Flight Procedure Tracking Form	Action: FLIGHT CHECK	Task Type: IAP	Date Open: 04/28/2011	Task #: 20110428218265 04007	Request #: 20110428218265
Procedure: GLS RWY 27 ORIG		Airport ID: KIAH	Airport: GEORGE BUSH INTERCONTINENTAL/HOUSTON		Reimbursable #:
City: HOUSTON	ST: TX	GPS #:		Estimated Chart Date: 07/26/2012	FICO #:
Fac ID: IAH	Fac. Type: GS	Specialist: SCOTT CORY			

Procedure Review

	Rec'd	Rel'd	Full Name	Comments
Lead:	05/31/2011	02/22/2012	JILL OLSON	
QA:	02/22/2012	02/22/2012	STEVEN SZUKALA	
Liaison:	02/22/2012		Terrell	WAIVER

Procedure Comments: ENROUTE | Remark Type: INFORMATION

pg 16 of 16

HOUSTON, TX GEORGE BUSH INTERCONTINENTAL/HOUSTON (KIAH) GLS RWY 27, ORIG ENROUTE-YES FC: 5 29 12 PUB: 7 26 12

ATTACHED FORMS: 8260-3; 8260-10; 8260-9; 8260-2(S): OENTO-INT, REV 10; FESTA-INT, REV 9; REDOC-INT, REV 6; SILLS-INT, REV 3; TICOY-INT, REV 4; TRANN-INT, REV 10

CONTACT: JILL OLSON, AJV-353 LEAD, 405.954.9568

LAAS	APP CRS	Rwy ldg 10000
CH 22306 GGHI	265°	THRE 86
		Apt Elev 97

GLS RWY 27

HOUSTON/GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH)

For inoperative ALSF, increase GLS all Cats visibility to RVR 4000, DME/DME RNP-0.3 NA. GPS required. Simultaneous approach authorized with Rwy 26R and Rwy 27. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

NA

ALSF-2

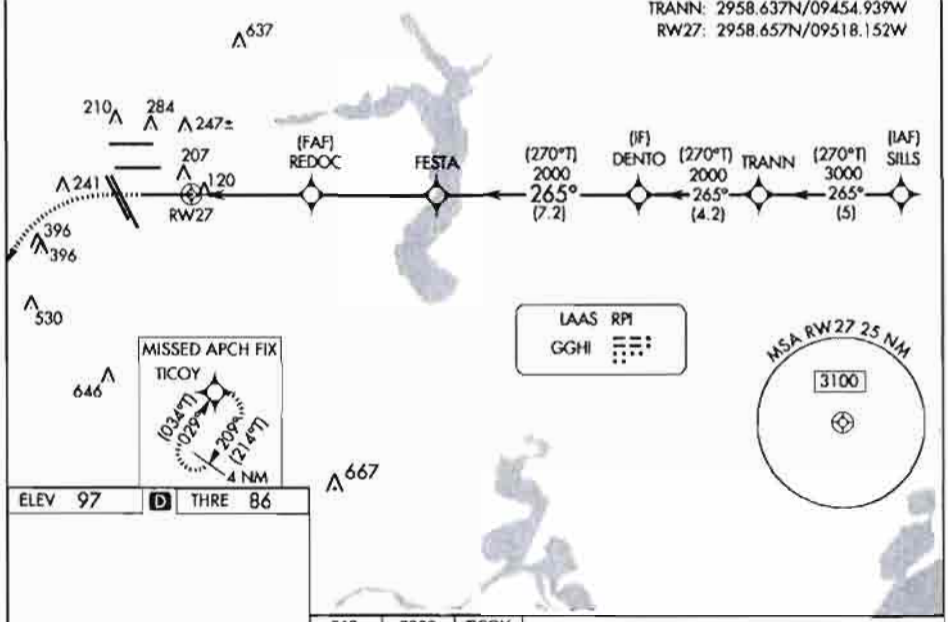
MISSED APPROACH: Climb to 560 then climbing left turn to 3000 direct TICOY and hold.

ATIS	HOUSTON APP CON	HOUSTON TOWER	GND CON	CLNC DEL
124.05	120.05 379.1 EAST 124.35 316.15 WEST	120.725 125.35 127.3 135.15 288.25 290.2	118.575 119.95 121.7	128.1

RADAR REQUIRED

PROTOTYPE - NOT FOR NAVIGATION

DENTO: 2958.647N/09459.810W
FESTA: 2958.657N/09508.125W
REDOC: 2958.658N/09513.237W
SILLS: 2958.621N/09449.136W
TICOY: 2942.021N/09535.474W
TRANN: 2958.637N/09454.939W
RW27: 2958.657N/09518.152W



ELEV 97 | D | THRE 86

560	3000	TICOY

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 70).

GLS unusable inside DA.

