RADIO FIX AND HOLDING DATA RECORD

NAME: ALBERT LEA VOR/DME **STATE:** MN **COUNTRY:** US **ICAO REGION CODE:** K3

LATITUDE/LONGITUDE: 434054.25N/0932214.72W **TYPE:**

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	DIST FROM FAC FEET	MRA	MAA
1	ALBERT LEA	AEL	VOR/DME	T							12000

HOLDING: **HOLDING TYPE OF ACTION:** CANCEL

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	S	AEL	VOR/DME	173.00	353.00	R	1		2900	6000	4	5
2	N	AEL	VOR/DME	342.00	162.00	R	1		2900	6000	4	5

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (27-000002)	433807.00N/0932221.00W	1571	4D
2	200	WINDMILL (27-020624)	434458.38N/0932816.52W	1727	5D

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
ASSIGNED FACILITY MAGVAR: 1E (2010).

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	VOR RWY 17		1	KAEL	ALBERT LEA	MN (US)
IAP	VOR RWY 35		2	KAEL	ALBERT LEA	MN (US)
IAP	ILS OR LOC RWY 35			KAUM	AUSTIN	MN (US)
IAP	ILS OR LOC RWY 30			KOWA	OWATONNA	MN (US)

REQUIRED CHARTING: IAP, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5 **DATE OF REVISION:** 01/03/2019

REASON FOR REVISION:
1. ADDED FACILITY MAGVAR TO REMARKS.
2. AMENDED VOR/DME RWY 35 TO VOR RWY 35 AT KAEL IN FIX USE.
3. ADDED ILS OR LOC RWY 30 AT KOWA TO FIX USE.
4. ADDED ILS OR LOC RWY 35 AT KAUM TO FIX USE.

INITIATED BY: **DATE:** **ORGANIZATION:** **NAME:**

OFFICE OF PRIMARY RESPONSIBILITY: AJV-5422 **NAME:** PETER GUIMOND

APPROVED BY: **DATE:** 04/09/2026 **OFFICE:** AJV-A431 **NAME:** CASEY HILL

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZMP
ATC FACILITY: RST APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: ALMAY **STATE:** MN **COUNTRY:** US **ICAO REGION CODE:** K3

LATITUDE/LONGITUDE: 440330.87N/0933506.10W **TYPE:** WP, INT, DME

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	DIST FROM FAC FEET	MRA	MAA
1	ROCHESTER	RST	VOR/DME	L	286.45	291.45	45.93	45.93		3400	17500
2	GOPHER	GEP	VORTAC	VH	182.00	188.00		65.86		5000	17500
3	HALFWAY	FOW	VOR/DME	T	224.72	226.72	12.75	12.75		3400	12000
4	MASON CITY	MCW	VOR/DME	VH	343.19	349.19		58.88		4600	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
RST	VOR/DME	R-286	46	3400	17500
GEP	VORTAC	R-182	66	5000	17500
MCW	VOR/DME	R-343	59	4600	15800

FIX RESTRICTIONS:
MRA V505 5000

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:
ROCHESTER (FAC 1) AND GOPHER (FAC 2) USED TO ESTABLISH FIX COORDINATES.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V24	1, 2, 3				(US)
EN ROUTE	V398	1, 2, 3				(US)
EN ROUTE	V505	1, 2, 3, 4				(US)
IAP	RNAV (GPS) RWY 17			KAEL	ALBERT LEA	MN (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 12			KFBL	FARIBAULT	MN (US)
IAP	VOR RWY 12	1, 3		OWA	OWATONNA	MN (US)

REQUIRED CHARTING: IAP, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 9 **DATE OF REVISION:** 05/14/2026

REASON FOR REVISION:
FIX MAKE-UP FACILITIES: FAC 2 AND FAC 4 CLASS CHANGED FROM "H" TO "VH".
FIX USE: REMOVED VOR RWY 17 AND VOR RWY 35 AT KAEL.

INITIATED BY: **DATE:** **ORGANIZATION:** **NAME:**

OFFICE OF PRIMARY RESPONSIBILITY: AJV-A431 **NAME:** TIMOTHY JOHNSON

APPROVED BY: **DATE:** 04/09/2026 **OFFICE:** AJV-A431 **NAME:** CASEY HILL

SIGNATURE:

RADIO FIX AND HOLDING DATA RECORD

NAME: KASPR **STATE:** MN **COUNTRY:** US **ICAO REGION CODE:** K3

LATITUDE/LONGITUDE: 435755.76N/0931449.35W **TYPE:** WP, INT, DME

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	DIST FROM FAC FEET	MRA	MAA
1	FARMINGTON	FGT	VORTAC	H	178.03	184.03	40.02	40.02		3000	45000
2	ROCHESTER	RST	VOR/DME	DH	286.44	291.44		30.26		3000	45000
3	MASON CITY	MCW	VOR/DME	VH	357.93	003.93	52.36	52.36		3000	45000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
FGT	VORTAC	R-178	41	3000	17500
RST	VOR/DME	R-286	31	19300	45000
MCW	VOR/DME	R-357	53	3000	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	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	S	FGT	VORTAC	178.03	358.03	R	1-1 1/2		3000	45000	6	31

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	WINDMILL (27-020988)	435527.18N/0930814.27W	1715	5D

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
FARMINGTON (FAC 1) AND ROCHESTER (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	V13	1, 2				(US)
EN ROUTE	V24	1, 2				(US)
EN ROUTE	V398	1, 2				(US)
IAP	RNAV (GPS) RWY 17			AEL	ALBERT LEA	MN (US)
IAP	RNAV (GPS) RWY 17			AUM	AUSTIN	MN (US)
IAP	RNAV (GPS) RWY 30			FBL	FARIBAULT	MN (US)
IAP	VOR-A	1, 2		FBL	FARIBAULT	MN (US)
IAP	VOR RWY 12	1, 2		OWA	OWATONNA	MN (US)
STAR	KASPR	1, 2, 3	1	MSP	MINNEAPOLIS	MN (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 16 **DATE OF REVISION:** 05/14/2026

REASON FOR REVISION:
FIX USE: REMOVED VOR RWY 17 AND VOR RWY 35 AT AEL.

INITIATED BY: **DATE:** **ORGANIZATION:** **NAME:**

OFFICE OF PRIMARY RESPONSIBILITY: AJV-A431 **NAME:** TIMOTHY JOHNSON

APPROVED BY: **DATE:** 04/09/2026 **OFFICE:** AJV-A431 **NAME:** CASEY HILL

SIGNATURE: