US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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
OPTOC (IAF)	SEVSY (FB)	289.16 / 5.00	2000
SEVSY (IF)	WITZI (FB)	218.93 / 6.12	2000
WITZI (FAF)	YAKUD/2.20 NM TO RW22 (FB)	218.90 / 3.82	
YAKUD/2.20 NM TO RW22	RW22 (MAP) (FO)	218.87 / 2.20	
RW22 (MAP)	500 MSL	218.87	500
500 MSL	WATFO (FO)		3100

MISSED APPROACH

LPV: DA
LNAV/VNAV: DA
LNAV: RW22

CLIMB TO 500 THEN CLIMBING LEFT TURN TO 3100 TO WATFO AND HOLD.

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. PROFILE STARTS AT SEVSY
3. FAC: 218.90 FAF: WITZI DIST FAF TO MAP: 6.02 THLD: 6.02
4. MIN. ALT: SEVSY 2000, WITZI 2000, YAKUD/2.20 NM TO RW22 780*
5. DIST TO THLD FROM OM: ____ MM: ____ IM: ____ 150 HAT: ____ 100 HAT: ____ GS ANT: ____
6. MIN GS INCPT: 2000 GS ALT AT: WITZI 2000 OM: ____ MM: ____ IM: ____
7. GS ANGLE: 3.00 TCH: 53.6 34:1 IS CLEAR
8. MSA FROM: RW22 3100

ADDITIONAL FLIGHT DATA:
HOLD SE, LT, 316.00 INBOUND.
CHART FAS OBST: 141 STACK 293758N/0950716W
DISTANCE TO THLD FROM 200 HATH: 0.46 NM.
CHART VDP AT 1.00 MILES TO RW22*
*LNAV ONLY.
WAAS CHANNEL # 61111
REFERENCE PATH ID: W22A
LTP HAE: -17.9 M
CHART: LA PORTE MUNI

MAG VAR: 5E EPOCH YEAR: 2000

MINIMUMS

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT ALTERNATE: N A 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
LPV DA	230	2400	200	230	2400	200	230	2400	200	230	2400	200	230	2400	200
LNAV/VNAV DA	340	2400	310	340	2400	310	340	2400	310	340	2400	310	340	2400	310
LNAV MDA	400	2400	370	400	2400	370	400	3500	370	400	3500	370	400	3500	370
CIRCLING	500	1	468	500	1	468	500	1 1/2	468	600	2	568	660	2 1/4	628

NOTES:
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 43C (109F). @ CAT E 800-2 1/4
CHART NOTE: DME/DME RNP-0.3 NA.
CHART PLANVIEW NOTE: RADAR REQUIRED.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT.
(SEE FORM 8260-10)

CITY AND STATE	ELEVATION: 32 THRE: 30	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
HOUSTON, TX	AIRPORT NAME: ELLINGTON FIELD	RNAV	RNAV (GPS) RWY 22, AMDT 2 26 JULY 2012	AMDT: 1A DATED 04/05/2012

NOTES, (CONT.):
CHART NOTE: CIRCLING NA WEST OF RWY 17R-35L.
CHART NOTE: FOR INOPERATIVE MALSR, INCREASE LPV CAT E VISIBILITY TO RVR 4000, LNAV/VNAV CAT E VISIBILITY TO RVR 5000 AND LNAV CATS C, D AND E VISIBILITY TO RVR 5000.

QUALITY 2 CHECKED

CITY AND STATE	ELEVATION: 32 THRE: 30	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
HOUSTON, TX	AIRPORT NAME: ELLINGTON FIELD	RNAV	RNAV (GPS) RWY 22, AMDT 2 26 JULY 2012	AMDT: 1A DATED: 04/05/2012

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.

FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KEFD
RUNWAY	RW22
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W22A
LTP/FTP LATITUDE	293650.5400N
LTP/FTP LONGITUDE	0950843.9700W
LTP/FTP ELLIPSOIDAL HEIGHT	-00179
FPAP LATITUDE	293546.1300N
FPAP LONGITUDE	0950954.7900W
THRESHOLD CROSSING HEIGHT (TCH)	00053.6
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0312
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	87FC4DAE

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+00092
FPAP ORTHOMETRIC HEIGHT	+00092

QUALITY CHECKED 2

CITY AND STATE	ELEVATION: 32 THRE: 30	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
HOUSTON, TX	AIRPORT NAME: ELLINGTON FIELD	RNAV	RNAV (GPS) RWY 22, AMDT 2 26 JULY 2012	AMDT: 1A DATED: 04/05/2012

