

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (RNP) 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>	
MSP	RNAV (RNP) Y RWY 30R	2	MINNEAPOLIS	MN	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
842	822	RNAV (RNP) Y RWY 30R	03/02/2017	0E	2015
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>	
RNAV			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>
GROVZ	IAF	WULAM		TF	FB	1.00	301.62	3.14	6000
WULAM		BONNA		TF	FB	1.00	301.58	3.14	5000
BONNA		SAMMZ		TF	FB	1.00	301.53	3.14	4000
GEEQU	IAF	SAMMZ		TF	FB	1.00	278.46	10.50	4000
TRTEL	IAF	SOGGY		TF	FB	1.00	224.12	5.97	5000
SOGGY		SAMMZ		TF	FB	1.00	271.06	5.95	4000
OSMOH	IF	HIGHA		TF	FB	1.00	121.62	6.16	6000
HIGHA		COTTG		RF	FB	1.00	(3.04 NM RADIUS CW (CFMDM))	4.71	4500
COTTG		RVERR		RF	FB	1.00	(3.04 NM RADIUS CW (CFMDB))	3.27	3500
RVERR		JACKO		RF	FB	1.00	(3.04 NM RADIUS CW (CFMDJ))	1.57	3000
SAMMZ	IF	JACKO	PFAF	TF	FB	1.00	301.49	3.14	3000
JACKO	PFAF	RW30R	MAP	TF	FO	0.30	301.45	6.67	
RW30R	MAP	1300 MSL		CA			301.45		1300
1300 MSL		GEP VORTAC		DF	FO	1.00			3000

MISSED APPROACH

MAP:

RNP: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1300 THEN CLIMBING RIGHT TURN TO 3000 DIRECT GEP VORTAC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
37
CHECKED

PROFILE:

1.	PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)									
2.	PROFILE STARTS AT JACKO														
3.	FAC:	301.45	FAF:	JACKO	PFAF:	JACKO	DIST FAF TO MAP:		DIST FAF TO THLD:						
4.	MIN ALT: JACKO 3000														
5.	DIST TO THLD FROM PFAF:	6.67	MM:		IM:		150 HAT:		275 HAT:	0.70	GS ANT:				
6.	MIN GP INCPT:	3000	GP ALT AT PFAF:	JACKO 3000					OM:		MM:		IM:		
7.	GP ANGLE:	3.00	34:1:	IS CLEAR	20:1:	IS CLEAR	TCH:	54.8							
8.	MSA FROM: RW30R 3500														

PBN REQUIREMENTS NOTE:

RNP AR APCH - GPS. AUTHORIZATION REQUIRED. FROM HIGH: RF.

NOTES:

CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -20°C OR ABOVE 54°C.
CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO RNP 0.15.
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.
CHART SPEED ICON IN PLANVIEW AT GROVZ: MAX 210 KIAS.
CHART SPEED ICON IN PLANVIEW AT GEEQU: MAX 210 KIAS.
CHART SPEED ICON IN PLANVIEW AT TRTEL: MAX 210 KIAS.
CHART SPEED ICON IN PLANVIEW AT OSMOH: MAX 210 KIAS.
CHART SPEED ICON IN PLANVIEW AT SAMMZ: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

HOLD NW, LT, 117.00 INBOUND.
CHART AT OR ABOVE 7000 AT GROVZ.
CHART MANDATORY 7000 AT GEEQU.
CHART MANDATORY 7000 AT TRTEL.
CHART MANDATORY 8000 AT OSMOH.

MINIMUS

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

ALTERNATE: NA ☐ STANDARD

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
AUTHORIZATION REQUIRED															
RNP 0.15 DA	1097	5000	275	1097	5000	275	1097	5000	275	1097	5000	275			
RNP 0.30 DA	1298	6000	476	1298	6000	476	1298	6000	476	1298	6000	476			



CHANGES - REASONS

1. INCREASED RNP 0.15 VISIBILITY ALL CATS FROM RVR 4000 TO RVR 5000; DECREASED RNP 0.30 VISIBILITY ALL CATS FROM 1 3/8 SM TO RVR 6000. - IAW 8260.3F TABLE 3-3-1.
2. UPDATED CNF FIX HIGHA – COTTG FROM CFMDJ TO CFMDM; CNF FIX COTTG – RVERR FROM CFMDJ TO CFRMDB. – UPDATED EVALUATION.
3. FINAL JACKO – RW30R COURSE UPDATED FROM 301.44 TO 301.45. – FIX JACKO MOVED TO ALIGHT WITH ILS OR LOC RWY 30R.
4. LINE 5: UPDATED DIST TO THLD FROM OM TO DIST TO THLD FROM PFAF: 6.67. ADDED DISTANCE TO THLD FROM 275 HAT: 0.70. REMOVED "DISTANCE TO THLD FROM 275 HAT: 0.70 NM" FROM ADDITIONAL FLIGHT DATA. – IAW 8260.19J 8-6-7 E; FORMS UPDATED.
5. LINE 7: ADDED 20:1 IS CLEAR. – NO 20:1 PENETRATIONS FOUND.
6. REMOVED CHART NOTE: GPS REQUIRED; ADDED PBN REQUIREMENTS NOTES: RNP AR APCH – GPS. AUTHORIZATION REQUIRED. FROM HIGHA: RF. – IAW 8260.19J 8-6-8.
7. REMOVED CHART PLANVIEW NOTE AT GROVZ/OSMOH: RADAR REQUIRED FOR PROCEDURE ENTRY AT GROVZ/OSMOH. – NOT REQUIRED.
8. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -19C (-2F) OR ABOVE 54C (130F) UPDATED TO -20C TO 54C. – FAHRENHEIT REMOVED IAW 8260.19J; UPDATED WEATHER STRUDY COMPLETED.
9. REMOVED CHART PLANVIEW NOTE ADJACENT TO OSMOH IF: RF REQUIRED. - NOTES ADDED IN PBN REQUIREMENTS AS REQUIRED.
10. REMOVED CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.15 ALL CATS VISIBILITY TO RVR 4500 AND RNP 0.30 CAT D VISIBILITY TO 1 5/8 SM; ADDED CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO RNP 0.15. – NEW EVALUATION COMPLETED.
11. ADDED CHART SPEED ICON IN PLANVIEW AT GROVZ: MAX 210 KIAS. – PER ATC/FPT REQUEST.
12. REMOVED ADDITIONAL FLIGHT DATA: #TCH 874.6 MSL (DO NOT CHART). - NO LONGER A DOCUMENTATION REQUIREMENT.
13. REMOVED ADDITIONAL FLIGHT DATA: "ROUTE TYPE: A, H," "ROUTE TYPE QUALIFIER 1: F" AND "ROUTE TYPE QUALIFIER 2: S." – NO LONGER A DOCUMENTATION REQUIREMENT.
14. UPDATED ADDITIONAL FLIGHT DATA: FROM CHART MINIMUM 7000 AT GROVZ TO CHART AT OR ABOVE 7000 AT GROVZ. – IAW 8260.19J 8-6-11 N.
15. UPDATED CHART NOTE: FROM "CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 30L AND ILS V RWY 35 [CONVERGING]" TO "SIMULTANEOUS APPROACH AUTHORIZED." - IAW 8260.19J 8-6-10 O(9).

10/21/2025: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 03/10/2025.

1. ADDED CHART SPEED ICON IN PLANVIEW AT SAMMZ: MAX 210 KIAS.

COORDINATED WITH:

A4A

☒

ALPA

☒

AOPA

☒

APA

☒

HAI

☐

NBAA

☒

OTHER: ZMP, MSP APP CON, MSP ATCT, AMGR

FLIGHT CHECKED BY

SHAWN D MAXWELL

Digitally signed by
CASIMIR L TABAKA
Jan 08, 2026

OFFICE

AJF

DATE

01/05/2026

DEVELOPED BY

CASIMIR L. TABAKA (BARBARA GORMAN)

Digitally signed by
CASIMIR L TABAKA
Jan 08, 2026

OFFICE

AJV-A432

DATE

03/10/2025

APPROVED BY

CASIMIR L. TABAKA

Digitally signed by
CASIMIR L TABAKA
Jan 08, 2026

OFFICE

AJV-A430

DATE

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>
MSP	RNAV (RNP) Y RWY 30R	2	MINNEAPOLIS	MN	842	RNAV

PART A: OBSTRUCTION DATA SEGMENTS

INITIAL

FROM GROVZ **TO** WULAM

RNP 1.00 **DISTANCE** 3.14 **PAT** **MAP** **HAT** **HMAS**

<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	444430.00N/0925403.00W	1162	215	8	4B	1000				AC8 AT3830	6000
TERRAIN	444609.00N/0925054.00W	925 (900)								AS1500	2400

