

RADIO FIX AND HOLDING DATA RECORD

NAME: AGUDE

STATE: WI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 450745.68N/0922330.99W

TYPE: WP, 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	085.00	091.00	41.69	41.69		3400	17500
2	EAU CLAIRE	EAU	VORTAC	VL	286.00	290.00	41.29	41.29		3400	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
GEP	VORTAC	R-085	42	3400	15400
EAU	VORTAC	R-286	42	3400	15500

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE (US)
EN ROUTE	V78	1, 2				WI (US)
IAP	RNAV (GPS) RWY 18			KAHH	AMERY	WI (US)
IAP	RNAV (GPS) RWY 8			3T3	BOYCEVILLE	WI (US)
STAR	AGUDE	1, 2		KCFE	BUFFALO	MN (US)
STAR	AGUDE	1, 2		KFBL	FARIBAULT	MN (US)
STAR	AGUDE	1, 2		KGYL	GLENCOE	MN (US)
STAR	AGUDE	1, 2		KMGG	MAPLE LAKE	MN (US)
STAR	AGUDE	1, 2		KANE	MINNEAPOLIS	MN (US)
STAR	AGUDE	1, 2		KFCM	MINNEAPOLIS	MN (US)
STAR	AGUDE	1, 2		KLVN	MINNEAPOLIS	MN (US)
STAR	AGUDE	1, 2		KMIC	MINNEAPOLIS	MN (US)
STAR	AGUDE	1, 2		KSGS	SOUTH ST PAUL	MN (US)
STAR	AGUDE	1, 2		21D	ST PAUL	MN (US)
STAR	AGUDE	1, 2		KSTP	ST PAUL	MN (US)
STAR	AGUDE	1, 2		KRNH	NEW RICHMOND	WI (US)
STAR	AGUDE	1, 2		KOEO	OSCEOLA	WI (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5

DATE OF REVISION: 08/07/2025

REASON FOR REVISION:

1. FIX MAKE-UP: UPDATED FAC 1 GEP VORTAC CLASS FROM "H" TO "VH", AND FAC 2 EAU VORTAC CLASS FROM "H" TO "VL".
2. ESV: UPDATED GEP VORTAC MAX ALT FROM "17500" TO "15400" AND EAU VORTAC MAX ALT FROM "17500" TO "15500"

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:

Digitally signed by

DAVID DANNER

May 09, 2025

QUALITY
14
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: STILS

STATE: WI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 450803.82N/0923841.22W

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	GOPHER	GEP	VORTAC	VH	085.00	091.00	30.94	30.94	3400	17500
2	FARMINGTON	FGT	VORTAC	VH	031.00	037.00		37.92	3400	17500

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V78	1, 2				(US)
IAP	RNAV (GPS) RWY 17			KANE	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) RWY 1			KRPD	RICE LAKE	WI (US)
STAR	AGUDE	1, 2		KCFE	BUFFALO	MN (US)
STAR	AGUDE	1, 2		KFBL	FARIBAULT	MN (US)
STAR	AGUDE	1, 2		KGYL	GLENCOE	MN (US)
STAR	AGUDE	1, 2		KMGG	MAPLE LAKE	MN (US)
STAR	AGUDE	1, 2		KANE	MINNEAPOLIS	MN (US)
STAR	AGUDE	1, 2		KFCM	MINNEAPOLIS	MN (US)
STAR	AGUDE	1, 2		KLVN	MINNEAPOLIS	MN (US)
STAR	AGUDE	1, 2		KMIC	MINNEAPOLIS	MN (US)
STAR	AGUDE	1, 2		KSGS	SOUTH ST PAUL	MN (US)
STAR	AGUDE	1, 2		21D	ST PAUL	MN (US)
STAR	AGUDE	1, 2		KSTP	ST PAUL	MN (US)
STAR	AGUDE	1, 2		KRNH	NEW RICHMOND	WI (US)
STAR	AGUDE	1, 2		KOEO	OSCEOLA	WI (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 12

DATE OF REVISION: 08/07/2025

REASON FOR REVISION:

1. FIX MAKE-UP: UPDATED GEP VORTAC CLASS FROM "H" TO "VH".

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:

Digitally signed by

DAVID DANNER

May 09, 2025

QUALITY
14
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: THATS

STATE: WI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 450623.02N/0912821.68W

TYPE: 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	085.00	091.00	80.77	80.77		8000	45000
2	EAU CLAIRE	EAU	VORTAC	VL	357.14	001.14		12.53		5200	45000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
GEP	VORTAC	R-085	81	8000	15400

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

GOPHER (FAC 1) AND EAU CLAIRE (FAC 2) USED TO ESTABLISH FIX COORDINATES.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	AGUDE	1, 2		KCFE	BUFFALO	MN (US)
STAR	AGUDE	1, 2		KFBL	FARIBAULT	MN (US)
STAR	AGUDE	1, 2		KGYL	GLENCOE	MN (US)
STAR	AGUDE	1, 2		KMGG	MAPLE LAKE	MN (US)
STAR	AGUDE	1, 2		KANE	MINNEAPOLIS	MN (US)
STAR	AGUDE	1, 2		KFCM	MINNEAPOLIS	MN (US)
STAR	AGUDE	1, 2		KLVN	MINNEAPOLIS	MN (US)
STAR	AGUDE	1, 2		KMIC	MINNEAPOLIS	MN (US)
STAR	AGUDE	1, 2		KSGS	SOUTH ST PAUL	MN (US)
STAR	AGUDE	1, 2		21D	ST PAUL	MN (US)
STAR	AGUDE	1, 2		KSTP	ST PAUL	MN (US)
STAR	AGUDE	1, 2		KRNH	NEW RICHMOND	WI (US)
STAR	AGUDE	1, 2		KOEO	OSCEOLA	WI (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 7

DATE OF REVISION: 08/07/2025

REASON FOR REVISION:

1. FIX MAKE-UP: UPDATED FAC 1 GEP VORTAC CLASS FROM "H" TO "VH" AND FAC 2 EAU VORTAC CLASS FROM "H" TO "VL"

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:

Digitally signed by

DAVID DANNER

May 09, 2025

QUALITY
14
CHECKED

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 LENGTH TIME	DME	HOLDING ALTITUDES MIN	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	20

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	450748.00N/0925748.00W	1260	4B
2	200	TOWER (27-000481)	450828.02N/0930602.27W	1426	4D
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:

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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; UPDATED PAT 4 MAX PATTERN FROM "11" TO "20"; RENUMBERED REMAINING.
2. PROCEDURES REQUIRING CLIMB-IN-HOLD: ADDED "ILS OR LOC RWY 32 KSTP"
3. HOLDING: UPDATED PAT 2 200K OBSTACLE ACC CODE FROM "5D" TO "4D"; 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:	<i>Digitally signed by</i> DAVID DANNER May 15, 2025	

QUALITY
14
CHECKED