

LCQ21: Unmanned aircraft systems

Following is a question by the Hon Jeremy Tam and a written reply by the Secretary for Transport and Housing, Mr Frank Chan Fan, in the Legislative Council today (January 23):

Question:

It has been reported that the flight movements at Gatwick Airport in London were suspended twice late last year due to the intrusion of unmanned aircraft systems (UASs), which in total lasted for over 30 hours and affected about 1 000 flights and 140 000 passengers. Despite the presence of legislation in the United Kingdom banning UASs from flying inside and within 1 000 metres surrounding the airport and from flying above 400 feet, the aforesaid incident still happened and the law enforcement agencies have failed to track down the perpetrators so far. After the aforesaid incident, the authority of the airport has procured an anti-UAS system at a cost of £5 million to deal with similar incidents in future. On preventing the operation of the Hong Kong International Airport from being affected by UASs, will the Government inform this Council:

(1) of (i) the number of reports received by the authorities concerning the illegal flying of UASs within the Bylaw Area prescribed in the Airport Authority Bylaw (Cap. 483A), (ii) the respective numbers of persons arrested, prosecuted and convicted for illegally flying of UASs within the Bylaw Area, and (iii) the punishments imposed on those convicted, in each of the past five years;

(2) whether it has formulated measures for the expeditious handling of the situation of UASs illegally flying within the Bylaw Area, so as to avoid disruptions to flight movements; if so, of the details (including the procedure for activating the contingency measures); if not, the reasons for that; and

(3) whether equipment with the following functions has been installed at the Hong Kong International Airport: detecting UASs flying within the Bylaw Area, manipulating such UASs to land safely and stop operating, and tracking down the location of the person who has flown the UASs; if so, of the details, if not, the reasons for that?

Reply:

President,

Unmanned aircraft systems (UAS) are classified as aircraft and are governed, as far as aviation safety is concerned, by the civil aviation legislation. Article 48 of the Air Navigation (Hong Kong) Order 1995 (Cap. 448C) stipulates that a person who recklessly or negligently causes or permits an aircraft (including an UAS and a model plane) to endanger any person or property is liable to prosecution, and upon conviction, to a fine

and to imprisonment for two years. Moreover, under section 35 of the Airport Authority Bylaw (Cap. 483A), no person shall, within the Bylaw Area (Note), fly a model plane (including UAS). Offenders shall be liable on conviction to a maximum penalty of a fine of HK\$50,000 and imprisonment for six months.

The Civil Aviation Department (CAD) has initiated a review of the regulation of UAS, with a view to safeguarding public safety while accommodating the technological development and diversified uses of UAS. To facilitate the Government in reviewing the existing statutory requirements and exploring ways to refine the prevailing regulatory regime, the CAD commissioned an overseas consultant to conduct a study on the regulation of UAS. In April 2018, the CAD published the consultancy report and launched a three-month public consultation on the directions for regulating UAS. The CAD is now drawing up detailed proposals for an enhanced regulatory regime of UAS taking into account the recommendations of the consultancy study and the views gathered during the consultation exercise. The CAD planned to consult the Legislative Council on the proposed legislative amendments for the enhanced regime of UAS in 2019.

Meanwhile, the CAD will continue to work proactively to enhance the awareness of UAS operators on safe operation through different channels like television and radio, the Department's website, other relevant websites and publications. For instance, the CAD has been promoting the safe operation of UAS through various television and radio programmes such as "Police Magazine" and "Innovation GPS" since May 2017. Meetings with UAS organisations and manufacturers are also held from time to time to strengthen co-operation on safety promotion. In view of the recent intrusions of UAS into Gatwick Airport in London, the CAD immediately contacted local UAS organisations to remind UAS operators that flying UAS in the Bylaw Area and in the vicinity of the airport is prohibited. The Airport Authority Hong Kong (AA) has already put up notices at appropriate positions in the Hong Kong International Airport (HKIA) and will consider other channels including the AA's website to remind various sectors of the community about the legislation prohibiting the flying of model plane (including UAS) in those areas.

My reply to the various parts of the Hon Jeremy Tam's question is as follows:

(1) According to the record of the AA, there was one case of illegal operation of UAS within the Bylaw Area stipulated in the Airport Authority Bylaw over the past five years which happened in July 2017. The offender was subsequently convicted of "causing or permitting an aircraft to endanger any person or property" under the Air Navigation (Hong Kong) Order 1995 and was fined HK\$2,000.

(2) Pursuant to the Airport Authority Bylaw, no one shall fly a model plane (including UAS) within the Bylaw Area. The AA and the law enforcing agency will pay attention to if there have been UAS operations when they are on duty and patrolling the Airport Area. If the AA is aware or notified of any illegal UAS operation within the Bylaw Area, it will immediately request the Police to follow up the incident and deploy its staff to search for the UAS and its operator in the Airport Area. Under the existing communication

mechanism between the AA and CAD, if flight movements are affected by the operation of UAS, the AA and CAD will discuss the matter and make appropriate arrangements. In case of flight disruptions, the AA will liaise closely with the industry and disseminate real-time flight information to update the affected passengers and airlines on the latest situation. Having regard to the technological development of UAS, the CAD and AA will review the co-ordination and handling procedures with the Police in a timely manner to strengthen the contingency measures.

(3) To ensure aviation safety, the CAD and AA have been monitoring and taking precautions against the operation of UAS in the Airport Area. Currently, the HKIA is equipped with certain UAS detection system but the details of which could not be disclosed due to security reason. The CAD and AA are making reference to the experience of and equipment adopted by other international airports and further exploring various viable technologies to be applied to the HKIA in a bid to further enhance the monitoring and precautionary measures against illegal operation of UAS in the Airport Area, thereby minimising the possible impact on airport operation and aviation safety.

Note: Under section 3 of the Airport Authority Bylaw, the Bylaw Area shall comprise – (i) all the Restricted Area; (ii) all that portion of the Airport Area no part of which is either in the Restricted Area or on any road or length of road; and (iii) all the designated roads, but shall not include any area within an area referred to in paragraph (i), (ii) or (iii) which is also within the MTR Area.