



# Filming with drones in the UK - Guidance for Productions

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## Overview

Since December 2020, the rules regulating the use of small unmanned aircraft in the UK have changed. The new regulations do not differentiate between commercial and non-commercial use and instead focus on a risk-based approach. When you fly a drone in the UK you are now subject to different rules based on the weight of the aircraft that you wish to fly. These are split into categories for each class. You must comply with the regulations based on the category that your operation falls within.

This document is intended for guidance when it comes to planning your flight. The responsibility lies with you as the operator or pilot to seek the official guidance from the Civil Aviation Authority (CAA), to ensure that you are operating legally within the UK.

## Before you start planning your flight – key considerations

Prior to conducting any flight it is recommended that you assess the risk and plan your operation well in advance. These are the key factors you should consider before planning your flight.

### Distance from uninvolved persons

The regulations now are primarily based on the distance from persons rather than vehicles vessels and structures, however vehicles and buildings will normally contain people, so the operator / pilot must take this into consideration and not cause or permit the aircraft to endanger them. "Distance from persons" should therefore be taken to include vehicles and buildings unless these are known to be unoccupied, to ensure safety and best practice. The minimum required distance is determined by the weight and type of aircraft (e.g. whether it holds an appropriate safety rating (C class or UK class)). These rules vary but the basic rule is to remain 50m from uninvolved people and no overflight when operating in the open category. Please [see table](#) for further details.

If your aircraft has no minimum distance required from persons, we would recommend that 5m distance be observed as an absolute minimum to help ensure safety.

Operators / Pilots should also observe the "1 to 1" rule for separation distances to allow a safe flight - this is a rule of thumb which states that you must remain equal distance horizontally and vertically, e.g. 100m high requires 100m horizontal separation.



## Overflight of uninvolved persons

You should assess the area to ensure that no people are put at unnecessary risk from the aircraft, you should also ensure that you are not overflying uninvolved people. In most cases it is illegal to overfly uninvolved people unless you hold an operational authorisation with the CAA or are operating with a smaller aircraft. Please [see table](#) for further clarification.

## Congested areas

A congested area is defined as a Town, City, Industrial or Recreational area. To fly within a congested area you must fall into the correct criteria and this requires further training in most cases. It is illegal to fly your drone in these areas if it does not meet the standards of pilot competency, or the weight limitations fall outside of what is deemed to be safe.

## Assemblies of people

Assemblies of people can be thought of as any situation where people cannot easily or quickly move away in case of danger - e.g. commercial streets, beaches, concerts, play parks, rallies. Assemblies of people should be avoided whenever possible and it is illegal to overfly any assembly of people in the majority of cases ([see table](#) for requirements for each category).

## Airspace near airports

It is illegal to fly your drone in or around an airport which has a flight restriction zone without permission. You must obtain permission from the relevant air traffic control or airfield operator if you wish to fly in this area. Some airfields do not have these restrictions in place, but you must identify them in the planning process to ensure that you do not endanger manned aviation at these sites.

Please see the CAA's guidance for flights around airports here: <https://dronesafe.uk/>

## Risks around roads

There are many risks to flying around busy roads, and this should be avoided wherever possible. Any possible loss of control around a road could potentially cause a traffic accident, and anything that may distract a driver is a significant hazard also.

As vehicles contain people, you must not overfly them at any height when operating your drone within the open category unless your aircraft falls within that criteria or you hold a CAA operational authorisation, in which case you must ensure that a safe flight can be made, which is your personal responsibility.

We do not recommend the overflight of roads. To reduce risk, if necessary, it is best practice to treat roads as if you were crossing them on foot, i.e. to fly over only if there is a sufficient gap between cars that would allow you to cross over safely if on foot.



## Weather

You must ensure that you assess the weather well in advance of any planned flights and then re-assess prior to take off. Considerations for wind and rain should be made and most aircraft are not waterproof (unless specified by the manufacturer) so flights in wet conditions should be avoided.

