

US DEPARTMENT of TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

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 depiction attached.

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
MARNR RNAV	SIX	MARNR.MARNR6	FIVE	15 OCT 2015	21 JUL 2016

TRANSITION ROUTES:

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Mag Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
BUHNR	BUHNR.MARNR6	BUHNR	BUHNR						AT/ABOVE 12000
			MARNR	151.32	08.14	9000	4400		AT/ABOVE 12000
JIGEB	JIGEB.MARNR6	JIGEB	JIGEB						AT/ABOVE 12000
			MARNR	131.58	13.56	9000	4400		AT/ABOVE 12000
ROESH	ROESH.MARNR6	ROESH	ROESH						
			MARNR	152.16	36.21	9000	4400		AT/ABOVE 12000
TATOOSH	TOU.MARNR6	TOU VORTAC	TOU VORTAC						AT/ABOVE FL200
			LOOOO	084.71	51.07	10000	5100		AT/ABOVE 17000
			MARNR	085.68	22.00	10000	5000		AT/ABOVE 12000
VANCOUVER, B.C.	YVR.MARNR6	YVR VOR/DME	YVR VOR/DME						AT/ABOVE FL200
			ROESH	152.06	27.28	9000	2800		
			MARNR	152.16	36.21	9000	4400		AT/ABOVE 12000
VICTORIA	YYJ.MARNR6	YYJ VOR/DME	YYJ VOR/DME						AT/ABOVE FL200
			ORCUS	131.20	27.00	10000	3500		AT/ABOVE 17000
			MARNR	131.48	21.49	9000	4400		AT/ABOVE 12000

ARRIVAL ROUTE DESCRIPTION:

LANDING RWY RW16L/C/R: FROM MARNR ON TRACK 105.74/5.97 CROSS BOANE AT/ABOVE 11000 AND AT 250 KIAS (MEA 9000/MOCA 4400), THEN ON TRACK 092.58/10.91 TO CROSS NEHOS AT OR ABOVE 8000 AND AT 230 KIAS (MEA 8000/MOCA 1900), THEN ON TRACK 146.36/9.69 TO CROSS GRIFY AT 6000 AND AT 210 KIAS (MEA 6000/MOCA 2000). EXPECT ASSIGNED INSTRUMENT APPROACH PRIOR TO GRIFY.

LANDING RWY RW34L/R/C: FROM MARNR ON TRACK 131.67/8.00 TO CROSS PNELA AT/ABOVE 12000 AND AT 270 KIAS (MEA 9000/MOCA 4400), THEN ON TRACK 131.78/14.27 TO CROSS VEGGN BETWEEN 11000 AND 15000 AND AT 250 KIAS (MEA 9000/MOCA 3000), THEN ON TRACK 138.09/9.70 TO CROSS UNITT AT OR ABOVE 10000 AND AT 230 KIAS (MEA 8000/MOCA 1700), THEN ON TRACK 163.36/6.38 TO CROSS WUBET AT OR ABOVE 8000 (MEA 7000/MOCA 1900), THEN ON TRACK 163.35/6.65 TO CROSS SHIPZ AT 7000 AND AT 210 KIAS (MEA 6000/MOCA 1900), THEN ON TRACK 163.34/3.50 TO EMMSS (MEA 6000/MOCA 2000), THEN ON TRACK 163.34.

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 280 KIAS. MAINTAIN 280 KIAS UNTIL SLOWED BY THE STAR.

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

FIXES AND/OR HOLDING PATTERNS:

CHART HOLDING AT MARNR (HOLD NW, RT, 131.48 INBOUND, 10 NM LEGS.)

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COMMUNICATIONS:

SEATTLE APP CON, SEATTLE-TACOMA ATIS

AIRPORTS SERVED:

SEATTLE-TACOMA INTL, SEATTLE, WA

LOST COMMUNICATIONS PROCEDURE:

LANDING RWY16: AT GRIFY, EXECUTE THE ILS RWY 16R APPROACH.

LANDING RWY34: AT EMMSS, PROCEED DIRECT TO SONDR AND EXECUTE THE ILS RWY 34L APPROACH.

REMARKS:

TOU TRANSITION DID NOT PASS DME ASSESSMENT AT 9000. MEA 10000 USED.

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0)

REFERENCE MAG VAR: KSEA 17E/2010

CHANGES:

1. REPLACED BELNE WITH NEW WP EMMSS AS BEGINNING OF FM LEG ON RWY 34L/C/R TRANSITION.
2. ADDED MOCAs TO ARRIVAL ROUTE DESCRIPTION.

REASONS:

1. NECESSARY TO SEPARATE BEGINNING OF FM LEG AND CONNECTING POINT WITH IAP.
2. REQUIRED BY FAAO 7100.9E.

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STAR (DATA RECORD)

Arrival Name		Number		STAR Computer Code		Superseded Number		Dated		Effective Date	
MARNR RNAV		SIX		MARNR.MARNR6		FIVE		15 OCT 2015		21 JUL 2016	
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS		
En Route Transition											
BUHNR	481018.00N / 1225327.00W	Y		IF			AT/ABOVE 12000		BUHNR.MARNR6		
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.MARNR6		
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.MARNR6		
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.MARNR6		
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											
YVR VOR/DME	490438.35N / 1230856.66W	Y		IF			AT/ABOVE FL200		YVR.MARNR6		
ROESH	483752.47N / 1230108.38W	Y	FB	TF	169.06	27.28					
MARNR	480219.92N / 1225059.67W	Y	FB	TF	169.16	36.21	AT/ABOVE 12000	AT 270K			
En Route Transition											
YYJ VOR/DME	484337.35N / 1232903.70W	Y		IF			AT/ABOVE FL200		YYJ.MARNR6		
ORCUS	482039.54N / 1230744.01W	Y	FB	TF	148.20	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	QUALITY		
BOANE	475906.00N / 1224331.00W	Y	FB	TF	122.74	05.97	AT/ABOVE 11000	AT 250K	17		
CHECKED											

QUALITY
17
CHECKED

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FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
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 16L/C/R

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	AT 230K	
WUBET	472807.90N / 1222752.92W	Y	FB	TF	180.36	06.38	AT/ABOVE 8000		
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			
KSEA:RWY 34L/C/R				FM	180.34				RECOMMENDED NAVAID: YYJ VOR/DME

