

Laser Illumination: A Dangerous Threat

Pilots have long known that lasers present a threat to aviation safety. As early as April 1980, the FAA began recording laser incidents. After pilots complained about outdoor laser lights near Las Vegas, Nev., in 1993, the Food and Drug Administration (FDA) determined in early 1994 that at least one Las Vegas casino was operating laser lights without a required variance and that others were not following approved procedures for operating laser light shows.

The incidents of accidental lasing of aircraft in the Las Vegas area in the 1990s added impetus to ALPA's efforts to mitigate the threat posed by laser illuminations. In 1994, ALPA safety experts played a major role in the Society of Automotive Engineers (SAE) G-10 (Aviation Human Factors Committee) Laser Safety Hazards Subcommittee's efforts to develop guidelines for laser shows in navigable airspace.

The Subcommittee's work, driven by ALPA input, became the focal point for updating existing FAA and FDA guidelines related to outdoor laser shows and a variety of related subjects, including flight crew training, airport laser charting, and air traffic control (ATC) protocols. As a result, on Oct. 30, 1995, the FAA and the FDA declared a temporary moratorium on outdoor laser light shows within a 20-mile radius of three Las Vegas airports.

In the ensuing years, ALPA continued to remain focused

on mitigating the threat posed to civil aviation by laser illuminations, working with such organizations as the American Medical Association (AMA), the International Federation of Air Line Pilots' Associations (IFALPA), the U.S. Air Force, the Federal Bureau of Investigation (FBI), the Federal Air Marshal Service (FAMS), and the International Civil Aviation Organization (ICAO).

In spite of those efforts, the increase in laser incidents in recent years has been staggering. Between April 1980 and September 2003, the FAA recorded fewer than 50 reported incidents. From 2004 through 2006, however, the annual reports of laser incidents progressively increased from 46 to 348, then 451. Some 604 incidents were reported in 2007; in 2008, the annual total rose to 790. By late May 2009, another 466 incidents had been reported since the first of the year.

One of the primary challenges for government agencies has been to establish appropriate statutory authority through which those individuals responsible for laser illumination attacks could be aggressively prosecuted. Before 2004, most criminal prosecutors seemed to be unaware of the dangers posed by hand-held lasers used to target airliners.

Early federal prosecutions could be pursued under Title 18 USC, Section 32, Interfering with Flight Crews. The

widely publicized arrest of a man for lasing the cockpit of a private aircraft that was on approach to Teterboro, N.J., on Dec. 29, 2004, however, resulted in the first successful federal prosecution using the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT) Act.

The April 2008 edition of *The FBI Law Enforcement Bulletin* reported an attempt to introduce new federal legislation: "The new legislation would amend the federal criminal code to impose a fine or prison term of up to 5 years for any person



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who knowingly aims the beam of a laser pointer at an aircraft or its flight path," the *Bulletin* explained. "If enacted, this would create Title 18, U.S. Code, Section 39A, Aiming a Laser Pointer at an Aircraft." Unfortunately, this effort has not been successful to date.

Several states have recently passed their own statutes to authorize criminal prosecution of laser attacks on airlin-

ers. California has been particularly successful, having established new laws under Sections 247.5 and 248 of the California Penal Code.

After pointing a laser at an aircraft on March 16, 2009, a Roseville, Calif., man was arrested by members of the Sacramento Joint Terrorism Task Force and the Roseville Police Department. He was convicted, and on Sept. 8, 2009, was sentenced to 37 months in prison. ALPA's president, Capt. John Prater, showed ALPA's appreciation for this appropriate law enforcement and judicial action by sending congratulatory letters to U.S. Attorney General Eric Holder, FBI Director Robert Mueller, and FAMS Director Robert Bray. In those communications, ALPA offered its assistance in future laser illumination prosecutions.

The ALPA National Security Committee (NSC), chaired by Capt. Robb Powers (Alaska), continues to coordinate with federal and local law enforcement authorities on laser issues by hosting subject-matter experts as speakers at the Association's AvSec meetings and conferences, and by supporting efforts to pass new federal legislation to address this high-priority issue.

Included in this issue of *Air Line Pilot* is a Jeppesen-sized insert, provided by the NSC, to guide ALPA members in reacting to an inflight laser illumination and during post-event follow-up. We hope that this information will be of value to you.—Mike Fredericks, ALPA Senior Aviation Security Specialist