

Power Loss Down Low

- A PUSH THE NOSE DOWN.** You may only have seconds to maintain a flying angle of attack and airspeed.
- B ENACT YOUR PRELOADED DECISION.** There's no time to make a plan, so you'd better already have one.
- C TROUBLESHOOT BY FEEL AND MEMORY, IF POSSIBLE.** If you have time, try key memory items that might bring your engine back to life—if you're not taking your eyes off the landing target to do so.
- D COMMUNICATE, IF POSSIBLE.** If time and workload permit, make a mayday call on whatever frequency you're already using.
- E ACCEPT WHAT YOU GET.** You may have no great options. Commit to what you do have and keep positive control to the end.

KEY SKILLS



Prepare so your first actions are correct



Fly the airplane



Never give up

SCENARIO 1

Total Power Loss on Takeoff at 300 AGL



*You're departing Runway 34 at Bandon State (S05) in a Cessna 172 into clear skies and a light northwest wind. As the altimeter rolls through 400 feet (300 AGL), **your engine seems a lot quieter.***

A Push the Nose Down

You were at full power on departure and pitched up to about 75 knots (V_Y flaps up). You couldn't see much of the horizon over the cowlings, which is normal. Now you need the pitch for best glide speed or a power-off approach. That means you'll see a lot of terrain you're about to meet in front of you.

You have seconds to make this huge change in pitch attitude. But that's not all: You lost the first four or so of those seconds realizing the engine has quit and reacting. Because you held the pitch you know by heart, much of your flying energy has bled off.

TIP For most light singles, if you pitch to make the bottom of the wing parallel to the horizon, you'll be at approximately best glide. This is easier to see with high wings, but it works on most low wings too.

Any further delay in a PUSH to pitch down may cost enough energy that you'll lose control of the airplane close to the ground. That's nearly always fatal. To make matters worse (like it's not bad enough already?) pilots often instinctively pull even after they start sinking in a futile attempt to climb.

If you push hard enough to feel light in your seat, that's fine. Even if you have no time to do anything else, you've averted a loss of control accident and can land the plane somewhere under control, into the wind, at minimum speed and energy. The "push" has turned a disastrous event into a probably survivable one.