

Flight Procedures Cover Page	Task Action: FLIGHT CHECK	Task Type: STAR	Estimated Chart Date: 04/17/2025	APWS Task ID: 8A712ED44F1640BC97F0945ECDF6BF32	APWS Project ID: 4A903BB025934DB89C1767F947EE4090
Procedure: STAR SKNRD FIVE (RNAV) ARRIVAL HOUSTON TX KIAH		Enroute: YES	Specialist: Gorman, Barbara		Agreement Number:
Airport ID: KIAH			Airport City: HOUSTON		State: TX
Facility ID:	Facility Type:	Flight Inspection Remark Type: New FC Slot			
<div>Procedure Comments: APPROVAL LETTER: DESCENT GRADIENT ACTIVE DATA USED FOR KIAH AIRPORT AND RUNWAYS. CONTACT: CASIMIR TABABKA 405.954.7931</div> <div>02/03/2025: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 11/05/2024. 1. ADDED NOTE: DO NOT FILE - TO BE ASSIGNED BY ATC.</div> <div>QUALITY 16 CHECKED</div> <div>QUALITY 35 CHECKED</div> <div>QUALITY 41 CHECKED</div>					

FIPC DME/DME FORM						
PROCEDURE: STAR SKNRD FIVE (RNAV) ARRIVAL HOUSTON TX KIAH			AIRPORT NAME: GEORGE BUSH INTCNTL/HOUSTON		AIRPORT ID: KIAH	SPECIAL CONTROL NO: OG-12-156-24
FAC ID: SKNRD5		CITY: HOUSTON			ST: TX	ORIG CHART DATE: 04/17/2025
DFL TYPE: PROC/D	THIRD PARTY: <input type="checkbox"/> YES	EST. TIME ON SITE: 1.0	REIMB. NUMBER: AC0721	PTS TASK ID: 8A712ED44F1640BC97F0945ECDF6BF32		
PREFLIGHT NOTES						
REVIEWER: anthony d vallera					DATE: 02/01/2025	
COMMENTS:					CHECK ONE:	
					<input checked="" type="checkbox"/> FLT CK REQ <input type="checkbox"/> NFCR <input type="checkbox"/> REJECT	
					<div style="display: flex; justify-content: space-between;"> YES NO </div>	
					CPV COMPLETE?	
				X		
PROCEDURE RESULTS						
INSPECTION DATE: 02/01/2025	CREW #: VN218	N #: N90	INSTRUMENT PROCEDURE STATUS: <input checked="" type="checkbox"/> SAT <input type="checkbox"/> SAT W/CHANGES <input type="checkbox"/> UNSAT		ARINC CODING: <input checked="" type="checkbox"/> SAT <input type="checkbox"/> SAT/GOLD <input type="checkbox"/> UNSAT	
FLIGHT INSPECTOR SIGNATURE: anthony d vallera @ 02/01/2025 16:48			PRINTED NAME: VALLERA, ANTHONY DOMINIC			NOTAM INITIATED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
FLIGHT INSPECTOR REMARKS:						
DME/DME STATUS: <input type="checkbox"/> SAT <input type="checkbox"/> UNSAT		SPECIALIST SIGNATURE:			PRINTED NAME:	
SPECIALIST REMARKS:						
IN-FLIGHT OBSTACLE REPORT						
OBSTRUCTION ID #:	COORDINATES OR LOCATION:	GNSS ALTITUDE (MSL):	BAROMETRIC ALTITUDE (MSL):	HEIGHT ABOVE GROUND LEVEL:		



Federal Aviation Administration

Memorandum

Date: August 29, 2024

To: Charles R Erickson, (Acting) Fight Procedures Team Manager

From: Morgan S. Lee, Support Manager (A), Airspace and Procedures,
Houston District (TCHU1-ZHU)

Prepared by: William Roth, Senior ATC Specialist, NAVTAC Support

Subject: Letter of Approval Request SKNRD STAR, KIAH

KIAH SKNRD Standard Terminal Arrival Route (STAR): SKNRD TO BFFET Descent Gradient.

Currently, FAAO 8260.3F, para 2-2-8a (1), the maximum permissible descent gradient 10,000ft MSL and above is 330 ft/nm (approximately 3.11 degrees). SKNRD has a restriction of AT OR BELOW 16000ft MSL and BFFET has a restriction of between 12000 and 14000ft MSL. The descent gradient (570.36 ft/nm) from SKNRD TO BFFET is greater than the maximum permissible gradient allowed. Flight Standards approval is required.

The SKNRD STAR serves the George Bush Intercontinental Airport. The descent gradient of 570.36 ft/NM from SKNRD TO BFFET is calculated by measuring from 16000ft MSL at SKNRD descending to the bottom of the restriction blocks altitude of BETWEEN 12000 and 14000ft MSL at BFFET over a distance of 7.01 NM. However, the gradient over multiple fixes is within the maximum permissible descent gradient. Descending from altitude of between 19000 AND 22000ft MSL at DOOBI to BETWEEN 12000 and 14000ft MSL at BFFET, over a distance of 23.46NM, is a gradient of 298.38 ft/NM when measured from the bottom of the restriction block at DOOBI and the bottom of the restriction block at BFFET. The altitude restrictions at SKNRD and BFFET are for ATC operational requirements. Industry indicates that the procedure can be easily managed without increased energy management actions by the flight crew and these altitude restrictions have been published on this procedure for several years without any reported issues.

GEORGE BUSH INTCNL/HOUSTON (IAH)
HOUSTON, TEXAS

AUTOMATED AL-5461 SKNRD ARRIVAL

HOUSTON, TEXAS
GEORGE BUSH INTCNL/HOUSTON (IAH)

ARRIVAL ROUTE DESCRIPTION

ALEXANDRIA TRANSITION (AEX.SKNRD5):

PLANB TRANSITION (PLANB.SKNRD5):

SWEUP TRANSITION (SWEUP.SKNRD5):

From DOOBI on track 242° to cross SKNRD at or below 16000 and at 280K.

LANDING RUNWAY 8L: From SKNRD on track 242° to cross BFFET between 12000 and 14000 and at 250K, then on track 242° to cross KNGWD at between 8000 and 10000 and at 240K, then on track 257° to cross ZOEEE at 7000 and at 240K, then on track 267° to cross CASST at 6000 and at 210K, then on track 267°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 8R, 9: From SKNRD on track 242° to cross BFFET between 12000 and 14000 and at 250K, then on track 242° to cross KNGWD between 8000 and 10000 and at 240K, then on track 225° to cross EDEEE at or below 8000, then on track 225° to cross REAPR at 6000, then on track 225° to cross SHIVV at 6000 and at 240K, then on track 267° to cross HOWLN at 6000 and at 210K, then on track 267°. Expect RADAR vectors to final approach course.

PROTOTYPE: NOT
FOR NAVIGATION

AUTOMATED AL-5461 SKNRD ARRIVAL CONT.

SE-5

10 DEC 2024

COMPILER: CG

REVIEWER:

DBL CHKR:

EFF: FIG

ARRIVAL ROUTE DESCRIPTION

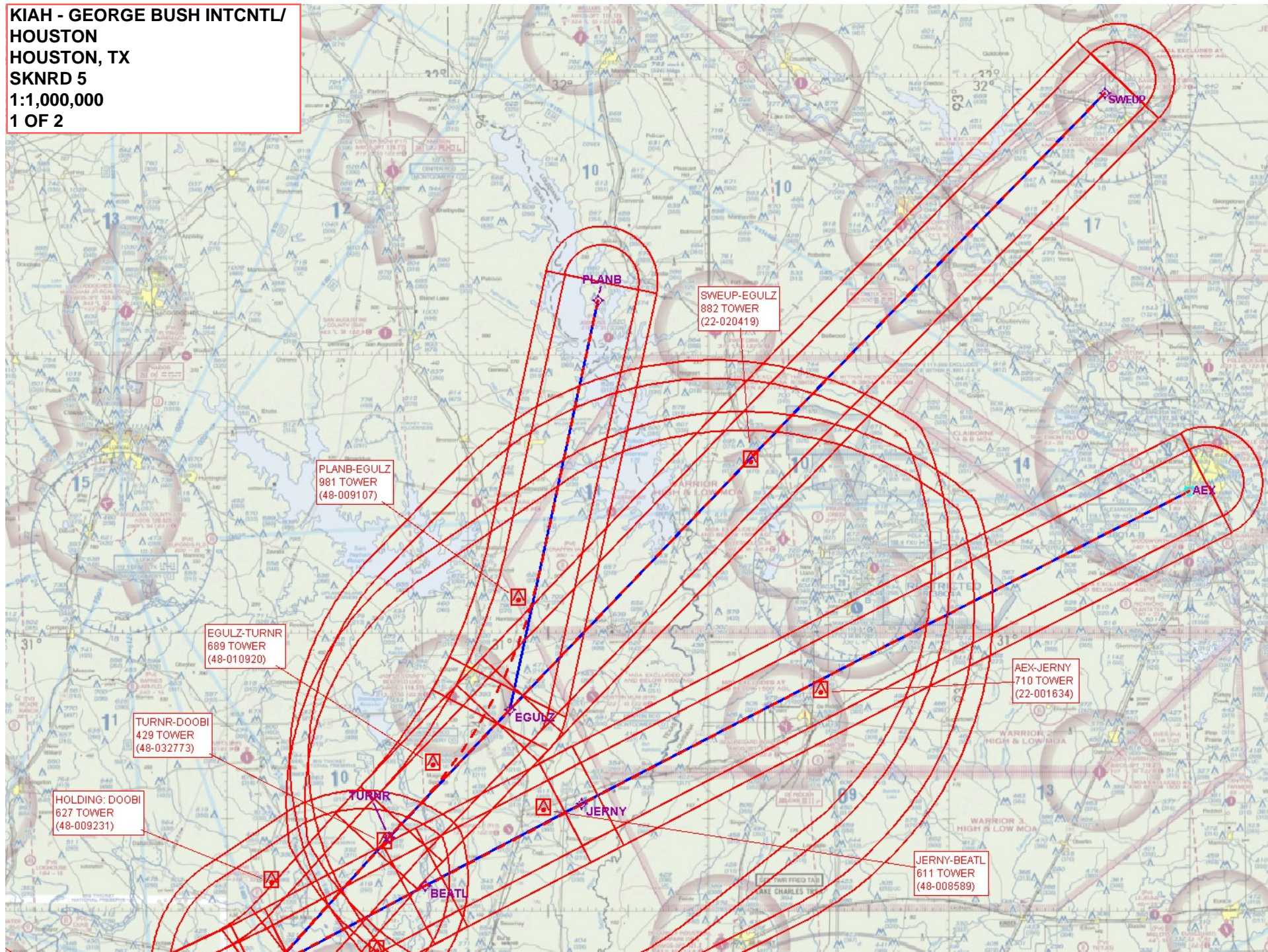
- ALEXANDRIA TRANSITION (AEX.SKNRD4):
- PLANB TRANSITION (PLANB.SKNRD4):
- SAWMILL TRANSITION (SWB.SKNRD4):

From DOOBI on track 242° to cross SKNRD at or below 16000 and at 280K.

