

RADIO FIX AND HOLDING DATA RECORD

NAME: CARLETON VOR/DME STATE: MI COUNTRY: US ICAO REGION CODE: K5
 LATITUDE/LONGITUDE: 420252.90N/0832727.30W 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	FEET	MRA	MAA
1	CARLETON	CRL	VOR/DME	H							45000

FIX RESTRICTIONS:

UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3000.

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

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)

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	V10					(US)
EN ROUTE	V176					(US)
EN ROUTE	V188					(US)
EN ROUTE	V426					(US)
EN ROUTE	V493					(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 RPM RWY 22L		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, II)		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 RWY 21		1	KTTF	MONROE	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: 18

DATE OF REVISION: 04/27/2017

REASON FOR REVISION:

CHANGE FIX NAME FROM CARLETON VORTAC TO CARLETON VOR/DME.

UPDATED FIX USE; DELETED DP SANDUSKY FOR KBKL, KCGF, KCLE, KLPR, KLNN, K1G1, K1G5, K2G1 AND K7G8.

DEVELOPED BY: **DATE:** 11/22/2016 **OFFICE:** AJV-5410 **NAME:** MARY LYNNE HOEGSTROM

APPROVED BY: **DATE:** **OFFICE:** AJV-5410 **NAME:** GEORGE DAVIS

SIGNATURE:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: FORT WAYNE VORTAC **STATE:** IN **COUNTRY:** US **ICAO REGION CODE:** K5

LATITUDE/LONGITUDE: 405844.63N/0851117.01W **TYPE:**

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	FEET	MRA	MAA
1	FORT WAYNE	FWA	VORTAC	H							45000

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG TIME	LENGTH DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	SE	FWA	VORTAC	140.75	320.75	R	1		4000	6000	4	5

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	TOWER (18-000045)	410539.00N/0851049.00W	1648	4D
1	200	TOWER (18-000023)	410012.00N/0850559.00W	1159	4D

HOLDING RESTRICTIONS:

UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3000.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.
ASSIGNED FACILITY MAG VAR: 6W 2020.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	FORT WAYNE			KARB	ANN ARBOR	MI (US)
DP	FORT WAYNE			KDET	DETROIT	MI (US)
DP	FORT WAYNE			KDTW	DETROIT	MI (US)
DP	FORT WAYNE			KYIP	DETROIT	MI (US)
DP	FORT WAYNE			KPTK	PONTIAC	MI (US)
DP	OBRLN			KCGF	CLEVELAND	OH (US)
DP	OBRLN			KCLE	CLEVELAND	OH (US)
DP	DAYTON			KDAY	DAYTON	OH (US)
DP	OBRLN			K1G1	ELYRIA	OH (US)
DP	OBRLN			KLPR	LORAIN/ELYRIA	OH (US)
DP	OBRLN			K1G5	MEDINA	OH (US)
DP	OBRLN			K7G8	MIDDLEFIELD	OH (US)
DP	OBRLN			K2G1	PAINESVILLE	OH (US)
DP	OBRLN			KLNN	WILLOUGHBY	OH (US)
EN ROUTE	J149					(US)
EN ROUTE	J178					(US)
EN ROUTE	J64					(US)
EN ROUTE	V11					(US)
EN ROUTE	V144					(US)
EN ROUTE	V221					(US)
EN ROUTE	V277					(US)
EN ROUTE	V340					(US)
EN ROUTE	V38					(US)
EN ROUTE	V55					(US)
EN ROUTE	V96					(US)
IAP	NDB RWY 5			KANQ	ANGOLA	IN (US)
IAP	ILS OR LOC RWY 27			KGWB	AUBURN	IN (US)
IAP	RNAV (GPS) RWY 27			KGWB	AUBURN	IN (US)
IAP	RNAV (GPS) RWY 9			KGWB	AUBURN	IN (US)
IAP	VOR-A			KGWB	AUBURN	IN (US)
IAP	ILS OR LOC RWY 32			KFWA	FORT WAYNE	IN (US)
IAP	ILS OR LOC RWY 5			KFWA	FORT WAYNE	IN (US)
IAP	ILS RWY 05 (CAT II)			KFWA	FORT WAYNE	IN (US)
IAP	LOC BC RWY 14		1	KFWA	FORT WAYNE	IN (US)
IAP	RNAV (GPS) RWY 14			KFWA	FORT WAYNE	IN (US)
IAP	RNAV (GPS) RWY 23			KFWA	FORT WAYNE	IN (US)
IAP	RNAV (GPS) RWY 32			KFWA	FORT WAYNE	IN (US)
IAP	RNAV (GPS) RWY 5			KFWA	FORT WAYNE	IN (US)
IAP	VOR OR TACAN RWY 23			KFWA	FORT WAYNE	IN (US)
IAP	VOR OR TACAN RWY 5			KFWA	FORT WAYNE	IN (US)
IAP	VOR OR TACAN RWY14			KFWA	FORT WAYNE	IN (US)
IAP	RNAV (GPS) RWY 31			KSMD	FORT WAYNE	IN (US)
IAP	VOR RWY 13			KSMD	FORT WAYNE	IN (US)
IAP	NDB RWY 9			KHHG	HUNTINGTON	IN (US)
IAP	VOR-A			KHHG	HUNTINGTON	IN (US)
IAP	RNAV (GPS) RWY 23			KOKK	KOKOMO	IN (US)
IAP	HI-ILS OR LOC RWY 25			KTOL	TOLEDO	OH (US)
IAP	HI-ILS OR LOC RWY 7			KTOL	TOLEDO	OH (US)
IAP	HI-TACAN RWY 25			KTOL	TOLEDO	OH (US)
IAP	HI-TACAN RWY 7			KTOL	TOLEDO	OH (US)

