



AIRSPACE

CLASSIFICATION

- Airspace is generally categorised according to the table on the left. Classes are A–G. Whatever the class of airspace determines certain factors that you need to know: whether you are allowed in it, whether you are separated from other traffic within it, whether you need to be in communication with the Air Traffic Service Provider, amongst other things. Sometimes you need a clearance to be in the airspace.
- The class of airspace also influences what the minimum visibility and separation from cloud should be.

CONTROLLED AIRSPACE

US D IFR-	A	Where	Most airways; London/Manchester TMAs.
		VFR Flight	VFR flight not permitted.
		Clearance	ATC clearance required.
		Radio	Radio required.
		ATC Services	Air Traffic Control service.
CTR G 0000 FL195	C	Where	Mostly above FL195 and some airways.
		VFR Flight	Generally not permitted above FL195. Specific arrangements for glider operations in TRAs apply.
		Clearance	ATC clearance required.
		Radio	Radio required.
		ATC Services for VFR traffic	Air Traffic Control service.
	VFR Separation	VFR traffic separated from IFR. Traffic information on other VFR traffic.	
CTR D 0000 2000	D	Where	Most aerodrome CTRs and CTAs. Some TMAs and lower levels of selected airways.
		VFR Flight	VFR flight permitted. SVFR permissible in CTRs.
		Clearance	ATC clearance required.
		Radio	Radio required.
		ATC Services for VFR traffic	Air Traffic Control service.
	VFR Separation	VFR traffic given information on IFR and other VFR traffic. SVFR separated from IFR and other SVFR.	
TRAs E 0000 0000	E	Where	Scottish airways.
		VFR Flight	VFR flight permitted.
		Clearance	ATC clearance not required for VFR flight, pilots encouraged to contact ATC.
		Radio	Radio not required for VFR flight.
		ATC Services for VFR traffic	Basic and Traffic services.
	VFR Separation	Traffic information provided for VFR flights if in receipt of a Traffic Information Service.	

OUTSIDE CONTROLLED AIRSPACE

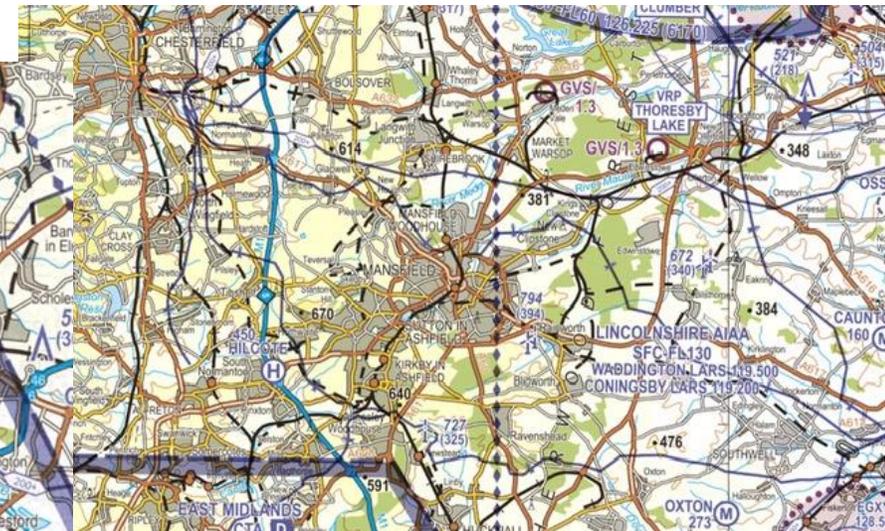
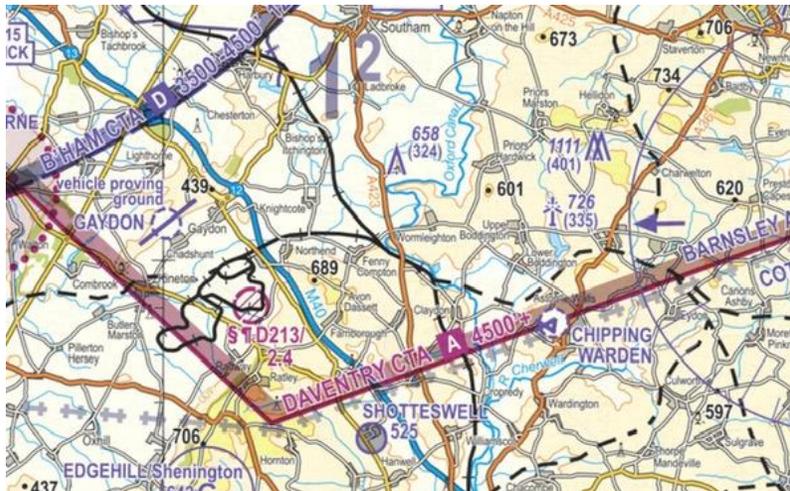
FL300 FL225	G	Where	'Open FIR'.
		VFR Flight	VFR flight permitted.
		Clearance	ATC clearance not required.
		Radio	Radio not required.
		ATC services for VFR traffic	Basic and Traffic services.
	VFR Separation	Traffic information provided for VFR flights if in receipt of a Traffic Information Service.	

THANKFULLY FOR HELICOPTERS THE UK ONLY REALLY USES CLASSES A, D & G...

Class A is usually at higher altitudes and surrounds major airports like Manchester and Heathrow. VFR Traffic is not allowed in. Notice this Class A says +4500 (i.e. starts 4500 feet above sea level).

Class D surrounds smaller airports like Leeds or Doncaster. VFR Traffic is allowed in, but it is important to establish a clearance with the ATS Provider. Class D can start from the surface upwards or from a specified altitude.

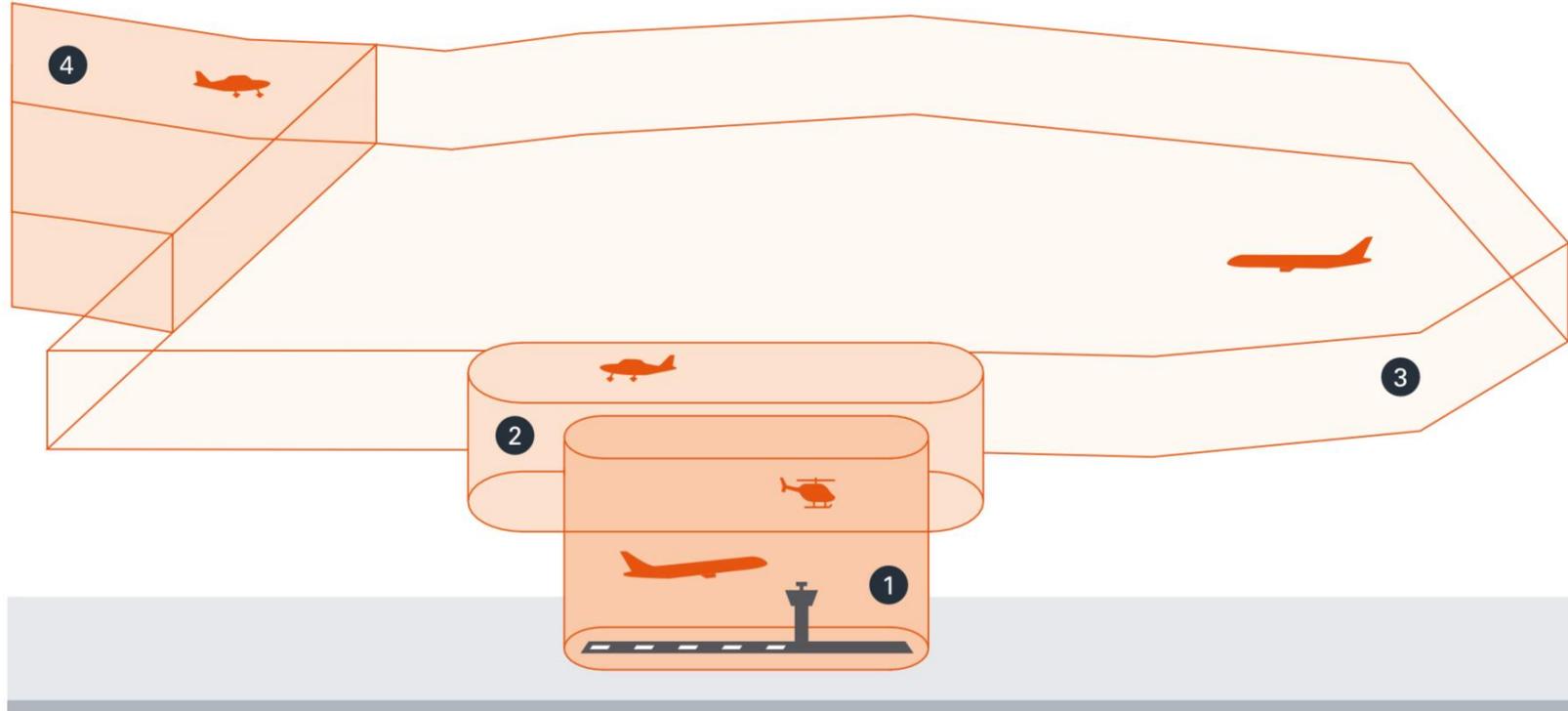
Class G makes up most airspace away from Airports and is totally uncontrolled. It is possible to get an Air Traffic Service, but this type of airspace is free to all. Class G is not marked on the chart.



STATES MAY MAKE USE OF DIFFERENT CLASSES. FOR EXAMPLE FRANCE USES MORE CLASS E, SO ITS IMPORTANT TO KNOW WHERE TO LOOK TO KNOW WHAT THE REQUIREMENTS ARE WHEN PLANNING TO FLY IN UNFAMILIAR AIRSPACE.

AIRSPACE IS BUILT IN BLOCKS

- Close to a major airport the airspace usually starts from the surface upwards. As you get further away airspace then generally starts from an altitude above sea level (QNH).



- 1) CTR (Control Zone)
- 2) CTA (Control Area)
- 3) TMA (Terminal Maneuvering Area)
- 4) Airway

CLASS D

Class D airspace starting from the surface is called a CTR (Control Zone). If it starts from a specified altitude upwards it is called a CTA (Control Area). Notice that the charts give the frequency and a listening squawk code to input to the transponder so the ATS Provider can see that you are listening in. If you wish to transit you must request a 'Zone Transit'.



CLASS G

Class G Airspace is not marked on the chart. Don't just assume that Class G extends upwards indefinitely. Charts, like the one helicopter pilots use, only show airspace below 5000 feet so there may well be controlled airspace above. Within Class G Airspace there are often other things going on such as small airfields, or restricted areas.



THE ATZ (AERODROME
TRAFFIC ZONE) AND
MATZ. (MILITARY
AERODROME TRAFFIC
ZONE)





ATZ



The ATZ is a circle of airspace extending upwards from the surface to 2000 feet above the ground. An ATZ is 4nm diameter (sometimes 5nm if the longest runway is longer than 1850m). You can transit an ATZ easily but it is important to gather all information about circuit traffic if the ATZ is active and call as you enter and leave. If the ATZ isn't active you should still make 'blind' calls as you enter and leave.

Some ATZs are controlled because they have a Tower controlling the aerodrome. You shouldn't go through these without a proper clearance. The lines to the left indicate an ILS Approach. Don't cross these lines and speak to the airport on their frequency.

ATZ

- Within an ATZ the service is usually provided by either an 'Air-Ground', a Flight Information Service, or a Tower.
- An Air-Ground is the simplest form. You can normally start without requesting and don't require clearance or permission to operate in and around the airfield but you should follow circuit patterns and procedures where possible and make normal 'downwind' and 'final' calls on the radio. If the airfield uses a 'radio' callsign (e.g. Fenton Radio) then it is an Air Ground.
- A Flight Information Service uses the callsign 'Information' (e.g. Sywell Information). You often need to request start and they provide instructions on arrival/departure and movement around the airfield. You shouldn't move freely like you would at an Air-Ground but you can easily request alternate actions which are at your discretion.
- A Tower callsign indicates controlled airport and you should follow their instructions. You need to request start and often need to book out on the phone before intended departure. You will more than likely receive a departure clearance that you need to read back. Before take-off/landing you should hear and read back the calls 'cleared take-off/cleared to land'.
- If in doubt, assume you need permission and you can't go too far wrong.

MATZ

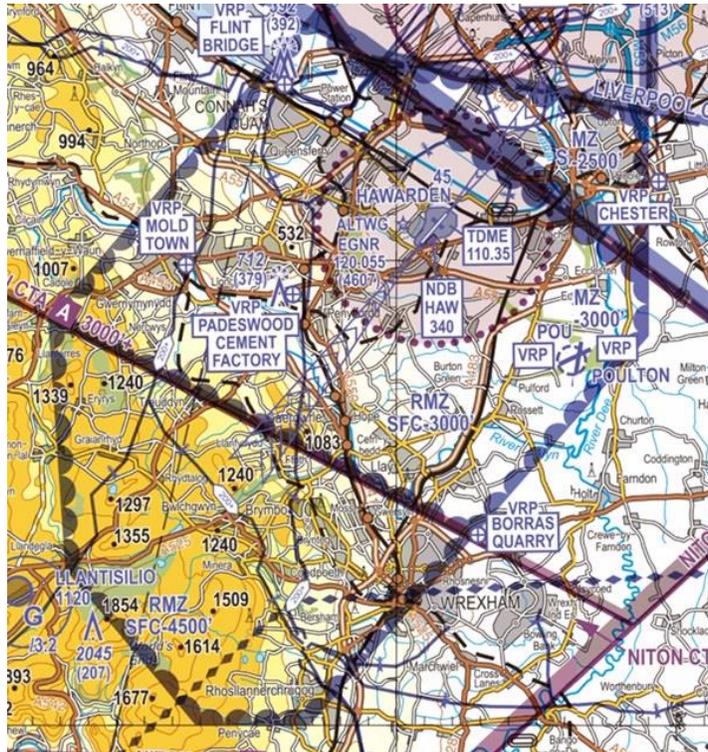
A Military Aerodrome Traffic Zone surrounds military airports. They contain an inner ATZ which you shouldn't enter during published hours of operation (many say H24 meaning 24 hours) unless you have a clearance to do so. If there is no answer then assume you DO NOT have permission to enter. The outer ring and extension (called a stub) aren't actually controlled and so in theory you don't need a clearance to transit through but this isn't recommended and you should at least tell the ATS Provider what you would like to do in case they have some conflicting traffic. A MATZ extends from the surface to 3000 feet above ground level (AGL). The stubs start at 1000 feet and extend upwards to 3000 feet.

If you wish to cross a MATZ you should ask for a 'MATZ Crossing'.

Most MATZ can provide you with a service outside of controlled airspace and some are assigned to do so (for example if a particular MATZ is marked as a LARS (Lower Airspace Radar Service)).

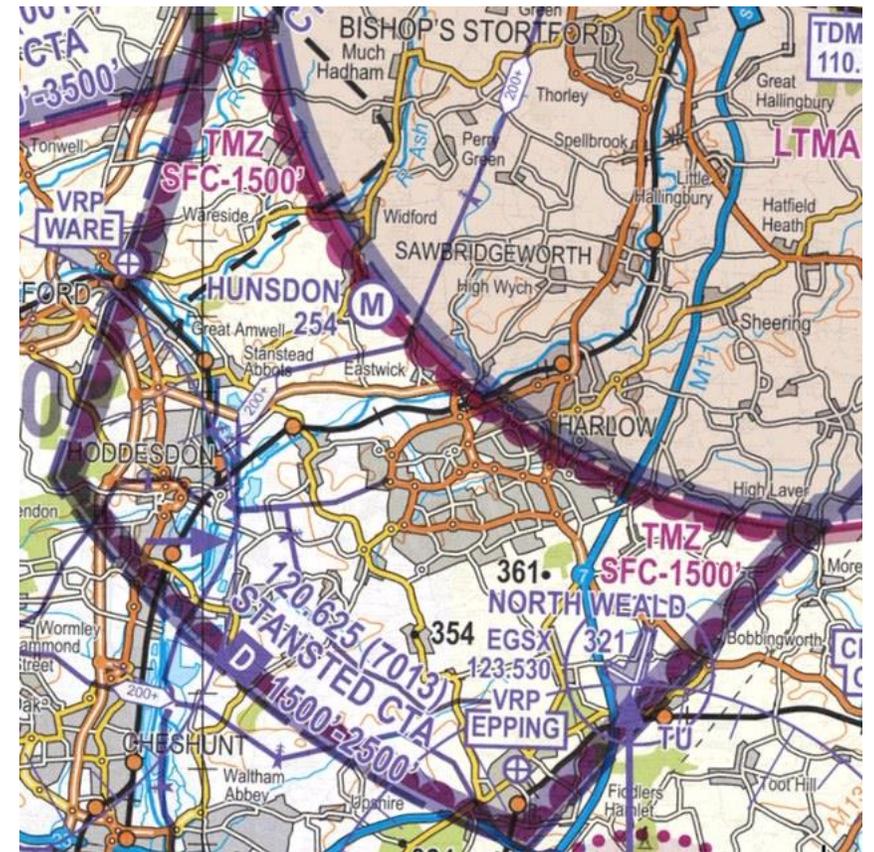


RMZ & TMZ



RMZ indicated by blue semicircles

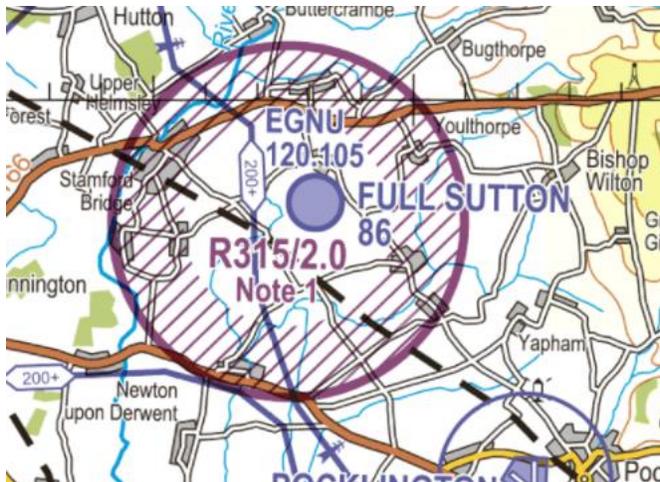
- An RMZ is a radio mandatory zone. You must establish 2-way communication with the ATS Provider.
- A TMZ is a transponder mandatory zone. You usually require a mode S Transponder (one that sends information about your aircraft as opposed to just the code).
- Details of individual RMZs/TMZs can be found in the AIP Entry for that airfield. Sometimes this information is republished in Pooleys.



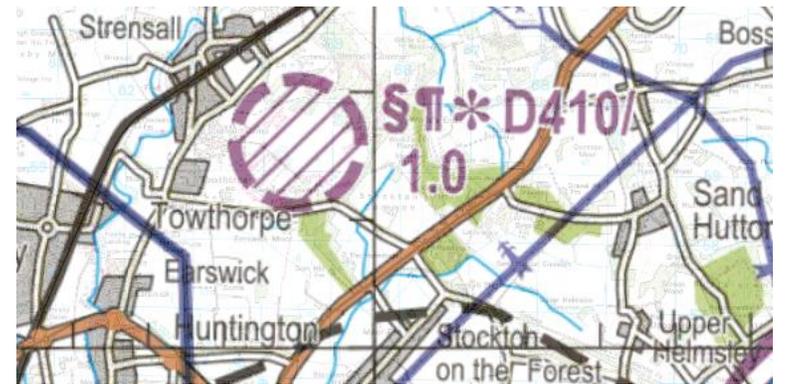
TMZ indicated by purple semicircles

RESTRICTED, PROHIBITED AND DANGER AREAS

Indicated by either an R, P or D, Restricted, Prohibited and Danger Areas should be avoided except in the case of a Danger area if you can establish if it is active or not. To do this there is sometimes a frequency or phone number somewhere on the chart, or a nearby ATS Provider may be able to tell you. If in doubt, then give a wide berth or go over the top at a suitable altitude. To find out specific details on an R, P or D area you should visit the AIP. Temporary Restricted Areas may also be established around events such as Silverstone. These are called a RA(T) and you need to check the NOTAMS to know they are there.



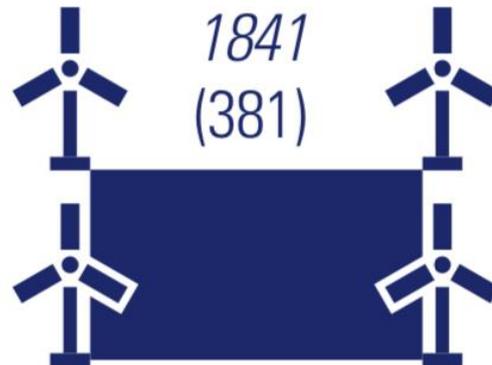
The numbers after the designating letter are specific to the particular area. The numbers after the / indicate the altitude to which they extend upwards to (e.g. /2.0 means 2000 feet (QNH)).



OTHER SYMBOLS TO WATCH OUT FOR



A G indicates Glider Activity. You should never fly through unless you can establish contact on the appropriate frequency. A number indicates maximum altitudes of winch launch (whether that be for gliding or other activities like hang/para gliding. You could encounter cables if you fly through.



Be aware of wind turbines or other obstacles that you may encounter on your route.

USEFUL LINKS

- The Skyway Code - a really useful CAA publication geared towards general aviation flying.

<https://www.caa.co.uk/General-aviation/Safety-information/The-Skyway-Code/#:~:text=The%20Skyway%20Code%20is%20designed%20to%20provide%20private,be%20viewed%20online%20or%20downloaded%20for%20later%20use.>

- Legend for CAA 1:250,000 Chart.

<http://www.cumbriasoaringclub.co.uk/documents/CAA%20Quarter%20Mil%20Chart%20Legend.pdf>

- The Aeronautical Information Service - here you will find the AIP and access to NOTAMS.

<http://www.nats-uk.ead-it.com/public/index.php.html>

- Listening Squawks for the UK

<https://airspace-safety.com/listening-squawks/>