

THE CHINESE UNIVERSITY OF HONG KONG

Guidelines on Operation of Unmanned Aerial Systems at CUHK

1. Introduction

Unmanned Aerial Systems (UASs), commonly known as drones, have been growing by leaps and bounds in recent years in Hong Kong, due to fast-developing technology and declining costs. There is currently no legislation in Hong Kong regulating specifically the operations of UASs. However, a number of issues including safety concerns and privacy issues need to be addressed. In order to maintain UAS operations safe and orderly on campus, this set of guidelines has been drawn up for those who intend to operate UASs for teaching and research purposes as well as for other non-commercial (but not recreational) activities within the campus. The guidelines apply to all operations of UASs on campus, regardless whether the operator concerned is from the University community or an external party.

2. Major principles

- The flying of UASs within the airspace of the University campus must be operated by competent operators who have obtained prior approval from the University and if required, valid permits issued by the Civil Aviation Department (CAD), HKSARG.
- Only operations for legitimate purposes related to University activities, viz. research, teaching, operational or promotional activities of the University will be allowed. Operation of UASs for recreational purpose is not allowed on campus. Applicants should be members of staff or students and applications should be made on a Department/Unit basis. Applications from external parties should be submitted through the University Department/Unit hosting/co-sponsoring the proposed activities on campus.
- The UAS must not fly over the No Flying Zones (Appendix 1) and staff/student quarters at CUHK, as well as inside buildings or premises.
- The application for flying UAS within the airspace of the University shall be approved only if:
 - ✓ The procedure set out in the following section has been complied with properly;
 - ✓ Adequate insurance coverage of the operation has been procured; and
 - ✓ The associated risks and privacy issues from the use of the UAS have been properly addressed.

3. Application procedures

Apart from the internal requirement, applicants should take note of the following requirements under the prevailing laws: The user of the UAS must possess a valid permit issued by the CAD if an aircraft (without fuel) is above a designated weight (currently 7 kg) OR an aircraft of any weight using for hire or reward. All such flight proposals submitted to the University should therefore require valid permits issued by CAD. Authorization/permission from the University, as the land owner, forms part of the required documents for UAS applications to CAD. In this connection, an approval-in-principle from the University will be granted upon clearance from the internal procedure as set out below.

- (a) All applications, with the purpose of flight(s), the proposed schedule and area(s) of operation clearly stated, should be made on the designated proforma.
- (b) First-tier endorsement by the Chairman/Head of the hosting Department/Unit should be granted upon affirming the legitimate purpose of operating UASs on campus, as well as the

assurance that competent operators will be engaged for the flights and there be an undertaking for full compliance with these guidelines.

- (c) An application endorsed by the Chairman/Head of the hosting Department/Unit should be submitted to the Estates Management Office (EMO) to coordinate the vetting process by the following Professional and Administrative Service (PAS) Units for advice to the approval authority:
- (i) Estates Management Office (EMO) to assess/advise on the availability of the proposed operation areas;
 - (ii) University Safety Office (USEO) to assess/advise on the proposed operation areas and safety concerns, if any;
 - (iii) Security Office (SCU) to assess/advise on the proposed schedule and orderly operation of UASs; and
 - (iv) Audio-Visual Division (CUAV) to arrange site test(s) for the operator(s) to ascertain the safe operation of the UAS on campus, particularly in respect of those applications where CAD's permit is not required.
- (d) Upon clearance from the PAS units (viz., EMO, USEO, SCU and CUAV), the applicant may submit the application for consideration/approval by the respective University authority, i.e. Faculty Dean in the case of faculty-based units and Supervising Officers in the case of non-faculty-based units.
- (e) Upon approval by the relevant authority:
- (i) For UAS (without fuel) weighing not more than the designated statutory limit (currently 7 kg or less) AND the operation is not for hire or reward, the applicant should inform SCU for issuance of internal permit to enable the flying operation.
 - (ii) For UAS (without fuel) weighing more than the designated statutory limit (currently 7 kg) OR UAS of any weight for hire or reward, EMO will issue written approval-in-principle to facilitate the CAD application. The applicant should arrange for an appropriate insurance to be taken out in the joint name with the University or liaise with the service provider of the flying operation to arrange for such insurance coverage to be payable by the service provider. Departments/Units could contact Business Office for the insurance requirements of the University. Applicant should then start the CAD application. Please refer to the following link for information: <https://e-submission.cad.gov.hk/&common/cad/fcballon.nsf/uas?openform>. Upon obtaining the CAD's approval, the applicant should file a copy to SCU for issuance of internal permit to enable the flying operation.

4. UAS to be Operated by Students of CUHK

Students who wish to operate a UAS for non-recreational purpose should submit the application (a) through their affiliating Departments/Units OR (b) in the name of a student body through the Office of Student Affairs (OSA), which must have been registered under the Student Union or the OSA. It shall be the responsibility of the student applicant or the concerned student body to submit and follow through the application to CAD and EMO set out in paragraph 3 above. OSA only assumes the role of coordination for the application from the student body.

5. Privacy Concerns

Users of the UAS should be particularly mindful of the need to respect personal data privacy to eliminate or reduce the harmful effects of these highly privacy-intrusive features. The UAS must not fly over the *No Flying Zones* (Appendix 1) and staff quarters/student hostels at CUHK.

The use of a UAS with camera is regulated by the Personal Data (Privacy) Ordinance [Cap. 482] as it may involve the collection of personal data. In March 2015, the Office of the Privacy Commissioner for Personal Data issued the Guidance on CCTV Surveillance and Use of Drones: (https://www.pcpd.org.hk/english/resources_centre/publications/files/GN_CCTV_Drones_e.pdf)

This guide contains reminders that drone operators (i.e. those who operate camera equipped drones) are regulated by the Personal Data (Privacy) Ordinance (including the Data Protection Principles therein) and have a duty to respect personal privacy. The guide also offers guidelines on recording, handling recorded images, retention and encryption of image transmission. However, the guide does not have the force of law, so the Government must necessarily rely on the Personal Data (Privacy) Ordinance or other existing laws when evaluating any public offenses involving drones (and UASs).

6. Operation of UASs

Before the operation of the UAS, the applicant via the hosting Department/Unit concerned should issue notice to all relevant parties who may be involved or affected. During the operation, the hosting Department/Unit (or the service provider) must ensure their risk control measures have been properly implemented, and they are well prepared for any emergencies. One staff member (or a student representative in the case of a student body) should be assigned by the hosting Department/Unit concerned as the officer-in-charge on the spot, who should carry the internal permit issued by SCU throughout the operation.

All operations of UASs on campus should follow the safety guideline for the operation of UASs established by CAD. Users of UASs must comply with all applicable requirements: https://www.cad.gov.hk/english/Unmanned_Aircraft_Systems.html

7. Suspension of UASs

Operation of the UAS may be suspended if:

- there is any unsafe act;
- deviation from the approved flight plan and/or risk control measures is observed;
- the emergency plan/procedure is not ready; or
- any legitimate concern or valid complaint from the public or occupant of the University is received.

8. Violations of the University's policies and guidelines

Any violations of the University's policies and guidelines will be handled in accordance with applicable disciplinary procedures and depending on the gravity of the case, can be a subject of civil proceedings in court.

Useful references:

- CAD - UAS on-line application form: <https://e-submission.cad.gov.hk/&common/cad/fcballon.nsf/uas?openform>
- CAD – Operations of UAS: https://www.cad.gov.hk/english/Unmanned_Aircraft_Systems.html
- Guidance Note on CCTV Surveillance and Use of Drones by the Office of the Privacy Commissioner for Personal Data in March 2015: https://www.pcpd.org.hk/english/resources_centre/publications/files/GN_CCTV_Drones_e.pdf

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香港中文大學 THE CHINESE UNIVERSITY OF HONG KONG

Campus No Flying Zone

THE REMAINING PORTION OF SHA TIN TOWN LOT NO. 437 AND THE EXTENSIONS THERETO



吐露港 TOLO HARBOUR

香港科技園 HONG KONG SCIENCE PARK

校園東區 EASTERN CAMPUS

沙田海 SHA TIN HOI

Campus Boundary

- No Flying Zone: 1. All pink areas 2. All staff quarters 3. All student hostels

中央校園 CENTRAL CAMPUS

- H1 范克廉樓 BENJAMIN FRANKLIN CENTRE
H1a 范克廉樓(游泳池) BENJAMIN FRANKLIN CENTRE (SWIMMING POOL)
H2 大學行政樓 UNIVERSITY ADMINISTRATION BUILDING
H3 大學圖書館 UNIVERSITY LIBRARY
H3a 田家炳樓 TIN KA PING BUILDING
H3b 李達三藥劑學中心 LI DAK SUM YIP YIO CHIN BUILDING
H4 中國文化研究所 INSTITUTE OF CHINESE STUDIES
H4a 文物館西翼 WEST WING OF THE ART MUSEUM
H4b 文物館東翼 EAST WING OF THE ART MUSEUM
H5 文物館工作處 ART MUSEUM CONSERVATION ANNEX
H6 兆龍樓 SUI LOONG PAO BUILDING
H7 碧秋樓 PI CHIU BUILDING
H8 滌昌堂 Y.C. LIANG HALL
H8a 後備發電機 EMERGENCY POWER GENERATOR
H8b 金禧承澤園 GOLDEN JUBILEE GARDEN OF APPRECIATION
H9 邵逸夫堂 SIR RUN RUN SHAW HALL
H10 科學館 UNIVERSITY SCIENCE CENTRE
H10a 高鋸樓 CHARLES KUEN KAO BUILDING
H10b 銘源樓 R.C. LEE LECTURE HALL
H10c 馬福樓 MA LIN BUILDING
H10d 科學館東座 SCIENCE CENTRE EAST BLOCK
H10e 溫室及動物飼養室 GREEN HOUSE & ANIMAL HOUSE
H10f 危險品貯存庫 DANGEROUS GOODS STORE
H11 李卓敏基本醫學大樓 CHOH-MING LI BASIC MEDICAL SCIENCES BUILDING
H11a 基本醫學大樓新翼 BASIC MEDICAL SCIENCES BUILDING TEACHING ANNEX
H12 何東夫人堂 LADY HO TUNG HALL
H15 康復室 CHAN CHUN HA HALL
H15a 醫修樓樓頂 ESTATES AND MAINTENANCE BUILDING ANNEX
H16 大學健康醫療中心 UNIVERSITY HEALTH CENTRE
H17 雅禮賓館 YALI GUEST HOUSE
H17a 昆康樓 CHAN KWAN TUNG INTER-UNIVERSITY HALL
H17b 曙光樓 CHIANGS BUILDING
H20a 芝苑 (PGH2 研究生宿舍二座) PANACEA LODGE
H21 大學體育中心 UNIVERSITY SPORTS CENTRE
H21a 運動場一號室 SPORTS FIELD ANNEX 1
H22 浴池體育館 KWOK SPORTS BUILDING
H23 李達三樓 LI DAK SUM BUILDING
H23a 李兆基樓 LEE SHAU KEE BUILDING
H24 邵逸夫人樓 LADY SHAW BUILDING
H25 何善衡工程學大樓 HO SIN-HANG ENGINEERING BUILDING
H26 保安交通中心 SECURITY & TRANSPORT BUILDING
H27 馮景禧樓 FUNG KING HEY BUILDING
H28 梁錫瑛樓 LEUNG KAU KUI BUILDING
H29 富爾敦樓 JOHN FULTON CENTRE
H30 蒙民偉樓 MONG MAN WAI BUILDING
H31 貯物庫 NISSEN HUTS
H31a ... NEW OFFICE BUILDING
H32 蒙民偉工程學大樓 WILLIAM M.W. MONG ENGINEERING BUILDING
H33 教研樓一座 ACADEMIC BUILDING NO.1
H34 逸夫科學大樓 RUN RUN SHAW SCIENCE BUILDING
H40 衛星遙感地面接收站 SATELLITE REMOTE SENSING RECEIVING STATION
H40a 霍英東遙感科學館 FOK YING TUNG REMOTE SENSING SCIENCE BUILDING
H46 物業管理處 EMO BUILDING

校園東區 EASTERN CAMPUS

- E1 香港生物科技研究院 HONG KONG INSTITUTE OF BIOTECHNOLOGY
E2 教研樓二座 ACADEMIC BUILDING NO.2
E3 李福善海洋科學研究中心 SIMON F.S. LI MARINE SCIENCE LABORATORY
E4 水上活動中心 SIMON F.S. LI BUILDING
E5 上海醫科研究所 WATER SPORTS CENTRE
SHANGHAI FRATERNITY ASSOCIATION RESEARCH SERVICES CENTRE
E5a 自然地理實驗站 PHYSICAL GEOGRAPHY EXPERIMENTAL STATION
E5b 廢物處理處 WASTE DISPOSAL FACILITIES
E6 車輛維修站 VEHICLE MAINTENANCE WORKSHOP
E7 垃圾收集站 REFUSE COLLECTION DEPOT
E8 鄭裕彤樓 CHENG YU TUNG BUILDING
E9 香港凱悅酒店-沙田 (香港中文大學教學酒店) HYATT REGENCY HONG KONG, SHA TIN (Hotel Facilities of the Teaching Hotel of The Chinese University of Hong Kong)
E12 金禧校友園 GOLDEN JUBILEE ALUMNI GARDEN
E13 衛星遙感地面接收站 SATELLITE REMOTE SENSING RECEIVING STATION

三十九區 AREA 39

- A3 賽馬會研究生宿舍(二座) JOCKEY CLUB POSTGRADUATE HALL 2 (C.I.P.)
A4 賽馬會研究生宿舍(三座) JOCKEY CLUB POSTGRADUATE HALL 3 (C.I.P.)
A8 羅桂祥綜合生物醫學大樓 LO KWEE-SEONG INTEGRATED BIOMEDICAL SCIENCES BUILDING

其他區域 OTHERS/OUTLYING AREA

- O1 危險品貯存庫 DANGEROUS GOODS STORES

崇基學院 CHUNG CHI COLLEGE

- C1 利黃曉樓 ESTHER LEE BUILDING
C1a 利希慎音樂廳 LEE HYSAN CONCERT HALL
C2 崇基學院行政樓 ADMINISTRATION BUILDING
C3 李慧珍樓 LI WAI CHUN BUILDING
C3a 許慶成樓 HUI YEUNG SHING BUILDING
C3b 王福元樓 WONG FOO YUAN BUILDING
C3c 陳國棟樓 CHEN KOU BUN BUILDING
C3d 信和樓 SINO BUILDING
C4 崇基教堂 COLLEGE CHAPEL
C5 神學樓 THEOLOGY BUILDING
C5a 容啟東校長紀念樓 PRESIDENT CHI-TUNG YUNG MEMORIAL BUILDING
C6 嶺南體育館 LINGNAN STADIUM
C8 何添樓 HO TIM BUILDING
C9 蘭苑 ORCHID LODGE
C10 聯誼會 STAFF CLUB
C11 卑路志圖書館 ELISABETH LUCE MOORE LIBRARY
C12 萃志堂 CHUNG CHI TANG
C13 方潤華樓 FONG YUN WAH HALL
C13a 後備發電機 EMERGENCY POWER GENERATOR
C14 方樹泉樓 FONG SHU CHUEN BUILDING
C15 崇基教職員宿舍A座 STAFF QUARTERS A
C16 崇基教職員宿舍B座 STAFF QUARTERS B
C17 崇基教職員宿舍C座 STAFF QUARTERS C
C18 崇基教職員宿舍D座 STAFF QUARTERS D
C19 崇基教職員宿舍E座 STAFF QUARTERS E
C20 華達堂 HUA LIEN TANG
C21 明華堂 MING HUA TANG
C22 應林堂 YING LIN TANG
C23 何善衡夫人宿舍 MADAM S.H. HO HALL
C24 文質堂 WEN CHIH TANG
C25 崇基教職員宿舍S座 STAFF QUARTERS S
C29 崇基教職員宿舍H座 STAFF QUARTERS H
C29a ... ENTRANCE PIAZZA OUTSIDE
C30 博文苑 INTER-UNIVERSITY STATION
MTR-UNIVERSITY HALL
(PGH3 研究生宿舍三座)
C31 文林堂 WEN LIN TANG
C32 利樹培堂 LEE SHU PUI HALL
C34a 五旬節會樓(高座) PENTECOSTAL MISSION HALL COMPLEX (HIGH BLOCK) (SIR CHO YIU HALL)
C34b 五旬節會樓(低座) PENTECOSTAL MISSION HALL COMPLEX (LOW BLOCK)
C38 龐萬倫學生中心 YASUMOTO INTERNATIONAL ACADEMIC PARK
C39a 康本國際學術園 WU HO MAN YUEN BUILDING
C39b 伍何曼樓 AN INTEGRATED TEACHING BUILDING
C39c 綜合教學樓

新亞書院 NEW ASIA COLLEGE

- N1 誠明館 CHENG MING BUILDING
N2 人文館 HUMANITIES BUILDING
N3 錢穆圖書館 CHIEN MU LIBRARY
N4 樂群館-梁詒庭樓 STAFF STUDENT CENTRE - LEUNG HUNG KEE BUILDING
N5 知行樓 CHIH HSING HALL
N6 會友樓 FRIENDSHIP LODGE
N7 學思樓 XUESI HALL
N7a 合一亭 PAVILION OF HARMONY
N8 志文樓 GRACE TIEN HALL
N9 紫霞樓 DAISY LI HALL
N12 學生宿舍(興建中) STUDENT HOSTEL (C.I.P.)

聯合書院 UNITED COLLEGE

- U1 曾憲梓樓 TSANG SHIU TIM BUILDING
U2 聯合書院 UNITED COLLEGE
U3 鄭志多媒體圖書館 WU CHUNG MULTIMEDIA LIBRARY
U4 張淑珊師生康樂大樓 T.C. CHENG BUILDING
U5 湯若望宿舍 CHEUNG CHUK SHAN AMENITIES BUILDING
U6 伯利衛宿舍 ADAM SCHALL RESIDENCE
U7 聯合書院 BETHLEHEM HALL
U8 恆生樓 U.C. STAFF RESIDENCE
U11 陳震夏宿舍 HANG SENG HALL
U11a 思源廣場 CHAN CHUN HA HOSTEL
SI YUAN AMPHITHEATRE

逸夫書院 SHAW COLLEGE

- S1 國樞樓(高座) KUO MOU HALL (HIGH BLOCK)
S2 國樞樓(低座) KUO MOU HALL (LOW BLOCK)
S3 文瀾堂 WEN LAN TANG
S4 翁祥樓 YEN LUN LODGE
S4a 潘永明樓 HUNG WING MING BUILDING
S5 大講堂 SHAW COLLEGE LECTURE THEATRE
S6 逸仙樓 YAT SEN HALL
S8 第二學生宿舍(低座) STUDENT HOSTEL 2 (LOW BLOCK)

晨興書院 MORNINGSIDE COLLEGE

- MC1 格林伯格樓 MAURICE R. GREENBERG BUILDING
MC2 高座 HIGH BLOCK

善衡書院 S.H. HO COLLEGE

- SH1 何添堂 HO TIM HALL
SH2 利國偉堂 LEE QUO WEI HALL

文書院 C.W. CHU COLLEGE

- CW1 何陳婉珍樓 INA HO CHAN UN CHAN BUILDING
CW2 學生宿舍 STUDENT HOSTEL
CW3 朱潔玲樓 MARINA TSE CHU BUILDING

伍宜孫書院 WU YEE SUN COLLEGE

- YS1 伍宜孫書院西座 WU YEE SUN COLLEGE WEST BLOCK
YS2 伍宜孫書院東座 WU YEE SUN COLLEGE EAST BLOCK
YS3 伍宜孫書院康體中心 WU YEE SUN COLLEGE ACTIVITY CENTRE

Scale: 0 50 100 200 300m

Legend: CIP = CONSTRUCTION IN PROGRESS UP = UNDER PLANNING

和聲書院 LEE WOO SING COLLEGE

- WS1 顧維華費偉芬抗暴樓 DOROTHY AND TI-HUA KOO BUILDING
WS2 北座 NORTH BLOCK

研究生宿舍 POSTGRADUATE HALL

- PGH1 賽馬會研究生宿舍(一座) JOCKEY CLUB POSTGRADUATE HALL 1
PGH2 研究生宿舍二座 (H17b 曙光樓) POSTGRADUATE HALL NO.2 (H17b CHIANGS BUILDING)
PGH3 研究生宿舍三座 (C30 博文苑) POSTGRADUATE HALL NO.3 (C30 INTER-UNIVERSITY HALL)
PGH4 研究生宿舍四座 POSTGRADUATE HALL NO.4
PGH5 研究生宿舍五座 POSTGRADUATE HALL NO.5
PGH6 研究生宿舍六座 POSTGRADUATE HALL NO.6

國際生舍堂 INTERNATIONAL HOUSE

- IH1 國際生舍堂一室 INTERNATIONAL HOUSE 1
IH2 國際生舍堂二室 INTERNATIONAL HOUSE 2
IH3 國際生舍堂三室 INTERNATIONAL HOUSE 3
IH4 國際生舍堂四室 INTERNATIONAL HOUSE 4
IH5 國際生舍堂五室 INTERNATIONAL HOUSE 5

教職員宿舍 RESIDENTIAL AREA

- V1 漢園 VICE-CHANCELLOR'S RESIDENCE
R3 第三苑 UNIVERSITY RESIDENCE NO.3
R4 第四苑 UNIVERSITY RESIDENCE NO.4
R10 第十苑 UNIVERSITY RESIDENCE NO.10
R11 第十一苑 UNIVERSITY RESIDENCE NO.11
R12 第十二苑 UNIVERSITY RESIDENCE NO.12
R13 第十三苑 UNIVERSITY RESIDENCE NO.13
R14 第十四苑 UNIVERSITY RESIDENCE NO.14
R15 第十五苑 UNIVERSITY RESIDENCE NO.15
R16 第十六苑 UNIVERSITY RESIDENCE NO.16
R17 第十七苑 UNIVERSITY RESIDENCE NO.17