U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

VOR STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.23

Bearings, headings, courses, 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 in feet RVR.

TERMINAL ROUTES

FROM	TO	COURSE AND DISTANCE	ALTITUDE
SSO VORTAC	TOMBS INT/FHU 12.76 DME	225.45 / 57.16 (SSO R-225)	12000
TOMBS INT/FHU 12.76 DME CW (IAF)	CITOS/FHU 12.76 DME/RADAR	12.76 DME ARC (FHU LR-070)	8200
DEYNE INT/FHU 28.01 DME (IAF)	CITOS/FHU 12.76 DME/RADAR	259.00 / 15.25 (FHU R-079)	8200
CITOS/FHU 12.76 DME/RADAR (IF)	FOGPU/FHU 6.50 DME/RADAR	259.00 / 6.26 (FHU R-079)	6300

MISSED APPROACH

MAP: 5.14 MILES AFTER FOGPU/FHU 6.50 DME/RADAR OR AT CIXOR/FHU 1.36 DME FIX

CLIMB TO 5300 THEN CLIMBING RIGHT TURN TO 9500 ON HEADING 067 AND FHU R-021 TO TOMBS INT/DUG 36.00 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 9500.

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. PROFILE STARTS AT CITOS/FHU 12.76 DME/RADAR
3. FAC 259.00 FAF FOGPU/FHU 6.50 DME/RADAR DIST FAF TO MAP 5.14 THLD 5.14
4. MIN. ALT CITOS 8200, FOGPU 6300
8. MSA FROM: FHU VOR/DME 060-200 16000, 200-290 10700, 290-060 9000

ADDITIONAL FLIGHT DATA:

HOLD E, RT, 286.38 INBOUND.
FAS OBST: 4702 AAO 313400N/1101606W
CHART: 4787 TOWER 313359N/1101359W
CHART: ASR/PAR.
CHART R-2303 A, B, C, AND R-2312.
CHART TOMBSTONE A/C MOA.
CHART VDP AT 2.80 DME;
DISTANCE VDP TO THLD 1.45 MILES.
CHART FHU R-021 AT TOMBS.
FOGPU TO RW26: 3.02/51.
CHART DUG R-286 AT TOMBS AND DEYNE.
CHART DUG 12.16 DME AT DEYNE AND 36 DME AT TOMBS.
FAC 340R OF RWY C/L EXTENDED 3000 FROM THLD.

MAG VAR: 13E EPOCH YEAR:1965

MINIMUMS

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT ALTERNATE: N A STANDARD @

CATEGORY =====>	A			B			C			D			E		
	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA
S-26	5140	1	541	5140	1	541	5140	1 5/8	541	5140	1 5/8	541			
CIRCLING	5160	1	441	5180	1	461	5180	1 5/8	461	5280	2	561			

NOTES:

CHART NOTE: CIRCLING NA S OF RWYS 8 AND 30.
CHART NOTE: DME OR RADAR REQUIRED.
CHART PLANVIEW NOTE: DME OR RADAR REQUIRED.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT.
CHART NOTE: CIRCLING TO RWYS 12, 21, AND 30 NA AT NIGHT.

@ NA WHEN CONTROL TOWER CLOSED.

CITY AND STATE	ELEVATION: 4719 THRE: 4599	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP
FORT HUACHUCA SIERRA VISTA, AZ	AIRPORT NAME: SIERRA VISTA MUNI-LIBBY AAF	FHU	VOR RWY 26, AMDT 5, 07/26/2012	AMDT 4
				DATE 09/01/2005

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☒ NO	SEE CHANGES	07/26/2012

COORDINATED WITH:

ATA	AAT	ALPA	APA	AOPA	NBAA	OTHER (specify)
☐	☐	☒	☐	☒	☒	☒ ZAB, FHU APP CON, FHU ATCT, HQ USAASA, AIRPORT MANAGER, ST. AV.

