

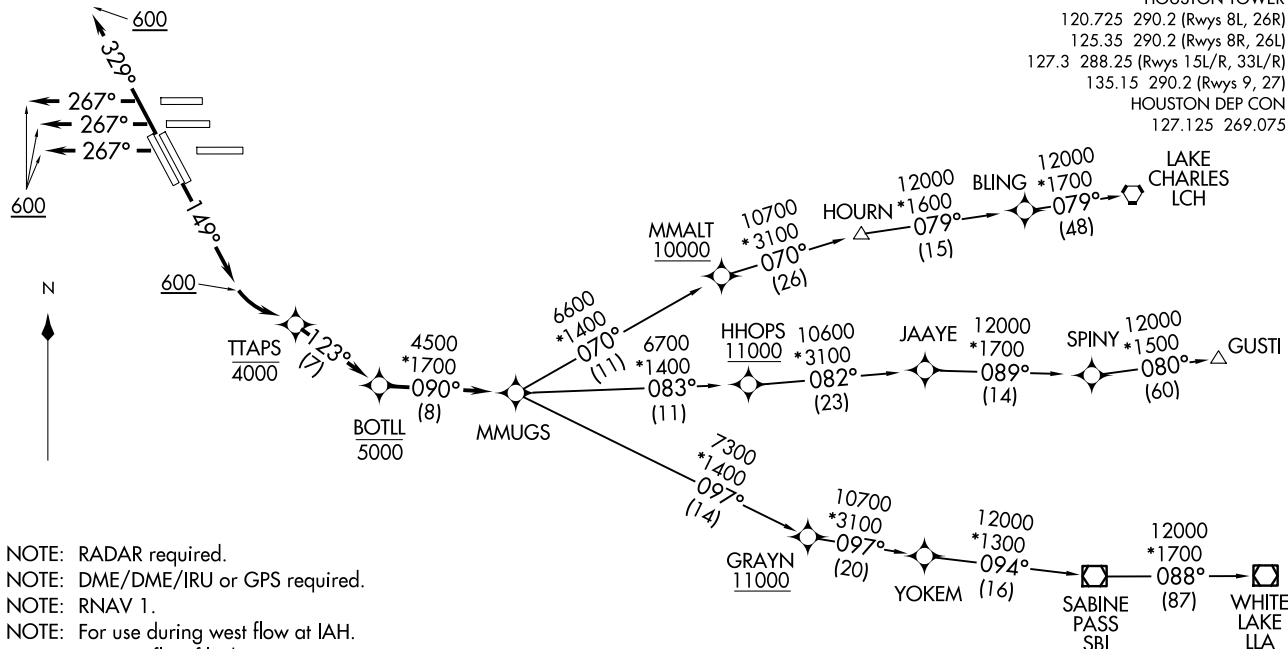
MMUGS FOUR DEPARTURE (RNAV)  
(MMUGS4.MMUGS) 10 DEC 15

HOUSTON, TEXAS  
GEORGE BUSH INT/CNTL/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.



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

(MMUGS4.MMUGS) 21112

MMUGS FOUR DEPARTURE (RNAV)

AL-5461 (FAA)

HOUSTON, TEXAS  
GEORGE BUSH INT/CNTL/HOUSTON (IAH)

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



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, 27 NOV 2025 to 25 DEC 2025

SC-5, 27 NOV 2025 to 25 DEC 2025