

RADIO FIX AND HOLDING DATA RECORD

NAME: HOMUR

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 452505.56N/0940436.50W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE

DP
DP
DP
DP

USE TITLE

KBREW (RNAV)
KBREW (RNAV)
KBREW (RNAV)
KBREW (RNAV)

FAC

PAT

AIRPORT IDENT

ANE
FCM
MSP
STP

CITY

MINNEAPOLIS
MINNEAPOLIS
MINNEAPOLIS
ST PAUL

STATE

MN (US)
MN (US)
MN (US)
MN (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 10/29/2026

REASON FOR REVISION:

1. TYPE: ADDED "WP" AND REMOVED "INT" AND "DME."
2. FIX MAKE-UP FACILITES: REMOVED GEP VORTAC AND REDWOOD FALLS VOR/DME.
3. ESV: REMOVED RWF ESV.
4. REMARKS: REMOVED "GOPHER (FAC 1) AND REDWOOD FALLS (FAC 2) USED TO ESTABLISH FIX COORDINATES."
5. FIX USE: UPDATED KANE/KFCM/KMSP/KSTP DP "KBREW" TO "KBREW (RNAV)."

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: JUDITH TUTTLE

APPROVED BY:

DATE: 09/24/2026

OFFICE: AJV-A422

NAME: RAKE MCGRAW

SIGNATURE:

Digitally signed by

ALLAN WILL

Aug 26, 2026



RADIO FIX AND HOLDING DATA RECORD

NAME: HRBEK

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 451852.31N/0934825.17W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE

DP
DP
DP
DP

USE TITLE

KBREW (RNAV)
KBREW (RNAV)
KBREW (RNAV)
KBREW (RNAV)

FAC

PAT

AIRPORT IDENT

ANE
FCM
MSP
STP

CITY

MINNEAPOLIS
MINNEAPOLIS
MINNEAPOLIS
ST PAUL

STATE

MN (US)
MN (US)
MN (US)
MN (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4

DATE OF REVISION: 10/29/2026

REASON FOR REVISION:

1. TYPE: REMOVED "INT" AND "DME."
2. FIX MAKE-UP FACILITIES: REMOVED GEP VORTAC AND REDWOOD FALLS VOR/DME.
3. ESV: REMOVED RWF ESV.
4. REMARKS: REMOVED "GOPHER (FAC 1) AND REDWOOD FALLS (FAC 2) USED TO ESTABLISH FIX COORDINATES."
5. FIX USE: UPDATED KANE/KFCM/KMSP/KSTP DP "KBREW" TO "KBREW (RNAV)."
6. CHARTING: REMOVED "AREA, EN ROUTE LOW, EN ROUTE HIGH, CONTROLLER LOW, CONTROLLER HIGH."

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: JUDITH TUTTLE

APPROVED BY:

DATE: 09/24/2026

OFFICE: AJV-A422

NAME: RAKE MCGRAW

SIGNATURE:

Digitally signed by
ALLAN WILL
Aug 26, 2026



RADIO FIX AND HOLDING DATA RECORD

NAME: KBREW

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 453503.67N/0943053.21W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE

DP
DP
DP
DP

USE TITLE

KBREW (RNAV)
KBREW (RNAV)
KBREW (RNAV)
KBREW (RNAV)

FAC

PAT

AIRPORT IDENT

ANE
FCM
MSP
STP

CITY

MINNEAPOLIS
MINNEAPOLIS
MINNEAPOLIS
ST PAUL

STATE

MN (US)
MN (US)
MN (US)
MN (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4

DATE OF REVISION: 10/29/2026

REASON FOR REVISION:

1. FIX MAKE-UP FACILITIES: REMOVED GEP VORTAC AND REDWOOD FALLS VOR/DME.
2. ESV: REMOVED GEP AND RWF ESVS.
3. REMARKS: REMOVED "GOPHER (FAC 1) AND REDWOOD FALLS (FAC 2) USED TO ESTABLISH FIX COORDINATES."
4. FIX USE: UPDATED KANE/KFCM/KMSP/KSTP DP "KBREW" TO "KBREW (RNAV)."
5. CHARTING: REMOVED "EN ROUTE LOW, CONTROLLER LOW, CONTROLLER HIGH."

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: JUDITH TUTTLE

APPROVED BY:

DATE: 09/24/2026

OFFICE: AJV-A422

NAME: RAKE MCGRAW

SIGNATURE:

Digitally signed by

ALLAN WILL

Aug 26, 2026

QUALITY
8
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: KEETN

STATE: ND

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 463554.53N/0965137.63W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: ESTABLISH

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE
DP
DP
DP
DP

USE TITLE
KBREW (RNAV)
KBREW (RNAV)
KBREW (RNAV)
KBREW (RNAV)

FAC

PAT

AIRPORT IDENT
ANE
FCM
MSP
STP

CITY
MINNEAPOLIS
MINNEAPOLIS
MINNEAPOLIS
ST PAUL

STATE
MN (US)
MN (US)
MN (US)
MN (US)

REQUIRED CHARTING: DP, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 10/29/2026

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: JUDITH TUTTLE

APPROVED BY:

DATE: 09/24/2026

OFFICE: AJV-A422

NAME: RAKE MCGRAW

SIGNATURE: *Digitally signed by*
ALLAN WILL
Aug 26, 2026

QUALITY
8
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: TWINZ

STATE: WI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 450255.67N/0921721.64W

TYPE: DME

AIRSPACE DOCKET:

FIX TYPE OF ACTION: CANCEL

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	FEET	MRA	MAA
1	MINNEAPOLIS	MSP	VOR/DME	L	074.90	076.90	41.37	41.37		5000	17500
2	EAU CLAIRE	EAU	VORTAC	L	281.00	285.00	35.71	35.71		5000	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
MSP	VOR/DME	R-075	42	5000	17500

HOLDING:

HOLDING TYPE OF ACTION:

REMARKS:

MINNEAPOLIS (FAC 1) USED TO ESTABLISH FIX COORDINATES.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	EAU CLAIRE ARRIVAL	1, 2		MSP	MINNEAPOLIS	MN (US)

REQUIRED CHARTING: STAR, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4

DATE OF REVISION: 11/13/2014

REASON FOR REVISION:

1. REMOVED J106 FROM FIX USE.
2. ADDED DIST FROM FAC NM TO FAC 1 AND FAC 2.

INITIATED BY:

DATE:

ORGANIZATION: MINNEAPOLIS ARTCC NAME:

DEVELOPED BY:

DATE: 09/02/2014

OFFICE: AJV-354

NAME: JIMMY HUGHES

APPROVED BY:

DATE: 09/24/2026

OFFICE: AJV-A422

NAME: RAKE MCGRAW

SIGNATURE:

Digitally signed by

ALLAN WILL

DISTRIBUTION:

NFDC

FPO: EST

ARTCC: ZMP

ATC FACILITY: MSP TOWER

OTHER:

Aug 26, 2026

