

# Safety News

## EMS Safety 'Most Wanted'

The U.S. National Transportation Safety Board (NTSB) has added enhanced safety in emergency medical services (EMS) flight operations to its list of "most wanted" safety improvements.

"Our Most Wanted List, which was created in 1990, was designed to raise the public's awareness and support for transportation safety issues," said NTSB Acting Chairman Mark V. Rosenker. "The safety issues on this list are critical to improving transportation safety. When acted upon, these recommendations will reduce accidents and save lives."

The NTSB noted that nine fatal helicopter EMS accidents and 35 fatalities occurred between December 2007 and Oct. 15, 2008.

"The safety board is concerned that these types of accidents will continue to occur if a concerted effort is not made to improve the safety of emergency medical flights," the NTSB said. "Specifically, the following actions would help . . . : implementation of a flight risk evaluation program for EMS operators; establishment of formalized dispatch and flight-following procedures, including up-to-date weather regulations; installation of terrain awareness and warning systems on aircraft; and conduct of all flights with medical personnel on board in accordance with [the stricter regulations that govern commuter aircraft operations]."

The NTSB has recommended these safety actions to the U.S. Federal Aviation Administration (FAA) in recent years but considers the FAA's responses unacceptable.



© Dan Barnes/iStockphoto

The NTSB has scheduled a three-day public hearing on helicopter EMS operations beginning Feb. 3, 2009, in its Washington, D.C., board room and conference center. Robert Sumwalt, the NTSB member who will serve as chairman of the hearing, said the session will "provide an opportunity to learn more about the industry so that possibly we can make further recommendations that can prevent these accidents and save lives."

The 2009 Most Wanted List discusses recommendations in 15 "areas of concern," including six areas that affect aviation operations. In addition to safer EMS operations, the other aviation recommendations are related to runway safety, flight in icing conditions, cockpit image recording systems, improved crew resource management training for on-demand carriers, and reduction in the number of accidents and incidents caused by human fatigue. Other areas of concern involve operations in other modes of transportation.

## Opposition to Single-Pilot Cruise

Adoption of the single-pilot cruise concept (SPCC) suggested by some aircraft manufacturers would harm airline flight safety, the International Federation of Air Line Pilots' Associations (IFALPA) says.

SPCC would allow flight crewmembers to rest in an area outside the flight deck for extended periods during cruise, with one pilot remaining at the controls. IFALPA said that the concept would be the equivalent of "flying solo in an aircraft designed to be operated by two pilots. . . ."

"The SPCC is based on the continuing development and introduction of emerging technologies, for example, voice recognition, data-based automation and even electronic flight bag

concepts which may include attempts to extend the product's functionality for future use in SPCC operations."

Among the SPCC safety issues raised by IFALPA are the absence of cross-checking while only one pilot is on the flight deck, the absence of fatigue-avoidance countermeasures such as conversation, and no safeguard against inadvertent napping on the flight deck. In addition, existing procedures are based on the assumption of a two-pilot operation, IFALPA said.

"One of the cornerstones of flight safety is redundancy," IFALPA said. "The SPCC provides no backup for the pilot at the controls, should he become unconscious or otherwise incapacitated."



© J Tan/iStockphoto

### Protecting Volunteered Safety Information

**F**light Safety Foundation has announced support for statutory protection against the release of information gathered by voluntary self-disclosure reporting programs.

“We can and must do everything possible to ensure the continued flow of critical safety information that is increasingly coming under assault in courts around the world,” said Foundation President and CEO William R. Voss.

Kenneth P. Quinn, the Foundation’s general counsel, told participants in the FSF International Air Safety Seminar in Honolulu in late October, “Since prosecutors and courts are not protecting the confidentiality of voluntarily supplied safety information, legislatures need to step in to prevent critical sources of safety data from drying up.”

The Foundation endorsed a plan to grant voluntary self-disclosure reporting programs — such as the aviation safety action program (ASAP), flight

operational quality assurance (FOQA) and the aviation safety information analysis and sharing (ASIAS) system — a “qualified exception” from the legal discovery process. U.S. law currently provides such protection for cockpit voice recorder (CVR) recordings and transcripts.

Airlines and civil aviation regulators use the predictive information gathered by these self-disclosure reporting programs to identify threats to safety and to develop strategies to mitigate the threats. Supporters estimate that 98 percent of the safety information obtained through these programs would no longer be available if participants in the programs were exposed to prosecution and reprisals.

The Foundation’s action followed a recent judicial decision that ordered the release of confidential ASAP data in a case involving the August 2006 fatal crash of a Comair Bombardier



© David Meharey/iStockphoto

CRJ100ER in Lexington, Kentucky, U.S. The judge said that Congress had the authority to extend the same protection to ASAP information that it had to CVR recordings and transcripts but had never done so.

The Foundation also noted several recent criminal prosecutions in Europe that have relied on information voluntarily provided to accident investigators.

### Accident Investigation Guidelines

**A**viation accident investigators should improve regional cooperation in accident and incident investigation to provide assistance in countries without the expertise to conduct their own investigations, safety specialists said during a meeting sponsored by the International Civil Aviation Organization (ICAO).

They also agreed that all final accident reports should be made available to the public, and that better coordination is needed between safety investigations and related judicial processes.

The specialists’ recommendations will be reviewed by the ICAO Air Navigation Commission, which will submit proposals to the ICAO Council.

During their October meeting, ICAO Secretary General Taïeb Chérif praised investigators for their “important role in the holistic approach to safety pursued by all aviation stakeholders, which is key to air transport’s envied position as the safest mode of passenger transportation.”

Omari Nundu, president of the Air Navigation Commission, told participants that continued safety improvement can be achieved only through “an unimpeded flow of safety information from sources such as accident and incident investigations, which is not possible when such information is used for other than safety-related purposes.”



© naphtalina/iStockphoto

### Red Dye Warning

**M**aintenance personnel are being warned not to use some types of liquid red dyes in nondestructive testing of critical safety components. The Civil Aviation Safety Authority of Australia (CASA) says that although the dyes are being used increasingly in such tests, “there are limits and prohibitions on their use in aviation.”

CASA warns against the use of Type II liquid visible dye in final acceptance of inspection of aerospace products and in conjunction with fluorescent dye penetrant systems.

CASA said in an airworthiness bulletin that before maintenance personnel use dye penetrant in nondestructive testing, they should “familiarize themselves with the applicable standard for the method they employ and the procedure for inspection of the aircraft component or material.”

### In Other News ...

The **U.S. Federal Aviation Administration** (FAA) has convened a government-industry council to implement a systemic approach to improving runway safety. The Runway Safety Council will analyze the root causes of runway incursions. ... The **Civil Aviation Safety Authority of Australia** is reviewing the risks presented to aviation safety by wind farms located near airports and determining what regulations would enhance safety.

**Correction** ... An OnRecord item in the October 2008 issue incorrectly stated that the airport traffic control tower at the airport in Keene, New Hampshire, U.S., was closed. The airport is uncontrolled.

### Controller Convictions Protested

The International Federation of Air Line Pilots' Associations (IFALPA) is asking a Japanese court to overturn the convictions of two air traffic controllers involved in the January 2001 near collision of two Japan Air Lines airplanes.

The two controllers — a student air traffic control officer and his supervisor — were found guilty of professional negligence and given suspended prison sentences in connection with the incident, in which the Boeing 747 and McDonnell Douglas DC-10 came within 100 m (328 ft) of each other. A number of passengers and crewmembers were injured during evasive maneuvers by the crew of one of the airplanes.



© Victoria Alexandrova/iStockphoto

“To pursue this conviction not only does nothing to improve safety in air transport, it may actually harm it,” IFALPA said, calling on the Japanese government to enact legislation to enable the Japanese courts to comply with International Civil Aviation Organization provisions that discourage criminal prosecution of aviation personnel for their involvement in accidents or incidents.

### WAAS Approaches Becoming Common

Wide area augmentation system (WAAS)-based area navigation instrument approaches in the United States now outnumber ground-based instrument landing system (ILS) approaches, the U.S. Federal Aviation Administration (FAA) says.



U.S. Federal Aviation Administration

The FAA said that it passed a “key milestone” in September, with publication of the 1,333rd WAAS-based localizer performance with vertical guidance (LPV) approach. The LPV approaches serve 833 airports.

“This is clearly a turning point for aviation and the way pilots navigate,” the FAA said.

Plans call for publication of 500 new WAAS-based instrument approach procedures every year “until every qualified runway in the [national airspace system] has one,” the FAA said, noting that WAAS improves safety by increasing the number of approaches with vertical guidance.

WAAS was commissioned in 2003 to improve the accuracy of information received from global positioning system (GPS) satellites. A 2003 Flight Safety Foundation study found that the use of WAAS-based instrument approaches could prevent 141 accidents and 250 fatalities over a 20-year period.

### TOW Checks Required

Flight crews on airplanes in the McDonnell Douglas DC-9/MD-80 series must add a check of the takeoff warning (TOW) system before starting the engines for every flight, according to an airworthiness directive issued by the European Aviation Safety Agency (EASA).

The TOW system warns flight crews if flaps and slats have not been correctly set.

The EASA action follows the issuance by Spanish investigators of a preliminary report on the Aug. 20 crash of a Spanair DC-9-82 on takeoff from Madrid. The airplane was destroyed in the crash, which killed 154 people and resulted in serious injuries for 18. Preliminary indications were that the flaps were not set properly for takeoff. Investigation of the crash is continuing.

The European Joint Aviation Authorities simultaneously issued an operational directive for operators of the same aircraft, calling for operators to include the TOW check in the pre-start checks for every flight.

Compiled and edited by Linda Werfelman.