## Flying safely and responsibly (Points 1 and 2)

General responsibilities.

## 1. You're responsible for flying safely whenever you fly

As well as flying within the law, you should always be ready for something to go wrong with your drone or model aircraft. This is especially important if you fly your drone or model aircraft over people.

You could be fined for breaking the law when flying your drone or model aircraft.

In the most serious cases, you could be sent to prison.

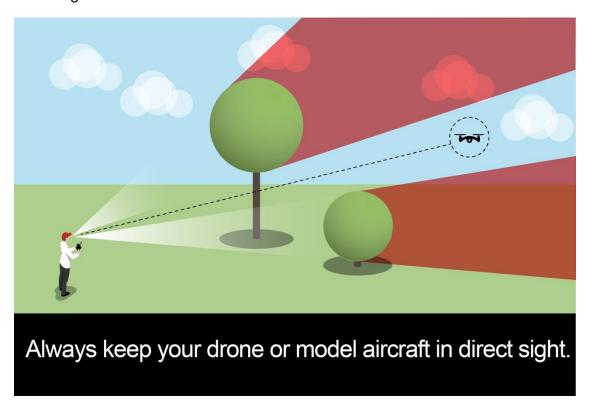
## 2. Always keep your drone or model aircraft in direct sight and make sure you have a full view of the surrounding airspace

This is the best way to be sure of spotting any nearby hazards in the air or on the ground and avoiding collisions.

You must be able to see your drone or model aircraft without using:

- binoculars
- a telephoto lens
- electronic viewing equipment, such as a smart phone, tablet or video goggles

Normal glasses and contact lenses are fine.



## Where you can fly (Points 3 to 7)

Height limits and distances from people, buildings, crowds and vehicles. Restrictions on flying near to airports.

## 3. Never fly above 400ft (120m)

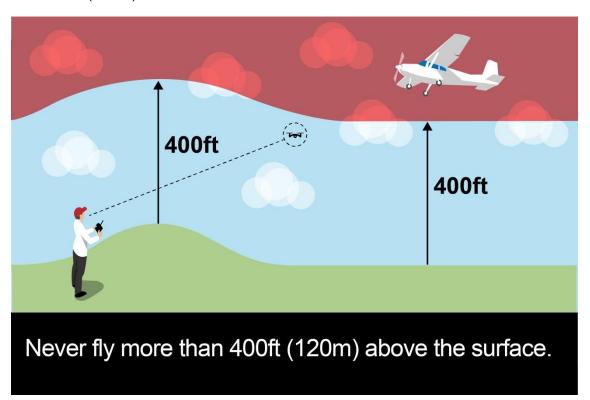
Your drone or model aircraft must never be more than 400ft (120m) from the surface of the earth.

This will help you to avoid colliding with planes, helicopters and other aircraft, which normally fly higher than this.

Always look and listen out for other aircraft that may be flying below 400ft (120m), such as air ambulances and police helicopters.

#### Flying where there are hills, mountains or cliffs

If you fly where the ground level falls or rises, such as over hills, mountains or cliffs, you'll need to adjust the height of your drone or model aircraft so that it's never more than 400ft (120m) from the surface.



## 4. Keep the right distance from people, property, vehicles and busy areas

Never fly your drone or model aircraft closer than the legal distances.

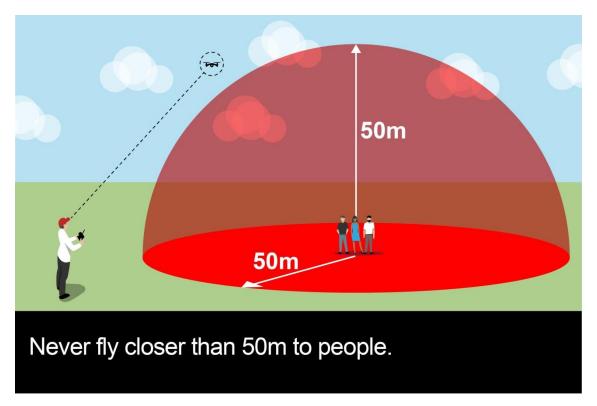
The distances in point 4 apply to drones and model aircraft fitted with cameras. Even if you don't have a camera, you must still fly safely, so following these points will help you do this.

### People

Never fly closer to people than **50m**.

Even when your drone is more than 50m away from people, it's safer to avoid flying or hovering directly over them. You're responsible for flying safely whenever you fly.

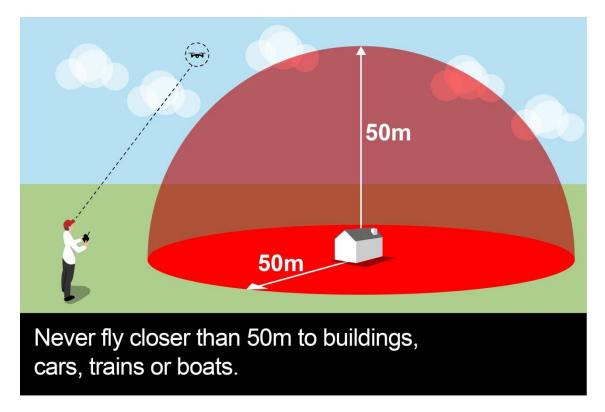
During take-off and landing, you can reduce this distance down to 30m.



These limits do not apply to you or people who are with you and are involved in what you're doing, such as friends and family out flying with you.

Buildings, structures, vehicles, trains, boats and other types of transport

Never fly closer to these than **50m**.



Does not apply to those you own or where the owner has given you permission to fly closer.

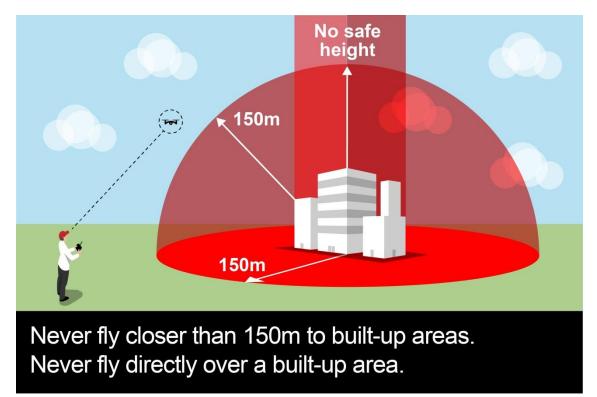
## Built-up and busy areas

Never fly closer to built-up and busy areas than 150m.

Never fly above these areas at any height.

Examples of built-up and busy areas:

- · cities and towns
- villages
- beaches and recreational parks that are part of a city, town or village
- housing estates
- schools and offices
- · retail, warehouse, industrial and business parks
- theme parks



The law refers to built-up and busy areas as congested areas.

### Crowds of more than 1,000 people

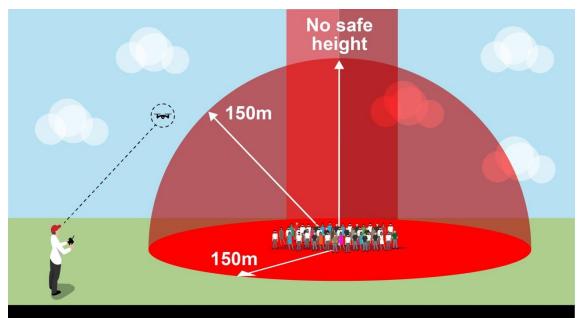
Never fly closer to crowds of more than 1,000 people than 150m.

Never fly above crowds at any height.

A crowd is any organised, open-air gathering of 1,000 people or more.

#### Such as at a:

- sports event
- music festival or concert
- march or rally
- carnival



Never fly closer than 150m to a crowd of 1,000 people or more. Never fly directly over a crowd.

## 5. Stay well away from airports, airfields and aircraft

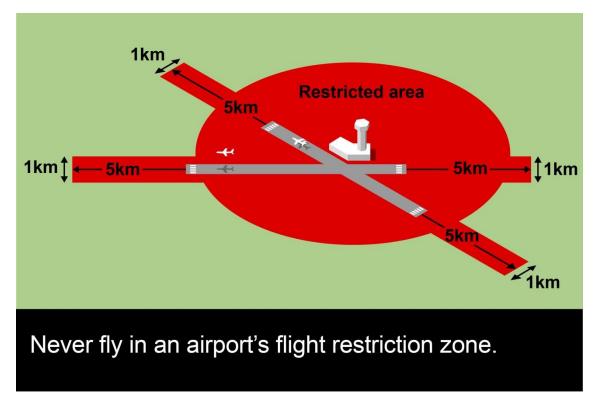
Warning If you endanger the safety of an aircraft, you could go to prison for five years.

Most airports and airfields have a flight restriction zone (FRZ). You must never fly in this zone unless you have permission from the airport. The zone is in place to avoid any collisions with aircraft at or near the airport.

Always check before you fly.

The DroneSafe website (opens in a new window) gives details of airfield restrictions.

Some drone apps also give details of flight restriction zones.



## 6. Always check and follow any flying restrictions

There are different types of restrictions on where you can fly. Always check before you fly.

You can check using:

- a drone app (opens in a new window), such as those listed on dronesafe.uk
- the NATS drone website (opens in a new window) (NATS is the air traffic control organisation)
- the Aeronautical Information Publication

If you use an app, make sure you understand exactly what information it will give you.

#### Restricted airspace

This includes areas around prisons, military bases, royal palaces, government sites and more.

#### **Events**

Flying may be temporarily banned in specific areas during some events, such as airshows or festivals. This is to keep everyone safe.

There may also be security reasons for banning flying, such as at political conferences.

#### Emergency incidents

Temporary restrictions may be established at very short notice due to emergency incidents, such as road traffic accidents, fires and floods.

#### Official information on activities affecting flying – called NOTAMs (Notice to Airmen)

NOTAMS are the official notices on activities that affect where aircraft, including drones and model aircraft can fly.

Many drone apps include details of NOTAMs. You can also find NOTAMs at the NATS drone website (opens in a new window).

#### Geo-awareness software

Your drone or model aircraft may include software designed to help you avoid flying in certain restricted areas.

You should not alter or disable this software if your drone or model aircraft has it.

## 7. Check for local restrictions and temporary hazards

Always check before you fly and be ready to respond if anything changes.

#### Byelaws

Byelaws may restrict when and where you can fly.

Look out for local signs for information and contact details where you can find out more. Byelaws are unlikely to be shown on apps or drone websites.

#### Structures in the area

Check for any structures, such as cranes, masts and wires. Remember, you must be at least 50m away from these.

Do not fly if there are structures in the area that will mean it's not safe or legal.

#### Animals

Do not fly where you'll disturb animals.

#### Other aircraft

This includes unusual or specialist flying activities, such as air ambulances, police helicopters, light aircraft, military low flying, crop spraying, and electricity pylon surveying.

Always be ready to respond in the safest way possible so that you keep everyone safe.

#### Signs

Check for signs that say you cannot fly drones or model aircraft.

Some sites may have restrictions that are not listed in apps and other services.

## **Extra flying permission**

If you want to do more types of flying, you'll need to get the correct <u>permission or</u> exemption (opens in a new window) first.

### For example:

- if you want to fly at or near an airport, you need permission from the airport
- if you want to fly at different heights or distances to the ones in this Code, you need permission from the Civil Aviation Authority
- if you want to fly closer to or over a built-up or busy area, you need permission from the Civil Aviation Authority
- if you want to fly to make money or for any kind of payment, you need permission for commercial operations from the Civil Aviation Authority

From time to time, the Civil Aviation Authority may issue general exemptions and permissions (opens in a new window)

## Making every flight safe (Points 8 to 15)

What to do before flying, during a flight and after a flight.

## 8. Make sure you know what your drone or model aircraft can and cannot do

Make sure you have read any instructions before you fly.

Key points to know are:

- how far your drone or model aircraft can fly
- how long your drone or model aircraft can fly before running low on power or fuel
- whether your drone or model aircraft has a 'return-to-home' function that means it can fly back to you if there is a problem

## 9. Make sure your drone or model aircraft is fit to fly

#### Check fuel and battery levels

Take special care to check that fuel and battery levels will last through your flight. This includes any extra fuel you might need in an emergency or for flying in difficult weather, such as windy conditions.

Remember to check the battery power in the controller too.

