



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

# InFO

Information for Operators

InFO 10023  
DATE: 12/15/10

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:** Aircraft Wheel Assembly and Multiple Tie Bolt Failures

**Purpose:** This InFO advises operators to be aware of the potential of multiple tie bolt failures on aircraft wheels.

**Background:** The Federal Aviation Administration (FAA) continues to receive reports of incidences from industry of premature wheel tie bolt failures. This issue has even been addressed in an Airworthiness Directive (AD) 99-19-27, applicable to Boeing Model 737-100 to -500 series aircraft of which terminating action would have been accomplished by this date. Tie bolt failures have not been isolated to the B-737 aircraft, as wheel tie bolt failures have been reported involving other type of aircraft such as MD-88 and B-757.

**Discussion:** Most Aircraft Maintenance Manuals (AMM) call for specific visual inspections to ensure the integrity of tie bolts' cadmium plating, which if deteriorated could lead to a potential for corrosion to develop. They also provide a detailed non-destructive testing (NDT) inspection to detect for the presence of any cracks.

**Recommended Action:** Operators should use the internal data collected by Continuing Analysis and Surveillance System (CASS) in determining if reported tie bolt failures outside of their normally scheduled inspection intervals warrants additional action. Operators should ensure that their maintenance program addresses the proper inspection and installation procedures to ensure the integrity of the tie bolts.

**Contact:** Questions or comments concerning this InFO should be directed to Air Carrier Maintenance Branch, (AFS-330) at (202) 385-6402.