

Improvements Sought in Maintenance Oversight

The U.S. National Transportation Safety Board (NTSB), citing maintenance problems that preceded the Dec. 19, 2005, fatal crash of a Grumman Turbo Mallard G-73T, has recommended actions to verify that maintenance programs address recurring or systemic discrepancies.

The NTSB recommended that the U.S. Federal Aviation Administration (FAA) “verify that the maintenance programs of commercial aircraft operators include stringer criteria to address recurring or systemic discrepancies, including, if necessary, further analysis of the discrepancies through a comprehensive engineering evaluation.”

A second recommendation said that the FAA should “identify the systemic deficiencies in the maintenance program oversight procedures that led to [the 2005] accident and modify those procedures to ensure that the maintenance program

plans for commercial operators are adequate to ensure the continued airworthiness, both structural and otherwise, of the operator’s fleet.”

The accident occurred when a Chalk’s Ocean Airways amphibious airplane struck the water in a shipping channel adjacent to the Port of Miami after takeoff from the Miami Seaplane Base for a flight to Bimini, Bahamas. All 20 people in the airplane were killed, and the airplane was destroyed.

The NTSB said that the probable cause of the crash was the “in-flight failure and



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separation of the right wing during normal flight.” The failure resulted from “the failure of the Chalk’s Ocean Airways maintenance program to identify and properly repair fatigue cracks in the right wing and the failure of the ... FAA to detect and correct deficiencies in the company’s maintenance program,” the NTSB said.

New Navigation Options

Researchers are seeking options for the introduction of safer instrument navigation systems using global navigation satellite system (GNSS) approaches with vertical guidance.

The Civil Aviation Safety Authority of Australia (CASA) has commissioned a study to identify the best and most affordable technology for the approaches, which will incorporate vertical guidance into information already available from the GNSS.

“The major airlines with the advanced navigation technologies of their new generation aircraft ... are already using this type of approach around Australia and overseas,” said Ian Mallett, a CASA navigation systems specialist. “It is now time to make vertical guidance available to anyone with the technology in their aircraft and the training to fly using the instruments.”

The International Civil Aviation Organization (ICAO) and Flight Safety Foundation have said that approaches with vertical guidance are seven or eight times safer than straight-in approaches without vertical guidance (see related story, p 20).

Study results, expected in about six months, will be shared with the international aviation industry, CASA said.



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Runway Assignment

The Airbus A380 will be permitted to operate on standard-width runways of about 150 ft/45m in the United States, the U.S. Federal Aviation Administration (FAA) says. The European Aviation Safety Agency (EASA) issued a similar decision late in 2006 (ASW, 7/07, pp. 46-49).

James J. Ballough, director of the FAA Flight Standards Service, told Airbus in a letter dated July 19, 2007, “This aircraft has been shown to be safely controllable and to be compliant with applicable airworthiness requirements when operating on runways with a width of 45 meters (150 feet) or more.”

Airbus said that the FAA’s approval was a result of “a unique operational evaluation, including airport compatibility checks, route-proving campaigns and dedicated flight-testing together with the authorities.”

New Push for Safety

Indonesia has agreed to restructure its Directorate General of Civil Aviation as part of an effort to achieve quick and wide-ranging improvements in its civil aviation system.

In an agreement with the International Civil Aviation Organization (ICAO), Indonesia also pledged to enact legal measures to better comply with international safety obligations, to ensure that the required human and financial resources are available to implement the improvements, and to correct aviation safety deficiencies identified by ICAO and other organizations.

“There is an urgent need to implement a concrete, realistic and achievable plan of action,” said ICAO President Roberto Kobeh González.

The agreement also calls for Indonesia to implement a “proactive and systemic management of safety” to

comply with national and international safety standards and industry best practices, ICAO said.

Several major aviation accidents have occurred in Indonesia in recent months, and the U.S. Federal Aviation Administration — in a study commissioned by the Indonesian government — has said that the Indonesian Directorate General of Civil Aviation is not in compliance with ICAO aviation safety standards for oversight of air carrier operations.



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Bird Strike Study

Aircraft operated by Taiwan-based airlines were involved in 1,009 reported bird strikes from 2002 through 2006, according to a report by Flight Safety Foundation–Taiwan.

Of that number, 125 strikes caused damage to the aircraft, and 26 resulted in “abnormal situations” in which flight crews were forced to return to the departure airport, reject a takeoff or conduct an emergency landing, the report said. Eighty-two of the 1,009 incidents occurred outside Taiwan but involved aircraft operated by Taiwanese companies.

The greatest number of bird strikes reported in a single year was 237, reported in 2003. The lows were 138 strikes, reported in 2005, and 151 strikes, reported in 2006.

More TAWS Training Urged

Flight crews of Airbus A320s should be reminded periodically of the necessity for an immediate response to any warning from a terrain awareness and warning system (TAWS) during “instrument flight or flight in difficult weather conditions or flight in the mountains,” said the final report on the May 3, 2006, crash of an A320 into the Black Sea.

The report by the Air Accident Investigation Commission of the Interstate Aviation Committee said that civil aviation authorities of countries within the Commonwealth of Independent States should ensure that the reminders are delivered to A320 crews through training exercises. The authorities also should consider extending the recommendation to crews of other types of aircraft, the report said.

Another of the nearly two dozen recommendations called for the aviation authorities and industrial and scientific

research groups to “organize and conduct research into the conditions under which a crew may lose spatial orientation and/or upset aircraft attitude may develop, and to issue practical recommendations to enhance flight safety.” The recommendation said that the research should emphasize the evaluation of illusions related to in-flight acceleration.

The A320, operated by Armavia, was destroyed and all 113 occupants were killed in the crash in Sochi, Russia, following a flight from Yerevan, Armenia. The crash occurred as the crew conducted the missed approach segment of an instrument

landing system approach and attempted a climbing maneuver in night instrument meteorological conditions below the established minimums for the landing runway.

The investigation commission said that the captain’s incorrect control inputs resulted in an “abnormal situation” and that his subsequent actions “were insufficient to prevent development of the abnormal situation into the catastrophic one.”



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Cautious Footwork

Embraer Legacy pilots risk inadvertently placing their transponders in standby mode during flight if they bump them while placing their feet on a footrest just below the instrument panel, the U.S. Federal Aviation Administration (FAA) says.

In Safety Alert for Operators (SAFO) 07005, the FAA said that pilots might not notice the corresponding standby indication on the pilot flight display, which would be indicated in white letters, which are “not as noticeable as differently colored caution or warning indications.”

The FAA said that an inadvertent change in VHF radio frequencies also might result from a pilot’s foot contacting the radio management unit.

“Switching a transponder with a functioning traffic-alert and collision avoidance system (TCAS) to standby mode renders the TCAS ineffective,” the SAFO said. “Two airplanes equipped with TCAS would fail to see each other if they were on a collision course. Pilots could presume TCAS was operating normally if they failed to notice the subtle “TCAS OFF” indication on the pilot flight display.”

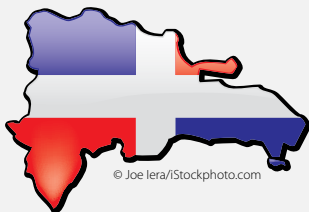
The safety alert recommended that training centers and operators ensure the pilots are aware of the hazard, which the FAA said was discovered during an investigation. The SAFO did not mention the subject of the investigation.



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In Other News ...

The U.S. Federal Aviation Administration, which audits civil aviation authorities worldwide for compliance with International Civil Aviation Organization safety standards, has raised the safety rating for the **Dominican Republic** to Category 1



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— in compliance. ... More than half of all accidents involving private airplane operations in **Australia** during a five-year period occurred during the landing phase, a study by the Australian Transport Safety Bureau says. In comparison, helicopter accidents were distributed fairly evenly among

takeoff, cruise, maneuvering and landing phases. ... The **European Civil Aviation Conference**, in its annual Safety Assessment of Foreign



Aircraft (SAFA) report, says that during 2006, 34 European member states conducted 7,458 ramp inspections of 822 operators from 127 states. The report says that, although the average number of findings per inspection increased in 2006, the increases were in items considered minor findings and were accompanied by decreases in the number of significant and major findings.

Icing Rules

New airworthiness standards for performance and handling characteristics of transport category airplanes in icing conditions will take effect for U.S. transport category airplanes in October.



U.S. National Aeronautics and Space Administration

The U.S. Federal Aviation Administration (FAA) published its final rule on the subject on Aug. 8, 2007; the rule takes effect Oct. 9.

The FAA said that the action is designed to “improve the level of safety for new airplane designs when operating in icing conditions and [to harmonize] the U.S. and European airworthiness standards for flight in icing conditions.”

Compiled and edited by Linda Werfelman.