

Introduction

The purpose of this leaflet is to provide guidance to pilots on the types of Air Traffic Service (ATS) that are available within Class E and G airspace¹ (see UK AIP ENR 1.4 for explanations of the airspace classifications and where they are established) in the UK Flight Information Regions (FIRs). These ATS are provided in accordance with CAP 774 UK Flight Information Services (UK FIS), which explains in detail the ATS available in Class G airspace and, where specified, Class E airspace. The UK FIS comprise the following ATS:

- Basic Service.
- Traffic Service.
- Deconfliction Service.
- Procedural Service.

The ATS are intended to cater for a wide variety of airspace users and aerial tasks and it is the pilot of an aircraft who must choose the service that they require. It is essential that the service requested is appropriate both for the type of flight that is being undertaken and the meteorological conditions that are expected. Pilots should bear in mind that some ATS units (ATSU) are staffed by Flight Information Service Officers² (FISOs) and as such will **ONLY** be able to provide a Basic Service. **Traffic Service and Deconfliction Service are provided subject to ATC workload and other constraints and are not guaranteed to be available. This should be considered when planning the flight.**

The basis of the UK FIS are that all pilots, air traffic controllers (ATCO) and FISOs understand what each of the services can provide to pilots and, perhaps more importantly, understand what they do **not** provide. In providing any of the UK FIS, an ATSU can only provide assistance - pilots are always responsible for collision avoidance and terrain clearance. It is essential to remember that an ATS is not intended to replace pre-flight planning, nor is it a comprehensive source of information on the presence of other aircraft.

It is vital that pilots understand the benefits and limitations of the available ATS, in order to be able to ask an ATSU for the one that is best suited to their requirements. In other words, always ask for the level of service appropriate to actual need and be prepared to consider the implications on the flight if that service is not available.

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Safety Sense Leaflet 27 provides advice concerning flight inside controlled airspace.

² FISOs provide advice and information to pilots that is useful for the safe and efficient conduct of flight. In addition, in granting or refusing permission under Rules 12 and 13 of the Rules of the Air Regulations 2015, Aerodrome FISOs are permitted to pass instructions to vehicles and personnel operating on the manoeuvring area.

The UK FIS are designed to balance the provision of advice and information provided to pilots, in order to assist them in safely achieving the objectives of the flight.

- When operating VFR and only in need of information on general airspace activity, local altimeter settings, etc, then it's likely that a Basic Service will be appropriate.
- If operating IFR in IMC and 'see and avoid' principles may be difficult or impossible to apply and assistance from ATC is required to deconflict you from other aircraft in your vicinity, then it's likely that a Deconfliction Service will be appropriate. This is the only surveillance-based UK FIS where a controller will provide you with this type of advice.
- Traffic Service may be requested under VFR or IFR where surveillance based information from ATC on other traffic is sufficient to help to avoid other traffic visually.

Basic Service

A Basic Service is intended to offer the pilot maximum autonomy and is available to IFR flights in Class G airspace, or VFR flights in Class E and Class G airspace. If the ATCO or FISO are aware of airspace activity that may affect your flight they will tell you; however, this is subject to their workload and the avoidance of other traffic is solely the pilot's responsibility. Maintain a good lookout.

Traffic Service

Under a Traffic Service, an ATCO will use radar to provide you with detailed traffic information on specific conflicting aircraft; they will not provide you with deconfliction advice, regardless of your meteorological conditions. A Traffic Service is available to IFR flights in Class G airspace, or VFR flights in Class G airspace.

Deconfliction Service

Only available to IFR flights in Class G airspace. An ATCO will use radar to provide you with detailed traffic information on specific conflicting aircraft AND advice on how to avoid that aircraft. However, the pilot retains responsibility for collision avoidance; you can opt not to follow the ATCO's advice.

Procedural Service

Only available to IFR flights. A non-surveillance service in which deconfliction advice is provided against other aircraft in receipt of a Procedural Service from the same ATCO; the ATCO will not be aware of any other aircraft. The pilot is responsible for collision avoidance. Maintain a good lookout.

Manoeuvring

Basic Service

You are free to manoeuvre laterally and vertically unless you have agreed with a specific limitation with ATC in order to allow them to coordinate you against other aircraft. For example, to fly not above a particular altitude, or remain north of a specified line feature.

Traffic Service

ATC will expect you to fly in accordance with the details you have passed them. You should not change from this, or from any agreed heading or level/level block, without first advising ATC **AND** obtaining a response from them; they may be coordinating your flight against other aircraft, based on their ability to predict where you're going.

Deconfliction and Procedural Service

ATC will expect you to fly in accordance with the details you have passed them. You may not change your heading or level without the approval of ATC; they may be coordinating and deconflicting your flight against other aircraft, based on their ability to predict where you're going.

Traffic information

The purpose of traffic information is to assist you to visually acquire other traffic by providing you with:

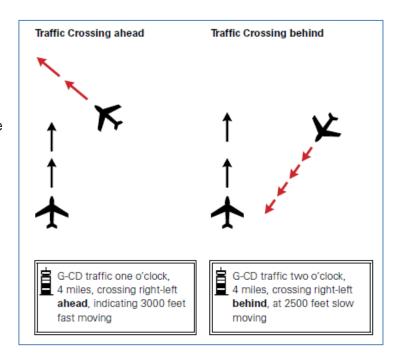
- The position and movement of conflicting aircraft in relation to you.
- The vertical position of conflicting aircraft.
- The apparent horizontal and vertical speed of conflicting aircraft, where relevant.
- The conflicting aircraft type, if known and considered relevant.

The terms used to describe the conflicting aircraft's relative movement have specific meaning and it is important that you understand this in order to plan your reaction to the information. The terms most often used by ATC are:

Crossing

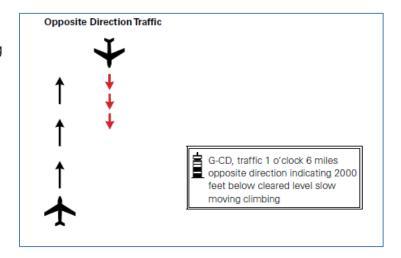
Used to describe the relative movement between your aircraft and the conflicting traffic.

ATC will describe the relative direction of movement either "left to right" or "right to left" and should include the words "ahead" or "behind" where appropriate, to assist you in assessing the conflicting aircraft's flight path.



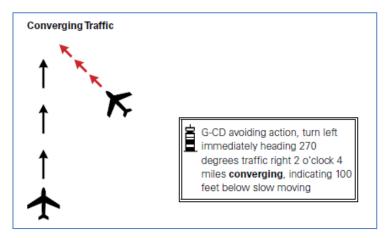
Opposite direction

Used to describe where the flight path of the conflicting aircraft is approximately 180° opposed to that of your flight path but is not necessarily converging.



Converging

Used to describe where there is no relative movement between your aircraft and the conflicting traffic and/or ATC perceives there to be a significant risk of mid-air collision. This type of conflict is the hardest to spot because the human eye is better at detecting moving rather than stationary targets. The conflicting aircraft may appear, at least initially, to be a black dot that is not moving on the canopy.



Avoiding action

Under Basic Service or Traffic Service, where traffic information includes the term "converging", you need to act quickly to visually acquire the conflicting aircraft and to decide on a course of action.

It can take a significant amount of time to visually acquire a conflicting aircraft, identify whether the aircraft poses a threat and to then respond to that threat. Consider also that, if having received traffic information you request a Deconfliction Service in order to receive deconfliction advice, ATC needs enough time to assess the situation, make a decision and provide you with that advice. Remember also that you will need enough time to then process and react to that advice. In short, plan ahead and select an ATS that is appropriate for your phase of flight and meteorological conditions and keep this under review throughout your flight.

Terrain and obstacle clearance

Pilots are **always** responsible for providing their own **terrain and obstacle** clearance whilst flying outside controlled airspace. However, ATC will only provide a Deconfliction Service, or vectors to pilots in receipt of a Traffic Service, at levels which they consider to be terrain safe.

Radar service limitations

Unknown traffic may make unpredictable or high-energy manoeuvres and some aircraft, for example gliders, microlights, balloons and very slow moving aircraft do not always show on radar. When they do, they are often indistinguishable from the radar returns of, say, birds or even road vehicles. Moreover, some radar only show aircraft with transponders. As a result, it is vitally important to maintain the best possible look-out for other aircraft, even when receiving a radar service.

A radar service can be adversely affected by other factors – such as radar clutter, poor radar performance, high traffic density and controller workload – which may mean that traffic information or deconfliction advice is less accurate, late or absent. In these circumstances, ATC will usually give specific warnings of the situation, e.g. "reduced traffic information due radar coverage". You should note the warning and conduct your flight accordingly – for example, adjust your look-out scan, or perhaps change your route or level to provide greater separation from the problem area. Occasionally however, the controller may have to offer an alternative service.

How to obtain a service

You should contact the appropriate ATSU and ask for the service you require. The controller or FISO will tell you whether your request can be met. You can request a change in the type of service at any time. Having established 2-way RT with the unit and been advised to "pass your message", the following information is to be passed:

- Callsign and type of aircraft
- Departure and destination airfields
- Estimated position
- Level (or level band for traffic carrying out general handling)
- Flight rules (IFR/VFR)
- Intentions (next reporting/turning point or general handling area)

ATC will make all reasonable endeavours to provide the type of service that you require; however, there are times when this may not be possible due to the volume of traffic already in receipt of a service from the unit, individual controller workload, equipment serviceability etc. In such cases, ATC may 'reduce' the provision of traffic information and/or deconfliction advice, or may offer the next most appropriate level of service available.

Even when providing a Basic Service, ATC may wish to identify your aircraft on radar to confirm your position and may also allocate you a transponder code – but be aware that neither of these means that you are receiving any type of radar service. ATC may wish, for example, to be able to pass traffic information on you, to another aircraft that is receiving an ATS.

Once an ATS has been agreed, it is important to bear in mind that as the flight progresses and changing weather conditions are experienced, the choice of service may need to be re-considered. For example, a Basic Service or a Traffic Service might not be appropriate for flight in IMC, or where lookout is constrained by other factors, when other ATS are available. The relationship between weather expectations and the availability of the UK FIS need to be considered during pre-flight planning.

Availability of services

Any ATSU may provide the services described in this leaflet³ but you should particularly note the following:

Lower Airspace Radar Service

Specific ATSUs within the UK participate in a system called the Lower Airspace Radar Service (LARS). The location of these units makes them particularly suitable for providing an ATS to transit traffic at and below FL 95 and are generally available on weekdays 0800 to 1700 local. It's important to know that the LARS is just the system of units and **not** the service itself; the LARS units provide UK FIS. Details of the LARS can be found in the UK AIP at ENR 1.6.3, with the participating units and their area of responsibility shown in a chart at ENR 6.1.6.3.

Area Control Centre (ACC) Flight Information Service

The London and Prestwick ACCs provide UK FIS within their respective areas of responsibility, as shown in the charts at UK AIP ENR 6-2-0-1 and 6-2-0-2. FISOs use the callsign "Scottish Information" or "London Information" and provide Basic Service only. Traffic Service and Deconfliction Service are available from controllers at the Prestwick ACC in many parts of the Scottish FIR, subject to controller workload. You should consider a call if you have not obtained an ATS elsewhere and note that the service for the whole London FIR may be operated by one person. Although a transponder code may be allocated by a FISO, no radar service will be provided.

