Power-Off Stalls Imminent and Full – Landing Configuration

OBJECTIVE:	To recognize indications of an imminent or full stall during power-off situations and to make prompt, positive recoveries, with minimum loss of altitude while maintaining coordinated flight.
STANDARDS:	Sport/Recreational/Private - Heading: ±10° or Bank: ≤20° ±10° Demonstrated proper recovery procedure. Maintains coordinated flight. Avoids secondary stalls/spins. Recovers with minimum altitude loss.
CONDITIONS:	Stalls should be accomplished in straight flight and turns using various flap settings. Emphasis should be placed on smoothness, coordination, and accuracy. Some recoveries during training may be with power at idle.

DESCRIPTION:

- Select an altitude to allow recovery above 1500' AGL (1000' AGL-Sport).
- Perform Pre-Maneuver Checklist.
- Perform clearing turns.
- Apply carburetor heat, as appropriate. Reduce power to 1500 RPM (or 15" MP).
- Smoothly increase pitch to maintain altitude while slowing to final approach speed. When airspeed is within flap operating range, add flaps incrementally until full flaps are obtained. When airspeed is below V_{LO}, extend the landing gear as required.
- Stabilize aircraft, maintaining heading.
- Adjust power to the approach power setting while establishing the approach attitude.

- From final approach airspeed and attitude, reduce power to idle and continue to increase pitch. Establish a bank angle up to 20°, if desired, in appropriate direction.

- Initiate recovery when:
  - Imminent stall-The first buffet or rapid decay of control effectiveness is experienced.
  - Full stall-A sudden loss of control effectiveness occurs, excessive sink rate, or sudden nose pitch down with full up elevator is experienced.

- Recover by simultaneously adding full power (carb heat off as required), decreasing the angle of attack, and leveling the wings. Select the second flap setting, establish a pitch attitude to minimize altitude loss (approximately V_X attitude) and establish a positive rate of climb.

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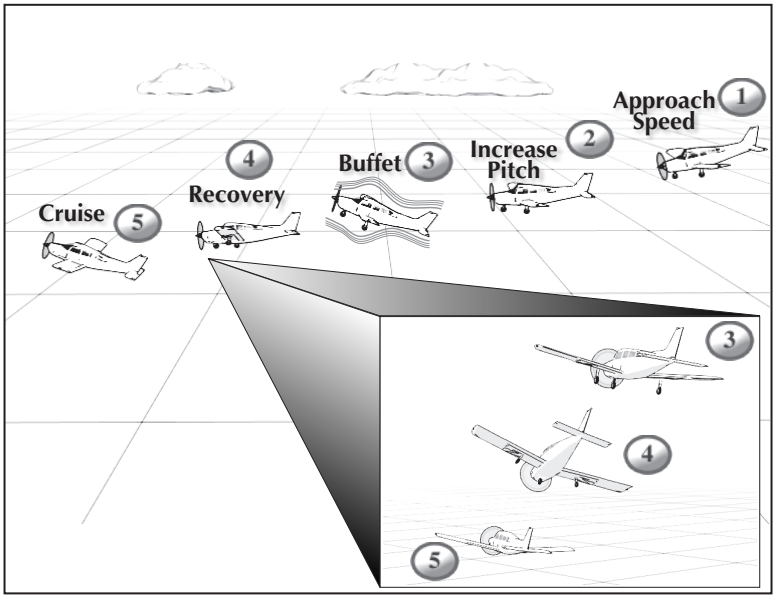
- With a positive rate of climb, select the first flap setting, retract the landing gear as required, and establish V_Y attitude.
- Above the appropriate indicated airspeed, retract flaps.
- 5 • Resume normal cruise, or as specified.



COMMON ERRORS:

- Failure to adequately clear the area.
- Inability to recognize an approaching stall condition through feel for the airplane.
- Premature recovery.
- Overreliance on the airspeed indicator while excluding other cues.
- Inadequate scanning resulting in an unintentional wing-low condition during entry.
- Excessive back elevator pressure resulting in an exaggerated nose-up attitude during entry.
- Inadequate rudder control.
- Inadvertent secondary stall during recovery.
- Failure to maintain a constant bank angle during turning stalls.
- Excessive forward-elevator pressure during recovery resulting in negative load on the wings.
- Excessive airspeed buildup during recovery.
- Failure to take timely action to prevent a full stall during the conduct of imminent stalls.
- Failure to establish positive rate of climb prior to retracting landing gear.

NOTES: