

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.33

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> WACO RGNL	<u>AIRPORT ID</u> KACT	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 19	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> WACO	<u>STATE</u> TX
<u>AIRPORT ELEVATION</u> 516	<u>TDZE</u> 505	<u>SUPERSEDED</u> RNAV (GPS) RWY 19	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>DATED</u> 12/07/2017	<u>MAG VAR</u> 7E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 30 JANUARY 2020	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1985

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
IGORR		UZOKU		TF	FB	1.00	082.54	8.38	3000
IMIPE	IAF	CHRU		TF	FB	1.00	266.41	7.99	3000
WESLI	IAF	CHRU		TF	FB	1.00	187.28	4.93	3000
UZOKU	IAF	CHRU		TF	FB	1.00	097.19	6.85	3000
CHRU	IF	COFFI		TF	FB	1.00	187.26	5.95	2100
COFFI	FAF	RW19	MAP	TF	FO	0.30	187.24	4.85	
RW19	MAP	705 MSL		CA			187.24		
705 MSL		YAYUC		DF	FB	1.00			
YAYUC		BOSEL		TF	FO	1.00	171.16	8.05	4000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW19

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4000 DIRECT YAYUC AND ON TRACK 171.16 TO BOSEL AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
22
CHECKED

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT CHRUS

3. FAC: 187.24

FAF: COFFI

DIST FAF TO MAP: 4.85

DIST FAF TO THLD: 4.85

4. MIN ALT: CHRUS 3000, COFFI 2100

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

200 HAT: 0.46

GS ANT:

6. MIN GP INCPT: 2100

GP ALT AT FAF : COFFI 2100

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 54.5

8. MSA FROM: RW19 3600

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -8°C OR ABOVE 54°C.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV VISIBILITY ALL CATS TO RVR 4000.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT IGORR ON V17 NORTHWEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT IMIPE ON V15-54 NORTHEAST BOUND.
CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.

ADDITIONAL FLIGHT DATA:

CHART: ASR.
CHART CIRCLING ICON.
CHART VDP AT 1.07 NM TO RW19*
*LNAV ONLY
WAAS CHANNEL #82119
REFERENCE PATH ID: W19A
FAS OBST: 640 AAO 314048N/0971310W.
HOLD S, RT, 344.00 INBOUND
LTP HAE: 125.8 M

MINIMUMS:

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT

ALTERNATE: NA ☐ STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA**	705	2400	200	705	2400	200	705	2400	200	705	2400	200			
LNAV/VNAV DA	755	2400	250	755	2400	250	755	2400	250	755	2400	250			
LNAV MDA	900	2400	395	900	2400	395	900	3500	395	900	3500	395			
CIRCLING	940	1	424	980	1	464	1020	1 1/2	504	1160	2	644			

QUALITY
22
CHECKED

CHANGES - REASONS

- 1. REMOVED FEEDER SEGMENT FROM CELTC TO WESLI (IAF) - PER FPT REQUEST DUE TO JEN VOR MON.
- 2. MOVED BACKUP ALTIMETER TO BACK OF 8260-9 AND UPDATED IT FROM: CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED USE MC GREGOR EXECUTIVE ALTIMETER SETTING AND INCREASE ALL DA 31 FEET AND ALL MDA 40 FEET; INCREASE LNAV CAT C VISIBILITY TO RVR 6000 TO: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED USE MC GREGOR EXECUTIVE ALTIMETER SETTING: INCREASE LPV DA TO 736 FEET; INCREASE LNAV/VNAV DA TO 786 FEET; INCREASE ALL MDAS 40 FEET AND VISIBILITY CATS C/D TO RVR 4000 AND INCREASE CIRCLING CAT D VISIBILITY 1/4 SM - CRITERIA FORMAT CHANGE.
- 3. UPDATED ADDITIONAL FLIGHT DATA VDP DISTANCE TO RW19* FROM 1.08 NM TO 1.07 NM - UPDATED DATA.
- 4. UPDATED MISSED CA ALTITUDE FROM 704 TO 705 - UPDATED DATA WITH A CHANGE IN TDZE FROM 504 TO 505.
- 5. UPDATED LPV DA FROM 704 ALL CATS TO DA 705 ALL CATS; LOWERED LNAV/VNAV DA/HAT FROM DA 869/HAT 365 ALL CATS TO DA 755/HAT 250 ALL CATS; LNAV HAT FROM HAT 396 ALL CATS TO HAT 395 ALL CATS - FPT LOWERED TREE HEIGHT FROM 80 FT TO 55 FT, UPDATED DATA AND TDZE CHANGED FROM 504 TO 505.
- 6. CHANGE IN TDZE FROM 504 TO 505 - UPDATED AIRNAV DATA.
- 7. DELETED NOTE: DME/DME RNP-0.3 NA AND ADDED PBN REQUIREMENTS NOTE: RNP APCH - REFERENCE REVISED CRITERIA.
- 8. MOVED PFAF 387 FEET NORTHEAST - UTILIZED CURRENT PFAF FORMULA.
- 9. ADDED 20:1 IS CLEAR TO LINE #7 OF THE 8260-3 - REFERENCE 8260.19H CRITERIA NO 20:1 VISUAL SURFACE PENETRATIONS.
- 10. UPDATED BARO-VNAV NOTE FROM: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 47C (116F) TO: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -8C OR ABOVE 54C - UPDATED TEMPERATURE DATA AND FAHRENHEIT NO LONGER REQUIRED.
- 11. UPDATED FAS DATA BLOCK INFORMATION AS FOLLOWS: UPDATED LTP/FTP LATITUDE/LONGITUDE FROM 313720.9000N-0971327.6400W TO 313720.8930N-0971327.6355W; LTP/FTP ELLIPSOIDAL HEIGHT FROM +01259 TO +01258 AND CRC REMAINDER CHANGED FROM 539096E2 TO 5072ABBA - NEW AND OR UPDATED DATA BASE.
- 12. UPDATED FAS DATA BLOCK INFORMATION AS FOLLOWS: UPDATED LTP/FTP/FEP LATITUDE/LONGITUDE FROM 313720.9000N-0971327.6400W TO 313720.8930N-0971327.6355W; FPAP LOCATION FROM: 313612.7200N-0971347.8400W TO 313554.3395N-0971353.280W AND CRC REMAINDER CHANGED FROM 53906E2 TO 5072ABBA - NEW AND OR UPDATED DATA BASE.
- 13. CHANGED INITIAL IAF FROM FEPHY TO IAF IMIPE - DUE TO LEG LENGTH AND DTA AT CHUUS.
- 14. MOVED FIX YAYUC 2390 FT SOUTH - MISSED SEGMENT TOO SHORT.
- 15. CHANGED INITIAL IAF FROM UTPIZ TO IAF UZOKU AND CONNECTED THE FEEDER SEGMENT FROM IGORR - DUE TO LEG LENGTH AND DTA AT CHRUS.
- 16. UPDATED PROFILE LINE 3 DIST FAF TO MAP/DIST FAF TO THLD FROM 4.78 TO 4.85 - MOVED PFAF 387 FEET DUE TO CURRENT PFAF FORMULA.
- 17. CHANGED MISSED APROACH TRACK FROM YAYUC TO BOSEL FROM 171.69 TO 171.16 - FIX YAYUC MOVED 2390 FT SOUTH - TO ALLOW ALL SEGMENTS OF THE MISSED TO BUILD CORRECTLY.
- 18. ADDITONAL FLIGHT DATA: CHANGED FAS OBSTACLE FROM 599 TREE 313735N/0971358W TO 640 AAO 314048N/0971310W AND REMOVED FAS OBST 649 AAO 314048N/0971310W - 599 TREE WAS FOR THE LNAV/VNAV SEGMENT - LNAV/VNAV OBSTACLES NOT CHARTED; UPDATED FINAL OBSTACLE.
- 19. UPDATED THE FOLLOWING COURSES AND DISTANCES: IGORR TO UZOKU FROM: 085.16/10.18 TO: 082.54/8.38; IMIPE TO CHRUS FROM: 277.32/6.32 TO: 266.41/7.99; UZOKU TO CHRUS FROM: 097.21/5.00 TO: 097.19/6.85; YAYUC TO BOSEL FROM: 171.69/7.66 TO: 171.16/8.05; UPATED DISTANCES CHRUS TO COFFIFROM: 6.02 TO: 5.95 AND COFFI TO MAP FROM: 4.78 TO 4.85 - DUE TO LEG LENGTH CHANGES TO MEET CRITERIA.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ACT ATCT, ACT APP CON, ZFW, AMGR.

FLIGHT CHECKED BY

BRIAN HARRELSON

Digitally signed by
WARDELL HENNING
Nov 19, 2019

OFFICE
FICO

DATE
11/15/19

DEVELOPED BY
SYLVAN DRAKES

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APPROVED BY
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Digitally signed by
WARDELL HENNING
Nov 19, 2019

OFFICE
AJV-A430

DATE

TITLE
MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KACT
RUNWAY	RW19
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W19A
LTP/FTP LATITUDE	313720.8930N
LTP/FTP LONGITUDE	0971327.6355W
LTP/FTP ELLIPSOIDAL HEIGHT	+01258
FPAP LATITUDE	313554.3395N
FPAP LONGITUDE	0971353.2805W
THRESHOLD CROSSING HEIGHT (TCH)	00054.5
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0584
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	5072ABBA

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+01531
FPAP ORTHOMETRIC HEIGHT	+01531

