



**JARUS Guidance Material (GM) to
JARUS RECOMMENDATION
UAS RPC CAT A AND CAT B
Regarding Recognised Assessment Entity (RAE)**

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Explanatory Note

This document provides JARUS guidance material (GM) on the qualification for an entity that a competent authority may recognise as a provider for theoretical knowledge examination and practical skill assessment. This recognised assessment entity (RAE) can be any natural or legal person (e.g. training organisation, educational institution or UAS operator) as deemed acceptable by the competent authority.

The assessment for remote pilots in Category C (Certified) is outside the scope of this GM.

Rationale

An RAE is an entity recognised by the competent authority as a provider for theoretical knowledge examination and practical skill assessment as described in Article 3 (c) of the JARUS Recommendation UAS RPC Cat A and Cat B.

For the purposes of the JARUS Specific Operational Risk Assessment (SORA), an RAE provides a high level of assurance and integrity with regard to Operational Safety Objectivities (OSO) on remote crew training (See OSO 9, 15 and 22).

RAE requirements for recognition

Scope

- 1.1 An applicant for an RAE should demonstrate the capability and outline procedures to assess the remote pilot competence (RPC) of remote pilots, based on both a theoretical knowledge examination and, if applicable, a practical skill assessment. Competent authorities may choose to recognise an RAE that only provides theoretical knowledge examinations or only provides practical skill assessments.

Application

- 1.2 An RAE should provide at least the following information to the competent authority upon application for recognition:

- RAE exposition;
- Technical procedures manual (TPM);
- If applicable, practical skill assessment requirements to the application;
- If applicable, theoretical knowledge examination questions to the application;
- Description of any other material needed to conduct the assessment.

- 1.3 Amendments that result in a change to the recognition of the RAE should be subject to a new recognition by the competent authority.

Requirements for the recognition of an RAE

General Requirements

- 1.4 Where an entity that is seeking recognition as an RAE is also involved in any Category A or B operations, there must be a distinct division between these operations and the RAE activities such that the objectivity of the recommendations and reports made by the RAE is not called into question.
- 1.5 Any RAE personnel responsible for the, technical examination and, if applicable, practical skill assessment tasks should have the competence to conduct these tasks. Personnel participating in the evaluations should not participate in them when they feel that their objectivity may be affected.
- 1.6 The RAE should demonstrate the capability to adequately perform the technical and administrative tasks linked with the entire task process, including the adequacy of personnel and the use of facilities and equipment appropriate to the task.
- 1.7 The RAE personnel responsible for the theoretical examination and, if applicable, the practical skill assessments, should meet the following requirements, as applicable:
 - sound technical, theoretical knowledge training or vocational qualification in a relevant subject area. This can be demonstrated through any of the following means:
 - (i) practical aviation background in the areas relevant for the theoretical knowledge training provided, and have undergone a course of theoretical knowledge training in instructional techniques; or (ii) previous experience in giving theoretical examination;
 - if applicable, satisfactory knowledge of the requirements for the practical skill assessment tasks they carry out and adequate experience of such processes;
 - if applicable, the ability to administer the declarations, records and reports that demonstrate that the relevant practical skill assessments have been carried out and the conclusions of those practical skill assessments.
 - The ability to assess operations manuals (SORA Annex A - Conops) and determine a remote pilot's required level of competence for the proposed operation(s).
- 1.8 The RAE personnel should not disclose information supplied by the UAS operator or remote pilot to any person other than the competent authority.

Specific requirements

1.9 The RAE should demonstrate, based on the information submitted in their RAE exposition, that it has the capability to undertake its tasks. These requirements can be covered within a technical procedures manual in support of their RAE exposition. The following points are to be considered when preparing the required documentation:

General approval requirements:

- general organisation and coordination;
- if applicable, facilities for theoretical knowledge examination;
- if applicable, facilities for practical skill assessment;
- equipment and tools;
- processes and associated materials, i.e. technical procedures manual and study material for student remote pilots;
- number and competence of personnel, i.e. qualifications and experience for the role being performed.

Management and personnel:

- an accountable manager. The responsibility of that accountable manager within the RAE should consist of ensuring that all tasks are performed to the required standards and that the RAE is continuously in compliance with the information and procedures identified in the RAE exposition;
- a person or group of persons to ensure that the RAE complies with the requirements detailed within the RAE exposition, and that they are identified, together with the extent of their respective responsibilities. Such person(s) act under the direct authority of the accountable manager. The person(s) nominated are able to show the appropriate knowledge, background and experience to undertake their respective tasks;
- The RAE maintains a record of all personnel authorised to submit recommendations or issue certifications. The record shall include details of the scope of their authorisation.

Organisational Exposition

1.10 The RAE submits to the competent authority an RAE exposition providing the following information:

- A statement signed by the accountable manager confirming that the RAE exposition and any associated manuals meet the standards and will be complied with at all times.
- Documents detailing nominated personnel conducting theoretical examinations, or practical skill assessments to include:
 - (i) Descriptions of the respective personnel's competence;

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- (ii) Personnel duties and responsibilities;
 - (iii) A chart of the RAE showing associated chains of responsibility.
- A detailed description of the facilities for theoretical knowledge examinations, and practical skill assessments, including the physical location.
 - The procedure for amendments to the RAE exposition and the notification of changes to the competent authority.
 - The levels of theoretical knowledge examinations and practical skill assessments that the RAE will provide to remote pilots.
 - Where applicable, the RPC documentation that the RAE will provide to remote pilots to include a physical representation of the proposed document.
 - Arrangements for a formal, periodic internal safety-review that shall be convened at least once in any three-month calendar period. These reviews can be conducted sooner should an immediate safety risk be identified that requires immediate action by the RAE.

RAE Recognition

1.11 An RAE should be recognized by the competent authority when it has demonstrated compliance with the applicable requirements, subsequent to the necessary audit(s) and inspection(s) being completed by the competent authority in this regard.

The competent authority issues terms of recognition that identify the scope of work for which the RAE is entitled to conduct theoretical knowledge examination and practical skill assessment privileges.

Changes to the RAE Organisation

1.12 An RAE notifies the competent authority of each change to the RAE that is significant to the showing of compliance, conformity or theoretical knowledge examination and, if applicable, practical skill assessment of remote pilots. This includes changes to:

- The location of the facilities;
- accountable manager;
- personnel conducting theoretical knowledge examinations or practical skill assessments;
- methods of conducting theoretical knowledge examinations or practical skill assessments.

Transferability

1.13 A recognition as an RAE is not transferable, except as a result of a change in ownership. A change of ownership is considered a significant change and necessitates new application for recognition to the competent authority.

RAE audit, investigation findings and observations

1.14 The RAE allows the competent authority to review any report and make any inspection and perform or test any theoretical knowledge examinations and, if applicable, practical skill assessments necessary to check the validity of the compliance statements submitted.

1.15 When objective evidence is found by the competent authority during an audit or inspection, showing non-compliance of the RAE with the applicable requirements, the authority will notify the RAE responsible using one of the following formats:

- A *finding* is any non-compliance with these requirements that could lead to uncontrolled non-compliances or which could affect the safety of an UAS operation;
- An *observation* is any non-compliance with these requirements that is not classified as a finding. For example, where there is potential for future non-compliance if no action is taken, or where the competent authority may wish to indicate an opportunity for safety improvement or something that is not good practice.

1.16 After receipt of findings or observations notification:

- In the case of a finding, the RAE should demonstrate corrective action to the satisfaction of the competent authority within a period of one month after written confirmation of the finding;
- In the case of an observation, the corrective action period granted by the competent authority is appropriate to the nature of the finding but in any case, initially should not be more than six months. In certain circumstances and subject to the nature of the observation, the competent authority may extend the six-month period subject to a satisfactory corrective action plan.

1.17 In the case of a finding, the RAE may be subject to a provisional, partial or full suspension, or revocation. The RAE provides confirmation to competent authority of receipt of the notice of suspension or revocation of the RAE in a timely manner. This should be done in writing to the competent authority.

- A provisional suspension means that an RAE's operation is suspended pending further investigation;
- A partial suspension means that only part of the RAE's operation is suspended pending corrective action;

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- A full suspension means that the entire RAE's operation is suspended pending corrective action;
 - A revocation means that an entity is no longer recognised as an RAE and may no longer exercise the privileges of an RAE.

Duration and continued validity

1.18 The period of validity of an RAE is three calendar years from the date the recognition is granted, or as otherwise determined by the competent authority. The competent authority is expected to audit the RAE at least once within this period.

1.19 However the RAE's privileges and status may be revoked if:

- the RAE fails to demonstrate compliance with the applicable requirements or any changes to the requirements, criteria or assessment standards that may subsequently be published by the competent authority;
- the competent authority is prevented from performing its investigations by the RAE;
- the RAE has surrendered their recognition;
- the RAE fails to apply for a renewal.

1.20 Upon surrender or revocation, the original RAE recognition document must be returned to the competent authority.

Privileges

When applicable, an RAE assesses RPC of the remote pilot and makes an appropriate recommendation to the competent authority to issue RPC documentation according to JARUS.UAS.SPECIFIC.RPC.060.

If applicable, an RAE makes recommendations which state that an individual has successfully demonstrated RPC to fly an UA safely by meeting all critical elements of the practical skill assessment, as established in JARUS recommendation UAS RPC Cat A and Cat B. It is the remote pilot's responsibility to ensure that appropriate training modules are undertaken for the intended operation. In cases where an RAE has been given authority to issue a remote pilot's RPC certificate the RAE is still responsible for notifying the competent authority of the issued remote pilot's RAC certificate and providing relevant remote pilot information.

Record keeping

1.21 The RAE should keep the following records for a period of three years or what the local authorities determine as applicable:

- A complete record of each remote pilot student's theoretical knowledge examination, practical skill assessment feedback, and any RPC recommendation made to the competent authority;
- A record of each internal safety review or meeting;
- A record of any follow-up actions resulting from any internal review or audit.

These records must be stored in a secure manner to ensure that no damage to, or tampering of, records can occur.

Assessment methods – Theoretical knowledge examination

1.22 The theoretical knowledge examination should be conducted as described in JARUS Recommendation UAS RPC Cat A and Cat B.

1.23 Each theoretical knowledge examination can be conducted via an electronic, or a paper-based assessment format but must be of a closed book format (except when the multiple-choice questions require reference to charts, or other sources of specific aeronautical information).

1.24 Any candidate with a recognised disability should be accommodated as appropriate under national/competent authority guidelines.

Assessment methods - Practical skill assessment, if applicable

1.25 The practical skill assessment should be conducted as described in JARUS Recommendation UAS RPC Cat A and Cat B.

1.26 This practical skill assessment must ensure that the student remote pilot is able to undertake the safe operation of a UAS within Category A2 or A3 or Category B as applicable. The practical skill assessment should address aspects from site/location assessment, preparation/flight planning, pre-flight checks, flight procedures including use of automated features and manual control where applicable and abnormal/failure scenarios.

1.27 The RAE and the person responsible for the practical skill assessment have adequate knowledge of the UAS that is to be used in the assessment. The person responsible for conducting the practical skill assessment may also offer suitable theoretical knowledge training to the student remote pilot prior to conducting the practical skill assessment.

1.28 The primary practical skill assessment location(s) should be outdoors where possible and suitable for this task, i.e. of suitable dimensions, volume and airspace class. If the

RAE uses an indoor facility, for example due to inclement weather, then the facility should be of a sufficient size to accommodate practical skill assessment of all precision flight elements.

1.29 The result of the practical skill assessments will be pass or fail. Practical skill assessment report(s) should contain details of practical skill assessments and all actions performed by the student remote pilot. The report contains the following as a minimum requirement:

- The student remote pilot's identification details;
- The identity of the person responsible for the practical skill assessment;
- Performance marks for each action performed by the student remote pilot;
- An overall practical skill assessment of the student remote pilot's RPC;
- Practical skill assessment feedback providing guidance on areas for improvement where applicable.

1.30 The record is appropriately signed and dated by the person responsible for the practical skill assessment once complete.