265° to RW27

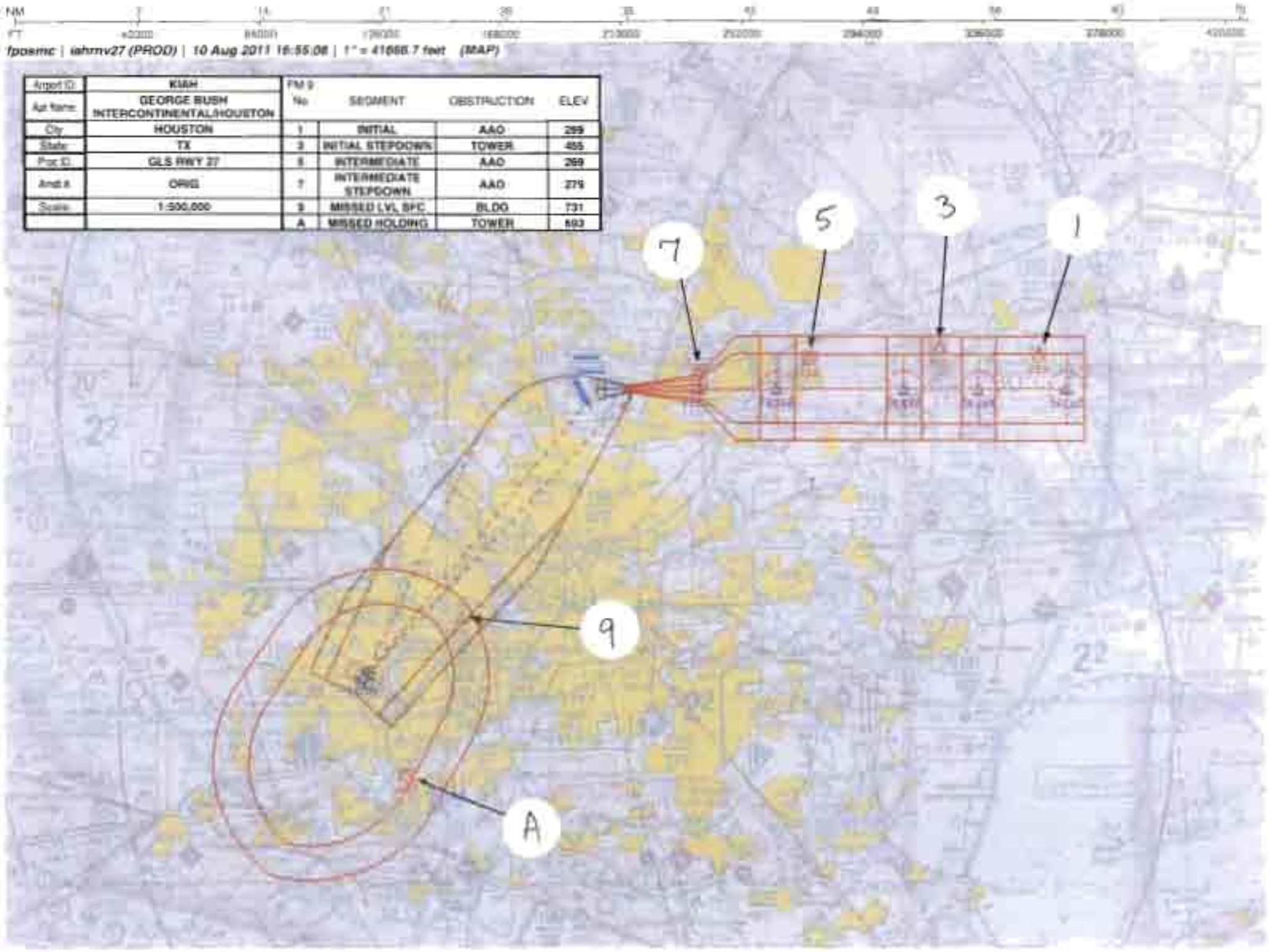
CATEGORY	A	B	C	D	E
GLS DA	383/24 297 (300-½)				

TDZ/CL Rwys 8R, 8L, 15R, 26R, 26L, 27 and 33L
HIRL all Rwys

fposmc | iahrnv27 (PROD) | 10 Aug 2011 16:55:08 | 1" = 41666.7 feet (MAP)

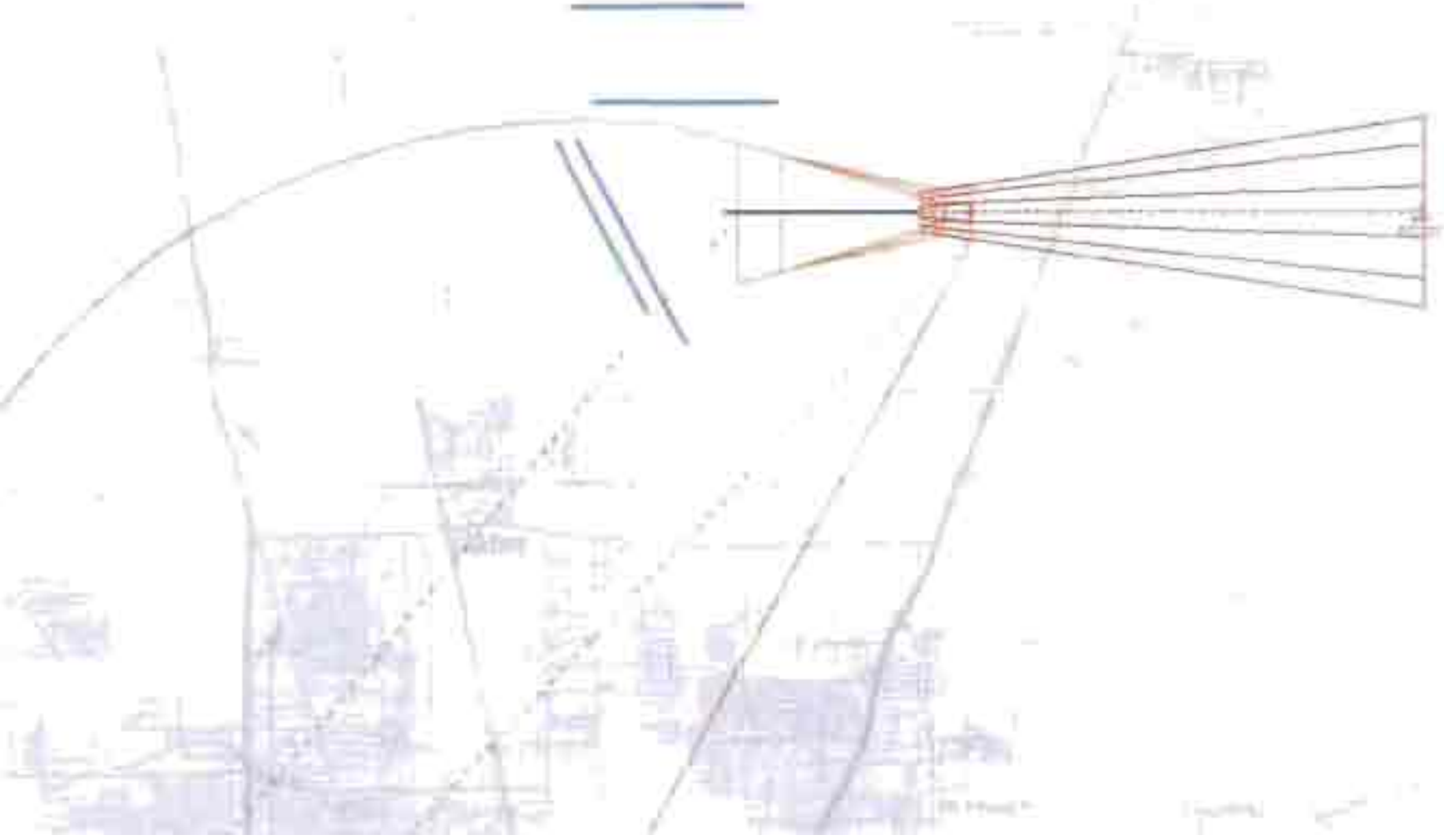
Airport ID:	KIAH
Apt Name:	GEORGE BUSH INTERCONTINENTAL/HOUSTON
City:	HOUSTON
State:	TX
Proc ID:	GLS RWY 27
Amdt #	ORIG
Scale:	1:500,000

FM 9 No	SEGMENT	OBSTRUCTION	ELEV
1	INITIAL	AAO	259
3	INITIAL STEPDOWN	TOWER	455
5	INTERMEDIATE	AAO	269
7	INTERMEDIATE STEPDOWN	AAO	279
9	MISSED LVL SFC	BLDG	731
A	MISSED HOLDING	TOWER	593



fposmc | iahrnv27 (PROD) | 27 Jul 2011 08:01:34 | 1" = 8333.3 feet (MAP)

Airport ID	KIAH	FM 8 No	SEGMENT	OBSTRUCTION	ELEV
Apt Name	GEORGE BUSH INTERCONTINENTAL/HOUSTON				
City	HOUSTON		GLS FINAL		ASC
State	TX				
Proc ID	GLS RWY 27				
Amd #	ORIG				
Scale	1:100,000				



US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

GLS - 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
SILLS (IAF)	TRANN (FB)	265.20 / 5.04	3000
TRANN	DENTO (FB)	265.15 / 4.23	2000
DENTO (IF)	FESTA (FB)	265.11 / 7.22	2000
FESTA	REDOC (FB)	265.04 / 4.44	1500
REDOC (FAF)	RW27 (MAP) (FO)	265.00 / 4.27	
RW27 (MAP)	560 MSL	265.00	560
560 MSL	TICOY (FC)		3000

MISSED APPROACH

MAP: DA

CLIMB TO 560 THEN CLIMBING LEFT TURN TO 3000 DIRECT TICOY AND HOLD.

ADDITIONAL FLIGHT DATA:
HOLD SW, RT, 029.22 INBOUND.
DISTANCE TO THLD FROM 200 HATH: 0.46 NM.
LAAS CHANNEL # 22306
REFERENCE PATH ID: GGHI
CHART LOC RWY 26L AND RWY 26R.
LTP HAE: -1.4 M

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. PROFILE STARTS AT SILLS
3. FAC: 265.00 FAF: DIST FAF TO MAP: 4.27 THLD:
4. MIN. ALT: SILLS 3000, TRANN 3000, DENTO 2000, FESTA 2000, REDOC 1500
5. DIST TO THLD FROM OM: 4.27 MM: IM: 150 HAT: 100 HAT: GS ANT:
6. MIN GS INCPT: 1500 GS ALT AT: REDOC 1500 OM: MM: IM:
7. GS ANGLE: 3.00 TCH: 55.0 34:1 IS CLEAR
8. MSA FROM: RW27 3100

