

RADIO FIX AND HOLDING DATA RECORD

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

LATITUDE/LONGITUDE: 310004.59N/0972415.09W TYPE: INT, 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	MAA
1	CENTEX	CWK	VORTAC	H	003.86	009.86	37.84	37.84	3500	45000
2	GOOCH SPRINGS	AGJ	VORTAC	H	100.99	105.99	39.57	39.57	3500	45000
3	WACO	ACT	VORTAC	H	180.99	189.99	40.18	40.18	3500	45000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
ACT	VORTAC	R-181	41	3500	6000

HOLDING: HOLDING TYPE OF ACTION: MODIFY

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	N	ACT	VORTAC	180.99	180.99	R	1	3600 6000	6 14

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (48-009511)	310442.00N/0972034.00W	1115	5D
1	310	TOWER (48-005677)	311854.00N/0971937.00W	2541	1A

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	ILS OR LOC RWY 16	KTPL	TEMPLE	TX (US)

REMARKS:

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	CONRA	2		KHLR	FORT HOOD (KILLEEN)	TX (US)
DP	CONRA	2		KGRK	FORT HOOD/KILLEEN	TX (US)
DP	CONRA	2		KILE	KILLEEN	TX (US)
EN ROUTE	V17	1, 2				(US)
IAP	ILS OR LOC RWY 16	2, 3	1	KTPL	TEMPLE	TX (US)
IAP	RNAV (GPS) RWY 16			KTPL	TEMPLE	TX (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5

DATE OF REVISION: 07/14/2022

REASON FOR REVISION:

1. FIX USE UPDATE: CHANGED ILS OR LOC RWY 15 AND RNAV (GPS) RWY 15 AT KTPL TO ILS OR LOC RWY 16 AND RNAV (GPS) RWY 16.
2. PROCEDURES REQUIRING CLIMB-IN-HOLD UPDATE: CHANGED RWY 15 TO 16.
3. CHANGED PAT 1 TEMPLATES MIN/MAX 14/15 TO 6/14.
4. ADDED CONTROLLER LOW TO REQUIRED CHARTING.

INITIATED BY: DATE: ORGANIZATION: NAME:

OFFICE OF PRIMARY RESPONSIBILITY: AJV-A430 NAME: KWEKU DONKOR

APPROVED BY: DATE: 07/14/2022 OFFICE: AJV-A433 NAME: LONNIE EVERHART

SIGNATURE:

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: MODIFY

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	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	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	KACT	WACO	TX (US)
3	VOR RWY 17	KPWG	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			KLBX	ANGLETON/LAKE JACKSON	TX (US)
DP	JOE POOL			KGKY	ARLINGTON	TX (US)
DP	CENTEX			KAUS	AUSTIN	TX (US)
DP	JOE POOL			KADS	DALLAS	TX (US)
DP	CURLO (RNAV)			KDAL	DALLAS	TX (US)
DP	JOE POOL			KDAL	DALLAS	TX (US)
DP	RAMBL (RNAV)			KDAL	DALLAS	TX (US)
DP	VENUS			KDAL	DALLAS	TX (US)
DP	JOE POOL			KRBD	DALLAS	TX (US)
DP	JOE POOL			KTKI	DALLAS	TX (US)
DP	JASPA (RNAV)			KDFW	DALLAS-FORT WORTH	TX (US)
DP	JOE POOL			KDFW	DALLAS-FORT WORTH	TX (US)
DP	KEENE			KDFW	DALLAS-FORT WORTH	TX (US)
DP	NELYN (RNAV)			KDFW	DALLAS-FORT WORTH	TX (US)
DP	JOE POOL			KDTO	DENTON	TX (US)
DP	LAMPS			KHLR	FORT HOOD (KILLEEN)	TX (US)
DP	LAMPS			KGRK	FORT HOOD/KILLEEN	TX (US)
DP	JOE POOL			KAFW	FORT WORTH	TX (US)
DP	JOE POOL			KFTW	FORT WORTH	TX (US)
DP	JOE POOL			KFWS	FORT WORTH	TX (US)
DP	JOE POOL			KNFW	FORT WORTH	TX (US)
DP	LEONA			KGLS	GALVESTON	TX (US)
DP	JOE POOL			KGPM	GRAND PRAIRIE	TX (US)
DP	LEONA			KAXH	HOUSTON	TX (US)
DP	LEONA			KCXO	HOUSTON	TX (US)
DP	LEONA			KDWH	HOUSTON	TX (US)
DP	LEONA			KEFD	HOUSTON	TX (US)
DP	LEONA			KHOU	HOUSTON	TX (US)
DP	LEONA			KIAH	HOUSTON	TX (US)
DP	LEONA			KIWS	HOUSTON	TX (US)
DP	LEONA			KSGR	HOUSTON	TX (US)
DP	LEONA			KTME	HOUSTON	TX (US)
DP	LAMPS			KILE	KILLEEN	TX (US)
DP	LEONA			T41	LA PORTE	TX (US)
DP	JOE POOL			KLNC	LANCASTER	TX (US)
DP	JOE POOL			KHQZ	MESQUITE	TX (US)
DP	TAKE-OFF MINIMUMS			KPWG	WACO	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	KCPT	CLEBURNE	TX (US)
IAP	RNAV (GPS) RWY 33	KCPT	CLEBURNE	TX (US)
IAP	NDB RWY 32	KCRS	CORSICANA	TX (US)
IAP	ILS OR LOC RWY 36L	KFWS	FORT WORTH	TX (US)
IAP	VOR/DME OR GPS-A	T15	MARLIN	TX (US)
IAP	NDB-A	KLXY	MEXIA	TX (US)
IAP	RNAV (GPS) RWY 36	KJWY	MIDLOTHIAN/WAXAHACHIE	TX (US)
IAP	ILS OR LOC RWY 16	KTPL	TEMPLE	TX (US)
IAP	RNAV (GPS) RWY 16	KTPL	TEMPLE	TX (US)
IAP	ILS OR LOC RWY 19	KACT	WACO	TX (US)
IAP	VOR RWY 14	KACT	WACO	TX (US)
IAP	VOR/DME RWY 32	1 KACT	WACO	TX (US)
IAP	ILS OR LOC RWY 17L	1 KCNW	WACO	TX (US)
IAP	NDB RWY 35R	KCNW	WACO	TX (US)
IAP	RNAV (GPS) RWY 17L	KCNW	WACO	TX (US)
IAP	RNAV (GPS) RWY 35R	KCNW	WACO	TX (US)
IAP	RNAV (GPS) RWY 35	2 KPWG	WACO	TX (US)
IAP	VOR RWY 17	3 KPWG	WACO	TX (US)
STAR	BLUBELL	T00	ANAHUAC	TX (US)
STAR	BLUBELL	KLBX	ANGLETON/LAKE JACKSON	TX (US)
STAR	DODJE	KGKY	ARLINGTON	TX (US)
STAR	BLEWE	KAUS	AUSTIN	TX (US)
STAR	BLEWE	KEDC	AUSTIN	TX (US)
STAR	BLEWE	KHYI	AUSTIN	TX (US)
STAR	BLUBELL	54T	BAYTOWN	TX (US)
STAR	BLUBELL	KHPY	BAYTOWN	TX (US)
STAR	RIICE	6R3	CLEVELAND	TX (US)
STAR	YEAGR	KADS	DALLAS	TX (US)
STAR	YEAGR	KDAL	DALLAS	TX (US)
STAR	DODJE	KRBD	DALLAS	TX (US)
STAR	YEAGR	KTKI	DALLAS	TX (US)
STAR	CEDAR CREEK	KDFW	DALLAS-FORT WORTH	TX (US)
STAR	YEAGR	KDFW	DALLAS-FORT WORTH	TX (US)
STAR	DODJE	KLUD	DECATUR	TX (US)
STAR	DODJE	KDTO	DENTON	TX (US)
STAR	DODJE	KAFW	FORT WORTH	TX (US)
STAR	DODJE	KFTW	FORT WORTH	TX (US)
STAR	DODJE	KFWS	FORT WORTH	TX (US)
STAR	DODJE	KNFW	FORT WORTH	TX (US)
STAR	BLUBELL	KGLS	GALVESTON	TX (US)
STAR	DODJE	KGPM	GRAND PRAIRIE	TX (US)
STAR	BLUBELL	KAXH	HOUSTON	TX (US)
STAR	RIICE	KCXO	HOUSTON	TX (US)
STAR	RIICE	KDWH	HOUSTON	TX (US)
STAR	BLUBELL	KEFD	HOUSTON	TX (US)
STAR	BLUBELL	KHOU	HOUSTON	TX (US)
STAR	RIICE	KIAH	HOUSTON	TX (US)
STAR	BLUBELL	KIWS	HOUSTON	TX (US)
STAR	BLUBELL	KLVJ	HOUSTON	TX (US)
STAR	BLUBELL	KSGR	HOUSTON	TX (US)
STAR	BLUBELL	KTME	HOUSTON	TX (US)
STAR	BLUBELL	T41	LA PORTE	TX (US)
STAR	BLEWE	KRYW	LAGO VISTA	TX (US)
STAR	BLEWE	3R9	LAKEWAY	TX (US)
STAR	DODJE	KLNC	LANCASTER	TX (US)
STAR	RIICE	T78	LIBERTY	TX (US)
STAR	YEAGR	KHQZ	MESQUITE	TX (US)
STAR	DODJE	KJWY	MIDLOTHIAN/WAXAHACHIE	TX (US)
STAR	YEAGR	F46	ROCKWALL	TX (US)
STAR	BRAUN (RNAV)	KSAT	SAN ANTONIO	TX (US)
STAR	MARCS	KSAT	SAN ANTONIO	TX (US)
STAR	BRAUN (RNAV)	KSKF	SAN ANTONIO	TX (US)
STAR	MARCS	KSKF	SAN ANTONIO	TX (US)
STAR	BRAUN (RNAV)	KSSF	SAN ANTONIO	TX (US)
STAR	MARCS	KSSF	SAN ANTONIO	TX (US)
STAR	BLEWE	T74	TAYLOR	TX (US)
STAR	BRAUN (RNAV)	KRND	UNIVERSAL CITY	TX (US)
STAR	MARCS	KRND	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: 30

DATE OF REVISION: 07/14/2022

REASON FOR REVISION:

FIX USE UPDATE: CHANGED ILS OR LOC RWY 15 AND RNAV (GPS) RWY 15 AT KTPL TO ILS OR LOC RWY 16 AND RNAV (GPS) RWY 16.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A433

NAME: KWEKU DONKOR**APPROVED BY:****DATE:** 07/14/2022**OFFICE:** AJV-A430**NAME:** LONNIE EVERHART**SIGNATURE:**