

**CIVIL AVIATION DIRECTIVE - 8201** 

# PRODUCTION ORGANISATION APPROVAL

**CAAM PART 21 SUBPART G** 

CIVIL AVIATION AUTHORITY OF MALAYSIA





#### Introduction

In exercise of the powers conferred by section 24O of the Civil Aviation Act 1969 [Act 3], the Chief Executive Officer makes this Civil Aviation Directive (CAD) 8201 – Production Organisation Approval (CAAM Part 21 Subpart G), pursuant to Regulation 21, 189 and 193 of the Malaysian Civil Aviation Regulations (MCAR) 2016.

This CAD provides the procedures and requirements pertaining to a certificate of approval and for any matters connected therewith.

This Civil Aviation Directive 8201 – Production Organisation Approval (CAAM Part 21 Subpart G) is published by the Chief Executive Officer under section 24O of the Civil Aviation Act 1969 [*Act 3*] and come into operation on 1<sup>st</sup> May 2021.

### Non-compliance with this Directive

Any person who contravenes any provision in this Notice commits an offence and shall on conviction be liable to the punishment under section 24O of the Civil Aviation Act 1969 [Act 3].





#### **Civil Aviation Directive components and Editorial practices**

This Civil Aviation Directive is made up of the following components and are defined as follows:

**Standards:** Usually preceded by words such as "shall" or "must", are any specification for physical characteristics, configuration, performance, personnel or procedure, where uniform application is necessary for the safety or regularity of air navigation and to which Operators must conform. In the event of impossibility of compliance, notification to the CAAM is compulsory.

**Recommended Practices:** Usually preceded\_by the words such as "should" or "may", are any specification for physical characteristics, configuration, performance, personnel or procedure, where the uniform application is desirable in the interest of safety, regularity or efficiency of air navigation, and to which Operators will endeavour to conform.

**Definitions:** Terms used in the Standards and Recommended Practices which are not self-explanatory in that they do not have accepted dictionary meanings. A definition does not have an independent status but is an essential part of each Standard and Recommended Practice in which the term is used, since a change in the meaning of the term would affect the specification.

**Notes:** Included in the text, where appropriate, Notes give factual information or references bearing on the Standards or Recommended Practices in question but not constituting part of the Standards or Recommended Practices;

It is to be noted that some Standards in this Civil Aviation Directive incorporates, by reference, other specifications having the status of Recommended Practices. In such cases, the text of the Recommended Practice becomes part of the Standard.

The units of measurement used in this document are in accordance with the International System of Units (SI) as specified in CAD 5. Where CAD 5 permits the use of non-SI alternative units, these are shown in parentheses following the basic units. Where two sets of units are quoted it must not be assumed that the pairs of values are equal and interchangeable. It may, however, be inferred that an equivalent level of safety is achieved when either set of units is used exclusively.

Any reference to a portion of this document, which is identified by a number and/or title, includes all subdivisions of that portion.

Throughout this Civil Aviation Directive, the use of the male gender should be understood to include male and female persons.



#### **Record of revisions**

Revisions to this CAD shall be made by authorised personnel only. After inserting the revision, enter the required data in the revision sheet below. The *'Initials'* has to be signed off by the personnel responsible for the change.

Rev No.	Revision Date	Revision Details	Initials





#### 1 General

#### 1.1 Citation

- 1.1.1 These Directives are the Civil Aviation Directives 8201 Error! Use the Home tab to apply antitle to the text that you want to appear here. [CAD Error! Use the Home tab to apply anno to the text that you want to appear here.], Issue 01/Revision 00, and comes into operation on 1st May 2021.
- 1.1.2 This CAD 8201 Error! Use the Home tab to apply antitle to the text that you want to appear here., Issue 01/Revision 00 will remain current until withdrawn or superseded.

#### 1.2 **Applicability**

- 1.2.1 The following persons shall be subject to this CAD—
  - a) an applicant for a certificate of approval for production under regulation 21 of the MCAR; and
  - b) a holder of a certificate of approval for design under regulation 21 of the MCAR.

#### 1.3 Revocation

1.3.1 This CAD, revokes Notice 8201 issue 1 dated 01 February 2012.

#### 1.4 **Definition**

1.4.1 In this CAD, unless the context otherwise requires—

Aeronautical Product means any aircraft, aircraft engine, aircraft propeller or a part to be installed thereon;

**Certificate of Approval** means a certificate of approval issued under regulation 21 of the MCAR;

**POA** means Production Organisational Approval;

**POE** means Production Organisation Exposition;

**MCAR** means Civil Aviation Regulations 2016;

**CAAM** means Civil Aviation Authority of Malaysia.

# 2 Scope [21.A.131]

#### 2.1 This CAD establishes:

 The procedure for the issuance of a POA for a production organisation showing conformity of products, parts and appliances with the applicable design data;
and The rules governing the rights and obligations of the applicant for, and holders of, such approvals.

# 3 Eligibility [21.A.133]

3.1 Any person or organisation engaged or intending to engage in, any stage of manufacture or construction of aircraft, engine, propeller or aircraft part or appliance shall be eligible as an applicant for a POA.

Note. – For the purposes of this CAD, "aircraft part or appliance" means any part, instrument, mechanism, equipment, apparatus, appurtenance or accessory fitted to, or installed or provided in, an aircraft including communications equipment that is used or intended to be used in operating or controlling the aircraft in flight.

#### 3.2 The applicant shall:

- a) justify that, for a defined scope of work, an approval under this CAD is appropriate for the purpose of showing conformity with a specific design; and
- b) hold or have applied for an approval of that specific design; or
- c) have ensured, through an appropriate arrangement with the applicant for, or holder of, an approval of that specific design, satisfactory coordination between production and design.
- 3.3 CAAM does not issue a POA if the facility is located outside of Malaysia, unless CAAM finds that the facility places no undue burden on CAAM in administering applicable airworthiness requirements..

# 4 Application for the Issuance of a Certificate of Approval [21.A.134]

4.1 Each application for POA shall be made in a form and manner established by CAAM and shall include a draft of the Production Organisation Exposition (POE) as required in paragraph 7 of this CAD, and the terms of approval requested to be issued under paragraph 12 of this CAD.

# 5 Issue of Provisional Certificate of Approval and Certificate of Approval [21.A.135]

- 5.1 CAAM may issue a provisional certificate of approval if CAAM is satisfied that the applicant complies with the applicable requirements under this CAD.
- 5.2 A holder of a provisional certificate of approval shall
  - a) be entitled to perform activity in accordance with the terms and conditions specified in the provisional certificate of approval; and



- b) not release the data without an authorisation from CAAM.
- 5.3 CAAM may issue a certificate of approval if CAAM is satisfied that the organisation who holds a provisional certificate of approval has demonstrated technical competency in the production and has fulfilled applicable requirements under this CAD.
- 5.4 Where a certificate of approval is issued:
  - a) the provisional certificate of approval shall have no effect; and
  - b) the holder of the provisional certificate of approval shall within a reasonable period from the date of issuance, return the provisional certificate of approval to CAAM.
- 5.5 An organisation may be entitled to have a provisional certificate of approval for POA if
  - a) CAAM is satisfied that their Safety Management System is in accordance with CAD 19 (only for organisation responsible for the manufacture of aircraft/ engine/ propeller); and
  - b) it complies with the applicable requirements under this CAD.

### 6 Quality System

[21.A.139]

- The production organisation shall demonstrate that it has established and is able to maintain a quality system. The quality system shall be documented. This quality system shall be such as to enable the organisation to ensure that each product, part or appliance produced by the organisation or by its partners, or supplied from or subcontracted to outside parties, conforms to the applicable design data and is in condition for safe operation, and thus exercise the privileges set forth in paragraph 17 of this CAD.
- 6.2 The quality system shall contain:
  - a) As applicable within the scope of approval, control procedures for:
    - 1) Document issue, approval, or change;
    - 2) Vendor and subcontractor assessment audit and control;
    - 3) Verification that incoming products, parts, materials, and equipment, including items supplied new or used by buyers of products, are as specified in the applicable design data;
    - 4) Identification and traceability;
    - 5) Manufacturing processes;
    - 6) Inspection and testing, including production flight tests;

- 7) Calibration of tools, jigs, and test equipment;
- 8) Non-conforming item control;
- 9) Airworthiness coordination with the applicant for, or holder of, the design approval;
- 10) Records completion and retention;
- 11) Personnel competence and qualification;
- 12) Issue of airworthiness release documents;
- 13) Handling, storage and packing;
- 14) Internal quality audits and resulting corrective actions and preventive actions;
- 15) Work within the terms of approval performed at any location other than the approved facilities;
- Work carried out after completion of production but prior to delivery, to maintain the aircraft in a condition for safe operation;
- 17) Issue of permit to fly and approval of associated flight conditions.

Note. – The control procedures need to include specific provisions for any critical parts.

b) An independent quality assurance function to monitor compliance with, and adequacy of, the documented procedures of the quality system. This monitoring shall include a feedback system to the person or group of persons referred to in paragraph 8c)2) of this CAD and ultimately to the accountable manager referred to in paragraph 8c)1) of this CAD to ensure, as necessary, corrective action.

# 7 Exposition

[21.A.143]

- 7.1 The organisation shall furnish to CAAM a production organisation exposition (POE) providing the following information:
  - a) A statement signed by the accountable manager confirming that the POE and any associated documents which define the approved organisation's compliance with this CAD will be complied with at all times;
  - b) The titles and names of the management staff approved by CAAM in accordance with paragraph 8c)2)of this CAD;
  - c) The duties and responsibilities of the management staff as required by paragraph 82)of this CAD including matters on which they may deal directly with CAAM on behalf of the organisation;

- CAAM
- d) An organisational chart showing associated chains of responsibility of the management staff as required by paragraphs 8c)1) and c)2) of this CAD;
- e) A list of certifying staff as referred to in paragraph 8d) of this CAD;
- f) A general description of man-power resources;
- g) A general description of the facilities at the address specified in the production organisation's certificate of approval;
- h) A general description of the production organisation's scope of work relevant to the terms of approval;
- i) The procedure for the notification of organisational changes to CAAM;
- j) The amendment procedure for the POE;
- k) A description of the quality system and the procedures as required by paragraph 6.2 of this CAD; and
- I) A list of those outside parties referred to in paragraph 6.1 of this CAD.
- m) if flight test are to be conducted, a flight test operations manual defining the organisation's policies and procedures in relation to flight test. The flight test operations manual shall include:
  - a description of the organisation's processes for flight test, including the flight test organisation involvement into the permit to fly issuance process;
  - crewing policy, including composition, competency, currency and flight time limitations, in accordance with Categories of flight test and associated flight test crew qualifications to this CAD, where applicable;
  - 3) procedures for the carriage of persons other than crew members and for flight test training, when applicable;
  - 4) a policy for risk and safety management and associated methodologies;
  - 5) procedures to identify the instruments and equipment to be carried;
  - a list of documents that need to be produced for flight test.
- 7.2 The POE shall be amended as necessary to remain an up-to-date description of the organisation, and copies of any amendment shall be furnished to CAAM.

# 8 Approval Requirements

[21.A.145]

- 8.1 The production organisation shall demonstrate, on the basis of the information submitted in accordance with paragraph 7 of this CAD that:
  - a) with regard to general approval requirements, facilities, working conditions, equipment and tools, processes and associated materials, number and



competence of staff, and general organisation are adequate to discharge obligations under paragraph 18 of this CAD.

- b) with regard to all necessary airworthiness and environmental data:
  - The production organisation is in receipt of such data from CAAM, and from the holder of, or applicant for, the type-certificate, or design approval, including any exemption granted to the CO2 production cutoff requirements, to determine conformity with the applicable design data;
  - 2) The production organisation has established a procedure to ensure that airworthiness and environmental data are correctly incorporated in its production data and,
  - 3) Such data are kept up to date and made available to all personnel who need access to such data to perform their duties.
- c) with regard to management and staff:
  - A manager has been nominated by the production organisation, and is accountable to CAAM. His or her responsibility within the organisation shall consist of ensuring that all production is performed to the required standards and that the production organisation is continuously in compliance with the data and procedures identified in the exposition referred to in paragraph 7 of this CAD.
  - A person or group of persons have been nominated by the production organisation to ensure that the organisation is in compliance with the requirements of this CAD, and are identified, together with the extent of their authority. Such person(s) shall act under the direct authority of the accountable manager referred to in paragraph 8(c)1)of this CAD. The persons nominated shall be able to show the appropriate knowledge, background and experience to discharge their responsibilities.
  - 3) Staff at all levels has been given appropriate authority to be able to discharge their allocated responsibilities and that there is full and effective coordination within the production organisation in respect of airworthiness, and environmental data matters.
- d) with regard to certifying staff, authorised by the production organisation to sign the documents issued under paragraph 17 of this CAD under the scope or terms of approval:
  - The knowledge, background (including other functions in the organisation), and experience of the certifying staff are appropriate to discharge their allocated responsibilities;
  - 2) The production organisation maintains a record of all certifying staff which shall include details of the scope of their authorisations;

CAAM

 Certifying staff are provided with evidence of the scope of their authorisation

# 9 Changes To The Approved Production Organisation [21.A.147]

- 9.1 After the issue of a POA, each change to the approved production organisation that is significant to the showing of conformity or to the airworthiness and environmental characteristics of the product, part or appliance, particularly changes to the quality system, shall be approved by CAAM. An application for approval shall be submitted in writing to CAAM and the organisation shall demonstrate to CAAM, before implementation of the change, that it complies with this CAD.
- 9.2 CAAM shall establish the conditions under which a production organisation approved under this CAD may operate during such changes unless CAAM determines that the approval should be suspended.

## 10 Change Of Location

[21.A.148]

10.1 A change of the location of the manufacturing facilities of the approved production organisation shall be deemed of significance and therefore shall comply with paragraph 9 of this CAD.

# 11 Transferability

[21.A.149]

11.1 Except as a result of a change in ownership, which is deemed significant for the purpose of paragraph 9 of this CAD, a POA is not transferable.

# 12 Terms of Approval

[21.A.151]

- 12.1 The terms of approval shall identify the scope of work, the products or the categories of parts and appliances, or both, for which the POA holder is entitled to exercise the privileges under paragraph 17 of this CAD.
- 12.2 Those terms shall be issued as part of a POA.

# 13 Changes To The Terms Of Approval

[21.A.153]

13.1 Each change to the terms of approval shall be approved by CAAM. An application for a change to the terms of approval shall be made in a form and manner established by CAAM. The applicant shall comply with the applicable requirements of this CAD.

#### 14 Investigation

[21.A.157]

- 14.1 The production organisation shall make arrangement that allows any persons authorised by CAAM to make any investigations, including investigations of partners and subcontractors, necessary to determine compliance and continued compliance with the applicable requirements of this CAD.
- 14.2 The production organisation shall allow any persons authorised by CAAM to review any report and make any inspection and perform or witness any flight and ground test necessary to check the validity of the compliance statements submitted by the applicant.

15 Findings [21.A.158]

- When objective evidence is found showing non-compliance of the holder of a POA with the applicable requirements of this CAD, the finding shall be classified as follows:
  - a) A level one finding is any non-compliance with this CAD which could lead to uncontrolled non-compliances with applicable design data and which could affect the safety of the aircraft.
  - b) A level two finding is any non-compliance with this CAD which is not classified as level one.
- 15.2 After receipt of notification of findings under the applicable administrative procedure established by CAAM,
  - a) In case of a level one finding, the holder of the POA shall demonstrate immediate corrective action to the satisfaction of CAAM.
  - b) In case of level two findings, the corrective action period granted by CAAM shall be appropriate to the nature of the finding but in any case initially shall not be more than 14 days. In certain circumstances and subject to the nature of the finding CAAM may extend the 14 days period subject to a satisfactory corrective action plan agreed by CAAM.
- 15.3 In case of level one or level two findings, the POA holder may be subject to a partial or full limitation, suspension or revocation under the applicable administrative procedure established by CAAM. The holder of the POA shall provide confirmation of receipt of the notice of limitation, suspension or revocation of the POA in a timely manner.

# 16 Duration and Continued Validity

[21.A.159]

16.1 A POA shall be issued for a period of one (1) year. It will be renewed upon satisfactory Authority annual audit and acceptance of annual renewal fee. It shall remain valid as stated in the certificate unless;

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- a) The production organisation fails to demonstrate compliance with the applicable requirements of this CAD; or
- b) CAAM is prevented by the holder or any of its partners or subcontractors to perform the investigations in accordance with paragraph 14 of this CAD; or
- There is evidence that the production organisation cannot maintain satisfactory control of the manufacture of products, parts or appliances under the approval; or
- d) The production organisation no longer meets the requirements of paragraph 3 of this CAD; or
- e) The certificate has been surrendered or revoked under the applicable administrative procedures established by CAAM.
- 16.2 Upon surrender or revocation, the certificate shall be returned to CAAM.

#### 17 Privileges

[21.A.163]

- 17.1 Pursuant to the terms of approval issued under paragraph 12 of this CAD, the holder of a POA may:
  - a) Perform production activities under this CAD;
  - b) In the case of complete aircraft and upon presentation of a Statement of Conformity, obtain an aircraft certificate of airworthiness and a noise certificate without further showing; or
  - c) In the case of other products, parts or appliances, issue CAAM Form 1 in accordance with CAD 8708 without further showing.
  - d) maintain a new aircraft that it has produced and issue a certificate of release to service (POA Maintenance Release) in respect of that maintenance.
  - e) under the procedures agrees with CAAM for production, for an aircraft it has produced and when the production organization itself is controlling under its POA the configuration of the aircraft and is attesting conformity with the design conditions approved for the flight, to issue a permit to fly in accordance with CAD 8305 including approval of the flight conditions in accordance with CAD 8305.

## 18 Obligations of the Holder

[21.A.165]

- 18.1 The holder of a POA shall:
  - ensure that the POE furnished in accordance with paragraph 7 of this CAD and the documents, to which it refers, are used as basic working documents within the organization;



- b) maintain the production organisation in conformity with the data and procedures approved for the POA;
  - 1) determine that each completed aircraft conforms to the type design and is in condition for safe operation prior to submitting Statements of Conformity to CAAM; or
  - 2) determine that other products, parts or appliances are complete and conform to the approved design data and are in condition for safe operation before issuing CAAM Form 1 to certify conformity to approved design data and condition for safe operation;
  - 3) additionally, in the case of environmental requirements determine that:
    - the completed engine is in compliance with the applicable engine exhaust emission requirements on the date of manufacture of the engine; and
    - ii) the completed aeroplane is in compliance with the applicable CO<sub>2</sub> emissions requirements on the date its first certificate of airworthiness is issued.
  - 4) other products, parts or appliances conform to the applicable data before issuing CAAM Form 1 as a conformity certificate;
- c) record all details of work carried out;
- d) establish and maintain an internal occurrence reporting system in the interest of safety, to enable the collection and assessment of occurrence reports in order to identify adverse trends or to address deficiencies, and to extract reportable occurrences. This system shall include evaluation of relevant information relating to occurrences and the promulgation of related information;
- e) provide the following reports:
  - 1) Report to the holder of the type-certificate or design approval, all cases where products, parts or appliances have been released by the production organisation and subsequently identified to have possible deviations from the applicable design data, and investigate with the holder of the type- certificate or design approval in order to identify those deviations which could lead to an unsafe condition:
  - 2) Report to CAAM, the deviations which could lead to an unsafe condition identified according to paragraph 18e1) of this CAD. Such reports shall be made not later than seventy-two (72) hours in a form and manner established by CAAM unless exceptional circumstances prevent this;
  - Where the holder of the POA is acting as a supplier to another production organisation, report also to that other organisation all cases where it has released products, parts or appliances to that organisation and subsequently identified them to have possible deviations from the applicable design data;



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- f) provide assistance to the holder of the type-certificate or design approval in dealing with any continuing airworthiness actions that are related to the products parts or appliances that have been produced;
- g) establish an archiving system incorporating requirements imposed on its partners, suppliers and subcontractors, ensuring conservation of the data used to justify conformity of the products, parts or appliances. Such data shall be held at the disposal of CAAM and be retained in order to provide the information necessary to ensure the continuing airworthiness of the products, parts or appliances;
- where, under its term of approval, the holder issues a certificate of release to service, determine that each completed aircraft has been subjected to necessary maintenance and is in condition for safe operation, prior to issuing the certificate;
- i) where applicable, under the privilege of CAD 8305 paragraph 1.2.1 (c), determine that conditions under which a permit to fly can be issued;
- j) where applicable, under the privilege of CAD 8305 paragraph 1.2.1 (c), establish compliance with paragraph 2 before issuing a permit to fly to an aircraft.

