Directorate of Airspace Policy

All NATMAC Representatives

25 September 2009
DAP/BM/LB/ClassF

NATMAC INFORMATIVE LETTER

Dear Colleagues,

THE FUTURE APPLICATION OF CLASS F AIRSPACE IN UK FLIGHT INFORMATION REGIONS

ICAO Doc 4444 (PANS-ATM) states that, where air traffic advisory service is implemented, this is considered normally as a temporary measure only until such time as it can be replaced by air traffic control, ie, through the application of Classes A-E rather than Class F. Within the UK FIRs Class F is specified only for UK Advisory Routes (ADRs). Although a study into the future of UK ADRs had been undertaken in 2006, the recent ICAO Safety Oversight Audit of the CAA found that there are no timelines for replacing Class F within the UK.

It is therefore the intention of the CAA for UK ADRs to be progressively replaced by airspace classifications and structures better suited to the prevailing operational conditions associated with each of the changes. The CAA seeks to complete this action by the end of 2011, and the purpose of this letter is to inform you of the Directorate's policy statement on the future application of Class F in the UK FIRs, a copy of which is at Enclosure 1.

In seeking to remove Class F airspace it will be necessary to identify the appropriate alternative airspace arrangements. The Directorate will re-establish the Technical Sub Group (TSG) of the Airspace Strategy Steering Group, consisting of key affected stakeholders to identify these alternatives and to formulate whatever regulatory arrangements are considered necessary to accompany these. A similar approach was taken to formulate the regulatory basis to the introduction of Class C airspace in the UK FIRs.

Proposals to replace individual ADRs with higher classifications (ie, to establish airways), or declassification to Class G will be developed (and ultimately submitted to DAP) by NATS in accordance with the requirements of the Airspace Change Process (ACP). In the case of each ADR, the application of a particular airspace class will be determined by the need to establish a known traffic environment in either or both Visual Meteorological Conditions (VMC) and Instrument Meteorological Conditions (IMC) in specific areas, subject to the availability of the requisite navigational infrastructure and air traffic services within each particular volume of airspace. Route utilisation and underlying safety concerns will help determine such need; indications of recent ADR utilisation and safety occurrences within them can be found at Annexes A and B.

NATMAC will, of course, be engaged – along with other stakeholders - in ACP-related consultation. However, any NATMAC members wishing to raise related issues in advance of

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such consultation may, of course, bring these to the attention of Mr Stuart Lindsey (Hd DAP Controlled Airspace Section for TSG's consideration beforehand. Equally, any NATMAC body that wishes to engage in the work of the TSG should advise Stuart Lindsey accordingly.

In the light of this development it has been necessary to revise the DAP policy statement concerning the application of ICAO Airspace Classifications in UK FIRs that was published in December 2008. The revised version was published at the end of July 2009, and a copy is at Enclosure 2.

Yours sincerely,

Original signed

J C WALKER
NATMAC Secretary

Annexes:

A. ADR Movements January 2004 to December 2008.
B. ADR AIRPROX Below FL195 January 2004 to December 2008.

Enclosures:

1. The Future Application of Class F Airspace in UK Flight Information Regions - DAP Policy Statement dated September 2009.
2. The Application of ICAO Airspace Classifications in UK Flight Information Regions - DAP Policy Statement dated July 2009.

Annex A

ADR MOVEMENTS JANUARY 2004 TO DECEMBER 2008

ADR	2004 total	2004 daily mean	2005 total	2005 daily mean	2006 total	2006 daily mean	2007 total	2007 daily mean	2008 total	2008 daily mean
W3D/N560D[1]	18422	50.3	21150	57.9	22581	61.9	22762	62.4	22439	61.3
W5D	6893	18.8	7813	21.4	9969	27.3	9733	26.7	10070	27.5
W2D	6598	18.0	7025	19.2	7343	20.1	8813	24.1	8053	22.0
W4D	5000	13.7	5216	14.3	6055	16.6	6693	18.3	7306	20.0
W6D	2899	7.9	3231	8.9	4727	13.0	5251	14.4	5265	14.4
N573D/N580D[2]	3250	8.9	3427	9.4	3335	9.1	3876	10.6	4009	11.0
A1D	3685	10.1	3832	10.5	3494	9.6	3154	8.6	3355	9.2
W911D	6515	17.8	3231	8.9	3350	9.2	3332	9.1	3385	9.2
P600D	1656	4.5	1914	5.2	1835	5.0	942	2.6	1766	4.8
W958D	1853	5.1	2016	5.5	1859	5.1	1737	4.8	1714	4.7
N552D	645	1.8	854	2.3	1149	3.1	1572	4.3	1547	4.2
W928D	3304	9.0	4596	12.6	1678	4.6	1309	3.6	1080	3.0
G4D/N160D[3]	364	1.0	684	1.9	537	1.5	568	1.6	846	2.3
N553D	37	0.1	36	0.1	28	0.1	285	0.8	406	1.1
N562D	230	0.6	244	0.7	159	0.4	415	1.1	383	1.0

[1] W3D renumbered N560D 15 March 2007.
[2] N573D renumbered N580D 15 March 2007.
[3] N160D established 16 March 2006 following realignment of G4D beneath UN160 and subsequent renumbering.

Annex B

ADR AIRPROX BELOW FL195 JANUARY 2004 TO DECEMBER 2008

DATE	ADR	POSITION	FL	CONFLICTORS	REMARKS	UKAB GRADE
01 Jul 2004	W3D (N560D)	12nm SSW GUSSI	FL110	Gulfstream G4 Falcon 20	**UK AIRPROX 124/2004**. Prior to transfer, the G4 had been co-ordinated not below FL120 due to traffic at FL110. On transfer G4 was observed continuing its descent into conflict with a Falcon 20, before climbing and carrying out an avoiding turn. STCA activated. The pilot of the G4 reported that Scottish Control cleared them for descent to FL120 in preparation for final descent. The pilot's report goes on to state that they were then switched to a military radar control unit who cleared them direct to the INS VOR, then there was a garbled message about traffic off to the right side, then an audible FL110. The co-pilot interpreted this as a clearance to FL110 and selected 11000 on the altitude select panel. The Captain realised that the instruction was regarding traffic at FL110 and the altitude was quickly reselected to 12000. In the meantime while the altitude hold was deselected, the aircraft drifted down to 11700 feet. At no time did the crew lose sight of the converging traffic.	**C**
18 May 2005	W3D (N560D)	5nm NNE Wick VOR	FL120	SF340 Tornado F3	**UK AIRPROX 72/2005**. SF340, cruising at FL120 receiving a RAS, was given traffic info and avoiding action on two military a/c. SF340 subsequently reported receiving/complying with a TCAS RA and climbed to FL130. The military a/c was in a NOTAMED exercise area and was vectored on to the Saab by an AWACS a/c due to an error in classification by the AWACS controllers. On visually identifying the a/c as not involved in the exercise the military jet turned away.	**C**
25 Jul 2005	W3D	Vicinity of RANOK	FL150	Falcon 2000 2 x Tornado	**UK AIRPROX 121/2005**. Falcon 2000, descending in Advisory Route W3D and receiving a RAS, was given traffic info and avoiding action on two military jets that descended	**C**

					through Falcon 2000's level. The Falcon 2000 had turned after passing GOW on track to Inverness. Two military jets, under the control of an AWACS a/c, were then observed crossing the ADR well ahead of the Falcon 2000 but, soon afterwards, were observed turning from a westerly track onto a south easterly one, which placed them in conflict with the Falcon 2000. The ScACC controller complied with the terms of a RAS by passing both traffic info and avoiding action.	
19 Aug 2005	A1D	21nm NNW LOMON	FL145	SF340 Tornado F3	**UK AIRPROX 146/2005**. SF340 received and actioned a TCAS RA. Investigations indicate that the SF340 was under a RAS on an ADR when ATC passed traffic information and avoiding action. The Saab crew received various TCAS advice and acquired the military jet visually. The military pilot first saw the a/c directly ahead in his HUD and had time to turn right and increase the ROD.	**B**
28 Oct 2005	W3D (N560D)	16nm N RANOK	FL135	B737 2 x Sea Harrier	**UK AIRPROX 194/2005**. Avoiding action was given to B737 as formation of two military jets indicated a conflict. The pair of military jets descended whilst crossing ADR W3D (Class F airspace) causing concern to the ScACC controller.	**C**
22 Nov 2005	W6D	27nm Inverness	FL120	SF340 2 x Tornado GR4	**UK AIRPROX 202/2005**. The military jet(s) also received repeated traffic info and suggested avoiding action from military ATC. The military jets flew close enough to the Saab 340B to initiate a TCAS RA and cause concern to its pilot.	**C**
17 Feb 2006	W3D (N560D)	6nm S Kirkwall	FL50	BE200 SF340	**UK AIRPROX 20/2006**. BE200 climbed to altitude 4000ft instead of cleared FL40 and lost separation with a SF340 at FL50. SF340 received/complied with a TCAS RA. STCA activated. Traffic info and avoiding action given. Investigation by the BE200 operator identified a failure in the SOPs. Appropriate rectification carried out to prevent recurrence.	**C**
06 Mar 2006	W3D (N560D)	16nm S Inverness	FL65	BAe146 Jaguar	**UK AIRPROX 27/2006**. BAe146 at 20 DME INS and at FL65 receiving a RAS, was handed to Inverness Tower. Prior to making contact, BAe146 received/complied with a TCAS RA of monitor vertical speed, which then changed to descend. BAe146 had the traffic, a military jet, visual. The military pilots	**B**

					concerned disregarded the ACN guidance regarding Advisory Routes and flew into conflict with the BAe146, which they did not see.	
06 Jun 2006	W5D	59nm NNE Aberdeen	FL180	BAe146 Tornado GR4	**UK AIRPROX 65/2006**. During a military exercise, a BAe146 operating on W5D receiving a RAS was given traffic info. Subsequently, BAe146 reported a TCAS TA on two visual military jets and disconnected autopilot to visually manoeuvre to the East until clear of conflict. Sighting report in Class F airspace.	**C**
31 Jul 2006	W3D (N560D)	11nm NNE RANOK	FL120	SF340 2 x F-15	**UK AIRPROX 116/2006**. SF340 received and actioned a TCAS RA, initially for 'climb' and then 'descend'. The SF340 crew visually acquired the military jets at approximately 5nm and maintained visual contact until they had passed. The military crews report seeing the SF340 at 8nm visually and 12nm on radar.	**C**
16 Feb 2007	W3D (N560D)	7nm S Inverness	6800 ft	ATR72 GY80	**UK AIRPROX 12/2007**. Conflict in Class F/G Airspace with both a/c having been issued with traffic info.	**C**
29 Jan 2008	N560D	5nm N Wick	FL150	BE200 Nimrod MR2	**UK AIRPROX 11/2008**. BE200 climbing to FL155 received/complied with a TCAS RA due to conflict with a military a/c at FL150 in Class F airspace. Traffic info had previously been passed to BE200. STCA activated. Investigations indicated that the primary cause of this AIRPROX was the military a/c entering the Wick hold at FL150 against the Beech 200 who was being provided with an Air Traffic Advisory Service by ScACC whilst in Class F airspace.	**B**
05 Jun 2008	W2D	23nm WNW Blackpool	FL170	ATR72 Hawk	**UK AIRPROX 75/2008**. A military a/c operating not below FL180 and an ATR72 at FL170 receiving a RAS. Military a/c alleged to have descended through the ATR72's level. ATR72 forced to make an evasive manoeuvre (TCAS Climb). Military a/c was in contact with Warton ATC and was visual with the ATR72 at all times.	**C**
30 Jun 2008	P600D	TROUT	FL115	BE200	**UK AIRPROX 93/2008**. BE200 at FL115 and a military a/c descending to FL111 at waypoint TROUT. BE200 given	**C**

				Tornado GR4	avoiding action and traffic info. CAA Closure: Information indicates that this was a controller perceived confliction in the ADR.	
13 Oct 2008	N560D	5 nm N RANOK	FL120	SF340 Tornado F3	**UK AIRPROX 143/2008**. Saab 340 and a military a/c 5nm North of RANOK at FL120. Avoiding action and traffic info given to the Saab 340 that was receiving a RAS from ScACC. The ScACC controller gave traffic info and avoiding action to the Saab 340 on the military a/c.	**C**

Key to UKAB Grades

B - Safety not assured: The safety of the aircraft was compromised.
C - No risk of collision: No risk of collision existed.

Directorate of Airspace Policy

September 2009

Policy Statement

THE FUTURE APPLICATION OF CLASS F AIRSPACE IN UK FLIGHT INFORMATION REGIONS

1 The Application of ICAO Airspace Classes in the UK FIRs

1.1 ICAO requires that airspace is classified and designated according to the ICAO Air Traffic Service (ATS) Airspace Classifications as detailed in References A to C. The UK currently applies the Airspace Classification System subject to such Differences that may be detailed at Reference D, the European Commission's Airspace Classification Regulation (Reference E) and the Policy Statement at Reference F.

1.2 The application of each of the ICAO ATS Airspace Classifications and of the services within each of those in use in the UK FIRs shall be in accordance with the harmonisation principles of the ECAC Airspace Strategy.

1.3 The airspace classification to be applied to a particular volume of airspace will depend principally upon the number of Air Transport Movements (ATMs) operating within it, the complexity of IFR operations within it and also upon the safety hazards posed to IFR passenger air transport traffic by other airspace activities.

2 Class F Airspace

2.1 Within the UK FIRs Class F is specified for UK Advisory Routes (ADRs - see References G-I and the map at Reference J). Reference C states that, where an air traffic advisory service is implemented, this is considered normally as a temporary measure only until such time as it can be replaced by an air traffic control service, ie, through the application of Classes A-E.

2.2 Although a study into the future of UK ADRs (first established in the 1960s) had been undertaken in 2006 (see report at Reference K), the ICAO Universal Safety Oversight Audit Programme (USOAP) inspection of the UK conducted during February 2009 found that there are no timelines for replacing air traffic advisory service within Class F within the UK and that, in ICAO terms, this was inappropriate use of this airspace classification (see Reference L). It is therefore the intention of the CAA for UK ADRs to be progressively replaced by airspace classes better suited to the operational conditions associated with each of these routes, and in accordance with principles outlined above. The CAA seeks to identify how this action will be taken forward by the end of 2011, and the purpose of this paper is to identify options in order to achieve that goal.

3 Service Provision Within UK Class F Airspace

3.1 ATS arrangements and procedures to be followed by aircraft operating along UK ADRs are described at Reference G. The ICAO requirements for an Air Traffic Advisory Service to be provided within Class F airspace are met in the UK through the provision of a Deconfliction Service or Procedural Service (as detailed at Reference M) to IFR aircraft that have flight planned to fly along ADRs.

4 Options for Change

4.1 Alternative airspace arrangements must be considered in advance of the removal of Class F airspace within the UK FIRs. Three such alternatives exist, thus:

a. **Option 1 -** Replacement of all existing Class F airspace by controlled airspace, i.e. Classes A-E.

b. **Option 2 -** Replacement of all existing Class F airspace by Class G airspace.

c. **Option 3 -** Replacement of all existing Class F airspace by Classes A-E and G on a case-by-case basis.

4.2 In each case, the application of a particular airspace classification shall be determined by the need to establish a known traffic environment in either or both Visual Meteorological Conditions (VMC) and Instrument Meteorological Conditions (IMC) in specific areas subject to the availability of the requisite navigational infrastructure and air traffic services within each particular volume of airspace. Route utilisation and underlying safety concerns will determine the most appropriate solution.

4.3 Option 1 is considered inappropriate (in particular where the utilisation of the existing ADRs is historically very low) as it is likely to lead to the application (wholly or in part) of unnecessarily restrictive airspace Classifications. In addition, any increase in ATS infrastructure deemed necessary to support service provision is likely to be extremely expensive. Conversely, Option 2 is likely to be appropriate in the case of most ADRs but would lead to the application of an inadequate airspace Classification in those areas where ADR utilisation is relatively high, even if only at certain times of the day. Option 3 is considered to be the most appropriate as it will lead to the identification and application of the most appropriate airspace Classifications best suited to the needs of all airspace users.

5 Application of Airspace Classes

5.1 The purpose of CAS in the UK is to enhance the protection of ATMs operating under Instrument Flight Rules (IFR) during en-route flight and 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 Visual Flight Rules (VFR). Such protection is principally established by means of a known traffic environment.

5.2 Class A and B

5.2.1 Class A will normally only be applied to airspace where the complexity of the ATM task justifies a permanent IFR-only environment. Its application is strictly limited and as such is considered to be too restrictive a Class and therefore an inappropriate alternative to Class F. Class B is not currently applied within UK airspace.

5.3 **Class C**.

5.3.1 Class C applies to the UK FIRs between FL 195 and FL 660 in accordance with the European Commission's Airspace Classification Regulation. Within the UK FIRs below FL195, Class C may be specified for airways (or portions thereof) and TMAs (or portions thereof). Class C airspace permits access by other airspace users under conditions that will enable the safe and expeditious flow of traffic and preserve the known environment that is important to CAT where the volume of traffic is at a level that requires the provision of a known environment.

5.3.2 It is the intention of the CAA for current Class D airways to be progressively specified as Class C to be better suited to the operational conditions associated with each of the airways in question. Whilst it is likely to be an appropriate alternative to a limited number of ADRs, Class C is (on the basis of utility and safety considerations, service provision and the potential access requirements of other airspace users) considered to be a generally inappropriate alternative to the greater part of current UK Class F airspace.

5.4 **Class D**.

5.4.1 Class D is to be specified for locations where a known traffic environment is necessary in both VMC and IMC. Within the UK FIRs below FL195, Class D may also be specified for TMAs (or portions thereof) and exceptionally for certain airways (or portions thereof). Class D airspace permits access by other airspace users under conditions that will enable the safe and expeditious flow of traffic and preserve the known environment that is important to IFR traffic where the volume of traffic is at a level that requires the provision of a known environment.

5.4.2 However, within Class D airspace VFR traffic is not separated from IFR traffic, and unlike Class C there are no restrictions applicable to VFR flight along a Class D airway. This may be unacceptable in certain environments. Therefore, whilst initially it may appear to be an appropriate alternative to Class F in certain cases, Class D may in fact be a less appropriate alternative to Class F than Class C.

5.5 **Class E**

5.5.1 Class E airspace is intended by ICAO to be exceptionally specified at locations where a known traffic environment is necessary only in IMC. Unlike Class D, VFR flight in Class E airspace is not subject to a clearance to operate within it, and does not constitute a known traffic environment. Whilst separation between IFR traffic is provided, separation between IFR and VFR traffic is only provided when practicable. Class E airspace is considered to be insufficiently different in nature from Class F and G airspace, especially when the provision of the UK Air Traffic Services Outside Controlled Airspace (ATSOCAS) is taken into consideration. As such, it does not confer operational and safety benefits over either of the lower Classes. In addition, it is the CAA's intention to progressively replace Class E airspace within the UK FIRs in accordance with Reference F. Therefore, Class E is not considered to be an appropriate alternative to Class F.

5.6 **Class G**.

5.6.1 Class G as applied to the remainder of the UK FIRs would appear to be an appropriate alternative to Class F where the application of higher classifications is not considered appropriate (or necessary) on the basis of utilisation levels and safety considerations. However, this will be subject to the continued provision of properly

resourced ATSOCAS within the limits of radio and radar cover in the areas where it is provided today.

6 Issues For Consideration

6.1 **General -** A number of factors will need to be taken into account in determining where it is appropriate to upgrade the existing route to a higher classification airway and where an appropriate ATSOCAS service will be adequate. The issues introduced in subsequent paragraphs appear in no particular order, neither do they represent a definitive list.

6.2 **ADR Utilisation Levels -** It will be necessary for a detailed study of ADR utilisation to be undertaken in order to support proposals to reclassify or declassify Class F as appropriate, and to determine the degree to which Flexible Use of Airspace arrangements can be applied. Such studies will need to consider utilisation within all ADR segments and at all available levels.

6.3 **Safety Occurrences -** It will be necessary for a detailed study of safety occurrences to be undertaken as a means of identifying the need to replace Class F airspace by a higher classification, rather than Class G.

6.4 **Flight Planning -** It is assumed that no flight planning issues will arise if routes are reclassified as airways. If routes are disestablished and the airspace reclassified as Class G it would continue to be possible to file IFR or VFR Flight Plans based upon established waypoints where these remain in place as part of an established and published structure. It would also be possible to file 'DCT', with associated routeing advice appearing in individual aerodrome AD2 entries.

6.5 **Conditional Routes (CDRs) -** Consideration will be given to the replacement of ADRs by CDRs where the establishment of airways on an H24 basis cannot be justified.

6.6 **Class G Routes -** It may be necessary to consider the feasibility for some form of flight-plannable route in order to enable the ATS system to respond appropriately to demand and to identify the limitations of radio and radar infrastructure availability; Helicopter Main Routes (HMRs) may provide a precedent of sorts in this regard in both service provision and planning terms. Alternatively, route descriptions as presented in the United Kingdom and Ireland Standard Route Document (Reference N) and/or individual Aeronautical Information Publication (AIP) AD2 entries may be sufficient. The viability of such routes in terms of flight planning and navigability (eg, navaid coverage and RNAV considerations) will need to be determined. It will also be necessary to determine whether proscribed Class G routes will lead to the funnelling of traffic in Class G and the operational and environmental impacts this may incur.

6.7 **Service Provision** - Where ADRs are replaced by a higher airspace classification it will be necessary to assess the consequences to service provision and controller licensing. Provision of an acceptable level of service within Class G airspace where this replaces Class F will also need to be determined.

6.8 **Impacts On/Relationships With Adjacent Airspace Structures** - It will be necessary to consider the impacts of any change to ADRs, not least those associated with extant airspace structures including SIDs, STARs, airspace restrictions and interfaces with adjacent FIRs. DAP Buffer Policy requirements must also be satisfied.

6.9 **CNS and Other Resource Impacts -** Although it is assumed there will be no changes to current CNS coverage, it will be necessary to determine whether this will remain

adequate for the revised airspace structures arising from the removal of Class F ADRs. Any resultant changes to CNS infrastructure requirements may have further non-CNS implications that will have to be identified.

6.10 **Costs/Route Charges -** Service provision, NERL Licence and cost recovery issues will need to be identified and addressed where necessary.

6.11 **Charting -** Charting issues may emerge, especially if a requirement to depict current ADR centrelines as Class G routes (as described above) emerges.

6.12 **Review of Scottish TMA -** Most ADRs lie wholly or partly within the Scottish FIR. Changes to these are likely to influence (or be influenced by) any future review by NATS of the structure of the Scottish TMA.

7 Changes to Airspace Classifications

7.1 **General -** Changes to the dimensions or classification of UK airspace are to be undertaken in accordance with References O and P. In considering alternative airspace classifications, the following principles will be applied:

a. Airspace classifications shall be selected to permit safe access to as many classes of user as possible.

b. The volume of controlled airspace (ie, Class D and above) shall be the minimum necessary for the effective protection of the whole ATC operation as defined by the ATS provider within a particular airspace, subject to the need to avoid over complication of airspace structures and any environmental considerations.

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.

7.2 **ACP Responsibilities and Consultation -** In all cases the ATS provider currently providing ATS along ADRs today will act as change sponsor. Consultation will include NATMAC members, service providers affected by the changes and airspace users. An assessment of the impacts upon aviation stakeholders of the replacement of ADRs by Class G airspace will be required. Where airspace upgrades are considered appropriate, environmental consultation will not be required provided it can be demonstrated that there will be no change to the pattern of flying within the route.

7.3 **Notification of Airspace Changes -** Industry will be notified of the outcomes of such consultation and of decisions to implement the resultant airspace changes, which will be introduced on specified AIRAC dates. The necessary AIP and VFR chart amendments will be prenotified by means of timely Aeronautical Information Circulars.

8 Milestones.

8.1 The following provisional milestones have been identified:

a. Planning to implement the removal of Class F airspace in the UK FIRs to be completed by the end of December 2009.

b. Consultation on the proposals to remove Class F airspace to be completed by December 2010.

c. Publish AICs notifying the arrangements and timeline for the replacement of Class F airspace by the end of October 2011.

9 DAP Point of Contact

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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 - Differences from ICAO Standards, Recommended Practices and Procedures.

E. European Commission Airspace Classification Regulation 730/2006 dated 11 May 2006.

F. Application of ICAO Airspace Classification in UK Flight Information Regions (Directorate of Airspace Policy, 22 July 2009).

G. UK AIP ENR 1.1.1 - ATS Routes and Upper Control Areas (UTA)

H. UK AIP ENR 1.4 - ATS Airspace Classification.

I. UK AIP ENR 3.1 - Lower ATS Routes.

J. UK AIP ENR 6-3-1-3 Air Traffic Advisory Routes in the United Kingdom FIR.

K. Study Into the Future of UK Advisory Routes (8AP/66/01/05/03 dated 20 January 2006)

L. ICAO Safety Oversight Audit of the UK CAA (February 2009) - Audit Finding ANS/02.

M. UK AIP ENR 1.1.2 - Air Traffic Services Outside Controlled Airspace.

N. United Kingdom and Ireland Standard Route Document (http://www.nats-uk.ead-it.com/aip/current/srd/SRDDOC.pdf)

O. CAP724 - The Airspace Charter.

P. CAP725 - CAA Guidance on the Application of the Airspace Change Process.

Directorate of Airspace Policy

July 2009

Policy Statement

THE APPLICATION OF ICAO AIRSPACE CLASSIFICATIONS IN UK FLIGHT INFORMATION REGIONS

1 The Purpose of Controlled Airspace (CAS)

1.1 The purpose of CAS in the UK is to enhance the protection of Air Transport Movements (ATMs) operating under Instrument Flight Rules (IFR) during en-route flight and 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 Visual Flight Rules (VFR). Such protection is principally established by means of a "known traffic" environment.

2 Airspace Policy

2.1 ICAO requires that airspace is classified and designated according to the ICAO ATS Airspace Classifications as detailed in References A to C. The UK currently applies the Airspace Classification System subject to such Differences that may be detailed at Reference D.

2.2 The application of each of the ICAO ATS Airspace Classifications and of the services within each of those in use in the UK 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.

2.3 The airspace classification to be applied to a particular volume of airspace will depend principally upon the number of ATMs operating within it, the complexity of IFR operations within it and also upon 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 necessary for the effective protection of the whole ATC operation as defined by the 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) CAS is to be classified in accordance with Reference B thus:

(1) Airspace allowing IFR operations only – Class A.

(2) Airspace allowing for both IFR and 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 3.5).

(4) Advisory Routes – Class F (see also paragraph 3.6).

(5) All other airspace – Class G.

3 Application of Airspace Classes

3.1 Class A will normally only be applied to airspace where the complexity of the ATM task justifies a permanent IFR-only environment. Within the UK FIRs, Class A is normally specified for airways, major Terminal Control Areas (TMAs) and Control Areas (CTAs). In the case of TMAs and CTA 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 ATC operations. Class A may also be specified for certain Control Zones (CTRs), based upon the historic and future mix of traffic, complexity of IFR operations and the density of operations.

3.2 Class B is not currently applied within UK airspace.

3.3 Class C applies to the UK FIRs between FL 195 and FL 660 in accordance with the European Commission's Airspace Classification Regulation (Reference E). Within the UK FIRs below FL195, Class C may be specified 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 specified 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 in section 2 above.

3.4 Class D is to be specified 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 specified for CTRs and CTAs in the vicinity of aerodromes (unless there is an overriding need for a more restrictive classification) and TMAs (or portions thereof). Within the UK FIRs below FL195, Class D may also be specified for TMAs (or portions thereof) and exceptionally for certain airways (or portions thereof).

3.5 Class E airspace is exceptionally specified at locations where a known traffic environment is necessary only in IMC. It is the intention of the CAA for Class E to be progressively replaced where appropriate within the UK FIRs by airspace classes that are considered to be better suited to the operational conditions associated with the airspace structures in question, and in accordance with principles outlined in section 2 above.

3.6 Class F is specified for UK Advisory Routes only. It is the intention of the CAA for UK Advisory Routes to be progressively replaced by airspace classes better suited to the operational conditions associated with each of these, and in accordance with principles outlined in section 2 above. The CAA seeks to complete this action by the end of 2011.

3.7 Class G applies to the remainder of the UK FIRs.

4 Changes to Airspace Classes

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

5 Air Traffic Services

5.1 Airspace classifications applied to a particular volume of airspace should be supported with the requisite navigational infrastructure and air traffic services. It is important therefore that changes to airspace classifications are co-ordinated with the relevant areas within the CAA and in particular Spectrum and Surveillance and Air Traffic Standards Department.

6 DAP Point of Contact

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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. European Commission Airspace Classification Regulation 730/2006 dated 11 May 2006.
F. CAP724 The Airspace Charter.
G CAP725 CAA Guidance on the Application of the Airspace Change Process