



Maneuvering Flight

More than 25 percent of general aviation fatal accidents occur during the maneuvering phase of flight — turning, climbing, or descending close to the ground. The vast majority of these accidents involve stall/spin scenarios (half of which are while in the traffic pattern) and buzzing attempts.

Stalls/Spins

The majority of fatal stall/spin accidents occur at low altitudes, when recovery is unlikely. A pilot can stall an aircraft at any flight attitude and at any airspeed. Try practicing stalls, or approaches to stalls, at a safe altitude with an experienced instructor. Remember that turns, either vertical (pull-ups) or horizontal, load the wings and increase the stall speed dramatically. A key antidote to maneuvering flight accidents in the pattern is being aware of stall/spin aerodynamics.

Target Fixation

Every pilot has practiced turns around a point to build skill in wind compensation, aircraft ground track control, orientation, and division of attention. However, stall recovery while turning around a point at the altitudes typically used for ground reference can be dangerously close to the ground. They're called moose stalls in Alaska and coyote stalls in Arizona because the pilot is focused more on the target point than turning the plane.

Formation Flying

Routinely performed for aerial photography, it's critical to know the pilot you're flying alongside. A miscommunication or lack of skill can be deadly.

Buzzing

Buzzing your friend's house to show off your piloting skills is never a good idea. It's reckless, and it may likely end in a violent angle-of-attack (AoA) stall. It will not be the type of stall with minor altitude loss that you experienced in training.

Resources

- *Maneuvering: Approach and Landing*, FAASafetyTeam Online Course:
<http://1.usa.gov/1pAC9W3>
- *FAA Safety Briefing*, March/April 2010:
<http://1.usa.gov/1k4CzBG>
- *FAA Safety Briefing*, March/April 2011:
<http://1.usa.gov/1kOqteO>
- *Airplane Flying Handbook*:
<http://1.usa.gov/18orxyp>
- *AOPA Safety Advisor*, Maneuvering Flight—Hazardous to Your Health?:
<http://bit.ly/1gZtoSy>

