

Southwest Airlines
Burbank, CA
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**National Transportation Safety Board
Washington, DC**

Attachment 11

Boeing slide compartment release bracket testing report

1 page

COORDINATION SHEET

SUBJECT: 737-600/700/800 Slide Compartment Release Bracket Testing

During the inertial loading of the forward LH slide/compartment assembly for certification, one leg of the slide compartment latch bracket became disengaged from the release latch assembly. Certification repeatability deployment was conducted with the slide/compartment assembly in this condition. The deployment was successfully conducted on July 18, 1997. As proposed, Boeing increased the material thickness of the bracket from 0.063 to 0.090 inch and widened the web of the bracket by 0.25 inch to provide additional stiffness. To substantiate that the new improved latch bracket will not alter the as-tested configuration, a series of pull force tests were conducted using the existing and new improved bracket configurations. Furthermore, one fwd and one aft door escape slide were successfully deployed from the fwd LH and aft LH door module using compartment assemblies with the new improved bracket on August 28, 1997.

Presented in the table below are the pull force test results for the existing bracket (P/N 65C30431-7) and the new improved bracket (P/N 65C30431-9).

Compartment Latch Pull Force Test Results

Door	Slide/ Compartment Assembly	Latch Bracket	Pull Force (lb.)			
			Test 1	Test 2	Test 3	Avg.
Fwd LH	416A2200-5	65C30431-7	20.5	18.1	18.5	19.7
Aft LH	416A2200-7	65C30431-7	19.3	20.0	20.3	19.9
Fwd LH	416A2200-9	65C30431-9	33.1	34.8	32.6	33.5
Aft LH	416A2200-11	65C30431-9	36.6	37.2	35.8	36.5

As expected the test data shows an increase in the pull force for the new improved latch bracket, however, this increase did not have any effects on the deployment/inflation of the fwd and aft door escape slides. Also, on September 15, 1997, a functional test on YA004 was successfully conducted using the new production slide compartment assemblies with the improved latch bracket.

The data presented clearly demonstrates that the new latch bracket does not change the form, fit, or function of the as-tested configuration.