

**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
VOR STANDARD INSTRUMENT APPROACH PROCEDURE  
TITLE 14 CFR PART 97.23**

Bearings, headings, courses, tracks 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 feet RVR.

<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
SOUTHWEST OREGON RGNL	KOTH	VOR RWY 5	11A	NORTH BEND	OR	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
17	16	VOR/DME RWY 4	11	06/25/2015	15E	2020
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
OTH			ROUTINE			

**TERMINAL ROUTES**

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
OTH VOR/DME		WESEB/8.00 DME					253.00	8.00	3000
ZUBOR/OTH 14.00 DME CCW	IAF	WABAR/OTH 14.00 DME	NOPT				14.00 DME ARC		2800
WABAR/OTH 14.00 DME CCW		ZIGVO/OTH 14.00 DME					14.00 DME ARC		2500
OVLEE/OTH 14.00 DME CW	IAF	ZIGVO/OTH 14.00 DME	NOPT				14.00 DME ARC		2500
ZIGVO/OTH 14.00 DME	IF	WESEB/OTH 8.00 DME					073.00	6.00 (OTH R-253)	1400

**MISSED APPROACH**

**MAP:**

OHEPU/OTH 4.52 DME

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 900 THEN CLIMBING RIGHT TURN TO 3000 ON HEADING 303 AND ON OTH VOR/DME R-253 TO WESEB/OTH 8.00 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**

**PROFILE:**

1. PT L SIDE OF COURSE 253.00 OUTBOUND 2200 FT WITHIN 10 MILES OF WESEB/OTH 8.00 DME (IAF)
- 2.
3. FAC: 073.00 FAF: WESEB/OTH 8.00 DME DIST FAF TO MAP: DIST FAF TO THLD: 3.98
4. MIN ALT: WESEB/OTH 8.00 DME 1400
8. MSA FROM: OTH VOR/DME 083-193 4600, 193-353 2700, 353-083 3900

**EQUIPMENT REQUIREMENTS NOTES:**

DME REQUIRED.

**NOTES:**

CHART NOTE: CIRCLING TO RWY 13, 31 NA AT NIGHT.



CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY

**ADDITIONAL FLIGHT DATA:**

CHART CIRCLING ICON.

WESEB TO RW04: 3.16/50.

CHART OTH R-008 AT ZUBOR.

CHART OTH R-333 AT WABAR.

CHART OTH R-167 AT OVLEE.

CHART VDP AT 5.50 DME

DISTANCE VDP TO THLD 1.48 NM

CHART FAS OBST: 289 TREE 432354N/1241541W.

FAC CROSSES RWY C/L EXTENDED 1275 FT FROM THLD.

HOLD W, RT, 073.00 INBOUND

**MINIMUMS:**

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT

**ALTERNATE:** NA ☐ STANDARD - CAT B 900-2, CAT C 1100-3, CAT D 1200-3

<b>CATEGORY:</b>	<b>A</b>			<b>B</b>			<b>C</b>			<b>D</b>			<b>E</b>		
<b>FINAL TYPE</b>	<b>DA/MDA</b>	<b>VIS</b>	<b>HAT/HAA</b>	<b>DA/MDA</b>	<b>VIS</b>	<b>HAT/HAA</b>	<b>DA/MDA</b>	<b>VIS</b>	<b>HAT/HAA</b>	<b>DA/MDA</b>	<b>VIS</b>	<b>HAT/HAA</b>	<b>DA/MDA</b>	<b>VIS</b>	<b>HAT/HAA</b>
S-05	540	1	524	540	1	524	540	1 1/2	524	540	1 1/2	524			
CIRCLING	680	1	663	820	1	803	1100	3	1083	1160	3	1143			

**CHANGES - REASONS**

1. DELETED NOTE: NIGHT LANDING: RWY 31 NA - REPLACED WITH NEW FORMATTED NOTE FOR CIRCLING NA AT NIGHT.

2. ADDED NOTE: CIRCLING RWY 13, 31 NA AT NIGHT - NEW FORMAT PER FAA ORDER 8260.19H PARA 8-6-11O(2)(G)

3. ADDED NIGHT RESTRICTION TO RWY 13 - PER FPT, SHIP PASSING THROUGH CHANNEL PENETRATES VISUAL SURFACE.

**COORDINATED WITH:**A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ **OTHER:** ZSE, APT MGR, KOTH ATCT.**FLIGHT CHECKED BY**PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:  
FLIGHT INSPECTION REVIEW NOT REQUIRED**OFFICE****DATE****DEVELOPED BY**

KELLY DEAN

Digitally signed by

**KELLY D DEAN****DONALD H LANIER**

Dec 16, 2019

**OFFICE**

AJV-A431

**DATE**

11/04/2019

**APPROVED BY**

LONNIE EVERHART

Nov 26, 2019

Digitally signed by

**DONALD H LANIER**

Dec 16, 2019

**OFFICE**

AJV-A430

**DATE****TITLE**

MANAGER

QUALITY  
16  
CHECKED

FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

AIRPORT	AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
SOUTHWEST OREGON RGNL	KOTH	VOR RWY 5	11A	NORTH BEND	OR	17	OTH

PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM OTH VOR/DME TO WESEB/8.00 DME

<u>RNP</u>	<u>DISTANCE</u> 8.00	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
1.TREE	432455.00N/1241006.70W	853	50	3	2A	2000				AT147	3000
2.TERRAIN	432455.00N/1241006.70W	703 (700)								AS1500	2200

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INITIAL: ARC

FROM ZUBOR/OTH 14.00 DME CCW TO WABAR/OTH 14.00 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
3.AAO	433827.29N/1240101.09W	1528	50	3	2A	1000				AT272	2800
4.TERRAIN	433739.00N/1240254.00W	1139 (1100)								AS1500	2600

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INITIAL: ARC STEPDOWN

FROM  
WABAR/OTH 14.00 DME CCW

TO  
ZIGVO/OTH 14.00 DME

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
5.AAO	433654.00N/1241236.00W		279	164	98	4E	1000				AT1221	2500
6.TERRAIN	433500.00N/1241306.00W		56 (100)								AS1500	1600

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
--------------	-----	------	------	-----	------	----	----	-----	---------------	------	---------	------------------------

SEGMENT REMARKS:

INITIAL: ARC

FROM  
OVLEE/OTH 14.00 DME CW

TO  
ZIGVO/OTH 14.00 DME

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
7.AAO	430755.51N/1241437.55W		1231	50	3	2A	1000					2300
8.TERRAIN	430755.51N/1241437.55W		1031 (1000)								AS1500	2500

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
--------------	-----	------	------	-----	------	----	----	-----	---------------	------	---------	------------------------

SEGMENT REMARKS:

INTERMEDIATE

FROM

ZIGVO/OTH 14.00 DME

TO

WESEB/OTH 8.00 DME

<u>RNP</u>	<u>DISTANCE</u> 6.00	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>					
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
9.SHIP	432430.17N/1242613.28W		140	50	20	2C	500				AT760	1400
10.OVER WATER	432430.17N/1242613.28W		0 (0)								AS1000	1000

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE: PT

FROM

10 NM

TO

WESEB/OTH 8.00 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
	10.00										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
9.SHIP	432430.17N/1242613.28W	140	50	20	2C	500				AT760	1400
10.OVER WATER	432430.17N/1242613.28W	0 (0)								AS1000	1000

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL

FROM

WESEB/OTH 8.00 DME

TO

OHEPU/OTH 4.52 DME

RNP	DISTANCE	PAT	MAP				HAT	HMAS				
	3.48		OHEPU/OTH 4.52 DME				524					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
11.TREE	432353.54N/1241541.29W		289	50	20	2C	250					540

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

PROCEDURE TURN

FROM

WESEB

TO

10 NM

RNP	DISTANCE	PAT	MAP				HAT	HMAS				
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
12.AAO	431748.62N/1242305.79W		934	50	3	2A	1000					2000
13.TERRAIN	431748.62N/1242305.79W		734 (700)								AS1500	2200

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSED APPROACH

FROM

OHEPU/OTH 4.52 DME

TO

WESEB/OTH 8.00 DME

RNP	DISTANCE	PAT	MAP	HAT			HMAS 290					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				3000
1.TREE	432455.00N/1241006.70W		853	50	3	2A	1000					1900
2.TERRAIN	432455.00N/1241006.70W		703 (700)								AS1500	2200

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
--------------	-----	------	------	-----	------	----	----	-----	---------------	------	---------	------------------------

SEGMENT REMARKS:

CIRCLING

☐ ALL CATS

☒ CAT A

☒ CAT B

☒ CAT C

☒ CAT D

☐ CAT E

☐ NOT AUTHORIZED

OBSTRUCTION	COORDINATES	RADIUS	HAA	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
CATEGORY A											
14.TREE	432415.60N/1241511.30W	1.30	663	369	50	20	2C	300			680
CATEGORY B											
15.TREE (KOTH0083)	432623.64N/1241243.39W	1.81	803	513	20	3	1A	300			820
CATEGORY C											
16.TREE	432450.00N/1241030.00W	2.84	1083	789	50	20	2C	300			1100
CATEGORY D											
1.TREE	432455.00N/1241006.70W	3.72	1143	853	50	3	2A	300			1160

CIRCLING REMARKS:



MSA

CENTER

OTH VOR/DME

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
083-193	AAO	430551.00N/1234333.00W	119	27.2	3504	164	98	4E	1000			4600
193-353	AAO	432948.00N/1240345.00W	029	06.7	1697	164	98	4E	1000			2700
353-083	AAO	432254.00N/1234033.00W	080	21.7	2881	164	98	4E	1000			3900

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:





PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH  
ZSE ARTCC, SEA APP CON, OTH TOWER

<u>WX SERVICE</u> AWOS	<u>LOCATION</u> KOTH	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KOTH	<u>DISTANCE</u> 0	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 0
<u>BACK-UP WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>SERVICE-A</u>	<u>ADJUSTMENTS</u>

WX REMARKS:

<u>PRIMARY NAVAID</u> OTH VOR/DME	<u>MONITOR POINT</u> POCC	<u>HRS OPERATION</u> 24	<u>CAT</u> 1
--------------------------------------	------------------------------	----------------------------	-----------------

<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>	<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW13 - MIRL (PCL), REIL (PCL)	BSC-G	
RW31 - MIRL (PCL), REIL (PCL), PAPI-4L	BSC-G	
RW05 - MALSR (PCL), HIRL (PCL), VASI-4R	PIR-F	
RW23 - HIRL (PCL), REIL (PCL)	PIR-F	

<u>GLIDESLOPE ANGLE</u>	<u>ELEV RWY THRESHOLD</u>	<u>TCH</u>	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u> 3.00	<u>TCH</u> 50.0
-------------------------	---------------------------	------------	------------------------	--------------------------	---------------------------	--------------------

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD

☐

1275

FT FROM THRESHOLD

DISPLACED THRESHOLD DISTANCE

ON CENTERLINE

☒

FT FROM CENTERLINE

CRITICAL TEMPERATURES

CRITICAL LOW

CRITICAL HIGH

ACT

APT ISA

CRITICAL TEMPERATURE REMARKS:



"VISUAL PORTION OF FINAL" PENETRATIONS

Final Type	CIRCLING RWY 13		
20:1			
140 SHIP (VISI PEN 12) 432527.09N/1241458.88W (45.32)			
Final Type	CIRCLING RWY 31		
20:1			
261 TREE (41-040195) 432358.57N/1241336.95W (29.16)		249 TREE (41-024380) 432359.57N/1241339.74W (26.73)	
200 TREE (41-040200) 432404.41N/1241350.40W (18.76)		228 TREE (41-023235) 432400.61N/1241342.66W (15.73)	
225 TREE (41-024375) 432400.73N/1241342.33W (12.63)		183 TREE (41-024339) 432406.61N/1241350.66W (11.86)	
180 TREE (41-040199) 432406.34N/1241351.17W (8.63)		28 VEGETATION (41-025181) 432432.01N/1241412.04W (7.7)	
201 TREE (41-024341) 432401.32N/1241349.98W (5.48)		168 TREE (41-024337) 432407.79N/1241351.91W (4.35)	
54 TREE (41-024481) 432425.50N/1241410.32W (2.05)		52 TRANSMISSION_LINE (41-022208) 432425.25N/1241411.20W (0.6)	
52 POLE (41-024512) 432425.25N/1241411.20W (0.6)		237 TREE (41-024383) 432356.44N/1241339.20W (0.05)	

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or  
5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

PER FPT, NO SUITABLE BACK-UP ALTIMETER.

VEGETATION HEIGHT: 150' PER FPT  
SHIP HEIGHT: 140' PER FPT USED ON PREVIOUS PROCEDURE DEVELOPMENT.  
PER FPT, 140' SHIP CAUSES 20:1 PENETRATION TO RWY 13

FINAL COURSE NOT WITHIN APPROACH LIGHTS LATERAL LIMITS.

ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



<u>AIRPORT</u> SOUTHWEST OREGON RGNL	<u>AIRPORT ID</u> KOTH	<u>PROCEDURE NAME</u> VOR RWY 5	<u>AMDT NO.</u> 11A	<u>CITY</u> NORTH BEND	<u>STATE</u> OR	<u>AIRPORT ELEVATION</u> 17	<u>FACILITY</u> OTH
---	---------------------------	------------------------------------	------------------------	---------------------------	--------------------	--------------------------------	------------------------

PART D: AIRSPACE

DOCKET #

ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE

DISTANCE FROM	FACILITY	TO 1000FT POINT	7.00
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	2.70
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	088.00
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	100
DISTANCE FROM	FACILITY	TO 1500FT POINT	12.20
WIDTH OF	INTERMEDIATE	SEGMENT AT 1500FT POINT	6.45
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	088.00
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	0

THRESHOLD  
COORDINATES  
(IF STR-IN)

432453.02N/1241538.15W

ARP COORDINATES

432501.00N/1241449.30W

RUNWAY APCH END  
AND DIST FURTHEST  
FROM ARP

RUNWAY 31 DISTANCE 6.45 NM

FAF  
COORDINATES

432438.54N/1242104.80W

FIX NAME  
COORDINATES

REMARKS

FACILITY: OTH VOR/DME INTERMEDIATE HIGH TERRAIN POINT IS OVER WATER

QUALITY  
16  
CHECKED

FAA Form 8260-9 / (11/16) Supersedes Previous Edition

Electronic Version

Page 9 of 10

FACILITY  
OTH

**TITLE**  
AERONAUTICAL INFORMATION SPECIALIST

