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1 INTRODUCTION

a) In this leaflet, 'controlled airspace' means airspace of Classes A, B, C, D and E (the UK does not use B at present). This leaflet describes only the types of air traffic service available **outside** controlled airspace; i.e. airspace Classes F and G – often known as the 'open' FIR. SafetySense Leaflet [27](#) gives advice for flight in Controlled Airspace. In addition to the Alerting (Emergency) Service required by ICAO, the following types of service form part of the UK Flight Information Services (FIS) as defined in CAP 774:

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

These services apply to the departure, en-route and arrival stages of your flight.

b) If you require one of these services you must ask an appropriate Air Traffic Service Unit (ATSU) to provide the particular service you wish to receive. However, some ATSUs are only staffed by Flight Information Service Officers (FISO). Such ATSUs will **ONLY** be able to provide a Basic Service for their area of responsibility.

c) If the service you requested cannot be provided, for instance due to workload or equipment problems, another service may be offered.

d) Alerting Service is provided automatically by ATSUs (see also paragraph 2(c)).

e) It is important that you understand the benefits and limitations of the available air traffic services so that you can ask the controller for the best one to suit your needs.

f) You do not have to hold an instrument rating to fly in accordance with the Instrument Flight Rules (IFR) **outside controlled airspace**. There is nothing mysterious about IFR within UK airspace, they are there to ensure that you have adequate clearance from ground obstacles and that you are safely separated in the vertical plane, according to your magnetic track, from other aircraft in flight. The **UK** regulations for IFR flights outside controlled airspace are as follows:

- Except when necessary for take-off and landing, or when authorised by the appropriate authority, you must be flying at least 1000 ft above the highest obstacle within 5 nm of your aircraft. However, you may disregard this if you are flying IFR below 3000 ft and you are **clear of cloud and in sight of the surface**.*

- If you are in level flight above the transition altitude (usually 3000 ft amsl but higher under some Controlled Airspace) you must set your altimeter to 1013 Hpa (Mb) and fly at a level appropriate to your magnetic track in accordance with the Quadrantal System.

g) There is often confusion about the IFR in relation to VMC and IMC. 'VMC' and 'IMC' refer to the weather conditions encountered during flight and are terms used to denote actual weather conditions, in relation to the 'VFR minima'. 'VMC' are conditions which fulfil the VFR minima. In the UK, pilots are quite at liberty to fly under IFR when in VMC.

h) The VFR minima (weather conditions for flying in accordance with Visual Flight Rules – i.e. VMC) for flight **outside controlled airspace** are contained in the box below. For VFR flight in Airspace Classes C, D, or E, stricter limits apply. See Leaflet 27 "Flight in Controlled Airspace".

	<u>Distance from cloud</u>		<u>Flight Visibility</u>
	<u>Horizontal</u>	<u>Vertical</u>	
at and above FL 100	1500 m	1000 ft	8 km
below FL 100	1500 m	1000 ft	5 km
OR <u>at or below 3000 ft amsl</u>	clear of cloud with the surface in sight		5 km
Aircraft, other than helicopters, flying at 140 kt IAS or less	clear of cloud with the surface in sight		1500 m
Helicopters (at reasonable IAS)	clear of cloud with the surface in sight		1500 m

PILOTS MUST BE AWARE OF THE MINIMUM SAFE ALTITUDE AND MUST COMPLY WITH RULE 5 OF THE RULES OF THE AIR REGULATIONS (THE LOW FLYING RULES)

2 NON- RADAR SERVICES

a) Basic Service:

This non-radar service provides information to assist with the safe and efficient conduct of your flight. The information available may include:

- Weather.
- Serviceability of navigation and approach aids.
- Conditions at aerodromes.
- General airspace activity.
- Other information pertinent to flight safety.

Remember that no air traffic service is intended to replace pre-flight planning, nor is it intended to be a comprehensive source of information on the presence of other aircraft. The controller may be able to provide information on aircraft in your vicinity that have contacted him, but it is **most unlikely** that he will be aware of **all** aircraft that may affect your flight. You must not expect warnings of conflicting traffic to be given under a Basic Service. Most ATSU's can provide a Basic Service within their local areas. Basic Service can normally be provided when conditions prevent an ATSU providing a radar service.

b) Procedural Service:

This non-radar service is the equivalent of the deconfliction service described below. The controller deconflicts **participating** traffic by issuing level, track and/or timing instructions. It is routinely used for IFR traffic carrying out pilot-interpreted approaches when radar is not available, or for aircraft flying along Advisory Routes. It may also be used when radar contact is temporarily lost with an aircraft

receiving one of the radar services. You **must** inform the controller before changing track or level, or if your ETA changes by 3 minutes or more, because it may affect your separation from other aircraft. The controller will only be aware of traffic that he is communicating with, so, if you can, keep a good lookout for the others!

c) Alerting (Emergency) Service:

When the controller becomes aware, or suspects, that you need Search and Rescue assistance, he will notify the appropriate organisations; this is known as an Alerting Service. It is not a service which you request – it is provided automatically. Remember, the best way of making sure that the controller realises that you have an emergency situation is to make a clear MAYDAY or PAN call, whichever is appropriate.

3 RADAR SERVICES



a) Traffic Service

Traffic Service is a radar service which aims to provide you with information on conflicting traffic, but **no** avoiding action will be offered. Hence you are responsible for maintaining separation from other aircraft. This service is tailor-made for letting you get on with your flying in VMC while the controller provides you with an extra pair of eyes. This is a very useful facility when carrying out general handling, or when flying through busy airspace where repeated avoiding action under

Deconfliction Service may be unnecessary and time-wasting. The controller may provide radar headings for his planning purpose or at the pilot's request. The pilot still remains responsible for separation from other aircraft and may decide not to accept the heading. However, you **must** tell the controller **before** you change level, operating area, heading or route. Traffic Service may be requested under any flight rules or meteorological conditions, but in IMC it is better to obtain and use Deconfliction Service (if available).

b) **Deconfliction Service**

If controller workload permits, this service is available to all flights, irrespective of flight rules or meteorological conditions. It aims to provide you with the information **and** the advisory avoiding action necessary to deconflict you from other aircraft. It is the preferred radar service when flying in IMC. But remember, if you are:

- not qualified to fly in IMC; or
 - qualified but out-of-practice,
- you **must NOT** accept an advisory turn or level change which will put you into IMC.

However, if you do not take the controller's advice, or if for any other reason you cannot accept heading or level changes, you **must tell the controller**, who may be able to offer alternative avoiding action. You **must** also inform the controller before making any other changes in heading or level, because it may affect your separation from other aircraft. If you request Deconfliction Service, but the controller is unable to provide that service, you may be offered Traffic Service instead.

4 HOW TO OBTAIN A SERVICE

a) You should contact the appropriate ATSU and ask for the service you require. The controller will tell you whether your request can be met. You can request a change in the type of service at any time. You should give the ATSU the following information:

- call sign and type of aircraft;
- departure and destination airfields;
- estimated position;
- level (or level band for traffic carrying out general handling);
- intention (next reporting/turning point or general handling area);
- flight rules (IFR/VFR); and
- type of service requested.

b) Services are available from civil and military ATSUs, subject to their operating hours and controller workload. However, at weekends many military ATSUs are closed and you may not be able to obtain a radar service for every part of your route. In this case, consider contacting the FIR Flight Information Service Officer for a Basic Service, or aerodromes along your route who may be able to provide a more comprehensive air traffic service for their local area.

NB: Remember, even when only providing a Basic Service, a controller may wish to identify your aircraft on radar to confirm your position – but that does **not** mean that a radar service will subsequently be provided. Furthermore, just because you have been allocated a transponder code, **AND IDENTIFIED, it does not mean that you are receiving any service.**

5 RADAR SERVICE LIMITATIONS

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 birds, road vehicles etc.; this is an inherent limitation in radar services. It is important that you are aware of this and **maintain the best possible look-out for other aircraft even though you are receiving a radar service**. When a radar service is adversely affected by other factors, e.g. weather returns on the radar, poor radar performance, high traffic density, controller workload etc., the controller may give you a specific warning of the situation, e.g. 'Reduced traffic information from all around, at base of radar cover'. You should note the warning and conduct your flight accordingly, for example adjusting your look-out scan, or perhaps changing your altitude to provide greater separation from the problem.

6 TERRAIN AND OBSTACLE CLEARANCE



Pilots are **always** responsible for providing their own **terrain and obstacle clearance** whilst flying under VFR. However, ATSU's will only provide Deconfliction Service above levels/altitudes which they consider safe.

7 CHANGING FREQUENCY



When you are in sight of your destination or wish to change to another frequency, always tell the FISO/Controller that you are leaving their frequency and your subsequent intentions.

8 AVAILABILITY OF SERVICES

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

a) Lower Airspace Radar Service:

Although many ATSU's can provide radar services, those whose location makes them particularly suitable for providing radar service to transit traffic at and below FL 95 participate in a system called the Lower Airspace Radar Service (LARS). Details are in the UK AIP ENR 1-6-4, latest chart of coverage shown in 6-1-6-3. The service is mostly available weekdays 0800 to 1700 local.

b) ATCC FIR Service:

The London and Scottish ATCCs try to provide FIS in their FIRs. Details are in the UK AIP ENR 1-1-2-1-2. You should consider a call if you have not obtained any service elsewhere. (Note that the service for the whole London Flight Information Region may be operated by one person.) Although a transponder code may be allocated by the FISO, no radar service will be provided.

c) Military Aerodrome Traffic Zone Penetration Service:



This is available for aerodromes which have Military Aerodrome Traffic Zones (MATZs). The Service will often include provision of a radar service. Details are in AIC 95/2008 (Yellow 276) 'Military Aerodrome Traffic Zones' and in the UK AIP ENR 2-2-3. SafetySense Leaflet [26](#) contains guidance for visiting or flying near military aerodromes.

d) Other radar service providers:

As published on charts and in the UK AIP ENR – 1-6-5 and 1-6-6, Radar services may be available from other providers in certain areas for flights above FL 55. Military radar units may also be able to provide similar services above FL 100.

e) Danger Area Services:



Nominated ATSUs (see UK AIP ENR 5-1-3-1 to -22 and the legend on the CAA 1:500,000 charts) may provide (†) a Danger Area Crossing Service (DACs) or (§) a Danger Area Activity Information Service (DAAIS). DACs may also be available by telephone (¶). **MERELY OBTAINING INFORMATION UNDER DAAIS DOES NOT GIVE A CLEARANCE TO CROSS AN ACTIVE DANGER AREA. YOU MUST HAVE A SPECIFIC CLEARANCE.**

f) Areas of Intense Aerial Activity and Aerial Tactics Areas:

Intense civil and/or military activity takes place within these areas which are listed in ENR 5-2. Pilots of non-participating aircraft who fly in these AIAAs/ATAs should keep a good look out and consider calling the appropriate frequency, which is also shown on the 1:500,000 chart.

g) Free-fall Parachute Drop Zones:

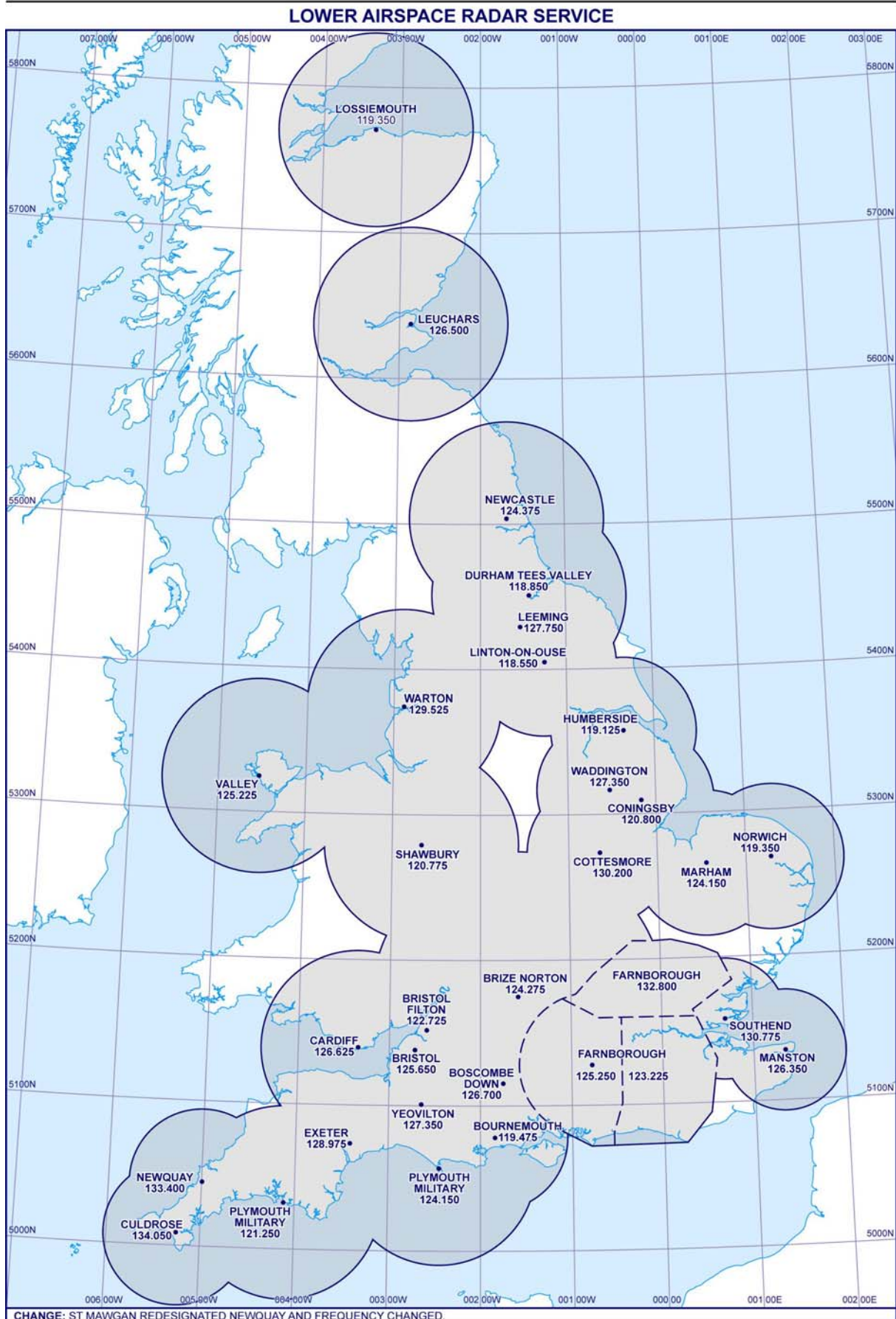


Intense free-fall activity is conducted up to FL 150 at permanent drop zones (listed in the UK AIP at ENR 5.5) or at other sites by NOTAM. Activity information may be available from certain 'Nominated ATSUs' as listed on the legend of VFR charts, but pilots are advised to assume a drop zone (DZ) is active if no information can be obtained. Parachute dropping aircraft and, on occasions, parachutists may be encountered outside the DZ circle shown on VFR charts and pilots are strongly advised to give a wide berth to all active DZs.

LARS units as at December 2008 (Weekday cover)

UK AIP

(18 Dec 08) ENR 6-1-6-3



AERO INFO DATE 15 OCT 08

Civil Aviation Authority

AMDT 13/08

Air Traffic Services Outside Controlled Airspace – Which do you need?

Basic Service

A Basic Service is intended to offer the pilot maximum autonomy and the avoidance of other traffic is solely the pilot's responsibility. The controller/FISO will pass information pertinent to the safe and efficient conduct of flight. This can include weather, changes of serviceability of facilities, conditions at aerodromes and general activity information within a unit's area of responsibility.

Traffic Service

A Traffic Service provides the pilot with surveillance derived traffic information on conflicting aircraft. No deconfliction advice is passed and the pilot is responsible for collision avoidance. A Traffic Service contains the information available in a Basic Service. In addition, controllers provide surveillance derived traffic information on relevant conflicting traffic. Headings and/or levels may also be issued for positioning and/or sequencing.

Deconfliction Service

A Deconfliction Service provides the pilot with traffic information and deconfliction advice on conflicting aircraft. However, the avoidance of other aircraft is ultimately the pilot's responsibility. A Deconfliction Service contains the information available in a Basic Service. In addition, controllers shall aim to assist the pilot with his responsibility for the safety of the aircraft by passing traffic information and deconfliction advice. Headings and/or levels will also be issued for positioning, sequencing and/or deconfliction advice.

Procedural Service

A Procedural Service is a non surveillance service in which deconfliction advice is provided against other aircraft in receipt of a Procedural Service from the same controller. The avoidance of other aircraft is the pilot's responsibility.

Pilots are always responsible for their own terrain and obstacle clearance