



Unmanned Aircraft System Operations in UK Airspace – Recognised Assessment Entity for Flightworthiness RAE(F) Policy Concept

CAP 722J

First Edition

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Revision History

First Edition

March 2025

This is the first edition of this document following public consultation.

Abbreviations and Glossary of Terms

AMC	Acceptable Means of Compliance
BVLOS	Beyond Visual Line of Sight
CAA	UK Civil Aviation Authority
COR	Containment Requirements
COT	Containment Requirements (Tether)
Crit.	Criterion
OA	Operational Authorisation
OAT	Outside Air Temperature
OSO	Operational Safety Objective
PBO	Performance-based Oversight
QMS	Quality Management System
RAE(F)	Recognised Assessment Entity for Flightworthiness
RPAS	Remotely Piloted Aircraft System
SAIL	Specific Assurance and Integrity Level
SORA	Specific Operations Risk Assessment
TMPR	Tactical Mitigation Performance Requirements
TPM	Technical Procedures Manual
UAS	Unmanned Aircraft System
UK	United Kingdom
Compliance basis	List of all UK SORA requirements which the OA Applicant must comply with to obtain an OA for their intended operation. The list includes requirements that are already complied with through a SAIL Mark certificate, and identifies such requirements as already complied with. The compliance basis takes the form of a spreadsheet called the 'compliance matrix', where each requirement is identified in a single row.

Compliance approach	A high level description of how the OA Applicant intends to comply with the UK SORA requirements. It is an extension of the compliance matrix (see definition for compliance basis) with added columns, where the OA Applicant provides against each requirement a brief statement of the compliance method (one sentence suffices) and the expected evidence documents (generic document titles suffice). The actual compliance data and documents are not required at this stage. Where a requirement is satisfied through a SAIL Mark certificate, the OA Applicant writes a simple statement such as “compliance demonstrated by the SAIL Mark certificate”.
Compliance evidence	<p>Compliance evidence is the term used to describe a piece of evidence used to demonstrate compliance with a regulation, requirement or standard. Compliance evidence can take several forms such as:</p> <ul style="list-style-type: none"> i) Flight logs. ii) Technical data sheet. iii) Flight tests. iv) Design information.
Designer	The person or design and production organisation responsible for the development and manufacture of a UAS.
Entity	The person that is or wishes to be approved as a Recognised Assessment Entity for Flightworthiness.
Flightworthiness	The process for technical assurance of a UAS in the Specific Category of Operation, such that it is in a condition for safe operation.
OA Applicant	The individual or organisation who applies to the CAA for an operational authorisation within the specific category.
Person	Where this Policy Concept refers to a ‘person’, it means a natural person or a legal person. A natural person is an individual – a human being as opposed to a corporate entity. This may be someone operating as a sole trader, whether or not they employ or contract with others to do specific tasks. A legal person in this context is a person other than a natural person, for example a limited liability company or other type of organisation, that has legal rights and is subject to legal obligations.

Staff	Where this Policy Concept refers to the “staff” of an entity, it means the entity’s employees and individuals with whom the entity has a contract for services (i.e. sub-contracted workers).
UK SORA	The UK version of SORA adopted as AMC to Article 11 of the UK Reg (EU) 2019/947; it is adapted from the version of SORA developed with the Joint Authorities for Rulemaking on Unmanned Systems (JARUS).

The definitive list of abbreviations and terms/definitions that are relevant to UAS operations within the UK and for the whole CAP 722 ‘series’ of documents are centralised within CAP 722D UAS Definitions and Glossary.

Foreword

Aim

This RAE(F) Policy Concept is intended for use by an entity that is, or wishes to be approved, as an RAE(F), to understand the requirements, administrative processes, instructions, and guidance related to the operation of an RAE(F) within the United Kingdom. This document and the SAIL Mark Policy Concept (CAP 722K) describe the technical assessments that are conducted by an RAE(F).

This RAE(F) Policy Concept should be used in conjunction with the UK Specific Operations Risk Assessment (SORA), set out within the Acceptable Means of Compliance (AMC) and Guidance Material (GM) to Article 11 of Assimilated Regulation (EU) 2019/947.

This document is being published as a Policy Concept. The contents of this Policy Concept are available for immediate use, however some of the content or requirements may change in due course. As this process is new to both the CAA, and industry, we expect to work closely with industry throughout its deployment to understand how it is used, and areas where more, or different, guidance may be required.

How to use this document

According to the AMC and GM to Article 11 of Assimilated Regulation (EU) 2019/947 (UK Reg (EU) 2019/947) an Operational Authorisation (OA) Applicant may choose to use the UK SORA methodology to conduct its risk assessment under that Article, and according to AMC and GM to Article 11(2)(d) of that Regulation, an OA Applicant may choose to comply with that provision by relying on an Unmanned Aircraft System (UAS) that has been granted a Specific Assurance and Integrity Level (SAIL) Mark certificate by the CAA.

An RAE(F) may be approved in accordance with the RAE(F) Policy Concept to advise the CAA as to the technical features of a UAS proposed or anticipated to be used in an operation that relies on a risk assessment carried out in accordance with the UK SORA Methodology. To provide this advice, an RAE(F) will carry out a detailed assessment of a specific UAS or a UAS configuration against UK SORA requirements.

The UK SORA requirements are related to the design, construction, and flying characteristics of the UAS, therefore compliance to these requirements is interpreted as the UAS being 'flightworthy' for the intended operation.

In this RAE(F) Policy Concept:

'Requirements' highlighted in dark green are conditions that an entity must comply with to obtain and maintain approval as an RAE(F). Any individual requirement may

comprise several parts (indicated by paragraphs (a, b, c, etc.) and sub-paragraphs (i, ii, iii, etc.)). Every part of a requirement must be fulfilled to comply with the requirement as a whole.

'Guidance' highlighted in light green is guidance material that is intended to help the entity understand how to comply with the associated requirements.

The purpose of this format is to make it clear to readers what an entity must do to obtain and maintain approval as an RAE(F).

This document also applies the following editorial practices:

'Must' indicates a condition that the entity is required to comply with to obtain or maintain approval as an RAE(F).

'Should' indicates a strong recommendation: while the entity is not required to comply with the recommendation to obtain or maintain approval as an RAE(F), the CAA would expect it to have regard to the recommendation and provide clear and rational justification for not following it.

'May' indicates discretion.

'Must not' indicates prohibition.

Where any reference in this Policy Concept is made to a document or a piece of legislation, it should always be assumed that the amended version is being referred to, unless stated otherwise. It is an entity's responsibility to ensure that it is using the latest version currently in force.

Policy and scope

This RAE(F) Policy Concept sets out:

- the minimum criteria an entity must meet to be approved as an RAE(F);
- the process for applying to be approved as an RAE(F);
- the role of an approved RAE(F);
- the impacts for an OA Applicant of assessment by an RAE(F); and
- the conditions an entity must comply with to maintain approval as an RAE(F), including its roles and responsibilities in relation to the technical assessment of an individual UAS in relation to a given planned operation, for the purpose of a 'Specific' Category Operational Authorisation (OA) application.

This RAE(F) Policy Concept should be read alongside the SAIL Mark Policy Concept (CAP 722K), which sets out an RAE(F)'s roles and responsibilities in relation to the technical assessment of a UAS at the design stage.

The CAA has the function of authorising operations in the 'Specific' category under Article 12 UK Reg (EU) 2019/947. To carry out this function, we must evaluate the risk

assessment and the robustness of the mitigating measures proposed by an OA Applicant to keep the UAS operation safe in all phases of flight (Article 12(1)). This includes mitigation measures relating to the technical features of the UAS: we must establish whether these mitigation measures are sufficiently robust to keep the operation safe in view of the identified ground and air risks (Article 12(2)(b)).

The CAA may take into account advice from entities approved under this RAE(F) Policy Concept to facilitate our assessment of whether mitigation measures relating to the technical features of a UAS are sufficiently robust for operations at a given SAIL. The CAA may grant a SAIL Mark certificate or an Operational Authorisation where we are satisfied of that robustness.

To be approved for the purpose of giving such advice, an entity must demonstrate to our satisfaction, on a continuing basis, that it meets the criteria and complies with conditions for approval set out in this RAE(F) Policy Concept, including as to the competence and technical expertise of its personnel and as to the appropriate processes and procedures for the assessment of technical documents, components and standards; in this RAE(F) Policy Concept, these are referred to as “requirements”.

The approval granted to an RAE(F) under this RAE(F) Policy Concept will be valid only in UK airspace and will not confer any approval that is recognised outside the UK.

Context

The CAA has contributed to, and further adapted, the methodology developed by the Joint Authorities for Rulemaking on Unmanned Systems (JARUS) to establish criteria for assessing mitigation measures relating to the technical features of a UAS. These are listed in the UK Specific Operations Risk Assessment (UK SORA) methodology adopted as AMC to Article 11 of UK Reg (EU) 2019/947.

UK SORA identifies a range of technical issues that could, if not adequately addressed, endanger a UAS operation. It also identifies criteria that can be used to determine whether a given technical issue can be deemed to be mitigated to a low, medium or high level of robustness. These are referred to as “UK SORA requirements” (note that these are not legal requirements, but rather the steps or factors that are necessary in the specific context of the UK SORA methodology to enable the conclusion to be reached that a given objective has been met to a given standard).

UK SORA also sets out a clear methodology by which a UAS operator can assess ground and air risks for the planned operation and arrive at final ground and air risk scores. These consolidated scores are combined to generate a SAIL, with SAIL 1 reflecting the lowest ground and air risk and SAIL 6 the highest.

The UK SORA requirements are therefore mapped against each SAIL to identify the level of robustness necessary to conclude that mitigation measures relating to the relevant technical issues are appropriate to the level of ground and air risk in question.

Role of an RAE(F)

An entity approved as an RAE(F) may carry out detailed assessment of a UAS against UK SORA requirements at either the design stage or the OA application stage, if requested to do so by a UAS designer or an OA applicant. These two pathways are described below.

The RAE(F) will advise the CAA as to whether the UAS complies with the relevant UK SORA requirements.

The CAA will take the advice of the RAE(F) into account:

- when deciding whether the conditions for issuing a SAIL Mark certificate have been met (as set out in the SAIL Mark Policy Concept); or
- when evaluating an OA Applicant's risk assessment and deciding whether the conditions for granting the operational authorisation have been met.

Two pathways for assessing a UAS against the UK SORA requirements are proposed:

1. At the design stage: A person may choose to incorporate technical features associated with specific UK SORA requirements into the design of a UAS during its development phase. They may then request that the design be assessed to verify whether it meets those UK SORA requirements. Where the CAA is satisfied that a UAS in a given configuration complies with the UK SORA requirements associated with one or more given SAILs, a SAIL Mark certificate may be granted for that UAS configuration, which will be described as "SAIL Marked". The SAIL Mark certificate will indicate the highest SAIL for which the Designer has demonstrated that UAS meets the UK SORA requirements to the appropriate level of robustness.

Where the CAA evaluates a risk assessment that includes a SAIL Marked UAS, it may be deemed (in the absence of evidence to the contrary) that the UAS has the minimum technical features considered necessary to reduce risk to an acceptable level in the class of operations to which the SAIL Mark relates.

In practical terms, the SAIL Mark will reflect the highest SAIL at which the CAA deems the UAS to be safe to operate.

2. During the process of applying for an operational authorisation (OA): A person may include in their OA application a proposal to use a specific UAS. They must provide sufficient evidence alongside their risk assessment to satisfy us that the UAS has the technical features necessary to reduce the risks of the planned operation to an acceptable level.

The RAE-F will provide advice to the CAA, after having carried out its assessments, by means of flightworthiness report.

The CAA will take into account the advice from the RAE-F in determining whether the risks of the operation have been reduced to an acceptable level, in order to issue an Operational Authorisation based on UK SORA.

Point of Contact

Unless otherwise stated, all enquiries relating to this CAP should be made to:

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Aviation House
Beehive Ringroad
West Sussex
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Chapter 1

RAE(F) Policy Concept

1.1 Privileges

Requirements

An Entity that, upon application for approval as an RAE(F) and on a continuing basis, satisfies the CAA of its ability to comply with all the requirements of the RAE(F) Policy Concept may, within its terms of approval:

- (a) Advise the CAA that a UAS Designer has demonstrated to its satisfaction, evidence of compliance with the requirements described in the SAIL Mark Policy Concept in relation to a specified SAIL.
- (b) Advise the CAA that an OA Applicant has demonstrated to its satisfaction evidence of compliance with the UK SORA requirements specified in section 5.4.
- (c) Submit a flightworthiness report to the CAA assessing whether the UAS is “flightworthy” for the intended operation.

Guidance

- (a) By approving an Entity as an RAE(F) under this RAE(F) Policy Concept, the CAA indicates that it is satisfied that the Entity has adequate processes, personnel, and experience to assess whether the design, construction, and flying characteristics of a UAS comply with the UK SORA requirements that apply to that UAS configuration under the SAIL Mark Policy Concept. Where an RAE(F) conducts that assessment and is satisfied that compliance has been proved, it may advise the CAA that the Designer has satisfied the conditions for a SAIL Mark for that specific UAS configuration.

A SAIL Mark is granted during the design phase, not as part of an OA application. But an OA Applicant may use a SAIL Mark as evidence of deemed compliance with some UK SORA requirements.

- (b) The RAE(F) would give this advice after it has assessed and verified that the design, construction and flying characteristics of the UAS comply with the applicable UK SORA requirements, and that the UAS is ‘flightworthy’ for the intended operation.

1.2 Terms of approval

Requirements

- (a) An Entity must comply with the Terms of Approval issued to it by the CAA and may only exercise the privileges under section 1.1 within the scope of its Terms of Approval.
- (b) An Entity must not exercise the privileges listed in section 1.1 for a UAS in relation to which it is the Designer.
- (c) An entity, its Director and staff responsible for carrying out the assessment of a UAS under this Policy Concept may not be involved, either directly or as authorised representatives, in the design, production, marketing or maintenance of that UAS or in its operation, service provision or use. This prohibition does not exclude the exchange of technical information between an entity and third parties involved in the activities listed above.

Guidance

- (b) This prohibition is intended to avoid conflict of interest and ensure independent assessment of UAS flightworthiness. For example, if an Entity has both a Design/Production branch and an Operations branch approved as separate RAE(F)s then one cannot assess the other.

1.3 Validity

Requirements

- (a) An RAE(F) approval is valid for one year from the date of the approval but may be renewed on reapplication.
- (b) The CAA may suspend or revoke an RAE(F) approval at any time, including in but not limited to the following instances:
 - i. The Entity fails to demonstrate compliance with applicable regulations, requirements of the RAE(F) Policy Concept (as amended from time to time) or assessment standards relating to that Policy Concept as published by the CAA.
 - ii. The Entity prevents the CAA from carrying out any oversight relating to the RAE(F) Policy Concept.
 - iii. The CAA is not satisfied that the Entity can maintain control of the activities under their RAE(F) approval.
 - iv. The Entity no longer meets the eligibility requirements for an RAE(F) approval.
 - v. The Entity surrenders their RAE(F) approval.
 - vi. A nominated person within the Entity breaches the [CAA's fitness of character](#)

[policy](#).

- (c) An Entity must not exercise the privileges in section 1.1 or hold itself out as an RAE(F) when its approval has expired, whether or not it has applied for a reapplication of its approval.
- (d) Upon surrender or revocation of an RAE(F) approval, an Entity must return to the CAA any RAE(F) approval that is in force and valid at the date of the surrender or revocation.

Guidance

- (a) The CAA may decide to increase the period of validity of an RAE(F) approval in accordance with performance-based oversight (PBO) principles as the maturity of the Entity increases. More information on PBO can be found on the CAA website.
- (b) The duration of validity of the RAE(F) approval is displayed on the approval certificate.

1.4 Transferability

Requirements

An RAE(F) must not transfer its approval except as a result of a change in Entity ownership.

Guidance

A change of ownership is considered a significant change and requires an application to the CAA as per section 2.7.

Chapter 2

RAE(F) Approval Requirements

2.1 General approval requirements

Requirements

- (a) An Entity must demonstrate to the CAA's satisfaction that it is able to comply with the requirements of the RAE(F) Policy Concept on a continuing basis.
- (b) An Entity must demonstrate to the CAA's satisfaction, based on the information submitted in its exposition (section 3.3) and during ongoing oversight (section 4.1), that facilities, working conditions, equipment and tools, processes, number, fitness of character and competence of personnel, general organisation and coordination are adequate to discharge the Entity's obligations under the requirements of the (RAE(F) Policy Concept.
- (c) An Entity and its staff must carry out their duties with the greatest possible professional integrity and the greatest possible technical competence.
- (d) An Entity must be covered by adequate liability insurance throughout the period of its approval.

Guidance

- (a) This includes the successful completion of any audits and inspections that may be required by the CAA as part of the application process and through continuing oversight.

2.2 Quality Management System

Requirements

- (a) An Entity must demonstrate to the CAA's satisfaction that it has established and is able to maintain on a continuing basis an adequate Quality Management System (QMS).
- (b) The QMS must be relevant to the scope of activities of the Entity as an RAE(F).
- (c) The QMS must enable the Entity:
 - i. To control and supervise the assessment tasks that it proposes to undertake as an RAE(F).

- ii. To independently monitor the compliance with, and adequacy of, the documented procedures of the QMS. This monitoring must include a feedback system to a person or a group of persons having the responsibility to ensure corrective actions.
- (d) An Entity must ensure that its quality assurance functions are independent from the functions they monitor, including as to lines of reporting, authority and access within the Entity, and that they are not dependent on the functions they monitor.

Guidance

- (a) The CAA will verify on the basis of the exposition (section 3.3) and by appropriate oversight (section 4.1) that an Entity can fulfil the requirements relating to an adequate QMS.

A QMS is an organisational structure with responsibilities, procedures, processes and resources, which implements a management function to determine and enforce quality principles.

The QMS should be documented in such a way that the documentation can be made easily available to personnel who need to use the material for performing their normal duties and to the CAA when performing its oversight functions. This means in particular that:

- Procedures, instructions, and data are available in writing and the updating process is clearly described.
- Relevant procedures are distributed to the staff in a controlled manner.
- Procedures which identify persons responsible for the prescribed actions are established.

The manager responsible for ensuring that the QMS is implemented and maintained should be identified.

- (b) Certain QMS standards may contain sub-parts that are not applicable to RAE(F) activities; only those aspects which are applicable should be used.
- (c) Adequacy of procedures means that the QMS, through the use of these procedures, is capable of meeting its objectives. To ensure this, the quality assurance function should include planned continuing and systematic evaluation or audits of factors that affect the quality of technical assessments and overall delivery of flightworthiness and SAIL Mark advice.

2.3 Entity Management

Requirements

- (a) An Entity must nominate an accountable manager.
- (b) The accountable manager must ensure that all tasks are performed to the required standards and that the Entity, as well as its employees and individuals with whom the Entity has a contract for services ('staff') are continuously in compliance with the data and procedures identified in the exposition (section 3.3).
- (c) The Entity is always accountable for ensuring compliance with Terms of Approval and the requirements of the RAE(F) Policy Concept notwithstanding the nomination of an accountable manager or nominated persons in accordance with this section, or the allocation of tasks to staff or consultants.
- (d) Where a person or group of persons has been nominated to ensure the Entity complies with the requirements detailed in the exposition, they must be identified, together with the extent of their respective responsibilities. The nominated persons must act under the direct authority of the accountable manager.
- (e) The Entity must ensure that staff at all levels are given appropriate authority to be able to discharge their allocated responsibilities, and there must be full and effective coordination within the Entity in respect to the tasks to be performed within the scope of this RAE(F) Policy Concept.
- (f) The Entity must ensure that staff at all levels, including the accountable manager, can be relied upon as honest and truthful and are demonstrably consistent in applying the rules, in spirit and letter, in accordance with the [CAA's fitness of character policy](#).
- (g) With regard to the staff authorised to sign the documents issued under the privileges of section 1.1:
 - i. The Entity must maintain a written record of the authorised staff, which must include the scope of their authorisation and the date on which it was granted.
 - ii. The authorised staff must be provided with evidence of the scope of their authorisation and the date on which it was granted.

Guidance

The requirements apply to all staff who participate in the RAE(F) activities.

2.4 Competence of staff

Requirements

- (a) The nominated persons who ensure that the Entity complies with the requirements detailed in the exposition must have the appropriate knowledge, background and experience to discharge their allocated responsibilities.
- (b) The staff authorised by the Entity to sign the documents issued under the privileges of section 1.1 must have the required knowledge, background (including other functions in the Entity) and experience appropriate to discharge their allocated responsibilities.
- (c) The assessment staff must meet the following requirements:
 - i. Sound technical and vocational training in the relevant subject area.
 - ii. Sound knowledge of UK SORA methodology and associated acceptable means of compliance and guidance material.
 - iii. Sound knowledge of methodologies to compile and present data to show compliance with technical requirements.
 - iv. The ability to interpret and assess technical information documents.
 - v. The ability to assess a design against technical standards.
 - vi. The ability to produce any advice, records and reports that demonstrate that the relevant assessments have been carried out and the conclusions of these assessments.

Guidance

Authorised and assessment staff should have experience in any or all of the following areas: manned aircraft development, UAS development, safety, manufacture, aircraft certification, aircraft maintenance, and associated industry standards.

2.5 Impartiality of staff

Requirements

- (a) The staff must be free of any pressure and incentive of any type, in particular of financial type, that could affect their judgment or the outcome of their assessments.
- (b) The remuneration of the staff involved in the assessment activities must not depend on the number of assessments carried out or on the outcome of such assessments.

Guidance

These requirements are to ensure that the objectivity of the activities conducted under the RAE(F) approval is not called into question.

2.6 Training of staff

Requirements

- (a) All staff must receive sufficient training to perform their allocated tasks.
- (b) Training of staff must include the following aspects commensurate with the level of complexity:
 - i. Basic training received and standard attained.
 - ii. Specific training received and standard attained.
 - iii. Continued training received.
- (c) Training material and plans must be developed and provided to the staff, and an annual review performed to ensure they are kept up to the required standards due to changes in regulations and policies.
- (d) Training records must be kept and an annual review of the training needs of all staff must be performed to ensure that the staff are trained to the processes and procedures relevant to their allocated tasks.

Guidance

- (a) New staff may be trained by existing staff who are approved signatories.

Training may take the form of:

- Explanation of the processes involved.
- Demonstration of the processes involved.
- Allowing the trainee to carry out technical assessment under the supervision of the approved signatory, until the trainee becomes an authorised signatory.

Training may also include attendance to industry courses on manned aircraft or UAS design, safety, manufacture and industry standards.

2.7 Changes to the Entity

Requirements

- (a) Upon issue of the RAE(F) approval, any change to the Entity that is significant to the assessment of compliance with UK SORA requirements, particularly changes to the QMS, must be approved by the CAA.
- (b) An application for a variation must be submitted to the CAA in accordance with 3.2 (d), and the Entity must demonstrate to the CAA before implementing the change that it

will continue to comply with the requirements of this RAE(F) Policy Concept after implementation.

Guidance

(a) The following changes are considered significant and would require an approval by the CAA:

- Change in Entity ownership.
- Change of address.
- Change in Accountable Manager.
- Change in the scope of the RAE(F) approval.

The following changes would not typically be considered significant and would not require an approval by the CAA:

- Personnel amendments (excluding the Accountable Manager).
- Administrative updates to exposition and supporting documents.

Chapter 3

RAE(F) Application Process

3.1 Eligibility

Requirements

- (a) Any natural or legal person is eligible for an approval under the requirements of this RAE(F) Policy Concept.
- (b) Where the applicant for an RAE(F) approval is an individual, they must be at least 18 years of age.
- (c) The RAE(F) approval is limited to Entities whose primary place for conducting the RAE(F) activities defined in this RAE(F) Policy Concept is in the UK.
- (d) The RAE(F) may conduct activities in third countries, however the additional cost of oversight such as audit or travel must be borne entirely by the approved entity. All location specific regulatory requirements must also be met and demonstrated to the CAA as part of an application and through ongoing oversight.

Guidance

- (d) Additional charges for overseas travel can be found on the CAA website ORS5 scheme of charges which can be accessed [here](#).

3.2 Application

Requirements

- (a) Application for the approval as an RAE(F) must be made in a form and manner established by the CAA and include an outline of the terms of approval and associated privileges requested.
- (b) Initial application for approval as an RAE(F) must be made in writing to uavenquiries@caa.co.uk using the appropriate form found on the CAA website.
- (c) Renewal application for approval as an RAE(F) must be made in writing to uavenquiries@caa.co.uk using the appropriate form found on the CAA website, up to 90 days before the date of expiry of the current approval.
- (d) Variation application must be made in writing to uavenquiries@caa.co.uk using the appropriate form found on the CAA website.
- (e) The application must contain all documentation to satisfy the requirements in section 2 and section 3.

- (f) The Applicant must pay the required charges when applying.

Guidance

- (a) The RAE(F) application is assessed by the CAA in the following manner:
- The application forms and relevant documents are examined for completeness and correctness – also known as a ‘desktop assessment’.
 - Once all documents have been assessed, initial feedback is provided electronically. This feedback may also contain an oversight report that will provide any findings and/or observations with a request to address these.
 - When any initial findings or observations have been addressed satisfactorily and the desktop assessment has been completed, an on-site audit may be scheduled.
 - Upon approval, an RAE(F) receives an approval.
 - The Entity is notified when an application is unsuccessful with associated feedback. Should the Entity wish to apply again, a subsequent application will be presented as an initial application.
- (b) Applying for a renewal before the date of expiry of the current approval does not affect the period of validity of the current approval.
- (c) The application process will not begin until the necessary fees have been paid. The RAE(F) should refer to the CAA Scheme of Charges in force at the time of application for the relevant application fees. Where the CAA requires additional hours to assess an application, the Entity will be notified before any further charges are applied.

It is recommended that a renewal application be submitted no less than 30 days before the date of expiry to allow sufficient time for the renewal application to be processed.

3.3 Exposition

Requirements

- (a) The Entity must submit to the CAA an exposition that contains the following minimum sections, which should be used as a template for the exposition document:
- Compliance statement
A statement signed by the accountable manager confirming that the exposition and any associated manuals that define the approved Entity’s compliance with this RAE(F) Policy Concept will be complied with at all times.
 - Scope of approval
A description of the intended scope of the RAE(F) approval.

iii. Organisation

- An organisational chart showing the chains of responsibility of the Entity's nominated person in accordance with requirement 2.3 R(a) and (c).

- The title, name, duties, responsibilities, experience and competency of the nominated person in accordance with requirement 2.3 R(a) and (c), including matters on which they may deal directly with the CAA on behalf of the Entity.

- A list of the staff authorised by the Entity to sign the documents in accordance with requirement 2.3 R(e), including a description of their experience and competency.

- The procedures to maintain impartiality of the staff in accordance with section 2.5.

- A general description of staff and resources.

iv. Facilities

A description of the facilities and locations that will be used to perform the RAE(F) tasks.

v. Change management

- The procedure for the notification of organisational changes to the CAA.

- The procedures for amending and distributing the exposition internally.

vi. Quality Management System

- A description of the QMS and associated processes and procedures in accordance with section 2.2.

- A description of internal assurance audit processes.

vii. Safety review

A description of the process for formal, periodic internal safety reviews. The process must include safety reviews as a result of reported occurrences.

(b) The exposition and the documents to which it refers must be implemented and followed within the Entity.

(c) The exposition must be amended as necessary to remain an up-to-date description of the Entity, and copies of any amendments must be supplied to the CAA.

3.4 Technical Procedures Manual

Requirements

The Entity must provide a Technical Procedures Manual (TPM) which includes the following processes and procedures:

- (a) Administration of an assessment to support an OA application and a SAIL Mark application.
- (b) Review of the OA Applicant or Designer's compliance basis and approach.
- (c) Verification of the OA Applicant or Designer's compliance with UK SORA requirements.
- (d) Recurrent manufacturing auditing for SAIL 5 and 6 per section 5.5 of the RAE(F) Policy Concept and per section 2.5 of the SAIL Mark Policy Concept (CAP 722K).
- (e) Data handling per section 5.2 of the RAE(F) Policy Concept and per section 2.3 of the SAIL Mark Policy Concept (CAP 722K).
- (f) Interfaces between parties per section 5.3 of the RAE(F) Policy Concept and per section 2.4 of the SAIL Mark Policy Concept (CAP 722K).
- (g) Assessment criteria and procedures for a SAIL Mark in accordance with the SAIL Mark Policy Concept (CAP 722K).
- (h) Advice about the flightworthiness of a UAS in the context of an OA application, per sections 5.1 and 5.6 of the RAE(F) Policy Concept.

Guidance

The TPM may be presented to the CAA as a separate document or as part of the exposition submission. The TPM should include all document templates used as part of these processes and procedures.

- (a) This should detail the information captured in the certificate and the means to deliver it to the Entity and the CAA.
- (b) This should detail the flightworthiness report and the means to communicate the advice to the Entity and the CAA.

Chapter 4

CAA Oversight of the RAE(F)

4.1 CAA oversight

Requirements

- (a) The RAE(F) must make arrangements to allow the CAA to undertake any oversight activities that are necessary to determine initial and continued compliance with the requirements of this RAE(F) Policy Concept.
- (b) The RAE(F) must allow the CAA to review any report, make any inspection and perform or witness any activities that the CAA deems necessary to check the validity of the RAE(F)'s compliance to the requirements of this RAE(F) Policy Concept.
- (c) Upon receipt of an oversight report from the CAA, the RAE(F) must respond within the allocated timescale detailing the actions it intends to take to rectify any identified issues.
- (d) Upon receipt of a notification of a finding by the CAA, the holder of the RAE(F) approval must demonstrate corrective action to the satisfaction of the CAA within the allocated timescale.
- (e) If notified of a suspension or revocation, the RAE(F) approval holder must provide the CAA with written confirmation of receipt of the notice of suspension or revocation within two working days of receipt.

Guidance

Audits

The CAA conduct a desktop audit annually when an RAE(F) has applied to renew its approval. In addition, an on-site audit is normally programmed to be carried out at regular intervals.

Depending on the complexity and output of the RAE(F), performance-based oversight principles dictate that the CAA's level of oversight is varied. This may mean more frequent audits or variations in scope and manpower employed to conduct the activity.

On-site audits are scheduled with the RAE(F), although the CAA reserves the right to conduct unannounced audits if such action is considered necessary. Audits are conducted by the CAA and should be carried out at one of the primary assessment sites to facilitate inspection of the facilities.

Any findings or observations are discussed during the audit and a timescale for their rectification is agreed.

An oversight report is distributed to the RAE(F) within 28 working days of completion of an audit. The RAE(F) is expected to respond within the allocated timescale detailing the actions it intends to take to rectify any identified issues. Further communication continues as considered necessary by the CAA until the oversight report and associated findings/observations are closed.

Findings and Observations

When objective evidence is found by the CAA during an audit or inspection that shows non-compliance with the applicable requirements, a finding is notified to the RAE(F) approval holder.

Findings are classified as follows:

- A level-one finding is any non-compliance with these requirements that could affect the safety of a UAS operation.
- A level-two finding is any non-compliance with these requirements that is not classified as level-one.

The CAA may raise an observation where it considers that there is potential for future non-compliance if no action is taken, or where the CAA wishes to indicate an opportunity for safety improvement or indicate something that is not considered good practice.

Subsequent Actions

On receipt of a notification of a finding or an observation, the CAA expects the RAE(F) to take the following actions:

- In the case of a level-one finding, the holder of the RAE(F) approval demonstrates corrective action to the satisfaction of the CAA within a period of no more than 21 working days after written confirmation of the finding.
- In the case of a level-two finding, the corrective action period granted by the CAA is appropriate to the nature of the finding but is not normally more than three months. In certain circumstances and subject to the nature of the finding, the CAA may extend the three-month period subject to a satisfactory corrective action plan.
- In the case of an observation, corrective action is not obligatory, but an RAE(F) is expected to provide a sound reasoning as to why the observation is not being followed.

Suspensions and Revocations

A level-one or level-two finding may result in a provisional, partial or full suspension of the RAE(F) approval, or a revocation.

If notified of a suspension or revocation, the RAE(F) approval holder provides the CAA with written confirmation of receipt of the notice of suspension or revocation within two working days of receipt.

- A provisional suspension means that an RAE(F)'s approval is suspended pending

further investigation.

- A partial suspension means that only part of the RAE(F)'s approval is suspended pending corrective action.
- A full suspension means that the entire RAE(F)'s approval is suspended pending corrective action.

A revocation means that the Entity is no longer approved as an RAE(F) and may no longer exercise the privileges of an RAE(F) until a new application is made and a new RAE(F) approval issued.

Review

If the CAA refuses an Entity's application for approval as an RAE-F, the Entity may have that decision reviewed. Additionally, if the CAA proposes to revoke or suspend an RAE-F approval an RAE-F may have that proposal reviewed. [Appeal a decision the CAA has made affecting your organisation.](#)

Chapter 5

Flightworthiness Assessment for an OA

5.1 Process

Requirements

- (a) An RAE(F) must confirm the provision and scope of their services for the OA process and communicate it to both the OA Applicant and the CAA.
- (b) If a UAS is SAIL Marked, an RAE(F) must confirm:
 - i. the validity of the SAIL Mark certificate;
 - ii. the UK SORA requirements that are deemed to be satisfied by virtue of the SAIL Mark certificate;
 - iii. whether the OA Applicant has made any changes to the UAS that amount to a modification as defined by the UAS modification policy in Section 1.4 of CAP 722K.
- (c) If an RAE(F) determines that a modification was made by the OA Applicant to a SAIL Marked UAS, the RAE(F) must follow the process in 6.2.
- (d) An RAE(F) must review and agree the proposed compliance basis and compliance approach with the OA Applicant for the UK SORA requirements identified in 5.4.
- (e) An RAE(F) must assess and validate the OA Applicant's compliance to the UK SORA requirements identified in 5.4.
- (f) Where an RAE(F) concludes as a result of its assessment that a UAS complies with the applicable UK SORA requirements, it must advise the CAA via a flightworthiness report per section 5.6 and must at the same time send a copy of that report to the OA Applicant.
- (g) Where an RAE(F) concludes as a result of its assessment that a UAS does not comply with the applicable UK SORA requirements, it must advise the CAA detailing the reasons for its conclusions and must at the same time send a copy of its advice to the OA Applicant.

Guidance

- (a) The OA Applicant identifies that they need to, or would like to, make use of the services of an RAE-F in order to meet certain technical UK SORA requirements. Some of these may already have been met through the provision of a SAIL Mark to the Designer.

The OA Applicant selects and applies to an RAE(F) of their choice. The RAE(F) should communicate their acceptance of the application back to the OA Applicant and to the CAA through a signed electronic letter.

- (b) If a SAIL Mark is held, the UK SORA requirements satisfied through the SAIL Mark are indicated on the SAIL Mark certificate.
- (c) The OA Applicant will need to provide their compliance basis and approach to the RAE(F), which includes identification of the UK SORA requirements complied with through the SAIL Mark certificate (if applicable).

The RAE(F) reviews the proposed compliance basis and approach for correctness, taking into account the impact of any modification made to the UAS as part of the SAIL Mark Policy Concept described in section 1.4 of CAP 722K, such that corrections can be made early in the process before compliance data starts being developed.

- (d) Once the compliance basis and approach have been agreed, the OA Applicant provides their compliance evidence data and further populates their compliance matrix, which is assessed and verified by the RAE(F).
- (e) The UK SORA requirements are related to the design, construction, and flying characteristics of the UAS, therefore compliance to these requirements is interpreted as the UAS being 'flightworthy' for the intended operation.

5.2 Data handling and retention

Requirements

- (a) The RAE(F) must provide secure storage for the OA Applicant's data and for their own data to ensure that no damage to, or tampering of, records can occur.
- (b) The RAE(F) must not disclose the OA Applicant's data or other information acquired in the course of carrying out their duties under the RAE(F) Policy Concept, except to its staff, to the CAA, where required to do so by law or where required to do so by the CAA or the OA Applicant, and in relation to personal data, it must comply with the UK General Data Protection Regulation (GDPR) and the Data Protection Act 2018. The RAE(F) must ensure that its staff comply with the obligations above.
- (c) The RAE(F) must keep any of the OA Applicant's data that they have on record in their database for 3 months after the CAA has decided to grant or refuse the OA, or until a Regulation 6 process has been completed, whichever is the later and must then delete all records of the OA Applicant's data from their database.
- (d) The RAE(F) must submit their flightworthiness report to the CAA.

- (e) The RAE(F) must keep a record of their assessment data for the period set out in section 5.2 (c), ensure the CAA receives a copy of all such assessment data before the end of that period, and delete the assessment data at the end of that period.
- (f) The assessment data referred to in (e) includes:
 - i. Assessment report of Operator manual.
 - ii. Assessment report of ground risk mitigation means.
 - iii. Assessment report of air risk mitigation means.
 - iv. Assessment report of compliance to Operational Safety Objectives (OSO).
 - v. Assessment report of compliance to containment requirements.
 - vi. Test witnessing reports.
 - vii. Flightworthiness report.
 - viii. Corrective actions by the OA Applicant to achieve compliance with UK SORA requirements.
- (g) Data records listed in (f) must include details of any standards used by the RAE(F) to conduct the assessments.
- (h) At any time during its assessment the RAE(F) must provide access to, or copies of any data specified in this section to the CAA upon request, within the notified timescale.
- (i) An Entity whose RAE(F) approval is surrendered or revoked must provide to the CAA as soon as reasonably practicable the data specified in (f) in relation to every OA and SAIL Mark assessment performed by the Entity up to the date of the surrender or revocation of the RAE(F) approval and must then delete all such data from its own systems.
- (j) The RAE(F) must delete any of the OA Applicant's data that they have on record in their database no later than 3 months after the date on which an OA Applicant terminates their application.

Guidance

The OA Applicant will need to exchange data with the RAE-F for assessment purposes. This data must be held securely and deleted as per the requirements section above. Privilege-based access ensures that intellectual property data is only accessed on a need-to-know basis and controlled, and duties of confidence are imposed to provide further protection of an OA Applicant's data.

If there is a requirement to host this data on CAA IT systems, such that the OA Applicant and RAE-F can both access this securely without it being held directly on the RAE-F IT system, this should be discussed with the RAE-F and CAA.

Once the RAE-F has completed any assessment, the OA Applicant will upload any relevant certificates or reports as part of their UK SORA application, on the digital application service. The RAE-F is not involved in the OA application.

- (a) If held on CAA IT systems, the RAE(F) may create copies of the OA Applicant's data in their own database for convenience, in which case they should ensure that the data is always kept secured and only the latest version of the documents is being used.
- (b) The OA Applicant may instruct the RAE(F) to liaise with a third party contracted by the OA Applicant for the assessment of certain documents.

The RAE(F) is expected to comply with any requests from the Air Accident Investigation Branch (AAIB).

5.3 Interfaces between parties

Requirements

- (a) The RAE(F) must communicate with the OA Applicant as and when necessary, as set out within the RAE(F) procedures.

Guidance

The OA Applicant should not normally need to communicate with the CAA on matters that involve the RAE(F), other than for the purpose of section 5.1.

- (a) The RAE(F) should communicate with the OA Applicant as required to progress the compliance assessment; this may be done via e-mails, phone, video calls, face-to-face meetings, etc.

The RAE(F) is expected to possess the required means and knowledge to assess the OA Applicant's compliance without intervention from the CAA. The RAE(F) would therefore not normally communicate with the CAA about its assessment of a UAS, except to notify the CAA on completion of the flightworthiness assessment.

5.4 UK SORA requirements to be assessed

Requirements

The RAE(F) must assess the OA Applicant's compliance with the following UK SORA requirements:

UK SORA Annex B:

- (a) M1A Criterion 2 (if applicable).
- (b) M2 Criterion 1 (if applicable).
- (c) M2 Criterion 2 (if applicable).

UK SORA Annex E:

- (d) OSO 2.
- (e) OSO 3 Criterion 1.
- (f) OSO 4.
- (g) OSO 5.
- (h) OSO 6.
- (i) OSO 7 Criterion 1.
- (j) OSO 16 Criterion 3.
- (k) OSO 18.
- (l) OSO 19.
- (m) OSO 20.
- (n) OSO 23.
- (o) OSO 24
- (p) Containment requirements.

Guidance

The UK SORA sets out which requirements above, need to be met, and to what level of robustness. The RAE-F should agree with the applicant, which of these requirements will be assessed.

The RAE(F) may require further updates to the existing compliance evidence, or the development of new evidence if they determine that the evidence provided is insufficient to demonstrate compliance with the UK SORA requirements.

The RAE(F) may elect to witness any test.

5.5 Recurrent manufacturing auditing for SAIL 5 and 6

Requirements

Where a high level of assurance is required for OSO 2, the RAE(F) must inform the CAA that this is the case, so that recurring audit plan with the OA Applicant can be established, to verify that the manufacturing procedures satisfy the UK SORA requirements and verifies that the UAS conforms to its design and specification on an ongoing basis.

5.6 Flightworthiness report

Requirements

- (a) The flightworthiness report must include:
 - i. The OA application number.
 - ii. Advice by the RAE(F) as to whether the UAS design meets the relevant UK SORA requirements.
 - iii. The list of UK SORA requirements complied with.
 - iv. A summary of the assessment's outcome of the OA Applicant's data, with references to separate assessment reports as applicable.
 - v. Corrective actions and updates by the OA Applicant to achieve compliance.
 - vi. SAIL Mark recommendation (if applicable).
- (b) The flightworthiness report and all documents referred to in it must be uniquely identified and signed at the appropriate authority level within the Entity.
- (c) The template to draft the flightworthiness report can be found on the CAA website.

Guidance

- (a) Examples of separate assessment reports are identified in section 5.2. These reports are not required to be delivered with the flightworthiness report to the CAA.

Chapter 6

SAIL Mark Policy Concept

6.1 Application of SAIL Mark Policy Concept

Requirements

Where an RAE(F) is carrying out activities that fall within the SAIL Mark Policy Concept (CAP 722K), it must comply with the requirements of that Policy Concept in so far as they relate to the roles and responsibilities of an RAE(F).

Guidance

The SAIL Mark Policy Concept (CAP 722K) sets out requirements that apply to the Designer applying for a SAIL Mark as well as requirements that apply to the RAE(F) assessing the UAS in accordance with that Policy Concept. The conditions an Entity must comply with to maintain approval as an RAE(F) include the RAE(F) requirements set out in the SAIL Mark Policy Concept.

6.2 Modification of a SAIL Marked UAS by the OA Applicant

This section describes the process when an OA Applicant wishes to make a change to a SAIL Marked UAS, before applying for an OA.

Guidance for a UAS Operator, wishing to make a change to its SAIL Marked UA can be found in CAP 722L.

Guidance for a Designer wishing to make a change to a SAIL Marked UAS can be found in CAP 722K.

Requirements

- (a) If the OA applicant identifies that they need to make a modification to their SAIL Marked UAS, they must communicate this to the RAE(F).
- (b) The RAE(F) must assess the proposed modification, using guidance in CAP 722L to determine whether it is a minor or major change.
- (c) The RAE(F) must notify the CAA via a signed electronic letter of any change it has determined to be a major modification (as per CAP 722L) and must treat the modified UAS as not having a SAIL Mark certificate.
- (d) An RAE(F) must consider what if any impact the modification has on the OA Applicant's proposed compliance basis and agree a revised compliance basis and

approach with the OA Applicant that ensures the UAS, as modified, complies with the applicable UK SORA requirements as identified in section 5.4.

- (e) Where an RAE(F) has agreed a revised compliance basis and approach, it must continue to follow the process in section 5.1 from (e) onwards.

Guidance

- (a) A major modification to a SAIL Marked UAS will invalidate the assumption of compliance with UK SORA requirements as confirmed by the Designer through the SAIL Mark certificate process. The OA Applicant will have previously considered this in their compliance basis and approach provided to the RAE(F). In such case, the SAIL Mark can no longer be relied on as evidence of compliance with the UK SORA requirements, and the OA Applicant will be required to provide new compliance evidence.