

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 FEET	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 LENGTH TIME 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)
4	RNAV (GPS) RWY 14	KMIC	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)
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 RWY 35 (CAT II/III)		KMSP	MINNEAPOLIS	MN (US)
IAP	ILS RWY 35 (SA CAT I)		KMSP	MINNEAPOLIS	MN (US)
IAP	ILS OR LOC RWY 12L (ALT MA)		KMSP	MINNEAPOLIS	MN (US)
IAP	ILS OR LOC RWY 30L		KMSP	MINNEAPOLIS	MN (US)
IAP	ILS OR LOC RWY 30R	1	KMSP	MINNEAPOLIS	MN (US)
IAP	ILS RWY 12L (CAT II) (ALT MA)		KMSP	MINNEAPOLIS	MN (US)
IAP	ILS RWY 12L (CAT III) (ALT MA)		KMSP	MINNEAPOLIS	MN (US)
IAP	ILS RWY 12L (SA CAT I) (ALT MA)		KMSP	MINNEAPOLIS	MN (US)
IAP	ILS RWY 30L (CAT II)		KMSP	MINNEAPOLIS	MN (US)
IAP	ILS V RWY 35 (CONVERGING)		KMSP	MINNEAPOLIS	MN (US)
IAP	ILS Z OR LOC RWY 35		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		KMGS	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: 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. REQUIRED CHARTING: REMOVED DP.

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: JEMEF

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 450804.08N/0933858.22W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: ESTABLISH

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE
IAP

USE TITLE
RNAV (GPS) RWY 14

FAC

PAT

AIRPORT IDENT
KMIC

CITY
MINNEAPOLIS

STATE
MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 12/31/2020

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A423

NAME: PHILLIP BRANDENBURG

APPROVED BY:

DATE:

OFFICE: AJV-A420

NAME: MARLON ROBINSON

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: MSP APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: OYNOP

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 451230.78N/0933108.71W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME DME	HOLDING MIN	ALTITUDES MAX	TEMPLATES MIN	MAX
1	NW		WP	319.28	139.28	R	4	3000	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (27-001958)	451420.00N/0934114.00W	1500	4D

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 14		1	KMIC	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) RWY 32		1	KMIC	MINNEAPOLIS	MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 12/31/2020

REASON FOR REVISION:

REMOVED FAC 1 KMIC R14L FROM FIX MAKE-UP FACILITIES.
CHANGED PAT 1 INBOUND COURSE FROM 139.29 TO 139.28.
UPDATED FIX USE, CHANGED KMIC RNAV (GPS) RWY 14L TO RWY 14, ADDED KMIC RNAV (GPS) RWY 32.
MOVED REMARK HOLDING LIMITED TO ESTABLISHED PATTERN TO RESTRICTIONS, ADDED PRECIPITOUS TERRAIN REMARK.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A423

NAME: PHILLIP BRANDENBURG

APPROVED BY:

DATE:

OFFICE: AJV-A420

NAME: MARLON ROBINSON

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: MIC TOWER, MSP APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: ZAPIN

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 452314.76N/0933007.35W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME DME	HOLDING MIN	ALTITUDES MAX	TEMPLATES MIN	MAX
1	SE		WP	152.47	332.47	R	4	3100	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (27-000990)	452011.92N/0932331.17W	2048	1A

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	T383					(US)
IAP	RNAV (GPS) RWY 14			KMIC	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) RWY 34		1	KPNM	PRINCETON	MN (US)

REQUIRED CHARTING: IAP, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5

DATE OF REVISION: 12/31/2020

REASON FOR REVISION:

UPDATED FIX USE: CHANGED FROM KPNM "RNAV (GPS) RWY 33" TO "RNAV (GPS) RWY 34."

UPDATED HOLDING PATTERN 1 CONTROLLING OBSTACLE FROM "TOWER (24-0990)" TO "TOWER (27-000990)."

UPDATED FIX USE: CHANGED FROM KMIC "RNAV (GPS) RWY 14L" TO "RNAV (GPS) RWY 14."

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A422

NAME: JUDITH TUTTLE

APPROVED BY:

DATE:

OFFICE: AJV-A420

NAME: MARLON ROBINSON

SIGNATURE:

DISTRIBUTION:

NFDC

FPO: FTW

ARTCC: ZMP

ATC FACILITY: MSP APP CON

OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: ZUNBE STATE: MN COUNTRY: US ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 450650.85N/0932444.07W TYPE: WP

AIRSPACE DOCKET: FIX TYPE OF ACTION: MODIFY

HOLDING: HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
USE TYPE						
IAP	RNAV (GPS) RWY 14			KMIC	MINNEAPOLIS	MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 DATE OF REVISION: 12/31/2020

REASON FOR REVISION:
FIX MOVED 1.16 NM SOUTHEAST, ATC REQUESTS RETAIN FIX NAME.
REMOVED FAC 1 KMIC R14 FROM FIX MAKE-UP FACILITIES.
REMOVED REMARK, RNP CRITERIA APPLIED.
UPDATED FIX USE, CHANGED KMIC RNAV (GPS) RWY 14L TO RWY 14.

INITIATED BY:	DATE:	ORGANIZATION:	NAME:
OFFICE OF PRIMARY RESPONSIBILITY:		AJV-A423	NAME: PHILLIP BRANDENBURG
APPROVED BY:	DATE:	OFFICE: AJV-A420	NAME: MARLON ROBINSON

SIGNATURE:

DISTRIBUTION: NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: MIC TOWER, MSP APP CON
OTHER: