

# RADIO FIX AND HOLDING DATA RECORD

NAME: CODDS

STATE: OH

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 420853.16N/0812237.30W

TYPE: CNF

AIRSPACE DOCKET: 16-AGL-2

FIX TYPE OF ACTION: CANCEL

**REMARKS:**

ENROUTE: V116.

CNF AT US/CANADIAN BOUNDARY.

REQUIRED CHARTING: CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 07/05/2007

DEVELOPED BY:

DATE:

OFFICE:

NAME:

APPROVED BY:

DATE:

OFFICE: AJV-5412

NAME: JULIE MORGAN

SIGNATURE: *Digitally signed by*  
**JULIE A MORGAN**

DISTRIBUTION:

NFDC  
FPO: FTW  
ARTCC: ZOB  
ATC FACILITY:  
OTHER:

Mar 16, 2018



# RADIO FIX AND HOLDING DATA RECORD

NAME: DEXER

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 422013.19N/0835337.26W

TYPE: WP

AIRSPACE DOCKET: 16-AGL-2

FIX TYPE OF ACTION: MODIFY

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 MIN	ALTITUDES MAX	TEMPLATES MIN	MAX
1	W		WP	258.17	078.17	R	4	3000	6000	5	6

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (26-001919)	421747.00N/0835301.00W	1408	5D

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

## REMARKS:

DEPICT ON CONTROLLER CHART 9  
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 23R		1	KYIP	DETROIT	MI (US)

REQUIRED CHARTING: IAP, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 9

DATE OF REVISION: 05/24/2018

## REASON FOR REVISION:

REMOVED:  
V221 AND V116 FROM FIX USE  
DME FROM FIX TYPE  
FAC 1 (SVM)

DEVELOPED BY: DATE: 11/15/2017 OFFICE: AJV-5412 NAME: ROSE BOONE

APPROVED BY: DATE: OFFICE: AJV-5420 NAME: JULIE MORGAN

SIGNATURE: Digitally signed by  
JULIE A MORGAN

DISTRIBUTION: NFDC  
FPO: CEN  
ARTCC: ZOB  
ATC FACILITY: DTW APP CON  
OTHER: YIP ATCT  
Mar 16, 2018

QUALITY  
20  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: ECKDO

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 421424.43N/0844449.16W

TYPE: WP

AIRSPACE DOCKET: 16-AGL-2

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: CANCEL

FIX USE:

USE TYPE  
IAP

USE TITLE  
RNAV (GPS) RWY 31

FAC

PAT

AIRPORT IDENT  
KBTL

CITY  
BATTLE CREEK

STATE  
MI (US)

REQUIRED CHARTING: IAP, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 16

DATE OF REVISION: 05/24/2018

REASON FOR REVISION:

REMOVED:

V116 AND V233 FROM FIX USE

DME AND INT FROM FIX TYPE

HOLDING LIMITED TO ESTABLISHED PATTERN FROM FIX RESTRICTIONS

PRECIPITOUS TERRAIN EVALUATION COMPLETED FROM REMARKS

FAC 1 (JXN), FAC 2 (LFD), AND FAC 3 (AZO)

NAVAIDS USED TO ESTABLISH FIX FROM REMARKS

HOLDING

DEVELOPED BY:

DATE: 11/22/2017

OFFICE: AJV-5412

NAME: ROSE BOONE

APPROVED BY:

DATE:

OFFICE: AJV-5420

NAME: JULIE MORGAN

*Digitally signed by*

SIGNATURE: **JULIE A MORGAN**

Mar 16, 2018

DISTRIBUTION:

NFDC

FPO: CEN

ARTCC: ZOB

ATC FACILITY: AZO APP CON, BTL

OTHER:

QUALITY  
20  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: ERRTH

STATE:

COUNTRY: CA

ICAO REGION CODE: CY

LATITUDE/LONGITUDE: 421122.00N/0815609.00W

TYPE: WP, INT, DME

AIRSPACE DOCKET: 16-AGL-2

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	WINDSOR	YQG	VOR/DME	H	100.89	094.89	39.98	39.98		3400	45000
2	CHARDON	CXR	VOR/DME	H	324.60	319.60	53.17	53.17		8000	45000

## EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
CXR	VOR/DME	R-325	54	8000	45000

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## REMARKS:

WINDSOR (FAC 1) AND CHARDON (FAC 2) USED TO ESTABLISH FIX COORDINATES

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	ERRTH	1		KARB	ANN ARBOR	MI (US)
DP	ERRTH	1		KDET	DETROIT	MI (US)
DP	ERRTH	1		KDTW	DETROIT	MI (US)
DP	ERRTH	1		KYIP	DETROIT	MI (US)
DP	ERRTH	1		KPTK	PONTIAC	MI (US)

REQUIRED CHARTING: DP, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4

DATE OF REVISION: 05/24/2018

## REASON FOR REVISION:

ADDED WP TO FIX TYPE  
REMOVED V116 AND V396 FROM FIX USE

DEVELOPED BY: DATE: 11/15/2017

OFFICE: AJV-5412

NAME: ROSE BOONE

APPROVED BY: DATE:

OFFICE: AJV-5420

NAME: JULIE MORGAN

SIGNATURE: Digitally signed by

JULIE A MORGAN

DISTRIBUTION:

NFDC  
FPO: CEN  
ARTCC: ZOB  
ATC FACILITY: DTW APP CON  
OTHER:



# RADIO FIX AND HOLDING DATA RECORD

**NAME:** HARWL **STATE:** MI **COUNTRY:** US **ICAO REGION CODE:** K5  
**LATITUDE/LONGITUDE:** 421550.23N/0841138.70W **TYPE:** WP, DME  
**AIRSPACE DOCKET:** 16-AGL-2 **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	DETROIT	DXO	VOR/DME	H	281.00	275.00	37.00	37.00		3000	17500
2	SALEM	SVM	VORTAC	L	255.20	252.20	28.08	28.08		3000	17500
3	JACKSON	JXN	VOR/DME	L	093.54	088.54	11.79	11.79		3000	17500

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

**REMARKS:**

SALEM (FAC 2) AND JACKSON (FAC 3) USED TO ESTABLISH FIX COORDINATES

**FIX USE:**

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	PALACE	1, 3		KARB	ANN ARBOR	MI (US)
DP	PALACE	1, 3		KDET	DETROIT	MI (US)
DP	PALACE	1, 3		KDTW	DETROIT	MI (US)
DP	PALACE	1, 3		KYIP	DETROIT	MI (US)
DP	PALACE	1, 3		KPTK	PONTIAC	MI (US)

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 7 **DATE OF REVISION:** 05/24/2018

**REASON FOR REVISION:**

REMOVED V116 AND V221 FROM FIX USE  
ADDED WP TO FIX TYPE

**DEVELOPED BY:** **DATE:** 11/15/2017 **OFFICE:** AJV-5412 **NAME:** ROSE BOONE  
**APPROVED BY:** **DATE:** **OFFICE:** AJV-5420 **NAME:** JULIE MORGAN  
 Digitally signed by  
**SIGNATURE:** JULIE A MORGAN

**DISTRIBUTION:** NFDC  
 FPO: CEN  
 ARTCC: ZOB  
 ATC FACILITY:  
 OTHER: Mar 16, 2018



# RADIO FIX AND HOLDING DATA RECORD

NAME: KALAMAZOO VOR/DME STATE: MI COUNTRY: US ICAO REGION CODE: K5  
 LATITUDE/LONGITUDE: 421413.15N/0853311.35W TYPE:

AIRSPACE DOCKET: 16-AGL-2 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	KALAMAZOO	AZO	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 LENGTH TIME DME	HOLDING ALTITUDES MIN MAX	TEMPLATES MIN MAX
1	N	AZO	VOR/DME	007.00	187.00	R	1	2600 6000	4 5

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	TOWER (26-001159)	421823.13N/0853925.03W	1449	5D
1	200	TOWER (26-001159)	421823.13N/0853925.03W	1449	5D

## HOLDING RESTRICTIONS:

UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 2500.

