

(Translation)

政府總部
運輸及房屋局
運輸科
香港添馬添美道2號
政府總部東翼



LC Paper No. CB(4)1371/20-21(04)

**Transport and
Housing Bureau
Government Secretariat**

Transport Branch
East Wing, Central Government Offices,
2 Tim Mei Avenue,
Tamar, Hong Kong

本局檔號 Our Ref.: THB(T)CR 59/951/08

電話 Tel: (852) 3509 8195

來函檔號 Your Ref.: CB4/SS/8/20

傳真 Fax: (852) 2524 9397

by Email

(Email: hhchan@legco.gov.hk, ssptam@legco.gov.hk, mlmlui@legco.gov.hk)

17 August 2021

Ms Shirley CHAN
Clerk to Subcommittee on Subsidiary Legislation to
Regulate the Operation of Small Unmanned Aircraft,
Legislative Council Complex,
1 Legislative Council Road,
Central, Hong Kong

Dear Ms CHAN,

**Subcommittee on Subsidiary Legislation to
Regulate the Operation of Small Unmanned Aircraft**

The Administration's response

In response to the public submissions to the Subcommittee on Subsidiary Legislation to Regulate the Operation of Small Unmanned Aircraft, the Administration's consolidated response is set out below.

In recent years, small unmanned aircraft ("SUA") has been gaining popularity both in Hong Kong and worldwide. The uses of SUA range from recreation and STEM (science, technology, engineering and mathematics) education to professional deployment. To grasp the tremendous potentials in SUA applications in tandem with the evolving technology and innovation while safeguarding aviation and public safety, the Administration sees the need to introduce a customised and forward-looking regime for regulating and supporting SUA operations. The Small Unmanned Aircraft Order ("the Order") is a piece of subsidiary legislation made under the Civil Aviation Ordinance (Cap. 448) which aims to achieve this policy objective.

Under the Order, SUA operations will be regulated under a risk-based approach. Based on the weight of the SUA and the operational risk level, SUA operations of different risk levels will be subject to the corresponding regulatory requirements. For Category A1/A2 operations, no prior permission from the Civil Aviation Department (“CAD”) will be required if relevant requirements such as operating requirements are complied with; and for Category B operations involving higher-risk, operations shall only be conducted upon prior permission from CAD. Permission may be granted on a one-off or longer term basis to facilitate applicants. This regulatory regime is flexible and forward-looking and is able to cater for the rapid development of SUA and the diversified operational needs of different categories of SUA, including certain operations with special needs such as drone racing, surveying and 3D mapping, etc.

After the passage of the Order and before its implementation, CAD will publish a Safety Requirements Document (“SRD”) to provide the general public and stakeholders with further technical/operational guidance and details of application for permission, including guidelines for indoor operations, details of application for permission to conduct Category B operations, etc. We understand that certain operations may have special needs and will provide specific information in relation to such operations where necessary and appropriate to further elaborate the detailed guidelines, application details, and facilitating measures under the regulations.

SUA Operations for Search and Rescue

Given its flexibility and accessibility to remote areas, SUA operations could be most useful in dangerous situations and other situations to enhance efficiency. As such, SUA is commonly used for search and rescue operations. In support of the SUA innovation development, a flexible and forward-looking mechanism is adopted in the new regime to address the diversified SUA types and different operational needs, including operations with special operational need such as search and rescue. These operations can be carried out after obtaining permission to conduct Category B operations from CAD.

Application of SUA

Under the Order, SUA is defined as unmanned aircraft with power driven machine weighing not more than 25 kg. While it does not cover non-power driven machines such as kites, balloons, sky lanterns, paper airplanes, etc., it covers traditional model aircraft weighing not more than 25 kg. Nonetheless, considering that the operation mode of traditional model

aircraft is different from SUA, CAD will consider granting exemption with conditions from certain provisions (e.g. equipment requirements, operating requirements, etc.) to balance safety risks and to minimise the impact to traditional model aircraft activities, provided that the relevant venue is a controlled environment and suitable for the safe conduct of the flight activities.

Operating Requirements

Under the risk-based regime, no prior permission from CAD will be required to conduct Category A1/A2 operations, and requirements for Category A1 operations are less stringent than those for Category A2 operations, e.g. no age limit for remote pilots of Category A1 operations. As no prior permission is required for these operations, given the different types of SUA operations under the densely populated environment of Hong Kong, diversified types of SUA (e.g. self-assembled SUA and kid toys), and varied skill levels of remote pilots, the operating parameters of the corresponding operating requirements must be set in a safe and proportional manner to safeguard public and aviation safety.

The proposed parameters for Category A1/A2 operations are set based on the above principles. The maximum flying altitude is set to maintain a safe separation between SUA and helicopters to avoid threats to aviation safety. The requirements on maximum distance and visual-line-of-sight are imposed to ensure that the remote pilot can keep the SUA in sight and take immediate action under unforeseeable emergency situation during the flight. On the basis that public and aviation safety would not be compromised, the proposed parameters for Category A2 operations have already been set at a higher level, whereas those for Category A1 operations, which are subject to fewer requirements (mainly operating requirements), are set at a lower level.

Nonetheless, CAD fully appreciate the rapid development of SUA application and technology and the evolving operating parameters. Therefore, the operating parameters will not be rigidly specified in the new Order. CAD will review and update the operating parameters in accordance with the latest technological development, local conditions and international regulatory practices as and when appropriate.

Fees Arrangement

In terms of fees, in order to minimise the burden on users as far as possible at the initial stage of the new regime and encourage participation from the public and the industry, all fees relating to applications processed by CAD or provision of services by CAD will not be charged for the first

three years of implementation of the Order. After three years, CAD will set the fees on a full cost-recovery basis, and table the proposal in respect of the fee levels and the commencement date to the Legislative Council (“LegCo”) for negative vetting. After the implementation of the Order, CAD will review and assess whether there would be room for further reduction of the relevant costs, including making use of the one-stop electronic platform, which will be launched in the near term, to save costs through technology.

Drone Racing Activities

As mentioned above, flexibility has been built in the Order to cater for different types of SUA operations, including drone racing. On the basis that aviation and public safety would not be compromised, the Order allows drone racing events and training to take place. For example, if drone racing activities are conducted in schools or indoor areas, they will not be subject to most of the requirements under the Order, and prior permission from CAD will not be required. If drone racing activities are proposed at other locations, application for the proposed activities will be considered by CAD, if the relevant venue is a controlled environment and suitable for the safe conduct of the flight activities. If the operating guidelines, risk assessment and mitigating measures, safety management measures, etc. submitted are adequate, CAD may consider granting longer-term permission, including exemptions from requirements as appropriate, such as the minimum age limit for remote pilots, speed, equipment requirements, etc.

In terms of venues, CAD has been liaising with relevant Government bureaux / departments, such as the Leisure and Cultural Services Department (“LCSD”) and the Agriculture, Fisheries and Conservation Department (“AFCD”). With the enactment of the Order which will enhance public safety, departments are generally positive towards appropriate use of SUA in their venues. CAD will continue to actively liaise with relevant departments. In this connection, having collaborated with LCSD, suitable venues under their purview have been identified in a pilot scheme for organising SUA activities.

Regarding the pilot scheme for SUA training, the advanced rating training courses under the Order are designed to help participants to gain a thorough understanding of the new regulatory requirements and develop situational awareness and safety management skills through flight planning, risk assessment and mitigating measures, so as to safeguard aviation and public safety. As for the other skills involved, such as filming or drone racing skills/techniques, the Administration will leave it to the training institutions to decide on the types of training to offer, so as to allow more flexibility and diversified courses to be provided. The pilot scheme aims at assisting CAD in validating training syllabus and assessment criteria for the above advanced

rating courses. After the passage of the Order, training institutions may apply to CAD to become an approved training organisation and conduct approved advanced rating training courses.

Real Estate Administration

As to the views of the Hong Kong Institute of Real Estate Administrators, the above responses are equally applicable, including longer-term permissions, detailed guidelines/ application guidance materials, fees, etc. In addition, we will also prescribe additional equipment requirements for Category B operations, depending on the complexity and potential risks of the flight. With regard to insurance, we will continue to liaise with the Insurance Authority and the Hong Kong Federation of Insurers, so that the insurance industry can better understand the needs of SUA industry and collect more information and statistics for formulation of suitable insurance products. On the retention of flight information, section 14 of the Order stipulates that relevant persons must keep information recorded by a safety system in connection with a flight for a period of six months.

If the committee has any other questions, please contact this Bureau.

Yours sincerely,

(TE Chi-wang)

for the Secretary for Transport and Housing,

c.c. Civil Aviation Department