

Revision 7

Product Certification—Type Acceptance Certificates

23 January 2025

General

Civil Aviation Authority ACs contain guidance and information about standards, practices, and procedures that the Director has found to be an **acceptable means of compliance** with the associated rules and legislation.

Consideration will be given to other methods of compliance that may be presented to the Director. 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 Civil Aviation Rule Part 21, Subparts B, *Type Certificates and Type Acceptance Certificates*, and D, *Changes to Type Certificates and Type Acceptance Certificates*. This material is intended to assist organisations and persons in gaining certification for aircraft types to be operated in New Zealand.

Related Rules

This AC relates specifically to Part 21, Subparts B and D.

Change Notice

Revision 7 adds a link to Appendix 2 and updates Appendix 2, which is attached as a separate document on the landing page for the AC. It also:

- updates the terminology for type certificates (TCs) and type acceptance certificates (TACs) to align with ICAO requirements
- updates the title of Appendix 2 to *Product Certification—Type Acceptance Certificates*
- clarifies the types of aircraft covered by Appendix 3
- deletes the sections, *Operations under Part 91* and *Special Federal Aviation Regulations (SFAR) No. 41*, in Appendix 3
- adds a version history
- removes specific form numbers, and
- makes updates throughout to align with current AC format.

Version History

History Log

Revision No.	Effective Date	Summary of Changes
AC21-1	23 Aug 1995	Initial issue
AC21-1.6, Appendix 6	12 Feb 1996	Further update Note: Decision made to remove suffix number after this revision, as not required for future updates.
Rev. 1 (as AC21-1A)	25 Aug 1997	Superseded information in AC21-1
AC21-1.2, Appendix 2	25 Aug 1997	Appendix 2 to AC21-1A. Superseded information in AC21.1.6
AC21-1.2, Appendix 2, Rev 1	1 Apr 2005	Updated the list of aircraft types and models that have been issued with Type Certificates (TCs) or Type Acceptance Certificates (TACs).
AC21-1, Rev. 2	27 Apr 2007	Re-numbered from AC 21-1A to AC 21-1 as part of a project to standardise the numbering of all ACs.
AC21-1, Appendix 2, Rev. 3	10 Mar 2008	Included updated TC references to reflect the issue of European Aviation Safety Authority (EASA) TCs for existing aircraft.
AC21-1, Rev. 4	6 Sept 2010	Corrected the CAA Form to be used to apply for a TAC.
AC21-1, Appendix 2, Rev. 4	31 July 2013	Included updated TC references, particularly from EASA Removed types where type design approval has lapsed Added details of type-accepted engines and propellers.
AC21-1, Rev. 5 (including update of Appendix 2)	10 June 2016	Updated the model listings maintains guidance information on type acceptance only Removed guidance information on type certification Amended the title of the AC to reflect its current contents.
AC21-1, Rev. 6	29 Jan 2018	Amended the introduction section specific to the eligibility of aircraft in the standard or restricted category.
AC21-1, Rev. 6, Appendix 2	16 Apr 2018	Updated the model listings and State-of-Design acceptance basis, particularly for EASA type certificates.

AC21-1, Rev. 7 (including update of Appendix 2)	23 January 2025	<p>Adds a link to Appendix 2.</p> <p>Updates Appendix 2 throughout.</p> <p>Updates the title of Appendix 2 to <i>Product Certification—Type Acceptance Certificates</i>.</p> <p>Updates the terminology for TCs and TACs to align with ICAO requirements.</p> <p>Clarifies the types of aircraft covered by Appendix 3.</p> <p>Deletes the sections, <i>Operations under Part 91</i> and <i>Special Federal Aviation Regulations (SFAR) No. 41</i>, in Appendix 3.</p> <p>Adds a version history.</p> <p>Removes specific form numbers.</p> <p>Makes updates throughout.</p>
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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 (or a flight permit for a microlight).

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.

Only aircraft in the standard or restricted category are eligible for hire or reward operations under Part 91 and only aircraft in the standard category are eligible for air transport operations under Parts 121, 125 or 135. Aircraft are only eligible to be issued with an airworthiness certificate in 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.

TCs and TACs are issued and changed under Part 21 including:

- Subpart B that covers:
 - type certification of products (aircraft, aircraft engines, or propellers) in New Zealand
 - type acceptance of ICAO National Airworthiness Authority (NAA) type-certificated products imported into New Zealand
- Subpart D that covers changes to TCs and TACs.

This AC gives guidance for applicants wishing to apply for the issue of, or the change to, a TAC.

Refer to AC21-7, *Product Certification—Type Certificates*, for information on applying for or amending a TC.

Type Acceptance Certificates (TACs)

General

Type acceptance is a process involving validation of an ICAO NAA TC. There should be no difficulties obtaining type acceptance of an ICAO NAA TC that has been issued in the normal category or equivalent by a “recognised” NAA, such as NAAs for Australia, Canada, USA, Brazil, Britain or Europe. Their design standards and airworthiness certification processes are familiar to CAA. If an importer is contemplating importing an aircraft with a TC issued by an NAA from a country that CAA has had no previous interaction with, prospective applicants should consult with CAA prior to making an application.

Once issued, any subsequent aircraft of that type covered by the TAC are eligible for the issue of an airworthiness certificate under Part 21 Subpart H, *Airworthiness Certificates*.

Note: All aircraft must go through the entry process for the issue of an airworthiness certificate. See AC21-2, Aircraft certification - Airworthiness certificates in the standard and restricted categories, for further details.

For the issue of a TAC, rule 21.41, *Airworthiness requirements*, requires the applicant to show that the aircraft complies with a set of airworthiness and environmental standards specified in Part 21, Appendix C, *Airworthiness Design Standards*.

Applicants who are unsure whether an aircraft, engine or propeller type or serial number is type-accepted in New Zealand, should contact CAA directly with details and their contact information at: certification@caa.govt.nz or info@caa.govt.nz

Effective dates for TACs

For TACs, rule 21.41 accepts the effective date of the applicable standards as the date assigned in the State-of-Design TC, or an equivalent document, unless the Director specifies another date in writing.

Note: Rule 21.41 refers to ‘foreign type certification’, now referred to as ICAO NAA TCs or State-of design TCs.

The Director will only specify other dates where the NAA’s procedures would make the level of standards inconsistent with those that apply for New Zealand type certification.

Design Standards—Standard Category

For the issue of a standard category TAC the set of airworthiness and environmental standards are prescribed in Part 21, Appendix C (a) and include:

- the US Federal Aviation Regulations (FAR) Parts 23 to 36 inclusive
- airworthiness standards that are found by the Director to:
 - comply with the International Civil Aviation Organization (ICAO) Annex 8 requirements and
 - provide levels of safety equivalent to the basic airworthiness standards of the FAR Parts 23-35.

In addition, Part 21 Appendix C (c) details the requirement to provide an aircraft flight manual (AFM) as part of the design standards for an aircraft.

Equivalent Airworthiness Standards

Although the basic design standards are the current FARs, the Director accepts as equivalent the standards which were in force at the time the State-of-Design TC was issued, which includes British or European design requirements or their earlier versions.

Standards which were accepted as equivalent at the time are detailed in Appendix 3. Note these are only applicable to older aircraft and in the context of validation of an older TC (typically TCs that were issued at least 30 years ago). When an applicant applies under each of these standards, the AFM requirements of Part 21, Appendix C (c) should also be applied.

The paragraph under Part 21, Appendix C (c) means that if the original design standards which an aircraft was approved under for the State-of-Design TC did not require an AFM, and therefore there is none referenced under the State-of-Design TC, then a suitable document to be adopted in New Zealand must be provided. For example, the US NAA, the Federal Aviation Authority (FAA), did not require AFMs to be approved for light aircraft until around 1978. (Instead, any mandatory information or flight limitations was provided to the pilot in the form of instrument markings and placards.) However, the aircraft TC holder usually provided a pilot's manual in some form, which was often called the Owner's Manual or something similar. If available CAA adopts this document as the AFM in New Zealand.

If the aircraft does not have such a handbook, for example if it is very old, CAA can help in the selection of a suitable document. If there is no AFM as part of the State-of-Design TC, CAA recommends the applicant just states that fact on the application and requests assistance from CAA with identification or production of an alternative AFM.

An applicant for type acceptance will not normally have to consider whether the design standards for the State-of-Design TC are acceptable, provided the State-of-Design TC was either issued by a recognised country, or it has been previously validated by one of the recognised national airworthiness authorities, such as the FAA.

Changes to TACs

Changes to TACs are covered by Part 21 Subpart D, paragraph 21.95(b), *Design changes requiring a new certificate*.

Originally the Director issued a new certificate and type acceptance report for each new application. Current policy is that a type acceptance report will be issued to cover each State-of-Design TC, and includes all applicable models and variants listed on that State-of-Design TC. The report is amended to a later revision number to add new models or serial number ranges or a change to the original certification basis.

TAC—Application

General

A TAC is issued as a validation of a State-of-Design TC and is based on the supply of the data specified in Part 21 Subpart B. It is not necessary for an example of the aircraft type to have been imported.

An application for a TAC is to be made on the application form. The applicable form can be found on the CAA website: search for 'Forms' and click on the filter for Part 21.

Any person or organisation may apply for a TAC, including an overseas person or organisation such as the manufacturer or TC holder. The support of the State-of-Design TC holder will always be required however, due to the nature of the data required.

The TAC is issued in respect of the aircraft type itself: there is no certificate holder as such. The TAC is issued to validate a State-of-Design TC in New Zealand. For this reason, an actual certificate is not normally produced. However, where the applicant is the TC holder, a certificate can be produced for display purposes.

Note: *All charges associated with the issue of the TAC will normally be invoiced to the applicant. CAA will invoice another client if it receives a written request, and that client has agreed in writing to accept the charges.*

Engines and propellers

Part 21, Subpart B, provides for type acceptance of products, which includes engines and propellers. A type acceptance application for an aircraft can include the engine and propellers, or they can be the subject of a separate type acceptance application.

ICAO type certificate (TC)

Type acceptance in New Zealand is based on validation of the State-of-Design ICAO TC, to ensure that CAA has the most direct supply of continuing airworthiness data. The State-of-Design NAA should also be able to provide the best support of the TC.

Product type details

The applicant should specify the State-of-Design TC and details of which models the TAC is to cover. The only restriction on the number of models that can be included is that they must all be included on the same State-of-Design TC. The data supplied, including AFMs, must cover all the models.

The category of type acceptance granted will usually follow the category shown on the State-of-Design TC, subject to CAA's review of the certification basis.

Type acceptance applicability is usually determined by the coverage of the manuals supplied. Therefore, it may be not only model and variant but also serial number specific.

Supply of data

Data supporting the application should be supplied at the time of the application, or, if it is not available at that time, a covering letter should give the details of when the data will be available. If the applicant is not the TC holder, CAA will contact the TC holder and request the data needed. Any costs imposed by the TC holder for the provision of type data must be met by the applicant.

The applicant should supply with the application copies of the following:

- TC data sheet (except FAA or EASA, which are available on the internet)
- compliance summary documents for airworthiness and environmental certification
- details of any exemption granted, equivalent safety findings or special conditions applied
- maintenance manual (MM)
- parts catalogue

- continuing airworthiness information

for the aircraft, engine and propeller.

Note: For all data, including aircraft and component manuals, CAA prefers electronic format, such as soft copies of documents, or access to a website database.

An inherent part of type acceptance is continued support of the aircraft and component documentation. This will inevitably require the support of the respective TC holder. There is a form available on the CAA website for the use of the respective TC holders as an agreement to supply updates of manuals. To find it on the CAA website, search for 'Forms' and click on the filter for Part 21.

Where the application is for a model on a TC, and another model on the same TC has already been type-accepted, CAA should be consulted before requesting data from the TC holder, as CAA may already hold some or all of the data requirements.

For larger aircraft certificated under FAR Part 25, *Transport Category*, or an equivalent, it is desirable to supply additional data that may subsequently be required for other CAA certificates or approvals. Examples of such additional data are included in Appendix 1 of this AC.

Validation visit

In line with CAA policy, in response to the requirements of ICAO Annex 8, *Airworthiness of Aircraft*, a more in-depth review is conducted where either:

- CAA has not had any recent contact with a manufacturer, TC holder, or NAA of the State-of-Design, or
- the type has new or unusual features or a very recent certification basis, or
- the new type will be a multi-aircraft new fleet for an Air Transport Operator, for which CAA will need to have detailed knowledge and experience to support the introduction.

This review would involve a validation visit by CAA certification specialists to the TC holder and/or manufacturer if different.

This is an opportunity for CAA to become familiar with the aircraft and the approval process and paperwork, as well as establishing contacts with the TC holder. CAA has found it essential to have a good working relationship for technical queries and continuing airworthiness information. Such a visit is provided for under sections 3.0.2.1 and 3.0.2.5 of the Implementation Procedures for Airworthiness under *CAA /FAA Bilateral Airworthiness Safety Agreement*.

In accordance with the Civil Aviation Charges Regulations any such work overseas must be paid for by the applicant, including travel and accommodation costs and expenses. There is updated information on CAA's fees and levies on this page:

<https://www.aviation.govt.nz/about-us/what-we-do/how-we-are-funded/fees-levies-and-charges/>

Training

Where a new aircraft type is being introduced into service in New Zealand which will require significant approval action and subsequent regulatory oversight by CAA, the applicant will need to provide appropriate training for CAA staff who will be involved in approval of the aircraft for air transport operations. This would include:

- a full type-rating course for a flight operations inspector for each type
- a general familiarisation course (typically 1-2 weeks) for a mechanical systems airworthiness inspector
- an avionics familiarisation course for an avionics systems airworthiness inspector.

Ideally this should be provided in advance of the aircraft entering service.

Appendix 1—Additional Data Examples for Large Aircraft Certificated in the Transport Category

DATA	USE
Maintenance, overhaul and repair manuals for airframe, engines, propellers and equipment additional to those required under rule 21.43, <i>Data requirements</i>	Evaluation and issue of airworthiness directives (ADs). Defect and engineering investigations.
The detailed specification for the type	Conformity with operating rule equipment requirements.
Electrical load analysis	Approval of design changes.
Operations manual	Approval of operator's operations manual and training courses.
Master minimum equipment list (MMEL)	Approval of NZ operator's MELs.
Maintenance planning document (MPD)	Approval of maintenance programmes.
Maintenance review board document (MRB)	Approval of maintenance programmes.
Maintenance schedule	Approval of maintenance programmes.

Appendix 2 — Product Certification—Type Acceptance Certificates

Appendix 2 is published separately to the rest of this AC on the AC21-1 landing page here:

<https://www.aviation.govt.nz/rules/advisory-circulars/show/AC21-1>

It is also available here:



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Appendix 3—Equivalent Airworthiness Standards

The following paragraphs list the sets of standards the Director accepts as being equivalent for the issue of a standard category TAC.

Note: *As mentioned in the Equivalent Airworthiness Standards section of this AC, the standards in this section are only applicable to standards which were equivalent at the time for existing TCs. They are usually for older aircraft, typically at least 30 years old.*

British Civil Airworthiness Requirements (BCARs)

Acceptable BCARs include:

- BCAR Part 23 – Light Aeroplanes
- BCAR Part 29 – Rotorcraft
- BCAR Part 31 – Manned Free Balloons

Note: *Part 31 supersedes the earlier British Airworthiness Requirements – Hot Air Balloons.*

In addition, older superseded BCARs will be accepted for aircraft certificated to those standards at the time:

- Section D – Aeroplanes
- Section E – Gliders
- Section G – Rotorcraft
- Section K – Light Aeroplanes

The *British Airworthiness Requirements – Hot Air Balloons*, superseded by BCAR Part 31, are accepted by the Director and are published by the:

British Balloon and Airship Club
Email: information@bbac.org

BCARs are available online at:

[CAP 747: Mandatory Requirements for Airworthiness | Civil Aviation Authority](#)

Civil Air Regulations

Acceptable Civil Air Regulations include:

- Part 3 – *Airplane Airworthiness: Normal, Utility and Acrobatic Categories*
- Part 4b – *Airplane Airworthiness: Transport Category*, subject to compliance with the Special Airworthiness Requirements of Federal Aviation Regulations Part 121 Subpart J
- Part 6 – *Rotorcraft Airworthiness: Normal Category*
- Part 7 – *Rotorcraft Airworthiness: Transport Category*

Civil Air Regulations were published by the FAA. They have now been superseded by FARs. FARs are also available on the FAA website at www.faa.gov.

Joint Airworthiness Requirements (JARs)

EASA has taken over the responsibility for regulating airworthiness and maintenance issues within the EU Member States, so the airworthiness and maintenance JARs of the Joint Aviation Authorities (JAAs) have been transposed or converted into EASA regulatory measures.

Some (e.g. JAR-21, JAR-145 ...) became Implementing Rules (IR) through a Commission Regulation, and others became Acceptable Means of Compliance (AMC) and Certification Specifications (CS) through Agency decisions. As they were finalised, these requirements were made available on EASA's website (www.easa.europa.eu) as EASA IR, AMC or CS.

There is more information at this link:

<https://jaato.com/joint-aviation-requirements-jars/>

JAA retained its function for operations and licensing as well as airworthiness and maintenance issues for the **JAA member states outside EASA**.

Acceptable JARs include:

- JAR-22 – Sailplanes and Powered Sailplanes
- JAR-23 – Small Aeroplanes
- JAR-25 – Large Aeroplanes
- JAR-E – Engines
- JAR-P – Propellers
- JAR-VLA – Very Light Aeroplanes

JAR-VLA applies to aeroplanes with a maximum certified take-off weight of not more than 750 kg and a stalling speed, in the landing configuration, of not more than 45 knots.

The acceptable means of compliance and interpretations of JAR-VLA Section 2 will also be accepted.

Aircraft type-certified under these standards will generally be limited to privileges applicable under the original design standard. JAR-VLA aircraft are limited to Part 91 operations and in many cases day-VFR flight.

EASA Certification Specifications (CS)

Acceptable EASA CS include:

- CS-22 (Sailplanes and Powered Sailplanes)
- CS-23 (Normal, Utility, Aerobatic and Commuter Aeroplanes)
- CS-25 (Large Aeroplanes)
- CS-27 (Small Rotorcraft)

- CS-29 (Large Rotorcraft)
- CS-31HB (Hot Air Balloons)
- CS-E (Engines)
- CS-P (Propellers)
- CS-VLA (Very Light Aeroplanes)
- CS-VLR (Very Light Rotorcraft)

EASA CS are available on their website at <http://www.easa.europa.eu/>.

Other equivalent standards

Other sets of standards may be accepted by the Director as equivalent airworthiness standards if they meet the criteria of Part 21 Appendix C (a)(2). To provide evidence that the criteria are met, the Director may require an applicant to supply:

- a copy of the set of standards and a certified English translation if required
- evidence of the effective date
- evidence that the standards apply, in the country of origin, to operations equivalent to the air transport operations as defined in the civil aviation rules
- evidence that the standards are accepted as meeting the requirements of ICAO Annex 8
- a comparison of the requirements with those of the basic standards that apply for the class of aircraft, engine, or propeller at the same effective date
- accident data relating to the class of aircraft, engine, or propeller complying with the standards

At an early stage, the Director should be advised of any intentions to use a set of other equivalent standards. The Director may already hold the necessary evidence or may have accepted the set as equivalent. In other cases, the Director may have previously decided that a set of standards does not meet the requirements for acceptance in the standard category.

For example, Eastern European and Soviet airworthiness standards pre-1990 have never been accepted as equivalent by any of the recognised western NAAs.

Restricted Category

For the issue of a TAC in the restricted category, an applicant should show that the aircraft complies with a set of acceptable airworthiness standards. Part 21 Appendix C (b) prescribes acceptable airworthiness standards for the restricted category as:

- any of the FARs prescribed in Appendix C (a)(1), excluding those requirements that the Director finds inappropriate for the purpose for which the aircraft is to be used, or
- a set of airworthiness design standards that the Director finds appropriate for the purpose for which the aircraft is to be used.

Restricted category type acceptance certificates may be issued for the following purposes:

- some specific operations under Part 91
- agricultural aircraft operations under Part 137
- special purpose operations, such as helicopter external load operations under Part 133.

Aircraft with a restricted category type acceptance certificate will only be eligible for the issue of an airworthiness certificate in the restricted category for the purpose for which the TAC was issued. This may include the above but may not include air transport operations under Parts 121 and 135.

When an applicant applies under each of these standards, they should apply the AFM requirements of Part 21, Appendix C (c).

Agricultural aircraft operations

Although Part 26 Appendix B.2 calls up some sections of Civil Aeronautics Manual 8 (CAM 8) as additional requirements for agricultural aircraft, CAM 8 in its entirety has never been accepted in New Zealand as an appropriate overall standard for an agricultural aircraft.

This is because the structural and handling provisions are considerably abbreviated from the standard category airworthiness requirements for that class of aircraft. Aircraft certificated to CAM 8 have only been accepted in New Zealand where the aircraft has also been shown to meet the structural requirements of FAR Part 23, or an equivalent set of standards, either by a statement on the TC or a certified statement from the TC holder. In addition, CAA will assess the overall level of non-compliance with a Part 21 Appendix C (a)(1) standard.

Special Purpose Operations

Some NAAs, such as the FAA, have provisions to issue Restricted Category TC based on lesser criteria than that equivalent to FAR Parts 23-35. These are typically based on satisfactory military service. CAA has accepted some helicopter-restricted TC in the past, but these did not have a good safety record. Strict criteria have been imposed for their continued operation. Anyone considering applying for type acceptance of a Restricted Category should contact CAA in advance to discuss this.

An airworthiness certificate issued in the Restricted Category may be limited to flight within New Zealand and will be endorsed as follows:

This aircraft does not meet the airworthiness requirements of ICAO, as prescribed by Annex 8 of the Convention on International Civil Aviation. For this reason, special permission to operate must be obtained from each country over whose territory the aircraft is to be flown.