香港特別行政區政府
民航處
Civil Aviation Department
The Government of the Hong Kong Special Administrative Region

Small Unmanned Aircraft Advisory Circular No. AC-014

Date: 18 July 2025

Permission for Category C Small Unmanned Aircraft Operations and Pre-defined Scenario #1

1. Background

1.1 Under the Small Unmanned Aircraft Order ("SUA Order"), small unmanned aircraft ("SUA") operations are regulated under a risk-based approach and classified according to the weight of the SUA and the operational risk level. With a view to facilitating the use of SUA with weight above 25 kg but not exceeding 150 kg in Hong Kong, amendments to the SUA Order have been introduced and have come into operations on 18 July 2025.

1.2 Due to their heavier weight and usually larger size, **Category C SUA** with weight exceeding 25 kg at any time during the flight are subject to a higher level of risk. Their operations are categorised as **"Advanced Operations"** for which a permission under section 37 of the SUA Order is required from the Civil Aviation Department ("CAD") prior to operations.

1.3 To facilitate the applications for operations of Category C SUA, this Advisory Circular ("AC") sets out requirements for Category C SUA and a pre-defined scenario of use of Category C SUA and the associated requirements for permission. A streamlined application process may be adopted for the proposed operations which can fulfil operating requirements under the pre-defined scenario #1 (see paragraph 7). In case if the pre-defined scenario #1 cannot fulfil the operational need, the applicant may still apply to the CAD with detailed proposal and justifications to be detailed in paragraph 11.8.

2. Definition

2.1 "**Daylight hours**" means *the time from half an hour before sunrise until half an hour after sunset (both points of time exclusive), where sunrise and sunset are determined at surface level.*

Note:
Information of sunrise and sunset time may be obtained from the Hong Kong Observatory ("HKO"), e.g. through HKO's Mobile App under the "Astro & Tide Info" section or the HKO Almanac.

2.2 **Detect and Avoid** ("DAA") means the capability to see, sense or detect conflicting traffic or other hazards, and take appropriate action.

2.3 A **visual line of sight** ("**VLOS**") is direct and unaided (other than by way of corrective lenses and sunglasses) visual contact with the SUA and the surrounding airspace in which the SUA is operating. VLOS can be maintained by:

a) the remote pilot of the SUA, and/or
b) a visual observer ("VO"), chosen by the remote pilot, who is **at the same location as the remote pilot**, has good eyesight and is capable of communicating timely and effectively with the remote pilot of the SUA to avoid collision.

2.4 Pursuant to section 3(2)(d) of the SUA Order, an SUA is a **Category C SUA** in respect of a flight if its weight exceeds 25 kg but does not exceed 150 kg at any time during the flight.

In determining the weight or dimension of SUA, everything installed in, carried by, or attached to the SUA is to be taken into account. For example, the weight or dimension of any battery, fuel or payload carried by the SUA, such as cameras, lens filters, rotor guards, stickers, lights, etc. are considered as part of the weight or overall dimension.

2.5 **"Involved Person"** means a person who takes part in or is well aware of the SUA operation, understands the risk, and is aware of the instructions and safety precautions in regard to the SUA operations. In practical terms, this means that an involved person must:

- be clearly notified about and aware of the SUA operations;
- understand the risks involved;
- have reasonable safeguards introduced for them by the venue manager or the SUA operating crew during the SUA operations; and
- be expected to follow the directions and safety precautions provided.

2.6 A **vehicle** or **vessel** is considered to be "**under the control of the remote pilot**" (known as "involved" hereafter) if:

- The remote pilot shall be satisfied that a permission has been granted by appropriate persons which have an interest in the vehicle or vessel (e.g. the management party of the vehicle or vessel) for an SUA to operate within a distance less than the required lateral separation;
- Persons on board can reasonably be expected to follow directions and safety precautions for the SUA operation to avoid unplanned interactions with the SUA; and
- Persons on board shall be adequately briefed or informed about the SUA operations.

2.7 A **structure** is considered to be "**under the control of the remote pilot**" (known as "involved" hereafter) if:

- The remote pilot shall be satisfied that a permission has been granted by appropriate persons which have an interest in the structure (e.g. the management party of the structure) for an SUA to operate within a distance less than the required lateral separation;
- Occupants of the structure can reasonably be expected to follow directions and safety precautions for the SUA operations to avoid unplanned interactions with the SUA; and
- Occupants of the structure shall be adequately briefed or informed about the SUA operations.

2.8 **"Uninvolved Person/Vehicle/Vessel/Structure"** means any person/vehicle/vessel/ structure other than an "involved person/vehicle/vessel/structure".

3. Applicability

3.1 This AC applies to applicants who wish to apply for a permission from the CAD to conduct operations of Category C SUA under pre-defined scenario #1 ("PS1") within Hong Kong. Should any the requirements laid out in this AC cannot be met, please refer to paragraph 11.8 of this circular.

4. Technical and Equipment Requirements

4.1. A Category C SUA shall meet at least one of the following requirements as acceptance basis:

a) A Category C SUA is issued with a Type Certificate ("TC") by a national aviation authority ("NAA") in accordance with certification standards defined in ICAO Annex 8 as accepted by the CAD;
b) A Category C SUA is issued with an official document or a documentary substantiation by the SUA manufacturer to demonstrate compliance with technical standards of its national authority or NAA as accepted by the CAD; or
c) A self-assembled or self-built SUA Category C SUA is demonstrated in conformity to a NAA-approved design or a national authority's technical standards as accepted by the CAD and assessed to the satisfaction of the CAD.

4.2. Subject to the risks and complexity of the proposed operations, the CAD may require that the Category C SUA shall possess a TC which shall be submitted to the CAD in support of the application.

4.3. The Category C SUA shall be equipped with the necessary safety system capable of performing the functions specified in section 13 of the SUA Order, i.e. flight log and geo-awareness functions.

4.4. The Category C SUA shall be provisioned with the following capabilities:

a) Ground risk mitigation measures – such as features to reduce effect of the SUA impact dynamics (i.e. area, energy, impulse, transfer energy, etc.) with parachute as an example. The mitigation is automated as featured by the SUA manufacturer and /or manually activated by the remote pilot in case of SUA system malfunctions or failures.
b) Air risk mitigation measures – DAA system shall be adopted. In case the operator would like to propose other alternative means of compliance, detailed specification and procedures shall be submitted for CAD's consideration.

4.5. In addition to the above requirements, geo-fence and altitude limiting functions shall be equipped to cage the Category C SUA manoeuvres within a pre-defined flight area and level. Real Time Kinematic (RTK) positioning system is recommended.

4.6. Appropriate SUA controlling system (including ground station, remote controller, flight controlling software, etc.) shall also be in place to assist the remote pilot in identifying the Category C SUA's position in real time.

4.7. The technical specifications of the Category C SUA, together with the safety systems, SUA controlling system (including ground station, remote controller, flight controlling software, etc.), etc. shall be detailed and documented. The relevant documents shall be submitted to the CAD in support of the application.

4.8. All personnel and crew members involved in the operations of Category C SUA including the remote pilot are recommended to be provided with appropriate high visibility personal protective equipment (e.g. reflective apparel, safety vests, etc.).

5. Maintenance and Modification Requirements

5.1. The maintenance schedule and instructions of Category C SUA established by the SUA manufacturer shall be strictly complied with by the operator.

5.2. Maintenance of Category C SUA shall be carried out by:

a) the SUA manufacturer,
b) the organisation(s) authorised by the SUA manufacturer, or
c) the SUA operator's authorised personnel who are trained by the SUA manufacturer and competent on the relevant tasks and skills.

5.3. Communication protocols between the SUA operator and manufacturer shall be established to ensure that urgent SUA system modification or upgrade can be accomplished in a timely manner prior to the next SUA operations.

5.4. Any additional equipment or accessories mounted on the Category C SUA shall be the parts approved or accepted by the SUA manufacturer.

5.5. Any equipment or accessories without the approval of, or not listed in the acceptance list of, the SUA manufacturer shall not be installed on the Category C SUA unless the SUA functionality and performance are demonstrated to be unaffected or a clearance from the SUA manufacturer is obtained.

5.6. The relevant maintenance schedule and instructions, as well as communication protocols, shall be submitted to the CAD in support of the application. Maintenance records shall also be properly kept and be provided to the CAD upon request.

6. Personnel Requirements

6.1 The remote pilot of Category C SUA shall hold a valid remote pilot certificate and be assigned with "Advanced Rating (Category C SUA)".

6.2 If a visual observer is involved in the operation, the remote pilot shall choose a visual observer ("VO") whom the remote pilot is satisfied that the VO is competent for the advanced operations to be conducted.

6.3 In addition to the VO and subject to the area of operations, to provide additional safety and observation support, sufficient supporting crew shall be positioned in the area of

operations to assess the SUA's position, maintain constant visual lookout for any uninvolved people/vehicles/vessels getting close to the SUA, and take necessary actions concerning ground safety.

6.4 Prior to operations, the VO and/or other supporting crew shall be adequately briefed on details of the flight plan, safety risks involved, risk mitigations, operating procedures and emergency procedures, etc. They shall also be made aware of the terms and conditions of the permission issued by the CAD under section 37 of the SUA Order, and take all necessary measures to comply with such terms and conditions specified therein.

6.5 Effective audio communication must be maintained between the remote pilot, VO and / or supporting crew at all times during the flight.

6.6 Subject to the risks and complexity of the proposed operations, the remote pilot, supporting crew and other relevant personnel shall also attend prescribed training if so required by the CAD and/or the SUA manufacturer.

6.7 Training records shall be properly kept and be provided to the CAD upon request.

7. Operating Requirements and Pre-defined Scenario 1

7.1 A flight plan for each intended operation of Category C SUA shall be devised, including but not limited to the proposed operation date, time, take-off and landing point(s), flight path, flight altitude, and geo-fenced area (if any), together with the applicable operating and weather conditions and risk mitigation measures. The flight plan shall be appropriately documented and kept for at least two (2) years from the date of operation.

7.2 As part of the risk assessment process, a thorough site and flight safety assessment covering the take-off and landing points, and areas along and surrounding the SUA flight paths shall be conducted prior to the intended operations, to identify, record and address any hazards, restrictions and obstacles in the associated areas.

7.3 The SUA shall not be operated within a restricted flying zone or carry any dangerous goods during flight, unless a relevant permission has been separately obtained. For details of the restricted flying zone, please refer to the Drone Map published by the CAD.

7.4 To facilitate the applications for operations of Category C SUA, Pre-defined Scenario 1 ("PS1") and the applicable operating requirements are detailed in **Table 1**. The parameters shall be complied with during operations of the Category C SUA.

Table 1 – Table of Operating Requirements for Pre-defined Scenario #1

Operating Requirements	Pre-defined Scenario #1
Area of operations	Controlled ground area without any uninvolved people, structures, vehicles and vessels
Time of operations	Daylight hours only
Maintain visual line of sight (VLOS)	✓
Maximum flying altitude	300 ft Above Ground Level (AGL)
Minimum lateral separation from uninvolved people/ structures/vehicles/vessels*	30 m*
Maximum speed	20 km/hr
Maximum number of SUA to be operated by a remote pilot at the same time	1
Maximum characteristic dimensions of SUA (e.g. wingspan or longest distance between any two rotor blade tips)	3 m, except that the longest distance between any two rotor blade tips can be up to 3.2 m
Dropping from SUA	Considered on a case-by-case basis and the operator shall ensure that the mechanism of payload release will prevent accidental dropping or release of any substance
Carriage of persons or animals	×

** Cordon line must be established. For tethered operations with the tether length not exceeding 25 m, the minimum lateral separation from uninvolved people/structures/ vehicles/vessels = tether length + 5m from the point where the tether is fixed to the ground.*

8. Emergency Procedures

8.1 The operator and remote pilot shall determine suitable responses and fail-safe mechanism for emergency scenarios. There shall be proven and well documented emergency procedures including but not limited to the following scenarios:

a) Inoperative motors/blades;
b) Intermittent/degraded/permanent loss of C2 link;
c) Partial or total failure of Flight Critical System ("FCS"), SUA controlling system (including ground station, remote controller, flight controlling software, etc.), surveillance system (if applicable), etc.;
d) Navigation system failures, e.g. degradation or total loss of GNSS, sensors/ cameras;
e) Flight planning failures that could result in a loss of containment, i.e. incorrect setting of waypoints / Return-To-Home ("RTH") functions;
f) Flyaway, motor failures, other malfunctions, and other emergency scenarios that may arise specific to the proposed operations;
g) Fire;
h) Low battery, etc.

9. Insurance Requirements

9.1 Pursuant to the SUA Order, a policy of insurance shall be in force during Category C SUA operations for the third-party liability (for bodily injury and/or death) arising out of or caused by the SUA operations. If the weight of a Category C SUA does not exceed 75 kg at all times during the flight, the minimum coverage is HKD $15 million. If the weight of a Category C SUA exceeds 75 kg at any times during the flight, the minimum coverage is HKD $20 million.

10. Others

10.1 The remote pilot, responsible person of SUA or any other person who knowingly causes or permits the aircraft to be operated for the flight shall take note that apart from the SUA Order, other regulations, bylaws, requirements, etc. may also govern the usage of SUA. Applicable rules shall be observed and consent from relevant land or property owner, management, authority or agency shall be obtained if deemed necessary or appropriate for the intended operations.

11. Application Procedures

11.1. The application form can be downloaded from the electronic portal for small unmanned aircraft, "eSUA", at https://esua.cad.gov.hk/. The completed form shall be submitted to the CAD by email to sua@cad.gov.hk, accompanied by relevant application fee.[1]

[1] The application fee relating to the permission will be waived until further notice.

11.2. The applicant is suggested to submit the following documents **at least 28 calendar days** before the date of intended operation in order to provide sufficient time for processing and flight demonstration if required:

a) A completed application form (available at https://esua.cad.gov.hk/);
b) Technical specifications of the proposed Category C SUA and safety equipment (e.g. parachute), supported by acceptance by other civil aviation authorities if available (e.g. type certificate);
c) Qualifications and training records of the remote pilots and other crew (See **section 6**);
d) An operations manual (See **Appendix A**);
e) A risk assessment identifying hazards specific to proposed Category C SUA operations and the corresponding risk mitigation measures (See **Appendix B**);
f) A flight plan (See **paragraph 11.3**); and
g) Any other information/documents required in the application form

Subject to the risks and complexity of the proposed operations, the CAD may require applicant to submit additional information/documents for assessment.

Flight Plan

11.3. The flight plan shall at least include the following details. Any information that is subject to further changes shall be clearly indicated.

a) Take-off / landing point
b) Flight path / area
c) Geo-fencing boundary
d) Altitude and speed
e) How is VLOS maintained
f) Position of remote pilot and other crew members
g) The method of maintaining minimum separation from uninvolved persons and vehicle, vessel or structure not under control of remote pilot

Flight demonstration

11.4. During the application process, the applicant will be required to conduct a demonstration flight for each proposed type/model of Category C SUA. Demonstration of SUA's reaction to emergency scenarios (e.g. sudden appearance of other flying objects, loss of communication, RTH operations, battery failure) shall be arranged upon the requests from the CAD. Additional demonstration may be required subject to the risks and complexity of the proposed operations. The applicant is responsible to make necessary arrangement for the flight, in particular:

a) The flight must be carried out in a site permitted for SUA operation, in which the applicable separation from uninvolved people, structures, vehicles or vessels can be maintained;
b) The applicant shall be able to demonstrate the normal operation and emergency procedures; and
c) The relevant equipment capabilities, particularly those which are being relied upon as safety mitigations, must be demonstrated.

11.5. As the time required for the processing of the application would depend on the **completeness** and **readiness** of the submission, applicants shall ensure that the submissions are in order to facilitate the processing of applications. The CAD can only process the application with all required information; whilst application with insufficient details may lengthen the application process.

11.6. To expedite the application process for conducting repeated Category C SUA operation at a specific site, the CAD may consider granting a permission with a longer validity period. The applicant shall indicate on the application form and provide the required information to demonstrate the compliance with the requirements set out in this AC.

11.7. The CAD may refuse to grant the permission under pre-defined scenario #1 if the applicant cannot demonstrate the compliance with the requirements set out in this AC.

11.8. Notwithstanding the above, if operational justifications with evidence can be provided to the satisfaction of the CAD to demonstrate that the requirements under pre-defined scenario #1 cannot fulfil the operational need, the applicant may apply to the CAD for a permission to operate Category C SUA with full justifications, details of operations, corresponding risk mitigation measures (to address both ground risk and air risks in detail), and a comprehensive risk assessment (e.g. in accordance with JARUS guidelines on Specific Operations Risk Assessment) for the CAD's preliminary assessment. Further information/document/proof shall be provided to the CAD upon request. Applicants are advised to discuss their proposals with the CAD well in advance before making applications.

12. Enquiries

12.1. This AC will be subject to review and update from time to time in the light of the advancement of technology and increasing popular use of SUA in different professional applications. It shall also be noted that the safety requirements provided above are not meant to be exhaustive. It shall be the responsibility of the applicant to comply with all applicable regulatory requirements, put in place appropriate safety precautions and risk mitigating measures for the subject SUA operation, as well as to follow the requirements and guidelines set out by any property owner and/or manager to ensure the safe operations of SUA at all times.

12.2. This AC shall be read in conjunction with the SUA Order, SRD and other SUA related documents published by the CAD.

12.3. For enquiries, please contact the Unmanned Aircraft Office of the CAD at sua@cad.gov.hk.

Appendix A – Outline of Operations Manual for Category C SUA Operations

Table A.1 provides an outline of the areas and details that shall be included in an Operations Manual (OM) for conducting a Category C SUA operation. The template is not exhaustive and may be adjusted as necessary to suit the particular arrangements of an individual operator.

A sample OM for SUA advanced operations is also available on the CAD website (https://esua.cad.gov.hk/) for reference.

Table A.1 – Outline of an OM for Category C SUA Operation

Part A – Organisational Procedures		
1	**Administration**	
1.1	Contents	Brief list of OM contents
1.2	Introductory statement and applicability	State the applicability of this OM to whom and when the contents within this OM must be adhered to.
1.3	Definitions	Include any common acronyms, if necessary
1.4	Document control and amendment procedure	Include access and distribution, amendment procedure, revision history and means to indicate amendments. *Note: Amendments shall be accepted by the CAD coming into effect.*
2	**Organisation**	
2.1	Structure of organisation and management lines	Organogram with brief description.
2.2	Roles and responsibilities	Specify the roles and responsibilities of each key position, including Accountable Manager, remote pilot, supporting crew, visual observer, maintenance personnel, and etc.
2.3	Competency of the personnel	Detail the qualification / experience / training requirements required for each position of personnel.
2.4	Training programme	Detail the training programme (OEM and internal training, as well as initial and recurrent training) for each type / model of SUA and/or type of operation.
2.5	Safety and quality assurance	Detail the safety and quality assurance activities for operation and ensuring continuous compliance with applicable requirements, Operations Manual, and etc.

2.6	Accident / incident handling and reporting	Describe the internal and external reporting procedures for accident / incident (e.g. definition, reporting line and timeframe), as well as the investigation and follow-up policy (e.g. root cause identification, corrective action). *Note: The following reporting procedures to authorities shall be followed:* *(i) Notify Police by phone immediately and an email notification to the CAD at sua@cad.gov.hk, if the operation has caused any damage to property or injury to person;* *(ii) Within 24 hours of any incident or accident (whether or not there was damage to third party property or injury), provide full details of the circumstances in writing to the CAD by email to sua@cad.gov.hk.* *(iii) Within 3 calendar days, provide additional details and / or investigation findings by email to sua@cad.gov.hk.*
3	**Overview of the SUA System and Safety Equipment**	
3.1	Brief technical description of the SUA	Provide information about the SUA such as: (i) SUA registration number (ii) Manufacturer name (as applicable) (iii) Type of SUA (e.g. multi-copter / fixed-wing / helicopter) (iv) Model name or model number (as applicable) (v) Serial number of aircraft or flight controller (as applicable) (vi) Weight and size of SUA (vii) Payload (viii) Command and control (C2) Link (ix) Navigation and positioning system and fall-back design (x) Sensing system and collision avoidance (xi) Means to cage the SUA within intended area of operations (xii) Fail-safe mechanism

		(xiii) Other technical specifications including maximum take-off weight, maximum flying altitude, maximum speed, maximum operating time, wind speed limitation, other weather limitation etc. (xiv) Full technical specifications can be supplemented in the Appendix or as a separate technical manual.
3.2	Brief technical description of the SUA controlling system (including ground station, remote controller, flight controlling software, etc.)	(i) Display of telemetry data and warning (ii) Primary and redundancy C2 link network, its frequency, maximum working distance, latency, etc. (iii) State how a C2 link between the SUA and the ground control station is established and maintained.
3.3	Brief technical description of the safety system	Taking parachute as an example: (i) Manufacturer and model name (ii) Minimum deployment altitude (iii) Descent rate (iv) Triggers (v) Conformity to relevant industry standard or manufacturer acceptance, and etc.
3.4	Maintenance	(i) Maintenance schedule (ii) Maintenance personnel (iii) Maintenance instruction/procedure (iv) Record of defects and maintenance (v) Test before returning to service
4	**Operational Control**	
4.1	Monitoring of SUA operation	(i) Describe how the various operating parameters will be monitored by the remote pilot / operating crew. This shall include (but not be limited to) flight altitude, latitude & longitude, GNSS / GPS / RTK equipage, battery level, geo-fencing, C2 link between each SUA and the ground control station. (ii) Maintain a good lookout at all times and avoid collision with other aircraft (both manned and unmanned).

4.2	Management of cordon-off area	Describe how the cordoning measures are maintained and the access control is exercised.
4.3	Crew health	A statement and any guidance to ensure that the crew are appropriately fit before conducting any operations.
4.4	Emergency abort criteria	(i) State the abort conditions which, if reached, would lead to an immediate and safe termination of the operation. (ii) State who is responsible to make real-time decision to abort the operation.
5	**Permission Maintenance**	
5.1	Documentation and records	Indicate the documents/checklists/records to be maintained and the retention period (at least 2 years upon flight date)
5.2	Change of information	Indicate the procedures to initiate change in policies/procedures/requirements/personnel/ SUA, and the reporting mechanism to the CAD
Part B - Operating Procedures		
1	**Flight Planning / reparation**	
1.1	On-site survey and assessment	Procedures, checklist and items applicable for site survey during flight planning
1.2	Risk management	Describe how the safety risk specific to the operation would be identified and mitigated to an acceptable level.
1.3	Cordoning measures	Explain how the cordon line(s) would be marked and the assess to the cordon-off area would be controlled to ensure no unauthorised entry into the operating area.
1.4	Means of communications	Describe communication protocol with relevant airspace authority and users before operation
2	**Pre-flight Check**	
2.1	Pre-flight check	Procedures, checklist and items for pre-flight check, including but not limited to: (i) Validation of flight planning (ii) Selection of operating area and alternative (iii) Cordon procedure (iv) Communication among crew and with relevant airspace stakeholders

		(v) Crew health (vi) Weather checks (vii) Preparation and serviceability of SUA and equipment (viii) Battery management (ix) Assembly and loading of SUA
3	**Normal Operating Procedures**	
3.1	Start	These procedures may be contained in the operator's manual or equivalent but shall cover all necessary matters including safety. Critical information shall be specified. This shall include the minimum number of satellites tracked and the minimum battery level required before and during the operation. For example, the operation shall be terminated if the number of satellites tracked dropped below the minimum number (e.g. eight satellites), or battery level dropped below the minimum level (e.g. 30% battery level), etc.
3.2	Take-off	
3.3	In flight	
3.4	Landing	
3.5	Shutdown	
4	**Emergency Procedures**	
4.1	Emergency procedures for different scenarios	Specify the emergency procedures in response to at least the following situations: (i) SUA mechanical failure (ii) Fire (iii) Loss of C2 link (iv) Loss of GPS / GNSS signal (v) Low battery (vi) Flyaway (vii) Public encroachment (viii) Aircraft encroachment
Part C – Appendices		
1	SUA technical specifications	Full technical specifications of the SUA as applicable
2	Forms and checklist	Include, but not limited to, the following forms/checklists: (i) Flight record (ii) Battery log (iii) Maintenance log (iv) Site survey form (v) Risk assessment form

		(vi) Operation checklist (vii) Self-assessment checklist (viii) Occurrence report

Appendix B – Safety Risk Assessment for Operations of Category C SUA

The applicant shall identify risks specific to the proposed operation and propose effective risk mitigating measures so that the risks are mitigated to an acceptable level. A template of risk assessment is available in the sample of Operations Manual available at https://esua.cad.gov.hk/. The following is an example of safety risk assessment for Category C SUA operation and some anticipated risks to be addressed. Applicant shall note that the list is not exhaustive. Any other risks associated with the proposed operation shall be identified and addressed.

Risk No.	Identified Hazard	Associated Risk (What & How)	Existing Mitigation	Current Risk Rating	Further Mitigation	Revised Risk Rating
1.	*Loss of C2 link due to interference*	*The SUA cannot be effectively controlled*	*Closed 4G network is used (instead of wifi)*	*4B*	*Long range "LoRa" network is deployed*	*2B*
2.	*Loss of C2 link due to network capacity*					
3.	*Loss of or poor GPS / GNSS due to interference*					
4.	*The SUA fail to identify the "home" position*					
5.	*The SUA overshoot the geo-fence when travelling towards it at maximum speed*					
6.	*The battery falls below optimal level during operation*					
7.	*The SUA drop during operation*					
8.	*Any other single points of failure*					

– END –