MAG VAR: 5E EPOCH YEAR: 2000

MINIMUMS

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

ALTERNATE: N A X

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
GLS DA	286	2400	200	286	2400	200	286	2400	200	286	2400	200	286	2400	200

NOTES:
CHART NOTE: FOR INOPERATIVE ALSF, INCREASE GLS ALL CATS VISIBILITY TO RVR 4000.
CHART NOTE: DME/DME RNP-0.3 NA.
CHART NOTE: GPS REQUIRED.
CHART PLANVIEW NOTE: RADAR REQUIRED.
(SEE FORM 8260-10)

QUALITY CHECKED

CITY AND STATE	ELEVATION: 97 THRE: 86 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
HOUSTON, TX	GEORGE BUSH INTERCONTINENTAL/HOUSTON	GIAH	GLS RWY 27, ORIG	AMDT: NONE
				DATED

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 ZHU, IAH APP CON, IAH TOWER, AMGR

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:

DEVELOPED BY		
NAME: SCOTT M. CORY	FIFO AJV-353	DATE: 11/09/2011

APPROVED BY		
NAME: LARRY H STROUT MANAGER	FIFO AJV-353	DATE:

CHANGES:

1. ORIGINAL PROCEDURE.

REASONS:

1. FPT REQUEST.

03/12/2012: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 11/09/2011.
1. ADDED PROFILE NOTE: GLS UNUSABLE INSIDE DA.

04/02/2012: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 11/09/2011.
1. ADDED ARINC 8260-10 FORMS AND UPDATED PAGE NUMBERS.

QUALITY 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.

NOTES, (CONT.):
CHART PROFILE NOTE: VGSI AND GLS GLIDEPATH NOT COINCIDENT.
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 26L AND RWY 26R.
CHART NOTE: USE OF FD OR AP PROVIDING RNAV TRACK GUIDANCE REQUIRED DURING SIMULTANEOUS OPERATIONS.
CHART PROFILE NOTE: GLS UNUSABLE INSIDE DA.

QUALITY CHECKED

CITY AND STATE	ELEVATION: 97 THRE: 86	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
HOUSTON, TX	AIRPORT NAME: GEORGE BUSH INTERCONTINENTAL/HOUSTON	GIAH	GLS RWY 27, ORIG	AMDT: NONE
				DATED:

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 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	14
AIRPORT IDENTIFIER	KIAH
RUNWAY	RW27
APPROACH PERFORMANCE DESIGNATOR	1
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	5
REFERENCE PATH IDENTIFIER (APPROACH ID)	GGHI
LTP/FTP LATITUDE	295839.4055N
LTP/FTP LONGITUDE	0951809.0920W
LTP/FTP ELLIPSOIDAL HEIGHT	-00014
FPAP LATITUDE	295839.3300N
FPAP LONGITUDE	0952002.7900W
THRESHOLD CROSSING HEIGHT (TCH)	00055.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
CRC REMAINDER	F5B86428

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+00262
FPAP ORTHOMETRIC HEIGHT	+00262

QUALITY CHECKED

CITY AND STATE	ELEVATION: 97 THRE: 86	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
HOUSTON, TX	AIRPORT NAME: GEORGE BUSH INTERCONTINENTAL/HOUSTON	GIAH	GLS RWY 27, ORIG	AMDT: NONE
				DATED:

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:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

GLS

INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES TITLE 14 CFR PART 97.29

