

UNITED STATES AIR FORCE FLIGHT STANDARDS SERVICE TACAN STANDARD INSTRUMENT APPROACH PROCEDURE

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>
TOL	HI - TACAN RWY 25	4D	TOLEDO	OH
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>DATED</u>	<u>EPOCH YEAR</u>
684	678	HI - TACAN RWY 25	09/10/2020	1990
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>
TOL TACAN			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>
CRL VOR/DME		MYANN/TOL 25.00 DME					192.94	52.17	18000
FWA VORTAC		MYANN/TOL 25.00 DME					085.14	70.64	18000
ROD VORTAC		MYANN/TOL 25.00 DME					022.91	56.95	18000
MYANN/TOL 25.00 DME	IAF	POUDR/TOL 15.00 DME					350.00 (TOL R-170)	10.00	10000
POUDR/TOL R-170/15.00 DME CCW		IKASE/TOL 15.00 DME					15.00 DME ARC		4000
IKASE/TOL 15.00 DME	IF	ORUYI/TOL 6.00 DME					260.00	9.00	2400

MISSED APPROACH

MAP:

IXOQY/TOL 1.00 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 THEN LEFT TURN ON TOL TACAN R-170 TO POUDR/15.00 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- PROFILE STARTS AT MYANN/TOL 25.00 DME
- FAC: 260.00 FAF: ORUYI/TOL 6.00 DME DIST FAF TO MAP: DIST FAF TO THLD: 5.83
- MIN ALT: MYANN/TOL 25.00 DME 18000, POUDR/TOL 15.00 DME 10000, IKASE/TOL 15.00 DME 4000, ORUYI/TOL 6.00 DME 2400, ZARIP/TOL 2.50 DME 1240
- MSA FROM: TOL TACAN 3100, ESA W/IN 100 NM 3100



NOTES:

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON FWA VORTAC AIRWAY RADIALS 077 CW 130.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE (ANGLE)/TCH (FEET)).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ROD VORTAC ON V47 SOUTHWEST BOUND.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-25 ALL CATS VISIBILITY TO RVR 6000.

ADDITIONAL FLIGHT DATA:

CHART ARRIVAL HOLDING AT MYANN: HOLD S, LT, 350.00 INBOUND, 15,000, MAX FL180.

HOLD S, LT, 350.00 INBOUND.
CHART FAS OBST: 818 TOWER (39-105710) 413655N/0834513W.
CHART TOL R-170 AT POUDR.
FAC CROSSES RWY C/L EXTENDED 956 FT FROM THLD.
CHART: ASR.
CHART CIRCLING ICON.
ORUYI TO RW25: 2.69/69.

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/4, CAT E 800-2 1/2, NA WHEN LOCAL WEATHER NOT AVAILABLE.

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
S-25		NA			NA		1080	4000	402	1080	4000	402	1080	4000	402
CIRCLING		NA			NA		1360	2	676	1400	2 1/4	716	1400	2 1/2	716

CHANGES - REASONS

- AIRPORT ELEVATION CHANGED FROM "683" TO "684" – NEW AIRNAV DATA AND IAW 8260.19I PARA 8-6-2.F.
- TERMINAL ROUTES: CHANGED "POUDR/TOL 15.00 DME CCW TO IKASE/TOL 15.00 DME" TO "POUDR/TOL R-170/15.00 DME CCW TO IKASE/TOL 15.00 DME" – UPDATED TO MATCH PROCEDURE CHARTING AND FIX MAKE-UP.
- MISSED APPROACH POINT: CHANGED FROM "IXOQY/TOL 1.00 DME FIX" TO "IXOQY/TOL 1.00 DME" – NEW FORMATTING IN SIAP AND IAW 8260.19I PARA 8-6-6.C.
- PROFILE LINE 2: CHANGED FROM "PROFILE STARTS AT MYANN" TO "PROFILE STARTS AT MYANN/TOL 25.00 DME"- IAW 8260.19I PARA 8-6-7.B.(3).
- PROFILE LINE 4: CHANGED MIN ALT FOR "MYANN/TOL 25.00 DME 15000" TO "MYANN/TOL 25.00 DME 18000" – ALL ENTRIES TO MYANN ARE MADE AT FL180 AND IAW 8260.19I PARA 8-6-7.D.
- PROFILE LINE 8: CHANGED ESA FROM "ESA W/IN 100 NM 4000" TO "ESA W/IN 100 NM 3100" – TO MATCH CURRENT PUBLISHED PROCEDURES.
- NOTES: CHANGED "CHART NOTE: FOR INOPERATIVE ALS, INCREASE CAT C VISIBILITY TO 1 SM" TO "CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-25 ALL CATS VISIBILITY TO RVR 6000" - NEW TARGETS EVALUATION.
- ADDITIONAL FLIGHT DATA: CHANGED "CHART ARRIVAL HOLDING AT MYANN: HOLD S, LT, 350.00 INBOUND, 15,000" TO "CHART ARRIVAL HOLDING AT MYANN: HOLD S, LT, 350.00 INBOUND, 15,000BFL180" – PER ATC REQUEST AND IAW 8260.19J PARA 8-6-11.N.
- ADDITIONAL FLIGHT DATA: CHANGED "CHART FAS OBST: 786 TOWER 413529N/0834654W" TO "CHART FAS OBST: 818 TOWER (39-105710) 413655N/0834513W" – IAW 8260.19I PARA 8-6-10.C.
- MINIMUMS: CHANGED S-25 ALL CATS MDA/HAT FROM "1040/362" TO "1080/402" AND VISIBILITY CAT C FROM "3/4" TO "4000", CAT D/E FROM "1" TO "4000" – IAW 8260.19I PARA 8-6-11.C.
- MINIMUMS: CHANGED CIRCLING HAA: CAT C FROM "677" TO "676", CAT D/E FROM "717" TO "716" – UPDATE TO AIRPORT ELEVATION AND IAW 8260.19I PARA 8-6-11.C.



**UNITED STATES AIR FORCE
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>
TOL	HI - TACAN RWY 25	4D	TOLEDO	OH	684	TOL TACAN

PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM CRL VOR/DME **TO** MYANN/TOL 25.00 DME

<u>RNP</u>	<u>DISTANCE</u> 52.17	<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. TOWER (39-001418)	413922.00N/0832645.00W	1848	500	50	5D	1000				AT15152	18000
2. TERRAIN	411057.00N/0833412.00W	749 (700)								AS1500	2200

COMPUTATIONS

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

SEGMENT REMARKS:

FEEDER

FROM FWA VORTAC **TO** MYANN/TOL 25.00 DME

<u>RNP</u>	<u>DISTANCE</u> 70.64	<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. TOWER (39-000616)	410812.00N/0835424.40W	1817	500	50	5D	1000				AT15183	18000
4. TERRAIN	405624.00N/0850003.00W	1817 (1800)								AS1500	3300

COMPUTATIONS

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

SEGMENT REMARKS:



FEEDER

FROM

ROD VORTAC

TO

MYANN/TOL 25.00 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>				<u>HMAS</u>		
	56.95										
<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>
5. TOWER (39-000804)	401821.00N/0840654.00W	1529	500	50	5D	1000				AT15471	18000
6. TERRAIN	403524.00N/0835018.00W	1109 (1100)								AS1500	2600

COMPUTATIONS

ALTKIASKTASHAAVKTWTRBADTACOURSE CHANGEDVEBVEB OCSRF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INITIAL

FROM

MYANN/TOL 25.00 DME

TO

POUDR/TOL 15.00 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>
7. WINDMILL (39-004119)	412227.50N/0834427.43W	1068	250	50	4D	1000				AT7932	10000
8. TERRAIN	411136.00N/0834042.00W	735 (700)								AS1500	2200

COMPUTATIONS

ALTKIASKTASHAAVKTWTRBADTACOURSE CHANGEDVEBVEB OCSRF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INITIAL: ARC

FROM

POUDR/TOL R-170/15.00 DME CCW

TO

IKASE/TOL 15.00 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>
1. TOWER (39-001418)	413922.00N/0832645.00W	1848	500	50	5D	1000				AT1152	4000
9. TERRAIN	411851.00N/0833845.00W	726 (700)								AS1500	2200

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE

FROM

IKASE/TOL 15.00 DME

TO

ORUYI/TOL 6.00 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
	9.00										
<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>
10. TOWER (39-002110)	413912.00N/0833253.00W	1058	500	50	5D	500				AT842	2400
11. TERRAIN	413639.00N/0833024.00W	673 (700)								AS1500	2200

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL

FROM

ORUYI/TOL 6.00 DME

TO

ZARIP/TOL 2.50 DME

RNP	DISTANCE	PAT	MAP		HAT	HMAS					
	3.50										
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
12. TOWER (39-000799)	413732.00N/0834241.00W	938	250	50	4D	250				AC50	1240

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: STEPDOWN

FROM

ZARIP/TOL 2.50 DME

TO

IXOQY/TOL 1.00 DME

RNP	DISTANCE	PAT	MAP		HAT	HMAS					
	1.50		IXOQY/TOL 1.00 DME		402						
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
13. TOWER (39-105710)	413655.31N/0834513.27W	818	20	3	1A	250					1080

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSSED APPROACH

FROM

IXOQY/TOL 1.00 DME

TO

POUDR/15.00 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u> 830				
<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>
							ASC				3000
7. WINDMILL (39-004119)	412227.50N/0834427.43W	1068	250	50	4D	1000					2100
14. TERRAIN	413651.00N/0840109.00W	758 (800)								AS1500	2300

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 C											
15. TOWER (39-000157)	413602.00N/0835302.00W	1.70	676	998	250	50	4D	300		AC50	1360
CATEGORY D											
16. TOWER (39-003822)	413603.54N/0835426.34W	2.30	716	1049	500	50	5D	300		AC50	1400
CATEGORY E											
16. TOWER (39-003822)	413603.54N/0835426.34W	2.88	716	1049	500	50	5D	300		AC50	1400

CIRCLING REMARKS:



ESA

CENTER

TOL TACAN

RADIUS

100

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TOWER (39-000134)	412148.00N/0814258.00W	103	94.9	2049	250	50	4D	1000			3100

ESA REMARKS:

MSA

CENTER

TOL TACAN

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TWR (39-000350)	414003.00N/0832122.00W	082	20.4	2016	500	50	5D	1000			3100

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

FOR CONTINGENCY PURPOSES:
NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE DUH ALTIMETER SETTING AND INCREASE ALL MDAS 40 FEET, S-25 ALL VISIBILITIES TO RVR 4500 AND CIRCLING CATS D AND E VISIBILITY 1/4 SM.
NOTE: FOR INOPERATIVE ALS WHEN USING DUH ALTIMETER SETTING, INCREASE S-25 CAT E VISIBILITY TO 1 3/8 SM.
FPT ADVISES AT THE NEXT AMENDMENT TO ADD VDP.



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

TOL TOWER, TOL APP CON

<u>WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>SERVICE-A</u>	<u>ADJUSTMENTS</u>
ASOS	TOL	24	TOL	0	Y	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>
AWOS-3	DUH	24	DUH	11.25	Y	28

WX REMARKS:

RASS PRESSURE PATTERNS THE SAME
KTOL 683, KDUH 669.0
RA = 28.0.

<u>PRIMARY NAVAID</u>	<u>MONITOR POINT</u>	<u>HRS OPERATION</u>	<u>CAT</u>
TOL TACAN	MOCC	24	1

<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>	<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW16 - MIRL, REIL, PAPI-4L	NPI-G	
RW34 - REIL, MIRL, PAPI-4L	NPI-G	
RW07 - ALSF-2, HIRL, TDZ, C/LINE	PIR-G	APPROACH, ROLL OUT
RW25 - MALSR, HIRL, C/LINE, PAPI-4L	PIR-G	APPROACH, ROLL OUT

<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>
					3.00	68.7

FINAL APPROACH COURSE AIMING

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



HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

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

PENETRATIONS REMARKS:

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

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	THLD	TO 1000FT POINT	3.47
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	2.45
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	255
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	700
DISTANCE FROM	THLD	TO 1500FT POINT	5.40
WIDTH OF	INTERMEDIATE	SEGMENT AT 1500FT POINT	2.64
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	255
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	700

THRESHOLD COORDINATES (IF STR-IN)413533.62N/0834741.97W

ARP COORDINATES413512.54N/0834828.18W

RUNWAY APCH END AND DIST FURTHEST FROM ARP

FAF COORDINATESRUNWAY 7 DISTANCE 1.08 NM

FIX NAME COORDINATES413710.30N/0834014.08W

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED

PART E: PREPARED BY

NAME

WESTLEY OWENS

OFFICE

AJV-A431

DATE

03/22/2024

TITLE

