

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33**

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</u> GEORGE BUSH INTERCONTINENTAL/HOUSTON	<u>AIRPORT ID</u> KIAH	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 15R	<u>ORIGINAL/AMENDMENT</u> 2C	<u>CITY</u> HOUSTON	<u>STATE</u> TX
<u>AIRPORT ELEVATION</u> 96	<u>TDZE</u> 95	<u>SUPERSEDED</u> RNAV (GPS) RWY 15R	<u>ORIGINAL/AMENDMENT</u> 2B	<u>DATED</u> 08/17/2017	<u>MAG VAR</u> 3E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 30 JANUARY 2020	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2015

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>
DUCOZ	IAF	GRAAF		TF	FB	1.00	148.87	5.01	3000
GRAAF	IF	VETTE		TF	FB	1.00	148.89	2.27	3000
VETTE		JAKPO		TF	FB	1.00	148.91	4.91	2000
JAKPO	FAF	RW15R	MAP	TF	FO	0.30	148.92	5.81	
RW15R	MAP	295 MSL		CA			148.92		
295 MSL		JINIP		DF	FB				
JINIP		COSBI		TF	FO	1.00	079.21	20.26	2000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW15R

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 DIRECT JINIP AND LEFT TURN ON TRACK 079.21 TO COSBI AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT DUCOZ

3. FAC:

148.92

FAF: JAKPO

DIST FAF TO MAP: 5.81

DIST FAF TO THLD: 5.81

4. MIN ALT: DUCOZ 3000, GRAAF 3000, VETTE 3000, JAKPO 2000

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

200 HAT: 0.46

GS ANT:

6. MIN GP INCPT:

2000

GP ALT AT FAF : JAKPO 2000

OM:

MM:

IM:

7. GP ANGLE:

3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 54.0

8. MSA FROM: RW15R 3100

PBN REQUIREMENTS NOTE:

RADAR REQUIRED FOR PROCEDURE ENTRY.
RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -3°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV CAT E VISIBILITY TO RVR 4000, LNAV/VNAV ALL CATS VISIBILITY TO RVR 5500, AND LNAV CAT C/D/E VISIBILITY TO 1 3/8 SM.

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.30 NM TO RW15R*
*LNAV ONLY
WAAS CHANNEL #97599
REFERENCE PATH ID: W15A
FAS OBST: 329 AAO 300403N/0952608W.
HOLD E, LT, 267.41 INBOUND
LTP HAE: 1.5 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	295	1800	200	295	1800	200	295	1800	200	295	1800	200	295	1800	200
LNAV/VNAV DA	460	3500	365	460	3500	365	460	3500	365	460	3500	365	460	3500	365
LNAV MDA	580	2400	485	580	2400	485	580	5000	485	580	5000	485	580	5000	485



CHANGES - REASONS

- 1. UPDATED LNAV/VNAV MINIMUMS FROM DA 420/HAT 324 TO DA 460/HAT 365, ALL CATS VISIBILITY RVR 3500 - NEW CONTROLLING OBSTACLE, INCORPORATED NOTAM !FDC 9/3994.
- 2. UPDATED LPV MINIMUMS FROM DA 296/HAT 200 TO DA 295/HAT 200, LNAV MINIMUMS FROM MDA 580/HAT 484 TO MDA 580/HAT 485 - THLD WAS CONVERTED TO TDZE. P-NOTAM 6/9035.
- 3. CHANGED CHART NOTE: "FOR INOPERATIVE MALSR, INCREASE LPV CAT E VISIBILITY TO RVR 4000, LNAV/VNAV CAT E VISIBILITY TO RVR 5000, AND LNAV CAT C/D/E TO 1 3/8 SM" TO "FOR INOPERATIVE ALS, INCREASE LPV CAT E VISIBILITY TO RVR 4000, LNAV/VNAV ALL CATS VISIBLTY TO RVR 5500, AND LNAV CAT C/D/E VISIBILITY TO 1 3/8 SM - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-11O(3)(D).
- 4. CHANGED CHART NOTE FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -3C (27F) OR ABOVE 54C (130F)." TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -3C OR ABOVE 54C" UPDATED CHART NOTE PER 8260.19H, 8-6-9 (S).
- 5. REPLACED DME/DME RNP-0.3 NA WITH PBN REQUIREMENTS NOTE: RNP APCH - 8260.58A TABLE 1-2-1.E 1, FLIGHT PROCEDURES AND AIRSPACE.
- 6. FPAP COORDINATES CHANGED FROM 295748.7565N/0952047.5810W TO 295748.7560N/0952047.5800W - IAW FAAO 8260.19H APPENDIX K PARA 4M.
- 7. DELETED CHART PLANVIEW NOTE: RADAR REQUIRED - REPLACED WITH EQUIPMENT NAVSPEC REQUIREMENTS RADAR REQUIRED FOR PROCEDURE ENTRY.
- 8. CRC REMAINDER CHANGED FROM 890849F6 TO 51E76D4E - LTP/FTP ELLIPSOIDAL HEIGHT AND FPAP COORDINATES CHANGED.
- 9. VDP CHANGED FROM 1.29 NM TO RW15R TO 1.30 NM TO RW15R - IAW 8260-3D, 2-6-5B.(1).

COORDINATED WITH:

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

<u>FLIGHT CHECKED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
BRIAN HANSEN	DAVID DANNER	FICO	12/1/19	
	Dec 06, 2019			
<u>DEVELOPED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
DAVID DANNER (LORRI DOWNEY)	DAVID DANNER	AJV-A421	08/28/2019	
	Dec 06, 2019			
<u>APPROVED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
MARLON ROBINSON	DAVID DANNER	AJV-A420		MANAGER
	Dec 06, 2019			



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KIAH
RUNWAY	RW15R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W15A
LTP/FTP LATITUDE	295916.1080N
LTP/FTP LONGITUDE	0952141.0380W
LTP/FTP ELLIPSOIDAL HEIGHT	+00015
FPAP LATITUDE	295748.7460N
FPAP LONGITUDE	0952047.5800W
THRESHOLD CROSSING HEIGHT (TCH)	00054.0
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)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	51E76D4E

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+00289
FPAP ORTHOMETRIC HEIGHT	+00289