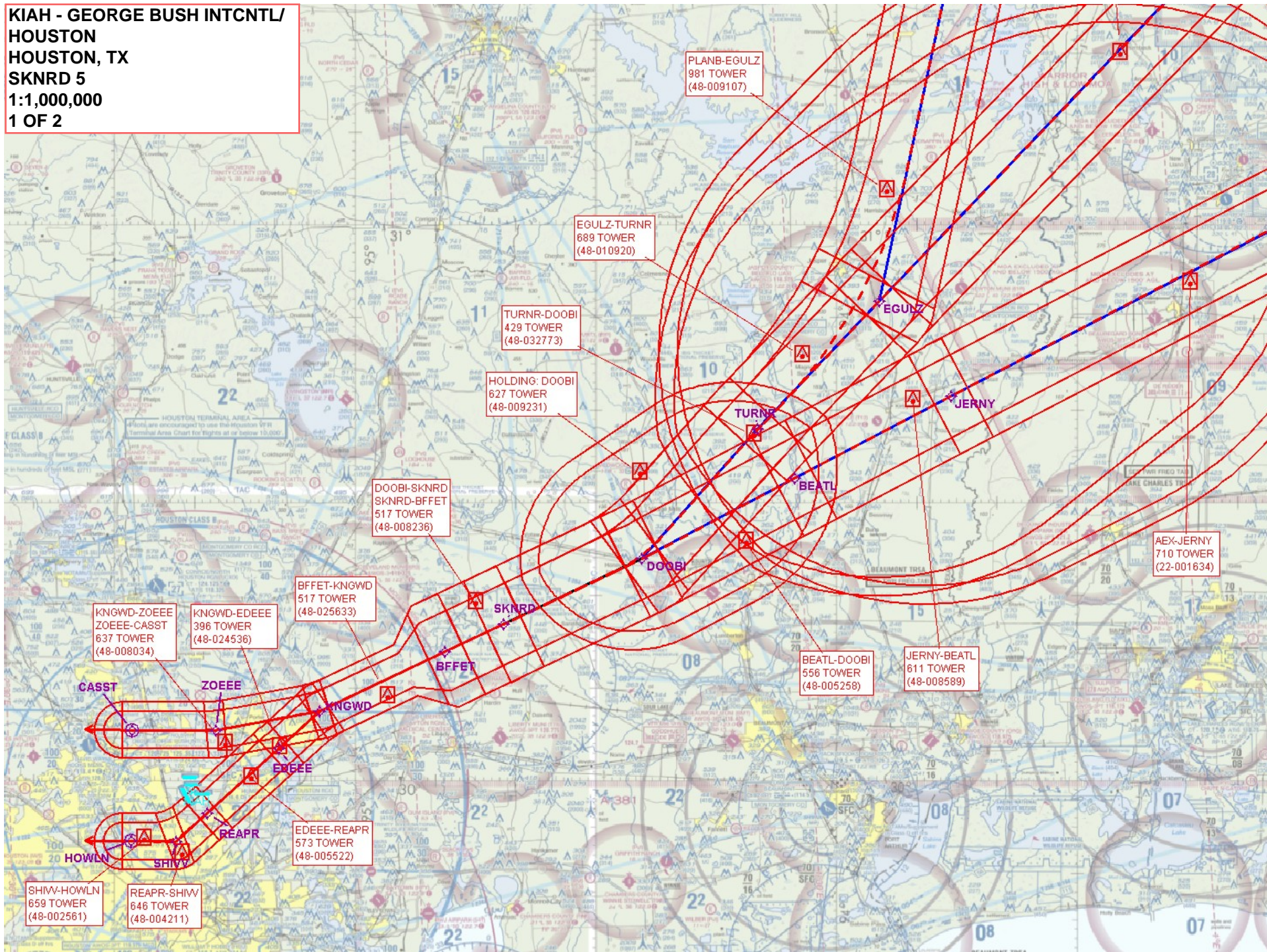
LANDING RUNWAY 8L: From SKNRD on track 242° to cross BFFET at or above 12000 and, at or below 14000 and at 250K, then on track 242° to cross KNGWD at or above 8000, at or below 10000 and at 240K, then on track 257° to cross ZOEEE at 7000 and at 240K, then on track 267° to cross CASST at 6000 and at 210K, then on track 267°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 8R, 9: From SKNRD on track 242° to cross BFFET at or above 12000, at or below 14000 and at 250K, then on track 242° to cross KNGWD at or above 8000, at or below 10000 and at 240K, then on track 225° to cross EDEEE at or below 8000, then on track 225° to cross REAPR at 6000, then on track 225° to cross SHIVV at 6000 and at 240K, then on track 267° to cross HOWLN at 6000 and at 210K, then on track 267°. Expect RADAR vectors to final approach course.

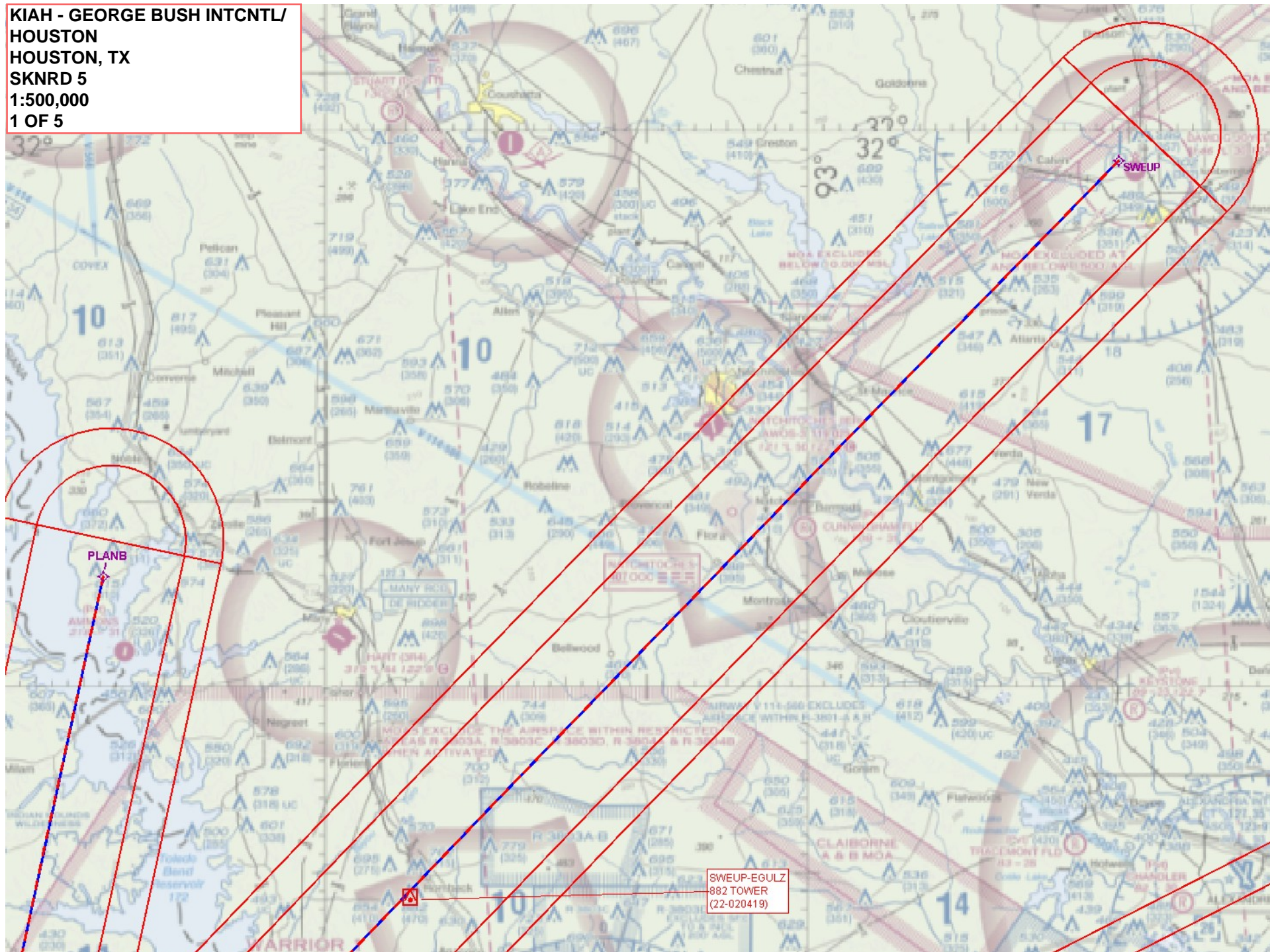
KIAH - GEORGE BUSH INTCNL/
HOUSTON
HOUSTON, TX
SKNRD 5
1:1,000,000
1 OF 2



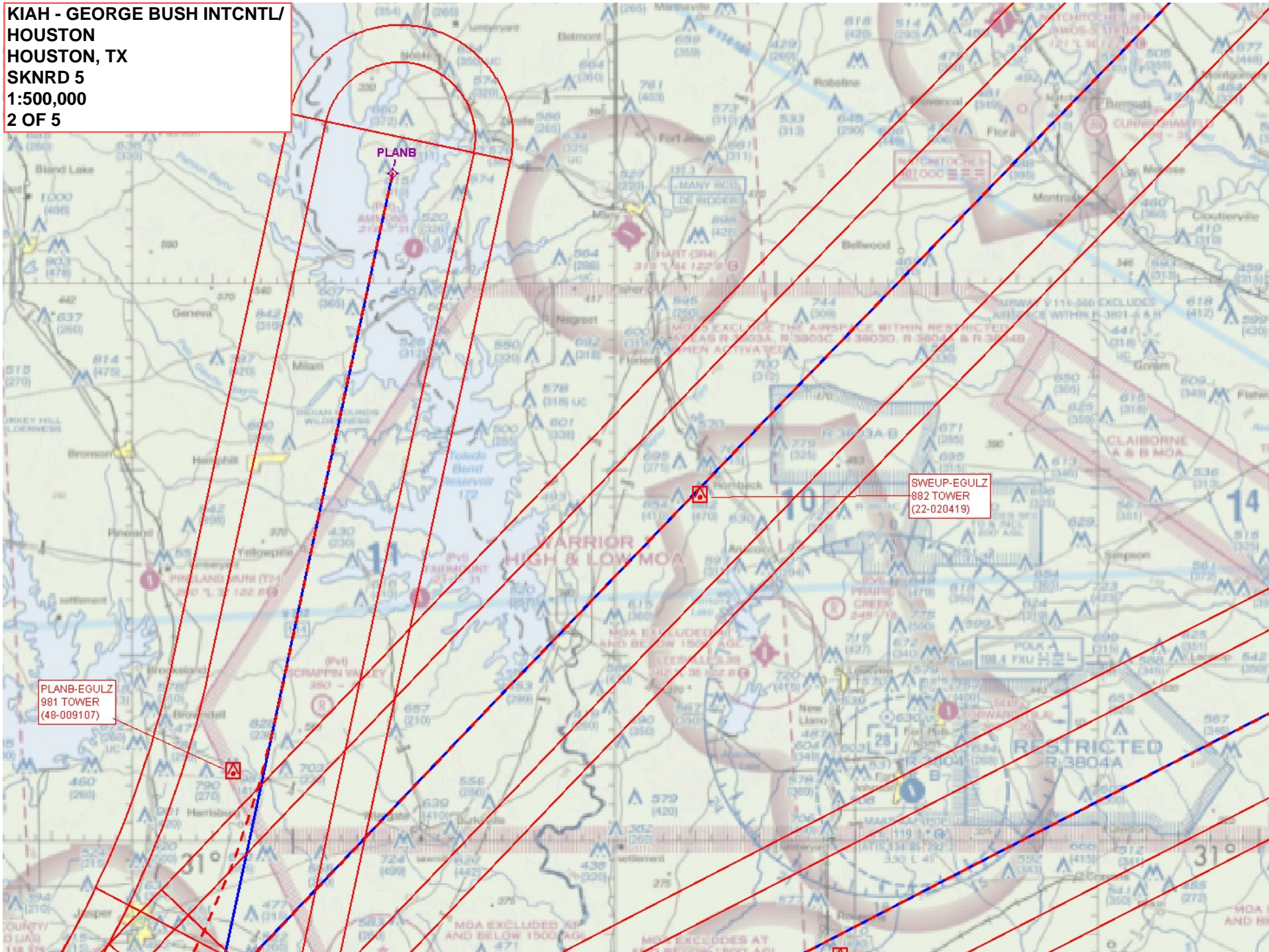
**KIAH - GEORGE BUSH INTCNTL/
HOUSTON
HOUSTON, TX
SKNRD 5
1:1,000,000
1 OF 2**



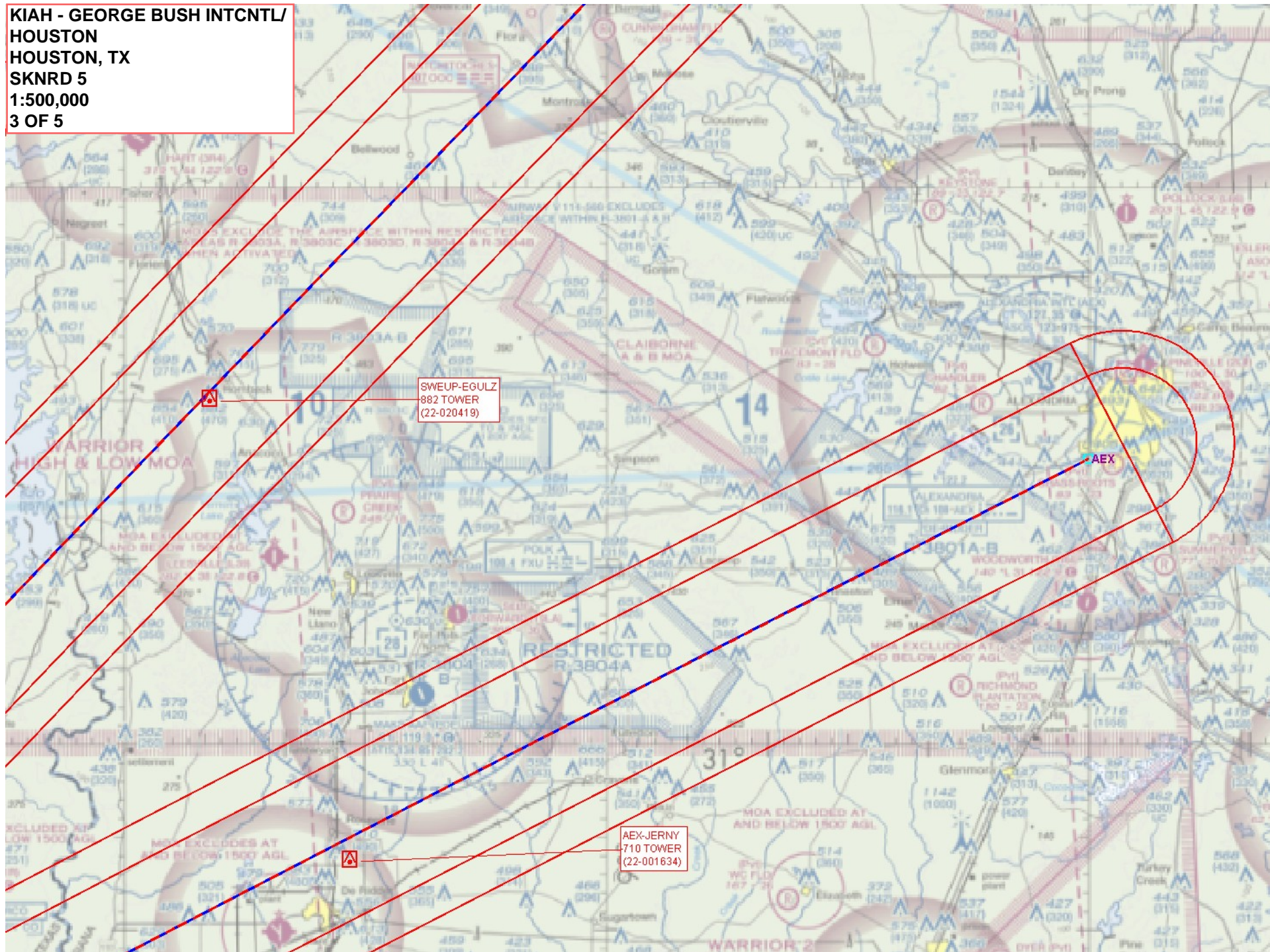
KIAH - GEORGE BUSH INTCNL/
HOUSTON
HOUSTON, TX
SKNRD 5
1:500,000
