



Civil Aviation Department
The Government of the Hong Kong Special Administrative Region



ICAO

Regulation of Small Unmanned Aircraft in Hong Kong, China – From Facilitation and Empowerment

Unmanned Aircraft Systems – Remotely Piloted Aircraft Systems
Implementation/Regulation Webinar for the APAC Region

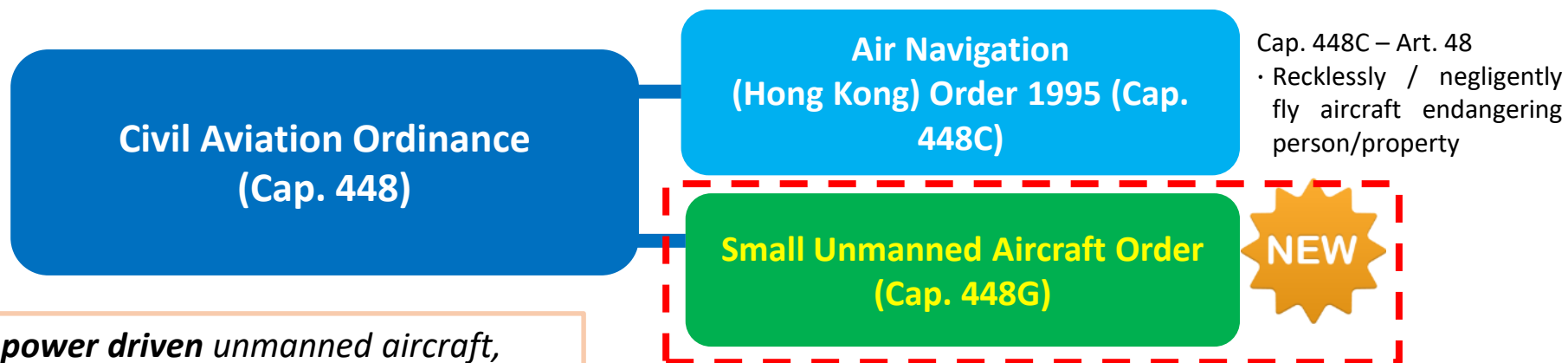
10 May 2023
Hong Kong, China





Overview of the Regulatory Regime for Small Unmanned Aircraft (SUA)

- Rising **popularity** and **diversified uses** of SUA necessitates a **forward-looking regulatory regime**.
- To safeguard **public and aviation safety**, while allowing room for **innovative development** and applications
- **Risk-based**, regardless of recreational or commercial
- Benefits of new regime:
 - **Clarity** (for SUA users to follow)
 - **Flexibility** (**Overarching regulatory principle/ framework** in legislation; detailed parameters /requirements in Gazette Notice/ Requirements Document/ Guidelines which maybe reviewed and adjusted if required)



SUA means “any **power driven** unmanned aircraft, **weighing 25 kilograms or less** including **everything** installed in, carried with or attached to the aircraft at the commencement of its flight.”



Overview

Operations Requirements	Cat A1 (≤ 250g)	Cat A2 ^ (>250g, ≤ 7kg) and Category A1 SUA under exemption	Cat B / Advanced * (>7kg, ≤ 25kg)
<u>Registration</u>	✗	✓	✓
<u>Labelling</u>	✗	✓	✓
<u>Equipment</u>	✗	✓	✓
<u>Training / Assessment</u>	✗	✗	✓
<u>Insurance</u>	✗	✗ [^]	✓
<u>CAD's Prior Permission</u>	✗	✗	✓

Corresponding Operating requirements:

flying altitude, operation hours, separation with uninvolved persons, operations within VLOS and etc.

* If operations of Cat A1/A2 SUA exceed the respective operating requirements, all requirements for Cat B SUA apply

^ Effective date for insurance requirements for Cat A2 SUA to be determined



SUA Applications in Hong Kong, China



Surveying & Inspections



Aerial Photography/ Filming



Government Operations



Drone Racing



Drone Show



STEM Education at Schools



Stakeholder Engagement whilst Developing and Implementing the New Regime

Collaboration with the Industry

- **Rounds of consultation** with various SUA user groups prior to developing the new regime
- Close liaison with the industry and professional groups to ensure smooth transition to the new regime
- **Briefing sessions, talks and meetings** were arranged to introduce to SUA users the new requirements





Facilitating Various Types of SUA Operations

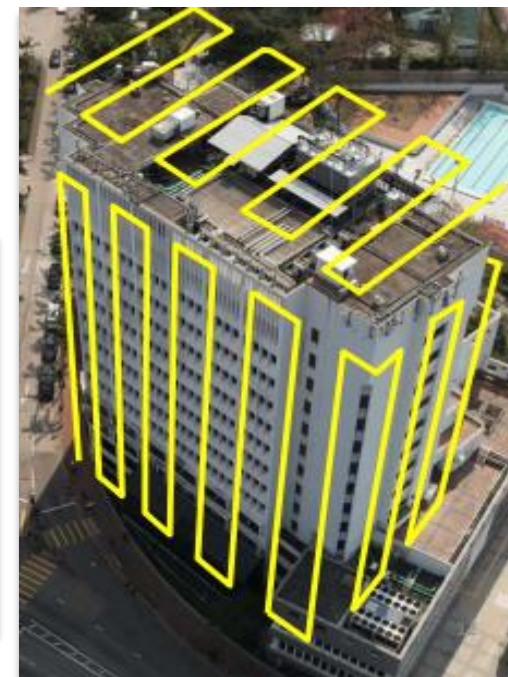
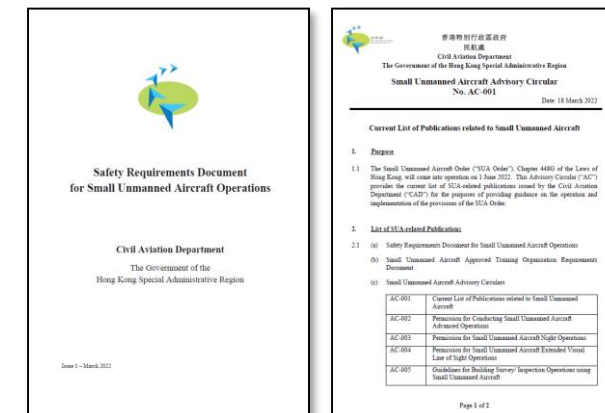
➤ **Clear guidance** : Safety Requirement Documents and Advisory Circulars covering various types of operation

➤ **Long-term permission** for conducting Advanced Operations

- No need to seek separate approval prior to each and every operations
- Safety oversight and continuous monitoring

➤ **Facilitating Government operations**

- To deliver public service and for emergency responses





Dedicated One-stop Portal - eSUA

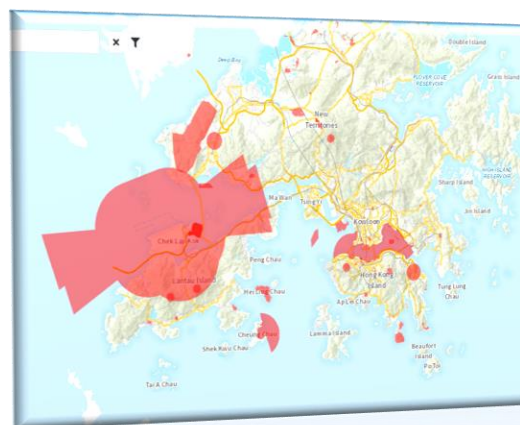
Seamless SUA and Pilot Registrations

- Online registration services
- All-in-one info portal providing drone map, FAQ & safety information
- Facilitate disseminating information and reaching out to SUA users



eSUA

eSUA



DRONE MAP



REMOTE PILOT



SUA REGISTRATION

SUA REGISTRATION

Now showing 9 of 9 results

If you have just created an account on eSUA, SUA registration submitted will only be processed after verification of your account details. If supplementary information is needed, you will receive our email notification in about 3 working days.

<p>Serial No. 2512</p> <p>Weight of SUA: 500g</p> <p>Reg. No. HKD0010001</p> <p>View Application</p>	<p>Serial No. 2512</p> <p>Weight of SUA: 500g</p> <p>Reg. No. HKD0008871</p> <p>View Application</p>
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Submit Applications for All SUA



Reaching out to Schools and the Youth

- **Special facilitation** in place for school operations (STEM activities, drone shows, operations for research and etc.)
- Participate in various SUA / STEM-related events to **promote the new regime**
- **Instill safety awareness among youngsters**
- **Nurturing young talents** to become good members of the SUA community



Guidelines for Small Unmanned Aircraft Operations within School Premises

1. **Background**
 - 1.1 The Small Unmanned Aircraft Order ("SUA Order"), Chapter 486G of the Laws of Hong Kong, comes into operation on 1 June 2022. Under the SUA Order, small unmanned aircraft ("SUA") operations are regulated under a risk-based approach and be classified according to the weight of the SUA and the operational risk level. The SUA Order is a piece of subsidiary legislation made under the Civil Aviation Ordinance that aims to provide a flexible and forward-looking regime for the regulation and development of SUA operations in Hong Kong.
 - 1.2 Considering that operations of SUA by schools or educational institutions (hereafter referred to as "school operations") are normally within school premises under the supervision of educational institutions, and with a view to facilitating the optimal development of SUA applicants like STEM education, school operations under the specific conditions are not subject to most of the requirements under the SUA Order (section 9 of the SUA Order refers). This will allow education institutions to, among others, design and operate SUAs in accordance with their own curriculum as part of the STEM education or for research and development purposes.
 - 1.3 The above notwithstanding, offences related to various endangering acts, such as the offence of operating an SUA dangerously or the offence of recklessly or negligently causing or permitting an SUA to endanger any person or property still apply to school operations for educational or research purposes in any case.
 - 1.4 This Advisory Circular ("AC") is issued to provide guidance for the operations of SUA within school premises for educational or research purpose from the aviation safety perspective.

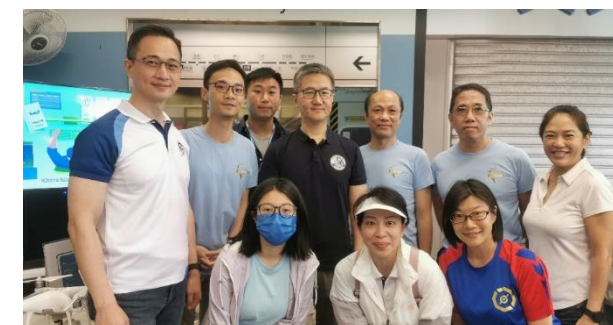




Territory-wide Safety Promotion

Highlights

- ❑ Joint **PR** operation along **SUA hotspots (Victoria Harbour and hiking spots)**
- ❑ Joint **enforcement actions** to deter unauthorised operations in RFZ
- ❑ Featured on **Facebook and YouTube**
- ❑ Participation in other publicity events (e.g. Talks in SciFest, Junior Police Call Open Day)
- ❑ **Online advertisements on targeted sites**
- ❑ **Advertisements on public transport**

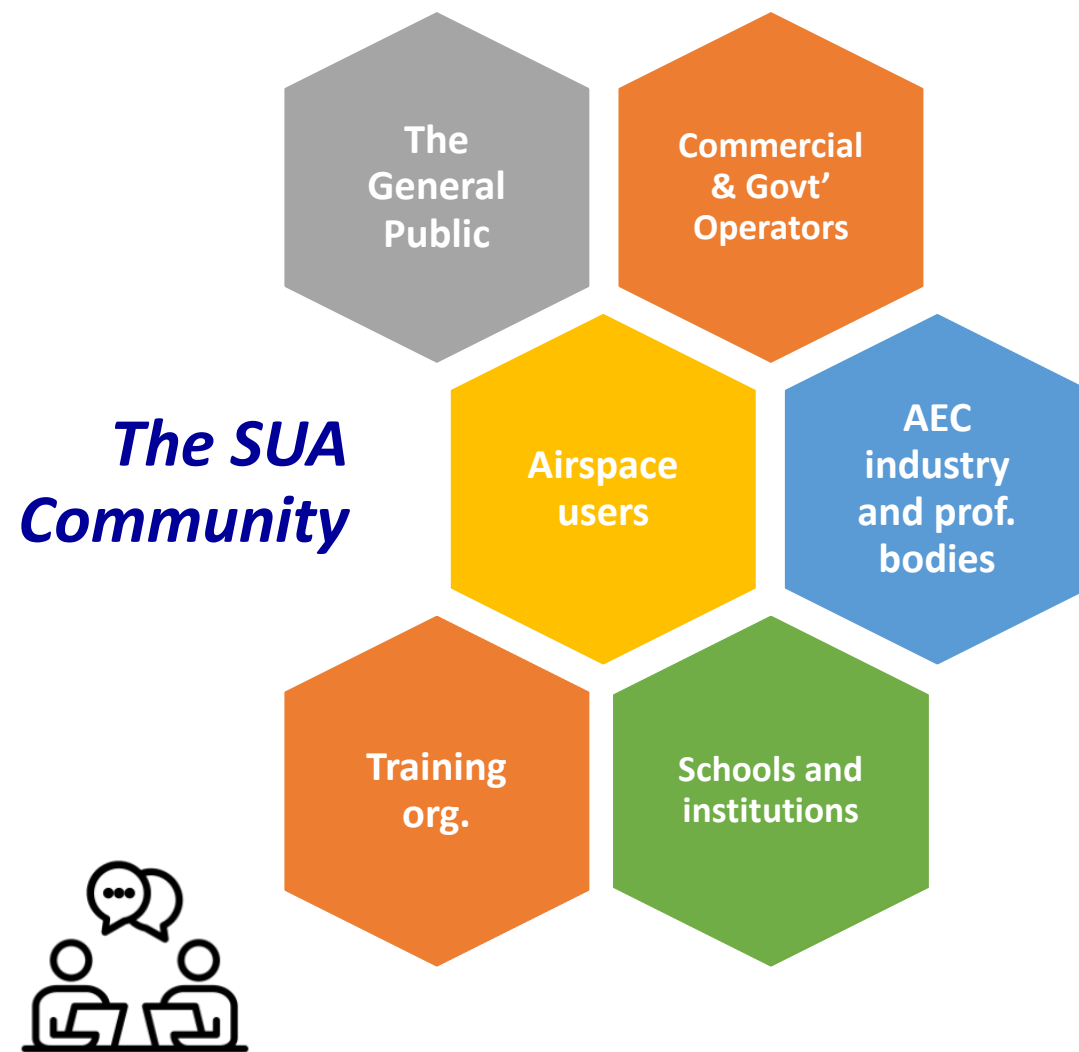




Smooth Transition in Numbers

4 major group of stakeholders

- ~**20 000** registered remote pilots and ~**24 000** SUA responsible persons (i.e. owner)
- **Advanced Operations Permission (AOP) issued to 60+ organisations**
 - Long-term permission for conducting Advanced Operations
 - Safety surveillance programme
- **40+** offices of Government Departments using SUA with technical support and guidance provided by the CAD
- **8** Approved Training Organisations under the SUA Advanced Training Organisation Scheme, incl. surveillance

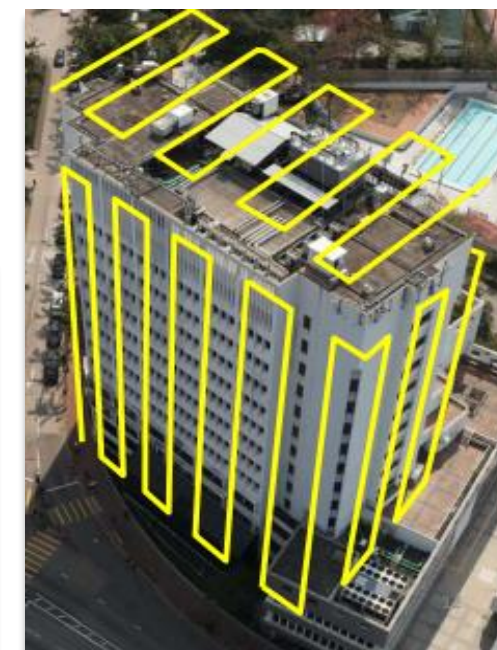


*Figures as of end April 2023



Emerging Collaboration among Stakeholders: I

- **High-density urban landscape** in Hong Kong: strong demand for SUA in surveying, inspection and filming
- **Government departments** have incentives to operate SUA as alternative to conventional job functions and/or engage **AOP holders**
- **Delivering public services with SUA**
 - Joint hands with departments to **provide guidance and advice to AOP holders** (contractors and subcontractors) for government projects
 - **Trials** for more advanced operations (delivery of emergency supplies, BVLOS operations for search and rescue, automatic operations) often in conjunction with AOP holders





Emerging Collaboration among Stakeholders: II

- Remote pilots of Advanced Operations require **Advanced Rating**
- **Approved Training Organisation (ATO)** offered courses to **individuals, AOP holders, and Gov operators**
- ATOs foster **high safety standards**, help **explain CAD requirements** and **share best practices**
- Government departments can **flexibly meet their training needs** (in-house and/or contract out) under the ATO Scheme





Concluding Remarks

- To recognise efforts and cooperation from the SUA community to ensure **a successful and smooth transition** to the new regime
- To capitalise on the emerging ecosystem to **foster and lead collaboration amongst users** to embrace innovative development
- To **proactively communicate** with the SUA community for identifying rooms for fine-tuning operating parameters and other technical requirements





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Thank you

