

# RADIO FIX AND HOLDING DATA RECORD

NAME: OSAYI

STATE: KY

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 364916.66N/0863608.57W

TYPE: DME

AIRSPACE DOCKET: 16-ASO-12

FIX TYPE OF ACTION: NO CHANGE

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	BOWLING GREEN	BWG	VORTAC	H	227.97	229.97	10.00	10.00		2600	17500

## HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	VOR -A	1		KBWG	BOWLING GREEN	KY (US)

REQUIRED CHARTING: IAP, CONTROLLER

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 08/17/2017

## REASON FOR REVISION:

ADDED DOCKET NUMBER.  
DELETED V94 FROM FIX USE. AIRWAY CANCELLED PER DOCKET AND JACKS CREEK (JKS) VOR/DME DECOMMISSIONING.  
DELETED EN ROUTE LOW FROM REQUIRED CHARTING.

DEVELOPED BY:      DATE: 05/18/2017      OFFICE: AJV-5413      NAME: VICTOR NASO (KELLIE BARNES)

APPROVED BY:      DATE:      OFFICE: AJV-5410      NAME: GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:      NFDC  
FPO: EST  
ARTCC: ZME  
ATC FACILITY:  
OTHER:

QUALITY  
13  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** OZSOM **STATE:** TN **COUNTRY:** US **ICAO REGION CODE:** K7  
**LATITUDE/LONGITUDE:** 352444.36N/0895733.14W **TYPE:** WP, INT, DME  
**AIRSPACE DOCKET:** 16-ASO-12 **FIX TYPE OF ACTION:** NO CHANGE

**FIX MAKE-UP FACILITIES:**

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	MRA	MAA
1	GILMORE	GQE	VOR/DME	L	077.12	081.12	25.76	25.76	3000	17500
2	MEMPHIS	MEM	VORTAC	H	001.83	002.83	23.82	23.82	3000	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	S	MEM	VORTAC	001.83	001.83	R	1		3000	14000	5	14
2	W		WP	261.00	081.00	R		4	3000	6000	5	6

**CONTROLLING OBSTRUCTIONS:**

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (47-000710)	352838.41N/0895657.58W	802	2C
2	200	TOWER (47-001165)	352054.31N/0895916.32W	685	5D
2	310	TOWER (05-000947)	352802.00N/0901127.00W	1486	5D

**HOLDING RESTRICTIONS:**  
HOLDING LIMITED TO ESTABLISHED PATTERNS.

**PROCEDURES REQUIRING CLIMB-IN-HOLD:**

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
2	RNAV (GPS) RWY 36	K2M8	MILLINGTON	TN (US)

**REMARKS:**  
PRECIPITOUS TERRAIN EVALUATION COMPLETE.

**FIX USE:**

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 36		2	K2M8	MILLINGTON	TN (US)
IAP	ILS OR LOC RWY 22	1, 2	1	KNQA	MILLINGTON	TN (US)

**REQUIRED CHARTING:** IAP, CONTROLLER

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 6 **DATE OF REVISION:** 08/17/2017

**REASON FOR REVISION:**

ADDED AIRSPACE DOCKET NUMBER.  
DELETED V124 FROM FIX USE AND EN ROUTE LOW CHARTING. AIRWAY BEING CANCELLED PER DOCKET AND JACKS CREEK (JKS) VOR DECOMMISSIONING.

**DEVELOPED BY:** **DATE:** 05/19/2017 **OFFICE:** AJV-5413 **NAME:** VICTOR NASO (KELLIE BARNES)

**APPROVED BY:** **DATE:** **OFFICE:** AJV-5410 **NAME:** GEORGE DAVIS

**SIGNATURE:**

**DISTRIBUTION:** NFDC  
FPO: EST  
ARTCC: ZME  
ATC FACILITY: MEM APP CON  
OTHER:

QUALITY  
13  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: PLUGS

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 452727.37N/0933222.65W

TYPE: INT, DME

AIRSPACE DOCKET: 16-AGL-21

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	H	333.42	339.42	20.00	20.00	3000	17500
2	ST CLOUD	STC	VOR/DME	T	100.92	103.92	22.58	22.58	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	NW	GEP	VORTAC	333.00	153.00	R	1-1 1/2		4000	17500	5	17
2	W	STC	VOR/DME	280.92	100.92	R	1	4	4000	13000	5	11

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	TOWER (24-0857)	452259.60N/0934230.90W	2454	1A
1	200	TOWER (24-0102)	452500.00N/0933244.00W	1371	4D
2	200	TOWER (24-0857)	452259.60N/0934230.90W	2454	1A

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 31			KSTC	ST CLOUD	MN (US)

REQUIRED CHARTING: IAP, AREA, CONTROLLER

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 7

DATE OF REVISION: 08/17/2017

## REASON FOR REVISION:

ADDED DOCKET NUMBER.  
REMOVED V82 AND V161 FROM FIX USE. AIRWAY CANCELLED DUE TO DOCKET AND BRAINERD (BRD) VOR DECOMMISSIONING.  
ADDED DIST FROM FAC NM TO FAC 1 AND FAC 2.  
UPDATE FIX USE.  
REMOVED CONVERGING ILS RWY 30L/ILS PRM RWY 30L/ILS RWY 30L/ILS OR LOC RWY 30L (KMSP) FROM FIX USE.  
ADDED HOLDING LIMITED TO ESTABLISHED PATTERNS TO HOLDING RESTRICTIONS.  
CHANGED FAC 2 MINIMUM HOLDING ALTITUDE FROM 14000 TO 13000, DUE TO SERVICE VOLUME LIMITATIONS.  
ADDED PRECIPITOUS TERRAIN EVALUATION COMPLETED TO REMARKS..

DEVELOPED BY: DATE: 05/18/2017 OFFICE: AJV-5410 NAME: VICTOR NASO (THERON CYRUS)

APPROVED BY: DATE: OFFICE: AJV-5410 NAME: GEORGE DAVIS

SIGNATURE:

DISTRIBUTION: NFDC  
FPO: CHI  
ARTCC: ZMP  
ATC FACILITY: MSP APP CON  
OTHER:

QUALITY  
13  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: ROGOE

STATE: TN

COUNTRY: US

ICAO REGION CODE: K7

LATITUDE/LONGITUDE: 362434.11N/0871216.79W

TYPE: WP, INT, DME

AIRSPACE DOCKET: 16-GL-21

FIX TYPE OF ACTION: CANCEL

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	BOWLING GREEN	BWG	VORTAC	H	227.97	229.97	48.15	48.15		4000	17500
2	NASHVILLE	BNA	VORTAC	H	305.07	303.07		30.05		4000	17500

## EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
BWG	VORTAC	R-228	49	3000	17500

## HOLDING:

HOLDING TYPE OF ACTION: CANCEL

## 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		WP	309.88	129.88	R		4	4000	6000	5	6

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (47-001717)	362601.00N/0872044.00W	1099	5E

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V94	1, 2				(US)
IAP	RNAV (GPS) RWY 17		1	KCKV	CLARKSVILLE	TN (US)
IAP	RNAV (GPS) RWY 35			KCKV	CLARKSVILLE	TN (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 06/03/2010

## REASON FOR REVISION:

ADDED WP TO FIX TYPE.  
ADDED DIST FROM FAC VALUE TO FAC 1 AND FAC 2.  
RAISED MRA FOR FAC 1 AND FAC 2 FROM 3000 TO 4000.  
ADDED HOLDING PATTERN 1.  
UPDATED FIX USE AND REMARKS.

DEVELOPED BY:

DATE: 01/04/2010

OFFICE: AVN-110

NAME: KELLY DEAN

APPROVED BY:

DATE:

OFFICE: AJV-5410

NAME: GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:

NFDC  
FPO: EST  
ARTCC: ZME  
ATC FACILITY: BNA APP CON  
OTHER: CAMPBELL APP CON

QUALITY  
13  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: SAUGR

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 452054.45N/0932852.21W

TYPE: WP, DME

AIRSPACE DOCKET: 16-AGL-21

FIX TYPE OF ACTION: MODIFY

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	GOPHER	GEP	VORTAC	H	333.42	339.42	13.00	13.00		3000	17500

## HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	BAINY (RNAV)			KMSP	MINNEAPOLIS	MN (US)
STAR	GOPHER	1		KMSP	MINNEAPOLIS	MN (US)

REQUIRED CHARTING: STAR, CONTROLLER

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3

DATE OF REVISION: 08/17/2017

## REASON FOR REVISION:

ADDED AIRSPACE DOCKET NUMBER.

UPDATED FIX USE.

DELETED V82-161 FROM FIX USE. AIRWAY BEING CANCELLED PER DOCKET AND BRAINERD (BRD) VOR DECOMMISSIONING.

DELETED EN ROUTE LOW FROM REQUIRED CHARTING.

DEVELOPED BY: DATE: 05/18/2017

OFFICE: AJV-5410

NAME: VICTOR NASO (THERON CYRUS)

APPROVED BY: DATE:

OFFICE: AJV-5410

NAME: GEORGE DAVIS

SIGNATURE:

## DISTRIBUTION:

NFDC  
FPO: CEN  
ARTCC: ZMP  
ATC FACILITY: MSP APP CON  
OTHER:

QUALITY  
13  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: SQEAK

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 475210.97N/0932650.55W

TYPE: WP, INT, DME

AIRSPACE DOCKET: 16-AGL-21

FIX TYPE OF ACTION: MODIFY

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	MRA FEET	MAA
1	INTERNATIONAL FALLS	INL	VORTAC	L	176.31	182.31	41.83		5000	17500
2	BIGFORK	FOZ	NDB	MH	056.14	058.14			5000	17500

## EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
INL	VORTAC	R-176	47	5000	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	S		WP	176.31	356.31	R		5	5000	14000	5	11

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	TOWER (27-002716)	474820.00N/0932438.00W	1801	4D

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V217	1, 2				(US)
EN ROUTE	V218	1, 2				(US)
EN ROUTE	V505	1, 2				(US)
IAP	NDB RWY 15			KFOZ	BIGFORK	MN (US)
IAP	RNAV (GPS) RWY 16			KGPZ	GRAND RAPIDS	MN (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5

DATE OF REVISION: 08/17/2017

## REASON FOR REVISION:

ADDED AIRSPACE DOCKET NUMBER.

UPDATED FIX USE

REMOVED V161 FROM FIX USE. AIRWAY REPLACED WITH V218 PER AIRSPACE DOCKET AND DECOMMISSIONING OF BRAINERD (BRD) VOR.

ADDED V218 TO FIX USE. REPLACED V161 PER AIRSPACE DOCKET AND DECOMMISSIONING OF BRAINERD (BRD) VOR.

MOVED HOLDING LIMITED TO ESTABLISHED PATTERN FROM REMARK TO HOLDING RESTRICTIONS.

ADDED PRECIPITOUS TERRAIN EVALUATION COMPLETED TO REMARKS.

REMOVED FAC 3 (KFOZ) FROM FIX MAKE-UP FACILITIES.

DEVELOPED BY:

DATE: 05/18/2017

OFFICE: AJV-5410

NAME: VICTOR NASO (THERON CYRUS)

APPROVED BY:

DATE:

OFFICE: AJV-5410

NAME: GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:

NFDC  
FPO: CEN  
ARTCC: ZMP  
ATC FACILITY:  
OTHER:

QUALITY  
13  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: SULLY

STATE: MS

COUNTRY: US

ICAO REGION CODE: K7

LATITUDE/LONGITUDE: 344536.84N/0890543.24W

TYPE: DME

AIRSPACE DOCKET: 16-ASO-12

FIX TYPE OF ACTION: MODIFY

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	HOLLY SPRINGS	HLI	VORTAC	L	088.62	091.62	19.84			2000	17500

## HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V54	1				(US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 08/17/2017

## REASON FOR REVISION:

ADDED AIRSPACE DOCKET NUMBER.

