Hawarden Airport
Hawarden Airport Radio Mandatory Zone
Airspace Change Proposal (Annex B)
Post Consultation Report

ISSUE 2

Date 8th July 2016

Serco UK & Europe
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United Kingdom

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<th>Responsibility</th>
<th>Date</th>
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<tr>
<td>Manager Air Traffic Services</td>
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</tr>
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<td></td>
</tr>
<tr>
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<td>Mark Spedding</td>
<td>Authorisation</td>
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### DOCUMENT STATUS

### ISSUE RECORD

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<td>2</td>
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<tr>
<td>01</td>
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<td>02</td>
<td>CAA SARG Kingsway</td>
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Introduction

Hawarden Airport is operated as a licensed aerodrome by Airbus Operations Ltd. Airbus Operations Ltd contracts the provision of Air Traffic Services (ATS) to Serco, who are an Air Navigation Service Provider (ANSP) approved under Article 7 of the European Commission Regulation 550/2004. In its capacity as an ANSP, Serco must satisfy the UK Civil Aviation Authority (CAA) as to their competence to provide safe and effective Air Navigation Services.

The Air Traffic Services Unit (ATSU) at Hawarden Airport currently provides services to aircraft in Controlled Airspace but predominantly in uncontrolled airspace. ATS are provided to all aircraft, both those operating at Hawarden Airport and those transiting the area, in accordance with UK FIS. The diversity and nature of aircraft operations in uncontrolled airspace has led to conflicts between aircraft, which is likely to become more frequent with known and forecast traffic increases at Hawarden Airport. In particular, it is a concern that the 'see & avoid principle' often applied to operations in uncontrolled airspace is unrealistic given the diverse speeds and size of aircraft utilising Hawarden Airport and the surrounding airspace. Resolution of these conflicts increases the workload of Air Traffic Control (ATC) and regularly results in the extended routing of flights, at the expense of efficient and effective use of airspace.

In order to comply with its responsibilities for safety management of the ATS and ensure flight safety in the airspace in the vicinity of Hawarden Airport, Serco (on behalf of Airbus Operations Ltd) is submitting this Airspace Change Proposal (ACP) to the CAA to establish a Radio Mandatory Zone in the vicinity of Hawarden Airport.

CAA Civil Aviation Publication (CAP) 725 sets out the processes that are to be followed in applying for making a change to any airspace. This Airspace Change Proposal (ACP) has been developed in accordance with the requirements specified in CAP 725.

CAP 725 requires the sponsor (Serco) of the ACP to carry out a consultation with the airspace users who may be directly or indirectly affected by the change and with organisations representing those who may be affected on the ground by the environmental impact of the change; As the change proposed has been identified only to have an impact on aviation stakeholders the public were not being canvassed as part of this process, however they were free to participate in this process if they so desired.

An initial Post Consultation Report was supplied to the CAA. It was noted that the response rate was lower than would have been desired. In agreement with the CAA it was decided to contact previous non-responding stakeholders and allow them an additional period to comment on the proposal.

This document is the Post Consultation Report and forms Annex B to the Airspace Change Proposal. The document describes the processes followed within the consultation & records the level of responses and engagement from consultees. It also outlines common issues and attempts to respond to and address these.

A number of Appendices provide amplifying detail where necessary, including a comprehensive Glossary of the aviation terminology used. Additionally, as the required changes affected by requirements arising from a number of UK, European and International Policies and Strategies, a list of source documents is included for reference by consultees.
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<th>Description</th>
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<tbody>
<tr>
<td>ACP</td>
<td>Airspace Change Proposal</td>
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<tr>
<td>ANSP</td>
<td>Air Navigation Service Provider</td>
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<tr>
<td>ATC</td>
<td>Air Traffic Control</td>
</tr>
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<td>ATCO</td>
<td>Air Traffic Control Officer</td>
</tr>
<tr>
<td>ATS</td>
<td>Air Traffic Service</td>
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<td>CAA</td>
<td>Civil Aviation Authority</td>
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<td>CAP</td>
<td>Civil Aviation Publication</td>
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<tr>
<td>CTR</td>
<td>Control Zone</td>
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<tr>
<td>NATMAC</td>
<td>National Air Traffic Management Advisory Committee</td>
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<td>NATS</td>
<td>National Air Traffic Services</td>
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<tr>
<td>NM</td>
<td>Nautical Mile</td>
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<tr>
<td>RTF</td>
<td>Radio Telephony</td>
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<tr>
<td>SARG</td>
<td>Safety and Airspace Regulatory Group</td>
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<td>SSR</td>
<td>Secondary Surveillance Radar</td>
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Post Consultation Report

1. Overview

1.1 Chester Hawarden Airport is proposing to submit to the Civil Aviation Authority a case for the establishment of a Radio Mandatory Zone in the vicinity of Hawarden Airport in order to enhance the safety and efficiency of operation for all flights operating to/from Hawarden Airport, by providing a known traffic environment for aircraft in the critical stages of flight, and of other flights operating in the area.

