Directorate of Airspace Policy

All NATMAC Representatives

17 November 2008

NATMAC CONSULTATIVE LETTER

Dear Colleague,

AREAS of INTENSE AIR ACTIVITY, AERIAL TACTICS AREAS and the ADVISORY RADIO AREA REVIEW

As notified in my letter of 8th April[1], the Directorate of Airspace Policy (DAP) Off-Route Airspace Section has been conducting a Review of Areas of Intense Air Activity (AIAA), Aerial Tactics Areas (ATA) and the Advisory Radio Area (ARA) with the objective of securing the most efficient and safe use of UK airspace, as well as spreading best practice.

It is important that the dimensions of the areas should truly reflect the disposition of activity in the delineated airspace by balancing the needs of broad awareness and accurate information whilst providing airspace users with valuable information to assist with flight planning and safety assessment. The Report, considering airspace users, service providers and the user requirements, concluding the initial package of work (Phase 1) is attached. I welcome your comments, but particularly invite your consideration of the recommendations.

Phase 2 of the Review consists of the following:

a) Review of the remaining AIAAs.

b) Consideration of the advice to ac transiting AIAAs.

c) Consideration of chart symbology to aid clarity and understanding.

[1] NATMAC Informative, 8 April 2008.

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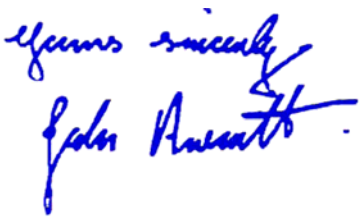
Phase 2 of the Review is well underway and I welcome your comments on parts b and c outlined above. Once we have collated those views, completed our visits to units and analysed the information, I shall consult you further on any proposed changes. Your replies, by the end of January please, and any questions should be directed to Richard Hinchcliffe, Off-Route Airspace Section (020 7453 6543, richard.hinchcliffe@caa.co.uk) here at CAA House.



J R D Arscott
Director

Attachment:

1. Phase 1 Report on Areas of Intense Air Activity (AIAAs) and the Advisory Radio Area (ARA)

Directorate of Airspace Policy
Off Route Airspace 3

DAP/ORA/ORA3/Review of AIAAsATAsARA 10th November 2008

NATMAC

PHASE 1 REPORT on AREAS of INTENSE AIR ACTIVITY (AIAAs) and the ADVISORY RADIO AREA (ARA)

References:

A. NATS 8AP/06/02/06, 8 August 1990.
B. DAP, Initial Discussion Paper On The AIAAs, ATAs and ARA), 26 Jul 07 – AIAA Review.
C. UK Flight Safety Committee Response, 10 January 2008.
D. NATMAC Informative Letter, 31 March 08.
E. DAP, Review Paper on the Areas of Intense Air Activity (AIAAs), Aerial Tactics Areas (ATAs) and the Advisory Radio Area (ARA), 5 October 07.
F. AIP ENR 5-2-8/11.
G. LARS Review of Service Provision, 7 March 2008.

1. Introduction

1.1 The last full review of Areas of Intense Air Activity (AIAAs[1]) and the Advisory Radio Area (ARA[1]) within the London and Scottish FIRs took place in 1988; thereafter, HQ MATO (Airspace Policy) questioned their validity in 1990. Responses to the latter survey indicated that there was value in the retention of AIAAs and the ARA (Reference A). The Vale of York and Lincolnshire AIAAs were further adjusted in 1997 to reflect the reorganisation and establishment of the Royal Navy, Royal Air Force and Army Air Corps Flying Training Schools (FTS).

1.2 In order to promote a universally safer Class G environment the Directorate of Airspace Policy (DAP) is addressing the extent and pertinence of individually promulgated AIAAs and the ARA within the London and Scottish FIRs. This latest phase of study is not seen as an exercise to quantify activity levels in Class G airspace, although intensity of UK military fast jet and fixed-wing training activity in the London and Scottish FIRs has diminished (para 2.2), but is seen as integral to the Airspace & Safety Initiative (ASI[2]) by identifying an associated hazard and developing a mitigation strategy while meeting the needs of all airspace users. This identification and mitigation strategy should reflect the changing capabilities of all types of aircraft and the geographic shift in military activity, particularly as UK airspace becomes increasingly more complex and recreational and

