

RADIO FIX AND HOLDING DATA RECORD

NAME: BURLINGTON VOR/DME

STATE: IA

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 404324.44N/0905533.20W

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	BURLINGTON	BRL	VOR/DME	L							17500

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG TIME	LENGTH DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	E	BRL	VOR/DME	108.00	288.00	R	1		2300	17500	4	16
2	E	BRL	VOR/DME	073.26	253.26	R	1		2600	6000	4	5
3	NW	BRL	VOR/DME	309.21	129.21	R	1		2300	6000	4	5

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (17-002165)	404027.00N/0905216.00W	1080	5D
2	200	TOWER (17-002165)	404027.00N/0905216.00W	1080	5D
3	200	TOWER (17-002165)	404027.00N/0905216.00W	1080	5D

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.
ASSIGNED FACILITY MAGVAR: 5E/1965.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V10					(US)
EN ROUTE	V48					(US)
EN ROUTE	V580					(US)
EN ROUTE	V63					(US)
EN ROUTE	V67					(US)
IAP	ILS OR LOC RWY 36		1	KBRL	BURLINGTON	IA (US)
IAP	VOR RWY 12		1	KBRL	BURLINGTON	IA (US)
IAP	VOR RWY 30		1	KBRL	BURLINGTON	IA (US)
IAP	RNAV(GPS) RWY 17			KFSW	FORT MADISON	IA (US)
IAP	RNAV(GPS) RWY 35			KFSW	FORT MADISON	IA (US)
IAP	VOR/DME-A		2	KFSW	FORT MADISON	IA (US)
IAP	ILS OR LOC RWY 26		3	KEOK	KEOKUK	IA (US)
IAP	RNAV(GPS) RWY 14			KEOK	KEOKUK	IA (US)
IAP	RNAV(GPS) RWY 36			KCTK	CANTON	IL (US)
IAP	ILS OR LOC RWY 3			KGBG	GALESBURG	IL (US)
IAP	RNAV (GPS) RWY 3			KGBG	GALESBURG	IL (US)
IAP	LOC RWY 27			KMQB	MACOMB	IL (US)
IAP	RNAV (GPS) RWY 9			KMQB	MACOMB	IL (US)

REQUIRED CHARTING: IAP, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 19

DATE OF REVISION: 12/26/2024

REASON FOR REVISION:

1. FIX USE: REMOVED DP DES MOINES AT KD SM.
2. REQUIRED CHARTING: REMOVED DP.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: RICHARD CHRISTENSEN

APPROVED BY:

DATE: 12/26/2024

OFFICE: AJV-A431

NAME: ERIC N SUSKI

Digitally signed by

ERIC N SUSKI

Sep 26, 2024

SIGNATURE:

QUALITY
8
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: CEDAR RAPIDS VOR/DME

STATE: IA

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 415315.17N/0914708.70W

TYPE:

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	CEDAR RAPIDS	CID	VOR/DME	H							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	W	CID	VOR/DME	269.00	089.00	R	1		2500	6000	4	5
2	W	CID	VOR/DME	279.44	099.44	R	1		2300	6000	4	5

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	415451.00N/0915618.00W	1208	4E
1	310	TOWER (19-001055)	414500.00N/0915017.00W	1834	5D
2	200	AAO	415451.00N/0915618.00W	1208	4E

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	ILS OR LOC RWY 27	KCID	CEDAR RAPIDS	IA (US)

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.
ASSIGNED FACILITY MAGVAR: E5/1965.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V156					(US)
EN ROUTE	V172					(US)
EN ROUTE	V294					(US)
EN ROUTE	V341					(US)
EN ROUTE	V503					(US)
EN ROUTE	V67					(US)
IAP	ILS OR LOC RWY 27		1	KCID	CEDAR RAPIDS	IA (US)
IAP	ILS OR LOC RWY 9			KCID	CEDAR RAPIDS	IA (US)
IAP	RNAV (GPS) RWY 13			KCID	CEDAR RAPIDS	IA (US)
IAP	RNAV (GPS) RWY 31			KCID	CEDAR RAPIDS	IA (US)
IAP	ILS OR LOC RWY 36			KDBQ	DUBUQUE	IA (US)
IAP	LOC RWY 31			KDBQ	DUBUQUE	IA (US)
IAP	VOR RWY 31			KDBQ	DUBUQUE	IA (US)
IAP	VOR RWY 36			KDBQ	DUBUQUE	IA (US)
IAP	VOR/DME RWY 31			KOOA	OSKALOOSA	IA (US)
IAP	VOR RWY 11		2	8C4	TIPTON	IA (US)
IAP	RNAV (GPS) RWY 27			KVTI	VINTON	IA (US)
IAP	ILS OR LOC RWY 12			KALO	WATERLOO	IA (US)
IAP	LOC BC RWY 30			KALO	WATERLOO	IA (US)
IAP	VOR RWY 12			KALO	WATERLOO	IA (US)
IAP	VOR RWY 18			KALO	WATERLOO	IA (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 28

DATE OF REVISION: 12/26/2024

REASON FOR REVISION:

1. REMOVED AIRSPACE DOCKET: 23-AGL-8.
2. FIX USE: REMOVED DP DES MOINES AT KDSM.
3. REQUIRED CHARTING: REMOVED DP.

Digitally signed by

ERIC N SUSKI

Sep 26, 2024

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: RICHARD CHRISTENSEN

APPROVED BY:

DATE: 12/26/2024

OFFICE: AJV-A431

NAME: ERIC N SUSKI

QUALITY
8
CHECKED

SIGNATURE:



RADIO FIX AND HOLDING DATA RECORD

NAME: DUBUQUE VORTAC

STATE: IA

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 422405.29N/0904232.68W

TYPE:

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	DUBUQUE	DBQ	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 TIME	LENGTH DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	W	DBQ	VORTAC	272.00	092.00	L	1 1/2		18000	40000	16	27

REASON FOR NONSTANDARD HOLDING:

PAT 1 ATC REQUEST

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN(S)

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.
ASSIGNED FACILITY MAGVAR: E4/1965.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	PAL-WAUKEE			KPWK	CHICAGO/PROSPECT HGTS/WHEELING	IL (US)
EN ROUTE	J100					(US)
EN ROUTE	J128					(US)
EN ROUTE	J144					(US)
EN ROUTE	J82					(US)
EN ROUTE	J84					(US)
EN ROUTE	J94					(US)
EN ROUTE	T302					(US)
EN ROUTE	V100					(US)
EN ROUTE	V129					(US)
EN ROUTE	V158					(US)
EN ROUTE	V246					(US)
EN ROUTE	V341					(US)
IAP	ILS OR LOC RWY 15			KDVN	DAVENPORT	IA (US)
IAP	ILS OR LOC RWY 36			KDBQ	DUBUQUE	IA (US)
IAP	LOC RWY 31			KDBQ	DUBUQUE	IA (US)
IAP	RNAV (GPS) RWY 13			KDBQ	DUBUQUE	IA (US)
IAP	RNAV (GPS) RWY 18			KDBQ	DUBUQUE	IA (US)
IAP	RNAV (GPS) RWY 31			KDBQ	DUBUQUE	IA (US)
IAP	RNAV (GPS) RWY 36			KDBQ	DUBUQUE	IA (US)
IAP	VOR RWY 13			KDBQ	DUBUQUE	IA (US)
IAP	VOR RWY 31			KDBQ	DUBUQUE	IA (US)
IAP	VOR RWY 36			KDBQ	DUBUQUE	IA (US)
IAP	RNAV (GPS) RWY 33			KPVB	PLATTEVILLE	WI (US)
IAP	RNAV (GPS) RWY 7			KPVB	PLATTEVILLE	WI (US)
STAR	JANESVILLE		1	KORD	CHICAGO	IL (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 23

DATE OF REVISION: 12/26/2024

REASON FOR REVISION:

1. REMOVED DOCKET: 23-AGL-8.
2. FIX USE: REMOVED DP DES MOINES AT KDSM.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: RICHARD CHRISTENSEN

APPROVED BY:

DATE: 12/26/2024

OFFICE: AJV-A431

NAME: ERIC N SUSKI

Digitally signed by

ERIC N SUSKI

Sep 26, 2024

SIGNATURE:



RADIO FIX AND HOLDING DATA RECORD

NAME: FOURH STATE: IA COUNTRY: US ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 410325.00N/0932827.00W TYPE: WP

AIRSPACE DOCKET: FIX TYPE OF ACTION: MODIFY

HOLDING: HOLDING TYPE OF ACTION:

FIX USE:	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
USE TYPE	DES MOINES			KDSM	DES MOINES	IA (US)
DP	ATC COORDINATION					(US)
OTHER						

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 DATE OF REVISION: 12/26/2024

REASON FOR REVISION:

1. FIX USE: ADDED DP DES MOINES AT KDSM.
2. REQUIRED CHARTING: ADDED DP.

INITIATED BY:	DATE:	ORGANIZATION:	NAME:
OFFICE OF PRIMARY RESPONSIBILITY:		AJV-A431	NAME: RICHARD CHRISTENSEN
APPROVED BY:	DATE: 12/26/2024	OFFICE: AJV-A431	NAME: ERIC N SUSKI
	SIGNATURE:		<i>Digitally signed by</i> ERIC N SUSKI Sep 26, 2024



RADIO FIX AND HOLDING DATA RECORD

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

LATITUDE/LONGITUDE: 450844.47N/0932223.45W 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	GOPHER	GEP	VORTAC	H						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	NW	GEP	VORTAC	297.00	117.00	L	1	3000 14000	4 10
2	W	GEP	VORTAC	264.00	084.00	R	1	2700 14000	4 12
3	NW		WP	297.00	117.00	L	4	3000 14000	5 11
4	N		WP	346.00	166.00	L	4	3100 14000	5 11
5	W		WP	265.00	085.00	R	4	2700 14000	5 13

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (27-000032)	451043.00N/0932100.00W	1530	4D
1	265	TOWER (27-000032)	451043.00N/0932100.00W	1530	4D
2	200	TOWER (27-000032)	451043.00N/0932100.00W	1530	4D
2	310	TOWER (27-000032)	451043.00N/0932100.00W	1530	4D
3	200	TOWER (27-000032)	451043.00N/0932100.00W	1530	4D
3	265	TOWER (27-000032)	451043.00N/0932100.00W	1530	4D
4	200	TOWER (27-000032)	451043.00N/0932100.00W	1530	4D
4	310	TOWER (27-000990)	452011.92N/0932331.17W	2048	1A
5	200	TOWER (27-000032)	451043.00N/0932100.00W	1530	4D
5	310	TOWER (27-000499)	450344.83N/0930822.61W	2438	1D

REASON FOR NONSTANDARD HOLDING:

PAT 1 ATC REQUEST
PAT 3 ATC REQUEST
PAT 4 ATC REQUEST

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
2	ILS OR LOC RWY 27	KANE	MINNEAPOLIS	MN (US)
4	RNAV (GPS) RWY 14	KMIC	MINNEAPOLIS	MN (US)
5	RNAV (GPS) RWY 27	KANE	MINNEAPOLIS	MN (US)

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED
HOLDING PATTERN 1 AND 4 EVALUATED FOR MILITARY AIRCRAFT AT KMSP
ASSIGNED FACILITY MAGVAR: E6 1965
PAT 5 310KT CONTROLLING OBSTACLE 1604 FT MSL PRIMARY EQUIVALENT.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
SPECIAL IAP	COPTER RNAV (GPS) 18		4	25MY	MINNEAPOLIS	MN (US)
SPECIAL IAP	COPTER RNAV (GPS) 18		4	MY65	MINNEAPOLIS	MN (US)
SPECIAL IAP	COPTER RNAV (GPS) 12		4	7MN1	ST PAUL	MN (US)
DP	COULT			KANE	MINNEAPOLIS	MN (US)
DP	KBREW			KANE	MINNEAPOLIS	MN (US)
DP	WLSTN			KANE	MINNEAPOLIS	MN (US)
DP	COULT			KFCM	MINNEAPOLIS	MN (US)
DP	KBREW			KFCM	MINNEAPOLIS	MN (US)
DP	WLSTN			KFCM	MINNEAPOLIS	MN (US)
DP	COULT			KMSP	MINNEAPOLIS	MN (US)
DP	KBREW			KMSP	MINNEAPOLIS	MN (US)
DP	LEINY (RNAV)			KMSP	MINNEAPOLIS	MN (US)
DP	WLSTN			KMSP	MINNEAPOLIS	MN (US)
DP	COULT			KSTP	ST PAUL	MN (US)
DP	KBREW			KSTP	ST PAUL	MN (US)
DP	WLSTN			KSTP	ST PAUL	MN (US)
EN ROUTE	J114					(US)
EN ROUTE	J21					(US)
EN ROUTE	J25					(US)
EN ROUTE	J36					(US)
EN ROUTE	J68					(US)
EN ROUTE	J70					(US)
EN ROUTE	T330					(US)
EN ROUTE	T383					(US)

QUALITY
8
CHECKED

EN ROUTE	V148			(US)	
EN ROUTE	V161			(US)	
EN ROUTE	V2			(US)	
EN ROUTE	V218			(US)	
EN ROUTE	V413			(US)	
EN ROUTE	V505			(US)	
EN ROUTE	V510			(US)	
EN ROUTE	V78			(US)	
EN ROUTE	V82			(US)	
EN ROUTE	V97			(US)	
IAP	VOR -A		KCFE	BUFFALO	MN (US)
IAP	RNAV (GPS) RWY 34		KCBG	CAMBRIDGE	MN (US)
IAP	ILS OR LOC RWY 27	2	KANE	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) RWY 18		KANE	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) RWY 27	5	KANE	MINNEAPOLIS	MN (US)
IAP	VOR RWY 9	2	KANE	MINNEAPOLIS	MN (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 10R		KFCM	MINNEAPOLIS	MN (US)
IAP	VOR RWY 10R		KFCM	MINNEAPOLIS	MN (US)
IAP	ILS OR LOC RWY 30		KLVN	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) RWY 14	4	KMIC	MINNEAPOLIS	MN (US)
IAP	ILS RWY 35 (CAT II/III)		KMSP	MINNEAPOLIS	MN (US)
IAP	ILS RWY 35 (SA CAT I)		KMSP	MINNEAPOLIS	MN (US)
IAP	ILS OR LOC RWY 12L (ALT MA)		KMSP	MINNEAPOLIS	MN (US)
IAP	ILS OR LOC RWY 30L		KMSP	MINNEAPOLIS	MN (US)
IAP	ILS OR LOC RWY 30R	1	KMSP	MINNEAPOLIS	MN (US)
IAP	ILS RWY 12L (CAT II) (ALT MA)		KMSP	MINNEAPOLIS	MN (US)
IAP	ILS RWY 12L (CAT III) (ALT MA)		KMSP	MINNEAPOLIS	MN (US)
IAP	ILS RWY 12L (SA CAT I) (ALT MA)		KMSP	MINNEAPOLIS	MN (US)
IAP	ILS RWY 30L (CAT II)		KMSP	MINNEAPOLIS	MN (US)
IAP	ILS V RWY 35 (CONVERGING)		KMSP	MINNEAPOLIS	MN (US)
IAP	ILS Z OR LOC RWY 35		KMSP	MINNEAPOLIS	MN (US)
IAP	LOC RWY 17		KMSP	MINNEAPOLIS	MN (US)
IAP	LOC RWY 22		KMSP	MINNEAPOLIS	MN (US)
IAP	LOC RWY 4	1	KMSP	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) RWY 4	3	KMSP	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) Z RWY 30R	3	KMSP	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) Z RWY 35	3	KMSP	MINNEAPOLIS	MN (US)
IAP	RNAV (RNP) Y RWY 30R	3	KMSP	MINNEAPOLIS	MN (US)
IAP	ILS OR LOC RWY 9		KRGK	RED WING	MN (US)
IAP	LOC RWY 34		KSGS	SOUTH ST PAUL	MN (US)
IAP	ILS OR LOC RWY 31		KSTC	ST CLOUD	MN (US)
IAP	VOR RWY 31		KSTC	ST CLOUD	MN (US)
IAP	ILS OR LOC RWY 14		KSTP	ST PAUL	MN (US)
IAP	ILS OR LOC RWY 32		KSTP	ST PAUL	MN (US)
IAP	RNAV (GPS) RWY 14		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	ENCEE (RNAV)		KANE	MINNEAPOLIS	MN (US)
STAR	GOPHER		KANE	MINNEAPOLIS	MN (US)
STAR	TWOLF		KANE	MINNEAPOLIS	MN (US)
STAR	AGUDE		KFCM	MINNEAPOLIS	MN (US)
STAR	ENCEE (RNAV)		KFCM	MINNEAPOLIS	MN (US)
STAR	GOPHER		KFCM	MINNEAPOLIS	MN (US)
STAR	TWOLF		KFCM	MINNEAPOLIS	MN (US)
STAR	AGUDE		KLVN	MINNEAPOLIS	MN (US)
STAR	ENCEE (RNAV)		KLVN	MINNEAPOLIS	MN (US)
STAR	GOPHER		KLVN	MINNEAPOLIS	MN (US)
STAR	TWOLF		KLVN	MINNEAPOLIS	MN (US)
STAR	AGUDE		KMIC	MINNEAPOLIS	MN (US)
STAR	ENCEE (RNAV)		KMIC	MINNEAPOLIS	MN (US)
STAR	GOPHER		KMIC	MINNEAPOLIS	MN (US)
STAR	TWOLF		KMIC	MINNEAPOLIS	MN (US)
STAR	BAINY (RNAV)		KMSP	MINNEAPOLIS	MN (US)
STAR	EAU CLAIRE		KMSP	MINNEAPOLIS	MN (US)
STAR	GOPHER		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	ENCEE (RNAV)		KSTP	ST PAUL	MN (US)
STAR	GOPHER		KSTP	ST PAUL	MN (US)
STAR	TWOLF		KSTP	ST PAUL	MN (US)
STAR	AGUDE		KRNH	NEW RICHMOND	WI (US)
STAR	TWOLF		KRNH	NEW RICHMOND	WI (US)
STAR	AGUDE		KOEO	OSCEOLA	WI (US)
STAR	TWOLF		KOEO	OSCEOLA	WI (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 33

DATE OF REVISION: 12/26/2024

QUALITY
8
CHECKED

REASON FOR REVISION:
FIX USE: REMOVED DP DES MOINES AT KDSM.

Digitally signed by
ERIC N SUSKI
Sep 26, 2024

INITIATED BY:	DATE:	ORGANIZATION:	NAME:
		AJV-A431	RICHARD CHRISTENSEN
OFFICE OF PRIMARY RESPONSIBILITY:			
APPROVED BY:	DATE: 12/26/2024	OFFICE: AJV-A431	NAME: ERIC N SUSKI
	SIGNATURE:		



RADIO FIX AND HOLDING DATA RECORD

NAME: GPPLE STATE: IA COUNTRY: US ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 410828.00N/0940230.00W TYPE: WP

AIRSPACE DOCKET: FIX TYPE OF ACTION: MODIFY

HOLDING: HOLDING TYPE OF ACTION:

FIX USE:	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
USE TYPE	DES MOINES			KDSM	DES MOINES	IA (US)
DP	ATC COORDINATION					(US)
OTHER						

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 DATE OF REVISION: 12/26/2024

REASON FOR REVISION:

1. FIX USE: ADDED DP DES MOINES AT KDSM.
2. REQUIRED CHARTING: ADDED DP.

INITIATED BY:	DATE:	ORGANIZATION:	NAME:
OFFICE OF PRIMARY RESPONSIBILITY:		AJV-A431	NAME: RICHARD CHRISTENSEN
APPROVED BY:	DATE: 12/26/2024	OFFICE: AJV-A431	NAME: ERIC N SUSKI

SIGNATURE:

Digitally signed by
ERIC N SUSKI
Sep 26, 2024



RADIO FIX AND HOLDING DATA RECORD

NAME: HEEVN

STATE: IA

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 420026.00N/0932822.00W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE
DP
OTHER

USE TITLE
DES MOINES
ATC COORDINATION

FAC

PAT

AIRPORT IDENT
KDSM

CITY
DES MOINES

STATE
IA (US)
(US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 12/26/2024

REASON FOR REVISION:

1. FIX USE: ADDED DP DES MOINES AT KDSM.
2. REQUIRED CHARTING: ADDED DP.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: RICHARD CHRISTENSEN

APPROVED BY:

DATE: 12/26/2024

OFFICE: AJV-A431

NAME: ERIC N SUSKI

SIGNATURE:

Digitally signed by

ERIC N SUSKI

Sep 26, 2024



RADIO FIX AND HOLDING DATA RECORD

NAME: ICUBS

STATE: IA

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 414851.00N/0930521.00W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE
DP
OTHER

USE TITLE
DES MOINES
ATC COORDINATION

FAC

PAT

AIRPORT IDENT
KDSM

CITY
DES MOINES

STATE
IA (US)
(US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 12/26/2024

REASON FOR REVISION:

1. FIX USE: ADDED DP DES MOINES AT KDSM.
2. REQUIRED CHARTING: ADDED DP.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: RICHARD CHRISTENSEN

APPROVED BY:

DATE: 12/26/2024

OFFICE: AJV-A431

NAME: ERIC N SUSKI

SIGNATURE:

Digitally signed by

ERIC N SUSKI

Sep 26, 2024



RADIO FIX AND HOLDING DATA RECORD

NAME: IWILD

STATE: IA

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 415658.00N/0940207.00W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE
DP
OTHER

USE TITLE
DES MOINES
ATC COORDINATION

FAC

PAT

AIRPORT IDENT
KDSM

CITY
DES MOINES

STATE
IA (US)
(US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 12/26/2024

REASON FOR REVISION:

1. FIX USE: ADDED DP DES MOINES AT KDSM.
2. REQUIRED CHARTING: ADDED DP.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: RICHARD CHRISTENSEN

APPROVED BY:

DATE: 12/26/2024

OFFICE: AJV-A431

NAME: ERIC N SUSKI
Digitally signed by

SIGNATURE:

ERIC N SUSKI

Sep 26, 2024



RADIO FIX AND HOLDING DATA RECORD

NAME: KORRN

STATE: IA

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 413246.00N/0941927.00W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE
DP
OTHER

USE TITLE
DES MOINES
ATC COORDINATION

FAC

PAT

AIRPORT IDENT
KDSM

CITY
DES MOINES

STATE
IA (US)
(US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 12/26/2024

REASON FOR REVISION:

1. FIX USE: ADDED DP DES MOINES AT KDSM.
2. REQUIRED CHARTING: ADDED DP.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: RICHARD CHRISTENSEN

APPROVED BY:

DATE: 12/26/2024

OFFICE: AJV-A431

NAME: ERIC N SUSKI

SIGNATURE:

Digitally signed by

ERIC N SUSKI

Sep 26, 2024

QUALITY
8
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: LINCOLN VORTAC

STATE: NE

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 405525.66N/0964431.23W

TYPE:

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	LINCOLN	LNK	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 TIME	LENGTH DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	N	LNK	VORTAC	355.00	175.00	R	1		3000	6000	4	5
2	N	LNK	VORTAC	005.00	185.00	R	1		3000	6000	4	5
3	N	LNK	VORTAC	005.00	185.00	R	1		3100	6000	4	5

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (31-001233)	410236.58N/0964259.00W	1703	2C
2	200	TOWER (31-001233)	410236.58N/0964259.00W	1703	2C
3	310	TOWER (31-000415)	410723.60N/0965004.80W	2070	4D

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN(S)
PAT 3 CHART 310K ICON

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
3	ILS Y OR LOC Y RWY 36	KLNK	LINCOLN	NE (US)

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.
ASSIGNED FACILITY MAGVAR: E9/1965.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	OMAHA			KOMA	OMAHA	NE (US)
EN ROUTE	J146					(US)
EN ROUTE	J44					(US)
EN ROUTE	J60					(US)
EN ROUTE	T411					(US)
EN ROUTE	V138					(US)
EN ROUTE	V532					(US)
EN ROUTE	V71					(US)
IAP	RNAV (GPS) RWY 17			KCEK	CRETE	NE (US)
IAP	RNAV (GPS) RWY 35			KCEK	CRETE	NE (US)
IAP	VOR/DME RWY 17			KCEK	CRETE	NE (US)
IAP	VOR/DME RWY 35			KCEK	CRETE	NE (US)
IAP	RNAV (GPS) RWY 32			93Y	DAVID CITY	NE (US)
IAP	NDB RWY 17			KFMZ	FAIRMONT	NE (US)
IAP	NDB RWY 35			KFMZ	FAIRMONT	NE (US)
IAP	HI-ILS Z OR LOC Z RWY 18			KLNK	LINCOLN	NE (US)
IAP	HI-ILS Z OR LOC Z RWY 36			KLNK	LINCOLN	NE (US)
IAP	HI-VOR Z OR TACAN RWY 18			KLNK	LINCOLN	NE (US)
IAP	HI-VOR/DME OR TACAN RWY 36			KLNK	LINCOLN	NE (US)
IAP	ILS Y OR LOC Y RWY 18		2	KLNK	LINCOLN	NE (US)
IAP	ILS Y OR LOC Y RWY 36		3	KLNK	LINCOLN	NE (US)
IAP	VOR RWY 17		1	KLNK	LINCOLN	NE (US)
IAP	VOR Y RWY 18		1	KLNK	LINCOLN	NE (US)
IAP	ILS OR LOC RWY 36			KOMA	OMAHA	NE (US)
IAP	RNAV (GPS) RWY 34			KSWT	SEWARD	NE (US)
IAP	RNAV (GPS) RWY 17			KJYR	YORK	NE (US)
IAP	RNAV (GPS) RWY 35			KJYR	YORK	NE (US)
STAR	HOWRY			KOFF	OMAHA	NE (US)
STAR	HOWRY			KOMA	OMAHA	NE (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 26

DATE OF REVISION: 12/26/2024

REASON FOR REVISION:

1. REMOVED AIRSPACE DOCKET: 23-ACE-6.
2. FIX USE: REMOVED DP DES MOINES AT KDSM.



INITIATED BY:	DATE:	ORGANIZATION:	NAME:
OFFICE OF PRIMARY RESPONSIBILITY:		AJV-A431	NAME: RICHARD CHRISTENSEN
APPROVED BY:	DATE: 12/26/2024	OFFICE: AJV-A431	NAME: ERIC N SUSKI
	SIGNATURE:		<i>Digitally signed by</i> ERIC N SUSKI Sep 26, 2024



RADIO FIX AND HOLDING DATA RECORD

NAME: MANAA

STATE: IA

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 411717.00N/0930432.00W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE
DP
OTHER

USE TITLE
DES MOINES
ATC COORDINATION

FAC

PAT

AIRPORT IDENT
KDSM

CITY
DES MOINES

STATE
IA (US)
(US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 12/26/2024

REASON FOR REVISION:

1. FIX USE: ADDED DP DES MOINES AT KDSM.
2. REQUIRED CHARTING: ADDED DP.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: RICHARD CHRISTENSEN

APPROVED BY:

DATE: 12/26/2024

OFFICE: AJV-A431

NAME: ERIC N SUSKI

SIGNATURE:

Digitally signed by

ERIC N SUSKI

Sep 26, 2024



RADIO FIX AND HOLDING DATA RECORD

NAME: MASON CITY VOR/DME

STATE: IA

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 430541.13N/0931947.54W

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	MASON CITY	MCW	VOR/DME	VH						45000

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG TIME	LENGTH DME	HOLDING ALTITUDES MIN MAX	TEMPLATES MIN MAX
1	W	MCW	VOR/DME	278.00	098.00	L	1		3000 45000	4 29
2	S	MCW	VOR/DME	176.00	356.00	R	1		3000 6000	4 5
3	W		WP	278.00	098.00	L		10	15000 45000	16 30

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	WINDMILL (19-060134)	430321.68N/0932630.32W	1766	4D
2	200	TOWER (19-001289)	430528.00N/0932359.00W	1665	2C
3	265	TOWER (19-001056)	431005.60N/0930603.90W	1978	5D

REASON FOR NONSTANDARD HOLDING:

PAT 1 ATC REQUEST

PAT 3 ATC REQUEST

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:

HOLDING PAT 3 FOR ATC USE (NOT CHARTED).
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
ASSIGNED FACILITY MAGVAR: 6E (1965).

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	ORSKY			KANE	MINNEAPOLIS	MN (US)
DP	ORSKY			KFCM	MINNEAPOLIS	MN (US)
DP	ORSKY			KMSP	MINNEAPOLIS	MN (US)
DP	ORSKY			KSTP	ST PAUL	MN (US)
EN ROUTE	J148					(US)
EN ROUTE	J16		1			(US)
EN ROUTE	J25					(US)
EN ROUTE	J90					(US)
EN ROUTE	V120		1			(US)
EN ROUTE	V13					(US)
EN ROUTE	V158					(US)
EN ROUTE	V161					(US)
EN ROUTE	V505					(US)
IAP	RNAV (GPS) RWY 33			KFXV	FOREST CITY	IA (US)
IAP	VOR-A			KFXV	FOREST CITY	IA (US)
IAP	ILS OR LOC RWY 6			KFOD	FORT DODGE	IA (US)
IAP	VOR/DME RWY 35			KHPT	HAMPTON	IA (US)
IAP	ILS OR LOC RWY 36			KMCW	MASON CITY	IA (US)
IAP	VOR RWY 36		2	KMCW	MASON CITY	IA (US)
IAP	ILS OR LOC RWY 12			KALO	WATERLOO	IA (US)
IAP	RNAV (GPS) RWY 35			KAEL	ALBERT LEA	MN (US)
IAP	VOR RWY 35			KAEL	ALBERT LEA	MN (US)
IAP	ILS OR LOC RWY 35			KAUM	AUSTIN	MN (US)
IAP	RNAV (GPS) RWY 17			KAUM	AUSTIN	MN (US)
IAP	RNAV (GPS) RWY 35			KAUM	AUSTIN	MN (US)
STAR	JANESVILLE		1	KORD	CHICAGO	IL (US)
STAR	KASPR			KMSP	MINNEAPOLIS	MN (US)
STAR	TWOLF			KSTP	ST PAUL	MN (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 27

DATE OF REVISION: 12/26/2024

REASON FOR REVISION:

FIX USE: REMOVED DP DES MOINES AT KDMS.

QUALITY
8
CHECKED

INITIATED BY:	DATE:	ORGANIZATION:	NAME:
OFFICE OF PRIMARY RESPONSIBILITY:		AJV-A431	NAME: RICHARD CHRISTENSEN
APPROVED BY:	DATE: 12/26/2024	OFFICE: AJV-A431	NAME: ERIC N SUSKI
	SIGNATURE:		<i>Digitally signed by</i> ERIC N SUSKI Sep 26, 2024



RADIO FIX AND HOLDING DATA RECORD

NAME: SIOUX FALLS VORTAC **STATE:** SD **COUNTRY:** US **ICAO REGION CODE:** K3

LATITUDE/LONGITUDE: 433858.17N/0964652.05W **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	SIOUX FALLS	FSD	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 TIME	LENGTH DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	NW	FSD	VORTAC	327.00	147.00	L	1		3400	17500	4	16

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (46-000442)	434449.00N/0965320.00W	2269	3D
1	310	TOWER (46-000442)	434449.00N/0965320.00W	2269	3D

REASON FOR NONSTANDARD HOLDING:

PAT 1 AT REQUEST

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	TAKEOFF MINIMUMS	KFSD	SIOUX FALLS	SD (US)

REMARKS:

CHART PAT 1 EN ROUTE LOW.
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
ASSIGNED FACILITY MAG VAR: 9E 1965

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	LEINY (RNAV)			KMSP	MINNEAPOLIS	MN (US)
DP	MEADOW LAKE			KMSP	MINNEAPOLIS	MN (US)
DP	MINNEAPOLIS			KMSP	MINNEAPOLIS	MN (US)
DP	OMAHA			KOMA	OMAHA	NE (US)
DP	TAKEOFF MINIMUMS		1	KFSD	SIOUX FALLS	SD (US)
EN ROUTE	J114					(US)
EN ROUTE	J16					(US)
EN ROUTE	J45					(US)
EN ROUTE	J82					(US)
EN ROUTE	Q19					(US)
EN ROUTE	T348					(US)
EN ROUTE	T407					(US)
EN ROUTE	V120					(US)
EN ROUTE	V148					(US)
EN ROUTE	V170					(US)
EN ROUTE	V80					(US)
IAP	ILS OR LOC RWY 12			KMML	MARSHALL	MN (US)
IAP	VOR RWY 12			KMML	MARSHALL	MN (US)
IAP	RNAV (GPS) RWY 18			KPQN	PIPESTONE	MN (US)
IAP	ILS OR LOC RWY 12			KBKX	BROOKINGS	SD (US)
IAP	RNAV (GPS) RWY 30			KBKX	BROOKINGS	SD (US)
IAP	RNAV (GPS) RWY 33			KMDS	MADISON	SD (US)
IAP	HI-ILS OR LOC RWY 21			KFSD	SIOUX FALLS	SD (US)
IAP	HI-ILS OR LOC RWY 3			KFSD	SIOUX FALLS	SD (US)
IAP	HI-TACAN RWY 15			KFSD	SIOUX FALLS	SD (US)
IAP	ILS OR LOC RWY 21		1	KFSD	SIOUX FALLS	SD (US)
IAP	ILS OR LOC RWY 3		1	KFSD	SIOUX FALLS	SD (US)
IAP	RNAV (GPS) RWY 27			KFSD	SIOUX FALLS	SD (US)
IAP	RNAV (GPS) RWY 9			KFSD	SIOUX FALLS	SD (US)
IAP	VOR OR TACAN RWY 15		1	KFSD	SIOUX FALLS	SD (US)
IAP	VOR/DME OR TACAN RWY 33		1	KFSD	SIOUX FALLS	SD (US)
STAR	ENCEE (RNAV)			KANE	MINNEAPOLIS	MN (US)
STAR	ENCEE (RNAV)			KFCM	MINNEAPOLIS	MN (US)
STAR	ENCEE (RNAV)			KLVN	MINNEAPOLIS	MN (US)
STAR	ENCEE (RNAV)			KMIC	MINNEAPOLIS	MN (US)
STAR	ENCEE (RNAV)			KSTP	ST PAUL	MN (US)

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

COMPULSORY REPORTING POINT: NO

QUALITY
8
CHECKED

RECORD REVISION NUMBER: 29

DATE OF REVISION: 12/26/2024

REASON FOR REVISION:

1. FIX USE: REMOVED DP DES MOINES AT KDSM AND IAP RNAV (GPS) RWY 36 AT KPQN.
2. FIX USE: CHANGED IAP HI-ILS RWY 21 AT KFSD TO HI-ILS OR LOC RWY 21.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: RICHARD CHRISTENSEN

APPROVED BY:

DATE: 12/26/2024

OFFICE: AJV-A431

NAME: ERIC N SUSKI

SIGNATURE:

*Digitally signed by***ERIC N SUSKI**

Sep 26, 2024



RADIO FIX AND HOLDING DATA RECORD

NAME: ST JOSEPH VORTAC STATE: MO COUNTRY: US ICAO REGION CODE: K3
 LATITUDE/LONGITUDE: 395738.08N/0945530.79W 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	ST JOSEPH	STJ	VORTAC	H						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	N	STJ	VORTAC	347.41	167.41	R	1	2700 6000	6 7
2	S	STJ	VORTAC	175.00	355.00	R	1	3000 17500	6 16
3	S		WP	175.00	355.00	R		6000 10000	8 10

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	TOWER (29-002003)	400404.94N/0945205.10W	1524	1A
1	265	TOWER (29-002003)	400404.94N/0945205.10W	1524	1A
2	230	TOWER (29-001514)	395834.00N/0945838.00W	1520	5D
2	265	TOWER (29-000024)	394612.00N/0944755.00W	1792	4D
3	230	TOWER (29-001514)	395834.00N/0945838.00W	1520	5D

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.
 230K/265K PATTERNS USED FOR MILITARY REQUIREMENTS.
 ASSIGNED FACILITY MAG VAR: 8E 1965.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	CHIEF			KFLV	FORT LEAVENWORTH	KS (US)
DP	ROYAL			KFLV	FORT LEAVENWORTH	KS (US)
DP	WILDCAT			KFLV	FORT LEAVENWORTH	KS (US)
DP	CHIEF			KIXD	OLATHE	KS (US)
DP	ROYAL			KIXD	OLATHE	KS (US)
DP	WILDCAT			KIXD	OLATHE	KS (US)
DP	CHIEF			KOJC	OLATHE	KS (US)
DP	ROYAL			KOJC	OLATHE	KS (US)
DP	WILDCAT			KOJC	OLATHE	KS (US)
DP	MEADOW LAKE			KMSP	MINNEAPOLIS	MN (US)
DP	MINNEAPOLIS			KMSP	MINNEAPOLIS	MN (US)
DP	CHIEF			KMCI	KANSAS CITY	MO (US)
DP	ROYAL			KMCI	KANSAS CITY	MO (US)
DP	WILDCAT			KMCI	KANSAS CITY	MO (US)
DP	CHIEF			KMKC	KANSAS CITY	MO (US)
DP	ROYAL			KMKC	KANSAS CITY	MO (US)
DP	WILDCAT			KMKC	KANSAS CITY	MO (US)
DP	CHIEF			KLXT	LEE'S SUMMIT	MO (US)
DP	ROYAL			KLXT	LEE'S SUMMIT	MO (US)
DP	WILDCAT			KLXT	LEE'S SUMMIT	MO (US)
DP	CHIEF			KGPH	MOSBY	MO (US)
DP	ROYAL			KGPH	MOSBY	MO (US)
DP	WILDCAT			KGPH	MOSBY	MO (US)
DP	CHIEF			KSTJ	ST JOSEPH	MO (US)
DP	ROYAL			KSTJ	ST JOSEPH	MO (US)
DP	WILDCAT			KSTJ	ST JOSEPH	MO (US)
EN ROUTE	J18					(US)
EN ROUTE	V159					(US)
EN ROUTE	V50					(US)
EN ROUTE	V77					(US)
IAP	VOR-A			KFLV	FORT LEAVENWORTH	KS (US)
IAP	ILS OR LOC RWY 19R		2	KMCI	KANSAS CITY	MO (US)
IAP	ILS OR LOC RWY 1L		2	KMCI	KANSAS CITY	MO (US)
IAP	ILS OR LOC RWY 27		2	KMCI	KANSAS CITY	MO (US)
IAP	ILS RWY 19R (CAT II-III) (ALT MA)		2	KMCI	KANSAS CITY	MO (US)
IAP	ILS RWY 19R (SA CAT I) (ALT MA)		2	KMCI	KANSAS CITY	MO (US)
IAP	RNAV (GPS) RWY 14			KEVU	MARYVILLE	MO (US)
IAP	RNAV (GPS) RWY 32			KEVU	MARYVILLE	MO (US)
IAP	ILS OR LOC RWY 35			KSTJ	ST JOSEPH	MO (US)
IAP	LOC BC RWY 17		1	KSTJ	ST JOSEPH	MO (US)
IAP	RADAR 1		2	KSTJ	ST JOSEPH	MO (US)
IAP	VOR OR TACAN RWY 17		1	KSTJ	ST JOSEPH	MO (US)
IAP	VOR OR TACAN RWY 35			KSTJ	ST JOSEPH	MO (US)
STAR	JSONN (RNAV)		3	KMCI	KANSAS CITY	MO (US)

QUALITY
8
CHECKED

STAR
STARMARWI
MARWIKOFF
KOMAOMAHA
OMAHANE (US)
NE (US)**REQUIRED CHARTING:** DP, STAR, MILITARY IAP, IAP, EN ROUTE LOW, EN ROUTE HIGH, CONTROLLER LOW, CONTROLLER HIGH**COMPULSORY REPORTING POINT:** NO**RECORD REVISION NUMBER:** 22**DATE OF REVISION:** 12/26/2024**REASON FOR REVISION:**

FIX USE: REMOVED DP DES MOINES AT KDSM.

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

AJV-A431

NAME: RICHARD CHRISTENSEN**APPROVED BY:****DATE:** 12/26/2024**OFFICE:** AJV-A431**NAME:** ERIC N SUSKI**SIGNATURE:***Digitally signed by***ERIC N SUSKI**

Sep 26, 2024



RADIO FIX AND HOLDING DATA RECORD

NAME: TOPEKA VORTAC STATE: KS COUNTRY: US ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 390813.48N/0953257.01W TYPE:

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	TOPEKA	TOP	VORTAC	VL						17500

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	NE	TOP	VORTAC	025.00	205.00	L	1	2800 6000	4 5

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (20-001186)	391204.27N/0953452.27W	1420	1A

REASON FOR NONSTANDARD HOLDING:

PAT 1 AT REQUEST

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.
ASSIGNED FACILITY MAG VAR E05/1990

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	RACER			KFLV	FORT LEAVENWORTH	KS (US)
DP	TIFTO			KFLV	FORT LEAVENWORTH	KS (US)
DP	RACER			KIXD	OLATHE	KS (US)
DP	TIFTO			KIXD	OLATHE	KS (US)
DP	RACER			KOJC	OLATHE	KS (US)
DP	TIFTO			KOJC	OLATHE	KS (US)
DP	RACER			KMCI	KANSAS CITY	MO (US)
DP	TIFTO			KMCI	KANSAS CITY	MO (US)
DP	RACER			KMKC	KANSAS CITY	MO (US)
DP	TIFTO			KMKC	KANSAS CITY	MO (US)
DP	RACER			KLXT	LEE'S SUMMIT	MO (US)
DP	TIFTO			KLXT	LEE'S SUMMIT	MO (US)
DP	RACER			KGPH	MOSBY	MO (US)
DP	TIFTO			KGPH	MOSBY	MO (US)
DP	RACER			KSTJ	ST JOSEPH	MO (US)
DP	TIFTO			KSTJ	ST JOSEPH	MO (US)
EN ROUTE	T411					(US)
EN ROUTE	V280					(US)
EN ROUTE	V4					(US)
EN ROUTE	V508					(US)
EN ROUTE	V71					(US)
EN ROUTE	V77					(US)
IAP	ILS OR LOC RWY 33			KLWC	LAWRENCE	KS (US)
IAP	VOR/DME-A			KLWC	LAWRENCE	KS (US)
IAP	ILS OR LOC RWY 3			KMHK	MANHATTAN	KS (US)
IAP	VOR RWY 3			KMHK	MANHATTAN	KS (US)
IAP	VOR-F			KMHK	MANHATTAN	KS (US)
IAP	ILS OR LOC RWY 36			KIXD	OLATHE	KS (US)
IAP	ILS OR LOC RWY 31			KFOE	TOPEKA	KS (US)
IAP	TACAN RWY 13			KFOE	TOPEKA	KS (US)
IAP	TACAN RWY 31			KFOE	TOPEKA	KS (US)
IAP	VOR/DME OR TACAN RWY 21		1	KFOE	TOPEKA	KS (US)
IAP	VOR/DME OR TACAN RWY 3			KFOE	TOPEKA	KS (US)
IAP	ILS OR LOC RWY 13		1	KTOP	TOPEKA	KS (US)
IAP	LOC BC RWY 31		1	KTOP	TOPEKA	KS (US)
IAP	RNAV (GPS) RWY 31			KTOP	TOPEKA	KS (US)
IAP	ILS OR LOC RWY 19R			KMCI	KANSAS CITY	MO (US)
IAP	ILS OR LOC RWY 27			KMCI	KANSAS CITY	MO (US)
IAP	ILS RWY 19R (CAT II - III)			KMCI	KANSAS CITY	MO (US)
IAP	ILS RWY 19R (SA CAT I)			KMCI	KANSAS CITY	MO (US)
IAP	ILS OR LOC RWY 19		1	KMKC	KANSAS CITY	MO (US)
IAP	ILS OR LOC RWY 4			KMKC	KANSAS CITY	MO (US)
STAR	JHAWK			KFLV	FORT LEAVENWORTH	KS (US)
STAR	JHAWK			KIXD	OLATHE	KS (US)
STAR	JHAWK			KOJC	OLATHE	KS (US)
STAR	JHAWK			KMCI	KANSAS CITY	MO (US)
STAR	JHAWK			KMKC	KANSAS CITY	MO (US)

QUALITY
8
CHECKED

STAR	JHAWK	KLXT	LEE'S SUMMIT	MO (US)
STAR	JHAWK	KGPH	MOSBY	MO (US)
STAR	JHAWK	KSTJ	ST JOSEPH	MO (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 24

DATE OF REVISION: 12/26/2024

REASON FOR REVISION:

1. REMOVED AIRSPACE DOCKET: 23-ACE-4.
2. FIX USE: REMOVED DP DES MOINES AT KDSM.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: RICHARD CHRISTENSEN

APPROVED BY:

DATE: 12/26/2024

OFFICE: AJV-A431

NAME: ERIC N SUSKI

SIGNATURE:

Digitally signed by

ERIC N SUSKI

Sep 26, 2024

QUALITY
8
CHECKED