

**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 ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>		
TPH	VOR-A	ORIG	TONOPAH	NV		
<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SUPERSEDED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>
5430			NONE		17E	1965
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
TPH	380150.32N/1170200.61W		ROUTINE			

**TERMINAL ROUTES**

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
-------------	-----------------	-----------	-----------------	-----------------	--------------	------------	---------------	-----------------	-----------------

**MISSED APPROACH**

**MAP:**

2.55 NM AFTER TPH VORTAC OR AT DECCA/TPH 2.55 DME

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 6800 THEN CLIMBING LEFT TURN TO 8700 ON HEADING 250 AND ON TPH VORTAC R-278 TO TOBEY INT AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**

**PROFILE:**

- |              |  |                |            |                  |      |                   |    |          |                  |
|--------------|--|----------------|------------|------------------|------|-------------------|----|----------|------------------|
| 1. PT        | L  | SIDE OF COURSE | 107.88     | OUTBOUND         | 8800 | FT WITHIN         | 10 | MILES OF | TPH VORTAC (IAF) |
| 2.           |  |                |            |                  |      |                   |    |          |                  |
| 3. FAC:      | 287.88                                   | FAF:           | TPH VORTAC | DIST FAF TO MAP: | 2.55 | DIST FAF TO THLD: |    |          |                  |
| 4. MIN ALT:  | KINKS INT/6.10 DME 8100, TPH VORTAC 7100 |                |            |                  |      |                   |    |          |                  |
| 8. MSA FROM: | TPH VORTAC 140-240 10100, 240-140 10700  |                |            |                  |      |                   |    |          |                  |

**NOTES:**

CHART NOTE: CIRCLING RWY 11 NA AT NIGHT.  
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, PROCEDURE NA.  
CHART NOTE: CIRCLING NA FOR CAT D SW OF RWY 15-33.

**ADDITIONAL FLIGHT DATA:**

FAC CROSSES AIRPORT REFERENCE POINT.

HOLD E, RT, 278.40 INBOUND.  
CHART FAS OBST: 5530 TREE 380409N/1170354W.



MINIMUMS:  
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT  
ALTERNATE: NA ☐ CAT A, B 1300-2, CAT C, D 1300-3

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
CIRCLING	6640	1 1/4	1210	6640	1 1/2	1210	6640	3	1210	6640	3	1210			

CHANGES - REASONS

COORDINATED WITH:  
A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZLC, RNO FSS, AMGR.

FLIGHT CHECKED BY

KEVIN Y CHENG

Digitally signed by

DAVID DANNER

Jul 08, 2024

OFFICE

FPO

DATE

07/02/2024

DEVELOPED BY

DAVID DANNER (DALLIN STRICKLAND)

Digitally signed by

DAVID DANNER

Jul 08, 2024

OFFICE

AJV-A421

DATE

07/20/2023

APPROVED BY

DAVID DANNER

Digitally signed by

DAVID DANNER

Jul 08, 2024

OFFICE

AJV-A421

DATE

09/05/2024

TITLE

MANAGER



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

<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>
TPH	VOR-A	ORIG	TONOPAH	NV	5430	TPH

**PART A: OBSTRUCTION DATA SEGMENTS**

**INTERMEDIATE: PT**

**FROM** 10 NM **TO** KINKS INT/6.10 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>			<u>HMAS</u>		
	3.90										
<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>
AAO	375900.00N/1165339.00W	6572	215	8	4B	500				DG1028	8100
TERRAIN	375900.00N/1165339.00W	6371 (6400)								AS1500	7900

**COMPUTATIONS**

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

**SEGMENT REMARKS:**

**INTERMEDIATE: PT STEPDOWN**

**FROM** KINKS INT/6.10 DME **TO** TPH VORTAC

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>			<u>HMAS</u>		
	6.10										
<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>
AAO	375900.00N/1165339.00W	6572	215	8	4B	500					7100
TERRAIN	375939.00N/1165433.00W	5498 (5500)								AS1500	7000

**COMPUTATIONS**

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

**SEGMENT REMARKS:**



FINAL

FROM

TPH VORTAC

TO

2.55 NM AFTER TPH VORTAC OR AT DECCA/TPH 2.55 DME

RNP

DISTANCE

PAT

MAP

HAT

HMAS

2.55

2.55 NM AFTER TPH VORTAC OR AT DECCA/TPH 2.55 DME

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TREE	380409.00N/1170354.00W	5530	215	8	4B	250				MA860	6640

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

PROCEDURE TURN

FROM

TPH VORTAC

TO

10 NM

RNP

DISTANCE

PAT

MAP

HAT

HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	380415.00N/1164448.00W	7527	215	8	4B	1000				PR110	8700
TERRAIN	380415.00N/1164448.00W	7326 (7300)								AS1500	8800

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSSED APPROACH

FROM

2.55 NM AFTER TPH VORTAC OR AT DECCA/TPH 2.55 DME

TO

TOBEY INT

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u> 6390			
<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>
AAO	380303.00N/1171357.00W	7386	215	8	4B		ASC				8700
AAO	380303.00N/1171357.00W	7386	215	8	4B	1000				PR90	8500
TERRAIN	380303.00N/1171357.00W	7185 (7200)								AS1500	8700

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											
TREE	380409.00N/1170718.00W	1.41	1210	5606	215	8	4B	300		SI	6640
CATEGORY B											
TREE	380403.00N/1170806.00W	2.02	1210	5691	215	8	4B	300		SI	6640
CATEGORY C											
TREE	380309.00N/1170924.00W	3.21	1210	6009	215	8	4B	300		SI	6640
CATEGORY D											
AAO	380751.00N/1170748.00W	4.20	1210	5853	215	8	4B	300		SI	6640

CIRCLING REMARKS:

MSA

CENTER

TPH VORTAC

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
140-240	AAO	380042.00N/1172906.00W	250	21.4	9088	215	8	4B	1000			10100
240-140	AAO	375742.00N/1162742.00W	081	27.4	9606	215	8	4B	1000			90700

MSA REMARKS:

QUALITY  
35  
CHECKED

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

ZLC ARTCC, RNO FSS, NELLIS APP CON

<u>WX SERVICE</u> ASOS	<u>LOCATION</u> TPH	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> TPH	<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:

NO SUITABLE BACKUP ALTIMETER.

<u>PRIMARY NAVAID</u> TPH VORTAC	<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>
01H		
RW11 - MIRL (PCL)	BSC-F	
RW29 - MIRL (PCL)	BSC-F	
RW15 - MIRL (PCL), PAPI-2L (PCL)	NPI-G	
RW33 - MIRL (PCL)	NPI-G	

<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>	<u>TCH</u>
-------------------------	---------------------------	------------	------------------------	--------------------------	-------------------	------------

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<input type="checkbox"/>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	<input type="checkbox"/>	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
---------------------	----------------------	------------	----------------

CRITICAL TEMPERATURE REMARKS:

"VISUAL PORTION OF FINAL" PENETRATIONS

FINAL TYPE	CIRCLING RWY 11
20:1	
5433 VEGETATION (32-079370) 380400.9000N/1170531.1400W (0.4334)	
<u>PENETRATIONS REMARKS:</u>	



HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PENETRATIONS REMARKS:

PART C: GENERAL REMARKS:

VDP NOT ESTABLISHED - FINAL IS CIRCLING ONLY.  
PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
100' VEGETATION USED PER FPT.  
ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.

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	MAP	TO 1000FT POINT	.22
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	2.23
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	304.88
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	5400
DISTANCE FROM	MAP	TO 1500FT POINT	2.15
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	2.04
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	304.88
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	5400

THRESHOLD COORDINATES (IF STR-IN)

ARP COORDINATES	380335.62N/1170511.76W
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 33 DISTANCE 0.68 NM
FAF COORDINATES	380150.32N/1170200.61W
FIX NAME COORDINATES	

REMARKS

PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
DAVID DANNER (DALLIN STRICKLAND)	AJV-A421	07/20/2023	AERONAUTICAL INFORMATION SPECIALIST