FLIGHT CHECKED BY

NAME:	FIFO	DATE:
PENDING	FIOG	05/23/2012

DEVELOPED BY

NAME:	FIFO	DATE:
ADOLFO URRUTIA (AMANDA ROBBINS)	AJV-354	03/06/2012

APPROVED BY

NAME:		FIFO	DATE:
DEZ SILAGYI	MANAGER	AJV-354	

CHANGES:

1. ADDED VDP AT 2.8 DME, 1.45 NM TO THLD.
2. REMOVED ARH DME FROM PLATE, REPLACED BY NEW FHU DME, UPDATED ALL DME INSTANCES.
3. CHANGED DME DIST FOR CIXOR, FOGPU, AND CITOS, REMOVED ARH 0.6, 5.7, 12.3 ADDED FHU 1.36, 6.5, 12.76.
4. ADDED INITIAL 12.76NM FHUDME ARC FROM TOMBS TO CITOS, MOVED CITOS WEST 0.38NM, AND UPDATED DISTANCE FROM CITOS TO FOGPU FROM 6.64 TO 6.26.
5. MODIFIED MISSED APPROACH HOLDING FROM CLIMBING RIGHT TURN TO 9500 VIA FHU R-021 TO TOMBS INT/DUG 36 DME AND HOLD, TO CLIMB TO 5300 THEN CLIMBING RIGHT TURN TO 9500 ON HEADING 67 AND FHU R-021 TO TOMBS INT/DUG 36 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 9500.
6. UPDATED S-26 HAT/VIS, CAT A/B FROM HAT 511 TO HATH 541, CAT C/D VIS/HAT 1 1/2 511 TO VIS/HATH 1 5/8 541; AND CIRC VIS CAT C FROM 1 1/2 TO 1 5/8.
7. ADDED CHART TOMBSTONE A/C MOAS.
8. ADDED INITIAL FROM DEYNE, AND FEEDER FROM SSO VORTAC WITH STEPDOWN AT ZONSI, AND DELETED INITIAL FROM CAYLA.
9. ADD RADAR TO EXTENDED CENTERLINE FIXES.
10. ADDED DME DIST AT TOMBS FROM FHU VOR/DME.
11. ADDED CHART NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT.
12. UPDATE ALL INSTANCES OF TDZE 4629 TO THRE 4599.
13. ADDED CIRCLING RESTRICTION NOTES.

VOR: 313522.76N / 1102117.79W, DME: 313522.76N / 1102117.29W

REASONS:

1./2./3. PER FPT, DME COMMISSIONED AT LIBBY VOR, NOW PROVIDES FINAL DME GUIDANCE.
4./5. PER FPT.
6. APPLICATION OF 8260.3B CHANGE 20, USING HATH INSTEAD OF HAT, AND VISIBILITY UPDATES (8260.3B CHG 20, CHAPTER 3).
7. FEEDER GOES UNDER TOMBSTONE C MOA.
8. FHU MGR REQUEST, PER FPT, AND COCHISE (CIE) VORTAC DECOMMISSIONED JULY 2012.
9. FHU MGR WANTS FIX IDENTIFIED AS RADAR.
10. NEEDED SSO DME FOR FEEDER, AND FHU VORDME FOR INITIAL ARC.
11. PER CRITERIA DUE TO VGSI TCH IS 80.3, VDA TCH IS 51.
12. PER CRITERIA, HAT IS NOW REPLACED BY HATH (8260.54A PARA 1.4.1C, REF PARA 1.6).
13. 20:1 PENETRATIONS TO RWYS 3,12,21,30 (8260.3B CHG 20, PARA 3.3.2D).

05/29/12: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 03/06/12.
1.REMOVED ZONSI-TRANSITION FROM SSO TO TOMBS CAN NOT BE BELOW 12000 AND DME NOT AVAILABLE PER FC, THEREFORE ZONSI DOES NOTHING FOR PROCEDURE.
SEE 8260-10

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

VOR STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - - TITLE 14 CFR PART 97.23

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CITY AND STATE	ELEVATION: 4719 THRE: 4599	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
FORT HUACHUCA SIERRA VISTA, AZ	AIRPORT NAME: **SIERRA VISTA MUNI-LIBBY AAF**	**FHU**	**VOR RWY 26, AMDT 5, 07/26/2012**	AMDT: **4**
				DATED: **09/01/2005**

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER ☐ (specify) _____

FLIGHT CHECKED BY

NAME:	FIFO	DATE:

DEVELOPED BY

NAME:	FIFO	DATE:

APPROVED BY

NAME:	FIFO	DATE:

CHANGES:

REASONS:

REASONS CONT.
2.CHANGED SSO TO ZONSI AND ZONSI TO TOMBS TO BE JUST SSO TO TOMBS.
3.ADDED SEGMENT DISTANCE FROM SSO TO TOMBS AT 57.16NM.
4.RAISED FEEDER ALT FROM 9500 TO 12000-REQUIRED FOR VOR RECEPTION FROM SSO, DG TO IF IS OK PER CRITERIA.
5.UPDATED MAPS/RENUMBERED ALL OBSTACLES.

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
FEEDER	SSO VORTAC	TOMBS INT/FHU	1. AAO	315718.00N/1095942.00W	7822 (4E)	2000	AT2178	12000
		12.76 DME	2. TERRAIN	315718.00N/1095942.00W	7622 (7600)		AS1500	9100
INITIAL: ARC	TOMBS INT/FHU	CITOS/FHU 12.76	3. AAO	313533.00N/1100142.00W	5604 (4E)	1000	AT1596	8200
	12.76 DME CW	DME/RADAR	4. TERRAIN	313533.00N/1100142.00W	5404 (5400)		AS1500	6900
INITIAL	DEYNE INT/FHU	CITOS/FHU 12.76	5. AAO	313051.00N/1095436.00W	6723 (4E)	1000	PR118 AT359	8200
	28.01 DME	DME/RADAR	6. TERRAIN	313051.00N/1095436.00W	6523 (6500)		AS1500	8000
INTERMEDIATE	CITOS/FHU 12.76	FOGPU/FHU 6.50	7. AAO	313701.50N/1100927.65W	4674 (2C)	500	AT1126	6300
	DME/RADAR	DME/RADAR	8. TERRAIN	313701.50N/1100927.65W	4474 (4500)		AS1500	6000
FINAL	FOGPU/FHU 6.50	5.14 MILES AFTER	9. AAO	313400.00N/1101606.00W	4702 (4E)	250	AC98 XP90	5140
	DME/RADAR	FOGPU/FHU 6.50						
		DME/RADAR OR AT						
		CIXOR/FHU 1.36						
		DME FIX						
2. PROCEDURE TURN	NA							
3. MISSED APPROACH MAP:	5.14 MILES AFTER	TOMBS INT/DUG				ASC		9500
	FOGPU/FHU 6.50	36.00 DME	10. AAO	314234.34N/1100744.90W	5344 (2C)	1000		6400
ELEV:	4890		11. TERRAIN	314234.34N/1100744.90W	5144 (5100)		AS1500	6600

4. CIRCLING AREA	DISTANCE		HT. ABV. ARPT.							
CATEGORY A	1.3 NM	REQUIRED	350	ACTUAL	441	12. TREE	313518.82N/1102331.70W	4794 (2C)	300	XP66	5160
CATEGORY B	1.5 NM		450		461	13. TREE	313515.68N/1102345.94W	4844 (2C)	300	HAA	5180
CATEGORY C	1.7 NM		450		461	13. TREE	313515.68N/1102345.94W	4844 (2C)	300	HAA	5180
CATEGORY D	2.3 NM		550		561	14. TREE	313517.43N/1102442.66W	4894 (2C)	300	HAA	5280
CATEGORY E	4.5 NM		550								

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID: **FHU VOR/DME**

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
060-200	BLN (04-000378)	141/ 06.9	15000 (5E)	16000	290-060	AAO	333/ 14.9	7911 (6C)	9000
200-290	AAO	272/ 25.9	9653 (6C)	10700					

CITY AND STATE		FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
FORT HUACHUCA SIERRA VISTA, AZ	ELEVATION: 4719 AIRPORT NAME: SIERRA VISTA MUNI-LIBBY AAF	FHU VOR/DME	VOR RWY 26, AMDT 5, 07/26/2012	AWP

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE	3. ALTIMETER SETTING
ZAB ARTCC FHU APP CON FHU TOWER	[ ] N W S [ ] F A A [ ] A / C OTHER: ASOS	SOURCE: KFHU DISTANCE: HOURS REMOTE OPERATION: 24
SATISFACTORY ON: [X] V H F [X] U H F [ ] H F	LOCATION: KFHU	ADJUSTMENT: 0

4. MONITOR STATUS

PRIMARY NAVAID: FHU VOR/DME

MONITOR POINT: FHU ATCT / FT HUACHUCA FIRE DEPT

HRS OPTN:	
CAT 1	0800-2200 /2200-0800
CAT 3	

5. APPROACH & RUNWAY LIGHTING

[ ]	ALS
[ ]	(S) SALS
[ ]	MALS
[X]	HIRL 08 (PCL), 26 (PCL)
[X]	MIRL 12 (PCL), 30 (PCL)
[ ]	REIL
[ ]	TDZ
[ ]	C/LINE
[X]	OTHER (SPECIFY) LIRL 21 (PCL), 03 (PCL) PAPI-2R 30 (PCL) PAPI-4L 12 (PCL), 08, 26

6. RUNWAY MARKINGS

BASIC

ALL WEATHER PIR-G 08, 26

INSTRUMENT NPI-G 12, 21, 30, 03

7. RUNWAY VISUAL RANGE

APPROACH

MIDFIELD

ROLL OUT

8. GLIDE PATH

GP ANGLE: ELEV RWY THRESHOLD:

DISTANCE FROM RWY: ELEV GP ANTENNA:

THRESHOLD CROSSING HEIGHT:

9. FINAL APPROACH COURSE AIMING

[ ] RUNWAY THRESHOLD 3000 FT. FROM THRESHOLD

[ ] ON CENTERLINE 340 FT. FROM CENTERLINE

10. WAIVERS: NONE

PART D - PREPARED BY: ADOLFO URRUTIA (AMANDA ROBBINS)

DATE: 03/06/2012

TITLE: AERONAUTICAL INFORMATION SPECIALIST

OFFICE: AJV-354

PART C - REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

TERPS PARAGRAPH 289 APPLIED TO 4787 TOWER 313359N/1101359W

NO ADDITIONAL AIRSPACE REQUIRED.

PROCEDURE REQUIRES MAGVAR CHANGED FROM 13E TO 10E, PER FPT ROTATION WILL BE COMPLETED AT FUTURE DATE, FPT IS WORKING ON SCHEDULING.

DME SCH COMMISSION JUL 2012 ADDED TO LIBBY VOR.

KFHU APT MGR ADV NEW DME AT LIBBY VOR/DME WILL BE MONITORED 24 HRS, UNTIL TWR 24 HRS, DME MONITORED BY FHU ATC AND BY LOCAL FIRE DEPT.

ASSUMED VEGETATION HEIGHT 20 FEET PER FPT.

KFHU ASOS-3 ON SERVICE A. NO SUITABLE BACKUP ALTIMETER SETTING PER FPT.
VGSI DATA: 3.00/80.3

FAC AIMING: 339.52FT RT OF 3000 FT EXTENDED C/L.

ALL INTERMEDIATE OBSTACLES ARE THE SAME.
INTERMEDIATE NAME CITOS KEPT SAME, PER FHU MGR OPERATIONAL ADVANTAGE EMAIL.
FHU APT MGR REQUESTED ALL FIX TO BE IDENTIFIED AS RADAR FIX, SENT EMAIL WITH ALL FIX LAT/LONG.

INITIAL DEYNE DEV TO ELIMINATE ARRIVAL HOLDING AT TOMBS, FHU MGR CONCUR.
INITIAL ARC DEV AT REQUEST OF FHU MGR, FROM TOMBS.
FEEDER FROM SSO PER REQUEST OF FHU MGR, FEEDER ALT 10000 BELOW THE TOMBSTONE C MOA.
ARRIVAL HOLDING AT TOMBS FROM FEEDER TO ARC NOT REQUIRED AS TURN IS LESS THAN 120 DEGREES.
FEEDER SEG SSO TO TOMBS PRECIPITOUS; ROC REDUCTION NOT AUTH/2000 ROC REQUIRED.

CIRCLING NA S OF RWY 8-30 DUE TO RISING TERRAIN.
CIRCLING R12/30/21 NA AT NIGHT DUE TO 20:1 AND UNVERIFIED/NO VGSI. CIRCLING R3 NA AT NIGHT DUE TO 20:1 AND DUE TO CIRCLING NA S OF FIELD.

PER 5/23/2012 FC, FROM SSO TO TOMBS CAN NOT BE BELOW 12000, AND VOR ONLY- DME NOT AVAILABLE FROM SSO. DG FROM 12000 TOMBS TO IF IS UNDER CRITERIA REQUIRED DG.

VDP LAT/LONG: 313516.86N-1101801.07W.
289 OBST(04-000480) AC4D, FLIGHT CHECKED 7/1/96.

TERPS, VOLUME 1, VISUAL PORTION OF FINAL PENETRATIONS:
FPT NOTIFIED VIA EMAIL 06 MARCH 2012
20:1
RW03 4660 BUSH (KFHU0012) 313518.45N/1102051.75W(4.74)
RW12 4616 BUSH (KFHU0006) 313537.24N/1102036.44W(3.36)
RW12 4624 BUSH (KFHU0041) 313535.43N/1102039.64W(5.72)
RW12 4626 BUSH (KFHU0042) 313536.09N/1102040.88W(1.43)
RW21 4590 BUSH (KFHU0016) 313545.23N/1102024.31W(4.21)
RW21 4593 TREE (KFHU0017) 313546.92N/1102026.16W(5.15)
RW30 4621 RFLTR (KFHU0043) 313459.76N/1101944.40W(1.89)

XP:LAXFPT MANDATED MIN MDA PER PREVIOUS AMDT

XP: 66FT LAX FPT MANDATED MIN MDA PER PREVIOUS AMDT.

RADIO FIX AND HOLDING DATA RECORD

NAME: CITOS **STATE:** AZ **COUNTRY:** US

LATITUDE/LONGITUDE: 313455.11N/1100622.06W **TYPE:** RADAR, 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	DIST FROM FAC FEET	MRA	MAA
1	LIBBY	FHU	VOR/DME	T	079.00	092.00	12.76	12.76		8200	9500

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

REMARKS:
LIBBY (FAC 1) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	VOR RWY 26	1		KFHU	FORT HUACHUCA/SIERRA VISTA	AZ (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 07/26/2012

REASON FOR REVISION:
FIX MOVED 2288FT EAST.
DELETED FAC 2 (ARH;T), 3 (CIE;C), 4 (KFHU R26).
CHANGE FAC 1 FROM LIBBY FHU VOR TO LIBBY FHU VOR/DME, DME COMMISSIONED.
ADDED DME DISTANCE AND NM FROM FAC TO FAC 1.
UDPATED FAC1 MRA FROM 8300 TO 8200, LOWERED ALT FIX TO BE USED.
UPDATED FAC1 MAA FROM 12000 TO 9500, CORRECTED HIGHEST ALT FIX TO BE USED.
REMOVED INT FROM FIX TYPE, COCHISE VORTAC CIE TO BE DECOMISSIONED.
UPDATED FIX USE FORMAT, AND FIX USE.

DEVELOPED BY: **DATE:** 03/02/2012 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZAB
ATC FACILITY: FHU APP CON
OTHER: FHU ATCT

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: CIXOR **STATE:** AZ **COUNTRY:** US

LATITUDE/LONGITUDE: 313519.90N/1101942.50W **TYPE:** 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	DIST FROM FAC FEET	MRA	MAA
1	LIBBY	FHU	VOR/DME	T	079.00	092.00	1.36	1.36		5040	6000

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

REMARKS:
LIBBY (FAC 1) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	VOR RWY 26	1		KFHU	FORT HUACHUCA/SIERRA VISTA	AZ (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 07/26/2012

REASON FOR REVISION:
DELETED FAC2 (ARH;T).
CHANGED FAC1 FROM LIBBY FHU VOR TO LIBBY FHU VOR/DME, DME COMMISSIONED.
ADDED DME DISTANCE, AND NM FROM FAC TO FAC1.
UPDATED FIX USE AND FIX USE FORMAT.

DEVELOPED BY: **DATE:** 03/02/2012 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZAB
ATC FACILITY: FHU APP CON
OTHER: FHU ATCT

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: DEYNE **STATE:** AZ **COUNTRY:** US

LATITUDE/LONGITUDE: 313419.75N/1094831.59W **TYPE:** INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	DOUGLAS	DUG	VORTAC	L	286.38	299.38	12.16	12.16		9500	17500
2	LIBBY	FHU	VOR/DME	T	079.00	092.00	28.01	28.01		9500	14500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
FHU	VOR/DME	R-079	29	8200	14500

REMARKS:
DOUGLAS (FAC 1) USED TO ESTABLISH FIX COORDINATES
TERPS PARAGRAPH 287A APPLIED, DIVERGENCE ANGLE BETWEEN FAC1 AND FAC2 LESS THAN 30 DEGREES (27).

NOTE:ESV MIN ALT AT 8200 TO ENSURE FACILITY RECEPTION FOR ENTIRE INITIAL SEGMENT ON KFHU VOR RWY 26 TERMINAL PROCEDURE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V66	1				(US)
IAP	VOR RWY 26	1, 2		KFHU	FORT HUACHUCA SIERRA VISTA	AZ (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 07/26/2012

DEVELOPED BY: **DATE:** 03/03/2012 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZAB
ATC FACILITY: FHU APP CON
OTHER: FHU ATCT

QUALITY 4 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: FOGPU **STATE:** AZ **COUNTRY:** US

LATITUDE/LONGITUDE: 313508.89N/1101341.48W **TYPE:** RADAR, 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	DIST FROM FAC FEET	MRA	MAA
1	LIBBY	FHU	VOR/DME	T	079.00	092.00	6.50	6.50	39495	6300	8000

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

REMARKS:
LIBBY (FAC 1) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	VOR RWY 26	1		KFHU	FORT HUACHUCA/SIERRA VISTA	AZ (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 07/26/2012

REASON FOR REVISION:
DELETED FAC2(ARH;T), FAC3(KFHU R26).
CHANGED FAC1 FROM LIBBY FHU VOR TO LIBBY FHU VOR/DME, DME COMMISSIONED.
ADDED DME DISTANCE, AND NM FROM FAC, AND FEET FROM FAC TO FAC1.
UPDATED FIX USE AND FIX USE FORMAT.
REMOVED MILITARY IAP FROM REQUIRED CHARTING.

