

# 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)

QUALITY  
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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:**      *Digitally signed by*  
**STEVEN A VARGAS**

**DISTRIBUTION:**      **NFDC**      Jan 30, 2017  
**FPO:** CEN  
**ARTCC:** ZAU  
**ATC FACILITY:** FWA APP CON, FWA ATCT  
**OTHER:**

QUALITY  
10  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: WERBU STATE: IN COUNTRY: US ICAO REGION CODE: K5  
 LATITUDE/LONGITUDE: 411111.77N/0853016.14W 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	MRA	MAA
1	FORT WAYNE	FWA	VORTAC	H	317.02	311.02	19.00	19.00	2700	17500
2	MARION	MZZ	VOR/DME	L	013.78	010.78		42.33	2700	17500
3	GOSHEN	GSH	VORTAC	H	130.47	130.47	31.17	31.17	2700	17500

## EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
MZZ	VOR/DME	R-014	43	2700	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	HOLDING ALTITUDES DME	MIN	MAX	TEMPLATES MIN	MAX
1	NW	GSH	VORTAC	130.47	130.47	R	1		4000	10000	6	9
2	SE		WP	154.25	334.25	R		4	2700	6000	5	6

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (18-002382)	411445.00N/0852747.00W	1270	5D
2	200	TOWER (18-002382)	411445.00N/0852747.00W	1270	5D

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

## REMARKS:

FORT WAYNE (FAC 1) AND MARION (FAC 2) USED TO ESTABLISH FIX COORDINATES  
 PRECIPITOUS TERRAIN EVALUATION COMPLETED.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V55	1, 2, 3	1			IN (US)
IAP	ILS OR LOC RWY 32 (ALT MA)	2, 3	1	KFWA	FORT WAYNE	IN (US)
IAP	ILS OR LOC RWY 5 (ALT MA)	2, 3	1	KFWA	FORT WAYNE	IN (US)
IAP	ILS RWY 5 (CAT II) (ALT MA)	2, 3	1	KFWA	FORT WAYNE	IN (US)
IAP	RNAV (GPS) RWY 13			KSMD	FORT WAYNE	IN (US)
IAP	RNAV (GPS) RWY 23		2	KSMD	FORT WAYNE	IN (US)
IAP	RNAV (GPS) RWY 31		2	KSMD	FORT WAYNE	IN (US)
IAP	RNAV (GPS) RWY 5		2	KSMD	FORT WAYNE	IN (US)
IAP	RNAV (GPS) RWY 27			KASW	WARSAW	IN (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5

DATE OF REVISION: 04/27/2017

## REASON FOR REVISION:

UPDATED FAC 2 DIST FROM FAC FROM 42.32 TO 42.33.  
 UPDATED PAT 1 ACCURACY CODE FROM 5D TO 1A, CHANGED MIN/MAX TEMPLATES FROM 10/13 TO 8/11.  
 ADDED FORT WAYNE (FAC 1) AND MARION (FAC 2) USED TO ESTABLISH FIX COORDINATES AND 265K PATTERN EVALUATED FOR MILITARY USE TO REMARKS.  
 REMOVED FAC 1 AND FAC 2 USED FOR ILS OR LOC RWY 32 ALT MISSED FIX FROM REMARKS.  
 UPDATED FIX USE.

10/24/16: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 05/23/16.

1. UPDATED FAC 1 MAG BRG FROM 311.02 TO 317.02.
2. UPDATED PAT 1 TEMPLATES MIN FROM 8 TO 6, MAX FROM 11 TO 9 AND CONTROLLING OBSTRUCTION DATA.
3. REMOVED 265K PATTERN EVALUATED FOR MILITARY USE FROM REMARKS.
4. UPDATED FIX USE.
5. REMOVED MILITARY IAP FROM REQUIRED CHARTING.

DEVELOPED BY: DATE: 05/23/2016 OFFICE: AJV-5423 NAME: PABLO ORTIZ  
 APPROVED BY: DATE: OFFICE: AJV-5420 NAME: TONY LAWSON  
 SIGNATURE: Digitally signed by STEVEN A VARGAS  
 Jan 30, 2017

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