1.2 An Airspace Change Proposal has been developed in accordance with the requirements of the Civil Aviation Authority as detailed in CAP 725 CAA Guidance on the Application of the Airspace Change Process.

1.3 This process requires that the Sponsor of the change, carries out a comprehensive consultation with affected organizations and individuals (in this case the aviation industry) that may be affected by the proposed change.

1.4 This document is the Report of the Sponsor Consultation carried out by Hawarden ATC between 23rd February 2015 and 1st June 2015 in accordance with the requirements of CAA Document CAP752. As such it will form part of the formal airspace change proposal (ACP) to be submitted to the CAA.

1.5 The background to the consultation and the methodology used is detailed at appendix A of this Report.

1.6 The consultation process requires that Hawarden Airport should take a balanced view on the key issues raised by consultees and, if appropriate and feasible within the safety and regulatory requirements, adapt the proposal to address objections or concerns identified. Where appropriate, issues arising from the consultation have been, or are aiming to be, addressed by continuing dialogue with relevant parties and with the CAA.

1.7 This Report provides statistical analysis of the consultation and identifies the main issues raised by consultees who responded to the consultation. It provides the Hawarden Airport view on the issues identified and outlines post-consultation action that has been, or is planned to be, undertaken by Hawarden.

1.8 Whilst the general public were not specifically invited to take part in the consultation process, they were not precluded from doing so and any responses were included.

1.9 Having carried out a Sponsor Consultation in accordance with the CAAs requirements, Hawarden Airport intends to continue with the submission of a formal proposal to the CAA in accordance with the provisions of CAP 725.

1.10 Hawarden Airport thanks all consultees who took part in the consultation of the RMZ proposal.
2 Early stakeholder engagement

2.1 Throughout the consultation process, Hawarden ATC followed the 7 stage process as laid out in CAP 725. In addition to this Hawarden ATC elected to engage early with aviation stakeholders. This allowed the sponsor to identify issues early in the airspace design process.

2.2 Engagement was threefold; a website www.hawardenrmz.co.uk was set up with information and a feedback facility. Letters and e-mails were sent to over 75 identified potential stakeholders. Several aviation presentation events were held.¹

2.3 The early engagement allowed more of a collaborative approach to the airspace design and for two-way discussions to take place, both on-line and face to face (at presentations). This permitted Hawarden ATC to elaborate on the issues and plans and for stakeholders to voice their concerns.

2.4 The presentations and feedback identified key stakeholders that would require further development of the proposal in order to, as far as possible address their concerns. This led to the creation of focus groups.

3 Focus groups

3.1 Following the early stakeholder engagement, some stakeholders identified issues which required further development of the proposed change. Focus groups have been set up with:

- North Wales Hang Gliding and Para-gliding Association;
- Cheshire Flyers; North Wales Gliding Club.

3.2 As the consultation progressed additional focus meetings were held with other stakeholders to address individual concerns and operational considerations. These included;

- Poulton South Airstrip operator.
- Gresford Flash Airstrip operator.
- North Wales Gliding club.
- British Gliding Association.

¹ A list of the main stakeholders is included at Appendix B.
4 Overview of Responses

4.1 A total of 117^2 aviation and potentially affected organisations, representatives or individuals were consulted. The aviation consultees included local airspace user organisations, national representative bodies and Air Traffic Management organisations. Responses were received from (20%) of the consultees to the initial consultation. A higher response would have been desirable and following liaison with the CAA a secondary consultation period (which allowed those who had not previously responded to do so) was held. This identified several consultees who were no longer in existence and generated a more favourable response rate of 25%.

4.2 The consultees comprised;

- General Consultees - 57
- Hawarden based aviators - 14
- Local airports and ATC agencies - 20
- NATMAC - 26

^2 This was reduced from the original 141 consultees – identifying organisations that had ceased trading or were using multiple e-mail addresses or those that were providing a combined response to the consultation.
4.3 It is notable that several of the individuals or organisations did not respond individually but responded as part of their relevant national organisation. This was the case for the local gliding sites, military units and certain LAA consultees. For these grouped responses, the individuals were identified but counted as a single consultee and responding consultee for statistical purposes.

