US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

ILS - STANDARD
INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.29

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
TAPOW/EFD 15.00 DME CW (IAF)	PAHSU INT/EFD 14.98 DME/RADAR	15.00 DME ARC (EFD LR-167)	3100
PAHSU INT/EFD 14.98 DME/RADAR (IF)	MARZY INT/EFD 7.08 DME/RADAR	353.84 / 8.02 (I-EFD)	2100

MISSED APPROACH

ILS: DA
LOC: 5.69 MILES AFTER MARZY INT/EFD 7.08 DME/RADAR OR AT BAYUU/ 1.40 DME FIX

CLIMB TO 700 THEN CLIMBING RIGHT TURN TO 3100 ON HUB VOR/DME R-129 TO WATFO INT/HUB 22.33 DME AND HOLD (TACAN AIRCRAFT CLIMB TO 700 THEN CLIMBING RIGHT TURN TO 3100 ON EFD TACAN R-136 TO WATFO INT/EFD 15.98 DME AND HOLD SE, LT, 316.00 INBOUND), OR AS DIRECTED BY ATC. (SEE FORM 8260-10)

ADDITIONAL FLIGHT DATA:
HOLD SE, LT, 308.53 INBOUND.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE WATFO INT/VUH 9.33 DME, LT, 319.82 INBOUND.
CHART FAS OBST: 74 POLE 293522N/0950959W
CHART EFD R-151 AT TAPOW.
CHART MANDATORY 2100 AT MARZY.

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. PROFILE STARTS AT PAHSU INT/EFD 14.98 DME/RADAR
3. FAC: 353.84 FAF: MARZY INT/EFD 7.08 DME/RADAR DIST FAF TO MAP: 5.69 THLD: 6.34
4. MIN. ALT: PAHSU 3100, MARZY 2100, JUVUM/EFD 2.45 DME 620*
5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 1047
6. MIN GS INCPT: 2100 GS ALT AT: MARZY 2100 OM: - MM: - IM: -
7. GS ANGLE: 3.00 TCH: 53.9
8. MSA FROM: HUB VOR/DME 3100

MAG VAR: 5E EPOCH YEAR: 2000

MINIMUMS

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

CATEGORY =====>	A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
S-ILS 35L	228	4000	200	228	4000	200	228	4000	200	228	4000	200	228	4000	200
S-LOC 35L	620	4000	592	620	4000	592	620	1 3/8	592	620	1 3/8	592	620	1 3/8	592
CIRCLING	620	1	587	620	1	587	620	1 3/4	587	620	2	587	660	2 1/4	627
JUVUM DME MINIMUMS															
S-LOC 35L	440	4000	412	440	4000	412	440	5000	412	440	5000	412	440	5000	412
CIRCLING	500	1	467	500	1	467	500	1 1/2	467	600	2	567	660	2 1/4	627

NOTES:
CHART PLANVIEW NOTE: DME OR RADAR REQUIRED.
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT.
*LOC ONLY
CHART NOTE: FOR INOPERATIVE MALSF, INCREASE S-LOC 35L CATS A/B VISIBILITY TO RVR 5000, CATS C/D/E (SEE FORM 8260-10)

CAT E 700-2 1/4
@ CAT E 800-2 1/4

QUALITY CHECKED 3

CITY AND STATE	ELEVATION: 33 THRE: 28	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
HOUSTON, TX	AIRPORT NAME: ELLINGTON FIELD	I-EFD	ILS OR LOC RWY 35L, AMDT 6	AMDT: 5B
				DATED 02/09/2012

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
[ ] YES [X] NO		**ROUTINE**

COORDINATED WITH:

ATA	AAT	ALPA	APA	AOPA	NBAA	OTHER (specify)
X		X	X	X	X	X **EFD ATCT, HOU APP CON, ZHU, ST AV DIR., AMGR**

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME: **JILL OLSON (KISSY MAXFIELD)**	FIFO **AJV-353**	DATE: **07/21/2012**
APPROVED BY		
NAME: **LARRY H STROUT** **MANAGER**	FIFO **AJV-353**	DATE:

CHANGES:

