

# **CIVIL AVIATION DIRECTIVE – 1821**

# MAINTENANCE TRAINING ORGANISATION APPROVAL

CAAM PART 147

CIVIL AVIATION AUTHORITY OF MALAYSIA



# Introduction

In exercise of the powers conferred by section 24O of the Civil Aviation Act 2019 (Act 3), the Chief Executive Officer makes this Civil Aviation Directive (CAD) 1821 – Maintenance Training Organisation Approval (CAAM Part 147) pursuant to Regulation(s) 31, 32, 189 and 193 of the Malaysian Civil Aviation Regulations (MCAR) 2016.

This Directive provides the requirement governing the issuance, renewal and variation of Maintenance Training Organisation Approval and for any matters connected therewith.

This Directive 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 2021.

#### 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 punishments under Section 24O (2) of the Civil Aviation Act 1969 (Act 3) and/or under Malaysia Civil Aviation Regulation 2016.

(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.

**Appendices:** Material grouped separately for convenience but forms part of the Standards and Recommended Practices stipulated by the CAAM.

**Definitions:** Terms used in the Standards and Recommended Practices which are not selfexplanatory 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.

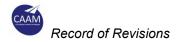
Throughout this Civil Aviation Directive, the use of the male gender should be understood to include male and female persons.

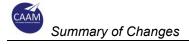


# **Record of Revisions**

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.

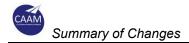
ISS/REV No.	<b>Revision Date</b>	Revision Details	Initials
ISS01/REV01	15 November 2021	Refer to summary of changes	CAAM
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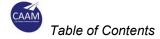




# Summary of Changes

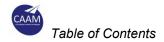
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# 1 General

#### 1.1 Citation

- 1.1.1 These Directives are the Civil Aviation Directives 1821 Maintenance Training Organisation Approval (CAAM Part 147), Issue 01/Revision 01, and comes into operation on 15<sup>th</sup> November 2021.
- 1.1.2 This CAD 1821 Maintenance Training Organisation Approval, Issue 01/Revision 01 will remain current until withdrawn or superseded.

#### 1.2 Applicability

- 1.2.1 The following persons shall be subject to this Directive
  - a) an applicant or holders of a certificate of approval under regulation 31(1)(c) of the MCAR; and
  - b) an applicant or holders of a certificate of approval under regulation 32 of the MCAR;

#### 1.3 Revocation

1.3.1 This CAD revokes Civil Aviation Circular 06/2021 – Changes to CAAM Definitions on Knowledge Examiner and Practical Assessor for Maintenance Training Organisation, dated 21 September 2021.

#### 1.4 Definitions

1.4.1 In this Directive, unless the context otherwise requires—

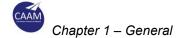
*Aircraft Maintenance Licence or AML* means a licence issued by CAAM in accordance with CAD 1801.

**AMO** means, an approved maintenance organisation which holds a valid certificate of approval granted under regulation 31(1)(b), or regulation 32 of the MCAR.

*Knowledge Examiner* means an appropriately qualified person authorised by the maintenance training organisation to develop theoretical examination question paper and conduct assessment on the performance of the examinations.

#### Large Aircraft means

- a) an aeroplane with a maximum certificated take-off mass exceeding 5,700 kg;
- b) an aeroplane equipped with turbojet engine(s) or more than one turboprop engine;
- c) a rotorcraft with a maximum certificated take-off mass exceeding 3,175 kg; or
- d) a rotorcraft with more than one engine.



*Maintenance* means, in relation an aircraft, the performance of tasks required to ensure the continuing airworthiness of the aircraft, including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair.

*Maintenance Experience* means experience of being involved in maintenance tasks on operating aircraft and cover a wide range of tasks in length, complexity and variety.

*Maintenance Training Organisation Exposition* or MTOE means an approved document that contains the material specifying the scope of work deemed to constitute approval and showing how the organisation intends to comply with this CAD.

*MTO or The Organisation* means an approved maintenance training organisation which holds a valid certificate of approval granted under regulation 31(1)(c), or regulation 32 of the MCAR.

*Practical Assessor* means an appropriately qualified person authorised by the maintenance training organisation to conduct the practical assessments in determining the level of practical knowledge or skill whether the trainee is competent.

*Validator* means a licensed personnel or a person authorised by the maintenance training organisation who is responsible to supervise, train and validate the skill training and experience acquisition of an aircraft maintenance trainee or personnel.

# 2 Application of Maintenance Training Organisation Approval

# (Subpart A)

- 2.1 An application for maintenance training organisation approval shall be made to the CAAM.
- 2.2 In the case of a maintenance training organisation under regulation 31 of MCAR, an applicant shall submit
  - a) an application form CAAM/AW/1821-01;
  - b) a maintenance training organisation exposition;
  - c) a description of the proposed maintenance training course programme;
  - d) CAAM Form 4 forms for each of the persons specified in paragraph 4.2 of this CAD; and
  - e) the applicable fee.
- 2.3 In the case of a maintenance training organisation under regulation 32 of the MCAR, an applicant shall submit
  - a) the documents specified in paragraph 2.2 above;
  - b) evidence that the organisation is approved as a maintenance training organisation by the local national aviation authority; and
  - c) evidence of need from local AMO.
- 2.4 The application form shall be signed by the nominated accountable manager.
- 2.5 The scope of application for maintenance training organisation may either be basic training or type training, or combination of both and is classified as following:
  - a) Basic Training
    - 1) Category A (Aircraft Maintenance Technician)
      - A1 Aeroplanes Turbine
      - A2 Aeroplanes Piston
      - A3 Helicopters Turbine
      - A4 Helicopters Piston
    - 2) Category B (Aircraft Maintenance Engineer Mechanical)
      - B1.1 Aeroplanes Turbine
      - B1.2 Aeroplanes Piston
      - B1.3 Helicopters Turbine

B1.4 – Helicopters Piston

**B2** – Avionics

- 3) Category B2 (Aircraft Maintenance Engineer Avionics)
- b) Type Training– aircraft type training which correspond to the category/ subcategory specified in paragraph 2.5(a) above including Category C
- 2.6 In addition to paragraph 2.2 above, in the case of basic training the organisation shall furnish an evidence of an engagement with local AMO to support the performance of practical training and on the job training for the trainee's practical hands-on activity and maintenance experience gathering.
- 2.7 An applicant for basic training is only applicable for organisation regulated under regulation 31 of MCAR.

# 3 Issue of Maintenance Training Organisation Provisional Approval and Maintenance Training Organisation Approval

- 3.1 For issue of maintenance training organisation provisional approval and maintenance training organisation approval for organisation located in Malaysia:
  - a) An organisation may be entitled to have a provisional certificate of approval for maintenance training organisation if CAAM is satisfied that it complies with the applicable requirements under this Directive.
  - b) A provisional certificate of approval holder shall be entitled to perform maintenance training activity in accordance with the conditions specified in the certificate to demonstrate technical competency.
  - c) A provisional certificate of approval holder shall not be entitled to issue a certificate of recognition as specified in paragraph 7.1(e) of this CAD.
  - d) An organisation who holds a provisional certificate of approval may be entitled to have a certificate of approval, if the CAAM is satisfied that it has
    - 1) demonstrated technical competency; and
    - 2) fulfilled the applicable requirements under this CAD.
  - e) The provisional certificate of approval is terminated upon the issuance of the certificate of approval.
- 3.2 For issue of maintenance training organisation approval for organisation located outside Malaysia:
  - a) An organisation may be entitled to have a maintenance training organisation approval if CAAM is satisfied that it complies with the applicable requirements under this CAD.

# 4 Organisational Requirements

#### 4.1 Facility requirements

- a) The size and structure of facilities shall ensure protection from the prevailing weather elements and proper operation of all planned training and examination on any particular day.
- b) Fully enclosed appropriate accommodation separate from other facilities shall be provided for the instruction of theory and the conduct of knowledge examinations.
  - 1) The maximum number of students undergoing knowledge training during any training course shall not exceed 28; and
  - 2) The size of accommodation for examination purposes shall be such that no student can read the paperwork or computer screen of any other student from his/her position during examinations.
- c) By derogation to paragraph 4.1(b) above, accommodation environment shall be maintained such that students are able to concentrate on their studies or examination as appropriate, without undue distraction or discomfort.
- d) In the case of a basic training course, basic training workshops and/or maintenance facilities separate from training classrooms shall be provided for practical instruction appropriate to the planned training course. If, however, the organisation is unable to provide such facilities, arrangements may be made with another organisation to provide such workshops and/or maintenance facilities, in which case a written agreement shall be made with such organisation specifying the conditions of access and use thereof. CAAM shall have access to any such contracted organisation and the written agreement shall specify this access.
- e) In the case of an aircraft type/ task training course, access shall be provided to appropriate facilities containing examples of aircraft type as specified in paragraph 4.4(d) of this CAD.
- f) The maximum number of students undergoing practical training during any training course shall not exceed 15 per practical instructor or validator.
- g) Office accommodation shall be provided for instructors, knowledge examiners and practical assessors of a standard to ensure that they can prepare for their duties without undue distraction or discomfort.
- h) Secured storage facilities shall be provided for examination papers and training records. The storage environment shall be such that documents remain in good condition for the retention period as specified in paragraph 4.6 of this CAD. The storage facilities and office accommodation may be combined, subject to adequate security.
- i) A library shall be provided containing all technical material appropriate to the scope and level of training undertaken.

(147.100)

(Subpart B)

#### 4.2 Personnel requirements

- a) The organisation shall appoint an accountable manager who has corporate authority for ensuring that all training commitments can be financed and carried out to the standard required by this CAD. The accountable manager shall:
  - 1) ensure that all necessary resources are available to accomplish training and examination commitments to support the organisation approval;
  - establish and promote the safety and quality policy specified in paragraph
    4.7 of this CAD; and
  - 3) demonstrate a basic understanding of this CAD.
- b) The organisation shall nominate a person or group of persons, whose responsibilities include ensuring that the organisation complies with this CAD. Such person(s) shall ultimately be responsible to the accountable manager.
  - 1) The person(s) nominated shall represent the training management structure of the organisation and be responsible for all functions specified in this CAD;
  - 2) The person or persons nominated shall be identified and their credentials submitted in a form and manner established by CAAM.
  - 3) The person(s) nominated shall be able to demonstrate relevant knowledge, background and satisfactory experience related to aircraft maintenance training and demonstrate a working knowledge of this CAD; and
  - 4) Procedures shall make clear who deputises for any particular person in the case of lengthy absence of the said person.
- c) The accountable manager under paragraph 4.2(a) of this CAD shall nominate a person with responsibility for monitoring the quality system, including the associated feedback system as required by paragraph 4.7 of this CAD. The appointed person shall have direct access to the accountable manager to ensure that the accountable manager is kept properly informed on quality and compliance matters.
- d) The organisation shall nominate a person, or group of persons who shall represent the examination structure of the organisation and be responsible for all functions specified in paragraph 4.8 of this CAD. Such person shall be able to demonstrate relevant knowledge, background and satisfactory experience related to the examination.

Note. — Persons nominated under paragraphs 4.2(a), 4.2 (b), 4.2(c), and 4.2(d) shall be subjected to acceptance by CAAM.

e) The organisation shall contract sufficient staff to plan/perform knowledge and practical training, conduct knowledge examinations and practical assessments in accordance with the terms of approval.

#### Chapter 4 – Requirements

- f) The organisation shall have a maintenance training man-hour plan showing that the organisation has sufficient staff to plan, perform, supervise, conduct training, knowledge examination, practical assessment and quality monitor the organisation in accordance with the approval. In addition, the organisation shall have a procedure to reassess training activity intended to be carried out when actual staff availability is less than the planned staffing level for any particular training.
- g) By derogation to paragraph 4.2(e) and 4.2(f) above, when another organisation is subcontracted to provide practical training and assessments, such other organisation's staff may be nominated to carry out practical training and assessments.
- h) Any person may carry out any combination of the roles of instructor, knowledge examiner and practical assessor are subject to compliance with paragraph 4.2(i) of this CAD.
- i) The qualification, experience, skills and competency of instructors, knowledge examiners and practical assessors shall be established and controlled in accordance with the criteria published in CAGM 1823. The process and criteria shall be documented in the exposition and approved by CAAM.
- j) Knowledge examiners and practical assessors, including their capability shall be specified in the MTOE.
- k) Instructors, knowledge examiners and practical assessors shall undergo updating training at least every 24 months relevant to current technology, practical skills, human factors and the latest training techniques appropriate to the knowledge being trained, examined or assessed.
- I) The maintenance training organisation shall establish and control the competence of personnel involved in any training, examination, management and quality audits in accordance with a procedure, and to a standard, agreed by CAAM.

