

VII. Slow Flight and Stalls

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| Task | B. Power-Off Stalls |
| References | FAA-H-8083-2, FAA-H-8083-3; AC 61-67; POH/AFM |
| Objective | To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with power-off stalls. Note: See <u>Appendix 7: Aircraft, Equipment, and Operational Requirements & Limitations</u> . |
| Knowledge | The applicant demonstrates understanding of: |
| <i>PA.VII.B.K1</i> | Aerodynamics associated with stalls in various airplane configurations, to include the relationship between angle of attack, airspeed, load factor, power setting, airplane weight and center of gravity, airplane attitude, and yaw effects. |
| <i>PA.VII.B.K2</i> | Stall characteristics (i.e., airplane design) and impending stall and full stall indications (i.e., how to recognize by sight, sound, or feel). |
| <i>PA.VII.B.K3</i> | Factors and situations that can lead to a power-off stall and actions that can be taken to prevent it. |
| <i>PA.VII.B.K4</i> | Fundamentals of stall recovery. |
| Risk Management | The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing: |
| <i>PA.VII.B.R1</i> | Factors and situations that could lead to an inadvertent power-off stall, spin, and loss of control. |
| <i>PA.VII.B.R2</i> | Range and limitations of stall warning indicators (e.g., airplane buffet, stall horn, etc.). |
| <i>PA.VII.B.R3</i> | Failure to recognize and recover at the stall warning during normal operations. |
| <i>PA.VII.B.R4</i> | Improper stall recovery procedure. |
| <i>PA.VII.B.R5</i> | Secondary stalls, accelerated stalls, and cross-control stalls. |
| <i>PA.VII.B.R6</i> | Effect of environmental elements on airplane performance related to power-off stalls (e.g., turbulence, microbursts, and high-density altitude). |
| <i>PA.VII.B.R7</i> | Collision hazards, to include aircraft, terrain, obstacles, and wires. |
| <i>PA.VII.B.R8</i> | Distractions, improper task management, loss of situational awareness, or disorientation. |
| Skills | The applicant demonstrates the ability to: |
| <i>PA.VII.B.S1</i> | Clear the area. |
| <i>PA.VII.B.S2</i> | Select an entry altitude that will allow the Task to be completed no lower than 1,500 feet AGL (ASEL, ASES) or 3,000 feet AGL (AMEL, AMES). |
| <i>PA.VII.B.S3</i> | Configure the airplane in the approach or landing configuration, as specified by the evaluator, and maintain coordinated flight throughout the maneuver. |
| <i>PA.VII.B.S4</i> | Establish a stabilized descent. |
| <i>PA.VII.B.S5</i> | Transition smoothly from the approach or landing attitude to a pitch attitude that will induce a stall. |
| <i>PA.VII.B.S6</i> | Maintain a specified heading $\pm 10^\circ$ if in straight flight; maintain a specified angle of bank not to exceed 20° , $\pm 10^\circ$ if in turning flight, while inducing the stall. |
| <i>PA.VII.B.S7</i> | Acknowledge cues of the impending stall and then recover promptly after a full stall occurs. |
| <i>PA.VII.B.S8</i> | Execute a stall recovery in accordance with procedures set forth in the POH/AFM. |
| <i>PA.VII.B.S9</i> | Configure the airplane as recommended by the manufacturer, and accelerate to V_x or V_y . |
| <i>PA.VII.B.S10</i> | Return to the altitude, heading, and airspeed specified by the evaluator. |