

RADIO FIX AND HOLDING DATA RECORD

NAME: CRUXX

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 415812.67N/0840839.46W

TYPE: 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	MRA FEET	MAA
1	FORT WAYNE	FWA	VORTAC	H	044.04	038.04	75.82	75.82	7500	17500
2	LITCHFIELD	LFD	VOR/DME	L	106.07	101.07	28.31	28.31	3000	17500
3	DETROIT	DXO	VOR/DME	H	253.50	247.50	37.67	37.67	7500	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
FWA	VORTAC	R-044	76	7500	17500

FIX RESTRICTIONS:

MRA ALL 7500

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	SW	FWA	VORTAC	224.04	044.04	R	1-1 1/2	7500 17500	10 18

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	TOWER (26-000526)	415609.00N/0841814.00W	1548	4D

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:

FORT WAYNE (FAC 1) USED TO ESTABLISH FIX COORDINATES
PRECIPITOUS TERRAIN EVALUATION COMPLETE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	CRUXX	1, 2, 3	1	KARB	ANN ARBOR	MI (US)
STAR	CRUXX	1, 2, 3	1	KYIP	DETROIT	MI (US)
STAR	CRUXX	1, 2, 3	1	KONZ	DETROIT/GROSSE ILE	MI (US)
STAR	CRUXX	1, 2, 3	1	KOZW	HOWELL	MI (US)
STAR	CRUXX	1, 2, 3	1	KTTF	MONROE	MI (US)
STAR	CRUXX	1, 2, 3	1	KY47	NEW HUDSON	MI (US)
STAR	CRUXX	1, 2, 3	1	K1D2	PLYMOUTH	MI (US)
STAR	CRUXX	1, 2, 3	1	KPTK	PONTIAC	MI (US)
STAR	CRUXX	1, 2, 3	1	K3TE	TECUMSEH	MI (US)
STAR	CRUXX	1, 2, 3	1	KVLL	TROY	MI (US)

REQUIRED CHARTING: STAR, CONTROLLER

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 9

DATE OF REVISION: 05/24/2018

REASON FOR REVISION:

1. DELETED FAC 3 CARLTON CLR VOR/DME FROM MAKE-UP FACILITIES.
2. CHANGED DETROIT DXO VOR/DME FROM FAC 4 TO FAC 3 IN MAKE-UP FACILITIES.
3. IN ESV CHANGED FWA VORTAC RADIAL FROM R-038 TO R-044.
4. DELETED V10 FROM FIX USE.
5. IN FIX USE, CHANGED CRUXX STAR FAC FROM 4 TO 3.
6. REMOVED RNAV (GPS) RWY 5 AT KADG FORM FIX USE.
7. REMOVED IAP FROM REQUIRED CHARTING.
8. DELETED V11 FROM FIX USE.
9. DELETED EN ROUTE LOW FROM CHARTING.

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: TOL, DTW
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: EDGE E

STATE: OH

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 412920.26N/0843922.54W

TYPE: WP, 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	WATERVILLE	VWV	VOR/DME	L	275.14	273.14	45.95	45.95		3000	17500
2	FORT WAYNE	FWA	VORTAC	H	044.04	038.04	38.92	38.92		3000	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
VWV	VOR/DME	R-275	46	3000	17500

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

WATERVILLE (FAC 1) AND FORT WAYNE (FAC 2) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V11	1, 2				(US)
IAP	RNAV (GPS) RWY 9			KUSE	WAUSEON	OH (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 7

DATE OF REVISION: 05/24/2018

REASON FOR REVISION:

1. DELETED V126, V92 FROM FIX USE.
2. DELETED PRECIPITOUS TERRAIN EVALUATION COMPLETE IN REMARKS.

DEVELOPED BY:

DATE: 12/04/2017

OFFICE: AJV-5422

NAME: KEVIN KESZLER

APPROVED BY:

DATE:

OFFICE: AJV-5420

NAME: JULIE MORGAN

SIGNATURE:

DISTRIBUTION:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: HIRED

STATE: MI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 414902.28N/0841828.97W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

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 MIN	ALTITUDES MIN MAX	TEMPLATES MIN MAX
1	E		WP	100.67	280.67	R	4	3100	8000	5 15

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (26-002795)	415127.00N/0841926.00W	1259	2C

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 28		1	KJYM	HILLSDALE	MI (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5

DATE OF REVISION: 05/24/2018

REASON FOR REVISION:

REMOVED "INT" AND "DME" FROM FIX TYPE.
REMOVED FAC 1 AND 2 FROM FIX MAKE-UP.
REMOVED ESV FWA VORTAC R-044.
REMOVED "MRA ALL 6000" FROM FIX RESTRICTIONS.
LOWERED HOLDING PAT 1 MIN ALT FROM 6000 TO 3100 AND MIN TEMPLATE FROM 6 TO 5.
CHANGED PAT 1 CONTROLLING OBSTACLE ACCURACY CODE FROM 4D TO 2C.
REMOVED UPN AND 310KT CONTROLLING OBSTACLES.
REMOVED "UNPLANNED HOLDING RESTRICTION AT OR ABOVE 6000" AND ADDED "HOLDING LIMITED TO ESTABLISHED PATTERN."
REMOVED CLIMB-IN-HOLD FOR KJYM RNAV (GPS) RWY 28.
REMOVED FIX COORDINATES ESTABLISHMENT REMARK.
REMOVED V11, V30, & V45 FROM FIX USE.
REMOVED "ENROUTE LOW" AND "CONTROLLER" FROM REQUIRED CHARTING.

DEVELOPED BY:

DATE: 12/01/2017

OFFICE: AJV-5412

NAME: ROSE BOONE

APPROVED BY:

DATE:

OFFICE: AJV-5420

NAME: JULIE MORGAN

SIGNATURE:

DISTRIBUTION:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: PIONS

STATE: OH

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 413913.98N/0842854.92W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	AAO	414912.00N/0843342.00W	1303	4E
UPN	230	TOWER (26-001645)	415328.00N/0843853.00W	1562	5D
UPN	265	TOWER (26-001645)	415328.00N/0843853.00W	1562	5D

HOLDING RESTRICTIONS:

UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 4000.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	DAYTON			KDAY	DAYTON	OH (US)
IAP	RNAV (GPS) RWY 12			KDFI	DEFIANCE	OH (US)

REQUIRED CHARTING: DP, IAP, CONTROLLER

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 10

DATE OF REVISION: 05/24/2018

REASON FOR REVISION:

1. DELETED DAYTON DQN VOR/DME FROM MAKE-UP FACILITIES.
2. DELETED CARLETON CRL VOR/DME FROM MAKE-UP FACILITIES.
3. DELETED WATERVILLE VWV VOR/DME FROM MAKE-UP FACILITIES.
4. DELETED FORT WAYNE FWA VORTAC FROM MAKE-UP FACILITIES.
5. DELETED DQN VOR/DME ESV.
6. DELETED CRL VOR/DME ESV.
7. IN FIX RESTRICTION, DELETED MCA V98 10000 SOUTHBOUND AND MRA 10000 ALL.
8. IN REMARKS, DELETED ANGLE BETWEEN DQN AND FWA DID NOT MEET TERPS 287B CRITERIA, APPLIED 287B TO VWV AND FWA.
9. DELETED V98 FROM FIX USE.
10. IN FIX USE DELETED V11 AND V6.
11. DELETED REMARK TO WATERVILLE (FAC 1) AND FORT WAYNE (FAC 2) USED TO ESTABLISH FIX COORDINATES.
12. DELETED RNAV (GPS) RWY 5 AT KADG FROM FIX USE.
13. DELETED INT AND DME FROM TYPE.
14. DELETED FWA ESV.
15. REMOVED ENROUTE LOW FROM FIX USE.

DEVELOPED BY:

DATE: 11/17/2017

OFFICE: AJV-5422

NAME: KEVIN KESZLER

APPROVED BY:

DATE:

OFFICE: AJV-5420

NAME: JULIE MORGAN

SIGNATURE:

DISTRIBUTION:

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