

FAA Test Hazard Analysis

FAR No.: 25.201	FAR Title: Stall Demonstration	Risk Level: High
Maneuver Title: Stall		
Maneuver Description: As per AC 25-7A Section 6 "Stalls" Para 29 1) Trim hands off between 1.13 and 1.3 Vsr1 2) 1 kt/sec decel wings level 3) 1 and 3 kt/sec turning 4) Power off and power on; 5) Power on = PLF at MLGW and 1.5 Vsr1, flaps approach 6) Stall defined by nose down pitch not readily arrested; deterrent buffet; stick pusher; or stick at the aft stop (2 sec min)		
Hazard: Loss of Control		
Cause(s): 1. 1. Unpredicted aerodynamic response. 2. Stick Pusher fails to prevent aircraft from reaching aerodynamic stall. 3. Improper control inputs.		
Mitigation(s): 1.1 1. Do stall testing in a buildup approach: <ul style="list-style-type: none"> a. from least risk to highest risk <ul style="list-style-type: none"> i. forward cg, mid cg, aft cg ii. Power off before power on iii. Wings level before turning iv. 1 kt/sec before 3 kt/sec b. terminate buildup if FAR limits on bank angle are exceeded at any point of the buildup 2. Establish minimum altitudes for: <ul style="list-style-type: none"> a. entry, b. recovery initiation, c. recovery chute deployment and d. manual bailout. 3. Perform pre-flight checks of stall warning and stick pusher, as applicable. 4. Anti-spin chute must be installed, functional and armed. Perform pre-flight and pre-maneuver checks of chute as applicable. 5. Minimum crew onboard. 6. Emergency Egress system must be installed and armed. Perform pre-flight and pre-maneuver checks of egress system as applicable. 7. Crew to wear helmets and parachutes. 8. Surface winds must be less than xx kts (parachute dependent). 9. No aggravated input stalls. All stalls will be ball centered. 10. No asymmetric power stalls.		

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| <ol style="list-style-type: none">11. If departing controlled flight retard throttles to idle and centralize controls.12. Do not add power during recovery until airspeed is increasing above 1.2 Vs. |
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Warning: It is imperative that this information be applied by a knowledgeable flight test professional given the inherently hazardous nature of these activities. This data is general and all items may not apply. Application may require additional research to understanding the safe approach and mitigation sequence for a specific flight test situation.

FAA Note: The maneuver information described in this database is for reference only. Consult Title 14 CFR for actual FAR requirements.