

Laser Penalties

The U.S. Federal Aviation Administration (FAA) says it will begin imposing civil penalties against people who shine lasers into aircraft cockpits.

“Shining a laser into the cockpit of an aircraft is not a joke,” FAA Administrator Randy Babbitt said. “These lasers can temporarily blind a pilot and make it impossible to safely land the aircraft, jeopardizing the safety of the passengers and people on the ground.”

The FAA said it was acting in accordance with Federal Aviation Regulations — in particular, with one provision



U.S. Department of Transportation

that prohibits interfering with flight crewmembers operating an aircraft. The FAA previously has cited the regulation in cases involving passengers interfering with crewmembers performing their duties. The maximum penalty is \$11,000 per violation.

“Today’s interpretation reflects the fact that pointing a laser at an aircraft from the ground could seriously impair a pilot’s vision and interfere with the flight crew’s ability to safely handle its responsibilities,” the FAA said.

In the first five months of 2011, pilots reported more than 1,100 incidents of laser cockpit illumination. The number of reported incidents has steadily risen from about 300 in 2005 to 2,836 in 2010.

The FAA attributes the increase in reported events in part to increased pilot awareness of the reporting system. The agency also cited the wider availability of inexpensive laser devices.

Legislation is pending in Congress to criminalize the intentional aiming of a laser device at an aircraft, although some defendants have been prosecuted under existing laws. Several states and cities already have passed similar measures, and the FAA said it will work with law enforcement officials to help in criminal prosecutions.

Icing Issues

A study conducted for the European Aviation Safety Agency (EASA) has recommended stricter standards for ground deicing and anti-icing and increased cooperation between the industry and aviation authorities.

The study called for continued collection and analysis of safety data, development of comprehensive regulations and guidance for operators, an ongoing review of whether regulations are being applied consistently throughout Europe and further research into the performance of deicing/anti-icing fluids.

“Overall, if the EASA adopted the recommendations, there would be a beneficial reduction in the risks associated with deicing/anti-icing,” the report said. “Implementing some of the recommendations would have an initial negative economic impact; however, the gains expected, in the long term, from reduced incidents and losses will more than compensate economically. Furthermore, with

improved standards of deicing/anti-icing, it is expected that fluid use and application will become more efficient, thereby providing not just economic but also environmental benefits.”

The study was ordered in the aftermath of the winters of 2005 and 2006, when a number of events were reported involving “stiff or frozen” flight controls, many of them in aircraft without powered flight control systems (*ASW*, 9/06, p. 26).

“These events were attributed to the rehydration and subsequent freezing of the residues of thickened anti-icing fluids previously applied to the aircraft,” the report said.

At the time, the U.K. Air Accidents Investigation Branch and the German Federal Bureau of Aircraft Accident



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Investigation, among others, issued safety recommendations that called for improving the availability of Type I deicing/anti-icing fluids and encouraging their use, and for consideration of approving and certifying deicing/anti-icing service providers and training organizations.

Type I fluids are half ethylene glycol and half heated water and are considered “unthickened” and more suitable for use on aircraft with nonpowered flight controls.

Flying Into Wires

Nearly two-thirds of wire strike accidents reported in Australia in the past decade involved pilots who were aware of the position of the wires before their aircraft struck them, according to research by the Australian Transport Safety Bureau (ATSB).

The agency said that, of 180 wire strike accidents reported between 2001 and 2010, the pilots involved in 63 percent told investigators that they knew the wires were there. Of the 180 accidents, 100 involved agricultural flying.

“In many of these accidents, the pilot was not completely focused on the immediate task of flying due to a change of plans,” the ATSB said in a report on the research, adding that pilots should “treat any changes in your plan as a ‘red flag’ — that is, treat it as something you should consider and assess before going any further.”

IS-BAO Restructuring

The International Business Aviation Council (IBAC) has completed an assessment of the business aviation industry’s safety standard — the International Standard for Business Aircraft Operations (IS-BAO).

The assessment, conducted by an IBAC task force, concluded with recommendations calling for changes in the management structure and revenue/cost models “to enable the sustained growth and value of the industry standard as it becomes increasingly more important to the future safety oversight programs required to keep the excellent safety record of business aviation constantly improving.”

IBAC also announced the appointment of James Cannon as IS-BAO program director.



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Medical Guidelines

Pilots who have suffered strokes should be required to undergo specific neuropsychological evaluations before receiving medical certificates, the U.S. National Transportation Safety Board (NTSB) says.

In a safety recommendation to the U.S. Federal Aviation Administration (FAA), the NTSB said the FAA should “consult with appropriate specialists and revise the current ... guidance on issuance of medical certification subsequent to ischemic stroke or intracerebral hemorrhage to ensure that it is clear and that it includes specific requirements for a neuropsychological evaluation and the appropriate assessment of the risk of recurrence or other adverse consequences subsequent to such events.”

The NTSB cited the Aug. 9, 2010, crash of a de Havilland DHC-3T near Aleknagik, Alaska, U.S., that killed the pilot

and four passengers. Four other passengers received serious injuries.

