

RADIO FIX AND HOLDING DATA RECORD

NAME: WACO VORTAC STATE: TX COUNTRY: US ICAO REGION CODE: K4
 LATITUDE/LONGITUDE: 313944.03N/0971608.45W 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	WACO	ACT	VORTAC	VH						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	ACT	VORTAC	328.00	148.00	R	1	3000 6000	4 13
2	N		WP	018.17	198.17	R	4	2500 6000	5 6
3	N	ACT	VORTAC	005.10	185.10	R	1	4000 6000	4 13

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (48-010156)	314411.97N/0971928.01W	1065	4D
1	310	TOWER (48-008113)	314736.90N/0972719.80W	1296	4D
2	200	TOWER (48-010156)	314411.97N/0971928.01W	1065	4D
3	200	TOWER (48-010156)	314411.97N/0971928.01W	1065	4D
3	310	TOWER (48-010156)	314411.97N/0971928.01W	1065	4D

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	VOR/DME RWY 32	ACT	WACO	TX (US)
1	ILS OR LOC RWY 17L	KCNW	WACO	TX (US)
3	VOR RWY 17	PWG	WACO	TX (US)

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.
 ASSIGNED FACILITY MAGVAR: 9E (1965).

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	LEONA			LBX	ANGLETON/LAKE JACKSON	TX (US)
DP	JOE POOL			GKY	ARLINGTON	TX (US)
DP	CENTEX			AUS	AUSTIN	TX (US)
DP	JOE POOL			CPT	CLEBURNE	TX (US)
DP	JOE POOL			ADS	DALLAS	TX (US)
DP	CURLO (RNAV)			DAL	DALLAS	TX (US)
DP	JOE POOL			DAL	DALLAS	TX (US)
DP	RAMBL (RNAV)			DAL	DALLAS	TX (US)
DP	VENUS			DAL	DALLAS	TX (US)
DP	JOE POOL			RBD	DALLAS	TX (US)
DP	JOE POOL			TKI	DALLAS	TX (US)
DP	JOE POOL			DFW	DALLAS-FORT WORTH	TX (US)
DP	KEENE			DFW	DALLAS-FORT WORTH	TX (US)
DP	NELYN (RNAV)			DFW	DALLAS-FORT WORTH	TX (US)
DP	JOE POOL			LUD	DECATUR	TX (US)
DP	JOE POOL			DTO	DENTON	TX (US)
DP	LAMPS			GRK	FORT HOOD (KILLEEN)	TX (US)
DP	LAMPS			HLR	FORT HOOD (KILLEEN)	TX (US)
DP	JOE POOL			50F	FORT WORTH	TX (US)
DP	JOE POOL			AFW	FORT WORTH	TX (US)
DP	JOE POOL			FTW	FORT WORTH	TX (US)
DP	JOE POOL			FWS	FORT WORTH	TX (US)
DP	JOE POOL			NFW	FORT WORTH	TX (US)
DP	LEONA			GLS	GALVESTON	TX (US)
DP	JOE POOL			GPM	GRAND PRAIRIE	TX (US)
DP	LEONA			AXH	HOUSTON	TX (US)
DP	LEONA			CXO	HOUSTON	TX (US)
DP	LEONA			DWH	HOUSTON	TX (US)
DP	LEONA			EFD	HOUSTON	TX (US)
DP	LEONA			HOU	HOUSTON	TX (US)
DP	LEONA			IAH	HOUSTON	TX (US)
DP	LEONA			IWS	HOUSTON	TX (US)
DP	LEONA			SGR	HOUSTON	TX (US)
DP	LEONA			TME	HOUSTON	TX (US)
DP	LAMPS			ILE	KILLEEN	TX (US)
DP	LEONA			T41	LA PORTE	TX (US)
DP	JOE POOL			LNC	LANCASTER	TX (US)
DP	JOE POOL			HQZ	MESQUITE	TX (US)

DP	JOE POOL		JWY	MIDLOTHIAN/WAXAHACHIE	TX (US)
DP	JOE POOL		F46	ROCKWALL	TX (US)
DP	TAKE-OFF MINIMUMS		PWG	WACO	TX (US)
DP	JOE POOL		WEA	WEATHERFORD	TX (US)
EN ROUTE	J21				(US)
EN ROUTE	J25				(US)
EN ROUTE	J50				(US)
EN ROUTE	V15				(US)
EN ROUTE	V17				(US)
EN ROUTE	V358				(US)
EN ROUTE	V54				(US)
EN ROUTE	V548				(US)
IAP	LOC RWY 15		CPT	CLEBURNE	TX (US)
IAP	RNAV (GPS) RWY 33		CPT	CLEBURNE	TX (US)
IAP	ILS OR LOC RWY 36L		FWS	FORT WORTH	TX (US)
IAP	VOR/DME OR GPS-A		T15	MARLIN	TX (US)
IAP	RNAV (GPS) RWY 36		JWY	MIDLOTHIAN/WAXAHACHIE	TX (US)
IAP	ILS OR LOC RWY 16		TPL	TEMPLE	TX (US)
IAP	RNAV (GPS) RWY 16		TPL	TEMPLE	TX (US)
IAP	VOR/DME RWY 32	1	ACT	WACO	TX (US)
IAP	ILS OR LOC RWY 19		ACT	WACO	TX (US)
IAP	VOR RWY 14		ACT	WACO	TX (US)
IAP	ILS OR LOC RWY 17L	1	CNW	WACO	TX (US)
IAP	RNAV (GPS) RWY 17L		CNW	WACO	TX (US)
IAP	RNAV (GPS) RWY 35R		CNW	WACO	TX (US)
IAP	RNAV (GPS) RWY 35	2	PWG	WACO	TX (US)
IAP	VOR RWY 17	3	PWG	WACO	TX (US)
STAR	DODJE		GKY	ARLINGTON	TX (US)
STAR	BLEWE		AUS	AUSTIN	TX (US)
STAR	BLEWE		EDC	AUSTIN	TX (US)
STAR	BLEWE		HYI	AUSTIN	TX (US)
STAR	RIICE		6R3	CLEVELAND	TX (US)
STAR	YEAGR		ADS	DALLAS	TX (US)
STAR	YEAGR		DAL	DALLAS	TX (US)
STAR	DODJE		RBD	DALLAS	TX (US)
STAR	YEAGR		TKI	DALLAS	TX (US)
STAR	CEDAR CREEK		DFW	DALLAS-FORT WORTH	TX (US)
STAR	YEAGR		DFW	DALLAS-FORT WORTH	TX (US)
STAR	DODJE		LUD	DECATUR	TX (US)
STAR	DODJE		DTO	DENTON	TX (US)
STAR	DODJE		AFW	FORT WORTH	TX (US)
STAR	DODJE		FTW	FORT WORTH	TX (US)
STAR	DODJE		FWS	FORT WORTH	TX (US)
STAR	DODJE		NFW	FORT WORTH	TX (US)
STAR	DODJE		GPM	GRAND PRAIRIE	TX (US)
STAR	RIICE		CXO	HOUSTON	TX (US)
STAR	RIICE		DWH	HOUSTON	TX (US)
STAR	RIICE		IAH	HOUSTON	TX (US)
STAR	BLEWE		RYW	LAGO VISTA	TX (US)
STAR	BLEWE		3R9	LAKEWAY	TX (US)
STAR	DODJE		LNC	LANCASTER	TX (US)
STAR	RIICE		T78	LIBERTY	TX (US)
STAR	YEAGR		HQZ	MESQUITE	TX (US)
STAR	DODJE		JWY	MIDLOTHIAN/WAXAHACHIE	TX (US)
STAR	YEAGR		F46	ROCKWALL	TX (US)
STAR	MARCS		SAT	SAN ANTONIO	TX (US)
STAR	MARCS		SKF	SAN ANTONIO	TX (US)
STAR	MARCS		SSF	SAN ANTONIO	TX (US)
STAR	BLEWE		T74	TAYLOR	TX (US)
STAR	MARCS		RND	UNIVERSAL CITY	TX (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 36

DATE OF REVISION: 05/14/2026

REASON FOR REVISION:

1. FIX USE KGRK LAMPS SID CITY/STATE CHANGED FROM FORT HOOD/KILLEEN TO FORT HOOD (KILLEEN).
2. FIX USE REMOVED KCNW NDB RWY 35.
3. PROCEDURES REQUIRING CLIMB-IN-HOLD ADDED KCNW ILS OR LOC RWY 17L FOR HP1.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: CHARLES HIRST

APPROVED BY:

DATE: 04/09/2026

OFFICE: AJV-A431

NAME: CASIMIR TABAKA

SIGNATURE:

RADIO FIX AND HOLDING DATA RECORD

NAME: CUKAV

STATE: TX

COUNTRY: US

ICAO REGION CODE: K4

LATITUDE/LONGITUDE: 315141.47N/0970503.61W

TYPE: WP, INT

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	MAA
1	WACO	I-CNW	LOC		353.55	357.55		14.19	2300	4900
2	WACO	ACT	VORTAC	VH	029.32	038.32		15.22	2300	4900

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	N		WP	353.54	173.54	L		4	2400	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	WINDMILL	315808.74N/0970332.04W	1349	4D

REASON FOR NONSTANDARD HOLDING:

PAT 1 AIR TRAFFIC REQUEST

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 17L		1	CNW	WACO	TX (US)
IAP	ILS OR LOC RWY 17L	1, 2		CNW	WACO	TX (US)
IAP	RNAV (GPS) RWY 35R		1	CNW	WACO	TX (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4

DATE OF REVISION: 09/03/2026

REASON FOR REVISION:

1. PATTERN 1 MINIMUM HOLDING ALTITUDE CHANGED FROM 2300 TO 2400.
2. CONTROLLING OBSTRUCTION CHANGED TO 1349 MSL WINDMILL.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: TIMOTHY JOHNSON

APPROVED BY:

DATE: 07/30/2026

OFFICE: AJV-A431

NAME: CASEY HILL

SIGNATURE:

RADIO FIX AND HOLDING DATA RECORD

NAME: OLHUF

STATE: TX

COUNTRY: US

ICAO REGION CODE: K4

LATITUDE/LONGITUDE: 313540.57N/0970415.46W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: ESTABLISH

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE
IAP

USE TITLE
RNAV (GPS) RWY 35R

FAC

PAT

AIRPORT IDENT
CNW

CITY
WACO

STATE
TX (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 05/05/2011

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 10/19/2010

OFFICE: AVN-120

NAME: HERMAN ROGERS

APPROVED BY:

DATE: 03/29/2011

OFFICE: AVN-120

NAME: GREGORY YAMAMOTO

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: CEN
ARTCC: ZFW
ATC FACILITY: WACO APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: OMOBE STATE: TX COUNTRY: US ICAO REGION CODE: K4

LATITUDE/LONGITUDE: 312423.24N/0970341.68W 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	MAA
1	WACO	ACT	VORTAC	H	136.16	145.16	18.65	18.65	2400	17500

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		WP	173.56	353.56	R	4	2300 6000	5 6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (48-024594)	311414.90N/0970031.70W	790	5D

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V15	1				(US)
IAP	RNAV (GPS) RWY 17L		1	CNW	WACO	TX (US)
IAP	RNAV (GPS) RWY 35R		1	CNW	WACO	TX (US)

REQUIRED CHARTING: IAP, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 DATE OF REVISION: 08/15/2019

REASON FOR REVISION:

CHANGED REQUIRED CHARTING FROM CONTROLLER TO CONTROLLER LOW.
CHANGED FAC 1 MAG/TRUE BEARING FROM 136.17/145.17 TO 136.16/145.16.
INCREASED PAT 1 MIN HOLDING FROM 2000 TO 2300.

INITIATED BY: DATE: ORGANIZATION: NAME:

OFFICE OF PRIMARY RESPONSIBILITY: AJV-A432 NAME: MICHAEL HARRIS

APPROVED BY: DATE: 06/20/2019 OFFICE: AJV-A43 NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION: NFDC
FPO: CEN
ARTCC: ZFW
ATC FACILITY: WACO APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: RUBDY

STATE: TX

COUNTRY: US

ICAO REGION CODE: K4

LATITUDE/LONGITUDE: 313200.56N/0970404.47W

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 35R

FAC

PAT

AIRPORT IDENT
CNW

CITY
WACO

STATE
TX (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3

DATE OF REVISION: 08/15/2019

REASON FOR REVISION:

FIX MOVED 34.2 FT NORTH; COORDINATES UPDATED.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A432

NAME: MICHAEL HARRIS

APPROVED BY:

DATE: 06/20/2019

OFFICE:

NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: CEN
ARTCC: ZFW
ATC FACILITY: WACO APP CON
OTHER: