

# Unstabilized Approaches Revisited



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In this edition of *US AIRWAVES*, you are going to see several articles about unstabilized approaches. There is a reason for that: they are back. Not only have the numbers shown an increase from the data we see from our Flight Operations Quality Assurance (FOQA) program, we also had several operational incidents that resulted from unstabilized approaches.

For review, what defines a stabilized approach? The *Flight Operations Manual* is very clear on this. Paragraph 5.10.8 on page 5-38 states:

**Stabilized Approach.** An approach where the aircraft is:

- on a desired glidepath (visual or electronic),
- at a relatively constant rate of descent,
- at the proper approach speed with engines spooled up,
- in trim, and
- in an approved landing configuration.

It goes on to say that a go-around must be executed if not in a stabilized condition by 1,000 feet in IMC conditions or by 500 feet in visual conditions.

When one reviews the worldwide airline accident statistics, you'll find the number one category of accidents is Controlled Flight Into Terrain (CFIT). Approach and Landing (ALA) accidents, which is a subcategory of CFIT, yields the most fatalities of any aircraft accident group. While not every unstabilized approach neces-

sarily ends in an ALA accident, almost without fail, most of these accidents began with an unstabilized approach.

There are a few common threads in unstabilized approaches. Most occur in visual conditions. Many occur when there has been a last-minute runway change. Often they occur at the end of a long duty day. All involve poor CRM skills among the crewmembers.

So what can we as airmen do to prevent an unstabilized approach?

1. Maintain awareness—Know the weather (e.g., tailwind) and type of approach being assigned by ATC, tailwinds, etc.
2. “Fly the Way You Train, Train the Way You Fly”—This old adage applies all the time. The procedures in Chapter 18 of your Pilot’s Handbook should work regardless of the conditions or types of approaches being flown.
3. Know your personal limitations—If you are new to a particular aircraft type, be a little more conservative (just getting stabilized at 500 feet on your first leg off of IOE might not be prudent).
4. Fly your airplane—Don’t let time pressures or ATC rush you into an approach if you are not ready.
5. Use your CRM skills—If you are uncomfortable with the way the approach is going, say something to your other crewmember(s).

And finally, if you find yourself in an unstabilized approach, just GO AROUND.

The need to execute a go-around is NOT a reflection on your ability as a pilot. It is NOT a form of failure. It is NOT going to lead to disciplinary action from the Company or enforcement action from the FAA. A go-around is a necessary tool we must occasionally use to execute our duties as professional airmen.

### **Don't forget your dispatcher**

Often in our desire to keep the metal moving, we forget about the role of our dispatcher in the scheme of things. Remember, under FAR 121, the dispatcher has a joint role and responsibility for the operation of the flight.

It's always a good idea to coordinate all maintenance, ATC, MEL concerns, etc., directly through your dispatcher. Make him or her your single point of contact for all activities pertaining to your flight.

A brief phone call to your dispatcher prior to the flight can bring you up to date on any last-minute items that may not be a part of your paperwork. En route, the use of ACARS to communicate any ATC reroutes or maintenance requests at your destination can go a long way to enhancing both the efficiency and safety of your flight.

### **Call your ALPA safety rep**

It has been written before, and cannot be emphasized enough, that if you are ever involved

in any sort of accident or incident, no matter how minor it may seem, do not talk to anyone until you have contacted ALPA. Something as simple as a low-speed rejected takeoff can turn into a regulatory nightmare for you if the paperwork and notifications are not completed correctly and in a timely manner.

A case in point: We recently had an incident that seemed rather benign involving a flight control problem. The crew wrote it up, didn't talk to anyone, and went on their way. It turned out the NTSB was VERY interested in this particular problem, as a similar malfunction had led to a serious accident with loss of life several years ago. Over eight hours passed before we were able to track down this crew.

It's easy to find us: Our contact numbers should be on a card behind your ID. We're also in the gray sheets of the *US AIRWAVES*, on a bright orange card in your Jepp Manual, and in *Safety On Line*.

So whether you are a line pilot, a check pilot, or a chief pilot, we are available to help you seven days a week, 24 hours a day. It could be the most important phone call you ever make. It certainly is the easiest.

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## ***LOSA Is Coming***

One important tool that an airline can employ to measure the effectiveness of its safety programs is the line audit. Sometimes these audits are performed by outside firms such as the FAA, and sometimes management accomplishes them internally. Beginning in October, US Airways will conduct such an internal audit utilizing a program called LOSA, or Line Orientation Safety Audit.

The basics of the LOSA program were developed by NASA and the University of Texas under the direction of Dr. Robert L. Helmreich, recognized as one of the world's leaders in conducting flight deck human factors research. One of the Company's main goals for this audit is to use the findings to tailor policies, proce-

dures, and the operational environment in order to maximize safety and efficiency for our crewmembers.

Specially trained US Airways pilots from both the check airmen ranks and ALPA will conduct this audit with jumpseat observations. The important thing is that these are NOT check rides. These jumpseat observations are completely non-jeopardy. The observers will be there simply to collect data, not to critique or discipline crews. By seeing what is really happening on the line, the strengths and weaknesses of our system can be identified, and adjustments can be made, which in turn will make our system safer for us to work in.

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### ***B-737 Rudders – The Beginning of the Final Chapter***

As a result of the NTSB investigation into the USAir 427 accident, an engineering test and evaluation board was formed to conduct a failure analysis of the rudder actuation and control system of the B-737. Recently this board completed its work and issued a report. In their report, they presented nine key findings and issued a series of both near- and long-term recommendations.

The Engineering Test and Evaluation Board (ETEB) report, which was released to the public in its entirety, identified a variety of items that are intended to be accomplished by Airworthiness Directives, along with some target dates. In the short term, the following items and their associated target dates were identified:

1. Implementation of a revised jammed rudder procedure—October 2000
2. Increased emphasis in training through the FAA to include pilot awareness of the need to write up a variety of rudder anomalies (not just major events)—November 2000
3. An update on standard maintenance inspections for latent failures in the rudder system—February 2001
4. Changes to the maintenance planning document and trouble shooting guide to improve maintenance personnel’s ability

to troubleshoot the system—March 2001.

In the long term, a redesign of the rudder is planned that will replace the current PCU with two independent PCUs, plus a backup. This design is not necessarily set in stone. The actual redesign is to be finalized by mid-2001 and certified in 2003, with retrofit to begin in 2003 immediately after certification. There is a target of a five-year retrofit schedule, based on the 2003 certification date. However, Boeing feels they can finish the retrofit by 2006.

The release of this report now moves us into the final chapter on the B-737 rudder saga. Last year, we were all very pleased with the findings of the NTSB when they issued their final report on USAir 427. This new report from the ETEB not only validated ALPA’s and the NTSB’s previous conclusions, but also quantified these findings in a very thorough and scientific manner.

We will be getting more information out to you about this report as we continue to analyze its contents. In the meantime, we continue to work with our own flight training and maintenance departments to see if there is more that can be done to enhance the safety of the B-737 in order to make a safe airplane even safer.