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```
HEADER                                                                                             1         1         1         1
         1         2         3         4         5         6         7         8         9         0         1         2         3
123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
HDR      USA       HOUSTON                  TX   IAP       KIAH      GLS RWY 27          ORIG
WAYPOINT                                                                                           1         1         1         1
         1         2         3         4         5         6         7         8         9         0         1         2         3
123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
SUSAEAENRT   DENTO K40    C     N29583880W094594861                       E0029     NAR           DENTO
SUSAEAENRT   FESTA K40    C     N29583939W095080749                       E0030     NAR           FESTA
SUSAEAENRT   REDOC K40    C     N29583950W095131422                       E0030     NAR           REDOC
SUSAEAENRT   SILLS K40    C     N29583727W094490817                       E0028     NAR           SILLS
SUSAEAENRT   TICOY K40    C     N29420124W095352844                       E0032     NAR           TICOY
SUSAEAENRT   TRANN K40    C     N29583821W094545635                       E0028     NAR           TRANN
AIRPORT                                                                                            1         1         1         1
         1         2         3         4         5         6         7         8         9         0         1         2         3
123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
SUSAP KIAHK4AIAH      0    120YHN29590396W095202919E005000097         1800018000C    MNAR    GEORGE BUSH INTERCONTINENTAL/H
SEGMENT                                                                                            1         1         1         1
         1         2         3         4         5         6         7         8         9         0         1         2         3
123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
SUSAP KIAHK4FJ27   ASILLS 010SILLSK4EA0E  A    IF                                 + 03000     18000                 A LS
SUSAP KIAHK4FJ27   ASILLS 020TRANNK4EA0E       TF                                 + 03000                           A LS
SUSAP KIAHK4FJ27   ASILLS 030DENTOK4EA0E  B    TF                                 + 02000                           A LS
SUSAP KIAHK4FJ27   ASILLS 040FESTAK4EA0EE      TF                                 + 02000                           A LS
SUSAP KIAHK4FJ27   J      010FESTAK4EA0E  I    IF                                 + 02000     18000                 A LS
SUSAP KIAHK4FJ27   J      020REDOCK4EA0E  F    TF                                 + 01500                 RW27  K4PGA LS
SUSAP KIAHK4FJ27   J      030RW27 K4PG0GY M    TF                                   00141             -300          A LS
SUSAP KIAHK4FJ27   J      040         0  M     CA                     2650        + 00560                           A LS
SUSAP KIAHK4FJ27   J      050TICOYK4EA0EY  L   DF                                 + 03000                           A LS
SUSAP KIAHK4FJ27   J      060TICOYK4EA0EE  R   HM                     02920040    + 03000                           A LS
```

QUALITY CHECKED

CITY AND STATE: **HOUSTON, TX**	ELEVATION: **97** TDZE: **86** AIRPORT NAME: **GEORGE BUSH INTERCONTINENTAL/HOUSTON**	FACILITY IDENTIFIER: **GIAH**	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE: **GLS RWY 27, ORIG**	SUP: AMDT: **NONE** DATED:

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:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

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```
RUNWAY                                                                                                                  1         1         1         1
         1         2         3         4         5         6         7         8         9         0         1         2         3
12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
SUSAP KIAHK4GRW27    0100002650 N29583941W095180909+0100    -0001400086000055150IIGHI3
PATH POINT                                                                                                              1         1         1         1
         1         2         3         4         5         6         7         8         9         0         1         2         3
12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
SUSAP KIAHK4QJ27   RW27 001   05GGHI1N2958394055W09518090920-000140300N2958393300W0952002790010675000000055 0F      F5B86428
SUSAP KIAHK4QJ26   RW27 002E      +00262+00262          22306
MSA                                                                                                                     1         1         1         1
         1         2         3         4         5         6         7         8         9         0         1         2         3
12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
SUSAP KIAHK4SRW26 K4PG                0   18018003125                                                                                  M
GLS                                                                                                                     1         1         1         1
         1         2         3         4         5         6         7         8         9         0         1         2         3
12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
SUSAP KIAHK4TGGHI1   022306RW27                    2650N30000409W095202020KIAH     23  300E0050  00094NARL    00014
```

QUALITY CHECKED

CITY AND STATE:	ELEVATION: 97 TDZE: 86	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
HOUSTON, TX	AIRPORT NAME: GEORGE BUSH INTERCONTINENTAL/HOUSTON	GIAH	GLS RWY 27, ORIG	AMDT: NONE
				DATED:

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:	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	SILLS	TRANN	1. AAO	300009.00N/0945057.00W	269 (4E)	1000	AT1731	3000
			2. TERRAIN	300036.00N/0945130.00W	69 (100)		AS1500	1600
INITIAL: STEPDOWN	TRANN	DENTO	3. TOWER (48-000177)	300036.07N/0945730.00W	455 (1A)	1000	AT545	2000
			4. TERRAIN	300036.07N/0945730.00W	69 (100)		AS1500	1600
INTERMEDIATE	DENTO	FESTA	5. AAO	300000.00N/0950600.00W	269 (2C)	500	AT1231	2000
			6. TERRAIN	300000.00N/0950600.00W	69 (100)		AS1500	1600
INTERMEDIATE: STEPDOWN	FESTA	REDOC	7. AAO	295909.00N/0951315.00W	279 (2C)	500	AC98 AT623	1500
			8. TERRAIN	295842.00N/0951312.00W	79 (100)		AS1000	1100
FINAL	REDOC	RW27				ASC		286/200
2. PROCEDURE TURN	NA							
3. MISSED APPROACH MAP:	DA	TICOY				ASC		3000
			9. BLDG (48-004421)	294459.00N/0952857.00W	731 (5D)	1000		1800
ELEV:	118		10. TERRAIN	295624.00N/0952521.00W	122 (100)		AS1500	1600

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL
CATEGORY A	1.3 NM	350	
CATEGORY B	1.5 NM	450	
CATEGORY C	1.7 NM	450	
CATEGORY D	2.3 NM	550	
CATEGORY E	4.5 NM	550	

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID: RW27

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
360-360	TWR (48-004048)	198/ 26.1	2049 (5D)	3100					

CITY AND STATE	ELEVATION: 97 / AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
HOUSTON, TX	GEORGE BUSH INTERCONTINENTAL/HOUSTON	GIAH	GLS RWY 27, ORIG	ASW

CHECKED

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE	3. ALTIMETER SETTING
ZHU ARTCC IAH APP CON IAH TOWER	N W S / F A A / A / C — OTHER: ASOS	SOURCE: KIAH DISTANCE: HOURS REMOTE OPERATION:
SATISFACTORY ON: X VHF X UHF HF	LOCATION: KIAH	ADJUSTMENT: 0

