

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
VOR STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR PART 97.23

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

TERMINAL ROUTES				MISSED APPROACH
FROM	TO	COURSE AND DISTANCE	ALTITUDE	MAP: 4.98 MILES AFTER EPH VORTAC OR AT EPH 4.98 DME FIX
WIPES INT/EPH 13.04 DME	EPH VORTAC	239.81 / 13.04	4000	CLIMBING LEFT TURN TO 4000 VIA EPH VORTAC R-182 TO PLUS INT/EPH 13.30 DME AND HOLD. CONTINUE CLIMB-IN-HOLD TO 4000; OR WHEN DIRECTED BY ATC, CLIMBING LEFT TURN TO 4000 DIRECT EPH VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000, HOLD N, RT, 202.00 INBOUND.
WIPES INT/EPH 13.04 DME CCW (IAF)	WAGOB/EPH 13.04 DME (NOPT)	13.04 DME ARC	3500	
WAGOB/EPH 13.04 DME (IF)	EPH VORTAC	202.00 / 13.04	3000	
				ADDITIONAL FLIGHT DATA: HOLD SW, LT, 058.98 INBOUND. CHART FAS OBST: 1389 ELEVATOR 471938N/1183059W CHART VDP AT 3.87 DME; DISTANCE VDP TO THLD 1.11 MILES. CHART EPH R-060 AT WIPES. CHART IN PLANVIEW: EPH VORTAC. CHART: ALTERNATE MA HOLDING, HOLD N EPH VORTAC, RT, 202.00

1. PT L SIDE OF COURSE 021.75 OUTBOUND 4000 FT WITHIN 10 MILES OF EPH VORTAC (IAF)
 2. _____
 3. FAC 201.75 FAF EPH VORTAC DIST FAF TO MAP 4.98 THLD 4.98
 4. MIN. ALT EPH VORTAC 3000
 8. MSA FROM: EPH VORTAC 360-180 3900, 180-360 5100

MAG VAR: 21E

EPOCH YEAR: 1975

MINIMUMS															
TAKEOFF:	STANDARD	X	SEE FAA FORM 8260-15A FOR THIS AIRPORT				ALTERNATE: N A				STANDARD				
CATEGORY	A			B			C			D			E		
	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA
S-21	1680	1	404	1680	1	404	1680	1 1/4	404	1680	1 1/4	404			
CIRCLING	1720	1	444	1740	1	484	1780	1 1/2	504	2500	3	1224			

NOTES:

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MOSES LAKE/GRANT COUNTY INTL ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET, INCREASE S-21 CAT D VISIBILITY 1/4 MILE.
 CHART NOTE: VDP NA WHEN USING MOSES LAKE/GRANT COUNTY INTL ALTIMETER SETTING.
 CHART NOTE: FINAL APPROACH FROM EPH VORTAC HOLDING PATTERN NOT AUTHORIZED. PROCEDURE TURN REQUIRED.

© CAT D 1300-3
 © NA WHEN LOCAL WEATHER NOT AVAILABLE.

CITY AND STATE EPHRATA, WA	ELEVATION: 1276 TDZE: 1276 AIRPORT NAME: EPHRATA MUNI	FACILITY IDENTIFIER: EPH	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: VOR RWY 21, AMDT 19 07 MAY 2009	SUP VOR OR GPS RWY 20 AMDT 18B DATE 01/18/2007
--------------------------------------	--------------------------------------------------------------------	------------------------------------	--------------------------------------------------------------------------------------	------------------------------------------------------------------------------

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION VOR STANDARD INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARDS SERVICE - FAR PART 97.23					Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.										
TERMINAL ROUTES					MISSED APPROACH										
FROM	TO	COURSE AND DISTANCE	ALTITUDE	MAP: 4.98 MILES AFTER EPH VORTAC OR AT EPH 4.98 DME FIX CLIMBING LEFT TURN TO 4000 VIA EPH VORTAC R-182 TO PLUS INT/EPH 13.30 DME AND HOLD. CONTINUE CLIMB-IN-HOLD TO 4000; OR WHEN DIRECTED BY ATC, CLIMBING LEFT TURN TO 4000 DIRECT EPH VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000, HOLD N, RT, 202.00 INBOUND. ADDITIONAL FLIGHT DATA: HOLD SW, LT, 058.96 INBOUND. CHART FAS OBST: 1369 ELEVATOR 471938N/1193059W CHART VDP AT 3.87 DME; DISTANCE VDP TO THLD 1.11 MILES. CHART EPH R-060 AT WIPES. CHART IN PLANVIEW: EPH VORTAC. CHART: ALTERNATE MA HOLDING, HOLD N EPH VORTAC, RT, 202.00											
WIPES INT/EPH 13.04 DME	EPH VORTAC	239.61 / 13.04	4000												
WIPES INT/EPH 13.04 DME CCW (IAF)	WAGOB/EPH 13.04 DME (NOPT)	13.04 DME ARC	3500												
WAGOB/EPH 13.04 DME (IF)	EPH VORTAC	202.00 / 13.04	3000												
1. PT <u>L</u> SIDE OF COURSE <u>021.75</u> OUTBOUND <u>4000</u> FT WITHIN <u>10</u> MILES OF <u>EPH VORTAC</u> (IAF) 2. _____ 3. FAC <u>201.75</u> FAF <u>EPH VORTAC</u> DIST FAF TO MAP <u>4.98</u> THLD <u>4.98</u> 4. MIN. ALT <u>EPH VORTAC 3000</u> 8. MSA FROM: <u>EPH VORTAC 360-180 3900, 180-360 5100</u>					MAG VAR: 21E EPOCH YEAR: 1975										
MINIMUMS															
TAKEOFF:	STANDARD	X	SEE FAA FORM 8260-15A FOR THIS AIRPORT				ALTERNATE: N A		STANDARD @						
CATEGORY =====>	A			B			C			D			E		
	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA
S-21	1680	1	404	1680	1	404	1680	1 1/4	404	1680	1 1/4	404			
CIRCLING	1720	1	444	1740	1	464	1780	1 1/2	504	2500	3	1224			
NOTES: CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MOSES LAKE/GRANT COUNTY INTL ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET, INCREASE S-21 CAT D VISIBILITY 1/4 MILE. @ CAT D 1300-3 CHART NOTE: VDP NA WHEN USING MOSES LAKE/GRANT COUNTY INTL ALTIMETER SETTING. @ NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART NOTE: FINAL APPROACH FROM EPH VORTAC HOLDING PATTERN NOT AUTHORIZED. PROCEDURE TURN REQUIRED.															
CITY AND STATE		ELEVATION: 1276 TDZE: 1276		FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP VOR OR GPS RWY					
EPHRATA, WA		AIRPORT NAME:		EPH		VOR RWY 21, AMDT 19				20					
		EPHRATA MUNI								AMDT 18B					
										DATE 01/18/2007					



ALL AFFECTED PROCEDURES REVIEWED? <input checked="checked" type="checkbox"/> YES <input type="checkbox"/> NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE <div style="text-align: center;">ROUTINE</div>							
COORDINATED WITH:									
<table style="width:100%; border: none;"> <tr> <td style="text-align: center;">ATA <input type="checkbox"/></td> <td style="text-align: center;">AAT <input type="checkbox"/></td> <td style="text-align: center;">ALPA <input checked="checked" type="checkbox"/></td> <td style="text-align: center;">APA <input type="checkbox"/></td> <td style="text-align: center;">AOPA <input checked="checked" type="checkbox"/></td> <td style="text-align: center;">NBAA <input checked="checked" type="checkbox"/></td> <td style="text-align: center;">OTHER (specify) <input checked="checked" type="checkbox"/> ZSE, EPH FSS, EAT FSS, SEA FSDO, AMGR</td> </tr> </table>			ATA <input type="checkbox"/>	AAT <input type="checkbox"/>	ALPA <input checked="checked" type="checkbox"/>	APA <input type="checkbox"/>	AOPA <input checked="checked" type="checkbox"/>	NBAA <input checked="checked" type="checkbox"/>	OTHER (specify) <input checked="checked" type="checkbox"/> ZSE, EPH FSS, EAT FSS, SEA FSDO, AMGR
ATA <input type="checkbox"/>	AAT <input type="checkbox"/>	ALPA <input checked="checked" type="checkbox"/>	APA <input type="checkbox"/>	AOPA <input checked="checked" type="checkbox"/>	NBAA <input checked="checked" type="checkbox"/>	OTHER (specify) <input checked="checked" type="checkbox"/> ZSE, EPH FSS, EAT FSS, SEA FSDO, AMGR			
FLIGHT CHECKED BY									
NAME: <i>Rick A. Webb</i> <i>for Larry D. Ingram</i>		DATE: 6-11-08 <div style="text-align: center;">FIFO AVN</div>							
DEVELOPED BY									
NAME: <i>DEZ SILAGYI (RONALD SALPINO)</i> <i>D. W. ()</i>		DATE: 03/06/2008 <div style="text-align: center;">FIFO AVN-130</div>							
APPROVED BY									
NAME: <i>Rick A. Webb</i> RICK A. WEBB		DATE: MAR 05 2009 <div style="text-align: center;">FIFO AVN-130</div>							
CHANGES:									
<ol style="list-style-type: none"> 1. FINAL SEGMENT MDAS LOWERED FROM 1760 TO 1680. 2. CIRCLING SEGMENT MDAS LOWERED FROM (CAT A-C) 1800 TO 1720 CAT A, 1740 CAT B, 1780 CAT C. 3. MSA RAISED, 000-180 FROM 3800 TO 3900 AND 180-000 FROM 4700 TO 5100. 4. CHANGED BACK-UP ALTIMETER SOURCE FROM KEAT TO KMWH. 5. RAISED FEEDER ALTITUDE FROM 3800 TO 4000. 6. RAISED FAF ALTITUDE FROM 2900 TO 3000. 7. REMOVED CNF (DMAKQ) AT THE EPH R-022/13 AND ADDED A NAMED FIX WAGOB. 8. CHANGED RUNWAY 20 TO RUNWAY 21. 9. ADDED VDP. 10. FINAL DESCENT ANGLE RAISED FROM 3.03 TO 3.17 DEGREES. 11. RAISED PT ALTITUDE FROM 3500 TO 4000 FEET. 12. REMOVED GPS OVERLAY. 									
REASONS:									
<ol style="list-style-type: none"> 1-2. REMOVED RASS ADJUSTMENT THAT WAS PREVIOUSLY ADDED TO MDA. 3-5-6-11. MAP STUDY. 4. FPO REQUESTED. 7. 8260.19D PARA 264. 8. MAGVAR UPDATE FOR THE AIRPORT. 9. 8260.3B PARA 253A. 10. FAF ALTITUDE RAISED DUE TO AIRSPACE CRITERIA IN INTERMEDIATE SEGMENT AND MDA LOWERED 80 FEET. 12. STAND ALONE RNAV (GPS) PROCEDURE DEVELOPED. 									

QUALITY
 2
 CHECKED

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.			
FEEDER	WIPES INT/EPH	EPH VORTAC	1. AAO	472815.00N/1191139.00W	2005 (4E)	2000	MT-5	4000			
	13.04 DME		2. TERRAIN	472815.00N/1191139.00W	1805 (1800)		AS1500	3300			
INITIAL: ARC	WIPES INT/EPH	WAGOB/EPH 13.04	3. AAO	473354.00N/1190639.00W	2212 (2C)	1000		3300			
	13.04 DME CCW	DME	4. TERRAIN	473354.00N/1190639.00W	2012 (2000)		AS1500	3500			
INTERMEDIATE	WAGOB/EPH 13.04	EPH VORTAC	5. AAO	472915.00N/1192006.00W	2199 (2C)	500		2700			
	DME		6. TERRAIN	472915.00N/1192006.00W	1999 (2000)		AS1000	3000			
INTERMEDIATE: PT	10 NM	EPH VORTAC	5. AAO	472915.00N/1192006.00W	2199 (2C)	500		2700			
			6. TERRAIN	472915.00N/1192006.00W	1999 (2000)		AS1000	3000			
FINAL	EPH VORTAC	4.98 MILES AFTER	7. ELEVATOR	471938.00N/1193059.00W	1369 (4D)	250	AC50	1680			
		EPH VORTAC OR	(53-000485)								
		AT EPH 4.98 DME									
		FIX									
2. PROCEDURE TURN	EPH VORTAC	10 NM	8. AAO	472659.50N/1193304.30W	2842 (6A)	1000	AT158	4000			
			9. TERRAIN	472659.50N/1193304.30W	2642 (2600)		AS1000	3600			
3. MISSED APPROACH	MAP: 4.98 MILES AFTER	PLUSS INT/EPH				ASC		4000			
	EPH VORTAC OR	13.30 DME	10. TREE	471824.00N/1193217.00W	1419 (2C)	1000		2500			
	ELEV: 1430		11. TERRAIN	471824.00N/1193217.00W	1219 (1200)		AS1500	2700			
4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT.									
CATEGORY A	1.3 NM	REQUIRED	350	ACTUAL	444	10. TREE	471824.00N/1193217.00W	1419 (2C)	300		1720
CATEGORY B	1.5 NM		450		464	12. ELEVATOR	471905.12N/1193302.58W	1423 (1B)	300		1740
CATEGORY C	1.7 NM		450		504	13. TREE	471844.06N/1193350.60W	1479 (2C)	300		1780
CATEGORY D	2.3 NM		550		1224	14. TOWER (53-000716)	471911.76N/1193422.99W	2185 (1A)	300		2500
CATEGORY E	4.5 NM		550								
5. MINIMUM SAFE ALTITUDES				PRIMARY NAVAID: EPH VORTAC							
SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A		
360-180	AAO	013/ 28.5	2900 (6A)	3900							
180-360	AAO	270/ 29.0	4033 (5E)	5100							
CITY AND STATE		AIRPORT & ELEVATION		1276	FACILITY		PROCEDURE AND AMENDMENT NO:		REGION		
EPHRATA, WA		EPHRATA MUNI			EPH VORTAC		VOR RWY 21, AMDT 19		ANM		



