

# RADIO FIX AND HOLDING DATA RECORD

NAME: GOPHER VORTAC STATE: MN COUNTRY: US ICAO REGION CODE: K3  
 LATITUDE/LONGITUDE: 450844.47N/0932223.45W TYPE:

AIRSPACE DOCKET: FIX TYPE OF ACTION: NO CHANGE

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	MRA	MAA
1	GOPHER	GEP	VORTAC	VH						45000

HOLDING: HOLDING TYPE OF ACTION: NO CHANGE

## PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG TIME	LENGTH DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	NW	GEP	VORTAC	297.00	117.00	L	1		3000	14000	4	10
2	W	GEP	VORTAC	264.00	084.00	R	1		2700	14000	4	12
3	NW		WP	297.00	117.00	L		4	3000	14000	5	11
4	N		WP	346.00	166.00	L		4	3100	14000	5	11
5	W		WP	265.00	085.00	R		4	2700	14000	5	13

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (27-000032)	451043.00N/0932100.00W	1530	4D
1	265	TOWER (27-000032)	451043.00N/0932100.00W	1530	4D
2	200	TOWER (27-000032)	451043.00N/0932100.00W	1530	4D
2	310	TOWER (27-000032)	451043.00N/0932100.00W	1530	4D
3	200	TOWER (27-000032)	451043.00N/0932100.00W	1530	4D
3	265	TOWER (27-000032)	451043.00N/0932100.00W	1530	4D
4	200	TOWER (27-000032)	451043.00N/0932100.00W	1530	4D
4	310	TOWER (27-000990)	452011.92N/0932331.17W	2048	1A
5	200	TOWER (27-000032)	451043.00N/0932100.00W	1530	4D
5	310	TOWER (27-000499)	450344.83N/0930822.61W	2438	1D

## REASON FOR NONSTANDARD HOLDING:

PAT 1 ATC REQUEST  
 PAT 3 ATC REQUEST  
 PAT 4 ATC REQUEST

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

## PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
2	ILS OR LOC RWY 27	KANE	MINNEAPOLIS	MN (US)
5	RNAV (GPS) RWY 27	KANE	MINNEAPOLIS	MN (US)

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED  
 HOLDING PATTERN 1 AND 4 EVALUATED FOR MILITARY AIRCRAFT AT KMSP  
 ASSIGNED FACILITY MAGVAR: E6 1965  
 PAT 5 310KT CONTROLLING OBSTACLE 1604 FT MSL PRIMARY EQUIVALENT.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
SPECIAL IAP	COPTER RNAV (GPS) 18		4	25MY	MINNEAPOLIS	MN (US)
SPECIAL IAP	COPTER RNAV (GPS) 18		4	MY65	MINNEAPOLIS	MN (US)
SPECIAL IAP	COPTER RNAV (GPS) 12		4	7MN1	ST PAUL	MN (US)
DP	MINNEAPOLIS			KMSP	MINNEAPOLIS	MN (US)
EN ROUTE	J114					(US)
EN ROUTE	J21					(US)
EN ROUTE	J25					(US)
EN ROUTE	J36					(US)
EN ROUTE	J68					(US)
EN ROUTE	J70					(US)
EN ROUTE	T330					(US)
EN ROUTE	T383					(US)
EN ROUTE	V148					(US)
EN ROUTE	V161					(US)
EN ROUTE	V2					(US)
EN ROUTE	V218					(US)
EN ROUTE	V413					(US)
EN ROUTE	V505					(US)
EN ROUTE	V510					(US)
EN ROUTE	V78					(US)
EN ROUTE	V82					(US)
EN ROUTE	V97					(US)
IAP	VOR-A			KCFE	BUFFALO	MN (US)
IAP	RNAV (GPS) RWY 34			KCBG	CAMBRIDGE	MN (US)
IAP	ILS OR LOC RWY 27		2	KANE	MINNEAPOLIS	MN (US)

