



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

# InFO

Information for Operators

InFO 12007  
DATE: 4/16/12

Flight Standards Service  
Washington, DC

[http://www.faa.gov/other\\_visit/aviation\\_industry/airline\\_operators/airline\\_safety/info](http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/info)

*An InFO contains valuable information for operators that should help them meet certain administrative, regulatory, or operational requirements with relatively low urgency or impact on safety.*

**Subject:** Instrument Landing System (ILS) Fluctuations Caused by Movement through the ILS Critical Area

**Purpose:** This InFO reminds operators of the potential for erroneous glideslope, and/or localizer indications caused by movement of aircraft or equipment through ILS critical areas.

**Background:** Recently the Federal Aviation Administration (FAA) has received several reports from both pilots and air traffic controllers of instances of localizer, and/or glideslope fluctuations while the aircraft is navigating on the ILS. This well known phenomenon may occur when aircraft or vehicles are moving through the ILS localizer and/or glideslope critical areas, and is due to interference with the ILS signals. In several cases, the aircraft automation/autopilot followed ILS fluctuations causing the aircraft to pitch and roll excessively. Air Traffic Control (ATC) protects the ILS critical areas when arriving aircraft are inside the outer marker/final approach fix (FAF) on an ILS approach, and the reported ceiling is less than 800 feet or visibility is less than 2 miles. The ILS critical areas are not protected for aircraft outside the FAF. In conjunction with the guidance found in the Aeronautical Information Manual (AIM), pilots should be continually aware of the conditions under which the critical area protections are imposed, and whether or not the ILS fluctuations are likely caused by movement through the ILS Critical Area, or an actual equipment malfunction. In all cases it is **imperative** that the pilot maintain positive aircraft control whether or not the autopilot is engaged, and coupled to the ILS.

**Recommended Action:** Directors of safety, directors of operations, directors of training, chief pilots, fractional ownership program managers, training managers, and operators of aircraft should:

- Distribute ILS critical area information, reporting recommendations to ATC, and guidance to flightcrews.
- Emphasize positive aircraft control with or without the use of automation.
- Develop realistic training scenarios to include recognition, awareness, and operating procedures in relation to fluctuations of the localizer, and/or glideslope signal.

**Additional Reference:** For additional references, please see the following:

- Aeronautical Information Manual-Chapter 1-1-9, Chapter 2-3-5, Chapter 2-3-8.

**Contact:** Questions or comments regarding this InFO should be directed to Air Carrier Operations Branch, AFS-220, (202) 267-8166.