

# RADIO FIX AND HOLDING DATA RECORD

NAME: FELUS

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 421721.68N/0832721.08W

TYPE: WP, RADAR, INT, DME

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	FAC FEET	MRA	MAA
1	DETROIT	I-LSW	LOC/DME		052.72	046.72	3.74	5.31	32237	2000	5200
2	SALEM	SVM	VORTAC	L	142.31	139.31		9.43		2000	5200

## REMARKS:

DETROIT (FAC1) AND SALEM (FAC2) USED TO ESTABLISH FIX COORDINATES.  
I-LSW DME ANTENNA COORDINATES: 421444.89N/0833057.11W

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 23	1, 2		KYIP	DETROIT	MI (US)
IAP	RNAV (GPS) RWY 23			KYIP	DETROIT	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3

DATE OF REVISION: 05/19/2022

## REASON FOR REVISION:

- 1: FIXED MOVED 1.97 FT NE.
- 2: UPDATED I-LSW DISTANCE FROM FAC FROM 32235 FT TO 32237 FT.
- 3: UPDATED SVM MAA FROM 17500 TO 5200.
- 4: CHANGED KYIP ILS OR LOC RWY 23L TO ILS OR LOC RWY 23.
- 5: CHANGED KYIP RNAV (GPS) RWY 23L TO RNAV (GPS) RWY 23.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A432

NAME: JOHN KEEFER

APPROVED BY:

DATE: 05/19/2022

OFFICE: AJV-A430

NAME: LONNIE EVERHART

SIGNATURE:

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** KUPNE **STATE:** MI **COUNTRY:** US **ICAO REGION CODE:** K5

**LATITUDE/LONGITUDE:** 422624.33N/0832624.99W **TYPE:** WP, RADAR, DME

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** NO CHANGE

**FIX MAKE-UP FACILITIES:**

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	MRA	MAA
1	DETROIT	DXO	VOR/DME	H	352.49	346.49	14.00	14.00	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	S		WP	172.49	352.49	R		4	4000	6000	5	13
2	S	DXO	VOR/DME	352.49	352.49	R	1		4000	6000	4	13

**CONTROLLING OBSTRUCTIONS:**

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (26-000543)	422911.99N/0832949.10W	1389	5D
1	310	TOWER (26-000324)	422901.00N/0831844.00W	1750	4D
2	200	TOWER (26-000543)	422911.99N/0832949.10W	1389	5D
2	310	TOWER (26-000324)	422901.00N/0831844.00W	1750	4D

**HOLDING RESTRICTIONS:**

HOLDING LIMITED TO ESTABLISHED PATTERN.

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

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	RNAV (GPS) RWY 27R	KDTW	DETROIT	MI (US)
2	ILS OR LOC RWY 27R	KDTW	DETROIT	MI (US)

**REMARKS:**

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

**FIX USE:**

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 27R	1	2	KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) RWY 27R		1	KDTW	DETROIT	MI (US)
IAP	ILS OR LOC RWY 23	1		KYIP	DETROIT	MI (US)
IAP	RNAV (GPS) RWY 23			KYIP	DETROIT	MI (US)

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 3

**DATE OF REVISION:** 05/19/2022

**REASON FOR REVISION:**

1. UPDATED FIX USE KYIP FROM ILS OR LOC RWY 23L TO ILS OR LOC RWY 23.
2. UPDATED FIX USE KYIP FROM RNAV (GPS) RWY 23L TO RNAV (GPS) RWY 23.
3. UPDATED MAX HOLDING PATTERN TEMPLETS FROM 6 & 5 TO 13.
4. REMOVED HOLDING PAT 1 & 2 CLIMB IN HOLD EVALUATED PAT 13 FROM REMARKS.

<b>INITIATED BY:</b>	<b>DATE:</b>	<b>ORGANIZATION:</b>	<b>NAME:</b>
<b>OFFICE OF PRIMARY RESPONSIBILITY:</b>		AJV-A432	<b>NAME:</b> JOHN KEEFER
<b>APPROVED BY:</b>	<b>DATE:</b> 05/19/2022	<b>OFFICE:</b> AJV-A430	<b>NAME:</b> LONNIE EVERHART
<b>SIGNATURE:</b>			

# RADIO FIX AND HOLDING DATA RECORD

NAME: ZAVEX

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 420801.70N/0834040.09W

TYPE: WP, RADAR, INT, DME

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	MRA	MAA
1	CARLETON	CRL	VOR/DME	H	300.68	297.68	11.10	11.10	3000	6000
2	DETROIT	DXO	VOR/DME	H	257.18	251.18	14.67	14.67	3000	6000

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	CRL	VOR/DME	300.53	120.53	R	1		3000	6000	4	12
2	NW		WP	300.53	120.53	R		4	3000	6000	5	13

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	421303.00N/0835030.00W	1149	4E
1	310	TOWER (26-000576)	421105.75N/0835612.28W	1535	2C
2	200	AAO	421057.00N/0835412.00W	1172	4E
2	310	TOWER (26-000576)	421105.75N/0835612.28W	1535	2C

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN(S)

## PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	ILS OR LOC RWY 23	KYIP	DETROIT	MI (US)
2	RNAV (GPS) RWY 23	KYIP	DETROIT	MI (US)

## REMARKS:

CARLETON (FAC1) AND DETROIT (FAC2) USED TO ESTABLISH FIX COORDINATES.  
PRECIPITOUS TERRAIN EVALUATION COMPLETED

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 23 (ALTERNATE MISSED)	1, 2	1	KYIP	DETROIT	MI (US)
IAP	RNAV (GPS) RWY 23		2	KYIP	DETROIT	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 05/19/2022

## REASON FOR REVISION:

- 1: UPDATED MAX TEMPLATE FOR PATTERN 1 FROM 5 TO 12.
- 2: UPDATED MAX TEMPLATE FOR PATTERN 2 FROM 6 TO 13.
- 3: ADDED NEW CLIMB-IN-HOLD CONTROLLING OBSTRUCTION TOWER FOR BOTH PATTERN 1 AND 2.
- 4: UPDATED PAT 1 200 KIAS CONTROLLING OBSTRUCTION FROM "AAO 421327.00N/0834918.00W 1155 MSL (5E)" TO "AAO 421303.00N/0835030.00W 1149 MSL (4E)".
- 5: UPDATED PAT 2 200 KIAS CONTROLLING OBSTRUCTION ACCURACY CODE FROM 5E TO 4E.
- 6: ADDED PRECIPITOUS TERRAIN EVALUATION COMPLETED TO REMARKS.
- 7: ADDED HOLDING LIMITED TO ESTABLISHED PATTERN TO HOLDING RESTRICTIONS.
- 8: ADDED ALTERNATE MISSED TO ILS OR LOC RWY 23 FIX USE.
- 9: CHANGED ALL REFERENCES OF KYIP RWY 23L TO RWY 23.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A432

NAME: JOHN KEEFER

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