[1] UK AIP ENR 1.1.5 – Airspace Restrictions, Danger Areas and Hazards to Flight
[2] The Airspace & Safety Initiative (ASI) is a joint CAA, NATS, Airport Operator's Association, General Aviation and Ministry of Defence effort to investigate and tackle the major safety risks in UK airspace

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commercial traffic growth continues apace Class G airspace is no exception as the requirements of its users (predominantly GA and MoD) become more varied and complex, reflected across all portions of Class G airspace within the London and Scottish FIRs. Increased uptake, and improved operation, of SSR Transponders will significantly advance interoperability between aircraft in Class G airspace rather than increased segregation, thereby best serving the interests of all airspace users[3]. The MoD has expressed that signposting of one portion of Class G airspace being more congested than another has utility. However, this signposting should be pertinent, reflecting aircraft activity, performance and location, reinforced by local and national publicity, or risk the loss in significance. Education, awareness and consideration for others' activities are key. These signposts may be viewed as a 'permanent NOTAM' with an added advantage of the charting element;historically the UK Airprox Board (UKAB) and the UK Flight Safety Committee (UK FSC) support this view (Reference C). Indeed, MoD, in the past, has been encouraged to communicate details of exceptional military aerial activity within Class G airspace. HQ Air Command (ATC) views the promulgation of AIAAs, the ARA or ATAs as consistent with this remit and that value remains in selected promulgation.

1.4 The accuracy and pertinence of these sign-posted areas is essential where civilian operators are to be encouraged to take heed of the promulgated activities and adjust their actions accordingly. In this latest phase of the study (References B, D and E) DAP staff addressed Vale of York, Lincolnshire and Oxford AIAAs and the Boscombe Down ARA to ascertain position and density of activity in and around the existing signposted areas. Officers Commanding Operations (or their equivalent), Chief Flying Instructors (or their equivalent) and Senior Air Traffic Control Officers (or their equivalent) at the majority of aerodromes lying in the vicinity of these four areas were consulted to ascertain a qualitative, as well as a quantitative (where possible), analysis of the position, level, density, vulnerabilities, interaction of aerial activity as well as the air traffic resource available within the area. This latter aspect should not be overlooked as the Lower Airspace Radar Service (LARS[4]) Scheme, in particular, provides pilots with the primary source of traffic information in these areas (Reference F). In sum the following questions were considered:

1.4.1 Is the AIAA or ARA still justified by the aerial activities now being carried out in the area?

1.4.2 Are the lateral and vertical limits still appropriate or should an area be increased or could it be decreased?

2. Current Promulgation and Airspace Activity

2.1 AIAAs, the ARA and ATAs (Reference F), situated in Class G airspace below FL195 (and Class C airspace FL195-FL245), have been denoted in the UK military and civilian AIPs for some considerable time and act as a signpost on aeronautical charts (Annex A). These areas are Class G/C airspace with no formal 'reserved' status and afford the aircraft 'operating' within the published limits of the area no additional protection. These areas are listed as airspace within which the intensity, type of activity and potential interaction of civil and/or military flying is exceptionally high or where aircraft, either singly or in combination with others, regularly participate in unusual manoeuvres. Presently, GA and commercial helicopter operators fully appreciate that Class G airspace below 2000ft agl, comprising the UK low flying system (UK LFS), is busy and populated by military aircraft engaged in high energy/unusual manoeuvres. Guidance

[3] Full RIA (Version 2.1) for a Proposal for Phase 1 of an Incremental Expansion of the Use of SSR Mode S Technology for Flight in UK Airspace

[4] LARS' primary objective is to aid the flow of air traffic arriving at, and departing from, airfields not protected by controlled airspace by encouraging aircraft transiting the area to receive an air traffic service (ATS)

and systems are in place to obviate the perceived, enhanced risk in this particular slice of airspace. Therefore, the UK Flight Safety Committee view the direction provided in the AIP (Reference F) for pilots of non-participating aircraft in the vicinity of, or who are unable to avoid the annotated areas, as a valid extension to pro-active flight safety guidance.

