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Agenda Item 4:

ICAO / Member State / Industry Presentation

**REGULATION OF SMALL UNMANNED AIRCRAFT IN HONG KONG, CHINA
– UPDATE ON THE IMPLEMENTATION OF THE
NEW REGULATORY REGIME**

(Presented by Hong Kong, China)

SUMMARY

A new regulatory regime for the operations of small unmanned aircraft (“SUA”) successfully commenced on 1 June 2022 in Hong Kong, China. Safety promotional campaign, extensive engagement with stakeholders and issuance of reference materials helped ensure a smooth transition to the risk-based regulatory regime, which aims to foster long-term development and application of SUA in the densely-populated city whilst safeguarding aviation and public safety. This paper shares the experiences of Hong Kong, China in developing and implementing the new regulatory regime.

1. INTRODUCTION

1.1 The development of SUA technology and application has been rapid over the past few years in Hong Kong, China and worldwide. The Civil Aviation Department (CAD) of Hong Kong, China (HKCAD) has therefore embarked on formulating a new forward-looking regulatory regime for SUA that can foster the innovative development and diversified application of SUA whilst safeguarding aviation and public safety. To this end, a customised and self-contained legislation under the Civil Aviation Ordinance, namely the Small Unmanned Aircraft Order (“SUA Order”) was introduced to make available the necessary legal framework for regulating SUA.

1.2 The commencement of the SUA Order on 1 June 2022 is a new chapter in regulating SUA operations in Hong Kong, China. A six-month grace period ending on 30 November 2022 has been given for most provisions of the SUA Order for the public to familiarise and comply with the new requirements. The exceptions are offences in relation to endangering acts, restricted flying zones and enforcement which have taken immediate effect upon the commencement to safeguard aviation and public safety.

2. DISCUSSION

A Risk-Based Regulatory Regime

2.1 Under the new SUA Order, SUA operations, regardless of their purposes, are regulated under a risk-based approach. Based on the weight of the SUA and the operational risk level, SUA operations are subject to corresponding requirements including registration and labelling of SUA, registration of remote pilots, training and assessment, equipment, operating requirements and insurance. A set of parameters has been designated to delineate “Standard Operations” for operations with a lower operational risk level, which does not require prior permission from the HKCAD. Regulatory resources, on the contrary, focus on operations exceeding the said operating parameters, within restricted flying zones and/or involving SUA weighing 7 kg or above, which are “Advanced Operations”. Prior permission for these operations is required.

Registration and the Dedicated Electronic Portal

2.2 Registration and labelling requirements ensure the traceability of the owner and remote pilot, and hence enhance the enforceability of the regulatory requirements. Under the new risk-based regime, except for operations of SUA which weight does not exceed 250 grams and are within applicable operating requirements at all times during the flight, both SUA and remote pilots are required to be registered. A dedicated one-stop electronic platform, the “Electronic Portal for Small Unmanned Aircraft (eSUA)” was formally rolled out on 10 May 2022 following the launch of a beta version for industry partners and stakeholders since early 2022.

2.3 Registration aside, the public can also refer to an interactive drone map published on the eSUA for checking the long-term and temporary restricted flying zones against their present location as indicated by their smartphones. They can also complete a safety quiz to test their knowledge and awareness on safe SUA operations.

Training and Assessment Requirements

2.4 Appropriate training helps remote pilots to acquire safety information and operational knowledge, and enhance their situation awareness and safety management skills. To ensure the competence of remote pilots engaging in advanced operations, remote pilots conducting high risk operations are required to complete the advanced training and assessment by an SUA Training Organisation approved by the HKCAD. The SUA Approved Training Organisation Scheme introduced in December 2021 aims at widening choice of training courses to cater for different needs of the industry and remote pilots. The HKCAD continuously monitors training organisations approved under the Scheme.

Facilitating Various Types of SUA Operations

2.5 The HKCAD recognises the diversity of SUA application in Hong Kong and their distinctive risk profiles. SUA takes up an increasingly vital role in supporting public and private services, as it provides a safe and economical alternative to the conventional, labour-intensive approaches adopted in surveying, inspection, patrolling and other functions. While drones are widely used in aerial photography of the city’s world-renowned night cityscape and country parks accessible within one-hour travel from downtown, various types of drone operations, such as drone shows and night operations, are gaining popularity.

2.6 To support the public and the industry to conduct SUA operations for varied purposes and raise their awareness on safe SUA operations, the HKCAD has published related guidelines and circulars targeting common segments of SUA users on its website. A Safety Requirements Document

and a series of advisory circulars are published to provide SUA users with comprehensive safety requirements and specific guidelines for respective operations types ranging from indoor operations to night operations, school operations to aerial surveying.

2.7 To cater for the frequent advanced operations conducted and/or commissioned by different professional and commercial entities, permission of a longer term would be granted to eligible operators subject to conditions. These operators are not required to seek separate approval prior to each and every operation should the operations comply with related safety requirements. A robust safety oversight and surveillance system on Permission holders is rolled out in parallel to ensure that aviation and public safety is not compromised by the flexibility and facilitation provided to them.

Reaching out to SUA Users

2.8 The HKCAD has been proactively collaborating with key stakeholders, industry partners to secure buy-in, and formulate a smooth and coordinated transition into the new regulatory regime. Throughout the legislative process, and in particular the months leading up to the commencement of the new law, the HKCAD met a myriad of groups and representatives and held a number of briefing sessions addressing their specific operational needs and concerns; overwhelming responses were received from our industry partners. These events not only helped disseminate the latest regulatory requirements to the industry, they enabled the HKCAD to collect updated information on the trend of SUA applications, understand the actual needs of a variety of stakeholders in Hong Kong, China, thereby fine-tuning requirements documents and engagement strategies. Equally, the HKCAD works with fellow Bureaux and Departments of the Hong Kong SAR Government to provide active support and pertinent advice to facilitate their application of SUA and technologies in the provision of public services and law enforcement. Government flights should be operated in safety standards comparable to the requirements under the Order.

Engagement with Schools and Educational Institutions

2.9 Recognising drones as a key driver and component of STEM education, majority of the operating requirements, except maximum flying altitude, do not apply to SUA operations for education and research purposes within school premises. Essential information of the new regime and the applicable advisory circulars were disseminated, and briefing sessions were given to primary / secondary schools and tertiary institutions. Keynote speeches were delivered at events held by partnering organisations, highlighting the objectives of the legislation and the flexibility built-in for school operations. Clear and precise regulatory requirements synergize with ongoing funding initiatives by the Hong Kong SAR Government to promote STEM education. Local schools are now on course to offer a wide range of learning activities to students. Government departments have been partnering with the tertiary institutions to conduct trials and research involving SUA. We are positive that the private sector will follow suit and capitalise on similar mode of collaboration.

Territory-wide Safety Promotion

2.10 The HKCAD has launched a comprehensive publicity and public relations campaign using not only the Department's website, but also other platforms such as social media and television. The HKCAD collaborated with the Police in distributing leaflets at SUA hotspots in the vicinity of the Victoria Harbour and take enforcement actions to deter unlawful actions such as operating SUA in restricted flying zones. Collaboration with relevant venue management authorities is underway to step up publicity in other SUA hotspots, including popular hiking tracks, to raise public awareness on safe and responsible SUA operations.

2.11 We promoted the new regime via interactive live broadcast online programme. Advertisements were placed on selected websites and social media platforms to reach the target audience. The animated safety promotional videos we produced are regularly shown by the stakeholders in their own publicity events. As we predict that more sectors of society will tap the versatile, cost-effective application of SUA, HKCAD stands ready to modify safety promotion and publicity strategies and emphases accordingly.

Way Forward

2.12 In devising standards and requirements most suitable for local circumstances and promotional campaign outlined above, Hong Kong, China has benefited from the experience and insights of other States/Administrations. Noting more advanced SUA application has come into play in some parts of the world, we will keep abreast of relevant regulatory considerations and evolving measures to integrate SUA in the airspace, so as to foster innovation without compromising aviation and public safety.

3. ACTION BY THE MEETING

3.1 The Meeting is invited to note Hong Kong, China's efforts in introducing and promoting the SUA Order; and facilitating the stakeholders for smooth transition to the new regime.

3.2 Member States/Administrations are encouraged to share their experiences and regulatory best practices in regulating SUA.

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