

## Laser Attacks on Aircraft

### BACKGROUND

The hazard posed by laser attacks against civil aircraft, specifically the deliberate targeting of flight crew with laser illumination to disrupt the safe operation of the aircraft, is a matter of increasing worldwide concern. Available data indicate that the frequency of laser attacks on civil aircraft continues to rise significantly. In the US alone, thousands of laser strikes are officially reported by pilots every year. These strikes can result in distraction, disruption, disorientation and, in extreme cases, blindness and incapacitation.

Although most attacks happen when the aircraft is in close proximity to the ground, events are now being recorded at altitudes in excess of 8,000 feet. So far, when a pilot has been attacked on final approach, they have been able to hand control to the other pilot to complete the landing safely. IFALPA is extremely concerned that as the power, range, and divergence of the beams increase, we will see events where both pilots are effectively incapacitated close to the ground, with likely catastrophic consequences. The Federation therefore believes that laser attacks represent a critical security and safety issue and should be considered as acts of unlawful interference.

Some technological means to defend against the dangers posed by laser attacks are already being developed but, rather than having to deal with them in flight, the Federation strongly believes that the best line of defence is effective ground security preventing them in the first place. IFALPA therefore supports further research to find solutions which would assist law enforcement authorities in stopping these attacks and in locating the perpetrators so they can be dealt with in an appropriate manner.

The lack of proper legislation is of concern: even when airport security patrols or the local police manage to locate and catch the perpetrator(s) of a laser attack, prosecutions are very rare. IFALPA believes that States should establish and implement regulations, practices, and procedures (including reporting standards) to safeguard civil aviation against laser attacks on aircraft. Following the concerns officially raised by the Federation at the 2014 Aviation Security Panel meeting, ICAO sent out a Letter in December 2014 urging States to identify laser attacks as a hazard to civil aviation, and to ensure that the general public is fully aware of the seriousness and possible consequences of these attacks. In the same Letter, States were encouraged to enforce all relevant laws and to apply penalties against perpetrators in accordance with applicable legislation.

### POSITION

Two years after the release of the ICAO State Letter, current legislation in many, if not most, States is still insufficient to provide an effective deterrence to laser attacks, as shown by their ongoing increase. IFALPA therefore calls for States and the aviation community to act as a matter of urgency through the enactment and enforcement of appropriate legislation and the promotion of public campaigns aimed at educating the public at large as to the danger of a laser illumination on a civil aircraft. The Federation also believes that a laser attack leading to any injury to a pilot's eyes should be classified as a Serious Incident and subject to the appropriate investigation by the Accident Investigation Authority.