



# ADVISORY CIRCULAR AC 21-14 v4.1



# **Production certificates**

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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.

Advisory Circulars should always be read in conjunction with the relevant regulations.

# **Audience**

This advisory circular (AC) applies to:

- applicants for a production certificate
- production certificate holders maintaining their certificates.

# **Purpose**

This AC gives information and guidance to persons applying for or holding production certificates.

This AC is not mandatory and does not constitute a regulation, nor will the Civil Aviation Safety Authority (CASA) use it as the basis for accepting or rejecting other means of compliance with the regulations. Other means of compliance may be acceptable if in compliance with the regulations.

### For further information

For further information on this AC, contact CASA's Airworthiness and Engineering Branch (telephone: 131 757; email: airworthiness.standards@casa.gov.au).

# **Status**

This version of the AC is approved by the Manager, Airworthiness and Engineering Branch.

Note: Changes made in the current version are annotated with change bars.

Version	Date	Details
v4.1	August 2018	Minor amendment to include information about incorporation of STCs by reference in production to formalise harmonisation with the corresponding parts of FAA Order 8120.22A. Various miscellaneous corrections and updates.
v4.0	May 2014	This is the fourth version of this AC and replaces AC 21-14(2) dated February 2012. It has been amended to update certain information following the amendments to Subpart 21.G of the Civil Aviation Safety Regulations 1998 (CASR) in July 2013.

Unless specified otherwise, all subregulations, regulations, divisions, subparts and parts referenced in this AC are references to the *Civil Aviation Safety Regulations 1998 (CASR)*.

Version	Date	Details
(2)	February 2012	This AC supersedes AC 21.14(1) dated May 2006. This version has been amended to update regulatory references in Appendix A - 4.2, following the publication of a new Subpart 21.M of CASR in June 2011.
(1)	May 206	This AC supersedes AC 21.14(0) dated September 1999 and includes information on amendments to CASR Subpart 21.G issued in November 2003.
(0)	April 1998	This AC is to be read in conjunction with CASR Part 21 Subpart G (CASRs 21.131 to 21.166).

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## 1 Reference material

### 1.1 Acronyms

The acronyms and abbreviations used in this AC are listed in the table below.

Acronym	Description
AC	Advisory Circular
APMA	Australian Parts Manufacturer Approval
ARC	Authorised Release Certificate
ATSO	Australian Technical Standard Order
CAR	Civil Aviation Regulations 1988
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulations 1998
CofA	Certificate of Airworthiness
ETSO	European Technical Standard Order
MRB	Material Review Board
PLR	Production Limitation Record
STC	Supplemental Type Certificate
TC	Type Certificate
TSO	Technical Standard Order
Acronym	Description
AC	advisory circular
CAR	Civil Aviation Regulations 1988
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulations 1998

#### 1.2 Definitions

Terms that have specific meaning within this AC are defined in the table below. Additional definitions are available in regulation 21.132 and the CASR Dictionary. Where defined terms are used within this AC, they are italicised on first use and referenced via a footnote.

Term	Definition
Aircraft/aeronautical product	A Class I, Class II or Class III product.
Authorised release certificate (ARC)	A document issued by the manufacturer of an aircraft engine, propeller, Class II or Class III product, manufactured under Part 21, that includes a statement that the product conforms to its product design and is in a condition for safe

Term	Definition	
	operation.	
Class I product	A complete aircraft, aircraft engine or propeller for which a type certificate or foreign type certificate has been issued.	
Class II product	A major component of a Class I product (for example, wings, fuselages, empennage assemblies, landing gears, power transmissions and control surfaces), the failure of which would jeopardise the safety of a Class I product; or any part, material, or appliance, approved and manufactured under an ATSO in the "C" series.	
Class III product	Any part or component which is not a Class I or Class II product and includes standard parts (for example, those designated as AN, NAS or SAE).	
Licensing agreement	A commercial agreement between a type certificate or supplemental type certificate holder and a production certificate holder (or applicant) formalising the rights and duties of both partners to use the design data for the purpose of manufacturing the product or part.	
One-off production certificate	A production certificate for the manufacture of Class II or Class III products, as described in subregulation 21.133 (2B).	
Person	An individual or body corporate.	
Quality system	A manual describing the inspection and test procedures necessary to ensure that each product manufactured under the production certificate is in a condition for safe operation and conforms to:  a. for a Class I product—the type design b. for a Class II, Class III or unapproved Class I product—the product design.	
Record	Information inscribed on a tangible medium or stored in an electronic or other medium that is retrievable in perceivable form.	
Supplier	Any person who furnishes aeronautical products or services to a production certificate holder.	
Term	Definition	

#### 1.3 References

#### Regulations

Regulations are available on the Federal Register of Legislation website <a href="https://www.legislation.gov.au/">https://www.legislation.gov.au/</a>

Document	Title
Part 11 of CASR	Regulatory administrative procedures
Part 13 of CASR	Enforcement procedures
Part 21 of CASR	Certification and airworthiness requirements for an aircraft and parts
Subpart 21.G of CASR	Production certificates
CASR Dictionary	
Schedule 1 to the Civil	Fees for aviation regulatory services

Document	Title
Aviation (Fees) Regulations 1995	
Regulations 1995	

#### **Advisory material**

CASA's advisory circulars are available at <a href="http://www.casa.gov.au/AC">http://www.casa.gov.au/AC</a>

CASA's Civil Aviation Advisory Publications are available at <a href="http://www.casa.gov.au/CAAP">http://www.casa.gov.au/CAAP</a>

Document	Title
AC 21.13	Australian-Designed Aircraft - Type Certification
AC 21-16	Approval of Materials, Parts, Processes and Appliances
AC 21-20	Production Under Type Certificate Only
AC 21-27	Manufacturing Approval – Overview
AC 21-601	Australian Technical Standard Order Authorisation

#### 1.4 Forms

CASA's forms are available at <a href="http://www.casa.gov.au/forms">http://www.casa.gov.au/forms</a>

Form number	Title
CASA form 849	Application for CASR Part 21 Production Approval

#### 2 Introduction

#### 2.1 General

- 2.1.1 The Civil Aviation Regulations 1988 (CAR) and the Civil Aviation Safety Regulations 1998 (CASR) require that aircraft/aeronautical products¹ must be approved before use. The approval process of aircraft/aeronautical products requires that their production, inspection and testing be carried out in a controlled environment. The certification of an organisation manufacturing aircraft/aeronautical products provides control of the production environment.
- 2.1.2 This AC is one of several about production approval of aircraft/aeronautical products. Other related ACs include:
  - AC 21-16—Approval of Materials, Parts, Processes and Appliances
  - AC 21-20—Production Under Type Certificate Only
  - AC 21-27—Manufacturing Approval Overview
  - AC 21-601—Australian Technical Standard Order Authorisation.

## 2.2 Overview of production certificates

- 2.2.1 A production certificate is a production approval issued to eligible persons<sup>1</sup>, under the provision of Subpart 21.G, to manufacture aircraft/aeronautical products. The Subpart 21.G certification scheme defines clear roles and accountabilities for applicants, CASA and production certificate holders.
- 2.2.2 Any eligible person may apply for a production certificate. CASA issues production certificates to authorise manufacture of *Class I, Class II and Class III products*<sup>1</sup>. In certain cases, CASA may also issue a production certificate for an unapproved Class I product<sup>2</sup>. An applicant for a production certificate to manufacture a Class I product is required to hold a current Australian or foreign Type Certificate (TC) or Supplemental Type Certificate (STC) for the product, or be a licensee of these certificates.
- 2.2.3 A production certificate holder must establish and maintain a *quality system*<sup>1</sup>, a Material Review Board (MRB) and develop a procedures manual that meets the regulatory requirements of Subpart 21.G.<sup>3</sup> These documents form part of the documentary evidence that provides CASA with confidence that the production certificate holder can properly carry out the authorised manufacturing activities.
- 2.2.4 CASA grants production certificates to applicants after assessing their competence and capability, in accordance with the requirements prescribed in Subpart 21.G. A Production Limitation Record (PLR) included with the production certificate defines the scope of manufacturing activities for which the applicant demonstrates compliance with the requirements of Subpart 21.G. This scope of activities includes the aircraft/aeronautical products for which the applicant's processes and procedures have been evaluated.

<sup>&</sup>lt;sup>1</sup> See Definitions section of this AC.

<sup>&</sup>lt;sup>2</sup> See regulation 21.132 for the definition of 'unapproved Class I product'.

<sup>&</sup>lt;sup>3</sup> An MRB is not required for a one-off production certificate.

- 2.2.5 In some cases, production certificate holders are also able to conduct certain maintenance training. CASA may also grant, on request, additional privileges to production certificate holders to perform certain other functions regulated by Part 21.
- 2.2.6 A production certificate remains valid until the production certificate holder surrenders it for any reason or CASA cancels or suspends the certificate in accordance with the regulations. If the location of the manufacturing facility is changed then the production certificate stops being in force.

#### 2.3 Technical data for manufacture of aircraft/aeronautical products

- 2.3.1 The technical data for manufacture of an aircraft/aeronautical product under a production certificate must be approved and must include all the information necessary to manufacture the part. The technical data must include the following:
  - the drawings and specifications necessary to define the configuration and design features of the part
  - information on dimensions, materials and process used to manufacture the part
  - any methods used to test or inspect the part.
- 2.3.2 Examples of technical data that can be used for manufacturing parts under a production certificate include, but are not limited to, the following:
  - Class I product:
    - the data approved in the type certificate or foreign type certificate
  - Class II or III product:
    - the data approved in the product design approved under regulation 21.132A
    - o the data approved in an STC or a foreign STC
    - o the data approved in a modification or repair design approval under Subpart 21.M (e.g. regulation 21.435, 21.437, 21.465, 21.470 or 21.475)
    - o the data approved in a design covered by an approval that continues to be in force under regulation 202.054—that is, designs of modifications and repairs previously approved under regulation 35 of CAR.

# 2.4 STC modifications incorporated by a TC/PC holder

- 2.4.1 When the holder of a TC seeks and obtains its own STC, or is licensed to use another person's STC data, the TC holder may amend the TC to incorporate the STC approval by reference (see AC 21.13 for guidance on applications for changes to a TC). Another party's STC that is incorporated during production and is referenced in and becomes a part of the TC need not be shown on the PLR. When a TC is amended to incorporate data approved under an STC, only the TC will be shown on the PLR.
- 2.4.2 The STC holder retains ownership of the STC and must give the TC holder permission to use the STC (refer to regulations 21.120, 21.120A and 21.133). The responsibility and control of the STC type design data remains wholly with the STC holder. The STC holder would be responsible for continued operational safety and making changes to the STC type design data as needed for safety. The STC holder would also be responsible for the instructions for continuing airworthiness and manufacturer's maintenance manuals having airworthiness limitations sections. From the TC holder's

- standpoint, when incorporating the STC into a TC type design by reference, the TC holder must retain in the records a copy of the STC and the STC holder's permission statement.
- 2.4.3 The TC holder is responsible for referencing the STC drawing list and its revision level in the TC type design data. The TC holder also will be responsible for reviewing the type design for changes to the interfacing components.
- 2.4.4 When an STC is being installed during aircraft production, the TC holder may need to modify the STC installation instructions and installation drawings, APMA articles or TC interfacing components to aid in installation as part of the production line. Any STC or TC type design changes will need to be documented in the TC holder's type design data as well as the installation instructions and be approved as required by the regulations.
- 2.4.5 The STC installation drawings and instructions need to be added to the PC holder's document control system, production build instructions, and/or aircraft build records. The production organisation is responsible for the STC installation's compatibility with the aircraft and other STC installations.

# 3 Application for issue of a production certificate

#### 3.1 Who is eligible to apply for a production certificate?

- 3.1.1 The following persons may apply for a production certificate:
  - the holder or licensee of a current Australian TC or foreign TC
  - the holder or licensee of a current Australian STC or foreign STC
  - a person who has an agreement with a foreign manufacturer to manufacture a
    product for supply to the foreign manufacturer, when the terms of agreement
    require the person to be approved by CASA to manufacture the product
  - a person lawfully manufacturing, or proposing to manufacture, aircraft components for which a certificate of type approval is in force (under the transitional provisions of regulation 313 of CAR)
  - a person engaged in manufacture of Class II or Class III products, on a one-off basis, for supply to:
    - o the holder of a certificate of approval issued under regulation 30 of CAR or a Part 145 approved maintenance organisation to maintain aircraft
    - o the owner or operator of an aircraft for installation in or on the aircraft/aeronautical product.
- 3.1.2 Modification parts for an STC can be manufactured under either a production certificate or an Australian Parts Manufacturer Approval (APMA). STC holders who only intend to produce STC modification parts are advised to apply for an APMA. Production certificate holders for a Class I product should apply for production approval of STC kits under their existing production certificate.
- 3.1.3 A production certificate to manufacture parts on a one-off basis<sup>4</sup> only allows supply of these parts to approved maintenance organisations, operators or owners of aircraft for installation in or on an aircraft/aeronautical product in the course of maintenance, but does not allow general sale.
- 3.1.4 Parts for general sale must be manufactured under any of the following:
  - an APMA
  - an Australian Technical Standard Order (ATSO) authorisation or
  - a production certificate, as spare parts for a Class I product.
- 3.1.5 For further guidance on one-off production certificates, refer to Appendix A of this AC.

#### 3.2 How to apply?

- 3.2.1 The applicant should submit to CASA a duly completed Form 849 and a copy of their draft quality system manual. The applicant must include the following information on the application form:
  - details of the aircraft, aircraft engine, propeller or aeronautical product to be manufactured under the production certificate

<sup>&</sup>lt;sup>4</sup> Under the provision of subregulation 21.133 (2B).

- details of the technical data to be used during the manufacture; in the case the applicant is not the holder of the technical data, evidence of the technical/licensing arrangements with the holder of the technical data should be provided
- location of the production facilities.

#### 3.3 Where to apply?

3.3.1 All applications for issue of, or changes to, a production certificate must be lodged with CASA's Permissions Issue Team. The <u>Permissions Issue Team</u> can be contacted by telephone on 13 17 57. Additional information and contact details are available on the CASA website (http://www.casa.gov.au).

#### 3.4 Payment of fees

- 3.4.1 CASA charges an hourly fee to process an application for a production certificate, as specified in Schedule 1 to the *Civil Aviation (Fees) Regulations 1995*. The applicant must pay the estimated fee before CASA will begin to assess the application.<sup>5</sup>
- 3.4.2 When issuing production certificates, CASA follows an estimate/payment/settlement procedure:
  - a. the CASA office that receives the application prepares a fee estimate based on an estimate of hours to process the application and advises the applicant
  - a. the applicant pays the estimated fee
  - b. CASA records actual work-hours expended as the task is undertaken
  - c. CASA issues a settlement statement just before the production certificate is issued.
- 3.4.3 If CASA overestimated the fee, CASA issues a refund to the applicant at the completion of the application. If CASA underestimated the fee, CASA will advise the applicant once 90% of the estimated hours have been consumed and re-estimate the hours/fees to complete the application. The applicant must make the final payment before the work on the application will be resumed and the production certificate will be issued.

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<sup>&</sup>lt;sup>5</sup> In accordance with section 97 of the *Civil Aviation Act 1988*, CASA may not process an application until the fee is paid in advance.

# 4 Process for assessment and issue of a production certificate

#### 4.1 Appointment of a project officer

- 4.1.1 On receipt of an application for a production certificate, CASA assigns a project officer to manage the project. This person coordinates all aspects of the project from CASA's perspective and acts as CASA's contact person for the assessment of the application.
- 4.1.2 The CASA project officer makes arrangements for:
  - assessment of the applicant's proposed quality system and draft procedures manual, which should contain proposed procedures for compliance with regulations 21.143, 21.144 and 21.145, as applicable
  - on-site review of the applicant's organisation, quality system, production facilities, suppliers and technical data, in accordance with the regulations
  - evaluation and approval of the design data submitted (except for a one-off production certificate).
- 4.1.3 For an initial application of a production certificate for a Class I product or Class II product, or when entire facilities have been relocated or are added to the production certificate for such a product, CASA may convene a Production Certification Board. This board is essentially CASA's fact finding group, responsible for a thorough assessment of the applicant's organisation, quality system and production facilities in accordance with the requirements of Part 21.
- 4.1.4 Upon completion of the evaluation, CASA will formally notify the applicant of any corrective actions needed to comply with the quality system requirements of regulations 21.139, 21.143 and 21.144. CASA will issue the production certificate when the applicant complies with these requirements and other applicable requirements of Part 21.

# 4.2 Quality system and procedures manual

- 4.2.1 CASA's process for assessment of an applicant/production certificate holder's quality system is described in AC 21-27.
- 4.2.2 To comply with regulation 21.139, an applicant/production certificate holder must have in place a quality system that provides control over all phases of manufacture, including control over the manufacture of all supplier-furnished aeronautical products. Regulation 21.143 requires that an applicant must submit to CASA, for approval, a quality manual (however described) that addresses the requirements of regulations 21.143 and 21.144, as applicable. The procedures must provide sufficient detail to help CASA determine that they address regulatory compliance (i.e. they must be measurable).
- 4.2.3 The regulations do not prescribe a format for the procedures manual, or specific implementation schemes or organisational concepts that must be established. This allows the production certificate holder to design processes and procedures that meet its operational requirements and comply with the regulatory requirements.

- 4.2.4 If the procedures manual refers to further operational details necessary to implement the processes and procedures within the organisation, those additional operational details are taken to be part of the manual.
- 4.2.5 A quality system previously established, audited and certified by a third party certifying agency (such as certification to AS/NZS ISO 9001 standard under JAS-ANZ system) is not sufficient to establish compliance with Part 21. CASA makes an independent assessment of such systems. However, a quality system based on AS/NZS ISO 9001, SAE AS9100 or equivalent, if properly implemented, should address most quality system requirements prescribed in Part 21. CASA makes an independent assessment of such systems to ensure all the specific requirements of Part 21 have been addressed.
- 4.2.6 Depending on the size of the manufacturing facilities and/or product complexity, the procedures manual may or may not be a lengthy document. Where the manual makes reference to the organisation's other documents or data, the manual should briefly summarise the referenced procedure, method, or system. Any such referenced material becomes part of the manual.
- 4.2.7 The procedures manual should include procedures for notification to CASA of changes to the quality system and for amendment of the manual as described in section 4.6 of this AC. A revision page or similar control would ensure that the original approval date and the date of each amendment is recorded. The applicant/production certificate holder should use a number or letter to identify each amendment to the manual.
- 4.2.8 An applicant for a production certificate (other than a one-off production certificate) must establish an MRB that includes representatives from the manufacturer's inspection and engineering departments. The purpose of an MRB is to ensure the traceability and disposition of materials and parts used during manufacture so that the products continue to meet the technical data.

#### 4.3 Production limitation record

- 4.3.1 Each production certificate includes, or has attached to it, a production limitation record. The production limitation record is the means for listing the products, a description of the product and associated approved design data that a production certificate holder is authorised to manufacture under the production certificate. A production certificate may not authorise production of every model listed on a TC. Therefore, for a Class I product, CASA will list on the production limitation record the specific models included in the TC that are authorised for manufacture under the production certificate and the date of such authorisation.
- 4.3.2 A production limitation record for a one-off production certificate describes the type of parts authorised for manufacture under the production certificate.

# 4.4 Issue of production certificates

4.4.1 The applicant is entitled to be issued a production certificate if CASA finds that the applicant has demonstrated compliance with the requirements of Subpart 21.G and all

<sup>&</sup>lt;sup>6</sup> As required by regulation 21.145.

applicable provisions of the regulations. However, there are instances where the issue of a production certificate may place an undue burden on CASA in the fulfilment of its certificate management obligations. CASA may refuse to issue a production certificate if aspects of an organisation's operations (e.g. location) occur outside of Australian territory.<sup>7</sup>

4.4.2 If CASA declines to issue a production certificate, or imposes a condition or limitation on the certificate that is not acceptable to the applicant/production certificate holder, then the applicant/production certificate holder may apply to the Administrative Appeals Tribunal for review of CASA's decision.<sup>8</sup>

#### 4.5 Amendment of production certificates

- 4.5.1 A production certificate may be amended to account for several different circumstances; the following provide examples of possible reasons for change:
  - the production certificate holder may apply to add a new TC, new model, or an STC to the production certificate
  - when production of a Class I product, as well as its spare parts/aeronautical products, has stopped the production certificate holder should request deletion of the applicable TC from the production limitation record and CASA will issue a revised production limitation record
  - if the production certificate holder stops manufacturing complete products but continues to manufacture spare parts/aeronautical products, the production limitation record does not require amendment.
- 4.5.2 A production certificate holder should lodge application for amendment of the certificate in the same form and manner as used for the original application. The application must:
  - be in writing (on CASA Form 849)
  - state the proposed change
  - be accompanied by a copy of all parts of the production certificate holder's quality system and procedures manual that would be affected by the proposed change, with all proposed changes clearly identified.
- 4.5.3 CASA will issue a revised production limitation record after any required assessment/approval of production facilities, and changes to the quality system and procedures manual, is completed.

# 4.6 Changes in quality system

4.6.1 The production certificate holder must ensure that each manufactured product conforms to its technical data and is in a condition for safe operation. The holder may make changes to the quality system for product improvements, improved organisational efficiencies, or other operational reasons. However, the production certificate holder must ensure that the quality system remains in compliance with the regulations at all

<sup>&</sup>lt;sup>7</sup> See regulation 21.137.

<sup>8</sup> See regulation 201.004.

- times, and that changes do not adversely affect the conformity or airworthiness of the product.
- 4.6.2 According to regulation 21.147, the production certificate holder must immediately notify CASA, in writing, of any change to the quality system that may affect inspection, conformity or airworthiness of the product. To ensure that changes to a quality system do not result in non-compliance with Part 21, the production certificate holder should establish a good working relationship with CASA. This will promote an exchange of information so that CASA can review and provide feedback on planned changes that may affect the inspection, conformity or airworthiness of the product before they are implemented.
- 4.6.3 It is difficult to give all-encompassing examples of changes that affect the inspection, conformity or airworthiness of a product. Examples of changes that may have a substantial impact on the quality system are:
  - relocation of part of a manufacturing facility or addition to existing facilities
  - substantial changes to production capacity or methods
  - changes in the placement or control of significant sub-contracted work or supplied parts
  - substantial changes to the organisational structure or key personnel responsible for quality
  - changes in quality control data or procedures that may have a substantial impact on the inspection, conformity and airworthiness of a product.
- 4.6.4 The production certificate holder may make any change to its quality system in accordance with a procedure described in the procedures manual. This procedure should also include the process for notifying CASA of changes to the quality system. The procedure must ensure that the procedures manual is amended, as necessary, to remain in compliance with applicable regulations and provides an up-to-date description of the production organisation and its quality system. The production certificate holder must provide, for CASA's review, a copy of all amendments to the procedures manual made in response to changes to the quality system. Changes to the procedure for amending the quality system and the procedures manual must be acceptable to CASA.
- 4.6.5 Once notified by the production certificate holder, CASA will review the changes made to the quality system and may require the holder to make certain revisions to ensure that the quality system:
  - continues to comply with applicable regulatory requirements
  - is adequate to support production of conforming and airworthy products.

# 4.7 Privileges

4.7.1 A production certificate holder may seek an instrument of appointment, either for the production certificate holder or for suitably qualified employees, to issue CofAs and export CofAs for new aircraft manufactured under the production certificate. The names of the authorised persons, and procedures for issuing CofAs and export CofAs, can be included in the procedures manual.

4.7.2 A production certificate holder may issue an ARC, in accordance with their quality system, to accompany products (other than complete aircraft) manufactured under the production certificate. CASA has also issued a generic instrument of appointment to allow qualified employees of a production certificate holder to issue export airworthiness approvals for these products.

#### 4.8 Responsibilities of a production certificate holder

- 4.8.1 It is the responsibility of the production certificate holder to ensure that the manufactured product conforms to the CASA-approved manufacturing processes and the design/technical data. Although this responsibility remains with the production certificate holder, some of the burden of inspection and testing may be relieved when the production certificate holder:
  - uses other type certificated products
  - uses products manufactured under another production certificate or released with an ARC, or equivalent
  - uses aeronautical products produced under an ATSO authorisation
  - uses parts manufactured under an APMA
  - uses imported aeronautical products or products that comply with Subpart 21.N
  - delegates specific inspection and testing duties to suppliers; however, the production certificate holder remains responsible for controlling the design, physical configuration and operating condition of the products furnished by such a supplier.
- 4.8.2 Under regulation 21.165, the production certificate holder must maintain the quality system in conformity with the CASA-approved procedures manual. They must also ensure that each completed product that is submitted for airworthiness certification/approval conforms to the approved technical data and is in a condition for safe operation. Production certificate holders are encouraged to set up an independent quality assurance function to monitor compliance with, and adequacy of, the documented procedures of the quality system. This monitoring should include a system of feedback to management to ensure effective review of corrective actions.
- 4.8.3 Under Part 21, the production certificate holder is also obliged to:
  - report failures, malfunctions and defects to CASA as required by regulation 21.003.
     The production certificate holder should establish a procedure for such reporting and include it in the procedures manual
  - keep records<sup>11</sup> of design and production data in accordance with regulation 21.166
  - mark all products and parts manufactured under the production certificate in accordance with Subpart 21.Q.

<sup>&</sup>lt;sup>9</sup> Refer to subregulation 42.420 (5) of CASR and 42WA (4) of CAR.

<sup>&</sup>lt;sup>10</sup> Qualified employees should be identified in the procedures manual as authorised persons for the purpose of regulation 21.324.

<sup>&</sup>lt;sup>11</sup> See Definitions section of this AC.

#### 4.9 Transferability and duration

- 4.9.1 The issuance of a production certificate is based on the demonstrated capability of the applicant/production certificate holder. Therefore, a production certificate issued under regulation 21.134 is not transferable to another person.
- 4.9.2 If a manufacturing organisation is purchased by, or included as part of a transfer of assets to, a third party and this results in a new legal entity being responsible for manufacturing, then the new legal entity is not automatically entitled to the production certificate. If continued production under a production certificate is desired, the new owner must apply for a production certificate. When CASA assesses a new owner's application, CASA would approve processes and procedures it had previously approved under the original production certificate, on the condition that the new owner was able to demonstrate the necessary ability and commitment to continue those processes and procedures.
- 4.9.3 A production certificate ceases to be in force if:
  - CASA cancels the certificate
  - the termination date specified on the certificate has been reached
  - the main facility specified on the production certificate has been moved to another location and the production certificate holder does not apply to CASA to amend the production certificate
  - the production certificate holder surrenders the certificate to CASA for any reason.

#### 4.10 CASA surveillance and audits

4.10.1 CASA regularly conducts surveillance and audits of all production certificate holders and selected suppliers, directed at the production facilities and the complete quality system. If an inspection or test conducted during such surveillance reveals that any part of the data or system does not meet the applicable requirements, CASA will request changes to the quality system or data and/or issue an observation or safety finding to the production certificate holder.

# Appendix A

**One-off production certificates** 

#### A.1 Introduction

A.1.1 Subregulation 21.133 (2B) states that a person may apply for a production certificate to manufacture a Class II or Class III product on a one-off basis, for supply to an approved maintenance organisation or an owner/operator of an aircraft. This provision allows a manufacturer to obtain a production approval, in the form of a one-off production certificate, to manufacture modification or replacement parts in accordance with approved technical data for use in the maintenance of aircraft/aeronautical products.

#### A.2 Restrictions on the manufacture of parts

- A.2.1 A one-off production certificate is limited to the manufacture of a part on demand—that is, for a specific need at the time rather than for general sale in quantity. The eligibility condition for a one-off production certificate indicates that the part is to be used by the maintenance organisation, owner/operator for installation on the aircraft/aeronautical product undergoing maintenance. This condition implies that the purchaser must order the part for installation on a particular aircraft/aeronautical product. It does not preclude the supply of multiple parts to meet a purchase order for installation on one or more aircraft/aeronautical products undergoing maintenance.
- A.2.2 Anyone (other than the original equipment manufacturer) who wants to manufacture modification and replacement parts for general sale should apply for an APMA. Parts manufactured with an APMA can be manufactured in quantity and distributed widely via the parts distribution system. These parts will have the APMA marking privilege and have automatic installation approval on eligible type certificated products.
- A.2.3 A one-off production certificate may be used for the manufacture of either Class II or Class III products. However, it cannot be used for the manufacture of parts or appliances to a TSO/ETSO/ATSO standard and have the TSO/ETSO/ATSO marking. Persons who want to manufacture such parts or appliances must apply for an ATSO authorisation.

#### A.3 Kinds of parts that can be manufactured

- A.3.1 While there is no general restriction on the kinds of parts that can be manufactured under a one-off production certificate, the applicant must have the capability, with respect to facilities, equipment and qualified staff, to manufacture these parts. All parts must be manufactured in accordance with approved technical data; therefore, the availability of approved technical data will be one of the key restrictions on parts that can be manufactured under a one-off production certificate.
- A.3.2 Examples of parts that can be manufactured under a one-off production certificate are:
  - control cables
  - hoses
  - electrical cable looms and assemblies
  - metal parts by machining and turning
  - sheet metal parts
  - secondary structural elements.

#### A.4 Quality system requirements

A.4.1 The quality system for a one-off production certificate must include all quality system elements prescribed in regulations 21.143 and 21.144 as applicable to the manufactured parts, except that an MRB is not required. The required depth and complexity of the quality system will depend on the kinds of parts to be manufactured under the one-off production certificate. The quality system must be sufficient to ensure that manufactured parts conform to the approved technical data and are in a condition for safe operation.

#### A.5 Part marking

- A.5.1 Regulation 21.875 requires a part manufacturer, which includes the holder of a one-off production certificate, to legibly and permanently mark each manufactured part with the following identification information:
  - the trademark or name of the manufacturer
  - a part number that clearly distinguishes the part.
- A.5.2 The identification information must be marked in a way that ensures it is not likely to be defaced. If it is not practical to mark on the part, because of its shape, size or nature, the manufacturer must include the identification information in the ARC supplied with the part.

#### A.6 Production limitation record for a one-off production certificate

- A.6.1 The kinds of parts that are authorised to be manufactured under a one-off production certificate are specified in the accompanying PLR. The PLR may include any of the following limitations:
  - the types of parts that can be manufactured and the manufacturing processes used
  - the required approved technical data
  - any other limitation imposed by CASA in the interest of aviation safety.

#### A.7 Issue of authorised release certificates

- A.7.1 One-off production certificate holders must ensure that parts are manufactured in conformity with approved technical data and are in a condition for safe operation. Production certificate holders may make the certification to this effect, for completed parts manufactured under their production certificate, by issuing ARCs for those parts.
- A.7.2 To help the user/installer determine the installation eligibility of the part on a particular aircraft/aeronautical product, the holder of a one-off production certificate should note, in 'Block 12 Remarks' of the ARC, the following information:
  - the approved technical data used to manufacture the part
  - the identity of the person ordering the part and the aircraft on which the part will be installed.