1. PFAF MARZY RELOCATED TO NEW PFAF LOCATION.
2. ADDED JUVUM SDF.
3. S-ILS 35L VISIBILITY CHANGED FROM RVR 2600 TO RVR 4000.
4. ADDED DME OR RADAR REQUIRED NOTE TO PLANVIEW; DELETED CHART NOTE DME OR RADAR REQUIRED.
5. ADDED JUVUM FIX MINIMUMS.
6. UPDATED INOPERATIVE MALSF NOTE.
7. ADDED INOPERATIVE MALSF NOTE FOR JUVUM FIX MINIMUMS.
8. REMOVED VDP.
9. ADDED INOP TABLE DOES NOT APPLY TO S-ILS 35L.
10. S-ILS 35L DA RAISED FROM 227 TO 228.
11. AIRPORT ELEVATION RAISED FROM 32 TO 33.
12. THLD ELEVATION RAISED FROM 27 TO 28.

REASONS:

1. IAW 8260.54A FORMULA 2-16B.
2. TO MITIGATE AAO.
3. DUE TO MALSF GENOT (VISIBILITY VALUES SHOULD NOT BE LESS THAN RVR 4000).
4. DME OR RADAR REQUIRED FOR PROCEDURE ENTRY.
5. SDF MAY NOT ALWAYS BE RECEIVED.
6. S-ILS 35L VISIBILITY INCREASED.
7. ADDED SDF MININUMS.
8. DME NOT COLLOCATED WITH FACILITY PROVIDING FINAL APROACH COURSE GUIDANCE.
9. IAW 8260.19D 8-54 M (3C).
10. THLD ELEVATION RAISED FROM 27 TO 28.
11, 12. NEW AIRPORT SURVEY.

QUALITY 3 CHECKED

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 aiport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

MISSED APPROACH INSTRUCTIONS, (CONT.):
ALTERNATE MA: CLIMB TO 700 THEN CLIMBING RIGHT TURN TO 3100 ON VUH VORTAC R-320 TO WATFO INT/VUH 9.33 DME AND HOLD.

NOTES, (CONT.):
VISIBILITY TO 1 3/4 MILE.
CHART NOTE: FOR INOPERATIVE MALSF WHEN USING JUVUM FIX MINIMUMS, INCREASE S-LOC 35L CATS A/B VISIBILITY TO RVR 5000, CATS C/D/E VISIBILITY TO 1 1/8 MILE.
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-ILS 35L.
CHART NOTE: CIRCLING NA W OF RWY 17R-35L.

QUALITY CHECKED 3

CITY AND STATE	ELEVATION: 33 THRE: 28	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
HOUSTON, TX	AIRPORT NAME: ELLINGTON FIELD	I-EFD	ILS OR LOC RWY 35L, AMDT 6	AMDT: 5B
				DATED: 02/09/2012

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

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:

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.

ARINC PACKET - 424-18 - ILS

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAD        EFD   K4010940 TLW                    EFD N29362145W095093475E0050000281     NARELLINGTON
        SUSAD        HUB   K4011710VDHW N29392022W095163583    N29392022W095163583E0050000472     NARHOBBY

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   MARZY K40    C     N29291574W095094093                      E0029     NAR           MARZY
        SUSAEAENRT   PAHSU K40    C     N29212017W095092992                      E0029     NAR           PAHSU
        SUSAEAENRT   TAPOW K40    R     N29223703W095023576                      E0029     NAR           TAPOW
        SUSAEAENRT   WATFO K40    C     N29235391W094580402                      E0028     NAR           WATFO

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KEFDK4AEFD     0     090YHN29362640W095093150E005000033         1800018000C    MNAR    ELLINGTON FIELD

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KEFDK4FI35L  ATAPOW 010TAPOWK4EA0E  A    IF EFD K4      15100150        D                18000                 0 NS
        SUSAP KEFDK4FI35L  ATAPOW 020PAHSUK4EA0EE BR   AF EFD K4      174701501510    D   + 03100                           0 NS
        SUSAP KEFDK4FI35L  I      010PAHSUK4EA0E  I    IF IEFDK4      17380160        PI  J 031000210018000                 0 NS
        SUSAP KEFDK4FI35L  I      020MARZYK4EA0E  F    CF IEFDK4      1738008035400080PI  G 0210002100        -300HUB  BK4D 0 NS
        SUSAP KEFDK4FI35L  I      030RW35LK4PG0GY M    CF IEFDK4      1738001735400063PI    00082             -300          0 NS
        SUSAP KEFDK4FI35L  I      040         0  M     CA                     3538        + 00700                           0 NS
        SUSAP KEFDK4FI35L  I      050         0    R   CIY                    1740                                          0 NS
        SUSAP KEFDK4FI35L  I      060WATFOK4EA0EY      CF HUB K4      1285022312850120D   + 03100                           0 NS
        SUSAP KEFDK4FI35L  I      070WATFOK4EA0EE  L   HM                     3085T010    + 03100                           0 NS

