Guide to Visual Flight Rules in the UK

Contents Page

Introduction

Aeronautical Information

Airspace Classifications and Visual Flight Rules

- Aerodrome Traffic Zones (ATZs)
- Military Aerodrome Traffic Zones (MATZs)

Airspace subject to Flight Restrictions and Hazards

- Prohibited, Restricted and Danger Areas
- Royal Flights
- Areas of Intense Air Activity (AIAAs) and Aerial Tactics Areas (ATAs)
- Gliders
- Free Fall Parachute Drop Zones
- Bird Sanctuaries
- High Intensity Radio Transmission Areas (HIRTAs)
- Temporary Reserved Areas (TRAs)
- Emergency Restriction of Flying Regulations and Restricted Area (Temporary) – RA(T)

Types of Air Traffic Services at Aerodrome

Standard Overhead Join Diagram

Air Traffic Rules and Services

Altimeter Setting Procedures

Carriage of Equipment

SSR Operating Procedures

Filing of Flight Plans

Low-Level Civil Aircraft Notification Procedures (CANP)

Aeroplane Performance

Other useful sources of information relating to VFR Flying

- RT Procedures
- Frequency Reference Cards
- VFR Legends

March 2009

Introduction

<< back to contents page

The information relates, in general to Lower Airspace. Lower Airspace is defined as that airspace up to Flight Level 95 (FL95); Middle Airspace is between FL100 and FL195 and Upper Airspace is deemed as that above FL195. No detailed information is included in respect of Upper Airspace. Pilots intending to carry out VFR flights at or above FL195 should consult the UK AIP.

Pilots of VFR flights within UK Airspace below FL 195 are invited to consult this guidance material on the understanding that it **does not represent a substitute for the more comprehensive information contained in the AIP**. In the event of confliction between information in this guide and the AIP, information in the AIP should be regarded as the authoritative source. Please note that the UK AIP can be viewed at **www.ais.org.uk.**

Certain sections of the airspace rules and regulations outlined in this Guide either do not apply to gliders or are applied differently. The main differences are outlined on page 10. Glider pilots intending to operate in UK airspace should consult the UK Air Navigation Order, the UK Rules of the Air Regulations and the UK AIP to ascertain how the rules and regulations apply to their flight.

VFR flight is permitted in Visual Meteorological Conditions (VMC) by day within UK Airspace except that which is notified as Class 'A' Airspace.

The VMC minima are determined by class of airspace, altitude and airspeed; however, the pilot licence privileges notified at Schedule 8 of the UK Air Navigation Order (ANO) may impose more stringent requirements on PPL/NPPL/BCPL holders.

VFR flight is not permitted in any UK airspace at night. Night is defined as the time from half an hour after sunset until half an hour before sunrise, sunset and sunrise being determined at surface level.

In general separation standards are not applied by ATC to or between VFR flights and therefore separation from other aircraft remains the responsibility of the pilot in command of a VFR flight. The exception to this applies in Class C Airspace – where ATC will separate VFR from IFR but not VFR from VFR.

Of additional note are the CAA published **"How not to infringe - ten top tips"** as listed below –

1. Navigation is a skill, and needs to be practised regularly, both planning a flight and conducting it. Safety Sense Leaflet 5 (available on the CAA website and in the LASORS publication) contains good advice on VFR navigation, but it only works if you read and apply it!
2. If you plan a route through controlled airspace, remember that a crossing clearance may not always be possible and consider that route as your 'secondary' plan. Your primary plan should avoid controlled airspace - and don't forget to make your overall time and fuel calculations using the longer, primary route!
3. Where possible, avoid planning to fly close to controlled airspace boundaries. If you do need to do so, be very careful. A small navigational error or distraction of any sort can lead to an infringement – and it doesn't take much to ruin your day!
4. Pilot workload rises rapidly in less than ideal weather - and so do infringements. If the weather starts to deteriorate, consider your options early and if necessary divert or turn back in good time.
5. If you wish to transit controlled airspace, think about what you need to ask for in advance and call the appropriate Air Traffic Control (ATC) unit at 10 nautical miles or five minutes flying time from the airspace boundary. This gives the controller time to plan ahead.
6. Thinking before you press the transmit switch and using the correct Radio phraseology helps air traffic control to help you - and sounds more professional!
7. Be aware that ATC may be busy when you call them – just because the frequency doesn't sound busy doesn't mean that the controller isn't busy on another frequency or on landlines.
8. Remember - the instruction 'Standby' means just that; it is not an ATC clearance and not even a precursor to a clearance. The controller is probably busy so continue to plan to fly around the airspace. Only fly across the airspace if the controller issues a crossing clearance.
9. Your planned route through controlled airspace may appear simple on your chart but the traffic patterns within that airspace may make it unrealistic in practice. Be prepared for a crossing clearance that does not exactly match your planned route but will allow you to transit safely.
10. Don't be afraid to call ATC and use the transponder when lost or uncertain of your position - overcoming your embarrassment may prevent an infringement, which may in turn prevent an Airprox (or worse).

Please note this document should be used for guidance only. Any changes affecting the contents will be amended on the appropriate AIRAC date – or as soon as possible thereafter.

Users of the guide are invited to comment on this guidance material provided and to submit suggestions for possible future enhancement to:

Manager Aeronautical Charts & Data
Directorate of Airspace Policy
CAA House
45-59 Kingsway
London
WC2B 6TE

vfrcharts@caa.co.uk

Aeronautical information

<< back to contents page

Where to find information:

UK Aeronautical Information Publication (UK AIP)

Static information, updated every 28 days, containing information of lasting (permanent) character essential to air navigation.

GEN – General operational, legal and administrative information.
ENR – En-route airspace information, including airspace classifications, types of airspace, airspace restrictions, operation of equipment, etc.
AD – Information pertaining to UK licensed aerodromes.

AIP Supplements

Temporary changes to the AIP, usually of long duration, containing comprehensive text and/or graphics.

Aeronautical Information Circulars (AICs)

AICs are notices relating to safety, navigation, technical, administrative or legal matters. These are issued whenever it is necessary to promulgate information that does not qualify for inclusion in the AIP or as an AIP supplement. Circulars are published on Thursdays every 28 days. Each AIC is numbered sequentially by calendar year, eg 16/2004, 1/2007.

In order to facilitate easy selection of AICs they are colour-coded as follows:

White - Administration matters, eg licence examination dates, new publications or amendments to publications, course fees and charges.
Yellow - Operational matters including ATS facilities and requirements.
Pink - Safety related topics.
Mauve - UK Airspace Restrictions imposed in accordance with the Temporary Restriction of Flying Regulations.
Green - Maps and Charts.

Each AIC is also given an additional 'colour continuity number' that appears after the serial number, e.g. Yellow 113, Mauve 211.

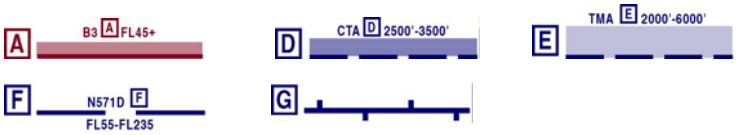
AICs may be reissued or amended, in which case text insertions or amendments will be marked by a thick vertical bar or an arrow facing the text in the margin. Deletions will be marked by an arrow facing away from the text.

Notices to Airmen (NOTAM)

Notices concerning the condition or change to any facility, service or procedure notified within the AIP. **NOTAM** are available in the form of Pre-Flight Information Bulletins (PIB) using a live database at the AIS website.

Airspace Classifications

<< back to contents page



The airspace over the UK and surrounding waters from the surface to FL 245 is divided into two Flight Information Regions (FIR); the London FIR and the Scottish FIR. The airspace above the FIR is known as the Upper Flight Information Region (UIR). The airspace within the FIR/UIR is divided into different types using the ICAO Airspace Classification System.

The ICAO Airspace Classification System consists of seven classes of airspace, each specifying minimum Air Traffic Service requirements and the services provided. The UK has adopted the ICAO System but for the present only six classes have been implemented. (No airspace is designated Class B in the UK). Classes A, C, D & E are Controlled Airspace whilst for Classes F & G Airspace the UK has registered differences from the ICAO Standard so as to allow greater flexibility to VFR flights at and below 3000ft amsl and to allow IFR flight in this airspace without the requirement to carry a radio.

Aerodrome Traffic Zones (see page 6 of this document) adopt the classification of the airspace in which they are situated but additional Rules apply to flight within them.

Visual Flight Rules

<< back to contents page

The Visual Flight Rules (Rules 25 to 29 of the UK Rules of the Air Regulations 2007 refer) require an aircraft to be flown in accordance with the VMC minima appropriate to the classification of the airspace. Additionally, when flying in controlled airspace (except Class E) unless otherwise authorised by the ATC Unit, the commander of the aircraft must file a flight plan (see page 29), obtain an ATC clearance, maintain a listening watch on the appropriate frequency and comply with any instructions given by the ATC Unit. Pilots are reminded that a response of “Standby” from ATC is NOT a clearance and Controlled Airspace (CAS) should NOT be entered on such a command.

VFR flight is not permitted in Class A Controlled Airspace.

Requirements for VFR flights

Weather minima for VFR flight within Controlled Airspace (Classes C to E Airspace).

(a) At and above FL 100

8 km flight visibility#
1500m horizontally from cloud*
1000ft vertically from cloud*.

(b) Below FL 100

5 km flight visibility#
1500m horizontally from cloud*
1000ft vertically from cloud*.

(c) At or below 3000ft

As in (b) above

for fixed wing aircraft operating at 140kt or less:
5 km flight visibility#
Clear of cloud and in sight of the surface.

For helicopters:
Clear of cloud and in sight of the surface.

For the purpose of taking off or landing within a Control Zone, the actual meteorological visibility reported by ATC shall be taken as the flight visibility. (Rule 26 of the UK Air Navigation Order refers).

There is no Class B Airspace in the UK FIR and Class C only exists above FL195. To accommodate VFR and military autonomous operations above FL 195 Temporary Reserved Areas (TRAs) have been introduced. TRAs are notified volumes of airspace within which ATS will be provided in accordance with UK Air Traffic Services Outside Controlled Airspace (ATSOCAS) rules. The dimensions and activation times of these TRAs are detailed in the **UK AIP ENR 5.2.**

For further details of TRAs please refer to AIC 1/2007 (Yellow 227)

Weather minima for VFR flight outside Controlled Airspace (Classes F and G Airspace)

(a) At and above FL 100

8km flight visibility
1500 m horizontally from cloud
1000ft vertically from cloud.

(b) Below FL 100

5km flight visibility
1500 m horizontally from cloud
1000ft vertically from cloud.

(c) At or below 3000ft

As in (b) above or:

for any aircraft:
5 km flight visibility
Clear of cloud and with the surface in sight or

for an aircraft, other than a helicopter, operating at 140kt or less:
1500 m flight visibility
Clear of cloud and with the surface in sight or

for helicopters:
1500m horizontally from cloud
Clear of cloud, with the surface in sight and in a flight visibility of at least 1500m

Speed Limitations

Below FL100, an airspace speed limit of 250kt applies. In addition, this limit may be lower when published in procedures or when required by ATC.

Flight Plan Requirements

A Flight Plan is required for flights in all Controlled Airspace except Class E. In certain circumstances the Flight Plan requirement may be satisfied by passing flight details on RTF (see page 30). A Flight Plan comprises sufficient information to enable an ATC Unit to issue a clearance and for search and rescue purposes (Rule 29 of UK Air Navigation Order refers).

ATC Clearance and ATC Instructions

(a) ATC Clearance is required for flight in all Controlled Airspace except Class E, and compliance with ATC instructions is mandatory.

(b) In Class E Controlled Airspace pilots of VFR flights are strongly recommended to make their presence known to the appropriate ATC Unit and comply with ATC instructions.

(c) Outside Controlled Airspace an aircraft receiving a service from an ATC Unit is expected to comply with ATC instructions unless the pilot advises otherwise.

ATC Responsibility for VFR Flights

Inside Controlled Airspace:

Class C: Separation provided between IFR and VFR flights;
Traffic Information and instructions in respect of other VFR flights to enable pilots to effect avoidance and integration.

Class D: Traffic Information and instructions to enable pilots to effect avoidance and integration.

Class E: As for Class D as far as is practicable for known flights.

Outside Controlled Airspace (Airspace Classes F and G):

UK Flight Information Services (See Page 20)

VFR Flight in Class C Airspace Above FL 195

VFR flight by civil aircraft above FL 195 shall not be permitted unless it has been accorded specific arrangements by the appropriate ATS authority. VFR flight shall only be authorised:

(a) in reserved airspace;

(b) outside reserved airspace up to FL 285, and then only when authorised in accordance with the procedures detailed for Non-Standard Flights in Controlled Airspace.

If utilising permanently established reserved airspace, the established booking procedures for that airspace should be followed. If there is a need for the establishment of temporary reserved areas then procedures for conducting Unusual Aerial Activities in Controlled Airspace shall be followed. Standing arrangements for temporary reserved areas for gliding in Class C airspace are shown at ENR 1.1.1.

It is anticipated the demand for VFR access outside of an airspace reservation will be minimal. Such access will be accommodated within the context of safety, capacity and effect on the ATS network as a whole; consequently VFR access to the ATS route structure is only likely to be permitted in exceptional circumstances. In this case the appropriate civil ATC Unit will co-ordinate provision of ATS. Operators seeking to operate in such areas should contact the appropriate ACC Operations Department. Applications for VFR flight to avoid IFR ATS route flow restrictions will not be granted.

Operators seeking localised VFR flight above FL 195 not requiring reserved airspace and clear of the ATS route structure should contact the Military Airspace Manager (MAM) in the Airspace Management Cell located at LACC, who will co-ordinate access arrangements and military ATC provision within unit capacity. Such flights shall only be permitted where procedures are established with the controlling authority.

VFR Flight in Class C Areas of Delegated ATS

Charts depicting these areas are detailed at ENR 6-2. These delegated areas of ATS are busy international interfaces. Consequently, approval for VFR flight will only be granted in exceptional circumstances and after co-ordination with and agreement of the respective ATS provider.

Applications for VFR access to these areas should in the first instance be made to:

Directorate of Airspace Policy
Airspace Utilisation Section (AUS)
K7
CAA House
45-59 Kingsway
London
WC2B 6TE

Tel: 020-7453 6599
Fax 020-7453 6593

Aerodrome Traffic Zones (ATZ)

<< back to contents page

An ATZ is established around each aerodrome notified for the purposes of Rule 45 of the UK Rules of the Air Regulations during the times notified (see 19). Rule 45 states that an aircraft shall not fly, take-off or land within the ATZ of an aerodrome unless the commander of that aircraft has obtained the permission of the air traffic control unit at the aerodrome or – where there is no air traffic control unit – has obtained from the aerodrome flight information unit at the aerodrome, information to enable the flight within the zone to be conducted with safety or – where there is no air traffic control unit nor aerodrome flight information service unit – has obtained information from the air/ground radio station at that aerodrome to enable the flight to be conducted with safety.

Pilots wishing to enter an ATZ must comply with the published requirements for that particular aerodrome and in the case of an aerodrome with an Air Traffic Control Unit, with any instructions issued by that unit. ATZs are not included in the Airspace Classification System. An ATZ conforms to the Class of Airspace in which it is situated thus, for example, in Class G Airspace Rule 45 will apply but in Class D Airspace the requirements of Class D will apply in addition (UK AIP section ENR 1.4 refers).

An ATZ is defined in relation to an aerodrome where:

(a) the length of the longest runway is notified as 1850 metres or less, the airspace extending from the surface to a height of 2000ft above the level of the aerodrome within the area bounded by a circle centred on the notified mid-point of the longest runway and having a radius of 2nm. Where such an ATZ would extend less than 1.5nm beyond the end of any usable runway at the aerodrome the radius of the circle may be extended to 2.5nm;

(b) the length of the runway is notified as greater than 1850 metres, the airspace extending from the surface to a height of 2000ft above the level of the aerodrome within the area bounded by a circle centred on the notified mid-point of the longest runway and having a radius of 2.5nm.

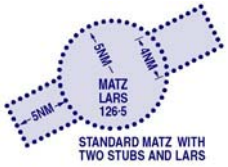
An ATZ at a civil aerodrome does not exist outside the notified hours of operation of the A/G, AFISO or ATC Unit. At a Government aerodrome, an ATZ will remain active during such times as are notified, regardless of the operational status of its ATS unit (UK AIP section ENR 2.2 and, where appropriate, certain section AD 2 items 2.17 refer). However, pilots are reminded that flying may take place outside of the published aerodrome operating hours and should therefore exercise caution when flying in the vicinity.

Reference to specific ATZ's can be found in the ENR section 2-2-2-1/5 of the AIP.

See the UK ATS Airspace Classifications Summary diagram

Military Aerodrome Traffic Zones (MATZ)

<< back to contents page



Military Aerodrome Traffic Zones (MATZ) are established at a number of locations – follow the link on page 8 for details. The purpose of a MATZ is to provide a volume of airspace within which increased protection may be given to aircraft in the critical stages of circuit, approach and climb-out. Normally, these zones comprise:

(a) the airspace within 5nm of the mid-point of the longest Runway, from the surface to 3000ft above aerodrome level;

(b) the airspace within a 'stub' (or at some aerodromes 2 stubs) projected from the above airspace having a length of 5nm along its centre-line, aligned with a selected final approach path, and a width of 4nm (2nm either side of the centre-line), from 1000ft above aerodrome level to 3000ft above aerodrome level.

An Aerodrome Traffic Zones (ATZ) exists within most MATZ and is based upon the same reference points as listed in the table below. Although the recognition of a MATZ by civil pilots is not mandatory, they are encouraged to do so. Civil pilots, however, must comply with the provisions of the current UK Rules of the Air Regulations in respect of the ATZ. The notified hours of operation of an ATZ may vary from the notified hours of watch of a MATZ.

MATZ Penetration Procedures for Civil Aircraft

A MATZ Penetration Service for the provision of increased protection of VHF RTF equipped civil aircraft is available from the controlling aerodrome of said MATZ – pilots wishing to penetrate a MATZ are requested to observe the following procedures:

(a) when 15nm or 5 min flying time from the zone boundary, whichever is the greater, establish two-way RTF communication with the controlling aerodrome on the appropriate frequency using the following phraseology:

'.....(controlling aerodrome), this is.....(aircraft callsign), request MATZ penetration'.

(b) when the call is acknowledged and the ATS Unit requests 'pass your message', pass the following information:

(i) Call Sign/Type

(ii) Departure Point and Destination

(iii) Present Position

(iv) Level

(v) Additional Details/Intentions (e.g. Flight Rules, next route point)

(c) comply with any instructions issued by the controller.

(d) maintain a listening watch on the allocated RTF frequency until the aircraft is clear of the MATZ.

(e) advise the controller when the aircraft is clear of the MATZ.

Flight conditions are not required unless requested by the controller.

The military ATSU providing the MATZ Penetration Service will normally continue with the service that the aircraft was previously receiving. In the interests of flight safety and good airmanship, it is strongly recommended that all pilots not previously receiving an ATS obtain a MATZ penetration 'approval' from the MATZ operating authority, prior to entering a MATZ. It is recognized that most MATZ crossing/penetration 'approvals' will be obtained via RT by pilots in receipt of an ATSOCAS; however, it should be possible for a pilot to request a MATZ crossing/penetration 'approval' without the use of radio (ie by prior agreement via telephone). In accordance with Class G airspace classification and the rules of ATSOCAS, pilots are ultimately responsible for maintaining their own separation against other airspace users within the MATZ. Occasionally, a change in service may need to be negotiated in order to facilitate the MATZ crossing and the advisory information and/or instructions passed by the ATSU will accord with the service being provided. In the event of no radar being available, a procedural service, and/or routeing instructions, might be provided to aircraft penetrating the MATZ

If appropriate, controllers will endeavour to co-ordinate flights with the controlling authority of an adjacent zone, but pilots should not assume clearance to penetrate another MATZ until it is explicitly given.

To enable vertical separation to be applied, all aircraft will be given an altimeter setting to use within the MATZ. Normally this will be the aerodrome QFE, with the exception of the following:

(a) Within the Odiham MATZ the transit pressure setting will be the Farnborough QNH.

(b) Within the Warton MATZ the setting will be the Warton QNH.

(c) Within the Lakenheath/Mildenhall MATZ the setting will be the Lakenheath QNH.

(d) In the case of overlapping MATZs, the altimeter setting to be used will be the QFE of the higher or highest aerodrome of the CMATZ. This will be passed as the 'Clutch QFE'.

Whilst every effort will be made to ensure the safe separation of aircraft complying with these procedures, since compliance is not compulsory, some civil aircraft within the MATZ may not be known to the controller. Pilots should therefore keep a good lookout at all times. Terrain clearance will be the responsibility of pilots.

Availability of the MATZ Penetration Service

A MATZ penetration service will be available during the published hours of watch of the respective units. However, as many units are often open for flying outside normal operating hours, pilots should call for the penetration service irrespective of the hours of watch published. If, outside normal operating hours, no reply is received after two consecutive calls, pilots are advised to proceed with caution. Information on the operation of aerodromes outside their normal operating hours may be obtained by telephone from the appropriate Military Air Traffic Control Centre:

North of N5430 - Telephone: Scottish ACC (MIL) 01292-479800, Ext 6703/4

South of N5430 - Telephone: London ACC (MIL) 01895-426150.

Reference to specific MATZ's can be found in the ENR section 2-2-3-1/3 of the AIP.

See also the MATZ coverage Diagram

Airspace subject to Flight Restrictions or Hazards

<< back to contents page

Prohibited Areas

A Prohibited Area is an area of airspace of defined dimensions within which the flight of aircraft is prohibited.

Reference to specific Prohibited Areas can be found in the ENR section 5-1-1-1 of the AIP.

Restricted Areas

A Restricted Area is an area of airspace of defined dimensions within which the flight of aircraft is restricted in accordance with certain specified conditions.

Reference to specific Restricted Areas can be found in the ENR section 5-1-2-1/8 of the AIP.

Danger Areas

A Danger Area is an area of airspace which has been notified as such within which activities dangerous to the flight of aircraft may take place or exist at such times as may be notified.

Unauthorised entry into many Danger Areas is prohibited within the period of activity of the Danger Area by reason of Bylaws made under the Military Lands Act 1892 and associated legislation. Danger Areas where Bylaws prohibit entry are annotated in the remarks column within UK AIP section ENR 5.1 and are highlighted with an asterisk on the UK CAA Aeronautical Charts.

A Danger Area Crossing Service (DACS) or a Danger Area Activity Information Service (DAAIS) is available for certain Danger Areas. DACS and DAAIS availability is detailed within UK AIP section ENR 5.1 and on the legend to UK AIP chart ENR 6-5-1-1 (United Kingdom Airspace Restrictions and Hazardous Areas). Details of DACS and DAAIS contact frequencies are also printed on UK CAA Aeronautical Charts.

Reference to specific Danger Areas can be found in the ENR section 5-1-3-1/23 of the AIP.

Royal Flights

<< back to contents page

A Royal Flight over the United Kingdom is a flight of a civil or military aircraft carrying certain members of the Royal Family. Flights within the United Kingdom by other reigning Sovereigns, Prime Ministers and Heads of State of Commonwealth and foreign countries may also be afforded Royal Flight status.

Royal Flights in fixed-wing aircraft are, whenever possible, to take place within the national ATS route structure. Standard ATC procedures shall be applied to Royal Flights when operating in Class A/C airspace. In all other instances, the airspace around the route will be designated CAS-T.

CAS-T of appropriate height/width bands and levels, will be established to encompass any portion of the track and flight level of the Royal aircraft which lies outside of permanent Class A/C airspace. Control Zones and Control Areas will be established around all airfields used for the departure or arrival of a Royal Flight.

Regardless of the prevailing meteorological conditions, aircraft may only fly within CAS-T when ATC clearance has been obtained from the controlling authorities specified in the following sub-paras:

(a) **Temporary Control Zones**. Temporary Control Zones will be established around airfields of departure and destination where no permanent control zone exist. Control Zones for Royal Flights will normally extend for 10nm radius from the centre of the airfield from ground level to a flight level designated for each Royal Flight. The Control Zone will be established for a period (for outbound flights) of 15 minutes before, until 30 minutes after, the ETD of the Royal aircraft or (for inbound flights) for a period of 15 minutes before, until 30 minutes after, the ETA of the Royal aircraft at the airfield concerned, based on planned times. Overall control of these Control Zones is to be exercised, as appropriate, by the Commanding Officer of a military airfield or the ATS authority of a civil airfield.

(b) **Temporary Control Areas**. Temporary Control Areas will be established to meet the specific requirements of a Royal Flight. The lateral and vertical limits, the duration and the controlling authority of such areas will be promulgated via NOTAM. The controlling authority will be the appropriate civil ATCC.

(c) **Permanent Control Zones and Areas**. The controlling authority will be the designated controlling authority for the Permanent Zone or Area and the duration will be as laid down in the sub paras (a) and (b) above. Where an airfield has its own Control Zone, then the requirement to establish a Temporary Control Zone of the dimensions specified in para (a) above may be waived.

(d) **Temporary Controlled Airways**. Temporary Controlled Airways will be established to join temporary or permanent Control Zones or Control Areas, as appropriate, for 15 minutes before ETD at the departure airfield until 30 minutes after ETA at the destination. The lateral dimensions of such airways will be 5nm each side of the intended track of the Royal Flight and vertical limits will be designated. The controlling authority will be the appropriate civil ATCC.

A Temporary Control Zone or Area may be cancelled at the discretion of the Military Commander or Civil ATC Supervisor, as appropriate, when the Royal aircraft has left the zone or area and is established en-route in a Temporary Controlled Airway, permanent Class A/C airspace, or has landed.

Training Flights, including parachute training flights, by any member of The Royal Family planned and carried out under VFR or IFR, and under the control of an ATCRU or aerodrome radar, will normally be classified as Royal Flights. CAS-T, if required, will be established as agreed by the aircraft operating organisation and the Directorate Airspace Policy, Airspace Utilisation Section.

Procedures Applicable to Royal Flight CAS-T

CAS-T will normally be notified as Class A airspace for the purpose of the Rules of the Air Regulations 2007.

CAS-T not already notified under Rule 18 of the Rules of the Air Regulations 2007, is hereby notified for the purpose of Rule 18 and IFR applies at all times.

CAS-T established outside of existing Class A/C airspace, is hereby notified respectively as either Control Zones or Control Areas (as appropriate) as defined in Article 155(1) of the Air Navigation Order 2005.

Clearances to climb or descend maintaining VMC will not be given to aircraft in CAS-T.

Gliders shall not fly in CAS-T.

Promulgation of Royal Flight Information

Dissemination of information concerning a Royal Flight is made via a Notification Message on a Royal Flight Collective, giving full flight details. Information on the establishment of CAS-T, including vertical limits, is promulgated by NOTAM.

Areas of Intense Air Activity (AIAA)

<< back to contents page

Airspace within which the intensity of civil and/or military flying is exceptionally high or where aircraft, either singly or in combination with others, regularly participate in unusual manoeuvres.

Pilots of non-participating aircraft who are unable to avoid AIAA should keep a good look-out and are strongly advised to make use of a radar service; the areas are depicted on UK AIP chart ENR 6-5-2-1 and, together with their appropriate Radar unit contact frequencies, on UK CAA Aeronautical Charts.

Reference to specific AIAA's can be found in the ENR section 5-2-8/9 of the AIP.

Aerial Tactics Areas (ATA)

<< back to contents page

Airspace of defined dimensions designated for air combat training within which high energy manoeuvres are regularly practised by formations of aircraft. Pilots of aircraft unable to avoid these areas should keep a good look-out and are strongly advised to make use of a radar service. Autonomous operations are only permitted within ATAs above FL 195 when the overlying TRA is active.

Reference to specific ATA's can be found in the ENR section 5-2-10 of the AIP.

Gliders

<< back to contents page

Airspace and ATC Rules

Certain of the airspace rules and regulations outlined in this guide either do not apply to gliders or are applied differently. In particular:

(a) **Airways (Class A)**. Although VFR flight is not permitted in Class A Airways, gliders are exempt from this requirement if the airway is notified for the purpose of the UK Air Navigation Order Rule 18. Presently this arrangement is extant in Airways P600 and B226 for flights that comply with the conditions detailed in a Letter of Agreement between Scottish ACC and the BGA, and the glider pilot has received a briefing within the previous 12 months. In particular a glider may cross-designated corridors within Airways P600 and B226 without complying with the normal requirements for operation in Class A airspace. In particular:

(i) An ATC clearance is required;

(ii) the crossing is carried out in VMC by day (for the purpose of this paragraph the VMC minimum is to be 8 km visibility, 1500 m horizontal and 1000ft vertical from cloud);

(iii) the glider pilot is responsible for maintaining VFR separation from other gliders crossing the airways.

(b) **Class C Airspace**. See UK AIP ENR for details of Class C airspace for gliders above FL195

(c) **Class D Control Zones/Areas**. Gliders require an ATC clearance to cross Class D Airspace. Arrangements exist between some Class D airspace operating authorities and local gliding clubs whereby gliders are permitted access to specific portions of airspace under agreed procedures without having to communicate with ATC. Under these circumstances arrangements and procedures are published in the affected ATC unit and gliding club operating procedures.

Communications

Gliders are required to carry VHF RTF equipment to access Class A, Class C and most Class D Airspace, (under specific arrangements RTF equipment may not be required for access to Class D Airspace).

Glider pilots are required to hold a current Flight Radiotelephony Operators Restricted Licence to operate RTF equipment when communicating with an ATC unit

Reference to specific Glider Launch Sites can be found in the ENR section 5-5-1-1/6 of the AIP.

Winch Launch Activities

Maximum Altitude of cables is represented in thousands and hundreds of feet above mean sea level calculated using a minimum cable height of 2000ft AGL plus site elevation. At some sites the cable may extend above 2000ft AGL. Due to the ground-based cable, aircraft should avoid over-flying these sites below the indicated altitude.

Symbols depicting Non Winch Launch Hang/Para Gliding sites have been removed from VFR charts as they were not an accurate representation of the activity on any given day. Airspace users should be aware that single or groups of soaring or motorised Hang/Para Gliders can be found flying anywhere in the open FIR up to 15,000ft.

Free Fall Parachute Drop Zones

<< back to contents page

Regular free-fall parachuting from up to FL 150 takes place at a number of sites (marked on UK CAA Aeronautical Charts and listed at UK AIP section ENR 5.5) and within several Danger Areas. The sites include a number of licensed and government aerodromes but parachuting may also take place at any licensed or government aerodrome. Night parachuting may also take place and this activity will be promulgated by NOTAM.

Once parachutists have exited the drop aircraft their ability to manoeuvre is severely restricted. Visual sighting of free-falling bodies is virtually impossible and the presence of an aircraft within the Drop Zone may be similarly difficult to detect from the parachutists' point of view. Pilots are strongly advised to avoid flight through airspace where parachuting activities are notified as taking place. Pilots are also advised to assume the Drop Zone is active if no information can be obtained from the NATSU.

Reference to specific FFDZ's can be found in the ENR section 5-5-3-1/4 of the AIP.

Bird Sanctuaries

<< back to contents page

A number of areas in the United Kingdom have been designated sanctuaries to provide an undisturbed environment for birds to breed and roost.

Similarly, offshore islands, headlands, cliffs, inland waters and shallow estuaries attract flocks of birds for breeding, roosting and feeding at various times of the year. In order to lessen the risk of bird strikes pilots should avoid overflight of such locations below a height of 1500ft. Where it is necessary to fly lower pilots should bear in mind that the risk of a bird strike increases with speed and that birds rarely hit an object moving slower than 80kt.

Apart from endangering aircraft by flying close to bird colonies, the breeding of the birds may be upset and the practice should be avoided on conservation grounds. It should also be appreciated that, especially in the case of sea bird colonies, concentrations of birds may be soaring on lee waves downwind of the area where they breed.

Textual reference to Bird Sanctuaries can be found in the ENR section 5-6-1

High Intensity Radio Transmission Areas (HIRTA)

<< back to contents page

HIRTA are areas of defined dimensions within which there is radio energy of an intensity that may cause interference or damage to communications or navigation equipment and may be injurious to health. Pilots should be aware that these transmissions can give false indications on navigation and systems monitoring equipment; GPS is particularly vulnerable. Details of the major sites are listed at UK AIP section ENR 5.3 and are depicted on UK CAA Aeronautical Charts.

Reference to specific HIRTAs can be found in the ENR section 5-3-2-1/2 of the AIP.

Other Activities and Hazards

Within UK FIR there are numerous obstacles and various sites at which glider and hang-glider winch launching, parascending, and microlight flying takes place, many of which affect the airspace above 1000ft AGL. Most of these are shown on UK CAA Aeronautical Charts.

Reference can also be found in the AIP sections ENR 5-4:

Land Based Obstacles

Off-shore Obstacles

Temporary Reserved Area (TRA)

<< back to contents page

A Temporary Reserved Area (TRA) is a defined volume of airspace normally under the jurisdiction of one aviation authority and temporarily reserved, by common agreement, for the specific use by another aviation authority and through which other traffic may be allowed to transit under an ATS authority. TRAs have been established between FL 195 and FL 245 to accommodate the various VFR UK airspace users including military autonomous operational requirements above FL 195. TRAs may be used simultaneously by both civil and military aircraft, including aircraft in en-route transit through a TRA. Operations will be conducted in accordance with the Rules of the Air, or as agreed via the Unusual Aerial Activities regulations, and required equipment carriage and operation. Although the background classification between FL195 and FL 245 within UK airspace is Class C, to avoid operational restrictions, military aircraft may operate autonomously or in be receipt of an ATS from approved ATS units within a TRA. ATS in TRAs will be provided in accordance with the rules for Air Traffic Services Outside Controlled Airspace (ATSOCAS).

Where other airspace structures, such as Controlled Airspace (ATS Routes), Managed Danger Areas, Danger Areas, etc, overlap a TRA the airspace structure with the more restrictive criteria is to take precedence.

The dimensions, operating hours and full details of all UK TRAs are at ENR 5-2-2/3.

For VFR access to a TRA, the following is required:

(a) File a flight plan (when specified an abbreviated flight plan will be acceptable). Note: not applicable to gliders operating within TRA (G) under LoA conditions.

(b) Obtain an ATC clearance to enter the TRA.

(c) Select SSR Code A/C as directed by ATC.

(d) Monitor ATC frequency.

Emergency Restriction of Flying Regulations and Restricted Area (Temporary) – RA(T)

An Emergency Controlling Authority (ECA) may seek to inhibit flight in the vicinity of an emergency incident on land or at sea within the United Kingdom Flight Information Regions if it considers it essential for the safety of life or property and particularly for the protection of those engaged in Search and Rescue action.

Depending upon the nature of the incident the initial action will normally be the establishment of a Temporary Danger Area notified by NOTAM. However, if a Temporary Danger Area fails to meet the objective or is deemed to be inappropriate for a particular incident, Emergency Restriction of Flying Regulations may be introduced. The Regulations will make it an offence to fly within the designated Restricted Area (Temporary) without the permission of the appropriate ECA. Notification of the coming into force of Emergency Restriction of Flying Regulations and details of the Restricted Area (Temporary) will be made by NOTAM and at the same time any previously established Temporary Danger Area will be withdrawn.

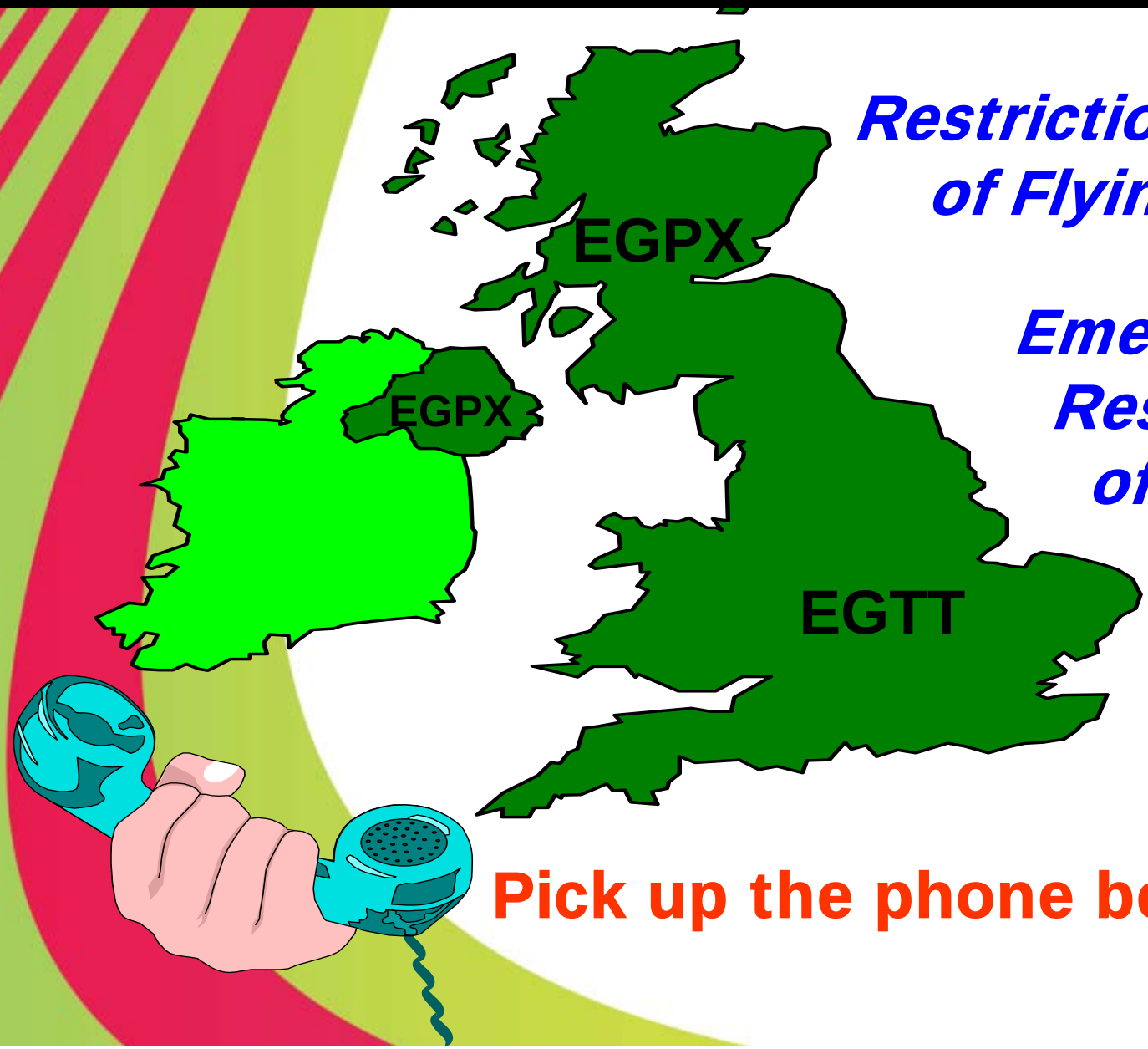
The ECA is the only authority that may grant permission for aircraft to be flown within the notified airspace. Subject to overriding considerations of safety, flights by aircraft directly associated with the emergency will invariably be given priority over those seeking to overfly for any other reason.

A Restricted Area (Temporary) is established primarily to enable Restrictions of Flying Regulations to be put in place in the vicinity of air shows, for security reasons, to cover radar outages, and to meet other requirements. Restrictions of Flying Regulations are put in place under Article 96 of the ANO, and detailed in the UK AIP at ENR 1-1-5-1. Full details of current RA(T)s can be found, prior to flight, on the AIS Freephone Information Line 0500-354802.

<< back to contents page

See the next page for an Aeronautical Information Services (AIS) Diagram

AIS Information Line 0500 354802



Restrictions of Flying

Emergency Restrictions of Flying

Airspace Changes

Pick up the phone before you fly

Types of Air Traffic Services at Aerodromes

<< back to contents page

Aerodrome Air Traffic Services

Air Traffic Control (ATC) at an aerodrome is responsible for the control of aircraft in the air in the vicinity of the aerodrome and for the control of all traffic on the manoeuvring area. All movements of aircraft and vehicles on the manoeuvring area are subject to prior permission from ATC.

Control of movements of vehicles and persons on the apron is the responsibility of the aerodrome authority. Movement of aircraft on the apron is subject to prior permission from ATC, who will provide advice and instructions to assist in the prevention of collisions between moving aircraft.

The total ATC responsibility at an aerodrome is shared between Aerodrome Control and Approach Control. Aerodrome Control is responsible for aircraft on the manoeuvring area except the runways-in-use. The point dividing the responsibilities of Aerodrome Control and of Approach Control for aircraft on the runways-in-use and in the air may vary with different weather conditions or for other considerations, but it is the normal rule that departing aircraft contact Aerodrome Control first and that arriving aircraft contact Approach Control first for ATC instructions.

Three types of service are used at United Kingdom aerodromes for the control or supervision of aerodrome traffic. Where Air Traffic Control is required an Aerodrome Control Service (**TWR**) is provided. At other aerodromes, either an Aerodrome Flight Information Service (**AFIS**) or an Air-Ground Service (**A/G**) may be provided. Where traffic levels are variable, the available service may be changed at specific times or by arrangement.

ATC fulfils its functions at an aerodrome by giving aircraft by RTF the instructions and information required for taxiing, takeoff or landing.

At some busy airports to alleviate RTF loading on the operational channels, Automatic Terminal Information Service (ATIS) broadcast messages are used to pass routine arrival/departure information on a discrete RTF frequency or on an appropriate VOR. Pilots of aircraft inbound to these airports are required on first contact with the aerodrome ATS Unit to acknowledge receipt of current information by quoting the code letter of the broadcast. Pilots of outbound aircraft are not normally required to acknowledge receipt of departure ATIS but are requested to ensure that they are in possession of up-to-date information. ATIS is described in ICAO Doc 7030, EUR/RAC paragraph 12.

Approach Control Service (APP)

Approach Control Services are provided at aerodromes that are within Controlled Airspace and at some others which are outside controlled airspace. In the latter case, however, there is no legal requirement for pilots to comply with the instructions issued by Approach Control unless they are within the Aerodrome Traffic Zone. Nor is there any legal requirement for such pilots to report their presence. It is, therefore, impossible for Approach Control to be sure that they are giving separation from all aircraft in their area.

The more aircraft that are known to Approach Control at an aerodrome outside Controlled Airspace, the better will be the service provided and pilots are therefore strongly recommended either:

(a) to avoid flying under IFR within 10 nm radius at less than 3000 ft above an aerodrome having Approach Control;

or

(b) if it is necessary to fly under IFR in such an airspace, to contact Approach Control when at least 10 minutes flying time away and to comply with any instructions they may give.

Responsibility of APP at Aerodromes within Controlled Airspace

Approach Control will provide standard separation to IFR flights from the time or place at which

(a) inbound aircraft are released by the ACC or Zone Control until they are transferred to Aerodrome Control;

and

(b) outbound aircraft are taken over from Aerodrome Control until they are handed over to the ACC or Zone Control;

(c) aircraft inbound from the FIR come under its jurisdiction within the Controlled Airspace until they are transferred to Aerodrome Control.

Responsibility of APP at Aerodromes outside Controlled Airspace

Subject to the reservation regarding the legal requirements outlined above, that Approach Control Services outside Controlled Airspace are advisory only. Approach Control will provide separation between aircraft under its jurisdiction from the time and place at which:

(a) arriving aircraft are released by the ACC until they are transferred to Aerodrome Control;

(b) arriving aircraft first place themselves under Approach Control until they are transferred to Aerodrome Control;

(c) departing aircraft are taken over from Aerodrome Control until they are transferred to the ACC, or they state that they no longer wish to be controlled or they are more than 10 minutes flying time away from the aerodrome, whichever is the sooner;

(d) transit aircraft first place themselves under the control of Approach Control until they are clear of the approach pattern or state they no longer wish to be controlled.

The allocated RTF callsigns are ‘TOWER’, ‘APPROACH’, ‘GROUND’, ‘RADAR’, ‘CONTROL’ or ‘DIRECTOR’.

Aerodrome Flight Information Service (AFIS)

The AFIS is a service provided at an aerodrome to give information useful for the safe and efficient conduct of flights in the Aerodrome Traffic Zone (ATZ) and to give taxi instructions on the apron and manoeuvring area. From the information received pilots flying within the ATZ will be able to decide the appropriate course of action to be taken to ensure the safety of flight.

FIS is available at aerodromes during the hours of operation indicated at AD 2 and AD 3. The service is easily identifiable by the call sign suffix 'INFORMATION'. Only the holder of an FIS officers licence is permitted to use this suffix.

The AFISO is responsible for:

(a) issuing information to aircraft flying in the ATZ to assist pilots in preventing collisions;

(b) issuing instructions and information to aircraft on the apron and manoeuvring area to assist pilots in preventing collisions between aircraft and vehicles/obstructions on the manoeuvring area, or between aircraft moving on the apron;

(c) issuing instructions to vehicles and persons on the manoeuvring area;

(d) informing aircraft of essential aerodrome information (ie the state of the aerodrome and its facilities);

(e) provision of an alerting service;

(f) initiating overdue action.

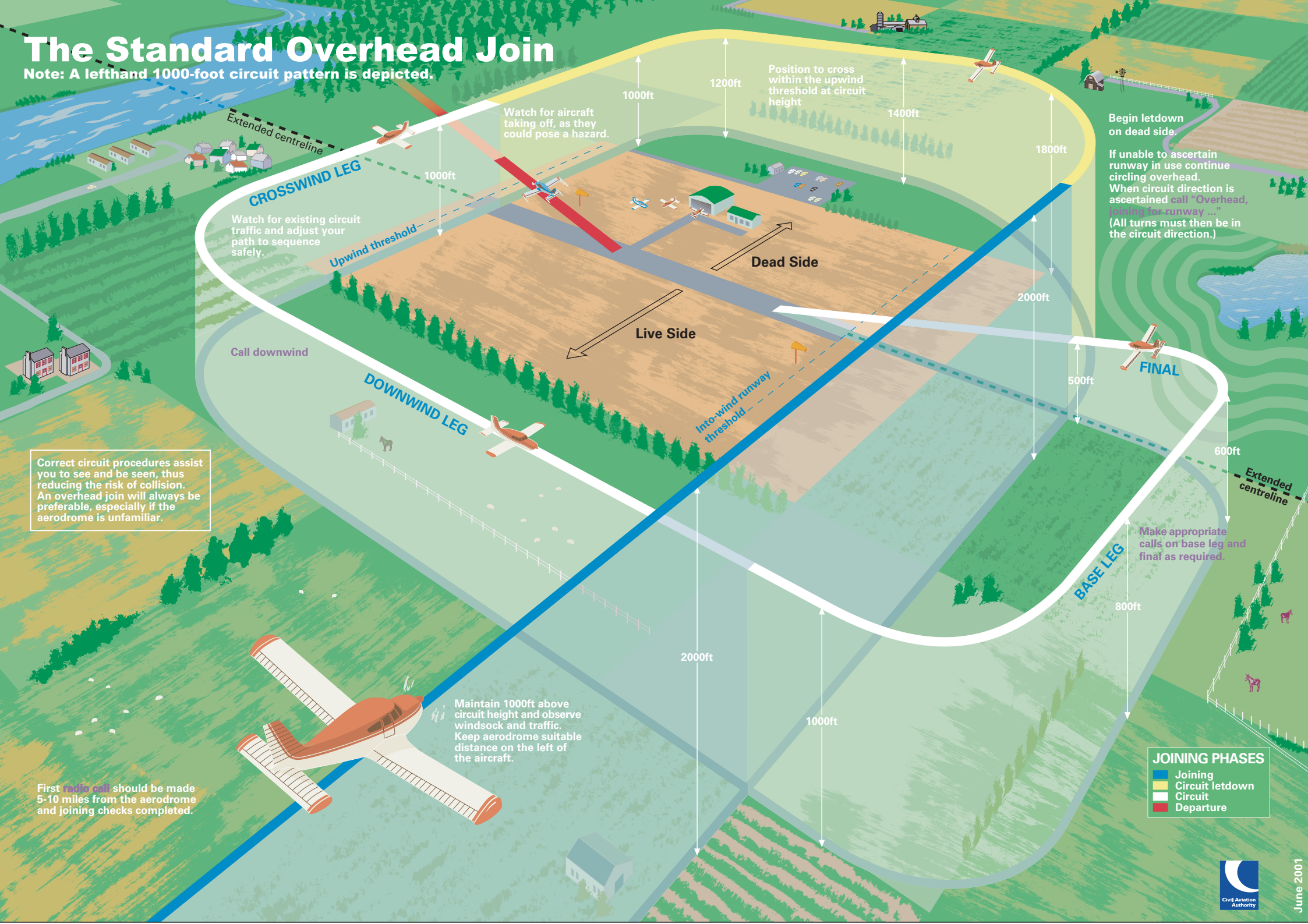
Air-Ground (A/G)

The person providing the service is not licensed and may only give information to aircraft. No instructions of any kind may be issued. The allocated RTF callsign for this service is ‘RADIO'.

See overleaf for Standard Overhead Join Graphic

The Standard Overhead Join

Note: A lefthand 1000-foot circuit pattern is depicted.



General Rules for VFR Flights

Position Reporting

Pilots in command of VFR flights should make a position report in the following circumstances:

(a) after transfer of communication;

(b) on reaching the limit of ATS clearance;

(c) when instructed by Air Traffic Control;

(d) when operating flights across the English Channel (i.e when crossing the coast, both outbound and inbound, and when crossing the FIR boundary.

Arriving Aircraft

An aircraft approaching an aerodrome under VFR where an Approach Control Service is available should make initial RTF contact when 15nm or five minutes flying time from the ATZ boundary, whichever is the greater. As well as landing information, ATC will pass information on pertinent known traffic to assist pilots of VFR flights to maintain separation from both IFR and other known VFR flights.

If radar sequencing of IFR flights is in progress, ATC will provide VFR flights with information to enable them to fit into the landing sequence.

Approach Control will instruct pilots when to change to Aerodrome Control.

When approaching an aerodrome without an Approach Control service, but having an ATZ, pilots must comply with the requirements of Rule 45 of the UK Rules of the Air Regulations relating to flights within ATZ described below. At an aerodrome without an ATZ pilots must comply with Rule 12 of the UK Rules of the Air Regulations see Flight in Vicinity of an Aerodrome - Note 1 overleaf.

Visual Circuit Reporting Procedures

In order that maximum use may be made of aerodromes for the purpose of landing and taking off, it is essential that pilots accurately report their position in the circuit (see Flight in Vicinity of an Aerodrome - Note 2 overleaf).

Position reports are to be made as follows:

(a) Downwind - aircraft are to report ‘Downwind’ when abeam the upwind end of the runway.

(b) Base Leg - Aircraft are to report ‘Base Leg’, if requested by ATC, immediately on completion of the turn onto base leg.

(c) Final - Aircraft are to report ‘Final’ after the completion of the turn onto final approach and when at a range of not more than 4nm from the approach end of the runway.

(d) Long Final - Aircraft flying a final approach of a greater length than 4nm are to report ‘Long Final’ when beyond that range and ‘Final’ when a range of 4nm is reached. Aircraft flying a straight-in approach are to report ‘Long Final’ at 8nm from the approach end of the runway and ‘Final’ when a range of 4nm is reached.

At grass aerodromes, the area to be used for landing should be regarded as the runway for the purposes of reporting.

‘Permit to Fly’ Aircraft

Aircraft operating on a ‘Permit to Fly’ (eg ‘home-built’ aircraft not subject to a regular ‘Certificate of Airworthiness’) shall not be flown over any assembly of persons or over any congested area of a city, town or settlement

Flight within Aerodrome Traffic Zones

The following paragraphs apply to aerodromes described in column 1 of the following table and notified for the purposes of Rule 45 of the UK Rules of the Air Regulations (see below) and throughout the period specified in column 2.

Aerodrome type	**Period**
A Government Aerodrome	at such times as are notified
An aerodrome having an air traffic control unit or an aerodrome flight information unit.	during the notified hours of watch of the air traffic control unit or the aerodrome flight information unit.
A licensed aerodrome having a means of two way radio communications with aircraft	during the notified hours of watch of the air/ground radio station

Rule 45 states that an aircraft shall not fly, take-off or land within the Aerodrome Traffic Zone to which this paragraph applies unless the commander of the aircraft has obtained the permission of the air traffic control unit at the aerodrome or, where there is no air traffic control unit, has obtained from the aerodrome flight information service unit at that aerodrome, information to enable the flight within the zone to be

conducted with safety or, where there is no air traffic control unit nor aerodrome flight information service unit, has obtained information from the air/ground radio station at that aerodrome to enable the flight to be conducted with safety.

The commander of an aircraft flying within the Aerodrome Traffic Zone of an aerodrome to which this paragraph applies shall:

(a) maintain a continuous watch on the appropriate radio frequency notified for communications at the aerodrome or, if this is not possible, cause a watch to be kept for such instructions as may be issued by visual means.

(b) where the aircraft is RTF equipped, communicate its position and height to the air traffic control unit, the aerodrome flight information service unit or the air/ground radio station at the aerodrome (as the case may be), on entering the zone and immediately prior to leaving it.

Flight in the Vicinity of an Aerodrome

The purpose of these paragraphs is to give guidance to pilots and operators at aerodromes located outside Controlled Airspace and is concerned primarily with the application of Rule 12 and Rule 45 of the UK Rules of the Air Regulations.

Note 1.

The specific requirements for flight within an ATZ have already been detailed. Not withstanding Rule 39, Rule 17 also applies at all aerodromes. Rule 12 requires that, unless otherwise authorised by an air traffic control unit at the aerodrome, the commander of a flying machine, glider or airship while flying in the vicinity of an aerodrome, or what he ought reasonably to know to be an aerodrome, shall conform to the traffic pattern formed by other aircraft intending to land at that aerodrome, or keep clear of the airspace in which the traffic pattern is formed. The rule also lays down the convention that circuit patterns will be left-hand unless otherwise indicated.

Note 2.

Pilots will be familiar with the theoretical standard aerodrome circuit pattern. However, because of the diverse nature of aircraft types, performance and the application of local requirements it is not possible to define an actual common pattern for use at all aerodromes.

Flying activities at aerodromes should, wherever possible, be contained within the hours published in the UK AIP, AIP Supplement or NOTAM. However, at some aerodromes flying takes place outside the normal published hours of operation and pilots should exercise caution when flying in the vicinity of an aerodrome that they believe to be closed.

Special VFR Flight

A Special VFR flight is a flight made in a Control Zone under circumstances which would normally require the flight to be made under the Instrument Flight Rules (IFR) but is made under special conditions and with the permission of ATC instead of under the full IFR. These circumstances are:

(a) at any time in a Class A Control Zone;

(b) in IMC or at night in any other Control Zone.

The following conditions are applicable to all Special VFR flights:

(a) the pilot must obtain an ATC clearance and comply with ATC instructions;

(b) the pilot must at all times remain clear of cloud and in sight of the surface;

(c) the pilot must at all times remain in flight conditions which enable him to determine his flight path and keep clear of obstacles;

The following general conditions are also applicable to Special VFR flights:

(a) it may be necessary for ATC purposes to impose a height limitation or routing instructions on a Special VFR clearance.

(b) Special VFR clearance will not normally be granted for aircraft with an All Up Weight greater than 5700 kg and that are capable of flight under IFR.

(a) Special VFR clearance will only be granted when traffic conditions will enable the flight to take place without hindrance to normal IFR flights.

(b) weather limitations for Special VFR flights arriving at or departing from certain aerodromes may be detailed in the UK AIP. Without prejudice to such limitations, ATC will not issue a Special VFR clearance to any fixed wing aircraft intending to depart from an aerodrome in a Control Zone when the official meteorological report indicates that the visibility is 1800 m or less and/or the cloud ceiling is less than 600ft.

(e) a Special VFR clearance does not absolve the pilot from the responsibility of complying with the appropriate ATZ Rules.

(f) a Special VFR clearance does not absolve the pilot from the relevant Low Flying Rules (Rule 5 of the UK Rules of the Air Regulations refers) other than the ‘1000ft’ element of Rule 5 where the clearance permits flight below that height. In particular it does not absolve the pilot from the requirement of that Rule when flying over a congested area (and elsewhere for a helicopter) to operate the aircraft at such a height as would enable it to alight without danger to persons and property on the ground in the event of an engine failure.

(g) in certain Control Zones particular routes and/or the ATZ may be notified which permit the pilot to operate on a Special VFR Clearance in a flight visibility of less than 10 km without the requirement to hold a Instrument or IMC Rating (Schedule 8 of the UK Air Navigation Order refers).

(h) a full flight plan is not required (unless the pilot requires the destination aerodrome to be advised), but details of the flight must be passed, either by RTF or, at busy aerodromes, through the Flight Briefing Unit, to enable ATC to issue a clearance.

(i) ATC will provide standard separation between all Special VFR flights and between IFR flights and Special VFR flights.

The following loss of communications procedures apply to Special VFR flights:

(a) if the aircraft is suitably equipped, Squawk 7600 with Mode C.

(b) transmit blind position reports and intentions if it is believed that the aircraft transmitter may be functioning.

(c) if the aircraft is not yet within the Control Zone: Do not enter the Control Zone even if clearance has been obtained.

(d) if inbound to the aerodrome and within the Control Zone: Continue in accordance with the clearance to the aerodrome and land as soon as possible. Watch for visual signals when in the aerodrome traffic circuit.

(e) if transiting the Control Zone: Continue flight not above the cleared level specified and leave the Control Zone by the most direct route taking into account the weather conditions, obstacles and known areas of dense traffic.

(f) in all cases notify the ATC Unit concerned as soon as practicable.

London Control Zone (Class A Airspace): For the smaller aerodromes at Denham, Fairoaks and White Waltham, local flying areas, access lanes and associated special procedures and conditions are established. (Additional temporary access lanes may be established from time to time for special events). Flights operating in these areas and lanes (permanent areas/lanes can be viewed by clicking on the link below) will be considered as Special VFR flights and adherence to the special procedures will be considered as compliance with ATC clearance. However, separation between aircraft using these areas and procedures cannot be given and pilots are responsible for providing their own separation from other aircraft in the relevant airspace.

View the London CTR local flying and entry/exit procedures Diagram

It should also be noted that within the Channel Islands Control Zone (Class A Airspace) the carriage of transponders is mandatory for aircraft operating on Special VFR clearances within the Channel Islands Control Zone.

Air Traffic Services Outside Controlled Airspace

<< back to contents page

Overview

The ICAO requirements for a Flight Information and Alerting Service are met in the UK FIRs through a suite of services, collectively known as the UK Flight Information Services (FIS).

Within Class G airspace, regardless of the service being provided, pilots are ultimately responsible for collision avoidance and terrain clearance, and they should consider service provision to be constrained by the unpredictable nature of this environment.

A pilot shall determine the appropriate service for the various phases and conditions of flight and request that service from the controller/FISO. An Alerting Service will be provided in association with all services.

Controllers will make all reasonable endeavours to provide the service that a pilot requests. However, due to finite resources or controller workload, tactical priorities may influence service availability. FISOs are not licensed to provide Traffic Service, Deconfliction Service, or Procedural Service.

Instructions issued by controllers/FISOs to pilots operating outside controlled airspace are not mandatory; however, the services rely upon pilot compliance with the specified terms and conditions so as to promote a safer operating environment for all airspace users.

Agreements can be established between a controller and a pilot such that the operation of an aircraft is laterally or vertically restricted beyond the core terms of the Basic Service or Traffic Service. Unless safety is likely to be compromised, a pilot shall not deviate from an agreement without first advising and obtaining a response from the controller.

There may be circumstances that prevent controllers from passing timely traffic information and/or deconfliction advice, e.g. high workload, areas of high traffic density, against unknown aircraft conducting high energy manoeuvres, or when traffic is not displayed to the controller. Controllers shall inform the pilot of known reductions in traffic information along with the reason and the probable duration; however, it may not always be possible to provide these warnings in a timely fashion.

Basic Service

Basic Service provides advice and information useful for the safe and efficient conduct of flights. This may include weather information, changes of serviceability of facilities, conditions at aerodromes, general airspace activity information, and any other information likely to affect safety. The avoidance of other traffic is solely the pilot's responsibility.

Pilots should not expect any form of traffic information from a controller/FISO and the pilot remains responsible for collision avoidance at all times. However, on initial contact the controller/FISO may provide traffic information in general terms to assist with the pilot's situational awareness. This will not normally be updated by the controller/FISO unless the situation has changed markedly, or the pilot requests an update.

Basic Service is available at all levels and the pilot remains responsible for terrain clearance at all times.

Unless the pilot has entered into an agreement with a controller to maintain a specific course of action, a pilot may change heading, route, or level without advising the controller. A controller will not issue specific heading instructions; however, generic navigational assistance may be provided on request.

Traffic Service

Traffic Service is a surveillance based ATS, where in addition to the provisions of a Basic Service, the controller provides specific surveillance derived traffic information to assist the pilot in avoiding other traffic.

If a controller issues a heading and/or level that would require flight in IMC, a pilot who is not suitably qualified to fly in IMC shall inform the controller and request alternative instructions.

The controller will pass traffic information on relevant traffic, and update the traffic information if it continues to constitute a definite hazard, or if requested by the pilot. However, high controller workload and RTF loading may reduce the ability of the controller to pass traffic information, and the timeliness of such information. Whether traffic information has been passed or not, a pilot is expected to discharge his collision avoidance responsibility without assistance from the controller. If after receiving traffic information, a pilot requires deconfliction advice, an upgrade to Deconfliction Service shall be requested.

Subject to ATS surveillance system coverage, Traffic Service may be provided at any level and the pilot remains responsible for terrain clearance at all times.

A pilot may operate under his own navigation or a controller may provide headings and levels for the purpose of positioning, sequencing or as navigational assistance. If a heading or level is unacceptable to the pilot he shall advise the controller immediately. Unless safety is likely to be compromised, a pilot shall not change level, route, manoeuvring area, or deviate from an ATC heading without first advising and obtaining a response from the controller.

Deconfliction Service

A Deconfliction Service is a surveillance based ATS where, in addition to the provisions of a Basic Service, the controller provides specific surveillance derived traffic information and deconfliction advice.

The controller will expect the pilot to accept headings and/or levels that may require flight in IMC. A pilot who is not suitably qualified to fly in IMC shall not request a Deconfliction Service unless compliance permits the flight to be continued in VMC.

A controller will provide traffic information, accompanied with a heading and/or level aimed at achieving a planned deconfliction minima. High controller workload or RTF loading may reduce the ability of the controller to pass such deconfliction advice; furthermore, unknown aircraft may make unpredictable or high-energy manoeuvres. Consequently, controllers cannot guarantee to achieve these deconfliction minima; however, they shall apply all reasonable endeavors. The avoidance of traffic is ultimately the pilot's responsibility.

The pilot shall inform the controller if he elects not to act on the controller's deconfliction advice, and; therefore accepts responsibility for initiating any
subsequent collision avoidance against that particular conflicting aircraft.

A Deconfliction Service will only be provided to aircraft operating at or above a terrain safe level, unless on departure from an aerodrome when climbing to a terrain safe level, or when following notified instrument approach procedures. If a controller detects a confliction when an aircraft is departing from an aerodrome and climbing to the terrain safe level, or when following notified instrument approach procedures, traffic information without deconfliction advice shall be passed. However, if the pilot requests deconfliction advice, or the controller considers that a definite risk of collision exists, the controller shall immediately offer such advice.

Unless safety is likely to be compromised, a pilot shall not change heading or level without first obtaining approval from the controller.

Procedural Service

A Procedural Service is a non surveillance ATS where, in addition to the provisions of a Basic Service, the controller provides instructions, which if complied with, shall achieve deconfliction minima against other aircraft participating in the Procedural Service. Neither traffic information nor deconfliction advice can be passed with respect to unknown traffic.

The controller will expect the pilot to accept levels, radials, tracks and time
allocations that may require flight in IMC. A pilot who is not suitably qualified to fly in
IMC shall not request a Procedural Service unless compliance permits the flight to be
continued in VMC.

A Procedural Service is available at all levels and the pilot remains wholly responsible for terrain clearance at all times.

A controller will provide deconfliction instructions by allocating levels, radials, tracks, and time restrictions, or use pilot position reports, aimed at achieving a planned
deconfliction minima. The pilot shall inform the controller if he elects not to act on the controller's deconfliction advice, and therefore accepts responsibility for initiating any subsequent collision avoidance against the aircraft in question and any other aircraft affected.

The controller will provide traffic information on conflicting aircraft being provided with a Basic Service and those where traffic information has been passed by another ATS unit; however, there is no requirement for deconfliction advice to be passed, and the pilot is wholly responsible for collision avoidance.

Unless safety is likely to be compromised, a pilot shall not change level, radial, track, or time restriction without first obtaining approval from the controller. If a level, radial, track, or time restriction is unacceptable to the pilot, he shall advise the controller immediately.

Air Traffic Control Centres (ACC)

Basic Service is also provided by ACCs (Callsign London Information and Scottish Information) through an FIS Officer (FISO) operating on specially allocated RTF channels. In addition to the normal Basic Service, described above the FISO will:

(a) On receipt of a request for joining or crossing clearance of Controlled Airspace or Advisory Routes either:

(i) Inform the pilot that he should change frequency in time to make the request direct to the appropriate ATC Unit at least 10 minutes before ETA for the entry or crossing point or

(ii) Obtain the clearance from the appropriate ATC Unit himself and pass it to the pilot on the FIR frequency.

(b) Pass ETA to destination aerodromes in special circumstances, such as diversions, or at particular locations when traffic conditions demand it. Normally, however, pilots who wish destination aerodromes outside Controlled Airspace to have prior warning of arrival should communicate direct with ATC at the aerodrome concerned, at least 10 minutes before ETA.

(c) Accept airborne flight plans and pass the information to the appropriate authority.

The service from London Information will be provided by one controller only; pilots are therefore asked to keep their use of it to a minimum. Due to the possibility of simultaneous aircraft transmissions, the response to RTF calls may be affected. Requests for joining or crossing airways within the London FIR should continue to be made on the London FIS frequencies rather than direct on the Controlled Airspace sector frequencies.

Reference to specific ATSU's can be found in the ENR section 6-1-10-1 of the AIP

Lower Airspace Radar Service (LARS)

Availability of Service

(a) A diagram showing the LARS coverage can be found from the link on page 23 and a list of participating ATSU is below;

(b) The service is available to all aircraft flying outside Controlled Airspace up to and including FL 95, within the limits of radar/radio cover. The service will be provided within approximately 30nm of each participating ATS Unit. Unless a participating ATS Unit is H24, the service will normally be available between 0800 & 1700 (Winter) and 0700 & 1600 (Summer), Mondays to Fridays. However, as some participating Units may remain open to serve evening, night or weekend flying, pilots are recommended to call for the service irrespective of the published hours of ATS. If no reply is received after three consecutive calls, it should be assumed that the service is not available.

(c) LARS will not normally be available from non-H24 ATSUs at weekends and Public Holidays;

(d) Pilots intending to operate above FL 95 may be advised to contact an appropriate ATCRU.

(e) The service provided will be a Deconfliction Service or a Traffic Service (see previous pages).

(f) Bristol Filton and Bristol LARS

Due to the impracticalities caused by the position of Bristol Controlled Airspace with regard to the LARS area served by Bristol Filton, it has been agreed that during the hours of service published for Bristol Filton LARS the following procedures will apply:

(i) Aircraft requiring a LARS north of a line between the M5 Bridge over the River Avon and the M4 junction 18, i.e. north of a line 512920N 0024135W and 513005N 0022119W, will receive the service from Bristol Filton.

(ii) Aircraft requiring a LARS south of a line between the M5 Bridge over the River Avon and the M4 junction 18 will receive the service from Bristol.

(iii) aircraft calling either one of these Units in the other's agreed area of responsibility will be instructed to contact the appropriate Unit.

(g) The provision of LARS is at the discretion of the controllers concerned because they may be fully engaged in their primary tasks. Occasionally, therefore, the service may not be available.

Reference to specific LARS can be found in the ENR section 1-6-3-1/4 of the AIP.

For further details see the LARS coverage diagram

Altimeter Setting Procedures

<< back to contents page

General Procedures

The Transition Altitude within the United Kingdom is 3000ft except in or beneath that airspace specified below.

Vertical positioning of aircraft when at, or below, any Transition Altitude will be expressed in terms of Altitude. Vertical positioning at, or above, the Transition Level will normally be expressed in terms of Flight Level; in these circumstances, when descending through the Transition Layer, vertical position will be expressed in terms of Altitude and when climbing, in terms of Flight Level. It should not be assumed that separation exists between the Transition Altitude and Transition Level.

Flight levels are measured with reference to the Standard Pressure datum of 1013.2 mb. In the UK consecutive Flight Levels above the Transition Level are separated by pressure intervals corresponding to 500ft in the ISA; at and above FL 200, by pressure levels corresponding to 1000ft (except in an active TRA where 500ft pressure levels are applied up to FL 245). FL 195 will not be allocated as a cruising level.

Civil aircraft using military aerodromes must conform to military procedures.

QNH and temperature reports for certain aerodromes are given in MET broadcasts and can also be obtained from ATS Units. These QNH values are rounded down to the nearest whole millibar but are available at certain aerodromes in tenths of millibars for landing aircraft on request.

Altimeter Setting Regions

Altimeter Setting Regions (ASR). To make up for any lack of stations reporting actual QNH, the UK has been divided into a number of ASRs for each of which the National Meteorological Office calculates the lowest forecast QNH (Regional Pressure Setting) for each hour. These values are available hourly for the period H+1 to H+2 and may be obtained from all aerodromes having an Air Traffic Service, from the London, Manchester and Scottish ACCs, or by telephone.

The ASRs are listed below, together with the MET Office Codes in parenthesis. The areas covered by these regions are shown on the combined Flight Information Region (FIR) and ASR chart on next page.

Skerry (01)	Holyhead (07)	Chatham (12)	Orkney (17)
Portree (02)	Barnsley (08)	Portland (13)	Marlin (18)
Rattray (03)	Humber (09)	Yarmouth (14)	Petrel (19)
Tyne (04)	Scillies (10)	Cotswold (15)	Skua (20)
Belfast (05)	Wessex (11)	Shetland (16)	Puffin (21)

Airspace within all Control Zones (CTRs), and within and below all Terminal Control Areas (TMAs), Control Areas (CTAs) except Airways and the Daventry and Worthing Control Areas, during their notified hours of operation, do not form part of the ASR Regional Pressure Setting system.

Apart from the exceptions listed at paragraph above when flying at or below the Transition Altitude below TMAs and CTAs, pilots should use the QNH of an adjacent aerodrome. It may be assumed that for aerodromes located beneath such Areas, the differences in QNH values are insignificant. When flying beneath Airways whose base levels are expressed as Altitudes, pilots are recommended to use the QNH of an adjacent aerodrome in order to avoid penetrating the base of Controlled Airspace.

Within the Channel Islands Control Zone, the lowest forecast QNH value is available for terrain clearance purposes.

Pilots operating north of 6130N within the airspace detailed in UK AIP Section ENR 2.2, when not receiving a service from Sumburgh Radar are advised to use the Puffin RPS when flying at or below 3,000ft.

The QNH settings to be used in the Northern North Sea Radar Service Areas are shown in UK AIP chart **ENR 6-1-15-1.**

Selected Transition Altitudes

The following Transition Altitudes apply to flights within or beneath the following airspace:

Aberdeen CTR/CTA	6,000ft	Glasgow CTR	6,000ft
Belfast CTR/TMA	6,000ft	Leeds Bradford CTR/CTA	5,000ft*
Birmingham CTR/CTA	4,000ft	London TMA	6,000ft
Bristol CTR/CTA	6,000ft	Manchester TMA	5,000ft
Cardiff CTR/CTA	6,000ft	Newcastle CTR/CTA	6,000ft
Durham Tees Valley	6,000ft*	Scottish TMA	6,000ft
East Midlands CTR/CTA	4,000ft	Solent CTA	4,000ft*
Edinburgh CTR/CTA	6,000ft	SumburghCTR/CTA	6,000ft*

* Note: Outside the notified hours of operation the Transition Altitude is 3000ft.

For further details see the UK Altimeter Setting & Flight Information Regions Chart contained in the AIP, and the Terrain Clearance table on the next page.

TERRAIN CLEARANCE TABLE

ACD M20/06/03 05.01.06

ASRs	WESSEX	Scillies	Cotswold	Portland	Chatham	Yarmouth	TYNE	Belfast
Highest Obstacle	2907ft	1378ft	2660ft	1995ft	1310ft	1380ft	2930ft	2868ft
Minimum Altitude	4300ft	2400ft	4000ft	3000ft	2400ft	2400ft	4300ft	4200ft
REGIONAL QNH	**GREEN**						**BLUE**	
1032 or Above	FL40	FL20	FL35	FL25	FL20	FL20	FL40	FL40
1014 - 1031	FL45	FL25	FL40	FL30	FL25	FL25	FL45	FL45
995 - 1013	FL50	FL30	FL45	FL35	FL30	FL30	FL50	FL50
977 - 994	FL55	FL35	FL50	FL40	FL35	FL35	FL55	FL55
960 - 976	FL60	FL40	FL55	FL45	FL40	FL40	FL60	FL60
943 - 959	FL65	FL45	FL60	FL50	FL45	FL45	FL65	FL65
927 - 942	FL70	FL50	FL65	FL55	FL50	FL50	FL70	FL70

IMPORTANT - SET 1013mb ON THE ALTIMETER SUB-SCALE TO FLY AT A FLIGHT LEVEL.

ASRs	PORTREE	Orkney	Skerry	Shetland	HOLYHEAD	Barnsley	Humber	
Highest Obstacle	4406ft	3791ft	1421ft	1477ft	3560ft	3116ft	473ft	
Minimum Altitude	5800ft	5100ft	2800ft	2800ft	4900ft	4500ft	1500ft	
REGIONAL QNH	**RED**				**YELLOW**			
1032 or Above	FL55	FL50	FL25	FL25	FL45	FL40	FL15	
1014 - 1031	FL60	FL55	FL30	FL30	FL50	FL45	FL20	
995 - 1013	FL65	FL60	FL35	FL35	FL55	FL50	FL25	
977 - 994	FL70	FL65	FL40	FL40	FL60	FL55	FL30	
960 - 976	FL75	FL70	FL45	FL45	FL65	FL60	FL35	
943 - 959	FL80	FL75	FL50	FL50	FL70	FL65	FL40	
927 - 942	FL85	FL80	FL55	FL55	FL75	FL70	FL45	

1. **REMEMBER: Although you use the Regional QNH to obtain the Terrain Clearance Flight Level you must set 1013mb on the altimeter sub-scale to fly at that Flight Level.**
2. **Geographical minimum alt (SH) has been adjusted to 300ft to allow for uncharted obstacles.**
3. **IMPORTANT: When lost or uncertain of your position always call the Distress and Diversion cell on 121·5MHz at the earliest opportunity.**
4. **For information on how to use this table refer to AICs.**

Carriage of Equipment

<< back to contents page

Radio Equipment

Except when flying for the purpose of public transport (Schedule 5 of the UK Air Navigation Order refers) there is no mandatory requirement for the carriage of radio equipment outside Controlled Airspace. For further details you are advised to refer to **GEN 1-5-3**.

SSR operating procedures

<< back to contents page

General

In accordance with Article 20(2) and Schedule 5 of the Air Navigation Order 2005, the SSR transponder shall be operated within the airspace notified at paragraph GEN 1-5-3, paragraph 1.3.

In airspace where the operation of transponders is not mandatory pilots of suitably equipped aircraft should comply with the need for Conspicuity Codes – as listed below – except when remaining within an aerodrome traffic pattern below 3000ft AGL.

With the exceptions detailed above pilots shall:

(a) if proceeding from an area where a specific code has been assigned to the aircraft by an ATS Unit, maintain that code setting unless otherwise instructed;

(b) select or reselect codes, or switch off the equipment when airborne only when instructed by an ATS Unit;

(c) acknowledge code setting instructions by reading back the code to be set;

(d) select Mode C simultaneously with Mode A unless otherwise instructed by an ATS Unit;

(e) when reporting levels under routine procedures or when requested by ATC, state the current altimeter reading to the nearest 100ft. This is to assist in the verification of Mode C data transmitted by the aircraft.

Note: If, on verification there is a difference of more than 200ft between the level readout and the reported level, the pilot will normally be instructed to switch off Mode C. If independent switching of Mode C is not possible the pilot will be instructed to select Code 0000 to indicate a transponder malfunction.

Special Purpose Codes

Some Mode A codes are reserved internationally for special purposes and should be selected as follows:

(a) Code 7700. To indicate an emergency condition, this code should be selected as soon as is practicable after declaring an emergency situation, and having due regard for the over-riding importance of controlling aircraft and containing the emergency. However, if the aircraft is already transmitting a discrete code and receiving an air traffic service, that code may be retained at the discretion of either the pilot or the controller;

(b) Code 7600. To indicate a radio failure;

(c) Code 7500. To indicate unlawful interference with the planned operation of a flight, unless circumstances warrant the use of Code 7700;

(d) To indicate an aircraft conducting IFR flight as GAT, where the downlinked aircraft identification is validated as matching the aircraft identification entered in the flight plan;

(e) Code 2000. When entering United Kingdom airspace from an adjacent region where the operation of transponders has not been required;

(f) Code 7007. This code is allocated to aircraft engaged on airborne observation flights under the terms of the Treaty on Open Skies. Flight Priority Category B status has been granted for such flights and details will be published by NOTAM. Mode C should be operated with all of the above codes;

Mode C should be operated with all the above codes.

Conspicuity Code

When operating at and above FL 100 pilots ***shall*** select code 7000 and Mode C except:

(a) when receiving a service from an ATS Unit or Air Defence Unit which requires a different setting;

(b) when circumstances require the use of one of the Special Purpose Codes or one of the other specific conspicuity codes assigned in accordance with the UK SSR Code Assignment Plan as detailed in the table at ENR 1-6-2-5 to ENR 1-6-2-10.

When operating below FL 100 pilots ***should*** select Code 7000 and Mode C except as above.

Pilots are warned of the need for caution when selecting code 7000 due to the proximity of the Special Purposes Codes.

Parachute Dropping

Unless a discrete code has already been assigned, pilots of transponder equipped aircraft should select Code 0033, together with Mode C, five minutes before the drop commences until the parachutists are estimated to be on the ground.

Aerobatic Manoeuvres

The use of Special Purpose Code 7004 shall be for solo or formation aerobatics, whilst displaying, practising or training for a display or for aerobatics training or general aerobatic practice. Any civil or military pilot may use this code whilst conducting aerobatic manoeuvres.

Unless a discrete code has already been assigned, pilots of transponder equipped aircraft should select Code 7004, together with Mode C, five minutes before commencement of their aerobatic manoeuvres until they cease and resume normal operations.

Pilots are encouraged to contact ATCUs and advise them of the vertical, lateral and temporal limits within which they will be operating and using the SSR Code 7004.

Controllers are reminded that SSR Code 7004 must be considered as unvalidated and the associated Mode C unverified. Traffic information will be passed to aircraft receiving a service as follows: 'Unknown aerobatic traffic, (number) o'clock (distance) miles opposite direction/crossing left/right indicating (altitude) unverified (if Mode C displayed)'.

Mode S Aircraft Identification

To ensure that you comply with ICAO airborne equipment requirements and for the latest details on Mode S please refer to **ENR 1-6-2-2**.

Transponder Failure

Failure before intended departure

If the transponder fails before intended departure and cannot be repaired pilots shall:

(a) plan to proceed as directly as possible to the nearest suitable aerodrome where repair can be made;

(b) inform ATS as soon as possible preferably before the submission of a flight plan. When granting clearance to such aircraft, ATC will take into account the existing and anticipated traffic situation and may have to modify the time of departure, flight level or route of the intended flight;

(c) insert in item 10 of the ICAO flight plan under SSR the letter N for complete unserviceability of the transponder or in the case of partial failure, the letter corresponding to the remaining transponder capability as specified in ICAO Doc 4444, Appendix 2.

Failure after departure

If the transponder fails after departure or en-route, ATS Units will endeavour to provide for continuation of the flight in accordance with the original flight plan. In certain traffic situations this may not be possible particularly when the failure is detected shortly after take-off. The aircraft may then be required to return to the departure aerodrome or to land at another aerodrome acceptable to the operator and to ATC. After landing, pilots shall make every effort to have the transponder restored to normal operation. If the transponder cannot be repaired then the above failure prior to departure provisions – (a) to (c) – should be applied.

At present the temporary failure of SSR Code C alone would not restrict the normal operation of the flight.

Radio Telephony Phraseology for use with SSR.

This is in accordance with ICAO Doc 4444, Chapter 12 para 12.4.3.

UK SSR Code Assignment Plan.

Reference to specific SSRs can be found in the **ENR section 1-6-2-1/10** of the AIP.

Filing of VFR Flight Plans

<< back to contents page

Flight Rules and Categories of FPL

Subject to the mandatory requirements of airspace classification shown below, a pilot may file a **VFR** or **IFR** Flight Plan for any flight. When flying in different types of airspace, a pilot may indicate if the aircraft will fly VFR first, then change to IFR; or vice versa.

There are three categories of FPL:

(a) **Full** Flight Plans - the information filed on the FPL Form (CA48/RAF F2919);

(b) **Repetitive** Flight Plans;

(c) **Abbreviated** Flight Plans - the limited information required to obtain a clearance for a portion of flight, filed either by telephone prior to take-off or by radiotelephony (RTF) when airborne.

Note: The destination aerodrome will only be advised of the flight provided that the flight plan information covers the whole route of the flight.

When to file a VFR FPL

A VFR FPL may be filed for any flight.

A VFR FPL **must** be filed in the following circumstances:

(a) All flights within **Class B, C and D** Controlled Airspace irrespective of weather conditions;

(b) Any flight from an aerodrome in the United Kingdom, being a flight whose destination is more than 40 km from the aerodrome of departure and the aircraft Maximum Total Weight Authorised exceeds 5700 kg;

(c) **All** flights to or from the United Kingdom that will cross the United Kingdom FIR Boundary;

(d) Any flight in **Class F** Airspace wishing to participate in the Air Traffic Advisory Service

It is **advisable** to file a VFR FPL if the flight involves flying:

(a) Over the sea, more than 10 nm from the UK coastline;

(b) Over sparsely populated areas where Search and Rescue operations would be difficult;

(c) Into an area in which search and rescue operations are in progress. The flight plan should include the expected times of entering and leaving the area and the details must also be passed to the parent ACC. The ACC will notify Kinloss ARCC.

Flight Planning in Remote Areas and Alerting Action

Pilots may file a flight plan for any flight, but it is most advisable to file a FPL if flying over the sea more than 10 nm from the UK coast, or over sparsely populated areas where search and rescue operations may be difficult.

Filing a FPL makes the ATSU at the destination aerodrome aware of an inbound aircraft's planned flight details. Once the FPL DEP message has been received, the destination aerodrome calculates the aircraft's estimated time of arrival (ETA). If the aircraft fails to arrive or make communication, the ATSU will start overdue action 30 minutes after the calculated ETA. Preliminary action will be taken to confirm the flight plan details and departure time. The supplementary flight plan information (which is not normally transmitted with the FPL) will be requested from the departure aerodrome. If the FPL has been filed for a departure from an aerodrome not connected to the AFTN, the pilot should indicate in Item 18 where the Supplementary FPL information can be obtained (such as the Parent ATSU if the FPL has been filed through them).

Note: Booking Out does not constitute filing a flight plan.

If no FPL is filed, the destination aerodrome may not know that the aircraft is inbound to them, and will not be able to calculate an ETA, nor will they be prepared to initiate alerting action - unless additional information comes to their notice that an aircraft is in difficulties.

Searching for an aircraft that may have forced landed in difficult terrain or a sparsely populated area, or ditched in a large expanse of water, can be a difficult and lengthy process. The sooner an ATSU can detect that an aircraft needs assistance and alerts search and rescue services, the better for all concerned.

It is also important, that if a pilot does file a FPL and then lands elsewhere, that they notify the original destination without delay. When landing at an alternate aerodrome with an ATSU, it can be expected that the ATSU will send an arrival message on the pilot's behalf. However, it is important that the pilot informs the ATSU that they have diverted from the planned destination. Failure to notify the original destination may cause unnecessary search and rescue action to be initiated.

Highland and Island Airports Limited have highlighted the specific remoteness of some of their airports and the CAA considers it appropriate to emphasise the advice to pilots to file a flight plan when flying to or from the following HIAL aerodromes:

Barra (EGPR)	Kirkwall (EGPA)
Benbecula (EGPL)	Stornoway (EGPO)
Campbeltown (EGEC)	Sumburgh (EGPB)
Inverness (EGPE)	Tiree (EGPU)
Islay (EGPI)	Wick (EGPC

Abbreviated Flight Plans

An Abbreviated Flight Plan is the limited information required to obtain a clearance for a portion of flight, filed either by telephone prior to take-off or by radiotelephony (RTF) when airborne. This might apply in the case of a required clearance to fly in a Control Zone (CTR) or crossing an Airway. No flight plan form is submitted and the destination aerodrome will not be informed.

In the case of a departure from an aerodrome within a CTR, an Abbreviated FPL may be sufficient to obtain an ATC clearance to depart the aerodrome and route to the appropriate CTR/CTA boundary and fulfils the requirement for 'Booking Out'. However, some aerodromes require aircraft to follow designated noise preferential routes, which may be identified as Standard Departure Routes (SDRs) depending on the outbound track of the flight.

A Full flight plan must be filed if the pilot requires the destination aerodrome to be notified of the flight.

Booking Out

Rule 17 of the Rules of the Air Regulations 1996 requires a pilot intending to make a flight to inform the Air Traffic Service Unit (ATSU) at the aerodrome of departure, an action known as 'Booking Out'. Filing a FPL constitutes compliance with this Rule. The action of 'Booking Out', however, does not involve flight details being transmitted to any other ATSU.

Submission Time Parameters

VFR flight plans should be submitted to the ATSU at the departure aerodrome at least 60 minutes before clearance to start up or taxi is requested. The local ATSU, if required, will assist in compiling the flight plan. If the departure aerodrome is not connected to the AFTN, the pilot is responsible for arranging for the ATSU to dispatch the completed flight plan via the Parent Unit. If the departure aerodrome has no ATSU, the pilot must arrange for the flight plan to be passed to the aerodrome's Parent Unit for onward transmission.

The Date of Flight (DOF) must be included in Item 18 of the FPL for all flights planned for the following day or beyond.

Submitting a FPL Through the Departure Aerodrome ATSU

A written FPL, which is filed through the ATSU at the departure aerodrome, must be submitted on the FPL form CA48/RAF F2919. The local ATSU may assist in compiling FPLs and checking them. However, the ultimate responsibility for filing an accurate FPL rests with the pilot or AO. If the departure aerodrome is not connected to the Aeronautical Fixed Telecommunications Network (AFTN), the pilot is responsible for arranging for the FPL to be filed with the appropriate Parent Unit.

Addressing VFR Flight Plans

Increasingly the responsibility for originating the FPL and its associated messages is being delegated by ATC to airlines and AOs. In such instances the responsibility for completing all parts of the form, including the addressing, rests with them. Although the ultimate responsibility for filing an accurate FPL rests with the pilot or operator, those who file through an ATSU or Parent Unit will be given assistance by ATC.

When addressing a VFR flight plan it is important to note that in addition to addressing the Destination Aerodrome, and when applicable the appropriate adjacent foreign FIR(s), it **must** also be addressed to the appropriate UK FIR(s), when entering or remaining within them, as listed below:

(a) EGZYVFRP Scottish and Oceanic FIRs

(b) EGZYVFRT London FIR

Further addressing information is available at UK AIP ENR 1.11, and in the **CAP 550 'Random FPL AFTN Address Book'**, available for reference at ATSUs.

Additionally, CAP 550 is available in electronic format at: www.caa.co.uk (this will link to NATS/AIS website (login required)) or may be purchased through Tangent Marketing Services Limited, details as follows:

Tangent Marketing Services Limited
37 Windsor Street
Cheltenham
Gloucestershire
GL52 2DG

Tel: +44-(0)870-8871410
Fax: +44-(0)870-8871411

E-mail: sales@tangentuk.com

Addressing VFR Flight Plans with Portion(s) of Flight Operated as IFR

The UK is a participating State in the Integrated Initial Flight Plan Processing System (IFPS). IFPS is the only system for the distribution of IFR General Air Traffic (GAT) flight plans and associated messages to Air Traffic Service Units (ATSUs) within the participating European States - the IFPS Zone. The roles and responsibilities of IFPS, with regard to addressing FPL, are detailed in the paragraph 3.

Note: Although IFPS handles IFR flight plans, it will not process the VFR portions of any mixed VFR/IFR flight plan.

Therefore, in order to ensure that all relevant ATSUs are included in the flight plan message distribution, pilots or Aircraft Operators should make certain that whenever a flight plan contains portions of the flight operated under VFR, in addition to IFR, the FPL must be addressed to:

(a) IFPS (EGZYIFPS)

(b) Aerodrome of departure

(c) Aerodrome of destination

(d) All FIRs that the flight will route through under VFR (in UK address to EGZYVFRP for Scottish/Oceanic FIRs and/or EGZYVFRT for London FIR).

(e) any additional addressees specifically required by State or Aerodrome Authorities.

UK Parent ATSU System

Facilities exist within the UK for the interchange of messages for aerodromes not connected to the AFTN, and also for aerodromes without an ATSU, through the use of nominated ATSUs which have the capability to act as Parent ATSUs (Parent Units).

The chart at UK AIP ENR 6-1-10-1 shows the areas of responsibility for each Parent Unit. Any pilot or operator at an aerodrome which does not have an ATSU, or is not on the AFTN, and who wishes to file a FPL, should file their FPL to the appropriate Parent Unit that is responsible for their departure aerodrome. This procedure also applies if a FPL needs to be filed outside the hours of operation of the ATSU at the departure aerodrome.

The staff at the Parent Unit will assist in the completion of the FPL if required and will address it appropriately for processing through the AFTN. It is preferable to fax the FPL, if possible, and include the telephone contact of the pilot or operator in case of a query. When the pilot or operator requires specific addresses, in addition to those normally inserted by the ATSU for that flight, it should be ensured that such requirements are notified at the time of filing the FPL. Operators and pilots are reminded of the importance of adhering to the submission time requirements detailed in this publication when filing with a Parent Unit.

The pilot is responsible for ensuring that the **departure time** is passed to the Parent Unit with whom the FPL has been filed, so as to activate the FPL and to enable the DEP message to be sent to the appropriate addressees. Arrangements should be made for a 'responsible person' on the ground to telephone the departure time to the Parent Unit. Failure to pass the departure time will result in the FPL remaining inactive. Consequently, this could result in the destination aerodrome not being aware that the aircraft is airborne and any necessary alerting action may not then be taken.

Exceptionally, the Flight Information Region (FIR) Controller at the ACC will accept departure times on RTF from pilots who have departed from aerodromes where there is no ATSU, or it is outside the hours of operation. The pilot is to request the Controller to pass the departure time to the Parent Unit to which the FPL was submitted. However, controller workload may cause a delay in forwarding such departure messages.

Parent Unit Telephone Number(s) and Fax Number(s)

Parent Unit	Telephone Number	Fax Number
London Heathrow	020-8750 2615 / 2616	020-8750 2617 / 2618
Manchester	0161-499 5502 / 5500	0161-499 5504
Scottish ACC	01292-692679	01292-671048

Action When the Destination Aerodrome has no ATSU or AFTN Link

If a pilot has filed a FPL to a destination that does not have an active ATSU, and is not connected to the AFTN, they are required to pass the ETA, prior to departure, to a 'responsible person' at the destination aerodrome. In the event of the aircraft failing to arrive at the destination aerodrome within 30 minutes of the notified ETA, the 'responsible person' must **immediately** advise the Parent Unit in order that alerting action may be commenced.

Exceptionally, where a pilot is unable to find someone to act as a 'responsible person' at the destination aerodrome, they may contact the appropriate Parent Unit prior to departure and request that it acts in this capacity. In this case, the pilot must contact the Parent Unit within 30 minutes of the ETA (calculated from the FPL and departure time), as failure to do so will trigger alerting action.

Delays, Departures, Modifications and Cancellations to a Filed Flight Plan

General

Having filed a FPL, pilots or AOs may require to change the existing FPL details. In most cases, a standard modification message can be sent. However, in some cases, the original FPL must be cancelled and a new FPL submitted. A second FPL cannot simply be used to amend the first.

Delays

ICAO requires that an appropriate delay message (DLA) must be sent if the EOBT is more than 30 minutes later than that already shown in the FPL. It is important that, in the event of a delay of 30 minutes or more to the EOBT, the pilot advises the departure aerodrome ATSU/Parent Unit so that a DLA message can be sent.

In order to meet the requirements of ATFM, all IFR aircraft operating within Europe must have any changes to their EOBT of +/- 15 minutes notified to the Integrated Flight Plan Processing System (IFPS).

Departures

The pilot is responsible for ensuring that the airborne time of the flight is passed to the ATSU with whom the flight plan has been filed. The ATSU will ensure that the departure (DEP) message is sent to the appropriate addressees. The pilot should try to arrange for a 'responsible person' on the ground to telephone the airborne time to the ATSU, as passing it over the RTF may, due to controller workload, lead to a delay in sending a departure message. Failure to pass the airborne time will result in the flight plan remaining inactive; consequently, this could result in the destination aerodrome not being aware that alerting action should be taken. If there is no ATSU at the departure aerodrome, or the ATSU is not connected to the AFTN, the pilot must ensure that the departure time is passed to the Parent Unit for onward transmission.

DEP messages must always be sent for VFR FPLs and IFR FPLs operating outside Controlled Airspace (CAS) or outside the IFPS Zone. A DEP message is not required if an IFR FPL has been filed with IFPS and the flight will operate solely within the IFPS Zone.

Note: Failure to activate the FPL could result in the destination aerodrome not being aware that alerting action should be taken.

Modifications

Other modifications to a filed FPL, such as a change in aircraft type, speed, level, route, etc, can be notified using a change (CHG) message. It is also important that when any changes or modifications are made to the original FPL, that a change (CHG) message is transmitted to all the addressees that will be affected by the change or modification.

In the case of FPLs filed with IFPS, and as long as the CHG message is sent to them, IFPS will do this automatically for the IFR portions of the FPL.

Cancellations

Any changes to aircraft call sign, point of departure and/or destination will require the original FPL to be cancelled and a new FPL submitted. Should the flight be cancelled, for any reason, it is equally important to ensure that a cancellation (CNL) message is transmitted to all the original FPL addressees.

In the case of FPLs filed with IFPS, and as long as the CNL message is sent to them, IFPS will do this automatically for the IFR portion of the FPL.

Action in the Event of Diversion

If a pilot lands at an aerodrome, other than the destination specified in the FPL, they must ensure that the ATSU at the original destination is informed within 30 minutes of the ETA (calculated from the FPL and departure time). This will avoid unnecessary search and rescue action being taken by the Alerting Services.

Persons On Board

The number of persons on board a flight, for which a FPL has been filed, must be available to ATC for search and rescue purposes for the period up to the ETA at the destination aerodrome plus one hour. If this information has been sent to the AO's handling agency at destination, no further action is required. Otherwise, the information is to be made available as follows:

(a) Where the AO or handling agency at the departure aerodrome closes before the ETA plus one hour, the AO or handling agency must lodge the number on board with the ATSU serving the aerodrome of departure;

(b) Where the departure aerodrome ATSU closes down before the ETA plus one hour, that ATSU must lodge the number directly with the appropriate Area Control Centre (ACC);

(c) At aerodromes without an ATSU, where the aerodrome closes before ETA at destination plus one hour, the aerodrome operator or handling agency must lodge the name and address of officials who have access to flight departure records with the appropriate ACC, so that they can be contacted as necessary, either direct or through the local police.

Note: The procedure above only applies if 'TBN' (or similar) has been inserted in Item 19 to indicate that the total number of persons on board was not known at the time of filing the FPL.

Cross-Channel Flight Planning

Pilots undertaking Cross-Channel flights are reminded that a flight plan **MUST** be filed for all flights to or from the United Kingdom which will cross the United Kingdom/France FIR Boundary.

The CAA have received reports that some VFR flight plans, filed for flights between France and the United Kingdom, have not been received at the UK destination aerodrome. Although these reports are infrequent, they nevertheless identify a significant safety aspect of cross-channel flight planning. The ability of the Air Traffic Service Unit at the destination aerodrome to be aware of an inbound flight is a key factor to alert search and rescue services, when appropriate.

The pilot is responsible for submitting (filing) a FPL to the Air Traffic Service Unit (ATSU) at the departure aerodrome at least 60 minutes before clearance to start up or taxi is requested. The local ATSU will, if required, assist the pilot to complete the FPL. If there is no ATSU at the departure aerodrome, or the ATSU is not connected to the Aeronautical Fixed Telecommunication Network (AFTN), the pilot must ensure that the FPL is passed to the aerodrome's Air Traffic Services Parent Unit for onward transmission. If pilots send their FPLs by fax, or make use of a computer based FPL system (as used in France and some other countries), they should assure themselves that the FPL has been accepted and has been transmitted by AFTN on their behalf. A telephone call to the ATSU receiving the FPL, or contact with the ATSU at the aerodrome of departure, will enable pilots to confirm that their FPL has been received, accepted and transmitted.

FPLs should be addressed to:

(a) The destination aerodrome;

(b) All interested ATSUs en-route;

(c) The London FIR - EGZYVFRT;

(d) The Scottish/Oceanic FIRs - EGZYVFRP (when necessary);

(e) All foreign FIRs that the aircraft will fly through or land/depart from.

Pilots must ensure that well-defined, significant points are included in the FPL to indicate where the aircraft will cross the UK or near continent coastlines. This information should be shown in Item 15 (Route) or Item 18 (Other information: EET/). Additionally, for flights to/from France, the French Authorities require the frontier crossing point (the UK/France FIR boundary position) to be included in Item 15 (Route) of the FPL. To assist pilots, the UK now includes the ATS route reporting points on the Southern England and Wales 1:500 000 chart. These can be used as a frontier crossing point. A position may also be shown as LAT/LONG, or as a bearing and distance from a route reporting point or navigation aid.

Example:

Cap Gris Nez - RINTI
Cap Gris Nez - 51N00130E
Cap Gris Nez - RINTI23005
Cap Gris Nez - DVR16010

The EET for this position should be shown in Item 18 of the FPL (Other information) in the format EET/LFFF(elapsed time) or EET/EGTT (elapsed time), depending on flight direction.

Example: EET/LFFF0145 (UK/France) or EET/EGTT0020 (France/UK).

Recommended VFR routes from the Solent CTA to the **Channel Islands** are shown in the UK AIP Aerodrome Section - Jersey, page AD 2-EGJJ-3-1.

Pilots may elect to file their return FPLs at the same time as they file their outbound FPL. The normal requirement is to address the FPL solely to the aerodrome of departure. However, if the pilot also adds the addressee of the destination aerodrome, then this will ensure that the return destination in the UK is aware of the intended return flight, just in case the return FPL is not transmitted from the non-UK country. If the return flight occurs on a different day, pilots must ensure that the date of flight (DOF) is shown in Item 18 of the FPL.

Example: DOF/070922 (DOF/year/month/day = Date of flight 22 September 2007).

Special VFR

A Special VFR Flight (SVFR) is a flight made at any time in a control zone which is Class A airspace, or in any other control zone in IMC or at night, in respect of which the appropriate air traffic control unit has given permission for the flight to be made in accordance with special instructions given by that unit instead of in accordance with the Instrument Flight Rules and in the course of which flight the aircraft complies with any instructions given by that unit and remains clear of cloud and in sight of the surface.

A Special VFR clearance may be requested without the submission of a full flight plan. However, brief details of the proposed flight are required to be passed to the appropriate ATSU before a SVFR clearance is issued.

SVFR Regulations

In the UK, VFR flight is not permitted at night. That means that every pilot who flies in uncontrolled airspace between evening civil twilight and morning civil twilight must follow the Instrument Flight Rules.

In the Air Navigation Order, Rules of the Air, Rules 33, 35, 36 and 37 lay down the rules for IFR flight within controlled airspace, including the filing of a flight plan and the obtaining and obeying of an air traffic control clearance. Pilots without an instrument rating are normally prohibited from flying under IFR in controlled airspace, although an IMC rating will suffice in Class D and E airspace in the UK. However, flight may be possible with a ‘Special VFR’ clearance in some control zones.

Clearance for Special VFR flight in the UK is an authorisation by ATC for pilots to fly within a Control Zone although they are unable to comply with IFR. In exceptional circumstances, requests for Special VFR flight may be granted for aircraft with an all-up weight exceeding

5700 kg and capable of flight under IFR. Special VFR clearance is only granted when traffic conditions permit it to take place without hindrance to the normal IFR flights, but for aircraft using certain notified lanes, routes and local flying areas, special conditions may be applied – pilots should refer to the AD 2 Section of the UK AIP for details.

SVFR Flight Planning Requirements

If intending to take advantage of SVFR privileges, pilots must ensure that ATC understands their requirements and any limitations that might affect their ability to accept the clearance given to them. A Full FPL is not required for a Special VFR flight, but ATC must be given brief details of the call sign, aircraft type and pilot's intentions. These details may be passed either by RTF or, at busy aerodromes, through the Flight Clearance Office.

A Full FPL must be filed if the pilot requires the destination aerodrome to be notified of the flight. The CA48 flight plan should be filed as normal, with "I" as the flight rules written in Item 8 (IFR). Any part of the route in which the pilot requires SVFR clearance must be clearly stated, and Item 15 is suitable to show this requirement. When completing Item 15, designate the point(s) on the boundary of controlled airspace at which you intend to enter or leave, and write "SVFR" as your routeing within the control zone. Once in radio contact, if you are unable to accept flight in IMC, you must inform ATC.

Special VFR Clearance

Requests for Special VFR clearance to enter a Control Zone, or to transit a Control Zone, may be made to the ATC authority whilst airborne. Aircraft departing from aerodromes adjacent to a Control Zone boundary and wishing to enter may obtain Special VFR clearance either prior to take-off by telephone or by RTF when airborne. In any case, all such requests must specify the ETA for the selected entry point and must be made 5-10 minutes beforehand.

The specific conditions associated with SVFR clearances in each control zone are published in the UK AIP (AD 2 Section) for individual aerodromes.

Special VFR is permitted in the UK at night. However, in general terms, SVFR is a specific clearance within the Instrument Flight Rules, and pilots should treat any such clearance as merely relaxing the requirements to fly as IFR rather than being an extension of VFR. In any case, an SVFR clearance can only be given if traffic and controller workload allows.

Without prejudice to existing weather limitations on Special VFR flights at specific aerodromes (as detailed within the AD 2 Section) ATC will not issue a Special VFR clearance to any fixed-wing aircraft intending to depart from an aerodrome within a Control Zone, when the official meteorological report indicates that the visibility is 1800 m or less and/or the cloud ceiling is less than 600 ft.

Aircraft using the access lanes and local flying areas notified for Denham, White Waltham and Fairoaks in the London CTR, and any temporary Special Access Lanes which may be notified from time to time, will be considered as Special VFR flights and compliance with the procedures published for the relevant airspace will be accepted as compliance with an ATC clearance. As such, flight plans are not required to be filed and separate requests should not be made nor will separate clearances be given. Separation between aircraft, which are using such airspace, cannot be given, and pilots are responsible for providing their own separation from other aircraft in the relevant airspace.

A diagram detailing the VFR Flight Planning Process can be found in the ENR section 1-10-13.

Low-Level Civil Aircraft Notification Procedures (CANP)

<< back to contents page

Introduction

Many military and civil aircraft operate in Class G Airspace below 2000ft AGL, where ground radio and radar coverage is not always available to assist pilots in avoiding collisions. Collision avoidance must necessarily, therefore, be based on the 'see and avoid' principle, assisted as far as possible by information on known activity. Whereas a variety of civil aviation activities take place within this airspace, military activity consists mainly of low flying training.

It is not practicable to obtain and disseminate traffic information on all civil flights below 2000ft AGL, nor is it possible to disseminate details of military low level flights within the UK Low Flying System (UKLFS) to civil operators. Nevertheless, the greatest conflict of interests occurs at or below 1000ft AGL where the majority of military low level operations take place and where civil aircraft may be engaged upon activities, as defined at paragraph below and overleaf, which might inhibit pilot look-out or reduce aircraft manoeuvrability. In addition, certain recreational and other civil flying activity, away from licensed aerodromes, needs to be considered.

A system exists to collect information on civil aerial activities for distribution to military operators to assist in flight planning. This system is known as the Low Level Civil Aircraft Notification Procedure (CANP).

Before commencing any low flying sortie, military pilots receive a comprehensive brief on all factors likely to affect their flight, including relevant CANP details. Hence, maximum participation in CANP by those planning to conduct the qualifying activities is essential if full benefit is to be obtained from the procedure.

Pilots/operators, or their representatives, intending to embark upon aerial activities described below should notify details of the flights to the Low Flying Booking Cell (LFBC) at the London Air Traffic Control Centre (Military) – LATCC(Mil). For the purposes of CANP, direct-dial, Freephone and Freefax facilities are available during these hours:

Monday to Thursday	0700 – 2300 (local);
Friday	0700 – 1700 (local).

Email or Fax notification is preferred for CANP requests as this allows the LFBC to email, ‘faxback’ or telephone confirmation of fax receipt and issue a reference number to the aircraft operating authority. Contact numbers are as follows:

Fax: 0800-3892225
Tel: 0800-515544
Email : witlfos-lfbc@wittering.raf.mod.uk

Commercial Aerial Activity

The following civil aerial activities at and below 1000ft AGL with an expected duration in excess of 20 minutes at a specific location, should be notified to the LFBC:

(a) aerial crop spraying (this includes all agricultural tasks carried out by an aircraft);

(b) underslung aerial load lifting;

(c) aerial photography and filming;

(c) aerial survey/air surveillance.

Pipeline/powerline inspection activity is the subject of an AIC. However, aircraft carrying out powerline inspections and which are able to operate within a limited geographical area may apply for warning status under CANP. Any request for such protection should be made as far in advance as is possible through the email address, Freefax or Freephone details shown above. The manager of the UKLFS at Low Flying Operations Squadron (LF Ops Sqn), RAF Wittering will consider requests of this nature on a case-by-case basis.

Procedure

CANP fax and telephone messages should provide details of the intended activity in the following format:

(a) type of activity;

(b) location(s) – preferably as a 2-letter, 6-figure grid reference taken from an OS 1:50,000 map, although latitude and longitude will be accepted. The name of a nearby village or town is also required;

(c) area of operation(s) – see paragraph below referring to ‘Operating Area Boundaries’

(d) date and time of intended operation(s) – start/finish in local time;

(e) maximum operating height(s) AGL;

(f) number and type(s) of aircraft;

(g) contact fax and/or telephone number(s);

(h) operating company and fax/telephone number(s) (if applicable).

Example: CANP NOTIFICATION

A – Underslung Loads
B – SU 561310 - Ovington
C – 2nm radius
D – 12 September - 1000 to 1300
E – 1000ft AGL
F – Single MB105 Helicopter
G – Contact fax and telephone number for the site
H – Rotary Helicopters Ltd - fax and telephone number of operator.

Once a notification has been accepted, the LFBC will allocate a reference number which pilots/operators should retain. Operators are advised that, in the interests of safety and accuracy, all telephone calls to the LFBC are recorded.

Operators should, where possible, use the freefax facility as the primary method of filing a notification. Requests should be submitted using Form CA 2366 reproduced at ENR 1-10-18. Customised variations of this form are acceptable providing they contain all the required information. A contact fax and telephone number must be provided in order that notification can be confirmed and a reference number issued. (Additional copies of Form CA 2366 can be obtained from the Directorate of Airspace Policy (DAP) at the address shown on page 37). Users will receive a CANP reference number from the LFBC by 'faxback' or return telephone call. This reference number should be retained until the termination of the activity with which it is associated.

Pre-notification Required

Pre-notification of intended operations should be communicated, by fax if possible, to the LFBC not less than 4 hours before commencement of the activity. Fax requests will receive a 'faxback' or telephone call from the LFBC with time authentication and reference number. Notifications by telephone will receive a time authentication followed by a return call from the LFBC with a reference number. Successful transmission of the CA 2366, or a time authenticator for notification by telephone, not less than 4 hours from the start of the CANP activity can be considered as confirmation that a CANP avoidance for the period requested will be issued.

Whenever possible, pre-notification of operations due to take place up to 1300 hours (local time) should be made the previous day and those due to take place after 1300 hours (local time) should be pre-notified on the morning of the same day. Consideration should also be given to the LFBC opening hours – Monday to Thursday, 0700-2300 (local) and Friday to Sunday, 0700-1700 (local) – as multiple notifications just prior to LFBC evening closure may not be processed until the following morning and operators therefore risk not having their activity notified to military crews before activity commencement the next day. It is accepted that there will be occasions when the minimum pre-notification time cannot be met. Nevertheless, late notifications should still be made and every effort will be made to distribute the information as widely as possible. However, reports received less than 4 hours before operations are due to commence are, progressively as the time diminishes, less likely to reach all military pilots before they depart on their low level sorties and will, therefore, only be issued as a warning to military aircrew.

CANP operators who are aware of commercial activities well in advance are encouraged to contact the manager of the UKLFS, as far in advance as possible (01780-783838 Ext 3291 (Attn Ops LF), Tel: 01780-783838 Ext 7402), with as many details of the activity as are available at the time.

Due to the closure of the LFBC at weekends, activities planned for the weekend should be notified to the LFBC no later than 1600 hours (local time) on the Friday before, in order to receive warning status against any pre-notified Military flying. This also applies to flights which may enter low level due to the prevailing weather and the nature of the activity.

Operating Area Boundaries

The airspace notified under CANP should not exceed an area bounded by a 2nm radius circle. If more than one area is to be notified, these areas are not to be activated concurrently. In the case of under slung aerial load lifting operations the area should be defined as a corridor extending 2nm either side of intended track from ground level to a maximum of 1000ft AGL. When the route of an under slung load exceeds 20nm it should, wherever possible, be divided into sections not exceeding 20nm in length; an overlap of 20 minutes is acceptable in such circumstances.

Pilots of military fixed-wing aircraft flying at an IAS greater than 140kt will avoid areas reported under CANP either laterally or vertically. CANP users should note that military pilots may over fly the reported area by a minimum of 500ft. Thus, for example, if the height of the CANP area is 1000ft AGL, military aircraft may over fly the area at a minimum height of 1500ft AGL. Therefore, the lateral and vertical boundaries that define the area of activity should equate only to the parameters within which the activity is planned to take place and should not build in an allowance as a safety factor.

Pilots/operators should note that, other than in exceptional circumstances, the dimensions of a CANP 'avoidance' as defined above are generally not negotiable. Any request for a CANP of non-standard dimensions should be made, as far in advance as possible, to the manager of the UKLFS on either faxusing the numbers listed above.

Cancellation and Re-submissions

Activities reported under CANP may considerably restrict the airspace available for military low flying training. Thus, in order to maintain the integrity of the CANP system, every reasonable attempt should be made to inform the LFBC as soon as it becomes obvious that an activity previously notified will no longer take place, or that the activity has been completed. Notification of a completed activity should be made irrespective of the time remaining on the CANP.

To eliminate the possibility of error, an application must be made in accordance with the aforementioned parameters on each occasion. Re-submission by reference to a previously issued CANP Reference Number will not be accepted by the LFBC.

Infringements of CANP Airspace

Infringements of CANP airspace will be fully investigated. If it is considered that CANP airspace has been infringed by military aircraft, and more than 4 hours pre-notification (in the correct format) has been given, then pilots/operators should contact the LFBC as soon as possible with the following information:

(a) reference number;

(b) date and time of the incident;

(c) number and type of aircraft involved;

(d) position and estimated profile (heading/height) of aircraft involved.

Pilots/operators should note that military light aircraft flying at an IAS of 140kt or less, helicopters and any aircraft flying within a MATZ, need not avoid CANP airspace. However, pilots of such military aircraft will be aware of the notified activity, subject to the minimum notifying period.

Recreational and Other Aerial Activities

Recreational Aerial Activities

The LFBC invite notifications concerning certain recreational aerial activities planned to occur at or below 1000ft AGL. Such notifications will be granted warning status under CANP and will be promulgated to military aircrew. Notifications are only required, however, when 5 or more gliders, hang-gliders and paragliders, free-flight balloons, microlight aircraft or model aircraft will be operating:

(a) from a site not listed in the UK AIP for such activity; or

(b) from a site listed in the UK AIP but outside the published operating hours of the site, where these are detailed.

Notwithstanding the provisions of paragraph (b) above, operators will be aware that Permissions for cable launched gliding, hang-gliding and paragliding activities, to a height of more than 60 metres AGL, are issued by DAP. Individual Permissions will stipulate that, if the activity is during a weekday, it is conditional on compliance with the CANP system.

BHPA Members may also seek avoidance status when operating from one of the BHPA listed sites on weekdays (as also listed in the Mil AIP Vol 3, Part 1, Section 2). The LFBC must be notified by 2000 hours the day before flight (1600 hours on the preceding Friday for Saturdays and Sundays), otherwise the site will attract warning status only. The LFBC should be informed as soon as possible if the activity is cancelled.

Other Aerial Activities

The LFBC also invites notification of the following activities:

(a) tethered and captive balloons (to a height greater than 60 metres AGL);

(b) kite flying, involving 5 or more kites from a specified site, (to a height greater than 60 metres);

(c) operations of aircraft from water;

(d) any other aerial activity likely to create an exceptional concentration of aircraft at a site not listed in the UK AIP.

Procedure

Email, fax or telephone notification should provide details of the intended activity as outlined previously.

Example: RECREATIONAL ACTIVITY

A – Hang Gliding
B – ST 187101 – Upottery Aerodrome, Devon
C – 2nm radius
D – 19 November - 0900 to 1500 (local time)
E – N/A
F – Expected number of Hang Gliders - 6
G – Telephone number of the site
H – Discover Hang Gliding Group (Telephone number if different to that at G).

Once a notification has been accepted, the LFBC will allocate a reference number which pilots/operators should retain.

The Freefax facility – on 0500-300120 – should be used where possible for the notification of recreational activities.

Pre-notification is once again required.

Operating Area Boundaries

The airspace notified should not exceed an area bounded by a 2nm radius circle, from ground level to 1000ft AGL.

Recreational and other aerial activities will not normally attract CANP avoidance areas; however, warnings of such activities will be promulgated to military aircrew.

Cancellation

Every reasonable attempt should be made to inform the LFBC as soon as it becomes obvious that an activity previously notified will no longer take place, or that the activity has been completed. Notification of a completed activity should be made irrespective of the time remaining on the CANP.

Comments / Recommendations

Users are invited to forward comments on CANP, or recommend improvements to the procedure, to the Directorate of Airspace Policy at the following address:

Directorate of Airspace Policy
CAA House
45-59 Kingsway
London
WC2B 6TE

Tel: 020-7453 6543
Fax: 020-7453 6565

The Civil Low Flying/Aerial Activity form is available at ENR 1-10-18.

Aeroplane performance

<< back to contents page

Below is a table of recommended safety factors to be applied to the take off/landing distances published in Flight Manuals when the surface is other than dry and paved. Although dry grass is now assessed as requiring a slightly lower increase in landing distance required, the increase is greater when landing on any form of wet surface, either grass or paved.

Factors must be multiplied i.e. 1.2 x 1.3

	TAKE-OFF		LANDING	
Condition	Increase in take-off distance to height 50 feet	Factor	Increase in landing distance from height 50 feet	Factor
10% increase in aeroplane weight, e.g. another passenger	20%	1.20	10%	1.10
Increase of 1000 feet in aerodrome elevation	10%	1.10	5%	1.05
Increase of 10º C in ambient temperature	10%	1.10	5%	1.05
Dry grass* - up to 20cm (8 in) on firm soil	20%	1.20	15%+	1.15
Wet grass* - up to 20 cm (8in) on firm soil	30%	1.30	35% Very short grass may be slippery, and distances may increase by up to **60**%	1.35
Wet paved surface	-	-	15%	1.15
A 2% slope*	Uphill 10%	1.10	Downhill 10%	1.10
Tailwind component 10% of lift off or landing speed	20%	1.20	20%	1.20
Soft ground or snow*	25% or more	1.25 +	25% or more	1.25+
NOW USE ADDITIONAL SAFETY FACTORS (if data is unfactored)		**1.33**		**1.43**

Notes:

1.* Effect on ground run/roll will be proportionately greater.

2.+ For a few types of aeroplane e.g. those without brakes, grass surfaces may decrease the landing roll. However, assume the INCREASE shown until you are thoroughly conversant with the aeroplane type.

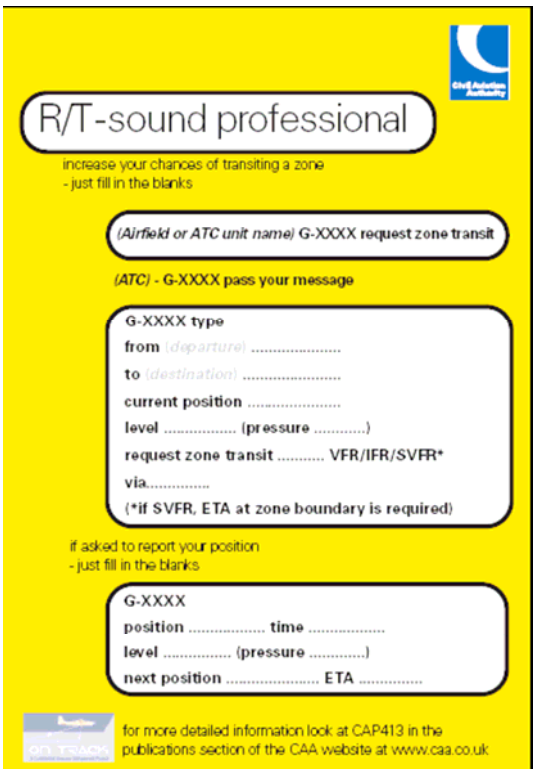
3. Any deviation from normal operating techniques is likely to result in an increased distance.

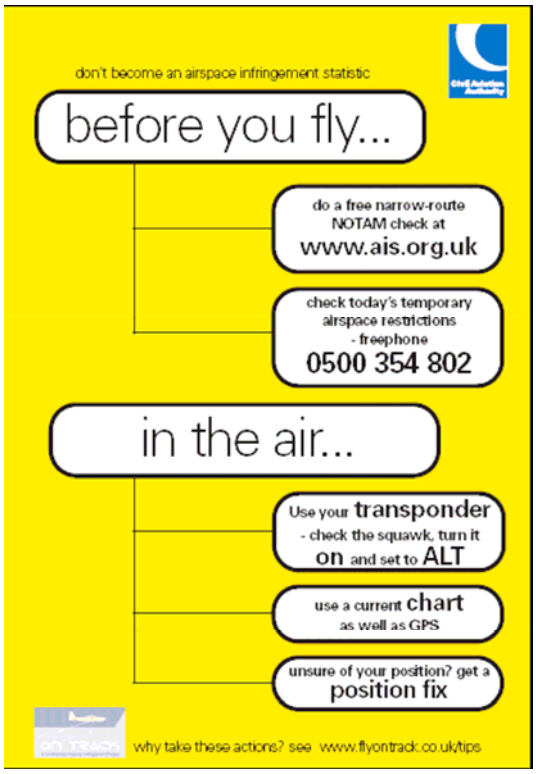
Other useful sources of information relating to VFR Flying

[<< back to contents page]

RT Procedures

RT CAP413 - Kneeboard





Frequency Reference Cards

[<< back to contents page]

As the CAA VFR charts are already quite detailed, the decision was made to provide additional information on a separate reference cards, with one covering the Northern and Scottish 1:500k Aeronautical Charts, and another for the Southern Chart.

They feature ICAO designators for use with GPS and selected ATC frequencies plus information regarding DACS (Danger Area Crossing Service), DAAIS (Danger Area Activity Information Service) and parachute drop zone information and comes free with each 1:500,000 CAA chart purchased.

The information has been kept generic in order that the card may also be used with the 1:250 000 series charts.

This reference card enables us to provide pilots with the extra information required without cluttering up the main charts, which could make them too difficult to read. The card has been produced in 'kneeboard size' and is therefore easy to use in the cockpit. We hope this will bring greater awareness to airspace users and will increase the safety of VFR navigation.

View the Northern and Scottish Frequency reference card.

View the Southern Frequency reference card.

Generic A4 VFR Legends

[<< back to contents page]

These can be downloaded and printed from the CAA website.

View the 1:500,000 Legend

View the 1:250,000 Legend

LASORS

This document gives pilots a one-stop reference for all aspects of safe aeroplane operation. This can be viewed on the CAA website at **www.caa.co.uk/lasors** and is also downloadable by clicking **here.**

Safety Sense Leaflets

<< back to contents page

Also found via the CAA website. **Click here for list of available leaflets**