DEVELOPED BY: **DATE:** 03/02/2012 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZAB
ATC FACILITY: FHU APP CON
OTHER: FHU ATCT

RADIO FIX AND HOLDING DATA RECORD

NAME: TOMBS **STATE:** AZ **COUNTRY:** US

LATITUDE/LONGITUDE: 314558.36N/1101255.25W **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	DIST FROM FAC FEET	MRA	MAA
1	DOUGLAS	DUG	VORTAC	L	286.38	299.38	36.00	36.00		9500	17500
2	LIBBY	FHU	VOR/DME	T	021.03	034.03	12.76	12.76		9500	17500
3	LIBBY	ARH	TACAN	T	018.31	030.31	12.53	12.53		9500	17500
4	DRAGOO	DAO	NDB	MH	018.37	031.37		12.66		9500	17500
5	SAN SIMON	SSO	VORTAC	H	225.45	238.45		57.16		12000	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
SSO	VORTAC	R-225	58	12000	17500
FHU	VOR/DME	R-021	13	16600	17500
ARH	TACAN	R-018	13	16600	17500

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	E	DUG	VORTAC	286.38	286.38	R	1-1 1/2		9500	17500	11	18
2	E		WP	106.38	286.38	R		7	9500	17500	10	17

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	AAO	315012.00N/1095603.00W	7346	4E
1	265	AAO	315114.90N/1095546.40W	7346	6C
1	310	AAO	315043.04N/1102431.01W	7559	2C
2	230	AAO	315006.00N/1095603.00W	7087	4E
2	265	AAO	315012.00N/1095603.00W	7346	4E

PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
1	230	114
1	265	229
1	310	224
2	265	114

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	ILS OR LOC RWY 26	KFHU	FORT HUACHUCA SIERRA VISTA	AZ (US)
1	VOR RWY 26	KFHU	FORT HUACHUCA SIERRA VISTA	AZ (US)
1	PAR/ASR	KFHU	FORT HUACHUCA SIERRA VISTA	AZ (US)

REMARKS:
DOUGLAS (FAC 1) USED TO ESTABLISH FIX COORDINATES
PRECIPITOUS TERRAIN EVALUATION COMPLETED
NOTE: SSO ESV ONLY GOOD FOR VOR RADIAL, NO DME AT ANY ALTITUDE PER FC 5/29/12.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V-66	1, 2, 3, 4	1			(US)
IAP	ILS OR LOC RWY 26	1, 2, 4, 5	1	KFHU	FORT HUACHUCA SIERRA VISTA	AZ (US)
IAP	NDB RWY 26	1, 2, 3	1	KFHU	FORT HUACHUCA SIERRA VISTA	AZ (US)
IAP	PAR/ASR	1, 2, 3, 4	1	KFHU	FORT HUACHUCA SIERRA VISTA	AZ (US)
IAP	RNAV (GPS) RWY 26		2	KFHU	FORT HUACHUCA SIERRA VISTA	AZ (US)
IAP	RNAV (GPS) RWY 8			KFHU	FORT HUACHUCA SIERRA VISTA	AZ (US)
IAP	TACAN RWY 26	1, 3	1	KFHU	FORT HUACHUCA SIERRA VISTA	AZ (US)
IAP	TACAN RWY 8	1, 3	1	KFHU	FORT HUACHUCA SIERRA VISTA	AZ (US)
IAP	TAKE-OFF MINIMUMS	1, 2, 4		KFHU	FORT HUACHUCA SIERRA VISTA	AZ (US)
IAP	VOR RWY 26	1, 2, 5	1	KFHU	FORT HUACHUCA SIERRA VISTA	AZ (US)

