

VII. Slow Flight and Stalls

Task	<i>Task B. Power-Off Stalls</i>
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.
Knowledge	The applicant demonstrates understanding of:
<i>PA.VII.B.K1</i>	1. The importance of the 1,500-foot (ASEL/ASES) or 3,000-foot (AMEL/AMES) AGL minimum altitude.
<i>PA.VII.B.K2</i>	2. How the maneuver relates to a normal flight.
<i>PA.VII.B.K3</i>	3. The components of a stabilized descent.
<i>PA.VII.B.K4</i>	4. Approach to stall indications.
<i>PA.VII.B.K5</i>	5. Full stall indications.
<i>PA.VII.B.K6</i>	6. Which aircraft inputs are required to meet heading or bank angle requirements.
<i>PA.VII.B.K7</i>	7. The stall recovery procedure.
<i>PA.VII.B.K8</i>	8. The importance of establishing the correct aircraft configuration during the recovery process and the consequences of failing to do so.
<i>PA.VII.B.K9</i>	9. Aerodynamics associated with stalls and spins in various aircraft configurations and attitudes.
<i>PA.VII.B.K10</i>	10. Circumstances that can lead to an inadvertent stall or spin.
Risk Management	The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing:
<i>PA.VII.B.R1</i>	1. The interplay of aerodynamic factors (angle of attack (AOA), airspeed, load factor, aircraft configuration, aircraft weight, and aircraft attitude.)
<i>PA.VII.B.R2</i>	2. The range and limitations of stall warning indicators (e.g.: aircraft buffet, stall horn, etc.).
<i>PA.VII.B.R3</i>	3. The effect of environmental elements on aircraft performance.
<i>PA.VII.B.R4</i>	4. Required actions for aircraft maximum performance and the consequences of failing to do so.
<i>PA.VII.B.R5</i>	5. Collision avoidance, scanning, obstacle and wire strike avoidance.
<i>PA.VII.B.R6</i>	6. Failure to follow the stall recovery procedure.
<i>PA.VII.B.R7</i>	7. Failure to maintain coordinated flight during the maneuver.
<i>PA.VII.B.R8</i>	8. Secondary stalls.
<i>PA.VII.B.R9</i>	9. Inadvertent stall or spin.
Skills	The applicant demonstrates the ability to:
<i>PA.VII.B.S1</i>	1. 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.S2</i>	2. Establish a stabilized descent in the approach or landing configuration, as specified by the evaluator.
<i>PA.VII.B.S3</i>	3. Transition smoothly from the approach or landing attitude to a pitch attitude that will induce a stall.
<i>PA.VII.B.S4</i>	4. Maintain a specified heading, $\pm 10^\circ$, and if in straight flight, maintain a specified angle of bank not to exceed 20° , $\pm 10^\circ$ and if in turning flight, while inducing the stall or as recommended by aircraft manufacturer to a safe maneuvering altitude.
<i>PA.VII.B.S5</i>	5. Recognize and recover promptly after a full stall has occurred.
<i>PA.VII.B.S6</i>	6. Retract the flaps to the recommended setting; retract the landing gear, if retractable, after a positive rate of climb is established.
<i>PA.VII.B.S7</i>	7. Execute a stall recovery in accordance with procedures set forth in the AFM/POH.
<i>PA.VII.B.S8</i>	8. Accelerates to V_X or V_Y speed before the final flap retraction; returns to the altitude, heading and airspeed specified by the examiner.

VII. Slow Flight and Stalls

Task	Task C. Power-On 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-on stalls. Note: (See Appendix 6 –Safety of Flight.)
Knowledge	The applicant demonstrates understanding of:
PA.VII.C.K1	1. The importance of the 1,500-foot (ASEL/ASES) or 3,000-foot (AMEL/AMES) AGL minimum altitude.
PA.VII.C.K2	2. How the maneuver relates to a normal flight.
PA.VII.C.K3	3. Rationale for power setting variances.
PA.VII.C.K4	4. Approach to stall indications.
PA.VII.C.K5	5. Full stall indications.
PA.VII.C.K6	6. Which aircraft inputs are required to meet heading or bank angle requirements.
PA.VII.C.K7	7. Determining the most efficient stall recovery procedure.
PA.VII.C.K8	8. The importance of establishing the correct aircraft configuration during the recovery process and the consequences of failing to do so.
PA.VII.C.K9	9. The aerodynamics associated with stalls and spins in various aircraft configurations and attitudes.
PA.VII.C.K10	10. The circumstances that can lead to an inadvertent stall or spin.
PA.VII.C.K11	11. The circumstances that can lead to an accelerated stall.
Risk Management	The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing:
PA.VII.C.R1	1. Aerodynamic factors (angle of attack (AOA), airspeed, load factor, aircraft configuration, aircraft weight, and aircraft attitude.)
PA.VII.C.R2	2. The range and limitations of stall warning indicators (e.g. aircraft buffet, stall horn, etc.)
PA.VII.C.R3	3. The effect of environmental elements on aircraft performance.
PA.VII.C.R4	4. Required actions for aircraft maximum performance and the consequences of failing to do so.
PA.VII.C.R5	5. Accelerated stalls.
PA.VII.C.R6	6. Collision avoidance, scanning, obstacle and wire strike avoidance.
PA.VII.C.R7	7. Failure to follow the stall recovery procedure.
PA.VII.C.R8	8. Failure to maintain coordinated flight during the maneuver.
PA.VII.C.R9	9. Secondary stalls.
PA.VII.C.R10	10. Inadvertent stall or spin.
Skills	The applicant demonstrates the ability to:
PA.VII.C.S1	1. 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).
PA.VII.C.S2	2. Establish the takeoff, departure, or cruise configuration as specified by the evaluator.
PA.VII.C.S3	3. Set power (as assigned by the evaluator) to no less than 65 percent available power.
PA.VII.C.S4	4. Transition smoothly from the takeoff or departure attitude to the pitch attitude that will induce a stall.
PA.VII.C.S5	5. Maintain a specified heading, $\pm 10^\circ$, and if in straight flight and maintain a specified angle of bank not to exceed 20° , $\pm 10^\circ$, if in turning flight, while inducing the stall or as recommended by aircraft manufacturer to a safe maneuvering altitude.
PA.VII.C.S6	6. Recognize and recover promptly after a fully developed stall occurs.
PA.VII.C.S7	7. Retract the flaps to the recommended setting; retract the landing gear if retractable, after a positive rate of climb is established.
PA.VII.C.S8	8. Execute a stall recovery in accordance with procedures set forth in the AFM/POH.
PA.VII.C.S9	9. Accelerate to V_x or V_y speed before the final flap retraction; return to the altitude, heading, and airspeed specified by the evaluator.