

RADIO FIX AND HOLDING DATA RECORD

NAME: AMRST **STATE:** OH **COUNTRY:** US

LATITUDE/LONGITUDE: 411442.18N/0825919.80W **TYPE:** WP, 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	DRYER	DJB	VOR/DME	H	265.00	260.00	38.00	38.00	3000	20000
2	WATERVILLE	VWV	VOR/DME	L	114.64	112.64	31.87	31.87	3000	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
VWV	VOR/DME	R-115	32	18600	26000

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:

DRYER (FAC 1) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	ALPHE (RNAV)	1		KBKL	CLEVELAND	OH (US)
DP	AMRST	1		KBKL	CLEVELAND	OH (US)
DP	ALPHE (RNAV)	1		KCGF	CLEVELAND	OH (US)
DP	AMRST	1, 2		KCGF	CLEVELAND	OH (US)
DP	ALPHE (RNAV)	1		KCLE	CLEVELAND	OH (US)
DP	AMRST	1, 2		KCLE	CLEVELAND	OH (US)
DP	ALPHE (RNAV)	1		K1G1	ELYRIA	OH (US)
DP	AMRST	1, 2		K1G1	ELYRIA	OH (US)
DP	ALPHE (RNAV)	1		KLPR	LORAIN/ELYRIA	OH (US)
DP	AMRST	1, 2		KLPR	LORAIN/ELYRIA	OH (US)
DP	ALPHE (RNAV)	1		K1G5	MEDINA	OH (US)
DP	AMRST	1, 2		K1G5	MEDINA	OH (US)
DP	ALPHE (RNAV)	1		K7G8	MIDDLEFIELD	OH (US)
DP	AMRST	1, 2		K7G8	MIDDLEFIELD	OH (US)
DP	ALPHE (RNAV)	1		K2G1	PAINESVILLE	OH (US)
DP	AMRST	1, 2		K2G1	PAINESVILLE	OH (US)
DP	ALPHE (RNAV)	1		KLNN	WILLOUGHBY	OH (US)
DP	AMRST	1, 2		KLNN	WILLOUGHBY	OH (US)
EN ROUTE	V426	1				(US)
EN ROUTE	V584	1, 2				(US)
IAP	RNAV (GPS) RWY 27			KFZI	FOSTORIA	OH (US)
IAP	RNAV (GPS) RWY 32			KTDZ	TOLEDO	OH (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5 **DATE OF REVISION:** 10/15/2015

REASON FOR REVISION:

UPDATED FIX MAKE-UP.
DELETED MRA RESTRICTIONS.
UPDATED FIX USE.
DELETED ESV DATA FOR CRL.
UPDATED REMARKS, FAC 1 USED TO ESTABLISH FIX COORDINATES.

DEVELOPED BY: **DATE:** 06/19/2015 **OFFICE:** AJV-353 **NAME:** ADRIAN BLAND

APPROVED BY: **DATE:** 07/21/2015 **OFFICE:** AJV-353 **NAME:** GEORGE GONZALEZ

SIGNATURE:

DISTRIBUTION: NFDC
FPO: CEN
ARTCC: ZOB
ATC FACILITY: CLE APP CON
OTHER:

QUALITY
18
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: CETYA

STATE: OH

COUNTRY: US

LATITUDE/LONGITUDE: 413231.40N/0832700.69W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE
IAP

USE TITLE
RNAV (GPS) RWY 32

FAC

PAT

AIRPORT IDENT
KTDZ

CITY
TOLEDO

STATE
OH (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 07/21/2016

REASON FOR REVISION:

1. UPDATED FIX USE: CHANGED RWY 4 TO RWY 32 AT KTDZ.

DEVELOPED BY:

DATE: 03/07/2016

OFFICE: AJV-5421

NAME: JAMES ROGERS

APPROVED BY:

DATE:

OFFICE: AJV-5420

NAME: GEORGE GONZALEZ

SIGNATURE:

DISTRIBUTION:

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

QUALITY
18
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: HOKVO

STATE: OH

COUNTRY: US

LATITUDE/LONGITUDE: 413017.04N/0832356.09W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE
IAP

USE TITLE
RNAV (GPS) RWY 32

FAC

PAT

AIRPORT IDENT
KTDZ

CITY
TOLEDO

STATE
OH (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 07/21/2016

REASON FOR REVISION:

1. L/L CHANGED FROM 413016.38N/0832355.19W TO 413017.036N/0832356.090W; FIX MOVED 0.02 NM SE.

DEVELOPED BY:

DATE: 03/28/2016

OFFICE: AJV-5421

NAME: JAMES ROGERS

APPROVED BY:

DATE:

OFFICE: AJV-5420

NAME: TONY LAWSON

SIGNATURE:

DISTRIBUTION:

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

QUALITY
18
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: VASHO

STATE: OH

COUNTRY: US

LATITUDE/LONGITUDE: 412625.87N/0825713.91W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

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 MAX	TEMPLATES MIN	MAX
1	W		WP	278.64	098.64	R	4	3000	6000	5	14

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (39-001705)	413039.00N/0830535.00W	1080	4D
1	310	TOWER (39-000745)	412348.00N/0824731.00W	1437	3C

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	RNAV (GPS) RWY 27	KPCW	PORT CLINTON	OH (US)

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 27		1	KPCW	PORT CLINTON	OH (US)
IAP	RNAV (GPS) RWY 32			KTDZ	TOLEDO	OH (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3

DATE OF REVISION: 03/05/2015

REASON FOR REVISION:

UPDATE PATTERN 1 CONTROLLING OBSTACLE.

DEVELOPED BY:

DATE: 10/01/2014

OFFICE: AJV-351

NAME: RICHARD CLARK

APPROVED BY:

DATE: 03/05/2015

OFFICE: AJV-353

NAME: GEORGE GONZALEZ

SIGNATURE:

DISTRIBUTION:

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

QUALITY
18
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: WATERVILLE VOR/DME

STATE: OH

COUNTRY: US

LATITUDE/LONGITUDE: 412705.35N/0833819.30W

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	WATERVILLE	VWV	VOR/DME	L							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	SW	VWV	VOR/DME	228.52	048.52	R	1		2300	6000	4	5
2	SE	VWV	VOR/DME	140.00	320.00	R	1		2400	14000	4	13
3	SE	VWV	VOR/DME	139.00	319.00	R	1		2300	6000	4	5
4	S	VWV	VOR/DME	180.00	360.00	R	1		2500	6000	4	5
5	N	VWV	VOR/DME	358.76	178.76	R	1		2200	6000	4	5
6	SW	WP	WP	240.50	060.50	R		4	2300	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	265	TOWER (39-001418)	413922.00N/0832645.00W	1849	5D
1	200	WINDMILL (39-004119)	412227.50N/0834427.43W	1068	4D
2	200	TOWER (39-001311)	412728.00N/0833933.00W	1051	5D
3	200	TOWER (39-001311)	412728.00N/0833933.00W	1051	5D
4	200	TOWER (39-001311)	412728.00N/0833933.00W	1051	5D
5	200	TOWER (39-000655)	413157.00N/0833536.00W	1149	5D
6	200	WINDMILL (39-004119)	412227.50N/0834427.43W	1068	4D

HOLDING RESTRICTIONS:

UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3000.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	FORT WAYNE			KARB	ANN ARBOR	MI (US)
DP	RICHMOND			KARB	ANN ARBOR	MI (US)
DP	ROSEWOOD			KARB	ANN ARBOR	MI (US)
DP	FORT WAYNE			KDET	DETROIT	MI (US)
DP	RICHMOND			KDET	DETROIT	MI (US)
DP	ROSEWOOD			KDET	DETROIT	MI (US)
DP	FORT WAYNE			KDTW	DETROIT	MI (US)
DP	RICHMOND			KDTW	DETROIT	MI (US)
DP	ROSEWOOD			KDTW	DETROIT	MI (US)
DP	FORT WAYNE			KYIP	DETROIT	MI (US)
DP	RICHMOND			KYIP	DETROIT	MI (US)
DP	ROSEWOOD			KYIP	DETROIT	MI (US)
DP	FORT WAYNE			KPTK	PONTIAC	MI (US)
DP	RICHMOND			KPTK	PONTIAC	MI (US)
DP	ROSEWOOD			KPTK	PONTIAC	MI (US)
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	V30-45					(US)
EN ROUTE	V45-493					(US)
EN ROUTE	V467					(US)
EN ROUTE	V47					(US)
EN ROUTE	V493					(US)
EN ROUTE	V584					(US)
EN ROUTE	V6					(US)
EN ROUTE	V6-30-126					(US)
EN ROUTE	V92					(US)
EN ROUTE	V92-126					(US)
IAP	NDB RWY 5			KADG	ADRIAN	MI (US)
IAP	RNAV (GPS) RWY 23			KADG	ADRIAN	MI (US)
IAP	VOR OR GPS-A		4	KDUH	LAMBERTVILLE	MI (US)
IAP	RNAV (GPS) RWY 3			KTTF	MONROE	MI (US)
IAP	VOR RWY 18		5	K1G0	BOWLING GREEN	OH (US)
IAP	NDB RWY 27			KFZI	FOSTORIA	OH (US)
IAP	RNAV (GPS) RWY 27			KFZI	FOSTORIA	OH (US)

QUALITY
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CHECKED

IAP	VOR-A		KFZI	FOSTORIA	OH (US)
IAP	VOR RWY 9		K14G	FREMONT	OH (US)
IAP	RNAV (GPS) RWY 28		K7W5	NAPOLEON	OH (US)
IAP	VOR RWY 28	2	K7W5	NAPOLEON	OH (US)
IAP	RNAV (GPS) RWY 24		K16G	TIFFIN	OH (US)
IAP	VOR RWY 6		K16G	TIFFIN	OH (US)
IAP	RNAV (GPS) RWY 32	6	KTDZ	TOLEDO	OH (US)
IAP	RNAV (GPS) RWY 4	6	KTDZ	TOLEDO	OH (US)
IAP	VOR RWY 4	1	KTDZ	TOLEDO	OH (US)
IAP	ILS OR LOC RWY 25	2	KTOL	TOLEDO	OH (US)
IAP	ILS OR LOC RWY 7	2	KTOL	TOLEDO	OH (US)
IAP	RNAV (GPS) RWY 25		KTOL	TOLEDO	OH (US)
IAP	VOR/DME RWY 34	3	KTOL	TOLEDO	OH (US)
STAR	LLEEO		CYQG	ONTARIO, CANADA	(CA)
STAR	KNOX		KORD	CHICAGO	IL (US)
STAR	LLEEO		KARB	ANN ARBOR	MI (US)
STAR	LLEEO		KDET	DETROIT	MI (US)
STAR	GEMNI		KDTW	DETROIT	MI (US)
STAR	WEEDA		KDTW	DETROIT	MI (US)
STAR	LLEEO		KYIP	DETROIT	MI (US)
STAR	LLEEO		KOZW	HOWELL	MI (US)
STAR	LLEEO		KMTC	MOUNT CLEMENS	MI (US)
STAR	LLEEO		KY47	NEW HUDSON	MI (US)
STAR	LLEEO		K1D2	PLYMOUTH	MI (US)
STAR	LLEEO		KPTK	PONTIAC	MI (US)
STAR	LLEEO		KVLL	TROY	MI (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 19

DATE OF REVISION: 03/05/2015

REASON FOR REVISION:

1. ADDED ROSEWOOD FIX USE.

DEVELOPED BY: **DATE:** 09/17/2014

OFFICE: AJV-353

NAME: STEVE NELSON

APPROVED BY: **DATE:** 03/05/2015

OFFICE: AJV-353

NAME: GEORGE GONZALEZ

SIGNATURE:

DISTRIBUTION:

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

QUALITY
18
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: WIMLU

STATE: OH

COUNTRY: US

LATITUDE/LONGITUDE: 412640.41N/0831859.16W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

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 MAX	TEMPLATES MIN	MAX
1	SE		WP	141.16	321.16	R	4	2300	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPD	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (39-001941)	413003.00N/0831616.00W	1247	5D

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 32		1	KTDZ	TOLEDO	OH (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 07/21/2016

REASON FOR REVISION:

1. UPDATED HOLDING PATTERN 1 CONTROLLING OBSTACLE ALTITUDE FROM 1248 TO 1247.

DEVELOPED BY: DATE: 03/28/2016 OFFICE: AJV-5421 NAME: JAMES ROGERS

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

SIGNATURE:

DISTRIBUTION:

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

QUALITY
18
CHECKED