



Stall/Spin Recovery Program

Flight 1 Ground

Review of aerodynamics including MCA, critical angle of attack, stalls, slips, skids, steep spiral vs spin, spin phases, PARE recovery. Citabria familiarization, spin requirements and FAA guidance AC 61-67C. 12 of the most common Stall/Spin myths.

Air:

1. Flight at minimum controllable airspeed
2. Stalls Power-off/Power-On, Accelerated, Secondary, Cross-Controlled, Falling Leaf
3. Full Control Slips/Skids
4. Spin Entry- Incipient- Recovery- PARE

Flight 2 Ground

Review spin entry and exit Procedures (PARE). Discuss different scenarios where pilots may accidentally induce stall/spins. AOPA Stall/Spin Statistics.

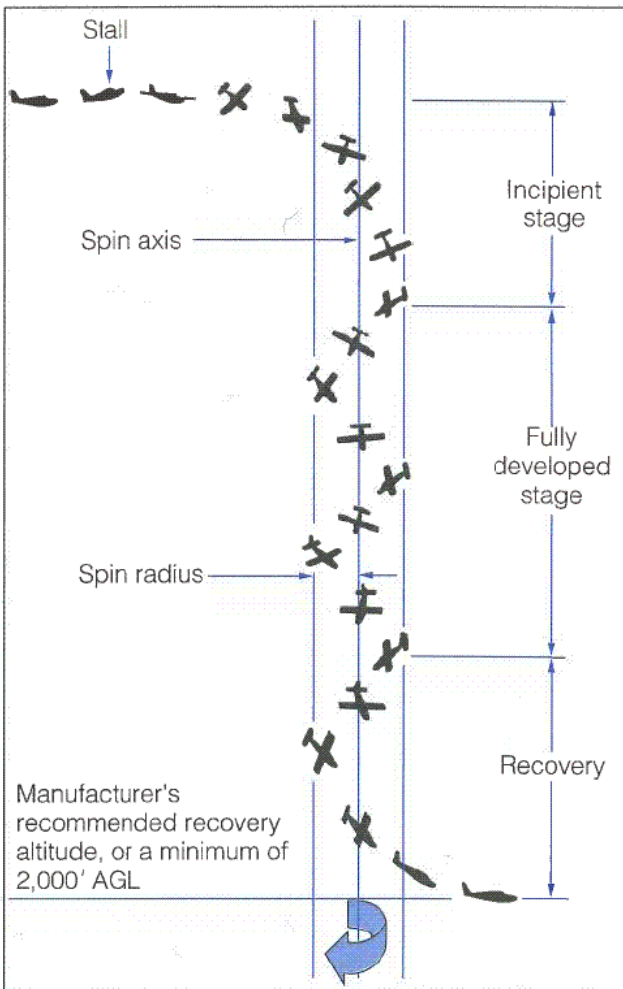
Air

1. One–turn, upright spin entry and recovery review 2. Two–turn, upright spin entry and recovery
2. Fully developed spins, autorotation and recovery.

3. Scenario-based spin entry:

- a. Base-to-final turn (cross control)
- b. Slipping flight and spins
- c. Go-arounds

4. Debrief and endorsement



V-Speed Symbol	Speed Value	What Is It?
V _{SO}	50 MPH	Stall speed or minimum steady flight speed in the landing configuration.
V _R	50 MPH, Short Field 55 MPH, Normal	Rotation speed. The speed at which the tailwheel is lowered towards the runway during takeoff.
V _X	58 MPH	Best Angle speed. In a climb it provides the maximum gain in altitude for the distance traveled forward.
V _Y	69 MPH	Best Rate speed. In a climb it provides the maximum gain in altitude per unit of time traveled.
V _{ENROUTE CLIMB}	75-80 MPH	In a climb it provides increased forward visibility and engine cooling.
V _{BEST GLIDE}	65 MPH	In a glide it provides the maximum distance traveled forward with the minimum altitude lost.
V _A	120 MPH, 1750 LBS	Design Maneuvering speed. Maximum speed at which full, abrupt deflection of the controls can be made without causing structural damage. Reduce speed to this value when in rough air.
V _{NO}	120 MPH	Maximum Structural Cruising speed. Do not exceed this speed except in smooth air.
V _{NE}	162 MPH	Never Exceed speed. Do not exceed this speed under any circumstances.
V _{NEGATIVE "G"}	135 MPH	Maximum speed during a negative "G" condition
V _{WINDOW OPEN}	130 MPH	Maximum speed at which the windows may be open.
Max. Demonstrated Crosswind	*17 KTS	Maximum crosswind component during which the aircraft has been landed by the manufacturer test pilot.

PARE- Recovery

P- Power- Power Off

A- Aileron Ailerons Neutral

R-Rudder Full Opposite to direction of yaw

E-Elevator Move Toward Neutral