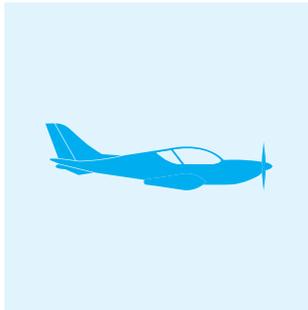


**AIRSPACE
& SAFETY
INITIATIVE**

AN INFRINGEMENT HAPPENED EVERY
11 HOURS IN UK AIRSPACE IN 2012.*
DONT BE PART OF THE STATISTIC.



*Number of hours in the year divided by number of reported infringements in 2012.

Pre-flight



Pre-flight planning is one of the most important steps to a safe flight.

- Ensure that you have a current aeronautical chart.
- Check NOTAMS and call the temporary restrictions free phone number on **0500 354 802** as a final safety net before departure.
- Check the local and en-route weather and check again just before flight.

Pre-flight planning tools

There are a number of free online pre-flight planning tools available to assist pilots in safely and easily planning their Visual Flight Rules (VFR) flights in and around busy airspace and to check NOTAMS.

NATS (National Air Traffic Services) has awarded its Safety Compliance Mark to SkyDemon Light. The mark indicates that the product complies with functionality set out by NATS to enhance flight safety.

The SkyDemon Light online flight planning tool can be found at www.skydemonlight.com

Remember

Always have a Plan B. If you are planning a controlled airspace (CAS) crossing, ensure that you have a back-up to avoid the airspace in case a clearance without delay is not possible. Have a decision point a few miles from CAS rather than right on the boundary, as it will make diverting around the airspace much easier, with less possibility of infringement. Plan time and fuel calculations for the longer route.



The weather can change rapidly so plan options for your flight, including diverting or turning back.





Lookout – see and avoid

Under visual flight rules 'see and avoid' is the prime means of segregation.

As a general rule, you should keep your eyes focussed for no more than 4-5 seconds on anything inside the aircraft for every 16 seconds spent scanning outside the aircraft.



Your eyes should be focussed inside the aeroplane for no more than 1/4 – 1/3 of the time.

Scan patterns

Two scanning patterns have proved to be effective for pilots:

1. Side-to-side scanning method

Start at the far left of your visual area and make a methodical sweep to the right, pausing very briefly in each block of the viewing area to focus your eyes. At the end of the scan, return to and scan the instrument panel and then repeat the external scan.

2. Front-to-side scanning method

Start in the centre block of your visual field (centre of front windshield); move to the left, focusing very briefly in each block, then swing quickly back to the centre block after reaching the last block on the left and repeat the action to the right. Then, after scanning the instrument panel, repeat the external scan.

Using a transponder

– Use a transponder. It will help ATC to see you on radar and may help to prevent an infringement or provide a quick resolution if an infringement occurs.

– Use the **ALT function**. It will show your level on radar and is particularly useful to controllers when you are flying below controlled airspace.

– Use of a transponder enables TCAS installed in some aircraft to be aware of your presence, providing a significant safety net.

– Use **listening out squawks** where they are available.

Use of GPS

– Do not use a GPS to 'fly the line' of controlled airspace as a small navigational error or distraction can lead to an infringement, and in some airspace commercial traffic can be less than three nautical miles inside the boundary.

– Ensure that GPS maps are up-to-date by using the latest database.

– Learn how to operate airspace warning elements of a GPS where fitted.

– Consider using a GPS-based airspace warning tool as a navigational back-up.

Visit the ASI website at www.airspacesafety.com and watch the 'Pilot's Guide to GPS'.

Infringement

Infringement of controlled airspace, danger and restricted areas is a serious aviation hazard and occurs when an aircraft enters the airspace without permission.



An infringement happened every 11 hours in UK airspace in 2012.

Risks of infringement

– Losing separation from other aircraft, including airliners, that may result in collision.

– Danger from military artillery or missile firing, manoeuvring high-performance aircraft, unmanned aircraft or helicopters.

– Collision with glider tow cables if flying through a glider launch site.

– Collision with parachutists or a parachute aircraft if flying through a parachute drop zone.



Did you know that the ASI website hosts a set of video guides to flying around the London TMA? Take a look at them at www.airspacesafety.com



Preventing infringements

– Make sure your navigation skills are current.

– Plan your flight properly and then fly the plan.

– Use an airspace alerting system such as **Aware**.

– Use **listening out squawks** where they are available.

– Turn on your transponder and make sure the **ALT function** is switched on.

– Use the **ATC services** available and ask D&D for help on 121.5 MHz if you become unsure of your position.

The Aware airspace warning device was developed with the full endorsement of NATS to address the year on year increase in airspace infringements in the UK. You can find more information at www.airspaceaware.com



Landing



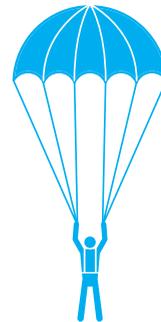
The standard 'overhead' join

An overhead join is a conventional method for an aircraft to approach and safely land at an airfield. It helps a pilot to integrate with other aircraft, join the circuit, and land.

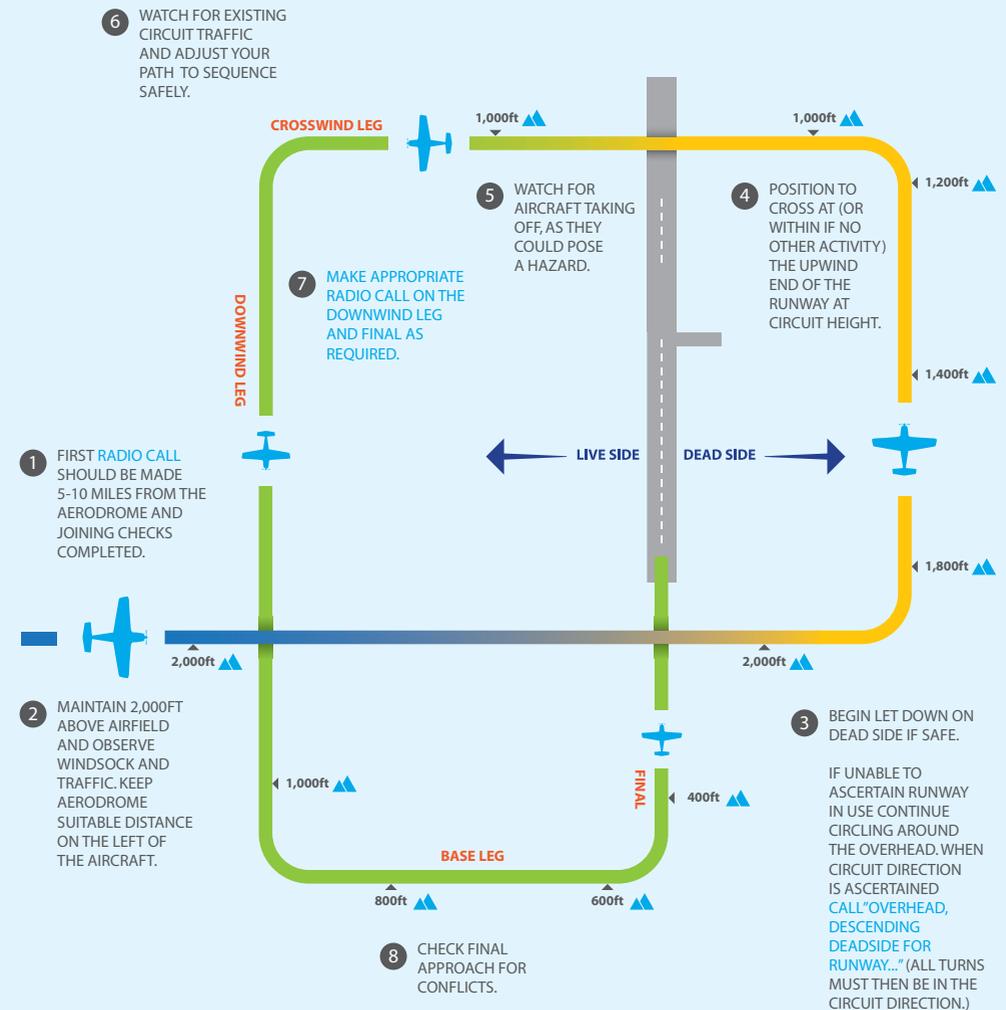
The purpose of the standard overhead join is to create an orderly flow of traffic into the circuit.

- Approach and overfly the airfield at 2,000ft above airfield level. You should have already checked the airfield elevation. Some airfields may specify that you join overhead at a different height.
- If you don't know the runway in use and landing details (e.g. from radio), once you are overhead, observe any T-Square and assess the wind. It helps to be directly over the windsock in order to estimate the direction. You should then make a decision about which runway you will use. Remember, if there are aircraft in the circuit, you should use the same runway as them.
- Fly to the dead side. This is the area on the opposite side of the runway to where the circuit is flown.

- Descend to circuit height on the dead side in a 180° descending turn in the same direction as the circuit – i.e. left hand turns if the circuit is left hand.
- Once you have reached circuit height, join the crosswind leg and follow the circuit around for a landing. Keep an eye out for other aircraft taking off and in the circuit.



The standard 'overhead' join – example of a left hand circuit



Useful links

Civil Aviation Authority (CAA)

The Civil Aviation Authority is the UK's specialist aviation regulator. Through its skills and expertise it is recognised as a world leader in its field.

www.caa.co.uk

The CAA publishes a series of Safety Sense leaflets on its website that are aimed at the GA pilot and give advice on all aspects of safe GA operations.

www.caa.co.uk/safetysense

NATS

A world leader in air traffic management, NATS provides safety by ensuring aircraft flying in UK airspace, and over the eastern North Atlantic, are safely separated.

www.nats.co.uk

NATS' Aeronautical Information Services website provides the official aeronautical information for the UK such as the UK Air Pilot.

www.nats-uk.ead-it.com

The Airspace and Safety Initiative (ASI)

The Airspace and Safety Initiative is a joint CAA, NATS and MoD project to investigate and tackle the major safety risks in UK airspace.

www.airspacesafety.com

Fly on Track

Fly on Track is a site dedicated to reducing unauthorised infringements of UK airspace.

www.flyontrack.co.uk

Met Office

Weather and climate change forecasts for the UK and worldwide. World leading weather services for the public, business, and government.

www.metoffice.gov.uk

Ministry of Defence

The Ministry of Defence (MOD) is the United Kingdom government department responsible for implementing the defence policy set by the UK's government, and is the headquarters of the British Armed Forces.

www.gov.uk/mod