

Drone Masterclass



Nabeel Masih

Rotary wing UAVs



Vapor 55 UAV Helicopter



DJI thermal drone



DJI Phantom 4 Pro



DJI Matrice 300



FreeFly Alta 8



DJI Matrice 200



DJI inspire 1



Yuneec Typhoon H

Fixed Wing UAVs



FLY-380 VTOL



MQ-9 Reaper



PD-1



senseFly eBee X

Hybrid UAVs



DJI MAVIC PRO



VTOL UAV prototype



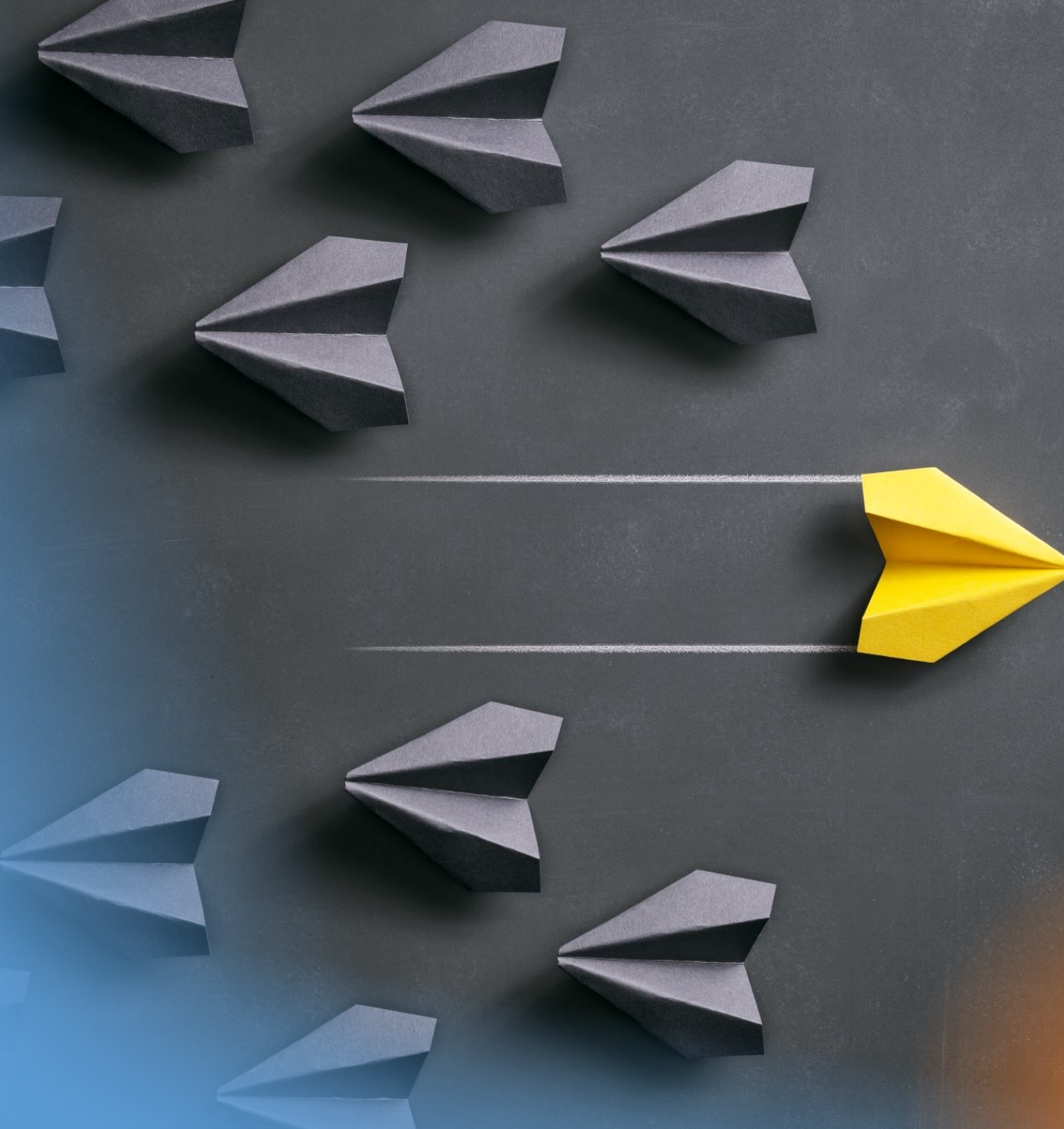
MH-ED30



Falcon Vertigo



RT-M50CD



You're responsible for flying safely whenever you fly

- Follow this Code to make sure you never put people in danger. Always be ready in case something should go wrong with your drone or model aircraft.
- 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.

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

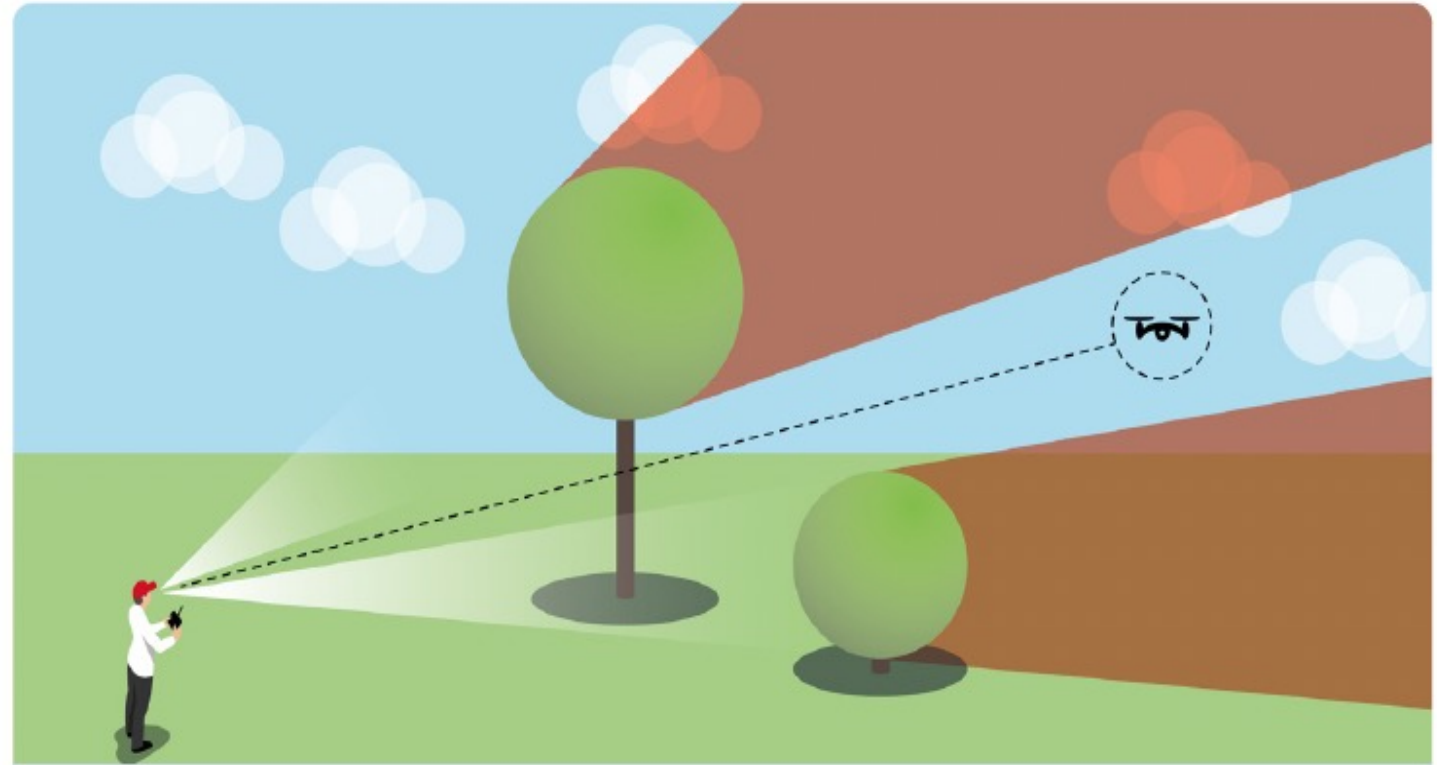
You must be sure that you'll be able to spot any nearby hazards, in the air or on the ground, and avoid any collisions.

You must be able to see your drone or model aircraft clearly enough that you can tell which way it's facing. This is so that you can steer and control it safely, even if something happens unexpectedly.

You must be able to see it without using:

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

Using normal glasses and contact lenses is fine.



Always keep your drone or model aircraft in sight

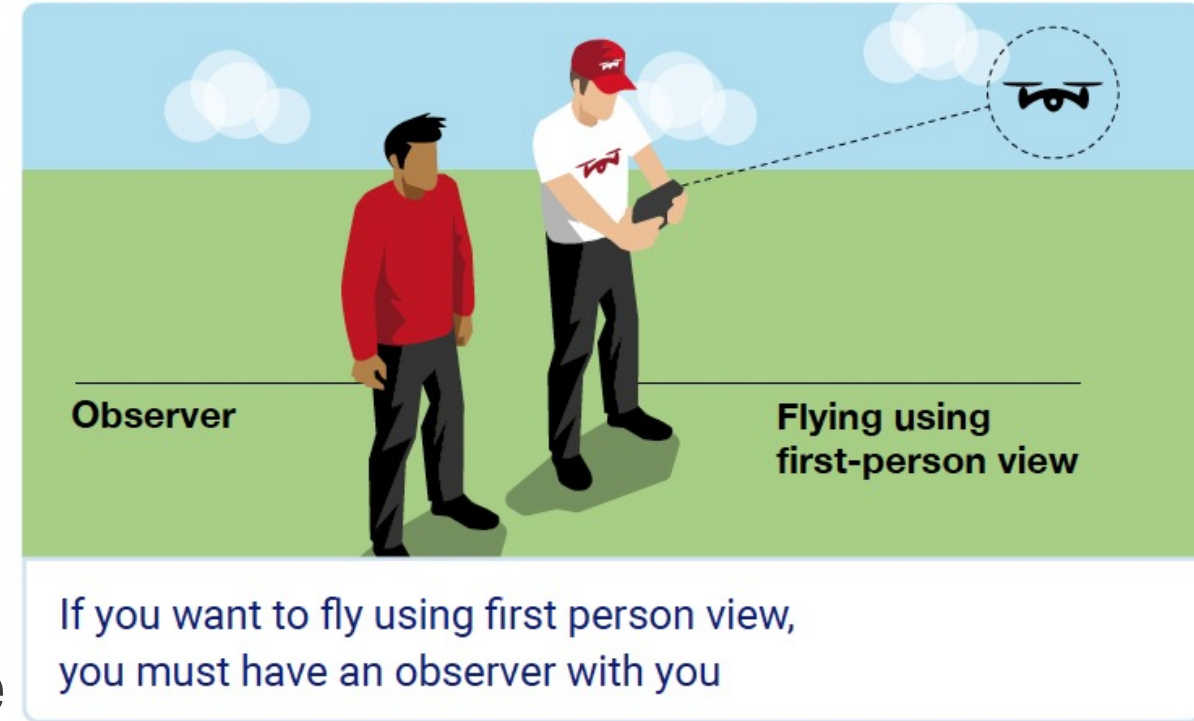
Flying with the help of an observer

You can ask someone to be your observer when you fly.

They must stand next to you and you must be able to talk to each other at all times.

Flying using first-person view (FPV)

Some drones and model aircraft are fitted with cameras that provide live video to devices such as smart phones, tablets and video goggles.



Where you can fly

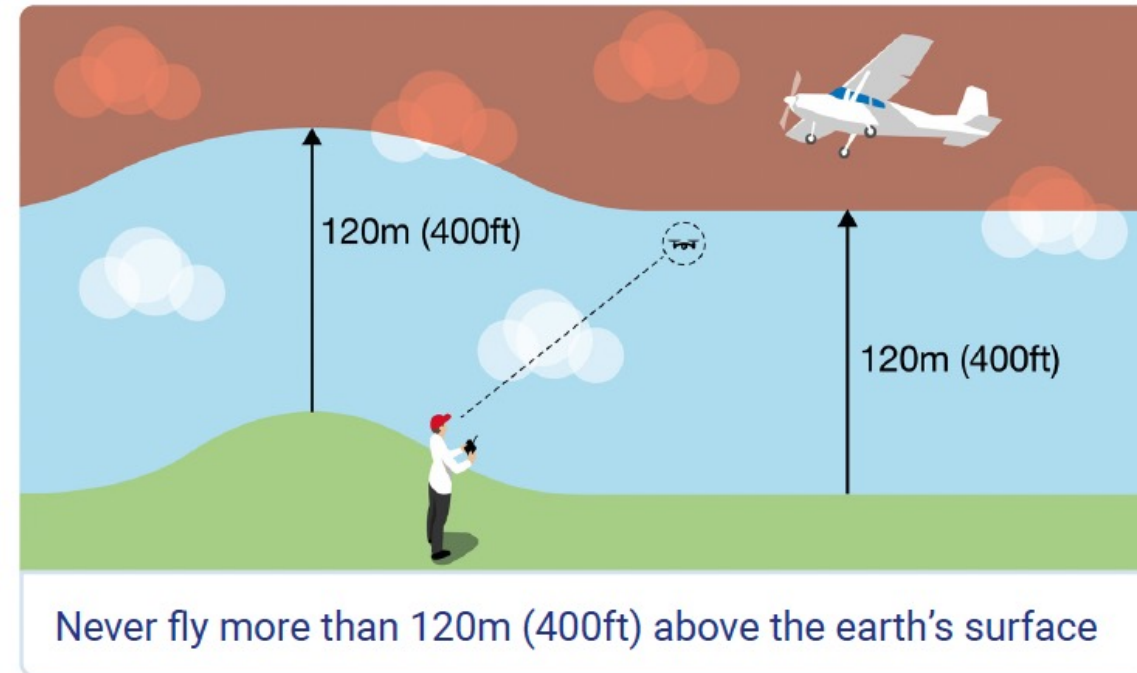
Legal height limits, distances from people, and areas where you must not fly.

Restrictions on flying near to airports and spaceports.

Fly below 120m (400ft)

Flying below the legal height limit of 120m (400ft) will reduce the risk of coming across other aircraft, which normally fly higher than this.

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

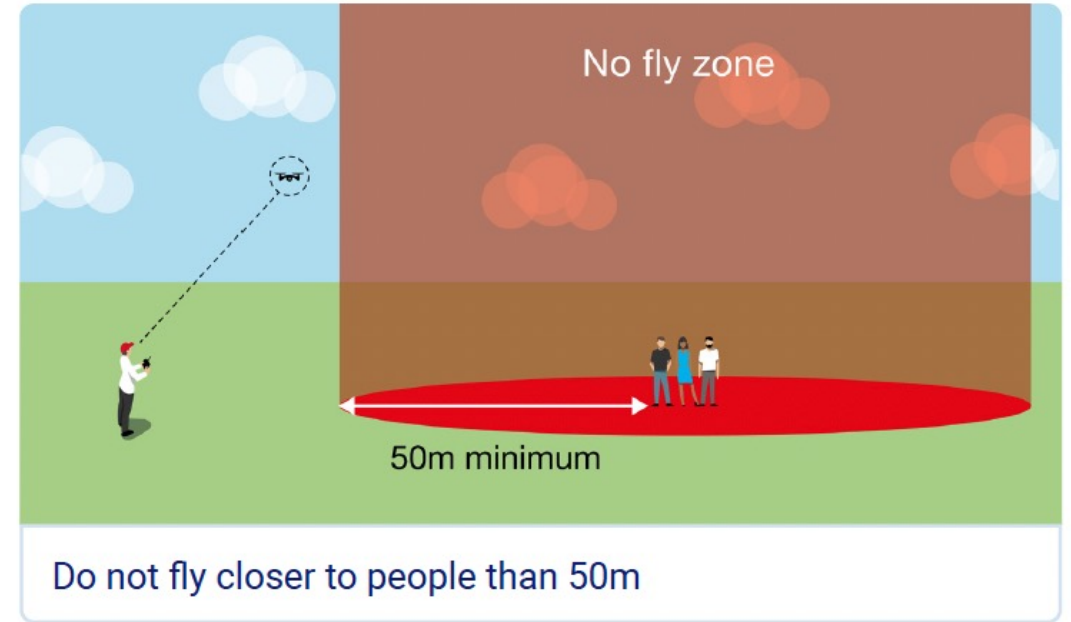


Do not fly closer to people than 50m

This includes people in buildings and transport, including cars, lorries, trains, and boats.

You must keep a minimum horizontal distance of 50m between your drone or model aircraft and people. This creates a no fly zone around people that goes all the way up to the legal height limit. It can help to think of this no fly zone as a cylinder.

You must not fly over people in this no fly zone, even if you fly higher than 50m.



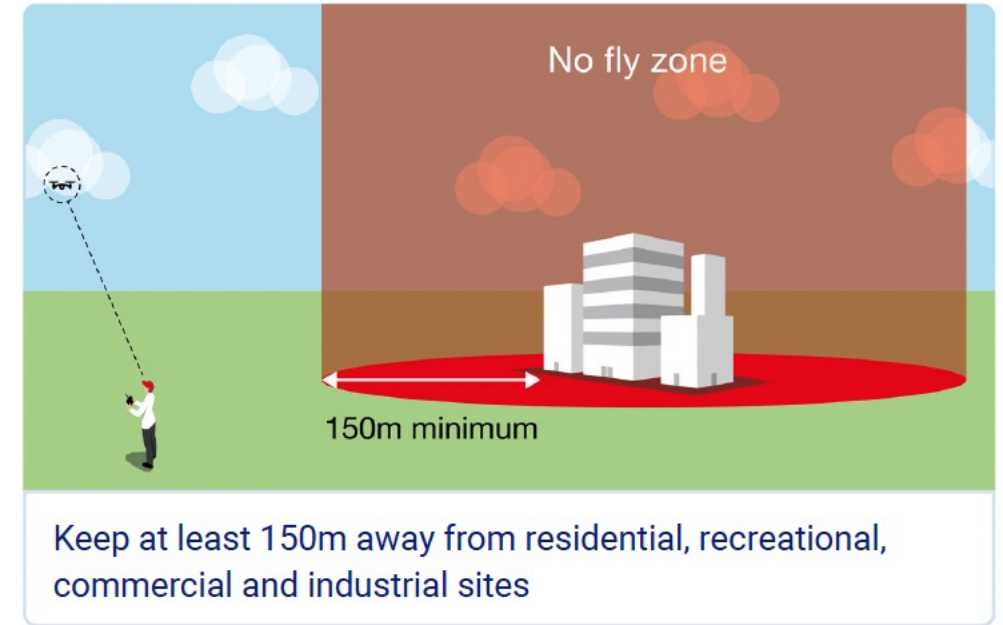
Keep at least 150m away from residential, recreational, commercial and industrial sites

150m is the minimum distance. Be prepared to increase the distance if you need to do that to fly safely.

Small drones and model aircraft: below 250g

You can fly small drones and model aircraft that are lighter than 250g at residential, recreational, commercial and industrial sites.

Remember, you must always fly safely.



