



NATS

**AIRSPACE CHANGE PROPOSAL
MANCHESTER CONTROL ZONE**



The Manchester Control Zone Airspace Change Proposal

Section 1 - Introduction

This document details the NATS proposal to make changes to the Manchester Control Zone (CTR).

1.1 Controlled and Uncontrolled Airspace

The skies above the United Kingdom are divided into various categories of "Controlled" and "Uncontrolled" airspace. Controlled airspace exists primarily to protect passenger carrying aircraft during their flight (see Appendices B and C for a more comprehensive explanation). Manchester Airport is surrounded by a Control Zone (CTR) of Class D Controlled Airspace. All aircraft operating in this airspace are required to communicate with Air Traffic Control (ATC) and comply with ATC instructions. Airspace that lays outside of Controlled Airspace (CAS) is Uncontrolled Airspace where airspace users may fly without communicating with, or seeking approval from, ATC. Uncontrolled Airspace is also known as Class G airspace.

1.2 Why Change?

The Manchester Control Zone (CTR) was established many years ago when the performance of aircraft operating into Manchester demanded a greater extent of Controlled Airspace (CAS) than is necessary today. NATS Manchester proposes to make changes to the existing structure to achieve the following aims:

1. Release back to Class G status certain portions of the current Class D CTR to enable General Aviation (GA) and other Airspace Users greater freedom to operate in these areas.
2. To create a simplified CTR structure delineated by appropriately positioned Visual Reference Points (VRPs) that enable easier navigation. This helps to mitigate against CAS infringements thereby creating a safer environment for all.
3. To reduce the need for CAS entry clearances. By releasing Airspace to Class G status the need for many CAS crossing clearance requests will be nullified thereby reducing ATC and Pilot workload.

1.3 What are the proposed changes?

The proposal relates to four separate portions of airspace detailed in boxed form in section 2.

1.4 When will the changes take effect?

Provided that the Civil Aviation Authority's Directorate of Airspace Policy (CAA DAP) agree to the proposals, it is hoped that implementation will take place in summer 2009.

1.5 The Airspace Change Process and Consultation

This proposal is being submitted in accordance with the Airspace Change Process, as detailed in the Airspace Charter, published by the Directorate of Airspace Policy (DAP) in Civil Air Publication (CAP) 724, with further guidance available in CAP 725.

Both CAP 724 and 725 are available at www.caa.co.uk/dap. The Directorate, which is part of the CAA, is the Airspace and Regulatory Authority for the UK and oversees the consultation process. Any enquiries regarding process related matters may be forwarded to the DAP point of Contact (POC) at:

Head of Business Management
Directorate of Airspace Policy
CAA House
45 -59 Kingsway
London
WC2 B 6TE

Enquiries relating to the proposal itself should be made to the postal address or email listed below.

1.6 What happens next?

1.6.1 The period of consultation begins on October 31st 2008 and closes 12 weeks later on January 23rd 2009.

1.6.2 NATS will consider feedback received during this period and a summary of consultation results will be forwarded to CAA.

1.6.3 Following review of feedback it may be necessary to revise the proposal and if that happens a further period of consultation with relevant parties may be required.

1.6.4 The Airspace Change proposal, together with any feedback received, will then be forwarded to CAA DAP for consideration. If DAP accept the proposal NATS will endeavor to implement the change as soon as practicable. This will not be before June 2009.

1.6.5 NATS Manchester Airport contends that the benefits of this proposal are compelling. Stakeholders are invited to send their views on the proposal to:

“ACP Feedback”, NATS Manchester, Room 805, Control Tower Building,
Manchester International Airport, M90 2PL.

Or to Email - egcc.acp@nats.co.uk

This information together with a downloadable response form (which will need to be printed and completed) is available at:

WWW.nats.co.uk

CLOSING DATE FOR RESPONSES IS JANUARY 30th
2009.

Section 2 - The Basics

2.1 New Class G airspace to replace existing Class D Low Level Route (LLR) – shown as A on Map One

1. Reclassify the Class D LLR to Class G airspace.
2. The upper limit to be raised to 1300 feet above mean sea level (amsl).
3. To establish a new CTA above the revised airspace to 3500 feet amsl.

2.2 North Western CTR boundary realignment – shown as B on Map One

1. To realign the North Western boundary of the CTR thereby creating a new "fillet" of Class G airspace from a point where the M56 Motorway crosses the existing Eastern LLR boundary at $53^{\circ}20'56''$ N, $002^{\circ}31'03''$ W (abeam Stretton VRP), to a point $53^{\circ}26'38''$ N, $002^{\circ}22'58''$ W (near Flixton Railway Station).
2. The fillet would extend to 2000 feet amsl. The airspace above 2000 feet up to 3500 feet amsl would be absorbed into the existing Class D CTA.

2.3 Northern CTR boundary realignment – shown as C on Map One

1. To extend the Northern boundary of the Manchester CTR from $53^{\circ}26'38''$ N, $002^{\circ}22'58''$ W (Flixton Railway Station) Northeastwards to the existing Northernmost point of the CTR at $53^{\circ}34'30''$ N, $002^{\circ}04'00''$ W (near Shaw and Delph).
2. A portion of the current Class D airspace in the North East quadrant of the CTR would be reclassified to Class G extending to 2000 feet amsl.
3. The airspace above 2000 feet up to 3500 feet amsl would be absorbed into the existing Class D CTA.

2.4 Southern CTR boundary realignment – shown as D on Map One

1. To realign the Southern boundary of the Manchester CTR Northeastwards from $53^{\circ} 10' 55''$ N, $002^{\circ} 22' 07''$ W (Holmes Chapel VRP), to pass South of Macclesfield, to intersect the existing eastern CTR boundary at $53^{\circ} 16' 16''$ N, $002^{\circ} 01' 31''$ W (near Lamaload Reservoir VRP).
2. Class G airspace up to 2500 feet amsl would replace the existing Class D airspace.
3. The airspace above 2500 feet amsl up to 3500 feet amsl would be absorbed into the existing Class D CTA.

Section 3 The Background

3.1 This proposal has resulted from work undertaken by a group called the Local Airspace Safety Team (LAST). This safety body has a membership comprised of a variety of local Airspace Users as well as representatives from NATS Manchester and Barton ATC with additional input from a commercial pilot representative.

3.2 The rationale behind the proposed changes has been driven by several factors;

3.2.1 Firstly, the current CTR structure was designed many years ago and is now larger than that needed for the safe protection of commercial operations. The proposal is very straightforward in that it merely seeks to reclassify portions of Class D Controlled airspace to Class G Uncontrolled airspace. This change will give airspace users a greater choice of available routes without needing to contact and request permission from ATC. This has the added benefit of reducing both pilot and ATC R/T workload.

3.2.2 There will be no changes to published AIP (Aeronautical Information Publication) IFR procedures into Manchester, Liverpool or Woodford – neither will any changes be made to Noise Preferential Routings.

3.2.3 The rules relating to the LLR are anachronistic and are potentially confusing. Currently the LLR is designated as Class D but unlike all other Class D airspace no CAS entry clearance is required to enter it. At a time when CAS infringements present one of the most serious safety hazards of modern times this sends out all the wrong messages and fails to impress upon all airspace users the necessity of receiving specific CAS clearance prior to entry. It is therefore far more appropriate that the Class D LLR be reclassified to Class G airspace.

3.2.4 The existing airspace is complex and awkward to navigate and this proposal seeks to simplify the CTR structure thereby securing a more efficient use of airspace that will satisfy the requirements of all users whilst also mitigating against potentially hazardous CAS infringements. To aid this, new Visual Reference Points (VRPs) were introduced in July 2008 which clearly delineate both the existing and proposed new CTR structure.

Section 4 The Options

4.1 In addition to the proposals outlined the following options were also considered.

4.1.1 "Do nothing".

The existing CTR boundary works well from an ATC viewpoint and provides more than adequate protection of Manchester air traffic. The boundary alignment works less well from an airspace user's viewpoint. The aim of this ACP is to *improve* on the existing arrangement so that in the future the extent of the CTR more accurately reflects need. The "do nothing" option is, therefore, deemed inappropriate.

4.1.2 Raise the upper limit of the LLR to 1500feet amsl.

Serious consideration was given to raising the upper limit of the LLR to 1500 feet amsl but real and justifiable concerns about the negative impact upon Liverpool vectoring procedures meant this option was discarded.

4.1.3 Expand the lateral limits of the LLR.

Consideration was given to expanding the lateral limits of the LLR both Eastwards and/or Westwards but this was deemed unnecessary for a number of reasons. Firstly, the lateral dimensions of the LLR are fit for purpose as they stand and more than adequate for the types of user –there is no need to change them. Secondly, the proposed "fillet" of airspace between Barton and Stretton will alleviate many of the existing downsides to the current LLR structure. Finally, from an ATC viewpoint, the area in question is a known "hotspot" for CAS infringements and altering the lateral limits of the LLR risks further complicating the situation.

4.1.4 Further raise the base of the CTAs.

It was considered to revise the CTA to the North of the CTR to have its base at 2500 feet amsl. This was rejected as it infringed the procedure containment for the POL and DESIG Standard Instrument Departures (SIDs) from Runways 23R/L.

Section 5 Operational Impacts

5.1 Whilst there will be no changes to AIP published IFR arrival or departure procedures from Manchester there will be clear operational benefits to returning airspace to Class G status. In addition to the changes to the LLR the proposed reclassification of airspace between Stretton and Barton allows airspace users greater freedom of choice to navigate around the Warrington area. Together with recent changes in the law removing restrictions upon "Permit to fly" operators, the additional Class G airspace is expected to alleviate overflight and "land clear" constraints placed upon airspace users flying in the Northern portion of the LLR. The "direct route" from Barton to the LLR to the South West is also viewed by local airspace users as very operationally desirable, in particular reducing the need to over fly Warrington.

5.2 With regard to the changes proposed in the North/ North East and Southern sections of the CTR, the proposed Class G airspace will give airspace users greater choice of route selection without the need to contact ATC.

5.3 A limited revision to the Woodford Entry/Exit Lane will be made to reflect the changes to the CTR boundary.

5.4 It is important to stress that these proposals do not seek to increase or decrease the amount or type of traffic using the subject airspace. Aircraft have always been allowed to fly in this airspace by requesting entry from ATC.

5.5 By reclassifying the airspace from Class D to Class G the constraint of having to make R/T calls on a busy ATC frequency will be removed and the consequent reduction of R/T loading will be beneficial to pilots and ATC alike.

Section 6 Environmental Impacts

6.1 It is vital to understand that ***no changes*** will be made to AIP published IFR arrival procedures to Manchester and Woodford. No changes will be made to AIP published IFR departure procedures from Manchester. There are no existing AIP published departure procedures from Woodford.

6.2 Noise Preferential Routings will remain the same.

6.3 Vectoring techniques will remain unaltered and altitudes assigned to commercial traffic into Manchester will not change as a result of these proposals.

6.4 The manner in which commercial traffic into and out of Manchester is controlled will remain unaltered and it is for this reason that, in our opinion, a CAP 725 environmental assessment is not required.

6.5 It is expected that there may be some environmental benefits to the changes in that the airspace up to 2000 feet amsl between Barton and Stretton will allow aircraft to stay higher for longer after departing Barton for the LLR. Conversely aircraft routing from the LLR in the direction of Barton will be permitted to climb earlier than is presently the case.

6.6 The revisions proposed are in themselves expected to neither increase nor decrease the overall level or types of aircraft operating in the vicinity of the Manchester CTR.

It is not anticipated that there be an increase in Military activity in these areas as a result of these proposals.

6.7 The greater flexibility for Pilots in route selection bestowed by this proposal means that it is likely that there will be a redistribution of GA traffic over a wider area although exact patterns are difficult to predict. It is possible that noise from GA activity will increase in some parts of the revised airspace and decrease in others.

