Unmanned Aerial Systems - Drones

Procedures
**Introduction**

Due to their size and use of high-speed rotors, UASs can be dangerous if not operated safely. Accidents and incidents associated with their use have increased in recent years resulting in serious injuries and deaths.

The Civil Aviation Authority defines the requirements for safe operation and management of Unmanned Aerial Systems (UAS). These Procedures enable University staff and students to meet these requirements.

**Procedures for operating and managing UAS activities**

These Procedures form part of the Standard on UASs and as such **MUST** be followed and will be audited against.

**Acronyms and abbreviations**

- UAS - Unmanned Aerial Systems (Drones)
- UAV – Unmanned Aerial Vehicle
- GPS – Geographical Positioning System
- CAA – Civil Aviation Authority
- SUA – Small Unmanned Aircraft
- SUASA - Small Unmanned Surveillance Aircraft
- OSC - Operating Safety Case
- NQE - National Qualified Entity
- CCTV – Closed Circuit Television
- UPFP – University Premises Flight Permit
- UAS OSC - Unmanned Aerial Systems Operational Safety Case

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Procedure 1 - UAS flights outdoors in the UK

Stage One – approval in principle

Prior to flight operations, submit an outline proposal to the UAS Administrator using Part 1 of the Proposal & Approval Form. If approval in principle is granted move to Part 2, otherwise, review your proposal. (Note: allow as much time as possible for this stage, as you may need to prepare documentation and apply for permissions from landowners and, possibly, the CAA).

Stage Two – assembling operational requirements

Project Lead consults UAS Administrator (or UAS Accountable Manager, for flights under current CAA Licence) for instructions regarding project management requirements. These requirements are recorded in the Stage 2 OSC Requirements section of the Proposal & Approval form.

Once the requirements have been recorded, the Project Lead and team implement the requirements and gather documentation proving compliance.

Stage Three – operational requirements check

On completion of Stage Two, Project Lead submits compliance evidence, with the Proposal & Approval form, to the UAS Administrator (or UAS Accountable Manager, for flights under current CAA Licence) as directed in Part 3.

The UAS Administrator (or UAS Accountable Manager, for flights under current CAA Licence) checks the content of the evidence pack. If sufficient, the project can continue. If not, it is returned for revision and resubmission.

Stage Four – flight arrangements

Note that all flights require landowner approval. For flights on campus, the Project Lead must request a University of Leeds Premises Flight Permit for each flight undertaken. If the flight takes place on other University of Leeds premises, a Flight Permit must be granted and in place, along with clearance from the site manager.

When the project has met all the above requirements, flights may take place. Flights must be carried out in strict accordance with the Operational Requirements.
Procedure 2 - UAS flights indoors in the UK

Stage One – approval in principle

Prior to flight operations, submit an outline proposal to the H&S Manager using the Proposal & Approval Form. If approval in principle is granted move to Part 2, otherwise review your proposal.

Stage Two – safe working measures

Project Lead consults H&S Manager for instructions regarding project management requirements. These requirements are recorded in the Stage 2 OSC Requirements section of the Proposal & Approval form.

Once the requirements have been recorded, the Project Lead and team implement the requirements and gather documentation proving compliance.

Stage Three – validation

On completion of Stage 2, Project Lead submits compliance evidence, with the Proposal & Approval form, to the H&S Manager, as directed in Part 3.

The H&S Manager checks the content of the evidence pack. If sufficient, the project can continue. If not, it is returned for revision and resubmission.

Stage Four – flight arrangements

When the project has met all the above requirements, flights may take place. Flights must be carried out in strict accordance with the Operational Requirements.
Procedure 3 – UAS flights outside the UK

Stage One – approval in principle

Prior to flight operations, submit an outline proposal to the UAS Administrator using Part 1 of the Proposal & Approval Form. If approval in principle is granted move to Part 2, otherwise, review your proposal. (Note: allow as much time as possible for this stage, as you may need to prepare documentation and apply for permissions from landowners and, possibly, overseas aviation authorities).

Stage Two – assembling operational requirements

Project Lead consults UAS Administrator for instructions regarding project management requirements, and identifies any other requirements of the relevant aviation authorities. These requirements are recorded in the Stage 2 OSC Requirements section of the Proposal & Approval form. Once the requirements have been recorded, the Project Lead and team implement the requirements and gather documentation proving compliance.

Stage Three – operational requirements check

On completion of Stage Two, Project Lead submits compliance evidence, with the Proposal & Approval form, to the UAS Administrator as directed in Part 3. The UAS checks the content of the evidence. If sufficient, the project can continue. If not, it is returned for revision and resubmission.

Stage Four – flight arrangements

Note that all flights require landowner approval. When the project has met all the above requirements, flights may take place. Flights must be carried out in strict accordance with the Operational Requirements.
Procedure 4 - UAS flights on University of Leeds premises by a Third Party

Stage 1 – gathering project information

When a Third Party wishes to fly a UAS on University of Leeds premises, there must be a member of University personnel liaising with the third party. This liaison person must begin the process of project approval by requesting copies of the following from the third party:

- CAA licence
- Risk assessment covering the project
- Proof that the pilot in charge of the flight has undergone training to NQE standard

Stage 2 – approval in principle

When documents are assembled, the liaison person submits them to the UAS Administrator, and requests flight approval in principle. If approval is withheld, reasons will be given, along with an indication of how the Third Party might revise their project plan or documentation, should they still wish to continue with the project.

Stage 3 – flight arrangements

Once Stage 2 approval is acquired, the Liaison person requests a University of Leeds Premises Flight Permit. When the project has met all the above requirements, flights may take place. Flights must be carried out in strict accordance with the Operational Requirements.