

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Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
ELLENSBURG (RNAV)	FOUR	ELN.ELN4	THREE	11/10/2016	

TRANSITION ROUTES:

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
ELLENSBURG	ELN.ELN4	ELN VOR/DME	ELN VOR/DME						AT/BELOW FL240
			THICK	259.00	15.17	10000	7200		
			RADDY	259.27	28.33	10000	8700		BETWEEN 10000 AND 11000
			ENNUM	257.05	21.86	8600			BETWEEN 9000 AND 10000
			KPOWW	210.34	09.42	4700			BETWEEN 5700 AND 9000

ARRIVAL ROUTE DESCRIPTION:

LANDING RWY 16: FROM KPOWW ON TRACK 274.96/3.50 TO CROSS WAALP BETWEEN 4700 AND 5700, THEN ON HEADING 330.00 OR AS ASSIGNED BY ATC. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING RWY 34: FROM KPOWW ON TRACK 210.22/7.23 TO CROSS OWSIN AT OR ABOVE 5600, THEN ON TRACK 259.48/4.02 TO TUNNR, THEN ON TRACK 316.38/3.53 TO CROSS JETEM AT OR ABOVE 3200. EXPECT ILS OR VISUAL APPROACH.

PBN REQUIREMENT NOTES

RNAV 1 - DME/DME/IRU OR GPS

EQUIPMENT REQUIREMENT NOTES

RADAR REQUIRED

PROCEDURAL DATA NOTES:

NOTE: TURBOJET AIRCRAFT DESCEND VIA MACH NUMBER UNTIL INTERCEPTING 280 KIAS, MAINTAIN 280 KIAS UNTIL 10000 FT.

FIXES AND/OR HOLDING PATTERNS:

CHART HOLDING AT CUBIT: W, RT, 087.00 INBOUND, 9 NM LEGS.

CHART HOLDING AT STEIL: W, RT, 077.00 INBOUND, 9 NM LEGS.

COMMUNICATIONS:

CHART: SEA APP CON

CHART: TCM TWR

CHART: TCM GND CON

AIRPORTS SERVED:

MCCHORD FLD (JOINT BASE LEWIS-MCCHORD), TACOMA, WA (KTCM)

LOST COMMUNICATIONS PROCEDURE:

RWY 16: AT WAALP, PROCEED DIRECT STEIL AND EXECUTE APPROACH, IF UNABLE HOLD AS PUBLISHED, MAINTAIN 4000 FT, SQUAWK APPROPRIATE BEACON CODE.

RWY 34: AT JETEM, EXECUTE APPROACH, IF UNABLE, PROCEED DIRECT CUBIT AND HOLD AS PUBLISHED, MAINTAIN 4000 FT, SQUAWK APPROPRIATE BEACON CODE.

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REMARKS:

ABBREVIATED AMDT DOES NOT MEET PERIODIC REVIEW REQUIREMENTS.

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0)

REFERENCE MAGNETIC VARIATION = KTCM 15E/2020

CHART LOCALIZERS: I-TCM AND I-MAR.

FLIGHT INSPECTED BY:

FLIGHT INSPECTION REVIEW NOT REQUIRED -  
PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJF-  
10) MEMO, APRIL 29, 2020

Name

Organization

Date

*Digitally signed by*

**DAVID DANNER**

Sep 07, 2021

Signature

*Digitally signed by*

**DAVID DANNER**

Sep 07, 2021

DEVELOPED BY:

DAN POWELL

Name

AJV-A442

Organization

08/16/2021

Date

*Digitally signed by*

**DAVID DANNER**

Sep 07, 2021

Signature

APPROVED BY:

PAT MULQUEEN

Name

AJV-A440

Organization

Date

Signature

CHANGES:

1. REMOVED MEAS AND MOCAS FROM COMMON ROUTE.
2. REFORMATTED PBN AND EQUIPMENT NOTES.
3. REMOVED TCM VORTAC FROM PROCEDURE.
4. REMOVED NOTE: CROSS KPOWW AT OR BELOW 230 KIAS.

REASONS:

1. NO LONGER PUBLISHED IAW 8260.19I.
2. IAW 8260.19I, 4-5-3.
3. NO LONGER APPLICABLE TO PROCEDURE.
4. NOTE NOT NECESSARY; RESTRICTION PUBLISHED ON 17.2 FORM.

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

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
ELLENSBURG (RNAV)	FOUR	ELN.ELN4	THREE	11/10/2016	

FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
EN ROUTE TRANSITION									
ELN VOR/DME	470127.75N/1202730.29W	Y		IF			AT/BELOW FL240		ELN.ELN4
THICK	470229.04N/1204937.78W	Y	FB	TF	274.00	15.17			
RADDY	470428.09N/1213058.25W	Y	FB	TF	274.27	28.33	10000B11000		
ENNUM	470510.49N/1220256.77W	Y	FB	TF	272.05	21.86	9000B10000		
KPOWW	465833.07N/1221243.77W	Y	FB	TF	225.34	09.42	5700B9000	AT/BELOW 230K	
RUNWAY TRANSITION									
KPOWW	465833.07N/1221243.77W	Y		IF			5700B9000	AT/BELOW 230K	
WAALP	465944.55N/1221731.82W	Y	FO	TF	289.96	03.50	4700N5700		
KTCM:RWY 16				VM	345.00				
RUNWAY TRANSITION									
KPOWW	465833.07N/1221243.77W	Y		IF			5700B9000	AT/BELOW 230K	
OWSIN	465327.50N/1222012.63W	Y	FB	TF	225.22	07.23	AT/ABOVE 5600		
TUNNR	465346.15N/1222602.90W	Y	FB	TF	274.48	04.02			
JETEM	465651.91N/1222830.96W	Y	FB	TF	331.38	03.53	AT/ABOVE 3200		
KTCM:RWY 34									

