

The Region Of Reversed Command

Here's a regime where things get backward—and the area in which too many approach accidents occur: The realm between the speeds for minimum-required power and the stall speed.

This territory upends the normal behavior of pitch versus power, so the FAA calls it “The Region of Reversed Command.” At such low airspeed near the stall AoA, the aircraft needs considerable power to maintain steady, level flight. But it still can maintain level flight and even climb...as long as you don't get slower.

Get much slower and the stall sets in or, if using high power to try to stay level, develop into a mushing descent. Neither is desirable when low and slow, airport pattern or elsewhere.

The safest solution—lower the nose and let speed increase slightly. From that point, airspeed increases mean you need progressively less power to maintain level flight and the phenomenon continues as speed increases until aircraft power is down to the minimum needed to stay level.

At that point, increasing speed beyond the setting for maximum endurance increases the power setting required for steady, level flight—in other words, things are back to normal in the pitch versus power world.

