

ATM Goals

Air traffic management (ATM) safety is improving but will require intensified effort to achieve the goals of the Single European Sky program, the Eurocontrol Safety Regulatory Commission (SRC) says.

In releasing its annual safety report for 2009, the SRC said that no ATM-related accidents were reported for aircraft weighing more than 2,250 kg (4,960 lb).

“The trend shows that the absolute number of accidents with an ATM contribution is decreasing,” the report said.

The report also noted a slight decrease in runway incursion incidents and a decrease in the total number of level bust incidents reported, although the number of serious incidents increased slightly. In addition, the report said, “there was a definite increase in the number of reported airspace infringements, with more serious incidents reported, but the number of major incidents remained the same.”

Jos Wilbrink, the 2010 SRC chairman, said, “One emerging issue is that although safety maturity in air navigation service providers is developing well, there is a lack of consistency in severity assessments. It is important that reports use the same standards so that reliable data can be established. The sharing of safety knowledge is fundamental in improving safety overall.”



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Research Agreement

The European Union (EU) and the U.S. Federal Aviation Administration (FAA) have agreed to work together on research to provide what the FAA called “seamless air traffic service” for aircraft flying between Europe and the United States.

Their agreement, signed in March in Budapest, Hungary, calls for research on “the interoperability of avionics, communication protocols and procedures, as well as operational methods” under the Next Generation Air Transportation System (NextGen) and its European counterpart, Single European Sky ATM (air traffic management) Research, known as SESAR.

Siim Kallas, European Commission vice president responsible for transport, who signed the agreement for the EU, said that, in another development, the EU and Eurocontrol had agreed to “explore a possible high-level cooperation agreement, thus consolidating the reform process of Eurocontrol, as well as the essential support provided by Eurocontrol to the implementation of [the Single European Sky], notably in its role as a performance review body and network manager for the [EU].”

Narrow Runways

Large aircraft will be required later this year to stop operating on runways in Australia that are narrower than the Australian Civil Aviation Safety Authority (CASA) standard.

Under current Civil Aviation Safety Regulations, large aircraft have been permitted to operate on runways that meet U.S. Federal Aviation Administration specifications. CASA says that beginning June 1, this practice will no longer be acceptable.

“This means that aerodrome operators must look at whether their runway widths meet the standards as set out in Part 139 of the Civil Aviation Safety Regulations, which is in accordance with International Civil Aviation Organization standards. In some cases, runways may have to be widened to accommodate aircraft that currently operate to an aerodrome.”

CASA said that, for example, Boeing 737s are required by Australian regulations to use runways at least 45 m (148 ft) wide. Nevertheless, they have been permitted to use runways that are 30 m (98 ft) wide.

CASA said that airport operators that cannot meet the Australian standards must seek an exemption from the regulation. Operators that use narrow runways also must seek approval to continue their operations, CASA said.



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Weather Tower Warning

Causing three fatal accidents involving collisions of aircraft with unmarked meteorological evaluation towers (METs), the U.S. National



U.S. National Oceanic and Atmospheric Administration

Transportation Safety Board (NTSB) has issued a safety alert warning pilots of dangers associated with the towers.

METs — many of which are only slightly shorter than 200 ft, the height at which the U.S. Federal Aviation Administration (FAA) requires obstruction markings — measure wind speed and direction during the development of wind farms (ASW, 11/10, p. 40).

METs typically are made from galvanized tubing with a diameter of 6–8 in (15–20 cm) and secured with guy wires installed at varying heights. Some of the structures, depending on their location, have been erected without notice to the aviation community, the NTSB said.

“Pilots have reported difficulty seeing METs from the air,” the NTSB added. “METs could interfere with low-flying aircraft operations, including those

involving helicopter emergency medical services, law enforcement, animal damage control, fish and wildlife, agriculture and aerial fire suppression.”

Only two of the 50 states have taken action designed to reduce the risks presented by METs to aircraft, the NTSB said, noting that Wyoming requires all METs to be registered and marked so that they can be seen from a distance of 2,000 ft (610 m); the state also maintains an online database. South Dakota requires that METs be marked.

The FAA has issued a notice of proposed rulemaking that updates Advisory Circular 70/7460-1K with a recommendation that METs be marked. Nevertheless, the NTSB said that it is concerned that, because the FAA would not mandate the markings, many METs would be constructed without adequate markings or notice to aviators.

FOD Protection

Boeing should be required to develop a method of protecting the elevator power control unit input arm assembly on many 737s against damage from foreign object debris (FOD), the U.S. National Transportation Safety Board (NTSB) says.

The NTSB cited a June 14, 2009, incident in which a Tailwind Airlines 737-400 experienced an uncommanded pitch-up when it was about 20 ft above ground level during approach to Diyarbakir Airport in Turkey. The flight crew “performed a go-around maneuver and controlled the airplane’s pitch with significant column force, full nose-down stabilizer trim, and thrust,” the NTSB said. “During the second approach, the flight crew controlled the airplane and landed by inputting very forceful control column inputs to maintain pitch control.”

The NTSB said that the two flight crewmembers received minor injuries during the go-around but did not provide details; none of the 159 passengers or cabin crewmembers was injured.

The NTSB determined that the uncommanded pitch-up was caused by FOD “lodged between the input arm assembly and the PCU [power control unit] housing” and credited the crew’s immediate response with contributing to the survivability of the incident.

As a result of its investigation, the NTSB issued five safety recommendations to the U.S. Federal Aviation Administration (FAA), including its call for Boeing to be required to develop a



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way to protect against FOD damage to the input arm assembly on Boeing 737-300 through -500 series airplanes.

The FAA also should require operators of the affected airplanes to implement the modification developed by Boeing, require Boeing to redesign the elevator control system “such that a single-point jam will not restrict the movement of the elevator control system and prevent continued safe flight and landing,” the NTSB said. Operators should then be required to implement the new design, the agency said.

In addition, the FAA said that Boeing should be required to develop “recovery strategies (for example, checklists, procedures or memory items) for pilots of 737 airplanes that do not have a mechanical override feature for a jammed elevator in the event of a full control deflection of the elevator system, and incorporate those strategies into pilot guidance.”

Tailcone Icing

The U.S. National Transportation Safety Board (NTSB), citing three recent incidents in which Cessna 560XLs experienced a loss of rudder control associated with ice buildup inside the tailcone, has recommended that operators be required to take corrective action specified by the manufacturer.

The NTSB published a safety recommendation calling on the U.S. Federal Aviation Administration (FAA) to issue an airworthiness directive to require Cessna 560XL operators to comply with Cessna Service Letter 560XL-53-08.

The letter says that the problem can be corrected by drilling a 0.75-in (1.91-cm) hole in the airplane's bulkhead "slightly above the lower edge ... [to] drain any water from the tailcone into the fuselage before the water level could become high enough to freeze around the rudder boost cables or pulleys." The letter also says operators should seal any drain holes in the tailcone.

The NTSB said it is investigating three incidents — each of which occurred in December 2010 — involving an ice buildup inside the tailcone. Investigators have found that ice that can freeze around the rudder boost cables and pulleys can interfere with their movement. No one was injured in the incidents, and all three airplanes landed safely.

In Other News ...

The International Civil Aviation Organization, in collaboration with the International Federation of Air Line Pilots' Associations, has published the 2011–2012 edition of its *Emergency Response Guidance Manual* — a guide for flight crews and cabin crews dealing with aircraft incidents involving **dangerous goods**. ... Nigeria's Accident Investigation Bureau has contracted with CAE Flight-scape for a comprehensive **flight safety laboratory** to include CAE Flightscape Insight software, designed to analyze flight data. It will be the first laboratory of its kind in sub-Saharan Africa. ... The U.S. Federal Aviation Administration has agreed to pay \$4.2 million for the installation of automatic dependent surveillance-broadcast (ADS-B) avionics in up to 35 JetBlue Airbus A320s to enable satellite-based, **NextGen**

flights from Boston and New York to the Caribbean beginning in 2012. The FAA said that under the agreement, it will "collect valuable NextGen data by observing and conducting real-time operational evaluations of ADS-B on revenue flights."

Corrections ... An article in the September 2010 issue ("Back to Where We Began," p. 1) incorrectly stated the timing of an incident in China involving falsification of the records of more than 200 pilots. The falsifications were discovered in 2008, and the problem was corrected. ... An article in the February 2011 issue ("SMS Swiss Style," p. 25) incorrectly stated the title of a Swiss official discussing the implementation of safety management systems. He is Peter Müller, safety analyst technical, Safety Risk Management, Swiss Federal Office of Civil Aviation (FOCA).

Capt. James C. Waugh

Capt. James C. Waugh, a retired airline pilot who served as chairman of Flight Safety Foundation in 1988 and 1989, died Feb. 24 after a long illness. He was 89.

Capt. Waugh, a native of Huntington, West Virginia, U.S., joined Pan American Airways' air ferries division — which supplemented the World War II air transport activities of the U.S. Navy and U.S. Army Air Corps — in 1942. After the war, he was a Naval Reserve officer until 1958.

During his years at Pan Am, he flew the Boeing 314, a four-engine flying boat, as well as a number of piston-engine airliners and jets. He was among the first to receive a type rating in the Boeing 747. He later held various management positions at the airline, including senior vice president, operations.

After retiring from Pan Am, he became chairman of Flight Safety Foundation. In 1995, the Foundation awarded him the *Aviation Week and Space Technology* Distinguished Service Award.

He is survived by his wife of 67 years, Mary Maxine Prockter Waugh; his children Barbara Waugh of Oakland, California, Jim Waugh of Greenwich, Connecticut, and Betsy Toro and Meg Koc, both of Cary, North Carolina; six grandchildren; and two great-grandchildren.

The family requested that, in lieu of flowers, donations be made to Flight Safety Foundation or to a favorite charity.

False Alerts

Older transponders are generating false short-term conflict alerts that have appeared on air traffic control (ATC) consoles, the Australian Transport Safety Bureau (ATSB) says.

The ATSB said that the false alerts have been detected by new terminal area radar equipment at Coolangatta and Melbourne. Similar new equipment is scheduled to be installed this year at several other major airports in Australia.

Mode A transponders work by emitting digital pulses that bear aircraft identification information. The pulses are transmitted "in response to the secondary surveillance radar used by [ATC] to identify all transponder-equipped aircraft," the ATSB said.

Compiled and edited by Linda Werfelman.