



**Federal Aviation
Administration**

Loss of Control Series

The Stabilized Approach and Go Around

Presented to: NTSB Safety Seminar

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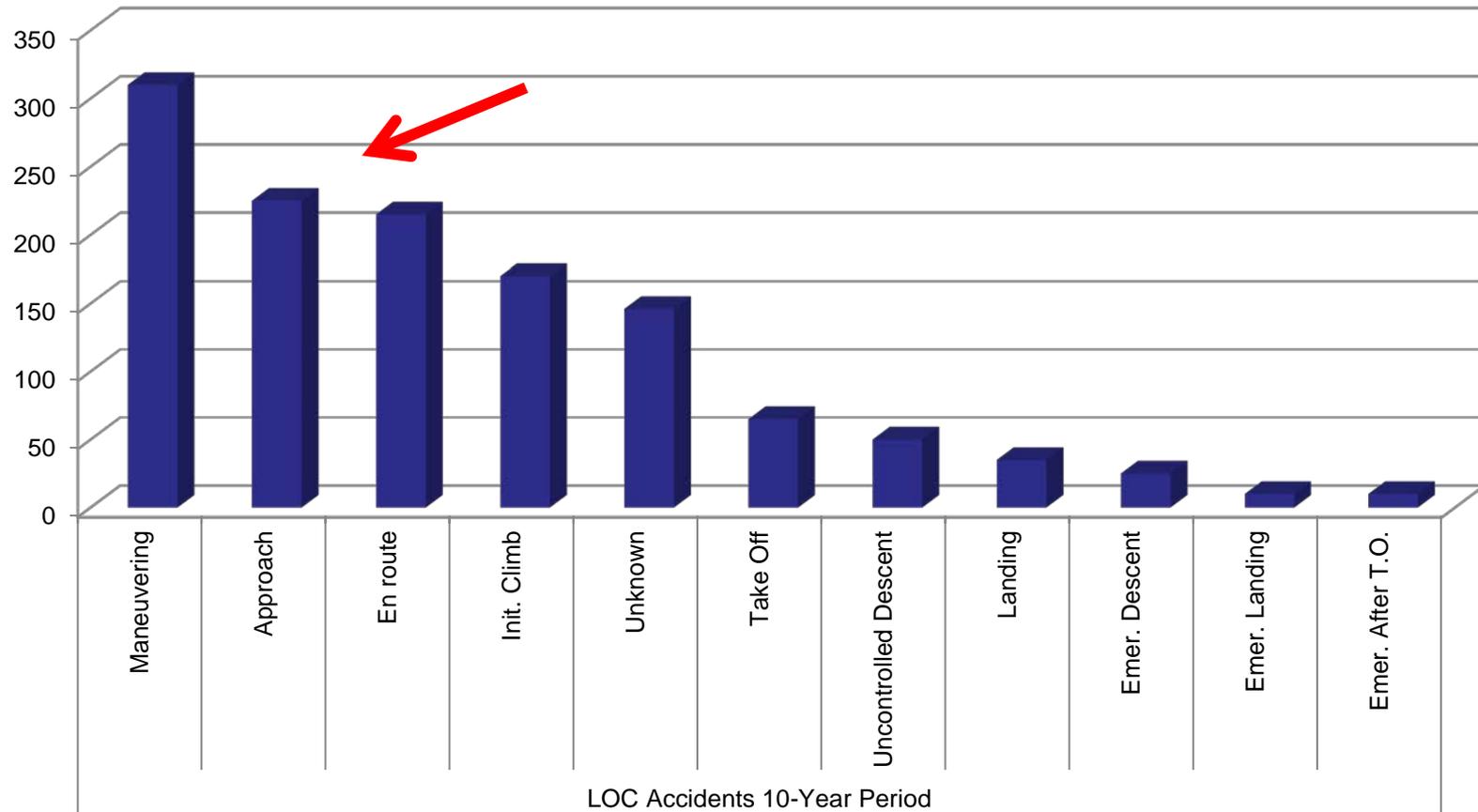




Overview

- **Loss of Control Accidents**
- **Loss of Control Work Group Recommendations**
- **Stabilized Approaches**
- **Go-arounds**
- **Tips and Tricks**