IAP	RNAV (GPS) RWY 18		KANE	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) RWY 27	5	KANE	MINNEAPOLIS	MN (US)
IAP	VOR RWY 9	2	KANE	MINNEAPOLIS	MN (US)
IAP	COPTER ILS OR LOC RWY 10R		KFCM	MINNEAPOLIS	MN (US)
IAP	ILS OR LOC RWY 10R		KFCM	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) RWY 10L		KFCM	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) RWY 10R		KFCM	MINNEAPOLIS	MN (US)
IAP	VOR RWY 10R		KFCM	MINNEAPOLIS	MN (US)
IAP	ILS OR LOC RWY 30		KLVN	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) RWY 14	4	KMIC	MINNEAPOLIS	MN (US)
IAP	ILS OR LOC RWY 30R	1	KMSP	MINNEAPOLIS	MN (US)
IAP	LOC RWY 17		KMSP	MINNEAPOLIS	MN (US)
IAP	LOC RWY 22		KMSP	MINNEAPOLIS	MN (US)
IAP	LOC RWY 4	1	KMSP	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) RWY 4	3	KMSP	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) Z RWY 30R	3	KMSP	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) Z RWY 35	3	KMSP	MINNEAPOLIS	MN (US)
IAP	RNAV (RNP) Y RWY 30R	3	KMSP	MINNEAPOLIS	MN (US)
IAP	ILS OR LOC RWY 9		KRGK	RED WING	MN (US)
IAP	LOC RWY 34		KSGS	SOUTH ST PAUL	MN (US)
IAP	ILS OR LOC RWY 31		KSTC	ST CLOUD	MN (US)
IAP	VOR RWY 31		KSTC	ST CLOUD	MN (US)
IAP	ILS OR LOC RWY 14		KSTP	ST PAUL	MN (US)
IAP	ILS OR LOC RWY 32		KSTP	ST PAUL	MN (US)
IAP	RNAV (GPS) RWY 14		KSTP	ST PAUL	MN (US)
STAR	AGUDE		KCFE	BUFFALO	MN (US)
STAR	AGUDE		KFBL	FARIBAULT	MN (US)
STAR	AGUDE		KGYL	GLENCOE	MN (US)
STAR	AGUDE		KMGG	MAPLE LAKE	MN (US)
STAR	AGUDE		KANE	MINNEAPOLIS	MN (US)
STAR	ENCEE (RNAV)		KANE	MINNEAPOLIS	MN (US)
STAR	GOPHER		KANE	MINNEAPOLIS	MN (US)
STAR	TWOLF		KANE	MINNEAPOLIS	MN (US)
STAR	AGUDE		KFCM	MINNEAPOLIS	MN (US)
STAR	ENCEE (RNAV)		KFCM	MINNEAPOLIS	MN (US)
STAR	GOPHER		KFCM	MINNEAPOLIS	MN (US)
STAR	TWOLF		KFCM	MINNEAPOLIS	MN (US)
STAR	AGUDE		KLVN	MINNEAPOLIS	MN (US)
STAR	ENCEE (RNAV)		KLVN	MINNEAPOLIS	MN (US)
STAR	GOPHER		KLVN	MINNEAPOLIS	MN (US)
STAR	TWOLF		KLVN	MINNEAPOLIS	MN (US)
STAR	AGUDE		KMIC	MINNEAPOLIS	MN (US)
STAR	ENCEE (RNAV)		KMIC	MINNEAPOLIS	MN (US)
STAR	GOPHER		KMIC	MINNEAPOLIS	MN (US)
STAR	TWOLF		KMIC	MINNEAPOLIS	MN (US)
STAR	BAINY (RNAV)		KMSP	MINNEAPOLIS	MN (US)
STAR	GOPHER		KMSP	MINNEAPOLIS	MN (US)
STAR	AGUDE		KSGS	SOUTH ST PAUL	MN (US)
STAR	AGUDE		21D	ST PAUL	MN (US)
STAR	AGUDE		KSTP	ST PAUL	MN (US)
STAR	ENCEE (RNAV)		KSTP	ST PAUL	MN (US)
STAR	GOPHER		KSTP	ST PAUL	MN (US)
STAR	TWOLF		KSTP	ST PAUL	MN (US)
STAR	AGUDE		KRNH	NEW RICHMOND	WI (US)
STAR	TWOLF		KRNH	NEW RICHMOND	WI (US)
STAR	AGUDE		KOEO	OSCEOLA	WI (US)
STAR	TWOLF		KOEO	OSCEOLA	WI (US)

**REQUIRED CHARTING:** DP, STAR, MILITARY IAP, IAP, AREA, EN ROUTE LOW, EN ROUTE HIGH, SPECIAL IAP, CONTROLLER LOW, CONTROLLER HIGH

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 34

**DATE OF REVISION:** 08/07/2025

**REASON FOR REVISION:**

1. FIX USE: REMOVED DP COULT, KBREW AND WLSTN AT KANE, KFCM, KMSP AND KSTP.
2. FIX USE: REMOVED DP LEINY (RNAV) AT KMSP.
3. FIX USE: REMOVED STAR EAU CLAIRE AT KMSP.
4. FIX USE: ADDED DP MINNEAPOLIS AT KMSP.
5. FIX USE: REMOVED IAP ILS RWY 35 (CAT II/III), ILS RWY 35 (SA CAT I), ILS OR LOC RWY 12L (ALT MA), ILS OR LOC RWY 30L, ILS RWY 12L (CAT II) (ALT MA), ILS RWY 12L (CAT III) (ALT MA), ILS RWY 12L (SA CAT I) (ALT MA), ILS RWY 30L (CAT II), ILS V RWY 35 (CONVERGING) AND ILS Z OR LOC RWY 35 AT KMSP.