Military Aerodrome Traffic Zone (MATZ) Penetration service

This is available for military aerodromes which have a MATZ. The service will often include provision of a radar service. Details are in the UK AIP at ENR 2.2.2 and contact frequencies are shown on the CAA 1:500 000 and 1:250 000 VFR charts. SafetySense Leaflet 26 contains guidance for visiting or flying near military aerodromes.

Other radar service providers

The UK FIS may also be provided by other civil or military providers in certain areas, including around certain Control Zones and Control Areas and under TMAs.

Danger Area Services

Nominated ATSUs (see UK AIP ENR 5.1.3 and the legend on the CAA 1:500 000 and 1:250 000 VFR charts) may provide a Danger Area Crossing Service (DACS) (annotated '†' against contact frequencies) or a Danger Area Activity Information Service (DAAIS) (annotated '§' against frequencies). DACS may also be available by telephone (annotated against contact numbers frequencies). MERELY OBTAINING INFORMATION UNDER DAAIS DOES NOT GIVE A CLEARANCE TO CROSS AN ACTIVE DANGER AREA. THE CONTROLLING UNIT MUST HAVE GIVEN YOU A SPECIFIC CLEARANCE TO ENTER IT.

Leaving the frequency

When you wish to change to another frequency, always tell the FISO/Controller that you are leaving their frequency and your subsequent intentions. Set SSR code 7000 or appropriate transponder code with the 'altitude' function (if available) selected.

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³ Pilots should bear in mind that some ATSU are staffed by FISOs and as such will ONLY be able to provide a Basic Service.

Frequency monitoring codes

Within the UK, specific frequency monitoring SSR codes (more popularly known as 'listening out' squawks) have been established for pilots to use when operating in the vicinity of certain areas of controlled airspace (see UK AIP ENR 1.6.2.2.5). Pilots monitoring these frequencies but who do not require an ATS should select the specified SSR code with altitude (if available) to indicate that they are monitoring the promulgated ATC frequency. This allows ATC to attempt to establish contact with an aircraft which is displaying such a code and which is considered to be infringing, or is likely to infringe, controlled airspace. Selection of these codes does not imply the provision of any form of ATS and their use does not prevent a pilot from requesting a service at any time.

Summary

It is essential to remember that an ATS is not intended to replace pre-flight planning, nor is it intended to be a comprehensive source of information on the presence of other aircraft. It is vital that pilots understand the benefits and limitations of the available UK FIS. Plan ahead and select the service that is appropriate for your phase of flight and meteorological conditions and amend your choice of ATS and/or your flight itself to suit the changing circumstances.

Resources

UK Flight Information Services (CAP 774)

The UK Flight Information Services (CAP 774) details the suite of air traffic services which (excluding aerodrome services) are the only services provided in Class G airspace within the UK Flight Information Region (Where notified, elements of the UK FIS are also provided to aircraft operating in Class E airspace). Therefore, this document is equally applicable to all civilian and military pilots, air traffic controllers, and Flight Information Service Officers.

Radiotelephony Manual (CAP 413)

The UK Radiotelephony Manual (CAP 413) aims to provide pilots, Air Traffic Services personnel and aerodrome drivers with a compendium of clear, concise, standard phraseology and associated guidance for radiotelephony communication in United Kingdom airspace.

CAA document search

NATS Aeronautical Information Service

- UK Integrated Aeronautical Information Package
- UK AIP GEN
- UK AIP ENR
- Aeronautical Information Circulars
- NOTAMS
- VFR chart updates

Airspace & Safety Initiative

The Airspace & Safety Initiative (ASI) is a joint CAA, NATS, AOA, GA and MoD project to investigate and tackle the major safety risks in UK airspace. The initiative aims to encourage good practice for all pilots, to help reduce airspace incidents such as infringements of controlled airspace.

Flyontrack

An independent website for private pilots, covering airspace infringement issues. The site is run on behalf of GASCo and is part of the Airspace & Safety Initiative.