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN:	CAT 1
		CAT 3
5. APPROACH & RUNWAY LIGHTING	X	ALSF-2 27, 08L, 26R, 26L
		(S) SALS
	X	MALSR 15R, 08R, 09, 33R
	X	HIRL 15R, 33L, 27, 08L, 08R, 26R, 09, 26L, 15L, 33R
		MIRL
		REIL
	X	TDZ 15R, 33L, 27, 08L, 08R, 26R, 26L
	X	C/L 15R, 33L, 27, 08L, 08R, 26R, 09, 26L, 15L, 33R
	X	OTHER (SPECIFY) PAPI-4R 33L, 09 PAPI-4L 15R, 27, 08R, 26L, 15L, 33R

6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER	PIR-G 15R, 27, 08L, 08R, 26R, 09, 26L, 33R
	INSTRUMENT	NPI-G 33L, 15L
7. RUNWAY VISUAL RANGE	APPROACH	15R, 33L, 27, 08L, 08R, 26R, 09, 26L, 15L, 33R
	MIDFIELD	15R, 33L, 27, 08L, 08R, 26R, 09, 26L, 15L, 33R
	ROLL OUT	15R, 33L, 27, 08L, 08R, 26R, 09, 26L, 15L, 33R

8. GLIDE PATH	GP ANGLE: 3.00	ELEV RWY THRESHOLD: 85.8
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT: 55.0

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

10. WAIVERS: 1

ORDER 8260.19E APPENDIX L PARA 4I; REFERENCE PATH IDENTIFIER (RPI) FORMAT.

PART D - PREPARED BY: SCOTT M. CORY	DATE: 11/09/2011
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-353

PART C - REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

2. KIAH ASOS ON SERVICE A; HRS OPTN: 24.

BACKUP ALTIMETER SOURCE NOT ESTABLISHED DUE TO REDUNDANT WEATHER SOURCES AT AIRPORT.

VGSI DATA: 3.00/70.3

SEE ATTACHED AIRSPACE LETTER.

8260.54A LPV (200' HATH) CRITERIA USED FOR DEVELOPMENT OF GLS (LAAS) PROCEDURES PER FPO/WORKING GROUP REQUEST.

GLS:
FINAL OCS SLOPE - 34:1

AVERAGE HIGH TEMPERATURE BASED ON 5-YEAR HISTORY (2006-2010), APPLIED TO FESTA; AHT: 39 C.

CIRCLING NA PER CENTRAL FPO AND ATC REQUEST.

SIMULTANEOUS APPROACH AUTHORIZATION AND ASSOCIATED NOTES INCLUDED ON PROCEDURE; PER FPT: AIR TRAFFIC HAS CONFIRMED THAT AS OF 18 JAN 2012 GNSS IS INCLUDED IN THE SIMULTANEOUS OPERATIONS PLAN FOR GROUND-BASED AND SATELLITE-BASED INSTRUMENT FLIGHT PROCEDURES.

PROCEDURE NOT CONNECTED TO ENROUTE STRUCTURE PER FPO/AIR TRAFFIC REQUEST; RADAR REQUIRED FOR PROCEDURE ENTRY.

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: DENTO **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 295838.80N/0945948.61W **TYPE:** WP, 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	DIST FROM FAC FEET	MRA	MAA
1	HOUSTON	I-GHI	LOC/DME		086.96	089.96	17.73	17.76		2000	5800
2	HOBBY	HUB	VOR/DME	H	032.10	037.10		24.17		2000	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-GHI	LOC/DME	R-087	18	2000	5800

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

REMARKS:
HOUSTON (FAC 1) USED TO ESTABLISH FIX COORDINATES
I-GHI DME COORDINATES: 295835.38N/0952013.58W

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	GLS RWY 27			KIAH	HOUSTON	TX (US)
IAP	ILS OR LOC RWY 27	1, 2		KIAH	HOUSTON	TX (US)
IAP	ILS RWY 27 (CAT II/III)	1, 2		KIAH	HOUSTON	TX (US)
IAP	ILS RWY 27 (SA CAT I)	1, 2		KIAH	HOUSTON	TX (US)
IAP	RNAV (GPS) Z RWY 27			KIAH	HOUSTON	TX (US)
IAP	RNAV (RNP) Y RWY 27			KIAH	HOUSTON	TX (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 10 **DATE OF REVISION:** 07/26/2012

REASON FOR REVISION:
REMOVED FIX RESTRICTION.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 12/05/2011 **OFFICE:** AJV-353 **NAME:** SCOTT CORY

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

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZHU
ATC FACILITY: IAH APP CON
OTHER:

QUALITY 1 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: FESTA **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 295839.39N/0950807.49W **TYPE:** WP, 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	DIST FROM FAC FEET	MRA	MAA
1	HOUSTON	I-GHI	LOC/DME		086.96	089.96	10.51	10.53		2000	4500
2	HOBBY	HUB	VOR/DME	H	015.90	020.90		20.63		2000	4500

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

REMARKS:
HOUSTON (FAC 1) USED TO ESTABLISH FIX COORDINATES
I-GHI DME COORDINATES: 295835.38N/0952013.58W

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	GLS RWY 27			KIAH	HOUSTON	TX (US)
IAP	ILS OR LOC RWY 27	1, 2		KIAH	HOUSTON	TX (US)
IAP	ILS RWY 27 (CAT II/III)	1, 2		KIAH	HOUSTON	TX (US)
IAP	ILS RWY 27 (SA CAT I)	1, 2		KIAH	HOUSTON	TX (US)
IAP	RNAV (GPS) Z RWY 27			KIAH	HOUSTON	TX (US)
IAP	RNAV (RNP) Y RWY 27			KIAH	HOUSTON	TX (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

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

REASON FOR REVISION:
REMOVED FIX RESTRICTION.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 12/05/2011 **OFFICE:** AJV-353 **NAME:** SCOTT CORY

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

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZHU
ATC FACILITY: IAH APP CON
OTHER:

QUALITY 1 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: REDOC **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 295839.50N/0951314.22W **TYPE:** WP, 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	DIST FROM FAC FEET	MRA	MAA
1	HOUSTON	I-GHI	LOC/DME		086.96	089.96	6.07	6.10	37034	1500	4500
2	HOBBY	HUB	VOR/DME	H	003.61	008.61		19.49		1500	4500

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

REMARKS:
PFAF DETERMINED IAW FAAO 8260.54A FORMULA 2-16B.
I-GHI DME COORDINATES: 295835.38N/0952013.58W

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	GLS RWY 27			KIAH	HOUSTON	TX (US)
IAP	ILS OR LOC RWY 27	1, 2		KIAH	HOUSTON	TX (US)
IAP	ILS RWY 27 (CAT II/III)	1, 2		KIAH	HOUSTON	TX (US)
IAP	ILS RWY 27 (SA CAT I)	1, 2		KIAH	HOUSTON	TX (US)
IAP	RNAV (GPS) Z RWY 27			KIAH	HOUSTON	TX (US)
IAP	RNAV (RNP) Y RWY 27			KIAH	HOUSTON	TX (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 6 **DATE OF REVISION:** 07/26/2012

REASON FOR REVISION:
REMOVED FIX RESTRICTION.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 12/05/2011 **OFFICE:** AJV-353 **NAME:** SCOTT CORY

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

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZHU
ATC FACILITY: IAH APP CON
OTHER:

QUALITY 1 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: SILLS **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 295837.27N/0944908.17W **TYPE:** WP, 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	DIST FROM FAC FEET	MRA	MAA
1	HOUSTON	I-GHI	LOC/DME		086.96	089.96	27.00	27.03		3000	10000
2	DAISETTA	DAS	VORTAC	H	210.47	215.47		15.62		3000	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-GHI	LOC/DME	R-087	28	3000	10000

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

REMARKS:
HOUSTON (FAC 1) USED TO ESTABLISH FIX COORDINATES
I-GHI DME COORDINATES: 295835.38N / 0952013.58W

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	GLS RWY 27			KIAH	HOUSTON	TX (US)
IAP	ILS OR LOC RWY 27	1, 2		KIAH	HOUSTON	TX (US)
IAP	ILS RWY 27 (CAT II/III)	1, 2		KIAH	HOUSTON	TX (US)
IAP	ILS RWY 27 (SA CAT I)	1, 2		KIAH	HOUSTON	TX (US)
IAP	RNAV (GPS) Z RWY 27			KIAH	HOUSTON	TX (US)
IAP	RNAV (RNP) Y RWY 27			KIAH	HOUSTON	TX (US)

REQUIRED CHARTING: IAP, CONTROLLER

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 **DATE OF REVISION:** 07/26/2012

REASON FOR REVISION:
REMOVED FIX RESTRICTION.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 12/05/2011 **OFFICE:** AJV-353 **NAME:** SCOTT CORY

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

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZHU
ATC FACILITY: IAH APP CON
OTHER:

QUALITY 1 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: TICOY **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 294201.24N/0953528.44W **TYPE:** WP, 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	DIST FROM FAC FEET	MRA	MAA
1	HUMBLE	IAH	VORTAC	H	214.90	219.90	20.00	20.00		3000	17500
2	HOBBY	HUB	VOR/DME	H	274.32	279.32		16.66		3000	17500

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	SW	IAH	VORTAC	214.90	034.90	R	1		3000	6000	5	6
2	SW		WP	209.22	029.22	R		4	3000	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (48-001285)	293723.76N/0953307.98W	608	2C
2	200	TOWER (48-003084)	293550.28N/0953240.38W	693	2C

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
HUMBLE (FAC 1) USED TO ESTABLISH FIX COORDINATES
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	GLS RWY 27		2	KIAH	HOUSTON	TX (US)
IAP	ILS OR LOC RWY 27	1, 2	1	KIAH	HOUSTON	TX (US)
IAP	ILS RWY 27 (CAT II/III)	1, 2	1	KIAH	HOUSTON	TX (US)
IAP	ILS RWY 27 (SA CAT I)	1, 2	1	KIAH	HOUSTON	TX (US)
IAP	RNAV (GPS) Z RWY 27		2	KIAH	HOUSTON	TX (US)
IAP	RNAV (RNP) Y RWY 27		2	KIAH	HOUSTON	TX (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4 **DATE OF REVISION:** 07/26/2012

