

Production Approval Procedures Manual

1. Introduction to Production Approval Procedures

1.1 About this Manual

Approved by Executive Manager, Operations Division Version 2.1: March 2010

1.1.1 Review of this Manual

Production Approval Manual Review Team

This Production Approval Procedures Manual will be reviewed as required and within 12 months of issue or review. The Production Approval Manual Review Team will comprise:

- Executive Sponsor – Executive Manager, Operations Division
- Technical Sponsor/Chair – Team Leader Manufacturing Section, Safety Oversight Branch
- Two Manufacturing Inspectors
- Administrative Support.

Recommending Changes to the Manual

If any information in this manual needs to be amended or new information added, notify the technical sponsor. Use [Form 476 Manual Amendment Request](#), when making suggestions, including additional sheets if necessary.

Definitions

See [6. Definitions](#).



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1.1.2 Purpose and Scope of the Manual

Purpose

CASR Part 21 The purpose of this manual is to provide CASA staff with procedures for assessing applications for Production Approvals (PAs) under **CASR Part 21** and for issuing those CASA approvals.

Scope

CASR Part 21 This manual applies to PAs under **CASR Part 21** including but not limited to the following:

- CASR Part 21. Subparts F, G, K, O, and Q** ● Production under Type Certificate (TC) (**CASR Part 21 Subpart F**)
- Production Certificate (PC) (**CASR Part 21 Subpart G**)
- Australian Parts Manufacturer Approval (APMA) (**CASR Part 21 Subpart K**)
- Australian Technical Standard Order Authorisation (ATSOA) (**CASR Part 21 Subpart O**)
- Identification of Aircraft and Aeronautical Products (**CASR Part 21 Subpart Q**)
- CASR Part 21.305 (e)** ● Other approvals under **CASR 21.305(e)**.

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1.2 Regulatory Framework

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1.2.1 Background

An outline of the background to this manual is as follows:

CASR Part
21
CAR 30

- a. Version 1 of this manual was introduced in May 2000 to address manufacture under CASR Part 21 and for transition from previous approvals issued under regulation 30 of CAR 1988.
- b. CASR Part 21 provisions were developed with the intent of reflecting the corresponding provisions in US FAR Part 21, but only where these were appropriate to Australian requirements.
- c. The result has been regulations that harmonise with international best practice while at the same time meeting Australia's obligations as a contracting state to ICAO.
- d. Audit of manufacturing approvals is conducted under CASA's surveillance procedures.
- e. Amendment 2.0 is introduced to clarify procedures in the light of experience gained since the introduction of CASR Part 21.

CASR Part
21



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1.2.2 Legislative Basis

Civil Aviation Act 1988 Section 11

CAA 1988
CAR 1988
CASR 1998
Part 21

Australia, as a contracting state to ICAO, has an obligation to ensure that functions carried out in Australia are performed in accordance with international agreements. The *Civil Aviation Act (1988)* section 11 refers. CAR 1988 and CASR Part 21 are consistent with the provisions of the Act.

Civil Aviation Act 1988 Section 31 and Civil Aviation Safety Regulations 1998 Part 201.4

CAA 31

Section 31 of the Act makes all decisions to refuse to grant, vary, suspend or cancel an approval appealable to the AAT.

CASR 201.4

CASR Part 201.4 makes appealable any condition imposed on an approval, authorisation, authority, certificate or permit.

Civil Aviation Act 1988 Section 97

CAA 97

If a fee is prescribed for the grant of an approval then the approval need not be granted until the fee is paid (section 97 of the Act).

Civil Aviation Safety Regulations Part 1

CASR Part 1

CASR Part 1 describes legislative links to other aviation legislation and practices.

Civil Aviation Safety Regulations Part 21 Subpart A

CASR
Part 21

Subpart A defines the applicability of CASR Part 21, including provisions dealing with falsification of applications, suspension and cancellation actions and reporting of failures by production approval holders.

Civil Aviation Safety Regulations Part 21 Subpart F

CASR Part
21 Subpart F

CASR Part 21 Subpart F prescribes the requirements for approval of production under a TC only. It contains the requirements for establishing a production inspection system and a Materials Review Board (MRB). This approval does not provide the same degree of flexibility as a Production Certificate.

Civil Aviation Safety Regulations Part 21 Subpart G

CASR Part
21 Subpart G

CASR Part 21 Subpart G prescribes the requirements for issue of a Production Certificate and the rules governing the production of aircraft, aircraft engines and propellers and certain parts.



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Civil Aviation Safety Regulations Part 21 Subpart K

CASR Part 21. Subpart K, **CASR** Subpart K prescribes the requirements for issue of an Australian Parts Manufacturer Approval. This approval requires the establishment of a Fabrication Inspection System (FIS) in addition to design approval.

Civil Aviation Safety Regulations Part 21 Subpart O

CASR Part 21. Subpart O, **CASR** Subpart O prescribes the requirements for issue of an Australian Technical Standard Order Authorisation. This approval is both a design and production approval.

Civil Aviation Safety Regulations Part 21 Subpart Q

CASR Part 21. Subpart Q, **CASR** Subpart Q prescribes the requirements for part identification and marking.

Civil Aviation Safety Regulations 21.305 (e)

CASR Part 21.305 (e), **CASR** Section 21.305(e) authorises approval of items not otherwise covered by other approval mechanisms.

Civil Aviation Safety Regulations Part 201

CASR Part 201, **CASR** Part 201 prescribes the appointment of authorised persons.

1.3.1 Staff Responsibilities

Executive Sponsor

The Executive Sponsor has responsibility for the overall control of this manual.

Technical Sponsor

The Technical Sponsor assumes technical responsibility for this manual and manages its development through to completion, or its amendment as and when required, in accordance with the Manual of Controlled Documents.

Managers

Managers ensure that CASA staff correctly implement the procedures in this manual.

CASA Officers

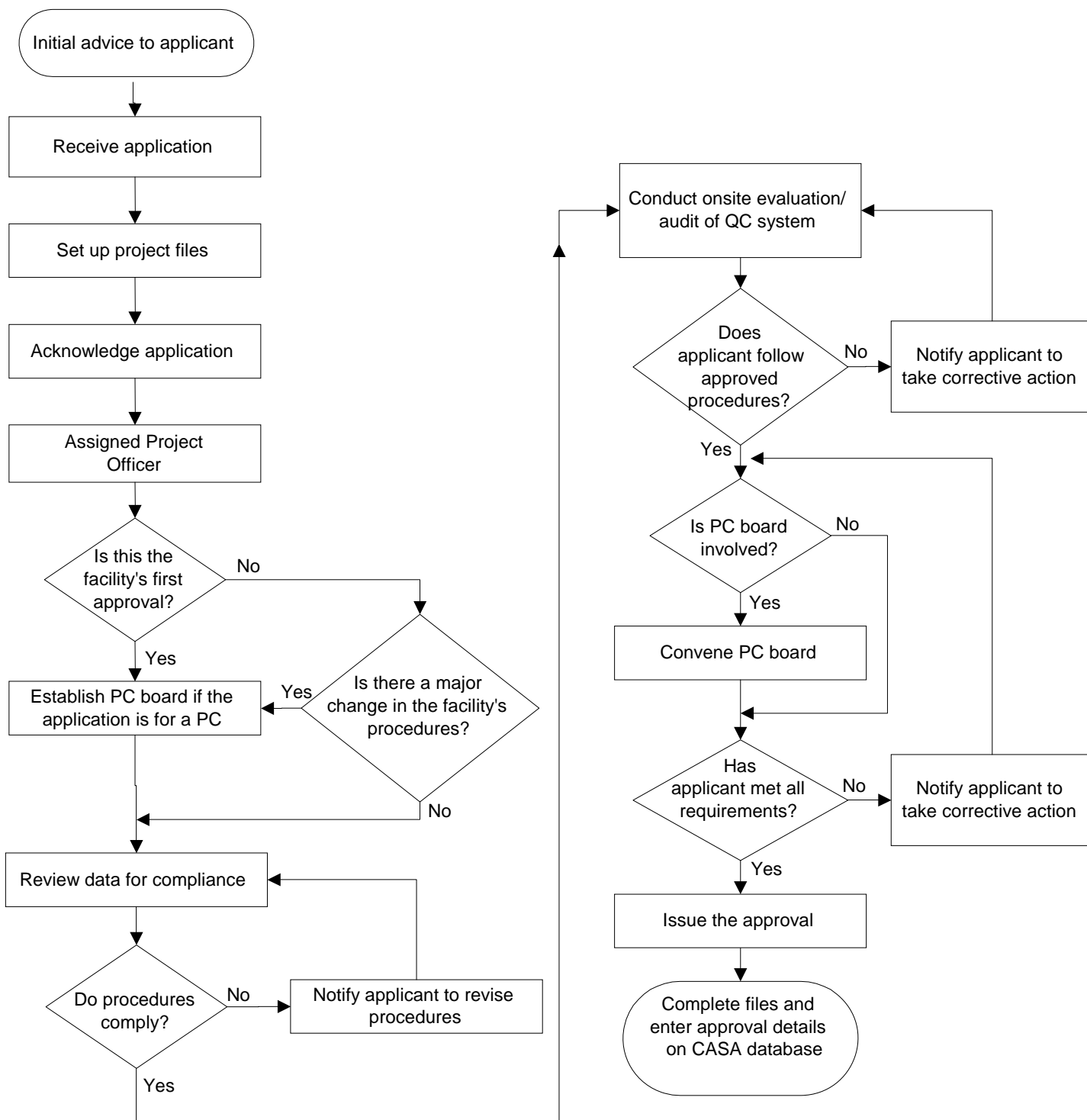
CASA officers are to:

- Adhere to the procedures in this manual
- Bring to the notice of the Technical Sponsor the need for amendments to the manual, in accordance with the instructions for [Recommending Changes to the Manual](#).

CASA Project Officer

The Team Leader Manufacturing Section appoints a Project Officer (PO) for a particular production approval, who ensures that the production approval application is assessed effectively and that all aspects of the approval are complete and in accordance with this manual. When satisfied, the Project Officer recommends the issue of the approval.

1.4.1 Production Approval Flowchart



1.5.1 Advice Provided by CASA for General Enquiries

AC 21.14,
21.16,
21.20,
21.27,
21.601

When people make inquiries about production approvals, provide them with relevant advice and request that they read the appropriate Advisory Circular (AC) for the particular approval, including:

- AC 21.14 Production Certificates
- AC 21.16 Australian Parts Manufacturer Approval
- AC 21.20 Production Under TC
- AC 21.27 Manufacturing Approval — Overview.
- AC 21.601 ATSOA (Yet to be issued)

Should the person wish to proceed, advise that a formal written application to CASA is required before the application can be processed. Enquirers must be advised that cost recovery procedures are applicable.

Regardless of which production approval is sought, it should be stressed to the applicant that it is the applicant's responsibility to demonstrate conforming products and parts. It is a CASA responsibility to find that conforming parts have been demonstrated as a basis for issue of the approval sought. A non-conformed proof-of-concept product is not a basis for CASA assessment and subsequent approval.

The CASA officer should advise the applicant of the advantages of obtaining a PC. The advantages of being a PC holder, compared to production under a TC only, include the following:

- No requirement to submit a [Statement of Conformity](#) to CASA, for each conformed product
- Reduced CASA involvement, relative to conformity inspections
- An Authorised Person within the Approved Production Inspection System (APIS) will be able to issue airworthiness certificates and approvals for completed products without reliance on CASA inspections
- The issue of export approvals for small aircraft without assembly or flight test ([CASR 21.325](#)).

CASR 21.325

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1.5 Processing Inquiries and Applications for Production Approvals

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1.5.2 On Receipt of an Application

Administrative Procedures

1. All correspondence is to be recorded and controlled in accordance with the Permissions Application Centre guidelines.
2. All actions to be properly documented and filed as appropriate.
3. All other administrative processes to be in accordance with the Manufacturing Section procedures.

Cost Recovery Procedures

The cost recovery procedures for production approvals are similar to those described in the Type Certification Procedures Manual.

Team Leader Manufacturing

The Team Leader Manufacturing Section is to monitor the progress of the application. If it becomes evident that the application will not be processed within the normal timeframe, ensure that the applicant is notified accordingly.

Project Officer

1. Raise *Form 883 Production Approval Assessment Control Document* and place it on the appropriate file.
2. Check that *Form 849 Production Approval Application* and covering letter are complete and on file.
3. Check the LARP database for any current enforcement actions pending or proceeding in relation to the applicant or whether any exclusion periods have been imposed. Refer any of these to the Office of Legal Counsel for advice.
4. Prepare a cost-recovery estimate within 7 days.
5. Forward the file with the attached cost-recovery details to the Permissions Application Centre.



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6. Send the applicant a letter of acknowledgment when notified that the applicant has accepted the estimate for service and/or the prescribed fee has been paid.

If a PCB is required, pre-PCB (CASA) and pre-PCB (applicant) meetings may now be convened (refer to [1.6.1 Production Certification Board](#)), to prepare both CASA officers involved in the assessment and the applicant for the requirements of the assessment. A PCB is required for Class 1 items, and may be required for other items, depending upon the complexity and investigations required.

7. If the application does not require the establishment of a PCB, proceed as for the preliminary assessment only.

Administration Officer

1. Complete the cost recovery documentation in accordance with the Financial Procedures Manual.
2. Return the file to the Project Officer.

1.6.1 Production Certification Board – Description

A Production Certification Board (PCB) is a CASA panel established for the purpose of facilitating the assessment of a production approval

PCBs should be convened for initial production approvals covered by production under TC or Production Certificate, or when entire facilities have been relocated or are to be added to the production approval. PCBs should not be convened for the addition of new models to the production approval or for relocation of a portion of a facility, unless significant changes in production technology or processes apply. In these instances, follow the procedures in [Chapter 2](#).

1.6.2 PCB Membership

The PCB will be chaired by Team Leader Manufacturing and will include the Project Officer and any other nominated specialists. These members will assist in evaluating the applicant's production, engineering, flight test procedures, and other related functions. The Project Officer may be, or act as, the Chairperson of the PCB and will coordinate activity through the Team Leader Manufacturing.

1.6.3 PCB Member Responsibilities

PCB Chairperson

The PCB chairperson is responsible for:

- Assigning board members, as deemed appropriate for the particular product, and notifying members of the pending PCB schedule in sufficient time to permit adequate planning and preparation
- Notifying the applicant of the PCB schedule
- Selecting a representative number of the applicant's supplier facilities for evaluation to determine whether or not the applicant's quality system provides for satisfactory supplier control
- Conducting pre/post-PCB meetings with CASA officers and/or the applicant
- Reviewing and analysing the PCB findings and ensuring that appropriate corrective actions have been or will be taken by the applicant
- Completing, signing, and distributing the PCB minutes.

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Project Officer

The Project Officer is responsible, using administrative assistance as appropriate, for:

- Establishing schedules
- Making arrangements for meeting rooms
- Obtaining sufficient copies of quality system data
- Making all other arrangements necessary for convening and conducting the PCB in the most expeditious manner
- Ensuring that all agreed-upon corrective actions have been taken by the applicant
- Preparing the minutes of the PCB.

Certification Specialists

The Certification Specialists are responsible for:

CASR
21.127,
21.128,
21.129,
21.143 (1)(c)

- Evaluating and approving the applicant's production engine/propeller test procedures, as required by CASR 21.143(1)(c), 21.127, 21.128 or 21.129
- Evaluating and approving the applicant's flight test procedures and check-off lists as required by CASR 21.143(1)(c)
- Reporting and making recommendations to the Project Officer (rather than making direct communication with the applicant).

1.6.4 Conduct of the PCB

A PCB is generally conducted as follows:

- Initial CASA personnel meeting
- Pre-PCB meeting
- PCB meetings
- Review of the PCB process and conduct.

Initial CASA Planning Meeting

A meeting of CASA personnel is held to plan the preliminary assessment, Manufacturing Section recommendations, and related correspondence between CASA and the applicant. This meeting is also used to plan the PCB schedule for subsequent meetings; and establish agenda items for the pre-PCB meetings.

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Pre PCB Meeting

A Pre-PCB meeting may be held with the applicant's representatives upon receipt of the production approval application. This meeting should include the Chairperson and any other specialist as necessary. The purpose of this meeting is to advise the applicant of the purpose of the CASA PCB and of CASA's evaluation plans.

CASR 21.125, 21.135, 21.137 Inform the applicant that the PCB is a fact-finding body convened to determine whether or not the applicant is in compliance with CASR 21.125 or 21.135 and, that in making this determination, the PCB will thoroughly evaluate the applicant's quality system, data, organisation and production facilities. It is at this point that the Chairperson determines whether or not the location of the applicant's facilities poses an undue burden on CASA, as specified in CASR 21.137.

PCB Assessment of Applications

Following the pre-PCB meeting with the applicant, the PCB evaluates the applicant's quality system data and performs an on-site evaluation of the applicant's quality system, organisation production facility and suppliers, as appropriate.

PCB Meetings

PCB meetings are conducted as needed to discuss and evaluate each unsatisfactory condition and related recommendation submitted by each member. All unsatisfactory conditions are recorded as findings on *Form 883 Production Approval Assessment Control Document*. A final meeting, attended by all PCB members and representatives of the applicant, is held to advise the applicant of the PCB findings. Each unsatisfactory condition and recommendation should be presented and briefly discussed.

Corrective Action

In those instances where a product is being produced under a TC, the PCB must request that the applicant commence immediate corrective action on those items that directly involve the product and related quality practices. A reasonable time may be allowed for correcting deficiencies in the quality system data. However, the applicant must be advised that the PCB cannot recommend that an approval be issued until all applicable regulations are complied with and all corrective actions addressed to the satisfaction of the Team Leader Manufacturing.

Formal Confirmation

The applicant must also be advised that the applicant will receive an official letter confirming the verbal presentation of the list of unsatisfactory conditions and recommendations. This formal notification should be prepared and signed by the PCB Chairperson, within ten working days of the final meeting with the manufacturer.



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Violations

CASR
Part 21
Subpart F

If the applicant is manufacturing a product under a TC, and any of the unsatisfactory conditions are determined to be violations of CASR Part 21, Subpart F, appropriate enforcement actions should be initiated by the ESS Office.

Final Phase of the PCB

The final phase of a PCB is the evaluation by the Manufacturing Section of the corrective action taken by the applicant. The results of any re-inspection should be reported to the Chairperson of the PCB and, if satisfied, the Chairperson will make a recommendation to the Team Leader Manufacturing and sign off on *Form 883 Production Approval Assessment Control Document*.

PCB Conclusion

CASR
21.123,
21.135

Upon guidance from the Team Leader Manufacturing, the Permissions Application Centre will formally advise the applicant in writing, as soon as practicable, that based on a demonstrated compliance with CASR 21.123 or 21.135, an approval will be issued. Conversely, if compliance has not been demonstrated, the applicant will be formally advised that an approval will not be issued, and a statement of reasons must be advised to the applicant.

1.6.5 PCB Records

The Project Officer shall prepare the PCB minutes for the signature of the Chairperson. The minutes should contain a concise record of the entire PCB proceedings, including the names and titles of all participants. All correspondence and forms relating to the PCB, including letters to the applicant, the applicant's replies, etc, are considered to be part of the minutes and should be attached as appendices.

Once accepted by the Chairman, the PCB minutes should be distributed as follows:

- Original to the applicant's file
- One copy to Certification Support Services Section
- Copies to the members of the PCB.

1.6.6 Administration of Production Approvals Granted

Approval Numbers

All PA numbers incorporate the Aviation Reference Number (ARN) of the organisation.

PC Numbers

A PC's number consists of the letters PC- followed by the ARN of the applicant—for example, PC-123456. It is unlikely that there would be more than one PC issued to an organisation because the PLR can list multiple activities.

APIS Numbers

An APIS number consists of the letters APIS- followed by the ARN of the applicant—for example, APIS-123456. The specific products are specified on the Type Certificate.

APMA Numbers

Only one APMA is likely to be issued to an organisation. An APMA number consists of the letters APMA- followed by the ARN of the applicant—for example, APMA-123456. The specific products and parts are listed on the supplement, which is re-issued to add or delete products and parts. The first and any additional supplements are numbered consecutively from 001.

ATSOA Identification

CASR
21.865,
21.870

An ATSOA is expected to be a discrete issue, and an organisation is likely to have multiple ATSOA approvals. The Letter of Approval identifies the specific item(s). The applicant's ARN will be quoted in the letter. The articles must be marked in accordance with **CASR** 21.865 or 21.870.

ESS PA Database

After each PA is issued, the ESS administration staff are to enter the details of the specific approvals given into the MS Excel spreadsheet of PAs. Either weekly or as required, a copy of the complete database is to be forwarded to the CASA website controller in Canberra. The website controller will update the CASA external website and the intranet.

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