2.2 The expansion of CAS is undoubtedly compressing overland Class G aerial activity. The AIAAs, the ARA and ATAs signpost military or civil activity and imply a high density of dynamic and high-energy use relative to the surrounding airspace. However, there is no mechanism in place to examine the veracity for the existence of AIAAs, the ARA and ATAs within Class G airspace. The intensity of UK military fast jet and fixed-wing training activity in the London and Scottish FIRs has diminished by approx 65 000hrs, a drop of 35%[5] on the early 1990s hours; however, HQ Air Command (ATC) state that remaining military fixed-wing flying training has been squeezed into the airfields in the vicinity of the Vale of York, Lincolnshire and Oxford AIAAs. Hence, it would be wise to consider the level of activity in the Vale of York and Lincolnshire AIAAs as the 'benchmark' measure for intensity when signposting a particular area.

3. Findings

3.1 Vale of York AIAA. The number of flying stations within the Vale of York AIAA has reduced; both elementary and basic flying training activity remains high, based at RAF Leeming, RAF Linton-on-Ouse and RAF Church Fenton. The level of flying activity has reduced at RAF Leeming during the past decade; however, the level of flying training activity at RAF Linton-on-Ouse and RAF Church Fenton is forecast to increase in the short-term. A combined total, from RAF Linton-on-Ouse and RAF Church Fenton, of approximately 70[6] flying training sorties per day is forecast, with up to 60% of those sorties (approximately 40hrs) remaining within the AIAA. There are a number of civilian aerodromes in the vicinity of the Vale of York AIAA; RAF Linton-on-Ouse (and RAF Church Fenton derogated to RAF Linton-on-Ouse) have a number of Letters of Agreement (LoAs) with the local aerodromes that assist in the harmonization of aerial activity in the area. Furthermore, the military aerodromes in the area subscribe to the Yorkshire Area agreement, coordinating the flow of military air traffic arriving at, and departing from, these military aerodromes. The peculiarities of basic fast jet flying training in spinning, tail-chasing and aerobatics etc, mean that some sort of warning of flying activities outside the norm in Class G airspace is prudent. This activity predominantly, in the Tucano and Tutor, takes place below FL100. However, this ceiling may require an increase in the future (up to FL150), with the introduction of a new, pressurised basic flying training platform as a recommendation post the United Kingdom Military Flying Training system (UKMFTS) study. In addition, RAF Leeming places 3 to 6 sorties/day (daylight hours Monday to Friday) into the area, in addition to aerodrome departures and recoveries, under a local or Air Surveillance and Control System (ASACS) ATS. Practice forced landing (PFL) approach procedures form a fundamental part of elementary flying training leading to a high density of activity in the level between the surface and 2500ft at a vulnerable state of flight, again providing evidence for warning of intense, unusual flying activities in Class G airspace. There is a high level of GA activity within the AIAA and predominantly military/GA interaction occurs below 6000ft. Flying training must, to some extent, follow the weather and the area to the East of RAF Linton-on-Ouse remains the preferred airspace for local exercises. In poorer weather conditions flying training aircraft are compressed into smaller volumes of airspace, but equally it can be argued that the preponderance of GA activity, hence interaction, is much reduced in these inclement periods. The general radius of action for the Tutor is 15nm on general handling sorties within the AIAA, not navigational sorties, and the Tucano is 30nm. The intensity of activity from RAF Leeming, RAF Linton-on-

[5] Statistics provided by DASA
[6] Statistics provided by No 1 FTS

Ouse and RAF Church Fenton, below FL100, diminishes markedly towards the Yorkshire east coast. ATS service provision in the vicinity of the Vale of York, below FL100, is good. LARS provision is available from RAF Leeming, RAF Linton-on-Ouse, Durham Tees Valley and Humberside; there is considerable use made of this service (Reference G). However, there is UKAB evidence suggesting confusion in the Vale of York AIAA as to whom GA should contact. RAF Church Fenton provides a service to local operators during the aerodrome operating hours and civilian aerodromes on the periphery of the AIAA are available to provide a service. Co-operation between the ATS at Leeds-Bradford, Robin Hood Airport Doncaster Sheffield (RHADS) and RAF Linton-on-Ouse is good.

3.2 Lincolnshire AIAA. The recent decision to combine all RAF elementary flying training into Number Three FTS has increased activity levels at RAF Cranwell considerably. The expanding airway structure (including introduction of the RHADS CAS) has impacted upon local airspace usage. The other main FTS base within the Lincolnshire AIAA is RAF Barkston Heath. A combined total, from RAF Cranwell and RAF Barkston Heath, of approximately 175[7] flying training sorties (Tutor, Firefly, Dominie and Kingair) per day is forecast, with up to 60% of those sorties (approximately 95hrs) remaining within the AIAA. RAF Waddington and RAF Coningsby also lie within the boundary of the AIAA providing a high frequency of transit traffic, both fast jet and heavy airliner types. The military aerodrome traffic zones of RAF Scampton and the RAF Wittering/Cottesmore complex lie on the periphery of the AIAA providing a further frequency of fast jet transit traffic. There are a number of civilian aerodromes in the vicinity of the Lincolnshire AIAA; RHADS is very proactive with both RAF Cranwell and RAF Waddington in the harmonization of aerial activity in the area. The military aerodromes in the area have subscribed to the Lincolnshire Area agreement, coordinating the flow of military air traffic arriving at, and departing from, these military aerodromes. Actual coordination remains effective however, the mechanism underpinning this agreed coordination has lapsed. The peculiarities of basic fast jet flying training in spinning, tail-chasing, aerobatics and basic/intermediate multi-engined flying training mean that some sort of warning of flying activities outside the norm in Class G airspace is prudent. This activity predominantly, in the Tutor and Firefly, takes place below FL100 (this ceiling may increase (up to FL150) with the introduction of a new, pressurised basic flying training platform as a recommendation post the UKMFTS study, and in the Kingair below FL130. Practice forced landing (PFL) approach procedures in the Lincolnshire AIAA form a fundamental part of elementary flying training leading to a high density of activity in the level between the surface and 2500ft at a vulnerable state of flight, again providing evidence for warning of intense, unusual flying activities in Class G airspace and that the Lincolnshire AIAA be afforded the same treatment near the ground as the Vale of York AIAA and be promulgated down to the surface. There is a high level of GA activity within the AIAA, predominantly transits below 6000ft to/from East Anglia and the North. Flying training must, to some extent, follow the weather and the areas to the west and south west of RAF Cranwell for the Tutor and Firefly remain the preferred airspace for local exercises; the Kingair preferred area is to the north. In poorer weather conditions flying training aircraft are compressed into smaller volumes of airspace, but equally it can be argued that the preponderance of GA activity, hence interaction, is much reduced in these inclement periods. The general radius of action for the Tutor and Firefly is 15nm on general handling sorties (not navigation) within the AIAA and the Kingair is 50nm. ATS service provision in the vicinity of the Lincolnshire AIAA, below FL100, is good. LARS provision is available from RAF Waddington, RAF Coningsby, RAF Cottesmore and Humberside; there is considerable use made of this service (Reference G); RAF Cranwell provides a service to local operators during the aerodrome operating hours. Civilian aerodromes on the periphery of the AIAA are available to provide a service, in particular, RHADS.

[7] Statistics provided by No 1 EFTS

3.3 Oxford AIAA. The number of flying stations within the Oxford AIAA has reduced; however, anecdotally and combined with LARS statistics (Reference G), both civil and military flying training activity remains high, based at RAF Benson, Wycombe Air Park and Oxford. There is a high density of GA transit traffic on an axis Upper Heyford – Wycombe Air Park. It has been difficult to put actual figures on the level of activity; however, it would not appear to be at the same levels as the Vale of York and Lincolnshire AIAAs. The level of flying activity is forecast to increase at RAF Brize Norton, the entire military air-refueller tanker and fixed-wing transport fleets will be based there in the near future; hence, DAP awaits a HQ Air Command (ATC) airspace change proposal, related to the Brize Norton CTR, in 2012 (normal Airspace Change Process [ACP] guidelines will apply). The predominant concern in the Oxford AIAA is the interaction between military heavy airliner/transporter/tankers outside the Brize Norton CTR in Class G airspace, during transit to/from the airways structure, and GA traffic. This interaction takes place predominantly below 5000ft, at levels where there is a high level of GA activity within the AIAA, at a vulnerable stage of flight for the airliner/transporter/tankers (low altitude and low speed) on the periphery of the present Brize Norton CTR. ATS service provision in the vicinity of the Oxford AIAA, below FL100, is good. LARS provision is available from RAF Brize Norton; there is considerable use made of this service (Reference G) and co-operation between RAF Brize Norton and the ATS at Oxford is good.

3.4 Boscombe Down ARA. The intensity of flight trials and training at MoD Boscombe Down may have diminished slightly; however, the activity remains of an unusual nature, relative to the remaining Class G, and individual missions or trials flights contain concentrated, rigorous periods of experimental aerial activity. Furthermore, MoD proposes a southern extension to the Salisbury Plain Danger Areas (EG D123, 125, 126 and 128) to encompass unmanned aircraft system (UAS) operations (normal Airspace Change Process [ACP] guidelines apply). LARS provision is available from MoD Boscombe Down and there is considerable use made of this service (Reference G); co-operation between MoD Boscombe Down and local operators is good.

5. Recommendations

5.1 Vale of York AIAA. HQ Air Command (ATC) and HQ 22(Trg) Gp believe that there remains value in the promulgation of the Vale of York AIAA and have agreed to re-invigorate local notification of the area to local civilian operators. Further, it is recommended that:

5.1.1 Notwithstanding the mixed views of RAF Linton-on-Ouse, I remain convinced that the ceiling of the AIAA is lowered to FL100 from FL190.

5.1.2 Again, notwithstanding the mixed views of RAF Linton-on-Ouse, it is proposed that the eastern boundary is moved west by approximately 5nm, providing east coast GA transit traffic the opportunity to avoid the AIAA where convenient.

5.1.3 Notified hours of peak activity amended to 0900 - 1700 Mon to Fri in Winter (Summer 1hr earlier).

5.1.4 Notified activity (listed in the UK AIP ENR) adjusted to reflect practice forced landing exercises.

5.1.5 HQ Air Command (ATC) state which LARS unit they prefer traffic within the confines of the Vale of York AIAA to initially contact.

5.1.6 HQ Air Command reviews the requirements for the AIAA in 2013, post the UKMFTS study and the possible introduction of a pressurised basic flying training platform, thus qualifying concerns and validating the dimensions of the AAIA - is the AIAA still justified by the aerial activities being carried out in the area?

5.2 Lincolnshire AIAA. HQ Air Command (ATC) and HQ 22(Trg) Gp believe that there remains value in the promulgation of the Lincolnshire AIAA and have agreed to re-invigorate local notification of the area to local civilian operators. Further, it is recommended that:

5.2.1 The ceiling of the AIAA is lowered to FL130 from FL180.

5.2.2 The floor of the AIAA is lowered from 2 500ft to the surface.

5.2.3 Notified hours of peak activity amended to 0900 – 1700 Mon to Fri in Winter (Summer 1hr earlier).

5.2.4 Notified activity (listed in the UK AIP ENR) adjusted to reflect practice forced landing exercises.

5.2.5 The northwestern boundary of the area is amended to exclude the geographic area enclosed by the RHADS CTA-3.

5.2.6 HQ Air Command reviews the requirements for the AIAA in 2013, post the UKMFTS study; thus, qualifying concerns and validating the dimensions of the AAIA - is the AIAA still justified by the aerial activities being carried out in the area?

5.3 Oxford AIAA. HQ Air Command (ATC) and RAF Brize Norton believe that there remains value in the promulgation of the Oxford AIAA. Further, it is recommended that:

5.3.1 The dimensions of the AIAA remain extant.

5.3.2 HQ Air Command and RAF Brize Norton should consider reviewing the requirement and dimension of the AIAA as part of the Brize Norton CTR airspace change proposal.

5.4 Boscombe ARA. HQ Air Command (ATC) and MoD DE & S Boscombe Down believe that there remains value in the promulgation of the Boscombe ARA and have agreed to re-invigorate local notification of the area to local civilian operators. Further, it is recommended that:

5.4.1 The area retains the acronym ARA as this is viewed to add uniqueness to the area that will enhance situational awareness and pre-flight planning.

5.4.2 The ceiling of the ARA is lowered to FL195 from FL245. Temporary Restricted Area 2 (TRA02) fulfils testing requirements above FL195 up to FL245.

5.4.3 The geographical dimensions of the ARA remain extant.

5.4.4 HQ Air Command and MoD DE & S Boscombe Down review the requirements for the ARA in 2013; thus, qualifying concerns and validating the dimensions of the ARA in light of the Salisbury Plain (EG D123, D125, D126 and D128) Unmanned Air System (UAS) airspace requirement.

5.5 Operational Aeronautical Information Circular. Changes to the AIAAs and ARA will be detailed in an Operational Aeronautical Information Circular (yellow AIC) once Phase 2 is complete.

5.6 Education. HQ Air Command and MoD should take the opportunity presented by the ASI Communication and Education Programme (ACEP) in order to enhance the GA community awareness, understanding of, and best practice action when within AIAAs and the ARA. This may be achieved through visits to local GA Clubs within the vicinity of AIAAs and the ARA, local 'ShAirspace' events and Station Websites

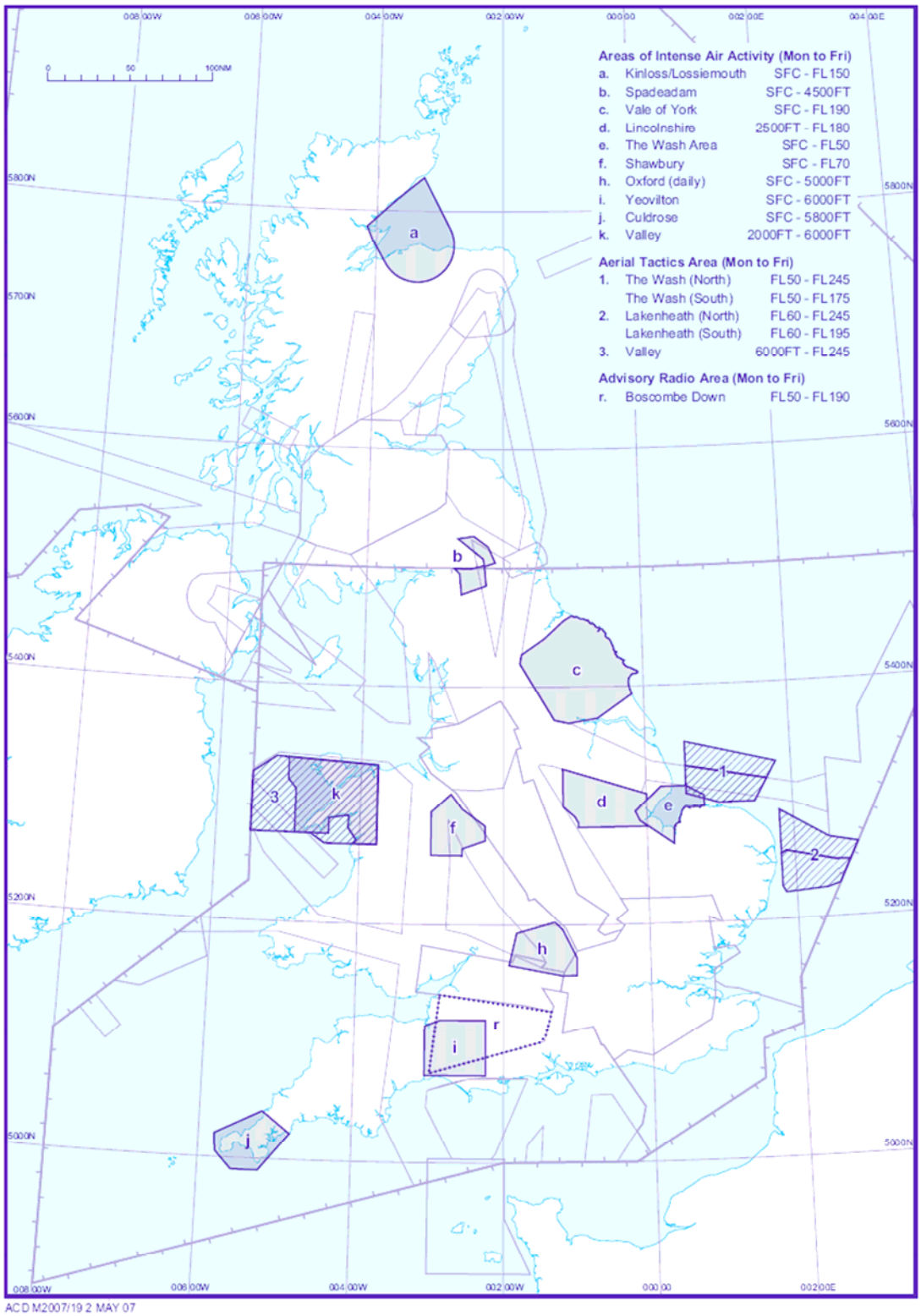
[*Original Signed*]

R A HINCHCLIFFE
ORA3

Annex:

A. Map of AIAAs, the ARA and ATAs.

AREAS OF INTENSE AIR ACTIVITY, ADVISORY RADIO AREA AND AERIAL TACTICS AREAS



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