

ELT Inspections

Annual inspections should be required to ensure that emergency locator transmitters (ELTs) in general aviation aircraft have been mounted and retained according to manufacturer specifications, the U.S. National Transportation Safety Board (NTSB) says.

The NTSB recommended that the U.S. Federal Aviation Administration (FAA) require the inspections as part of annual aircraft maintenance inspections. The NTSB also said that the FAA should determine whether the ELT mounting requirements and retention tests specified by Technical Standard Orders (TSOs) C-91a and C-126 are "adequate to assess retention capabilities in ELT designs" and, if necessary, should revise TSO requirements to ensure proper retention of ELTs in the event of a crash.

In making the recommendations, the NTSB cited the Aug. 9, 2010, crash of a de Havilland Turbine Otter in a mountainous area near Aleknagik, Alaska. The pilot and four passengers, including former U.S. Sen. Ted Stevens of Alaska, were killed in the crash, and four other passengers received serious injuries.

Searchers located the wreckage about five hours after the crash. No ELT signals were detected by search aircraft or by satellites, and after the wreckage was found, a searcher observed

the ELT on the floor of the airplane. The NTSB said that it was "dislodged from its mounting tray [and] detached from its antenna" during the crash and that it "failed to transmit radio signals to alert personnel of the downed airplane."

If the ELT had remained attached to its mounting tray, "it is likely that the signal would have been detected soon after the accident, and search and rescue personnel could have been dispatched directly to the accident site hours earlier," the NTSB said.



U.S. National Transportation Safety Board

Seats for Lap Children

Safe seating for young children "should not be considered optional," U.S. National Transportation Safety Board (NTSB) Chairman Deborah A.P. Hersman said in marking the start of a yearlong effort to promote child passenger safety.

"The laws of physics don't change, whether you are on an airplane or in an automobile," Hersman said, calling on the U.S. Federal Aviation Administration (FAA) to require that all airplane passengers — including children younger than 2 years, who currently are permitted to travel on the lap of an adult — occupy a seat with appropriate safety restraints.

"The safest place for children younger than age 2 traveling on airplanes is in an appropriate child safety seat," Hersman said. "The era of the lap child on airplanes should come to an end."

She praised a U.S. Department of Transportation advisory committee for recognizing the risks associated with children being held by adults during flights but added that the committee's acknowledgement of the risk is not enough. Instead, she said the FAA should be directed to require "that every person, including our youngest children, be restrained appropriately for their age and size."



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Single European Sky

Six European nations have signed a pact seen as a step toward achieving the Single European Sky initiative.

Belgium, France, Germany, Luxembourg, the Netherlands and Switzerland agreed to establish the Functional Aerospace Block — Europe Central (FABEC).

A European Union news release said that several functional airspace blocks, or FABs, are being established to "put an end to the current fragmentation of European airspace and enable more efficient and shorter flights. This, in turn, will increase safety and reduce aviation's impact on the environment."

This agreement marks the creation of the third FAB; previous agreements created the U.K.–Ireland FAB and the Denmark–Sweden FAB.

Siim Kallas, European Commission vice president responsible for transport, said that the agreement should be "an inspiration for the other member states," which aim to have all functional airspace blocks in place by Dec. 4, 2012.

Loading Errors

Aircraft operators must develop and comply with a system of cross checks by load personnel, computer software and flight crewmembers to guard against safety occurrences involving the loading of high capacity aircraft, the Australian Transport Safety Bureau (ATSB) says.

An ATSB review of loading occurrences from July 2003 through June 2010 found that most such incidents are relatively minor and that aircraft performance has been affected in a "small number" of cases. The most frequently reported problem, the ATSB said, is "cargo locks not being raised."

Other occurrences cited in the ATSB review involved the crew of an Airbus A330 being surprised that their airplane was nose-heavy during takeoff, the discovery — as an airplane left the gate — of a baggage handler who had fallen asleep in the cargo hold while waiting for late baggage, and

the observation by ground personnel that the front wheel of an airplane was "almost off the ground during loading" because the airplane was tail-heavy.

"The process of loading, flying and then unloading an aircraft is quite complex. ... Sometimes the complex coordination involved in loading high capacity aircraft breaks down," the ATSB said.

Nevertheless, the agency added, "There are people, processes, procedures and engineering equipment used by aircraft and ground operators to control the risks to an aircraft from a loading perspective."

To help guard against common loading errors, the ATSB recommended comparing aircraft weight as recorded in the aircraft manual with the load-report weight, incorporating rules within load-control software to prevent the generation of incorrectly configured aircraft load sheets and



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using on-board aircraft weight sensors "as a cross check against weight and center of gravity calculations." In addition, flight crews should refuse to accept load sheets while the aircraft is still being loaded, the ATSB said.

Avionics Compartment Fires

The French Bureau d'Enquêtes et d'Analyses (BEA), citing fires in the avionics compartments of two Boeing 747-400s, has recommended that the European Aviation Safety Agency (EASA) and the U.S. Federal Aviation Administration (FAA) require the installation of a key part on the 747's ground power unit (GPU).

The fires occurred March 18, 2010, in a Thai Airways International 747 and April 8, 2010, in a Cathay Pacific Airways 747; both airplanes were at the gate at Paris Charles de Gaulle Airport.

In each instance, the fire began as passengers were disembarking, soon after the GPU was connected. Also in each instance, connectors and electric cables were severely damaged, and the structural characteristics of the fuselage were distorted by the heat from the fire, the BEA said.

The BEA concluded that the fires were caused by short circuits in the avionics compartment. Investigators determined that in the Cathay Pacific airplane, "one of the two GPU electrical connectors was incorrectly connected" and that the same problem likely occurred in the other airplane.

"The incorrect connection, associated with inappropriate actions by ground technicians, was the cause of the two



Adrian Pingstone/Wikimedia

incidents," the BEA said. "The design of the electrical connector guides, installed on Boeing 747-400s before 2003, allows this incorrect connection to occur."

Boeing developed a solution that calls for installing a different guide, and the company is unaware of any cases of misalignment in airplanes in which that guide has been installed. The BEA recommendation asks the EASA and the FAA to mandate the replacement.

Recommendations on Aviation's Future

An advisory committee has recommended to U.S. Transportation Secretary Ray LaHood that the federal government help pay for installation of NextGen equipment on airplanes as part of a plan for addressing the challenges facing the aviation industry in the United States.

The recommendation was one of 23 submitted to LaHood by the Future of Aviation Advisory Committee, established in April 2010 to identify ways of bolstering aviation safety, as well as the

strength and competitiveness of the aviation industry.

Other recommendations included proposals to incorporate safety standards into the planning for NextGen — the plan to overhaul the National Airspace System formally known as the Next Generation Air Transportation System — and to expand the sources of safety data available to the U.S. Federal Aviation Administration. Another recommendation calls for improving methods of predicting safety risks.



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The Department of Transportation will review the recommendations to determine if and how they should be implemented.

Firefighter-Transport Standards

Mission-specific operating standards should be developed for operations involving the transport of firefighters, including requirements for compliance with aircraft operating limitations, the U.S. National Transportation Safety Board (NTSB) says.

The NTSB cited the Aug. 5, 2008, crash of a Sikorsky S-61N after takeoff, when the helicopter lost power and crashed into trees and then into the ground near Weaverville, California, U.S. The pilot and eight passengers were killed, and the copilot and three other passengers were seriously injured in the crash, which destroyed the helicopter. The accident occurred as the helicopter crew was transporting firefighters out of the Trinity Alps Wilderness.

The NTSB issued 10 recommendations to the U.S. Forest Service, which had a contract with the helicopter operator for fire-fighting services. The recommendations included development of the mission-specific operating standards and a requirement that Forest Service contractors comply with these standards, as well as establishment of an oversight program to ensure contractor compliance.

The NTSB's 11 recommendations to the U.S. Federal Aviation Administration included a call for clarification of oversight responsibilities for public aircraft.



Scott Lin/U.S. Forest Service

In Other News ...

The European Commission's 16th update of the list of airlines **banned** in the European Union (EU) has been expanded to include all carriers from Afghanistan, along with Mauritania Airways; CAAS, based in Kyrgyzstan; and Afric Aviation, certified in Gabon. At the same time, nine carriers based in the Republic of Kazakhstan were removed from the list, and operating limitations were eased for one operator based in Ghana. ... The Australian Civil Aviation Safety Authority has finalized its overhaul of aviation **maintenance regulations** for regular public transport operations, which will be phased in beginning in June 2011.

Corrections ... An accident reported in the October 2010 issue ("Too Heavy to Fly," p. 59) incorrectly stated the location of a fatal crash involving a Cessna 208B. The accident occurred at Eros Airport in Windhoek, Namibia. ... In the November 2010 issue, an incomplete photo credit appeared on p. 10. The credit line should have read Dylan Ashe/Flickr.

We're Moving ... Flight Safety Foundation is moving. Our new address, effective Jan. 31, 2011, is:

801 N. Fairfax Street, Suite 400
Alexandria, VA 22314-1774 USA
Telephone numbers will remain the same.

Compiled and edited by Linda Werfelman.