UPDATE FIX USE.

REMOVED INT FROM FIX TYPE.

REMOVED FAC 2 JACKS CREEK (JKS) FROM FIX MAKE-UP FACILITIES, JKS VOR DECOMMISSIONED.

REMOVED NDB RWY 17/NDB RWY 35 (KCRX) FROM FIX USE.

DEVELOPED BY: DATE: 05/18/2017

OFFICE: AJV-5410

NAME: VICTOR NASO (THERON CYRUS)

APPROVED BY: DATE:

OFFICE: AJV-5410

NAME: GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:

NFDC  
FPO: CEN  
ARTCC: ZME  
ATC FACILITY:  
OTHER:

QUALITY  
13  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: TEACH

STATE: TN

COUNTRY: US

ICAO REGION CODE: K7

LATITUDE/LONGITUDE: 362636.84N/0870918.71W

TYPE: WP, INT, DME

AIRSPACE DOCKET: 16-ASO-12

FIX TYPE OF ACTION: MODIFY

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	FAC FEET	MRA	MAA
1	BOWLING GREEN	BWG	VORTAC	H	227.97	229.97	45.00	45.00		10000	17500
2	NASHVILLE	BNA	VORTAC	H	310.98	308.98		29.29		10000	17500

## EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
BWG	VORTAC	R-228	45	10000	17500

## HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## REMARKS:

BOWLING GREEN (FAC 1) AND NASHVILLE (FAC 2) USED TO ESTABLISH FIX COORDINATES

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 13			KBNA	NASHVILLE	TN (US)

REQUIRED CHARTING: IAP, CONTROLLER

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 11

DATE OF REVISION: 08/17/2017

## REASON FOR REVISION:

ADDED AIRSPACE DOCKET NUMBER.  
DELETED FAC 3 (JARAS) IN FIX MAKE-UP.  
ADDED DIST FROM FAC IN FIX MAKE-UP.  
INCREASED MRA IN FIX MAKE-UP FOR FAC 1 (BWG) & FAC 2 (BNA) FROM 3000 TO 10000 DUE TO BWG VORTAC RESTRICTION.  
UPDATED FORMAT IN ESV AND INCREASED ESV MIN ALTITUDE FROM 3000 TO 10000.  
ADDED IN REMARKS: BOWLING GREEN (FAC 1) AND NASHVILLE (FAC 2) USED TO ESTABLISH FIX COORDINATES.  
DELETED IN REMARKS: ESVS; ON FILE FOR FACILITY 1 30/175.  
DELETED V94 FROM FIX USE. AIRWAY DELETED PER AIRSPACE DOCKET AND JACKS CREEK (JKS) VOR DECOMMISSIONING.  
DELETED EN ROUTE LOW CHARTING.

DEVELOPED BY:

DATE: 05/22/2017

OFFICE: AJV-5413

NAME: VICTOR NASO (KELLIE BARNES)

APPROVED BY:

DATE:

OFFICE: AJV-5410

NAME: GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:

NFDC  
FPO: EST  
ARTCC: ZME  
ATC FACILITY: BNA ATCT  
OTHER:

QUALITY  
13  
CHECKED



# RADIO FIX AND HOLDING DATA RECORD

NAME: TUNGY

STATE: TN

COUNTRY: US

ICAO REGION CODE: K7

LATITUDE/LONGITUDE: 354341.50N/0870312.21W

TYPE: WP, DME

AIRSPACE DOCKET: 16-ASO-13

FIX TYPE OF ACTION: NO CHANGE

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	SHELBYVILLE	SYI	VOR/DME	L	289.52	288.52	31.64	31.64		4000	17500

## HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) Y RWY 2C			KBNA	NASHVILLE	TN (US)
IAP	RNAV (GPS) Y RWY 2L			KBNA	NASHVILLE	TN (US)
IAP	RNAV (GPS) Y RWY 2R			KBNA	NASHVILLE	TN (US)

