

Safety News

HEMS Recommendations

The U.S. National Transportation Safety Board (NTSB) has issued 19 safety recommendations calling for changes in helicopter emergency medical services (HEMS) operations, including improvements in pilot training and development of a low-altitude airspace infrastructure.

The recommendations follow a public hearing, held in February, to examine HEMS safety issues in the aftermath of the most deadly year ever in U.S. HEMS operations — 12 crashes involving a total of 29 fatalities occurred in 2008.

“The pressure on HEMS operators to conduct their flights quickly in all sorts of environments makes these types of operations inherently more risky than other types of commercial flight operations,” said NTSB Chairwoman Deborah Hersman. “Operators need every available safety tool to conduct these flights and to determine when the risk of flying is just too great.”

The 19 safety recommendations include 10 recommendations to the U.S. Federal Aviation Administration (FAA), calling on the FAA to address issues involving pilot training; collection and analysis of flight data, weather data and safety data; flight data monitoring; development of an infrastructure for low-altitude airspace; and dual pilots, autopilots and night vision imaging systems (NVIS), including night vision goggles.

Two recommendations asked the Centers for Medicare and Medicaid Services within the U.S. Department of Health and Human Services to evaluate the rate structure used in HEMS reimbursement and the relationship between reimbursement and patient transport safety.

Two additional recommendations to the Federal Interagency Committee on Emergency Medical Systems involved coordination of HEMS transport in local and regional emergency medical systems and selection of the most appropriate transportation for trauma victims. The five remaining recommendations were addressed to public HEMS operators and involved improvements in pilot training, flight data monitoring and the use of dual pilots, autopilots and NVIS.

In a related development, Flight Safety Foundation, working with companies in the HEMS industry, has begun a study of the feasibility of flight data monitoring in HEMS operations. The study’s objective is to determine whether enough data can be collected to determine trends, identify risks and develop risk-mitigation strategies.

“We are optimistic that organized data collection from flights will lead to safer operations,” said FSF President and CEO William R. Voss. “We’ve seen that in commercial and corporate aviation with data collection being an integral part of safety management. We are well aware of the safety challenges facing helicopter air ambulance operations and are determined to be part of finding a solution.”



© Terry North/Stockphoto

Unapproved Parts

The U.S. Federal Aviation Administration (FAA) has approved a plan to require Southwest Airlines to replace unapproved parts that were installed on about 50 Boeing 737s.

The FAA and the airline have agreed that the unapproved part — described as being “associated with the hinge fittings for the exhaust

gate assembly which help protect the aircraft flaps from engine heat” — does not interfere with safe operation of the airplanes.

“As a result, the FAA has determined that the airline may continue to operate aircraft with the unapproved part until the parts can be replaced, on the condition that each plane must be

physically inspected for wear and tear every seven days, and the affected parts must all be replaced with an approved part by Dec. 24, 2009,” the FAA said.

The agency also has told Southwest to report to the FAA daily on the results of the inspections and to dispose of additional unapproved parts manufactured by the same vendor.

North Sea Tracking System

Air traffic management provider U.K. NATS and Oil and Gas U.K., a trade association for offshore energy development, are inaugurating a system designed to extend radar coverage to parts of the North Sea that previously were beyond the reach of land-based radar.

Oil and Gas U.K. says that the North Sea Multilateration System is the first system in the world to track offshore flights using multilateration — a process that allows air traffic control (ATC) to process Mode A/C/S transponder data, automatic dependent surveillance–broadcast (ADS-B) data and data from military aircraft.

The system will be used by controllers at Aberdeen (Scotland) Airport, which handles more than 25,000

helicopter flights each year, said John Mayhew, NATS general manager in Aberdeen.

Conventional radar allows ATC to track flights up to 80 nm (148 km) offshore.

“Beyond that range,” Mayhew said, “we have to transfer to radio-only procedures to monitor the helicopters’ position. The new system enables controllers to see the flights they’re controlling all the way to and from the platforms, so it will be easier to ensure that they maintain the correct track and height. And in the event of an emergency, the new system will help us to locate the helicopter.”

Flight trials were scheduled to begin in late September, with the system expected to be fully operational by June 2010.



© Trondur/Dreamstime

Glow-in-the-Dark Blades

Photoluminescent safety paint, which for several years has been used on propellers and rotor blades on military aircraft, is now being applied to civilian aircraft.

Defense Holdings Inc. (DHI), which manufactures a range of glow-in-the-dark devices, planned to apply the paint in late September to the first civilian aircraft — a police helicopter in Virginia, said Gregory Bender, DHI vice president and chief engineer.

The paint — developed under a U.S. Naval Air Systems Command contract and manufactured by Sherwin Williams Aerospace Coatings

— is used on the tips of propeller blades, main rotor blades and tail rotor blades to make the blades visible in the dark. It is intended to help people near the aircraft at night to avoid the injuries and deaths that would result from coming in contact with the blades in the dark (ASW, 8/06, p. 28). In addition, the increased visibility of propellers and rotor blades can help prevent midair collisions, Bender said.

The wavelength of the light emitted by the paint is outside the range of night vision goggles and does not interfere with pilots’ vision.

Battery Ban Urged

North American airline pilots are pressing for a ban on shipments of lithium batteries on passenger and cargo aircraft until new safety regulations are implemented to govern transport of the devices (ASW, 3/08, p. 42).

The Air Line Pilots Association, International (ALPA), which represents pilots at 36 airlines in Canada and the United States, said the ban is needed because of recent fires associated with the battery shipments.

“ALPA has long called for regulations to ensure that safety is the first priority in transporting shipments of lithium batteries aboard airliners,” said Mark Rogers, a first officer who directs ALPA’s dangerous goods program. “Now the evidence of a clear and present danger is mounting. We need an immediate ban on these dangerous goods to protect airline passengers, crews and cargo.”

ALPA said it was not seeking new restrictions on batteries that passengers carry onto aircraft to power laptop computers, cell phones and other items but rather to regulate lithium batteries that are shipped as cargo. Those batteries should be regulated as “dangerous goods” and should be packaged and labeled as such, and pilots should be notified when they are loaded onto their aircraft, ALPA said.



Wayne Rosenkrans

Bounced Landings

Pilots need more training to deal effectively with bounced landings, the Transportation Safety Board of Canada (TSB) said in recommending that the Canadian Department of Transport require air carriers to include bounced landing recovery techniques in manuals and training activities.

The recommendation followed the TSB investigation of a Kelowna Flightcraft Air Charter Boeing 727 cargo jet's hard landing at Hamilton (Ontario) Airport on July 22, 2008. The

airplane touched down hard, bounced and touched down hard again; the pilot then began a go-around, and as he did, the airplane's tail struck the runway. The airplane climbed and returned for a normal landing. No one was injured in the occurrence, which caused minor damage to the airplane.

The investigation determined that although the manufacturer's manual discussed what actions should be taken in case of a bounced landing, the operator's pilots had not practiced the

maneuver or received training on what to do.

"There are risks associated with this type of maneuver, and our investigation shows there is an underlying problem that must be addressed before a more serious accident happens," said Mark Clitsome, TSB director of air investigations. "Pilots rely on training and checklists when problems arise. The best way to ensure the safe outcome of a bounced landing is to make pilots more aware and better prepared."

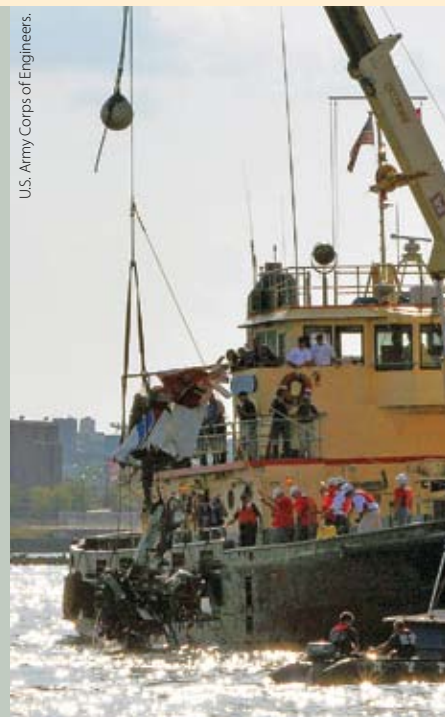
Recommended Airspace Review

The collision of a sightseeing helicopter and a small private airplane over the Hudson River near New York City has prompted safety recommendations by the U.S. National Transportation Safety Board (NTSB) calling for revised procedures for operations in the area.

Nine people were killed in the Aug. 8, 2009, midair collision of the Eurocopter AS 350BA operated by Liberty Helicopters and the Piper PA-32R-300, operated by a private pilot, and both aircraft were substantially damaged. The collision occurred in a visual flight rules "passageway" through New York's controlled airspace where non-air carrier traffic is permitted to operate without authorization from air traffic control

(ATC). The NTSB's investigation of the accident is continuing.

The NTSB safety recommendations to the U.S. Federal Aviation Administration called for revised ATC standard operating procedures for the passageway; briefings for controllers about the circumstances of the collision, including a discussion of the need to "remain attentive when on duty"; creation of a special flight rules area in the passageway; new requirements for vertical separation between helicopters and airplanes in the area and for special training for pilots before they conduct operations there; and a review of similar airspace configurations "where specific pilot training and familiarization would improve safety."



U.S. Army Corps of Engineers.

In Other News ...

The U.S. Federal Aviation Administration has established a new office — the **Accident Investigation and Prevention Service** — to use data gathered in accident and incident investigations to "better understand current and emerging risks across the aviation community." U.S. Transportation Secretary Ray LaHood said the new program

is designed to "give us better tools to spot potential safety problems and head off aviation accidents before they happen." ... The **International Standard for Business Aircraft Operations (IS-BAO)** has been recognized by the European Committee for Standardization (CEN) as the official industry standard for business aircraft operations

in Europe. ... The **SESAR Joint Undertaking** — responsible for developing a new European air traffic management system — has signed agreements with several airlines, manufacturers and aviation organizations to use their technical experts to devise a system that will meet future demand for air transport while also increasing safety levels.

Compiled and edited by Linda Werfelman.