

What's the big deal with stalls? We practice them in primary, advanced, instrument, commercial, CFI, multi-engine and MEI. Stalls, Stalls, Stalls. Isn't this over kill? One of the goals of stall training is to practice so much that recognition and recovery from a stall becomes instinctual – as we approach a stall we take the corrective action without even thinking about it. The Colgan Air crash may be an instance where the pilot didn't recognize he was approaching the critical angle of attack until it was too late. Following is a special report courtesy of the AOPA. The pilot overloaded the aircraft – not good. The pilot also followed his flight director into a stall (he may also have had the autopilot engaged), never recognized what was happening and never took proper corrective action. In fact he did the opposite of what he needed to do. Do we practice stalls too much? From y point of view maybe we don't practice them enough!

CFI's: In the airplane we practice stalls at least 1500 feet AGL (3000 feet AGL for multi-engine operations). We do this for safety. In the AATD you can practice power on and power off stalls as close to the runway as you want. Even if the syllabus doesn't call for it, the next time you're in the AATD put the student in a stall situation on a soft or short field takeoff and see if they recover.

Pilot crashes seconds after losing control in IMC – by David Kenny

In aviation, little things matter. Tossing a couple of extra bags in back can make an airplane unstable and tricky to control. Inattention at the wrong time can turn an unexpected event into a full-blown emergency—or keep a pilot from recognizing an emergency in time to respond.

On Aug. 28, 2006, the pilot of a Cirrus SR22 lost control of the airplane during a cruise climb in instrument meteorological conditions. Just 41 seconds later, it crashed into a retention pond, having fallen some 3,000 feet. The pilot was killed; his three passengers survived with serious injuries.

The airplane departed Eagle Creek Airpark (EYE) near Indianapolis and was identified by radar at 10:35 a.m. Track data showed it slowing from 117 KIAS at 1,670 msl to 97 knots at 2,500 msl and 87 knots at 3,000 msl. At 3,800 msl, it was down to 75 knots; at that point the airplane abruptly turned left and descended 2,200 feet in 30 seconds.

The passengers recalled that the climb seemed uneventful until about 4,000 feet, when the quality of the noise changed. One compared it to hearing the gear extend on a commercial airliner, "kind of feeling and hearing something

underneath of me.” The front-seat passenger (the pilot’s son, who was not a pilot himself) saw the pilot “struggling to control the airplane” as the wings dipped. Seeing the pilot “pulling backwards on the control yoke of the aircraft trying to keep the aircraft’s nose up,” he “grabbed the right-side yoke and attempted to help his father keep the aircraft nose elevated” until it entered a counterclockwise spin.

The SR22’s POH gives only one method of spin recovery: parachute deployment. Four seconds after the pilot’s son pulled the handle, the airplane hit the water. Witnesses said the parachute was about three-quarters open.

After drying and weighing its contents, the NTSB determined that the airplane was 333 pounds overweight at takeoff, almost 10 percent over its published maximum gross weight of 3,400 pounds. There were 262 pounds of gear in the rear baggage compartment (placarded for a maximum of 130), putting the CG seven-tenths of an inch aft of limits. They found the probable cause of the accident to be the pilot’s failure to maintain sufficient airspeed, resulting in a stall and subsequent spin.

An aft-of-limits CG makes stall recovery more difficult, but the passengers’ accounts make clear that the pilot never recognized the stall. Instead of recovering, he kept the airplane stalled until it spun. The stall warning horn functioned after the accident, and data downloaded from the primary flight display suggested that it should have sounded for about one minute before the stall and throughout the 25 seconds that the airplane wallowed before the spin.

Why would a 2,500-hour pilot, with more than 350 hours in type, fail to recognize an incipient stall? One possibility is that he was flying on autopilot. The NTSB is careful to note that they could not determine whether the autopilot was engaged during the climb. However, they also note that when set to hold a fixed rate of climb, the autopilot—which has sufficient elevator authority to stall the wing—will steadily increase the angle of attack (thereby reducing airspeed) and will not disconnect at either the stall warning or the actual stall. Cirrus training emphasizes use of the autopilot from shortly after takeoff to final approach. If the servos were flying the airplane, the pilot may not have felt it buffet before the stall break—which would have come as a complete surprise if he’d neglected to monitor his airspeed.

Complacency can be deadly in the cockpit. For all their capabilities, the most sophisticated new GA airplanes don’t fly themselves. They still require the full involvement of an alert and attentive pilot in command.

—David Kenny