#### Check any built-in software is up to date

The built-in software (called firmware) controls important navigation and flying controls. Depending on the type of drone or model aircraft you have, this could include:

- the latest information on flight restriction zones and other airspace restrictions so that your drone knows to avoid them
- how your drone uses its power
- how your drone knows its position
- how your drone lands if there's a problem

Keeping this software up to date will also help to protect against cyber attacks.

Follow the instructions to update the built-in software (firmware). Always check that the software has updated correctly before going flying.

## 10. Do not fly if the weather could affect your flight

#### Affecting your drone or model aircraft

Some of the things to look out for:

- winds could blow your drone or model aircraft off course or make it difficult to fly safely
- wind on the ground is often very different to the wind at height
- rain, snow and cold weather could all stop parts of your drone or model aircraft from working
- fog could mean you lose sight of your drone or model aircraft
- glare from the sun could mean you lose sight of your drone or model aircraft

#### Affecting you

Some of the things to look out for:

- cold or wet weather could affect your ability to control your drone or model aircraft safely.
- standing out in the sun could affect your ability to concentrate

#### Make sure your drone or model aircraft will work if the temperature is low

Follow the manufacturer's guidance on the safe temperatures to fly at.

Also, some types of battery, such as lithium-ion batteries, do not last as long in cold weather and this may reduce the amount of time you can fly.

## 11. Make sure you're fit to fly

#### Do not drink and fly

Alcohol will seriously affect your judgement and ability.

As a general rule, you should apply the same limits as you would for driving a car.

#### Do not fly under the influence of drugs or medicine

Check with your doctor or pharmacist if you are taking medicines that may affect your ability to operate your drone or model aircraft safely. Do not fly if they advise you that your ability to fly may be affected.

As a general rule, you should apply the same limits as you would for driving a car.

#### Do not fly if you're tired or unwell

Your judgement and ability could be affected if you are tired or unwell.

## 12. Take action quickly and safely if the situation in the air or on the ground changes

Always be ready to land your drone or model aircraft and wait until it is safe to fly again. For example, if a group of people or animals turn up in the area where you are flying.

You may need to adjust the height you're flying at.

Never fly in areas where the emergency services are responding to an incident.

## 13. Report any dangerous incidents or near misses

If something dangerous happens while you're flying your drone or model aircraft, you must report the incident to the Civil Aviation Authority (opens in a new window).

If you crash or are forced to land somewhere that you can't get to your drone or model aircraft, you should tell the site owner. This is particularly important at sensitive sites to avoid a security response.

If you see anybody using a drone or model aircraft in a suspicious or dangerous way, tell the police or site security, such as airport security.

## 14. Do not use your drone or model aircraft to make money or for any kind of payment

If you want to do this, you'll need to get a permission from the Civil Aviation Authority that allows you to conduct commercial operations.

## 15. If you fly your drone or model aircraft for recreation, you can choose whether or not to have insurance

Insurance is optional if you're flying for recreation. However, you should remember that you're responsible for your actions, which means you could be held personally liable for any injury or damage you cause while you're flying. This means you may want to consider getting insurance to protect yourself.

If your flight is for any reason other than recreation, you do need insurance.

## **Protecting people's privacy (Points 16 to 21)**

Making sure that you don't invade anyone's privacy when you're out flying. What you should and should not do with photos and videos.

## 16. Respect other people and their privacy

If you use a camera with your drone or model aircraft, you must respect other people's privacy when taking pictures or video.

If you take a video or photo of someone where they can expect privacy, such as inside their home or garden, you're likely to be breaking data protection laws.

It is against the law to take photographs or video for criminal or terrorist purposes.

If your drone or model aircraft has a camera, any photos or video you take may be covered by the General Data Protection Regulation (GDPR).

## 17. Make sure you know what your camera can do and the kind of images it can take

Knowing this will help to reduce the risk of taking photos or recording videos that invade privacy.

Make sure you know:

- what quality you can record
- how close your camera can zoom in
- if you can start and stop recording when you are flying

## 18. Make sure you can be clearly seen when you're out flying

This means people will know who's responsible for your drone or model aircraft.

## 19. Let people know before you start recording

In some cases, this will be easy. For example, if you're taking a photo of family and friends at a family barbeque.

