E)	500	AC98 AT2534	3700
(RNP 0.90)			20. TERRAIN	473448.00N/1222309.00W	352 (400)		AS1500	1900
INTERMEDIATE	VASHN	RAYUU	21. AAO	473448.00N/1223009.00W	634 (4E)	500	AC98 AT3468	4700
(RNP 1.00)			22. TERRAIN	473221.00N/1222948.00W	260 (300)		AS1500	1800
INTERMEDIATE: STEPDOWN	RAYUU	SEGAW	3. TOWER (53-000053)	473755.00N/1222114.00W	1015 (2A)	500	AC3 AT2182	3700
(RNP 1.00)			23. TERRAIN	473454.00N/1223006.00W	447 (400)		AS1500	1900
INTERMEDIATE: STEPDOWN	SEGAW	PINTR	24. BLDG (53-000455)	473616.80N/1221951.08W	1075 (1A)	500	AC3 AT1622	3200
(RNP 0.70)			25. TERRAIN	473754.00N/1222154.00W	430 (400)		AS1500	1900
INTERMEDIATE: STEPDOWN	PINTR	WOTIK	24. BLDG (53-000455)	473616.80N/1221951.08W	1075 (1A)	500	AC5 AS720	2300
(RNP 0.70)			26. TERRAIN	473642.00N/1221839.00W	391 (400)		AS1500	1900
3. MISSED APPROACH	MAP:							
	ELEV:							

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL
CATEGORY A	1.3 NM	350	
CATEGORY B	1.5 NM	450	
CATEGORY C	1.7 NM	450	
CATEGORY D	2.3 NM	550	
CATEGORY E	4.5 NM	550	

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID:

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A

CITY AND STATE		FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
SEATTLE, WA	ELEVATION: 433 AIRPORT NAME: SEATTLE-TACOMA INTL	RNAV	RNAV (RNP) Z RWY 16R, ORIG	ANM

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE	3. ALTIMETER SETTING
SATISFACTORY ON:	☐ NWS OTHER:	SOURCE:
	☐ FAA	DISTANCE:
	☐ A/C	HOURS REMOTE OPERATION:
☐ VHF ☐ UHF ☐ HF	LOCATION:	ADJUSTMENT:

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN:	CAT 1
		CAT 3

5. APPROACH & RUNWAY LIGHTING	☐	**ALS**
	☐	**(S) SALS**
	☐	**MALS**
	☐	**HIRL**
	☐	**MIRL**
	☐	**REIL**
	☐	**TDZ**
	☐	**C/LINE**
	☐	**OTHER (SPECIFY)**

6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER	
	INSTRUMENT	
7. RUNWAY VISUAL RANGE	APPROACH	
	MIDFIELD	
	ROLL OUT	
8. GLIDE PATH	GP ANGLE:	ELEV RWY THRESHOLD:
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT:

9. FINAL APPROACH COURSE AIMING	☐	RUNWAY THRESHOLD	FT. FROM THRESHOLD
	☐	ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS:

PART D - PREPARED BY:	DATE:
TITLE:	OFFICE:

PART C - REMARKS:
CONTINUED.

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
INTERMEDIATE: STEPDOWN	**WOTIK**	**FINKA**	**27. AAO**	**473139.00N/1222103.00W**	**643 (4E)**	**500**	**AC98**	**1300**
(RNP 0.70)			**28. TERRAIN**	**473224.00N/1222106.00W**	**375 (400)**		**AS1500**	**1900**
FINAL: RNP 0.3	**FINKA**	**DA**	**29. TREE**	**472827.81N/1221935.94W**	**574 (2C)**	**20.9:1**	**AC20**	**858/443**
MISSED APPROACH	DA	R16R				ASC		
(RNP 0.30 -1.00)		40:1						
MISSED APPROACH	R16R	ZERLI				ASC		
(RNP 0.30 -1.00)		40:1						
3. MISSED APPROACH MAP:	DA	ZERLI				ASC		2000
			30. TOWER (53-000029)	471643.50N/1223046.38W	918 (1D)	1000	AC50	2000
ELEV:	548		31. TERRAIN	472303.00N/1222427.00W	453 (500)		AS1500	2000

