

Fatigue Survey

Jeppesen is planning an industry-wide survey later this year to gather fatigue data from pilots and cabin crewmembers; the data ultimately will be used as part of a study to determine how crew fatigue issues develop.

Jeppesen said sleep and performance scientists will use the information gathered through the survey, scheduled for April, to help “improve and evaluate scientific fatigue models such as the Boeing Alertness Model.” Jeppesen is a subsidiary of The Boeing Co.

Jeppesen said that, to coincide with the study, a variation of the CrewAlert application — CrewAlert Lite — is available free on the iTunes App Store. The application is designed to “simplify capturing schedule information, sleep and wake periods and fatigue assessments ... [and enable] crew to predict fatigue risk using the Boeing Alertness Model,” Jeppesen said.

New Standards for First Officers

Pilots hired as first officers for U.S. passenger and cargo airlines would be required to have 1,500 flight hours under a proposal outlined by the Federal Aviation Administration.

The proposed rule would require first officers to hold an airline transport pilot (ATP) certificate and an aircraft type rating, which requires training and testing for a specific airplane type. Under current requirements, first officers must hold a commercial pilot certificate and have a minimum of 250 hours of flight time. Most major airlines, however, already have requirements that are considerably higher.

The proposed rule would make exceptions for pilots with fewer than 1,500 flight hours if they have an aviation degree or experience as a military pilot; those pilots could receive a “restricted privileges ATP” if they complied with certain other requirements.

The proposed rule stems from a requirement included in a 2010 law that mandated that airline first officers have at least 1,500 flight hours.

Public comments on the proposed rule will be accepted until April 29.



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First I-4D Flight

The first “initial four-dimensional (I-4D) flight” — a flight involving the usual three-dimensional trajectory, plus time — was conducted in early February, with test pilots flying an Airbus A320 from Toulouse, France, to Copenhagen, Denmark, and Stockholm, Sweden.

I-4D flight is considered a cornerstone of the Single European Sky ATM [Air Traffic Management] Research

(SESAR) program and the first step toward more predictable flights, SESAR said in a statement discussing the Feb. 10 flight.

“Greater certainty about the positions of every airspace user in the sky at any given moment will improve safety as well as flight predictability,” the SESAR program said. “The more efficient resource planning which this allows will in turn enable a greater carrying capacity for both airports and the European sky in general.”

SESAR characterized I-4D as a “major step toward full 4D operations.” In I-4D, “the capability of the aircraft FMS [flight management system] to provide very accurate trajectory predictions and execute a required time of arrival (RTA) at a defined three-dimensional waypoint can be exploited by both en route controllers for demand/capacity balancing, metering of flows by applying a controlled time over or by TMA [terminal maneuvering area] controllers sequencing for arrival management by applying a controlled time of arrival,” SESAR said.

I-4D is expected to be implemented in Europe in 2018, SESAR said.



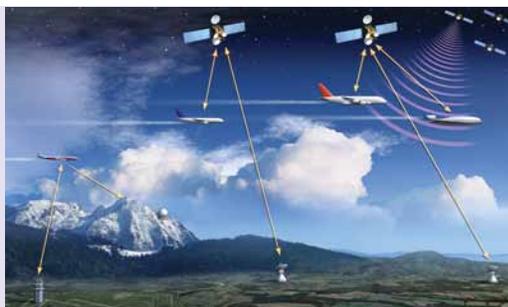
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Air Safety Targets

Europe has met the safety targets established by the European Civil Aviation Conference (ECAC) for reducing accidents related to air traffic management (ATM), the Eurocontrol Safety Regulation Commission (SRC) says.

In 2010, Eurocontrol received more data on ATM-related incidents than in previous years, “which reflects an improvement in the reporting culture,” the SRC said in its annual safety report for 2011.

Data analysis identified a number of safety areas in need of improvement, the report said, adding that “a critical concern is raised on the lack of resources and qualified staff at a national level dedicated to safety data collection and analysis.”



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New ATC Network

The U.S. Federal Aviation Administration (FAA) has approved the use of an ARINC high frequency data link (HFDL) network for future data link air traffic control communications.

ARINC said that the FAA’s action means that aircraft that already use HFDL for long distance operational communications also will be able to use it for communications with ATC.

The technology is known as FOH, or FANS (Future Air Navigation System) 1/A Over HFDL. ARINC said that FOH data link “provides an inexpensive global alternative to satellite-based global communications and ... is expected to be most beneficial in controlled oceanic airspace such as the North Atlantic and Pacific flight routes.”

Tests Urged for Overhead Bins

The installation design for overhead luggage bins and attached passenger service units (PSUs) in some Boeing 737s should be modified to prevent the PSUs, which contain passenger supplemental oxygen and reading lights, from separating during accidents and potentially injuring passengers, the U.S. National Transportation Safety Board (NTSB) says.

In a series of safety recommendations to the U.S. Federal Aviation Administration (FAA), the NTSB noted that several accidents have occurred in the past three years in which overhead bins and PSUs on next generation 737s (737NGs, including 737-600s, -700s, -800s and -900s) separated from their attachments. This probably increased the number of passenger injuries, especially head and facial injuries, the NTSB said.

In the most recent of four accidents cited by the NTSB, an Aires Airlines 737-700 crashed short of the landing runway at San Andreas Island Airport in Colombia on Aug. 16, 2010, killing two of the 127 people aboard. Fifteen others were seriously injured and 66 received minor injuries.

The accident is still under investigation by the Colombian Civil Aviation Authority, but early findings showed that 24 of the 30 PSUs installed in rows 1 through 5 fell when their outboard clamps fractured, along with nearly all of the PSUs in rows 10 through 27, the NTSB said. Preliminary information indicates that some passengers received skull fractures, cuts on the head and face, and other head injuries.

In all four accidents, the NTSB said, “the overhead bin and PSU installations were of common design and manufactured, installed and inspected per Boeing specifications.”

In all cases, “two polymer plastic clamps attach the outboard side of the PSU to the aircraft rail and fuselage side wall.”

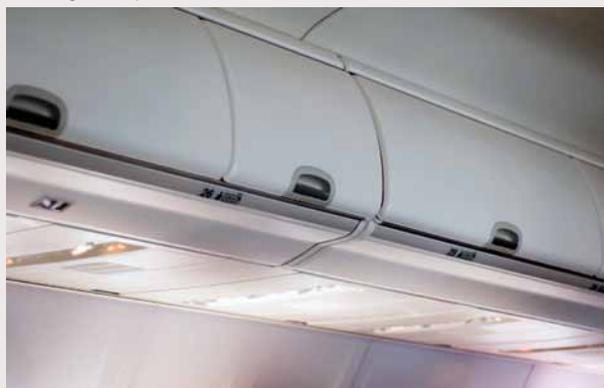
the NTSB said, noting that Boeing records show that the clamp was designed in 1980 and based on an older clamp design but with modifications to improve its strength and fit.

The NTSB recommended that the FAA “modify the design and test requirements for the attachment points of passenger service units to account for the higher localized loading that results from the relative motion of the attachment structure.”

The FAA also should require modification of the installation design of the overhead bins and PSUs manufactured by Boeing and installed in 737NGs “so that the PSUs remain attached to the bins or are captured in a safe manner during survivable accidents,” the NTSB said.

Another recommendation called on the FAA to “review the designs of manufacturers other than Boeing for overhead bins and ... PSUs to identify designs with deficiencies similar to those identified in Boeing’s design and require those manufacturers, as necessary, to eliminate the potential for PSUs to separate from their attachments during survivable accidents.”

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U.S. Government Says No to LightSquared

U.S. federal agencies say there is “no practical way” to mitigate the potential interference of the LightSquared planned wireless mobile broadband network with existing global positioning system (GPS) receivers and have taken steps to bar the company from beginning commercial operations.

The National Telecommunications and Information Administration, the agency that coordinates government use of the radio spectrum, said in mid-February that, after months of tests to identify the scope of the problem and analysis of proposed solutions, “it is clear that LightSquared’s proposed implementation plans, including operations in the lower 10 MHz, would impact both general/personal navigation and certified aviation GPS receivers.

“We conclude at this time that there are no mitigation strategies that both solve the interference issues and provide LightSquared with an adequate commercial network deployment.”

In response, the Federal Communications Commission (FCC), noting that it had “clearly stated from the outset [of LightSquared’s presentation of its plans] that harmful interference to GPS would not be permitted,” said that it would not



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lift an earlier order that prohibited LightSquared’s commercial operations “unless harmful interference issues were resolved.”

After the FCC’s action, LightSquared Chairman and CEO Sanjiv Ahuja said that company officials are “committed to finding a solution and believe that if all the parties have that same level of commitment, a solution can be found” (ASW, 2/12, p. 1). He subsequently resigned as CEO.

Expanded Directive

The European Aviation Safety Agency (EASA) has expanded on its January directive for detailed visual inspections of the wings of certain Airbus A380s (ASW, 2/12, p. 9) and is now calling for high frequency eddy current inspections of the wings of all A380s currently in service.

Airworthiness Directive (AD) 2012-0026, issued Feb. 8, says that all A380s that have accumulated fewer than 1,216 flight cycles must undergo the inspections “before or upon completion of” 1,300 flight cycles.

Airplanes with more than 1,216 flight cycles but fewer than 1,384 cycles must have the inspections within six weeks or 84 flight cycles, whichever occurs first after the Feb. 13 effective date of the AD.

Airplanes with 1,384 flight cycles or more must undergo the inspections within three weeks after Feb. 13.

If any cracks are detected, Airbus must be contacted for approved instructions prior to the next flight, the AD said.

Inspection results are to be reported to Airbus within two days after the eddy current inspections, the AD says.



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In Other News ...

Despite heavy snowfall and unusually cold temperatures, **European airports** are doing a better job than they did a year ago in clearing snow from runways, deicing aircraft and coordinating actions with officials at other airports, according to Siim Kallas, European Union vice president responsible for transport. ... The International Civil Aviation Organization says that its Continuous Monitoring and Oversight section — responsible for the **Universal Safety Oversight Audit Programme (USOAP)** — has been recertified to the ISO 9001:2008 standard for quality management systems. ... After years of short-term budget extensions, the U.S. Congress and President Obama have agreed on a \$63.4 billion **authorization bill** to fund the Federal Aviation Administration through 2015.

Compiled and edited by Linda Werfelman.