YOUR VIEW

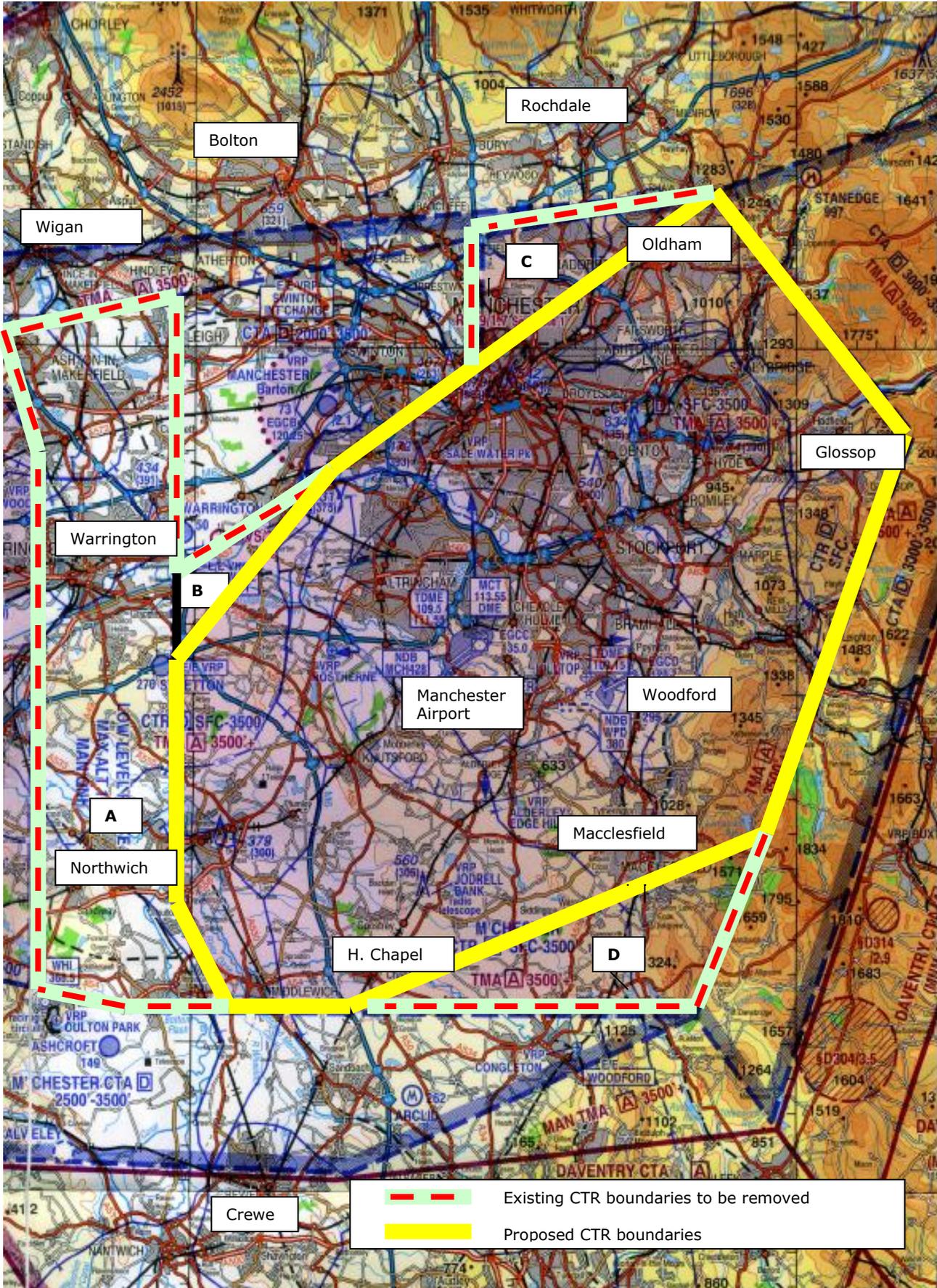
Your views on the merits or otherwise of this Airspace Change Proposal are welcomed. A response form is included. This document has been designed to be self explanatory but if you have any queries please address them to the "ACP Team" at the email or postal address on page 1 of this document.

This information is also available on the NATS website www.nats.co.uk

**CONSULTATION CLOSING DATE IS JANUARY 30th
2009**

Thank you.

**MAP ONE
CTR BOUNDARIES BEFORE AND AFTER PROPOSED CHANGE.**



APPENDIX A SUMMARY OF CONSULTEES

<p><u>ATC Organisations</u></p> <p>NATS Internal EGCC Tower/ Approach Working group MACC OS&I Birmingham</p> <p>Other ATC Organisations Manchester Barton Manchester Woodford Liverpool John Lennon Airport Blackpool Airport Ltd Hawarden Leeds Bradford RAF Shawbury Sherburn -In-Elmet Sherlowe Sleap Wolverhampton Halfpenny Green RAF Woodvale</p> <p><u>Airspace Users</u></p> <p>Police Operators GMP ASU (Barton) GMP ASU (Manchester) Cheshire ASU (Hawarden) Merseyside ASU (Woodvale) Lancashire ASU (Warton)</p> <p>Manchester based operators Oceansky (formerly NEA) JDAviation</p> <p>Local airspace Users Arclid Ashcroft Ince Lymm Dam Warrington</p> <p>Bay Flying club – Peter Ronfell North West Microlight Club – Peter Lomax & Don Bussell Lancashire Aero Club – Mike Bowden Otherton & St Michaels – Roger Huyshe YP Flying Group Blackpool – Ian Shaw LAA PFA NW Strut – Cliff Mort Brook Farm Microlight Club – Alan Eastham West Lancs Microlight School - John North</p> <p>Flying Schools – Barton Delta Aviation Flight Academy Heli Northwest LAC Flying School Mainair Microlight School Manchester Helicopter Centre Pennine Helicopters Ravenair Flying School</p>	<p>Flying Schools - Blackpool ANT Blackpool Air centre Brian Seedle Helicopters Flight Academy Helicentre Westair Ravenair Keenair Liverpool flying school Cheshire Air Training School Ltd</p> <p>Flying Schools Liverpool Ravenair Keenair / Liverpool Flying School Cheshire Air Training School Merseyflight Helicentre</p> <p>Flying Schools/ Users Hawarden Chester Handling Services / Chester Flying Schools</p> <p>Microlights with Letters Of Agreement (LOA) Trevors Close Farm Fern Farm Kinderton Farm Dobford Farm, North rode Kenyon Park Moss Farm</p> <p>Other Users – no LOA issued Dukinfield Farm Warrington Model club</p> <p>Helicopter Operations LOA issued High Peak Helicopters Pinfold Farm</p> <p>Manchester Airport Consultative Committee</p> <p>Manchester Airport Local Authority Environmental Officers Liaison Group</p>
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<p>NATMAC BAA RAF HQ Air LAA MOD DARS GATCO European UAV Systems Centre Ltd Light airlines PPL/IR Europe BALPA SRG GAPAN GASCO BHPA LAA UKAB MOD DAS BAe Systems HCGB UKFSC AOA BPA BBGA BMFA AOA BBAC BGA British Helicopter Advisory Board 3 AF-UK/A3 AOPA UK MOD AOPA/GASCO BA CAA (SRG) BMAA BATA BGA Heavy Airlines MOD ATC Policy & Regulation SO1 MOD Airspace Policy SO2</p>	<p><u>Other Parties</u></p> <p>Local Authority Consultee list Manchester Airport Local Environmental Health Officers Liaison Group. (Consult via MAPLC) Manchester City Council Salford Borough Council Trafford Council Oldham Metropolitan Borough Council Association of Greater Manchester Council AGMA Cheshire County Council Macclesfield Borough Council Warrington Council Vale Royal Borough Council</p> <p>Others Natural England Peak District National Park Authority</p>
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Copies of this document will be sent to all of the above for consultation. In addition presentations will be made at local venues and dates/times of these will be forwarded to the consultees.

Appendix B: Overview of Structure and Operation of UK Airspace *1

The airspace over the UK is a national asset and finite resource. The safe and efficient utilisation of our airspace is vital to both the UK economy and national defence. Accordingly, it is essential that UK airspace be provided, as far as possible, for the benefit of all users.

In simple terms, UK airspace, from ground level to approximately 66,000ft, is categorised as being either 'Controlled Airspace' or 'Uncontrolled Airspace':

Controlled airspace is established for the protection of aircraft during the various phases of flight and to facilitate a safe and expeditious flow of air traffic. Any aircraft operating within controlled airspace require an Air Traffic Control (ATC) clearance and must comply with the instructions issued. Controlled airspace is therefore, in most cases, a 'known environment', i.e. all traffic is known to the ATC system. Commercial, passenger-carrying aircraft operate almost exclusively inside controlled airspace. Controlled airspace can be divided into 5 main types:

- Control Zones, which extend from ground level and surrounding major airports
- Control Areas, which do not extend down to the ground but have base levels between approximately 2000 and 5000ft above the ground
- Airways, which are corridors of controlled airspace that form the main routes connecting major airports and are a form of Control Area
- Terminal Control Areas, which are larger Control Areas established around groups of airports where several airways converge
- Upper Airspace that comprises all UK airspace from FL245 (24,500ft) upwards.

Only the controlled airspace established in the immediate vicinity of major airports extends down to the ground.

Uncontrolled airspace: the airspace outside controlled airspace extends from ground level to 19,500ft or to the base of controlled airspace.

Although 'uncontrolled', pilots can request a range of Air Traffic Services (ATS) within such airspace from a variety of civil and military ATS providers. These services range from the mere provision of information to a radar service in which controllers provide sequencing and separation instructions.

Uncontrolled airspace is airspace within which receipt of an ATS, whilst often available, is not an absolute requirement. Pilots can operate without talking to ATC and without a specific air traffic clearance. They therefore fly on a 'see and avoid' basis such that they can determine their routes according to their own requirements. Such activity is subject to compliance with the basic Rules of the Air Regulations and any weather, airspace, pilot or aircraft licensing limitation. The majority of military, instructional and recreational flying takes place in uncontrolled airspace.

ATC Organisation: Responsibility for the provision of ATC services in the UK lies with both civil and military service providers, that will provide a service to both civil and military aircraft within their areas of responsibilities. Much of NATS activity is conducted from 3 control centres:

- NATS Swanwick.
- Scottish and Oceanic Area Control
- Manchester Area Control Centre (MACC)

*1 This is a precis of text from Directorate of Airspace Policy Environmental Information Sheet – Number 3 www.caa.co.uk/default.aspx?catid=7&pagetype=68&qid=295

Appendix C: A Brief Outline of Air Traffic Control at Manchester

Introduction

Manchester Airport is the third busiest airport in the UK. NATS provides the ATC service to aircraft operating into and out of Manchester

Air Traffic Control (ATC) is a service provided to afford a safe, orderly and expeditious flow of air traffic. In order to assist ATC in achieving these aims some airspace is designated as "Controlled Airspace" and some is designated as "Uncontrolled". Within these two broad divisions there are more specific sub categories of airspace classified as CLASS A,B,C,D,E,F and G.

The Controlled Airspace around Manchester

In simple terms, the Controlled Airspace in the Manchester area which lays below 10,000 feet above the ground is divided into 3 types:

Control Zone (CTR) which extends from ground level to 3,500 feet

Control Areas (CTA) which extend from various heights between 2000 to 3,500 feet

TMA/TCA Terminal Control Area which extends from 3,500 feet to significantly higher than 10,000feet.

Collectively these are known as Controlled Airspace or CAS. CAS is established for the protection of aircraft during various phases of flight. All aircraft operating within CAS must request ATC permission to do so and are required to comply with ATC instructions.

The purpose of the Manchester CTR is to protect inbound and outbound aircraft that are close to Manchester Airport. This airspace is also known as Class D airspace. This means that ATC is required to separate aircraft that are flying under Instrument Flight Rules (IFR). The vast majority of aircraft that operate into Manchester under IFR are commercial passenger jets. It is the job of ATC to keep these aircraft separated from each other. ATC will also provide information to aircraft flying under Visual Flight Rules (VFR) that will enable these aircraft to separate themselves from IFR and other VFR aircraft. The vast majority of VFR aircraft that operate in the Manchester CTR are light privately owned single or twin engined types.

Uncontrolled Airspace around Manchester

Where it is not necessary to have CAS there exists "Uncontrolled Airspace". In Uncontrolled Airspace, users may request a range of Air traffic Services (ATS) from Manchester ATC. However, Airspace Users are quite entitled to operate within this airspace without requesting the permission of or communicating with ATC. This is called Class G Airspace and within this airspace ATC has no requirement to separate aircraft from other aircraft. Aircraft in this environment are free to operate without any of the constraints that exist in CAS. General Aviation (GA) operators garner great flexibility from being able to operate in this environment. Airspace users are responsible for their own separation from other aircraft and operate on a "see and avoid" principle. The vast majority of instructional and recreational flying takes place within this type of airspace.

NATS MANCHESTER AIRSPACE CHANGE PROPOSAL

RESPONSE FORM

Name _____

Representing _____

Date _____

I have no objection to the proposal

I object to this proposal

Comments

(continue overleaf if required)

Please print this form and return before January 30th 2009 to:

**"ACP Feedback"
NATS Manchester
Room 805
Control Tower Building
Manchester Airport
M90 2PL**

or egcc.acp@nats.co.uk

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