You should check the manufacturer's maximum wind resistance on the aircraft that you are flying to avoid the risk of catastrophic failure if it is flown outside of the aircraft's recommended limits or "flight envelope".

## Insurance

If you are flying for a commercial purpose, then you must have valid insurance. This insurance has to comply with the regulations EC 785/2004 regardless of any other insurance you may have. If the flight is recreational then no insurance is legally required, however we recommend having public liability insurance as an absolute minimum.

## Visual Line of Sight (VLOS)

All flights must be conducted within VLOS within the Open Category, and can only be conducted in conjunction with an Operating Safety Case when operating in the Specific Category. Visual Line of Sight flights are automatically accepted by the CAA out to 500m from the remote pilot, but the aircraft must be visible to naked eye to monitor its path and maneuver it clear of obstructions to avoid collisions.

## Drone Categories

As the regulations are now based on an estimated calculation of potential risks, the rules for each aircraft are now dependent on the weight of the aircraft, or mass when it is in flight (Maximum Take Off Mass or "MTOM"), and when the drone was manufactured and thus whether it meets certain new safety standards.

As of 1st Jan 2023, all drones being manufactured will need to be "C class" or "UK class" drones (TBC), which have been designed to meet the new regulations. These will be subject to different restrictions and allow different activity, such as that enabled by "low speed mode".

Aircraft that were made prior to this date will still be able to be used within certain sub categories of the "Open Category" or under an appropriate Operational Authorisation post Jan 2023 ([see table](#)).



### Which Category is right for your project?

If your operation involves any of the following:

- Flying within a congested area
- Flying near live roads
- Flying close to persons or crowds
- Flying near or around airports
- Flying near railways
- Flying an aircraft over 2kg
- Flying within controlled airspace

We would generally recommend that you hire a suitably qualified drone operator for your production. This will ensure that the pilot knows and understands the regulations and will save time, whilst maintaining safety. Where you are using a smaller aircraft and are not flying close to uninvolved persons, this is generally a suitably low enough risk for flights in the open category.

#### UK Drone Categories

The requirement for a CAA permission to conduct '**Commercial Operations**' has been removed and the regulations based on safety and risk. The drone regulations are now split into three categories;

##### OPEN CATEGORY

Little to No Risk

##### SPECIFIC CATEGORY

Medium / Special Risk

##### CERTIFIED CATEGORY

Same regulation as manned aviation.

**Note:** This document will not give information on the '**Certified Category**' and production companies or operators should not be concerned about this and focus on the Open and Specific Category Rules **ONLY**.



## OPEN CATEGORY

### Overview

The Open Category is designed for the use of aircraft that pose little to no risk, it also relies heavily on new product standards and new aircraft coming onto the market to help improve safety.

There are 3 sub categories within this category.

In all sub categories: Max height 120m/400ft - No dropping of articles - No carriage of dangerous goods.

All flights must be within visual line of sight of the remote pilot.

<b>A1</b>	<p>This sub category allows the flight of aircraft weighing up to <b>250g</b>, close to people and over people, but not over crowds. It also allows flights of aircraft up to <b>500g</b> when the pilot holds a valid A2 Certificate of Competence. <b>NB: not applicable after 31st Dec 22.</b></p> <p>If the drone holds a C or UK Class rating of C1 then maximum take off weight can be up to 900g</p> <p><i>(Can fly within congested areas, i.e. towns, cities)</i></p>
<b>A2</b>	<p>This sub category allows the flight of current aircraft that do not hold a C or UK class, weighing up to <b>2kg</b> 'flying weight'. <b>NB: Not applicable after 31st Dec 22</b></p> <p>OR</p> <p>Up to <b>4kg</b> if the aircraft holds a <b>C or UK Class rating of C2 or UK class 2.</b></p> <p><b>Key rules:</b> Do not fly within <b>50m</b> of uninvolved people (Non C2).</p> <p>Do not fly within <b>30m</b> of uninvolved people (or within <b>5m</b> when a '<b>low speed</b>' mode is activated).</p> <p><i>(Can fly within congested areas, i.e. towns, cities)</i></p> <p><b>No overflight of uninvolved people</b></p>
<b>A3</b>	<p>Can fly aircraft weighing up to 25kg.</p> <p>No flights within 150m of a congested area, i.e. town city.</p> <p>Must remain 50m away from uninvolved people</p> <p><b>No overflight of uninvolved people</b></p>





