

Better Communications

The U.S. National Transportation Safety Board (NTSB), citing an Oct. 21, 2009, incident in which the pilots of a Northwest Airlines Airbus A320 were out of contact with air traffic control (ATC) for more than one hour as they flew past their destination airport, is recommending new procedures for documenting radio communications.

The NTSB said in its final report that the pilots failed to maintain radio communications because they were distracted by “a conversation unrelated to the operation of the aircraft.” After they re-established radio communications, they returned to their destination airport in Minneapolis and landed the airplane.

“The investigation found that the pilots had become engaged in a conversation dealing with the process by which pilots request flight schedules, and during the conversation, each was using his personal laptop computer, contrary to company policy,” the NTSB said. “The pilots were not aware of the repeated attempts by air traffic controllers and the airline to contact them.”

The NTSB said that the investigation identified “deficiencies in ATC communications procedures” — ATC procedures for documenting communication with flight crews and for identifying emergency communications.

As a result, the NTSB issued two safety recommendations to the U.S. Federal Aviation Administration (FAA). One called



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on the FAA to “require air traffic controllers to use standard phraseology, such as ‘on guard,’ to verbally identify transmissions over emergency frequencies as emergencies.”

The other said the FAA should “establish and implement standard procedures to document and share control information, such as frequency changes, contact with pilots and the confirmation of the receipt of weather information, at air traffic control facilities that do not currently have such a procedure.” The NTSB said these changes “should provide visual communication of at least the control information that would be communicated by the marking and posting of paper flight-progress strips.”

Surface Vehicle Safety

The Australian Civil Aviation Safety Authority (CASA) has proposed new regulations to govern vehicles that operate on aircraft maneuvering areas at several major airports.

There are no current regulations governing the entry, movement and surveillance of vehicles in these areas. The proposed

regulations would give CASA the authority to designate airports that would be required to have advanced surface movement guidance and control systems.

The regulations would require that vehicles operating at those airports be equipped with radios and electronic devices compatible with surface surveillance. They also would prohibit unequipped vehicles from entering aircraft maneuvering areas “without a close escort, and require vehicle drivers to monitor and communicate with air traffic control,” CASA said.

The regulations would affect operations at airports in Sydney, Brisbane, Melbourne and Perth.



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SMS for FAA

The U.S. Federal Aviation Administration (FAA) Air Traffic Organization has adopted a safety management system (SMS) that the agency says provides for managing risks associated with changes in the national airspace system.

FAA Administrator Randy Babbitt said the new SMS enables the agency to manage “the challenges of introducing new technology into the national airspace system. Practically speaking, SMS is as important as the new technology itself.”

As an example, he said that SMS would provide a framework for conducting a risk analysis as NextGen technology is introduced into the system. Such an analysis was conducted on automatic dependent surveillance–broadcast (ADS–B) equipment before it began operating in the Gulf of Mexico, he said (*ASW*, 2/10, p. 14).

Million-Dollar Penalty Proposal

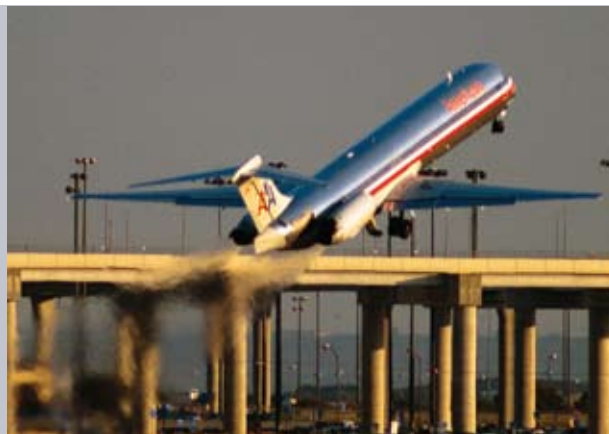
The U.S. Federal Aviation Administration (FAA) has proposed penalties totaling more than \$1 million against American Airlines for four maintenance violations (“Oversight Overlooked,” p. 54).

The largest of the four proposed penalties is \$625,000 and stems from an April 2008 case in which the FAA says that American Airlines maintenance personnel diagnosed problems in a McDonnell Douglas MD-82’s central air data computer (CADC) but, instead of replacing the unit, they improperly deferred action under the minimum equipment list (MEL).

However, the MEL “does not allow deferral of an inoperative CADC,” the FAA said. “The airline subsequently flew the plane on 10 passenger flights before the computer was replaced. During this time, flight crews were led to believe that both computers were working properly.”

The FAA also proposed a \$300,000 civil penalty for a Feb. 2, 2009, case in which the airline’s maintenance personnel deferred maintenance on an MD-82 under the MEL because a “pitot/stall heater light OFF light on the aircraft’s annunciator panel was inoperative.” The following day, technicians determined that the inoperative part was not the light but the captain’s pitot probe heater.

The MEL provides for deferred maintenance on pitot probe heaters only if flights are restricted to daytime visual



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meteorological conditions without flight into known or forecast icing conditions or visible moisture.

A \$75,000 penalty was proposed for what the FAA described as the airline’s failure to correctly comply with an airworthiness directive for the inspection of Boeing 757 rudder components. The FAA proposed an \$87,500 fine for a case involving what the agency said was the return to service of an MD-82 although records indicated that several steps of scheduled B-check maintenance were not checked as completed and replacement of a landing gear door was not noted in aircraft logbooks.

In each instance, the airline had 30 days to respond to the FAA’s proposal.

Transfer of Oversight

Transport Canada plans to resume its control of the certification and oversight of business aircraft — functions that currently are performed by the Canadian Business Aviation Association (CBAA).

The change, which takes effect April 1, 2011, will include the issuance of operating certificates and the processing of changes in existing certificates. Operators will remain responsible for

complying with maintenance requirements, and Transport Canada will continue to assess their compliance.

On April 1, 2010, and throughout the year preceding the transfer of certification and oversight responsibilities, Transport Canada said, it will “begin enhancing surveillance of the association’s certification and oversight functions” and “conduct a complete review of its surveillance and regulatory structure for business aviation operations.”

Transport Canada’s announcement follows criticism of its arrangement with CBAA by the Transportation Safety Board of Canada (TSB) and others. The TSB’s comments were included in its final report on the Nov. 11, 2007, crash of a Bombardier Global 5000 at Fox Harbour Aerodrome in Nova Scotia in which two people were

seriously injured (ASW 12/09–1/10, p. 18 and p. 22).

In the report, the TSB said that the accident “needs to be considered in the context of a relatively new and evolving safety regulatory environment” featuring safety management systems (SMS). The principles of SMS, which were behind the CBAA’s development of safety standards for business aviation, gave the operators “significant responsibility for safety management” but also left them “twice removed from Transport Canada’s scrutiny,” the TSB said, noting that SMS is a “useful and practical tool ... [that] requires the development of an appropriate balance between the responsibilities of the regulator, the operator and (in this instance) the delegated agency.” In this case, the TSB said, the appropriate balance “has not been established.”



Transportation Safety Board of Canada

Canadian Watchlist

The risk of collisions on runways is among the most critical safety issues in Canada’s transportation system, the Transportation Safety Board (TSB) said in releasing its “Watchlist” of nine items that present the greatest risks to Canadians.

“There is no higher priority” than the listed items, said TSB Chair Wendy Tadros. “It’s time for industry and regulators to step up and tackle these nine critical issues.”

Tadros said the list was developed after TSB analysts identified “troubling patterns” in their accident investigation work.

“Many times, we arrive on the scene of an accident and see the same safety issues — issues that we have raised before,” she said.

The TSB said that, from 1999 to 2007, some 3,831 runway incursions were reported at Canadian airports.

“Given the millions of takeoffs and landings each year, incursions are rare,” the TSB said. “However, the consequences can be catastrophic. The Board is concerned that incursions and the risk of collisions will remain until better defenses are put in place.”

The TSB reiterated its past recommendations calling for improved procedures and the use of enhanced collision warning systems.

Two other aviation issues were included on the Watchlist:

- Collisions with land and water that occur while aircraft are under crew control — a risk typically classified as controlled flight into terrain (CFIT); and,
- The risk of collisions on runways.

The TSB said that, between 2000 and 2009, there were 129 CFIT accidents in



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Canada that resulted in 128 fatalities. Past TSB recommendations have included a call for ground proximity warning systems in smaller aircraft. “Without this technology, passengers and crews continue to be at risk,” the TSB said.

The TSB said that, to reduce the risk of landing accidents and runway overruns, pilots need timely information about runway surface conditions, and airports must extend safety areas at the end of runways “or install other engineered systems and structures to safely stop planes that overrun.”

Low Approaches

Eurocontrol says that one European nation — which it does not name — has failed to establish operating minimums for its airports, causing pilots of some aircraft to conduct approaches and land when the runway visual range (RVR) is below the applicable minimum.

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“Consequently, air traffic controllers are not aware of such limitations (i.e., that for each instrument approach at a particular aerodrome, there is a minimum which no operator should go below),” Eurocontrol said. “Furthermore, the controllers do not have in place a procedure(s) to act as a safety check when a commander decided to commence an approach to land when the reported RVR is less than the specified minimum.”

European regulations say that minimums adopted by individual operators must not be lower than those specified in the European Aviation Safety Agency’s EU OPS 1.

Eurocontrol asked air navigation service providers and aircraft operators to comment on what actions controllers should take if a captain indicates that he or she plans to begin an approach when the RVR is below the lowest minimum for that airport.

In the News ...

The **SESAR Joint Undertaking** — the technological arm of the Single European Sky project — says it has spawned nearly 300 separate programs intended to modernize air traffic management throughout Europe. A task force is scheduled to report later this year on how to implement the programs. ... The Civil Aviation Safety Authority and the Australian Transport Safety Bureau have signed an agreement clarifying their complementary roles in enhancing aviation safety in **Australia** and pledging to make the most effective use of accident investigation findings. ... The International Civil Aviation Organization (ICAO) has offered to help coordinate reconstruction of the civil aviation infrastructure in **Haiti**, which was heavily damaged in the January earthquake. ICAO Secretary General Raymond Benjamin said the goal is to reconstruct a system that conforms to ICAO standards and avoid duplication of efforts by donor nations and organizations.

Compiled and edited by Linda Werfelman.