

# Radio and Transponder Mandatory Zones

Consultation on revised SARG Airspace Policy Statement

October 2020

## 1 Introduction

---

- 1.1 The CAA's [Airspace Modernisation Strategy](#) (CAP 1711) outlines the rationale for and identifies the way and means of modernising UK airspace. Focusing on the period until the end of 2024, the Strategy identifies 15 initiatives which provide the ways of modernising the UK's airspace. Initiative 11 focuses on electronic conspicuity and the utilisation of cost-effective electronic surveillance information with the objective of better integrating commercial and non-commercial operations in 'uncontrolled' airspace such that the airspace user can sense all others and be seen by all others.
- 1.2 As part of our work to enable the Airspace Modernisation Strategy and, specifically, the delivery of Initiative 11, the CAA has reviewed and drafted an amendment to our Airspace Policy Statement on Radio Mandatory Zones (RMZ) and Transponder Mandatory Zones (TMZ). The CAA now seek to obtain the views of the members of the NATMAC on this updated Airspace Policy Statement.

## 2 Purpose of the RMZ/TMZ Airspace Policy Statement

---

- 2.1 In August 2015, SARG published an [Airspace Policy Statement](#) relating to [RMZ and TMZ](#).
- 2.2 The objective of a RMZ/TMZ is to enhance the conspicuity of aircraft operating within, or in the vicinity of, complex, busy or otherwise unprotected airspace, in order to maintain a balance between safe, efficient operations and fair, equitable access to said airspace for all airspace users. RMZ and/or TMZ are established when the establishment of a more restrictive classification of airspace is not warranted but additional measures to enhance flight safety are required.
- 2.3 The purpose of the RMZ/TMZ Airspace Policy Statement is to detail UK policy and guidance for the establishment of, and operations within RMZs and TMZs in accordance with Reg (EU) No 923/2012 Standardised European Rules of the Air (SERA)<sup>1</sup>, and to place the content of SERA.6005 'Requirements for communications and SSR transponder' into a UK context.

## 3 Review of the extant RMZ/TMZ Airspace Policy Statement

---

- 3.1 The impetus for reviewing the Airspace Policy Statement was to explore whether it would be possible to utilise alternative forms of electronic conspicuity, for example ADS-B, within a transponder mandatory zone.

---

<sup>1</sup> Easy Access Rules for SERA can be found [here](#).

## 3.2 Requirements for carriage of SSR transponders

- 3.2.1 Reg (EU) No 923/2012 SERA Article 2(136) defines a TMZ as an airspace of defined dimensions wherein the carriage and operation of pressure-altitude reporting transponders is mandatory. SERA.6005(b) requires all flights operating within a TMZ to carry and operate SSR transponders capable of operating on Modes A and C or on Mode S, unless in compliance with alternative provisions prescribed for that particular airspace by the air navigation service provider (ANSP).
- 3.2.2 Paragraphs (4)(d) and (5)(b) of the table in Air Navigation Order 2016 Schedule 6 Part 2<sup>2</sup> requires the carriage of radio navigation equipment in notified airspace, with AIP GEN 1.5 Section 5.3.1 (SSR transponder equipment) clarifying that “For the purposes of the UK Air Navigation Order, EU Ops aeroplanes shall also be equipped in accordance with these requirements”.
- 3.2.3 For the purposes of the Air Navigation Order, AIP GEN 5.3.1(f) specifies that all aircraft within UK airspace notified as a TMZ shall carry and operate SSR Mode S Elementary Surveillance transponders<sup>3</sup>.

## 3.3 Opportunities for flexibility

- 3.3.1 SERA.6005(b) enables ANSPs to prescribe provisions within TMZ as an alternative to the requirement to carry an SSR transponder. The CAA considers that this affords ANSPs the opportunity to consider the utilisation of alternative forms of electronic conspicuity to achieve what the CAA has termed a ‘recognised air traffic environment’ (see below).

# 4 Proposed amendments to the RMZ/TMZ Airspace Policy Statement

---

- 4.1 The draft RMZ/TMZ Airspace Policy Statement is attached to the email introducing this document.
- 4.2 It is important to note that the only impacts upon the extant operational procedures relating to the use of RMZ and TMZ contained within these proposals are:
- The inclusion of a requirement for pilots to stipulate their flight rules in making their initial call to the RMZ Controlling Authority.
    - As our concepts to modernise UK airspace and the air traffic services arrangements in class G airspace gain maturity, we have identified the importance of pilots advising air traffic services providers of the flight rules under which their flights are operated.
  - That, whenever practicable, pilots should seek to establish two-way communications with the RMZ Controlling Authority when 15 nm or 5 minutes flying time from the RMZ boundary, whichever is the greater.
    - This text has been introduced to address the lack of appropriate guidance within the extant airspace policy statement and is based on the text of UK AIP GEN 3.3 3.7.3.1 relating to procedures for arriving VFR flights.
- 4.3 Otherwise, in addition to a number of editorial changes, the amendments which the CAA proposes to make to the RMZ/TMZ Airspace Policy Statement include:
- The ability for ANSPs to stipulate alternative forms of electronic conspicuity to SSR Mode S transponders.
    - The revised Airspace Policy Statement includes specific guidance to ANSPs on issues

<sup>2</sup> Scale E2 in Air Navigation Order 2016 refers.

<sup>3</sup> In exceptional circumstances, an application for an exemption from the SSR Mode S Elementary Surveillance transponder requirement may be made in accordance with AIP GEN 1.5 5.3.5.2.

to consider in developing safety requirements concerning the use of alternative forms of electronic conspicuity within a TMZ.

- A requirement for RMZ and TMZ controlling authorities to make provision for aircraft that are unable to comply with the notified requirements for flight in a RMZ/TMZ to gain access, where a demonstrable requirement exists.
- The addition of a list of applicable definitions and development of a definition of the term 'recognised air traffic environment'.
  - In considering the purpose of a RMZ and/or a TMZ, the CAA identified that whilst the purpose of a RMZ was clear (i.e. to produce a 'known air traffic environment') the same could not be said of a TMZ.
  - As such, to explain the purpose of a TMZ, the CAA has coined the term 'recognised air traffic environment'.
  - The CAA believes that this term will become increasingly relevant as we move towards improved levels of integration of air traffic and the development of a unified approach to unmanned aircraft systems traffic management ([CAP 1868](#) refers).
- A specific reference to highlight that RMZ and TMZ are established in accordance with the requirements of the CAA's Airspace Change Process (CAP 1616)<sup>4</sup>.
- Text to highlight that, notwithstanding the provisions within the Air Navigation Order relating to "flight restriction zones", small unmanned aircraft are not required to comply with the requirements of a notified RMZ/TMZ.

## 5 Consultation

---

### 5.1 Purpose of the consultation

- 5.1.1 The purpose of this consultation is to seek industry comment on the CAA's proposals to amend its RMZ/TMZ Airspace Policy Statement. The draft policy is attached to the covering email.
- 5.1.2 The information contained within this document allows stakeholders to determine whether the proposed amendment and timeline afford sufficient time for them to safely and effectively adapt their procedures and operations to the proposed new procedures.

### 5.2 Conduct of the consultation

- 5.2.1 The consultation period runs for 8-weeks from **26 October 2020** to **18 December 2020**.
- 5.2.2 Stakeholders are requested to use the consultation response form attached to the covering email to submit their comments on the draft RMZ/TMZ Airspace Policy Statement and described herein. The response form includes boxes to provide targeted responses on specific lines of text and a free-text box for more general comments. Respondents should indicate whether they support or object to the proposals and comment accordingly. Should a respondent object to the proposal or an aspect of it, evidence should be included to support the objection. Where respondents indicate a preference for an alternative solution (or solutions), these should be supported by appropriate justification.
- 5.2.3 In order to assist in fully determining the impact of the proposals, it is requested that respondents

---

<sup>4</sup> [CAP 1616: Airspace Change: Guidance on the regulatory process for changing the notified airspace design and planned and permanent redistribution of air traffic, and on providing airspace information.](#)

provide assessments of the impacts of the proposed amendment to the RMZ/TMZ Airspace Policy Statement.

5.2.4 Comments are to be returned to the contact e-mail address below. Early responses would be appreciated so that any issues arising may be addressed as soon as possible.

5.2.5 Due to the ongoing situation with Covid-19, this consultation will be managed wholly by email; written responses will not be accepted

### **5.3 Considerations for consultation responses**

5.3.1 Before responding to this consultation, stakeholders should first consider the following generic questions:

- Do you, or the organisation that you represent, fly within RMZ and/or TMZ, or 'manage' a RMZ and/or TMZ?
- If yes, how will the proposed changes to the RMZ/TMZ Airspace Policy Statement affect your operations?
- Are there any consequences of the proposed changes of which you feel the CAA should be made aware?
- What period of time do you or your organisation consider would be sufficient to enable you to adapt to the revised requirements (i.e. after publication of the finalized Airspace Policy Statement and before it becomes effective)?

### **5.4 Conclusion of the consultation period**

5.4.1 Following conclusion of the consultation, responses will be collated and analysed. The CAA will subsequently publish a Consultation Report summarising the responses along with its final proposals and the dates on which the proposed changes are planned to take effect.

5.4.2 The Consultation Report will be placed on the CAA website and the NATMAC will be notified of its publication. Wider industry will be notified of the outcomes of the consultation and of final change proposals by means of a CAA SkyWise alert.

5.4.3 Any amendments required to other CAA documents, for example the UK Air Traffic Management Vocabulary (CAP 1430) and the Radiotelephony Manual (CAP 413), will be developed separately in accordance with routine practices and promulgated by means of a CAA SkyWise alert.

### **5.5 Confidentiality**

5.5.1 All responses will be available for scrutiny under the Freedom of Information Act 2000 (FOI) or the Environmental Information Regulations 2004 (EIR), where relevant. Consultees are to note that requests for responses to be kept confidential will only be possible if these are consistent with the CAA's obligations under FOI, EIR and applicable European Union (EU) and UK data protection legislation.

### **5.6 Consultation focal point**

5.6.1 Consultation responses and any queries on the technical aspects of the proposals should be addressed by e-mail with the subject header 'RMZ/TMZ Airspace Policy Statement – Consultation' to:

[ATCProceduresWorkingGroup@caa.co.uk](mailto:ATCProceduresWorkingGroup@caa.co.uk)