

Unreported Wire Strikes

At least 40 percent of aircraft wire strikes in Australia have gone unreported in recent years, according to a report by the Australian Transport Safety Bureau (ATSB).

The ATSB based its conclusion on surveys of commercial electricity distribution and transmission companies, all of which were asked to provide data on all known wire strikes involving their wires between July 2003 and June 2011. The ATSB also requested information from a telecommunications company, which did not have a central data center for wire strike information and therefore did not participate.

During the eight-year period, pilots or operators had reported 166 wire strikes to the ATSB. Of these, about half involved crop spraying, and 17 percent involved aircraft engaged

in aerial stock mustering, fire control, surveying and photography — all operations that typically are conducted at low altitudes.

Information from electricity distribution and transmission companies indicated that an additional 101 wire strikes had not previously been reported to the ATSB.

The ATSB urged pilots and operators to report all future wire strikes “so that they can be investigated, if required, and so that occurrence details can be collected for research purposes to identify emerging safety trends.

“Information reported to the ATSB increases our understanding of wire strikes, the trends, as well as how and why they happen. It is only with reported information that the ATSB can improve aviation safety by establishing the true



extent of wire strikes and determining how and where they occur so that actions can be directed toward the most appropriate areas to reduce wire strikes.”

Simulator Time

New requirements for Australian pilots to undergo training and checking exercises in simulators will lessen risks of accidents during training, the Civil Aviation Safety Authority (CASA) says.

The requirements, which will take effect April 1, 2013, call for conversion command training, as well as training and checking, for pilots of multi-engine airplanes with 10 to 19 passenger seats to be conducted in “an appropriate simulator, if one is available in Australia.”

CASA says that pilots who are training to fly aircraft with at least 20 passenger seats must receive training in a simulator “if one is available in Australia or a recognized foreign state.”

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Canadian Watchlist

The Transportation Safety Board of Canada (TSB) has issued its 2012 Watchlist of the most critical safety issues facing aviation and other transportation systems in Canada.

Of the nine critical issues on the list, four involve aviation.

One issue involves air safety management systems (SMS), which the TSB said should be addressed with effective monitoring of “the integration of SMS practices into day-to-day operations.”

The TSB also called for action to address landing accidents and runway overruns. The agency said pilots must receive timely information about runway surface conditions during bad weather, and called for longer runway-end safety areas or the installation of engineered material arresting systems to safely stop overruns.

In addition, the TSB cited the risk of runway collisions, calling for improved runway procedures and the use

of enhanced collision warning systems at the country’s airports.

Finally, the agency cited collisions with land and water, which it said should be dealt with through improved non-precision approach procedures.

The Watchlist is the second to be issued by TSB. The original list, released in 2010, also cited the need to address runway collisions, collisions with terrain, landing accidents and runway overruns.

“The TSB found on some issues, there has been little or no change,” said TSB Chair Wendy Tadros. “Planes continue to run off our runways, or to collide with land and water.”

She urged the aviation community to act on the critical safety issues cited on the Watchlist, adding, “Canadians deserve the safest transportation system in the world.

The TSB noted progress in some 2010 Watchlist items, such as planned improvements for cockpit voice recorders.

Weather Warning

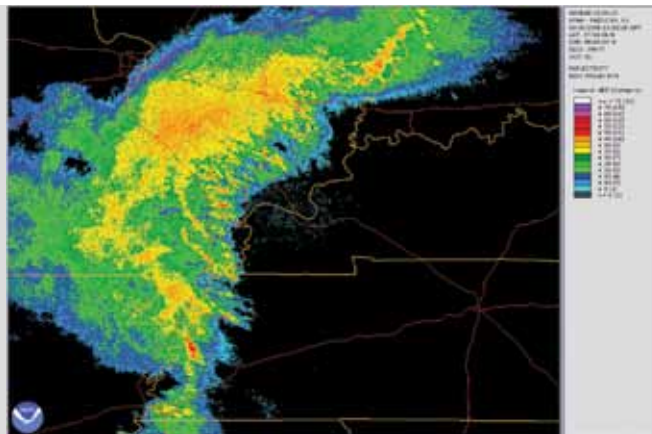
Pilots using certain types of weather display systems should be aware that the data being displayed may be as much as 20 minutes older than the display indicates, the U.S. National Transportation Safety Board (NTSB) says.

In a Safety Alert issued in mid-June, the NTSB said the warning applies to pilots who view “mosaic” imagery that is created from Next Generation Radar (NEXRAD) data and made available via flight information service–broadcast (FIS–B) and private satellite weather service providers. Airline pilots, who obtain their weather information from other sources, are not affected by the warning.

Mosaic images are created from data from multiple radar ground sites, and the NTSB said that “when a mosaic image is updated, it may not contain new information from each ground site.”

In addition, the NTSB said, “the age indicator displays the age of the mosaic image created by the service provider. Weather conditions depicted on the mosaic image will *always* be older than the age indicated on the display.”

The agency cited two fatal accidents in recent years in which NEXRAD mosaic imagery was available to pilots. In one accident — the March 25, 2010, crash of a Eurocopter AS350 B3 near Brownsville, Tennessee — the pilot had received a



U.S. National Oceanic and Atmospheric Administration

NEXRAD image labeled as 1 minute old, although the weather conditions depicted were 5 minutes old (ASW, 3/12, p. 45). The image showed severe weather about 7 mi (11 km) from the landing site, but in reality, the weather had reached the site.

The crash killed the pilot and two aeromedical personnel. The NTSB said the probable cause was “the pilot’s decision to attempt the flight into approaching adverse weather, resulting in an encounter with a thunderstorm with localized instrument meteorological conditions, heavy rain and severe turbulence that led to a loss of control.”

Airport Improvements

The International Civil Aviation Organization (ICAO) and Airports Council International (ACI) have agreed to cooperate on efforts to enhance safety at airports worldwide.

The agreement — signed in mid-June by ICAO Council President Roberto Kobeh González and ACI Director General Angela Gittens — calls for increased support for an ACI program to identify safety vulnerabilities and correct them, to work together on technical assistance projects, to exchange safety information and to promote regional cooperation (ASW, 4/12, p. 22).

Kobeh said the agreement “reflects ICAO’s continuing efforts to take a more action-oriented approach to promoting safety.”

Gittens added that the agreement was indicative of a new effort to expand ACI’s Airport Excellence in Safety Programme, which helps airports address safety issues through on-site peer reviews, information sharing, training and assistance in implementing management structures.

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Ending Idle Chatter

Inappropriate “chat” on the aeronautical emergency radio frequency 121.5 MHz could interfere with legitimate use of the frequency and should be eliminated, Eurocontrol says.



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The agency said in mid-June that it had been told, “on numerous occasions, about the misuse of the ... frequency, most recently involving inappropriate ‘chat’ related to the ongoing EURO 2012 football championship.”

Such conversations should be avoided “in order to maintain the integrity of the frequency for the purposes for which it is intended,” Eurocontrol said.

The agency asked operators to remind flight crews about the appropriate use of 121.5 MHz, as defined by national aviation authorities and the International Civil Aviation Organization.

Stick Pusher Protections

The U.S. National Transportation Safety Board (NTSB), citing the 2009 crash of an Avions de Transport Regional (ATR) Alenia ATR 42, says steps should be taken to ensure that the aircraft's stick pusher activates before the stall angle-of-attack (AOA) is reached when ice is accumulating on the airframe.

The 2009 crash prompted the NTSB to review the ATR 42 stall protection system, which "provides an aural warning and stick shaker to alert pilots that a stall is imminent and if the ... (AOA) is further increased, a stick pusher activates to automatically limit or reduce the AOA," the NTSB said.

"For a clean wing with no ice contamination, the ATR 42 is expected to stall at 14.4 degrees AOA, and the stick pusher activates at an angle lower than the clean-wing stall AOA. ... However, the stick pusher's activation AOA does not change when the ice protection system is turned on, and therefore it may not offer stall protection when the airplane encounters icing conditions."

In its safety recommendations, the NTSB said that the European Aviation Safety Agency (EASA) should revise the ATR 42's stick pusher activation AOA "to ensure that the stick pusher activates before the stall AOA in the presence of airframe ice accretions."

The NTSB also said that the EASA should evaluate all stick pusher-equipped transport category airplanes that it has certified "to ensure that the stick pusher activates at an angle-of-attack that will provide adequate stall protection in the presence of airframe ice accretions."



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The NTSB issued two similar recommendations to the U.S. Federal Aviation Administration.

The recommendations were developed in the aftermath of the Jan. 27, 2009, crash of an ATR 42 cargo airplane, registered to FedEx and operated by Empire Airlines, during an approach to Lubbock Preston Smith International Airport in Texas (ASW, 6/11, p. 18).

The captain was seriously injured, and the first officer received minor injuries in the crash, which resulted in substantial damage to the airplane. The NTSB said the probable cause was the flight crew's "failure to monitor and maintain a minimum safe airspeed while executing an instrument approach in icing conditions, which resulted in an aerodynamic stall at low altitude."

Contributing factors included the crew's failure to comply with standard operating procedures associated with a flap anomaly, the captain's decision to continue an unstabilized approach, poor crew resource management and the crew's fatigue and cumulative sleep debt, the NTSB said.

100 Audits and Counting

Flight Safety Foundation's Basic Aviation Risk Standard (BARS) program in June conducted the 100th safety audit of the 2-year-old program.

The 100th audit was conducted at Karratha Flying Services (KFS), a charter company in the Pilbara region of Western Australia. KFS was one of the first aviation companies to become a BARS member organization and one of the first to undergo an audit. The June BARS audit was the company's most recent.

The BARS program, introduced in 2010, was developed by Flight Safety Foundation in conjunction with several major mining and resource companies. The program's goal is to establish a single comprehensive risk standard for all aviation companies providing aviation services to resource companies.



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In Other News ...

The Association for Unmanned Vehicle Systems International has published a code of conduct for its members and others who operate **unmanned aircraft systems** (UAS), emphasizing "safety, professionalism and respect in all uses of UAS." ... The U.S. Federal Aviation Administration (FAA) has proposed a \$206,550 civil penalty against Martinaire Aviation for alleged violations of regulations governing the transportation of **hazardous materials** in 2011. Martinaire has 30 days after it receives the FAA's enforcement letter to respond.

Compiled and edited by Linda Werfelman.