



CIVIL AVIATION GUIDANCE MATERIAL – 1823

**GUIDANCE FOR QUALIFICATION
AND EXPERIENCE OF
INSTRUCTOR, KNOWLEDGE
EXAMINER AND PRACTICAL
ASSESSOR**

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CIVIL AVIATION AUTHORITY OF MALAYSIA

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Introduction

This Civil Aviation Guidance Material 1823 (CAGM-1823) is issued by the Civil Aviation Authority of Malaysia (CAAM) to provide guidance for organisation to demonstrate compliance with the requirements of CAD 1821 paragraph 4.2 in respect of qualification, experience, skill and competency of Instructors, Knowledge Examiners, and Practical Assessors.

Organisations may use these guidelines to demonstrate compliance with the provisions of the relevant CAD's issued. Notwithstanding Regulation 204 and Regulation 205 of the Malaysian Civil Aviation Regulations 2016 (MCAIR 2016), when the CAGMs issued by the CAAM are used, the related requirements of the CAD's are considered as met, and further demonstration may not be required.

A handwritten signature in black ink, appearing to read 'Chester Voo Chee Soon', written over a horizontal line.

(Captain Chester Voo Chee Soon)
Chief Executive Officer
Civil Aviation Authority of Malaysia

Civil Aviation Guidance Material Components and Editorial practices

This Civil Aviation Guidance Material 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 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 Guidance Material 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 Guidance Material, the use of the male gender should be understood to include male and female persons.



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1 Introduction

- 1.1 The competency of the instructors, knowledge examiners and practical assessors is an essential factor in contributing to the quality of a training course and its recognition by CAAM.
- 1.2 It is therefore important for the organisations to assess the qualifications, experience and skill of their instructional staff against relevant and verifiable criteria to be documented in the Maintenance Training Organisation Exposition (MTOE).
- 1.3 The assessment process and the continuation / revalidation process should be developed by the Maintenance Training Organisation (MTO) and referenced in the relevant MTOE.
- 1.4 To be deemed as competent, a potential or existing candidate for a position of instructor, knowledge examiner and practical assessor shall demonstrate that:
 - a) He/she has a good command of the subjects included into his/her assigned scope of instruction, examination or practical assessment. This includes having an adequate theoretical knowledge and, where appropriate, hands-on skills gained through practical training and/ or sufficient relevant working experience;
 - b) He/she is familiar with instruction, examination and assessment techniques, as appropriate, and has pedagogical skills & good communication abilities;
 - c) He/she is knowledgeable of the organisation's approved procedures in relation with his/her scope of activity and he understands the importance of instructional & examination staff ethics & integrity;
 - d) He/she is proficient with the specific training methods and equipment used by the particular training organisation; and
 - e) He/she is proficient in English language.
- 1.5 The training organisations should retain a record of the instructor, knowledge examiner, and practical assessor containing information relevant to his/ her qualifications, experience and skills, including training history for an indefinite period as well as ensuring that ALL instructional staff are issued with copies of their Personal Authorisation Documents or Certificates.
- 1.6 A record system should be established within the organisation to record the skills, proficiencies and competencies for the continuation / revalidation of the instructors, knowledge examiners, and practical assessors within the approved organisation. Periodicity of these checks should be recorded and retained in the individual's personal training record file.
- 1.7 CAAM shall have access to these records during safety oversight and/ or compliance audit.



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2 Definition

2.1 Instructor

2.1.1 A person who will deliver a CAAM Part-66 Module in accordance with CAD 1801 Appendix 1 and/ or Appendix 3 or part thereof. The instructor is not necessarily the person involved into the drafting of the course material such as content, duration or equivalent, however he/ she must be involved at some point into the organization of the lessons themselves, such as creation of the instructor notes, slides, sequencing or equivalent.

2.2 Knowledge Examiner

2.2.1 A person who is appropriately qualified and authorised by CAAM Part 147 Maintenance Training Organisation, in determining the level of theoretical knowledge of the trainee on a particular module, element, or part thereof to be examined. The function may include the drafting and/or the selection of questions (MCQs and essays), the performance of the examination exercise itself for essay question, the evaluation of the correctness of answers (except when correct answers are pre-determined) and the final judgement regarding the level of knowledge demonstrated by the trainee. Persons solely managing/ planning an exam session consisting of pre-selected MCQ questions are not considered as examiners and are therefore not subject to the knowledge and experience requirements but need to be trained to the examination procedure described in the exposition.

2.3 Practical Assessor

2.3.1 A person who is appropriately qualified and authorised by CAAM Part 147 Maintenance Training Organisation in determining the level of practical knowledge and skills of the trainee on a particular module, element, or part thereof. The function may include ensuring evidence of skill and experience acquisition and determine whether the trainee is competent at using tools and equipment and working in accordance with maintenance manuals as well as assessing the candidate situational and safety awareness. In addition, the function includes drafting and/or the selection of practical tasks and assessment, the performance oversight and assessments of the practical activities/ assessment kit developed.

2.4 Authorisation Documents/ Certificates

2.4.1 A document authorising the holder to instruct, examine or assess part of a course; this scope can cover a full course or be reduced to a particular module or element, or even be limited to a part thereof as an example sub-module, a specific area within a sub-module or equivalent, ATA chapter, sub-section of ATA chapter for type training or equivalent.

2.5 **Invigilator**

- 2.5.1 A person who is delegated by the MTO to invigilate the examination, other than those staff listed as examiner for the particular subject. The invigilator does not need to be qualified as an examiner, and in particular they don't need to demonstrate specialty knowledge, as long as their duty is strictly limited to the invigilation itself and excludes any participation to the preparation of the examination papers or to their grading. Invigilators must however be trained to the organisation's examination procedures with a specific emphasis on the exam's integrity aspects and on the handling of cheating or misconduct cases. Such staff should be listed by the organisation and records of their training be kept in the individual's file.
- 2.6 In this CAGM, 'instructional staff' 'means an instructor, knowledge examiner or practical assessor, or a combination of any roles.

3 Assessing the Competency

- 3.1 The assessment of the competency for initial and subsequent nomination of instructional staff are key-steps and must be conducted in accordance with a procedure described in the MTOE.
- 3.2 The assessment shall emphasis on the key elements such as the instructional staff qualification, training, skill and experience.
- 3.3 The procedure shall indicate the persons responsible for such assessment as well as the criteria used by the organisation to determine the eligibility of a candidate to a specific position of instructor, knowledge examiner or practical assessor.
- 3.4 The criteria established in Appendix 1 of this CAGM, provide guidance for the organisation to demonstrate whether the candidates fulfil the conditions specified in paragraph 1.4 of this CAGM.
- 3.5 In some cases, an alternative means of compliance may be proposed by the organisation, however the same level of confidence in the competency of the proposed instructor, knowledge examiner or practical assessor shall be assured. The acceptance of such alternate means is at the discretion of CAAM.
- 3.6 The procedure should include a face-to-face interview and assessment with the candidate including review of their credentials such as training certificates, experience records or others as applicable. Where necessary, it shall be completed by an in-situ evaluation of the candidate ability such as simulated training session or real class-teaching under supervision.
- 3.7 Where appropriate, the procedure should also consider a period of “OJT” (instruction under supervision) allowing a fine-tuned assessment before confirming the nomination of a candidate as an instructor, knowledge examiner or practical assessor. This is for instance in order to verify specific abilities or to verify the adherence to the organisation’s training / examination procedures.
- 3.8 The assessment should be verifiable by CAAM and therefore be documented. Supporting documents such as training certificates, working experience records, assessment records etc. should be kept in the individual file.
- 3.9 The training organisation should conduct regular assessments of their instructional staff to ensure the competency remains and the instructor is able to openly discuss and converse with his trainee on technical matters.
- 3.10 The preceding principles should be equally applied for the extension of an existing scope of instruction, examination or assessment held by a staff already



exercising such activities within the organisation. A lighter assessment process essentially centred on the specialty knowledge would however be appropriate.

4 Acceptance of Instructional Staff

- 4.1 The proposed candidate is formally accepted through the approval of MTOE containing the organisation's list of instructors, knowledge examiners and practical assessors. The list shall include contractors and part-timers as applicable.

Note.— No CAAM Form 4 is required for the acceptance of instructional and examination staff.

- 4.2 The acceptance of proposed candidate through the approval of MTOE shall also be supported with relevant documents and evidence such as assessment record, licence and/or degree, training certificates, and etc.
- 4.3 Application for additional instructional staff or an extension to existing scope of authorisation such as basic/ type rating category, additional aircraft type, modules/ submodule or to remove a limitation to certain basic (sub-) modules shall be submitted to CAAM together with proposed revision of MTOE together with applicable supporting documents.
- 4.4 The list shall contain a comprehensive information, as a minimum the staff authorised scope of activity for example type training, theoretical knowledge, A320 (CFM56) ATA 34, Category B2, where applicable as well as any limitations (i.e., Module 1 except sub-module 1.3), and the expiry of the organisation's authorisation when applicable.
- 4.5 The list shall be developed in a manner that CAAM can easily verify that there is at least 1 qualified instructor, examiner or assessor nominated for each part or sub-part of the approved training.

Note: The list may be controlled in separate document(s) and cross-referenced from the applicable section of the MTOE. The list shall be controlled in accordance with an established procedure, and/ or separately approved unless otherwise agreed, by CAAM.

- 4.6 Prior to approval of the MTOE, CAAM may request to conduct a physical assessment and oral interview of the candidate depending on the complexity and extent of the application being made. The acceptance of such candidate is at the discretion of CAAM.
- 4.7 Once formally accepted, the candidate should be provided with a personal authorisation document/ certificate issued by the MTO detailing the granted privileges and any applicable limitations.
- 4.8 The personal authorisation document as well as other records as specified in paragraph 1.5 and 1.6 of this CAGM shall be kept in a manner established in the documented procedure.



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5 Continuation/ Revalidation of Authorisation

- 5.1 The MTO should develop and document a program to maintain the qualifications of instructors, examiners and assessors. The updating training program shall as a minimum comply with CAD 1821 para 4.2(k) requirements.
- 5.2 This training should consist of a minimum of 35 hours within the 24-month period; in addition, MTO personnel are to remain conversant with the latest revision of the CAAM Part 147 requirements, standards and guidance material. They should also be conversant with the respective organisations MTOE and associated training procedures.
- 5.3 The MTO should ensure that personnel training records, including records of qualifications, update training and experience and competency is retained for each instructor, knowledge examiner and practical assessor. It is also expected that the MTO and its instructional staff should be able to evidence recency as part of the continuation of an approval. The organisations may wish to adopt the standard industry default of 6 months experience in a 24-month period, alternatively they may wish to define their own within their approved MTOE, subject to the approval of CAAM.
- 5.4 The MTO should deliver continuation training to all its staff in some form or another depending upon their scope and authorisation. As example, invigilators and examiners need to be familiar with exam process, instructors and assessors the training and assessment process.
- 5.5 In order for an instructor, knowledge examiner or practical assessor’s authorisation to be revalidated following renewal / expiry / withdrawal, the MTO should implement a reinstating procedure within their approved MTOE that will cover the relevant training disciplines associated with the authorisation concerned and evidence of recency, where applicable.
- 5.6 The criteria for reinstating should take into consideration the length of time the individual has been away from that specific training environment or discipline.
- 5.7 Any instructor, knowledge examiner or practical assessor who has passed 24-month period without exercising the privileges of his authorisation, as a minimum, shall comply with the Table 1 below:

Inactive Period	Recovery action
24 to 30 months	35 hours update training + Continuation training + Training organisation procedures and processes + 2 monitored training sessions with another instructor covering both theoretical and practical aspects.

30 months 60 months	As above plus two sit-ins on the type course for the authorisation being sought.
60 months and longer	Re-training in the core subject with successful examination.

Table 1: Recovery action for inactive period

- 5.8 CAAM has the authority to question and where necessary refuse any applicant's authorisation to be named as an instructor, assessor or examiner. This is regardless of whether the applicant has held an instructional position previously.
- 5.9 In ensuring that the organisation continuously remains in compliance with the standards of this CAGM and applicable requirements of CAD 1821, the organisation shall also be subjected to **safety oversight activity** by CAAM.

6 Appendices

6.1 Appendix 1 – Instructional staff requirement

1 GENERAL

- 1.1 All aircraft basic and type training instructors whether permanently or temporarily employed, must have undergone an instructional techniques training course to a nationally recognised standard or equivalent and be able to demonstrate a comprehensive understanding of the CAAM Part 66 and 147 regulatory requirements. Additionally, they should have a practical working knowledge of the maintenance training organisations exposition (MTOE) and associated training procedures and be familiar in their application.
- 1.2 Instructors, knowledge examiners, practical assessors and invigilators within the CAAM Part 147 training organisation must be listed in Part 1.5 of the MTOE (List of Maintenance Training Instructor, Knowledge Examiners and Practical Assessor).
- 1.3 CAAM Form 4 is only required for Training Manager, Quality Manager and Examinations Manager. (In smaller organisations, a combination of these positions may be held by the same person).
- 1.4 Instructors may with the consent of CAAM also combine roles/ positions within the training organisations, i.e. knowledge examiner, practical assessor; these other roles must be clearly identified against the individual within the relevant MTOE and annotated on their personal authorisation document/certificates

2 BASIC TRAINING

2.1 Theoretical Element Instructor

MODULE 1, 2, 3, 4		
Qualification/ Experience	Acceptable Means of Compliance	Remarks
Specialty knowledge	Hold an aeronautical / electrical/ mechanical engineering degree recognised by local education authorities, or an acceptable equivalent; or	<p>The degree specialty must be consistent with the modules to be taught (the curriculum must include appendix 1 sub-modules), and the level of the studies must be adapted to the level (1, 2 or 3) of the modules to be taught.</p> <p>The knowledge level attested should contain the elements of relevant sub-module to be taught</p>
	Hold CAAM Part 66 aircraft maintenance engineer licence relevant to the category/ subcategory for the modules to be taught, or an acceptable equivalent; or	A foreign aircraft maintenance engineer licence, issued by any ICAO contracting state may be acceptable by CAAM, provided with justification made by training organisation to utilise the expertise.
	Attained Part 147 Certificates of recognition with successful completion of training and examination for the modules to be taught, at the appropriate level (example of Module 1 for B1/B2 instructor in Module 1 class). The scope of instruction will be limited to the passed modules.	The Part 147 examination should not be attended in the MTO where the instructor is to exercise its privileges. To avoid conflict of interest, it is strongly recommended that the examination is taken at CAAM examination center.
Pedagogical Skills	Completion of instructor techniques training delivered by a legal entity to a nationally recognised standard; or	<p>The evaluation of training course syllabus should aim at least equivalent level of standard compare to the course attended at a nationally recognised standard.</p> <p>The quality manager, or training manager who assisted with the evaluation/ review should first be appropriately trained to the nationally recognised standard,</p>
	Completion of a “Train the trainer course”, with evaluation of the training course syllabus documented by Quality Manager.	

Other knowledge	A documented familiarisation with the specific training procedures and requirements as described in MTOE	
Specialty Experience	NIL	The practical experience in aircraft maintenance, design or production activities is advantageous; the advantage for the instructor is to understand the practical applications of a scientific knowledge and therefore to better appreciate the knowledge that the trainee must receive (as example, for a mathematics instructor, the practical applications may be the reading of inflation charts, the conversation of units or determination of a centre of gravity)

MODULE 5, 6, 8		
Qualification/ Experience	Acceptable Means of Compliance	Remarks
Specialty knowledge	<p>Hold an aeronautical / electrical/ mechanical engineering degree recognized by local education authorities, or an acceptable equivalent;</p> <p><u>and</u></p> <p>A training received to gain knowledge about the design, the function and the operation of relevant typical aircraft systems and components; or</p> <p>Hold CAAM Part 66 aircraft maintenance engineer licence relevant to the category/ subcategory for the modules to be taught, or an acceptable equivalent; or</p> <p>Attained CAAM Part 147 certificates of recognition with successful completion of training and examination for the modules to be taught, at the appropriate level. The scope of instruction will be limited to the passed modules.</p>	<p>The degree specialty must be consistent with the modules to be taught (the curriculum must include appendix 1 sub-modules), and the level of the studies must be adapted to the level (1, 2 or 3) of the modules to be taught.</p> <p>The knowledge level attested should contain the elements of relevant sub-module to be taught</p> <p>A foreign aircraft maintenance engineer licence issued by any ICAO contracting state may be acceptable by CAAM provided with justification made by training organisation to utilize the expertise.</p> <p>The Part 147 examination should not be attended in the MTO where the instructor is to exercise its privileges. To avoid conflict of interest, it is strongly recommended that the examination is taken at CAAM examination center.</p>
Pedagogical Skills	<p>Completion of instructor techniques training delivered by a legal entity to a nationally recognised standard; or</p> <p>Completion of a “Train the trainer course”, with evaluation of the training course syllabus and documented by Quality Manager;</p>	<p>The evaluation of training course syllabus should aim at least equivalent level of standard compare to the course attended at a nationally recognised standard.</p> <p>The quality manager, or training manager who assisted with the evaluation/ review should first be appropriately trained to the nationally recognised standard,</p>
Other knowledge	<p>A documented familiarisation with the specific training procedures and requirements as described in MTOE</p>	



Specialty Experience	NIL	The practical experience in aircraft maintenance, design or production activities is advantageous; the advantage for the instructor is to understand the practical applications of a scientific knowledge and therefore to better appreciate the knowledge that the trainee must receive (as example for a mathematics instructor, the practical applications may be the reading of inflation charts, the conversation of units or determination of a centre of gravity.
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MODULE 7		
Qualification/ Experience	Acceptable Means of Compliance	Remarks
Specialty knowledge	<p>Hold CAAM Part 66 aircraft maintenance engineer licence with type rating endorsed relevant to category/ subcategory to be taught or an acceptable equivalent; or</p> <p>Attained CAAM Part 147 certificates of recognition with successful completion of training and examination for Modules 7 in accordance with CAD1801 Appendix 1, at the appropriate level and passed aircraft type training in accordance with CAD 1801 Appendix 3 standard relevant to the category/ subcategory; or</p> <p>Specialised training received from nationally recognise training organisation / institution for specialized services.</p>	<p>A foreign aircraft maintenance engineer licence issued by any ICAO contracting state may be acceptable by CAAM provided with justification made by training organisation to utilize the expertise.</p> <p>The Part 147 examination should not be attended in the MTO where the instructor is to exercise its privileges. To avoid conflict of interest, it is strongly recommended that the examination is taken at CAAM examination center.</p> <p>Example of specialized services such as NDT, Welding etc. The purpose is to facilitate the use of instructors –non maintenance specialized- providing a specialized training (i.e. on welding) as part of the module 7 training and under the oversight of the module 7 maintenance instructor(s). The instruction will be limited to the concerned sub-modules.</p>
Pedagogical Skills	<p>Completion of instructor techniques training delivered by a legal entity to a nationally recognised standard; or</p> <p>Completion of a “Train the trainer course”, with evaluation of the training course syllabus and documented by Quality Manager;</p>	<p>The evaluation of training course syllabus should aim at least equivalent level of standard compare to the course attended at a nationally recognised standard.</p> <p>The quality manager, or training manager who assisted with the evaluation/ review should first be appropriately trained to the nationally recognised standard,</p>
Other knowledge	<p>Completion of organisation approved MTOE training; and</p>	

	<p>Completion of detailed Part 145 training course at; and</p> <p>Completion of basic Part 66 and Part 147 training course</p> <p>A documented familiarisation with the specific training procedures and requirements as described in MTOE; and</p>	
<p>Specialty Experience</p>	<p>3 years of relevant maintenance experience, or acceptable equivalent.</p>	<p>The experience must be representative of the subject to be taught and gained in civil aviation environment or acceptable equivalent such as maintenance, engineering, design organisation, or equivalent in civil aviation environment (aeronautical maintenance).</p>

MODULE 9		
Qualification/ Experience	Criteria	Remarks
Specialty knowledge	<p>Evidence of training on Human Factors in Aviation, of a minimum of 2 days. The syllabus of the training must meet the intent of Module 9 as specified in Appendix 1 of CAD1801; or</p> <p>Attained Part 147 certificates of recognition with successful completion of training and examination for Module 9.</p>	<p>The Part 147 examination should not be attended in the MTO where the instructor is to exercise its privileges. To avoid conflict of interest, it is strongly recommended that the examination is taken at CAAM examination center.</p>
Pedagogical Skills	<p>Completion of instructor techniques training delivered by a legal entity to a nationally recognised standard; or</p> <p>Completion of a “Train the trainer course”, with evaluation of the training course syllabus and documented by Quality Manager;</p>	<p>The evaluation of training course syllabus should aim at least equivalent level of standard compare to the course attended at a nationally recognised standard.</p> <p>The quality manager, or training manager who assisted with the evaluation/ review should first be appropriately trained to the nationally recognised standard,</p>
Other knowledge	<p>A documented familiarisation with the specific training procedures and requirements as described in MTOE; and</p> <p>Completion of organisation approved MTOE training; and</p> <p>Completion of detailed Part 145 training course; and</p> <p>Completion of basic Part 66 training course</p>	
Specialty Experience	NIL	<p>Experience which corresponds to human factors affecting aviation maintenance for example line & base maintenance is an advantage.</p>

MODULE 10		
Qualification/ Experience	Criteria	Remarks
Specialty knowledge	<p>Hold an aeronautical / electrical/ mechanical engineering degree recognized by the local education authorities, or an acceptable equivalent with evidence of successful completion of Part 66 Module 10 training and examination as specified in Appendix 1 of CAD 1801; or</p> <p>Hold CAAM Part 66 aircraft maintenance engineer licence applicable to relevant category/ subcategory;</p>	
Pedagogical Skills	<p>Completion of instructor techniques training delivered by a legal entity to a nationally recognised standard; or</p> <p>Completion of a “Train the trainer course”, with evaluation of the training course syllabus and documented by Quality Manager.</p>	<p>The evaluation of training course syllabus should aim at least equivalent level of standard compare to the course attended at a nationally recognised standard.</p> <p>The quality manager, or training manager who assisted with the evaluation/ review should first be appropriately trained to the nationally recognised standard.</p>
Other knowledge	<p>A documented familiarisation with the specific training procedures and requirements as described in MTOE; and</p> <p>Completion of organisation approved MTOE training; and</p> <p>Completion of detailed Part 66, Part 145 and Part M training course; and</p> <p>Completion of basic Part 21 training course; and</p> <p>Evidence of knowledge in regulatory aspect for civil aviation framework, safety management system, operational and airworthiness including specific approval.</p>	



Specialty Experience	3 years of relevant maintenance experience.	The experience must be representative of the subject to be taught and gained in civil aviation environment or acceptable equivalent such as maintenance, engineering, design organisation, or equivalent in civil aviation environment (aeronautical maintenance)
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MODULE 11, 12, 13, 14, 15, 16, 17		
Qualification/ Experience	Criteria	Remarks
Specialty knowledge	<p>Hold an aeronautical / electrical/ mechanical engineering degree recognized by the local education authorities, or an acceptable equivalent with evidence of successful completion of Part 66 module training and examination as specified in Appendix 1 of CAD 1801 relevant to the modules to be taught, at the appropriate level. The scope of instruction shall be limited to the passed modules; or</p> <p>Hold CAAM Part 66 aircraft maintenance engineer licence applicable to relevant category/ subcategory, or acceptable equivalent; or</p> <p>Specialized training received from an acceptable training organizations or institutions.</p>	<p>The Part 147 examination should not be attended in the MTO where the instructor is to exercise its privileges. To avoid conflict of interest, it is strongly recommended that the examination is taken at CAAM examination center.</p> <p>A foreign aircraft maintenance engineer licence issued by any ICAO contracting state may be acceptable by CAAM provided with justification made by training organisation to utilize the expertise.</p> <p>The purpose is to facilitate the use of specialized instructors providing a specialized training (i.e. on hydraulic power) as part of a complete module and under the oversight of the training manager. The instruction will be limited to the concerned sub-modules. Acceptable specialized training may for instance include specialized training offered by aircraft manufacturers and etc.</p>
Pedagogical Skills	<p>Completion of instructor techniques training delivered by a legal entity to a nationally recognised standard; or</p> <p>Completion of a “Train the trainer course”, with evaluation of the training course syllabus and documented by Quality Manager.</p>	<p>The evaluation of training course syllabus should aim at least equivalent level of standard compare to the course attended at a nationally recognised standard.</p> <p>The quality manager, or training manager who assisted with the evaluation/ review should first be appropriately trained to the nationally recognised standard.</p>

<p>Other knowledge</p>	<p>A documented familiarisation with the specific training procedures and requirements as described in MTOE; and</p> <p>Completion of organisation approved MTOE training; and</p> <p>Completion of basic Part 66 and Part 147 training course</p>	
<p>Specialty Experience</p>	<p>3 year of relevant maintenance experience, or acceptable equivalent.</p>	<p>The experience must be representative of the subject to be taught and gained in a civil aviation environment such as aviation engineering department or base maintenance AMO.</p>

2.2 Practical Element Instructor

Qualification/ Experience	Criteria	Remarks
	<p>Hold CAAM Part 66 aircraft maintenance engineer licence relevant to category/subcategory with appropriately aircraft type endorsed, or similar technology for each aircraft type used for the training, or acceptable equivalent; or</p>	<p>A foreign aircraft maintenance engineer licence issued by any ICAO contracting state may be acceptable by CAAM provided with justification made by training organisation to utilize the expertise.</p> <p>Example of B1.1 AML for B1.1 Instructor with 737-400 aircraft type endorsed for practical training on 737-400 aircraft type.</p>
Specialty knowledge	<p>Attained Part 147 certificates of recognition with successful completion of training and examination for module 7, Module 9 & 10, and Module 11 to 17 at appropriate level specified in accordance with CAD 1801 Appendix 1 relevant to the modules to be taught; and</p> <p>Evidence of successful completion (theoretical and practical) of aircraft type training, or type training with similar technology in the appropriate category for each aircraft type used for the training; or</p> <p>Specialised training received from nationally recognise training organisations/ institutions to cover specialised services. The instruction will be limited to the subjects/ methods covered by the specialised training(s). NDT instructors should be holder of a valid license or certificate in accordance with NDT standard (NAS410 or EN4179) acceptable to CAAM (level 2 minimum) or acceptable equivalent.</p>	<p>The Part 147 examination should not be attended in the MTO where the instructor is to exercise its privileges.</p> <p>The required level depends on the instructor's specialty either airframe or avionics.</p> <p>Example of specialized services such as NDT, Welding etc. The purpose is to facilitate the use of instructors –non maintenance specialized- providing a very specialized training (i.e. on welding) as part of the module 7 training and under the oversight of the module 7 maintenance instructor(s). The instruction will be limited to the concerned sub-modules.</p>

<p>Pedagogical Skills</p>	<p>Completion of instructor techniques training delivered by a legal entity to a nationally recognised standard; or</p> <p>Completion of a “Train the trainer course”, with evaluation of training course syllabus and documented by Quality Manager; or</p> <p>A practical instructor privilege (documented) granted by AMO when this part is contracted out (note: an administrative assessment of the competency is still required to be completed and documented by the MTO to determine how the AMO qualifies internal instructors).</p>	<p>The evaluation of training course syllabus should aim at least equivalent level of standard compare to the course attended at a nationally recognised standard.</p> <p>The quality manager, or training manager who assisted with the evaluation/ review should first be appropriately trained to the nationally recognised standard.</p>
<p>Other knowledge</p>	<p>Proficient in English language; and</p> <p>A documented familiarisation with the specific training procedures and requirements as described in MTOE; and</p> <p>Completion of organisation approved MTOE training; and</p> <p>Completion of basic Part 66 & Part 147 training and detailed Part 145 training course</p>	
<p>Specialty Experience</p>	<p>3 years of relevant maintenance experience. The experience shall be representative of the subject to be taught and gained as per following: -</p> <ul style="list-style-type: none"> i) aircraft maintenance instructor: experience to be gained in a regulated civil aviation environment or acceptable equivalent, ii) shop maintenance instructors (engine/ aircraft parts and component/ structural elements etc.): experience to be gained in approved civil aviation workshops and adequate to the component maintenance to be taught iii) For specialized services (welding, NDT etc.): relevant experience to be gained in industry 	<p>For Module 7 and Module 11 to 17, at least 1 year of experience exercising certification privileges in line and/ or base (hangar) maintenance.</p> <p>Care should be exercised that the experience gained in a non-aeronautical industry is relevant and transferable to aviation maintenance practices.</p>

2.3 Knowledge Examiner

Qualification/ Experience	Criteria	Remarks
Specialty knowledge	Shall meet the same criteria as the theoretical instructor of the concerned modules, as example examiner for module 11 shall meet the criteria of instructor module 11; and	
Pedagogical Skills	<p>Completion of a “Train the examiner course”; and</p> <p>Assessment performed and documented by the MTO’s Examination Manager if himself is appropriately qualified as knowledge examiner and in accordance with an MTOE procedure.</p>	<p>The train the examiner course shall be evaluated and documented by the quality manager.</p> <p>If the examination manager is not appropriately qualified, the quality manager is responsible to perform the assessment.</p>
Other knowledge	<p>Shall meet the same criteria as the theoretical instructor of the concern modules.</p> <p>Specific training to the organisation’s procedures addressing examinations and to the Part 66 examination standard; and</p> <p>Familiarisation with the TNA for theoretical aspect</p>	
Specialty Experience	Shall meet the same criteria as the theoretical instructor of the concerned modules. However practical experience in aircraft maintenance, design or production activities is an advantageous.	

2.4 Practical Assessor

Qualification/ Experience	Criteria	Remarks
Specialty knowledge	Shall meet the same criteria as the practical instructor of the concerned modules, as example examiner for module 11 shall meet the criteria of instructor module 11; and	
Pedagogical Skills	Completion of a “Train the assessor course”; and Assessment performed and documented by the MTO’s Examination Manager if himself appropriately qualified as practical assessor and in accordance with an MTOE procedure.	The train the assessor course shall be evaluated and documented by the quality manager. If the examination manager is not appropriately qualified, the quality manager is responsible to perform the assessment.
Other knowledge	Shall meet the same criteria as the practical instructor of the concern modules. Specific training to the organisation’s procedures addressing practical assessment and to the Part 66 assessment standard; and Familiarisation with the TNA for practical aspect	
Specialty Experience	5 years of relevant maintenance experience. The experience shall be representative of the subject to be taught and gained as per following: - i) aircraft maintenance instructor: experience to be gained in a regulated civil aviation environment or acceptable equivalent, ii) shop maintenance instructors (engine/ aircraft parts and component/ structural elements etc.): experience to be gained in approved civil aviation workshops and adequate to the component maintenance to be taught iii) For specialized services (welding, NDT etc.): relevant experience to be gained in industry	For Module 7 and Module 11 to 17, at least 2 years of experience exercising certification privileges in line and/ or base (hangar) maintenance. Care should be exercised that the experience gained in a non-aeronautical industry is relevant and transferable to aviation maintenance practices.

3 TYPE TRAINING

3.1 Theoretical Element Instructor

Qualification/ Experience	Criteria	Remarks
Specialty knowledge	<p>Attained Part 147 certificate of recognition with successful completion of training and examination including practical element of relevant aircraft type training at level 3. The Certificate of Recognition should address the category of license corresponding to the specialty of the instructor; and</p>	<p>The Part 147 examination should not be attended in the MTO where the instructor is to exercise its privileges unless specific measures are taken and accepted by CAAM to demonstrate that the integrity of examination is ensured</p>
	<p>A of refresher/update course on the concerned aircraft type if the instructor has not instructed the concerned aircraft type(s) in a Part 147 environment during the two years preceding its employment in the current MTO; or</p>	
	<p>Successful completion of type training with elements of theoretical and practical received in other than CAAM Part 147 MTO.</p> <p>The curriculum/ level of the course must be at least equivalent to CAD 1801 Appendix 3 type training standard. The equivalency of the course shall be demonstrated and documented by the MTO; and</p> <p>A refresher/update course on the concerned aircraft type if the instructor has not instructed the concerned aircraft type(s) or has not been actively involved in the relevant maintenance of the aircraft type (in the case of contracted MRO staff) during the two years preceding its employment by the current MTO</p>	<p>For new type certified aircraft, it is strongly recommended to complete at OEM, unless otherwise agreed by CAAM. For further information please refer CAD 1801 paragraph 8.3.</p> <p>Further guidance is provided in paragraph 3.0 of this Appendix.</p>

<p>Pedagogical Skills</p>	<p>Completion of instructor techniques training delivered by a legal entity to a nationally recognised standard; or</p> <p>Completion of a “Train the trainer course”, with evaluation of training course syllabus and documented by the Quality Manager.</p>	<p>The evaluation of training course syllabus should aim at least equivalent level of standard compare to the course attended at a nationally recognised standard.</p> <p>The quality manager, or training manager who assisted with the evaluation/ review should first be appropriately trained to the nationally recognised standard.</p>
<p>Other knowledge</p>	<p>Proficient in English language; and</p> <p>A documented familiarisation with the specific training procedures and requirements as described in MTOE; and</p> <p>A training on specific instructional methods or training devices used by the MTO such as simulators, synthetic trainers etc.</p>	
<p>Specialty Experience</p>	<p>3 years of relevant maintenance experience including 1 years of experience exercising certification privileges in line and/ or base (hangar) maintenance on the relevant aircraft type.</p> <p>Sufficient experience in performing technical training functions in OEM training organisation which is acceptable to CAAM</p>	<p>The experience must be representative of the elements(s) to be taught and gained in civil aviation environment or acceptable equivalent such as maintenance, engineering, design organisation etc.</p> <p>Does not apply for new type certified aircraft. The experience required will be determined by CAAM on case-to-case basis.</p>

3.2 Practical Element Instructor

Qualification/ Experience	Criteria	Remarks
Specialty knowledge	Shall meet the same criteria as the theoretical instructor of the concerned aircraft type training	
Pedagogical Skills	<p>Completion of instructor techniques training delivered by a legal entity to a nationally recognised standard; or</p> <p>Completion of a “Train the trainer course”, with evaluation of training course syllabus and documented by the Quality Manager; or</p> <p>A practical instructor privilege (documented) granted by AMO when this part is contracted out (note: an administrative assessment of the competency is still required to be completed and documented by the MTO to determine how the AMO qualifies internal instructors).</p>	<p>The quality manager who performed the evaluation should have already completed the instructor techniques training, or train the trainer course at a nationally recognize standard. The evaluation of training course should aim at least equivalent level of syllabus standard of the course attended.</p>
Other knowledge	Proficient in English language; and	
	A documented familiarisation with the specific training procedures and requirements as described in MTOE; and	
	A training on CAAM regulation; Completion of basic Part 66 & Part 147 and detailed Part 145 training course; and	
	A training on specific instructional methods or training devices used by the training organisation such as simulators, synthetic trainers etc.	

<p>Specialty Experience</p>	<p>For other than large aircraft, 3 years of relevant maintenance experience including 1 years of experience exercising certification privileges in line and/ or base (hangar) maintenance on the relevant aircraft type.</p> <p>For large aircraft, 5 years of relevant maintenance experience including 2 years of experience exercising certification privileges in line and/ or base (hangar) maintenance on the relevant aircraft type; or</p> <p>Sufficient experience in performing technical training functions in OEM training organisation which is acceptable to CAAM</p>	<p>The experience shall be representative of the subject to be taught and gained in approved civil aviation environment or acceptable equivalent</p> <p>Does not apply for new type certified aircraft. The experience required will be determined by CAAM on case-to-case basis.</p>
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3.3 Knowledge Examiner

Qualification/ Experience	Criteria	Remarks
Specialty knowledge	Shall meet the same criteria as the theoretical instructor of the concerned elements, for example examiner for navigation shall meet the criteria of navigation elements instructor); and	
Pedagogical Skills	Completion of a “Train the examiner course”; and Assessment performed and documented by the MTO’s Examination Manager if himself is appropriately qualified as knowledge examiner and in accordance with an MTOE procedure.	The train the examiner course shall be evaluated and documented by the quality manager. If the examination manager is not appropriately qualified, the quality manager is responsible to perform the assessment.
Other knowledge	Shall meet the same criteria as the theoretical instructor for type. Specific training to the organisation’s procedures addressing examinations and to the Part 66 examination standard; and Familiarisation with the TNA for theoretical aspect.	
Specialty Experience	Shall meet the same criteria as theoretical instructor for type	However practical experience in aircraft maintenance, design or production activities is advantageous

3.4 Practical Assessor

Qualification/ Experience	Criteria	Remarks
Specialty knowledge	Shall meet the same criteria as the practical instructor of the concerned elements, for example assessor for landing gear shall meet the criteria of landing gear elements practical instructor); and	
Pedagogical Skills	<p>Completion of a “Train the assessor course”; and</p> <p>Assessment performed and documented by the MTO’s Examination Manager if himself appropriately qualified as practical assessor and in accordance with an MTOE procedure.</p>	<p>The train the assessor course shall be evaluated and documented by the quality manager.</p> <p>If the examination manager is not appropriately qualified, the quality manager is responsible to perform the assessment.</p>
Other knowledge	<p>Shall meet the same criteria as the practical instructor for type.</p> <p>Specific training to the organisation’s procedures addressing practical assessment and to the Part 66 assessment standard; and</p> <p>Training on specific assessment methods or devices used by MTO, such as simulators, synthetic task trainers etc.</p> <p>Familiarisation with the TNA for practical aspect.</p>	
Specialty Experience	Shall meet the same criteria as practical instructor for type	

- 4 ASSESMENT OF THE TYPE TRAINING RECEIVED AT NON-PART CAAM 147 MAINTENANCE TRAINING ORGANISATION
- 4.1 Type training received at a non CAAM Part 147 MTO shall only be acceptable to CAAM, if it is: -
- (a) conducted by the manufacturer of the applicable aircraft or component; or
 - (b) conducted by the maintenance training organisation approved by the competent authority of a foreign contracting state which is acceptable to CAAM.
- 4.2 The following elements, at a minimum shall be evaluated and documented by the MTO to evidence that the type training standard is in compliance with CAD 1801 Appendix 3.
- (a) Type training syllabus:
Syllabus levels for the type training shall be assessed for equivalency to CAD 1801 Appendix 3 on the relevant licence category/ subcategories.
 - (b) Type training course length:
Verification that the course length shall be equivalent to CAAM Part 147 course for the same or similar aircraft type as specified in CAD 1801 Appendix 3.
 - (c) Type training course provider:
Record related to the course provider. Assess if possible if the training documentation/ material came from a reputable source and the training provided by an established organisation.
 - (d) Theoretical and practical training:
Verification that the course covers the theoretical and practical aspects. If the training covers only the theoretical aspect then the practical training shall be assessed separately. It should be noted that the practical training might have been carried out as structured OJT.
 - (e) Examination:
 - (i) Verify that individual training course certificates and the associated examination results are available;
 - (ii) Verification that the exam result is at least equivalent to CAD 1801 requirements; and
 - (iii) Review, when available, the examination paper and assess the multi choice questions (number of multi choice question per hour of training, pertinence of the questions).



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