

13 November 2014

## Policy Statement

# THE APPLICATION OF ICAO AIRSPACE CLASSIFICATIONS IN UK FLIGHT INFORMATION REGIONS

# 1 Airspace Policy

- 1.1 ICAO requires that airspace is classified and designated according to the ATS Airspace Classifications as detailed in References A to C. The UK currently applies the Airspace Classification System subject to such Differences detailed at Reference D. The ICAO ATS Airspace Classification has legal foundation in Reference E.
- 1.2 The application of each of the ICAO ATS Airspace Classifications and of the services within each of these in use in the UK Flight Information Regions (FIRs) will be in accordance with the harmonisation principles of the ECAC Airspace Strategy and any measures that emanate from the European Commission's Single European Sky policies.
- 1.3 The airspace classification to be applied to a particular volume of airspace will depend upon the number of Air Transport Movements (ATMs) operating within it, the complexity of Instrument Flight Rules (IFR) operations and the safety hazards posed to public transport flights operating under IFR. The following principles are central to its application:
  - (a) The volume of controlled airspace shall be the minimum practicable necessary for the effective protection of the whole ATC operation as defined by the Air Traffic Services (ATS) provider within a particular airspace, subject the need to avoid over-complication of airspace structures and any environmental considerations.
  - (b) The airspace classification shall be selected to permit safe access to as many classes of user as possible.
  - (c) The Flexible Use of Airspace (FUA) concept will be considered at every opportunity to allow maximum integrated usage of UK airspace by all users. Every effort will be made to ensure that airspace sharing arrangements are not overly complex and that such arrangements do not reduce flight safety or render the affected airspace (or sharing arrangements) unusable. Segregation of aerial activities by use of airspace classifications will only occur where no other viable alternatives exist and safety cannot be assured by any other means.
  - (d) Airspace is to be classified as follows:
    - (1) Airspace allowing IFR operations only Class A.
    - (2) Airspace allowing for both IFR and Visual Flight Rules (VFR) operations in a controlled environment Class C or D.

- (3) Airspace allowing for both IFR and VFR operations wherein VFR operations are not controlled Class E (see also paragraph 2.5).
- (4) Advisory airspace Class F.
- (5) All other airspace Class G.
- 1.4 Class A-E airspace is referred to as Controlled Airspace (CAS).

# 2 Application of Airspace Classes

- 2.1 Class A will normally only be applied to airspace where the complexity of the air traffic management task justifies a permanent IFR-only environment. Within the UK FIRs, Class A is normally notified for airways, major Terminal Control Areas (TMAs) and Control Areas (CTAs). In the case of TMAs and CTAs the application of Class A will be based upon the complexity of the route structure and interface procedures (particularly interaction with en-route services) together with associated ATS operations. Class A may exceptionally be notified for certain Control Zones (CTRs), based upon the historic and future mix of traffic, complexity of IFR operations and the density of operations.
- 2.2 Class B is not currently notified within the UK FIRs.
- 2.3 Class C applies to the UK FIRs between FL 195 and FL 660 in accordance with the European Commission's Airspace Classification Regulation (Reference F) and Rule 19 of Rules of the Air Regulations 2007. Within the UK FIRs below FL195, Class C may be notified for airways (or portions thereof) and TMAs (or portions thereof). It is a long-term aspiration of the CAA for current Class D airways to be progressively notified where appropriate as Class C *where this reflects actual* operational conditions associated with each of the airways in question, and in accordance with principles outlined above. Class C may also be notified for certain CTRs and CTAs in the vicinity of aerodromes, based upon the historic and future mix of traffic, complexity of IFR operations and the density of operations.
- 2.4 Class D is to be notified for locations where a known traffic environment is necessary in both Visual Meteorological Conditions (VMC) and Instrument Meteorological Conditions (IMC). Within the UK FIRs, Class D is normally notified for CTRs and CTAs in the vicinity of aerodromes (unless there is an overriding need for a more restrictive classification). Exceptionally, within the UK FIRs below FL195, Class D may also be notified for TMAs (or portions thereof) and exceptionally for certain airways (or portions thereof).
- 2.5 Class E airspace is to be notified where a known traffic environment is necessary only for IFR operations. Enhancements to the characteristics of Class E airspace, such as mandatory carriage and operation of transponders and/or radios, may be considered where the application of Classes A-D cannot be justified. Class E is not to be applied to CTRs.
- 2.6 Class F is not currently notified within the UK FIRs.
- 2.7 Class G applies to the remainder of the UK FIRs.
- 2.8 The **Annex** outlines the purpose of Controlled Airspace and each of the various structures referred to above.

#### 3 Changes to Airspace Classes

3.1 Changes to the dimensions or classification of UK airspace are to be undertaken in accordance with References G and H.

## 4 Air Traffic Services

- 4.1 Airspace classifications applied to a particular volume of airspace are to be supported with the requisite navigational infrastructure and air traffic services to provide for access by all classes of flights appropriate to the airspace classification. For example, the effective management of airspace in the vicinity of an aerodrome requires as a minimum primary radar-based ATS provision. Thus the provision of such equipment is a prerequisite for the establishment of CTRs and CTAs in the vicinity of an aerodrome.
- 4.2 It is important therefore that changes to airspace classifications are co-ordinated with the relevant areas within the CAA and in particular the Airspace, ATM and Aerodromes Department.

## 5 Enquiries

5.1 Enquiries concerning this policy statement should be addressed to the CAA at ats.enquiries@caa.co.uk.

## Annex:

The Purpose of Controlled Airspace

#### References:

- A. ICAO Annex 2 Rules of the Air.
- B. ICAO Annex 11 Air Traffic Services.
- C. ICAO Doc 4444 PANS-ATM.
- D. UK AIP GEN 1.7.
- E Implementing Regulation (EU) No. 923/2012 dated 26 September 2012 (Standardised European Rules of the Air).
- F. Regulation (EC) No. 730/2006 dated 11 May 2006 (Airspace Classification).
- G. **CAP 724** 'The Airspace Charter'.
- H. **CAP 725** 'CAA Guidance on the Application of the Airspace Change Process'.

# Annex The Purpose of Controlled Airspace

## Introduction

The purpose of CAS in the UK is to enhance the protection of ATMs operating under IFR during en-route flight and the critical stages of an Instrument Arrival or Departure. Such protection is principally established by means of a "known traffic" environment.

En-route controlled airspace will consist of airways and en-route CTAs within which specific ATS routes have been defined for the purpose of flight planning and which provide for the organization of an orderly traffic flow.

Controlled airspace in the terminal environment will consist of CTRs, CTAs and TMAs and serves to enhance the protection of Public Transport Flights operating under IFR during the critical stages of an Instrument Arrival or Departure and to permit the safe and effective integration of such traffic with other IFR flights and flights operating under VFR.

## Aerodrome Control Zones (CTRs) and Control Areas (CTAs)

CAS in the vicinity of aerodromes shall be designed to provide sufficient airspace protection for aircraft established on, or joining, the final approach track under radar direction, and the integration of aircraft in a radar traffic pattern or carrying out a missed approach.

The dimensions of CTRs and CTAs are to be sufficient to permit the effective integration of flights to and from any adjoining route structure where appropriate or the containment of published terminal, holding and instrument approach procedures where necessary.

Wherever practicable, the lower limit of a CTA adjoining a CTR should be no lower than 1,500 feet agl in order to permit VFR flights under the CTA to comply with the Rules of the Air. The use of an expanded CTR to permit higher CTA base levels is preferable.

#### **Terminal Control Areas (TMAs)**

TMAs are established to permit the safe integration of arriving and departing traffic flows of two or more major airfields or at the confluence of routes, and encompass the transition between the terminal and en-route phases of flight. A TMA is usually controlled by an Area Control Centre.

The complexity of the route structure and interface procedures (particularly interaction with en-route services) together with associated ATS operations will determine the extent of a TMA. Base levels should be set at the highest practicable levels to contain integrated instrument approach and departure profiles yet simultaneously permit the effective availability of airspace below the base of controlled airspace for the use by transit air traffic.

#### Airways

The establishment of a detailed ATS route network depends upon the composition of the air traffic it is intended to serve. Where national operations constitute the bulk of the traffic which is to be accommodated, priority should be given to satisfying these needs. However, adequate arrangements should be made to meet the needs of international operations through appropriate trunk routes and development of these trunk routes must be co-ordinated on at least a regional basis.

The majority of the ATS routes so established will be permanently available; however, there will be cases:

- (a) When routes are required only for specific periods of the year (seasonal routes); or
- (b) Where specific routes can be made available only during weekends or because they traverse areas which, during the week, are reserved for other activities (e.g. Conditional Routes); or
- (c) Where routes whose use depends on special co-ordination procedures can only be effected on an *ad hoc* basis for the specific flights involved and depending on the circumstances as they prevail at that time.

Such non-permanent routes should also be included in the ATS route network, however with a clear indication of the limitations imposed on their use.

The status given to individual ATS routes is primarily determined by the amount and type of traffic using the route.