

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
Distances are in nautical miles (NM). Graphic depictions attached.

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
HHOOD (RNAV)	FOUR	HHOOD.HHOOD4	THREE	06/25/2015	07 DEC 2017

TRANSITION ROUTES:

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Mag Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
BAYYR	BAYYR.HHOOD4	BAYYR	BAYYR						AT/ABOVE 13000
			HHOOD	254.30	13.14	9000	6900		BETWEEN 9000 AND 15000
DUFUR	DUFUR.HHOOD4	DUFUR	DUFUR						
			RABBI	269.75	09.28	13000	6800		AT/ABOVE 13000
			HHOOD	269.75	13.13	9000	7200		BETWEEN 9000 AND 15000
JKNOX	JKNOX.HHOOD4	JKNOX	JKNOX						AT/ABOVE FL240
			MYTOE	255.45	26.86	17000	4900		AT/ABOVE 17000
			BAYYR	254.55	15.00	13000	5800		AT/ABOVE 13000
			HHOOD	254.30	13.14	9000	6900		BETWEEN 9000 AND 15000
JORAD	JORAD.HHOOD4	JORAD	JORAD						AT/ABOVE FL240
			LUUND	232.74	19.54	17000	5600		AT/ABOVE 17000
			YENTL	232.42	14.98	13000	5500		AT/ABOVE 13000
			HHOOD	232.33	13.16	9000	6900		BETWEEN 9000 AND 15000
JOTBA	JOTBA.HHOOD4	JOTBA	JOTBA						AT/ABOVE FL240
			SODDA	282.72	27.30	17000	5400		AT/ABOVE 17000
			DUFUR	282.37	05.64	13000	5100		
			RABBI	269.75	09.28	13000	6800		AT/ABOVE 13000
			HHOOD	269.75	13.13	9000	7200		BETWEEN 9000 AND 15000
RABBI	RABBI.HHOOD4	RABBI	RABBI						AT/ABOVE 13000
			HHOOD	269.75	13.13	9000	7200		BETWEEN 9000 AND 15000
YENTL	YENTL.HHOOD4	YENTL	YENTL						AT/ABOVE 13000
			HHOOD	232.33	13.16	9000	6900		BETWEEN 9000 AND 15000

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ARRIVAL ROUTE DESCRIPTION:

FROM HHOOD ON TRACK 257.00/10.24 TO BLRUN (MEA 7200), THENCE...

LANDING RWY 10L/R: FROM BLRUN ON TRACK 270.64/13.86 TO CROSS SSDEE BETWEEN 9000 AND 11000 (MEA 7000/MOCA 6300), THEN ON TRACK 270.40/4.11 TO CROSS THEID BETWEEN 8000 AND 10000 (MEA 7000/MOCA 3800), THEN ON TRACK 270.35/4.25 TO CROSS EMZEY BETWEEN 7000 AND 8000 AND AT 230 KIAS (MEA 5000/MOCA 3300), THEN ON TRACK 281.18/6.47 TO CROSS CIZZL AT OR ABOVE 5000 AND AT 210 KIAS (MEA 5000/MOCA 3100), THEN ON TRACK 281.35/2.50 TO CROSS YORKY AT 5000 (MEA 5000/MOCA 2700), THEN ON TRACK 281.32/7.40 TO NNUTT (MEA 5000/MOCA 2700), THEN ON TRACK 278.00. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING RWY 21: FROM BLRUN ON TRACK 279.47/11.00 TO CROSS SOOZN AT 8000 AND AT 210 KIAS (MEA 6400), THEN ON TRACK 279.00. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING RWY 28L/R: FROM BLRUN ON TRACK 258.56/3.50 TO CROSS SHAFR AT 6700 AND AT 210 KIAS (MEA 6700). EXPECT RNAV (RNP)/ILS/VISUAL APPROACH AS ASSIGNED BY ATC.

PROCEDURAL DATA NOTES:

NOTE: RADAR REQUIRED

NOTE: RNAV 1

NOTE: DME/DME/IRU OR GPS REQUIRED

NOTE: TURBOJET AIRCRAFT DESCEND VIA MACH NUMBER UNTIL INTERCEPTING 280K. MAINTAIN 280K UNTIL SLOWED BY THE STAR.

FIXES AND/OR HOLDING PATTERNS:

CHART: BTG VORTAC, UBG VOR/DME, BUXOM, CREAK, and REEDI.

CHART HOLDING AT:

DUFUR (HOLD E, LT, 266.97 INBOUND, 10 NM LEGS),

JKNOX (HOLD E, RT, 255.45 INBOUND, 10 NM LEGS),

JOTBA (HOLD E, LT, 282.72 INBOUND, 10 NM LEGS),

LUUND (HOLD NE, LT, 232.42 INBOUND, 10 NM LEGS).

COMMUNICATIONS:

PDX ATIS, PDX APP CON, PDX TWR, PDX GND CON

AIRPORTS SERVED:

PORTLAND INTL, PORTLAND, OR (KPDX)

LOST COMMUNICATIONS PROCEDURE:

LANDING RWY 10: AT NNUTT, TURN LEFT DIRECT TO BUXOM AND EXECUTE ILS RWY 10L APPROACH.

LANDING RWY 21: AT SOOZN TURN RIGHT DIRECT TO CREAK AND EXECUTE LOC/DME RWY 21 APPROACH.

LANDING RWY 28: AT SHAFR, TURN LEFT DIRECT TO REEDI AND EXECUTE ILS RWY 28R APPROACH.

REMARKS:

THIS AMENDMENT DOES NOT QUALIFY AS A PERIODIC REVIEW.

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0)

REFERENCE MAGNETIC VARIATION = KPDX 16E/2010

QUALITY
17
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Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
HHOOD (RNAV)	FOUR	HHOOD.HHOOD4	THREE	06/25/2015	07 DEC 2017
<u>FLIGHT INSPECTED BY:</u>					
FLIGHT INSPECTION NOT REQUIRED, MANAGER ROBERT STUCKERT Name	AJW-331 Organization	<i>Digitally signed by</i> CASIMIR L TABAKA Sep 25, 2017	10/29/2014 Date	_____ Signature	
<u>DEVELOPED BY:</u>					
LEON FULLNER, MGR, AIRSPACE & PROCEDURES Name	SEATTLE ARTCC Organization	<i>Digitally signed by</i> CASIMIR L TABAKA Sep 25, 2017	08/28/2015 Date	_____ Signature	
<u>APPROVED BY:</u>					
MARLON J. ROBINSON, MANAGER Name	AJV-5440 Organization	<i>Digitally signed by</i> CASIMIR L TABAKA Sep 25, 2017	Date	_____ Signature	

CHANGES:

- 1) LOST COMMUNICATIONS FOR LANDING RWY 28 CHANGED FROM: "...LEFT TURN DIRECT NACIY..." TO: "...LEFT TURN DIRECT REEDI..."

REASONS:

- 1) REEDI IS AN IAF FOR THE ILS RWY 28R APPROACH

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STAR (DATA RECORD)

Arrival Name HHOOD (RNAV)		Number FOUR		STAR Computer Code HHOOD.HHOOD4		Superseded Number THREE		Dated 06/25/2015	Effective Date 07 DEC 2017
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
En Route Transition									
BAYYR	453143.56N / 1212412.24W	Y		IF			AT/ABOVE 13000	AT 270K	BAYYR.HHOOD4
HHOOD	453146.12N / 1214254.05W	Y	FB	TF	270.30	13.14	9000B15000	AT 250K	
En Route Transition									
DUFUR	452543.22N / 1211213.48W	Y		IF					DUFUR.HHOOD4
RABBI	452813.68N / 1212455.39W	Y	FB	TF	285.75	09.28	AT/ABOVE 13000	AT 270K	
HHOOD	453146.12N / 1214254.05W	Y	FB	TF	285.75	13.13	9000B15000	AT 250K	
En Route Transition									
JKNOX	453102.65N / 1202440.73W	Y		IF			AT/ABOVE FL240		JKNOX.HHOOD4
MYTOE	453136.91N / 1210252.08W	Y	FB	TF	271.45	26.86	AT/ABOVE 17000		
BAYYR	453143.56N / 1212412.24W	Y	FB	TF	270.55	15.00	AT/ABOVE 13000	AT 270K	
HHOOD	453146.12N / 1214254.05W	Y	FB	TF	270.30	13.14	9000B15000	AT 250K	
En Route Transition									
JORAD	454919.00N / 1203941.00W	Y		IF			AT/ABOVE FL240		JORAD.HHOOD4
LUUND	454211.17N / 1210539.66W	Y	FB	TF	248.74	19.54	AT/ABOVE 17000		
YENTL	453639.08N / 1212530.00W	Y	FB	TF	248.42	14.98	AT/ABOVE 13000	AT 270K	
HHOOD	453146.12N / 1214254.05W	Y	FB	TF	248.33	13.16	9000B15000	AT 250K	
En Route Transition									
JOTBA	451000.70N / 1203112.27W	Y		IF			AT/ABOVE FL240		JOTBA.HHOOD4
SODDA	452302.63N / 1210510.62W	Y	FB	TF	298.72	27.30	AT/ABOVE 17000		
DUFUR	452543.22N / 1211213.48W	Y	FB	TF	298.37	05.64			
RABBI	452813.68N / 1212455.39W	Y	FB	TF	285.75	09.28	AT/ABOVE 13000	AT 270K	
HHOOD	453146.12N / 1214254.05W	Y	FB	TF	285.75	13.13	9000B15000	AT 250K	

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Arrival Name HHOOD (RNAV)		Number FOUR		STAR Computer Code HHOOD.HHOOD4		Superseded Number THREE		Dated 06/25/2015	Effective Date 07 DEC 2017
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
En Route Transition									
RABBI	452813.68N / 1212455.39W	Y		IF			AT/ABOVE 13000	AT 270K	RABBI.HHOOD4
HHOOD	453146.12N / 1214254.05W	Y	FB	TF	285.75	13.13	9000B15000	AT 250K	
En Route Transition									
YENTL	453639.08N / 1212530.00W	Y		IF			AT/ABOVE 13000	AT 270K	YENTL.HHOOD4
HHOOD	453146.12N / 1214254.05W	Y	FB	TF	248.33	13.16	9000B15000	AT 250K	
Common Route									
HHOOD	453146.12N / 1214254.05W	Y		IF			9000B15000	AT 250K	HHOOD.HHOOD4
BLRUN	453217.38N / 1215727.02W	Y	FB	TF	273.00	10.24			
Runway Transition									
BLRUN	453217.38N / 1215727.02W	Y		IF					
SSDEE	453613.85N / 1221621.75W	Y	FB	TF	286.64	13.86	9000B11000		
THEID	453723.35N / 1222158.96W	Y	FB	TF	286.40	04.11	8000B10000		
EMZEY	453835.03N / 1222747.97W	Y	FB	TF	286.35	04.25	7000B8000	AT 230K	
CIZZL	454132.02N / 1223600.67W	Y	FB	TF	297.18	06.47	AT/ABOVE 5000	AT 210K	
YORKY	454240.88N / 1223910.78W	Y	FB	TF	297.35	02.50	AT 5000		
NNUTT	454604.32N / 1224834.49W	Y	FO	TF	297.32	07.40			
KPDX:RWY 10B				FM	294.00				RECOMMENDED NAVAID: HLN VORTAC
Runway Transition									
BLRUN	453217.38N / 1215727.02W	Y		IF					
SOOZN	453700.23N / 1221135.95W	Y	FO	TF	295.47	11.00	AT 8000	AT 210K	
KPDX:RWY 21				FM	295.00				RECOMMENDED NAVAID: HLN VORTAC

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HHOOD (RNAV)	FOUR	HHOOD.HHOOD4	THREE	06/25/2015	07 DEC 2017

FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
Runway Transition									
BLRUN	453217.38N / 1215727.02W	Y		IF					
SHAFR	453233.99N / 1220225.15W	Y	FB	TF	274.56	03.50	AT 6700	AT 210K	
KPDX:RWY 28B									

