Unmanned Aerial Vehicles (UAVs) – Open and Specific Categories only – Policy			
Policy…	✓	Code of Practice…	Guidance	Procedure…
		Organisation-wide✓	Local…	
Presented to the University Health & Safety Committee for Consultation			
Chairperson Dr Derek Millard Healy		Date Oct 2023	Review date 2026	
The purpose of presenting this document to the University Health and Safety Committee Standard 3 year re-fresh... Changes in practice and/or legislation New Policy. ✓.			

Contents

1. Introduction

An UAV is a small, unmanned aircraft normally controlled either autonomously, by on-board computers, or by the remote control of a pilot. UAVs typically consist of two parts, the UAV itself and the control system.

Due to their size and use of high-speed rotors / blades to propel them, UAVs can be exceptionally dangerous if not handled correctly. Accidents and incidents associated with their use are rising.

Until the 31st December 2020, the required level of pilot competency and certification was based on any commercial gain from flying a UAV. From 1st January 2021 this requirement no longer applies. Instead, the focus is to align pilot competency with the level of risk that each flight presents. Considerations include the Class of the aircraft being flown (including any accessories) how close the UAV will fly to people not directly involved with the flight (uninvolved people) and how close the UAV will fly from built-up areas (congested areas). The greater the risk, the more rigorous training and Civil Aviation Authority involvement is required.

This Policy details the key elements to ensure compliance with relevant statutory conditions.

2. Policy Statement and Scope

It is the policy of Brunel University London, so far as is reasonably practicable, but in accordance with the relevant statutory requirements and good practice, to ensure the health and safety of staff, students, and visitors to the University.

This Policy states the requirements placed on the University and any College or Commercial Services operating and commissioning UAVs to ensure, as far as is reasonably practicable, that the UAV used for University activities and /or those authorised to be flown over University property and land, are operated safely and in accordance with legislative requirements and associated good practice.

The Policy also states the duties and responsibilities placed on staff, students and others operating and commissioning UAVs on University related business.

The Policy applies to:

- Any UAV operated by the University with a maximum take-off mass of less than 25kg.
- The University and all its Colleges and Services, including the Students' Union wishing to commission a third party to undertake an UAV activity.
- All staff, students, and others operating UAVs on University related business.

The Policy does not apply to the following:

- The use of UAVs by University staff and students 25 kg and above, which is prohibited.

3. Related Policies and Legislation

In addition to those general duties in law, the University and its constituent Colleges and Services, have a specific obligation when operating UAVs to comply with the requirements of the Air Navigation (Amendment) Order 2020 (also known as CAP2038A00) which contains the Orders and Regulations for UK aviation. It covers ALL aircraft.

- CAP2038A00 is prepared by the UK Civil Aviation Authority (CAA); a public corporation which provides air traffic services and acts as an independent specialist aviation regulator.
- CAA powers include overseeing the use of UAVs, and can, if required prosecute.

4. Definitions / Terminology

For the purposes of this Policy the following definitions apply:

- **UAV**: Small unmanned aircraft (multi-rotor / fixed wing weighing less than 25kg).
- **MTOM**: Maximum Take-off Mass.
- **ANO: CAP2038A00**: Air Navigation Order 2016: The Order and Regulations.
- **CAA**: Civil Aviation Authority.
- **DMARES**: Drone & Model Aircraft Registration Scheme. DMARES is an on-line training and registration scheme required by the CAA before any person operates any camera equipped UAV, even sub 250g.
- **A2 'CoC'**: Certificate of Competency that enables operation of UAVs weighing between 250g and 2kg in built up areas.
- **GVC**[1]: General Visual Line of Sight Certificate (GVC) qualification required to operate UAVs weighing between 2kg and 25kg in built-up areas. Includes a theory test and practical flight assessment.
- **Flyer ID**: Unique Pilot ID issued on completion of DMARES.
- **Operator ID**: Required by any person (may be an organization) operating any UAV 250g and over and any UAV with a camera (excludes UAVs classed as a toy).
- **Risk Categories**:
  - **Open Category:** Low risk operations (including 3 sub-categories A1, A2, A3) that if set parameters are followed can be safely conducted and require no specific CAA authorisation.
  - **Specific Category:** Medium risk operations that cannot be conducted within the parameters of the Open Category. Requires greater, proven pilot competency and clearly defined operated procedures authorised by the CAA.
- **Operational Authorisation**: CAA authorisation required before any UAV operation within the 'Specific' Category takes place.
- **UAV Class**: The Open Category has five UAV classes: C0 (<250g) to C4 (<25Kg no automation). The primary factor in determining Class is the weight.
- **Remote Pilot (RP)**: Competent individual who operates UAV flight controls or if flying automatically monitors its course and can control its course by operating flight controls.

5. Responsibilities of Brunel University London

Through this Policy, the University establishes management arrangements to ensure UAVs are used safely and correctly in accordance with relevant legislation. The University will:

[1] Formerly PfCO qualification – GVC qualification must be held by 31st December 2023

a. Appoint UAV Officers (Directorates and Colleges that wish do UAV flights need to appoint a UAV officer, a role referenced throughout CAA documentation, they have an admin/assurance role, they fly UAVs when working under the 'Specific Category') with the skills and experience to advise Colleges / Commercial Services and who is the only member of University staff and / or student permitted to perform UAV operations in the Specific Category.
b. Obtain and maintain CAA Operational Authorisation (Required) to enable the UAV Officer to perform UAV operations in the Specific Category.
c. As part of b. above, maintain the Operations Manual (Required) and submit each year to the CAA for examination and approval.
d. Obtain and maintain the University's Operator ID (Required) to display on University owned UAVs.
e. Consider College / Directorates procedures and arrangements for the operation of UAVs and confirm compliance with this Policy and the Operations Manual, as applicable i.e. a Governance role undertaken as part of the HSET audit function.
f. Consider and approve arrangements for staff and students wishing to fly UAVs.
g. Consider and approve commissioned 3rd Parties and requests from 3rd Parties who wish to 'overfly' the University estate.
h. Delegate responsibility for the implementation of this Policy to Senior Management of Brunel University London.

6. College and Directorate Responsibilities

Where a College or Service wishes to use a UAV the Head/Director must ensure activities are undertaken safely and in accordance with the requirements of this Policy. This includes establishing arrangements to ensure:

a. A UAV officer for the college or the directorate must be appointed and be suitably trained. https://register-drones.caa.co.uk/
b. Inform HSET of the appointment a UAV office detailing training and licenses.
c. Staff and students understand:
    1) The procedures associated with the use of UAVs, including competency and authorisation requirements.
    2) Their personal responsibilities if operating their own UAV on University business.
d. College / Service 'owned' UAVs are operated correctly and safely.
e. Relevant records e.g. training, maintenance are kept.
f. UAV use is monitored, with concerns or proposed changes in UAV activity notified to.
g. The completion of appropriate risk assessments for activities.

7. The UAV[2]

Colleges / Directorates must seek the advice of their UAV Officer before purchasing any College / Directorate 'owned' UAV to ensure its Class is suitable for the task to be undertaken (e.g. flown near people).

[2] All UAVs must be registered in accordance with any legal requirement

The following arrangements must then be established for all University 'owned' UAVs:

a. Implement a maintenance / inspection regime, in accordance with the manufacturer's guidance for the UAV and any peripherals e.g. batteries.
b. Maintain records as required e.g. maintenance, inspections, battery log.
c. Ensure the University's Operator ID is displayed on all University owned UAVs.
d. Restrict access to UAVs to authorised persons only with UAVs secured when not in use.

In addition, Colleges / Services must ensure that any member of staff or student wishing to fly their own personal UAV on University related business:

e. Holds suitable personal Liability Insurance if not covered by University insurance.
f. Registers their UAV with the CAA with an Operator ID obtained and displayed on the UAV as required. **Note:** Evidence of this is required as part of Pilot Authorisation.
g. Understand their personal responsibilities i.e. inspections, maintenance.

8. Open category UAV operations

To operate UAVs in the Open Category the following minimum criteria must be met:

a. The UAV flight takes place at a safe distance from persons and not above crowds.
b. The UAV must be operated within visual line of sight (VLOS).
c. The UAV must not be flown more than 120m (400ft) from the closest point of the earth.

The Open Category then has 3 sub-categories that contain operational limitations (i.e. equipment used / separation distances). The aircraft Class determines which sub-category a UAV operation falls under, i.e.:

A1 – Close to people and potential over flight (C0 and C1 UAVs only)
A2 – Close to people, no over flight (C0, C1 and C2 UAVs only)
A3 – Far from people, no over flight (C0, C1, C2, C3 and C4 UAVs only)

It is envisaged most UAV operations by staff and student will involve Class C0 UAVs operating in the A3 sub-category, i.e. operating a UAV weighing <250g with a fitted camera, flying far from people, away from any built-up area and with no over flight of people

Staff or students considering using a UAV will be encouraged to work within these criteria. Details of the UAV to be used and the UAV operation will be required as part of the Remote Pilot Authorisation process.

9. Specific category UAV operations

UAV operations (up to 25kg) that cannot meet all 3 criteria of the Open Category fall under the remit of the Specific Category. In accordance with the University's CAA Operational

Authorisation, the College\Directorate UAV Officers are the only members of University staff or student permitted to carry out flights on University business in the Specific Category[3].

10. Remote pilot competency and approval – 'Open category'[4]

Staff and students wishing to operate a UAV on University business in the 'Open Category' must seek prior approval, submitting the *UAV – Remote Pilot Authorisation Form* (Required) to College\Directorate UAV Officer at least three (3) weeks before the flight with approval given before any UAV operation is undertaken.

As part of this process all staff and students must, as a minimum:

a. Undertake the on-line CAA foundation course - DMARES.
b. Obtain a Flyer ID on completion of the DMARES course.
c. Comply with the requirements of 'The UAV' outlined above.
d. Comply with Remote Pilot responsibilities and any specific requirements identified during the Pilot Authorisation process.

NOTE: Additional competencies may be required dependent on the UAV Class and how close the UAV will fly to uninvolved persons and built-up areas. In some instances, a practical flight assessment by a College\ Directorate UAV Officer may be necessary.

11. Commissioning of others (3rd parties) to undertake UAV activities

Any College / Directorate Service commissioning a 3rd Party to undertake UAV activity, must, before the 3rd Party performs the UAV activity:

a. Confirm the 3rd Party holds an appropriate CAA Operational Authorisation (see (b) below), have trained and registered Pilots, Insurances, Data Permissions (e.g. Filming Agreement) etc. and are experienced in the planned work.
b. Where the 3rd Party has no CAA Operational Authorisation, confirm, as part of the approval process:

    1. The UAV Class and the Subcategory of the flight.
    2. That the flight will be far from people with no over flight of uninvolved persons.
    3. There will be no flying over a congested area.
    4. Appropriate insurance is in place.
    5. Pilot competence; including their experience in the planned work.
    6. Operator ID information.
    7. Data and image capture permissions and arrangements.

c. Send a completed *3rd Party-Led UAV Operation Form* (Appendix 1), to College or Directorate UAV officer with approval received before work takes place.
d. Where aerial work is around or above University buildings or property, inform relevant Colleges / Services of the UAV work and controls that are in place and where appropriate, agree the time of overflying to minimise disruption.

---

[3] The Pilot must hold DMARES and the General Visual Line of Sight Certificate (GVC) qualification. CAA All Remote Pilots must be Registered in accordance with any legal requirement i.e. DMARES, Flyer ID

[4] Operational Authorisation, which requires the University to submit an Operations Manual is also required

e. If filming above areas 'not owned' by the University, seek written permission of the person responsible for that area before submitting the *3rd Party-Led UAV Operation Form*.

12. UAV Officers responsibilities

If a College or Directorate wishes to undertake UAV flights. They must appoint an UAV officer to ensure UAV operations are safe and comply with this policy and legislation.
The UAV Officer is appointed on behalf of a College or Directorate to perform in-house flight assessments and supervision of staff and students. The UAV Officer is the Remote Pilot named in the University's Operations Manual required as part of the CAA Operational Authorisation process and which enables the University to undertake UAV operations in the Specific Category. UAV officers must have the appropriate training as required by the CAA. The UAV officer must also approve 3rd party documents.

13. Duties of staff and students

Staff and students must never operate a UAV (personal or College / Service owned) or allow a 3rd Party to operate a UAV on University business until authorised by a Directorate or College UAV Officer.

Once authorisation is given the member of staff or student must ensure compliance with the requirements of this Policy and specific details included as part of relevant approval processes.

14. Review and audit procedures

The HSET will undertake periodic audits or reviews to assess the effectiveness of and compliance with, this Policy.

Colleges / Directorates must periodically review their own procedures to ensure the requirements of this Policy are implemented, suitable and effective.

The HSET will review this Policy in accordance with the agreed Review Schedule, with any significant changes considered by the University Health and Safety Committee.

15. Appendix

Brunel University London - 3rd Party led UAV operation approval form

Colleges and Services must submit this Form to the Brunel University's UAV Officer via Commercial Services for approval before a 3rd Party may operate a UAV on their behalf, or if a 3rd Party wishes to 'over fly' the University campus and where commissioned to fly on behalf of the University. **A supporting risk assessment and flight plan must also be attached.**

3rd Party Name & Contact Details:	
3rd Party CAA Operational Authorisation Ref. No:	

NOTE: If no CAA Operational Authorisation:

If no Operational Authorisation held, please (circle) as appropriate:			
Will the flight be classed as "Open Category"?		**YES**	**NO**
What Sub-Category will the flight be?	A1	A2	A3
Flight is far from people with no overflight of uninvolved persons		**YES**	**NO**
Flight will be 150m or more from a congested area		**YES**	**NO**

Dates of flight[5]:	From:	To:
Flight Location[6]:		
Type of flight[7]:		
Insurance in Place for UAV operations:		
Privacy Impact Controls (GDPR) Confirmed:		
3rd Party Remote Pilot Name / Contact Details:		

5 Approximate range of dates if exact date not known

6 Sufficient information to locate the flight area - **Detail parts of the University campus to be 'over flown' on next page**

7 Summary e.g. Video recording – commercial activity (Filming of videos, dramas, etc.), Video Survey, 3D Data Capture Test Flight, Gas Detection and what data will be captured

Remote Pilot Qualifications and Flyer ID:		
Drone Class to be used & CAA Operator ID:[8]	Drone Class (C0, C1, C2, C3, C4, or legacy):	Operator ID:
Flight Risk Assessment and indication of flight path/s attached:		
Please summarise general On-Site Controls e.g. Observers, Payload Master:		

Brunel University London Person/s requesting work

The completed form must be submitted to (To be identified) *before any UAV operation takes place (Email address & contact number to be provided)*

All comments / caveats contained in the Approval Section must be adhered to

Brunel University London Person(s) Requesting Work (Name):	
Contact Details:	

[8] Operator ID must be displayed on all drones to be used

Please detail what areas of the Brunel University London campus are being 'over flown' and who will be informed as part of this process:	Location / Building:			Person(s) to be Informed. **Note:** Security must also be informed pre and post flight on Security contact number
Relevant persons informed if 'Over Flying' Brunel University London campus	YES	NO	N/A	Date(s):

Approval from College\Directorate UAV Officer

Approved by University UAV Officer (Name & Signature):	
Date:	
Comments / Caveats:	**NOTE:** Approval for a flight where no CAA Operational Authorisation is held by the 3rd Party is only given subject to the following requirements being met: • The flight is in the 'Open Category'. • The flight is far from people, at least 150m away from a congested area and involves no overflying of uninvolved persons. • The 3rd Party's Operator ID is displayed on the drone, the Pilot has DMARES as a minimum and adequate Public Liability Insurance is in place.