#### 4.3 Record of Instructors, Examiners and Practical Assessors (147.110)

- a) The organisation shall maintain a record of all instructors, knowledge examiners and practical assessors. These records shall reflect the experience and qualification, training history and any subsequent training undertaken.
- b) Terms of reference shall be drawn up for all instructors, knowledge examiners and practical assessors.

Chapter 4 – Requirements

#### 4.4 Instructional Equipment

- a) Each classroom shall have appropriate presentation equipment of a standard that ensures students can easily read presentation text/ drawings/ diagrams and figures from any position in the classroom. Presentation equipment shall include representative synthetic training devices to assist students in their understanding of the particular subject matter where such devices are considered beneficial for such purposes. Synthetic training devices are working models of a particular system or component and include computer simulations. A synthetic training device is considered beneficial for complex systems and fault diagnostic purposes.
- b) The basic training workshops and/ or maintenance facilities as specified in paragraph 4.1(d) of this CAD must have all tools and equipment necessary to perform the approved scope of training.
- c) The basic training workshops and/or maintenance facilities as specified in paragraph 4.1(d) of this CAD must have an appropriate selection of aircraft, engines, aircraft parts and avionics equipment.
- d) The aircraft type training maintenance training organisation as specified in paragraph 4.1(e) of this CAD must have access to the appropriate aircraft type. Synthetic training devices may be used when such synthetic training devices ensure adequate training standards.

#### 4.5 Maintenance Training Material

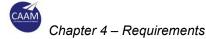
#### (147.120)

(147.125)

- a) Maintenance training course material shall be provided to the student and cover as applicable: -
  - 1) the basic knowledge syllabus specified in CAD 1801 Appendix 1 for the relevant aircraft maintenance licence category or subcategory;
  - 2) the type course content required by CAD 1801 Appendix 3 for the relevant aircraft type and aircraft maintenance licence category or subcategory;
- b) Students shall have access to examples of maintenance documentation and technical information in the library as specified in paragraph 4.1(i) of this CAD.

#### 4.6 Record-keeping

- a) The organisation shall establish a system of record-keeping that allows adequate traceability of the training and examination related process.
- b) The organisation shall keep all student training, examination and assessment records. Records shall not be destroyed without consent from CAAM.
- c) The records shall include as a minimum: -
  - 1) the student application documentation;
  - 2) the student previous and current certificate;



- 3) the student knowledge and practical training including examination and practical assessments;
- 4) details of any student exemption record;
- 5) any disciplinary and/ or termination records; and
- 6) any report from other foreign authorities relating to the student exemption
- d) The records shall be stored in a manner that ensures protection from damage, alteration and theft.
- e) All computer hardware used to ensure backup shall be stored in a different location from that containing the working data in an environment that ensures they remain in good condition.

#### 4.7 Training Procedure and Quality Systems

- a) The organisation shall establish procedures acceptable to CAAM to ensure proper training standards and compliance with all relevant requirements in this CAD.
- b) The organisation shall establish a quality system including:
  - 1) an independent audit function to monitor training standards, the integrity of knowledge examinations and practical assessments, compliance with and adequacy of the procedures, and
  - 2) a quality feedback reporting system of audit findings to the person or group of persons specified in paragraph 4.2(b) and 4.2(d) and ultimately to the accountable manager that ensures proper and timely corrective action is taken in response to reports resulting from the independent audits established to meet paragraph 4.7(b)(1) above.

#### 4.8 Examinations

#### (147.135)

(147.130)

- a) An approved maintenance training organisation shall only conduct the examination for which it is approved for its own student.
- b) The conduct of examination for other than its own student is not allowed unless approved by CAAM, subject to a controlled procedure established by the organisation.
- c) The organisation shall establish a procedure for the development and control of examination papers ensuring that—
  - 1) Examination papers shall be developed by an authorised knowledge examiner within the organisation. Papers may be prepared from a question databank for each examination sitting or a sufficient stock of papers may be held.
  - 2) Examination papers shall cover the complete syllabus concerned in accordance with CAD 1801 Appendix 1 and/ or Appendix 3.

- Examination standards for basic training shall be in accordance with CAD 1801 Appendix 2 and type training examination standard in accordance with CAD 1801 Appendix 3.
- 4) Each examination paper shall be identified with a reference number, issue or revision number and serial number. Records of papers shall be maintained.
- 5) Each examination paper shall be specified in the maintenance training programme.
- 6) The examination papers to be used in the examination shall be decided by a person specified in paragraph 4.2(d) of this CAD.
- 7) The organisation shall ensure the security of all questions. Examination databanks shall be kept secure and protected from unauthorised access by adequate security means. Examination papers and databank printouts shall be kept in locked cabinets.
- 8) A system for the management of the development, review and amendment of questions shall be established and records are maintained. Quality review of examination questions shall be regularly conducted. Records of such reviews shall be properly kept.
- 9) Records of completed examination shall be retained and maintained in accordance with paragraph 4.6 of this CAD.
- d) Only qualified candidates shall be allowed to sit for the examination. The organisation shall ensure that all candidates are adequately screened to prevent unqualified candidate from sitting in this examination.
- e) In the case of external candidate, the organisation shall control a list of qualified candidates with associated examination detail.
- f) Any student found during a knowledge examination to be cheating or in possession of material pertaining to the examination subject other than the examination papers and associated authorised documentation shall be disqualified from taking the examination and may not take any examination for at least 12 months after the date of the incident. CAAM shall be informed of any such incident together with the details of any enquiry within one calendar month.
- g) Any knowledge examiner or invigilator found prior or during examination to be providing question answers to any student shall be disqualified from acting as a knowledge examiner or invigilator and the examination shall be declared void. CAAM must be informed of any such occurrence within one calendar month.

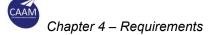
#### 4.9 Assessment

a) The practical assessment shall be carried out using an established assessment standard described in the maintenance training programme and assessed by the practical assessor.

- b) The assessment shall ensure evidence of knowledge, skill and experience acquisition and determine whether the student is <u>competent</u> at using tools and equipment and working in accordance with the applicable manuals. The assessment shall also emphasise on student's situation awareness ability and the application of safety principle.
- c) The organisation's practical assessor shall ensure the security and confidentiality of all assessment question.
- d) Assessment shall only be conducted at the approved location specified in paragraph 4.10 of this CAD, and be conducted:
  - 1) at appropriately enclosed and secured facility
  - 2) without the student carrying any instructional material pertaining to the assessment, other than assessment papers and associated authorised documents
  - 3) in a control environment where only the practical assessor and student scheduled is present for the assessment session.
- e) Any practical assessor found to be providing assessment answers to the student or otherwise assist a student to cheat, or not performing in accordance with paragraph 4.9 of this CAD, the organisation shall:
  - 1) disqualify the person from being an assessor;
  - 2) declare the assessment void in accordance with the organisation's control procedures; and
  - 3) inform CAAM of any such occurrence, within one calendar month.

#### 4.10 Maintenance Training Organisation Exposition (147.140)

- a) The organisation shall provide an exposition for use by the organisation describing the maintenance training organisation and its procedures and containing the following information—
  - a statement signed by the accountable manager confirming that the MTOE and any associated manuals define the maintenance training organisation's compliance with this CAD and shall be complied with at all times;
  - 2) the title(s) and name(s), if applicable of the person(s) nominated in accordance with paragraphs 4.2(b),4.2(c) and 4.2(d);
  - the duties and responsibilities of the person(s) specified in paragraph 4.10 (a)(2), including matters on which they may deal directly with CAAM on behalf of the maintenance training organisation;
  - a maintenance training organisation chart showing associated chains of responsibility of the person(s) specified in paragraph 4.10(a)(2);

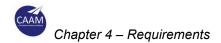


- 5) a list of the training instructors, knowledge examiners and practical assessors with associated capabilities;
- 6) a general description of the training and examination facilities located at each address, and if appropriate any other location, as required by paragraph 4.2.
- 7) a list of the maintenance training courses, which includes each maintenance training programme reference which form the extent of the approval;
- 8) the maintenance training organisation's exposition amendment procedure;
- the maintenance training organisation's procedures, including procedure for approval, amendments and quality review of each training programme as required by paragraph 4.7(a);
- the maintenance training organisation's control procedure, as required by paragraph 7.2(a), when authorised to conduct training, examination and assessments in locations different from those specified in paragraph 7.2(c) of this CAD;
- 11) a list of the location specified in paragraph 7.2(a) of this CAD.
- 12) a list of organisation, if appropriate specified in paragraph 7.2(d) of this CAD.
- b) The MTOE and any subsequent amendments shall be approved by CAAM.
- c) Notwithstanding paragraph 4.10 (b) above, any minor amendments to the exposition may be accomplished through an exposition procedure as approved by CAAM. The type of amendments which is considered as minor amendments shall be specified in the amendment procedure in the MTOE.

#### 4.11 Maintenance training programme

- a) The organisation shall develop and provide CAAM with a document describing its maintenance training course programme for each type of course offered.
- b) Training courses that may be offered at the organisation are state as below:
  - 1) Basic training as specified in paragraph 2.5 a) of this CAD;
  - 2) Aircraft type/ task training as specified in paragraph 2.5 b) of this CAD; or
  - 3) Both basic and type training specified in the aforesaid paragraph.
- c) The training programme shall contain both theoretical and practical elements specified in Chapter 5 or Chapter 6 of this CAD, and be established in accordance with the syllabus and training standard specified in CAD 1801 Appendix 1 and/or Appendix 3.

- d) The training programme shall include training need analysis, which contain at minimum the content of syllabus, the level of depth and its duration, and each examination paper corresponding to the learning objective appropriate to the type of course being offered.
- e) The training programme shall obtain CAAM approval prior to implementation. The organisation shall not change its approved training programme unless the change is approved in advance.
- f) The organisation shall only conduct training, examination and assessment in accordance with the approved maintenance training programme.



# 5 Approved Basic Training Course

#### 5.1 The approved basic training course

- a) The approved basic training course shall consist of knowledge training, knowledge examination, practical training and a practical assessment.
- b) The knowledge training element shall cover the subject matter for a category or subcategory aircraft maintenance licence as specified in Appendix 1 of CAD 1801.
- c) The knowledge examination element shall cover a representative cross section of knowledge training element's subject matter as specified in paragraph 5.1(b) above.
- d) The practical training element shall cover the practical use of common tooling/ equipment, the disassembly/ assembly of a representative selection of aircraft parts and the participation in representative maintenance activities such being carried out relevant to the particular CAAM Part-66 complete module.
- e) The practical assessment element shall cover the practical training and determine whether the student is able to demonstrate understanding of the particular subject, competent at using tools and equipment, able to work in accordance with maintenance manuals, and application of safety awareness.
- f) The conduct of knowledge training, knowledge examinations, practical training and practical assessments for basic training shall be in accordance with the standards defined, as agreed with CAAM in the approved documented training procedure.
- g) The duration of basic training courses shall be in accordance with Appendix 1 of this CAD.
- h) The duration of conversion courses between (sub)categories shall be determined through an assessment of the basic training syllabus and the related practical training needs.

#### 5.2 Basic knowledge examinations

#### (147.205)

- 5.2.1 Basic knowledge examinations shall:
  - a) be in accordance with the standard defined in CAD 1801;
  - b) be conducted without the use of training notes; and
  - c) cover a representative cross section of subjects from the particular module of training completed in accordance with CAD 1801 Appendix 1;

(SUBPART C)

(147.200)

#### 5.3 Basic practical assessments

- a) Basic practical assessments shall be carried out during the basic maintenance training course by the appropriately qualified practical assessors at the completion of each visit period to the practical workshops/maintenance facility.
- b) The student shall be assessed with competent with respect to paragraph 5.3(a) of this CAD.
- c) The organisation shall not conduct examination and assessment, unless it is approved to conduct the corresponding training.



# 6 Aircraft Type/ Task Training Course

#### 6.1 Aircraft type/ task training

- a) The organisation shall be approved to carry out CAAM Part-66 aircraft type and/or task training subject to compliance with the requirement specified in this and CAD 1801 paragraph 3.3 of CAD 1801.
- b) The organisation shall not conduct examination and assessment, unless it is approved to conduct the corresponding training.

(SUBPART D)

(147.300)



# 7 Privileges of the organisation

- 7.1 In accordance with the exposition, the organisation who holds certificate of approval shall be entitled to carry out the following tasks:
  - a) basic training courses to the CAAM Part-66 syllabus specified in accordance with CAD 1801, or part thereof;
  - b) aircraft type/task training courses in accordance with CAAM Part-66 syllabus as in CAD 1801;
  - c) the examination for student who attended the basic training course and type training course at the organisation including detail of assessment;
  - d) the examination for student who did not attended the basic training course at the organisation including details of assessment, provided that the examination is conducted at the location identified in the certificate of approval;
  - e) the issue of certificates of recognition in accordance with Appendix 2, of this CAD following successful completion of the approved basic or aircraft type/ task training courses and/or examination specified in paragraph 7.1(a), 7.1(b), 7.1(c) and 7.1(d) as applicable.
  - f) the organisation may only engage in the maintenance training activity specified in paragraph 7.1(a), (c), (d) and (e) or paragraph 7.1(b), (c) and (e) or paragraph 7.1(a), (b), (c), (d) and (e) when it holds a valid approval with appropriate rating.

#### 7.2 Limitations on the organisation

- a) Training, knowledge examinations and practical assessments may only be carried out at locations specified in the MTOE.
- b) By derogation to paragraph 7.2(a) above, the organisation may only conduct training, knowledge examinations and practical assessments in a location different from the locations specified in paragraph 7.2(a) above, in accordance with a control procedure specified in the maintenance training exposition. Such locations may not be listed in the maintenance training organisation exposition.
- c) The organisation may subcontract the conduct of type training to a nonmaintenance training organisation only when it is validated by CAAM as specified in paragraph 3.3.13 of CAD 1801 and when it is under the control of the organisation quality system.
- d) The subcontracting of type training and examination is limited to powerplant and avionics systems.



# 8 Continuation of an approval

#### 8.1 Changes to the organisation

# a) The organisation shall notify CAAM of any proposed changes to the organisation that affect the approval before any such change takes place, in order to enable CAAM to determine continued compliance with this CAD and to amend if necessary, the certificate of approval, except that in the case of proposed changes in personnel not known to the management beforehand, these changes must be notified at the earliest opportunity:

- 1) the name of the organisation;
- 2) the main location of the organisation;
- 3) additional locations of the organisation;
- 4) the accountable manager;
- 5) any of the persons nominated under paragraph 7.2(b), 7.2(c) and 7.2(d); and
- 6) the facilities, procedures and scope of work
- 7) changes to the maintenance training programme
- b) CAAM may prescribe the conditions under which the organisation may operate during such changes unless CAAM determines that the certificate of approval must be suspended.
- c) Failure to inform CAAM of such changes may result in suspension or revocation of the certificate of approval.

#### 8.2 Continued validity

## (147.155)

(147.150)

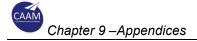
- a) A provisional certificate of approval issued by CAAM shall be valid for a period not exceeding 1 year and may not be renewed. Upon expiry, the application for maintenance training organisation approval is terminated.
- b) A certificate of approval issued by CAAM shall be valid for a period not exceeding 1 year.
- c) Validity of provisional certificate of approval or certificate of approval is subject to the following conditions:
  - 1) The approval is limited to that specified in the provisional certificate of approval or certificate of approval;
  - 2) The provisional certificate of approval or certificate of approval requires compliance with the procedures specified in the MTOE
  - 3) The organisation remaining in compliance with this CAD; and
  - 4) The certificate not being surrendered, suspended or revoked

- d) The list of maintenance training courses and examination deemed to constitute the approval shall be specified in the certificate of approval.
- e) An application to renew or vary the certificate of approval shall be made to CAAM by submitting—
  - 1) an application form CAAM/AW/1821-01;
  - 2) proposed amendments of MTOE, if applicable;
  - 3) a description of the maintenance training course programme, if applicable; and
  - 4) the applicable fee.
- f) CAAM may renew or vary the certificate of approval if CAAM is satisfied that the applicant has fulfilled all applicable requirements under this CAD.

#### 8.3 Findings

#### (147.160)

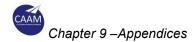
- a) A level 1 finding is any significant non-compliance with requirements which would invalidate the examination(s), and any significant non-compliance with the training process. The maintenance training organisation approval shall cease to be in force immediately until acceptable corrective action has been taken by the organisation.
- b) A level 2 finding is any non-compliance with the training process other than level 1 findings. If the organisation fails to accomplish the corrective action to the satisfaction of CAAM within 14 days after receipt of notification of findings, unless otherwise agreed, the maintenance training organisation approval shall cease to be in force until acceptable corrective action has been taken by the organisation.
- c) After receipt of notification of findings, the applicant or holder of the maintenance training organisation approval shall define a preventive action and demonstrate the preventive action and impact assessment to the satisfaction of CAAM within 90 days unless otherwise agreed. The maintenance training organisation approval shall be revoked, limited or suspended in whole or in part, depending upon the extent of the finding, until acceptable preventive action has been taken by the organisation.

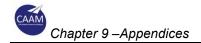


# 9 Appendices

# 9.1 Appendix 1 – Basic Training Course Duration

BASIC COURSE	DURATION (in hour)	THEORETICAL TRAINING RATIO (in %)		
A1	800	30 TO 35		
A2	650	30 TO 35		
A3	800	30 TO 35		
A4	800	30 TO 35		
B1.1	2400	50 TO 60		
B1.2	2000	50 TO 60		
B1.3	2400	50 TO 60		
B1.4	2400	50 TO 60		
B2	2400	50 TO 60		





#### 9.2 Appendix 2 – Certificate of Recognition

- a) The CAAM Part-147 basic training certificate template detailed below is to be used for recognition of completion of either the basic training, the basic examination or both the basic training and basic training examinations.
- b) The training certificate shall clearly identify each individual module examination by date passed together with the corresponding version of Appendix 1 of CAD 1801.

Sample of Certificate of Recognition for Basic Training Course and/ or Examinations.

# **CERTIFICATE OF RECOGNITION**

Approval Reference: [MTO Approval Number]

This Certificate of Recognition is issued to:

#### [NAME]

#### [DATE AND PLACE OF BIRTH]

BY:

#### [ COMPANY NAME AND ADDRESS ]

#### APPROVAL REFERENCE : [ MTO APPROVAL NUMBER ]

a maintenance training organisation approved to provide training and examinations, within its terms of approval in accordance with Civil Aviation Directive 1821

This certificate confirms that the above-named person has successfully completed the approved basic training programme stated below, passing the basic training course with the related examination and basic practical training with assessments in compliance with the Civil Aviation Regulation 2016 for the time being in force.

[BASIC TRAINING PROGRAMME (\*)] or/ and [BASIC EXAMINATION (\*)]

[LIST OF CAAM PART-66 MODULES/ DATE OF EXAMINATION PASSED ]

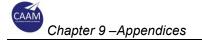
Date:

Signature:			

For: [COMPANY NAME]

#### 9.3 Appendix 3 – Aircraft type/ task training and examination

- a) The CAAM Part 147 type training certificate template detailed below is to be used for recognition of completion of either the theoretical elements, the practical elements or both the theoretical and practical elements of the type/ task rating training course.
- b) The certificate shall indicate the airframe and engine combination/ engine or avionics only for which the training was imparted.
- c) The appropriate references shall be deleted as applicable and the course type box shall detail whether only the theoretical elements or the practical elements were covered or whether theoretical and practical elements were covered.
- d) The training certificate shall clearly identify if the course is a complete course or a partial course (such as an airframe or powerplant or avionic/electrical course) or a <u>difference course</u> based upon the applicant previous experience, for instance Airbus A340 (CFM56) for A320 technicians. If the course is not a complete one, the certificate shall identify whether the interface areas have been covered or not.



Sample of Certificate of Recognition for Type/ Task Training Course.

Reference: [MTO Approval Number]

This Certificate of Recognition is issued to:

#### [NAME]

#### [DATE AND PLACE OF BIRTH]

BY:

#### [ COMPANY NAME AND ADDRESS ]

#### **REFERENCE : [ MTO APPROVAL NUMBER ]**

a maintenance training organisation approved to provide training and conduct examinations, within its terms of approval in accordance with Civil Aviation Directive 1821

This certificate confirms that the above-named person either successfully passed the theoretical (\*) and/or practical elements (\*) of the approved type training course stated below and the related examinations in compliance with Civil Aviation Regulation 2016 for the time being in force.

#### [ AIRCRAFT TYPE/ TASK TRAINING COURSE (\*) ]

#### [START and END DATES]

#### [ SPECIFY THEORETICAL ELEMENTS OR PRACTICAL ELEMENTS ] and/or [ AIRCRAFT TYPE EXAMINATION (\*) ]

#### [END DATE]

Date:

Signature:	

For: [COMPANY NAME]