

RADIO FIX AND HOLDING DATA RECORD

NAME: DELOW

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 422736.86N/0830403.36W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

FIX USE:
USE TYPE
IAP

USE TITLE
RNAV (GPS) RWY 33

FAC

PAT

AIRPORT IDENT
KDET

CITY
DETROIT

STATE
MI (US)

REQUIRED CHARTING: IAP, AREA, CONTROLLER

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 12

DATE OF REVISION: 05/24/2018

REASON FOR REVISION:

1. DELETED V2 FROM FIX USE.
2. DELETED V221 FROM FIX USE.
3. DELETED V464 FROM FIX USE.
4. DELETED FAC 1 AND FAC 2 FROM MAKE-UP FACILITIES.
5. DELETED SALEM (FAC 1) AND WINDSOR (FAC 2) USED TO ESTABLISH FIX COORDINATES FROM REMARKS.
6. DELETED PRECIPITOUS TERRAIN EVALUATION COMPLETED FROM REMARKS.
7. DELETED ENROUTE LOW FROM REQUIRED CHARTING.

DEVELOPED BY:

DATE: 11/20/2017

OFFICE: AJV-5422

NAME: KEVIN KESZLER

APPROVED BY:

DATE:

OFFICE: AJV-5420

NAME: JULIE MORGAN

SIGNATURE:

DISTRIBUTION:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: LANSING VORTAC **STATE:** MI **COUNTRY:** US **ICAO REGION CODE:** K5

LATITUDE/LONGITUDE: 424302.62N/0844151.03W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:**CANCEL

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	FEET	MRA	MAA
1	LANSING	LAN	VORTAC	L							17500

FIX RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

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	SW	LAN	VORTAC	236.93	056.93	R	1		2500	5000	4	5
2	S	LAN	VORTAC	165.00	345.00	L	1		2500	5000	4	5
3	SE	LAN	VORTAC	135.00	315.00	L	1		2500	5000	4	5
4	NW	LAN	VORTAC	311.74	131.74	R	1		2600	5000	4	5

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (26-000910)	423836.00N/0844757.00W	1367	5E
2	200	STACK (26-000677)	424132.00N/0843924.00W	1356	1D
3	200	TOWER (26-000308)	423844.00N/0843339.00W	1413	5D
4	200	STACK (26-000677)	424132.00N/0843924.00W	1356	1D

REASON FOR NONSTANDARD HOLDING:

PAT 2 AT REQUEST.
PAT 3 AT REQUEST.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.
D NOTAM 11/175 SHOWS LANSING VORTAC OTS PERMANENTLY.
ASSIGNED FACILITY MAG VAR: 5W 1995.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V103					MI (US)
EN ROUTE	V2					(US)
EN ROUTE	V2-26					(US)
EN ROUTE	V218					(US)
EN ROUTE	V233					(US)
EN ROUTE	V26					(US)
EN ROUTE	V45					(US)
EN ROUTE	V510					(US)
EN ROUTE	V84					(US)
IAP	RNAV (GPS) RWY 23R			KBTL	BATTLE CREEK	MI (US)
IAP	ILS OR LOC RWY 27			KFNT	FLINT	MI (US)
IAP	COPTER VOR 345		2	K4D0	GRAND LEDGE	MI (US)
IAP	VOR-A		2	K4D0	GRAND LEDGE	MI (US)
IAP	VOR/DME-A			K6D6	GREENVILLE	MI (US)
IAP	RNAV (GPS) RWY 30			K9D9	HASTINGS	MI (US)
IAP	VOR-A		3	KY70	IONIA	MI (US)
IAP	VOR RWY 6		1	KLAN	LANSING	MI (US)
IAP	VOR-A		4	KTEW	MASON	MI (US)
IAP	RNAV (GPS) RWY 11			KRNP	OWOSSO	MI (US)
STAR	SPRTN			CYQG	ONTARIO, CANADA	(CA)
STAR	SPRTN			KARB	ANN ARBOR	MI (US)
STAR	SPRTN			KDET	DETROIT	MI (US)
STAR	POLAR			KDTW	DETROIT	MI (US)
STAR	SPRTN			KYIP	DETROIT	MI (US)
STAR	SPRTN			KONZ	DETROIT/GROSSE ILE	MI (US)
STAR	SPRTN			KOZW	HOWELL	MI (US)
STAR	SPRTN			KTTF	MONROE	MI (US)
STAR	SPRTN			KMTC	MOUNT CLEMENS	MI (US)
STAR	SPRTN			KY47	NEW HUDSON	MI (US)
STAR	SPRTN			K1D2	PLYMOUTH	MI (US)
STAR	SPRTN			KPTK	PONTIAC	MI (US)
STAR	SPRTN			KD98	ROMEO	MI (US)
STAR	SPRTN			K3TE	TECUMSEH	MI (US)
STAR	SPRTN			KVLL	TROY	MI (US)