Stay well away from airports, airfields, spaceports and aircraft



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

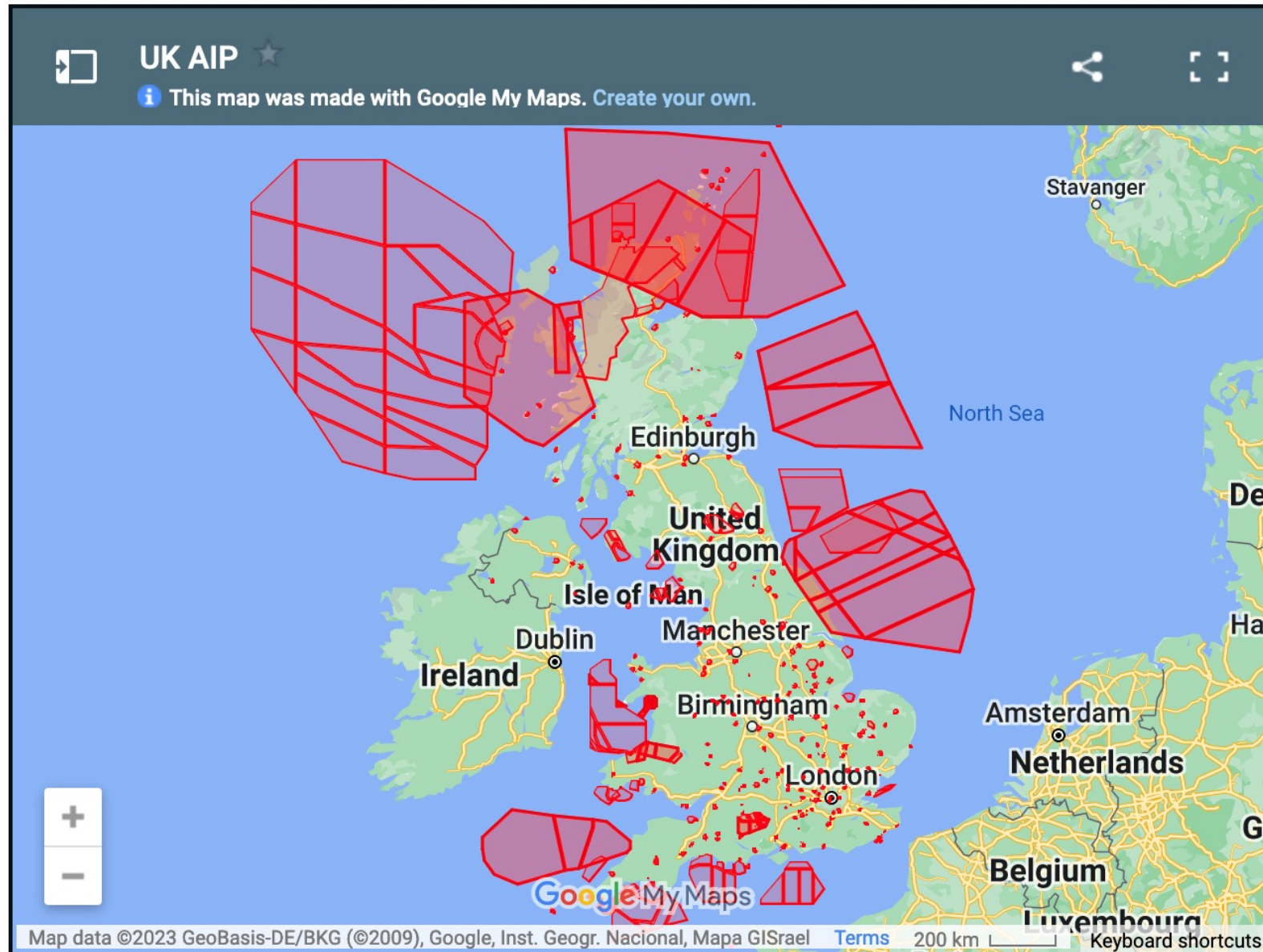
Most airports, airfields and spaceports have a flight restriction zone (FRZ).
Never fly in this zone unless you have permission from the airport, airfield or spaceport.
The zone is in place to avoid any collisions with aircraft or spacecraft at or near the site.
Some smaller airfields do not have an FRZ, but you still must not fly on or near these airfields where you could pose a danger to the safety of aircraft.

Checking for airport, airfield and spaceport restrictions

You can find details of FRZs and other airspace restrictions in [NATS' map of airspace restrictions](https://nats-uk.ead-it.com/cms-nats/opencms/en/uas-restriction-zones/#Dronesafe_Map).
Some drone apps also give details of flight restriction zones.

https://nats-uk.ead-it.com/cms-nats/opencms/en/uas-restriction-zones/#Dronesafe_Map

Airspace restrictions MAP



Follow any flying restrictions and check for hazards

Always check for restrictions and hazards before you fly.