The NTSB said the probable cause of the accident was the pilot’s “temporary unresponsiveness, for reasons that could not be established.” The NTSB noted that the pilot previously had experienced an intracerebral hemorrhage — a burst blood vessel in the brain — followed by “persistent and obvious cognitive deficits” for months after the hemorrhage.

The FAA was aware of the problem, but the flight surgeon who reviewed the pilot’s application said that he used the FAA *Aeromedical Certification Reference Manual* in determining that the pilot was eligible for an unrestricted first-class medical certificate.

“He stated that he did not speak with any outside consultants about the accident pilot because he was comfortable with the results he received from the evaluations of the pilot, including a status report provided by a local neurologist whom the flight surgeon considered reputable,” the NTSB said in the letter accompanying the safety recommendation.

The neurologist’s evaluation, however, did not discuss the pilot’s medical fitness for flight, the NTSB said.

“It is not clear that a sufficiently thorough aeromedical evaluation of the pilot would have denied the pilot eligibility for a first-class medical certificate,” the NTSB said. “However, a more rigorous decision-making process for evaluating this pilot with a history of [intracerebral hemorrhage] would have decreased the potential for adverse consequences.”



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NextGen Delays

Development and implementation of a data communications program that will be a key element of the U.S. Federal Aviation Administration’s (FAA’s) Next Generation Air Transportation System (NextGen) is likely to be delayed by at least two years, a federal audit says.

The audit by the U.S. Department of Transportation Office of Inspector General, published June 15, says that the System Wide Information Management (SWIM) program — designed to streamline data communications among all NextGen air traffic systems — may experience additional delays “because of a lack of clear lines of accountability for overseeing and managing the program.”

The FAA also has increased the costs for the first of three SWIM segments by more than \$100 million, the report says.

The first SWIM segment, originally scheduled for implementation between 2009 and 2013, is expected to facilitate the sharing of air traffic management information, including airport operational status, weather information, flight data, status of special use airspace and airspace restrictions.

The second segment, scheduled for implementation from 2012 through 2016, is expected to support improvements in flight planning throughout the National Airspace System, as



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well as “improved flight arrival, surface and departure flow, and restricted and regulated airspace capabilities.” It also will give NextGen users improved access to aviation weather data.

The third segment, scheduled between 2016 and 2019, is intended to provide improvements in communications and surveillance that will allow for reduced separation between aircraft on transoceanic routes and better airport surface traffic management.

Proposed Penalties

The U.S. Federal Aviation Administration (FAA) has proposed civil penalties totaling more than \$1 million against two U.S. airlines.



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The FAA proposed a \$584,375 penalty against United

Airlines for alleged violations of federal regulations governing random drug and alcohol tests for safety-sensitive employees. The company “failed to perform required pre-employment drug tests and receive verified negative test results” before it transferred 13 people to safety-sensitive jobs, the FAA said.

The agency’s proposed \$425,000 penalty against Atlantic Southeast Airlines came in response to the airline’s alleged operation of two Bombardier CRJs that were not in compliance with FAA regulations because they did not undergo required inspections after they were struck by lightning in 2008. The airplanes were flown on a total of 13 revenue passenger flights while they were not in compliance with the requirement, the FAA said.

Each airline has until mid-July to respond.

Fire Containment Cover

AmSafe Industries has introduced a fire containment cover to protect palletized aircraft cargo in case of fire.

The covers, manufactured from fire-retardant fabric, are designed to contain fires with temperatures as high as 1,500 degrees F (816 degrees C) for as long as four hours, isolating the flames from other cargo pallets.

They are intended primarily for use on palletized loads being shipped in unprotected Class E cargo compartments on the main decks of freighter airplanes and in Class D under-floor holds.



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New Fatigue Standards

The International Civil Aviation Organization (ICAO) has adopted new international standards for fatigue risk management systems (FRMS) to be used as an alternative to prescriptive flight and duty time limitations for flight crewmembers (see p. 33).

The new standards will take effect Dec. 15.

“Current flight and duty time regulations are a ‘one size fits all’ solution,” said Nancy Graham, director of ICAO’s Air Navigation Bureau. “Operators using FRMS have reported greater operational flexibility than current flight and duty time regulations, while maintaining, and even improving on, current safety levels. The new standards will facilitate the development and globally harmonized implementation of the systems while making it easier for regulators to assess and monitor their use.”

ICAO — working with national regulators, scientists and the aviation industry — has published guidance material designed to help operators in the development and implementation of FRMS.

The new standards will allow nations to choose whether to establish FRMS regulations, but ICAO said that the “provision of prescriptive flight and duty time limitations regulations remains mandatory for all states.”



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In Other News ...

In a move intended to increase **public access** to general aviation flight information, operators of general aviation aircraft in the United States will no longer be permitted to cite privacy concerns as a reason to prevent the public from viewing flight information on the Internet, the U.S. Federal Aviation Administration says. ... The Council of the International Civil Aviation Organization (ICAO) has adopted a **code of conduct** for the collection and use of aviation safety information. ... The Australian Civil Aviation Safety Authority has issued new safety regulations to govern **aviation maintenance**, including personnel licensing and airworthiness requirements.

Compiled and edited by Linda Werfelman.

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