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

COMPULSORY REPORTING POINT: NO

CHECKED 1 QUALITY

RECORD REVISION NUMBER: 9 **DATE OF REVISION:** 07/26/2012

REASON FOR REVISION:
CHANGED FAC2 FROM LIBBY FHU VOR TO LIBBY FHU VOR/DME, DME COMMISSIONED.
ADDED DME DIST TO FAC2.
UPDATED PRECIPITOUS TERRAIN ADDITION FOR PAT1 SPEED 230 FROM 81FT TO 114FT, AND PAT1 SPEED 265 FROM 138FT TO 229.
UPDATED PAT1 SPEED 230 CONT OBST ACCURACY CODE FROM 6A TO 4E.
UPDATED PAT1 SPEED 265 CONT OBST LAT/LONG, AND ACCURACY CODE FROM 6A TO 6C.
UPDATED PAT1 SPEED 310 CONT OBST ACCURACY CODE FROM 6A TO 2C.
UPDATED PAT2 SPEED 265 CONT OBST ACCURACY CODE FROM 6A TO 4E.
UPDATE FIX USE.
ADDED CIH REQUIREMENT FOR KFHU ILS OR LOC RWY 26 (INCLUDING ALTERNATE MISSED PATTERN) AND KFHU VOR/DME RWY 26.
ADDED PAT1 TO V-66 ENROUTE LOW CHART.
ADDED FAC5 SSO VORTAC.
ADDED ESV INFORMATION FOR SSO VORTAC, FHU VOR/DME.
CHANGED MIN ALTITUDE ON ESV FOR FHU VOR FROM 12000 TO 16600, AND CHANGED FAC TYPE FROM VOR TO VOR/DME.
CHANGED RADIAL/BEARING ON ESV FOR ARH TACAN FROM R-021 TO R-018.
REQUESTING FLIGHT CHECK ON ALL 3 ESVS.
ADDED FAC3 -TUSCON VORTAC, AND ASSOCIATED ESV, AND NOTE ABOUT ESV MIN ALT.
ADDED HOLDING PATTERN 3, AND ASSOCIATED OBST/PERCIPITOUS TERRAIN.
CHANGED REMARK FROM INDICATING FAC1 AND FAC4 USED TO ESTABLISH FIX COORDINATES, TO JUST FAC1 USED TO ESTABLISH FIX COORDINATES.

05/29/12: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 03/02/12.
1.REMOVED TUS HOLDING PAT3, ASSOCIATED OBST, AND ANY REFERENCES TO HOLDING-ESV NOT APPROVED, HOLDING NOT SATISFACTORY WITH TUS VTAC.
2.REMOVED TUS FAC6, AND TUS ESV-ESV NOT SATISFACTORY.
3.REMOVED DME FROM FAC5 SSO VTAC, DME NOT AVAILABLE AT ANY ALT.
4.REMOVED REMARK:NOTE: TUS ESV MIN ALT AT 7100 TO ENSURE FACILITY RECEPTION FOR CIH ON HOLDING PAT3.
5. ADDED REMARK:NOTE: SSO ESV ONLY GOOD FOR VOR RADIAL, NO DME AT ANY ALTITUDE PER FC 5/29/12.

DEVELOPED BY: **DATE:** 03/02/2012 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZAB
ATC FACILITY: FHU APP CON
OTHER: FHU ATCT

RADIO FIX AND HOLDING DATA RECORD

NAME: ZONSI **STATE:** AZ **COUNTRY:** US

LATITUDE/LONGITUDE: 315018.21N/1100448.24W **TYPE:** INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	SAN SIMON	SSO	VORTAC	H	225.45	238.45	49.00	49.00		10000	14500
2	DOUGLAS	DUG	VORTAC	L	298.94	311.94		32.84		10000	14500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
SSO	VORTAC	R-225	49	10000	14500

REMARKS:
SAN SIMON (FAC 1) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 26	1, 2		KFHU	FORT HUACHUCA SIERRA VISTA	AZ (US)
IAP	VOR RWY 26	1, 2		KFHU	FORT HUACHUCA SIERRA VISTA	AZ (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 07/26/2012

DEVELOPED BY: **DATE:** 03/03/2012 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZAB
ATC FACILITY: FHU APP CON
OTHER: FHU ATCT

RADIO FIX AND HOLDING DATA RECORD

INFO ONLY

NAME: SAN SIMON VORTAC **STATE:** AZ **COUNTRY:** US

LATITUDE/LONGITUDE: 321609.28N/1091547.12W **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	DIST FROM FAC FEET	MRA	MAA
1	SAN SIMON	SSO	VORTAC	H							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	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	E		WP	094.10	274.10	R		7	10000	14000	10	11

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	AAO	322236.00N/1090309.00W	6785	4E

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	SAN SIMON (RNAV) (OBSTACLE)			KCFT	CLIFTON/MORENCI	AZ (US)
DP	SAFFORD (RNAV) (OBSTACLE)			KSAD	SAFFORD	AZ (US)
DP	TUSCON			KTUS	TUCSON	AZ (US)
DP	WLDKT (RNAV)			KTUS	TUCSON	AZ (US)
DP	TAKE OFF			KP33	WILLCOX	AZ (US)
DP	ATKNN (RNAV)			KELP	EL PASO	TX (US)
DP	JCOXX (RNAV)			KELP	EL PASO	TX (US)
EN ROUTE	J104					(US)
EN ROUTE	J166					(US)
EN ROUTE	J4					(US)
EN ROUTE	J50					(US)
EN ROUTE	T310					(US)
EN ROUTE	V198					(US)
EN ROUTE	V202					(US)
EN ROUTE	V94					(US)
IAP	RNAV (GPS) A			KCFT	CLIFTON/MORENCI	AZ (US)
IAP	ILS OR LOC RWY 26			KFHU	FORT HUACHUCA SIERRA VISTA	AZ (US)
IAP	VOR RWY 26			KFHU	FORT HUACHUCA SIERRA VISTA	AZ (US)
IAP	RNAV (GPS) RWY 12		1	KSAD	SAFFORD	AZ (US)
IAP	RNAV (GPS) RWY 30			KSAD	SAFFORD	AZ (US)
IAP	RNAV (GPS) RWY 21			KP33	WILLCOX	AZ (US)
STAR	SUNSS			KCHD	CHANDLER	AZ (US)
STAR	SUNSS			KP19	CHANDLER	AZ (US)
STAR	SUNSS			KGEU	GLENDALE	AZ (US)
STAR	SUNSS			KGYR	GOODYEAR	AZ (US)
STAR	SUNSS			KFFZ	MESA	AZ (US)
STAR	SUNSS			KDVT	PHOENIX	AZ (US)
STAR	SUNSS			KIWA	PHOENIX	AZ (US)
STAR	KOOLY (RNAV)			KPHX	PHOENIX	AZ (US)
STAR	SUNSS			KPHX	PHOENIX	AZ (US)
STAR	SUNSS			KSDL	SCOTTSDALE	AZ (US)
STAR	ZONNA (RNAV)			KTUS	TUCSON	AZ (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 02/09/2012

REASON FOR REVISION:
UPDATED PAT 1 CONTROLLING OBSTRUCTION.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 07/25/2011 **OFFICE:** AJV-353 **NAME:** PABLO ORTIZ

APPROVED BY: **DATE:** 12/12/2011 **OFFICE:** AJV-353 **NAME:** GREGORY YAMAMOTO

QUALITY 2 CHECKED

INFO ONLY

INFO ONLY

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZAB
ATC FACILITY: ELP APP CON
OTHER: NGB/A306 (ANG)

INFO ONLY
QUALITY
2
CHECKED

TERMINAL AIRSPACE DATA REQUIREMENTS

CITY: **FORT HUACHUCA SIERRA VISTA** STATE: **AZ**

AIRPORT NAME: **SIERRA VISTA MUNI-LIBBY AAF** ID: **KFHU**

PROCEDURE: **VOR RWY 26** AMDT: **5**

DOCKET # :
(96-AXX-X/Required/Not Required)

ALL DIST TO 1/100 NM; ELEV TO NEAREST FT; COORD TO 1/100 SEC; DEG TO 1/100 DG.

1. Distance from **THLD** to 1000' point **3.14**
   (Enter THLD, FAF, ARP, FACILITY, as appropriate)
2. Width of **FINAL** segment at 1000' point **2.45**
   (Enter appropriate segment , final, intermediate, etc.)
3. True Course of **FINAL** segment containing 1000' point **272.00**
4. High Terrain in **FINAL** segment containing 1000' point **4686**
5. Distance from **THLD** to 1500' point **4.94**
   (If 1500' point in PT maneuvering area or holding pattern note in remarks)
6. Width of **FINAL** segment at 1500' point **2.63**
7. True Course of **FINAL** segment containing 1500' point **272.00**
8. High Terrain in **FINAL** segment containing 1500' point **4686**
9. Threshold Coordinates (if straight-in) ... **313515.45N** / **1101942.68W**
10. ARP Coordinates ..... **313518.50N** / **1102039.80W**
11. Runway Approach End and distance furthest from ARP.....RWY **8**
    Distance **1.16** NM
12. FAF Coordinates ..... **313508.89N** / **1101341.48W**
    (Click to Select)

REMARKS: Approach/Drawing attached.