

RADIO FIX AND HOLDING DATA RECORD

NAME: FARMINGTON VORTAC STATE: MN COUNTRY: US ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 443751.43N/0931055.39W 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	FARMINGTON	FGT	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	S	FGT	VORTAC	178.03	358.03	R	1	3000 14000	4 10
2	E	FGT	VORTAC	085.00	265.00	L	1	2800 14000	4 10
3	S		WP	178.03	358.03	R		3000 6000	5 6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (27-000313)	442835.00N/0931107.00W	1474	2C
2	200	TOWER (27-001333)	443417.00N/0930441.00W	1360	5D
3	200	TOWER (27-000313)	442835.00N/0931107.00W	1474	2C

REASON FOR NONSTANDARD HOLDING:

PAT 2 ATC REQUEST

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED
ASSIGNED FACILITY MAGVAR: 6E (1965)

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V13					(US)
EN ROUTE	V161					(US)
EN ROUTE	V171					(US)
EN ROUTE	V26					(US)
EN ROUTE	V82					(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 28L			KFCM	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) RWY 28R			KFCM	MINNEAPOLIS	MN (US)
IAP	ILS OR LOC RWY 30		2	KLVN	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) RWY 30			KLVN	MINNEAPOLIS	MN (US)
IAP	VOR RWY 12		2	KLVN	MINNEAPOLIS	MN (US)
IAP	ILS OR LOC RWY 12R		1	KMSP	MINNEAPOLIS	MN (US)
IAP	ILS RWY 12R (CAT II - III)		1	KMSP	MINNEAPOLIS	MN (US)
IAP	ILS RWY 12R (SA CAT I)		1	KMSP	MINNEAPOLIS	MN (US)
IAP	LOC RWY 17		1	KMSP	MINNEAPOLIS	MN (US)
IAP	LOC RWY 22		1	KMSP	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) RWY 22		3	KMSP	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) Z RWY 12R		3	KMSP	MINNEAPOLIS	MN (US)
IAP	RNAV (RNP) Y RWY 12R		3	KMSP	MINNEAPOLIS	MN (US)
IAP	ILS OR LOC RWY 30			KOWA	OWATONNA	MN (US)
IAP	ILS OR LOC RWY 9		2	KRGK	RED WING	MN (US)
IAP	LOC RWY 34			KSGS	SOUTH ST PAUL	MN (US)
IAP	RNAV (GPS) RWY 34			KSGS	SOUTH ST PAUL	MN (US)
IAP	ILS OR LOC RWY 14			KSTP	ST PAUL	MN (US)
IAP	ILS OR LOC RWY 32			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	AGUDE			KFCM	MINNEAPOLIS	MN (US)
STAR	AGUDE			KLVN	MINNEAPOLIS	MN (US)
STAR	AGUDE			KMIC	MINNEAPOLIS	MN (US)
STAR	KASPR			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	AGUDE			KRNH	NEW RICHMOND	WI (US)
STAR	AGUDE			KOEO	OSCEOLA	WI (US)

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

COMPULSORY REPORTING POINT: NO**RECORD REVISION NUMBER: 31****DATE OF REVISION: 03/19/2026****REASON FOR REVISION:**

FIX USE: REMOVED DP ORSKY, ROCHESTER, AND SCHEP FROM KANE, KFCM, KMSP AND KSTP; REMOVED DP COULT, MEADOW LAKE, WLSTN, MINNEAPOLIS AND ZMBRO, ILS OR LOC RWY 12L, ILS OR LOC RWY 30R, ILS RWY 12L (CATII-III), ISL RWY 12L (SA CAT I), ILS RWY 35 (CATII-III), ILS RWY 35 (SA CAT I), ILS V RWY 35 (CONVERING), ILS Z OR LOC RWY 35 FROM KMSP.
REQUIRED CHARTING: REMOVE DP.

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

AJV-A431

NAME: DEXTER SWEETING**APPROVED BY:****DATE: 02/12/2026****OFFICE: AJV-A422****NAME: RAKE MCGRAW****SIGNATURE:**

RADIO FIX AND HOLDING DATA RECORD

NAME: FOBUG

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 442519.96N/0930210.66W

TYPE: WP, 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	FAC FEET	MRA	MAA
1	FARMINGTON	FGT	VORTAC	VH	147.40	153.40	14.00	14.00		3000	45000
2	HALFWAY	FOW	VOR/DME	T	045.66	047.66	19.44	19.44		3000	33000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
FOW	VOR/DME	R-046	20	12000	33000

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

FARMINGTON (FAC 1) AND HALFWAY (FAC 2) USED TO ESTABLISH FIX COORDINATES.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V161	1, 2				(US)
EN ROUTE	V82	1, 2				(US)
IAP	RNAV (GPS) RWY 16			KTOB	DODGE CENTER	MN (US)
IAP	RNAV (GPS) RWY 34			KTOB	DODGE CENTER	MN (US)
IAP	RNAV (GPS) RWY 30			KFBL	FARIBAULT	MN (US)
IAP	RNAV (GPS) RWY 30			KLVN	MINNEAPOLIS	MN (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5

DATE OF REVISION: 03/19/2026

REASON FOR REVISION:

FIX MAKE-UP FACILITIES: CHANGED FAC 1 FARMINGTON VORTAC CLASS FROM H TO VH.

FIX USE: REMOVED DP ROCHESTER FROM KANE, KFCM, KMSP AND KSTP.

REQUIRED CHARTING: REMOVED DP; ADDED CONTROLLER LOW.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: DEXTER SWEETING

APPROVED BY:

DATE: 02/12/2026

OFFICE: AJV-A422

NAME: RAKE MCGRAW

SIGNATURE:

RADIO FIX AND HOLDING DATA RECORD

NAME: FRRAN

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 443513.47N/0930705.72W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: ESTABLISH

HOLDING:

HOLDING TYPE OF ACTION:

REMARKS:

RNAP PFAF CRITERIA APPLIED IAW 8260.54A FORMULA 2-16B.

FIX USE:

USE TYPE
IAP

USE TITLE
RNAV (GPS) RWY 30

FAC

PAT

AIRPORT IDENT
KLVN

CITY
MINNEAPOLIS

STATE
MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 05/03/2012

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 10/19/2011

OFFICE: AJV-353

NAME: JOSE ALFONSO (KISSY MAXFIELD)

APPROVED BY:

DATE: 02/28/2012

OFFICE: AJV-353

NAME: LARRY STROUT

SIGNATURE:

DISTRIBUTION:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: HINIS

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 443620.75N/0931006.74W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: ESTABLISH

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE
IAP

USE TITLE
RNAV (GPS) RWY 30

FAC

PAT

AIRPORT IDENT
KLVN

CITY
MINNEAPOLIS

STATE
MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 05/03/2012

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 10/19/2011

OFFICE: AJV-353

NAME: JOSE ALFONSO (KISSY MAXFIELD)

APPROVED BY:

DATE: 02/28/2012

OFFICE: AJV-353

NAME: LARRY STROUT

SIGNATURE:

DISTRIBUTION:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: JUNTU

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 444251.45N/0932744.07W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: ESTABLISH

HOLDING:

HOLDING TYPE OF ACTION: ESTABLISH

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	294.27	114.27	R	4	3000	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	WINDMILL (27-020526)	444410.01N/0932858.97W	1336	4D

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 12		1	KLVN	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) RWY 30		1	KLVN	MINNEAPOLIS	MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 09/23/2010

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 05/26/2010

OFFICE: AVN-120

NAME: THOMAS KIRKPATRICK

APPROVED BY:

DATE: 08/02/2010

OFFICE: AVN-120

NAME: SUE CRUMB

SIGNATURE:

DISTRIBUTION:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: PRESS

STATE: WI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 444240.72N/0924113.52W

TYPE: WP, 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	FEET	MRA	MAA
1	GOPHER	GEP	VORTAC	VH	125.47	131.47	39.17	39.17		3400	17500
2	FARMINGTON	FGT	VORTAC	VH	071.01	077.01	21.73	21.73		3500	17500

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 ALTITUDES MIN MAX	TEMPLATES MIN MAX
1	E	FGT	VORTAC	071.01	251.01	R	1	3000 6000	6 7

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (55-001228)	444501.00N/0923021.00W	1550	5E

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN

REMARKS:

GOPHER (FAC 1) AND FARMINGTON (FAC 2) USED TO ESTABLISH FIX COORDINATES.
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V2	1, 2				(US)
EN ROUTE	V26	1, 2				(US)
EN ROUTE	V97	1, 2				(US)
IAP	RNAV (GPS) RWY 30			KLVN	MINNEAPOLIS	MN (US)
IAP	LOC RWY 34	1, 2	1	KSGS	SOUTH ST PAUL	MN (US)
IAP	RNAV (GPS) RWY 34			KSGS	SOUTH ST PAUL	MN (US)
IAP	RNAV (GPS) RWY 32			KSTP	ST PAUL	MN (US)
IAP	RNAV (GPS) RWY 32			KRNH	NEW RICHMOND	WI (US)
STAR	WILDD	1, 2		KMSP	MINNEAPOLIS	MN (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 15

DATE OF REVISION: 11/27/2025

REASON FOR REVISION:

1. UPDATED FIX MAKE-UP FACILITIES: GEP AND FGT VORTAC CLASS FROM H TO VH.
2. FIX USE: SPLIT EN ROUTE ENTRY FROM V2-97 TO V2 AND V97.
3. REQUIRED CHARTING: UPDATED FROM CONTROLLER TO CONTROLLER LOW.
4. REMOVED UNPLANNED HOLDING CONTROLLING OBSTRUCTION AND ASSOCIATED HOLDING RESTRICTION.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A432

NAME: THERON CYRUS

APPROVED BY:

DATE: 10/23/2025

OFFICE: AJV-A430

NAME: CASIMIR TABAKA

SIGNATURE: