

RADIO FIX AND HOLDING DATA RECORD

NAME: FOMRU

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 444604.77N/0925414.72W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE
IAP

USE TITLE
RNAV (GPS) RWY 32

FAC

PAT

AIRPORT IDENT
KSTP

CITY
ST PAUL

STATE
MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 08/17/2017

REASON FOR REVISION:

1. REMOVED FAC1 (KSTP R32).

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 03/03/2017

OFFICE: AJV-5433

NAME: DAVID TEFFETELLER (DIANE LAIR)

APPROVED BY:

DATE:

OFFICE: AJV-5430

NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: HOVIN

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 445343.58N/0930128.22W

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	ST PAUL	I-BAO	LOC/DME		146.04	146.04	3.37	3.39		1360	5200
2	FARMINGTON	FGT	VORTAC	VH	016.94	022.94		17.24		1360	5200

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

ST PAUL (FAC 1) AND FARMINGTON (FAC 2) USED TO ESTABLISH FIX COORDINATES.
I-BAO DME COORDINATES: 445632.73N/0930403.99W

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 32	1, 2		KSTP	ST PAUL	MN (US)
IAP	RNAV (GPS) RWY 32			KSTP	ST PAUL	MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4

DATE OF REVISION: 08/07/2025

REASON FOR REVISION:

ADDED "WP" TO FIX TYPE.
ADDED KSTP RNAV (GPS) RWY 32 TO FIX USE.
CHANGED FAC 2 (FGT) CLASS FROM "H" TO "VH."

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A432

NAME: THERON CYRUS

APPROVED BY:

DATE: 07/03/2025

OFFICE: AJV-A432

NAME: CASIMIR TABAKA

SIGNATURE:

RADIO FIX AND HOLDING DATA RECORD

NAME: RULDE

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 445103.59N/0925856.86W

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	FAC FEET	MRA	MAA
1	ST PAUL	I-BAO	LOC/DME		146.04	146.04	6.58	6.60	40126	2500	5200
2	FARMINGTON	FGT	VORTAC	VH	026.81	032.81		15.72		2500	5200

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

ST PAUL (FAC 1) AND FARMINGTON (FAC 2) USED TO ESTABLISH FIX COORDINATES.
I-BAO DME COORDINATES: 445632.73N/0930403.99W

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 32	1, 2		KSTP	ST PAUL	MN (US)
IAP	RNAV (GPS) RWY 32			KSTP	ST PAUL	MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 08/07/2025

REASON FOR REVISION:

FIX LAT/LONG UPDATED FROM 445103.59M/0925856.84W TO 445103.59N/0925856.86W FOR PROPER ALIGNMENT.
CHANGED FAC 2 (FGT) CLASS FROM "H" TO "VH."
ADDED "I-BAO DME COORDINATES: 445632.73N/0930403.99W" TO REMARKS.
CHANGED FAC 1 DIST FROM FAC (FEET) FROM 40127 TO 40126.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A432

NAME: THERON CYRUS

APPROVED BY:

DATE: 07/03/2025

OFFICE: AJV-A432

NAME: CASIMIR TABAKA

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:

1. FIX MAKE-UP: UPDATED FAC 1 GEP VORTAC CLASS FROM "H" TO "VH"; DELETED FAC 4 "MINNEAPOLIS MSP VOR/DME" AND ASSOCIATED DATA
2. HOLDING: REMOVED PATTERN 6 AND 7 AND ASSOCIATED DATA; UPDATED PAT 5 MIN ALT FROM "4000" TO "3000"
3. 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.

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