

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
GLS STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.29**

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

<u>AIRPORT ID</u> KIAH	<u>PROCEDURE NAME</u> GLS RWY 9	<u>ORIGINAL/AMENDMENT</u> 1C	<u>CITY</u> HOUSTON	<u>STATE</u> TX		
<u>AIRPORT ELEVATION</u> 96	<u>TDZE</u> 90	<u>SUPERSEDED</u> GLS RWY 9	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 12/07/2017	<u>MAG VAR</u> 3E	<u>EPOCH YEAR</u> 2015
<u>FACILITY</u> GLS	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> 02/23/2023	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
URANG	IAF	CHILT		TF	FB	1.00	086.69	5.02	5000
CHILT		MEDIC		TF	FB	1.00	086.74	4.25	4000
MEDIC	IF	DOHNN		TF	FB	1.00	086.77	3.77	4000
DOHNN		SAYNO		TF	FB	1.00	086.82	3.92	3000
SAYNO		HYWAY		TF	FB	1.00	086.85	4.67	2000
HYWAY	PFAF	RW09	MAP	TF	FO	0.30	086.89	5.84	
RW09	MAP	580 MSL		CA			086.89		580
580 MSL		JEBOX		DF	FO	1.00			3000

MISSED APPROACH

MAP:

GLS: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 580 THEN CLIMBING RIGHT TURN TO 3000 DIRECT JEBOX AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



CHANGES - REASONS

1. RPI CHANGED FROM "GUYO" TO "G09A". - UPDATED IAW 8260.19I PARA 4-6-10B.
2. REMOVED NOTE DME/DME RNP -0.3 NA. - NOTE NO LONGER REQUIRED.
3. UPDATED NOTE "SIMULTANEOUS APPROACH AUTHORIZED WITH 8L/R." TO "SIMULTANEOUS APPROACH AUTHORIZED". - UPDATED IAW 8260.19I PARA 8-6-11O(8)A.
4. UPDATED PROFILE NOTE "GLS UNUSABLE INSIDE DA" TO "AUTOPILOT COUPLED APPROACH NA BELOW 290". - NOTE UPDATED IAW 8260.19 PARA 8-6-11O(7).
5. UPDATED NOTE "USE OF FD OR AP PROVIDING RNAV TRACK GUIDANCE REQUIRED DURING SIMULTANEOUS OPERATIONS" TO "USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS". - UPDATED IAW 8260.19 PARA 8-6-11O(8)D.
6. REMOVED RADAR REQUIRED PLANVIEW NOTE AND GPS REQUIRED NOTE. - NOTES NO LONGER REQUIRED.
7. ADDED PBN REQUIREMENT NOTE "RNP APCH - GPS". - NOTE ADDED IAW 8260.19I PARA 8-6-8(B)2.
8. UPDATED PROFILE NOTE "VGSi AND GLS GLIDEPATH NOT COINCIDENT" TO "VGSi AND GLS GLIDEPATH NOT COINCIDENT (VGSi ANGLE {ANGLE}/TCH {FEET}). - IAW 8260.19I PARA 8-6-9M(2).
9. CRC REMAINDER UPDATED FROM "83CBFBF2" TO "5EAD2384". - RPI UPDATED FROM "GUYO" TO "G09A".
10. RUNWAY TDZE UPDATED FROM 91 TO 90. - AIRNAV DATABASE UPDATE.
11. GLS DA MINIMUMS ALL CATS UPDATED FROM 291 TO 290. - TDZE UPDATED.

COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZHU, IAH APP CON, IAH TWR, AMGR

FLIGHT CHECKED BY

PENDING

OFFICE**DATE**

Digitally signed by

JOHNNIE BAKER

Dec 09, 2022

DEVELOPED BY

NICHOLAS K. JACKSON

Digitally signed by

NICHOLAS JACKSON

Nov 15, 2022

OFFICE

AJV-A431

DATE

10/27/2022

APPROVED BY

JOHNNIE BAKER

Digitally signed by

ERIC N SUSKI

Dec 07, 2022

OFFICE

AJV-A430

DATE**TITLE**
MANAGER

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION GLSOR STANDARD INSTRUMENT APPROACH PROCEDURE FLIGHT STANDARD SERVICE - FAR PART 97.33			Bearings, headings courses, and radials are magnetic. Elevations and altitudes are in fee, MSL, except HAT, HAA, TCH, and RAltitudes are minimum altitudes unless otherwise indicated. Ceilings are in fee above airport 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		RW09		
APPROACH PERFORMANCE DESIGNATOR		1		
ROUTE INDICATOR				
REFERENCE PATH DATA SELECTOR		4		
REFERENCE PATH IDENTIFIER (APPROACH ID)		G09A		
LTP/FTP LATITUDE		295839.3360N		
LTP/FTP LONGITUDE		0952002.7890W		
LTP/FTP ELLIPSOIDAL HEIGHT		+00000		
FPAP LATITUDE		295839.4070N		
FPAP LONGITUDE		0951809.0905W		
THRESHOLD CROSSING HEIGHT (TCH)		00049.6		
TCH UNITS SELECTOR (METERS OR FEET USED)		F		
GLIDEPATH ANGLE (GPA)		03.00		
COURSE WIDTH AT THRESHOLD		106.75		
LENGTH OFFSET		0000		
HORIZONTAL ALERT LIMIT (HAL)				
VERTICAL ALERT LIMIT (VAL)				
CRC REMAINDER		5EAD2384		
ADDITIONAL PATH POINT RECORD INFORMATION				
ICAO CODE		K4		
LTP ORTHOMETRIC HEIGHT		+00274		
FPAP ORTHOMETRIC HEIGHT		+00274		
CITY AND STATE HOUSTON, TX		ELEVATION:91 AIRPORT NAME GEORGE BUSH INTCNTL/HOU STON	TDZE:90 FACILITY IDENTIFIER: GIAH	PROCEDURE NO./AMDT NO./ GLS RWY 9, 1C EFFECTIVE DATE: 02/22/2023
				SUP: GLS RWY 9 AMDT: 1B DATED: 12/07/2017

QUALITY
25
CHECKED

FAA FORM 8260-10 / April 2006(Computer Generated)

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FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

<u>AIRPORT ID</u> KIAH	<u>PROCEDURE NAME</u> GLS RWY 9	<u>AMDT NO.</u> 1C	<u>CITY</u> HOUSTON	<u>STATE</u> TX	<u>AIRPORT ELEVATION</u> 96	<u>FACILITY</u> GIAH GBAS
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PART A: OBSTRUCTION DATA SEGMENTS

INITIAL

FROM
URANG

TO
CHILT

<u>RNP</u>	<u>DISTANCE</u> 5.02	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>							
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
1.TOWER (48-009581)	295942.00N/0954758.00W		466	500	50	5D	1000				AT3534	5000
2.TERRAIN	300033.00N/0955130.00W		220 (200)								AS1500	1700

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INITIAL: STEPDOWN

FROM
CHILT

TO
MEDIC

<u>RNP</u>	<u>DISTANCE</u> 4.25	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>							
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
3.TOWER (48-025873)	300000.60N/0954152.50W		483	50	20	2C	1000				AT2517	4000
4.TERRAIN	300009.00N/0954530.00W		201 (200)								AS1500	1700

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INTERMEDIATE

FROM
MEDIC

TO
DOHNN

RNP	DISTANCE 3.77	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
5.TOWER (48-002815)	295941.00N/0953729.00W		517	250	50	4D	500				AT2983	4000
6.TERRAIN	300027.00N/0953651.00W		145 (100)								AS1500	1600

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE: STEPDOWN

FROM
DOHNN

TO
SAYNO

RNP	DISTANCE 3.92	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
7.TOWER (48-005638)	295642.00N/0953214.00W		722	500	50	5D	500				AT1778	3000
8.TERRAIN	300030.00N/0953630.00W		145 (100)								AS1500	1600

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INTERMEDIATE: STEPDOWN

FROM
SAYNO

TO
HYWAY

RNP	DISTANCE 4.67	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
7.TOWER (48-005638)	295642.00N/0953214.00W		722	500	50	5D	500				AT778	2000
9.TERRAIN	295830.00N/0953200.00W		128 (100)								AS1500	1600

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:

FINAL: GLS

FROM
HYWAY

TO
RW09

RNP	DISTANCE 5.84	PAT	MAP DA	HAT 200			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				290

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:



