

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.
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Arrival Name KRATR (RNAV)	Number THREE	STAR Computer Code KRATR.KRATR3	Superseded Number TWO	Dated 06/25/2015	Effective Date
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TRANSITION ROUTES:

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
BUWZO	BUWZO.KRATR3	BUWZO	BUWZO						
			HELNS	164.00	41.73	10000	9600		
			KRATR	185.20	10.75	10000	9600		BETWEEN 10000 AND 13000
HELNS	HELNS.KRATR3	HELNS	HELNS						
			KRATR	185.20	10.75	10000	9600		BETWEEN 10000 AND 13000

ARRIVAL ROUTE DESCRIPTION:

FROM KRATR ON TRACK 184.61/10.19 TO CROSS HYKER BETWEEN 7000 AND 9000.

LANDING RWY 10L/R: FROM HYKER ON TRACK 207.20/12.00 TO CROSS VEEGN AT 5000 AND AT 210 KIAS, THEN ON TRACK 207.57/3.26 TO DOUHH, THEN ON TRACK 277.92/3.31 TO CROSS NNUTT AT 5000, THEN ON TRACK 277.92. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING RWY 21: FROM HYKER ON TRACK 185.53/11.81 TO CROSS BATYL AT 7000 AND AT 210 KIAS, THEN ON TRACK 160.00. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING RWY 28L/R: FROM HYKER ON TRACK 154.11/8.00 TO CROSS BOOSR AT 6000 AND AT 210 KIAS, THEN ON TRACK 154.13/11.69 TO CROSS RALEE AT 6000, THEN ON TRACK 100.00. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

PBN REQUIREMENT NOTES:

RNAV 1 - DME/DME/IRU OR GPS

EQUIPMENT REQUIREMENT NOTES:

RADAR REQUIRED

PROCEDURAL DATA NOTES:

NOTE: HELNS TRANSITION, ATC ASSIGNED ONLY.

NOTE: JET AIRCRAFT DESCEND VIA MACH NUMBER UNTIL 280 KIAS, IF UNABLE, ADVISE ATC.

FIXES AND/OR HOLDING PATTERNS:

CHART HOLDING AT HELNS: HOLD N, LT, 185.20 INBOUND, 10 NM LEGS.

CHART: CREAK, BUXOM, NACIY, SHYNE.

COMMUNICATIONS:

CHART: PDX TWR, PDX GND CON.

AIRPORTS SERVED:

<u>AIRPORT ID</u>	<u>CITY</u>	<u>STATE</u>
PDX	PORTLAND	OR



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LOST COMMUNICATIONS PREFERENCES:

- FOLLOW PUBLISHED CROSSING ALTITUDES AND THEN MAINTAIN LOWEST RWY TRANSITIONAL ALTITUDE UNTIL ESTABLISHED ON APPROACH PROCEDURE.
- RWY 10L/R: AT NNUTT, TURN LEFT DIRECT TO BUXOM AND PROCEED ON ILS OR LOC RWY 10L APPROACH.
- RWY 21: AT BATYL, TURN LEFT DIRECT TO CREAK AND PROCEED ON LOC/DME RWY 21 APPROACH.
- RWY 28L/R: AT RALEE, TURN LEFT DIRECT TO SHYNE, THEN TURN RIGHT DIRECT TO NACIY AND PROCEED ON ILS OR LOC RWY 28R APPROACH.

REMARKS:

- DO NOT CHART MOCA VALUES (ALL WITHIN 500 FT OF MEA).
- HELNS HOLDING CO IS 8304 TERRAIN; NO AAO APPLICATION; SEE STANDALONE MAP.

ADDITIONAL FLIGHT DATA:

- DME/DME ASSESSMENT: SAT (RNP 2.0)
- MAG VAR: PDX 16E/2010.
- CHART: BTG VORTAC
- CHART: SEA R-161 AT BUWZO
- CHART AT RALEE TERMINUS: PDX LDG RWY 28L/R
- CHART AT NNUTT TERMINUS: PDX LDG RWY 10L/R
- CHART AT BATYL TERMINUS: PDX LDG RWY 21

FLIGHT INSPECTED BY:

ORGANIZATION: DATE:

JORDAN ROLIH AJF 12/22/2025

Flight Inspected Signature:

Digitally signed by

ALLAN WILL

Dec 29, 2025

Digitally signed by

ALLAN WILL

Dec 29, 2025

Digitally signed by

ALLAN WILL

Dec 29, 2025

DEVELOPED BY:

THOMAS KUKLISH AJV-A330 08/07/2025

Developed By Signature:

APPROVED BY:

KYLE THOMPSON AJV-A330

Approved By Signature:

CHANGES:

- TRANSITION ROUTES: CHANGED BUWZO-HELNS SEGMENT MEA FROM 11000 TO 10000. REMOVED AT/ABOVE 11000 CROSSING ALTITUDE RESTRICTION.
- TRANSITION ROUTES: CHANGED ALL SEGMENT MOCAS FROM 8500 TO 9600.
- ARRIVAL ROUTE DESCRIPTION: REMOVED ALL MEAS/MOCAS.
- ARRIVAL ROUTE DESCRIPTION: RWY 10L/R TRANSITION: REPLACED VOODU WITH VEEGN. UPDATED COURSES/DISTANCES FROM HYKER-VEEGN AND VEEGN-DOUHH. ADDED 5000 FOOT CROSSING RESTRICTION @ NNUTT.
- ARRIVAL ROUTE DESCRIPTION: RWY 28L/R: REPLACED LIQWD WITH BOOSR AND SSSUN WITH RALEE. REMOVED SHYNE. UPDATED COURSES/DISTANCES FROM HYKER-BOOSR, BOOSR-RALEE, AND FM SEGMENT INBOUND FROM RALEE. ADDED 210K SPEED RESTRICTION @ BOOSR. ADDED 6000 FOOT CROSSING RESTRICTION AND REMOVED 210 KIAS SPEED RESTRICTION @ RALEE.
- FIXES AND/OR HOLDING PATTERNS: ADDED CHART: CREAK, BUXOM, NACIY, SHYNE.
- LOST COMMUNICATIONS PREFERENCES: LANDING RUNWAYS 28L/R: ADDED RALEE AND LEFT TURN TO SHYNE.



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8. ADDITIONAL FLIGHT DATA: ADDED TERMINUS POINT INFORMATION FOR ALL RUNWAYS.
9. REMARKS: ADDED DO NOT CHART MOCA VALUES WITHIN 500 FT OF MEA.
10. ADDED SPEED RESTRICTION AT/BELOW 260 KIAS TO FIX KRATR.
11. REMOVED ARPT K IDENT FROM 17.1 FORM.
12. REMOVED WORD THENCE FROM COMMON ROUTE ARRIVAL DESCRIPTION.
13. REFORMATTED HELNS ATC ASSIGNED NOTE.
14. REFORMATTED DESCEND VIA MACH NOTE.
15. REMOVED RECOMMENDED NAVAID FROM 17.2 FORM.
16. UPDATED LOST COMM VERBIAGE: REMOVED LANDING AND REPLACED EXECUTE WITH PROCEED.
17. REMARKS: ADDED HELNS HOLDING CO IS 8304 TERRAIN; NO AAO APPLICATION; SEE STANDALONE MAP.

REASONS:

- 1,4,5,7,10. ATC REQUEST.
2. NEW SEGMENT OBSTACLE EVALUATIONS.
3. REQUIRED DOCUMENTATION PER FAO 8260.3G, PARA 2-2-7E(3).
6. REQUIRED DOCUMENTATION PER FAO 8260.19K, PARA 4-5-12H(1).
8. REQUIRED DOCUMENTATION PER FAO 8260.19K, PARA 4-5-12J(5).
9. REQUIRED DOCUMENTATION PER FAO 8260.19K, PARA 4-5-12B(8).
11. REQUIRED DOCUMENTATION PER FAO 8260.19K PARA 4-5-12G.
12. REQUIRED DOCUMENTATION PER FAO 8260.19K PARA 4-5-12C.
13. REQUIRED DOCUMENTATION PER FAO 8260.19K PARA 4-5-12(3)(B).
14. REQUIRED DOCUMENTATION PER FAO 8260.19K PARA 4-5-2F.
15. REQUIRED DOCUMENTATION PER FAO 8260.19K, PARA 4-5-2(O).
16. FOR CONTINUITY WITH HHOOD6 STAR.
17. EXPLANATORY INFORMATION FOR FLIGHT CHECK/AIS REFERENCE.

