

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</u> EUGENE F KRANZ TOLEDO EXPRESS	<u>AIRPORT ID</u> KTOL	<u>PROCEDURE NAME</u> HI - TACAN RWY 7	<u>ORIGINAL/AMENDMENT</u> 6C	<u>CITY</u> TOLEDO	<u>STATE</u> OH	
<u>AIRPORT ELEVATION</u> 683	<u>TDZE</u> 683	<u>SUPERSEDED</u> HI - TACAN RWY 7	<u>ORIGINAL/AMENDMENT</u> 6B	<u>DATED</u> 04/27/2017	<u>MAG VAR</u> 5W	<u>EPOCH YEAR</u> 1990
<u>FACILITY</u> TOL TACAN	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
CRL VOR/DME		MYANN/TOL 25.00 DME					192.95	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	10.00 (TOL R-170)	10000
POUDR/TOL 15.00 DME CW		HOMIE/TOL 15.00 DME					15.00 DME ARC		4000
HOMIE/TOL 15.00 DME	IF	HEVOB/TOL 7.00 DME					068.00	8.00	2200

MISSED APPROACH

MAP:

TOL 1.59 DME

MISSED APPROACH INSTRUCTIONS:

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

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. PROFILE STARTS AT MYANN
3. FAC: 068.00 FAF: HEVOB/TOL 7.00 DME DIST FAF TO MAP: DIST FAF TO THLD: 5.41
4. MIN ALT: MYANN/TOL 25.00 DME 15000, POUDR/TOL 15.00 DME 10000, HOMIE/TOL 15.00 DME 4000, HEVOB/TOL 7.00 DME 2200, TETLE/TOL 4.00 DME 1240
8. MSA FROM: TOL TACAN 3100, ESA W/IN 100 NM 4000

EQUIPMENT REQUIREMENTS NOTES:



NOTES:

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ROD VORTAC ON V47 SOUTHWEST BOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON FWA VORTAC AIRWAY RADIALS 077 CW 134.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S- 7 CAT E VISIBILITY TO 1 3/8 SM.

ADDITIONAL FLIGHT DATA:

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

HOLD S, LT, 350.00 INBOUND.

CHART FAS OBST: 829 TOWER 413506N/0835034W.

CHART VDP AT 2.21 DME

DISTANCE VDP TO THLD 0.61 NM.

CHART TOL R-170 AT POU DR.

FAC CROSSES RWY C/L EXTENDED 1353 FT FROM THLD.

CHART: ASR.

CHART CIRCLING ICON.

HEVOB TO RW07: 2.55/55.

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-07		NA			NA		1140	4500	457	1140	4500	457	1140	4500	457
CIRCLING		NA			NA		1360	2	677	1400	2 1/4	717	1400	2 1/2	717

CHANGES - REASONS

1. CHANGED AIRPORT NAME FROM TOLEDO EXPRESS TO EUGENE F KRANZ TOLEDO EXPRESS - CHANGED TO UPDATED NAME

2. CHANGED MAP IN MISSED APPROACH SECTION FROM "5.41 NM AFTER HEVOB/TOL 7.00 DME OR AT TOL 1.59 DME" TO "TOL 1.59 DME" - PROCEDURE IS DME ONLY AND DOES NOT REQUIRE A TIMING TABLE

3. ADDED PLANVIEW NOTE "PROCEDURE NA FOR ARRIVAL ON FWA VORTAC AIRWAY RADIALS 077 CW 134" - ANGLE OF INTERSECTION MUST NOT EXCEED 120 DEGREES IAW 8260.3D 2-3-1 A(1)

4. ADDED PLANVIEW NOTE "PROCEDURE NA FOR ARRIVALS AT ROD VORTAC ON V47 SOUTHWEST BOUND" - ANGLE OF INTERSECTION MUST NOT EXCEED 120 DEGREES IAW 8260.3D 2-3-1 A(1)

5. CHANGED ALTERNATE MINIMUMS FROM "STANDARD - CAT D 800-2 1/4, CAT E 800-2 1/2" TO "STANDARD - CAT D 800-2 1/4, CAT E 800-2 1/2, NA WHEN LOCAL WEATHER NOT AVAILABLE." - IAW 8260.3D 3-4-1 A(3).

6. ADDED ADDITIONAL FLIGHT DATA NOTE "HEVOB TO RW07: 2.55/55." - IAW 8260.19H PARA 8-6-10P

7. ADDED ADDITIONAL FLIGHT DATA NOTE "CHART VDP AT 2.21 DME" - VDP IS PUBLISHABLE IAW 8260.3D PARA 2-6-5 (A)

8. ADDED ADDITIONAL FLIGHT DATA NOTE "DISTANCE VDP TO THLD .61 NM." - VDP IS PUBLISHABLE IAW 8260.3D PARA 2-6-5 (A)



COORDINATED WITH:

A4A ☐ **ALPA** ☐ **AOPA** ☐ **APA** ☐ **HAI** ☐ **NBAA** ☐ **OTHER:** ZOB, TOL APP CON, AMGR, TOL APP CON

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJF-10) MEMO, APRIL 29, 2020, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE**DATE**