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

COMPULSORY REPORTING POINT: NO**RECORD REVISION NUMBER: 20****DATE OF REVISION: 06/22/2017****REASON FOR REVISION:**

1. HOLDING: DELETED NE HOLDING PATTERN, FORMERLY PATTERN 1.
2. FIX USE: DELETED IAP VOR RWY 20 AT KFPK; DELETED IAPS ILS OR LOC RWY 10R AND ILS OR LOC RWY 28L AT KLAN.

DEVELOPED BY:**DATE:****OFFICE:****NAME:****APPROVED BY:****DATE:****OFFICE: AJV-5420****NAME: TONY LAWSON****SIGNATURE:****DISTRIBUTION:****NFDC****FPO: CHI****ARTCC: ZOB****ATC FACILITY: LAN APP CON, AZO APP CON****OTHER:**

RADIO FIX AND HOLDING DATA RECORD

NAME: SALEM VORTAC **STATE:** MI **COUNTRY:** US **ICAO REGION CODE:** K5

LATITUDE/LONGITUDE: 422431.11N/0833538.05W **TYPE:**

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	SALEM	SVM	VORTAC	L							45000

FIX RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

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	NE	SVM	VORTAC	033.00	213.00	R	1		3000	6000	4	5
2	NW	SVM	VORTAC	294.00	114.00	L	1		3000	6000	4	5
3	NW	SVM	VORTAC	303.76	123.76	L	1		2400	6000	4	5
4	S	SVM	VORTAC	170.00	350.00	R	1		3000	6000	4	5
5	N	SVM	VORTAC	360.00	180.00	R	1		3000	6000	4	5
6	N	SVM	VORTAC	343.63	163.63	L	1		2600	6000	4	5
7	NE	SVM	VORTAC	055.00	235.00	R	1		3000	6000	4	5
8	NW	WP		294.00	114.00	L		4	3000	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (26-000543)	422911.99N/0832949.10W	1389	5D
2	200	GEN UTIL (26-027127)	422403.80N/0833325.40W	1308	2C
3	200	GEN UTIL (26-027127)	422403.80N/0833325.40W	1308	2C
4	200	GEN UTIL (26-027127)	422403.80N/0833325.40W	1308	2C
5	200	AAO	423318.00N/0833942.00W	1349	4E
6	200	AAO	423318.00N/0833942.00W	1349	4E
7	200	TOWER (26-000543)	422911.99N/0832949.10W	1389	5D
8	200	GEN UTIL (26-027127)	422403.80N/0833325.40W	1308	2C

REASON FOR NONSTANDARD HOLDING:

PAT 3 ATC REQUEST
PAT 8 PAT 10 ATC REQUEST
PAT 2 ATC REQUEST
PAT 6 ATC REQUEST

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.
SALEM VORTAC MAGNETIC VARIATION W3/1965.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	MOONN			KARB	ANN ARBOR	MI (US)
DP	MOONN			KDET	DETROIT	MI (US)
DP	MOONN			KDTW	DETROIT	MI (US)
DP	MOONN			KYIP	DETROIT	MI (US)
DP	MOONN			KPTK	PONTIAC	MI (US)
EN ROUTE	J70					(US)
EN ROUTE	Q907					(US)
EN ROUTE	Q951					(US)
EN ROUTE	V133					(US)
EN ROUTE	V170					(US)
EN ROUTE	V26					(US)
EN ROUTE	V406					(US)
EN ROUTE	V90					(US)
IAP	RNAV (GPS) RWY 23			KADG	ADRIAN	MI (US)
IAP	VOR RWY 24		1	KARB	ANN ARBOR	MI (US)
IAP	VOR RWY 6		7	KARB	ANN ARBOR	MI (US)
IAP	ILS OR LOC RWY 15	1		KDET	DETROIT	MI (US)
IAP	ILS OR LOC RWY 33	1		KDET	DETROIT	MI (US)
IAP	ILS OR LOC RWY 21L			KDTW	DETROIT	MI (US)
IAP	ILS OR LOC RWY 22L			KDTW	DETROIT	MI (US)
IAP	ILS OR LOC RWY 27R		4	KDTW	DETROIT	MI (US)
IAP	ILS PRM RWY 22L (CLOSE PAR)			KDTW	DETROIT	MI (US)
IAP	ILS RWY 21L (SA CAT I & II)			KDTW	DETROIT	MI (US)
IAP	ILS OR LOC RWY 23L		2	KYIP	DETROIT	MI (US)
IAP	ILS OR LOC RWY 5R		2	KYIP	DETROIT	MI (US)
IAP	RNAV (GPS) RWY 23R			KYIP	DETROIT	MI (US)
IAP	RNAV (GPS) RWY 5L		8	KYIP	DETROIT	MI (US)
IAP	RNAV (GPS) RWY 5R		8	KYIP	DETROIT	MI (US)
IAP	VOR-A		6	KYIP	DETROIT	MI (US)
IAP	ILS OR LOC RWY 13			KOZW	HOWELL	MI (US)

IAP	RNAV (GPS) RWY 31		KOZW	HOWELL	MI (US)
IAP	VOR RWY 31		KOZW	HOWELL	MI (US)
IAP	VOR OR GPS-A	4	KY47	NEW HUDSON	MI (US)
IAP	RNAV (GPS) - B		K1D2	PLYMOUTH	MI (US)
IAP	VOR-A	3	K1D2	PLYMOUTH	MI (US)
IAP	ILS OR LOC RWY 9R	5	KPTK	PONTIAC	MI (US)
IAP	LOC BC RWY 27L	5	KPTK	PONTIAC	MI (US)
IAP	RNAV (GPS) RWY 27L		KPTK	PONTIAC	MI (US)
IAP	RNAV (GPS) RWY 9R		KPTK	PONTIAC	MI (US)
IAP	VOR RWY 27L	5	KPTK	PONTIAC	MI (US)
IAP	VOR RWY 9R	5	KPTK	PONTIAC	MI (US)
STAR	SPICA		KDTW	DETROIT	MI (US)
STAR	WEEDA		KDTW	DETROIT	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, AREA, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 27

DATE OF REVISION: 05/24/2018

REASON FOR REVISION:

1. REMOVED V26 FROM FIX USE.
2. SEPERADTED V133, V406, AND V464 INTO SEPARATE ENTRIES UNDER FIX USE.
3. REMOVED ESV FROM SVM VORTAC.
4. DELETED V418 FROM FIX USE.
5. REMOVED V221 FROM FIX USE.
6. DELETED V116, V2, V464 FROM FIX USE.

DEVELOPED BY: **DATE:** 11/16/2017 **OFFICE:** AJV-5422 **NAME:** KEVIN KESZLER

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

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZOB
ATC FACILITY: DTW APP CON, DET ATCT
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: WOLIS

STATE:

COUNTRY: CA

ICAO REGION CODE: CY

LATITUDE/LONGITUDE: 423738.13N/0813445.00W

TYPE: 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	AYLMER	YQO	VOR/DME	H	269.37	261.37		30.97		4500	17500
2	ERIE	ERI	VORTAC	L	309.00	303.00		67.94		5000	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
ERI	VORTAC	R-309	68	5000	31000

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	SPICA	1, 2		KDTW	DETROIT	MI (CA)

REQUIRED CHARTING: STAR, CONTROLLER

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 05/24/2018

REASON FOR REVISION:

1. DELETED FAC 3 LONDON YXU VOR/DME FROM MAKE-UP FACILITIES.
2. DELETED V221 FROM FIX USE.
3. UPDATED SPICA TWO STAR IN FIX USE.
4. REMOVED EN ROUTE LOW FROM REQUIRED CHARTING.
5. ADDED DIST FROM FAC 1 OF 30.97.
6. ADDED DIST FROM FAC 2 OF 67.97.
7. CHANGED FAC 1 TRUE/MAG BRG FROM 261.37/269.37 TO 361.38/269.38.
8. ADDED DME TO FIX TYPE.
9. DELETED V2 AND V464 FROM FIX USE.
10. DELETED INT FROM FIX USE.
11. DELETED EN ROUTE LOW FROM REQUIRED CHARTING.
12. CHANGED FAC 2 MRA FROM 4500 TO 5000.
13. ADDED ESV FROM ERI VORTAC.

DEVELOPED BY:

DATE: 12/06/2017

OFFICE: AJV-5422

NAME: KEVIN KESZLER

APPROVED BY:

DATE:

OFFICE: AJV-5420

NAME: JULIE MORGAN

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: CHI
ARTCC: ZOB
ATC FACILITY: TORONTO ARTCC
OTHER: PADC TRANSCANADA