1 OF 5



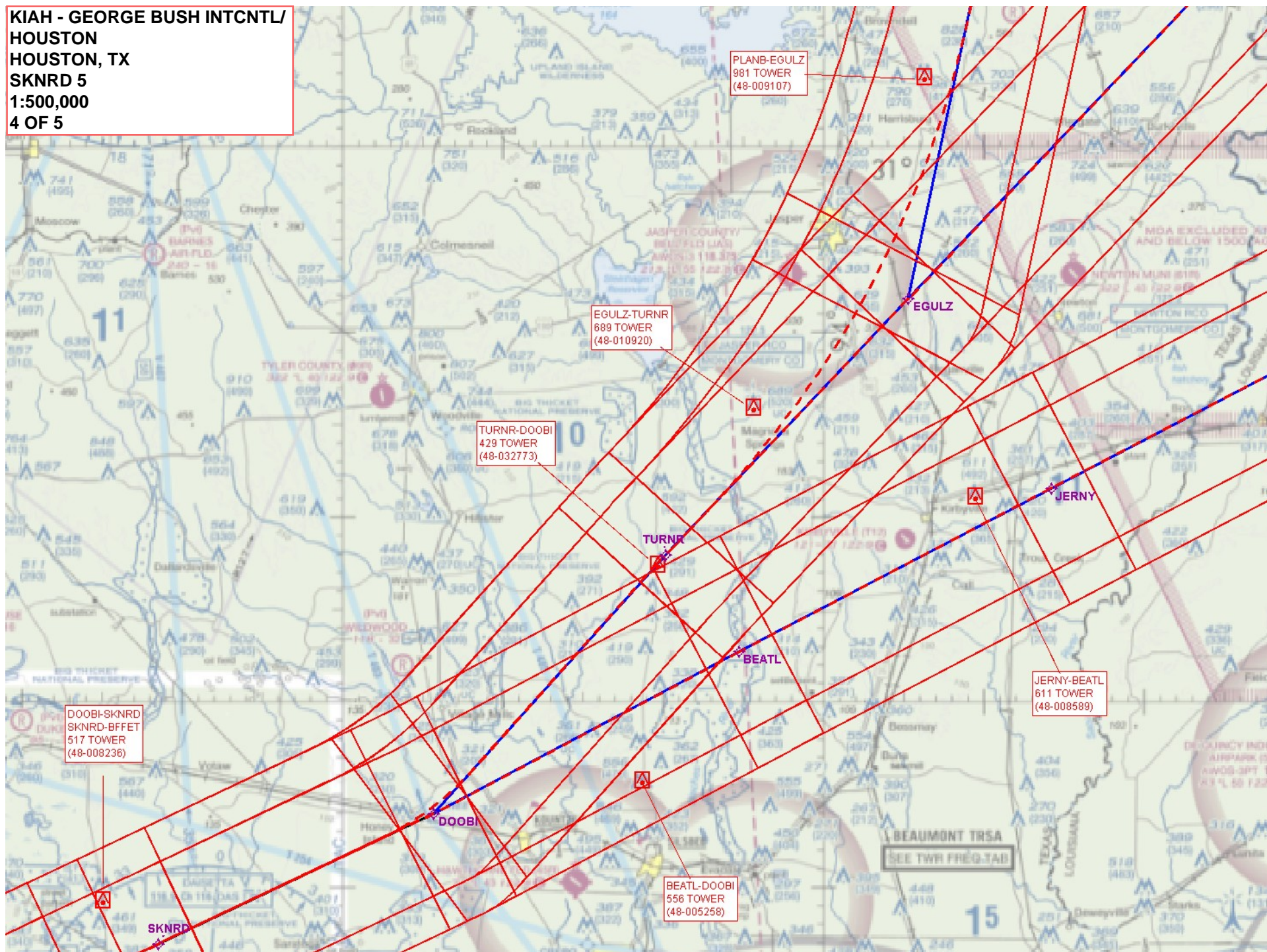
KIAH - GEORGE BUSH INTCNL/
HOUSTON
HOUSTON, TX
SKNRD 5
1:500,000
2 OF 5



KIAH - GEORGE BUSH INTCNL/
HOUSTON
HOUSTON, TX
SKNRD 5
1:500,000
3 OF 5



KIAH - GEORGE BUSH INTCNL/
HOUSTON
HOUSTON, TX
SKNRD 5
1:500,000
4 OF 5



KIAH - GEORGE BUSH INTCNL/
HOUSTON
HOUSTON, TX
SKNRD 5
1:500,000
5 OF 5