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
 ASSIGNED FACILITY MAG VAR: 1W 1965.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V156					(US)
EN ROUTE	V285					(US)
IAP	RNAV (GPS) RWY 11			K35D	ALLEGAN	MI (US)
IAP	RNAV (GPS) RWY 29			K35D	ALLEGAN	MI (US)
IAP	VOR RWY 29			K35D	ALLEGAN	MI (US)
IAP	ILS OR LOC RWY 23R			KBTL	BATTLE CREEK	MI (US)
IAP	VOR RWY 7			KOEB	COLDWATER	MI (US)
IAP	VOR-A			KC91	DOWAGIAC	MI (US)
IAP	ILS OR LOC RWY 35			KAZO	KALAMAZOO	MI (US)
IAP	RNAV (GPS) RWY 17			KAZO	KALAMAZOO	MI (US)
IAP	VOR RWY 35			KAZO	KALAMAZOO	MI (US)
IAP	NDB RWY 24			KIRS	STURGIS	MI (US)
IAP	VOR-A		1	KHAI	THREE RIVERS	MI (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 12 DATE OF REVISION: 05/24/2018

## REASON FOR REVISION:

1. ADDED KBTL ILS OR LOC RWY 23R TO FIX USE.
2. REMOVED KJXN VOR/DME RWY 24 AND VOR RWY 14 FROM FIX USE.
3. REMOVED KAZO RNAV (GPS) RWY 5 FROM FIX USE.
4. REMOVED KAZO RNAV (GPS) RWY 23 FROM FIX USE.
5. REMOVED KAZO RNAV (GPS) RWY 35 FROM FIX USE.
6. REMOVED V116 FROM FIX USE.
7. MOVED UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 2500 FROM FIX RESTICTIONS TO HOLDING RESRICTIONS.

DEVELOPED BY: DATE: 12/27/2017 OFFICE: AJV-5412 NAME: ROSE BOONE  
 APPROVED BY: DATE: OFFICE: AJV-5420 NAME: JULIE MORGAN  
 Digitally signed by  
 SIGNATURE: JULIE A MORGAN

DISTRIBUTION: NFDC  
 FPO: CEN  
 ARTCC: ZAU  
 ATC FACILITY: AZO APP CON, GRR APP CON  
 OTHER:  
 Mar 16, 2018

QUALITY  
20  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: KEELER VOR/DME

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 420839.88N/0860721.74W

TYPE:

AIRSPACE DOCKET: 16-AGL-2

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	KEELER	ELX	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 LENGTH TIME	DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	N	ELX	VOR/DME	001.27	181.27	R	1		2500	6000	4	5
2	S	ELX	VOR/DME	201.31	021.31	L	1		2500	6000	4	5
3	E	ELX	VOR/DME	085.68	265.68	L	1		2500	6000	4	5
4	NE	ELX	VOR/DME	043.69	223.69	R	1		2600	6000	4	5
5	E	WP	WP	086.00	266.00	L		4	2500	6000	5	6

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	TOWER (26-000381)	420453.57N/0855502.44W	1319	4D
1	200	AAO	420912.00N/0860845.00W	1040	4E
2	200	TOWER (26-001065)	420112.00N/0861405.00W	1112	5D
3	200	AAO	420354.00N/0855924.00W	1165	4E
4	200	TOWER (26-002131)	421202.20N/0855815.00W	1284	5D
5	200	TOWER (26-002131)	421202.20N/0855815.00W	1284	5D

## REASON FOR NONSTANDARD HOLDING:

PAT 2 AIR TRAFFIC REQUEST  
PAT 3 AIR TRAFFIC REQUEST  
PAT 5 AIR TRAFFIC REQUEST

## HOLDING RESTRICTIONS:

UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 2600.

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
ASSIGNED FACILITY MAG VAR 00E 1965

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	O'HARE			KORD	CHICAGO	IL (US)
DP	PAL-WAUKEE			KPWK	CHICAGO/PROSPECT HGTS/WHEELING	IL (US)
DP	MITCHELL			KMKE	MILWAUKEE	WI (US)
EN ROUTE	V100					(US)
EN ROUTE	V218					(US)
EN ROUTE	V277					(US)
EN ROUTE	V55					(US)
IAP	ILS OR LOC RWY 27			KEKM	ELKHART	IN (US)
IAP	ILS OR LOC RWY 28		4	KBEH	BENTON HARBOR	MI (US)
IAP	RNAV (GPS) RWY 10		5	KBEH	BENTON HARBOR	MI (US)
IAP	VOR RWY 28		3	KBEH	BENTON HARBOR	MI (US)
IAP	RNAV (GPS) RWY 27			KC91	DOWAGIAC	MI (US)
IAP	RNAV (GPS) RWY 9			KC91	DOWAGIAC	MI (US)
IAP	VOR-A		1	KC91	DOWAGIAC	MI (US)
IAP	RNAV (GPS) RWY 5			KAZO	KALAMAZOO	MI (US)
IAP	VOR-A		2	K3TR	NILES	MI (US)
IAP	RNAV (GPS) RWY 23			KLWA	SOUTH HAVEN	MI (US)
IAP	RNAV (GPS) RWY 5			KLWA	SOUTH HAVEN	MI (US)
IAP	VOR RWY 23			KLWA	SOUTH HAVEN	MI (US)
IAP	VOR-A			KHAI	THREE RIVERS	MI (US)
STAR	FAILS			KBKL	CLEVELAND	OH (US)
STAR	FAILS			KCGF	CLEVELAND	OH (US)
STAR	HIMEZ			KCLE	CLEVELAND	OH (US)
STAR	HIMEZ			K1G1	ELYRIA	OH (US)
STAR	HIMEZ			KLPR	LORAIN/ELYRIA	OH (US)
STAR	HIMEZ			K1G5	MEDINA	OH (US)
STAR	FAILS			K7G8	MIDDLEFIELD	OH (US)
STAR	FAILS			K2G1	PAINESVILLE	OH (US)
STAR	FAILS			KLNN	WILLOUGHBY	OH (US)

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

COMPULSORY REPORTING POINT: NO

QUALITY  
20  
CHECKED

RECORD REVISION NUMBER: 23

DATE OF REVISION: 05/24/2018

**REASON FOR REVISION:**

REMOVED V116 FROM FIX USE

ADDED REMARK: ASSIGNED FACILITY MAG VAR: 00E/1965

CHANGED UPN HOLDING OBSTACLE LAT/LONG AND ELEVATION FROM 1300 TO 1319; SAME OBSTACLE ID

ADDED (AZO) - RNAV (GPS) RWY 5 TO FIX USE

**DEVELOPED BY:****DATE:** 12/06/2017**OFFICE:** AJV-5412**NAME:** ROSE BOONE**APPROVED BY:****DATE:***Digitally signed by***OFFICE:** AJV-5420**NAME:** JULIE MORGAN**SIGNATURE:** **JULIE A MORGAN**

Mar 16, 2018

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



# RADIO FIX AND HOLDING DATA RECORD

**NAME:** LEROY **STATE:** MI **COUNTRY:** US **ICAO REGION CODE:** K5  
**LATITUDE/LONGITUDE:** 421418.08N/0852030.25W **TYPE:** DME  
**AIRSPACE DOCKET:** 16-AGL-2 **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	LITCHFIELD	LFD	VOR/DME	L	297.48	292.48	27.81	27.81	2700	17500
2	KALAMAZOO	AZO	VOR/DME	L	090.43	089.43	9.42	9.42	2700	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	W	AZO	VOR/DME	090.43	090.43	R	1	3000 6000	4 5

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	421606.00N/0852136.00W	1260	4D
1	310	TOWER (26-001159)	421823.13N/0853925.03W	1449	5D

