POWER-ON STALLS

2,500' AGL MINIMUM ALTITUDE

Goals:

Simulate an inadvertent stall during takeoff/climb.
Learn to recognize aircraft "feel", sounds and other hints of an incipient stall.
Learn the control inputs required for effective recovery.
Demonstrate the fact that a stall can occur at any pitch attitude.

Procedure:

Select an entry altitude per Airman Certification Standards (ACS)
Perform clearing turns
Configure the aircraft – mixture rich
Apply carburetor heat
Reduce power to approximately 1500 rpm to reduce speed
Pitch for normal takeoff/climb airspeed (Vx) 65 MPH +/-
Increase throttle to 2300 rpm (75% power)
Pitch up to a nose attitude that will induce a stall
Be alert to indications of a stall (warning horn/light, buffeting, and loss of control effectiveness)

Recover by simultaneously:

- Decreasing angle of attack, adding full power (if not already there)
- Using rudder to maintain coordination and keep the aircraft from "falling off" to one side or the other

Transition to a normal climb attitude at Vy
Resume normal cruise flight

Common Mistakes:

Reacting too slowly, or failing to apply enough forward pressure on the yoke as the airplane enters the stall
Attempting to keep the airplane from "falling off" by using ailerons, rather than rudder
Applying too much back pressure during the initial recovery and causing a secondary stall
Failing to maintain coordinated flight before and during the stall