

FEDERAL AVIATION ADMINISTRATION

FLIGHT STANDARDS SERVICE

GRAPHIC DEPARTURE PROCEDURES (DP)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated
Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

DP NAME		NUMBER	DP COMPUTER CODE	SUPERSEDED NUMBER	DATED	ACTUAL EFFECTIVE DATE
BNDTO		SIX	BNDTO6.BNDTO	FIVE	06/25/2015	11 JUL 2024
TYPE:	OBSTACLE	COPTER	SID	SPECIAL	RNAV	
	☐	☐	☒	☐	☒	

DP ROUTE DESCRIPTION:
TAKEOFF RWY 15L: CLIMB HEADING 148.96 TO 600, THEN RIGHT TURN DIRECT TO CROSS SCAMM AT OR BELOW 5000, THEN ON TRACK 276.90 TO SHAAK, THENCE...
TAKEOFF RWY 15R: CLIMB HEADING 148.95 TO 600, THEN RIGHT TURN DIRECT TO CROSS SCAMM AT OR BELOW 5000, THEN ON TRCK 276.90 TO SHAAK, THENCE...
TAKEOFF RWY 26L/26R: CLIMB HEADING 266.96 TO 600, EXPECT RADAR VECTORS TO SHAAK, THENCE...
TAKEOFF RWY 27: CLIMB HEADING 266.97 TO 600, EXPECT RADAR VECTORS TO SHAAK, THENCE...
TAKEOFF RWY 33L/33R: CLIMB HEADING 328.96 TO 600, EXPECT RADAR VECTORS TO SHAAK, THENCE...

...ON TRACK 276.86 TO BNDTO, THEN ON (TRANSITION). MAINTAIN 16000. EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

TRANSITION NAME	TRANSITION COMPUTER CODE	FROM FIX/NAVAID	TO FIX/NAVAID	COURSE	DISTANCE	MEA	MOCA	CROSSING ALTITUDE/FIXES
CRGER	BNDTO6.CRGER	BNDTO	CUZZZ	TRACK 281.23	22.90	8100	1800	CUZZZ AT/ABOVE 13000
			ZUUUU	TRACK 277.14	9.30	9900	1700	
			PUFER	TRACK 277.06	44.15	12000	2100	
			PSTUR	TRACK 276.78	34.30	12000	2400	
			CRGER	TRACK 280.77	32.91	12000	3100	
MNURE	BNDTO6.MNURE	BNDTO	FFOAM	TRACK 257.16	17.16	7000	1600	FFOAM AT/ABOVE 13000
			BOCCK	TRACK 269.42	12.85	9500	1600	
			MNURE	TRACK 277.31	18.98	12000	2100	
SAN ANTONIO	BNDTO6.SAT	BNDTO	FFOAM	TRACK 257.16	17.16	7000	1600	FFOAM AT/ABOVE 13000
			BOCCK	TRACK 269.42	12.85	9500	1600	
			MNURE	TRACK 277.31	18.98	12000	2100	
			MARCS	TRACK 262.50	67.76	12000	2600	
			SAT VORTAC	TRACK 241.29	34.82	12000	2800	



<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>ACTUAL EFFECTIVE DATE</u>
BNDTO	SIX	BNDTO6.BNDTO	FIVE	06/25/2015	11 JUL 2024
WAILN	BNDTO6.WAILN	BNDTO	BAAKE	TRACK 239.94	17.12
			WEEED	TRACK 250.00	13.80
			WAILN	TRACK 271.98	20.41

7000

1800

BAAKE AT/ABOVE 13000

9700

11700

1800

PBN REQUIREMENT NOTES:

RNAV 1 - DME/DME/IRU OR GPS REQUIRED.

EQUIPMENT REQUIREMENT NOTES:

RADAR REQUIRED.

RADAR REQUIRED FOR NON-GPS EQUIPPED AIRCRAFT.

PROCEDURAL DATA NOTES:

NOTE: FOR USE DURING WEST FLOW AT IAH, FOR EAST FLOW FILE THE PITZZ DEPARTURE.

TAKEOFF MINIMUMS:

RWY 15L,15R, 26L, 26R, 27, 33L, 33R: STANDARD WITH MINIMUM CLIMB OF 500 FT/NM TO 1200.

TAKEOFF OBSTACLES NOTES:

SEE FORM 8260-15A, TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP).

CONTROLLING OBSTACLES:**MSA:**

MSA FROM KIAH 3100

LOST COMMUNICATIONS PROCEDURES:**ADDITIONAL FLIGHT DATA:**

REFERENCE MAG VAR: KIAH 3E EPOCH YR: 2015.

DME/DME ASSESSMENT: SAT (RNP 2.O).

CHART: TOP ALTITUDE 16000.

AIRPORTS SERVED:

<u>AIRPORT ID</u>	<u>CITY</u>	<u>STATE</u>
KIAH	GEORGE BUSH INTERCONTINENTAL/HOUSTON	TX

COMMUNICATIONS:

CHART: ATIS, CLNC DEL, GND CON, TWR, DEP CON

FIXES AND/OR NAVAIDS:**REMARKS:**

ABBREVIATED AMENDMENT



<u>DP NAME</u> BNDTO	<u>NUMBER</u> SIX	<u>DP COMPUTER CODE</u> BNDTO6.BNDTO	<u>SUPERSEDED NUMBER</u> FIVE	<u>DATED</u> 06/25/2015	<u>ACTUAL EFFECTIVE DATE</u> 11 JUL 2024
<u>FLIGHT INSPECTED BY</u> NICHOLAS VARNER	<u>SIGNATURE</u> <i>Digitally signed by</i> DAVID DANNER Apr 12, 2024	<u>OFFICE</u> FIOG		<u>DATE</u> 4/8/2024	
<u>DEVELOPED BY</u> STEVEN DOUGHERTY	<i>Digitally signed by</i> STEVEN DOUGHERTY Apr 01, 2024	<u>OFFICE</u> AJV-A421		<u>DATE</u> 01/25/2024	
<u>APPROVED BY</u> DAVID DANNER	<u>SIGNATURE</u> <i>Digitally signed by</i> DAVID DANNER Apr 12, 2024	<u>OFFICE</u> AJV-A421		<u>DATE</u>	<u>TITLE</u> MANAGER
<u>REQUIRED EFFECTIVE DATE</u>					

COORDINATED WITH:

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

CHANGES - REASONS:

- CRGER ENROUTE TRANSITION FROM PUFER TO PSTUR MOCA CHANGED FROM 2100 FT TO 2400 FT - NEW OBSTACLE.
- EQUIPMENT REQUIREMENTS NOTES: ADDED "RADAR REQUIRED FOR NON-GPS EQUIPPED AIRCRAFT" - PER 8260.46J CH. 2.
- MSA: ADDED "MSA FROM KIAH 3100" - PER 8260.46J APPENDIX E.
- ADDITIONAL FLIGHT DATA: DELETED PILOT NAVIGATION AREA - NO LONGER REQUIRED.
- ADDITIONAL FLIGHT DATA: DELETED "CHART MEA/MOCA FROM SHAAK TO BNDTO, 3600/1600" - NO LONGER REQUIRED.
- PBN AND EQUIPMENT NOTES UPDATE - 8260.46J APPENDIX E.
- TAKEOFF OBSTACLES NOTES: REPLACED ALL OBSTACLES WITH THE STATEMENT "SEE FORM 8260-15A, TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP)" - 8260.46J APPENDIX E.
- REMARKS: ADDED "ABBREVIATED AMENDMENT" - SID PROCESSED AS ABBREVIATED AMENDMENT, 8260.46J APPENDIX E.
- COMMUNICATIONS: ADDED "CHART:..." - 8260.46J APPENDIX E.

04/01/24: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 01/25/24.

1. TRANSITION ROUTES: SAN ANTONIO TRANSITION, MARCS TO SAT VORTAC LEG: DISTANCE CHANGED FROM 31.82 TO 34.82.



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
DEPARTURE (DATA RECORD)**

<u>DP NAME</u>		<u>NUMBER</u>		<u>DP COMPUTER CODE</u>		<u>SUPERSEDED NUMBER</u>		<u>DATED</u>	<u>ACTUAL EFFECTIVE DATE</u>
BNDTO		SIX		BNDTO6.BNDTO		FIVE		06/25/2015	11 JUL 2024
<u>FIX/NAVAID</u>	<u>LAT/LONG</u>	<u>C</u>	<u>FO/FB</u>	<u>LEG TYPE</u>	<u>TC</u>	<u>DIST (NM)</u>	<u>ALTITUDE</u>	<u>SPEED</u>	<u>REMARKS</u>
RW15L (AER)	295916.40N/0952128.33W	N	-	-	-	-			
600 MSL		-	-	VA	151.96	-	AT/ABOVE 600		CG 500 FT/NM TO 1200
SCAMM	295722.80N/0952954.61W	Y	FB	DF	-	-	AT/BELOW 5000		RIGHT TURN
SHAAK	295803.64N/0953423.99W	Y	FB	TF	279.90	3.96			
RW15R (AER)	295916.11N/0952141.04W	N	-	-	-	-			
600 MSL		-	-	VA	151.96	-	AT/ABOVE 600		CG 500 FT/NM TO 1200
SCAMM	295722.80N/0952954.61W	Y	FB	DF	-	-	AT/BELOW 5000		RIGHT TURN
SHAAK	295803.64N/0953423.99W	Y	FB	TF	279.90	-			
RW26L (AER)	295936.38N/0951930.95W	N	-	-	-	-			
600 MSL		-	-	VA	269.96	-	AT/ABOVE 600		CG 500 FT/NM TO 1200
		-	-	VM	269.96	-			
SHAAK	295803.64N/0953423.99W	Y	FB	DF	-	-			
RW26R (AER)	300025.86N/0951949.29W	N	-	-	-	-			
600 MSL		-	-	VA	269.96	-	AT/ABOVE 600		CG 500 FT/NM TO 1200
		-	-	VM	296.96	-			
SHAAK	295803.64N/0953423.99W	Y	FB	DF	-	-			
RW27 (AER)	295839.41N/0951809.09W	N	-	-	-	-			CG 500 FT/NM TO 1200
600 MSL		-	-	VA	269.97	-	AT/ABOVE 600		

QUALITY
23
CHECKED

NFDD NO. 077							04/19/2024		60	
<u>DP NAME</u>		<u>NUMBER</u>		<u>DP COMPUTER CODE</u>		<u>SUPERSEDED NUMBER</u>		<u>DATED</u>	<u>ACTUAL EFFECTIVE DATE</u>	
BNDTO		SIX		BNDTO6.BNDTO		FIVE		06/25/2015	11 JUL 2024	
<u>FIX/NAVAID</u>	<u>LAT/LONG</u>	<u>C</u>	<u>FO/FB</u>	<u>LEG TYPE</u>	<u>TC</u>	<u>DIST (NM)</u>	<u>ALTITUDE</u>	<u>SPEED</u>	<u>REMARKS</u>	
		-	-	VM	269.97	-				
SHAAK	295803.64N/0953423.99W	Y	FB	DF	-	-				
RW33L (AER)	295748.75N/0952047.58W	N	-	-	-	-				
600 MSL		-	-	VA	331.96	-	AT/ABOVE 600		CG 500 FT/NM TO 1200	
		-	-	VM	331.96	-				
SHAAK	295803.64N/0953423.99W	Y	FB	DF	-	-				
RW33R (AER)	295731.55N/095202419W	N	-	-	-	-				
600 MSL		-	-	VA	331.96	-	AT/ABOVE 600		CG 500 FT/NM TO 1200	
		-	-	VM	331.96	-				
SHAAK	295803.64N/0953423.99W	Y	FB	DF	-	-				
SHAAK	295803.64N/0953423.99W	Y	-	IF	-	-				
BNDTO	295838.29N/0953813.36W	Y	FB	TF	279.86	3.37				
BNDTO	295838.29N/0953813.36W	Y	-	IF	-	-			BNDTO6.CRGER	
CUZZZ	300414.33N/0960348.07W	Y	FB	TF	284.23	22.90	AT/ABOVE 13000			
ZUUUU	300552.42N/0961421.48W	Y	FB	TF	280.14	9.30				
PUFER	301326.48N/0970432.09W	Y	FB	TF	280.06	44.15				
PSTUR	301911.13N/0974335.19W	Y	FB	TF	279.78	34.30				
CRGER	302657.12N/0982034.26W	Y	FB	TF	283.77	32.91				
BNDTO	295838.29N/0953813.36W	Y	-	IF	-	-			BNDTO6.MNURE	



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BNDTO		SIX		BNDTO6.BNDTO		FIVE		06/25/2015	11 JUL 2024
<u>FIX/NAVAID</u>	<u>LAT/LONG</u>	<u>C</u>	<u>FO/FB</u>	<u>LEG TYPE</u>	<u>TC</u>	<u>DIST (NM)</u>	<u>ALTITUDE</u>	<u>SPEED</u>	<u>REMARKS</u>
FFOAM	295540.52N/0955741.00W	Y	FB	TF	260.16	17.16	AT/ABOVE 13000		
BOCCK	295612.26N/0961227.32W	Y	FB	TF	272.42	12.85			
MNURE	295934.88N/0963357.84	Y	FB	TF	280.31	18.98			
BNDTO	295838.29N/0953813.36W	Y	-	IF	-	-			BNDTO6.SAT
FFOAM	295540.52N/0955741.00W	Y	FB	TF	260.16	17.16	AT/ABOVE 13000		
BOCCK	295612.26N/0961227.32W	Y	FB	TF	272.42	12.85			
MNURE	295934.88N/0963357.84	Y	FB	TF	280.31	18.98			
MARCS	295352.04N/0975140.70W	Y	FB	TF	265.50	67.76			
SAT VORTAC	293838.51N/0982740.74W	Y	FB	TF	244.29	34.82			
BNDTO	295838.29N/0953813.36W	Y	-	IF	-	-			BNDTO6.WAILN
BAAKE	295048.68N/0955545.28W	Y	FB	TF	242.94	17.12	AT/ABOVE 13000		
WEEED	294645.14N/0961054.94W	Y	FB	TF	253.00	13.80			
WAILN	294829.63N/0963417.12W	Y	FB	TF	274.98	20.41			