Examples of restrictions and hazards

Restricted airspace

Events

Emergency incidents

Tall structures

Animals and wildlife

Sites of Special Scientific Interest (SSSI)

The following national authorities provide information on SSSIs:

> Natural England

> Natural Resources Wales

> NatureScot

> Northern Ireland Environment Agency (NIEA)

Other aircraft

Signs

Making every flight safe

- **What to do before, during, and after a flight.**
- **Make sure you know what your drone or model aircraft can and cannot do**
- **Make sure your drone or model aircraft is fit to fly**
- **Never drop anything from your drone or model aircraft while it's flying**
- **Never carry any dangerous cargo on your drone or model aircraft**
- **Make sure any equipment is secure**
- **Do not fly if the weather could affect your flight**
- **Make sure you're fit and safe to fly**
- **Take action quickly and safely if the situation in the air or on the ground changes**
- **Report any dangerous incidents, near misses or suspicious activity**
- **Make sure you have the appropriate insurance**

Protecting people's privacy

- Making sure that you don't invade anyone's privacy when you're out flying. What you can and can't do with photos and videos.
- Respect other people and their privacy
- Make sure you know what your camera can do and the kind of images it can take
- Make sure you can be clearly seen when you're out flying
- Let people know before you start recording or taking pictures
- Think before sharing photos and videos
- Keep photos and videos secure



You must pass the CAA's official online theory test to get a flyer ID

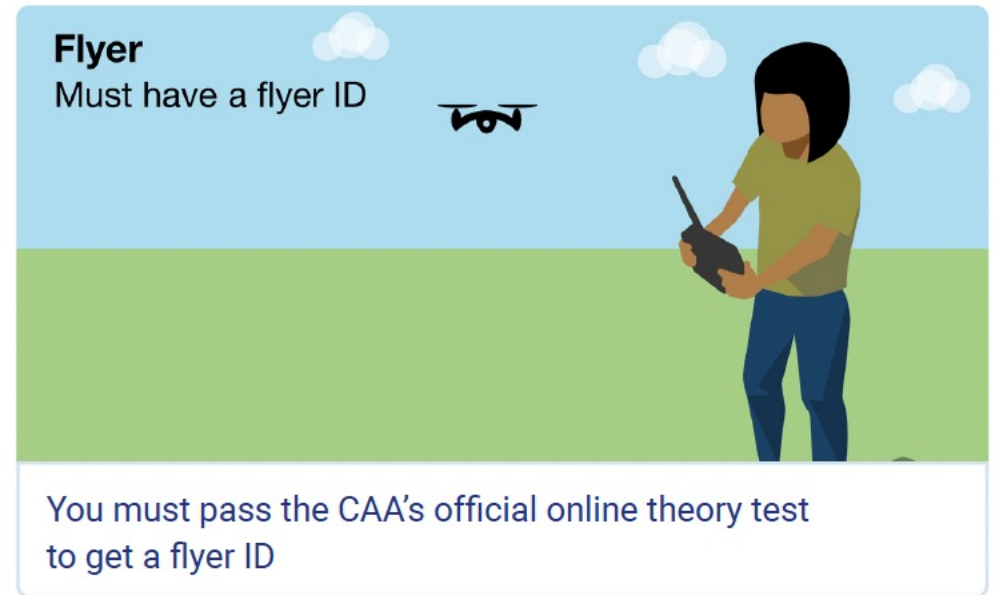
Children and adults must pass the test: there is no age limit.

For data protection reasons, children under 13 must be with a parent or guardian when they take the test and register.

You must pass the theory test to renew your flyer ID every five years

Your flyer ID will last for five years.

If you took your last test under the previous regulations, that flyer ID will last for three years. You can check when your ID expires in the [My registration area](#).



Background: Drones and model aircraft in the law

Acts and regulations

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.

- > [CAP1789A: Consolidated version of the EU UAS Implementing Regulation.](#)
- > [CAP1789B: Consolidated version of the EU UAS Delegated Regulation.](#)
- > [The Air Navigation Order 2016](#), including the [2018 amendment](#) and [2019 amendment](#). The Civil Aviation Authority has published a copy of the Air Navigation Order with amendments inserted.
- > [The Data Protection Act 2018.](#)