

USE OF DRONES

(Last updated: 10 June 2016)

EDITORIAL GUIDELINES ISSUES

*This guidance note discusses the considerations around the use of drones for filming. These are remote-controlled aircraft, where the pilot is not on board. The terminology relating to drones is still evolving, as is the technology, policy and regulatory environments. They are sometimes referred to as **Unmanned Aerial Vehicles (UAV)**. Whereas, the term **Unmanned Aircraft System (UAS)** has been adopted by the United States Federal Aviation Administration and the International Civil Aviation Organisation. This term refers to the unmanned aircraft and all the equipment that is necessary to operate it, such as the control station and communications or navigation equipment. The UK Civil Aviation Authority refers to drones, under 20kg, as **Small Unmanned Aircraft** and if fitted with cameras, as **Small Unmanned Surveillance Aircraft (SUSA)**. Other bodies, such as the European Commission, use the term **Remotely Piloted Aircraft Systems (RPAS)**. In the absence of settled terminology, this note will refer to these aircraft as 'drones'.*

It should be considered in conjunction with the [BBC Safety guidelines for drones](#), the Legal Appendix to this note and the following Editorial Guidelines:

- Privacy
[See Editorial Guidelines Section 7 Privacy.](#)
- Fairness, Contributors and Consent
[See Editorial Guidelines Section 6 Fairness, Contributors and Consent](#)
- Safety
[See Editorial Guidelines Section 5 Harm and Offence](#)
- The Law & Data Protection Act
[See Editorial Guidelines Section 18 The Law: Data Protection Act](#)

SUMMARY OF MAIN POINTS

- Drones should only be used for an editorial reason, given the potential safety risks of flying an aircraft.
- Any proposal to gather material using a drone must be referred to a senior editorial figure or, for independents, the commissioning editor.
- Any proposal to purchase a drone or operate a hired one yourself must be referred to BBC Safety.
- The use of drones is regulated in the UK by the Civil Aviation Authority (CAA). CAA rules require that any drones used by the media for filming must be operated by a certified drone pilot, who has CAA authorisation to fly, known as Permission for Aerial Work (PFAW) and valid insurance. The operation of drones which weigh more than 20 kg is subject to even more onerous CAA requirements.
- Drone operators should normally comply with the laws and regulations that apply to the airspace where the drone is flown, unless there is a strong editorial justification for not doing so. In a war zone it may not be

possible to seek permission to fly. In the absence of country-specific drone regulations, operators should aim to follow the UK CAA standards.

- Failure to adhere to the aviation regulations could lead to a criminal prosecution.
- Drones can be ‘highly privacy intrusive’ and a privacy impact assessment may be necessary to comply with the Information Commissioner’s Office guidance and the General Data Protection Regulation which came into law on 24 May 2016 (and will apply from 25 May 2018).
- Drones should not normally be used to identify individuals without their consent, or capture close-up images of private areas such as houses, gardens or offices without the consent of the owner, unless these areas can be seen from a public vantage point or there is a public interest in showing them.
- Any proposal to film with a drone where there is a privacy intrusion and consent is not obtained should be regarded as a proposal for secret filming which must be approved in advance.
- When assessing whether to use user generated content filmed from a drone we should consider whether the drone flight breached any of the CAA standard restrictions on drone flights and whether or not the person in charge of the drone should have held a Permission for Aerial Work (PFAW) certificate from the CAA.
- Where the BBC is offered user generated content and it appears the drone flight put the safety of people or property at risk or has otherwise been carried out illegally, including a breach of aviation regulations, any use of the footage gathered must be justified in the public interest. Any proposal to broadcast such footage must be referred to a senior editorial figure, or for independents, to the commissioning editor. Referral must also be made to Director Editorial Policy and Standards and Programme Legal Advice may be consulted.
- Any proposal to pay for such footage (see bullet point above) must be referred to a senior editorial figure, or for independents, to the commissioning editor. Referral must also be made to Director Editorial Policy, before negotiations on payments are conducted. Programme Legal Advice may also be consulted.
- The BBC must not ask a contributor, or third party, who does not have a required PFAW from the CAA and liability insurance, to conduct a flight or gather footage from one on our behalf.
- The person in charge of the drone is legally responsible for the safety of the each flight and must take all possible measures to mitigate the risks of a collision.

GUIDANCE IN FULL

- **Introduction**
- **Mandatory Referrals**
- **Regulation**
- **Privacy**
- **Data Protection**
- **Consent**
- **Investigative Use and Secret Recording**
- **UGC and Third Party Content**
- **Safety**
- **Legal Appendix**

Introduction

Drones were first used by the military and as such may have negative connotations. However, they are widely used in many industries now and their use by the BBC raises a number of editorial policy issues as well as legal, safety and regulatory ones.

Mandatory Referrals

(Mandatory Referrals are part of the BBC's editorial management system. While they will not, in themselves, meet the Principles in the Editorial Guidelines, they are an essential part of the process to ensure compliance and must be observed.)

- Any proposal to gather material using a drone must be referred to a senior editorial figure or, for independents, the commissioning editor.
- Any proposal to purchase a drone or operate a hired one yourself must be referred to BBC Safety.
- Any proposal to broadcast footage where the drone operation has put the safety of people or property at risk or has been carried out illegally, including in breach of aviation regulations, must be referred to a senior editorial figure, or for independents, to the commissioning editor. Referral must also be made to Director Editorial Policy and Standards and Programme Legal Advice may be consulted.
- Any proposal to pay for such footage (see bullet point above) must be referred to a senior editorial figure or for independents, to the commissioning editor. Referral must also be made to Director Editorial Policy and Standards before negotiations on payments are conducted. In English Regions referrals must be made to HRLP and through Heads of News and Current Affairs in the Nations. Programme Legal Advice may also be consulted.

Regulation

The media's use of drones is not akin to flying a model plane where no certification or permission to fly is necessary. In the UK, drones are regulated as 'aircraft' by the Civil Aviation Authority (CAA).

CAA regulations require that any drone weighing up to 20kg used by the media for filming must be operated by a certified drone pilot who has CAA authorisation to fly, known as Permission for Aerial Work (PFAW), and valid insurance. This also applies to third party operators hired by the BBC to fly a drone on our behalf, including freelance camera operators. (A list of preferred BBC suppliers can be found [here](#).)

CAA regulations also include standard restrictions on drone flights as well as ones which apply when drones are fitted with cameras. These are intended to ensure the safe flight of a drone. In addition, drone operators must be aware of no-fly zones or temporary bans.

These issues are set out in more detail in the Legal Appendix.

(See Legal Appendix, Use of Drones)

Legal advice on filming with drones is available from Programme Legal Advice.

Drone operators should normally comply with the relevant aviation rules governing their safe and legal operation, wherever in the world they are flown, unless there is a strong editorial justification for not doing so. In a war zone, it may not be possible to seek permission to fly.

Failure to adhere to a country's aviation regulations could lead to criminal prosecution.

In the absence of country-specific drone regulations, operators should aim to follow the CAA standards.

Editorial Justification

Drones should only be used for an editorial reason, given the potential safety risks with flying an aircraft. Any proposal to gather material using a drone must be referred to a senior editorial figure or, for independents, the commissioning editor.

Privacy

The versatility of drones and their ability to operate without the constraint of walls or fences means they can easily access private spaces. The Information

Commissioner's Office (ICO) has warned broadcasters that their use of drones "can be highly privacy intrusive" because of the potential to capture images of individuals "unnecessarily". The ICO suggests that while individuals may not be identifiable from a wide aerial shot, they might still be identifiable from the context in which they are filmed. Individuals may also be unlikely to realise that they are being recorded, even if they are aware of the presence of the drone itself.

Whether privacy will be infringed depends on where the drone will be flown and the images it captures.

Flying a drone in a public space like a park, is unlikely to lead to a breach of privacy where individuals in wide general views are not identified or featured, and are not doing anything inherently private.

However, filming someone's home or flying over their back garden, particularly if it can't be seen from a public vantage point, and filming it, may be akin to filming through their window.

Consideration needs to be given to whether a property owner or landowner has a reasonable expectation of privacy in their commercial land or buildings. People's expectations of privacy in, for example, schools, prisons, care homes, hospitals are also higher.

Some behaviour, such as receiving medical treatment, also attracts a higher expectation of privacy.

Any breach of privacy needs to be justified in the public interest.

[\(See Editorial Guidelines Section 7 Privacy: Introduction – Legitimate Expectations of Privacy & The Public Interest\)](#)

Where privacy is inadvertently infringed, steps should be taken to disguise identities.

Before planning a drone operation, users should consider the following:

- Is it necessary and proportionate for the recording to be continuous?
- Can the camera on the drone be switched on and off or re-directed so that privacy is not unnecessarily infringed if the aircraft captures images of people, property or land that is of no interest to the production?
- Are there ways of restricting the view or changing the angle of the lens to avoid capturing images where privacy may be unwarrantably breached, if for example the drone has to fly over someone's back-garden?
- Should a different take-off position or route be considered?

- Does the production need to provide information to make people aware drones are in use by the BBC or the purpose of filming? This might include the following:
 - Staff wearing highly visible clothing identifying themselves as BBC drone operators.
 - Signage in the area where the drone is being flown.
 - Information on posters or tickets at a live event or outside broadcast or similar.
 - Using social media to explain that filming is taking place from a drone in a defined area.

There is no need to warn people that they might be filmed if individuals are not going to be identifiable from the footage because the shot is too wide.

- Whether an area needs to be cordoned off to prevent anyone entering.

Data Protection

The General Data Protection Regulation which came into law on 24 May 2016 (and will only apply from 25 May 2018), will directly affect the way the BBC processes personal data, i.e. information by which a living individual can be identified. This includes a person's face or voice. There could be data protection issues arising from using drones for filming. The Information Commissioner's Office has issued guidance on this in its Data Protection Code for Surveillance Cameras and Personal Information which can be found [here](#). Where someone's privacy might be infringed without a strong public interest justification, or the use of drones is unexpected you may need to consider conducting a privacy impact assessment and you should refer to Data Protection Legal on [Gateway](#) for more advice.

(See Editorial Guidelines Section 18 The Law: Data Protection Act)

Consent

Permission to Fly

Consent to film individuals is separate to the legal requirements to get permission to fly from the aviation authority, which are set out in more detail in the Legal Appendix.

(See Legal Appendix: Use of Drones, Section F & G)

Other bodies, such as the emergency services, highways agencies or local authorities may also impose further restrictions.

A drone operator should normally have the land owner's permission for take-off and landing of the drone. If you are flying under a PFAW it is a requirement of the UK CAA that you obtain this permission from the landowner.

(See Legal Appendix: Rights of Property Owners, Point 35)

There are several classes of airspace in the UK in which you cannot fly a drone unless you have additional permission from the CAA. There are also areas of regulated airspace around sensitive and hazardous locations such as airports, prisons and nuclear power plants

(See Legal Appendix: Use of Drones, Section H Airspace)

Flying over private property, irrespective of whether the drone is filming or not, may also raise legal issues including trespass and nuisance. Property owners have rights in respect of their airspace above their property and you may need to seek permission from the owner.

(See Legal Appendix: Rights of Property Owners)

Further advice is available from Editorial Policy and Programme Legal Advice.

Editorial Consent

The need for consent will depend on what is being filmed.

Where we are filming in public or semi-public places, such as railway stations, we do not normally obtain consent from individuals who are incidentally caught on camera as part of a general view, unless they are engaged in an activity where they have a legitimate expectation of privacy.

We normally obtain consent before filming on private property.

Programmes which rely on access to an organisation's land or property should include consent to overfly that land or buildings in any agreement.

Drones should not normally be used to capture close-up images of individuals without consent, or private areas such as houses, gardens or offices without the consent of the owner, unless they can be seen from a public vantage point, or there is a public interest in showing them. If consent is not obtained, any proposal to use a drone for such footage should be regarded as a proposal for secret filming (see Investigative Use and Secret Recording below).

(See [Editorial Guidelines Section 7 Privacy: Privacy & Consent](#) & [Section 6 Fairness, Contributors and Consent](#))

Investigative Use and Secret Recording

Drones may be used for investigations where there is an evidential purpose in the footage to be obtained and providing there is a strong public interest justification for any intrusion of privacy. For example, drones could be used to document illegal activities such as fly tipping, smuggling or illegal agricultural conditions where evidence could not be acquired without the use of an aerial vehicle. Any proposal to film with a drone where there is a privacy intrusion and no consent is obtained should be regarded as a proposal for secret filming which must be approved in advance, through the usual process. The forms for secret recording for News and Current Affairs and Factual Programmes and Comedy and Entertainment Output can be found [here](#).

(See Editorial Guidelines [Section 7 Privacy, Secret Recording](#))

(See [Guidance, Secret Recording](#))

Any proposal to use a drone for surveillance, or to follow the subject of an investigation or hover outside a window where a meeting is taking place, should only be approved if there is any evidential purpose which is in the public interest to reveal.