REQUIRED CHARTING: IAP, CONTROLLER

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3

DATE OF REVISION: 08/17/2017

## REASON FOR REVISION:

ADDED AIRSPACE DOCKET NUMBER.  
DELETED V67 FROM FIX USE AND EN ROUTE LOW CHARTING. AIRWAY CANCELLED PER AIRSPACE DOCKET AND GRAHAM (GHM) VOR DECOMMISSIONING

DEVELOPED BY: DATE: 05/19/2017

OFFICE: AJV-5413

NAME: VICTOR NASO (KELLIE BARNES)

APPROVED BY: DATE:

OFFICE: AJV-5410

NAME: GEORGE DAVIS

SIGNATURE:

## DISTRIBUTION:

NFDC  
FPO: EST  
ARTCC: ZME  
ATC FACILITY: BNA APP CON  
OTHER:

QUALITY  
13  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: WANRI

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 481958.15N/0932511.18W

TYPE: DME

AIRSPACE DOCKET: 16-AGL-21

FIX TYPE OF ACTION: NO CHANGE

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	INTERNATIONAL FALLS	INL	VOR/DME	L	176.31	182.31	14.00	14.00		3000	17500

## HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V218	1				(US)
EN ROUTE	V505	1				(US)
IAP	ILS OR LOC/DME RWY 31	1		KINL	INTERNATIONAL FALLS	MN (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 08/17/2017

## REASON FOR REVISION:

ADDED AIRSPACE DOCKET NUMBER.

UPDATE FIX USE.

REMOVED V161 FROM FIX USE. AIRWAY SEGMENT CANCELLED PER AIRSPACE DOCKET.

ADDED V218 TO FIX USE, AIRWAY EXTENDED TO REPLACE V161 PER AIRSPACE DOCKET DUE TO BRAINERD VOR DECOMMISSIONING.

DEVELOPED BY:

DATE: 05/18/2017

OFFICE: AJV-5410

NAME: VICTOR NASO (THERON CYRUS)

APPROVED BY:

DATE:

OFFICE: AJV-5410

NAME: GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:

NFDC  
FPO: CEN  
ARTCC: ZMP  
ATC FACILITY:  
OTHER:

QUALITY  
11  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: WASMO

STATE: KY

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 370500.60N/0871802.19W

TYPE: WP, DME

AIRSPACE DOCKET: 16-ASO-13

FIX TYPE OF ACTION: NO CHANGE

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	CENTRAL CITY	CCT	VORTAC	L	186.65	185.65	18.00	18.00		3000	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	N		WP	006.65	186.65	R	4	3000 6000	5 6

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	370212.00N/0872327.00W	1014	4E

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 08		1	KHVC	HOPKINSVILLE	KY (US)
IAP	RNAV (GPS) RWY 26		1	KHVC	HOPKINSVILLE	KY (US)

REQUIRED CHARTING: IAP, CONTROLLER

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 08/17/2017

## REASON FOR REVISION:

ADDED AIRSPACE DOCKET NUMBER.  
DELETED V7 FROM FIX USE AND ENROUTE CHARTING. AIRWAY BEING CANCELLED PER DOCKET AND GRAHAM (GHM) VOR DECOMMISSIONING.

DEVELOPED BY: DATE: 05/18/2017 OFFICE: AJV-5413 NAME: VICTOR NASO (KELLIE BARNES)

APPROVED BY: DATE: OFFICE: AJV-5410 NAME: GEORGE DAVIS

SIGNATURE:

DISTRIBUTION: NFDC  
FPO: EST  
ARTCC: ZME  
ATC FACILITY: HOP APP CON  
OTHER:

QUALITY  
13  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: WENIB

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 460403.75N/0930806.17W

TYPE: WP, DME

AIRSPACE DOCKET: 16-AGL-21

FIX TYPE OF ACTION: NO CHANGE

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	SIREN	RZN	VOR/DME	L	293.26	295.26	35.13	35.13		6000	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	NW		WP	296.07	116.07	R		4	3000	14000	5	11