4. CIRCLING AREA	DISTANCE		HT. ABV. ARPT.		
CATEGORY A	1.3 NM	REQUIRED	350	ACTUAL	
CATEGORY B	1.5 NM		450		
CATEGORY C	1.7 NM		450		
CATEGORY D	2.3 NM		550		
CATEGORY E	4.5 NM		550		

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID:

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	MSA

CORRECTED 4

CITY AND STATE		FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
SEATTLE, WA	**ELEVATION: 433** AIRPORT NAME: **SEATTLE-TACOMA INTL**	**RNAV**	**RNAV (RNP) Z RWY 16R, ORIG**	**ANM**

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE	3. ALTIMETER SETTING
SATISFACTORY ON:	☐ N W S OTHER: ☐ F A A ☐ A / C	SOURCE: DISTANCE: HOURS REMOTE OPERATION:
☐ V H F ☐ U H F ☐ H F	LOCATION:	ADJUSTMENT:

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN:	CAT 1
		CAT 3

5. APPROACH & RUNWAY LIGHTING		
	☐	**ALS**
	☐	**(S) SALS**
	☐	**MALS**
	☐	**HIRL**
	☐	**MIRL**
	☐	**REIL**
	☐	**TDZ**
	☐	**C/LINE**
	☐	**OTHER (SPECIFY)**

6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER	
	INSTRUMENT	
7. RUNWAY VISUAL RANGE	APPROACH	
	MIDFIELD	
	ROLL OUT	
8. GLIDE PATH	GP ANGLE:	ELEV RWY THRESHOLD:
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT:

9. FINAL APPROACH COURSE AIMING			
	☐	RUNWAY THRESHOLD	FT. FROM THRESHOLD
	☐	ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS:

PART D - PREPARED BY:	DATE:
TITLE:	OFFICE:

PART C - REMARKS:

RADIO FIX AND HOLDING DATA RECORD

NAME: AGANE **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 474202.77N/1221857.01W **TYPE:** WP, RADAR, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	SEATTLE	I-CJL	LOC/DME		343.33	000.33	15.79	15.79		5000	5000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-CJL	LOC/DME	BRG-343	16	5000	5000

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:
DME ANTENNA COORDINATES: 472615.62N/1221859.94W
I-CJL GS ESV BEARING 343/15NM/5000.
I-CJL GS ANTENNA L/L: 472738.46N-1221900.60W.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 16R	1		KSEA	SEATTLE	WA (US)
IAP	ILS RWY 16R (CAT II/III)	1		KSEA	SEATTLE	WA (US)
IAP	RNAV (GPS) Y RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) M RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R			KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: IAP, SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 **DATE OF REVISION:** 03/07/2013

REASON FOR REVISION:
MOVED FIX 3297.24 FT @ 0.33T.
CHANGED DME AND DIST FROM FAC FROM 15.27/15.27 TO 15.79/15.79 RESPECTIVELY.
ADDED "SPECIAL" TO CHART PUB.
ADDED I-CJL GS ESV REMARK.

DEVELOPED BY: **DATE:** 09/01/2012 **OFFICE:** AJV-354 **NAME:** MARK ADAMS

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA APP/DEP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: BUGNE **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 473623.88N/1221859.91W **TYPE:** WP, RADAR, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	SEATTLE	I-CJL	LOC/DME		343.33	000.33	10.14	10.14		3200	4800

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:
DME ANTENNA COORDINATES: 472615.62N/1221859.94W
FIX LOCATED AT PFAF LOCATION USING AFS SPREADSHEET.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 16R	1		KSEA	SEATTLE	WA (US)
IAP	ILS RWY 16R (SA CAT I, CAT II/III)	1		KSEA	SEATTLE	WA (US)
IAP	RNAV (GPS) Y RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) M RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R			KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: IAP, SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 **DATE OF REVISION:** 03/07/2013

REASON FOR REVISION:
MOVED FIX 1227.07' @ 0.29T.
CHANGED FAC 1 DME AND DISTANCE FROM FAC FROM 9.95/9.94 TO 10.14/10.14 RESPECTIVELY.
ADDED "SPECIAL" TO CHART PUB.

DEVELOPED BY: **DATE:** 08/30/2012 **OFFICE:** AJV-354 **NAME:** MARK ADAMS

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA APP/DEP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: CFBRH **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 473346.57N/1222309.75W **TYPE:** CNF

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) M RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16C			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16L			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R			KSEA	SEATTLE	WA (US)

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 03/07/2013

DEVELOPED BY: **DATE:** 10/10/2012 **OFFICE:** AJV-354 **NAME:** JON DENTON

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA APP CON/ATCT
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: CFBRK **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 473943.85N/1222308.40W **TYPE:** CNF

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) M RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16C			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16L			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R			KSEA	SEATTLE	WA (US)

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 03/07/2013

DEVELOPED BY: **DATE:** 10/10/2012 **OFFICE:** AJV-354 **NAME:** JON DENTON

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA APP CON/ATCT
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: CELAK **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 473854.50N/1221858.63W **TYPE:** WP, RADAR, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	SEATTLE	I-CJL	LOC/DME		343.33	000.33	12.65	12.65		4000	4800

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-CJL	LOC/DME	BRG-343	12	4000	4000

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:
DME ANTENNA COORDINATES: 472615.62N/1221859.94W
I-CJL ESV IS FOR THE GLIDESLOPE.
I-CJL GS ANTENNA L/L: 472738.46N-1221900.60W.
FIX LOCATED AT PFAF LOCATION USING AFS SPREADSHEET.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 16R	1		KSEA	SEATTLE	WA (US)
IAP	ILS RWY 16R (SA CAT I, CAT II/III)	1		KSEA	SEATTLE	WA (US)
IAP	RNAV (GPS) Y RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) M RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R			KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: IAP, SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 **DATE OF REVISION:** 03/07/2013

REASON FOR REVISION:
MOVED FIX 2048.85' @ 000.33T.
CHANGED DME AND DISTANCE FROM FAC FROM 12.33NM TO 12.65NM.
ADDED "SPECIAL" TO CHART PUB.
ADDED I-CJL GS ESV IN REMARKS.

DEVELOPED BY: **DATE:** 08/30/2012 **OFFICE:** AJV-354 **NAME:** MARK ADAMS

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA APP/DEP CON
OTHER:

QUALITY 4 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: COPEX **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 473706.76N/1222544.13W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) M RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16C			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16L			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R			KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: IAP, SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 03/07/2013

DEVELOPED BY: **DATE:** 10/10/2012 **OFFICE:** AJV-354 **NAME:** JON DENTON

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA APP CON/ATCT
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: DLTNN **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 475150.71N/1223057.97W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) M RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16C			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16L			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R			KSEA	SEATTLE	WA (US)
STAR	MARNR (RNAV)			KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: STAR, IAP, SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 03/07/2013

REASON FOR REVISION:
ADDED STAR AND SIAP TO REQUIRED CHARTING.
UPDATED FIX USE, ADDED MARNR STAR AND RNAV (GPS) Z RWY'S 16L/C/R.

DEVELOPED BY: **DATE:** 09/13/2012 **OFFICE:** AJV-354 **NAME:** DION LANCIA

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA APP CON
OTHER:

QUALITY 4 RECORD

RADIO FIX AND HOLDING DATA RECORD

NAME: FERIE **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 474150.06N/1222902.24W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) M RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16C			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16L			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R			KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: IAP, SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 03/07/2013

REASON FOR REVISION:
FIX MOVED 20.27 FT NORTH, ATC REQUEST.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 10/10/2012 **OFFICE:** AJV-354 **NAME:** JON DENTON

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA APP CON/ATCT
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: FINKA **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 473219.10N/1221902.00W **TYPE:** WP, RADAR, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	SEATTLE	I-CJL	LOC/DME		343.33	000.33	6.06	6.06	27286	1900	4800

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:
DME ANTENNA COORDINATES: 472615.62N/1221859.94W
USED .54A PFAF FORMULA (IPDS & IAPA); IPDS L/L ARE 473219.104N-1221901.995.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 16R	1		KSEA	SEATTLE	WA (US)
IAP	ILS RWY 16R (SA CAT I, CAT II/III)	1		KSEA	SEATTLE	WA (US)
IAP	RNAV (GPS) Y RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) M RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R			KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: IAP, SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 03/07/2013

REASON FOR REVISION:
MOVED FIX 331.34' @ 000.33T TO CURRENT PFAF LOCATION FOR RWY 16R.
REMOVED KSEA RWY16R FROM FACILITIES.
UPDATED FAC 1 (CJL) FROM A HISTORY REVISION TO AN ACTIVE REVISION.
CHANGED DME DISTANCE AND DISTANCE FROM FACILITY FROM 6.01 TO 6.06 FOR FAC 1.
UPDATED FIX USE.
ADDED "SPECIAL" TO CHART PUB.

DEVELOPED BY: **DATE:** 08/28/2012 **OFFICE:** AJV-354 **NAME:** MARK ADAMS

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: KSEA ATCT, SEATTLE APP CON
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: GRIFY **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 474438.41N/1222252.33W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 16C (SA CAT I, CAT II, III)			KSEA	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 16L (SA CAT I, CAT II, III)			KSEA	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 16R (SA CAT I, CAT II, III)			KSEA	SEATTLE	WA (US)
IAP	RNAV (GPS) Y RWY 16C			KSEA	SEATTLE	WA (US)
IAP	RNAV (GPS) Y RWY 16L			KSEA	SEATTLE	WA (US)
IAP	RNAV (GPS) Y RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) M RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16C			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16L			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R			KSEA	SEATTLE	WA (US)
STAR	MARNR (RNAV)			KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: STAR, IAP, SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 03/07/2013

REASON FOR REVISION:
CHANGED SPECIAL FIX RESTRICTION TO RNAV (RNP) M RWY 16R VICE MARNR RNAV STAR.
ADDED IAP TO REQUIRED CHARTING.
UPDATED FIX USE, CONVERTED MARNR STAR FROM SPECIAL TO PUBLIC USE AND ADDED ALL OTHER PROCEDURES.

DEVELOPED BY: **DATE:** 09/13/2012 **OFFICE:** AJV-354 **NAME:** DION LANCIA

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA APP CON
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: HEGEM **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 473845.95N/1222734.82W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) M RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16C			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16L			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R			KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: IAP, SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 03/07/2013

REASON FOR REVISION:
FIX MOVED 1441.28 FT SE, FOR RF TURN.
ADDED IAP AND SPECIAL IAP CHARTING.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 10/10/2012 **OFFICE:** AJV-354 **NAME:** JON DENTON

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA APP CON/ATCT
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: MOONZ **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 473905.71N/1223006.88W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) M RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16C			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16L			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R			KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: IAP, SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 03/07/2013

DEVELOPED BY: **DATE:** 10/11/2012 **OFFICE:** AJV-354 **NAME:** JON DENTON

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA ATCT/APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: PINTR **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 473610.70N/1222101.62W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) M RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16C			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R			KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: IAP, SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 03/07/2013

REASON FOR REVISION:
FIX MOVED 1562.84 FT NW.
UPDATED FIX COORDINATES.
ADDED IAP AND SPECIAL IAP TO CHARTING.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 10/11/2012 **OFFICE:** AJV-354 **NAME:** JON DENTON

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA ATCT/APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: PPAUL **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 474422.40N/1222931.66W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) M RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16C			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16L			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R			KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: IAP, SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 03/07/2013

REASON FOR REVISION:
FIX MOVED 22.38 FT NORTH, ATC REQUEST.
UPDATED FIX COORDINATES.
ADDED IAP AND SPECIAL IAP FOR CHARTING.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 10/10/2012 **OFFICE:** AJV-354 **NAME:** JON DENTON

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA ATCT/APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: RAYUU **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 473347.17N/1222718.24W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) M RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16C			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16L			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R			KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: IAP, SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 03/07/2013

REASON FOR REVISION:
FIX MOVED 13.17 FT NORTH, ATC REQUEST.
UPDATED FIX COORDINATES.
ADDED IAP AND SPECIAL IAP CHARTING.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 10/10/2012 **OFFICE:** AJV-354 **NAME:** JON DENTON

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA ATCT/APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: SEGAW **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 473634.76N/1222309.11W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) M RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16C			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16L			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R			KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: IAP, SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 03/07/2013

REASON FOR REVISION:
FIX MOVED 55.18 FT NW.
UPDATED FIX COORDINATES.
ADDED IAP AND SPECIAL IAP TO CHARTING.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 10/10/2012 **OFFICE:** AJV-354 **NAME:** JON DENTON

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA ATCT/APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: VASHN **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 473041.41N/1222719.32W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) M RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16C			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16L			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R			KSEA	SEATTLE	WA (US)
STAR	HAWKZ (RNAV)			KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: STAR, IAP, SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 03/07/2013

DEVELOPED BY: **DATE:** 09/07/2012 **OFFICE:** AJV-354 **NAME:** DION LANCIA

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA APP CON
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: WOTIK **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 473345.67N/1221901.26W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) M RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R			KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: IAP, SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 03/07/2013

REASON FOR REVISION:
FIX MOVED 17.67 FT SW.
UPDATED FIX COORDINATES.
ADDED IAP AND SPECIAL IAP TO CHARTING.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 10/11/2012 **OFFICE:** AJV-354 **NAME:** JON DENTON

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA ATCT/APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: ZERLI **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 471615.99N/1223512.06W **TYPE:** WP, RADAR, INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	SEATTLE	SEA	VORTAC	H	210.00	229.00	15.00	15.00		5000	17500
2	MCCHORD	TCM	VORTAC	T	306.39	328.39	8.70	8.70		5000	12200

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	SW	SEA	VORTAC	210.00	030.00	R	1		5000	10000	6	10
2	SW		WP	210.00	030.00	R		4	2000	10000	4	10

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (53-000029)	471643.50N/1223046.38W	918	1D
1	310	TOWER (53-000694)	471813.81N/1222347.84W	955	4D
2	200	TOWER (53-000029)	471643.50N/1223046.38W	918	1D
2	310	TOWER (53-000694)	471813.81N/1222347.84W	955	4D

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	ILS OR LOC RWY 16R	KSEA	SEATTLE	WA (US)
1	ILS RWY 16R (SA CAT I, CAT II/III)	KSEA	SEATTLE	WA (US)
2	RNAV (RNP) M RWY 16R	KSEA	SEATTLE	WA (US)
2	RNAV (RNP) Z RWY 16R	KSEA	SEATTLE	WA (US)
2	RNAV (GPS) Y RWY 16R	KSEA	SEATTLE	WA (US)

REMARKS:
SEATTLE (FAC 1) USED TO ESTABLISH FIX COORDINATES
USED TEMPLATE #14 TO EVALUATE PAT 1 & PAT 2 C-I-H.
PRECIPITOUS TERRAIN EVAL COMPLETE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 16R	1, 2	1	KSEA	SEATTLE	WA (US)
IAP	ILS RWY 16R (SA CAT I, CAT II/III)	1, 2	1	KSEA	SEATTLE	WA (US)
IAP	RNAV (GPS) Y RWY 16R		2	KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) M RWY 16R		2	KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R		2	KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: IAP, SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 03/07/2013

REASON FOR REVISION:
ADDED "INT" AND "WP" TO FIX TYPE.
CHANGED PAT 1 RAD/CRS INBOUND FROM 209.80/029.80 TO 210.0/30.0 RESPECTIVELY.
ADDED WP HOLDING PAT 2.
ADDED "SPECIAL" TO CHART PUB.

DEVELOPED BY: **DATE:** 09/01/2012 **OFFICE:** AJV-354 **NAME:** MARK ADAMS

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

QUALITY 4 CHECKED

DISTRIBUTION: **NFDC**
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA APP/DEP CON

OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: PAINE VOR/DME **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 475511.40N/1221640.20W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	PAINE	PAE	VOR/DME	L							17500

FIX RESTRICTIONS:
SPECIAL RNAV (RNP) M RWY 16R, KSEA, SEATTLE, WA

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	NW	PAE	VOR/DME	329.04	149.04	R	1-1 1/2		2000	17500	4	16

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	200' AAO	475148.00N/1221706.00W	814	4E
1	310	200' AAO	475148.00N/1221706.00W	814	4E

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	BELLEVUE (LOST COMMUNICATIONS)	KRNT	RENTON	WA (US)

