

MMUGS FOUR DEPARTURE (RNAV)  
 (MMUGS4.MMUGS) 10 DEC 15  
 HOUSTON, TEXAS  
 GEORGE BUSH INTL/NHTL/HOUSTON (IAH)

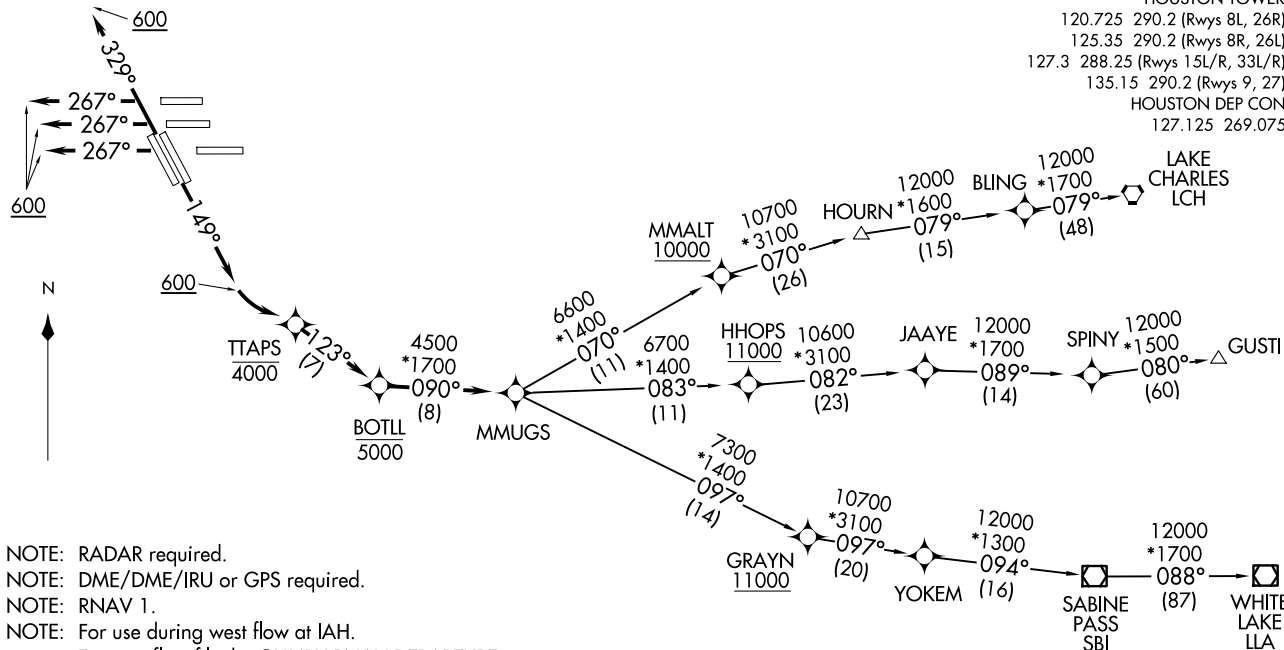
**TOP ALTITUDE:  
16000**

**TAKEOFF MINIMUMS**

Rwys 15L/R, 26L/R, 27, 33L/R: Standard  
 with minimum climb of 500' per NM to 800.

D-ATIS 124.05  
 CLNC DEL 128.1  
 CPDLC  
 GND CON  
 118.575 (Rwys 8L/R, 26L/R, 9, 27)  
 121.7 (Rwys 15L/R, 33L/R)  
 HOUSTON TOWER  
 120.725 290.2 (Rwys 8L, 26R)  
 125.35 290.2 (Rwys 8R, 26L)  
 127.3 288.25 (Rwys 15L/R, 33L/R)  
 135.15 290.2 (Rwys 9, 27)  
 HOUSTON DEP CON  
 127.125 269.075

(MMUGS4.MMUGS) 21112  
 MMUGS FOUR DEPARTURE (RNAV)  
 AL-5461 (FAA)  
 GEORGE BUSH INTL/NHTL/HOUSTON (IAH)  
 HOUSTON, TEXAS



- NOTE: RADAR required.
- NOTE: DME/DME/IRU or GPS required.
- NOTE: RNAV 1.
- NOTE: For use during west flow at IAH.  
For east flow file the GUMBY RNAV DEPARTURE.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 15L/R: Climb heading 149° to 600, then left turn direct to cross TTAPS at or below 4000, then on track 123° to cross BOTLL at or below 5000, thence . . . .

TAKEOFF RUNWAYS 26L/R, 27: Climb heading 267° to 600, expect RADAR vectors to cross BOTLL at or below 5000, thence . . . .

TAKEOFF RUNWAYS 33L/R: Climb heading 329° to 600, expect RADAR vectors to cross BOTLL at or below 5000, thence . . . .

. . . . on track 090° to MMUGS, then on (transition). Maintain 16000. Expect filed altitude 10 minutes after departure.

GUSTI TRANSITION (MMUGS4.GUSTI)

LAKE CHARLES TRANSITION (MMUGS4.LCH)

WHITE LAKE TRANSITION (MMUGS4.LLA)

SC-5, 19 MAR 2026 to 16 APR 2026

SC-5, 19 MAR 2026 to 16 APR 2026