Safety News

Quality Assurance Programs Sought

elicopter air tour operators should establish systems for the continuous analysis of the performance and effectiveness of their inspection and maintenance programs and provide model-specific training for their maintenance personnel, the U.S. National Transportation Safety Board (NTSB) says.

In a series of recommendations to the U.S. Federal Aviation Administration (FAA) and the Tour Operators Program of Safety (TOPS), the NTSB also called for the FAA to work with TOPS and other safety programs to establish guidance on the development and implementation of inspection and maintenance quality assurance programs.

The NTSB's recommendations followed the preliminary investigation of the fatal March 8, 2007, crash of a Heli-USA Airways Aerospatiale AS 350BA in Princeville, Hawaii, U.S. The pilot had reported hydraulic problems shortly before the crash and said that he planned to perform a run-on landing at Princeville Airport, the NTSB said. As he flew toward the airport, the helicopter became uncontrollable, the main rotor blades struck the ground, and the helicopter broke into several pieces. The pilot and three passengers were killed in the crash; the three other passengers were seriously injured. The investigation was continuing.

The NTSB also cited the Sept. 11, 2002, hydraulic failure of an Aerospatiale AS 350BA, also operated by Heli-USA, during its return from the Grand Canyon to McCarran International Airport in Las Vegas. The pilot diverted the helicopter to Grand Canyon West Airport in Peach Springs, Arizona. The helicopter was substantially damaged in the hard landing, and one passenger received minor injuries. The NTSB said that the probable cause of that accident was the pilot's "failure to maintain adequate airspeed and main rotor speed during the landing approach, as prescribed in the hydraulic pump failure emergency procedures found in the rotorcraft flight manual." A



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contributing factor was "the failure of the hydraulic pump due to excessive coupling spline wear, which was caused by the application of insufficient lubrication by the operator's maintenance personnel during pump installation."

The NTSB said that the investigation revealed safety issues related to the operator's "ineffective maintenance, inadequate quality assurance programs, model specific maintenance training and the ... FAA's lack of surveillance ... to identify maintenance nonconformance."

Similar issues were found in other air tour operators' maintenance programs, the NTSB said.

Surge in Bird Strike Reports

he number of bird strikes reported annually in Australia increased 60 percent between 2002 and 2006, although damaging bird strikes remained rare, according to a report by the Australian Transport Safety Bureau (ATSB).

Some 5,103 bird strikes were reported during the five-year period; of that number, 383 bird strikes, or 7.5 percent, were described as damaging strikes. "More importantly, bird strike events resulting in two-engine ingestion that have the potential to lead to an accident are even rarer at 0.15 percent (eight of 5,103)," the report said.

The rate of bird strikes per 10,000 aircraft movements increased from about one in 2002, when 750 bird strikes were reported, to two in 2006, when 1,200 strikes were reported. However, the rate of damaging bird strikes has remained the same since the 1980s, the report said.

The report attributed the increased number of reported bird strikes to several factors, including an increase in aircraft movements; the establishment in 2003 of the Australian Animal Wildlife Hazard Group, which disseminates information about bird strikes and encourages the reporting



Source: Australian Transport Safety Bureau

of strikes; and changes in the people and systems that report strikes.

Analysis of bird strike data dating to 1969 indicated that reporting of strikes has varied because of changes in perceptions of the importance of reporting, resources and legislation, the report said.

"The evidence for the increased reporting being responsible for the change in the number of bird strikes recorded is likely, rather than a change in the actual number of bird strikes," the report said.

Crashes Prompt Calls for EMS Safety

Six crashes in two months involving emergency medical services (EMS) helicopters operated in the United States — including a midair collision of two Bell 407s on approach to the same hospital helipad — has prompted the association representing the air medical transport industry to call for a "rolling safety stand down."

The Association of Air Medical Services says the action would allow for a renewed emphasis on safety while EMS operators continue to provide patient services.

The association, which planned a daylong safety summit in late July aimed at identifying strategies for improving the safety culture for EMS operations, also has reiterated its support for legislation and regulatory changes to "promote a safe transport environment" for patients and crewmembers.

U.S. Federal Aviation Administration (FAA) data show that the number of helicopter EMS accidents nearly doubled between the mid-1990s and a rapid growth period from 2000 to 2004, the year that the FAA began a government-industry partnership aimed at safety culture improvements.

The FAA says that "significant short-term safety gains" could result from actions such as risk-management training for flight crews and better use of night vision goggles and other technological advances.



Safety Pact

he European Union and the United States have formally agreed to a plan to improve aviation safety and reduce related costs.

The safety agreement, signed by Antonio Tajani, European Commission (EC) vice president for transport, and Robert Sturgell, acting administrator of the U.S. Federal Aviation Administration (FAA), calls for mutual recognition of aviation safety certificates.

It also provides for "the exchange of information on safety findings, including aircraft design and manufacturing, continued airworthiness and repair station oversight," the FAA said.

"The agreement will result in better harmonized safety systems on both sides of the Atlantic, as well as less cumbersome technical and administrative procedures for the recognition of certificates," the European Commission said. "It is expected that this will entail further improvement in safety levels and reduce costs by several millions of euros every year for European and U.S. manufacturers alike. These savings should in turn be reflected in fares for passengers."

A bilateral board will oversee implementation of the agreement; the board also will serve as a forum for discussion of safety issues.

Fire Fighting Foam

he U.K. Civil Aviation Authority (CAA) has begun an international research effort to improve the fire fighting foams used against aircraft fires.

Recent developments in chemical research may now allow for foams that could be used in smaller quantities, which could result in lighter-weight and more efficient fire fighting vehicles, the CAA said.

"This has the potential to enhance safety significantly and benefit the aviation industry and the traveling public," said Simon Webb, an airport fire specialist in the CAA Safety Regulation Group.

The goal is to develop foam-testing methods that will allow the production of foam that complies with new international regulatory standards. Existing standards were developed in the 1970s.

The research is being conducted on behalf of the International Civil Aviation Organization and funded by the CAA and Transport Canada.



Sgt John Jung/U.S. Air Force

FAA Faulted for Oversight Lapses

The U.S. Federal Aviation Administration (FAA) showed "serious lapses" in air carrier oversight when it "developed an overly collaborative relationship" with Southwest Airlines, according to a preliminary report by the U.S. Department of Transportation Inspector General (IG).

The report, which presents interim results of a review requested by the chairman of a congressional committee, said that the FAA inspection office overseeing Southwest repeatedly allowed the airline to self-disclose violations of airworthiness directives (ADs). Selfdisclosure allows operators to avoid penalties for their actions.

The report said that, according to Southwest, the airline "discovered [on March 14, 2007,] that it had violated the AD requiring fuselage inspections ...

and notified an FAA principal maintenance inspector (PMI) the following day. Although FAA requires air carriers to ground noncompliant aircraft and [requires] its inspectors to ensure that carriers comply, the inspector did not direct [Southwest] to ground the 46 affected aircraft."

The airline operated the noncompliant aircraft on 1,451 flights over eight days after notifying the FAA of the problem — and operated them in violation of the AD for as long as nine months, the report said.

The FAA has begun addressing the Southwest violation with a review of AD compliance at the airline, and at other air carriers, and with proposals to fine Southwest more than US\$10 million. The agency says that it agrees with the IG's findings in "virtually every area" and



has begun implementing many of the recommendations included in the report.

The recommendations include implementation of management controls over the voluntary disclosure reporting program such as implementing and enforcing "a process for second-level supervisory review of self-disclosures before they are accepted and closed acceptance and closure should not rest solely with one inspector."



Investigators are trying to determine the cause of the fire that burned through the top of this ABX Air Boeing 767 cargo airplane while it was parked at San *Francisco International Airport. The fire broke out just behind the cockpit as the* two-member crew was about to start the engines. Both crewmembers escaped without injury, and the airplane received substantial damage from the blaze, the U.S. National Transportation Safety Board said.

In Other News ...

resident Omar al-Bashir of Sudan has grounded all Antonov and Ilyushin aircraft, except for military airplanes, and removed the head of the Civil Aviation Authority (CAA) following four fatal crashes in two months, published reports said. ... The International Federation of Air Line Pilots' Associations (IFALPA) and the International Air Transport Association (IATA) are conducting an assessment of "communication availability and reliability in Africa as a provision for RVSM [reduced vertical separation minimum] implementation." RVSM allows for the reduction of vertical separation from 2,000 ft to 1,000 ft above Flight Level 290 (approximately 29,000 ft). ... A survey conducted for the Civil Aviation Safety Authority of Australia says 78 percent of Australians are "completely confident" or "very confident" about safety on flights between Australian capital cities.

Compiled and edited by Linda Werfelman.