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED: NO ADJUSTMENT

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	ARLINGTON			KAWO	ARLINGTON	WA (US)
DP	KIENO (OBSTACLE)			KBLI	BELLINGHAM	WA (US)
DP	PAINE			KPAE	EVERETT	WA (US)
DP	TAKE-OFF MINIMUMS			KPAE	EVERETT	WA (US)
DP	YELM			KOLM	OLYMPIA	WA (US)
DP	BELLEVUE (LOST COMMUNICATIONS)		1	KRNT	RENTON	WA (US)
DP	KENT			KBFI	SEATTLE	WA (US)
DP	NEEDLE			KBFI	SEATTLE	WA (US)
DP	BANGR (RNAV)			KSEA	SEATTLE	WA (US)
DP	HAROB (RNAV)			KSEA	SEATTLE	WA (US)
DP	MOUNTAIN			KSEA	SEATTLE	WA (US)
DP	SEATTLE			KSEA	SEATTLE	WA (US)
DP	SUMMA			KSEA	SEATTLE	WA (US)
EN ROUTE	V23					(US)
EN ROUTE	V287					(US)
IAP	LOC RWY 34			KAWO	ARLINGTON	WA (US)
IAP	NDB RWY 34			KAWO	ARLINGTON	WA (US)
IAP	RNAV (GPS) RWY 34			KAWO	ARLINGTON	WA (US)
IAP	RNAV (GPS) RWY 29			KBVS	BURLINGTON/MOUNT VERNON	WA (US)
IAP	ILS OR LOC/DME Y RWY 16R			KPAE	EVERETT	WA (US)
IAP	ILS OR LOC/DME Z RWY 16R			KPAE	EVERETT	WA (US)
IAP	ILS Z RWY 16R (SA CAT II)			KPAE	EVERETT	WA (US)
IAP	RNAV (GPS) RWY 34L			KPAE	EVERETT	WA (US)
IAP	RNAV (GPS) Y RWY 16R			KPAE	EVERETT	WA (US)
IAP	RNAV (GPS) Z RWY 16R			KPAE	EVERETT	WA (US)
IAP	VOR RWY 16R		1	KPAE	EVERETT	WA (US)
IAP	VOR/DME RWY 16R		1	KPAE	EVERETT	WA (US)
IAP	RNAV (GPS) Y RWY 16			KRNT	RENTON	WA (US)
IAP	RNAV (GPS) Z RWY 16			KRNT	RENTON	WA (US)
IAP	ILS OR LOC RWY 31L			KBFI	SEATTLE	WA (US)
IAP	RNAV (GPS) Y RWY 13R			KBFI	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 13R			KBFI	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 16C			KSEA	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 16L			KSEA	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 16R			KSEA	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 34C		1	KSEA	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 34L		1	KSEA	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 34R		1	KSEA	SEATTLE	WA (US)
IAP	ILS RWY 16C (SA CAT I, CAT II/III)			KSEA	SEATTLE	WA (US)

INFO ONLY

IAP	ILS RWY 16L (SA CAT I, CAT II/III)		KSEA	SEATTLE	WA (US)
IAP	ILS RWY 16R (SA CAT I, CAT II/III)		KSEA	SEATTLE	WA (US)
IAP	ILS RWY 34C (SA CAT I, CAT II)	1	KSEA	SEATTLE	WA (US)
IAP	ILS RWY 34L (SA CAT I, CAT II)	1	KSEA	SEATTLE	WA (US)
IAP	ILS RWY 34R (SA CAT I, CAT II)	1	KSEA	SEATTLE	WA (US)
IAP	RNAV (GPS) Y RWY 16C		KSEA	SEATTLE	WA (US)
IAP	RNAV (GPS) Y RWY 16L		KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) M RWY 16R		KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16C		KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16L		KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R		KSEA	SEATTLE	WA (US)
IAP	RNAV (GPS)-A		KS43	SNOHOMISH	WA (US)
STAR	MADEE (RNAV)		CYXX	ABBOTSFORD, BRITISH COLUMBIA	(CA)
STAR	MADEE (RNAV)		KBLI	BELLINGHAM	WA (US)
STAR	EPHRATA		KSEA	SEATTLE	WA (US)
STAR	GLASR		KSEA	SEATTLE	WA (US)
STAR	JAWBN		KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: DP, STAR, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 7 **DATE OF REVISION:** 05/05/2011

REASON FOR REVISION:
UPDATE HOLDING RESTRICTIONS
UPDATE FIX USE
UPDATE REQUIRED CHARTING

DEVELOPED BY: **DATE:** 10/06/2010 **OFFICE:** AVN-130 **NAME:** JOHN WALKER

APPROVED BY: **DATE:** 03/01/2011 **OFFICE:** AVN-130 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA
OTHER: PAE ATCT

TERMINAL AIRSPACE DATA REQUIREMENTS

CITY: **SEATTLE** STATE: **WA**

AIRPORT NAME: **SEATTLE-TACOMA INTL** ID: **KSEA**

PROCEDURE: **RNAV (RNP) Z RWY 16R** AMDT: **ORIG**

DOCKET#:
(96-AXX-X/Required/Not Required)

ALL DIST TO 1/100 NM; ELEV TO NEAREST FT; COORD TO 1/100 SEC; DEG TO 1/100 DG.

1. Distance from (Enter THLD, FAF, ARP, FACILITY, as appropriate)	**THLD**	to 1000' point	**3.23**
2. Width of (Enter appropriate segment, final, intermediate, etc.)	**FINAL**	segment at 1000' point	**1.20**
3. True Course of	**FINAL**	segment containing 1000' point	**180.33**
4. High Terrain in	**FINAL**	segment containing 1000' point	**459**
5. Distance from (If 1500' point in PT maneuvering area or holding pattern note in remarks)	**THLD**	to 1500' point	**10.13**
6. Width of	**INTERMEDIATE**	segment at 1500' point	**2.80**
7. True Course of	**INTERMEDIATE**	segment containing 1500' point	**180.33**
8. High Terrain in	**INTERMEDIATE**	segment containing 1500' point	**466**

9. Threshold Coordinates (if straight-in) ... **472749.81N** / **1221904.29W**

10. ARP Coordinates ..... **472659.60N** / **1221842.40W**

11. Runway Approach End and distance furthest from ARP ..... RWY **34R**

Distance **1.13** NM

12. FAF Coordinates ..... **473219.10N** / **1221902.00W**

REMARKS: Approach/Drawing attached.

SINGLE 1500 FT POINT BETWEEN CELAK AND BUGNE.

RWY 16R -
SEGMENT/S: WOTIK - FINKA

PFAF Calculations

Min Intermediate Segment Alt (a):	
LTP MSL Elevation (b):	
TCH:	
Glidepath Angle (⊖):	
Distance from LTP to PFAF (D):	0.00
	0.00 NM
LTP/FTP Latitude:	
LTP/FTP Longitude:	
True RWY Bearing/True Course:	
PFAF Latitude:	000° 00' 00.00"
PFAF Longitude:	000° 00' 00.00"

Latitude/Longitude valid for straight segment only

VEB OCS Origin & Slope

Intermediate Segment Altitude:	1900
LTP Elevation:	415
Glidepath Angle:	3
TCH:	54.9
RNP Value:	0.30
Δ ISA:	-22.135
Straight In Segment	
(*Wingspan =<262*) **LTP to Origin:**	3,652.74'
(*Wingspan =<136*) **LTP to Origin:**	3,443.69'
OCS Slope Ratio:	20.90 : 1
RF Turn Segment | Bank angle:	
(*Wingspan =<262*) **LTP to Origin:**	NA
(*Wingspan =<136*) **LTP to Origin:**	NA
OCS Slope Ratio:	NA

Version 2.0

VEB Temperature Limits

Glidepath Angle:		
Max Glidepath Angle:		
PFAF Elevation:		
LTP Elevation:		
ACT:		
Min Glidepath Angle	#DIV/0!	
NA Below	#DIV/0!	#DIV/0!
NA Above	#DIV/0!	#DIV/0!

Intermediate Segment VEB ROC

Glidepath Angle	3.00°
LTP MSL Elevation	415.00
TCH (ft)	54.90
OCS Slope	20.90
OCS Origin Distance (ft) *(measured along-track from LTP)*	3,652.74
Obstacle Distance (ft) *(measured along-track from LTP)*	23,176.81
VEB ROC *(at obstacle)*	**339**
Glidepath MSL altitude at Obstacle	1,697.42
OCS MSL altitude at Obstacle	1,358.11

KEEP WITH PACKAGE

WOTIK - FINKA