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

## PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	ILS OR LOC RWY 23R	KBTL	BATTLE CREEK	MI (US)

## REMARKS:

LITCHFIELD (FAC 1) USED TO ESTABLISH FIX COORDINATES  
 PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
 CLIMB IN HOLD EVALUATED PATTERN 12.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V30	1				(US)
IAP	ILS OR LOC RWY 23R	2	1	KBTL	BATTLE CREEK	MI (US)

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 21 **DATE OF REVISION:** 05/24/2018

## REASON FOR REVISION:

REMOVED V116 FROM FIX USE

**DEVELOPED BY:** **DATE:** 11/16/2017 **OFFICE:** AJV-5412 **NAME:** ROSE BOONE  
**APPROVED BY:** **DATE:** **OFFICE:** AJV-5420 **NAME:** JULIE MORGAN

**SIGNATURE:** *Digitally signed by*  
**JULIE A MORGAN**

**DISTRIBUTION:** NFDC  
 FPO: CEN  
 ARTCC: ZAU  
 ATC FACILITY:  
 OTHER:

Mar 16, 2018



# RADIO FIX AND HOLDING DATA RECORD

NAME: MAPER

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 420143.77N/0864408.03W

TYPE: WP, INT, DME

AIRSPACE DOCKET: 16-AGL-2

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	KEELER	ELX	VOR/DME	L	256.00	256.00	28.24	28.24		2400	17500
2	GIPPER	GIJ	VORTAC	H	310.00	310.00	24.35	24.35		2600	17500

## HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPACE	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	230	TOWER (26-001126)	420317.00N/0862731.00W	1160	5D

## HOLDING RESTRICTIONS:

UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 2500.

## REMARKS:

KEELER (FAC 1) AND GIPPER (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	V-526	1, 2				(US)
IAP	RNAV (GPS) RWY 18			KSBN	SOUTH BEND	IN (US)
IAP	RNAV (GPS) RWY 9L			KSBN	SOUTH BEND	IN (US)
IAP	RNAV (GPS) RWY 9R			KSBN	SOUTH BEND	IN (US)
IAP	ILS OR LOC RWY 28	1, 2		KBEH	BENTON HARBOR	MI (US)
IAP	RNAV (GPS) RWY 9			KC91	DOWAGIAC	MI (US)
IAP	RNAV (GPS) RWY 15			K3TR	NILES	MI (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 13

DATE OF REVISION: 05/24/2018

## REASON FOR REVISION:

REMOVED V116 FROM FIX USE

DEVELOPED BY:

DATE: 12/06/2017

OFFICE: AJV-5412

NAME: ROSE BOONE

APPROVED BY:

DATE:

OFFICE: AJV-5420

NAME: JULIE MORGAN

SIGNATURE: *Digitally signed by*  
**JULIE A MORGAN**

DISTRIBUTION:

NFDC  
FPO: CEN  
ARTCC: ZAU  
ATC FACILITY: SBN APP CON  
OTHER:  
Mar 16, 2018

QUALITY  
20  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: NEPTS

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 415802.99N/0870310.84W

TYPE: INT, DME

AIRSPACE DOCKET: 16-AGL-2

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	KNOX	OXI	VOR/DME	H	335.00	335.00		42.76		3000	17500
2	GIPPER	GIJ	VORTAC	H	290.16	290.16	35.02	35.02		3000	17500

## FIX RESTRICTIONS:

MRA ALL 3000

## HOLDING:

HOLDING TYPE OF ACTION: CANCEL

## REMARKS:

KNOX (FAC 1) USED TO ESTABLISH FIX COORDINATES

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V228	1, 2				(US)

REQUIRED CHARTING: AREA, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 7

DATE OF REVISION: 05/24/2018

## REASON FOR REVISION:

REMOVED FAC 1 (ELX), V116, HOLDING, AND ESV  
ADDED GIJ TO FIX MAKE UP  
FAC 1: ADDED DIST FROM FAC (NM).  
ADDED REMARK: KNOX (FAC 1) USED TO ESTABLISH FIX COORDINATES.  
REMOVED REMARK: HOLDING LIMITED TO ESTABLISHED PATTERN.

DEVELOPED BY:

DATE: 11/21/2017

OFFICE: AJV-5412

NAME: ROSE BOONE

APPROVED BY:

DATE:

OFFICE: AJV-5420

NAME: JULIE MORGAN

SIGNATURE: *Digitally signed by*  
**JULIE A MORGAN**

DISTRIBUTION:

NFDC  
FPO: CEN  
ARTCC: ZAU  
ATC FACILITY:  
OTHER:  
Mar 16, 2018

QUALITY  
20  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: OCTAS

STATE:

COUNTRY: CA

ICAO REGION CODE: CY

LATITUDE/LONGITUDE: 421329.91N/0822656.09W

TYPE: WP, DME

AIRSPACE DOCKET: 16-AGL-2

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	WINDSOR	YQG	VOR/DME	H	100.88	094.88	17.00	17.00		3000	17500

## HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	ERRTH	1		KARB	ANN ARBOR	MI (US)
DP	ERRTH	1		KDET	DETROIT	MI (US)
DP	ERRTH	1		KDTW	DETROIT	MI (US)
DP	ERRTH	1		KYIP	DETROIT	MI (US)
DP	ERRTH	1		KPTK	PONTIAC	MI (US)

REQUIRED CHARTING: DP, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3

DATE OF REVISION: 05/24/2018

## REASON FOR REVISION:

ADDED WP TO FIX TYPE.  
REMOVED V396 & V586 FROM FIX USE.

DEVELOPED BY: DATE: 03/10/2018

OFFICE: AJV-5412

NAME: ROSE BOONE

APPROVED BY: DATE:

OFFICE: AJV-5420

NAME: JULIE MORGAN

*Digitally signed by*  
SIGNATURE: **JULIE A MORGAN**

DISTRIBUTION: NFDC  
FPO: CEN  
ARTCC: ZOB  
ATC FACILITY: DTW APP CON  
OTHER:  
Mar 16, 2018

QUALITY  
20  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** TRACE **STATE:** OH **COUNTRY:** US **ICAO REGION CODE:** K5  
**LATITUDE/LONGITUDE:** 420718.65N/0810226.96W **TYPE:** WP  
**AIRSPACE DOCKET:** 16-AGL-2 **FIX TYPE OF ACTION:** MODIFY  
**HOLDING:** **HOLDING TYPE OF ACTION:** NO CHANGE

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 4 **DATE OF REVISION:** 05/24/2018

**REASON FOR REVISION:**

REMOVED FIX TYPE INT, DME AND ADDED WP.  
REMOVED FAC 1 (YQG), FAC 2 (CXR) & FAC 3 (ERI).  
REMOVED FIX RESTRICTION: MRA V116 11000  
REMOVED REMARK: WINDSOR (FAC 1) AND CHARDON (FAC 2) USED TO ESTABLISH FIX COORDINATES.  
REMOVED V116 FROM FIX USE.

**DEVELOPED BY:** **DATE:** 03/10/2018 **OFFICE:** AJV-5412 **NAME:** ROSE BOONE  
**APPROVED BY:** **DATE:** **OFFICE:** AJV-5420 **NAME:** JULIE MORGAN  
**SIGNATURE:** *Digitally signed by*  
*JULIE A MORGAN*  
**DISTRIBUTION:** NFDC Mar 16, 2018  
FPO: CEN  
ARTCC: ZOB  
ATC FACILITY:  
OTHER:



# RADIO FIX AND HOLDING DATA RECORD

NAME: WILLA

STATE: IL

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 415837.76N/0872537.15W

TYPE: WP

AIRSPACE DOCKET: 16-AGL-2

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: CANCEL

REQUIRED CHARTING: EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 9

DATE OF REVISION: 05/24/2018

## REASON FOR REVISION:

REMOVED RADAR, INT, DME FROM FIX TYPE  
REMOVED FAC 1 (ORD), FAC 2 (CGT) & FAC 3(DPA) FROM FIX MAKE-UP  
REMOVED ESV FOR (DPA)  
REMOVED HOLDING PAT 1 AND ALL ASSOCIATED DATA  
REMOVED HOLDING RESRICTION AND REMARKS  
REMOVED V116 AND ILS OR LOC RWY 9R (ALT MA) AT (KORD) FROM FIX USE  
REMOVED IAP AND AREA FROM REQUIRED CHARTING

