

## Unauthorized Flying of Drones Near Airports

## **BACKGROUND**

Drones have recently become more affordable to the public as their performance in terms of height, speed, and distance has greatly improved. Consequently, the hazard posed by the flying of unauthorized drones near airports worldwide has also increased. Available data indicate that the frequency of drone activity, both authorized and unauthorized, in the vicinity of airports continues to rise significantly. In the UK alone, for example, thousands of drone operations are detected near airports every month.

Most unauthorized occurrences are accidental and harmless to civil aviation. They are often linked to the operator's lack of familiarity with the rules of the air or a loss of control. However, drone operations can also have a malicious intent, such as the desire to create disruption or, in the worst-case scenario, to cause harm.

It is very difficult to distinguish between the different types of operations and track them accurately. IFALPA, ECA, and IFATCA are extremely concerned that some of those numerous drones could end up, either deliberately or not, in the direct flight path of an aircraft on arrival or departure, with catastrophic consequences, as demonstrated by a UK study published in 2017.

## **CURRENT MITIGATING MEASURES**

Several airports have been responding to the sighting of unauthorized drones by stopping operations for a period, leading to massive disruption. The most dramatic example was the closure of London Gatwick between 19 and 21 December 2018, following reports of drone sightings close to the runway. This led to hundreds of flights being cancelled, affecting over 100,000 passengers. Stockholm Arlanda has also closed on several occasions due to drones operating in the vicinity of the airport. Closing airports has huge financial and operational implications (diversions, stranded passengers, etc.), and has not proved successful in stopping unauthorized drones. It should not be considered as a sustainable solution.

<u>Guidance material</u> on the impact of unauthorized UA event close to aircraft and aerodromes has been produced as a result of an industry initiative started in 2020 and coordinated by IATA, with the participation of organizations such as ACI, IFALPA, ECA, IFATCA, ANSPs, and CAAs.

Another option which has been explored is the installation of technological means to detect and disable unauthorized drones. Such technology already exists at both London Gatwick and London Heathrow, amongst others. Depending on the type of equipment, unauthorized drones can be positively identified, tracked, jammed, or even destroyed. However, there is no international Standard on the design and operation of these systems, and their cost makes them largely inaccessible to most airports. Moreover, the possible undesired consequences of their use in terms of magnetic interference and collateral damage of disabled drones should not be underestimated.

## **POSITION**

IFALPA, ECA, and IFATCA believe that the best line of defence is preventing unauthorized drones from flying near airports in the first place. However, current legislation in many, if not most, States is still an insufficient deterrent to the unauthorized flying of drones near airports, as demonstrated by their steady increase.

IFALPA, ECA, and IFATCA therefore call for States to establish and implement further regulations, practices, certification standards and procedures, and appropriate penalties for offenders, in order to safeguard civil aviation against such activities.

Public awareness campaigns should be organized with the aim of educating the public at large as to the risks and implications of flying drones near airports. These campaigns have been very successful in decreasing the number of laser illuminations of aircraft, and the same could be achieved to prevent the inadvertent infringement of airspace.

Drone manufacturers should also play their part in safety improvement by the fitting of geo-fencing systems, registration numbers, and/or electronic signatures. Furthermore, IFALPA, ECA, and IFATCA believe that increased efforts should be made to thoroughly research technology regarding drone detection and counter-drone measures.

Sightings of drones likely to interfere with the flight path of aircraft should be subject to an immediate and standardized reporting process including ATC, airport Authorities, local police and, where relevant, flight crews operating in the area. Appropriate follow-up by law enforcement agencies should be ensured.

Finally, IFALPA, ECA, and IFATCA believe that any unauthorized flying of drones near airports that jeopardizes the safety of aircraft should be classified as a "serious incident"

(as per the ICAO Annex 13 definition) and be subjected to a thorough investigation by the relevant Authorities.
When there is malicious intent; it should further be classified as an "act of unlawful interference" as per ICAO Annex 17.
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