**INITIATED BY:**

**DATE:**

**ORGANIZATION:**

**NAME:**

**OFFICE OF PRIMARY RESPONSIBILITY:**

AJV-A431

**NAME:** EMMANUEL GONZALES

**APPROVED BY:**

**DATE:** 07/03/2025

**OFFICE:** AJV-A433

**NAME:** ROBERT HAMILTON

**SIGNATURE:**

# RADIO FIX AND HOLDING DATA RECORD

NAME: WHISK

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 450823.57N/0925743.72W

TYPE: WP, RADAR, INT, DME

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	MRA	MAA
1	GOPHER	GEP	VORTAC	VH	085.00	091.00	17.46	17.46	3000	17500
2	FLYING CLOUD	FCM	VOR/DME	L	046.15	047.15		27.84	3400	17500
3	FARMINGTON	FGT	VORTAC	VH	011.00	017.00	31.95	31.95	3000	17500

HOLDING:

HOLDING TYPE OF ACTION: MODIFY

## PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG TIME	LENGTH DME	HOLDING MIN	ALTITUDES MAX	TEMPLATES MIN	MAX
1	N		WP	017.00	197.00	R		4	3000	14000	5	11
2	N	FGT	VORTAC	011.00	191.00	R	1		4000	14000	6	11

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AA0	450748.00N/0925748.00W	1260	4B
2	200	TOWER (27-000481)	450828.02N/0930602.27W	1426	5D
2	310	TOWER (27-000499)	450344.83N/0930822.61W	2438	1D

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

## PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
2	ILS OR LOC RWY 32	KSTP	ST PAUL	MN (US)

## REMARKS:

GOPHER (FAC 1) AND FARMINGTON (FAC 3) USED TO ESTABLISH FIX COORDINATES.  
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V78	1, 2, 3				(US)
IAP	RNAV (GPS) RWY 22			KMSP	MINNEAPOLIS	MN (US)
IAP	ILS OR LOC RWY 14	1, 3	2	KSTP	ST PAUL	MN (US)
IAP	ILS OR LOC RWY 32	1, 3	2	KSTP	ST PAUL	MN (US)
IAP	RNAV (GPS) RWY 14		1	KSTP	ST PAUL	MN (US)
IAP	RNAV (GPS) RWY 32		1	KSTP	ST PAUL	MN (US)
STAR	AGUDE	1, 2, 3		KCFE	BUFFALO	MN (US)
STAR	AGUDE	1, 2, 3		KFBL	FARIBAULT	MN (US)
STAR	AGUDE	1, 2, 3		KGYL	GLENCOE	MN (US)
STAR	AGUDE	1, 2, 3		KMGG	MAPLE LAKE	MN (US)
STAR	AGUDE	1, 2, 3		KANE	MINNEAPOLIS	MN (US)
STAR	AGUDE	1, 2, 3		KFCM	MINNEAPOLIS	MN (US)
STAR	AGUDE	1, 2, 3		KLVN	MINNEAPOLIS	MN (US)
STAR	AGUDE	1, 2, 3		KMIC	MINNEAPOLIS	MN (US)
STAR	AGUDE	1, 2, 3		KSGS	SOUTH ST PAUL	MN (US)
STAR	AGUDE	1, 2, 3		21D	ST PAUL	MN (US)
STAR	AGUDE	1, 2, 3		KSTP	ST PAUL	MN (US)
STAR	AGUDE	1, 2, 3		KRNH	NEW RICHMOND	WI (US)
STAR	AGUDE	1, 2, 3		KOEO	OSCEOLA	WI (US)

REQUIRED CHARTING: STAR, IAP, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 16

DATE OF REVISION: 08/07/2025

## REASON FOR REVISION:

- FIX MAKE-UP: UPDATED FAC 1 GEP VORTAC CLASS FROM "H" TO "VH"; DELETED FAC 4 "MINNEAPOLIS MSP VOR/DME" AND ASSOCIATED DATA
- HOLDING: REMOVED PATTERN 6 AND 7 AND ASSOCIATED DATA; UPDATED PAT 5 MIN ALT FROM "4000" TO "3000"
- FIX USE: REMOVED (ALT MA) FROM STP ILS OR LOC 14 AND ILS OR LOC 32 IN FIX USE.

05/12/25: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 03/03/25.

- HOLDING: REMOVED PATTERNS 1, 2, AND 5 AND ASSOCIATED DATA; RENUMBERED REMAINING.
- PROCEDURES REQUIRING CLIMB-IN-HOLD: ADDED "ILS OR LOC RWY 32 KSTP"
- HOLDING: ADDED PAT 2 310K OBSTACLE; CHANGED PAT 1 OBSTACLE FROM "1250 (4E)" TO "1260(4B)".
- FIX USE: ADDED FAC 3 TO "ILS OR LOC RWY 32"

**INITIATED BY:****DATE:****ORGANIZATION:****NAME:****OFFICE OF PRIMARY RESPONSIBILITY:**

AJV-A423

**NAME:** HENRY BRADSHAW**APPROVED BY:****DATE:** 07/03/2025**OFFICE:** AJV-A423**NAME:** ALLAN WILL**SIGNATURE:**