COMPUTATIONS

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

SEGMENT REMARKS:

INITIAL: STEPDOWN

FROM WULAM **TO** BONNA

RNP 1.00 **DISTANCE** 3.14 **PAT** **MAP** **HAT** **HMAS**

<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	444436.00N/0925406.00W	1168	215	8	4B	1000				AC8 AT2824	5000
TERRAIN	444433.00N/0925406.00W	967 (1000)								AS1500	2500

COMPUTATIONS

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

SEGMENT REMARKS:

QUALITY
37
CHECKED

INITIAL: STEPDOWN

FROM

BONNA

TO

SAMMZ

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u>				
1.00	3.14										
<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	444645.00N/0930209.00W	1159	215	8	4B	1000				AC8 AT1833	4000
TERRAIN	444600.00N/0930109.00W	895 (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

GEEQU

TO

SAMMZ

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u>				
1.00	10.50										
<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 (27-001242)	444615.88N/0924943.73W	1230	250	50	4D	1000				AC50 AT1720	4000
TERRAIN	444645.00N/0924524.00W	1053 (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

TRTEL

TO

SOGGY

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>					<u>HMAS</u>	
1.00	5.97										
<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 (27-086167)	444940.83N/0924753.22W	1278	250	50	4D	1000				AC50 AT2672	5000
TERRAIN	445303.00N/0924806.00W	1023 (1000)								AS1500	2500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INITIAL: STEPDOWN

FROM

SOGGY

TO

SAMMZ

<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 (27-001242)	444615.88N/0924943.73W	1230	250	50	4D	1000				AC50 AT1720	4000
TERRAIN	444909.00N/0925230.00W	1010 (1000)								AS1500	2500

COMPUTATIONS

TF TURN FIX

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE

FROM

OSMOH

TO

HIGHA

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>					<u>HMAS</u>	
1.00	6.16										
<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>
CRANE (27-027655)	445606.16N/0930255.66W	758	250	50	4D	500				AC50 AT4692	6000
TERRAIN	445515.00N/0925927.00W	1079 (1100)								AS1500	2600

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE STEPDOWN

FROM

HIGHA

TO

COTTG

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>					<u>HMAS</u>	
1.00	4.71										
<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 (27-001684)	445452.66N/0925648.41W	1267	250	50	4D	500				AC50 AT2683	4500
TERRAIN	445454.00N/0925648.00W	1099 (1100)								AS1500	2600

COMPUTATIONS

RF SEGMENT

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

HIGHA-COTTG

6000

210

235.85

5158.20

38.85

3.04

19.87

(CFMDM)/4.71 NM

SEGMENT REMARKS:

INTERMEDIATE STEPDOWN

FROM

COTTG

TO

RVERR

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>
1.00	3.27				

<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	444854.00N/0930306.00W	1211	215	8	4B	500				AC8 AT1781	3500
TERRAIN	444936.00N/0930112.00W	951 (1000)								AS1500	2500

COMPUTATIONS

RF SEGMENT

COTTG-RVERR

ALT

4500

KIAS

210

KTAS

230.48

HAA

3658.20

VKTW

34.46

TR

3.04

BA

18.58

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

(CFMDB)/3.27 NM

SEGMENT REMARKS:

INTERMEDIATE STEPDOWN

FROM

RVERR

TO

JACKO

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>
1.00	1.57				

<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 (27-001093)	444742.43N/0930442.43W	1242	20	3	1A	500				AC3 AT1255	3000
TERRAIN	444748.00N/0930457.00W	1030 (1000)								AS1500	2500

COMPUTATIONS

RF SEGMENT

RVERR-JACKO

ALT

3500

KIAS

210

KTAS

227.00

HAA

2658.20

VKTW

38.24

TR

3.04

BA

18.63

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

(CFMDJ)/1.57 NM

SEGMENT REMARKS:



INTERMEDIATE

FROM

SAMMZ

TO

JACKO

RNP

1.00

DISTANCE

3.14

PAT

MAP

HAT

HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TOWER (27-001093)	444742.43N/0930442.43W	1242	20	3	1A	500				AC3 AT1255	3000
TERRAIN	444748.00N/0930457.00W	1030 (1000)								AS1500	2500

COMPUTATIONS

TF TURN FIX

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL

FROM

JACKO

TO

RW30R

RNP

0.15

DISTANCE

6.67

PAT

MAP

DA

HAT

275

HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC			MA20 XP5	1097

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

XP5 TO MAINTAIN CURRENT MINIMUMS; 50FT REDUCTION NOT ACHIEVABLE.