Fatal LOC Accidents 2001-2010





LOC Workgroup Findings

- Lack of single – pilot CRM skills



Un stabilized approaches



Inappropriate go-around procedures

- Flight after extended periods of not flying
- Insufficient transition training



Over reliance on automation

- Flight after use of drugs



Lack of Aeronautical Decision Making Skills

Instruments and VFR



Parameters - IFR

- **Stabilized by 1000 feet above touchdown elevation.**
 - On correct flight path
 - Small corrections to maintain
 - On speed
 - 1.3 VsO
 - +10/-0 (for 60 kt VsO = 78 knots)
 - Descent
 - On Glide Slope/VASI
 - 1000 fpm or less
 - In landing configuration
 - Landing checklist complete



Parameters - VFR

- **Stabilized by 500 feet above touchdown elevation.**
 - On correct flight path
 - Small corrections to maintain
 - On speed
 - 1.3 VsO
 - +10/-0 (for 60 kt VsO = 78 knots)
 - Descent
 - On Glide Slope/VASI
 - 1000 fpm or less
 - In landing configuration
 - Landing checklist complete



Read the book

- **Pilot's Operating Handbook**
- **Performance Charts**
- **Speeds for safe operation**
- **Emergency procedures**
- **Systems**



De stabilizing factors

- **Excessive Speed**
- **Excessive Altitude**
- **Maneuvering**
- **ATC and traffic**



It's hard to say, "unable."

- **Skilled**
- **Competent**
- **Adaptable**
- **Accommodating**
- **Rise to the Occasion**
- **Mission Oriented**
 - Git er done



Part of the problem?

- **CFI's can salvage student approaches**
- **Taking control can:**
 - Salvage the landing or approach
 - Save time and money
 - Keep the training on schedule
 - Impress the student
 - And maybe the boss
- **Sends the wrong message**
 - Let the student go around
 - Validate their good judgment



So when do I go around?

- **Whenever the approach becomes unstable**
 - At or below 1000 ft – IFR
 - At or below 500 ft – VFR
- **Whenever a landing can't be made**
 - Runway out of service
 - Traffic on runway
- **Make the decision early**
 - Stick to it
 - Changing your mind is destabilizing



Go-around & Missed Approach Priorities

- **Aviate**

- Maintain aircraft control
- Arrest descent
- Apply climb or level flight power
 - Configure for climb or level flight



•Go-around & Missed Approach Priorities

• Navigate

- IFR Continue to missed approach point then
 - Fly the missed approach procedure or
 - Follow ATC instructions
- VFR Continue to runway threshold & climb to pattern altitude then
 - Maneuver to remain in or reenter pattern or
 - Follow ATC instructions



•Go-around & Missed Approach Priorities

- **Communicate**

- IFR

- Tower or local traffic advisory frequency
 - ATC – state intentions

- VFR

- Tower or local traffic advisory frequency



The Automation Paradox





Tips and Tricks

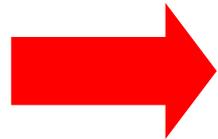
- **Plan for the miss or go around**
- **Preset the frequencies you'll need**
- **Manage Distractions**
- **Practice missed approaches & go-arounds**
- **Seek refresher training**
 - Annually
 - Wings Pilot Proficiency Program
 - When returning to flying after period of inactivity





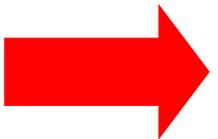
Stabilized approaches are essential to safe _____ flying.

A. Landing



B. Instrument

C. Private

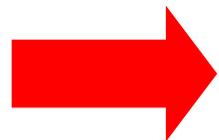


D. VFR



After you begin a go around you can change your mind but only once:

A. True

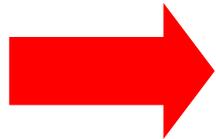


B. False



Flight Instructors should demonstrate how to salvage unstable approaches.

A. True



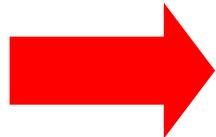
B. False



The order of priority in executing a missed approach or go-around is:

A. Communicate, aviate, navigate

B. Aviate, communicate, navigate



C. Aviate, navigate, communicate



Good practices to achieve stability are:

- A. Manage Distractions**
- B. Seek Refresher Training**
- C. Pre-set frequencies**
- D. Practice missed approaches and go-arounds**
- E. Participate in “Wings”**
-  **F. All of the above**



Questions?

