

# RADIO FIX AND HOLDING DATA RECORD

NAME: AKMEE

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 423740.18N/0830824.74W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: ESTABLISH

**FIX USE:  
USE TYPE**

**USE TITLE**

**FAC PAT**

**AIRPORT IDENT**

**CITY**

**STATE**

IAP	ILS OR LOC RWY 22L			KDTW	DETROIT	MI (US)
IAP	ILS PRM RWY 22L (CP)			KDTW	DETROIT	MI (US)
IAP	ILS RWY 22L (SA CAT I)			KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) PRM Z RWY 22L (CP)			KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) Z RWY 22L			KDTW	DETROIT	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 05/24/2018

DEVELOPED BY: DATE: 01/12/2018

OFFICE: AJV-5431

NAME: NICHOLAS JACKSON

APPROVED BY: DATE:

OFFICE: AJV-5430

NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

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

# RADIO FIX AND HOLDING DATA RECORD

NAME: BHOLD

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 422915.85N/0830936.17W

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 NM	FAC FEET	MRA	MAA
1	DETROIT	I-DWC	LOC/DME		035.71	028.71	17.39	19.70		6000	7000

## EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-DWC	LOC/DME	R-036	20	6000	7000

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## REMARKS:

DME ANTENNA COORDINATES: 421359.73N-0832050.33W

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 22L	1		KDTW	DETROIT	MI (US)
IAP	ILS PRM RWY 22L (CP)	1		KDTW	DETROIT	MI (US)
IAP	ILS RWY 22L (SA CAT I)	1		KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) PRM Z RWY 22L (CP)			KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) Z RWY 22L			KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) PRM X RWY 22L			KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) X RWY 22L			KDTW	DETROIT	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 8

DATE OF REVISION: 05/24/2018

## REASON FOR REVISION:

ADDED RNAV (RNP) PRM X RWY 22L TO FIX USE  
ADDED RNAV (RNP) X RWY 22L TO FIX USE  
UPDATED DME ANTENNA COORDINATES

DEVELOPED BY: DATE: 01/12/2018

OFFICE: AJV-5431

NAME: NICHOLAS JACKSON

APPROVED BY: DATE:

OFFICE: AJV-5430

NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

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

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** CARLETON VOR/DME      **STATE:** MI      **COUNTRY:** US      **ICAO REGION CODE:** K5

**LATITUDE/LONGITUDE:** 420252.90N/0832727.26W      **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	CARLETON	CRL	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	S	CRL	VOR/DME	180.00	360.00	R	1		3000	6000	4	5
2	W	CRL	VOR/DME	260.00	080.00	R	1		2400	6000	4	5
3	S	CRL	VOR/DME	196.00	016.00	R	1		3000	6000	4	5
4	S		WP	196.00	016.00	R		4	3000	6000	5	6

**CONTROLLING OBSTRUCTIONS:**

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	TOWER (26-002207)	420108.16N/0831422.74W	1079	5D
1	200	TOWER (26-003174)	420358.25N/0832337.21W	1017	1B
2	200	STACK (26-000291)	415940.00N/0833936.00W	1016	5D
3	200	TOWER (26-003174)	420358.25N/0832337.21W	1017	1B
3	310	STACK (26-000438)	415327.00N/0832043.00W	1386	5D
4	200	TOWER (26-000288)	415328.00N/0832540.00W	1014	4D

**HOLDING RESTRICTIONS:**

UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3000

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

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
3	ILS OR LOC RWY 27L	KDTW	DETROIT	MI (US)
3	ILS RWY 27L (SA CAT I, II)	KDTW	DETROIT	MI (US)
3	ILS OR LOC RWY 22L	KDTW	DETROIT	MI (US)
3	ILS RWY 22L (SA CAT I)	KDTW	DETROIT	MI (US)
3	ILS PRM RWY 22L (CP)	KDTW	DETROIT	MI (US)

**REMARKS:**

PRECIPITIOUS TERRAIN EVALUATION COMPLETED.  
HOLDING PAT 3 CLIMB IN HOLD EVALUATED PAT 13.  
ASSIGNED FACILITY MAG VAR: 3W 1965.

**FIX USE:**

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	AMRST			KBKL	CLEVELAND	OH (US)
DP	AMRST			KCGF	CLEVELAND	OH (US)
DP	AMRST			KCLE	CLEVELAND	OH (US)
DP	AMRST			K1G1	ELYRIA	OH (US)
DP	AMRST			KLPR	LORAIN/ELYRIA	OH (US)
DP	AMRST			K1G5	MEDINA	OH (US)
DP	AMRST			K7G8	MIDDLEFIELD	OH (US)
DP	AMRST			K2G1	PAINESVILLE	OH (US)
DP	AMRST			KLNN	WILLOUGHBY	OH (US)
EN ROUTE	J190					(US)
EN ROUTE	J34					(US)
EN ROUTE	J554					(US)
EN ROUTE	J584					(US)
EN ROUTE	V65					(US)
IAP	VOR RWY 6			KARB	ANN ARBOR	MI (US)
IAP	ILS OR LOC RWY 21L		1	KDTW	DETROIT	MI (US)
IAP	ILS OR LOC RWY 22L		3	KDTW	DETROIT	MI (US)
IAP	ILS OR LOC RWY 27L		3	KDTW	DETROIT	MI (US)
IAP	ILS PRM RWY 22L (CP)		3	KDTW	DETROIT	MI (US)
IAP	ILS RWY 21L (SA CAT I, II)		1	KDTW	DETROIT	MI (US)
IAP	ILS RWY 22L (SA CAT I)		3	KDTW	DETROIT	MI (US)
IAP	ILS RWY 27L (SA CAT I, II)		3	KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) RWY 22L		4	KDTW	DETROIT	MI (US)
IAP	ILS OR LOC RWY 5R			KYIP	DETROIT	MI (US)
IAP	RNAV (GPS) RWY 23R			KYIP	DETROIT	MI (US)
IAP	NDB RWY 4			KONZ	DETROIT/GROSSE ILE	MI (US)
IAP	VOR-A		2	KONZ	DETROIT/GROSSE ILE	MI (US)
IAP	VOR-A			K3TE	TECUMSEH	MI (US)
IAP	HI-ILS OR LOC RWY 7			KTOL	TOLEDO	OH (US)
IAP	HI-ILS OR LOC RWY 25			KTOL	TOLEDO	OH (US)
IAP	HI-TACAN RWY 25			KTOL	TOLEDO	OH (US)
IAP	HI-TACAN RWY 7			KTOL	TOLEDO	OH (US)
IAP	RNAV (GPS) RWY 25			KTOL	TOLEDO	OH (US)

STAR	CRUXX	KARB	ANN ARBOR	MI (US)
STAR	MIZAR	KDTW	DETROIT	MI (US)
STAR	WEEDA	KDTW	DETROIT	MI (US)
STAR	CRUXX	KYIP	DETROIT	MI (US)
STAR	CRUXX	KONZ	DETROIT/GROSSE ILE	MI (US)
STAR	CRUXX	KOZW	HOWELL	MI (US)
STAR	CRUXX	KTTF	MONROE	MI (US)
STAR	CRUXX	KY47	NEW HUDSON	MI (US)
STAR	CRUXX	K1D2	PLYMOUTH	MI (US)
STAR	CRUXX	KPTK	PONTIAC	MI (US)
STAR	CRUXX	K36MI	TECUMSEH	MI (US)
STAR	CRUXX	K3TE	TECUMSEH	MI (US)
STAR	CRUXX	KVLL	TROY	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, MILITARY IAP, IAP, AREA, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 19

**DATE OF REVISION:** 05/24/2018

**REASON FOR REVISION:**

1. REMOVED V10 FROM FIX USE.
2. REMOVED V176 FROM FIX USE.
3. ADDED ILS OR LOC RWY 22L, AND ILS RWY 22L (SA CAT I) AT KDTW TO PROCEDURES REQUIRING CLIMB- HOLD.
4. REMOVED KTTF VOR RWY 21 FROM FIX USE.
5. DELETED V188 FROM FIX USE.
6. DELETED V493 FROM FIX USE.
7. REMOVED V426 FROM FIX USE.

**DEVELOPED BY:**      **DATE:** 01/24/2018

**OFFICE:** AJV-5412

**NAME:** ROSE BOONE

**APPROVED BY:**      **DATE:**

**OFFICE:** AJV-5420

**NAME:** JULIE MORGAN

**SIGNATURE:**

**DISTRIBUTION:**

**NFDC**  
**FPO:** CEN  
**ARTCC:** ZOB  
**ATC FACILITY:** DTW  
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

NAME: DRBRN

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 423209.65N/0830726.76W

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	FAC FEET	MRA	MAA
1	DETROIT	I-DWC	LOC/DME		035.71	028.71	20.70	23.00		7000	10000

## EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-DWC	LOC/DME	R-036	24	7000	10000

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## REMARKS:

DME ANTENNA COORDINATES: 421359.73N-0832050.33W

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 22L	1		KDTW	DETROIT	MI (US)
IAP	ILS PRM RWY 22L (CP)	1		KDTW	DETROIT	MI (US)
IAP	ILS RWY 22L (SA CAT I)	1		KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) PRM Z RWY 22L (CP)			KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) Z RWY 22L			KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) PRM X RWY 22L			KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) X RWY 22L			KDTW	DETROIT	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4

DATE OF REVISION: 05/24/2018

## REASON FOR REVISION:

ADDED RNAV (RNP) PRM X RWY 22L TO FIX USE  
ADDED RNAV (RNP) X RWY 22L TO FIX USE  
UPDATED DME ANTENNA COORDINATES

DEVELOPED BY:

DATE: 01/12/2018

OFFICE: AJV-5431

NAME: NICHOLAS JACKSON

APPROVED BY:

DATE:

OFFICE: AJV-5430

NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

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

# RADIO FIX AND HOLDING DATA RECORD

NAME: HULKA

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 421739.21N/0831812.59W

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 NM	FAC FEET	MRA	MAA
1	DETROIT	I-DWC	LOC/DME		035.71	028.71	4.15	6.45	39211	2000	5100
2	SALEM	SVM	VORTAC	L	120.87	117.87		14.63		2000	5100

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## REMARKS:

DETROIT (FAC 1) USED TO ESTABLISH FIX COORDINATES  
DME ANTENNA COORDINATES: 421359.73N-0832050.33W

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 22L	1, 2		KDTW	DETROIT	MI (US)
IAP	ILS PRM RWY 22L (CP)	1, 2		KDTW	DETROIT	MI (US)
IAP	ILS RWY 22L (SA CAT I)	1, 2		KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) PRM Z RWY 22L (CP)			KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) Z RWY 22L			KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) PRM X RWY 22L			KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) X RWY 22L			KDTW	DETROIT	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 6

DATE OF REVISION: 05/24/2018

## REASON FOR REVISION:

FIX MOVED 3.39 FT SOUTHWEST  
ADDED RNAV (RNP) PRM X RWY 22L TO FIX USE  
ADDED RNAV (RNP) X RWY 22L TO FIX USE  
UPDATED DME ANTENNA COORDINATES

DEVELOPED BY: DATE: 01/12/2018

OFFICE: AJV-5431

NAME: NICHOLAS JACKSON

APPROVED BY: DATE:

OFFICE: AJV-5430

NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

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

# RADIO FIX AND HOLDING DATA RECORD

NAME: HWLER

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 415800.93N/0833234.34W

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 NM	FAC FEET	MRA	MAA
1	DETROIT	DXO	VOR/DME	H	214.12	208.12	16.73	16.73		4000	10000

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	ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	SW	DXO	VOR/DME	214.12	034.12	R	1-1 1/2		4000	6000	5	6
2	SW		WP	214.12	034.12	R		4	4000	6000	5	6

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (26-028234)	415557.30N/0833814.40W	948	4D
2	200	TOWER (26-028234)	415557.30N/0833814.40W	948	4D

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 22L	1	1	KDTW	DETROIT	MI (US)
IAP	ILS PRM RWY 22L (CP)	1	1	KDTW	DETROIT	MI (US)
IAP	ILS RWY 22L (SA CAT I)	1	1	KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) PRM Z RWY 22L (CP)		2	KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) Z RWY 22L		2	KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) PRM X RWY 22L		2	KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) X RWY 22L		2	KDTW	DETROIT	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 05/24/2018

## REASON FOR REVISION:

UPDATED HOLDING PAT 1 AND 2 CONTROLLING OBSTRUCTION  
ADDED RNAV (RNP) PRM X RWY 22L TO FIX USE  
ADDED RNAV (RNP) X RWY 22L TO FIX USE

DEVELOPED BY: DATE: 01/12/2018

OFFICE: AJV-5431

NAME: NICHOLAS JACKSON

APPROVED BY: DATE:

OFFICE: AJV-5430

NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

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

# RADIO FIX AND HOLDING DATA RECORD

NAME: LUPAY STATE: MI COUNTRY: US ICAO REGION CODE: K5  
 LATITUDE/LONGITUDE: 422622.02N/0831145.38W 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	I-DWC	LOC/DME		035.71	028.71	14.08	16.39	5000	6000
2	DETROIT	DXO	VOR/DME	H	035.18	029.18	15.56	15.56	4000	10000

## EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-DWC	LOC/DME	R-036	17	5000	6000

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	DXO	VOR/DME	215.18	215.18	R	1		4000	6000	5	6
2	NE		WP	035.18	215.18	R		4	4000	6000	5	6

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (26-000093)	422858.00N/0831219.00W	1749	1D
2	200	TOWER (26-000093)	422858.00N/0831219.00W	1749	1D

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

## REMARKS:

DETROIT (FAC 1) USED TO ESTABLISH FIX COORDINATES  
 DME ANTENNA COORDINATES: 421359.73N/0832050.33W.  
 PRECIPITOUS TERRAIN EVALUATION COMPLETED.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 22L	1		KDTW	DETROIT	MI (US)
IAP	ILS OR LOC RWY 4R		1	KDTW	DETROIT	MI (US)
IAP	ILS PRM RWY 22L (CP)	1		KDTW	DETROIT	MI (US)
IAP	ILS PRM RWY 4R (CAT II)(CP)		1	KDTW	DETROIT	MI (US)
IAP	ILS PRM RWY 4R (CAT III)(CP)		1	KDTW	DETROIT	MI (US)
IAP	ILS PRM RWY 4R (CP)		1	KDTW	DETROIT	MI (US)
IAP	ILS PRM RWY 4R (SA CAT I)		1	KDTW	DETROIT	MI (US)
IAP	ILS RWY 22L (SA CAT I)	1		KDTW	DETROIT	MI (US)
IAP	ILS RWY 4R (CAT II)		1	KDTW	DETROIT	MI (US)
IAP	ILS RWY 4R (CAT III)		1	KDTW	DETROIT	MI (US)
IAP	ILS RWY 4R (SA CAT I)		1	KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) PRM Z RWY 22L (CP)			KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) PRM Z RWY 4R (CP)		2	KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) Z RWY 22L			KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) Z RWY 4R		2	KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) PRM X RWY 22L			KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) PRM X RWY 4R		2	KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) X RWY 22L			KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) X RWY 4R		2	KDTW	DETROIT	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5 DATE OF REVISION: 05/24/2018