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (27-000155)	460658.00N/0931719.00W	1570	2D

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 35			KCOQ	CLOQUET	MN (US)
IAP	RNAV (GPS) RWY 34		1	KROS	RUSH CITY	MN (US)

REQUIRED CHARTING: IAP, CONTROLLER

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 08/17/2017

## REASON FOR REVISION:

ADDED AIRSPACE DOCKET NUMBER.  
REMOVED EN ROUTE LOW FROM REQUIRED CHARTING.  
UPDATE FIX USE.  
REMOVED V55 FROM FIX USE. AIRWAY CANCELLED PER AIRSPACE DOCKET AND BRAINERD (BRD) VOR DECOMMISSIONING.

DEVELOPED BY: DATE: 05/18/2017 OFFICE: AJV-5410 NAME: VICTOR NASO (THERON CYRUS)

APPROVED BY: DATE: OFFICE: AJV-5410 NAME: GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:

NFDC  
FPO: CEN  
ARTCC: ZMP  
ATC FACILITY:  
OTHER:

QUALITY  
13  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: WIMJY

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 472331.66N/0932831.27W

TYPE: WP, DME

AIRSPACE DOCKET: 16-AGL-21

FIX TYPE OF ACTION: NO CHANGE

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	GRAND RAPIDS	GPZ	VOR/DME	L	356.25	002.25	13.73	13.73		5000	17500

## HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V218	1		KFOZ	BIGFORK	(US)
IAP	RNAV (GPS) RWY 33					MN (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 08/17/2017

## REASON FOR REVISION:

ADDED AIRSPACE DOCKET NUMBER.

UPDATE FIX USE.

REMOVED V161 FROM FIX USE. AIRWAY CANCELLED PER DOCKET AND DECOMMISSIONING OF BRAINERD (BRD) VOR.

ADDED V218 TO FIX USE. AIRWAY EXTENDED PER DOCKET AND DECOMMISSIONING OF BRAINERD (BRD) VOR.

DEVELOPED BY: DATE: 05/18/2017

OFFICE: AJV-5410

NAME: VICTOR NASO (THERON CYRUS)

APPROVED BY: DATE:

OFFICE: AJV-5410

NAME: GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:

NFDC  
FPO: CEN  
ARTCC: ZMP  
ATC FACILITY:  
OTHER:

QUALITY  
13  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: WITEN

STATE: WI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 444748.53N/0892027.96W

TYPE: WP, INT, DME

AIRSPACE DOCKET: 16-AGL-23

FIX TYPE OF ACTION: CANCEL

## FIX MAKE-UP FACILITIES: FAC NAME

		IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	GREEN BAY	GRB	VORTAC	H	285.86	286.86	51.17	51.17		8000	17500
2	STEVENS POINT	STE	VORTAC	L	029.00	028.00		17.24		3000	17500

## EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
GRB	VORTAC	R-286	55	8000	17500

## HOLDING:

HOLDING TYPE OF ACTION: CANCEL

## 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	SE		WP	122.18	302.18	R		4	3000	6000	5	6
2	E	GRB	VORTAC	286.86	286.86	R	1		6000	14000	9	12

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (55-001440)	445249.00N/0891919.00W	1596	5D
2	230	TOWER (55-001175)	445408.87N/0891708.21W	1662	1A

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V26	1, 2				WI (US)
IAP	VOR RWY 21			KSTE	STEVENS POINT	WI (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 11

DATE OF REVISION: 07/21/2016

## REASON FOR REVISION:

CHANGED FAC 1 MRA FROM 7000 TO 8000.  
CHANGED GRB VTAC ESV DISTANCE FROM 52 TO 55, AND MIN ALTITUDE FROM 7000 TO 8000.

DEVELOPED BY: DATE: 11/04/2015 OFFICE: AJV-5421 NAME: ADRIAN BLAND

APPROVED BY: DATE: OFFICE: AJV-5410 NAME: GEORGE DAVIS

SIGNATURE:

## DISTRIBUTION:

NFDC  
FPO: CEN  
ARTCC: ZMP  
ATC FACILITY:  
OTHER:

QUALITY  
13  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** WREST **STATE:** WI **COUNTRY:** US **ICAO REGION CODE:** K5

**LATITUDE/LONGITUDE:** 433100.70N/0892322.10W **TYPE:** WP, INT, DME

**AIRSPACE DOCKET:** 16-AGL-23 **FIX TYPE OF ACTION:** NO CHANGE

**FIX MAKE-UP FACILITIES:**

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	FAC FEET	MRA	MAA
1	MADISON	MSN	VORTAC	L	351.44	354.44	22.42	22.42		2800	17500
2	DELLS	DLL	VORTAC	H	093.99	096.99	16.46	16.46		3000	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	N	MSN	VORTAC	351.44	171.44	R	1-1 1/2	3000 17500	5 17

**CONTROLLING OBSTRUCTIONS:**

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	TOWER (55-000919)	432602.00N/0893712.00W	1920	4D
1	200	STACK (55-000421)	432910.00N/0892513.00W	1457	5E

**HOLDING RESTRICTIONS:**

UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3000.

**REMARKS:**

MADISON (FAC 1) AND DELLS (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	V170	1, 2				(US)
IAP	RNAV (GPS) RWY 14			KMSN	MADISON	WI (US)
IAP	RNAV (GPS) RWY 18			KMSN	MADISON	WI (US)
IAP	RNAV (GPS) RWY 18			KC47	PORTAGE	WI (US)

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 10 **DATE OF REVISION:** 08/17/2017

**REASON FOR REVISION:**

ADDED AIRSPACE DOCKET NUMBER.  
UPDATED FAC 1 MRA FROM 2200 TO 2800.  
UPDATED FAC 2 MRA FROM 2200 TO 3000.  
ADDED REMARKS MADISON (FAC 1) AND DELLS (FAC 2) USED TO ESTABLISH FIX COORDINATES.  
DELETED V177 FROM FIX USE. AIRWAY CANCELLED PER DOCKET AND STEVENS POINT (STE) VOR DECOMMISSIONING.

**DEVELOPED BY:** **DATE:** 05/22/2017 **OFFICE:** AJV-5413 **NAME:** VICTOR NASO (KELLIE BARNES)

**APPROVED BY:** **DATE:** **OFFICE:** AJV-5410 **NAME:** GEORGE DAVIS

**SIGNATURE:**

**DISTRIBUTION:** NFDC  
FPO: CEN  
ARTCC: ZAU  
ATC FACILITY: MSN APP CON  
OTHER:

QUALITY  
13  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: ZAPIN

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 452314.76N/0933007.35W

TYPE: WP, DME

AIRSPACE DOCKET: 16-AGL-21

FIX TYPE OF ACTION: MODIFY

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	GOPHER	GEP	VORTAC	H			15.50	15.00		3000	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 MIN	ALTITUDES MAX	TEMPLATES MIN	MAX
1	SE		WP	152.47	332.47	R		4	3100	6000	5	6

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (24-0990)	452012.00N/0932329.00W	2049	5D

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 14L			KMIC	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) RWY 33		1	KPNM	PRINCETON	MN (US)

REQUIRED CHARTING: IAP, CONTROLLER

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 08/17/2017

## REASON FOR REVISION:

ADDED AIRSPACE DOCKET NUMBER.  
ADDED DIS FROM FAC FOR FAC 1.  
UPDATED FIX USE.  
REMOVED V82-161 FROM FIX USE. AIRWAY CANCELLED PER DOCKET AND BRAINERD (BRD) VOR DECOMMISSIONING.  
MOVED HOLDING LIMITED TO ESTABLISHED PATTERN FROM REMARKS TO HOLDING RESTRICTION.  
ADDED PRECIPITOUS TERRAIN EVALUATION COMPLETED TO REMARKS.  
DELETED FAC 2 (ZODOG).  
REMOVED EN ROUTE LOW FROM REQUIRED CHARTING.