DEVELOPED BY:

DATE: 03/10/2018

OFFICE: AJV-5412

NAME: ROSE BOONE

APPROVED BY:

DATE:

OFFICE: AJV-5420

NAME: JULIE MORGAN

SIGNATURE: *Digitally signed by*  
**JULIE A MORGAN**

DISTRIBUTION:

NFDC  
FPO: CEN  
ARTCC: ZAU  
ATC FACILITY: CHICAGO APP CON  
OTHER:  
Mar 16, 2018



# RADIO FIX AND HOLDING DATA RECORD

NAME: ZEGBI

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 421422.22N/0850455.14W

TYPE: WP

AIRSPACE DOCKET: 16-AGL-2

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REQUIRED CHARTING: EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 05/24/2018

## REASON FOR REVISION:

CHANGED FIX TYPE FROM DME TO WP

REMOVED FIX MAKE-UP FACILITIES: FAC 1 KALAMAZOO (AZO) VOR/DME

REMOVED V116 FROM FIX USE

DEVELOPED BY:

DATE: 03/10/2018

OFFICE: AJV-5412

NAME: ROSE BOONE

APPROVED BY:

DATE:

OFFICE: AJV-5420

NAME: JULIE MORGAN

SIGNATURE: *Digitally signed by*

**JULIE A MORGAN**

DISTRIBUTION:

NFDC

FPO: CEN

ARTCC: ZOB

ATC FACILITY:

OTHER:

Mar 16, 2018

QUALITY  
20  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: ZIMEG

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 420414.92N/0863055.04W

TYPE: WP

AIRSPACE DOCKET: 16-AGL-2

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE  
IAP

USE TITLE  
RNAV (GPS) RWY 05

FAC

PAT

AIRPORT IDENT  
KLWA

CITY  
SOUTH HAVEN

STATE  
MI (US)

REQUIRED CHARTING: IAP, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3

DATE OF REVISION: 05/24/2018

REASON FOR REVISION:

REMOVED:  
V116 FROM FIX USE  
DME FROM FIX TYPE  
FAC 1 (ELX)

DEVELOPED BY:

DATE: 11/16/2017

OFFICE: AJV-5412

NAME: ROSE BOONE

APPROVED BY:

DATE:

OFFICE: AJV-5420

NAME: JULIE MORGAN

*Digitally signed by*  
SIGNATURE: **JULIE A MORGAN**

DISTRIBUTION:

NFDC  
FPO: CEN  
ARTCC: ZAU  
ATC FACILITY: SNB APP CON  
OTHER:  
Mar 16, 2018





# RADIO FIX AND HOLDING DATA RECORD

NAME: ZIVDO

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 420727.09N/0861352.91W

TYPE: WP

AIRSPACE DOCKET: 16-AGL-2

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE  
IAP

USE TITLE  
RNAV (GPS) RWY 15

FAC

PAT

AIRPORT IDENT  
K3TR

CITY  
NILES

STATE  
MI (US)

REQUIRED CHARTING: IAP, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 05/24/2018

REASON FOR REVISION:

REMOVED:

V116 FROM FIX USE

FAC 1 (ELX)

DME FROM FIX TYPE

DEVELOPED BY:

DATE: 11/16/2017

OFFICE: AJV-5412

NAME: ROSE BOONE

APPROVED BY:

DATE:

OFFICE: AJV-5420

NAME: JULIE MORGAN

*Digitally signed by*

SIGNATURE: **JULIE A MORGAN**

Mar 16, 2018

DISTRIBUTION:

NFDC

FPO: CEN

ARTCC: ZAU

ATC FACILITY: SBN APP CON

OTHER:

QUALITY  
20  
CHECKED