## SPECIFIC CATEGORY

### Overview

The Specific Category is for operators who pose a higher risk than that of the Open Category.

Operating in this category requires an '**Operational Authorisation**' being held by the Operator.

This requires the remote pilot to hold a valid proof of pilot competency or General Visual Line of Sight Certificate (GVC).

The CAA Operational Authorisation must be valid.

Can fly aircraft up to 25kg maximum takeoff mass.

Must operate within the terms of the Operational Authorisation and risk assessment.

Can Use the Predefined risk assessment process set out by the CAA

#### Distances from uninvolved people:

30m take off and landing.

50m whilst in flight.

Can over fly uninvolved people (if safe to do so)

Max distances Visual line of sight 500m.

Max Height above surface - 120m (400ft)

Can use modules when available e.g. **Module 1 Extended Visual Line of Sight**

**Operators within the Specific Category can obtain extra permissions or exemptions from the CAA.**

Please see the Civil Aviation Publication [CAP 2012](#) for the rules of operation within the open category or [CAP 722](#) and [CAP2013](#) for the operating specific category.



## Planning a flight in the Open Category - Step by Step Checklist

This check list is for the open category. If your operation falls within the specific category then please operate under your procedures that form part of your CAA Operational Authorisation.

If you are planning to fly a drone in the open category, we recommend the following as a basic level for good practice.

1	<a href="#">Apply</a> for an Operator ID with the CAA, and Flier ID if required
2	Check to see who owns the land, to avoid any issues with trespass.
3	Make sure you have appropriate <a href="#">insurance</a> . Insurance is required for any commercial activity.
4	Check the aircraft's weight & category – <a href="#">see table</a>
5	<a href="#">Check</a> for any Airspace restrictions, Flight Restriction Zones (FRZ), Runway Protection Zones (RPZ), or No-fly zones to ensure that you are flying legally.
6	Check if you will be flying in a <a href="#">congested area</a> - if you are, this will need to be properly risk assessed
7	Check if at any point you will be flying close to people – <a href="#">see table</a>
8	Check to see if your operation may require flying over people at any time. Please note that overflight of assemblies of people is forbidden outside the A1 category.
9	Check if there are any local bylaws - check with the local authority website, this is your responsibility and you could face prosecution if you fail to comply.
10	Check if there are any local permitting requirements - if there is a local film office you should contact them to discuss your flight and any local processes you may need to follow, or any guidance or restrictions regarding the area in which you intend to operate. Be aware that there are additional restrictions in the capital, for more information visit <a href="#">Film London</a> .
11	Check that the risk is as low as reasonably practicable, and create a risk assessment if the flight is within a congested area.
12	Send details to the local authority (or film office), including: timings, map, risk assessment. Documentation may vary depending on the authority and your category/authorisation. Make sure you provide enough notice prior to your flights. (If you're applying for a flight in a restricted area, this normally requires 21 days notice)
13	Check that the weather is suitable in advance of the operation.
14	Check that the aircraft is airworthy.

### About [Osprey Drone Training](#):

Osprey Drone Training are a CAA approved drone training organisation providing a number of courses with qualifications to ensure safe drone flying.

For more info on **Creative England's Filming in England team**, please visit [www.filminginengland.co.uk](http://www.filminginengland.co.uk)  
To get in touch please email; [production@creativeengland.co.uk](mailto:production@creativeengland.co.uk)