UGC and Third Party Content

Increasingly we are being offered footage filmed by hobbyists using drones as well as agencies flying similar aircraft on a commercial basis. Drones are also being used across many industries for purposes from land surveying to building inspection or crop analysis, to conservation and wildlife tracking. Protest organisations, like animal rights groups, are also beginning to use drones to gather evidence of illegal behaviour, such as hunting or poaching or of activities normally out of sight at abattoirs or factory farms.

Usage

We should take reasonable steps where necessary to verify such footage.

We must also consider its provenance including whether the drone operation:

- put the safety of any person or property at risk,
- involved any intrusion into privacy or secret recording,
- involved any trespass,
- involved any infringement of other property rights like nuisance, or
- contravened aviation regulations.

In terms of aviation regulations, we should consider whether the drone flight breached any of the standard restrictions on drone flights (see Legal Appendix,

Sections D and E). We should also consider whether or not the person in charge of the drone should have held a Permission for Aerial Work certificate from the CAA (PFAW). PFAW is required for any drone flight undertaken with a view to receiving payment or some other 'valuable consideration' for the flight or footage (whether from the BBC or a third party). This covers not only commercial drone operators but also hobbyists who operate drones with a view to selling the footage to the media or obtaining some other valuable benefit including, for example, further commissions or a credit. A person in charge of a drone, who flies it without a PFAW when a PFAW is required, is liable to criminal prosecution by the CAA.

(See Legal Appendix Section F)

If user generated or third party content has been gathered by recklessly or wilfully endangering people or property, or by breaking the law, the BBC may decide not to broadcast it. Examples of this may include where a hobbyist has flown a drone in a no-fly zone, over large public gatherings or has prevented fire fighters from flying helicopters to deal with forest fires.

Where it appears to us that a drone operation has put the safety of people or property at risk or has otherwise been carried out illegally, including in breach of aviation regulations, any use of the footage gathered must be justified in the public interest. Any proposal to broadcast such footage must be referred to a senior editorial figure, or for independents, to the commissioning editor. Referral must also be made to Director Editorial Policy and Standards and Programme Legal Advice may be consulted.

Use of user-generated drone footage which intrudes into an individual's private life without consent must be justified in the public interest.

(See [Guidance User Contributions in News Output](#))

(See Editorial [Guidelines Section 7 Privacy: Introduction – The Public Interest](#))

Any proposal to use user-generated drone footage which amounts to secret recording must be referred to Editorial Policy prior to approval by a senior editorial figure or, for independents, by the commissioning editor. If the BBC would not have considered it justifiable to gather the material under similar circumstances, approval will also be required from Director Editorial Policy and Standards.

(See Editorial Guidelines [Section 7 Privacy: 7.4.21 Secret Recording from Outside Sources](#))

If we propose to use user-generated drone footage and it appears that the person in charge of the drone is at risk of investigation or prosecution in relation to their footage, they should be made aware of this risk and be prepared to accept it.

(See Editorial Guidelines [Section 6 Fairness, Contributors and Consent: Safety and Welfare of Contributors](#))

We should ensure that user generated drone footage is clearly identified as such or attributed to an appropriate third party.

The BBC must not ask a contributor, or third party, who does not have a PFAW from the CAA and liability insurance, to conduct a flight or gather footage from one on our behalf.

Payment

We only pay in exceptional circumstances for material supplied by members of the public. Where material is particularly editorially important or unique and depicts something of great significance, we may consider making an appropriate payment. Any proposal to pay for footage where the drone operation has put the safety of people or property at risk or has otherwise been carried out illegally, including a breach of aviation regulations must be referred to a senior editorial figure, or for independents to the commissioning editor. Referral must also be made to Director Editorial Policy and Standards, before negotiations on payments are conducted. In English Regions referrals must be made to HRLP and through Heads of News and Current Affairs in the Nations. Programme Legal Advice may also be consulted.

(See [Guidance, User Contributors in News Output: Payment for material/copyright](#))

Safety

The drone operator is legally responsible for the safety of each flight. You should not fly your aircraft in a way that could endanger people or property. The potential hazards increase with the height, altitude and speed of the aircraft. But even very small drones could be dangerous when flown in close proximity to people or property or other aircraft. You must take all possible measures to mitigate the risks of a collision.

Where a drone is used by a BBC operator it should be flown in accordance with the CAA approved operations manual.

You must consult BBC Safety for any proposal to purchase a drone or operate a hired aircraft yourself.

Further information about BBC Safety Guidelines for drones can be found [here](#).

USE OF DRONES **LEGAL APPENDIX**

(Last updated: 7 June 2016)

This note should be considered in conjunction with the latest Civil Aviation Authority Guidance which can change.