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICES - FAR PART 97.33

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 - RNAV (GPS)

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   OPTOC K40    W     N29413045W094483547                      E0028     NAR           OPTOC
        SUSAEAENRT   SEVSY K40    C     N29453666W094590421                      E0029     NAR           SEVSY
        SUSAEAENRT   WATFO K40    C     N29235391W094580402                      E0029     NAR           WATFO
        SUSAEAENRT   WITZI K40    W     N29411140W095035678                      E0029     NAR           WITZI
        SUSAEAENRT   YAKUD K40    W     N29382594W095065901                      E0029     NAR           YAKUD

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KEFDK4AEFD     0     090YHN29362640W095093150E005000032         1800018000C    MNAR    ELLINGTON FIELD

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KEFDK4FR22   AOPTOC 010OPTOCK4EA0E  A    IF                                                18000                 A JS
        SUSAP KEFDK4FR22   AOPTOC 020SEVSYK4EA0EE B 010TF                      28920100    + 02000                            A JS
        SUSAP KEFDK4FR22   R      010SEVSYK4EA0E  I    IF                                  + 02000     18000                 A JS
        SUSAP KEFDK4FR22   R      020WITZIK4EA1E  F 051TF                      21890061    + 02000                  RW22  K4PGA JS
        SUSAP KEFDK4FR22   R      020WITZIK4EA2WALPV       ALNAV/VNAV ALNAV                                                     JS
        SUSAP KEFDK4FR22   R      021YAKUDK4EA0E S  031TF                      21890038    V 0078000784        -300          A JS
        SUSAP KEFDK4FR22   R      030RW22 K4PG0GY M 031TF                      21890022      00084             -300          A JS
        SUSAP KEFDK4FR22   R      040          0  M     CA                     2189        + 00500                            A JS
        SUSAP KEFDK4FR22   R      050WATFOK4EA0EY  L   DF                                  + 03100                            A JS
        SUSAP KEFDK4FR22   R      060WATFOK4EA0EE  L   HM                      31600090    + 03100                            A JS

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KEFDK4GRW22    0080012189 N29365054W095084397-0100    -0017900030000054150I

                 1         2         3         4         5         6         7         8         9         0         1         2         3
PP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KEFDK4PR22   RW22 001 0000W22A0N2936505400W09508439700-001790300N2935461300W0950954790010675031200053 6F40035087FC4DAE
        SUSAP KEFDK4PR22   RW22 002E      +00092+00092LPV       61111

                 1         2         3         4         5         6         7         8         9         0         1         2         3
MSA     123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KEFDK4SRW22 K4PG                0   18018003125                                                                      M
```

CITY AND STATE	ELEVATION: 32 THRE: 30	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
HOUSTON, TX	AIRPORT NAME: ELLINGTON FIELD	RNAV	RNAV (GPS) RWY 22, AMDT 2 26 JULY 2012	AMDT: 1A DATED: 04/05/2012

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

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 - RNAV (GPS)

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	OPTOC	OPTOC	010	IAF	IF		FB					
	OPTOC	SEVSY	020		TF		FB	1.0	289.2(294.2T)	010.0	AA 02000	
		SEVSY	010	FACF	IF		FB				AA 02000	
		WITZI	020	FAF	TF		FB	0.5	218.9(223.9T)	006.1	AA 02000	
		YAKUD	021	SDF	TF		FB	0.3	218.9(223.9T)	003.8	AA 00780 GS 00784	
		RW22	030	MAP	TF		FO	0.3	218.9(223.9T)	002.2	AT 00084	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		218.9(223.9T)		AA 00500	
	WATFO	050		DF	L	FO				AA 03100	
	WATFO	060		HM	L	FO		316.0(321.0T)	009.0	AA 03100	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	OPTOC	N294130.45	W0944835.47	N2941.508	W09448.591
	SEVSY	N294536.66	W0945904.21	N2945.611	W09459.070
	WATFO	N292353.91	W0945804.02	N2923.899	W09458.067
	WITZI	N294111.40	W0950356.78	N2941.190	W09503.946
	YAKUD	N293825.94	W0950659.01	N2938.432	W09506.984
	RW22	N293650.54	W0950843.97	N2936.842	W09508.733

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW22	00030	54

CITY AND STATE	ELEVATION: 32 THRE: 30	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
HOUSTON, TX	AIRPORT NAME: ELLINGTON FIELD	RNAV	RNAV (GPS) RWY 22, AMDT 2 26 JULY 2012	AMDT: 1A DATED: 04/05/2012