DEVELOPED BY: DATE: 05/18/2017 OFFICE: AJV-5410 NAME: VICTOR NASO (THERON CYRUS)

APPROVED BY: DATE: OFFICE: AJV-5410 NAME: GEORGE DAVIS

SIGNATURE:

## DISTRIBUTION:

NFDC  
FPO: CEN  
ARTCC: ZMP  
ATC FACILITY: MSP APP CON  
OTHER:

QUALITY  
13  
CHECKED



# RADIO FIX AND HOLDING DATA RECORD

**NAME:** ZAVOX **STATE:** WI **COUNTRY:** US **ICAO REGION CODE:** K5  
**LATITUDE/LONGITUDE:** 434330.31N/0894323.84W **TYPE:** WP, DME  
**AIRSPACE DOCKET:** 16-AGL-23 **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	DELLS	DLL	VORTAC	H	006.53	009.53	10.60	10.60	3000	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	N		WP	011.39	191.39	R		4	3000	6000	5	6

**CONTROLLING OBSTRUCTIONS:**

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (55-001120)	435056.00N/0894022.00W	1422	5D

**HOLDING RESTRICTIONS:**

HOLDING LIMITED TO ESTABLISHED PATTERN.

**FIX USE:**

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 1		1	KDLL	BARABOO	WI (US)
IAP	RNAV (GPS) RWY 19		1	KDLL	BARABOO	WI (US)
IAP	RNAV (GPS) RWY 2			KISW	WISCONSIN RAPIDS	WI (US)

**REQUIRED CHARTING:** IAP, CONTROLLER

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 2 **DATE OF REVISION:** 08/17/2017

**REASON FOR REVISION:**

DELETED FAC 2, NO LONGER REQUIRED.  
 ADDED DIST FROM FAC 10.60 NM TO FAC 1.  
 MOVED HOLDING LIMITED TO ESTABLISHED PATTERN FROM REMARKS TO HOLDING RESTRICTIONS AREA.  
 UPDATED HOLDING OBSTACLE ID FROM 50-1120 TO 55-001120 SAME OBSTACLE NO ELEVATION CHANGE.  
 DELETED V228 FROM FIX USE. AIRWAY CANCELLED PER DOCKET AND STEVENS (STE)POINT VOR DECOMMISSIONING.  
 DELETED EN ROUTE LOW CHARTING.

**DEVELOPED BY:** **DATE:** 05/22/2017 **OFFICE:** AJV-5413 **NAME:** VICTOR NASO (KELLIE BARNES)

**APPROVED BY:** **DATE:** **OFFICE:** AJV-5410 **NAME:** GEORGE DAVIS

**SIGNATURE:**

**DISTRIBUTION:** NFDC  
 FPO: CEN  
 ARTCC: ZAU  
 ATC FACILITY: MSN APP CON  
 OTHER:

QUALITY  
 13  
 CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: ZOVNA

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 455742.60N/0924823.98W

TYPE: WP, DME

AIRSPACE DOCKET: 16-AGL-21

FIX TYPE OF ACTION: NO CHANGE

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	SIREN	RZN	VOR/DME	L	293.26	295.26	20.00	20.00		4000	17500

## HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 4			KMZH	MOOSE LAKE	MN (US)

REQUIRED CHARTING: IAP, CONTROLLER

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 08/17/2017

## REASON FOR REVISION:

ADDED AIRSPACE DOCKET NUMBER.

UPDATE FIX USE.

REMOVED V55 FROM FIX USE. AIRWAY BEING CANCELLED PER DOCKET AND BRAINERD (BRD) VOR DECOMMISSIONING.

REMOVED EN ROUTE LOW FROM REQUIRED CHARTING.

DEVELOPED BY:

DATE: 05/18/2017

OFFICE: AJV-5410

NAME: VICTOR NASO (THERON CYRUS)

APPROVED BY:

DATE:

OFFICE: AJV-5410

NAME: GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:

NFDC  
FPO: CEN  
ARTCC: ZMP  
ATC FACILITY:  
OTHER:

QUALITY  
13  
CHECKED