NOTES / EXPLANATIONS FROM OPPOSITE SIDE OF FORM:
SEE ATTACHED AIRSPACE LETTER.

RASS (PRESSURE PATTERNS THE SAME)
KEPH 1276' KMWH 1189'.

OBS # 7 WITH 50' AC EXCEEDS HIGHEST TERRAIN + 80' TREE.
FPO NOTIFIED MDA LOWERED.

PROCEDURE TURN HIGH TERRAIN OCCURS IN 1000' AIRSPACE.
HIGH TERRAIN IN 1500' AIRSPACE 2422
(477906.00N-1192018.00W)
2400 + 1500 = 3900.

80 FT TREES USED PER FPO.

REQUEST FLIGHT CHECK 4D ACCURACY CODE FOR OBS #7
(53-000485) ELEVATOR

MISSED APPROACH OBSTACLES CONT.

ALTERNATE:

--C 4000

AAO 471824.00N/1193217.00W 1419 (2C) 1000 2500
TERRAIN 471824.00N/1193217.00W 1219 (1200) AS1500
2700

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:		2. WEATHER SERVICE		3. ALTIMETER SETTING	
ZSE ARTCC MWH APP CON		<input type="checkbox"/> NWS	OTHER: ASOS	SOURCE:	
		<input type="checkbox"/> FAA		DISTANCE:	
		<input type="checkbox"/> A/C		HOURS REMOTE OPERATION:	
SATISFACTORY ON:		LOCATION: KEPH		ADJUSTMENT:	
<input checked="" type="checkbox"/> VHF <input checked="" type="checkbox"/> UHF <input type="checkbox"/> HF		HRS OPTN:			
4. MONITOR STATUS	PRIMARY			SECONDARY	
	NAVAID: EPH VORTAC			NAVAID:	
	MONITOR POINT: SEA & SLC MCC			MONITOR POINT:	
	HRS OPTN:	CAT 1 CAT 3	24	HRS OPTN:	CAT 1 CAT 3
5. AIRSPACE		FLOOR OF CONTROLLED AIRSPACE UNDER FAC			CONTROL AREA
		CONTROL ZONE:			HOURS OPTN
6. APPROACH & RUNWAY LIGHTING	ALS			<input checked="" type="checkbox"/> REIL 11, 21, 29 (PCL)	
	(S) SALS			TDZ	
	MALS			C/LINE	
	HIRL			OTHER (SPECIFY)	
	<input checked="" type="checkbox"/> MIRL 11, 21, 29, 03 (PCL)			VASI-2L 21, 03 PAPI-2L 29 (PCL)	
7. RUNWAY MARKINGS BSC-G 11, 29			8. RUNWAY VISUAL RANGE		
ALL WEATHER			APPROACH		
INSTRUMENT NPI-G 21, 03			ROLL OUT		
9. GLIDE SLOPE	G S ANGLE:		ELEV RWY THRESHOLD:		
	DISTANCE FROM RWY:		ELEV GS ANTENNA:		
			THRESHOLD CROSSING HEIGHT:		
10. FINAL APPROACH		<input checked="" type="checkbox"/>	RUNWAY THRESHOLD		FT. FROM THRESHOLD
COURSE AIMING		<input checked="" type="checkbox"/>	ON CENTERLINE		FT. FROM CENTERLINE
11. WAIVERS OF STANDARDS		NUMBER OF WAIVERS ON FILE NONE		DATES OF APPROVAL	

PART C - REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

BOTH KEPH AND KMWH ASOS ARE ON SERVICE-A
3. SOURCE: KEPH/KMWH
DISTANCE: 10.00 NM
HOURS REMOTE OPERATION: 24
ADJUSTMENT: 35.19'

VGSI DATA 3.00/51

PART D - PREPARED BY: DEZ SILAGYI (RONALD SALPINO)		DATE: 03/06/2008
TITLE: AERONAUTICAL INFORMATION SPECIALIST		OFFICE: AVN-130

QUALITY
CHECKED