Digitally signed by

ALLAN WILL

Jun 24, 2020

DEVELOPED BY

JOSEPH BLANCO

OFFICE

AJV-A423

DATE

04/16/2020

Digitally signed by

ALLAN WILL

Jun 24, 2020

RECOMMENDED BY

MARLON J. ROBINSON

OFFICE

AJV-A420

DATE

Digitally signed by

ALLAN WILL

Jun 24, 2020

TITLE

MANAGER

APPROVED BY**OFFICE****DATE****TITLE**

QUALITY
24
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
EUGENE F KRANZ TOLEDO EXPRESS	KTOL	HI - TACAN RWY 7	6C	TOLEDO	OH	683	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
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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	850 (900)								AS1500	2400

COMPUTATIONS

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



FEEDER

FROM

ROD VORTAC

TO

MYANN/TOL 25.00 DME

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	56.95											
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
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

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INITIAL

FROM

MYANN/TOL 25.00 DME

TO

POUDR/TOL 15.00 DME

<u>RNP</u>	<u>DISTANCE</u> 10.00	<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>
7.TOWER (39-000129)	411339.00N/0833831.00W		1017	500	50	5D	1000				AT7983	10000
8.TERRAIN	411136.00N/0834042.00W		735 (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

FROMPOUDR/TOL 15.00 DME CW

TOHOMIE/TOL 15.00 DME

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
9.WINDMILL (39-004119)	412227.50N/0834427.43W		1068	250	50	4D	1000				AT1932	4000
10.TERRAIN	413018.00N/0841039.00W		762 (800)								AS1500	2300

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

INTERMEDIATE

FROMHOMIE/TOL 15.00 DME

TOHEVOB/TOL 7.00 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>
11.TOWER (39-001097)	413215.00N/0840754.00W		1073	500	50	5D	500				AT627	2200
12.TERRAIN	413215.00N/0840754.00W		751 (800)								AS1000	1800

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

FINAL

FROM

HEVOB/TOL 7.00 DME

TO

TETLE/TOL 4.00 DME

RNP	DISTANCE 3.00	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
13.TOWER (39-003874)	413152.00N/0835547.00W		929	250	50	4D	250				AC50	1240

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

FINAL: STEPDOWN

FROM

TETLE/TOL 4.00 DME

TO

TOL 1.59 DME

<u>RNP</u>	<u>DISTANCE</u> 2.41	<u>PAT</u>	<u>MAP</u> TOL 1.59 DME	<u>HAT</u> 457(CDE)			<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>
CAT C: 14.TOWER (39-020300)	413506.00N/0835034.00W		829	500	50	5D	250				AC50	1140

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

MISSED APPROACH

FROM

TOL 1.59 DME

TO

POUDR/15.00 DME

RNP	DISTANCE	PAT	MAP	HAT			HMAS 882					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				3000
15.TOWER (39-000655)	413157.00N/0833536.00W		1148	500	50	5D	1000					2200
16.TERRAIN	412057.00N/0833942.00W		719 (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 C											
17.TOWER (39-000157)	413602.00N/0835302.00W	2.88	677	998	250	50	4D	300		AC50	1360
CATEGORY D											
18.TOWER (39-003822)	413603.54N/0835426.34W	3.76	717	1049	500	50	5D	300		AC50	1400
CATEGORY E											
18.TOWER (39-003822)	413603.54N/0835426.34W	4.7	717	1049	500	50	5D	300		AC50	1400

CIRCLING REMARKS:



<u>AIRPORT</u> EUGENE F KRANZ TOLEDO EXPRESS	<u>AIRPORT ID</u> KTOL	<u>PROCEDURE NAME</u> HI - TACAN RWY 7	<u>AMDT NO.</u> 6C	<u>CITY</u> TOLEDO	<u>STATE</u> OH	<u>AIRPORT ELEVATION</u> 683	<u>FACILITY</u> TOL TACAN
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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.

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

QUALITY
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<u>AIRPORT</u> EUGENE F KRANZ TOLEDO EXPRESS	<u>AIRPORT ID</u> KTOL	<u>PROCEDURE NAME</u> HI - TACAN RWY 7	<u>AMDT NO.</u> 6C	<u>CITY</u> TOLEDO	<u>STATE</u> OH	<u>AIRPORT ELEVATION</u> 683	<u>FACILITY</u> TOL TACAN
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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	3.74
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	2.53
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	063
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	700
DISTANCE FROM	THLD	TO 1500FT POINT	5.41
WIDTH OF	INTERMEDIATE	SEGMENT AT 1500FT POINT	2.70
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	063
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	700

THRESHOLD
COORDINATES
(IF STR-IN)

413452.99N/0834950.52W

ARP COORDINATES

413512.50N/0834828.20W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP

RUNWAY 7 DISTANCE 1.08 NM

FAF
COORDINATES

413226.27N/0835616.05W

FIX NAME
COORDINATES

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED

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PART E: PREPARED BY							
<u>NAME</u> JOSEPH BLANCO			<u>OFFICE</u> AJV-A423	<u>DATE</u> 04/16/2020	<u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST		

QUALITY

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