

## Push, Roll, Power, Stabilize

Trent Tresch  
2025

In a fixed wing aircraft, push–roll–power–stabilize is a control technique used to quickly and safely correct an undesired pitch or roll attitude, most commonly during unusual attitude recovery, stall recovery, or upset recovery. Patriots Jet Team provides upset recovery training regarding these methods where pilots obtain classroom instruction, then fly upset recovery in the L-39 and Sabreliner. Each step addresses a specific aerodynamic problem in the correct priority, so the aircraft returns to controlled, stable flight without overstressing the airframe.

Push comes first because excessive pitch-up (or high angle of attack) is often a root problem. Pushing forward on the controls reduces angle of attack, immediately restoring lift and preventing or breaking a stall. This is critical because adding power or rolling before reducing angle of attack can worsen the situation.

Roll is applied next to level the wings using coordinated aileron (and rudder as needed). A wings-level attitude reduces load factor and prevents tightening turns or spirals that can rapidly increase airspeed and structural loads.

Power is then adjusted to support the desired flight path—typically adding power to arrest altitude loss after a stall, or reducing power in a nose-low, overspeed situation. Power is managed only after the aircraft is flying again to avoid aggravating yaw, roll, or angle-of-attack issues.

Stabilize means establishing a safe, trimmed attitude with coordinated controls, proper airspeed, and a known configuration. This prevents secondary upsets and ensures the aircraft is fully under control before resuming normal flight.

The reason this sequence matters is aerodynamic priority:

1. Angle of attack first (push)
2. Load factor and attitude (roll)
3. Energy management (power)
4. Return to steady flight (stabilize)

This structured approach is taught because it works consistently across aircraft types and minimizes the risk of stall, spin entry, overspeed, or structural exceedance—especially in high-stress, time-critical situations.

Training opportunities can be pursued by contacting Patriots Jet Team directly:

[760 Osprey Court](https://patriotsjetteam.com/upset-recovery-training/)  
[Byron, CA 94514](https://patriotsjetteam.com/upset-recovery-training/)  
(925) 437-1035  
<https://patriotsjetteam.com/upset-recovery-training/>

## Project Photos



L-39 training aircraft used for upset experiential education.



Sabreliner also used in upset training.



Pilot in upset training program after L-39 flight.



Familiarization with the inside of the L-39.