

1. Introduction

The use of drones in filming activities is widespread, and constantly increasing. Their uses can include aerial filming and location surveying work. These devices clearly have enormous potential, but there are a number of regulatory, safety and privacy issues that must be addressed before they can be used by the production, or before engaging a third party to do so on their behalf.

2. Scope of policy

This policy outlines the requirements for ensuring that drone flights are conducted in accordance with the Civil Aviation Authority (CAA), health and safety legislation, and also comply with data protection requirements. It applies to all production staff, and to third parties/contractors engaged by the production, who use drones at the studio and at any off-site locations. Any use of a drone abroad should check the local regulatory requirements with the national aviation authority of the country they are working in.

3. Definitions

3.1 Drones

Small Unmanned Aircraft: *“any unmanned aircraft, other than a balloon or kite, having a mass of not more than 20kg without its fuel, but including any articles or equipment installed in, or attached to, the aircraft at the commencement of its flight”*. Where a drone is fitted with batteries, these are included as part of the 20kg limit.

Small Unmanned Surveillance Aircraft: *“a small unmanned aircraft which is equipped to undertake any form of surveillance or data acquisition”*.

Drones are also known as ‘Unmanned Aerial Vehicles’ (UAVs), ‘Unmanned Aircraft Systems’ (UAS), and ‘Remotely Piloted Aircraft Systems’ (RPAS). Other terminology may also be used.

Unmanned aircraft with an operating mass of more than 20 kg are subject to the whole of the UK Aviation regulations (as listed within the UK Air Navigation Order - ANO), although they may be exempted from certain requirements by the CAA. Because of this, any person intending to operate an unmanned aircraft with a mass of more than 20kg within the UK must obtain a specific approval, in the form of an Exemption, before any flight can take place. Further information on large unmanned aircraft can be found at the CAA website. Any proposal to use an unmanned aircraft with an operating mass of more than 20kg should be looked at separately from this policy.

3.2 Commercial Operations

Commercial operations: *“any operation of an aircraft other than for public transport:*

- Which is available to the public,
- Which, when not made available to the public, is performed under a contract between an operator and a customer, where the latter has no control over the operator in return for remuneration or other valuable consideration” .
- Valuable consideration means any gain, whether monetary or otherwise, received by the operator of the drone.

3.3 Congested Area

Congested Area: *“in relation to a city, town or settlement, any area which is substantially used for residential, industrial, commercial or recreational purposes”.*

What amounts to a congested area will depend on the circumstances in each case. An area can be congested even if parts of it are not used for residential, industrial, commercial or specified purposes. For example a back-lot would be considered a congested area.

3.4 Visual Line of Sight

This means the pilot of an aircraft is able to maintain direct, unaided (other than corrective lenses) visual contact with the aircraft which is sufficient to monitor its flight path in relation to other aircraft, persons, vessels, vehicles and structures for the purpose of avoiding collisions. Within the UK, visual line of sight operations are normally accepted out to a maximum distance of 500 meters (1640 feet) horizontally and 400 feet vertically from the pilot.

3.5 First Person View

The CAA states that *“drones that are fitted with video cameras may provide an opportunity to downlink ‘live’ video to the person flying the drone either via a mobile phone, tablet computer or other screen, or even through video goggles. This capability provides the operator with a pseudo ‘pilots eye view’ from the drone itself and is generally given the term ‘First Person View’ (FPV).”*

However, the law [ANO article 94(3)] requires that the person in charge of a drone must maintain direct unaided visual contact with the aircraft which is sufficient to monitor its flight path so that collisions may be avoided. This is obviously not possible if that person is wearing video goggles or otherwise constantly monitoring a display. Therefore, FPV flight is only permitted if the activity has been approved by the CAA.

3.6 Controlled Airspace and Air Traffic Control permission

The Air Navigation Order (ANO) Article 94(4) states that the person in charge of a small unmanned aircraft which has a mass of more than 7kg excluding its fuel but including any articles or equipment installed in or attached to the aircraft at the commencement of its flight, must not fly the aircraft:

- In controlled airspace unless the permission of the appropriate air traffic control unit has been obtained,
- Within an aerodrome traffic zone during the notified hours of watch of the air traffic control unit (if any) at that aerodrome unless the permission of any such air traffic control unit has been obtained,
- At a height of more than 400 feet above the surface unless it is flying in airspace described in sub- paragraph (a) or (b) and in accordance with the requirements for that airspace.

The CAA also states that *“In airspace control terms, operations of small drones weighing more than 7 kg are considered Unusual Aerial Activities. If the flight is to take place within controlled airspace, the person in charge of the small drone is required to seek prior approval from the relevant Air Traffic Control (ATC) unit.”* The local ATC (or airport) should therefore be contacted in advance of any such flight.

3.7 Persons under the control of the person in charge of the aircraft (CAA clarification):

These are persons who are solely present for the operation of the drone, or are otherwise directly participating in the flight. They should be under the control of the pilot or a site manager and will follow directions and safety precautions. This does not generally include spectators.

4. Legislation and guidance

The Air Navigation Order 2016 (“ANO”) is the main source of legislation regulating aviation activities within the UK, and imposes strict requirements regarding the operation of drones (see Appendix 1 for further details). Compliance with the ANO is monitored by the CAA. This should be consulted before flying drones.

The use of drones is also subject to the requirements of the Health and Safety at Work etc. Act 1974 and its statutory provisions, including the Management of Health and Safety at Work Regulations and the Provision and Use of Work Equipment Regulations.

5. Notification procedures

If a member of the crew wishes to operate a drone in connection with any part of the production, they must notify their HoD and the health and safety Manager.

If a crew member wishes to engage a third party/contractor to operate a drone in connection with the production, they must notify their HoD and the health and safety Manager.

6. Roles and responsibilities

6.1 The production must make arrangements to ensure that:

- The crew fulfil their duties under this policy,
- The operation of drones is monitored in accordance with this policy,
- Any permissions and/or regulatory permits for the intended use of drones are in place,
- The use of drones by or on behalf of staff and students takes place in accordance with a risk assessment, Standard Operating Procedure(SOP)/operations manual and flight plan submitted by them as part of the notification process,
- All control measures identified by risk assessments are implemented, maintained and effective,
- Crew have sufficient instruction and information and are adequately trained and supervised,
- Adequate arrangements are in place where facilities are shared or where the production is working on premises managed by third parties.
- Adequate emergency plans and procedures are in place to deal with foreseeable adverse events.
- Sufficient resources are made available to enable compliance with this policy.

6.2 Managers and Principal Contractors supervising crew or external parties who operate drones must ensure that:

- Any permissions and/or regulatory permits for the intended use of drones are in place,
- Permission to fly has been obtained from any land owner/manager over whose land the flight will take place,
- The use of drones by or on behalf of a member of crew has been risk assessed and notified to their HoD and the Health & Safety Manager,
- The use of drones by or on behalf of a member of crew under their supervision takes place in accordance with a site assessment, SOP/operations manual and flight plan submitted by them as part of the notification process,
- Crew have received sufficient instruction and information and are adequately trained and supervised to safely undertake the flight,
- Emergency procedures are in place to deal with any accident or adverse incident,
- Any control measures, including emergency procedures, identified by the risk assessment must be implemented, maintained and effective,

- Any Personal Protective Equipment (PPE) identified in the risk assessment as a control measure is worn, used and maintained in an appropriate manner,
- Any defects, errors or omissions in the procedure, PPE or equipment is reported to their Hod or the production Health & Safety Manager,
- Any accidents or near misses that occur whilst using drones are reported to their HoD or the production Health & Safety Manager.

6.5 Safety Services will:

- Provide competent and informed advice to all users regarding this policy and the safe use of drones,
- Monitor adherence to safe working practices and procedures,
- Investigate any accidents or incidents arising during the use of drones in order to identify the root cause.

7. Policy arrangements

7.1 Data Protection

If a drone has a camera (or is otherwise equipped for surveillance or data acquisition), it poses a privacy risk to other people. Both the acquisition, and subsequent recording, of personal data are subject to the requirements of the Data Protection Act 1998. Operators of drones with cameras should comply with the production's Data Protection Policy and CCTV Code of Practice.

The Information Commissioner's Office's CCTV Code of Practice contains guidance specifically directed towards the proper manner in which data may be processed using surveillance aircraft. Its recommendations include:

- Performing a robust privacy impact assessment, addressing the suitability of drones, in advance of deploying them,
- Procuring a recording device which:
 - (a) Is able to be turned on and off remotely with the effect that, without strong justification, recordings will not be continuous,
 - (b) Has restricted vision, so that its focus is only in one place.
- Having the operator of the drone wear high visibility clothing identifying themselves as such, and place signage nearby explaining the use of the drone and directing interested parties to a privacy notice available on a website or other similarly accessible location,
- Ensuring that all 'processing' of data, and not just the initial recording, be carried out in accordance with the Data Protection Act 1998.

Operators of drones with cameras should also comply with the Surveillance Camera Code of Practice, issued by the Home Office.

First Person View and the Data Protection Act:

The remote viewing of footage via a tablet or other hand held device is termed 'First Person View', i.e. images are captured on the camera and these images are then sent straight to a device but are not saved. This means that anyone viewing the images is seeing them in real time with no option to go back and view previous images.

The definition of processing under the Act is very wide in that it is not limited to simply holding the data. In the view of the ICO, obtaining/viewing data in this way also constitutes 'processing'. Even though the images captured on these cameras are not being saved, personal information is still being processed for the purposes of the DPA, and if individuals can be identified from the images, it will constitute processing of personal data.

The Information Commissioner's Office (ICO) has produced specific guidance on the use of unmanned aerial systems (UAS) (page 30) which covers the use of drones. They have also issued general guidance in relation to the responsible use of drones.

7.2 Civil Aviation Authority Permissions

If you are intending to operate a drone (of less than 20kg):

To undertake commercial operations,

Which is equipped to undertake any form of surveillance or data acquisition:

(a) Over or within 150 meters of any congested area or organized open-air assembly of more than 1,000 people, or within 50 meters of any person (other than the person flying the aircraft or a person under his/her control) or vessel, vehicle or structure which is not under the control of the person in charge of the aircraft;

(b) During take-off or landing, within 30 meters of any person (other than the person flying the aircraft or a person under his/her control).

Then you will need permission from the CAA in order to do this.

7.3 Land owner Permissions

Permission of the landowner must be obtained before a drone is flown over private land. Permission to fly a drone over the production site will be granted to a member

of crew who operate drones in the course of their employment subject to compliance with this policy.

7.4 Indoor flights

Guidance published by the CAA provides that *“the Air Navigation Order makes no distinction between flights made indoors or in the open; the drone safety criteria continue to apply. Notwithstanding this, certain hazard factors are heavily mitigated in that the aircraft is flying in an enclosed environment and access to the venue can be controlled. Persons within the building, and who may be exposed to a hazard by the flight, should meet the criteria for ‘persons under the control of the person in charge of the aircraft’ or else have safety precautions taken on their account (e.g. safety netting, tethered drone, etc). Minor indoor recreational use of a very small and light ‘toy’ drone is not generally regarded as having the same safety implications as for larger drones used outdoors or in commercial service”*.

7.5. Training and competence

Individuals must be competent to fly drones. Competence is based upon training and this ensures that individuals possess the relevant skills and knowledge to fly the drone safely and deal appropriately with any unexpected and abnormal occurrence. Individuals may fly drones under the supervision of an experienced pilot.

Currently there is no drone license available (for drones weighing less than 20Kg), and no legislation or specific requirement for those using small drones for non-commercial activities, or as a hobby, to have any official drone “qualification”. However, if you are intending to use a drone for commercial purposes it is a regulatory requirement to obtain CAA permissions for that work, and therefore necessary to undertake UAS/RPAS/UAV training. It is a requirement that such people will have met the requirements of the UK CAA’s CAP 722 Chapter 4: Civil UAS Remote Pilot Competency (see Appendix 2 for a summary). Any reputable course, such as those run by NATS, should be an enabler to gain permission from the CAA.

Factors such as pilot experience, aircraft mass and the conclusions of the safety assessment should be taken into consideration when determining whether a person should be permitted to act as a pilot or commander of a drone. If needed, CAA-approved training providers can be found online.

7.6 Risk Assessment

A suitable and sufficient risk assessment of the flight activity must be carried out in advance. This is in addition to the generation of a site assessment, flight plan and operations manual, and should consider the hazards likely to be encountered before, during and after flight. The assessment should be reviewed and updated for each flight undertaken.

7.7 Insurance

It is the responsibility of the production to make sure that the correct insurance is in place before any activity with drones takes place.

8. Monitoring and Auditing

Compliance with this policy will be monitored by the production Health & Safety Department and by the HoD of the department using the drone.

9. Policy Review

This policy will be reviewed at least yearly or as circumstances dictate by legislation.

10. References

Legislation:

- Air Navigation Order 2016
- Management of Health and Safety at Work Regulations 1999
- Provision and Use of Work Equipment Regulations 1998
- Data Protection Act 1998

Codes of Practice and Guidance:

- Civil Aviation Authority CAP 722
- Civil Aviation Authority CAP 398

Data Protection – Guidance from Information Commissioner’s Office:

[In the picture: A data protection code of practice for surveillance cameras and personal protection](#)

Guidance on the responsible use of drones

APPENDIX 1

Air Navigation Order 2016

240 Endangering safety of an aircraft

A person must not recklessly or negligently act in a manner likely to endanger an aircraft or any person in an aircraft.

241 Endangering safety of any person or property

A person must not recklessly or negligently cause or permit an aircraft to endanger any person or property.

94 Small unmanned aircraft

(1) A person must not cause or permit any article or animal (whether or not attached to a parachute) to be dropped from a small unmanned aircraft so as to endanger persons or property.

(2) The person in charge of a small unmanned aircraft may only fly the aircraft if reasonably satisfied that the flight can be safely made.

(3) The person in charge of a small unmanned aircraft must maintain direct, unaided visual contact with the aircraft sufficient to monitor its flightpath in relation to other aircraft, persons, vehicles, vessels and structures for the purpose of avoiding collisions.

(4) The person in charge of a small unmanned aircraft which has a mass of more of 7kg excluding its fuel but including any articles or equipment installed in or attached to the aircraft at the commencement of its flight, must not fly the aircraft:

- In Class A, C D or E airspace unless the permission of the appropriate air traffic control unit has been obtained.
- Within an aerodrome traffic zone during the notified hours of watch of the air traffic control unit (if any) at that aerodrome unless the permission of any such air traffic control unit has been obtained; or
- At a height of more than 400 feet above the surface unless it is flying in airspace described in sub-paragraph (a) or (b) and in accordance with the requirements for that airspace.

(5) The person in charge of a small unmanned aircraft must not fly the aircraft for the purposes of commercial operations except in accordance with a permission granted by the CAA.

95 Small unmanned surveillance aircraft

- (1) The person in charge of a small unmanned surveillance aircraft must not fly the aircraft in any of the circumstances described in paragraph (2) except in accordance with a permission issued by the CAA.
- (2) The circumstances referred to in paragraph (1) are:
- Over or within 150 metres of any congested area
 - Over or within 150 metres of an organised open-air assembly of more than 1000 persons
 - Within 50 metres of any vessel, vehicle or structure which is not under the control of the person in charge of the aircraft; or
 - Subject to paragraphs (3) and (4), within 50 metres of any person.
- (3) Subject to paragraph (4), during take-off or landing, a small unmanned surveillance aircraft must not be flown within 30 metres of any person.
- (4) Paragraphs (2)(d) and (3) do not apply to the person in charge of the small unmanned surveillance aircraft or a person under the control of the person in charge of the aircraft.
- (5) In this article a 'small unmanned surveillance aircraft' means a small unmanned aircraft which is equipped to undertake any form of surveillance or data acquisition.

265 Offences and penalties

- (6) Any person who contravenes any provision specified in Part 2 of Schedule 13 **[including articles 94 and 95]** is guilty of an offence and liable on summary conviction to a fine not exceeding level 4 on the standard scale.
- (7) Any person who contravenes any provision specified in Part 3 of Schedule 13 **[including article 241]** is guilty of an offence and punishable:
- on summary conviction:

in England and Wales by a fine; or in Scotland or Northern Ireland by a fine not exceeding the statutory maximum; or on conviction on indictment by a fine or by imprisonment for a term not exceeding two years, or to both.

(8) Any person who contravenes any provision specified in Part D of Schedule 13 **[including article 242]** is guilty of an offence and punishable:

- on summary conviction:

in England and Wales by a fine; or in Scotland or Northern Ireland by a fine not exceeding the statutory maximum; or on conviction on indictment by a fine or by imprisonment for a term not exceeding five years, or to both.

APPENDIX 2

Qualification level requirements for pilots of UAS by relevant mass category (taken from CAP 722)

Operating mass (maximum)	Pilot competency/Licensing requirements
7kg or less	None or NQE competency assessment or AMC*
More than 7kg – 20kg	None, RPL, NQE competency assessment or AMC*
More than 20kg to 150kg	RPL, NQE competency assessment or equivalent*
More than 150kg	RPL or equivalent*

***DEFINITIONS:**

NQL = National Qualified Entity (i.e. approved by CAA to train pilots)

AMC = Acceptable Means of Compliance (number of flight training hours that would satisfy the CAA

that formal training isn't required)

RPL = Remote Pilot's license