5 Useable responses

5.1 26 of the 29 responses declared a definitive position of being either in favour, or not in favour of the proposal. Only 3 responses were non-committal merely raising comments or requesting clarification.

5.2 All respondents who were non-supportive of the proposal also supplied comments and or points for clarification. In some cases this provided opportunities for further face to face engagement in order to address some of the issues raised.

5.3 Additionally, 21 of the 29 respondents also provided comments or clarification points which have been beneficial in developing the proposal.

5.4 A graph showing the spread of responses and feedback is shown below.
5.5 The comments and clarifications contained within the responses provided a range of issues, some common which are tabulated at Appendix C. This tabulation also lays out the responses, actions and comments of Hawarden ATC.

5.6 Following the focus groups and meetings held 6 of the 9 negative respondents (NWHGPC, Poulton South, Gresford and Cheshire Flyers) were satisfied that reasonable mitigations and alternative means of compliance had been proposed by Hawarden ATC such that their current operations could be continued with minimal impact.
6 Modifications to the proposal

6.1 As part of the review process, comments from Gliding representatives has led to the change of design at the southern edge of the RMZ. Whilst this does remove a level of known traffic environment from that originally proposed, it has been assessed that this can be operationally accommodated to provide a flexible use of airspace. In the absence of unknown traffic Hawarden ATC may elect to vector outside the RMZ at risk but always have the option to vector Right Hand for 04 if there is known or unknown traffic conflicting in the area. The final proposed design of the RMZ is depicted below.

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6.2 Whilst it was always recognised that accommodation would need to be made for non-radio aircrafts use of the proposed RMZ, it was originally envisaged that prior telephone booking would accommodate this element. The focus groups proved valuable in this respect as they identified that several operators used sites that had no land line telephones and mobile telephone signals too poor for reliable voice communications. As a result of this it was clear that text messaging provided a more reliable alternative to provide an alternative means of compliance for RMZ access.

6.3 Some concerns have been expressed as to the operation of ‘Poulton Disused Airfield’ and ‘Gresford Flash Airstrip’. Whilst it is accepted that low level two-way radio communication between Hawarden ATC and traffic using these sites it is not always possible, it is proposed that Letters of Agreement will be developed that would permit operation.
6.4 The operation of hang gliders and para-gliders (and to a certain extent gliders), is subject to the ambient weather conditions and therefore difficult to be precise at the planning stage. However, engagement with these stakeholders has identified typical launch sites and areas of operation, which when compared to their very low frequency, present a relatively low impact to Hawarden operations. As such it will be the intention to compose letters of agreement with associated procedures.

6.5 A common thread that has been suggested by radio equipped aircraft regularly using the airspace was the suggestion of a Frequency Monitoring Code\(^3\). This would be a dedicated Transponder code that would be published with associated procedures. In effect, an aircraft transiting the RMZ, maintaining a listening watch on the published frequency and displaying this code would be deemed to be in compliance with the requirements of the RMZ. Should Hawarden ATC require the details and intentions of the aircraft a specific request could be made. This would mean that should a transit aircraft, in compliance with this procedure, not affect Hawarden Traffic, it could operate in the airspace without the need for unnecessary two-way radio communication.

\(^3\) Also known as a Listening Squawk.
Conclusions

6.6 The Sponsor Consultation has been carried out in accordance with the requirements of the CAA as detailed in CAP 725. A comprehensive cross-section of Industry consultees has been included. The Industry consultees included representation at local and national level and included both airspace users and ATS provider interests.

6.7 Provision was made for individual members of the aviation community or individual members of the public to participate in the consultation and make their views known. Due regard has been taken of such submissions received.

6.8 A representative response rate (25%) has been achieved from which a balanced judgement can be made on this change to the airspace arrangements in the vicinity of Hawarden Airport. This response rate improved from 20% from the original consultation.

6.9 Hawarden ATC has found that no new or unexpected issues have arisen which would materially affect the fundamental case for the introduction of a Radio Mandatory Zone in the vicinity of Hawarden Airport, to provide for the safe and efficient conduct of aircraft in the critical stages of flight and for the safe operation of other aircraft in the vicinity.

6.10 Hawarden ATC concludes, therefore, that given the safety responsibilities and accountabilities placed upon it under the Air Navigation Order and EC Regulations 550/2004 and 1035/2011, there are no material issues arising from objections to the proposal that would justify withdrawal of the proposal.

6.11 Consequently, Hawarden Airport remains convinced that the case for the introduction of a Radio Mandatory Zone is sound and, following a detailed review of the more contentious aspects of the airspace design and discussions with the CAA regarding the detailed application of their regulatory requirements for airspace design, a formal Airspace Change Proposal will be submitted to the CAA.

6.12 Hawarden Airport would like to thank all the organisations and individuals who took part in the consultation and provided valuable input to the process. We look forward to continue working with stakeholders as the ACP process progresses.
7  Next Steps

7.1 Hawarden ATC will continue to prepare its formal submission to the CAA for the introduction of a Radio Mandatory Zone in the vicinity of Hawarden Airport. The CAA requires that all consultation material, including responses to the consultation and the Hawarden ATC analysis are included in the formal submission. This Report, together with any follow-up correspondence and review documentation, will also form part of the submission.

7.2 It is planned that the formal ACP will be submitted to the CAA in July 2016.

7.3 Following receipt of the formal proposal, the CAA will carry out a documentation check to ensure that the Hawarden Airport submission is complete and will request clarification and/or additional information if necessary. A Case Study will then be carried out by the CAA leading to a Regulatory Decision by the Head of the Safety and Airspace Regulation Group. This decision will normally be reached within a period of 17 weeks.

7.4 In the event that the Regulatory Decision supports the proposal then the Implementation Phase, taking a further absolute minimum of 56 days from the time that the necessary documentation is submitted to the Aeronautical Information Services (AIS) in accordance with the international requirements for the promulgation of aeronautical information.

7.5 It is anticipated that the Hawarden Radio Mandatory Zone could be established on 6th February 2017 (AIRAC 02/16).
Appendix A Consultation Methodology

A.1 Introduction

A.1.1 The CAA sets out its regulatory requirements and process for applications to change the status of airspace or associated arrangements in CAP 724 “The Airspace Charter” and CAP 725 “CAA Guidance on the Application of the Airspace Change Process”. An essential element of the airspace development process is for the Change Sponsor, in this case Hawarden ATC, to carry out an extensive consultation with the airspace users who may be directly or indirectly affected by the change and with organisations representing those who may be affected by the environmental impact of the change.

A.1.2 The establishment of a Radio Mandatory Zone is not a change of classification of airspace nor does it have an effect of the distribution of aircrafts flight tracks. However it does have a potential impact on airspace users which has to be assessed. The only established method for doing this was to follow the process of airspace changes detailed in CAP 725 requiring a full Industry consultation. Whilst the full ACP process requires Environmental and Community consultation, as neither of these elements were to be affected by the change they were not included in the formal consultation process.

A.1.3 Thus the airspace proposal development and Sponsor Consultation has been conducted in accordance with the CAA requirements.

A.2 Consultation Methodology

A.2.1 A comprehensive Sponsor Consultation Document was prepared by Hawarden ATC. The CAA also provided advice on the development of the Sponsor Consultation Document prior to its release.

A.2.2 The consultation invitation letter was distributed to Consultee Organisations by e-mail, detailing access links to the Sponsor Consultation Document via the RMZ consultation website. Electronic distribution of and website access to consultation material is acceptable to the CAA and now forms the standard method of undertaking such consultations.

A.2.3 Paper copies of the Consultation Document were available to consultees on request.

A.2.4 The Cabinet Office Code of Practice on Consultation and the CAA requirements specify a minimum period of 12 weeks for consultation. Hawarden ATC carried out this Consultation between 23rd February 2015 and 18th May 2015, allowing a 12-week period. Due to a distribution error the deadline was extended to 1st June to allow all consultees to have at least 12 weeks to assess and respond to the consultation.

A.2.5 Within the consultation period consultees were asked to consider the proposal and submit a response to Hawarden ATC, either in writing or through a discrete e-mail address (consultation@hawardenrmz.co.uk).

A.2.6 Additionally, a number of the consultee aviation organisations publicised the consultation on their websites or industry publications. Thus a wide spectrum of individual airspace users were made aware of the consultation.
A.2.7 In order to enable stakeholders and others to discuss the proposal with members of the Hawarden ATC team, a presentation evening was held at the Airport. In addition, individual meetings and briefings were held with various aviation representatives.

A.2.8 Once the formal consultation was under way the opportunity for additional presentations and meetings was made available. Both the North Wales Hang Gliding and Paragliding Association and the Cheshire Flyers hosted presentation of this type.

A.2.9 All consultee responses were acknowledged on receipt.

A.2.10 Consultees that raised objections or issues for resolution were contacted and either a dialogue via e-mail/letter or face to face meetings, were held to attempt to resolve any identified issues. An overview of the common issues raised and the Hawarden responses are tabulated at Appendix C.

A.2.11 Ongoing communication is being continued with organisations that will be subject to a letter of agreement in relation to the operation of the proposed RMZ.

A.2.12 On the conclusion of consultation a post consultation report was produced, submitted to SARG and made available on the website. Due to the relatively low response rate Hawarden Airport was advised to engage in an additional period of for those stakeholders that had not previously responded. This secondary consultation was run between 11th December 2015 and 7th February 2016.

A.2.13 Following the secondary consultation a post consultation report was produced together with the Aispace Change Proposal, Economic Impact Report and Environmental Report on 30th June 2016.

A.3 Consultees

A.3.1 Development of the “Consultee List” is defined by the CAA requirements of CAP 725. Hawarden ATC sought appropriate advice from the CAA in developing an appropriate list.

A.3.2 The CAA requires that the consultation must be addressed, to UK National Aviation Organisations on the CAA’s National Air Traffic Management Advisory Committee (NATMAC). The list of NATMAC organisations and their representatives was provided by CAA SARG. It should be noted that a number of NATMAC organisations field more than one representative.

A.3.3 Additionally, local airspace user groups who had previously participated in the pre consultation stakeholder engagement together with local airport users and off-airport airspace user organisations and local aerodromes that may be affected by the airspace change were included in the consultation.

A.3.4 The complete list of consultees is reproduced at Appendix B.

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4 In order to comply with our commitment to confidentiality, the responses have been anonymised.
Appendix B List of Consultees

B.1 General Consultees

Mr K Lewis  
Air Navigation & Trading Co Ltd  
Andrew Dixon  
Andy Thompson  
Antony Caveen  
email consultee 1 (redacted for privacy)  
Alison Lewis  
Ben Shone  
Bickerstaffe Aviation  
Bill Fisher  
email consultee 2 (redacted for privacy)  
email consultee 3 (redacted for privacy)  
Denbigh Flight Training  
Dragon Wings Microlights  
North Wales Air Academy  
Richard Davison  
Doug Blair  
Flyer Magazine  
Liverpool Flying School  
Fly Llanbedr Ltd  
email consultee 4 (redacted for privacy)  
Gary Stephens  
Geoff Hill  
Graham Worley  
Gordon MacDonald  
Gwyn Edwards  
Helicentre  
Heli Air (Manchester)  
Ian Shaw  
Flightpath UK  
John Bottomley  
Jonathon Clayton  
email consultee 5 (redacted for privacy)  
London Air Sports  
Mainair Microlight Centre  
Mike Jackson  
N P Sleigh  
N Stokes  
Tatenhill Aerodrome  
West Beach Air Academy  
Phil Jones  
Roger Breckell  
Roger Manley  
Ronald Barnard  
Richard Keech  
email consultee 6 (redacted for privacy)  
Roger Penney  
Steve Kirkham
West Air
Tim MacKay
Manchester Helicopter Centre
Tim Walker
e-mail consultee 7 (redacted for privacy)
Wizzard Helicopters
Richard Hedley
Stuart Ord
Dylan Smith

B. 2 Airport user consultees

British Midland Regional
Flintshire Flying School
Marshall Aerospace
National Police Air Service
Airbus Helicopters
Aviation Park Group
Raytheon Systems Ltd
Airbus Transport International
APEM Limited
JD Aviation
Grosvenor Estates
North Wales Military Aviation Services (NWMAS)
Exec Jet Charter (Williams)
Signum

B.3 Off-airport aerodrome and airspace user consultees

North West Air Ambulance
Cheshire Flyers (Arclid)
Mid Wales Airport
MANCHESTER City Airport (Barton)
Lancashire Aero Club
Mersey Flight
Liverpool Flying School
LOMAC Aviators
Midland Gliding Club
Ravenair
NWHPGC
Skydive Tilstock
Mona Flying Club
NWBAC
Manchester ATC
Liverpool Airport ATC
PC Wal Sector
Sleap Aerodrome/Shropshire Aero Club
Poulton South Airfield
Gresford Flash Airfield
B.4 NATMAC Consultees

CAA SARG
AOA
Aircraft Owners & Pilots Association (AOPA)
BAE Systems
British Airline Pilots' Association (BALPA)
North West Balloon & Airship Club (NWBAC)
British Gliding Association (BGA) - including Denbigh Gliding Club & North Wales Gliding Club
British Helicopter Association (BHA)
British Model Flying Association (BMFA)
ARPAS
Guild of Air Pilots & Air Navigators (GAPAN)
Helicopter Club of Great British (HCGB)
National Air Traffic Services (NATS)
Aviation Environment Federation
British Air Transport Association (BATA)
British Business & General Aviation Association (BBGA)
British Hand Gliding & Paragliding Association (BHPA)
British Microlight Aircraft Association (BMAA)/General Aviation Safety Council (GASCo)
British Parachuting Association (BPA)
Guild of Air Traffic Control Officers (GATCO)
Light Aircraft Association (LAA)
PPL/IR Europe
Low Fares Airlines
UK Airprox Board
UAVs

B.5 NATMAC military consultees

DAATM (including RAF Valley & RAF Shawbury)
## Appendix C Common Issues Raised & Responses

<table>
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<tr>
<th>Issue Raised</th>
<th>Hawarden ATC Response</th>
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<tr>
<td>Closing off of airspace to non-radio aircraft 2 responses.</td>
<td>The provision of alternative means of compliance in the form of telephone and or text booking for access to and use of the RMZ provides a reasonable means of access to the RMZ and as such does not ‘close off’ airspace to non-radio traffic.</td>
</tr>
<tr>
<td>RMZ establishment leads to circumnavigation (causing pilots to encounter cloud) 3 responses.</td>
<td>The provision of alternative means of compliance in the form of telephone and or text booking for access to and use of the RMZ provides a reasonable means of access to the RMZ. Additionally the availability of a ‘listening squawk’ will assist in reducing communication obligations when not operationally required. As such there are no qualifications or operational requirement to force pilots to circumnavigate the proposed RMZ. Whilst it is accepted that pilots may elect to do so, it is difficult to envisage a pilot electing to place his aircraft in a dangerous situation merely to avoid talking to ATC or to telephone/text his intentions in advance. Such a concept is contrary to the basic premise of good airmanship and self-preservation.</td>
</tr>
<tr>
<td>Lateral extent of proposed RMZ too large. 5 responses.</td>
<td>The proposed RMZ has undergone several design reviews which have reduced the lateral extent of the RMZ as far as is reasonably possible whilst still retaining the ATC operational enhancements provided by its adoption.</td>
</tr>
<tr>
<td>Vertical extent of proposed RMZ too great (not required to surface level). 2 responses.</td>
<td>The De-confliction minima required as part of UK FIS could not be achieved within the RMZ, if the RMZ was not from surface level, due to the vertical disposition of controlled airspace in the vicinity of Hawarden coupled with the terrain.</td>
</tr>
<tr>
<td>Low level RTF coverage from Hawarden ATC insufficient for scope of RMZ. 1 response.</td>
<td>There are no known areas of poor RTF coverage within the volume of the RMZ that are within the normal flight envelopes of aircraft using the RMZ with the exception of known gliding/hang gliding/para-gliding sites and local airstrips. These sites will be operated in accordance with letters of agreement established between Hawarden ATC and the site operators.</td>
</tr>
<tr>
<td>Issue Raised</td>
<td>Hawarden ATC Response</td>
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<tr>
<td>Adequacy of RTF capacity for increased traffic levels. 3 responses.</td>
<td>Whilst it is impossible to accurately quantify the required RTF capacity for the operation of the RMZ by the Hawarden Radar ATCO, it is believed that the current single ATCO has adequate capacity to accommodate the planned increase in RTF demand. Notwithstanding this, the Hawarden ATC has elected to obtain relevant equipment and licensing for the provision of an additional frequency therefore doubling the potential capacity.</td>
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<tr>
<td>Adequate ATC staff to operate relevant positions &amp; deal with the increased traffic levels. 2 responses.</td>
<td>In conjunction with the above response, the current staff roster structures allow for additional ad hoc operation of the ‘Radar Director Position’. It is noted that this issue was cited in relation to the current single radar position not being continuously operational, which was a historical issue prior to a recent increase in ATCO headcount.</td>
</tr>
<tr>
<td>Availability of training and briefing materials to pilots. 1 response.</td>
<td>Hawarden ATC accepts that education is a key element of the success of this proposal. Aside from the amendments to the UKAIP, local documentation and navigational charts, a degree of common sense and reality must be applied to the process. A thorough hazard analysis as part of the change assessment will be carried out to ensure these elements are adequately addressed. It has already been identified that the production of ‘stickers’ may be necessary to temporarily amend current 1:250,000 and 1:500,000 charts, together with local briefings of pilots at Hawarden ATC.</td>
</tr>
<tr>
<td>Disruption to Military Low Level Flying structure. 1 response.</td>
<td>The provision of alternative means of compliance in the form of telephone and or text booking for access to and use of the RMZ provides a reasonable means of access to the RMZ for military aircraft not able to make RTF contact with Hawarden. Additionally the availability of a ‘listening squawk’ will assist in reducing communication obligations when not operationally required. As such there are no operational requirement to alter the current military low level flying structure.</td>
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<td>Operational impact on adjacent ATC Units. 1 response.</td>
<td>It has been assessed that RMZ has a minor overlap with the Shawbury AIAA. As aircraft operating in these areas (in receipt of a service from Shawbury ATC) are operating within known parameters, and displaying a recognizable transponder code, the aircraft are effectively operating as known traffic. Furthermore coordination can readily be effected on such aircraft needing to operate outside agreed parameters. It is intended that procedures between Hawarden ATC and Shawbury ATC for operations in the ‘overlap areas’ will be documented in a Letter of Agreement. Similarly, amendments to operational procedures between Liverpool ATC and Hawarden ATC will be documented in an amendment to the current LoA.</td>
</tr>
<tr>
<td>Funnelling effect generated due to pilots circumnavigating. 1 response.</td>
<td>The provision of alternative means of compliance in the form of telephone and or text booking for access to and use of the RMZ provides a reasonable means of access to the RMZ. Additionally the availability of a ‘listening squawk’ will assist in reducing communication obligations when not operationally required. As such there are no qualifications or operational requirement to force pilots to circumnavigate the proposed RMZ. Whilst it is accepted that pilots may elect to do so, it cannot be quantified that this would generate a definite risk that would outweigh the benefits of introducing the RMZ. Furthermore the re-profiling of the Southern section of the proposed RMZ (to design 3) will reduce the potential for a single choke point resulting in a greater spread of air traffic, which elect to remain outside the RMZ.</td>
</tr>
<tr>
<td>Procedures for RPAS. 1 response.</td>
<td>Current practices for operations of RPAS in close proximity to Hawarden Airport are similar to the alternative means of compliance for use of the RMZ by non-radio aircraft. As this is exactly the solution suggested by the consultee, it will be incorporated into the procedures for the RMZ that will be published in the UKAIP.</td>
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<tr>
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<td>No commercial passenger traffic to support and RMZ. 2 responses.</td>
<td>This comment appears to be based on a historical concept that airspace changes could only be made to support commercial passenger transport operations. This supposition is incorrect and accordingly no such flights are required to support of the proposal.</td>
</tr>
<tr>
<td>Erroneous traffic data in support of the application. 2 responses.</td>
<td>The disparity between CAA data and the airports data is a known issue which is being investigated. Notwithstanding this, the Hawarden ATC has extensive accurate data to support the historical movement figures. The data showing increased ‘Beluga’ activity is factually based on known levels of wing production equating directly to increased flights of these aircraft. Accordingly this evidenced based data can be empirically supported.</td>
</tr>
<tr>
<td>Misquoting of Wake vortex category in support of application. 1 response.</td>
<td>The A300-600ST has an MTOM of 155,000kg and is therefore wake vortex category H (Heavy) in accordance with the UK specifications. As a result of this, all of the impacts stated within the consultation are valid albeit the recommended spacing on final approach has been reduced to 7NM (from the 8NM recommended at the time of originally compiling the document).</td>
</tr>
<tr>
<td>Restrictions of operations to established Hang Gliding and Paragliding operations. 1 response.</td>
<td>A focus group was established with the affected Hang gliding and paragliding club. The site usage is relatively infrequent and the typical arrival/departure profiles used by Hawarden (in wind conditions when site usage would lead to RMZ entry), provide minimal confliction scenarios. As a result a Letter of Agreement will be developed to allow continued usage of these HGP operations within the RMZ.</td>
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### Issue Raised

Established operational hours of the RMZ vs varied operational hours of the ATC unit. 1 response.

### Hawarden ATC Response

It is recognised that altering the hours of operation of the RMZ to coincide with the occasionally variable operational hours of Hawarden Airport will lead to operational issues including inadvertent breach of the RMZ conditions. However, it has been assessed that the traffic levels during the hours when Hawarden Airport is not published as normally open (UKAIP) are significantly lower. As such, operations at the airport can be safely and efficiently conducted without the need for the RMZ at these times. Accordingly, the proposed hours of establishment of the RMZ will be the same as the UKAIP published operational hours of Hawarden Airport.

Use of a Frequency monitoring code as an alternative means of compliance. 3 responses.

### Hawarden ATC Response

Hawarden ATC fully support this concept as a flexible alternative means of compliance. This will reduce or even negate unnecessary RTF calls when there is no conflicting traffic. Hawarden ATC will progress this concept to obtain a dedicated transponder code for this purpose and develop associated procedures, which will be published in the UKAIP as part of the RMZ entry.
Appendix D  Airspace Development – Options Considered

D.1 Introduction

D.1.1 CAP 725 requires that in developing proposals to change airspace, the change sponsors should consider a range of options, including the ‘Do Nothing’ option.

D.1.2 This appendix outlines the options considered by Hawarden Airport in order to arrive at the configuration and procedures being proposed.

D.1.3 It is important to note that the information contained within this appendix is provided purely to illustrate the options considered. Other than the final design of the RMZ, the options outlined in this appendix are not being considered for implementation and can be considered as having been rejected as unsuitable.

D.2 “Do nothing”

D.2.1 If the extant situation were allowed to continue, the forecast increased traffic operating at Hawarden Airport would continue to experience conflicts with unknown aircraft.

D.2.2 Over the past two years Hawarden Airport has attempted to increase awareness of the airport’s activity and encourage aircraft using the surrounding airspace to make two-way communication with Hawarden ATC. Unfortunately, there has been no marked increase in aircraft contacting Hawarden ATC and unknown aircraft still continue to operate in close proximity to Hawarden Airport.

D.2.3 The diversity of aircraft operating at Hawarden Airport and within its vicinity (in respect of differential speeds and handling characteristics) is not appropriate to application of the ‘see and avoid’ principle.

D.2.4 With the forecast increase in Hawarden Airport traffic about to take place a more pro-active stance needs to be taken in respect of operational efficiency and to further reduce any safety hazards that may be present. As such, ‘Do Nothing’ is not an option.

D.3 Controlled airspace (CTR)

D.3.1 The establishment of Controlled Airspace would certainly provide the known traffic and environment desired, ensure aircraft safety and increase operational efficiency of aircraft using Hawarden Airport. However, it is recognised conventionally CTRs are large in area and would expand an already substantial block of Controlled Airspace surrounding Hawarden Airport towards an area of rising terrain. This would have a significant impact on a large proportion of current airspace users.

D.3.2 The requirement to comply with an ATC clearance within Controlled Airspace would preclude use by some airspace users due to their reactive mode of flight. Meteorological minima applicable within such airspace would also impose access restrictions to airspace users in certain conditions.

D.3.3 In simple terms the adoption of Controlled Airspace would be more than is required to address the operational issues identified and is therefore unacceptable as a solution.
D.4 Transponder Mandatory Zone (TMZ)

D.4.1 The option to establish a TMZ was considered. Within this area, all airspace users would be required to be equipped with and operate a (mode C) transponder.

D.4.2 This would provide Hawarden ATC with a positive radar contact and level information. Unfortunately without the benefit of communicating with an aircraft, establishing its intentions and verifying the SSR data, the radar return would still be considered ‘unknown’ and therefore the relevant increased de-confliction minima would be applicable.

D.4.3 As a result of this, The TMZ option offers little benefit over the current situation and is therefore unacceptable as a solution.

D.5 Radio Mandatory Zone (RMZ)

D.5.1 The option to establish a RMZ was considered and explored further and was seen to bring significant greater benefits. The RMZ would require all aircraft to make and maintain two-way radio contact with Hawarden ATC and advise ATC with pertinent flight details. This would generate a known traffic environment.

D.5.2 An RMZ would not permit Hawarden ATC to deviate the route of all traffic to aid de-confliction, it would however, generate the known traffic environment within which the lower de-confliction minima can be applied (in accordance with UK FIS) and Hawarden traffic could be routed with the confidence that routine unexpected manoeuvres of aircraft do not need to be taken into account.

D.5.3 It was recognised that the establishment may generate some operational restrictions to non-radio equipped aircraft which currently utilise the airspace. To this end, it will be necessary to permit some ‘alternative means of compliance’ to be developed which would allow operators to access the airspace, yet still provide Hawarden ATC with a known traffic environment.

D.5.4 It was considered that the option of an RMZ provided the most balanced solution with due regard to Hawarden Airport operators and other airspace users.

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5 SSR returns on radar are not affected by aircraft size or construction material so the symbol on the radar display is the same for a glider or a Beluga.