## REASON FOR REVISION:

ADDED RNAV (RNP)PRM X RWY 22L  
 ADDED RNAV (RNP) X RWY 22L  
 ADDED ILS PRM RWY 4R (CAT II)(CP) TO FIX USE  
 ADDED ILS PRM RWY 4R (CAT III)(CP) TO FIX USE  
 ADDED ILS PRM RWY 4R (SA CAT I)(CP) TO FIX USE  
 ADDED ILS RWY 4R (CAT II)TO FIX USE  
 ADDED ILS RWY 4R (CAT III)TO FIX USE  
 ADDED ILS RWY 4R (SA CAT I) TO FIX USE  
 ADDED RNAV (RNP) X RWY 4R TO FIX USE  
 ADDED RNAV (RNP) PRM X RWY 4R TO FIX USE  
 UPDATED DME ANTENNA COORDINATES



<b>DEVELOPED BY:</b>	<b>DATE:</b> 01/12/2018	<b>OFFICE:</b> AJV-5431	<b>NAME:</b> NICHOLAS JACKSON
<b>APPROVED BY:</b>	<b>DATE:</b>	<b>OFFICE:</b> AJV-5430	<b>NAME:</b> PATRICK MULQUEEN
	<b>SIGNATURE:</b>		
<b>DISTRIBUTION:</b>	<b>NFDC</b>		
	<b>FPO:</b> CEN		
	<b>ARTCC:</b> ZOB		
	<b>ATC FACILITY:</b> DTW APP CON		
	<b>OTHER:</b>		

# RADIO FIX AND HOLDING DATA RECORD

NAME: MCOMB

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 423503.44N/0830517.25W

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 NM	FAC FEET	MRA	MAA
1	DETROIT	I-DWC	LOC/DME		035.71	028.71	24.00	26.31		8000	10000

## EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-DWC	LOC/DME	R-036	27	8000	10000

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 22L	1		KDTW	DETROIT	MI (US)
IAP	ILS PRM RWY 22L (CP)	1		KDTW	DETROIT	MI (US)
IAP	ILS RWY 22L (SA CAT I)	1		KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) PRM Z RWY 22L (CP)			KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) Z RWY 22L			KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) PRM X RWY 22L			KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) X RWY 22L			KDTW	DETROIT	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 05/24/2018

## REASON FOR REVISION:

ADDED RNAV (RNP) PRM X RWY 22L TO FIX USE  
ADDED RNAV (RNP) X RWY 22L TO FIX USE

DEVELOPED BY: DATE: 01/12/2018

OFFICE: AJV-5431

NAME: NICHOLAS JACKSON

APPROVED BY: DATE:

OFFICE: AJV-5430

NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

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

# RADIO FIX AND HOLDING DATA RECORD

NAME: OSKER

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 422328.14N/0831354.39W

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 NM	FAC FEET	MRA	MAA
1	DETROIT	I-DWC	LOC/DME		035.71	028.71	10.78	13.08		4000	5100

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## REMARKS:

DME ANTENNA COORDINATES: 421359.73N-0832050.33W.  
ESV ON DWC GS OUT TO 11 NM FROM GS/10.78 DME.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 22L	1		KDTW	DETROIT	MI (US)
IAP	ILS PRM RWY 22L (CP)	1		KDTW	DETROIT	MI (US)
IAP	ILS RWY 22L (SA CAT I)	1		KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) PRM Z RWY 22L (CP)			KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) Z RWY 22L			KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) PRM X RWY 22L			KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) X RWY 22L			KDTW	DETROIT	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 12

DATE OF REVISION: 05/24/2018

## REASON FOR REVISION:

ADDED RNAV (RNP) PRM X RWY 22L TO FIX USE  
ADDED RNAV (RNP) X RWY 22L TO FIX USE  
UPDATED DME ANTENNA COORDINATES

DEVELOPED BY:

DATE: 01/12/2018

OFFICE: AJV-5431

NAME: NICHOLAS JACKSON

APPROVED BY:

DATE:

OFFICE: AJV-5430

NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

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

# RADIO FIX AND HOLDING DATA RECORD

NAME: PUZEL

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 423505.15N/0825911.76W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 22L			KDTW	DETROIT	MI (US)
IAP	ILS PRM RWY 22L (CP)			KDTW	DETROIT	MI (US)
IAP	ILS RWY 22L (SA CAT I)			KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) PRM Z RWY 22L (CP)			KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) Z RWY 22L			KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) PRM X RWY 22L			KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) X RWY 22L			KDTW	DETROIT	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 05/24/2018

## REASON FOR REVISION:

ADDED ILS OR LOC RWY 22L TO FIX USE  
ADDED ILS PRM RWY 22L (CP) TO FIX USE  
ADDED ILS RWY 22L (SA CAT I) TO FIX USE  
ADDED RNAV (RNP) PRM X RWY 22L  
ADDED RNAV (RNP) X RWY 22L

DEVELOPED BY:

DATE: 01/12/2018

OFFICE: AJV-5431

NAME: NICHOLAS JACKSON

APPROVED BY:

DATE:

OFFICE: AJV-5430

NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

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

# RADIO FIX AND HOLDING DATA RECORD

NAME: ROUGE

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 422034.22N/0831603.21W

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 NM	FAC FEET	MRA	MAA
1	DETROIT	I-DWC	LOC/DME		035.71	028.71	7.47	9.78		3000	5100

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## REMARKS:

DME ANTENNA COORDINATES: 421359.73N-0832050.33W

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 22L	1		KDTW	DETROIT	MI (US)
IAP	ILS PRM RWY 22L (CP)	1		KDTW	DETROIT	MI (US)
IAP	ILS RWY 22L (SA CAT I)	1		KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) PRM Z RWY 22L (CP)			KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) Z RWY 22L			KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) PRM X RWY 22L			KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) X RWY 22L			KDTW	DETROIT	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 12

DATE OF REVISION: 05/24/2018

## REASON FOR REVISION:

ADDED RNAV (RNP) PRM X RWY 22L TO FIX USE  
ADDED RNAV (RNP) X RWY 22L TO FIX USE  
UPDATED DME ANTENNA COORDINATES

DEVELOPED BY: DATE: 01/12/2018

OFFICE: AJV-5431

NAME: NICHOLAS JACKSON

APPROVED BY: DATE:

OFFICE: AJV-5430

NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

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

# RADIO FIX AND HOLDING DATA RECORD

NAME: SPRER

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 423851.75N/0831159.04W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 22L			KDTW	DETROIT	MI (US)
IAP	ILS PRM RWY 22L (CP)			KDTW	DETROIT	MI (US)
IAP	ILS RWY 22L (SA CAT I)			KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) PRM Z RWY 22L (CP)			KDTW	DETROIT	MI (US)
IAP	RNAV (GPS) Z RWY 22L			KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) PRM X RWY 22L			KDTW	DETROIT	MI (US)
IAP	RNAV (RNP) X RWY 22L			KDTW	DETROIT	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 05/24/2018

## REASON FOR REVISION:

FIX MOVED 3.66 NM EAST  
FIX NAME RETAINED, ATC OPERATIONAL REQUEST  
ADDED ILS OR LOC RWY 22L TO FIX USE  
ADDED ILS PRM RWY 22L TO FIX USE  
ADDED ILS RWY 22L (SA CAT I) TO FIX USE  
ADDED RNAV (RNP) PRM X RWY 22L TO FIX USE  
ADDED RNAV (RNP) X RWY 22L TO FIX USE

DEVELOPED BY:

DATE: 01/12/2018

OFFICE: AJV-5431

NAME: NICHOLAS JACKSON

APPROVED BY:

DATE:

OFFICE: AJV-5430

NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

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