# LIVERPOOL HOPE UNIVERSITY

# DRONE USE

# CODE OF PRACTICE

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| Responsibility for Policy: | Legal Services and Health and Safety Assistant |
| Approved by and date: | SMT Approval 28/10/2019 |
| Frequency of Review: | 5 Yearly |
| Next Review date: | 28/10/2024 |
| Related Policies: | University Health and Safety Policy |
| Minor Revisions: | |
| EIA: | Not Required |

# Drone Use Code of Practice

## 1. Definitions used within this document

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| **UAV** | Unmanned Aerial Vehicles. Remotely operated aircraft which includes the control, launch and landing systems required for their operation. Also commonly referred to as 'Drones'. Small UAV's are typically under 20kg and can be fitted with cameras / recording equipment. All versions are covered by the scope of this policy. Also referred to as Small Unmanned Aircraft (SUA). |
| **Civil Aviation Authority** | The UK's specialist aviation regulator. The CAA promote rules and regulations under the Air Navigation Order 2016 (ANO 2016) for safe commercial and recreational use. The CAA also instructions on how to use UAV's safely, known as the 'Dronecode'. |
| **Commercial Use** | Any flight by a small unmanned aircraft in return for remuneration or other valuable consideration. Additional permissions are required under the Air Navigation Order when drones are being used for commercial operations. |
| **Flight restriction zone** | Areas where for safety or security reasons, drone use is not permitted. Different flight and runway protection zones exist for each category based of runway threshold. (see ANO Article 94B for more details) |
| **Congested Area** | A congested area means, 'in relation to a city, town or settlement, any area which is substantially used for residential, commercial, industrial or recreational purpose. |
| **Indoor Use** | UAV flights inside buildings or within areas where there is no possibility for the unmanned aircraft to 'escape' into the open air (such as a 'closed' netted structure) are not subject to air navigation legislation. Health and safety legislation will still apply. |

## 2. Policy Statement

The use of drones is becoming increasingly common, the University recognises unmanned aerial vehicles (UAVs) can be beneficial when used for research, teaching, events, commercial and recreational use, in connection with the University's activities. Given the risk to users, staff, students, members of public involving falling objects, security issues and the potential for property damage this policy sets out how UAV use should be planned and managed safely. There are also risks associated with data protection and legal issues arising from drone use overseas without the correct permissions in place.

The policy aims to ensure staff are informed to contribute to legislative compliance and adopt a sensible approach to drone use, in order to mitigate the legal, financial and reputational risks posed by misuse.

The University has adopted the Civil Aviation Authority's (CAA) approach to Drone safety for all flights;

1. Flights should only take place once the operator is satisfied it is safe to do so.
2. The person responsible for the flight should maintain a direct, unaided line of sight with the UAV at all times.
3. Flights must not exceed 120 metres / 400ft above ground level
4. No flying within a Flight Restriction Zone
5. UAV's must not be used for commercial purposes without the required prior permission from the CAA
6. UAV must not fly over or within 150m of any congested area or open air assembly of more than 1000 people
7. UAV's must not be flown within 50m of any vehicle or structure not under the control of the person operating the UAV
8. During take-off and landing, UAV's must not be flown within 50 metres of any person, except those involved with the flight.

The CAA's Dronecode can be referred to in full here.

## 3. Roles and Responsibilities

### a. Heads of Subject/Managers

Heads of Subject/Managers are responsible for ensuring suitable arrangements are in place for the safe use of UAVs. In some circumstances this will also include the safe design are considered and standards are agreed and understood by all staff within the School or Department.

Where UAVs are used for research purposes, the Principal Investigator ("PI") is responsible for approving the design and construction methods if in house design is involved as part of the project. It is also the PI's responsibility to ensure:

1. Suitable risk assessments and safe operating procedures are in place;
2. The pilot is suitably qualified and competent, appropriate to the type of UAV use;
3. The appropriate permissions are sought prior to flights taking place.

These conditions are a requirement regardless of the intended purpose of the flight, including whether for commercial or recreational use or whether the UAV is built or purchased.

Where data is being collected by use of a UAV, Heads of Department should ensure appropriate data protection training has taken place.

### b. Vice Chancellor's Office

The Legal Services and Health and Safety Assistant shall;

1. Provide advice and assistance to staff to help mitigate the safety risk associated with drone use on campus
2. Advise the University's Data Controller in the event of a suspected data breach in relation to drone use
3. Report to University Council any adverse outcomes involving drones, including accidents and near misses.
4. Conduct a review of this policy in light of changes to statutory requirements and good practice, at least once every five years.

### c. Pilot / Small Unmanned Aircraft Operator

The pilot has full responsibility of the safe operation of a UAV during a flight therefore pilots must be deemed competent to fly the drone or be directly supervised by a competent pilot who can intervene quickly during a flight if necessary. In practice this means the Air Navigation Order and the Rules of Air Regulations are understood. Prior permissions and proof of competence may need to be sought directly from the CAA if <u>any</u> of the following conditions are met:

1. The UAV has an operating mass greater than 20kg;
2. The flight is for commercial purposes; (in return for remuneration or other valuable consideration. When a flight is performed under a contract between the SUA operator and customer, where the customer has no control over the pilot/operator).
3. The UAV is fitted with camera or other surveillance equipment, to be used in a congested area, or closer to (than existing CAA distance references) people or property not under your control.

CAA permission is not required for practice and demonstration flights or internal research projects (indoor flights only).

Any commercial use of drones requires a CAA-issued Permission for Commercial Operations (PFCO). This is granted by submitting an Operations Manual to the CAA for their examination and approval.

For the full permission process, please refer to the CAA website.

**d. Flight Organiser; any other member of staff who may appoint an external UAV operator**

When organising UAV flights on University premises, organisers must notify the Legal Services and Health and Safety Assistant within at least 7 days-notice to enable a response to your request. The appointed third party must have the appropriate CAA permissions, suitably trained pilots, evidence of insurance cover and data protection permissions.

If organising UAV flights not on University premises, organisers must obtain advance written permission for any intended take off, flights and landing sites from the relevant landowner.

**e. Staff using drones overseas as part of University Fieldwork**

The Fieldwork Leader is responsible for ensuring UAV flights are properly planned, taking into account local conditions and laws within the country where the UAV is to be used. Local air traffic, pilot approval and equipment suitability are other factors that should be considered, a risk assessment is mandatory and should form part of the fieldwork risk assessment process and reported to the Legal Service and Health and Safety Assistant. Additional insurance cover may also be required, the University's Insurance Officer should be consulted in advance of travel.

## 4. Health and Safety Considerations

The University understands the risks may vary depending on the use of the UAV for research purposes, teaching activities, commercial or recreational use but the hazards will be similar in any case.
UAVs are considered work equipment and under the requirements of the Provision and Use of Work Equipment Regulations 1998 (PUWER) each UAV should be;

i. Suitable for its intended use,
ii. Safe for use, maintained in a safe condition and inspected to ensure it is correctly constructed and does not deteriorate
iii. Only be used by those who have received adequate information, instruction and training and in most cases, appropriate supervision.
iv. Fitted with suitable health and safety measures, including but not limited to protective devices and suitable controls, such as adequate means of isolation from energy sources, visible markings, warning devices and emergency stop features.

## 5. Insurance

The University's own insurance cover extends to the use of drones subject to conditions of the policy and certain restrictions. These restrictions are largely based on the CAA's Dronecode. The University's Student Union or students who wish to operate drones for recreational purposes on campus may need to arrange separate insurance cover. The University's Insurance Officer should be consulted for further advice.

## 6. Relevant Legislation

### a. General Data Protection Regulations 2018 (GDPR)

Under the General Data Protection Regulations 2018 (GDPR) any photographs or video recordings taken during a UAV flights are considered personal data, even where this footage is viewed remotely and not stored. This means the University as Data Controller must apply the data protection principles when processing this data.

Where third party UAV operators are appointed by the University and this includes the processing of personal data these arrangements must be covered by contract and include specific data protection clauses.

UAV operators are encouraged to complete a data protection impact assessment to consider how data will be processed. Practical considerations including identifying areas in which the drone will be operating and the UAV must be able to be powered off remotely at the request of any potential data subject.

Further information about the data protection principles can be found within the University Data Protection Policy.

### b. Air Navigation Order 2009 (ANO)

The Air Navigation Order (ANO) sets out the following restrictions; under Article 94(4) & 94(5) a drone weighing more than 7kg (excluding fuel) cannot be flown:

i. In class A, C, D or E airspace without prior permission from the CAA
ii. Within an aerodrome traffic zone during the hours of air traffic control watch without prior permission from the CAA
iii. At a height of more than 400ft (120m) above the surface in the above areas
iv. Any commercial use has to have the prior approval of the CAA

Liverpool Hope University Campuses do not currently fall under any restricted air traffic zones.

Under Article 95(2) of the ANO a drone being used for surveillance purposes cannot be flown:

i. Over or within 150m of any congested area
ii. Within 50m of any vessel, vehicle or structure not under the pilot's control
iii. Within 50m of any person (30m during take-off and landing)

iv. Within 150m of any crowd of more than 1,000 people

Anything which may breach these terms, requires prior permission from the CAA.

## Air Navigation Order amendments 2019 – Registration Requirement

From 30 November 2019, the ANO regulations have changed affecting operators of small UAVs. There is now a requirement for registration of a UAV with the CAA, for any drone with a mass of 250 grams or more, along with the requirement to obtain a theory test and flyer ID. The theory test and registration can be completed online via the Drone Registration and Education Scheme (DRES).

A UAV operator must have a valid registration and the registration number must be displayed on the aircraft. Registration also includes the completion of an online safety test. Failure to complete either can result in fines up to £1,000.

Full details of the 2019 updates to the Air Navigation Order can be found on the CAA website.

### References and Further Reading

Civil Aviation Authority: Drone Safety Risk: An Assessment – CAP 1627

The Air Navigation Order 2016 and Regulations – CAP 393

Drone Registration and Education Scheme (DRES)

Civil Aviation Authority: CAP1763 Air Navigation Order 2018 and 2019 amendments – Guidance for Small Unmanned Aircraft users

CAP 722: Unmanned Aircraft System Operations in UK Airspace - Guidance & Policy