



Land Surveying Division

Sr Koo Tak Ming LSD Council Chairman

Annual General Meeting (AGM) of the Land Surveying Division (LSD)

A notice on the LSD's AGM was sent to all LSD members by post on 25 October with the following details:

Date and time: Tuesday, 30 November 2021, at 6:30 pm

Venue: The Lecture Room, Surveyors Learning Centre

The Officers and Council Members for the 2021-2022 year will be elected by the Corporate Members who attend the AGM in person, in accordance with Paragraph 9.5 of the LSD Regulations.

All Corporate Members are invited to make their nominations in writing by completing the Nomination Form with original signature(s) and submitting it to the HKIS Secretariat for the attention of the LSD Honorary Secretary by no later than 5:30 pm on Tuesday, 16 November 2021. Late submissions will not be accepted.

I look forward to seeing you at the AGM.

New Regulatory Regime for the Operation of Small Unmanned Aircraft (SUA)

The Small Unmanned Aircraft Order was gazetted on 16 July 2021. The Legislative Council tabled it for negative vetting on 21

July. The Order would be operational with a transitional arrangement for certain offences under LN 116 during the six months between 1 June and 30 November 2022.

UAS is an important measurement tool for land surveyors in this new era of geospatial data capturing, digital mapping, 3D city modelling, BIM formation, and other survey support for smart city initiatives. Land surveyors use different sensors on UAS to achieve the required geospatial data across a particular spectrum to perform their work.

Mr Michael YUEN Siu Kei, Chief Operations Officer (Technical Administration) of the Civil Aviation Department's Unmanned Aircraft Office, delivered a CPD on the SUA Order to HKIS members. The talk contained a measured focus on the implementation of the Order right after the passage of the legislation.



Group Photo of Mr YUEN, his CAD colleagues, and the LSD Council



The CPD is conducted in hybrid mode (Zoom and face-to-face).



Mr YUEN shares his knowledge of the SUA Order's implementation with the audience.



Q&A Session from the Floor and Chat Room

The LSD supports the principle of regulating SUA operations to provide safer skies for UAS operations by all users. But it also cares about the enforcement actions of the new regulatory regime and delineation of legal responsibilities between UAS owners and operators in case of non-compliance.

Small Unmanned Aircraft (SUA)

- In HK, over **80,000** SUA in 2020 (+~20% p.a.)

SUA ≤ 250g
(Category A1 SUA)
(Market Share ~25%)

250g < SUA ≤ 7kg
(Category A2 SUA)
(Market Share ~75%)

7kg < SUA ≤ 25kg
(Category B SUA)
(Market Share ~ <1%)

Classification of SUAs

Enhanced Regulatory Requirements (by Risk-based Classifications)

- Weight**
- Operating requirements** (max. height, lateral separation, speed, etc.)
- Regardless of Recreational or Commercial purposes**

Requirements	Cat A1 (SUA ≤ 250g)	Cat A2 / Basic (250g < SUA ≤ 7kg)	Cat B / Advanced * (7kg < SUA ≤ 25kg)
Registration	✗	✓	✓
Labelling	✗	✓	✓
Equipment	✗	✓	✓
Training / Assessment	✗	✗	✓
Insurance	✗	✓	✓
CAD's Prior Permission	✗	✗	✓

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

Classification of SUAs Using a Risk-based Approach

Training Requirements for Remote Pilots

Cat A2 operations

Review an online Safety Information Package

Information Package includes a set of briefing slides that covers:

- Legal requirements;
- Do and Don'ts;
- Operating requirements;
- Privacy issues...

Cat B operations

- ✦ CAD-approved training
- ✦ Foreign licence conversion
- ✦ Recognition of experienced operators (transitional period: 1 year)

Training Requirements for Pilots of Different SUA Classes

DIVISIONAL NEWS & ACTIVITIES

組別簡訊

Insurance Requirements

Step by Step approach

Insurance in respect of SUA	Cat A1 (SUA ≤ 250g)	Cat A2 (250g < SUA ≤ 7kg)	Cat B / Advanced (7kg < SUA ≤ 25kg or beyond Cat A Ops)
Min. coverage for 3rd party liability for bodily injury / death	Nil	HK\$5 million (Effective date to be specified by DGCA at suitable time)	HK\$10 million (reference to Building Management (3 rd party risks Insurance) Regulation Cap. 344B)

Remark: 2 Sets of liability coverage was made reference to Merchant Shipping (Local Vessels) (Amount of Insurance Cover) Notice e.g. \$10M for vessel is permitted to carry more than 12 passengers, \$5M for vessel is permitted to carry 12 or less passengers.

Insurance Requirements for Different SUA Classes

Facilitating Measures For Surveying Industry

[Assign Advanced Rating to Experienced Remote Pilot] CAD to recognise experienced remote pilot who has been granted permit(s) under the existing regime as appropriate.

Facilitating Measures for Surveyors during Transitional Periods

Objectives – Facilitating Measures

- Understanding the practical needs to use SUA in the surveying industry, a flexible and forward-looking regulatory regime is needed to allow ample room for the development and applications of SUA while safeguarding public and aviation safety
- Adopting a risk-based approach, prior permission from CAD is not required for Cat. A1/ A2 operations but for Cat B. operations. CAD will facilitate the surveying industry with various measures (e.g. non-one-off application, a longer-term permission etc.)

Facilitating Measures for Surveyors to Use Different SUA Classes

Summary

- Accommodate the surveying industry's rising demand in the use of SUA through a flexible and forward-looking regulatory regime
- Provide facilitating measures for the industry's smooth transition
- Issue longer-term permission to facilitate the operators
- Publish guidance documents in due course to support the surveying industry and relevant stakeholders

Summary of the Facilitating Measures for Surveyors

Facilitating Measures For Surveying Industry

To provide seamless conversion arrangement to existing operators (100+)

Existing Operators
to provide supporting documents to ensure the compliance of new requirements

Vetted by UAO

Cat B Operators

Guidelines for specific operations to address public and individual sector's concerns

Facilitating Measures within the Surveying Industry for Existing Operators

The talk by Mr YUEN bridged the gap between surveyors and the regulatory authority and allowed us to discuss practical measures under the new regulatory regime for SUA operations.

The LSD will work closely with surveyors from various fields to develop facilitating measures that will permit the adoption of SUAs in their professional services.

It looks forward to those measures that will help land surveyors further develop their skill sets to provide better UAS services for the community.