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. Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
MADEE (RNAV)	FIVE	MADEE.MADEE5	FOUR	03/02/2017	05 OCT 2023

TRANSITION ROUTES:

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
PAINE	PAE.MADEE5	PAE VOR/DME	PAE VOR/DME						AT/ABOVE 16000
			EVRTT	333.04	06.40	10000	2100		AT/ABOVE 14000
			MADEE	333.01	19.60	3000	2100		

ARRIVAL ROUTE DESCRIPTION: THIS IS A CORRECTED COPY OF THIS PROCEDURE PREVIOUSLY PUBLISHED IN NFDD #164.

LANDING KBLI RWY 16: FROM MADEE ON TRACK 332.95/18.20 TO CROSS GERRD BETWEEN 5000 AND 7000, THEN ON TRACK 306.52/11.38 TO CROSS UCAKI AT OR ABOVE 4000, THEN ON TRACK 343.76/6.30 TO CROSS YAANO AT OR ABOVE 2000, THEN ON TRACK 343.76. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KBLI RWY 34: FROM MADEE ON TRACK 322.26/14.56 TO CROSS TUBTY AT OR ABOVE 3000 AND AT 210 KIAS, THEN ON TRACK 343.85. EXPECT RNAV (RNP/GPS) RWY 34 APPROACH OR RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING CZBB/CYXX: FROM MADEE ON TRACK 332.95/18.20 TO CROSS GERRD BETWEEN 5000 AND 7000, THEN ON TRACK 306.52/11.38 TO CROSS UCAKI AT OR ABOVE 4000, THEN ON TRACK 343.76/6.30 TO CROSS YAANO AT OR ABOVE 2000, THEN ON TRACK 343.76. 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: KBLI LANDING NORTH EXPECT RADAR VECTORS TO FINAL APPROACH COURSE AFTER TUBTY.

NOTE: KBLI LANDING SOUTH EXPECT RADAR VECTORS TO FINAL APPROACH COURSE AFTER YAANO.

NOTE: LANDING CYXX: EXPECT RADAR VECTORS TO FINAL APPROACH COURSE AFTER YAANO. NOTE: LANDING CZBB: EXPECT RADAR VECTORS TO FINAL APPROACH COURSE AFTER UCAKI.

NOTE: LANDING BLI RUNWAY 16, CYXX AND CZBB: FOR NON-GPS EQUIPPED AIRCRAFT, CVV DME MUST BE OPERATIONAL.

FIXES AND/OR HOLDING PATTERNS:

CHART HOLDING AT TECUV (HOLD NW, RT, 135.90 INBOUND, 4 NM LEGS.)

COMMUNICATIONS:

CHART: VICTORIA TERMINAL APP CON EAST (120.7), WEST (132.7)

CHART: WHIDBEY APP CON

CHART: KBLI TWR CHART: CYXX TWR

CHART: CRANBROOK RADIO

AIRPORTS SERVED:

AIRPORT ID	CITY	STATE
KBLI	BELLINGHAM	WA
CYXX	ABBOTSFORD, BRITISH COLUMBIA	
CZBB	DELTA, BC	

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Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
MADEE (RNAV)	FIVE	MADEE.MADEE5	FOUR	03/02/2017	05 OCT 2023

Digitally signed by

LOST COMMUNICATIONS PREFERENCES:

LANDING BLI RWY 16: AFTER UCAKI CONDUCT RNAV (RNP) Z RWY 16 APPROACH; IF UNABLE, PROCEED TO YAANO MAINTAIN 2000 AND PROCEED TO TECUV AND HOLD. LANDING CYXX AND CZBB: AFTER YAANO MAINTAIN 2000 AND PROCEED TO TECUV AND HOLD.

REMARKS:

MVA AFTER YAANO CONFIRMED AS 2000' MSL BY NAV CANADA ATC.

10000 MEA PAE EVRTT NEEDED FOR D/D/I NAVIGATION.

3000 MEA EVRTT MADEE NEEDED TO ALLOW DESCENT TO 3000 ON RWY 34 TRSN.

CHART VICTORIA TERMINAL APP CON EAST (120.7), WEST (132.7) PER ARTCC REQUEST.

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0)

MAG VAR = KBLI 16E/2020.

CHART AT TUBTY TERMINUS: KBLI LDG RWY 34.
CHART AT YAANO TERMINUS: LDG CYXX AND CZBB.
CHART AT YAANO TERMINUS: KBLI LDG RWY 16.

FLIGHT INSPECTED BY:	ORGANIZATION:	DATE:		CASIMIR L TABAKA	
Jordan Rolih	FPO	6/27/2023	Flight Inspected Signature:	Aug 21, 2023 Digitally signed by	
DEVELOPED BY: GLENN L. WOOD, SUPPORT MANAGER FOR AIRSPACE AND PROCEDURES	SEATTLE ARTCC	01/06/2023	Developed By Signature:	CASIMIR L TABAKA Aug 21, 2023 Digitally signed by	
APPROVED BY: CASIMIR L. TABAKA	AJV-A432		Approved By Signature:	CASIMIR L TABAKA Aug 21, 2023	

CHANGES:

- 1. AMENDED RWY 34 TRANSITION FROM MADEE BBELT TUBTY, TO MADEE TUBTY.
- 2. CHANGED CROSSING RESTRICTION AT TUBTY FROM AT/ABOVE 3500 TO AT/ABOVE 3000 AND AT 210 KIAS.
- 3. DELETED BBELT FROM PROCEDURE.
- MOVED YAANO 1363 FEET NORTH.
- 5. DELETED ALTITUDE AND SPEED RESTRICTIONS AT MADEE.
- 6. ADDED TERMINUS CHARTING INSTRUCTIONS: TUBTY, YAANO.
- 7. LOWERED MEA EVRTT TO MADEE FROM 6000 TO 3000.
- 8. EVRTT MOVED 3635 FT SE.
- 9. REMOVED RWY 34 LOST COMMUNICATIONS INSTRUCTIONS.
- CHANGED MOCA PAE EVRTT FROM 1900 TO 2100.

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Arrival Name Number STAR Computer Code Superseded Number Dated Effective Date

MADEE (RNAV) FIVE MADEE.MADEE5 FOUR 03/02/2017 05 OCT 2023

- 11. AMENDED ALL LOST COMM.
- 12. UPDATED COMM DATA.
- 13. REMOVED AIRPORT NAMES FROM AIRPORTS SERVED.
- 14. REMOVED RECOMMENDED NAVAID FROM 17.2.
- 15. REMOVED HUH AND CHARTED HOLDING FROM PROCEDURE.
- 16. ADDED TECUV AND HOLDING PATTERN AS A STAND ALONE FIX.

REASONS:

- 1. MITIGATES EXCESSIVE DESCENT GRADIENT.
- 2. ALTITUDE MATCHES MEA ON IAP. SPEED AT INDUSTRY'S REQUEST.
- 3. NO LONGER USED.
- 4. MITIGATES EXCESSIVE DESCENT GRADIENT UCAKI TO YAANO.
- 5. INDUSTRY REQUEST TO SMOOTH THE DESCENT GRADIENT BETWEEN GERRD AND YAANO.
- 6. FAAO 8260.19I, 4-5-2, h. (2).
- 7. NECESSARY TO ALLOW DESCENT TO TUBTY AT OR ABOVE 3000.
- 8. MITIGATES EXCESSIVE DG EVRTT TO TUBTY.
- 9. STD WITH IAP CONNECTION.
- 10. NEW EVRTT LOCATION AND UPDATED REFERENCE SOFTWARE RESULTS.
- 11. ATC REQUEST.
- 12. ATC REQUEST.
- 13. CURRENT DOCUMENTATION STANDARDS.
- 14. NO LONGER DOCUMENTED.
- 15. NO LONER USED FOR LOST COMMUNICATIONS INSTRUCTIONS.
- 16. USED FOR LOST COMMUNICATIONS PROCEDURES.

08/21/2023: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 05/04/2023.
CHANGED LOST COMMUNICATIONS PREFERENCES FOR LANDING CYXX AND CZBB: TO " LANDING CYXX AND CZBB: AFTER YAANO MAINTAIN 2000 AND PROCEED TO TECUV AND HOLD".

08/29/2023: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 8/21/2023 FIXED TYPO ON LOST COMM. CHANGED "YECUV AND HOLD" TO "TECUV AND HOLD"

FEDERAL AVIATION ADMINISTRATION FLIGHT STANDARDS SERVICE STAR (DATA RECORD)

Arrival Name MADEE (RNAV)		Number FIVE		:	STAR Computer Code MADEE.MADEE5		Supersede FOL		Dated 03/02/2017	Effective Date 05 OCT 2023
FIX/NAVAID	LAT/LONG	· <u>c</u>	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS	
En Route Transition										
PAE VOR/DME	475511.40N / 1221640.09W	Υ		IF			AT/ABOVE 16000		PAE.MADEE5	
EVRTT	480128.26N / 1221828.91W	Υ	FB	TF	349.04	06.40	AT/ABOVE 14000			
MADEE	482041.70N / 1222404.81W	Υ	FB	TF	349.01	19.60				
Common Route										
MADEE	482041.70N / 1222404.81W	Υ		IF					MADEE.MADEE5	
GERRD	483832.56N / 1222920.45W	Υ	FB	TF	348.95	18.20	5000B7000			
UCAKI	484733.45N / 1223948.81W	Υ	FB	TF	322.52	11.38	AT/ABOVE 4000			
YAANO	485351.15N / 1223951.22W	Υ	FO	TF	359.76	06.30	AT/ABOVE 2000			
CYXX/CZBB				FM	359.76					
Runway Transition										
MADEE	482041.70N / 1222404.81W	Υ		IF						
GERRD	483832.56N / 1222920.45W	Υ	FB	TF	348.95	18.20	5000B7000			
UCAKI	484733.45N / 1223948.81W	Υ	FB	TF	322.52	11.38	AT/ABOVE 4000			
YAANO	485351.15N / 1223951.22W	Υ	FO	TF	359.76	06.30	AT/ABOVE 2000			
KBLI:RWY 16				FM	359.76					
Runway Transition										
MADEE	482041.70N / 1222404.81W	Υ		IF						
TUBTY	483412.18N / 1223211.90W	Υ	FO	TF	338.26	14.56	AT/ABOVE 3000	AT 210K		
KBLI:RWY 34				FM	359.85					

