General Aviation Joint Steering Committee Safety Enhancement Topic



Stabilized Approach

Focusing on establishing and maintaining a stabilized approach and landing is a great way to avoid experiencing a loss of control. A stabilized approach is one in which the pilot establishes and maintains a constant angle glidepath towards a predetermined point on the landing runway. It is based on the pilot's judgment of certain visual clues, and depends on the maintenance of a constant final descent airspeed and configuration.

Factors of a Stabilized Approach

- \Rightarrow Maintain a specified descent rate.
- \Rightarrow Maintain a specified airspeed.
- \Rightarrow Complete all briefings and checklists.
- \Rightarrow Configure aircraft for landing (gear, flaps, etc).
- ⇒ Maintain the correct altitude levels (e.g., 500 feet for VMC approach; 1,000 feet for IMC).
- ⇒ Ensure only small changes in heading/pitch are necessary to maintain the correct flight path.

Go-Around for Safety

If these factors are not met, the approach becomes "unstabilized," which means a go-around for another attempt at landing.

If you choose to continue with an unstabilized approach, you risk landing too high, too fast, out of alignment with the runway centerline, or otherwise being unprepared for landing. These situations can result in loss of control of your aircraft.

Are Stabilized Approaches *Always* Safer?

Yes, if you've incorporated the checklists and are prepared for a safe landing. It's a good idea to execute a go around if your checklists are not completed. Your safety depends on your ability to focus on safely touching down.

Tips for a Stabilized Approach

- ⇒ Pay attention to the wind in traffic pattern operations, especially on the base to final turn.
- ⇒ Adjust your stabilized approach guidelines to your type of aircraft based on manufacturer's guidance.
- ⇒ Aircraft should be configured for landing at some predetermined distance from the airport or altitude, after which only small corrections to pitch, heading, and power setting should be made.
- \Rightarrow If not stabilized, go around.

Resources

Airplane Flying Handbook, chapter 8 http://1.usa.gov/18orxyp



www.FAASafety.gov