In other cases, this will be less practical, so you must be careful to respect everyone's right to privacy.

Remember, you must never fly over organised crowds of 1,000 people or more.

## 20. Think before sharing photos or video

Avoid sharing anything that could be unfair or harmful to anyone.

Think carefully about who could see your photos and videos – especially before posting them on social media. Apply the same common-sense approach that you would with images or video recorded on a smartphone or digital camera.

## 21. Keep photos and videos secure

Store images safely. Delete anything you don't need.

If you record images for commercial use, you'll need to meet further specific requirements as a data controller.

# Extra information : Getting a flyer ID and operator ID before you fly (Points 22 to 27)

What you need to do before you fly.

Two things are needed before flying a drone or model aircraft between 250g and 20kg:

- the person who will fly must pass the theory test to get a flyer ID
- the person or organisation that's responsible for the drone or model aircraft, must register to get an operator ID

If you want to fly and are also responsible for a drone or model aircraft, you'll need to pass the test to get a flyer ID and register to get an operator ID.

## Flyer ID

## 22. You must pass the theory test to get a flyer ID before you fly

Children and adults must take the test – there is no age limit.

#### Children under 13

Children under 13 must have a parent or guardian with them when they take the test to get their flyer ID.

#### Drones or model aircraft that weigh less than 250g

You do not need to pass the test before flying a drone or model aircraft below 250g.

#### Flying indoors or in a netted area

You do not need to pass the test if you will only ever fly indoors or in a securely netted area.

#### Other types of drone or model aircraft flying

You'll need to get permission from the Civil Aviation Authority (CAA) or an organisation acting on its behalf if you want to do either of the following:

- fly a drone or model aircraft that is above 20kg
- legally fly outside the rules in this Code

The type of permission you need depends on:

- the size and type of drone or model aircraft you want to fly
- where you want to fly
- how high you want to fly
- whether you want to fly for a hobby or for commercial reasons

You can find out more about <u>permissions and exemptions at the Civil Aviation Authority website (opens in a new window)</u>.

#### Permissions that come with membership of a club or association

In some cases, being a member of a recognised club or association gives you additional flying permissions. For example, you may be able to fly in an area that is normally restricted.

Check with your club or association before you fly.

#### Flying for commercial reasons

If you want to fly for commercial reasons, you'll need to get a permission from the CAA.

Commercial means using a drone or model aircraft in return for payment in any way. For example, if someone pays you to record or take photos of an event.

You must still take the theory test even if you already have a permission, such as a PfCO (permission for commercial operations).

#### Flying where there is an airport – within the flight restriction zone

If you want to fly a drone or model aircraft at or near an airport, you must get permission from the airport first.

You can get more information about how to do this at the DroneSafe website (opens in a new window).

## 23. You must take the theory test every three years

Your flyer ID will last for three years.

### **Operator ID**

## 24. The person or organisation that's responsible for a drone or model aircraft must register to get an operator ID

You must be over 18 to do this.

If you're under 18, you'll need to ask a parent, guardian or other appropriate adult to register.

#### Who is responsible for a drone or model aircraft

The law says that the person or organisation that 'has the management of' a drone or model aircraft is its operator.

This will usually be the person or organisation that owns it. That's not always the case. For example, if someone under 18 owns a drone or model aircraft, they can't be the operator.

## 25. Label your drone or model aircraft with your operator ID

Use the same operator ID to <u>label every drone or model aircraft</u> you're responsible for.

## 26. Make sure that anyone flying your drone or model aircraft has a valid flyer ID

### 27. Keep your operator ID up to date

Your operator ID will last for 12 months

## Background: Drones and model aircraft in the law

The following acts and regulations include some of the key points of law that this Drone and Model Aircraft Code is based on. The list is not intended to be comprehensive.

For the precise wording of the law, please see the acts and regulations. These are also available in print from The Stationery Office (opens in a new window).

## Acts and regulations

The Air Navigation Order 2016, including the 2018 amendment and 2019 amendment.

The Civil Aviation Authority has published a copy of the <u>Air Navigation Order with</u> amendments inserted (opens in a new window).

The Data Protection Act 2018 (opens in a new window).