Safety News

Headset Warning

Pilots and other flight crewmembers who use noise-canceling headsets may have difficulty hearing audible alarms and other sounds, the U.S. Federal Aviation Administration (FAA) warned in a bulletin issued in January to operators.

"Noise-canceling headsets cancel noise through a combination of physical means and electronic means," the FAA said. "While this technology can have many beneficial effects, such as providing clearer communications, reduced pilot fatigue and added comfort, electronic attenuation of important environmental sounds and alarms may occur."

Ordinary, non-noise-canceling headsets do not present the same problem because they reduce ambient noise physically, by providing "acoustical quieting," the FAA said.

The FAA recommended that operators and pilots should evaluate their use of noise-canceling headsets, both on the ground and during flight, to determine whether audible alarms and other sounds can be heard. If these sounds are inaudible, "operators should elect to find other solutions to discern such alarms or sounds, or discontinue the use of noise-canceling headsets," the FAA said.

Lightspeed Aviation's 20XLc Headset

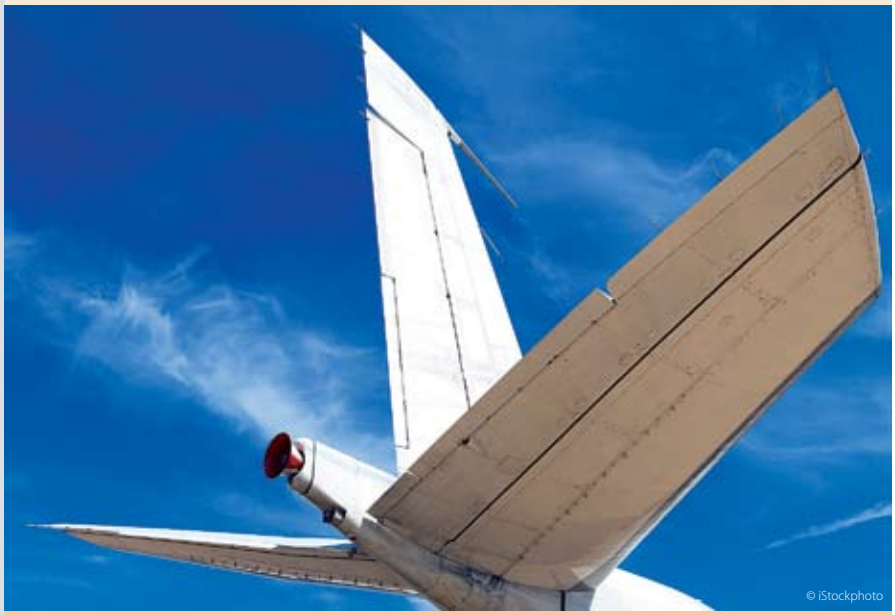
Developing Safer Rudders

A vertical motion simulator is being used in a three-phase testing program aimed at revising rudder certification regulations in an effort to achieve safer handling characteristics for large transport airplanes.

The program is being conducted by the U.S. National Aeronautics and Space Administration (NASA) Ames Simulation Laboratories and the U.S. Federal Aviation Administration.

The first phase of the tests is designed to "determine the necessary lateral motion of a simulator for determining valid pilot response to aggressive rudder control," NASA said. Researchers also will identify the initial flight control criteria for rudder control system designs. These criteria include "various parameters limits, such as the force required to push rudder pedals at different airspeeds, travel of the rudder pedals, the cable stretch coefficient and force induced on the tail," NASA said.

Subsequent testing phases will develop tentative criteria for rudder flight control systems and validate the criteria by using more complex piloting tasks.



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FAA Backs Later Retirement for Pilots

Administrator Marion C. Blakey of the U.S. Federal Aviation Administration (FAA) has proposed going along with an International Civil Aviation Organization (ICAO) standard to increase the mandatory retirement age to 65 from 60 (*ASW*, 2/07, p. 11).

Blakey said that the FAA would issue a formal notice of proposed rule making later this year and publish a final rule after a review of public comments.

ICAO's standard — which increases the upper age limit for pilots to 65, as long as another pilot in the flight crew is younger than 60 — took effect in November 2006. Since 1959, the FAA has required pilots of commercial airliners to retire at age 60.

"A pilot's experience counts — it's an added margin of safety," Blakey said. "Foreign airlines [which already have adopted the older retirement age] have demonstrated that experienced pilots in good health can fly beyond age 60 without compromising safety."

Air Traffic Estimates Soar

The number of passengers passing through airports around the world each year is likely to double by 2025 — from the 4.2 billion who traveled in 2005 to more than 9 billion, according to projections by the Airports Council International (ACI).

Increases are expected to be largest in India, with a forecast increase of 10.4 percent, and China, with 8.1 percent growth, ACI said in its *ACI Global Traffic Forecast 2006–2025*, released in late January.

Cargo operations also are expected to increase, with average increases in tonnage carried expected to grow 5.4 percent a year over the next 20 years. The greatest growth is expected to occur in Asia, which likely will be the world's largest freight market by 2025, ACI said.

"Both the scale and speed of growth indicated by this latest forecast represent a daunting challenge for airports," said ACI Director General Robert J. Aaronson.

He praised the European Commission for recognizing air traffic congestion as a "crucial concern" and said that many airport development projects are "held up by regulation which distorts market forces or creates expensive, time-consuming bureaucratic hurdles to airport development."

ATSB Launches Confidential Reporting Scheme

The Australian Transport Safety Bureau (ATSB) has begun a confidential reporting program for aviation safety designed to identify safety issues that otherwise might not come to the ATSB's attention.

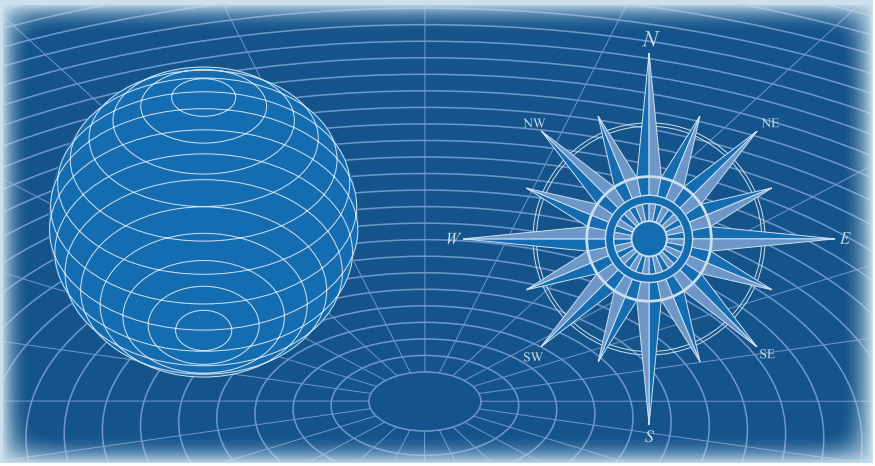
The new program — REPCON, which stands for Report Confidentially — complies with recommendations from the International Civil Aviation Organization to encourage confidential reporting of safety risks such as unsafe crew scheduling or noncompliance with rules or procedures.

"While Australia has the most comprehensive mandatory safety occurrence reporting legislation in the world, the Australian aviation industry has been keen to see a new confidential reporting scheme introduced with legislative coverage that will protect the identity of the reporter," said Mark Vaile, deputy prime minister and minister for transport and regional services.

GPS Approaches on the Horizon

The U.K. Civil Aviation Authority (CAA) says it expects to approve the use of global positioning system (GPS) nonprecision instrument approaches for general aviation aircraft by summer 2007.

CAA approval is expected to follow the analysis of more than 150 reports submitted by pilots who participated in a trial involving GPS approaches at six U.K. airports in 2006. The CAA said it will use data gathered during the trial to assess "the viability of the design, approval, management and use of such approaches."



High-Altitude Training

The U.S. National Transportation Safety Board (NTSB) has recommended changes in training for pilots who conduct high-altitude flights in regional jet airplanes.

The recommendations to the U.S. Federal Aviation Administration (FAA) include a call for enhanced training syllabuses that include methods of ensuring that pilots have a thorough understanding of regional jets' performance capabilities, limitations and high-altitude aerodynamics. The NTSB also recommended that air carriers ensure that their pilots have opportunities to practice high-altitude stall recovery techniques in a simulator.

The NTSB action follows the investigation of the Oct. 14, 2004, crash of a Pinnacle Airlines Bombardier CL600-2B19 near Jefferson City, Missouri, U.S.; both crewmembers on the positioning flight were killed, and the airplane was destroyed.

The NTSB said that the probable causes of the accident were "the pilots' unprofessional behavior, deviation from standard operating procedures, and poor airmanship, which resulted in an in-flight emergency from which they were unable to recover, in part because of the pilots' inadequate training; the pilots' failure to prepare for an emergency landing in a timely manner, including communicating with air traffic controllers immediately after the emergency about the loss of both engines and the availability of landing sites; and the pilots' failure to achieve and maintain the target airspeed in the double engine failure checklist, which caused the engine cores to stop rotating and resulted in the core lock engine condition." Contributing factors were "the engine core lock condition, which prevented at least one engine from being restarted, and the airplane flight manuals that did not communicate to pilots the importance of maintaining a minimum airspeed to keep the engine cores rotating," the NTSB said (*ASW*, 7/06, p. 44).

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In Other News ...

An appeals court in **Japan** has upheld a lower court's finding that a former pilot for Japan Air Lines was not guilty in a June 8, 1997, accident in which a flight attendant was killed and 13 passengers and crewmembers were injured. The lower court held that the pilot had not known that releasing the autopilot would result in violent pitch changes. … Five years after the crash of a Raytheon Beech Super King Air 200 carrying members of the Oklahoma State University basketball team, U.S. National Transportation Safety Board Chairman Mark V. Rosenker is commending the **National Collegiate Athletic Association, American Council on Education** and the **National Association for Intercollegiate Athletics** for compiling a student-transportation safety manual. All 10 occupants were killed in the Jan. 27, 2001, crash in Strasburg, Colorado, U.S., and the airplane was destroyed. … Data from the **Aviation Safety Network**, a service of Flight Safety Foundation, have been added to an international safety database on aircraft fires and cabin safety. The database is maintained by the Cabin Safety Research Technical Group, whose members include civil aviation authorities worldwide.


Cabin Safety Research Technical Group Database Screenshot

Compiled and edited by Linda Werfelman.