STAR	GOSHEN	KIGQ	CHICAGO	IL (US)
STAR	GOSHEN	KMDW	CHICAGO	IL (US)
STAR	PANGG (RNAV)	KMDW	CHICAGO	IL (US)
STAR	ESSPO (RNAV)	KORD	CHICAGO	IL (US)
STAR	KNOX	KORD	CHICAGO	IL (US)
STAR	VEECK (RNAV)	KORD	CHICAGO	IL (US)
STAR	WATSN (RNAV)	KORD	CHICAGO	IL (US)
STAR	GOSHEN	KGYY	GARY	IN (US)
STAR	GOSHEN	K05C	GRIFFITH	IN (US)
STAR	GOSHEN	K3HO	HOBART	IN (US)
STAR	CLANG	KEYE	INDIANAPOLIS	IN (US)
STAR	CLANG	KIND	INDIANAPOLIS	IN (US)
STAR	CLANG	KMQJ	INDIANAPOLIS	IN (US)
STAR	DEBAR	KCVG	COVINGTON	KY (US)
STAR	SHELBYVILLE	KCVG	COVINGTON	KY (US)
STAR	HEDEE	KK62	FALMOUTH	KY (US)
STAR	SHELBYVILLE	KK62	FALMOUTH	KY (US)
STAR	CRUXX	KARB	ANN ARBOR	MI (US)
STAR	MIZAR	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	K3TE	TECUMSEH	MI (US)
STAR	CRUXX	KVLL	TROY	MI (US)
STAR	HEDEE	KI69	BATAVIA	OH (US)
STAR	SHELBYVILLE	KI69	BATAVIA	OH (US)
STAR	HEDEE	KLUK	CINCINNATI	OH (US)
STAR	SHELBYVILLE	KLUK	CINCINNATI	OH (US)
STAR	GUNNE	KCMH	COLUMBUS	OH (US)
STAR	GUNNE	KLCK	COLUMBUS	OH (US)
STAR	GUNNE	KOSU	COLUMBUS	OH (US)
STAR	GUNNE	KTZR	COLUMBUS	OH (US)
STAR	HEDEE	KHAO	HAMILTON	OH (US)
STAR	SHELBYVILLE	KHAO	HAMILTON	OH (US)
STAR	GUNNE	KLHQ	LANCASTER	OH (US)
STAR	GUNNE	KVTA	NEWARK	OH (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 17

DATE OF REVISION: 04/27/2017

REASON FOR REVISION:

UPDATED PAT 1 RAD/CRS/BRG FROM 137.75 TO 140.75, CRS INBOUND FROM 317.75 TO 320.75, TEMPLATES MIN FROM 4 TO 8 AND REMOVED 200 KIAS OBSTRUCTION.

UPDATED FIX USE.

ADDED MAG VAR NOTE IN THE REMARKS SECTION.

12/19/16: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 05/24/16.

1. UPDATED PAT 1 TEMPLATES MIN FROM 8 TO 4, MAX 9 TO 5 AND CONTROLLING OBSTRUCTION DATA.

2. REMOVED 265K PATTERN EVALUATED FOR MILITARY USE FROM REMARKS.

3. UPDATED REMARKS FROM MAG VAR 0E 1965 TO ASSIGNED FACILITY MAG VAR: 6W 2020.

4. UPDATED FIX USE.

DEVELOPED BY: **DATE:** 05/24/2016 **OFFICE:** AJV-5423 **NAME:** PABLO ORTIZ

APPROVED BY: **DATE:** **OFFICE:** AJV-5420 **NAME:** TONY LAWSON

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZAU
ATC FACILITY: FWA APP CON, FWA ATCT
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: MYANN STATE: OH COUNTRY: US ICAO REGION CODE: K5
 LATITUDE/LONGITUDE: 411127.33N/0833923.47W TYPE: 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 FEET	MAA
1	TOLEDO	TOL	TACAN	T	170.00	165.00	25.00			18000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
TOL	TACAN	R-170	35	15000	18000

FIX RESTRICTIONS:

MILITARY ONLY

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	HOLDING ALTITUDES DME MIN MAX	TEMPLATES MIN MAX
1	S	TOL	TACAN	170.00	350.00	L		10 15000 18000	13 17

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	TOWER (39-001446)	405500.00N/0833545.00W	1310	5D
1	265	TOWER (39-000616)	410812.00N/0835424.40W	1817	5D

REASON FOR NONSTANDARD HOLDING:

PAT 1 AT REQUEST

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	HI-ILS OR LOC RWY 25		1	KTOL	TOLEDO	OH (US)
IAP	HI-ILS OR LOC RWY 7		1	KTOL	TOLEDO	OH (US)
IAP	HI-TACAN RWY 25		1	KTOL	TOLEDO	OH (US)
IAP	HI-TACAN RWY 7		1	KTOL	TOLEDO	OH (US)

REQUIRED CHARTING: MILITARY IAP, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3

DATE OF REVISION: 04/27/2017

REASON FOR REVISION:

- ADDED ESV DATA FOR TOLEDO (TOL) TACAN.
- MOVED "HOLDING LIMITED TO.." NOTE FROM REMARKS TO HOLDING RESTRICTIONS.
- ADDED "PRECIPITOUS TERRAIN EVAL..." NOTE TO REMARKS.
- MOVED "MILITARY ONLY" NOTE FROM REMARKS TO FIX RESTRICTIONS.
- UPDATED FIX USE.

DEVELOPED BY: DATE: 12/13/2016 OFFICE: AJV-5431 NAME: SEAN BARBEE

APPROVED BY: DATE: OFFICE: AJV-5430 NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: POUDR **STATE:** OH **COUNTRY:** US **ICAO REGION CODE:** K5

LATITUDE/LONGITUDE: 412107.39N/0834248.38W **TYPE:** 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	TOLEDO	TOL	TACAN	T	170.00	165.00	15.00	15.00		3000	15000

FIX RESTRICTIONS:
MILITARY ONLY

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	S	TOL	TACAN	170.00	350.00	L	8	3000 15000	11 16

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	TOWER (39-020159)	410410.00N/0833738.00W	1234	2B
1	265	TOWER (39-020159)	410410.00N/0833738.00W	1234	2B

REASON FOR NONSTANDARD HOLDING:
PAT 1 AIRSPACE COORDINATION.

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	HI-ILS OR LOC RWY 25		1	KTOL	TOLEDO	OH (US)
IAP	HI-ILS OR LOC RWY 7		1	KTOL	TOLEDO	OH (US)
IAP	HI-TACAN RWY 25		1	KTOL	TOLEDO	OH (US)
IAP	HI-TACAN RWY 7		1	KTOL	TOLEDO	OH (US)

REQUIRED CHARTING: MILITARY IAP, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 **DATE OF REVISION:** 04/27/2017

REASON FOR REVISION:

