



DRAFT

Advisory Circular

AC 21-2(1)

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STANDARD CERTIFICATES OF AIRWORTHINESS

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1. REFERENCES

Civil Aviation Safety Regulations 1998 (CASRs) Parts 21 to 35 and Civil Aviation Regulations 1988 (CARs).

2. PURPOSE

This Advisory Circular (AC) provides guidance and information to the public, Civil Aviation Safety Authority (CASA) staff and persons applying for the issue of standard certificates of airworthiness (CoAs).

3. STATUS OF THIS ADVISORY CIRCULAR

This is the first amendment of the AC issued on this subject.

Advisory Circulars are intended to provide advice and guidance to illustrate a means, but not necessarily the only means, of complying with the Regulations, or to explain certain regulatory requirements by providing informative, interpretative and explanatory material.

Where an AC is referred to in a 'Note' below the regulation, the AC remains as guidance material.

ACs should always be read in conjunction with the referenced regulations.

4. ACRONYMS

AC	advisory circular
AD	airworthiness directive
AFM	aircraft flight manual
AWI	airworthiness inspector
CAA{UK}	Civil Aviation Authority of the United Kingdom
CAR	Civil Aviation Regulations 1988
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulations 1998
CoA	certificate of airworthiness
DGAC	Direction Generale de l'Aviation Civile (of France)
EASA	European Aviation Safety Agency
FAA	Federal Aviation Administration (of the United States of America)
FOM	first-of-model
FOT	first-of-type
ICAO	International Civil Aviation Organization
LBA	Luftfahrt-Bundesamt (of the Federal Republic of Germany)
MTOW	maximum take-off weight
NAA	National Airworthiness Authority
RA-Aus	Recreational Aviation Australia
RLD	Rijks Luchtvaart Dienst (of the Kingdom of the Netherlands)
STC	supplemental type certificate

5. DEFINITIONS

aeronautical product means any part or material that is, or is intended by its manufacturer to be, a part of or used in an aircraft, unless excluded by the regulations.

aged aircraft means an aircraft over 14 years old since the date of manufacture with a maximum take-off weight in excess of 5700 kg.

aircraft model means a particular version of a type of aircraft, that is distinguished from another version of the same type by a change of sufficient effect on the weight, balance, structural strength, operational characteristics as would require a separate entry on a type certificate, identifying and approving the particular version as distinct from the identification and approval of other versions.

aircraft type means a design and make of aircraft and refers to a group of essentially similar aircraft which, although possibly existing in different models, stem from a common basic design.

airworthiness directive (AD) means a mandatory regulatory document which requires the registered operator to comply with the requirements to address an unsafe condition on an aircraft or aeronautical product.

Australian AD means an airworthiness directive issued by CASA under CASR 39.001.

certificate of airworthiness means a standard certificate of airworthiness or a special certificate of airworthiness.

National Airworthiness Authority (NAA) means the airworthiness regulatory authority of the country.

registration holder of an aircraft means the person whose name is entered in the Australian Civil Aircraft Register as that of the aircraft's owner.

standard certificate of airworthiness means a certificate of airworthiness issued for:

- (a) an aircraft type certificated in the normal, utility, acrobatic, commuter, or transport category;
- (b) a manned free balloon; or
- (c) an aircraft in a special class of aircraft.

state of design means the State having jurisdiction over the organisation responsible for the type design.

state of design AD means an airworthiness directive issued by the NAA of the state of design. It is also called a Country-of-Origin AD.

type acceptance certificate means a type acceptance certificate issued under CASR 21.029A.

type certificated means issued with a type certificate or type acceptance certificate.

6. BACKGROUND

- 6.1** Type certification is the process which can lead to issue of a type certificate for the design of a new type of aircraft. Type certification is necessary before a certificate of airworthiness (CoA) in one of the standard categories can be issued for an aircraft. Aircraft airworthiness certification is the process of assessing an aircraft against its type design, and ensuring the aircraft is in a condition for safe operation. Satisfactory completion of this process culminates in issue of a CoA for the individual aircraft.
- 6.2** The obligation on Contracting States of the International Civil Aviation Organization (ICAO) to issue CoAs, is specified in Part II, Section 3 of ICAO Annex 8 *Airworthiness of Aircraft*. A CoA may be issued to an individual aircraft on the basis of evidence that the aircraft complies with the applicable airworthiness requirements, and that the aircraft has been satisfactorily constructed and maintained. The airworthiness categories in which Australian CoAs may be issued are described in detail in a companion Advisory Circular, AC 21-1 *Aircraft Airworthiness Certification Categories and Designations Explained*.
- 6.3** A CoA is necessary for each individual Australian aircraft on the Australian Civil Aircraft Register as one of the legal conditions to being able to fly.

6.4 Issue of a standard CoA to an individual aircraft involves:

- ensuring that the aircraft conforms with the definition of the design and its method of construction i.e. the aircraft conforms to the type design; this in turn ensures that the aircraft meets:
 - a design standard; and
 - the specified airworthiness requirements;
- ensuring that the aircraft is free from manufacturing and post-production defects:
 - ensuring compliance with all applicable airworthiness directives (ADs). For imported aircraft, applicable ADs will include all applicable ADs from the state of design of the aircraft type;
- ensuring that all required modifications, as dictated by design changes and applicable ADs, have been embodied;
- ensuring that the required operational equipment has been fitted; and
- ensuring that the aircraft's airworthiness state is properly reflected in the required documentation including that alterations have been carried out in accordance with approved data.

7. STANDARD CERTIFICATES OF AIRWORTHINESS

7.1 A standard CoA may be issued in the following categories:

- transport;
- normal;
- utility;
- acrobatic;
- commuter; and
- manned free balloons.

7.2 Standard CoAs are only issued to aircraft which meet prescribed airworthiness standards e.g. CASR Part 23 (a design standard for small aircraft); CASR Part 25 (a design standard for transport category aircraft); CASR Part 31 (a design standard for manned free balloons); or a one-off standard, prescribed and published by CASA for special classes of aircraft.

7.3 Special CoAs or special flight permits cover all other cases. For relevant information, refer to AC 21-3 *Special Certificates of Airworthiness - Overview*.

8. APPLYING FOR A STANDARD CERTIFICATE OF AIRWORTHINESS

8.1 Who may apply

8.1.1 CASR 21.173 (1) states that an aircraft registration holder is eligible to apply for a CoA for the aircraft. The aircraft registration holder is the person nominated on the Certificate of Registration. Therefore one major prerequisite for application for a standard CoA is that the aircraft must already be registered.

8.2 Other basic prerequisites

8.2.1 As well as the aircraft being registered and appropriately marked there are two other basic prerequisites for issue of a standard CoA, as specified by the regulations:

- the aircraft must have been type certificated; a type certificate, type acceptance certificate, or equivalent document must have been issued; and
- a fireproof manufacturer's data plate must be secured to the aircraft, as required by CASR 21.820.

8.3 Where to apply

8.3.1 An applicant may wish the processing of an application for a standard CoA to be undertaken from the outset, by a person who is authorised by CASA to process and issue a CoA on CASA's behalf. Such persons have their authority conferred under CASR 21.176, and hence they may be referred to as '21.176 authorised persons'. In this case the 21.176 authorised person will undertake the necessary initial co-ordination with CASA field and central offices.

8.3.2 Alternatively, applicants for standard CoA issue may apply to the CASA regional office which covers the geographical prime base of intended operations. However, nothing precludes an applicant making the initial approach to the nearest CASA field office, and requesting CASA to coordinate the application.

8.4 The application form

8.4.1 A standard CoA application should be made on CASA Form No. 717 *Application for issue of a Standard Certificate of Airworthiness*. Application forms may be obtained from any one of the CASA field offices or the CASA website.

8.4.2 The initial form details should be typed, or filled in using neat block letters and a blue or black pen, as follows:

- **registration mark:** enter the aircraft's registration mark after the VH- designator;
- **manufacturer:** enter the name of the manufacturer as it appears on the aircraft manufacturer's data plate;
- **serial number:** enter the aircraft serial number as it appears on the aircraft manufacturer's data plate;
- **model:** enter the model designation if and as it appears on the aircraft manufacturer's data plate. If the details are not on the plate, use the relevant information contained in the aircraft's flight manual, and/or the type certificate data sheet. (Note: This information should align with that specified on the applicable Certificate of Registration);
- **place and year of manufacture:** if this information is not available from the manufacturer's data plate or log books, then it must be obtained from the aircraft manufacturer, using the aircraft's serial number with the query;
- **aircraft location and maintenance organisation:** enter aircraft location and/or the approved organisation where the aircraft is to be processed for CoA;
- **category requested:** tick boxes as applicable, noting:
 - a standard CoA can be issued in more than one category (for example normal and utility) if the relevant design standards for each are met;
 - two CoAs (for example, one to cover standard CoA category operation, and one to cover restricted category operation) may be issued for the one aircraft. An applicant

- for multiple CoAs in this context is entitled to such if compliance is shown with the requirements of each category when the aircraft is in the configuration for that category. (The applicant must show that the aircraft can be converted from one category to the other by removing or adding equipment using simple mechanical means);
- that the multiple certificates box should be ticked if multiple certification as described above is to be pursued. Note also that an application for issue of the special CoA must be made at this time (refer to AC 21-3 *Special Certificates of Airworthiness*); and
 - that if a standard CoA in the special class category is being requested, then the class is entered on the dotted line e.g. airship, tiltrotor etc;
 - **details of applicant:** enter the specific details as required. Note that a P. O. Box address is not acceptable, given the possible requirements for urgent document forwarding by CASA. The note in this block addresses the payment of a fee. This is discussed in more detail further below;
 - note also that the two requirements in Block No.5 ('Other details required for this application') are only necessary for special case aircraft:
 - the type certificate and type certificate data sheet will be supplied by the relevant holder or licensee of the type certificate, when that person is making application for the CoA for a new aircraft; and
 - the lower box is ticked in the case of transport category aeroplanes where:
 - the aeroplane was manufactured after 16 October 1987 in which case the following must be satisfied: for an aeroplane that is required to have more than one passenger emergency exit for each side of the fuselage, no passenger emergency exit shall be more than 60 ft from any adjacent passenger emergency exit on the same side of the same deck of the fuselage, as measured parallel to the aeroplane's longitudinal axis between the nearest exit edges; and
 - the applicant attaches the required compliance evidence for this with the application form; and
 - for the application form to be in the minimum state of completion for lodgement, the applicant must have signed Block No.3. It is possible for the form to be lodged by a person other than the aircraft registration holder. A letter of authority will be required in this case.

8.5 Payment of fees

8.5.1 Section 97 of the Civil Aviation Act requires prescribed fees to be paid to CASA in advance of work to be done.

8.5.2 In the case of issue of CoAs, an hourly fee specified in the CASA Schedule of Fees is charged. An estimate, payment and reconciliation procedure is as follows:

- Upon receiving application (form No.717), CASA prepares an estimate based on experience, and the specific tasks to be undertaken. This is usually when the applicant makes initial contact with the airworthiness inspector (AWI) assigned to the task. General eligibility, timeframe and operational role aspects are discussed. The estimate is based on time estimates, and travel costs as applicable;
- The applicant pays the estimated fee;
- Actual man hours expended are recorded as the task is undertaken; and

- A reconciliation will be made just before the CoA is issued. If an overestimate has been made, a refund will be paid to the applicant. If fees have been underestimated, a final payment from the applicant will be required prior to CoA issue.

8.5.3 A different fee structure may apply in the case of application through a 21.176 authorised person. This is a matter for the applicant and authorised person to negotiate, and is outside CASA control.

9. AIRCRAFT SOURCES

9.1 General

9.1.1 The sourcing of an aircraft involved in a standard CoA application process has a direct bearing on the expense, effort, time and data provision requirements of the applicant. The relevant variables are:

- whether the aircraft is Australian or foreign manufactured;
- whether the aircraft has been based in Australia prior to application, or whether it is being imported;
- whether the aircraft is new or used;
- whether the aircraft is a first-of-type (FOT) or first-of-model (FOM) for the purpose of CoA application;
- the age of the aircraft; and
- the modification status of the aircraft.

9.2 Country of manufacture

9.2.1 If an aircraft is one of a type manufactured in Australia, then, as a general rule, there should be few complications associated with provision of data necessary for design conformance; type certification data will be by CASA, and the CoA applicant would not normally be troubled in this regard. AC 21-13 provides guidance for issue of type certificates for Australian-designed aircraft.

9.2.2 If an aircraft of foreign manufacture has been approved for operation in Australia, then it will have been issued with some form of type certificate or equivalent document, depending on the era of such approval:

- for aircraft approved before November 1990, either a letter of approval, or previous issue of an Australian CoA;
- certificate of type approval (CTA) issued after a design validation, under CAR 22, or through automatic type acceptance, under CAR 22A;
- type certificate (as discussed below); or
- type acceptance certificate (as discussed below).

9.2.3 CASR 21.29A allows CASA to automatically issue an Australian type acceptance certificate (TAC) for an aircraft type that has a current type certificate issued to it by one or more of the seven recognised overseas authorities:

- the Federal Aviation Administration (FAA) of the USA;
- Transport Canada (Civil Aviation);
- the Direction Generale de l'Aviation Civile (DGAC) of France;
- the Civil Aviation Authority of New Zealand (CAA{NZ});

- the Civil Aviation Authority of the United Kingdom (CAA{UK});
- the Rijks Luchtvaart Dienst (RLD) of the Kingdom of the Netherlands; and
- The Luftfahrt-Bundesamt (LBA) of Federal Republic of Germany

As the European Aviation Safety Agency (EASA) is now the NAA for CAA{UK}, RLD, DGAC and LBA, it is now treated as a recognised overseas authority even if the country of manufacture of the aircraft which EASA is certifying is not one of those specified above.

Note: AC 21-30 Type Acceptance Certificates-Automatic Issue provides guidance for automatic issue of type acceptance certificates.

9.2.4 If a type acceptance certificate cannot be issued as per 9.2.3 above, then a full design validation must be undertaken by CASA. This involves scrutiny of design data by CASA technical specialists, and possibly a team technical visit to the manufacturer's site, in the case of transport category aircraft, and small aircraft, if new technology or unique design is involved. The applicant for this process to be undertaken (which would normally be the CoA applicant) is liable for the costs of such an exercise, which are additional to those already discussed at para 6.5 above. The whole validation process culminates in issue of an Australian type certificate. AC 21-31 *Aircraft type Certification-non-Automatic Issue* provides guidance for non-automatic issue of Australian type certificates.

9.3 Imported aircraft

9.3.1 It is desirable for an application for a standard CoA for aircraft being imported into Australia to be supported by a foreign export CoA or equivalent document (as discussed in more detail later in this AC), and that Australian format logbooks and other documentation have been raised.

9.4 Used aircraft

9.4.1 Data relevant to the history of used aircraft will be required, as discussed below.

9.5 First-of-type/first-of-model

9.5.1 CASA produces a ground inspection report (GIR), based on the CoA issue exercise for a FOT or FOM aircraft. It is for this reason that such a CoA issue exercise is more time-consuming than those for subsequent aircraft of the type or model. FOT/FOM CoAs issue exercises are normally only carried out by CASA inspectors; they are only delegated to a 21.176 authorised person in special circumstances. One criterion may be that the particular aircraft is a similar model to an aircraft already issued with an Australian CoA. A special Instrument of Appointment is required when the 21.176 authorised person is to raise the FOM ground inspection report.

9.5.2 Any condition identified during the ground inspection will be included as a condition on the CoA for all aircraft of this type and model.

9.6 Age and modification status

9.6.1 Old aircraft and those incorporating major modifications usually incur some extra time and effort in terms of documentary requirements, as discussed below.

10. SUPPLY OF DATA

10.1 Timely submission of the following data by the applicant for inspection by CASA or an authorised person will assist in the processing of an application for the issue of a CoA. It is in the applicant's interest that such submission should be made at the time of application, or as soon as practicable thereafter:

- all aircraft:
 - the Certificate of Registration;
 - evidence that there is an Australian type certificate or type acceptance certificate in force for the aircraft type and model;
 - evidence that the particular aircraft complies with the type design;
 - the logbooks or equivalent maintenance records for the aircraft;
 - the current weight and balance report; and
 - a copy of the aircraft flight manual (AFM), if it is required by the regulations;
- used aircraft:
 - data listed for *all aircraft* (above); and
 - the following data from the aircraft's service history:
 - total hours and flights of the aircraft and all life limited components;
 - the number of landings made, or if not available, a reliable estimate thereof;
 - the number of cabin pressurisation cycles and the pressure differentials to which the cabin has been subjected during its life;
 - a statement describing the past operational uses of the aircraft, including any special mission roles and the approximate times in each role;
 - a record of total hours and/or operating cycles, as appropriate, of all designated life-limited components of engines;
 - a record of all major structural and life-limited component changes such as those of wings, rotor blades, tailplanes etc., and the individual histories of such components unless new when fitted;
 - a record of all major structural repairs, and details of all salvage schemes, including the nature and cause of the damage in each case e.g. corrosion, cracking, lightning strike or accidental damage; and
 - a record of all major repairs performed on manned balloons;
- aged aircraft:
 - special requirements may be imposed on aircraft in excess of 5700 kg MTOW where the aircraft is older than 14 years from the date of manufacture. For such aircraft, data requirements are:
 - data listed for *used aircraft* (above);
 - details regarding previous operators of the aircraft, previous countries in which the aircraft has operated, and details of all structural repairs to the aircraft not carried out in accordance with the manufacturer's approved data; and
 - a copy of the relevant Structural Inspection Document (FAA Advisory Circular No. 91-60 is relevant);
- imported aircraft:
 - data listed for all aircraft, used aircraft or aged aircraft as appropriate; and

- one of the following documents:
 - a current export CoA for export to Australia, or current CoA. An export CoA should have been issued within 90 days and 50 hours flight time at the date of application for the CoA. The export CoA should also include evidence of compliance with all state of design ADs applicable to the aircraft; or
 - if neither of the above is available, nor can be reasonably obtained, then a written statement from the aircraft manufacturer, or from a maintenance organisation with an appropriate approval for aircraft maintenance for the type, that all applicable state of design ADs have been complied with, and the aircraft conforms to the type design; and
- modified aircraft:
 - A major modification is a change in the type design which has an appreciable effect on the weight, balance, structural strength, reliability, operational characteristics, or other characteristics affecting the airworthiness of an aircraft, aircraft engine or propeller, but not so appreciable as to necessitate a change to the type certificate. The major modification may be incorporated as a supplemental type certificate (STC). This is discussed in paragraph 16 of this AC. For aircraft incorporating major modifications, the data requirements are:
 - data as listed for the applicable aircraft above; and
 - written evidence that the modifications were incorporated in accordance with approved data; or
 - manufacturer's data approved by a recognised authority; or
 - data approved by a recognised authority in the state of design; or
 - data approved by an appropriate (CASA) authorised person.

11. THE AIRCRAFT INSPECTION

- 11.1** As well as carrying out detailed documentary checks on the data and documentation provided as per paragraph 8 above in accordance with approved maintenance data, the AWI or authorised person may inspect the aircraft. An inspection should determine whether it conforms to the type design, any modification or repairs to it have been carried out and it is in a condition for safe operation (refer to CASR 21.183(5)).
- 11.2** It is therefore incumbent on the applicant to make the aircraft available at a time and place mutually agreed to between the AWI or authorised person, and the applicant.
- 11.3** The physical inspection involves the completion of detailed checklists, and encompasses:
- inspection of structure, systems and engines, to the extent considered necessary to verify the aircraft is in a safe condition for flight, and to correlate physical aspects with the aircraft's documentation. The inspector will arrange provision of inspecting aids and checklists, but the applicant will be responsible for providing internal access to structure and systems if this is beyond the inspector's scope using his or her limited resources;
 - ensuring the correct registration markings and fireproof manufacturer's data plate are displayed;
 - correlation of aircraft data plate details with documentation;
 - ensuring all placards as called up by the AFM, Maintenance Manual and/or ADs are correctly positioned, formatted and legible;
 - ensuring the role equipment is correctly installed; and

- determining if operational equipment as required by the aircraft's intended role e.g. instrumentation, communication and navigation equipment, oxygen provisions, survival equipment etc. is correctly installed.
- 11.4** Formal non-compliance documents are not raised during the inspection process. Rather, the AWI or authorised person will continue a dialogue with the applicant in this regard, advising him or her of deficiencies if and as they are discovered, and advising the applicant in regard to the need for rectification. Non-compliances may be addressed in different ways; either:
- rectified before the CoA can be issued;
 - the applicant can accept operational restrictions on the aircraft for subsequent use (see paragraph 13.2 of this AC); or
 - transferred to the flight and technical log as deferred defects.
- 11.5** Some overseas regulatory authorities require a test flight (often referred to as a full maintenance test flight) as part of the CoA issue procedure. This is not the case in Australia. However, the need for some particular form of check test flight may arise during the course of the CoA aircraft inspection process e.g. to investigate apparent design non-compliances, or the nature of defects, which cannot be resolved by ground inspection alone.
- 11.6** With the issue of CASR Part 21, such flights are to be considered as maintenance flight tests, rather than a test flight for the purpose of demonstrating compliance as set out in 21.191(b). These flights will now be covered by an endorsement on the maintenance release, stating that a flight test is required for a particular purpose (refer to CAR 1988 43(9)).
- 11.7** Therefore, the CoA can be issued pending satisfactory completion of the maintenance flight tests. Both the CoA and maintenance release will require appropriate conditions and endorsements respectively for this interim period.
- 11.8** Once the aircraft and document inspections by the AWI or authorised person have been satisfactorily completed and any flight test satisfactorily completed, then that person completes the process:
- block No. 4 of CASA Form No. 717 is completed; conditions are entered overleaf if applicable;
 - in the case of FOT/FOM aircraft, receipt of ground inspection report documentation (at CASA central office) is confirmed;
 - outstanding costs are recovered from the applicant (See paragraph 8.5.2 above); and
 - the CoA is issued to the applicant.

12. MULTIPLE AIRWORTHINESS CERTIFICATION

- 12.1** If multiple airworthiness certification has been applied for as per paragraph 8.4.2 (category requested), for example in regard to the restricted category multiple certification, then the AWI or authorised person will have ensured that all the requirements for restricted category operation were checked during the CoA inspection, as well as ensuring the conversion from one category to the other by removing or adding equipment can be undertaken using simple mechanical means. The applicant may have to perform demonstrations in this respect to the satisfaction of the AWI or authorised person.

12.2 This sub-process will be completed when the special CoA in the restricted category is issued concurrently with the standard CoA (refer to AC 21-6 *Restricted Category Aircraft - Certification*). A similar process applies for other multiple airworthiness certifications.

13. CONDITIONS APPLIED TO A CERTIFICATE OF AIRWORTHINESS

13.1 CASA or an authorised person is permitted under CASR 21.176 to place any condition on the issue of a CoA considered necessary in the interests of aviation safety. This may include operational limitations. Any condition will be in writing, attached to the CoA.

13.2 The AWI or authorised person will, as a matter of course, fully discuss all proposed CoA conditions with the applicant prior to issue of the CoA. The aircraft must be subsequently operated and/or maintained under the terms of the CoA conditions.

14. STATUS OF THE CERTIFICATE OF AIRWORTHINESS

14.1 Duration

14.1.1 Australia generally does not currently require that standard CoAs be renewed on a periodic basis, as is the practice in some overseas countries, although the CoA can be issued for a specific period. The philosophy here is to ensure ongoing airworthiness of aircraft through prescribed maintenance requirements, surveillance and other continuing airworthiness controls.

14.2 Transfer

14.2.1 An Australian CoA is transferred with the aircraft as the CoA is issued to the particular aircraft. Thus the aircraft registration holder may change, but this does not invalidate the CoA. However, a CoA ceases to be in force if the aircraft ceases to be registered in Australia.

14.3 Cancellation/suspension

14.3.1 CASA has the power to suspend or cancel an Australian CoA. Such action must be through written notice to the aircraft registration holder. Such action will be taken if maintenance on the aircraft is not carried out in accordance with the appropriate regulations, and/or, in the case of regular public transport aircraft, if type certification support, in the sense of continuing airworthiness obligations, ceases from an overseas source. If CASA otherwise considers cancellation/suspension action is warranted in the interests of safety, then it may also suspend or cancel the CoA.

14.3.2 A suspension of a CoA will be lifted on a date prescribed by CASA.

14.3.3 If a CoA has been cancelled, either through action as per 14.3.1 above, or after an aircraft ceases to be on the Australian Civil Aircraft Register, then a new CoA will be required.

14.4 Variation

14.4.1 If a condition on a CoA is to be varied by CASA, then the CoA will be re-issued.

14.5 Surrender

14.5.1 If a CoA stops being in force, expires or is suspended or cancelled, the aircraft registration holder must surrender the CoA to CASA, on written request from CASA.

15. OVERSEAS ISSUE OF AN AUSTRALIAN CERTIFICATE OF AIRWORTHINESS

- 15.1** CASA reserves the right to refuse a request to assess an aircraft overseas. Under such circumstances, the applicant would need to establish the availability of an authorised person (qualified for the particular aircraft).
- 15.2** Australian CoAs are not normally issued overseas by CASA, due to resource limitations, the recovery of associated costs and the amount of preparation and travel time involved.
- 15.3** The applicant must make a written, justifiable request to the field office that will be issuing the CoA, providing:
- the reasons (justification) for the request;
 - details of the location of the aircraft;
 - details of the maintenance organisation that will be performing maintenance on the aircraft and making the certification in Block No. 4 of the CoA application form; and
 - the aircraft type and model.
- 15.4** The applicant must also acknowledge in writing that he or she accepts the principle of full cost recovery, including travel and accommodation costs. These costs are in addition to the CoA issue fees as already discussed in paragraph 8.5.
- 15.5** The travel and accommodation costs for the AWI include:
- business class international travel, economy class internal travel;
 - any connecting surface travel;
 - salary travel time costs;
 - accommodation costs;
 - travel allowance;
 - sundries allowance; and
 - clothing allowance (if applicable).
- 15.6** Advanced payment/reconciliation procedures as described in para 8.5.2 will also be followed in regard to these costs.
- 15.7** In the case of FOT/FOM aircraft where automatic acceptance is involved, the Australian type acceptance certificate must have been issued by CASA prior to the AWI's departure.
- 15.8** Where a full design validation exercise has been involved for a FOT/FOM aircraft prior to issue of the Australian type certificate, as in paragraph 9.2.4 above, then the issue of a CoA may not immediately follow the CASA team design validation visit, for the following reasons:
- there are invariably registration and contractual problems which delay immediate CoA issue;
 - the manufacturer is forced to accelerate the processing of modifications and flight manual amendments to a degree inconsistent with safe and proper administrative and airworthiness control; and
 - the regulatory authority in the country of origin may be pressured to rush its approval and endorsement procedures to the detriment of other established programs and priorities.

16. SUPPLEMENTAL TYPE CERTIFICATES (STC)

- 16.1** An STC formally identifies a major modification normally carried out on an aircraft by a party other than the type certificate holder, and is supported by an approved data package (refer to CASR 21.E).
- 16.2** An STC incorporated into an aircraft for which CoA issue is required will fall into one of three groups:
- an STC of Australian design, approved by CASA;
 - a foreign STC which has been previously accepted by CASA; or issued by an authority of a recognised country and automatically accepted under CASR 21.114; and
 - STCs which have not been approved or accepted by CASA as above.
- 16.3** An STC must be applicable to the particular aircraft by serial number and be in accordance with the type certificate or type acceptance certificate certification basis.
- 16.4** In the case of STCs which have not been approved or accepted by CASA above, it will be the responsibility of the applicant to furnish to CASA the design data package for the STC, so that CASA technical specialists may carry out a design validation. The package required, consisting of drawings, test reports, flight manual supplement (if required) etc., is that lodged by the STC holder to the regulatory authority which issued the STC. Applicants must be aware that the prime aircraft manufacturer and any overseas regulatory authority involved are under no obligation to, and indeed may be precluded from, supplying the STC data package. The applicant will have to negotiate with the STC holder, and this often takes time; the STC holder will normally charge for provision of the data. Costs are the applicant's responsibility. CASA fees for Australian validation approval will also apply (see paragraph 8.5).
- 16.5** Finally, a physical inspection, as part of the overall CoA issue inspection, of the STC as fitted to the specific aircraft, may be required in order to establish conformity of the STC. However, the aircraft documentation should be checked that the continuing airworthiness and maintenance requirements are adequately addressed.
- 16.6** For further information on STCs, see AC 21-15 *Supplemental Type Certificates*.

17. RA-AUS REGISTERED AIRCRAFT

- 17.1** An aircraft currently operating on the Recreational Aviation Australia (RA-Aus) register under Civil Aviation Order (CAO) 95.55 exemptions is not required to be maintained to the same standard of continuing airworthiness as an Australian aircraft with a CoA. Owners may wish to obtain a CoA after a period of operation on the RA-Aus register.
- 17.2** Any application for issue of an Australian standard CoA must be considered under CASR 21.183(4). This requires that the aircraft be shown to conform to the type certificate for the type of aircraft. The following procedure represents one means for an ex-RA-Aus aircraft to be shown to conform to the Type Certificate.
- 17.3** The aircraft must be inspected by either:
- the aircraft manufacturer; or
 - an approved organisation which has an agreement with the aircraft manufacturer for supply of approved data at the standard required by the current drawing list, product improvements, ADs etc.

17.4 On completion of the inspection of the aircraft, a Statement of Conformity, form No. 724 concerning the current status of the aircraft must be issued and certified. A copy of the form may be obtained from the CASA website or any one of the CASA airworthiness field offices. This statement becomes a part of the maintenance records of the aircraft.

17.5 All lifed components must be either:

- replaced; or
- overhauled in accordance with approved data and certified before return to service; or
- inspected in accordance with a procedure approved by CASA and certified as suitable for return to service for a period to be nominated.

Note: Where there is no approved overhaul or inspection procedure for a lifed component, the component must be replaced or a suitable procedure developed and submitted to CASA for approval.

17.6 All engines must be overhauled unless there is evidence acceptable to CASA regarding the engine's time-in-service and maintenance history.

17.7 All unapproved modifications, repairs or variations must be approved under the CASRs or removed. Unapproved components must also be replaced or approved under the CASRs.

17.8 However, it is more likely that the owner of an RA-Aus registered aircraft would apply for a special certificate of airworthiness in the primary or intermediate category, see also ACs 21-7 and AC 21-8 respectively.

18. ASSOCIATED MATTERS

18.1 The following matters are associated with CoA exercises. In some countries, these are integral with CoA application/issue procedures and have introduced confusion for some applicants seeking an Australian CoA.

18.2 Noise certification

18.3 Noise certification for individual aircraft is required before the aircraft can legally be operated in Australian territory. Aircraft noise is regulated through the Air Navigation (Aircraft Noise) Regulations, introduced under the Air Navigation Act 1920, in 1984. Noise certification or lack of such has no legal impact on type approval, or individual CoA issue. However, if an individual aircraft does not meet the Australian noise requirements, then it is illegal for that aircraft to operate in Australian territory, even though the aircraft may have a valid CoA.

18.4 Application for noise assessment for individual aircraft can be made to:

The Manager Environment Monitoring
Airservices Australia
GPO Box 367
Canberra. ACT 2601
AUSTRALIA.

Facsimile: 61 2 6268 4201
email: environment@airservices.gov.au

18.5 Import of aircraft

18.6 The formalities associated with the import of aircraft do not directly affect CoA application/issue, and are not matters which involve CASA.

18.7 The liaison required between the applicant and Australian Customs Service in regard to import formalities is straight forward. The applicant may choose to use a customs broker, or lodge an application directly with the Australian Customs Service.

18.8 Unpaved runway certification

18.9 Individual aeroplanes at or below 5700 kg MTOW may operate on unpaved runways in Australia, without the need for formal certification. Aeroplanes above 5700 kg MTOW are required to be certificated (by aircraft type) for such operations, with appropriate flight manual supplements or integrated data in the AFM.

18.10 Maintenance release

18.11 A maintenance release is not issued prior to CoA issue. However, an aircraft operating on a standard CoA cannot legally fly until a maintenance release has been issued and is in force.