

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33**

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>	
LAN	RNAV (GPS) RWY 10R	1A	LANSING	MI	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
861	861	RNAV (GPS) RWY 10R	02/25/2021	5W	1985
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>	
RNAV			ROUTINE		

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 005/30 CW 185/30	NOPT	OCTEC	IF/IAF	3000
2. 185/30 CW 275/30		JATVA	IAF	3000
3. 275/30 CW 005/30		ILLOV	IAF	3000

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>
JATVA	IAF	OCTEC	NOPT	TF	FB	1.00	185.44	7.00	3000
ILLOV	IAF	OCTEC	NOPT	TF	FB	1.00	005.44	7.00	3000
OCTEC	IF/IAF	AZDEZ		TF	FB	1.00	095.44	5.95	2400
AZDEZ	FAF	CIRAT/2.33 NM TO RW10R		TF	FB	0.30	095.53	2.33	
CIRAT/2.33 NM TO RW10R		RW10R	MAP	TF	FO	0.30	095.53	2.33	
RW10R	MAP	1153 MSL		CA			095.53		
1153 MSL		DUTVE		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW10R

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT DUTVE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
10
CHECKED

PROFILE:

1.	PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)									
2.	HOLD W OCTEC, RT, 095.44 INBOUND, 3000 IN LIEU OF PT (IAF), MAX 6000.														
3.	FAC:	095.53	FAF:	AZDEZ	DIST FAF TO MAP:	4.66	DIST FAF TO THLD:	4.66							
4.	MIN ALT:	OCTEC 3000, AZDEZ 2400, CIRAT/2.33 NM TO RW10R 1640													
5.	DIST TO THLD FROM OM:		MM:		IM:		150 HAT:		292 HAT:	0.74	GS ANT:				
6.	MIN GP INCPT:	2400	GP ALT AT PFAF:	AZDEZ 2400			OM:		MM:		IM:				
7.	GP ANGLE:	3.00	34:1:	IS NOT CLEAR	20:1:	IS CLEAR	TCH:	56.1							
8.	MSA FROM:														

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: CIRCLING RWY 10L, 28R NA AT NIGHT.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -19°C OR ABOVE 54°C.
CHART NOTE: RWY 10R HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV ALL CATS VISIBILITY TO RVR 4500, LNAV/VNAV ALL CATS VISIBILITY TO RVR 6000, LNAV CATS A/B TO RVR 5500 AND CATS C/D TO RVR 6000.

ADDITIONAL FLIGHT DATA:

HOLD E, RT, 275.78 INBOUND.
CHART FAS OBST: 1011 ANTENNA (26-175370) 424647N/0843845W.
CHART VDP AT 1.03 NM TO RW10R.
WAAS CHANNEL # 61314
REFERENCE PATH ID: W10A
LTP HAE: 228.6 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 900-3

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
LPV DA	1153	4000	292	1153	4000	292	1153	4000	292	1153	4000	292			
LNAV/VNAV DA	1245	4000	384	1245	4000	384	1245	4000	384	1245	4000	384			
LNAV MDA	1280	4000	419	1280	4000	419	1280	4000	419	1280	4000	419			
CIRCLING	1320	1	459	1340	1	479	1600	2	739	1760	3	899			



CHANGES - REASONS

1. IN TERMINAL ROUTES, CHANGED MAP SEGMENT FROM "1061 MSL TO DUTVE" TO "1153 MSL TO DUTVE" - LPV DA CHANGED TO 1153.
2. IN PROFILE, CHANGED 34:1 FROM "IS CLEAR" TO "IS NOT CLEAR" - NEW 34:1 SURFACE PENETRATION.
3. IN PROFILE CHANGED HAT FROM "200 HAT: 0.45" TO "292 HAT: 0.74" - LPV HAT INCREASED TO 292.
4. IN NOTES, ADDED "CHART NOTE: RWY 10R HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED." - NEW 34:1 SURFACE PENETRATION.
5. IN ADDITIONAL FLIGHT DATA, CHANGED NOTE FROM "VDP AT 1.02 NM TO RW10R*." TO "VDP AT 1.03 NM TO RW10R."- LNAV MDA INCREASED.
6. IN NOTES CHANGED NOTE FROM "FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 4500." TO "FOR INOPERATIVE ALS, INCREASE LPV ALL CATS VISIBILITY TO RVR 4500, LNAV/VNAV ALL CATS VISIBILITY TO RVR 6000, LNAV CATS A/B VISIBILITY TO RVR 5500 AND CATS C/D TO 6000." - ALL VIS VALUES INCREASED DUE TO 34:1 PENETRATIONS.
7. IN ADDITIONAL FLIGHT DATA, CHANGED LTP HAE FROM "228.7" TO "228.6" - CURRENT AIRNAV DATA.
8. IN ADDITIONAL FLIGHT DATA, CHANGED FAS OBST FROM "1010 TOWER 424647N/0843845W." TO "1011 ANTENNA (26-175370) 424647N/0843845W." - DUE TO NEW CONTROLLING OBSTACLE.
9. IN MINIMUMS, CHANGED LPV DA/ HAT FROM "1061/200" TO "1153/292"- NEW CONTROLLING OBSTACLE & CLEARING NOTAM 5/2545.
10. IN MINIMUMS, CHANGED LNAV/VNAV DA/VIS/HAT FROM "1172/2400/311" TO "1245/4000/384" - NEW CONTROLLING OBSTACLE, 34:1 PENETRATIONS & CLEARING NOTAM 5/2545.
11. IN MINIMUMS, CHANGED LNAV CAT A, B MDA/HAT FROM "1260/399" TO "1280/419" & CAT C, D MDA/VIS/HAT FROM "1260/3500/399" TO "1280/4000/419"- NEW CONTROLLING OBSTACLE & CLEARING NOTAM 5/2545.
12. CHANGED CRC REMAINDER FROM "5347B8CB" TO "32D872B7"- FPAP LAT/LONG CHANGED FROM: "424640.5815N/0843402.8160W" TO "424640.5800N/0843402.8165W".
13. IN PBN REQUIREMENTS NOTE, CHANGED NOTE FROM "RNP APCH" TO "RNP APCH-GPS"- IAW 8260.19J PARA 8-6-8.
14. IN NOTES, REMOVED "CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA." - NO LONGER QUALIFIES AS THE HAT IS GREATER THAN 200FT.
15. IN ADDITIONAL FLIGHT DATA, REMOVED "*" LNAV ONLY" - NO LONGER REQUIRED PER CURRENT CRITERIA.

10/6/25: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 9/12/25.
1. REMOVED CHART CIRCLING ICON NOTE - NO LONGER REQUIRED.

COORDINATED WITH:

A4A

☒

ALPA

☒

AOPA

☒

APA

☒

HAI

☐

NBAA

☒

OTHER: ZOB, LAN APP CON, LAN ATCT, AMGR

FLIGHT CHECKED BY
BRIAN PETER CARSON

Digitally signed by
ALLAN WILL
Oct 07, 2025

OFFICE
FIOG
DATE
09/09/2025

DEVELOPED BY
ALLAN WILL (TEVAR MALONE)

Digitally signed by
ALLAN WILL
Oct 07, 2025

OFFICE
AJV-A33
DATE
05/08/2025

APPROVED BY
KYLE THOMPSON

Digitally signed by
ALLAN WILL
Oct 07, 2025

OFFICE
AJV-A33
DATE
10/23/2025
TITLE
MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KLAN
RUNWAY	RW10R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W10A
LTP/FTP LATITUDE	424641.5315N
LTP/FTP LONGITUDE	0843603.7955W
LTP/FTP ELLIPSOIDAL HEIGHT	+02286
FPAP LATITUDE	424640.5800N
FPAP LONGITUDE	0843402.8165W
THRESHOLD CROSSING HEIGHT (TCH)	00056.1
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0160
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	32D872B7

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02622
FPAP ORTHOMETRIC HEIGHT	+02622



**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>
LAN	RNAV (GPS) RWY 10R	1A	LANSING	MI	861	RNAV

PART A: OBSTRUCTION DATA SEGMENTS

STRAIGHT-IN AREA

FROM 005/30 CW 185/30 **TO** OCTEC

<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>
TOWER (26-000456)	423415.00N/0852809.00W	1956	250	50	4D	1000					3000
TERRAIN	423709.00N/0852609.00W	1126 (1100)								AS1500	2600

COMPUTATIONS

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

SEGMENT REMARKS:

LEFT BASE AREA

FROM 185/30 CW 275/30 **TO** JATVA

<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>
STACK (26-000056)	424308.00N/0843328.00W	1449	100	20	3C	1000				AT551	3000
TERRAIN	424633.00N/0841812.00W	968 (1000)								AS1500	2500

COMPUTATIONS

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

SEGMENT REMARKS:

QUALITY
10
CHECKED

RIGHT BASE AREA

FROM

275/30 CW 005/30

TO

ILLOV

<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>
TOWER (26-001075)	422803.00N/0843906.00W	1956	500	50	5D	1000					3000
TERRAIN	421054.00N/0844027.00W	1090 (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

JATVA

TO

OCTEC

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
1.00	7.00										
<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>
TOWER (26-001769)	424832.00N/0844706.00W	1106	500	50	5D	1000				AT894	3000
TERRAIN	424530.00N/0845221.00W	880 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INITIAL

FROM

ILLOV

TO

OCTEC

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u>				
1.00	7.00										
<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>
AAO	424057.00N/0844854.00W	1126	164	98	4E	1000				AT874	3000
TERRAIN	424057.00N/0844854.00W	926 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE

FROM

OCTEC (IF/IAF)

TO

AZDEZ

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u>				
1.00	5.95										
<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>
TOWER (26-001769)	424832.00N/0844706.00W	1106	500	50	5D	500					1700
TERRAIN	424557.00N/0844636.00W	906 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: LPV

FROM

AZDEZ

TO

RW10R

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30	4.66		DA				292				
<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>
TREE (26-174026)	424646.04N/0843642.53W	949	20	3	1A		34.00:1			MA42	1153

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV/VNAV

FROM

AZDEZ

TO

RW10R

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30	4.66		DA				384				
<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>
TREE (26-174403)	424711.55N/0843725.41W	968	20	3	1A		23.70:1				1245

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV

FROM

AZDEZ

TO

CIRAT/2.33 NM TO RW10R

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30	2.33										
<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	424727.00N/0844124.00W	1129	215	8	4B	250				DG261	1640

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: LNAV STEPDOWN

FROM

CIRAT/2.33 NM TO RW10R

TO

RW10R

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>
0.30	2.33		RW10R	419	

<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>
ANTENNA (26-175370)	424647.37N/0843845.29W	1011	20	3	1A	250					1280

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

HOLD-IN-LIEU OF PT

FROM

OCTEC

TO

P-5

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>
		P-5			

<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>
TOWER (26-001976)	424237.00N/0845941.00W	1206	50	20	2C	1000				AT794	3000
TERRAIN	424218.00N/0850127.00W	916 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSED APPROACH: LPV

FROM

DA

TO

DUTVE

RNP 0.30-1.00	DISTANCE	PAT	MAP		HAT		HMAS 944				
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TREE (26-174026)	424646.04N/0843642.53W	949	20	3	1A		ASC				3000
TOWER (26-001649)	424553.00N/0842538.00W	1290	500	50	5D	1000					2300
TERRAIN	424615.00N/0841957.00W	977 (1000)								AS1500	2500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH: LNAV/VNAV

FROM

DA

TO

DUTVE

RNP 0.30-1.00	DISTANCE	PAT	MAP		HAT		HMAS 1084				
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				3000
TOWER (26-001649)	424553.00N/0842538.00W	1290	500	50	5D	1000					2300
TERRAIN	424615.00N/0841957.00W	977 (1000)								AS1500	2500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSSED APPROACH: LNAV

FROM

RW10R

TO

DUTVE

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30-1.00										1180	
<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
TOWER (26-001649)	424553.00N/0842538.00W	1290	500	50	5D	1000					2300
TERRAIN	424615.00N/0841957.00W	977 (1000)								AS1500	2500

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											
ANTENNA (26-099775)	424516.00N/0843448.03W	1.30	459	1012	20	10	1B	300			1320
CATEGORY B											
TOWER (26-130053)	424837.40N/0843526.65W	1.84	479	1021	50	20	2C	300			1340
CATEGORY C											
TOWER (26-000009)	424358.00N/0843313.00W	2.89	739	1247	50	50	2D	300		AC50	1600
CATEGORY D											
STACK (26-000056)	424308.00N/0843328.00W	3.77	899	1449	100	20	3C	300			1760

CIRCLING REMARKS:

MSA/ESA

CENTER

RADIUS

REMARKS:



NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

ALL VEGETATION 100 FEET.

PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

LAN APP CON, LAN TOWER, ZOB ARTCC, LAN FSS

<u>WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>WMSCR</u>	<u>ADJUSTMENTS</u>
ASOS	LAN	24	LAN		Y	0
<u>BACK-UP WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>WMSCR</u>	<u>ADJUSTMENTS</u>

WX REMARKS:

REDUNDANT WX AVAILABLE, SECONDARY ALTIMETER NOT REQUIRED.

<u>PRIMARY NAVAID</u>	<u>MONITOR POINT</u>	<u>HRS OPERATION</u>	<u>CAT</u>
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<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>	<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW10L	BSC-G	
RW28R	BSC-G	
RW06 - REIL, MIRL, PAPI-4L	NPI-F	
RW24 - MIRL, REIL, PAPI-4L	NPI-F	
RW10R - MALSR, HIRL, PAPI-4L	PIR-F	APPROACH, ROLL OUT
RW28L - MALSR, HIRL, PAPI-4R	PIR-F	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	860.2	56.1			3.00	72.6

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	X	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	X	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
-19C	+54C	-22C	+13.3C

CRITICAL TEMPERATURE REMARKS:

AVERAGE COLD TEMPERATURE DERIVED FROM 5-YEAR HISTORY (2015-2019).
CRITICAL LOW TEMPERATURE BASED ON ACT.
DESCENT RATE (FPM): STANDARD TEMP 967 HIGH TEMP 1275.



"VISUAL PORTION OF FINAL" PENETRATIONS

FINAL TYPE	CIRCLING RWY 10L
20:1	
850 LIGHTING (26-173554) 424652.8700N/0843509.7400W (0.34)	
FINAL TYPE	CIRCLING RWY 28R
20:1	

<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>				
LAN		RNAV (GPS) RWY 10R	1A	LANSING	MI	861	RNAV				
917 TREE (26-173217) 424656.8300N/0843359.1000W (7.86)											
FINAL TYPE	LPV, LNAV/VNAV, AND LNAV										
34:1											
949 TREE (26-174026) 424646.0400N/0843642.5300W (9.59)				948 TREE (26-174955) 424645.7100N/0843642.7500W (8.12)							
921 TREE (26-173746) 424645.8200N/0843630.8400W (7.24)				945 TREE (26-173789) 424645.5000N/0843642.9700W (4.64)							
945 TREE (26-175075) 424645.5700N/0843643.4200W (3.65)				938 TREE (26-173519) 424647.4800N/0843640.4800W (3.04)							
938 TREE (26-174920) 424645.0800N/0843641.3000W (1.32)				936 TREE (26-173953) 424644.4800N/0843640.7200W (0.61)							
940 TREE (26-174786) 424645.1200N/0843642.6300W (0.4)											
<u>PENETRATIONS REMARKS:</u>											

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

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

<u>PENETRATIONS REMARKS:</u>

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

CIRCLING RWY 10L, 28R NA AT NIGHT DUE TO FLIGHT INSPECTION FINDINGS.

USED TCH OF 56.1 FT WHICH WAS USED IN PREVIOUS DESIGN AND FLIGHT CHECKED.
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	THLD	TO 1000FT POINT	3.09
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	090.53
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	900
DISTANCE FROM	THLD	TO 1500FT POINT	4.66
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	2.13
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	090.53
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	900

THRESHOLD COORDINATES (IF STR-IN)	424641.53N/0843603.80W
ARP COORDINATES	424643.13N/0843510.34W
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 28L DISTANCE 0.74 NM
FAF COORDINATES	424644.28N/0844223.31W
FIX NAME COORDINATES	IAF JATVA 425347.40N/0845023.81W, IAF ILLOV 423947.19N/0845032.57W, IF/IAF OCTEC 424647.30N/0845028.20W

REMARKS

TAA INFORMATION: IF/IAF 005/30 CW 185/30 TO OCTEC, IAF 185/30 CW 275/30 TO JATVA, IAF 275/30 CW 005/30 TO ILLOV.
IAF JATVA: 425347.40N/0845023.81W, IAF ILLOV: 423947.19N/0845032.57W, IF/IAF OCTEC: 424647.30N/0845028.20W

PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
ALLAN WILL (TEVAR MALONE)	AJV-A33	05/08/2025	AERONAUTICAL INFORMATION SPECIALIST