FINAL

FROM

JACKO

TO

RW30R

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30	6.67		DA				476				
<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>
TRANSMISSION_LINE (27-090527)	445235.42N/0930942.37W	957	250	50	4D		22.09:1			AC50	1298

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH: LEVEL SURFACE

FROM

DA

TO

GEP VORTAC

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u>				
0.15-1.00											936
<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>
BUILDING (27-023903)	445238.20N/0931159.06W	931	20	3	1A		ASC				3000
BUILDING (27-000387)	445834.00N/0931621.00W	1743	100	20	3C	1000					2800
TERRAIN	450230.00N/0931424.00W	1007 (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: LEVEL SURFACE

FROM

DA

TO

GEP VORTAC

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30										1137	
<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
BUILDING (27-000387)	445834.00N/0931621.00W	1743	100	20	3C	1000					2800
TERRAIN	450230.00N/0931424.00W	1007 (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

MSA

<u>CENTER</u>		<u>RADIUS</u>										
RW30R		25										
<u>SECTOR</u>	<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>BEARING</u>	<u>DISTANCE</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
360-360	TWR (27-000499)	450344.84N/0930822.61W	012	11.1	2438	20	50	1D	1000			3500

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

NO STAR TIE-IN TO GROVZ TRANSITION PER AIR TRAFFIC/LEAD CARRIER REQUEST. STAR ENDS WITH RADAR VECTORS ON OSMOH TRANSITION.

210 KIAS MAX USED BEGINNING AT OSMOH, TRTEL, GEEQU AND GROVZ PER FPT/LEAD CARRIER REQUEST FOR STAR TIE-IN (AND TO REDUCE TURN RADIUS AND BANK ANGLE IAW 8260.58 HIGHA TO JACKO).

100' VEGETATION USED PER FPT.

PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

ZMP ARTCC, MSP APP CON, MSP TOWER

<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	MSP	24	MSP	0	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:

BACK-UP ALTIMETER NOT REQUIRED DUE TO REDUNDANT WEATHER REPORTING SOURCE ON FIELD.

<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>
RW17 - HIRL, C/LINE, REIL, PAPI-4R	NPI-G	APPROACH, MIDPOINT, ROLL OUT
RW04 - MALSR, HIRL, PAPI-4L	PIR-G	APPROACH, ROLL OUT
RW12L - ALSF-2, TDZ, C/LINE, HIRL, PAPI-4L	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW12R - ALSF-2, TDZ, C/LINE, HIRL, PAPI-4L	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW22 - MALSR, HIRL, PAPI-4L	PIR-G	APPROACH, ROLL OUT
RW30L - ALSF-2, C/LINE, HIRL, TDZ, PAPI-4L	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW30R - MALSF, HIRL, C/LINE, PAPI-4L	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW35 - ALSF-2, HIRL, C/LINE, TDZ, PAPI-4L	PIR-G	APPROACH, MIDPOINT, 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	819.8	54.8			3.00	71.3

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	X	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE	200
ON CENTERLINE	X	FT FROM CENTERLINE		

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
-20C	+54C	-25C	+13.33C

CRITICAL TEMPERATURE REMARKS:

AVERAGE COLD TEMPERATURE DERIVED FROM 5-YEAR HISTORY (2021-2024).
CRITICAL LOW TEMPERATURE BASED ON EFFECTIVE GPA.
DESCENT RATE (FPM): STANDARD TEMP 966 HIGH TEMP 1274.

"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:

VDP NOT ESTABLISHED - RNP PROCEDURE.
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
APPROVAL LETTER ON REQUEST FOR MANDATORY ALTITUDE AT OSMOH; 8260.19 8-6-11.N.

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	3.53
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	301.45
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	1000
DISTANCE FROM	THLD	TO 1500FT POINT	5.10
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	301.45
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	1000

THRESHOLD COORDINATES (IF STR-IN)	445253.54N/0931140.67W
ARP COORDINATES	445255.10N/0931318.40W
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 30R DISTANCE 1.19 NM
FAF COORDINATES	444924.94N/0930340.20W
FIX NAME COORDINATES	

REMARKS

THLD DISPLACED 200FT, ACTUAL COORDINATES: 445252.52N/0931138.30W

PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
CASIMIR L. TABAKA (BARBARA GORMAN)	AJV-A432	03/10/2025	AERONAUTICAL INFORMATION SPECIALIST