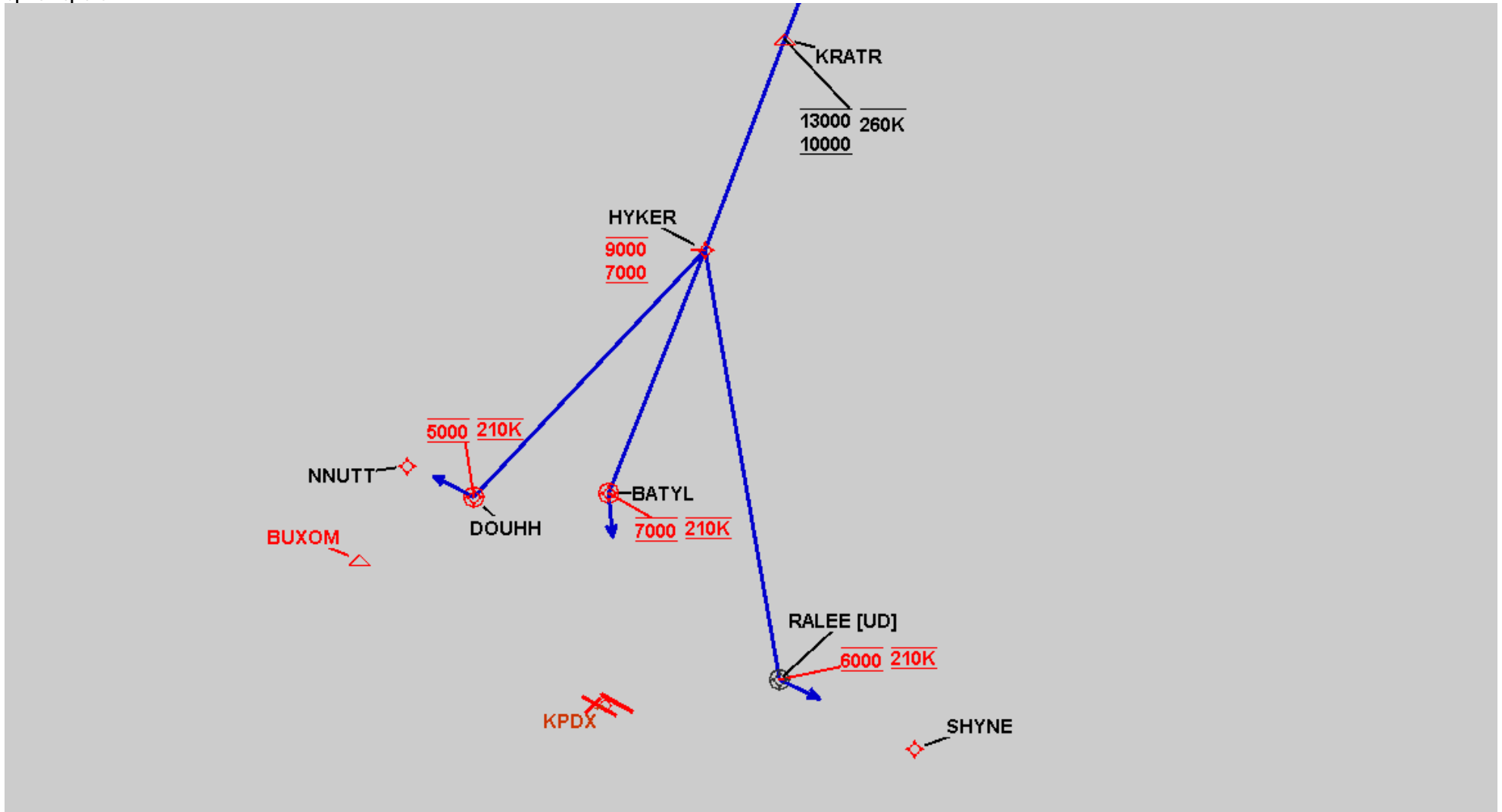


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Graphic Depiction 1

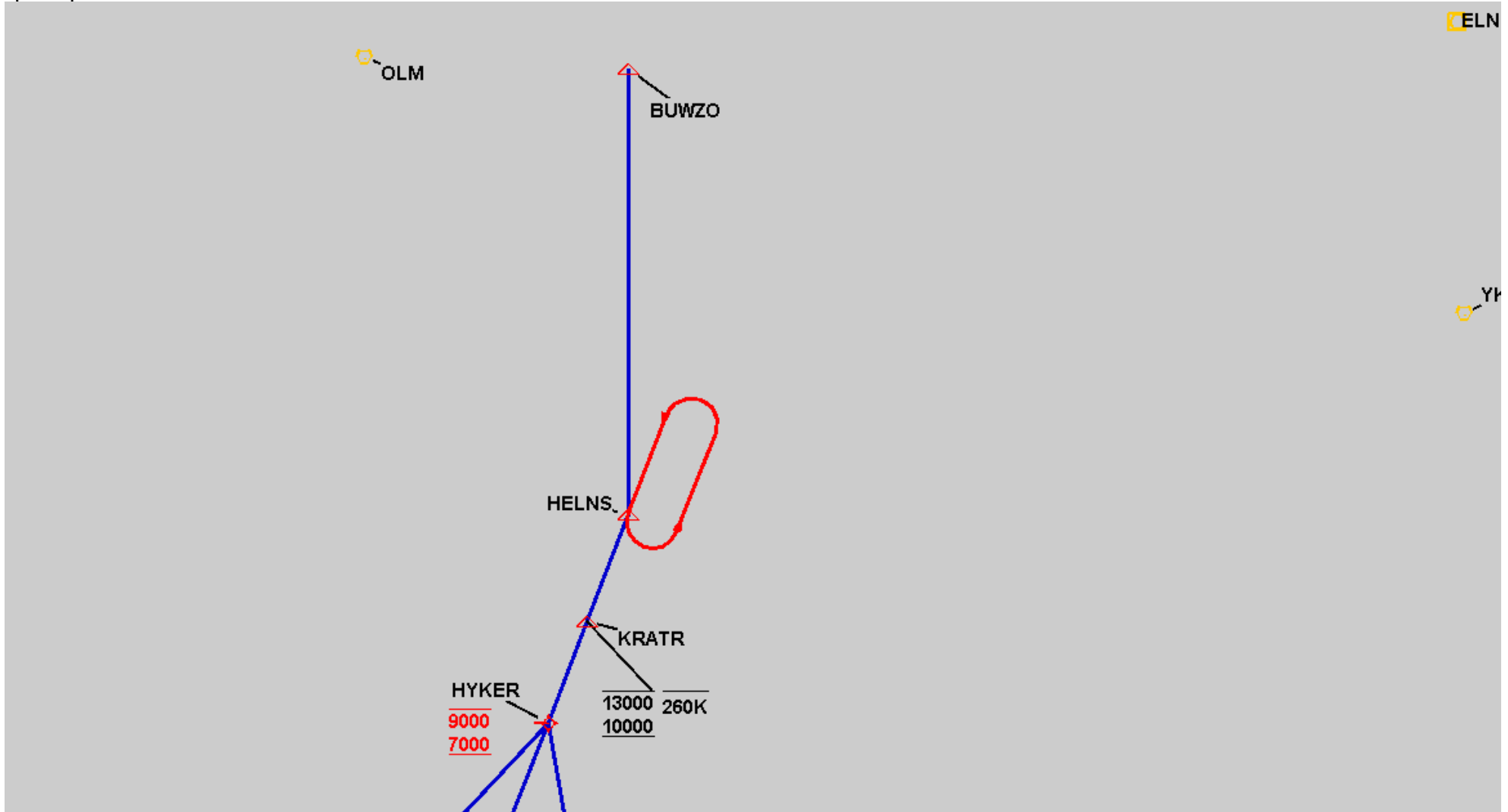


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Graphic Depiction 2



FEDERAL AVIATION ADMINISTRATION
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 STAR (DATA RECORD)

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date				
KRATR (RNAV)	THREE	KRATR.KRATR3	TWO	06/25/2015					
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
En Route Transition									
BUWZO	465708.19N / 1221834.62W	Y		IF					BUWZO.KRATR3
HELNS	461525.10N / 1221834.58W	Y	FB	TF	180.00	41.73			
KRATR	460523.57N / 1222409.90W	Y	FB	TF	201.20	10.75	10000B13000	AT/BELOW 260K	
En Route Transition									
HELNS	461525.10N / 1221834.58W	Y		IF					HELNS.KRATR3
KRATR	460523.57N / 1222409.90W	Y	FB	TF	201.20	10.75	10000B13000	AT/BELOW 260K	
Common Route									
KRATR	460523.57N / 1222409.90W	Y		IF			10000B13000	AT/BELOW 260K	KRATR.KRATR3
