

Consultation:

UK Recognised Assessment Entity – Flightworthiness and SAIL Mark Policies

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Foreword



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This consultation forms part of the UK Civil Aviation Authority's (CAA) ongoing work to enable Unmanned Aircraft Systems (UAS) to operate in UK Airspace in the Specific Category, a key component of the CAA Future of Flight Programme.

For more complex operations within the Specific Category, the flightworthiness of the UAS needs to be assessed and validated as part of the Operational Authorisation process. This assessment will review evidence relating to the design, build and testing of the UAS, helping to ensure that it is safe to fly in the proposed operation.

This assessment will be integral to the new SORA risk assessment approach and will also address recommendations from the Air Accidents Investigation Branch (AAIB). However, as the number and complexity of applications increases in the future, we need a scalable and sustainable way to make these assessments.

Therefore, a new type of Recognised Assessment Entity, the RAE(F), is proposed. The RAE(F) will validate evidence of compliance provided by UAS Operators and manufacturers, against technical requirements in their SORA-based application for an Operational Authorisation and then, if satisfied, give a recommendation to the CAA that the UAS is flightworthy.

The concept of a 'SAIL Mark' for UAS is also under development. This would see the RAE(F) working directly with UAS manufacturers during development. By validating OEM evidence, it will be possible to deliver a 'SAIL Mark' against a particular make & model of UAS, aligned to the SAIL levels within SORA in which it is safe to operate.

The feedback provided to this consultation will be essential to enable the CAA to develop policy that supports the UAS industry. I encourage you to take this opportunity to help shape the future of UAS policy.

Chapter 1

Introduction

Context – RAE(F)

- 1.1 This consultation includes both the proposed policies, and proposed new Acceptable Means of Compliance and Guidance Material (AMC/GM) to relevant regulations, relating to RAE(F) and Flightworthiness. This AMC/GM can be found in the draft CAP 722J RAE(F) document.
- 1.2 Applications for Operational Authorisations (OAs) within the Specific Category are growing in volume and complexity. This trend is expected to be further accelerated by the introduction of the UK Specific Operations Risk Assessment (SORA) methodology as part of the Digitising Specific Category Operations (DiSCO) project.
- 1.3 As volumes continue to increase, a new method of assessing technical characteristics of the UAS and compliance with relevant aspects of the UK SORA, which can be achieved in a scalable way, must be implemented.
- 1.4 The Recognised Assessment Entity (Flightworthiness), or RAE(F), is an external organisation that will assess the technical characteristics and safety features – or ‘flightworthiness’ – of a UAS to enable an Operational Authorisation within the Specific Category to be issued by the CAA. This will reduce the CAA resource requirement in assessing SORA applications, while supporting the UAS industry’s fast-paced innovation.
- 1.5 The RAE(F)’s role within the OA process is to:
 - i) Assess and validate the OA applicant’s compliance to relevant SORA requirements;
 - ii) Deliver a flightworthiness report to the CAA that declares the UAS is compliant with the above requirements, i.e. ‘flightworthy’ for the intended operation.
- 1.6 The CAA assesses and validates the OA’s compliance to the remaining SORA requirements and, with the RAE(F)’s flightworthiness report in place, is able to issue the OA to the Applicant.

Context – SAIL Mark

- 1.7 In the new SORA process, an Applicant who is not the UAS Designer is unlikely to possess the required technical data to comply with all of the relevant SORA requirements. Some of the requirements cannot be complied with on a UAS platform that has already been designed (e.g. bought off the shelf), e.g. where
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SORA requires the use of design standards or to conduct system safety assessments.

- 1.8 The SAIL Mark policy provides the option for the UAS Designer to comply with a number of requirements during the UAS development stage.
 - 1.9 The role of the RAE(F) will be as follows:
 - i) Assess and validate the OA Applicant's compliance to the relevant SORA requirements;
 - ii) Provide assurance to the CAA that enables a SAIL Mark certificate to be delivered to the Designer, specific to the UAS configuration that has been assessed.
 - 1.10 In the future, an Operator wishing to utilise this particular UAS will be able to obtain its SAIL Mark certificate. During the OA application process, the certificate will be used to provide automatic compliance with the associated requirements.
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Chapter 2

Responding to this consultation

Next Steps

Responses to this consultation can be submitted electronically using the CAA online consultation tool Citizen Space no later than **8 November 2024**.

Any enquiries regarding this consultation should be submitted via email to uavenquiries@caa.co.uk

We will consider all responses and aim to publish a final version of this policy by **Q2 2025**.

Why are we consulting?

It is important to the CAA that the public have an opportunity to voice their opinion on matters that could affect them. It is recognised that a public consultation provides a larger breadth of expertise and experience than contained within the CAA alone. There is also a legal requirement to consult when creating or amending AMC and GM, due to the legal status of these documents.

This document represents a significant publication that will impact UAS operations within Specific Category.

Consultation Details

Given the length of the documents being consulted on the CAA has chosen a mechanism of capturing feedback that allows for the simplest interrogation of the data.

To that end, each line or section within the document is sequentially numbered. If you identify an area you wish to provide feedback on, please follow the steps below.

1. Select the question that corresponds to the correct policy document, e.g. RAE(F) or SAIL Mark.
2. Identify the line number or section that you wish to provide feedback on.
3. Use the free text box to provide your feedback on that section, including any revised text that you wish to propose.

Repeat for each piece of unique feedback that you wish to provide.

There are a number of additional specific questions that you may answer, in addition to providing feedback as described above.
