

# RADIO FIX AND HOLDING DATA RECORD

NAME: BUTLER VORTAC STATE: MO COUNTRY: US ICAO REGION CODE: K3  
 LATITUDE/LONGITUDE: 381619.49N/0942917.74W TYPE:  
 AIRSPACE DOCKET: 21-ACE-1 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	BUTLER	BUM	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 TIME	LENGTH DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	E	BUM	VORTAC	110.00	290.00	R	1		2500	6000	4	5

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (29-001547)	381323.03N/0941820.05W	1352	1A

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN(S)

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
 ASSIGNED FACILITY MAGVAR: E7 1965.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	RACER			KFLV	FORT LEAVENWORTH	KS (US)
DP	RACER			KIXD	OLATHE	KS (US)
DP	RACER			KOJC	OLATHE	KS (US)
DP	RACER			KMCI	KANSAS CITY	MO (US)
DP	RACER			KMKC	KANSAS CITY	MO (US)
DP	RACER			KLXT	LEE'S SUMMIT	MO (US)
DP	RACER			KGPH	MOSBY	MO (US)
DP	RACER			KSTJ	ST JOSEPH	MO (US)
EN ROUTE	J110					(US)
EN ROUTE	J112					(US)
EN ROUTE	J134					(US)
EN ROUTE	J19					(US)
EN ROUTE	J87					(US)
EN ROUTE	Q176					(US)
EN ROUTE	T411					(US)
EN ROUTE	V13					(US)
EN ROUTE	V161					(US)
EN ROUTE	V234					(US)
EN ROUTE	V71					(US)
IAP	ILS OR LOC RWY 36			KIXD	OLATHE	KS (US)
IAP	LOC RWY 36			KOJC	OLATHE	KS (US)
IAP	RNAV (GPS) RWY 18			KBUM	BUTLER	MO (US)
IAP	RNAV (GPS) RWY 36			KBUM	BUTLER	MO (US)
IAP	VOR-A		1	KBUM	BUTLER	MO (US)
IAP	ILS OR LOC RWY 1L			KMCI	KANSAS CITY	MO (US)
IAP	ILS OR LOC RWY 1R			KMCI	KANSAS CITY	MO (US)
IAP	ILS RWY 1R (CAT II & III)			KMCI	KANSAS CITY	MO (US)
IAP	ILS RWY 1R (SA CAT I)			KMCI	KANSAS CITY	MO (US)
IAP	RNAV (GPS) Y RWY 1L			KMCI	KANSAS CITY	MO (US)
IAP	RNAV (GPS) Y RWY 1R			KMCI	KANSAS CITY	MO (US)
IAP	VOR-A			KNVD	NEVADA	MO (US)
STAR	TYGER			KFLV	FORT LEAVENWORTH	KS (US)
STAR	TYGER			KIXD	OLATHE	KS (US)
STAR	TYGER			KOJC	OLATHE	KS (US)
STAR	TYGER			KMCI	KANSAS CITY	MO (US)
STAR	TYGER			KMKC	KANSAS CITY	MO (US)
STAR	TYGER			KSTJ	ST JOSEPH	MO (US)
STAR	KAYLA (RNAV)			KSTL	ST LOUIS	MO (US)
STAR	KOOOP			KSTL	ST LOUIS	MO (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 23

DATE OF REVISION: 01/27/2022

REASON FOR REVISION:

QUALITY  
2  
CHECKED

1. UPDATED AIRSPACE DOCKET FROM 20-AEA-18 TO 21-ACE-1.
2. FIX USE: ADDED EN ROUTE T411 AND J134.
3. FIX USE: UPDATED KIXD IAP FROM ILS OR LOC/DME RWY 36 TO ILS OR LOC RWY 36.
4. FIX USE: UPDATED KNVD IAP FROM VOR/DME-A TO VOR-A.

<b>INITIATED BY:</b>	<b>DATE:</b>	<b>ORGANIZATION:</b>	<b>NAME:</b>
<b>OFFICE OF PRIMARY RESPONSIBILITY:</b>		AJV-A411	<b>NAME:</b> MARK CIARLONE
<b>APPROVED BY:</b>	<b>DATE:</b> 01/27/2022	<b>OFFICE:</b> AJV-A410	<b>NAME:</b> JULIE MORGAN
	<b>SIGNATURE:</b>	<i>Digitally signed by</i> <b>CASIMIR L TABAKA</b> Nov 24, 2021	

QUALITY  
2  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: DROOP

STATE: MO

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 370609.12N/0942642.39W

TYPE: WP

AIRSPACE DOCKET: 21-ACE-1

FIX TYPE OF ACTION: MODIFY

**FIX USE:**

USE TYPE

USE TITLE

FAC

PAT

AIRPORT IDENT

CITY

STATE

EN ROUTE

T312

(US)

EN ROUTE

T411

(US)

EN ROUTE

T413

(US)

REQUIRED CHARTING: EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 7

DATE OF REVISION: 01/27/2022

**REASON FOR REVISION:**

1. AIRSPACE DOCKET: ADDED 21-ACE-1.
2. FIX USE: DELETED EN ROUTE V13; ADDED ENROUTE T411.

08/12/21: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 07/12/21.

1. FIX USE: ADDED EN ROUTE T413.

11/09/21: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 07/12/21.

1. DELETED AIRSPACE DOCKET 20-ACE-26
2. TYPE: DELETED INT AND DME - FAC 1 EOS VOR DECOMMS 1/27/22.
3. FIX MAKE-UP FACILITIES: DELETED FAC 1 (EOS) AND FAC 2 (I-JLN).
4. REMARKS: DELETED FIX COORDINATE DETERMINATION REMARK.
5. DELETED KJLN IAP LOC BC RWY 31.
6. REQUIRED CHARTING: DELETED IAP.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A411

NAME: MARK CIARLONE

APPROVED BY:

DATE: 01/27/2022

OFFICE: AJV-A410

NAME: JULIE MORGAN

SIGNATURE:

*Digitally signed by*  
**CASIMIR L TABAKA**

Nov 24, 2021

QUALITY  
2  
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: 21-ACE-1 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	H							45000

## 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 ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	N	LNK	VORTAC	355.00	175.00	R	1		3000	6000	4	12

## CONTROLLING OBSTRUCTIONS:

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

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN(S)

## PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	ILS Y OR LOC Y RWY 18	KLNK	LINCOLN	NE (US)
1	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	DES MOINES			KDSM	DES MOINES	IA (US)
DP	CATTL			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)
EN ROUTE	V79					(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	VOR RWY 14			KFET	FREMONT	NE (US)
IAP	HI-ILS OR LOC/DME RWY 36			KLNK	LINCOLN	NE (US)
IAP	HI-ILS Z OR LOC Z RWY 18			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		1	KLNK	LINCOLN	NE (US)
IAP	ILS Y OR LOC Y RWY 36		1	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	PAWNEE CITY			KOFF	OMAHA	NE (US)
STAR	HOWRY			KOMA	OMAHA	NE (US)
STAR	PAWNEE CITY			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: 20

DATE OF REVISION: 03/24/2022

REASON FOR REVISION:



1. AIRSPACE DOCKET: ADDED 21-ACE-1.
2. FIX USE: DELETED FAC 1 FROM KOMA IAP ILS OR LOC RWY 36.
3. FIX USE: ADDED EN ROUTE T411.
4. FIX USE: DELETED 93Y IAP VOR/DME RWY 32.
5. FIX USE: UPDATED KFET IAP FROM VOR/DME RWY 14 TO VOR RWY 14.
6. REQUIRED CHARTING: ADDED CONTROLLER LOW AND CONTROLLER HIGH.

11/09/21: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 07/12/21.

1. FIX USE: ADDED KLNK IAPS ILS Y OR LOC Y RWY 18, ILS Y OR LOC Y RWY 36, VOR Y RWY 17, AND HI-ILS OR LOC/DME RWY 36.
2. FIX USE: DELETED KLNK IAP HI-ILS Z OR LOC-Z RWY 36.

11/18/21: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 07/12/21.

1. UPDATED MAX HOLDING TEMPLATE FROM 5 TO 12.
2. ADDED PROCEDURES REQUIRING CLIMB-IN-HOLD.
3. HOLDING PAT 1 RAD/CRS/BRG AND CRS INBOUND CHANGED FROM 005.00/185.00 TO 355.00/175.00.
4. FIX USE: ADDED PAT 1 TO KLNK IAPS ILS Y OR LOC Y RWY 36, AND VOR Y RWY 18.
5. ADDED CIH 310 KIAS OBSTRUCTION DATA.

<b>INITIATED BY:</b>	<b>DATE:</b>	<b>ORGANIZATION:</b>	<b>NAME:</b>
<b>OFFICE OF PRIMARY RESPONSIBILITY:</b>		AJV-A411	<b>NAME:</b> MARK CIARLONE
<b>APPROVED BY:</b>	<b>DATE:</b> 01/27/2022	<b>OFFICE:</b> AJV-A410	<b>NAME:</b> JULIE MORGAN

**SIGNATURE:**

*Digitally signed by*  
**CASIMIR L TABAKA**  
Nov 24, 2021

QUALITY  
2  
CHECKED

# 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:** 21-ACE-1      **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	L						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	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)	391204.00N/0953452.00W	1429	4D

**REASON FOR NONSTANDARD HOLDING:**

PAT 1 AT REQUEST

**REMARKS:**

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

**FIX USE:**

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	DES MOINES			KDSM	DES MOINES	IA (US)
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	V131					(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 OR LOC RWY 9			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	RNAV (GPS) Y RWY 9			KMCI	KANSAS CITY	MO (US)
IAP	ILS OR LOC RWY 19 (ALT MA)			KMKC	KANSAS CITY	MO (US)
IAP	ILS OR LOC RWY 3			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  
 2  
 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:** 19

**DATE OF REVISION:** 01/27/2022

**REASON FOR REVISION:**

1. AIRSPACE DOCKET: ADDED 21-ACE-1.
2. CONTROLLING OBSTRUCTIONS: DELETED UNPLANNED HOLDING OBSTRUCTION - CRITERIA REMOVED PER 8260.19I.
3. HOLDING RESTRICTIONS: DELETED UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3600 - CRITERIA REMOVED PER 8260.19I.
3. FIX USE: UPDATED KMHK IAP FROM ILS OR LOC/DME RWY 3 TO ILS OR LOC RWY 3.
4. FIX USE: UPDATED KMHK IAP FROM VOR/DME-F TO VOR-F.
5. FIX USE: UPDATED KIXD IAP FROM ILS OR LOC/DME RWY 36 TO ILS OR LOC RWY 36.
6. FIX USE: ADDED EN ROUTE T411.

<b>INITIATED BY:</b>	<b>DATE:</b>	<b>ORGANIZATION:</b>	<b>NAME:</b>
<b>OFFICE OF PRIMARY RESPONSIBILITY:</b>		AJV-A411	<b>NAME:</b> MARK CIARLONE
<b>APPROVED BY:</b>	<b>DATE:</b> 01/27/2022	<b>OFFICE:</b> AJV-A410	<b>NAME:</b> JULIE MORGAN
<b>SIGNATURE:</b>		<i>Digitally signed by</i> <b>CASIMIR L TABAKA</b> Nov 24, 2021	