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KEFDK4GRW35L   0090003538 N29353691W095094975+0000    -0018800028000054150IIEFD1

                 1         2         3         4         5         6         7         8         9         0         1         2         3
ILS     123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KEFDK4IIEFD1   011110RW35LN29371936W0950952133538N29354737W0950944901350 10470388300E00505400024

                 1         2         3         4         5         6         7         8         9         0         1         2         3
MSA     123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
```

QUALITY CHECKED

CITY AND STATE	ELEVATION: 33 THRE: 28	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
HOUSTON, TX	AIRPORT NAME: **ELLINGTON FIELD**	**I-EFD**	**ILS OR LOC RWY 35L, AMDT 6**	AMDT: **5B**
				DATED: **02/09/2012**

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

COORDINATED WITH:

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

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

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.

```
SUSAP KEFDK4SHUB  K4D B          0   18018003125                                                    M
```

QUALITY

CITY AND STATE	ELEVATION: 33 THRE: 28	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
HOUSTON, TX	AIRPORT NAME: ELLINGTON FIELD	I-EFD	ILS OR LOC RWY 35L, AMDT 6	AMDT: 5B
				DATED: 02/09/2012

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

COORDINATED WITH:

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

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

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.

ARINC SUMMARY - 424-18 - ILS

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	TAPOW	TAPOW	010	IAF	IF		FB					
	TAPOW	PAHSU	020		AF	R	FB		151.0()		AA 03100	
		PAHSU	010	FACF	IF		FB				AA 03100 GI 02100	
		MARZY	020	FAF	CF		FB		354.0()	008.0	GI 02100 GS 02100	
		RW35L	030	MAP	CF		FO		354.0()	006.3	AT 00082	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		353.8()		AA 00700	
		050		CI	R	FB		174.0()			
	WATFO	060		CF		FO		128.5()	012.0	AA 03100	
	WATFO	070		HM	L	FO		308.5()	T01.0	AA 03100	

POINT DATA

WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
EFD (DME)	N293621.45	W0950934.75	N2936.358	W09509.579
HUB	N293920.22	W0951635.83	N2939.337	W09516.597
MARZY	N292915.74	W0950940.93	N2929.262	W09509.682
PAHSU	N292120.17	W0950929.92	N2921.336	W09509.499
TAPOW	N292237.03	W0950235.76	N2922.617	W09502.596
WATFO	N292353.91	W0945804.02	N2923.899	W09458.067
RW35L	N293536.91	W0950949.75	N2935.615	W09509.829
IEFD (LOC)	N293719.36	W0950952.13	N2937.323	W09509.869

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW35L	00028	54

CITY AND STATE	ELEVATION: 33 THRE: 28	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
HOUSTON, TX	AIRPORT NAME: ELLINGTON FIELD	I-EFD	ILS OR LOC RWY 35L, AMDT 6	AMDT: 5B
				DATED: 02/09/2012

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

COORDINATED WITH:

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

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

ARINC PACKET - 424-18 - LOC

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAD        EFD   K4010940 TLW                    EFD N29362145W095093475E0050000281     NARELLINGTON
        SUSAD        HUB   K4011710VDHW N29392022W095163583    N29392022W095163583E0050000472     NARHOBBY

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   BAYUU K40    R     N29345815W095094886                      E0029     NAR           BAYUU
        SUSAEAENRT   JUVUM K40    R     N29335468W095094738                      E0029     NAR           JUVUM
        SUSAEAENRT   MARZY K40    C     N29291574W095094093                      E0029     NAR           MARZY
        SUSAEAENRT   PAHSU K40    C     N29212017W095092992                      E0029     NAR           PAHSU
        SUSAEAENRT   TAPOW K40    R     N29223703W095023576                      E0029     NAR           TAPOW
        SUSAEAENRT   WATFO K40    C     N29235391W094580402                      E0028     NAR           WATFO

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KEFDK4AEFD     0     090YHN29362640W095093150E005000033         1800018000C    MNAR    ELLINGTON FIELD

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KEFDK4FL35L  ATAPOW 010TAPOWK4EA0E  A    IF EFD K4      15100150        D               18000                 0 NS
        SUSAP KEFDK4FL35L  ATAPOW 020PAHSUK4EA0EE BR   AF EFD K4      174701501510    D   + 03100                           0 NS
        SUSAP KEFDK4FL35L  L      010PAHSUK4EA0E  I    IF IEFDK4      17380160        PI  + 03100     18000                 0 NS
        SUSAP KEFDK4FL35L  L      020MARZYK4EA0E  F    CF IEFDK4      1738008035400080PI    02100                 HUB  BK4D 0 NS
        SUSAP KEFDK4FL35L  L      021JUVUMK4EA0E S     CF IEFDK4      1738003435400046PI  + 00620             -300          0 NS
        SUSAP KEFDK4FL35L  L      030BAYUUK4EA0EY M    CF IEFDK4      1738002335400011PI    00288             -300          0 NS
        SUSAP KEFDK4FL35L  L      040         0  M     CA                      3538        + 00700                           0 NS
        SUSAP KEFDK4FL35L  L      050         0    R   CIY                     1740                                          0 NS
        SUSAP KEFDK4FL35L  L      060WATFOK4EA0EY      CF HUB K4      1285022312850120D   + 03100                           0 NS
        SUSAP KEFDK4FL35L  L      070WATFOK4EA0EE  L   HM                      3085T010    + 03100                           0 NS

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KEFDK4GRW35L   0090003538 N29353691W095094975+0000     -0018800028000054150IIEFD1

                 1         2         3         4         5         6         7         8         9         0         1         2         3
ILS     123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KEFDK4IIEFD1   011110RW35LN29371936W0950952133538N29354737W0950944901350 10470388300E00505400024
```

CITY AND STATE	ELEVATION: 33 THRE: 28	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
HOUSTON, TX	AIRPORT NAME: **ELLINGTON FIELD**	**I-EFD**	**ILS OR LOC RWY 35L, AMDT 6**	AMDT: **5B**
				DATED: **02/09/2012**

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

COORDINATED WITH:

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

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
MSA     123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KEFDK4SHUB  K4D B              0   18018003125                                                                          M
```

CITY AND STATE	ELEVATION: 33 THRE: 28	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
HOUSTON, TX	AIRPORT NAME: **ELLINGTON FIELD**	**I-EFD**	**ILS OR LOC RWY 35L, AMDT 6**	AMDT: **5B**
				DATED: **02/09/2012**

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

COORDINATED WITH:

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

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

LOC STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.25**

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.

ARINC SUMMARY - 424-18 - LOC

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	TAPOW	TAPOW	010	IAF	IF		FB					
	TAPOW	PAHSU	020		AF	R	FB		151.0()		AA 03100	
		PAHSU	010	FACF	IF		FB				AA 03100	
		MARZY	020	FAF	CF		FB		354.0()	008.0	AT 02100	
		JUVUM	021	SDF	CF		FB		354.0()	004.6	AA 00620	
		BAYUU	030	MAP	CF		FO		354.0()	001.1	AT 00288	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		353.8()		AA 00700	
		050		CI	R	FB		174.0()			
	WATFO	060		CF		FO		128.5()	012.0	AA 03100	
	WATFO	070		HM	L	FO		308.5()	T01.0	AA 03100	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	EFD (DME)	N293621.45	W0950934.75	N2936.358	W09509.579
	HUB	N293920.22	W0951635.83	N2939.337	W09516.597
	BAYUU	N293458.15	W0950948.86	N2934.969	W09509.814
	JUVUM	N293354.68	W0950947.38	N2933.911	W09509.790
	MARZY	N292915.74	W0950940.93	N2929.262	W09509.682
	PAHSU	N292120.17	W0950929.92	N2921.336	W09509.499
	TAPOW	N292237.03	W0950235.76	N2922.617	W09502.596
	WATFO	N292353.91	W0945804.02	N2923.899	W09458.067
	RW35L	N293536.91	W0950949.75	N2935.615	W09509.829
	IEFD (LOC)	N293719.36	W0950952.13	N2937.323	W09509.869

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW35L	00028	54

CITY AND STATE	ELEVATION: 33 THRE: 28	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
HOUSTON, TX	AIRPORT NAME: ELLINGTON FIELD	I-EFD	ILS OR LOC RWY 35L, AMDT 6	AMDT: 5B
				DATED: 02/09/2012

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

COORDINATED WITH:

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

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
INITIAL: ARC	TAPOW/EFD 15.00	PAHSU INT/EFD	1. TOWER (48-023422)	291800.65N/0950640.27W	2013 (5D)	1000		3100
	DME CW	14.98 DME/RADAR	2. TERRAIN	292339.00N/0950816.00W	34 (0)		AS1500	1500
INTERMEDIATE	PAHSU INT/EFD	MARZY INT/EFD	3. TOWER (48-004370)	292404.20N/0951217.88W	580 (2C)	500	AT1020	2100
	14.98 DME/RADAR	7.08 DME/RADAR	4. TERRAIN	292421.00N/0951242.00W	40 (0)		AC1500	1500
FINAL: ILS	MARZY INT/EFD	RW35L				ASC		228/200
	7.08 DME/RADAR							
FINAL: LOC	MARZY INT/EFD	JUVUM/EFD 2.45	5. AAO	293218.00N/0950957.00W	237 (2C)	250	DG133	620
	7.08 DME/RADAR	DME						
FINAL: LOC STEPDOWN	JUVUM/EFD 2.45	5.69 MILES AFTER	6. POLE (KEFD0066)	293522.02N/0950958.66W	74 (1A)	250	XP116	440
	DME	MARZY INT/EFD						
		7.08 DME/RADAR						
		OR AT BAYUU/						
		1.40 DME FIX						
2. PROCEDURE TURN	NA							
3. MISSED APPROACH MAP:	DA / 5.69 MILES	WATFO INT/HUB				ASC		3100
	AFTER MARZY	22.33 DME	7. TOWER (48-004625)	292443.62N/0945708.58W	590 (4D)	1000		1600
ELEV:	60/190		8. TERRAIN	293315.00N/0950912.00W	56 (100)		AS1500	1600

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL							
CATEGORY A	1.3 NM	350	587 / 467	9. TOWER (48-009792)	293431.31N/0950918.97W	187 (1A)	300	SI	620 / 500
CATEGORY B	1.5 NM	450	587 / 467	9. TOWER (48-009792)	293431.31N/0950918.97W	187 (1A)	300	SI	620 / 500
CATEGORY C	1.7 NM	450	587 / 467	9. TOWER (48-009792)	293431.31N/0950918.97W	187 (1A)	300	SI	620 / 500
CATEGORY D	2.3 NM	550	587 / 567	10. TOWER (48-008595)	293903.00N/0950847.00W	213 (5D)	300	SI / AC50 XP37	620 / 600
CATEGORY E	4.5 NM	550	627 / 627	11. TOWER (48-024657)	293437.36N/0950539.97W	288 (5D)	300	XP22 AC50 / XP22 AC50	660 / 660

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

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
360-360	TWR (48-004048)	242/ 12.3	2049 (5D)	3100					

CITY AND STATE	ELEVATION: 33 / AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
HOUSTON, TX	ELLINGTON FIELD	I-EFD	ILS OR LOC RWY 35L, AMDT 6	ASW

QUALITY CHECKED

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE		3. ALTIMETER SETTING
EFD TOWER HOU APP CON	N W S	OTHER:	SOURCE: KEFD
	F A A	FSS	DISTANCE:
	A / C		HOURS REMOTE OPERATION:
SATISFACTORY ON:			
X V H F X U H F H F	LOCATION:		ADJUSTMENT: 0

4. MONITOR STATUS	PRIMARY NAVAID: I-EFD	
	MONITOR POINT: EFD ATCT	
	HRS OPTN: CAT 1	24
	CAT 3	

5. APPROACH & RUNWAY LIGHTING	
	ALS
	(S) SALS
X	MALSR 22 MALSF 17R, 35L
X	HIRL 17R, 22, 35L, 04
	MIRL
	REIL
X	TDZ 17R, 22, 35L
X	C/L 17R, 22, 35L, 04
X	OTHER (SPECIFY) PAPI-4L 17R, 22, 35L, 04

6. RUNWAY MARKINGS	BASIC	BSC-G 35R, 17L
	ALL WEATHER	PIR-G 17R, 22, 35L
	INSTRUMENT	NPI-G 04
7. RUNWAY VISUAL RANGE	APPROACH	22, 35L
	MIDFIELD	
	ROLL OUT	22, 35L

8. GLIDE PATH		
	GP ANGLE: 3.00	ELEV RWY THRESHOLD: 27.6
	DISTANCE FROM RWY: 1047	ELEV GP ANTENNA: 26.6
		THRESHOLD CROSSING HEIGHT: 53.9

9. FINAL APPROACH COURSE AIMING			
	X	RUNWAY THRESHOLD	FT. FROM THRESHOLD
	X	ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS: NONE

QUALITY CHECKED 3

PART D - PREPARED BY:	DATE:
JILL OLSON (KISSY MAXFIELD)	07/21/2012
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-353

PART C - REMARKS:

VDP NOT ESTABLISHED - FINAL FACILITY DOES NOT HAVE DME.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

NO ADDITIONAL AIRSPACE REQUIRED.

KEFD 32.7, ON SERVICE A

VGSI DATA: 3.00/32.2

100 FT VEGETATION USED PER FPT.

CIRCLING NA WEST OF RWY 17R/35L FOR NOISE ABATEMENT

NO BACKUP ALTIMETER REQUIRED - 24 HR FACILITY WITH REDUNDANT SOURCES

RAISED VISIBILITY FOR S-ILS 35L FROM RVR 2600 TO RVR 4000 DUE TO MALSF GENOT (VISIBILITY VALUES SHOULD NOT BE LESS THAN RVR 4000).

116XP: TO MATCH CURRENT MDA

22XP: TO MATCH CURRENT MDA

37XP: TO MATCH CURRENT MDA

MISSED APPROACH OBSTACLES CONT.
ALTERNATE:
ASC 3100
7. TOWER (48-004625) 292443.62N/0945708.58W 590 (4D) 1000 1600
8. TERRAIN 293315.00N/0950912.00W 56 (100) AS1500 1600

RADIO FIX AND HOLDING DATA RECORD

NAME: BAYUU **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 293458.15N/0950948.86W **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	HOUSTON	I-EFD	LOC		173.84	178.84		2.35		340	4500
2	ELLINGTON	EFD	TACAN	L			1.40	1.40		340	4500

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

REMARKS:
HOUSTON (FAC 1) AND ELLINGTON (FAC 2) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	HI-ILS OR LOC/DME RWY 35L	1, 2		KEFD	HOUSTON	TX (US)
IAP	ILS OR LOC RWY 35L	1, 2		KEFD	HOUSTON	TX (US)

REQUIRED CHARTING: MILITARY IAP, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 12/13/2012

REASON FOR REVISION:
ADDED REMARK "HOUSTON (FAC 1) AND ELLINGTON (FAC 2) USED TO ESTABLISH FIX COORDINATES".

DEVELOPED BY: **DATE:** 07/16/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (KISSY MAXFIELD)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZHU
ATC FACILITY: HOU APP CON
OTHER: EFD ATCT

QUALITY CHECKED 3

RADIO FIX AND HOLDING DATA RECORD

NAME: JUVUM **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 293354.68N/0950947.38W **TYPE:** 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	HOUSTON	I-EFD	LOC		173.84	178.84		3.40		520	4500
2	ELLINGTON	EFD	TACAN	L			2.45	2.45		520	4500

REMARKS:
ELLINGTON (FAC 2) AND HOUSTON (FAC 1) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	HI-ILS OR LOC/DME RWY 35L	1, 2		KEFD	HOUSTON	TX (US)
IAP	ILS OR LOC RWY 35L	1, 2		KEFD	HOUSTON	TX (US)

REQUIRED CHARTING: MILITARY IAP, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 12/13/2012

DEVELOPED BY: **DATE:** 07/17/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (KISSY MAXFIELD)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZHU
ATC FACILITY: HOU APP CON
OTHER: EFD ATCT

QUALITY 3 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: MARZY **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 292915.74N/0950940.93W **TYPE:** WP, RADAR, 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	HOUSTON	I-EFD	LOC		173.84	178.84		8.04	48864	2100	4500
2	ELLINGTON	EFD	TACAN	L			7.08	7.08		2100	4500
3	TRINITY	MHF	VOR/DME	L	253.90	260.90		21.95		2100	17500

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

REMARKS:
HOUSTON (FAC 1) AND ELLINGTON (FAC 2) USED TO ESTABLISH FIX COORDINATES
RELOCATED TO NEW PFAF LOCATION IAW 8260.54A CRITERIA, FORMULA 8-16B.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	HI-ILS OR LOC/DME RWY 35L	1, 2, 3		KEFD	HOUSTON	TX (US)
IAP	ILS OR LOC RWY 35L	1, 2, 3		KEFD	HOUSTON	TX (US)
IAP	RNAV (GPS) RWY 35L			KEFD	HOUSTON	TX (US)

REQUIRED CHARTING: MILITARY IAP, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 7 **DATE OF REVISION:** 12/13/2012

REASON FOR REVISION:
ADDED REMARK "HOUSTON (FAC 1) AND ELLINGTON (FAC 2) USED TO ESTABLISH FIX COORDINATES"
MOVED FIX 688 FT SOUTH.

DEVELOPED BY: **DATE:** 07/16/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (KISSY MAXFIELD)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZHU
ATC FACILITY: HOU APP CON
OTHER: EFD ATCT

QUALITY 3 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: PAHSU **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 292120.17N/0950929.92W **TYPE:** WP, RADAR, 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	HOUSTON	I-EFD	LOC		173.84	178.84		15.95		2400	4500
2	ELLINGTON	EFD	TACAN	L			14.98	14.98		2400	4500
3	TRINITY	MHF	VOR/DME	L	235.15	242.15	24.36	24.36		2400	4500

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

REMARKS:
HOUSTON (FAC 1) AND ELLINGTON (FAC 2) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	HI-ILS OR LOC/DME RWY 35L	1, 2, 3		KEFD	HOUSTON	TX (US)
IAP	ILS OR LOC RWY 35L	1, 2, 3		KEFD	HOUSTON	TX (US)
IAP	RNAV (GPS) RWY 35L			KEFD	HOUSTON	TX (US)

REQUIRED CHARTING: MILITARY IAP, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4 **DATE OF REVISION:** 12/13/2012

REASON FOR REVISION:
ADDED REMARK: HOUSTON (FAC 1) AND ELLINGTON (FAC 2) USED TO ESTABLISH FIX COORDINATES.

DEVELOPED BY: **DATE:** 07/21/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (KISSY MAXFIELD)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZHU
ATC FACILITY: HOU APP CON
OTHER: EFD ATCT

QUALITY 3 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: WATFO **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 292353.91N/0945804.02W **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	HOBBY	HUB	VOR/DME	H	128.53	133.53	22.33	22.33		3100	17500
2	TRINITY	MHF	VOR/DME	L	225.53	232.53		14.55		3100	17500
3	ELLINGTON	EFD	TACAN	L	136.00	141.00	15.98	15.98		3100	17500
4	SCHOLES	VUH	VORTAC	L	319.82	325.82	9.33	9.33		3100	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	SE	EFD	TACAN	136.00	316.00	L	1		3100	17500	13	21
2	SE		WP	136.00	316.00	L		9	3100	14000	13	19
3	SE	HUB	VOR/DME	128.53	308.53	L	1		3100	14000	13	19
4	SE	VUH	VORTAC	319.82	319.82	L	1		3100	14000	12	18

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	310	TOWER (48-023422)	291800.65N/0950640.27W	2013	5D
2	310	TOWER (48-023422)	291800.65N/0950640.27W	2013	5D
3	310	TOWER (48-023422)	291800.65N/0950640.27W	2013	5D
4	310	TOWER (48-023422)	291800.65N/0950640.27W	2013	5D

REASON FOR NONSTANDARD HOLDING:
PAT 1 AIR TRAFFIC REQUIREMENT
PAT 2 AIR TRAFFIC REQUIREMENT
PAT 3 AIR TRAFFIC REQUIREMENT
PAT 4 AIR TRAFFIC REQUIREMENT

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
ELLINGTON (FAC 3) AND TRINITY (FAC 2) USED TO ESTABLISH FIX COORDINATES
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	HI-ILS OR LOC/DME RWY 17R	3	1	KEFD	HOUSTON	TX (US)
IAP	HI-ILS OR LOC/DME RWY 22	3	1	KEFD	HOUSTON	TX (US)
IAP	HI-ILS OR LOC/DME RWY 35L	1	1	KEFD	HOUSTON	TX (US)
IAP	HI-TACAN RWY 17R	3	1	KEFD	HOUSTON	TX (US)
IAP	HI-TACAN RWY 35L	1	1	KEFD	HOUSTON	TX (US)
IAP	ILS OR LOC RWY 17R	1, 2	3	KEFD	HOUSTON	TX (US)
IAP	ILS OR LOC RWY 22	1, 2	3	KEFD	HOUSTON	TX (US)
IAP	ILS OR LOC RWY 22 (ALTERNATE MISSED APPROACH)	2, 4	4	KEFD	HOUSTON	TX (US)
IAP	ILS OR LOC RWY 35L	1, 2	3	KEFD	HOUSTON	TX (US)
IAP	ILS OR LOC RWY 35L (ALTERNATE MISSED APPROACH)	2, 4	4	KEFD	HOUSTON	TX (US)
IAP	RNAV (GPS) RWY 17R		2	KEFD	HOUSTON	TX (US)
IAP	RNAV (GPS) RWY 22		2	KEFD	HOUSTON	TX (US)
IAP	RNAV (GPS) RWY 35L		2	KEFD	HOUSTON	TX (US)
IAP	RNAV (GPS) RWY 4		2	KEFD	HOUSTON	TX (US)
IAP	TACAN RWY 17R	3	1	KEFD	HOUSTON	TX (US)
IAP	TACAN RWY 22	3	1	KEFD	HOUSTON	TX (US)
IAP	TACAN RWY 35L	1	1	KEFD	HOUSTON	TX (US)
IAP	TACAN RWY 4	3	1	KEFD	HOUSTON	TX (US)

REQUIRED CHARTING: MILITARY IAP, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 8 **DATE OF REVISION:** 12/13/2012

REASON FOR REVISION:
HOLDING PATTERN 1, REMOVED LEG LENGTH 6 DME AND ADDED 1 TIME.
FAC 4 CHANGED MIN TEMPLATE SIZE FROM 13 TO 12.
ADDED REMARK "ELLINGTON (FAC 3) AND TRINITY (FAC 2) USED TO ESTABLISH FIX COORDINATES".

QUALITY 3 CHECKED

DEVELOPED BY:	**DATE:** 07/16/2012	**OFFICE:** AJV-353	**NAME:** JILL OLSON (KISSY MAXFIELD)
APPROVED BY:	**DATE:**	**OFFICE:** AJV-353	**NAME:** LARRY STROUT
	SIGNATURE:		

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZHU
ATC FACILITY: HOU APP CON
OTHER: EFD ATCT

QUALITY 3 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: TAPOW **STATE:** TX **COUNTRY:** US

INFO ONLY

LATITUDE/LONGITUDE: 292237.03N/0950235.76W **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	ELLINGTON	EFD	TACAN	L	151.00	156.00	15.00	15.00		3100	17500

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	HI-TACAN RWY 35L	1		KEFD	HOUSTON	TX (US)
IAP	ILS OR LOC RWY 35L	1		KEFD	HOUSTON	TX (US)
IAP	TACAN RWY 35L	1		KEFD	HOUSTON	TX (US)
IAP	TACAN RWY 4	1		KEFD	HOUSTON	TX (US)

REQUIRED CHARTING: MILITARY IAP, IAP

COMPULSORY REPORTING POINT: NO

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

REASON FOR REVISION:
RAISED MRA FROM 2400 TO 3100
ADDED DIST FROM FAC IN NM
UPDATED FIX USE

DEVELOPED BY: **DATE:** 04/15/2011 **OFFICE:** AJV-353 **NAME:** LARRY STROUT (BRIAN BERUBEE)

APPROVED BY: **DATE:** 11/14/2011 **OFFICE:** AJV-353 **NAME:** GREGORY YAMAMOTO

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZHU
ATC FACILITY: HOU APP CON
OTHER: EFD ATCT

QUALITY CHECKED 3

RADIO FIX AND HOLDING DATA RECORD

NAME: ZUKAS **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 292915.67N/0950940.93W **TYPE:** WP

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 35L			KEFD	HOUSTON	TX (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

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

DEVELOPED BY: **DATE:** **OFFICE:** **NAME:**

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZHU
ATC FACILITY: HOU APP CON
OTHER: EFD ATCT

CANCELLED

DATE:_____

BY:_____