



ANNEX TO PRINCIPLE (DEL.08)

**Annex H to Principle
(DEL.08) CASA 21.195A -
Issue an experimental
certificate for research
and development**

December 2024



Acknowledgement of Country

The Civil Aviation Safety Authority (CASA) respectfully acknowledges the Traditional Custodians of the lands on which our offices are located and the places to which we travel for work. We also acknowledge the Traditional Custodians' continuing connection to land, water and community. We pay our respects to Elders, past and present.

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1. CASR 21.195A - Issue an experimental certificate for research and development

1.1 Purpose

This annex describes the specific scope of the provision and supporting appointment criteria to appoint an applicant as an authorised person to issue an experimental certificate for an Australian aircraft for the purpose of research and development under regulation 21.191(a) and/or showing compliance with regulations under 21.191(b) of the *Civil Aviation Safety Regulations 1998 (CASR)*.

Note: Annex H is an annex to [Principle \(DEL.08\) Managing airworthiness-related external delegates and authorised persons](#) and is supported by Worksheet (DEL.08) Annex H - CASR 21.195A - Issue an experimental certificate for research and development.

1.2 Scope

Note: The scope of an instrument is dependent on the applicant's qualifications, experience and in some cases, employment conditions.

A person may apply to issue a special certificate of airworthiness (CofA) in the restricted category for:

- an aircraft manufactured under an Australian production certificate (PC)
- an aircraft other than one manufactured under an Australian PC that is:
 - aircraft type certificated in the normal, utility, acrobatic, commuter, primary, intermediate or restricted category
 - aircraft type certificated in the transport category
 - a non-type certificated aircraft.

Persons applying for an instrument of appointment (IOA) for the purpose of these regulations will be required to demonstrate an ongoing need to issue a number of experimental certificates during the validity of the instrument. An IOA will not generally be issued for one-off certificates for a particular flight.

1.3 Qualifications

For initial issue, the applicant must have successfully completed a mentoring program with a suitably qualified mentor within 12 calendar months prior to application and in relation to the following.

1.3.1 Aircraft manufactured under an Australian production certificate

- Have successfully completed the CASA CofA course within 12 calendar months prior to application and
- Have substantial experience in the design, manufacture, modification, and maintenance aircraft similar to the scope sought and
- Be employed by or having a demonstrated direct and ongoing relationship with the PC holder's organisation.

1.3.2 Aircraft not manufactured under an Australian production certificate

- Have successfully completed the CASA CofA course within 12 calendar months prior to application and
- Be the holder of one or more Part 35 of CAR and regulations 21.031, 21.095 or 21.098 of CASR IOA to approve the design of a modification or repair relating to aircraft similar to the scope sought.

Note: Holders of a valid instrument for the purpose of issuing CofA or experimental certificates (other than for unmanned aerial vehicles (UAV), amateur-built or light sport aircraft (LSA)) are exempt from having to complete the CofA course while their instrument remains valid. This exemption does not apply to the renewal requirements for any instrument.

1.3.3 Non-type certificated aircraft

- Have successfully completed the CASA CofA course within 12 calendar months prior to application or
- Hold a declaration of competence from a person acceptable to CASA from a recognised representative organisation such as Sports Aviation Federation of Australia (SAAA), Recreational Aviation Australia (RA Aus) etc. Applicants with substantial experience in the design, certification, manufacture, modification or maintenance of aircraft similar to the scope being sought, may request consideration be given to substitute the completion of a CofA course with an assessment (by interview) to determine their knowledge level.

1.4 Knowledge

The applicant will be asked to demonstrate the following at interview:

- a sound knowledge regarding the application of CASRs, [AC 21.10 - Experimental certificates](#) and other relevant advisory circulars (AC), CASA policies and procedures
- current technical knowledge and experience commensurate with that required for issuing experimental certificates
- a working knowledge of the information contained in aircraft type certification standards, information contained in aircraft type certificates (TC) and type certificate data sheets (TCDS), airworthiness limitations and certification maintenance requirements (CMR), aircraft flight manuals (AFM), airworthiness directives (AD) or other airworthiness and maintenance data applicable to the type of aircraft and prescribed purpose of operation
- a sound knowledge of the appropriate conditions that may be set in the interests of safety, including operational limitations and
- an understanding of the conditions under which an experimental certificate may be suspended or cancelled.

1.5 Competence

The applicant will be asked to demonstrate competence in:

- the application of policies, methodologies and processes described in the applicant's written procedures
- their ability to find and interpret information in the Australian civil aviation legislation related to airworthiness, maintenance and operational requirements, in particular those relating to the approval sought
- their ability to find and interpret information from foreign national airworthiness authorities (NAAs) related to airworthiness, maintenance and operational requirements.

1.6 Experience

Each applicant should submit, attached to their application, a resume setting out details of their experience that satisfies the relevant subparagraph below.

1.6.1 For a type certificated aircraft

1.6.1.1 Applicant can issue certificates of airworthiness

Where the applicant, at the time of application is authorised to issue standard or special CofA or other experimental certificates, must have carried out, under the supervision of CASA or a person authorised to issue experimental certificates, the functions leading up to the issue of at least one experimental certificate similar to the scope being sought (e.g. research and development (R&D)).

1.6.1.2 Applicant cannot issue certificates of airworthiness

Where the applicant, at the time of application is not authorised to issue standard or special CofA or other experimental certificates, must have carried out, under the supervision of CASA or a person authorised to issue experimental certificates the functions leading up to the issue of at least 2 experimental certificates similar to the scope being sought (e.g. R&D).

1.6.2 For a non-type certificated aircraft

For a non-type certificated aircraft, the applicant should submit a declaration of competence from a:

- person holding equivalent powers or
- recognised representative organisation such as Australian Warbirds Association Limited (AWAL), SAAA and RA Aus etc.

Note: A declaration of competence must be account for both the experimental certificate processes, and aircraft type experience.

1.7 Procedures manual - Specific criteria

In addition to the criteria listed at Appendix A in [Principle \(DEL.08\) Managing airworthiness-related external delegates and authorised persons](#), the applicant will be required to include the following in their procedures manual.

1.7.1 Reporting

Details of a register to record the following information about each experimental certificate, stating the:

- name of the holder of the certificate of registration (CofR)
- manufacturer, type, model and serial number of the aircraft
- registration marking
- date of issue, and expiry (if applicable) of each certificate

A procedure to ensure that all documents relating to the certificate are sent to the CASA Australian Civil Aircraft Register.

1.7.2 Application procedures

Procedures to ensure that:

- the application is from the CofR holder

- the application has all the information required (specific to the instrument)
- the aircraft is registered prior to application
- eligibility of proposed aircraft is determined for an Australian experimental certificate.

1.7.3 Application procedure assessment

- Description of the assessment process (e.g. flow charts, work sheets)
- Description of the process for considering applications for multiple purposes
- Liaison with CASA Certification Section in regard to possible test program requirements
- Technical matters to be considered during assessment stated
- Risk assessment and risk management procedures to consider all of the following items to ensure relevant conditions and operational limitations are applied to the experimental certificate.

Note: Assessment checklists must record all relevant information applicable to the aircraft.

- Review of information contained in the aircraft design and construction data, flight test standards, airworthiness limitations, service letters and bulletins, AFM and other relevant manufacturers' airworthiness data applicable to the aircraft
- Review of relevant NAA information relating aircraft design and construction, airworthiness limitations, AD and flight testing
- Review of repair and modification data applicable to the aircraft (aeronautical engineering Subpart 21.M and regulation 21.303 of CASR and Part 35 of CAR)
- Evaluation and interpretation of structural analysis test data
- Systems evaluation for complexity (e.g. pressurisation, retractable undercarriage, non-certificated engines, piston, turbine or jet engines)
- Analysis and determination of safe operation of the aircraft
 - Consideration of aircraft's operational safe history
 - Consideration of aircraft's nominated pilot(s) qualifications and experience
 - Criteria to determine the aircraft's nominated test flight area.
- A structured (staged) test flight program (with suitable operating conditions to establish the aircraft's operating performance and in turn its operating limitations – if any)
- Raising work/assessment package
- Inspection of aircraft
- Inspection of aircraft records
- Inspection of manufacturing records
- Placards and markings requirements
- Procedures for considering areas of operation (including noise, in and out of airports etc.)

1.7.4 Issuing certificate

- Numbering/identifying the experimental CofA document
- Completing / assessing completed work packages and log books
- Certifications for maintenance carried out
- Completion of checklists

- Description of the process for issuing the certificate (flow charts etc.)
- Relevant conditions stated in section 11 of [AC 21.10 - Experimental certificates](#) to be included on each certificate
- Duration of certificate stated.

1.7.5 Specific forms

- List and description of each form/checklist used during assessment included
- Description on the use of each form/checklist
- Copy of each form to be used during assessment included.

1.7.6 Remote Inspections

If a remote inspection procedure is included, it must only be for circumstances where travel is not possible due to extenuating circumstances. Procedures must detail:

- The limited circumstances where remote inspections may apply
- How third parties are coordinated
- The capacity of the person inspecting the aircraft
- The independence of the individual inspecting the aircraft
- The documentation to ensure there is sufficient evidence and all requirements of the inspection are captured for assessment by the authorised person

1.8 Surveillance of IOAs

1.8.1 Condition – Individual conditions, scope and limitations

Each Instrument of Appointment contains conditions and limitations specific to the individual. Common to these conditions are:

- The scope of the appointment
- Requirement to comply with an approved procedures manual; and
- A requirement to ensure all documents and checklists used in the application, assessment and issue of the certificate, are sent to the Civil Aviation Registrar within 7 days after issue.

For Surveillance activities, these areas may be validated by:

- Reviewing the DMNS and authorisation holders register to ensure tasks are within approved scope.
- Sample outputs to validate the process has been undertaken in accordance with the approved procedures manual and any relevant AC's as stated in the individual's instrument
- Ensure that where the instrument provides multiple delegations, documents are sampled against each head of power held under the instrument. The review of each sampled task should establish if the evidence provided to CASA sufficiently supported the issue of the certificate, such as reviewing an application for evidence of a program letter with sufficient detail including:
 - A description of the purpose of the application in sufficient detail to outline the aircraft configuration and program objectives, in a manner that will permit the authorised person to prescribe adequate limitations and conditions necessary to ensure safe operation
 - The estimated time (days) number of flight hours required for the program
 - The areas over which the flights will be conducted.

- Sampling tasks to verify the authorised person has established boundaries for flight areas and ensured hazards to persons on the ground or water are minimised (chapter 6, AC 21-10)
- Verifying any experimental certificates issued for research and development have been issued for a duration calculated using the time and number of flight hours proposed in the program letter, and not for a period exceeding one year.
- Reviewing the DMNS and authorisation holders register to ensure tasks are forwarded to CASA within specified timeframes.

1.8.2 Condition - Maintaining a register

The delegate must maintain a register containing the following information:

- The name of the registered operator
- The manufacturer, type, model and serial number of the aircraft
- The registration marking
- The category and purpose (as applicable) of each certificate
- The date of issue and date of expiry (if applicable) of each document

During surveillance, the register is validated by reviewing the DMNS records against the register held by the authorisation holder.

1.8.3 Condition - Maintaining records

The delegate must maintain copies of all documents associated with the exercise of power for at least 5 years after the date of issue. The inspector may review the following documents to determine whether the records are adequately maintained. Storage conditions and the content maintained should be accessible on site to the inspector. This can be paper based or electronic, however should be consistent with the authorisation holders procedures. If electronic (soft copy) then suitable back up files should be maintained.

1.8.4 Condition - Notification to CASA of intent to exercise powers

On engagement by a client, and prior to exercising their powers, the delegate must notify CASA through the Delegate Management Notification System. Compliance with this conditions may be validated by reviewing records within the evidence package to establish a reference point.

1.8.5 Condition - Notification of outcomes to CASA

The delegate must record the details of the outcome to CASA into the DMNS within 14 days after a power is exercised. Compliance with this condition may be verified by comparing the DMNS records task completed date against the date identified on the certificate issued.

1.8.6 Condition - Availability of records

It is a condition of an authorisation that a delegate must make their register and all documents available to a CASA inspector for inspection. Surveillance should validate that the register contains all the required documentation.

1.8.7 Relating a regulatory breach to a delegation

If a breach of a condition is found during a surveillance event, the inspector is to record the deficiency against the relevant condition and use the relate function in EAP to relate the breach to the regulation CASR 21.195A. This will enable reporting against that delegation.

1.9 Revision history

Table 1. Revision history table

Version No.	Date	Parts / Sections	Details
1.1	November 2024	1.7.6 / 1.8	Remote Inspections/ Surveillance
1.0	September 2024	All	First issue