MISSED APPROACH : GLS

FROM
DA

TO
JEBOX

RNP	DISTANCE	PAT	MAP	HAT			HMAS 125					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				3000
10.TOWER (48-002348)	294818.66N/0951219.38W		667	50	20	2C	1000					1700
11.TERRAIN	295921.00N/0951400.00W		89 (100)								AS1500	1600

COMPUTATIONS

ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:

CIRCLING

☐ ALL CATS

☐ CAT A

☐ CAT B

☐ CAT C

☐ CAT D

☐ CAT E

☒ NOT AUTHORIZED

MSA

CENTER
RW09

RADIUS
25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TWR (48-009465)	301351.00N/0950726.00W	033	18.7	2049	500	50	5D	1000			3100

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH
ZHU ARTCC, IAH TOWER, HOUSTON APP CON

WX SERVICE ASOS	LOCATION KIAH	HRS OPERATION 24	ALTIMETER SOURCE KIAH	DISTANCE 0	SERVICE-A Y	ADJUSTMENTS 0
BACK-UP WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	SERVICE-A	ADJUSTMENTS

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

PRIMARY NAVAID	MONITOR POINT	HRS OPERATION	CAT
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APPROACH AND RUNWAY LIGHTING SYSTEM	RUNWAY MARKINGS	RUNWAY VISUAL RANGE
RW15L - HIRL, C/LINE, PAPI-4R	NPI-G	APPROACH, MIDPOINT, ROLL OUT
RW33L - TDZ, HIRL, C/LINE, PAPI-4R	NPI-G	APPROACH, MIDPOINT, ROLL OUT
RW08L - TDZ, ALSF-2, HIRL, C/LINE	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW08R - TDZ, MALSR, HIRL, C/LINE, PAPI-4L	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW09 - MALSR, HIRL, C/LINE, PAPI-4R	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW15R - TDZ, MALSR, HIRL, C/LINE, PAPI-4L	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW26L - TDZ, ALSF-2, HIRL, C/LINE, PAPI-4R	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW26R - TDZ, ALSF-2, HIRL, C/LINE	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW27 - TDZ, ALSF-2, HIRL, C/LINE, PAPI-4L	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW33R - MALSR, HIRL, C/LINE	PIR-G	APPROACH, MIDPOINT, ROLL OUT

GLIDESLOPE ANGLE 3.00	ELEV RWY THRESHOLD 89.9	TCH 49.6	ELEV GS ANTENNA	DISTANCE FROM RWY	VGSI ANGLE 3.00	TCH 70.7
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FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<input checked="" type="checkbox"/>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	<input checked="" type="checkbox"/>	FT FROM CENTERLINE	



CRITICAL TEMPERATURES

CRITICAL LOW

CRITICAL HIGH

ACT

APT ISA

CRITICAL TEMPERATURE REMARKS:

"VISUAL PORTION OF FINAL" PENETRATIONS

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PENETRATIONS REMARKS:

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

75 FT VEGETATION UTILIZED PER FULLY AMENDED GLS PROCEDURES CHECKLISTS



<div>AIRPORT ID KIAH</div>	<div>PROCEDURE NAME GLS RWY 9</div>	<div>AMDT NO. 1C</div>	<div>CITY HOUSTON</div>	<div>STATE TX</div>	<div>AIRPORT ELEVATION 96</div>	<div>FACILITY GIAH GBAS</div>
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PART D: AIRSPACE

DOCKET #

ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE

DISTANCE FROM	THLD	TO 1000FT POINT	2.99
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	0.87
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	089.89
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	100
DISTANCE FROM	THLD	TO 1500FT POINT	4.56
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	089.89
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	100

THRESHOLD
COORDINATES
(IF STR-IN)

295839.34N/0952002.79W

ARP COORDINATES

295903.97N/0952029.19W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP

RUNWAY 27 DISTANCE 2.07 NM

FAF
COORDINATES

295838.86N/0952646.23W

FIX NAME
COORDINATES

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED

QUALITY
25
CHECKED

FAA Form 8260-9 / (11/16) Supersedes Previous Edition

Electronic Version

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PART E: PREPARED BY

NAME NICHOLAS K. JACKSON	OFFICE AJV-A431	DATE 10/27/2022	TITLE AERONAUTICAL INFORMATION SPECIALIST
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