

Warnings on NextGen Progress

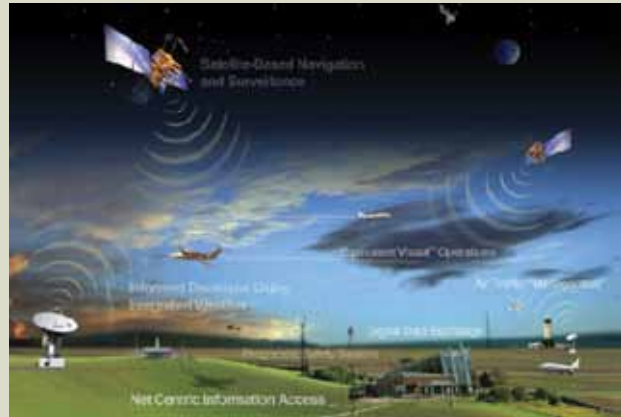
Delays by the U.S. Federal Aviation Administration (FAA) in implementing plans to modernize the National Airspace System could discourage the aviation industry from investing in the system, Calvin L. Scovel III, inspector general for the Department of Transportation (DOT), told Congress.

In testimony prepared for the House subcommittee on aviation, Scovel — whose office is responsible for oversight of all DOT programs — said the FAA faces three major challenges in implementing the Next Generation Air Transportation System (NextGen), which involves, in large part, the transition away from ground-based navigation aids in favor of a satellite-based system.

First, he cited the need for “timely execution” of key recommendations, adding, “The FAA has primarily focused its efforts on one of the most critical areas — improving airspace efficiency around major cities. However, it has not defined when users will benefit from the effort.

“As a result, industry representatives have expressed concerns over FAA’s execution with this and related projects, which will ultimately make them reluctant to invest in NextGen equipage and advance NextGen at key locations.”

The delays are likely to continue, Scovel said, because the FAA “has not made critical, longer-term design decisions on NextGen ground and aircraft systems.”



U.S. Federal Aviation Administration

He said the FAA also faces major challenges in the resolution of technical and program management problems with the en route automation modernization (ERAM) program and the agency’s management of program costs and schedules involving NextGen transformational programs.

Scovel said that, to advance NextGen and protect taxpayer interests, the FAA should emphasize three management areas: NextGen budget priorities and performance goals, problems with ERAM and “an integrated master schedule for all NextGen programs.”

Global Reporting System

The European Commission (EC) and the International Civil Aviation Organization (ICAO) have approved the use of a common taxonomy for reporting aviation accidents and incidents worldwide and a single repository for storing all accident data.

The agreement calls for ICAO to encourage its 190 member states to use the European Coordination Centre for Accident and Incident Reporting Systems (ECCAIRS), which was developed by the EC Joint Research Centre.

The EC will promote the use of the ICAO taxonomy in reporting and exchanging information about accidents and incidents.

“The availability of standardized data at the global level will help to better understand the causes of aviation accidents, to better detect potentially serious safety hazards and to identify emerging safety issues before they become accidents, ultimately enhancing aviation safety everywhere,” said Matthias Ruete, the EC’s director general of mobility and transport.

A 2005 directive requires member states of the European Union (EU) to use ECCAIRS to collect and share information about aviation accidents and incidents. Several non-EU states also have begun using ECCAIRS as a national reporting system.



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Loss of Separation

Numerous loss of separation incidents in African airspace could have been resolved or avoided if the flight crews involved had been listening to a prescribed radio frequency, the International Federation of Air Line Pilots’ Associations (IFALPA) says.

All flight crews operating in the African region are asked to “maintain a listening watch” on 126.9 MHz and follow other procedures based on in-flight broadcast procedures developed by the International Air Transport Association (IATA).

In many parts of Africa, IFALPA said in a September *Air Traffic Services Briefing Leaflet*, communications “have either not been implemented or operate well below the required reliability. This has an impact on the proper provision of air traffic services, especially the flight information service.”

As a result, authorities have said that the IATA procedures should be used until communications facilities are improved.

\$1.9 Million Penalty Proposed

The U.S. Federal Aviation Administration (FAA) has proposed a \$1.9 million civil penalty against Colgan Air, alleging that the airline allowed flight attendants “to work on 172 revenue passenger flights when they were not properly trained to use the planes’ cabin fire extinguisher system.”

Some 84 new flight attendants worked on flights in Bombardier Dash 8-Q400 twin turboprop airplanes in November 2009, the FAA said, adding that the flights came after the agency had told Colgan — a Pinnacle Airlines subsidiary based in Manassas, Virginia — that the flight attendants had not undergone training in the use of the Q400’s fire extinguishers. Instead, they had been trained in the operation of a different type of fire extinguisher, which is used in Colgan Saab 340s, the FAA said.

“The airlines have to properly train crewmembers on the use of emergency equipment,” said FAA Administrator Randy Babbitt. “The flight attendants’ primary responsibility is to know



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exactly how to handle emergency situations, and they can’t carry out that responsibility if they’re not properly trained.”

In a separate matter, the FAA has proposed a \$1.1 million civil penalty against Aviation Technical Services (ATS), which the FAA says made improper repairs to 44 Boeing 737-300s operated by Southwest Airlines.

The FAA says ATS, based in Everett, Washington, U.S., “failed to accomplish all the work required by three FAA airworthiness directives calling for five repetitive inspections and a one-time inspection to find and repair fatigue cracks in the fuselage skins” of the airplanes.

“After the inspections, ATS allegedly failed to install fasteners in all the rivet holes within the time specified for the task.”

The airplanes were returned to service between Dec. 1, 2006, and Sept. 18, 2009, the FAA said.

The FAA also proposed a \$2.4 million civil penalty against Cessna Aircraft for allegedly failing to comply with its own quality control system in manufacturing the wings on a Cessna Corvalis, a high-performance, four-seat, general aviation airplane.

The FAA’s action followed separation of carbon composite parts from a wing during a test flight in December 2010. The FAA said the separation occurred because high humidity in Cessna’s Chihuahua, Mexico, factory “prevented the bonded materials from curing properly.”

All three companies were given 30 days after receiving FAA enforcement letters to respond to the allegations.

Pilot Forecast for Asia

The Asia Pacific region will require hundreds of thousands of new pilots and maintenance technicians to support the modernization of existing air carrier fleets and growth in air travel in the next 20 years, according to projections by The Boeing Co.

Boeing projects that 182,300 new pilots and 247,700 new technicians will be required through 2030, most of them in China.

“We’re already beginning to see some delays and operational disruptions due to a shortage of pilots,” said Roei Ganzarski, chief customer officer for Boeing Flight Services. “To ensure the success of our industry as travel demand grows, it is critical that we continue to foster a talent pipeline of capable and well trained aviation personnel.”

Ganzarski said the aviation industry must “make a concentrated effort to get younger generations excited about careers in aviation. We are competing for talent with alluring high-tech companies, and we need to do a better job showcasing our industry as a global, technological, multi-faceted environment where individuals from all backgrounds and disciplines can make a significant impact.”

According to Boeing’s projections, China will need 72,700 pilots and 108,300 maintenance technicians between now and 2030, North East Asia will need 20,800 pilots and 30,200 technicians, and South East Asia will require 47,100 pilots and 60,600 technicians. In addition, Oceania will need 13,600 pilots and 15,600 technicians, and South West

Asia will need 28,100 pilots and 32,700 technicians.



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Ice-Detection Rule

Scheduled airlines in the United States are being required to install ice-detection equipment in their existing aircraft or to revise flight manuals to include information on when crews should activate ice-protection systems.

A new rule from the Federal Aviation Administration (FAA) requires that, if an aircraft is equipped with an ice-detection system, the system must alert the crew when activation is required. Under the rule, the system may either activate ice protection automatically or alert the pilots so they may activate it manually.

The rule also says that, if an aircraft does not have ice-detection equipment, the crew must activate the ice-protection system “based on cues listed in their airplane’s flight manual during climb and descent, and at the first sign of icing when at cruising altitude.”

The rule applies to aircraft weighing less than 60,000 lb (27,216 kg). The FAA said that studies have found that these aircraft are “more affected by undetected icing or late activation of the ice-protection system.” In addition, larger commercial aircraft already are required to be equipped with ice-detection equipment.



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New Rules

Australian aviation maintenance organizations have begun obtaining approval to operate under a new set of rules under Part 145 of the Civil Aviation Safety Regulations, introduced in June 2011.



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Three organizations have completed the transition to the new regulations, and a total of 250 are expected to complete the transition by June 2013, the Civil Aviation Safety Agency (CASA) says.

John McCormick, CASA director of aviation safety, says the new regulations will enhance safety, provide for increased flexibility and conform to international practices.

“The regulations enhance safety because they introduce requirements for safety management systems and human factors training into the maintenance sector for the first time,” McCormick says. “The new rules are also clearer, which will improve compliance with safety standards.”

Mechanical Failures Cited

Mechanical failure has been the most common cause of crashes in the Gulf of Mexico of helicopters involved in oil and gas production, according to a study by researchers at the Johns Hopkins University Center for Injury Research and Policy.

The study, published in the September issue of *Aviation, Space and Environmental Medicine*, found that 178 crashes involving oil and gas production helicopters in the Gulf were recorded by the U.S. National Transportation Safety Board (NTSB) from 1983 through 2009. The crashes caused 139 fatalities.

Mechanical failure was cited as the most common cause — in 38 percent of the crashes. Bad weather was the second-most common, cited as the cause of 16 percent of the crashes. Pilot error was a “major contributor” in 47 percent, “with poor decision making the most prevalent error,” the study said.

Fifteen of the 178 helicopters sank after crashes or emergency landings in Gulf waters because flotation devices were not activated, the report said.

The study found an average of 8.2 crashes per year from 2000 through 2009, compared with an average of 5.6 per year from 1983 through 1999. However, the study found that the number of crashes each year decreased after 2007.

Susan P. Baker, the lead author of the report on the study, said that, although the most recent data are encouraging, it is

too soon to tell whether they represent “a temporary statistical blip or the beginning of a positive trend.”



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Oxygen Mask Recommendations

The U.S. National Transportation Safety Board (NTSB), citing a fatal 2010 fire aboard a United Parcel Service (UPS) Boeing 747-400F, says operators should be required to install full-face oxygen masks on many commercial aircraft.

The NTSB said, in recommendations to the U.S. Federal Aviation Administration (FAA), that the action should be required on aircraft used in Federal Aviation Regulations Part 121 air carrier, 135 on-demand and 91 Subpart K fractional ownership operations.

A related recommendation called on the FAA to require operators of those aircraft to include, in initial and recurrent training, “tactile, hands-on training on the use of operable oxygen mask/goggle sets, including the use of the regulator’s emergency selector and the venting of the smoke goggles” and aircraft-specific training on cockpit

communications while oxygen masks are in use.

The NTSB cited the Sept. 3, 2010 crash of the UPS 747 as the two-member crew attempted to return to Dubai International Airport after a “FIRE MAIN DECK” warning illuminated at 32,000 ft, about 22 minutes after departure. Both crewmembers were killed, and the airplane was destroyed by the impact and subsequent fire.

The United Arab Emirates General Civil Aviation Authority is continuing its investigation, but the NTSB said that preliminary findings prompted the recommendations.

Simulations conducted during the accident investigation at UPS and Boeing training facilities showed that pilots had difficulty donning oxygen mask/goggle sets. Participants said the full-face oxygen mask was easier and faster to don and to use, the NTSB said.

Camel Scan

Australian pilots are being recruited for what the government calls a key role in managing the country’s feral camel population.



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Pilots of aircraft operating in outback areas where camels are common should note their camel sightings and enter the information into an online database. The information should be entered into the database on the CamelScan Web page at <feralscan.org.au/camelscan/default.aspx>. The data will be used to aid in efforts to manage Australia’s more than 1 million camels.

Feral camels are considered pests responsible for more than \$10 million in damage every year, including damage to airstrips and aircraft in remote areas.

In Other News ...

The U.S. Federal Aviation Administration (FAA) has approved Boeing’s design of the 787 **Dreamliner** and issued a production certificate to allow the company to proceed with manufacturing. In a related move, the European Aviation Safety Agency issued a validation of the FAA type certificate. ... More than 200 participants at a European Commission workshop have endorsed a call for Eurocontrol to develop a master plan for integrating **unmanned aircraft systems** into European airspace. ... The U.S. Federal Aviation Administration has introduced **airport surface detection equipment, model X (ASDE-X)** at 35 major U.S. airports. ASDE-X is a surface surveillance system designed to identify ground traffic to air traffic control.



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Police personnel in Nepal surround the wreckage of a Buddha Air Beechcraft 1900, which crashed Sept. 25 during approach to Kathmandu-Tribhuvan Airport after flying foreign tourists around Mount Everest. All 16 passengers and three crewmembers were killed.

Compiled and edited by Linda Werfelman.