HYKER	455551.24N / 1222918.23W	Y	FB	TF	200.61	10.19	7000B9000		
Runway Transition									
HYKER	455551.24N / 1222918.23W	Y		IF			7000B9000		
VEEGN	454705.83N / 1224102.59W	Y	FB	TF	223.20	12.00	AT 5000	AT 210K	
DOUHH	454443.96N / 1224415.32W	Y	FB	TF	223.57	03.26			
NNUTT	454604.32N / 1224834.49W	Y	FO	TF	293.92	03.31	AT 5000		
KPDX:RWY 10L,RWY 10				FM	293.92				
Runway Transition									
HYKER	455551.24N / 1222918.23W	Y		IF			7000B9000		
BATYL	454452.04N / 1223529.61W	Y	FO	TF	201.53	11.81	AT 7000	AT 210K	
KPDX:RWY 21				FM	176.00				



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<u>FIX/NAVAID</u>	<u>LAT/LONG</u>	<u>C</u>	<u>FO/FB</u>	<u>LEG TYPE</u>	<u>TC</u>	<u>DIST (NM)</u>	<u>ALTITUDE</u>	<u>SPEED</u>	<u>REMARKS</u>
Runway Transition									
HYKER	455551.24N / 1222918.23W	Y		IF			7000B9000		
BOOSR	454758.48N / 1222720.36W	Y	FB	TF	170.11	08.00	AT 6000	AT 210K	
RALEE	453627.61N / 1222429.11W	Y	FO	TF	170.13	11.69	AT 6000		
KPDX:RWY 28L,RWY 28R				FM	116.00				