INTRODUCTION

1. Drones are classified as “unmanned aircraft” and, when operating in the UK, are subject to regulation by the Civil Aviation Authority (CAA). The CAA is concerned with safety and it is CAA policy that drones must meet at least equivalent safety and operational standards as manned aircraft.

“UAS operations must be as safe as manned aircraft insofar as they must not present or create a greater hazard to persons, property, vehicles or vessels, whilst in the air or on the ground, than that attributable to the operations of manned aircraft of equivalent class or category.” (CAP 722, paragraph 1.1)

2. All operators of drones (private or commercial) must comply with UK civil aviation legislation. Relevant legislation is contained chiefly in the Civil Aviation Act 1982, the Air Navigation Order 2009 (ANO) (particularly, for small drones, Articles 166 and 167) (CAP 393) and the Rules of the Air Regulations, with detailed guidance set out in the CAA’s Unmanned Aircraft System Operations in UK Airspace – Guidance (CAP 722). The documents can be found on the CAA website www.caa.co.uk.
3. **The rules differ depending on whether your drone weighs 20kg or less or more than 20kg. This note set out the rules which apply to drones which weigh 20kg or less. If your drone weighs more than 20kg, more onerous requirements apply and you need to consult CAP 393 and CAP 722 on the CAA website.**
4. The use of drones by us or third parties may also give rise to specific legal issues in relation to the rights of property owners, as well as requiring consideration of the law relating to privacy and misuse of private information and data protection rights.

UK CIVIL AVIATION LAW

A. Terminology

5. In UK civil aviation law, a drone is classified as an **unmanned aircraft (UA)**, alternatively a **remotely-piloted aircraft (RPA)** or **remotely-piloted aircraft system (RPAS)**. If a drone weighs 20kg or less, it is classified as a **small unmanned aircraft (SUA)**. If it is equipped to **undertake** any form of surveillance or data acquisition (taking photographs, filming or other information-gathering), it is a **small unmanned surveillance aircraft (SUSA)** and additional restrictions on its use apply. The person who controls the UA during the flight is the **pilot** or **remote pilot**; for small unmanned aircraft, the term **person in charge** is used. (Explanations of other abbreviations and terms used in civil aviation law are set out in CAP 722.) This note is concerned with SUA and SUSA. **If your drone weighs more than 20kg you need to consult the CAP 393 and CAP 722 on the CAA website.**

6. **Weight/mass:** The **weight** of the drone is crucial in determining which rules apply. When calculating the weight of a drone, fuel is ignored but any articles or equipment installed in or attached to the drone, such as a camera, are included. Note, however, that the weight of any batteries is included: the battery itself is considered to be the fuel tank (only the 'charge' in the battery is the fuel)

B. Summary

7. In summary:
 - 7.1 There are significant restrictions as to when and where you can fly a drone in the UK (see section D). Even more restrictions apply if the drone is fitted with a camera or other recording equipment (see section E).
 - 7.2 The rules in section C and the restrictions on flight set out in sections D and E apply to **all operators of drones with a weight of 20kg or less** regardless of whether they are 'hobbyists' or commercial operators or the BBC.
 - 7.3 The restrictions can only be varied by grant of special permission from the CAA (see section G).

- 7.4 If purpose of the flight is **aerial work**, which means any form of valuable consideration has been given or offered for the flight, or for the images or footage from the flight, there is an additional – and onerous – requirement that you must obtain prior permission from the CAA (see sections F and G). Any filming with drones by the BBC in connection with programme-making will be considered aerial work by the CAA.
- 7.5 Contravention of these rules may lead to prosecution by the CAA and/or suspension, variation or revocation of any permission granted by the CAA.

C. Endangering people or property

8. It is a criminal offence if a person recklessly or negligently a) acts in a manner likely to endanger an aircraft, or any person in an aircraft (ANO Article 137), or b) causes or permits an aircraft (including a drone) to endanger any person or property (ANO Article 138). Contravention may lead to prosecution by the CAA and a fine, and in the case of an offence under Article 137, imprisonment.
9. Furthermore, pursuant to section 81 of the Civil Aviation Act 1982, it is a criminal offence to fly a drone (or any aircraft) so as to cause unnecessary danger to any person or property on land or water. The pilot and the owner (unless they can prove they were not at fault) can be prosecuted.

D. Standard restrictions on drone flights (with weight of 20kg or less)

10. Flying this type of drone is subject to the following standard restrictions regardless of who is flying the drone or for what purpose.
- 10.1 The person in charge of the drone must not cause or allow anything to be dropped from the drone which could endanger people or property.
- 10.2 The person in charge may only fly the drone if reasonably satisfied that the flight can safely be made.
- 10.3 The person in charge of the drone must maintain direct, unaided visual contact with the drone so they can monitor the flight path in relation to other aircraft, people, vehicles, vessels and structures so as to avoid collisions. CAA Guidance indicates that this that normally means a maximum distance between the pilot and the drone of 500 m

horizontally and 400 ft. vertically. It is also likely to prevent flying when it is dark (although specific permission from the CAA can be obtained for night flying). By implication, it means avoiding and giving way to manned aircraft at all times.

10.4 If the drone weighs more than 7 kg, it must not be flown:

- a. In **controlled airspace** (see section H below) unless permission has been obtained from the appropriate air traffic control unit.
- b. Within an **aerodrome traffic zone (ATZ)** (see section H below) unless permission has been obtained from the appropriate air traffic control unit or the person in charge of the aerodrome.
- c. Above 400 feet (except in accordance with any permission granted).

(As to how you calculate the weight, see section A above.)

11. In order to comply with the obligation under 10.2 above, the CAA strongly recommends in its Guidance (CAP 722) that those flying drones which weigh 7 kg or less comply with the restrictions under point 10.4 above or at least make contact with the appropriate ATC unit first to identify factors which might affect the safety of the flight.
12. Contravention of these restrictions may lead to prosecution by the CAA (including fines up to a current maximum of £2,500) and/or suspension, variation or revocation of any permission granted by the CAA. You may have a defence if you can show that the contravention was not avoidable by the exercise of reasonable care.
13. Special permission to vary any of these restrictions must be obtained from the CAA (or, where stated, the appropriate air traffic control unit). You will need to provide an Operating Safety Case (UAS OSC) explaining how the intended operations will be carried out safely.
14. In addition to the restrictions set out above, drones (like other aircraft) must not fly in designated **Danger Areas**, **Prohibited Areas** or, save in accordance with the stated conditions, **Restricted Areas**. For further information about these areas, see section H “**Airspace**” below.

E. Additional restrictions which apply to drones (which weigh 20kg or less) fitted with cameras etc. (SUSA)

15. The person in charge of a drone fitted with equipment to photograph, film or otherwise record information (a **SUSA**) must also comply with the following restrictions:

15.1 The drone must not be flown over or within 150 m of any **congested area**. This means any area in relation to a city, town or settlement which is substantially used for residential, industrial, commercial or recreational purposes.

15.2 It must not be flown over or within 150 m of an organised open-air assembly of more than 1,000 persons.

15.3 It must not be flown within 50 m of any vessel, vehicle or structure which is not under the control of the person in charge of the drone.

15.4 It must not be flown within 50 m of any person. During take-off or landing, this distance is reduced to 30 m. However, these restrictions do not apply to the person in charge of the drone or people **under the control of the person in charge of the drone**. This may include:

- Those present to participate in the drone flight operation.
- People under the control of the event manager or site manager **who can reasonably be expected to follow directions and safety precautions** to avoid accidents with the drone. This could include film and TV production staff and other participants involved in a shoot. However, current CAA Guidance (CAP 722) states that it will not include spectators or other persons gathered for sports or other mass public events and that it is not sufficient to inform people of the SUA operations via a public address system, online notice, e-mail, text and electronic or other means of ticketing.

16. Contravention of these restrictions may lead to prosecution by the CAA (including fines up to a current maximum of £2,500) and/or suspension, variation or revocation of any permission granted by the CAA. You may have a defence if you can show that the infringement was not avoidable by the exercise of reasonable care.

17. Special permission to vary any of these restrictions on a SUSAs flight must be obtained from the CAA.
18. If you are applying for permission to operate in a **congested area** or a **mass public event** you will need to provide an Operating Safety Case (OSC) explaining how the intended operations will be carried out safely. For example, this could involve a segregated take-off site within the main event, with the drone operating only vertically within strict lateral and vertical limits that keep it directly overhead the take-off site and away from the crowds. Current CAA Guidance (CAP 722) says that, in principle, the people involved must be able to choose whether or not to participate in the drone operations and their engagement in the main purpose of the event must not be affected by their choice. It also says that they must have sufficient information to understand the inherent risks posed by drone operations and reasonable safeguards must be in place to protect them during drone operations.

F. When permission is required before you can fly a drone

19. Permission from the CAA is required before you can fly any drone for the purpose of **aerial work**. This is called **permission for aerial work** or **PFAW**. A flight is for the purpose of aerial work if **valuable consideration** is **given or promised** in respect of the flight or the purpose of the flight.
 - 19.1 **Valuable consideration** has a very wide meaning so, while it plainly includes payment, any benefit which is more than nominal is likely to count.
 - 19.2 The purpose of the flight is the key consideration. If the flight is/was undertaken with the intention of getting payment or some other reward for the flight or any images or footage obtained from the flight, it will be a flight for the purpose of **aerial work**.
 - 19.3 Practically, the effect of the wide definition of **aerial work** is that any filming with drones for the BBC in connection with programme-making will be considered aerial work and the person in charge of the drone will need to have obtained **PFAW** from the CAA. If it is a BBC drone and BBC staff are flying it, the BBC will need to hold a PFAW. If the BBC contracts another person/organisation to do the drone flight, that person/organisation will need to hold the PFAW. If you are offered drone footage/photographs by a third party (including a hobbyist or other private individual) who has undertaken the flight with the intention of selling the footage/photographs, the flight will be aerial work and they

are liable to prosecution by the CAA for “using an unmanned aerial vehicle for commercial gain without permission” if they do not hold a PFAW. However, if a drone flight was undertaken for solely recreational purposes but, subsequently, we offer to provide payment or some other benefit in return for the footage/photographs that will not change the flight into aerial work. It is the purpose of the flight which determines whether or not it is aerial work.

20. Permission from the CAA is required to fly a drone which weighs more than 20 kg. (As to how you calculate the weight see section A above.)
21. Permission from the CAA is required if you wish to vary any of the standard restrictions on flight (see section D) or any of the restrictions which apply to a SUSA flight (see section E).
22. Failure to obtain the requisite permission may lead to prosecution by the CAA and a fine of up to £2,500.

G. Getting CAA permission

23. **Permission for aerial work (PFAW)**, or any other special permission, must be obtained from the CAA. However, the CAA has approved bodies, known as National Qualified Entities (NQEs), to conduct assessments of applicants and make recommendations to the CAA based upon these assessments. Applications for permission may be made either directly to the CAA or via an NQE.
24. Legally, for this purpose, the person in charge of the drone is responsible for ensuring that any permission required for the drone flight has been obtained. This person in charge can be an individual or another legal entity.
25. If you hire a third party to conduct a drone flight, that person or entity must have the requisite permission from the CAA and liability insurance policy to carry out the operation you propose. If you obtain footage from a drone flight conducted by someone else, that third party is legally responsible for obtaining any CAA permission required for the flight.
26. Applications for PFAW or other special permission should be made on CAA Form SRG1320 www.caa.co.uk/SRG1320. The applicant must demonstrate that they have fully considered the safety implications and taken all necessary steps to ensure the drone will not endanger people or property. Specifically, applicants must provide:

- 26.1 *Evidence of pilot competency:* There are three critical elements which proposed drone pilots must prove: theoretical knowledge/general airmanship, practical flight assessment on the class of SUA being applied for and recent flying experience on the class of SUA being applied for. Courses and certification covering these critical elements are offered by various bodies including NQEs.
- 26.2 *An Operations Manual:* This is a detailed document which, put simply, must explain who the operator is, what drone(s) will be flown, what type of operations will be flown and how they will be conducted safely. A template is provided at Appendix B of CAP 722.
- 26.3 *Proof of insurance:* At a minimum this must be third party liability cover up to the amount stated in EC Regulation EC 785/2004 (approximately £1 million).
27. A standard PFAW will be granted for a period of 1 year and will then require renewal. Special permissions may also be granted for one-off operations. Permission will be subject to conditions concerning, amongst other matters, the competency of the pilot(s), the functioning of the drone, operation of flights, maintenance of the drone and maintenance of flight records.

H. Airspace

28. If you are flying a drone you need to be aware of the location and rules applying to airspace. Any drone weighing more than 7 kg must not be flown in **controlled airspace** or within an **aerodrome traffic zone (ATZ)** unless prior permission has been obtained from the appropriate air traffic control unit. This is called a Non-Standard Flight (NSF) approval and must be obtained no less than 21 days before the planned operation. CAA guidance strongly recommends that contact is made with the relevant air traffic control unit, even where the drone weighs 7 kg or less.
29. UK airspace (from the surface up) is divided into **controlled airspace** and **uncontrolled airspace**. Within these two categories, there are different 'classes' of airspace according to the amount and type of aeronautical activity which takes place in it. Class A is allocated to the busiest **controlled airspace**. Classes C, D and E are allocated to other **controlled airspace**. Classes F and G cover all **uncontrolled airspace**. There is no Class B airspace in the UK. The boundaries and vertical extent of areas of **controlled airspace** are marked on CAA aeronautical charts. Fuller descriptions are given in the UK Aeronautical Information Publication (AIP).

30. **Aerodrome Traffic Zones (ATZ)** exist at most civil and military aerodromes. They are shown on CAA aeronautical charts and locations and details can also be found in the UK AIP. ATZ can be depicted as a cylinder, the standard dimensions being:

- Vertically - ground level to 2000 ft.
- Horizontally - a circle with a radius of 2 or 2.5 miles extending from the centre of the aerodrome runway (depending on its length)

Military air traffic zones (MATZ) are typically larger than this, but have no specific legal status for civilian aircraft and so are not an area that 'must' be avoided. Military airfields have an ATZ within the MATZ however, and this ATZ must still be respected.

31. Aircraft operating in controlled airspace may be required to follow notified routes and procedures to avoid conflict with other traffic. Within London airspace, operators should be aware that there are designated low-level routes for helicopters.

32. Aircraft may be prohibited from entering certain areas entirely.

32.1 **Prohibited areas** are defined area of airspace in which flight is prohibited, often for security reasons. They are depicted on aeronautical charts with the letter "P" followed by a serial number.

32.2 **Restricted areas** are defined areas of airspace in which flight is restricted according to certain conditions (e.g. there may be specific hours within which the restrictions operate). They protect sensitive locations such as prisons and nuclear facilities. They are depicted on aeronautical charts with the letter "R" followed by a serial number. There are certain restricted areas in London which require prior Enhanced Non-Standard Flight (ENSF) approval before any flight can take place. These are defined areas around Hyde Park, the City of London and the Isle of Dogs and are marked on aeronautical charts. ENSF approval to fly in these areas may take up to 28 days as there are additional security related approvals/clearances that need to be obtained.

32.3 **Danger areas** are defined areas in which activities dangerous to flight may occur. They are depicted on aeronautical charts with the letter "D" followed by a serial number.

32.4 The Secretary of State has power under Article 161 of the Air Navigation Order 2009 to prohibit, restrict or impose conditions on flights by aircraft if he decides it is necessary in the public interest by reason of:

- the intended gathering or movement of a large number of persons;

- the intended holding of an aircraft race or contest or a flying display; or
- national defence or any other reason affecting the public interest.

This power has been exercised to prohibit the flying of drones in London's Royal Parks. Failure to comply is a criminal offence.

32.5 Further details of all these areas are provided in the AIP, specifically within 'Purple' Aeronautical Information Circulars (AIC), with updates provided in NOTAMS (Notice to Airmen).

I. Using a drone abroad

33. Many European and other countries have adopted rules with regard to drones. However, while there are some common principles, the extent, content and level of detail of the rules differ. Operators should comply with such rules as are in force in the country in which they are operating and, if authorisation is required, apply for authorisation from the relevant national authority.

RIGHTS OF PROPERTY OWNERS

34. Drone operations are subject to the laws relating to trespass and nuisance.
35. The permission of the landowner on whose land the drone is intended to take off and land should be obtained. This requirement is included in the standard CAA permission for aerial work (PFAW).
36. Property owners have rights in respect of the airspace above their property. However, it will not be trespass to fly a drone over private property provided the flight is carried out at a reasonable and safe height, taking into account the wind, weather and all the circumstances of the case, and provided that all civil aviation rules are complied with (see sections C, D and E above). That means that if the drone is a SUSA (equipped with a camera etc.) the restrictions under section E above must be adhered to unless the person in charge has the property 'under control' (in other words, he/she has the permission of the owner/occupants).
37. Hovering noisily or unnecessarily at a low height might well be an intrusion constituting a legal nuisance or a privacy intrusion for which appropriate remedies could be obtained.
38. Note that, by Order of the Secretary of State, drones have been banned from all London's Royal Parks, including Hyde Park, Green Park, St James Park,

Kensington Gardens, Regent's Park and Primrose Hill, Richmond Park Bushy Park and Greenwich Park. (Richmond Park has a public flying field where UAVs, without cameras, can be flown from morning to 1pm daily.)