

Check, and Re-Check

The U.S. Federal Aviation Administration (FAA) should require air carrier aircraft operators to establish procedures requiring flight crews to “positively confirm and cross-check the airplane’s location at the assigned departure runway” before beginning a takeoff, the U.S. National Transportation Safety Board (NTSB) says.

The NTSB issued the safety recommendation as a result of its ongoing investigation of an Aug. 27, 2006, accident in which a Comair Bombardier CRJ100 crashed during a predawn takeoff in Lexington, Kentucky, U.S. Of the 50 people in the airplane, 49 were killed, and one — the first officer — was seriously injured.

“The airplane had been cleared by air traffic control (ATC) for takeoff on Runway 22, which is 7,003 ft [2,136 m] long; however, the crew mistakenly taxied onto Runway 26, which is 3,500 ft [1,068 m] long, and attempted to take off,” the safety recommendation says. “The cockpit voice recorder (CVR) did not record any indication that either pilot was confused about the aircraft’s position, but no statements were made confirming the aircraft’s position. CVR and flight data recorder data indicate that, as the airplane accelerated during the initial takeoff roll, both pilots noted the absence of edge lights on the runway but continued the takeoff roll.”

The safety recommendation says that flight crews of aircraft operated under U.S. Federal Aviation Regulations Part 121 should

confirm their location before the aircraft crosses the hold-short line for takeoff.

An accompanying safety recommendation says that the FAA should require Part 121 operators to provide “specific guidance to pilots on the runway lighting requirements for takeoff operations at night.”



Thom Airfield Lighting

MU-2B Training Proposal Revised

The U.S. Federal Aviation Administration (FAA) last month clarified some of the special training requirements that it proposed in September for Mitsubishi MU-2B pilots (see ASW, 1/07, p. 32). In a supplemental notice of proposed rule making, the FAA provided the following revised definitions:

- “*Initial/transition training* means the training that a pilot is required to receive if that pilot has fewer than 50 hours of documented flight time manipulating the

controls, while serving as pilot-in-command [PIC], of [an MU-2B] in the preceding 24 months;

- “*Requalification training* means the training that a pilot is: eligible to receive in lieu of initial/transition training if that pilot has at least 50 hours of documented flight time manipulating the controls, while serving as [PIC], of [an MU-2B] in the preceding 24 months; [or] required to receive if it has been more than 12

months since that pilot successfully completed initial/transition, requalification or recurrent training. Successful completion of initial/transition training can be used to satisfy the requirements of requalification training; [and,]

- “*Recurrent training* means the training that a pilot is required to have satisfactorily completed within the preceding 12 months. Successful completion of initial/transition or requalification training within the preceding 12 months satisfies the requirement of recurrent training. A pilot must successfully complete initial/transition training or requalification training before being eligible to receive recurrent training”

— ML



Mitsubishi Heavy Industries America

Airprox Attributed to Unapproved Descent

The failure of a Tupolev Tu-154M flight crew to comply with air traffic control instructions resulted in an airprox — or aircraft proximity — event involving an Airbus A319 near Zurich, Switzerland, the Swiss Aircraft Accident Investigation Bureau (AAIB) said.

The radar recording showed that, at the closest point, the two airplanes had an altitude difference of 300 ft and a lateral separation of 1.5 nm (2.8 km).

The final AAIB report on the Feb. 14, 2005, event said that the Tu-154M was being ferried from Warsaw, Poland, to Zurich and was nearing Zurich when an air traffic controller told the pilots to descend from Flight Level (FL) 170 (approximately 17,000 ft) to FL 150. At the time, the A319, en route to Zurich from Cologne/Bonn, Germany, was in level flight at FL 130.

The report said that the Tu-154M crew believed that their clearance was for a descent to FL 110. Their airplane descended to FL 133 before they began a climb back to FL 140, as directed by the controller.

Each flight crew received a traffic advisory from the on-board traffic-alert and collision avoidance system (TCAS) and established visual contact with the other airplane; the controller received a warning from the short-

term conflict alert system, the report said.

“It must remain open as to why the crew of the Tu-154M was of the opinion it had received an instruction to descend to FL 110,” the report said. However, one possibility was that the controller’s instruction repeated the word “one” several times, and “given the many ‘ones,’ during execution, it could subsequently have caused the crew to erroneously continue its descent,” the report said.



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New Life for Aging Helicopters

The U.S. Federal Aviation Administration has begun a five-year program to apply aging aircraft reliability techniques to helicopters. The project also will evaluate the characteristics of new composite materials in a variety of operating conditions.

“The margin for error in flying a helicopter, especially in rescue missions, is very slim,” said Sankaran Mahadevan, a Vanderbilt University professor of civil and environmental engineering who is the project’s principal investigator. “We want to make sure that helicopter pilots don’t have to deal with equipment failure, such as metal fatigue, on top of the challenges of shifting winds, unseen obstacles like power lines, birds flying into the blades and space limitations of maneuvering in tight spots.”

Taking Steps to Fix Faulty Generators

The U.K. Air Accidents Investigation Branch (AAIB) has issued a series of safety recommendations as a result of its preliminary investigation of a Sept. 15, 2006, incident involving the in-flight failure of an auxiliary power unit (APU) generator on an Airbus A319-111. The airplane had been dispatched with the APU generator on line in place of the faulty no. 1 main generator, under provisions of the operator’s minimum equipment list.

During cruise on the flight from Alicante, Spain, to Bristol, England, the airplane was near Nantes, France, when the APU generator disconnected, the AAIB report said. As a result, power was lost for some flight instruments and all radio telephony (RTF) communication, and the crew was unable to manually reconfigure the electrical system to recover the services. Instead, they selected the emergency transponder code and continued the flight in accordance with

the flight plan. At Bristol, the crew used the emergency landing gear extension system and landed the airplane safely.

The AAIB issued safety recommendations calling for Airbus to revise the “fault-monitoring logic of the generator control unit [on A320-series aircraft, from which the A319 was derived] to prevent the monitoring system from incorrectly interpreting a fault within the [unit] as an external system fault” and to modify the electrical system to “automatically transfer the electrical feed to the AC essential bus bar in the event of the loss of the no. 1 main AC bus bar.”

Two other recommendations called on Airbus to advise operators of A320s in which RTF communications rely on a single bus bar that they could experience a loss of all RTF communications and to modify the digital audio management units to ensure that power supplies for RTF communications have “an improved level of segregation.”

Wire Watch

Counting statistics showing that nearly 75 percent of wire strike accidents and incidents involve wires that pilots had previously identified, the Civil Aviation Safety Authority (CASA) of Australia is warning aerial agriculture pilots to be “extra vigilant” about the risks of wire strikes.

“Preflight planning has to be extremely thorough to identify wire strike risks, while wire awareness must be maintained at all times during low-level flight,” CASA said. A CASA report quoted Phil Hurst, chief executive officer of the Aerial Agriculture Association of Australia, as saying that planning and risk management are essential in aerial agriculture operations and should include a hazard checklist to identify wires and a survey flight from a safe altitude.

Data show that 119 wire strike accidents occurred in Australia from 1994 through 2004; of these, 74 accidents, or 62 percent, involved aerial agricultural flights.



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More Reports of Bird Strikes

The number of reported bird strikes in the United Kingdom increased significantly during the two years following a 2004 legislative change that required all bird strikes in U.K. airspace to be reported, according to a report prepared for the U.K. Civil Aviation Authority (see *ASW*, 1/07, p. 37). The previous requirement was for reporting bird strikes that resulted in aircraft damage.

Nevertheless, the report said that there was a continuing need for reminders to airports and aircraft operators to share not only bird strike reports but also warnings of bird activity. The report also recommended in-

creased efforts to publicize the proper methods of reporting bird strikes and providing feedback on the reports.

The report said that researchers found significant variations in information sharing. For example, the report said, “Some aircraft operators routinely copy their bird strike reports to the aerodrome management, seeing such exchange as vital. Others do not; indeed, one aircraft operator who was interviewed said that he had deliberately decided not to do so, as the resulting additional paperwork would tend to dilute the significance of more important messages.”

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In other news ...

The **Civil Aviation Administration of Moldova** has warned that an Antonov An-28 being prepared for operation by an unknown operator in the Democratic Republic of the Congo is not airworthy (see *ASW*, 12/06, p. 18). ... The **General Administration of Civil Aviation of China (CAAC)** and **Japan Airlines** have reached an agreement calling for the airline to work with the Civil Aviation Safety Institute of China on several projects “aimed at contributing to the development of global flight safety.” ... **Steven R. Chealander**, a former captain with American

Airlines and pilot in the U.S. Air Force, has been sworn in as a member of the U.S. National Transportation Safety Board. ... **Switzerland** has become the fourth non-European Union country to become a member of the European Aviation Safety Agency; the others are Iceland, Liechtenstein and Norway. ... **David North**, former editor-in-chief of *Aviation Week & Space Technology* and current chairman of the *AeroSafety World* editorial advisory board, has received the 2006 Lauren D. Lyman Award for excellence in aviation journalism from the Aerospace Industries Association.

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