University of Reading

Safety Code of Practice 54

2nd Edition, October 2021

DRONES

Summary
Code of Practice 54 Drones sets out the minimum requirements for Schools/Functions wishing to undertake any type of Drone operations for University of Reading activities. This document establishes the requirements for Schools/Functions to achieve the minimum standard to ensure that drone operations are conducted in a safe and legally compliant manner. It establishes responsibilities for those undertaking drone operations on behalf or for the University of Reading.

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1 INTRODUCTION

All drones (also known as unmanned aerial vehicles) have the potential to cause injury. The main risks are hitting people, property or overhead cables, interfering with other aircraft, privacy concerns, noise and general nuisance. There are strict and specific legal constraints as well as health and safety issues to be considered whenever Schools/Functions or individuals wish to use drones. The new technologies of semi-autonomous and swarm drones have the potential to introduce additional hazard and risk control issues.

Technical Services (TS) provides a professional Drone Service. The TS Drones Service is governed and managed in accordance with its own standards and rules, established by TS. Teams seeking to use drones are encouraged to use this professional service where possible.

This Safety Code of Practice establishes requirements for all other use of drones, that is those NOT under the control or supervision of the TS Drones service.

2 APPLICATION AND SCOPE

This Code of Practice applies to University work activities involving non-TS Drones Service drone operations wherever they are carried out, including those carried out on campus, off-campus or outside the UK. This Code applies to both indoor and outdoor use of drones; use for teaching, research and commercial purposes including but not limited to photography, surveillance for building maintenance and data acquisition; and it applies to hobby/recreational use. It does not cover balloons, kites or human-carrying aircraft flights.

Relevant Other Safety Codes of Practice

Incident notification and investigation requirements established by Safety Code of Practise 09 apply to both TS-controlled and non TS-controlled drone operations.

Event notifications are required for all drone flights, including TS-piloted flights, conducted on Whiteknights, Earley Gate, London Road or Greenland campuses (this will be addressed in the next update of Safety Code of Practice 33 – Event Management).

3 RESPONSIBILITIES

Heads of Schools and Functions are responsible for

- Establishing a School or Function policy on drone use, detailing at least if use of the TS Drone Service is preferred, if use of commercial drone operators is allowed, if Open or Specific Category Drone Use is allowed, and that Certified Category drone use is not permitted by the University.
- Seeking to use the Technical Services Drones Service if appropriate and available.
- Ensuring that all other drone operations carried out by staff or students on behalf of their School or Function, or in connection with their work or teaching activities, comply with the requirements of the Civil Aviation Authority (CAA) and this Safety Code of Practice.
- Identifying if drone flying on the School or Function's behalf is Open Category flying only or extends to Specific Category flying (see https://www.caa.co.uk/Consumers/Unmanned-aircraft/Recreational-drones/Flying-in-the-open-category/ and https://www.caa.co.uk/Commercial-industry/Aircraft/Unmanned-aircraft/Small-drones/Flying-in-the-specific-category/).
- Ensuring Certified Category flying (equivalent to flying an aircraft) is not permitted.
- For Open Category use: ensuring the Classification of the devices flown has been established and meets requirements for the Open Sub-Categories A1, A2 or A3 flying actually being undertaken (see https://register-drones.caa.co.uk/drone-code).
- For Open category use: ensuring all Flyers have passed the CAA online test, have CAA-issued Flyer-IDs, that whoever is acting for the School or Function as its Operator is registered as an Operator with the CAA, and that the Operator-ID is displayed on each device in use.
- For Specific Category use: ensuring the School or Function holds its own operational authorisation, issued by the CAA, supported by an operators manual and risk assessment (see https://publicapps.caa.co.uk/docs/33/CAP722%20Edition8(p).pdf).
- For Specific Category use: identifying the pilot competence required (including if the General VLOS Certificate is required).
- Ensuring photo, video or audio recordings made by any drone are managed in accordance with GDPR (addition information is contained within Section 5).
- Liaising with Procurement to ensure the University's insurance arrangements cover the intended drone use (devices above 20kg always require insurance).
- Seeking advance permission from Health & Safety Services for the use of
    - autonomous drones (not under direct operator control) or
    - drone swarms (multiple devices which co-ordinate movement and action) or
    - drop-load drones (which carry and release a payload)
- Ensuring any commercial drone operators used by the School or Function has a current CAA operational authorisation.

- Ensure that a list of Drones owned by the University of Reading is sent to the Insurance Officer annually or upon request.

Managers and Principal Investigators planning or agreeing to drone use as part of work or teaching activities are responsible for

- Ensuring the drone use is permitted by the School or Function's drone policy.
- Informing the Head of School or Function of the intention to use drones and supplying all information needed to comply with this Safety Code of Practice, in advance of the drone use.
- Informing flyers in control of devices that all drone use on Whiteknights, Earley Gate, London Road and Greenlands Campuses must be notified in advance through the University's Event Notification process.

Those selecting, purchasing or otherwise obtaining devices for use are responsible for

- Ensuring the device is permitted by the School or Function's drone policy and is under 250g or otherwise an appropriate class of device for the Sub-Category (A1, A2 or A3), if Open Flying is intended.
- Ensuring the device does not bring the drone use into the Certified Category (see CAP722, Section 2.2.3 https://publicapps.caa.co.uk/docs/33/CAP722%20Edition8(p).pdf).
- Ensuring the Head of School is explicitly informed if a device has an autonomous, swarm or drop-load capability.

Those contracting commercial drone operators are responsible for

- Ensuring the drone use is permitted by the School or Function's drone policy.
- Obtaining details of the commercial drone operator's current CAA operational authorisation and public liability insurance and making those available to the Head of School or Function and the local Health & Safety Committee.
- Informing flyers in control of devices that all drone use on Whiteknights, Earley Gate, London Road and Greenlands Campuses must be notified in advance through the University's Event Notification process.

Flyers or Pilots (staff or students), RUSU Student Societies, or any person using drones on campus for recreational or hobby use, are responsible for

- Ensuring they have passed the required online training or other certification required for the Category of drone use intended
- Ensuring they comply with The Drone and Model Aircraft Code (see https://register-drones.caa.co.uk/drone-code)
- Ensuring that all drone use on Whiteknights, Earley Gate, London Road and Greenlands Campuses is notified in advance through the University's Event Notification process.

Health & Safety Co-ordinators are responsible for

- Drawing to the attention of Heads of Schools/Functions, local drone flyers and local H&S Committees this Safety Code of Practice.

Health & Safety Services are responsible for

- Considering requests to grant permission for autonomous, swarm or drop-load drone use.
- Ensuring incidents are investigated and, if necessary, reported to the CAA.

4 REQUIREMENTS

Types of Flying

Under UK legislation drone use is either Open, Specific or Certified Category - see CAP 722, also known as *Unmanned Aircraft System Operations in UK Airspace – Guidance* from the CAA.

All **Open Category** drone use is required to comply with The Drone and Model Aircraft Code https://register-drones.caa.co.uk/drone-code and Annex A of CAP 722, also known as *Unmanned Aircraft System Operations in UK Airspace – Guidance* from the CAA.

All **Specific Category** drone use is required to comply with Annex B of CAP 722, also known as *Unmanned Aircraft System Operations in UK Airspace – Guidance* from the CAA.

All **Certified Category** drone use is not permitted by the University.

Insurance Requirements

All drones operatored by or on University premises or in connection with University activities must be suitably insursed. Please contact the Insurance Office for further information.

Flights on University of Reading Land

All drone flights on University campuses are required to be notified in advance through the University Event Notification process.

All drone flights on other University land, excepting those under the control of the TS Drone Service, are required to be notified in advance through the University Event Notification process.

Flights outside the United Kingdom

Any drone operations being undertaken outside the UK requires the drone operator to check with the relevant authority in the destination country for details of local requirements for flying drones.

If any drone operations are intended to be undertaken in an EU member state, they must be registered as an operator in that state. Checks should be carried out by the operator to ensure any specific member states requirements/exceptions are met.

The travel risk assessment should consider risks arising from travelling with, being found in possession of or using a drone and appropriate measures carried out.

Flights by advanced devices

All flights by

- autonomous drones (not under direct operator control) or
- drone swarms (multiple devices which co-ordinate movement and action) or
- drop-load drones (which carry and release a payload)

are required to have permission in advance from Health & Safety Services.

5 DATA PROTECTION, PRIVACY & INTELLECTUAL PROPERTY

UAV's that have cameras will potentially be capturing images of people and if so, the data they collect is covered by the General Data Protection Regulation 2016 and Data Protection Act 2018. As a result UAV's must be used responsibly and only operated in ways that respect the privacy of others.

Those operating UAV's are required to ensure that:

- Wherever reasonably practical, use of UAV's that are likely to capture identifiable individuals (as opposed to incidental footage of individuals at a distance) is made known to those in scope of the filming prior to the filming taking place. This may take the form of general communications regarding the planned use of the UAV in a particular area.
- UAV's are only used where there are clear and well defined legitimate purposes, and not in a way that could reasonably be considered to be privacy intrusive, for example, by focusing on particular individuals, or over areas where a higher expectation of privacy is likely, such as private gardens, close to office windows or around halls or residence. You must consider whether any particular privacy expectations would be likely in the context of where you are filming on a case by case basis.
- All users of UAV's fully understand the operations of the UAV, for example the ability to zoom, adjust image quality and stop and start recordings. Images of individuals captured must also be stored appropriately and kept secure.
- Where large scale recording of identifiable individuals is likely, a Data Protection Impact Assessment may be required. Advice should be sought from imps@reading.ac.uk

More information on the use of UAV's and privacy considerations can be found at: https://ico.org.uk/for-the-public/drones/

For UAV flights capturing images or videos of campus, a location agreement may also be required. Please enquire with the University Press Office in the first instance. Note that additional clearance

for some third party copyright-protected works captured within any photography or footage recorded from the UAV, such as artwork on temporary display, may be required prior to reuse.

6 EMERGENCIES

Drone flyers should inform University Security (Tel: 01183786300) immediately whenever

- there is any malfunction or near miss which creates a dangerous situation, or
- the device strikes any person, vehicle or animal, or
- the device is lost from view or comes down in an inaccessible, prohibited or private area

even if the device is subsequently retrieved undamaged. They should also inform their University manager or client immediately, who should ensure an incident notification is completed.

Where necessary, HSS will liaise with the CAA, Legal Services and the Universities Insurance on the University's behalf.

7 COMPETENCE REQUIREMENTS

Competency and training requirements for Open Category flying, for the different types of drone in current use, are specified in *Requirements for Flying in the Open Category* http://publicapps.caa.co.uk/docs/33/CAP2012_EU_Drone_Rules_Factsheet_V7%207.pdf

8 REVIEW & AUDIT

Heads of School/Function should review any history of incidents associated with drone use at least annually to confirm compliance with School/Function policy and to confirm that competence levels are appropriate.

Local Health & Safety Committees should consider drone use at least annually or whenever incident investigation indicates that arrangements are not effective or require improvement.

9 RECORDS & RETENTION REQUIREMENTS

Risk assessments, Flyer-ID, Operator-ID and any communications used to inform others, as required in Section 5 or Section 6, should be retained for 42 months after the flight.

10 RELEVANT LEGISLATION

The following legislation is relevant to UAV operations:

- CAP2013: Air Navigation Order 2020 Amendment – Guidance for unmanned aircraft system users – December 2020
- Health and Safety at Work etc. Act 1974
- Management of Health and Safety at Work Regulations 1999
- Provision and Use of Work Equipment Regulations 1998
- The Rules of the Air Regulations 2015 (SI 2015 No.840)
- The Air Navigation (General) Regulations 2006 (SI 2006 No. 601)
- CAP 33: Regulations made under powers in the Civil Aviation Act 1992 and the Air Navigation Order 2016
- CAP2072A00: Airline Operations - Civil Aviation Authority Regulations 1991/1672
- The General Data Protection Regulation 2018
- The Human Rights Act 1998 (Article 8)

11 REFERENCES/INFORMATION

- The Drone and Model Aircraft Code
  https://register-drones.caa.co.uk/drone-code
- CAP722 *Unmanned Aircraft System Operations in UK Airspace – Guidance*
  https://publicapps.caa.co.uk/docs/33/CAP722A-UASOSC.pdf

  CAP2012 Rquirements for Flying in the Open Category
  http://publicapps.caa.co.uk/docs/33/CAP2012_EU_Drone_Rules_Factsheet_V7%207.pdf