REASON FOR REVISION:
REMOVED FIX RESTRICTION.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 12/05/2011 **OFFICE:** AJV-353 **NAME:** SCOTT CORY

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

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZHU
ATC FACILITY: IAH APP CON
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: TRANN **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 295838.21N/0945456.35W **TYPE:** WP, 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	DIST FROM FAC FEET	MRA	MAA
1	HOUSTON	I-GHI	LOC/DME		086.96	089.96	21.96	21.99		3000	10000
2	DAISETTA	DAS	VORTAC	H	223.00	228.00		18.98		3000	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-GHI	LOC/DME	R-087	22	3000	10000

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

REMARKS:
HOUSTON (FAC 1) USED TO ESTABLISH FIX COORDINATES
I-GHI DME COORDINATES: 295835.38N/0952013.58W

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	GLS RWY 27			KIAH	HOUSTON	TX (US)
IAP	ILS OR LOC RWY 27	1, 2		KIAH	HOUSTON	TX (US)
IAP	ILS RWY 27 (CAT II/III)	1, 2		KIAH	HOUSTON	TX (US)
IAP	ILS RWY 27 (SA CAT I)	1, 2		KIAH	HOUSTON	TX (US)
IAP	RNAV (GPS) Z RWY 27			KIAH	HOUSTON	TX (US)
IAP	RNAV (RNP) Y RWY 27			KIAH	HOUSTON	TX (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 10 **DATE OF REVISION:** 07/26/2012

REASON FOR REVISION:
REMOVED FIX RESTRICTION.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 12/05/2011 **OFFICE:** AJV-353 **NAME:** SCOTT CORY

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

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZHU
ATC FACILITY: IAH APP CON
OTHER:

QUALITY 1

TERMINAL AIRSPACE DATA REQUIREMENTS

CITY: **HOUSTON** STATE: **TX**

AIRPORT NAME: **GEORGE BUSH INTERCONTINENTAL/HOUSTON** ID: **KIAH**

PROCEDURE: **GLS RWY 27** AMDT: **ORIG**

DOCKET#: **NOT REQUIRED**
(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 **3.01**
   (Enter THLD, FAF, ARP, FACILITY, as appropriate)
2. Width of **FINAL** segment at 1000' point **0.87**
   (Enter appropriate segment, final, intermediate, etc.)
3. True Course of **FINAL** segment containing 1000' point **270.00**
4. High Terrain in **FINAL** segment containing 1000' point **94**
5. Distance from **THLD** to 1500' point **4.58**
   (If 1500' point in PT maneuvering area or holding pattern note in remarks)
6. Width of **INTERMEDIATE** segment at 1500' point **2.42**
7. True Course of **INTERMEDIATE** segment containing 1500' point **270.04**
8. High Terrain in **INTERMEDIATE** segment containing 1500' point **83**
9. Threshold Coordinates (if straight-in) ... **295839.41N** / **0951809.09W**
10. ARP Coordinates ..... **295903.96N** / **0952029.19W**
11. Runway Approach End and distance furthest from ARP ..... RWY **27**
    Distance **2.07** NM
12. FAF Coordinates ..... **295839.50N** / **0951314.22W**

REMARKS: Approach/Drawing attached.

US Department of Transportation
Federal Aviation Administration

FLIGHT PROCEDURES STANDARDS WAIVER

FLIGHT STANDARDS USE ONLY

CONTROL NO:

1. Flight Procedure Identification:
Houston, TX (IAH)
George Bush Intercontinental/Houston
GLS RWY 27

2. Waiver Required and Applicable Standard:
8260.19E APPENDIX L PARA 4i; Reference Path Identifier (RPI). "For ground based augmentation systems (e.g., LAAS) the identifier is defined with a "G" followed by the runway number. The last character, beginning with the letter "A," excluding the letters "C," "L," and "R," will be used to define the first procedure, followed by a succeeding letter for each procedure to a particular runway."

3. Reason for Waiver *(Justification for nonstandard treatment)*:
The current RPI methodology allows multiple procedures at different airports located within the GBAS facility service volume to have the same RPI. For future application of GBAS RPI, Spectrum Engineering and GBAS program office have requested a new format which provides a unique RPI for all procedures at all airports within GBAS facility service volume. New RPI format is still defined with a "G", but is followed by the corresponding ILS system identifier for that runway. RPI for KIAH, GLS RWY 27: GGHI.

4. Equivalent Level of Safety Provided:

1. The change of RPI methodology supports current systems and future GBAS authentication.

2. Only a small number of aircraft are currently equipped to fly GLS approach procedures.

3. Air carriers must obtain FAA authorization via Operations Specifications (C052) to fly GLS procedures.

5. How Relocation or Additional Facilities Will Affect Waiver Requirement:
N/A

6. Coordination With User Organizations *(Specify)*:

AJV-353: _____

7. SUBMITTED BY

DATE:	Office Identification:	Title:	Signature:
	AJV-35	**Manager, Terminal Products Group**	**Greg Yamamoto**

FAA FORM 8260 - 1 / July 2003 (computer generated)

8. CONTINUATION
Comments:

9. AFS ACTION		
		Approved
		Disapproved
		Not Required

Comments:

Date:	Routing Symbol:	Signature: