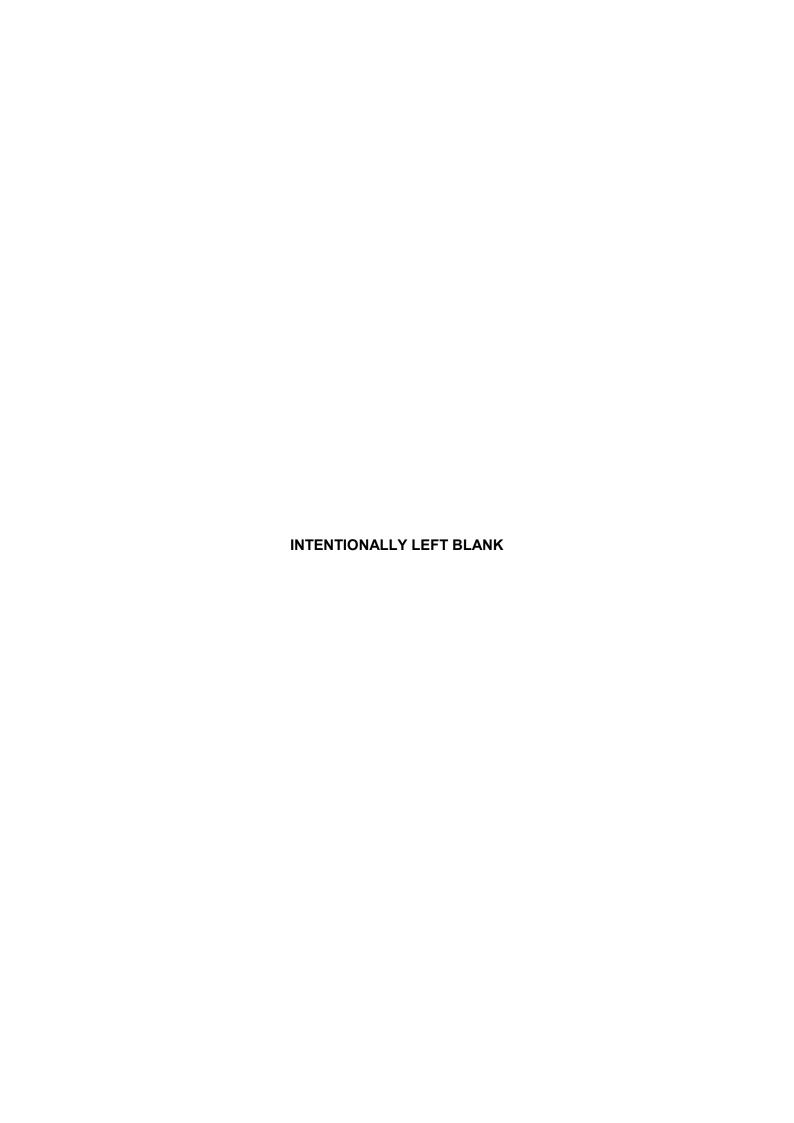


**CIVIL AVIATION DIRECTIVE – 8204** 

# PARTS AND APPLIANCES

**CAAM PART 21 SUBPART K** 

CIVIL AVIATION AUTHORITY OF MALAYSIA





## Introduction

In exercise of the powers conferred by regulations 24O of the Civil Aviation Act 1969 [Act 3], the Chief Executive Officer Makes this Civil Aviation Directive (CAD) 8204 – Parts and Appliances (CAAM Part 21 Subpart K), pursuant to Regulation 23, 189 and 193 of the Malaysia Civil Aviation Regulation (MCAR) 2016.

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

This CAD 8204 – Parts and Appliances (CAAM Part 21 Subpart K) is published by the Chief Executive Officer under section 24O of the Civil Aviation Act 1969 [*Act 3*] and come into operation on 15<sup>th</sup> November 2022.

## Non-compliance with this CAD

Any person who contravenes any provision in this CAD commits an offence and shall on conviction be liable to the punishment under section 240 of the Civil Aviation Act 1969 [Act 3] and/or under Malaysia Civil Aviation Regulation 2016.

(Datuk Captain Chester Voo Chee Soon)

Chief Executive Officer

Civil Aviation Authority of Malaysia



# **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.

**Tables and Figures**: These add to or illustrate a Standard or Recommended Practice and which are referred to therein, form part of the associated Standard or Recommended Practice and have the same status.

**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;

**Attachments**: Material supplementary to the Standards and Recommended Practices or included as a guide to their application.

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.

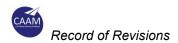
Throughout this Civil Aviation Directive, the use of the male gender should be understood to include male and female persons.



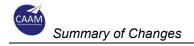
# **Record of revisions**

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
ISS02/REV00	15 <sup>th</sup> November 2022	Revision Details Refer to Summary of Changes	CAAM
	2022		



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# **Summary of Changes**

ISS/REV no.	Item no.	Revision Details
ISS02/REV00	Para 1.4.1	Added definition on Critical Component, FAA and PMA
	Para 3.1 a)	Added references to CAD 8107 and CAD 8108
	Para 5.1 a)	Paragraph breakdown for clarity
	Para 5.1 b)	Added requirement on marking and release parts and appliances by Type Certificate Holder, TSO holder or PMA holder
	Para 5.2 b)	Change to 'Reserved'.
	Para 5.2 c)	Removed reference to 5.2 b)
	Para 5.3	Added requirement on installation of parts and appliances without CAAM Form 1
	Chapter 6	Added requirement on PMA



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## 1 General

#### 1.1 Citation

- 1.1.1 These Directives are the Civil Aviation Directives 8204 Parts and Appliances (CAAM Part 21 Subpart K), Issue 02/Revision 00, and comes into operation on 15<sup>th</sup> November 2022.
- 1.1.2 This CAD 8204 Parts and Appliances (CAAM Part 21 Subpart K), Issue 02/Revision 00 will remain current until withdrawn or superseded.

## 1.2 **Applicability**

- 1.2.1 This CAD shall be applicable to
  - a) a holder of type certificate issued under regulation 23 of the MCAR;
  - b) a holder of certificate of approval issued under regulation 21 of the MCAR;
  - an applicant for an approval for the design of modification under regulation 24 of the MCAR; and
  - d) a holder of approval for the design of modification under regulation 24 of the MCAR.

## 1.3 **Revocation**

1.3.1 This CAD revokes Civil Aviation Directives 8204 – Parts and Appliances (CAAM Part 21 Subpart K) Issue 01/Revision 00, dated 1st February 2022.

## 1.4 **Definition**

1.4.1 In this CAD, unless the context otherwise requires—

**Critical Component** means a part identified as critical by the design approval holder (DAH) during the product certification process or otherwise by the Authority for the State of Design (SoD). Typically, such components include parts for which a replacement time, inspection interval, or related procedure is specified in the Airworthiness Limitations section or certification maintenance requirements of the manufacturer's maintenance manual or Instructions for Continued Airworthiness

## **FAA** means Federal Aviation Authority

**PMA** means Parts Manufacturer Approval. It is a combined design and production approval issued for modification and replacement articles. It allows a manufacturer to produce and sell these articles for installation on type certificated products

TSO means Technical Standard Order



2 Scope [21.301]

2.1 This CAD establishes the procedure relating to the approval of parts and appliances.

# 3 Compliance with Applicable Requirements [21.303]

- 3.1 The showing of compliance of parts and appliances to be installed in a type-certificated product shall be made—
  - a) in conjunction with the type-certification procedures of CAD 8102, CAD 8104, CAD 8105, CAD 8107 and CAD 8108 for the product in which it is to be installed;
     or
  - b) where applicable, under the TSO authorisation procedures of CAD 8205; or
  - c) in the case of standard parts, in accordance with Standards recognised by the CAAM.

# 4 Approval of parts and appliances

[21.305]

4.1 In all cases where the approval of a part or appliance is explicitly required by the CAAM, the part or appliance shall comply with the applicable TSO or with the specifications recognised as equivalent by the CAAM in the particular case.

# 5 The eligibility of parts and appliances for installation [21.307]

- 5.1 A part or appliance is eligible for installation in a type-certified product when it is in a condition for safe operation,
  - a) for parts manufactured in accordance with CAD 8201, it is marked in accordance with CAD 8206 and accompanied by an authorised release certificate (CAAM Form 1) in accordance with CAD 8708, certifying that the item was manufactured in conformity with approved design data.
  - b) for other than parts in paragraph 5.1 a), it is marked and released by Type Certificate Holder, TSO holder or PMA holder and accompanied with an authorised release certificate and its installation is under the control of Type Certificate holder, Supplemental Type Certificate holder or modification design approval holder.
- 5.2 By way of derogation of paragraph 5.1, the following parts or appliances do not require an CAAM Form 1 in order to be eligible for installation in a type-certified product:
  - a) a standard part;



- b) RESERVED
- c) a part or appliance that is an item of a higher assembly identified in paragraph 5.2 a) above.
- 5.3 Parts and appliances listed in paragraph 5.2 are eligible for installation in a type-certified product without being accompanied by CAAM Form 1, provided that the installer holds a document issued by the person or organisation that manufactured the part or appliance, which declares the name of the part or appliance, the part number, and the conformity of the part or appliance with its design data, and which contains the issuance date.

# 6 Product Manufacturer Approval (PMA) Parts

- 6.1 FAA PMA parts may be accepted as modification and/or replacement parts for installation on products where FAA is the Authority of State of Design in the following cases:
  - a) The FAA PMA part is not a "critical component" and the FAA PMA design was approved via:
    - i) Identicality without a licensing agreement per 14 CFR section 21.303; or
    - ii) Test reports and computations per 14 CFR section 21.303;
    - and data for installation has been certified or validated by CAAM in accordance with CAD 8104, CAD 8105, CAD 8107 or CAD 8108.
  - b) The FAA PMA part conforms to design data obtained under a licensing agreement from the TC or STC holder according to 14 CFR section 21.303 and the TC or STC has been validated by CAAM in accordance with CAD 8107 or CAD 8108.
  - c) The FAA PMA part is a "critical component" and the FAA PMA design was approved via:
    - i) An FAA-issued STC and CAAM has validated the STC in accordance with CAD 8108;
    - ii) Identicality without a licensing agreement per 14 CFR section 21.303 and CAAM has issued an STC in accordance with CAD 8105; or
    - iii) Test reports and computations per 14 CFR section 21.303 and CAAM has issued an STC in accordance with CAD 8105.
- Other than situation in para 6.1, the data for installation including the parts and appliances qualification shall be certified or validated in accordance with CAD 8104, CAD 8105 or CAD 8108 for:
  - a) FAA PMA products installed on products where the FAA is not the Authority of State of Design;



- b) PMA other than FAA PMA products installed on products where FAA is the Authority of State of Design; or
- c) PMA installed on products where the Authority of State of Design of the product is the same.
- 6.3 In addition to the requirements specified in para 6.1 and 6.2, PMA parts must be:
  - a) appropriate to the product, component, or appliance (i.e. product type is listed in the PMA approval) and is directly applicable to the work being carried out; and
  - b) not conflict with data provided by the manufacturer of the product or assembly on which the PMA part is to be installed.