

Revision 4

3 November 2021

Aircraft certification – airworthiness certificates in the *Standard* and *Restricted* categories

General

Civil Aviation Authority Advisory (CAA) Circulars (ACs) contain information about standards, practices and procedures that the Authority has found to be an acceptable means of compliance with the associated rule.

Consideration will be given to other methods of compliance that may be presented to the Authority. When new standards, practices or procedures are found to be acceptable they will be added to the appropriate AC.

Purpose

This AC describes an acceptable means of compliance with the standard and restricted categories airworthiness certification rules set out in Civil Aviation Rule Part 21, Subpart H. Each reference to a number in this AC, such as rule 21.15, is a reference to a specific rule.

This material is intended to assist organisations and persons in gaining certification for aircraft in New Zealand.

Related Rules

This AC relates specifically to Part 21, Subpart H – Airworthiness Certificates.

Change Notice

Revision 4 revises the policy regarding statements of conformity and the conduct of an eligibility investigation in the absence of one. It also makes minor changes to standardise style and format, e.g. moving the Introduction to after the Table of Contents.

Version History

The record of revisions to this AC are outlined overleaf:

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AC Revision No.	Effective Date	Summary of Changes
AC21-2	29 August 1995	Initial issue of this AC (as <i>International ferry flights – Restricted category airworthiness certificates</i>)
AC21-2, Rev 2A	25 August 1997	Replaced information in AC21-1 – <i>Product Certification – Type certificates, Type acceptance certificates, and Airworthiness certificates</i> and AC21-2 – <i>International Ferry Flights – Restricted category airworthiness certificates</i> .
AC21-2, Rev 2B	25 December 1997	Superseded information in AC21-2A, <i>Product certification – airworthiness certificates in the Standard and Restricted categories</i> .
AC21-2, Rev 3	27 April 2007	Re-numbered from AC 21-2B to AC 21-2 as part of a project to standardise the numbering of all ACs.
AC21-2, Rev 4	3 November 2021	Revises the policy regarding statements of conformity and the conduct of an eligibility investigation in the absence of one. Makes minor changes to standardise style and format.

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Introduction

To be eligible to operate in New Zealand under Part 91 an aircraft must have been issued with an airworthiness certificate.

Part 21 Subpart H prescribes the requirements for the issue of airworthiness certificates to aircraft. Airworthiness certificates are issued in four categories; standard, restricted, special, and provisional.

Aircraft are only eligible for the standard or restricted category if they have been type-certificated in New Zealand or type-certificated in a foreign country and subsequently type-accepted in New Zealand. Only aircraft in the standard or restricted category are eligible for the carriage of persons or goods for hire or reward operations under Part 91 and only aircraft in the standard category are eligible for air transport operations under Part 119.

This AC gives guidance for applicants wishing to apply for the issue of an airworthiness certificate in the standard or restricted categories only.

For the purposes of Part 21, the following ACs are relevant:

AC21-1	Product Certification – Type Acceptance Certificates
AC21-1 Appendix 2	Product Certification—Type Acceptance Certificates (Appendix 2 to AC21-1)
AC21-2	Aircraft certification – airworthiness certificates in the <i>Standard</i> and <i>Restricted</i> categories
AC21-3	Aircraft certification – airworthiness certificates in the <i>Special</i> category
AC21-4	Aircraft certification - <i>Amateur-built</i> aircraft Airworthiness Certificates
AC21-12	Airworthiness Certificates – Special Category – Light Sport Aircraft

General

Rule 91.101 requires all aircraft to have a current airworthiness certificate to be eligible for operations under Part 91. An exception to this requirement is for the operation of an aircraft for the purpose of demonstrating the eligibility of the aircraft for the issue, renewal, or reinstatement of an airworthiness certificate. The conditions of applying this exception are stated in rule 91.101(c).

Airworthiness certificates are issued under Part 21 Subpart H and in one of four categories:

- standard
- restricted
- special (including six sub-categories), or
- provisional.

This AC provides information to applicants for airworthiness certificates in the standard or restricted categories only.

Requirement for certificate

An aircraft to be used for the carriage of persons or goods for hire or reward operations under Part 91 is required to have been issued a standard or restricted category airworthiness certificate.

An aircraft to be used for air transport operations under Part 119 is required to have been issued a standard category airworthiness certificate.

Eligibility

To be eligible for the issue of an airworthiness certificate in the standard or restricted category an applicant should provide evidence that the aircraft conforms to a type certificate or type acceptance certificate issued under Part 21. Specifically, the applicant should ensure that, for the aircraft:

- a type certificate or type acceptance certificate has been issued, and
- evidence of conformity has been provided.

Type certification and type acceptance

Aircraft models that have been type-certificated or type-accepted in New Zealand and that are eligible for the issue of a standard or restricted category airworthiness certificate are listed in AC21-1 Appendix 2.

If an aircraft model is not already covered by a type acceptance certificate, one will have to be issued under Part 21, Subpart B. See AC21 for guidance on this subject.

Recent additions may not be shown in AC21-1 Appendix 2, so CAA's Certification (Aircraft & Products) Unit should be contacted if:

- the model is not listed
- the model is similar to but not identical to a model listed, or
- the serial number of the aircraft is outside the serial number range listed as eligible.

The Certification (Aircraft & Products) Unit can be contacted at certification@caa.govt.nz

Evidence of conformity***It is an applicant's responsibility
to provide evidence of an aircraft's conformity***

Under rule 21.191(1) the applicant for a standard or restricted category airworthiness certificate is required to provide the Director with evidence of conformity of an aircraft to the type design approved by the issue of a type certificate or type acceptance certificate. This evidence is required to confirm that the aircraft conforms to the approved type design.

Documents that CAA accepts as evidence of conformity for imported aircraft are:

- an Export Airworthiness Certificate or equivalent document issued by the National Aviation Authority (NAA) of an exporting country
- a statement of conformity issued by the (New Zealand) aircraft manufacturer
- a foreign domestic airworthiness certificate that:
 - includes evidence that a conformity inspection was required as part of the issue of the document, and
 - was issued within 60 days of the date of export, or
- a statement of conformity issued by a person or organisation authorised to make such a statement by the NAA of the exporting country.

Export Airworthiness Certificate

The preferred evidence of conformity to the applicable type certificate is an Export Airworthiness Certificate from the NAA of the exporting country. (This is especially relevant in the case of something like a helicopter or a turbine-powered pressurised aircraft with multiple life-limited components.) A recently issued airworthiness certificate with evidence of inspection by the NAA has similar standing.

Under the rules, however, an Export Airworthiness Certificate is not compulsory and alternative evidence can be accepted.

Alternative Statement of Conformity

Provided the aircraft has good documentation, CAA will accept as an alternative a Review of Airworthiness (RA) issued as a result of an inspection in New Zealand, by an Inspection Authorisation (IA) holder familiar with the type. However applicants are advised that if they do not have an Export Airworthiness Certificate, CAA will require complete substantiation of any modifications or repairs embodied on the aircraft, along with evidence of acceptability of any critical parts fitted (i.e. release notes for all those parts). CAA will require the most recent overhaul certificates for the engine and propeller.

NOTE: Under the FAA system an overhaul can be done by an Airframe and Power Plant (A&P) mechanic and does not require Part 145 certification as it would in New Zealand. The logbook entry can be quite brief, so may not be sufficient to be recognised in New Zealand.

Upholstery is another example of an area which could be problematic. If this is clearly not original and there are no records in the logbooks showing it was tested to meet the applicable fireproofing requirements, then this would have to be replaced. If an Export Airworthiness Certificate has been issued certifying the aircraft conformed to its type design, then that could be accepted as covering the interior replacement.

In summary, an Export Airworthiness Certificate is not mandatory, but if one is not available the onus is on the applicant to satisfy CAA that the aircraft is in conformity with its type certificate in all respects. There may be considerable risk in being able to do so. If no Export Airworthiness Certificate is obtained, then an RA would be an additional cost.

It is up to the importer to decide whether the cost of an Export Airworthiness Certificate outweighs the risks involved. For an original configuration aircraft with good records, the risk may be quite low. For an older aircraft, or a helicopter with multiple life-limited components, the risk could be considerable.

Note: It is CAA policy that an Export Airworthiness Certificate is mandatory in some cases:

- New Aircraft – A new production aircraft will always be delivered with a new airworthiness certificate or an Export Airworthiness Certificate. Therefore, one must be provided when it is imported into New Zealand. (An Export Airworthiness Certificate is always specified in any bilateral airworthiness agreements CAA has with any other authorities.)
- Transport Category Aircraft – An Export Airworthiness Certificate is required because it is impractical to be able to inspect and review all aspects of a large aircraft and its history. In addition, the State-of-Registry NAA is probably the only organisation with sufficient familiarity with the previous operator and maintenance providers to be able to make the certification of conformity.

Eligibility investigation

There are some circumstances where an RA would not be accepted on its own to establish conformity of an aircraft. These circumstances are:

- an aircraft that is incomplete or imported in a damaged condition, or
- an aircraft where the records are not complete.

In these circumstances, CAA will need to conduct an eligibility investigation to determine the condition and status of an aircraft and records at the time of import. If this is not established, CAA will have no way to determine whether the end product has been completed correctly, and therefore will be unable to establish conformity of the aircraft to the approved type design.

The eligibility investigation is not an acceptance by CAA of the aircraft, nor is it any guarantee that the aircraft can conform to its type certificate. The eligibility investigation will inform the applicant of whether the information provided will support the eventual issue of an airworthiness certificate. The eligibility investigation will also indicate the acceptable form of the statement of conformity that must eventually be provided.

Note: Importers should be aware that some aircraft may not be considered eligible for the eventual issue of an airworthiness certificate. In other cases, the required standard for a statement of conformity required by CAA may be difficult for the applicant to achieve.

The eligibility investigation will provide CAA a known starting point for the assessment of the applicant's evidence of conformity. It will also provide the applicant an indication of who will be acceptable to CAA for certifying a statement of conformity.

Application

To initiate an eligibility investigation, an application for an airworthiness certificate should be made:

- for imported aircraft, before, or as soon as practicable after, the aircraft arrives in the country, and
- for New Zealand aircraft, before, or as soon as practicable after, the decision to rebuild or return the aircraft to service is made.

In both cases the application should be made before any work on the aircraft is carried out. Failure to do this deprives CAA of the opportunity to determine a starting point for assessing the applicant's evidence of conformity. If the application is delayed the applicant may have no acceptable means of providing the evidence of conformity.

Investigation

The eligibility investigation is comprised of two elements to determine the eligibility status of the aircraft. The combination of these elements may be varied according to the amount of information provided by the applicant.

Documentation: A review of the supporting documentation supplied by the applicant as part of the initial application. The documentation should be as complete as possible and may include:

- evidence of why an Export Airworthiness Certificate was not reasonably obtainable
- the aircraft logbooks and maintenance records
- the last valid domestic airworthiness certificate
- a certified history of the aircraft since it was last airworthy
- a complete assessment by a licensed aircraft maintenance engineer of any damage to the aircraft and missing components, and/ or
- a copy of any accident report.

Inspection: A physical inspection of the aircraft. Inspection of the aircraft provides an assurance of the condition of the aircraft at the time of import or at the start of a rebuild, including an opportunity to:

- inspect the aircraft against the supporting documentation to ascertain the authenticity of the documentation
- review the proposed work plan to return the aircraft to conformity
- determine the acceptable data to be used to return the aircraft to conformity, and
- determine the acceptable evidence of conformity to be provided by the applicant.

At the completion of the Eligibility Investigation, CAA will advise whether the aircraft will be accepted for certification in New Zealand, at which point the rebuild or restoration can begin.

Certificate categories and purposes

General

An aircraft will be eligible for an airworthiness certificate in the category identified on the type certificate or type acceptance certificate:

- standard, or
- restricted.

A certificate may be issued in both the standard and restricted categories if:

- the aircraft meets the certification requirements for each category when in the configuration for that category, and
- the aircraft can be converted from one configuration to the other by removing or adding equipment by simple mechanical means.

Rule 21.177(d) states that the Director may prescribe, in an airworthiness certificate, the purposes for which the airworthiness certificate has been issued. If an application has been made for an airworthiness certificate for a specific operation or purpose, this purpose will be prescribed on the airworthiness certificate.

Standard category certificates

The issue of a standard category airworthiness certificate indicates the acceptability of the aircraft for all types of operations, subject to any operational rule requirements.

Restricted category certificates

An aircraft that is otherwise eligible for standard category may have its airworthiness certificate classified in the restricted category when:

- the aircraft is internally equipped for dispensing substances on an agricultural aircraft operation (and the extent of the internal equipment makes the aircraft inappropriate for use in an air transport operation)
- the State-of-Design type certificate is only issued in the restricted category, which applies to:
 - ex-military aircraft type certificated under FAR 21.25, or
 - some FAA type certificated agricultural aircraft
- the design approval for any modifications incorporated on the aircraft limits the aircraft to the restricted category, including:
 - special purpose operations, such as agricultural spraying operations (typically for helicopters)
 - international ferry flights, for which some design standard requirements are not fully met, such as where:
 - the aircraft is to operate at weights above the maximum certificated take-off weight or maximum zero fuel weight, or both

- a design change is installed that does not comply with the airworthiness standards applicable for the standard category, such as the use of a temporary ferry fuel tank system in the cabin.

Note: The granting of a restricted category airworthiness certificate for the purpose of a ferry flight will be subject to compliance with an approved design change for any modification. The design change will be required to meet standards accepted by the Director as providing an adequate level of safety for the operation.

For the issue of a restricted category airworthiness certificate, the applicant should identify the types of operations to be undertaken, including general operations under Part 91. These types of operation will be those prescribed during type certification or type acceptance. The types of operation will be prescribed on the airworthiness certificate and may be amended if design changes are incorporated on the aircraft.

If a restricted category airworthiness certificate is issued because the aircraft does not fully comply with its original design standard, a condition will be placed on the airworthiness certificate stating:

This aircraft does not comply with the International Airworthiness Standards of Annex 8 to the Convention on International Civil Aviation. Written permission must be obtained from any country over which the aircraft operates.

Certificate limitations and duration

Limitations

Limitations will normally only be placed on restricted category certificates, and only where the special purpose operations the aircraft is to be used for require additional limitations not already given in the applicable flight manual or flight manual supplements.

Aircraft with a restricted category airworthiness certificate are subject to the additional operational restrictions specified in rule 91.103, including no flight instruction operations except:

- conversion instruction
- instruction for an agricultural rating, or
- instruction for the specific purpose for which the aircraft has been certificated.

In all cases the Director may impose limitations to ensure the safe operation of the aircraft.

Appendix 1 of this AC is a general list of operations, limitations, and restrictions relating to airworthiness certificate categories.

Duration

Airworthiness certificates in the standard or restricted category will normally be issued as non-terminating documents.

Certificates with an expiry date may be issued where it is appropriate for the circumstances, such as where a certificate is issued in the restricted category for a special purpose, such as an international ferry flight, that is to be of a short duration.

Airworthiness certificate – application

General

An application for an airworthiness certificate in the standard or restricted category is to be made on CAA Form 24021/05.

This form is available on the CAA web page at: www.aviation.govt.nz – search under Forms.

The completed application form should be submitted to CAA:

- for aircraft with acceptable evidence of conformity, not less than 28 days prior to the date requested for the inspection of the aircraft
- for aircraft without acceptable evidence of conformity, immediately the aircraft is imported, or the decision is taken to rebuild, restore, and return the aircraft to service.

Note: All charges associated with the issue of the airworthiness certificate will normally be invoiced to the aircraft's registered owner. CAA will invoice another client if it receives a written request to do so and that client has agreed in writing to accept the charges.

If any required information is not available, this should be advised separately, with reasons, in a covering letter with the application.

Aircraft description

The applicant should ensure correct model designations are used.

The data plate should be checked to ensure that the information corresponds to references in the aircraft's documentation. If differences are found, the reasons for them should be determined and CAA advised.

Many aircraft have popular names that are sometimes incorrectly considered as the model designation. Examples are:

- Cessna Skymaster (correct model designation Cessna 337 series)
- Piper Tomahawk (correct model designation PA-38-112)

In addition, some aircraft are known by the original manufacturer name, such as Hughes 500 or Fletcher FU24. The aircraft is registered under the actual company name at the time of manufacture, which is usually specified on the dataplate.

For this reason, it is requested that a photo of the aircraft dataplate is forwarded with the airworthiness certificate or registration application.

Evidence of conformity

A copy of the statement of conformity as defined earlier in this AC should be supplied. If the aircraft is newly manufactured by an aircraft manufacturing organisation certificated under Part 148 the statement of conformity may be supplied at the time of the inspection of the aircraft.

For aircraft that do not have acceptable evidence of conformity, all information that will assist in determining whether an eligibility investigation is required should be supplied. Examples of this are provided earlier in this AC and on the application form. For further advice contact CAA's Certification (Aircraft & Products) Unit.

Design changes

All modifications that have been carried out should conform with design changes approved for the type. The applicant will be required to provide evidence of the approval of the design changes.

Evidence that design changes were approved by the Exporting State's NAA against the applicable type certification standards will be acceptable for the issue of an airworthiness certificate. A foreign authority's approval may be shown by:

- the issue of an Export Airworthiness Certificate or equivalent, and/ or
- copies of the applicable approval certificates.

Temporary alterations made for an import ferry flight should be removed before inspection of the aircraft. Such alterations may be listed in the Export Airworthiness Certificate. Any design changes made after the issue of the Export Airworthiness Certificate should be identified as such and separate evidence of the relevant approval provided.

Under rule 21.79, the issue of an airworthiness certificate for an imported aircraft will signify acceptance of any incorporated design changes that were installed overseas, for which there are certified entries in the aircraft's maintenance records and there is evidence the modification meets the applicable airworthiness requirements and noise and engine emission standards.

Maintenance records

Maintenance records should consist of logbooks or equivalent documentation that show the maintenance history of the airframe, engines, propellers and all installed equipment.

Compliance with the applicable airworthiness directives issued under Part 39 should be recorded in the maintenance records and certified.

For an imported aircraft issued with an Export Airworthiness Certificate, the maintenance records for the aircraft will usually show that the airworthiness directives of the exporting country have been complied with. The applicant should confirm this. The applicant should also determine if any additional airworthiness directives, applicable to the aircraft model and serial number, or its equipment, have been issued by the CAA of NZ and whether they have been complied with.

Additional airworthiness requirements

The additional airworthiness requirements of Part 26 are required to be met. For aircraft type certificated or type accepted after 1 April 1997, this compliance will have been shown at the time of the issue of the type certificate or type acceptance certificate. For other aircraft this will have to be determined on a case by case basis.

Maintenance inspection

The aircraft should have undergone a 100 hour / Annual inspection within 60 days of the date of application, conducted under Part 43 or an equivalent inspection accepted by CAA. An equivalent inspection could be an annual or 100-hour inspection performed under the FAA's FAR 43. Other types of inspections may be accepted if there is evidence that they provide an assurance of the condition of the aircraft and a level of inspection equivalent to Part 43.

Flight manual

The flight manual should be the one accepted by CAA for the aircraft model. This flight manual may differ from the one carried in the aircraft, either by revision state or origin. CAA's Certification (Aircraft & Products) Unit will advise the correct manual at the time of the application.

Aircraft inspection

CAA needs to inspect all aircraft prior to the issue of an airworthiness certificate.

Note: Newly manufactured hot-air balloons may be inspected by a person to whom the Director has delegated this function.

This inspection ensures that the aircraft:

- conforms to its approved type design
- complies with the applicable rules, and
- is in a condition for safe operation.

The applicant should be prepared to furnish the CAA inspector with:

- an aircraft complete and ready to fly except for cowlings, fairings, and panels opened for inspection
- an aircraft that has had the following carried out, as required:
 - weight and balance measurements
 - rigging checks
 - retraction tests
 - aircraft and engine duplicate control checks
 - fuel flow checks
 - full power engine runs
 - a compass swing
- an aircraft certificate of registration
- CAA logbooks for the aircraft, engine, propeller, and Airworthiness Directives to allow for the review of servicing records and the recording of the inspection and certification by the CAA inspector, and
- evidence that the minimum of a 100-hour / Annual inspection in accordance with Part 43 has been carried out.

The applicant should arrange for the aircraft and all required documentation to be available for inspection by CAA in a well-lit and sheltered place. This could be an aircraft hangar where there is adequate room for inspection. There should be inspection stands for access to higher areas, where applicable. All work on the aircraft should have been completed. Maintenance personnel should be available to open cowlings, fairings, and panels for inspection purposes.

CAA regards the initial inspection date specified in the application as provisional for planning purposes only.

On receipt of an application, CAA will reply with a comprehensive Information Letter detailing the requirements to be met for the issue of the certificate. This letter will finish by requesting the applicant to advise CAA in writing at least seven days in advance of a firm date requested for the inspection.

Note: CAA will issue airworthiness certificates outside New Zealand but, in addition to the normal charges, all travel costs and expenses are payable by the applicant, including air fares, travel time, accommodation, meals, incidentals, and taxes. A written agreement to meet these costs is required before the commencement of any travel.

