

All NATMAC Representatives

17<sup>th</sup> February 2017

*Dear Stakeholders,*

**CAA AIRSPACE CHANGE DECISION**

**INTRODUCTION OF THE HAWARDEN RADIO MANDATORY ZONE (RMZ)**

**Organisation proposing the change: SERCO Ltd (Hawarden)**

**Date of Airspace change proposal: 8<sup>th</sup> July 2016**

**Documents considered by the CAA:**

Airspace Change Proposal dated 8<sup>th</sup> July 2016

Hawarden RMZ Consultation Document

CAA RMZ Policy document

CAA Operational Assessment Annex C (incorporating environmental assessment)

CAA Consultation Assessment Annex D

**1. Introduction**

- 1.1 Hawarden Airport is operated as a licensed aerodrome by Airbus Operations Ltd. Airbus Operations Ltd contracts provision of Air Traffic Services (ATS) to Serco, the approved air navigation service provider (ANSP)<sup>1</sup>. In its capacity as an ANSP, Serco must satisfy the UK CAA as to its competence to provide safe and effective Air Navigation Services (ANS). Hawarden Airport is situated in Class G uncontrolled airspace, but is in close proximity to Controlled Airspace (CAS), both laterally and vertically. An Aerodrome Traffic Zone (ATZ) is established around the airport, with a radius of 2.5 nautical miles (nm) from the aerodrome reference point. Within the ATZ, any transit aircraft must maintain communication with Hawarden ATC and comply with ATC instructions. The Air Traffic Services Unit (ATSU) currently provides services to aircraft operating in controlled airspace, but predominantly in Class G uncontrolled airspace. ATS are provided to all aircraft operating at Hawarden airport and those requesting a local transit service. The diversity, nature and occasional

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<sup>1</sup> Serco are an ANSP approved under Article 7 of the European Commission Regulation 550/2004

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unpredictability of local air traffic operations in Class G has led to potential conflict between aircraft utilising Hawarden airport and unknown aviation activity in the local area. Hawarden Airport has submitted an airspace change proposal to introduce a Radio Mandatory Zone (RMZ) to help create and facilitate a known traffic environment for crews operating the Beluga A300-600 Super Transporter aircraft.

- 1.2 The justification for the introduction of an RMZ was focussed on the location of Hawarden Airport and its proximity to CAS structures. Above the airport is a complex network of CAS manifested by a confluence of ATS routes, together with the ATZ adjoining the Liverpool Class D Control Zone (CTR) to the north and close to the Manchester Control Area (CTA) to the northeast. The proximity of the CAS structures and the high ground to the south-west, results in a funnelling effect on the significant number of general aviation and military flights operating in the area and which transit through either the Hawarden RW 22 climb-out profile or the RW 04 approach. Hawarden ATC has to provide a Deconfliction Service to their IFR operations and is required to provide a minimum separation of 5nm laterally or 3000ft vertically against unknown conflicting traffic. If the conflict is not transponder equipped then 5nms separation is the only option available to the Hawarden ATC controller. The relatively high traffic density in the area makes it extremely difficult to satisfactorily maintain the required safety minima at all times. As Hawarden Airport is outside CAS, there are no Standard Instrument Departures (SIDs) for aircraft departing the aerodrome. Instead, standard outbound clearances are issued to comply with the clearance to join CAS. These clearances cannot guarantee satisfactory de-confliction from unknown, non-communicating aircraft operating outside the ATZ. In order to try and maintain safety of all aircraft, Hawarden ATC will mitigate the risk of unknown aircraft against its own operations by delaying its aircraft on departure until the unknown aircraft is no longer considered a risk. Inbound aircraft are released by Wallasey sector controllers to Hawarden ATC for the provision of air traffic services outside controlled airspace. Aircraft in conflict with unknown or non-communicating aircraft during an approach to either RW 04 or RW 22, sometimes results in controllers having to provide an extended routeing to maintain the required safety minima in congested Class G airspace. Hawarden ATC has attempted several publicity campaigns to inform and encourage aircraft operators to maintain 2-way communication with ATC when operating in the local area. These campaigns have had very limited success.
- 1.3 The Hawarden ATC RMZ Airspace Change Proposal document provides considerable detail on the proposed change and a comprehensive analysis of the other options that were considered. It also details the supporting infrastructure and resources that have been identified and are a prerequisite for any implementation of an RMZ. Hawarden ATSU has accurately identified the operational impact on all other airspace users, and has sought to introduce a compromise to satisfactorily meet their requirements and manage their concerns.
- 1.4 Airbus Industries has increased the rate of wing production and has subsequently placed a requirement on Hawarden aerodrome to manage increased delivery flights by the fleet of 5 Beluga aircraft. The increase in the number of delivery flights per year is expected to rise to 1200 in 2017. The proposal indicates that although the aerodrome's total movements dropped close to 15000 in 2015, the anticipated increase based on National forecasts and economic trends, supported by incremental Beluga operations, is calculated to pass 22000

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by 2017. It must be made clear though, that there are no plans for scheduled services from Hawarden Airport.

## **2. Information that has been considered**

- 2.1 In reaching a decision, I have considered a number of documents including the sponsor's airspace change proposal and consultation documents, the CAA case officer's Operational Report (Annex C), the Consultation Report (Annex D) and the CAA's extant RMZ Policy Statement. As detailed in the CAA Annex C Operational Assessment, no environmental assessment was considered necessary or appropriate for this proposal.

## **3. Proposal Overview**

- 3.1 As detailed in para 1.1 above, the proposal seeks to introduce a RMZ in accordance with the CAA's RMZ Policy Statement. The RMZ will provide Hawarden ATC with a fuller picture of the aircraft activities in the area and therefore assist it to manage a safer and effective flow of traffic within the confines of the RMZ. The proposer is fully conscious of the potential impact on local and itinerant airspace users and has sought to mitigate that impact, with the agreement of local users, to the greatest extent possible.

## **4. Consultation**

- 4.1 The change sponsor engaged with local aviation stakeholders ahead of the formal consultation to obtain their perspectives. Although it was perceived by some GA operators that the introduction of an RMZ would impact on some activities, Hawarden ATSU worked closely with various user groups and has sought to accommodate their activities. The early engagement generated a more fruitful and collaborative approach to the decision on the final airspace design. Focus groups with key stakeholders generated positive engagement and resulted in a greater understanding of all airspace users' requirements, both sponsors and GA operators.
- 4.2 Open-cockpit operators such as microlight, hang-gliders and para-gliding activities have very limited radio capabilities and cannot guarantee to adhere to the conditions generally associated with an RMZ. However, Letters of Agreement (LoAs) have been completed and will be signed-off as a condition of the regulatory approval of the implementation of the RMZ. These LoAs enable limited capability operators access to the airspace through alternative means, either by pre-notification or introduction of a local flying area at set times and coordinated with Hawarden ATC by telephone or SMS text.
- 4.3 Although the change sponsor completed two periods of consultation, only 25% of 117 of the pre-determined stakeholders responded. However, it was suggested by several consultees that radio and transponder equipped aircraft that regularly transit the local area could be accommodated by the introduction of a Frequency Monitoring Code<sup>2</sup>. This would be a dedicated Transponder code (squawk) that would be published with associated procedures,

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<sup>2</sup> Also known as a Listening Squawk

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which would allow aircraft to transit the RMZ without 2-way contact with Hawarden ATC, but would display this squawk and listen out on the appropriate frequency. This is considered as reasonable mitigation of fundamental issues. The Frequency Monitoring Code 4607 has been approved by the CAA code allocation manager, is a condition of approval, and will be live before implementation.

## **5. Ministry of Defence**

- 5.1 It was confirmed that the Ministry of Defence (MoD) had 'no objection' to the proposed RMZ. RAF Shawbury helicopter operations would continue to have unrestricted and uncoordinated access to the airspace whilst displaying a verified Shawbury transponder code; these details are included in an operational LoA. Low level fast-jet transits would be further accommodated by the introduction of the listening squawk facility.

## **6. NATMAC**

- 6.1 Some consultees objected to the proposal on the grounds that Commercial Air Traffic (CAT) operations were not involved in the justification and that, consequently, the proposal could not be justified. The CAA's decision-making process is bound by Section 70 of the Transport Act 2000 that defines the statutory obligations that the CAA must fulfil. At no point do the Directions under which it operates specify whether a proposal is justified on the grounds of CAT or otherwise. Consequently, I have assessed the current proposal, in accordance with the guidance in Section 70, on a case-by-case basis. All other responses to the Consultation were either neutral, supportive or where points of note were raised, were satisfactorily mitigated either by a redesign or through the introduction of agreed procedures detailed in bilateral LoAs.

## **7 Safety**

- 7.1 My primary duty is to maintain a high standard of safety in the provision of air traffic services and this takes primacy over all other duties.<sup>3</sup> I am satisfied that safety will not be compromised by the introduction of an RMZ. A clearance is not required to enter the airspace, which remains as Class G uncontrolled airspace and any potential funnelling effect has been mitigated by a redesign and reduction in area. The concern over frequency saturation will be addressed by the provision of an additional VHF frequency. Specific detail is included in the Hawarden RMZ AIC, with an embedded link to the CAA's TMZ/RMZ Policy Statement.

## **8 Environmental and economic impacts**

- 8.1 It is anticipated there will be no changes to either IFR or VFR operators' flight patterns other than those operators that choose not to comply with the RMZ due to the conditions detailed in the CAA RMZ Policy Statement. By providing Hawarden ATC with knowledge on

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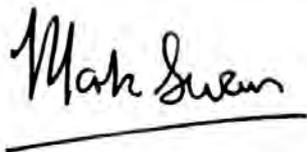
<sup>3</sup> Transport Act 2000, Section 70(1).

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previously unknown transit traffic, any tactical rerouting of the Beluga operations should be reduced.

## 9 Regulatory decisions

- 9.1 To accommodate all airspace users' requirements, Hawarden ATSU worked with a range of other airspace users, both military and civil, before launching formal consultation. These aviation stakeholders put forward their views and concerns which in the main, were accommodated through effective collaboration, resulting in the introduction of specific LoAs or redesign of the RMZ structure. The addition of the 'listening squawk' facility will enhance the efficiency of the operation of the airspace by reducing the need to maintain two-way radio communication and thereby simplifying the transit procedure.
- 9.3 To help develop efficiency of operation of the new structure, the following conditions must be met before implementation:
- Production and satisfactory promulgation of the Hawarden RMZ VFR flying guide.
  - Production of a Class G operations briefing package for A300-600N Beluga aircraft foreign crews.
  - Activation of the Frequency Monitoring Code facility
  - Introduction of an RMZ transit non-compliance log.
  - LoAs to be concluded and include completion of the signature process
- 9.2 Overall, I am satisfied that the all regulatory requirements will have been met and the intention is that the revised airspace will become effective from 30<sup>th</sup> March 2017 (AIRAC04/2017). The detail, including graphic, will first be promulgated in an Aeronautical Information Circular on Thursday 16<sup>th</sup> March 2017. My staff will review the effectiveness of the arrangements 12 months after introduction and the results of this review will be published.
- 9.3 If you have any queries, the SARG Project Leader is [REDACTED] who can be contacted on [REDACTED] or [REDACTED].

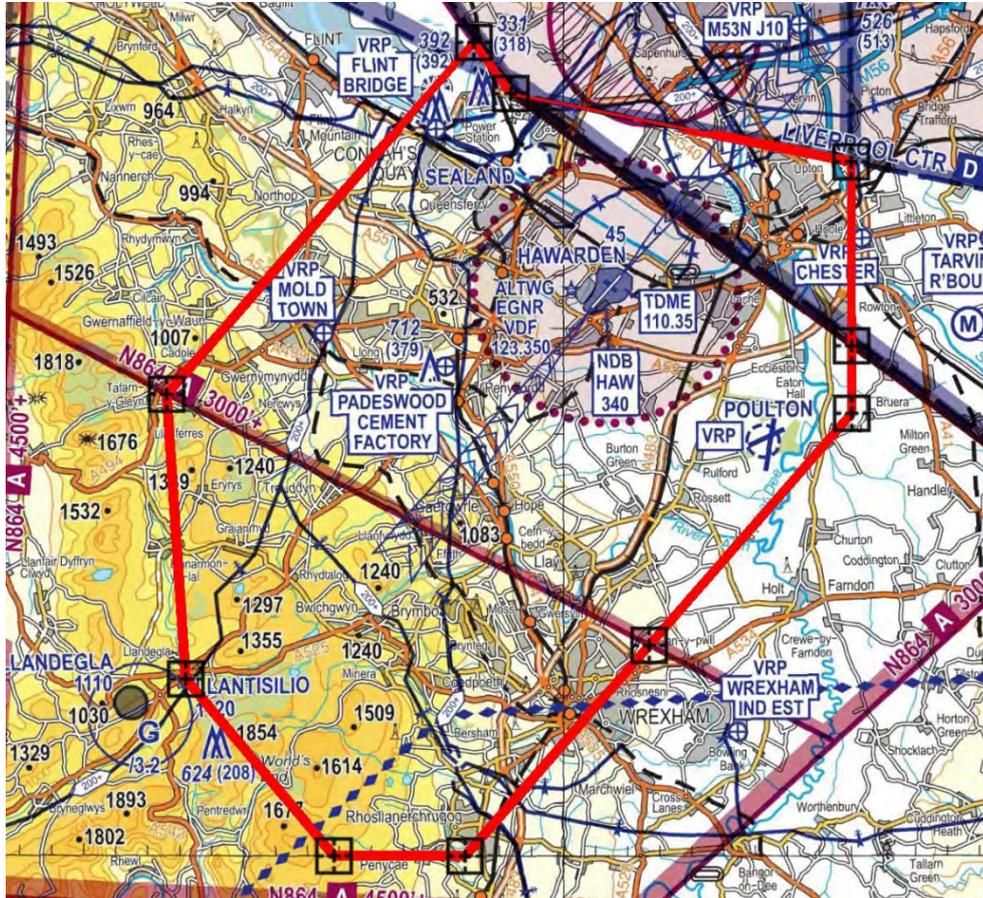


M Swan

Group Director, Safety and Airspace Regulation

Enclosure:

1. Hawarden Radio Mandatory Zone



Hawarden Radio Mandatory Zone