1. ADDED NM DIST TO FAC FOR FAC 1 IN FIX MAKE-UP FACILITIES.
2. CHANGED PAT 1 MIN HOLDING TEMPLATE FROM 7 TO 11 IAW 7130.3A, TABLE 8.
3. CHANGED PAT 1 230K CONTROLLING OBSTACLE FROM 1068 MSL WINDMILL (39-004119) TO 1234 MSL TOWER (39-020159).
4. CHANGED PAT 1 265K CONTROLLING OBSTACLE FROM 1105 MSL TOWER (39-002025) TO 1234 MSL TOWER (39-020159).
5. MOVED "HOLDING LIMITED TO..." NOTE FROM REMARKS TO HOLDING RESTRICTIONS.-
6. MOVED "MILITARY ONLY" NOTE FROM REMARKS TO FIX RESTRICTIONS.
7. UPDATED FIX USE.

DEVELOPED BY: **DATE:** 12/15/2016 **OFFICE:** AJV-5431 **NAME:** SEAN BARBEE

APPROVED BY: **DATE:** **OFFICE:** AJV-5430 **NAME:** PATRICK MULQUEEN

SIGNATURE:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: ROSEWOOD VORTAC **STATE:** OH **COUNTRY:** US **ICAO REGION CODE:** K5

LATITUDE/LONGITUDE: 401716.08N/0840235.15W **TYPE:**

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	FEET	MRA	MAA
1	ROSEWOOD	ROD	VORTAC	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	NW	ROD	VORTAC	310.00	130.00	R	1		2800	6000	4	5
2	NE	ROD	VORTAC	063.00	243.00	R	1		2800	6000	4	5
3	NE	ROD	VORTAC	064.96	244.96	R	1		3000	6000	4	5
4	W	ROD	VORTAC	248.49	068.49	R	1		3000	6000	4	5
5	SW	WP	WP	244.00	064.00	R		4	3000	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	TOWER (39-002629)	400822.15N/0835750.07W	1630	2C
1	200	TOWER (39-000804)	401821.00N/0840654.00W	1529	5D
2	200	TOWER (39-000804)	401821.00N/0840654.00W	1529	5D
3	200	TOWER (39-000804)	401821.00N/0840654.00W	1529	5D
4	200	TOWER (39-000804)	401821.00N/0840654.00W	1529	5D
5	200	TOWER (39-000804)	401821.00N/0840654.00W	1529	5D

HOLDING RESTRICTIONS:

UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 5000.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETE.
ASSIGNED FACILITY MAGVAR: 5 DEGREES WEST (1995).

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	GATEWAY			KALN	ALTON/ST LOUIS	IL (US)
DP	GATEWAY			KBLV	BELLEVILLE	IL (US)
DP	GATEWAY			KCPD	CAHOKIA/ST LOUIS	IL (US)
DP	MAREO			KEYE	INDIANAPOLIS	IN (US)
DP	MAREO			KHFY	INDIANAPOLIS	IN (US)
DP	INDY			KIND	INDIANAPOLIS	IN (US)
DP	MAREO			KIND	INDIANAPOLIS	IN (US)
DP	MAREO			KMQJ	INDIANAPOLIS	IN (US)
DP	MAREO			KTYQ	INDIANAPOLIS	IN (US)
DP	MAREO			KUMP	INDIANAPOLIS	IN (US)
DP	MAREO			KGEZ	SHELBYVILLE	IN (US)
DP	CINCINNATI			KCVG	COVINGTON	KY (US)
DP	HAGOL (RNAV)			KCVG	COVINGTON	KY (US)
DP	ROSEWOOD			KARB	ANN ARBOR	MI (US)
DP	ROSEWOOD			KDET	DETROIT	MI (US)
DP	ROSEWOOD			KDTW	DETROIT	MI (US)
DP	ROSEWOOD			KYIP	DETROIT	MI (US)
DP	ROSEWOOD			KPTK	PONTIAC	MI (US)
DP	GATEWAY			KSTL	ST LOUIS	MO (US)
DP	JHART (RNAV)			KSTL	ST LOUIS	MO (US)
DP	GATEWAY			KSUS	ST LOUIS	MO (US)
DP	OBRLN			KCGF	CLEVELAND	OH (US)
DP	OBRLN			KCLE	CLEVELAND	OH (US)
DP	LOCKBOURNE			KLCK	COLUMBUS	OH (US)
DP	DAYTON			KDAY	DAYTON	OH (US)
DP	OBRLN			K1G1	ELYRIA	OH (US)
DP	OBRLN			KLPR	LORAIN/ELYRIA	OH (US)
DP	OBRLN			K1G5	MEDINA	OH (US)
DP	OBRLN			K7G8	MIDDLEFIELD	OH (US)
DP	OBRLN			K2G1	PAINESVILLE	OH (US)
DP	OBRLN			KLNN	WILLOUGHBY	OH (US)
EN ROUTE	J149					(US)
EN ROUTE	J152					(US)
EN ROUTE	J39					(US)
EN ROUTE	J43					(US)
EN ROUTE	Q65					(US)
EN ROUTE	V210					(US)
EN ROUTE	V277					(US)
EN ROUTE	V383					(US)
EN ROUTE	V416					(US)
EN ROUTE	V435					(US)
EN ROUTE	V47					(US)

EN ROUTE	V542			(US)
IAP	ILS OR LOC RWY 5		KFWA	IN (US)
IAP	ILS RWY 5 (CAT II)		KFWA	IN (US)
IAP	RNAV (GPS) RWY 25	5	KEDJ	OH (US)
IAP	RNAV (GPS) RWY 7	5	KEDJ	OH (US)
IAP	VOR/DME RWY 25	4	KEDJ	OH (US)
IAP	VOR/DME RWY 7	4	KEDJ	OH (US)
IAP	ILS OR LOC RWY 28L		KCMH	OH (US)
IAP	ILS RWY 28L (SA CAT 1)		KCMH	OH (US)
IAP	ILS OR LOC RWY 18		KDAY	OH (US)
IAP	ILS OR LOC RWY 24L		KDAY	OH (US)
IAP	ILS OR LOC RWY 24R		KDAY	OH (US)
IAP	ILS OR LOC RWY 6L	2	KDAY	OH (US)
IAP	ILS RWY 6L (CAT II & III)	2	KDAY	OH (US)
IAP	RNAV (GPS) RWY 18		KDAY	OH (US)
IAP	RNAV (GPS) RWY 24L		KDAY	OH (US)
IAP	RNAV (GPS) Z RWY 24R		KDAY	OH (US)
IAP	RNAV (GPS) RWY 36		KFDY	OH (US)
IAP	RNAV (GPS) RWY 4		KI95	OH (US)
IAP	ILS OR LOC RWY 28		KAOH	OH (US)
IAP	RNAV (GPS) RWY 26		KI17	OH (US)
IAP	VOR RWY 26	2	KI17	OH (US)
IAP	RNAV (GPS) RWY 10		KSCA	OH (US)
IAP	RNAV (GPS) RWY 28		KSCA	OH (US)
IAP	VOR-A	3	KSCA	OH (US)
IAP	ILS OR LOC RWY 24		KSGH	OH (US)
IAP	NDB RWY 24		KSGH	OH (US)
IAP	VOR/DME RWY 33		KSGH	OH (US)
IAP	HI-ILS OR LOC RWY 07		KTOL	OH (US)
IAP	HI-ILS OR LOC RWY 25		KTOL	OH (US)
IAP	HI-TACAN RWY 07		KTOL	OH (US)
IAP	HI-TACAN RWY 25		KTOL	OH (US)
IAP	RNAV (GPS) RWY 20		KI74	OH (US)
IAP	VOR-A	1	KI74	OH (US)
IAP	RNAV (GPS) RWY 27		KVES	OH (US)
IAP	VOR-A		KAXV	OH (US)
STAR	WATSN (RNAV)		KORD	IL (US)
STAR	CLANG		KEYE	IN (US)
STAR	CLANG		KIND	IN (US)
STAR	CLANG		KMQJ	IN (US)
STAR	REDSTONE		KJVY	IN (US)
STAR	CINCE		KCVG	KY (US)
STAR	DEBAR		KCVG	KY (US)
STAR	HEDEE		KK62	KY (US)
STAR	REDSTONE		KLOU	KY (US)
STAR	REDSTONE		KSDF	KY (US)
STAR	GEMNI		KDTW	MI (US)
STAR	WEEDA		KDTW	MI (US)
STAR	HEDEE		KI69	OH (US)
STAR	HEDEE		KLUK	OH (US)
STAR	ZABER		KBKL	OH (US)
STAR	ZABER		KCGF	OH (US)
STAR	ZABER		KCLE	OH (US)
STAR	GUNNE		KCMH	OH (US)
STAR	GUNNE		KLCK	OH (US)
STAR	GUNNE		KOSU	OH (US)
STAR	GUNNE		KTZR	OH (US)
STAR	ZABER		K1G1	OH (US)
STAR	HEDEE		KHAO	OH (US)
STAR	GUNNE		KLHQ	OH (US)
STAR	ZABER		KLPR	OH (US)
STAR	ZABER		K1G5	OH (US)
STAR	ZABER		K7G8	OH (US)
STAR	GUNNE		KVTA	OH (US)
STAR	ZABER		K2G1	OH (US)
STAR	ZABER		KLNN	OH (US)
				WILLOUGHBY

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 26

DATE OF REVISION: 04/27/2017

REASON FOR REVISION:

1. ADDED "ASSIGNED FACILITY MAGVAR: 5 DEGREES WEST (1995)" REMARK.

DEVELOPED BY: DATE: 12/21/2016

OFFICE: AJV-5422

NAME: DUSTIN DAVIDSON

APPROVED BY: DATE:

OFFICE: AJV-5420

NAME: JULIE MORGAN

SIGNATURE:

DISTRIBUTION: NFDC
FPO: CEN
ARTCC: ZID
ATC FACILITY: COLUMBUS APP CON

OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: TOPHR LOM **STATE:** OH **COUNTRY:** US **ICAO REGION CODE:** K5
LATITUDE/LONGITUDE: 413310.29N/0835514.68W **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 NM	FAC FEET	MRA	MAA
1	TOPHR	TO	LOM-NDB								17500
2	TOLEDO	I-TOL	LOC		252.16	247.16		6.38	38767	2200	5100
3	TOLEDO	TOL	TACAN	T			5.99	5.99		2200	12000

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	W	TO	LOM	252.00	072.00	L	1-1 1/2	2300 17500	4 16

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (39-001097)	413215.00N/0840754.00W	1073	5D
1	265	TOWER (39-001692)	413329.00N/0841108.00W	1246	5D

REASON FOR NONSTANDARD HOLDING:

PAT 1 ATC REQUEST

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:

COORDINATES REFLECT LOCATION ON LOC/AZ CENTERLINE ABEAM THE TOPHR LOM.
 ACTUAL FACILITY LOCATION IS 413312.48N/0835515.91W.
 PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	VOR RWY 28	1		K7W5	NAPOLEON	OH (US)
IAP	HI-ILS OR LOC RWY 7	1, 2, 3		KTOL	TOLEDO	OH (US)
IAP	ILS OR LOC RWY 25	1	1	KTOL	TOLEDO	OH (US)
IAP	ILS OR LOC RWY 7	1, 2	1	KTOL	TOLEDO	OH (US)

REQUIRED CHARTING: MILITARY IAP, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 9 **DATE OF REVISION:** 01/08/2015

REASON FOR REVISION:

1. UPDATED FIX USE.
2. ADDED DIST FROM FAC FOR TOL LOC AND TACAN.
3. CORRECTED COORDINATES FROM 412210.10N/0835514.75W TO 413310.29N/0835514.68W.
4. UPDATED PAT 1 CONTROLLING OBSTACLES FROM 36-1097/36-1692 TO 39-001097/39-001692.
5. ADDED FAC 2 DIST FROM FAC IN FEET.
6. CHANGED FAC 2 AND 3 MRA FROM 2000 TO 2200.
7. ADDED REMARK: PRECIPITOUS TERRAIN EVALUATION COMPLETED.
8. MOVED REMARK, HOLDING LIMITED TO ESTABLISHED PATTERN, TO HOLDING RESTRICTIONS.
9. RAISED PAT 1 MIN HOLDING ALTITUDE FROM 2200 TO 2300.

DEVELOPED BY: **DATE:** 07/18/2014 **OFFICE:** AJV-353 **NAME:** PETER GETZ (CHRISTOPHER STEWART)
APPROVED BY: **DATE:** 01/08/2015 **OFFICE:** AJV-353 **NAME:** GEORGE GONZALEZ

SIGNATURE:

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