

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

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Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
MARNR (RNAV)	EIGHT	MARNR.MARNR8	SEVEN	10/12/2017	

TRANSITION ROUTES:

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
BUHNR	BUHNR.MARNR8	BUHNR	BUHNR						AT/ABOVE 12000
			MARNR	152.32	08.14	9000	5200		AT/ABOVE 12000
JIGEB	JIGEB.MARNR8	JIGEB	JIGEB						AT/ABOVE 12000
			MARNR	132.58	13.56	9000	5200		AT/ABOVE 12000
ROESH	ROESH.MARNR8	ROESH	ROESH						
			MARNR	153.16	36.21	9000	5200		AT/ABOVE 12000
TATOOSH	TOU.MARNR8	TOU VORTAC	TOU VORTAC						AT/ABOVE FL200
			LOOOO	085.71	51.07	15000	5200		AT/ABOVE 17000
			MARNR	086.68	22.00	9000	5200		AT/ABOVE 12000
VIXOR	VIXOR.MARNR8	VIXOR	VIXOR						AT/ABOVE FL200
			ORCUS	132.19	27.00	10000	5200		AT/ABOVE 17000
			MARNR	132.48	21.49	9000	5200		AT/ABOVE 12000

ARRIVAL ROUTE DESCRIPTION:

LANDING RWY 16L/C/R: FROM MARNR ON TRACK 106.74/5.97 TO CROSS BOANE AT OR ABOVE 11000 AND AT 250 KIAS, THEN ON TRACK 093.58/10.91 TO CROSS NEHOS AT OR ABOVE 8000 AND AT 230 KIAS, THEN ON TRACK 147.36/9.69 TO CROSS GRIFY AT 6000 AND AT 210 KIAS. EXPECT RNAV OR ILS APPROACH.

LANDING RWY 34L/C/R: FROM MARNR ON TRACK 132.67/8.00 TO CROSS PNELA AT OR ABOVE 12000 AND AT 270 KIAS, THEN ON TRACK 132.78/14.27 TO CROSS VEGGN BETWEEN 11000 AND 15000 AND AT 250 KIAS, THEN ON TRACK 139.09/9.70 TO CROSS UNITT AT OR ABOVE 10000, THEN ON TRACK 164.36/6.38 TO CROSS WUBET AT OR ABOVE 8000 AND AT 230 KIAS, THEN ON TRACK 164.35/6.65 TO CROSS SHIPZ AT 7000 AND AT 210 KIAS, THEN ON TRACK 164.34/3.50 TO CROSS EMMSS AT 7000, THEN ON TRACK 164.34. 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: JET AIRCRAFT DESCEND VIA MACH NUMBER UNTIL INTERCEPTING 280 KIAS. MAINTAIN 280 KIAS UNTIL SLOWED BY THE STAR.

NOTE: NON-RNP AR AIRCRAFT LANDING RWYS 34L/C/R, EXPECT RADAR VECTORS TO FINAL APPROACH COURSE PRIOR TO EMMSS.

NOTE: EXPECT ASSIGNED INSTRUMENT APPROACH PRIOR TO GRIFY.

FIXES AND/OR HOLDING PATTERNS:

CHART HOLDING AT MARNR: HOLD NW, RT, 132.48 INBOUND, 10 NM LEGS.

CHART HOLDING AT SONDR: HOLD S, RT, 358.00 INBOUND, 5 NM LEGS.

COMMUNICATIONS:

CHART: SEATTLE APP CON.

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MARNR (RNAV)	EIGHT	MARNR.MARNR8	SEVEN	10/12/2017	

AIRPORTS SERVED:

AIRPORT ID	CITY	STATE
KSEA	SEATTLE	WA

LOST COMMUNICATIONS PREFERENCES:

LANDING RUNWAY 16: AT GRIFY, PROCEED ON THE ILS RWY 16R APPROACH.
LANDING RUNWAY 34: AT EMMSS, PROCEED DIRECT TO SONDR AND THEN ON THE ILS RWY 34L APPROACH.

REMARKS:

HOLDING AT SONDR FOR LOST COMM ONLY.

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0)
MAG VAR: KSEA 16E/2020
CHART AT EMMSS TERMINUS: KSEA LDG RWY 34L/C/R
CHART AT GRIFY TERMINUS: KSEA LDG RWY 16L/C/R

FLIGHT INSPECTED BY:

ORGANIZATION: **DATE:**

GARY J VEER

FPO 4/24/2024

Flight Inspected Signature:

Digitally signed by
ERIC N SUSKI
May 07, 2024

DEVELOPED BY:

RICHARD E. CHRISTENSEN

AJV-A431 1/3/2024

Developed By Signature:

Digitally signed by
RICHARD E. CHRISTENSEN
May 02, 2024

APPROVED BY:

ERIC SUSKI

AJV-A431

Approved By Signature:

Digitally signed by
ERIC N SUSKI
May 07, 2024

CHANGES:

1. REPLACED YYJ VOR/DME WITH NEW WP VIXOR ON VICTORIA EN ROUTE TRANSITION, AND RENAMED TRANSITION FROM VICTORIA TO VIXOR.
2. ADDED AT 7000 ALTITUDE RESTRICTION AT EMMSS.
3. ALL MOCA VALUES CHANGED TO REPRESENT 5200.
4. REMOVED MEA/MOCA VALUES FROM ARRIVAL DESCRIPTION.
5. TATOO/VIXOR TRANSITIONS: MEA AT MARNR CHANGED FROM 10000 TO 9000.
6. ADDED EXPECT RNAV OR ILS APPROACH FOR RWY 16 L/C/R TRANSITION, AND EXPECT RNP 34L/C APPROACH OR RADAR VECTORS TO FINAL APPROACH COURSE FOR RWY 34L/C/R TRANSITION.
7. REMOVED RECOMMENDED NAVAID FROM 17.2.
8. REMOVED AIRPORT NAME FROM AIRPORTS SERVED.
7. DELETED SPEED RESTRICTION AT UNITT.
8. ADDED 230 KIAS SPEED RESTRICTION AT WUBET.

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9. MEA TOU TO LOOOO SET TO 15000 FOR ADEQUATE DME/DME/IRU NAVIGATION.
10. ADDED CHART AT EMMSS TERMINUS: KSEA LDG RWY 34L/C/R AND CHART AT GRIFY TERMINUS: KSEA LDG RWY 16L/C/R TO ADDITIONAL FLIGHT DATA.
11. REMOVED SEATTLE-TACOMA ATIS FROM COMMUNICATIONS.
12. ADDED RNAV 1 - DME/DME/IRU OR GPS TO PBN REQUIREMENT NOTES.
13. LOST COMM: LANDING RWY 16 CHANGED "EXECUTE" TO "PROCEED ON" AND LANDING RWY 34 FROM "EXECUTE" TO "AND THEN ON".
14. ADDED HOLDING AT SONDR ALONG WITH REMARKS FOR LOST COMM ONLY.

1. YYJ VOR/DME SCHEDULED FOR DECOMMISSIONING 12/26/24.
2. IAW FAO 8260.3E 2-2-7 F(2).
3. NEW REFERENCE SOFTWARE RESULTS.
4. NOT REQUIRED ANY LONGER PER CRITERIA.
5. COMMON FIX ALTITUDE.
6. TO LIST IAP'S AVAILABLE AT TERMINUS FIX.
7. RESOLVES CRITERIA VIOLATION OF MIN SPEED AT/ABOVE 10000.
8. ATC REQUEST. FACILITATES ARRIVAL SEQUENCING.
9. FOR ADEQUATE DME/DME/IRU NAVIGATION.
10. IAW 8260.19I 4-5-12J(5).
11. IAW 8260.19I 4-5-12F/AUTOCHARTED.
12. IAW 8260.19I 4-5-12D(2).
13. PER AFS GUIDANCE.
14. ATC REQUESTED HOLDING PATTERN AT SONDR FOR LOST COMM ONLY.

1. TRANSITION ROUTES: REMOVED VANCOUVER (YVR) TRANSITION FROM PROCEDURE PER NAV CANADA REQUEST, CONFIRMED BY ZSE AIRSPACE MANAGER.

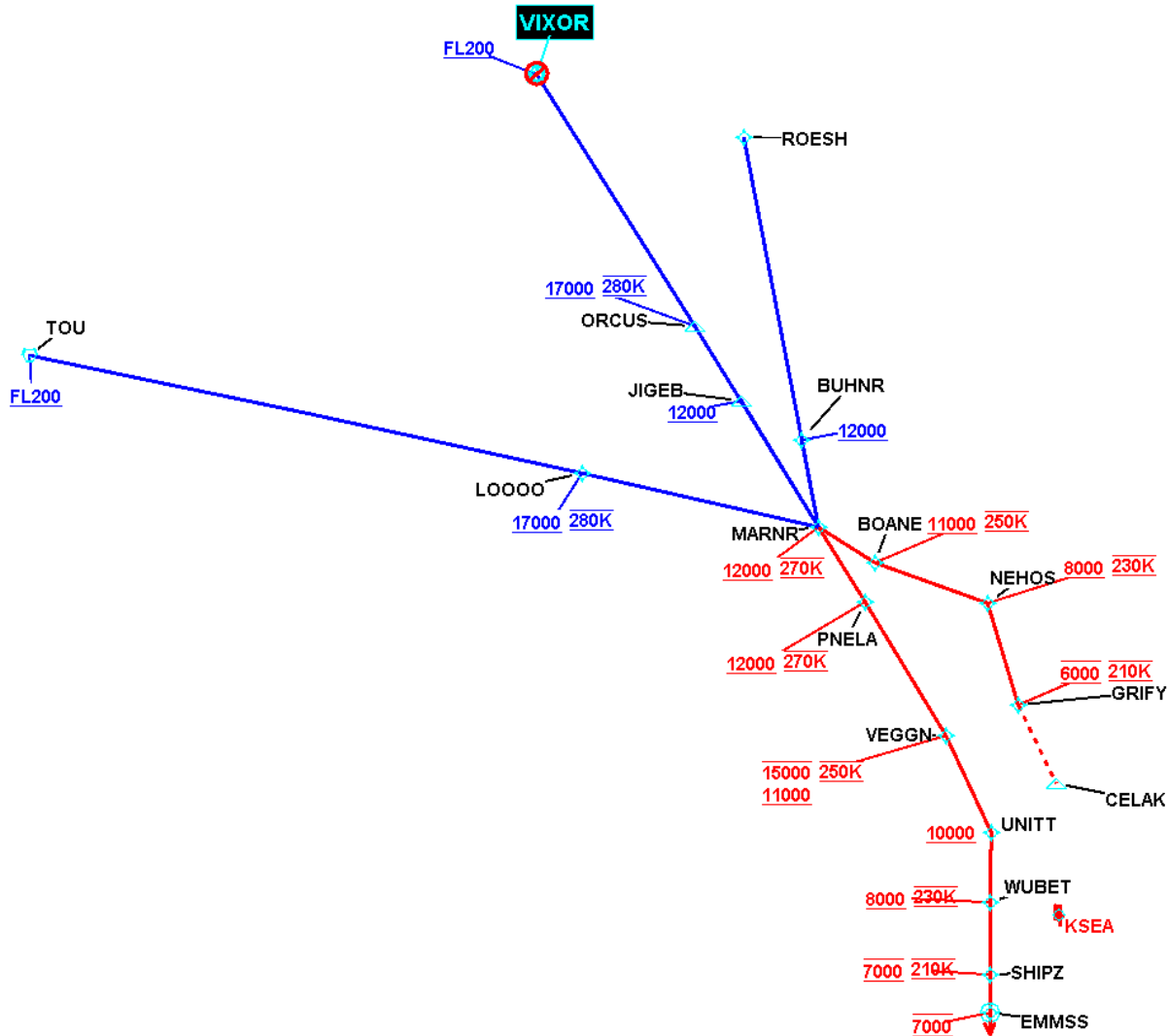
FÉXQUUÁ/UCÉUNQIPÁUWOT CÉOUWUOÁQYUUEJUOWUOPCPOOQAUUT ÁI Ì ÈBTHOÉÁ/UÁÌ Ì ÈJTHOÉJÈ
 GÉVIXORÁ UXOÓÁFÁVÁ ÒUV; COORDINATES UPDATED TO MATCH CANAV CANADA FIX COORDINATES FROM 484337.35N/1232903.70W TO Á
 484337.38N/1232904.16W.

Nov 01, 2024

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Graphic Depiction 1					



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STAR (DATA RECORD)**

Arrival Name MARNR (RNAV)	Number EIGHT		STAR Computer Code MARNR.MARNR8			Superseded Number SEVEN		Dated 10/12/2017	Effective Date
<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>
En Route Transition									
BUHNR	481018.00N / 1225327.00W	Y		IF			AT/ABOVE 12000		BUHNR.MARNR8
MARNR	480219.92N / 1225059.67W	Y	FB	TF	168.32	08.14	AT/ABOVE 12000	AT 270K	
En Route Transition									
JIGEB	481354.19N / 1230131.69W	Y		IF			AT/ABOVE 12000		JIGEB.MARNR8
MARNR	480219.92N / 1225059.67W	Y	FB	TF	148.58	13.56	AT/ABOVE 12000	AT 270K	
En Route Transition									
ROESH	483752.47N / 1230108.38W	Y		IF					ROESH.MARNR8
MARNR	480219.92N / 1225059.67W	Y	FB	TF	169.16	36.21	AT/ABOVE 12000	AT 270K	
En Route Transition									
TOU VORTAC	481759.64N / 1243737.36W	Y		IF			AT/ABOVE FL200		TOU.MARNR8
LOOOO	480714.00N / 1232259.00W	Y	FB	TF	101.71	51.07	AT/ABOVE 17000	AT 280K	
MARNR	480219.92N / 1225059.67W	Y	FB	TF	102.68	22.00	AT/ABOVE 12000	AT 270K	
En Route Transition									
VIXOR	484337.38N / 1232904.16W	Y		IF			AT/ABOVE FL200		VIXOR.MARNR8
ORCUS	482039.54N / 1230744.01W	Y	FB	TF	148.19	27.00	AT/ABOVE 17000	AT 280K	
MARNR	480219.92N / 1225059.67W	Y	FB	TF	148.48	21.49	AT/ABOVE 12000	AT 270K	
Runway Transition									
MARNR	480219.92N / 1225059.67W	Y		IF			AT/ABOVE 12000	AT 270K	
BOANE	475906.00N / 1224331.00W	Y	FB	TF	122.74	05.97	AT/ABOVE 11000	AT 250K	
NEHOS	475525.82N / 1222814.21W	Y	FB	TF	109.58	10.91	AT/ABOVE 8000	AT 230K	
GRIFY	474609.02N / 1222407.43W	Y	FB	TF	163.36	09.69	AT 6000	AT 210K	
KSEA:RWY 16C,RWY 16L,RWY 16R									

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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										
MARNR	480219.92N / 1225059.67W	Y		IF			AT/ABOVE 12000	AT 270K		
PNELA	475529.99N / 1224448.58W	Y	FB	TF	148.67	08.00	AT/ABOVE 12000	AT 270K		
VEGGN	474317.78N / 1223351.33W	Y	FB	TF	148.78	14.27	11000B15000	AT 250K		
UNITT	473430.20N / 1222749.34W	Y	FB	TF	155.09	09.70	AT/ABOVE 10000			
WUBET	472807.90N / 1222752.92W	Y	FB	TF	180.36	06.38	AT/ABOVE 8000	AT 230K		
SHIPZ	472129.06N / 1222756.51W	Y	FB	TF	180.35	06.65	AT 7000	AT 210K		
EMMSS	471759.17N / 1222758.32W	Y	FO	TF	180.34	03.50	AT 7000			
KSEA:RWY 34C,RWY 34L,RWY 34R				FM	180.34					