Guidance material for the qualification and experience of instructors, knowledge examiners and practical assessors

Abbreviations/Definitions
AMC: Acceptable Means of Compliance CAO: Continuing Airworthiness Organisation CAOM: Continuing Airworthiness Organisations Manager EASA: European Aviation Safety Agency GM: Guidance Material MTOA: Maintenance Training Organisation Approval MTOAP: Maintenance Training Organisation Approval Procedures MTOC: Maintenance Training Oversight Coordinator MTOE: Maintenance Training Organisation exposition WH: Working Hours WHOC: Working Hours Oversight Coordinator

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2. Introduction

147. A.105 “Personnel requirements” states:

“(f) The experience and qualifications of instructors, knowledge examiners and practical assessors shall be established in accordance with criteria published or in accordance with a procedure and to a standard agreed by the Competent Authority. “

It is therefore important for the Training Organisations to assess the qualifications and the experience of their instructional staff against relevant and verifiable criteria to be exposed in a dedicated MTOE procedure.

The purpose of this document is to provide guidelines for the establishment of the MTOE procedure related to the assessment of competency and the nomination of the instructional staff.

It applies to organisations approved for Basic Training and/ or Aircraft Type/ Task Training, as well as to organisations approved for type-examination only.

3. Disclaimer

The following applies to instructors, examiners and assessors exercising their privileges in “F Part 147” Maintenance Training & Examination Organisations approved by MKCAA.

4. Standard

4.1. General principles

To be deemed as competent, a candidate for a position of instructor, knowledge examiner or practical assessor should demonstrate that:

- 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.

- He/she is familiar with instruction, examination and assessment techniques, as appropriate, and has pedagogical skills & good communication abilities.

- He/she is knowledgeable on the training organization approved procedures in relation with his/her scope of activity (instruction, knowledge examination and/ or practical assessments), and he understands the importance of instructional & examination staff ethics & integrity.

- He/she is proficient with the specific training methods and equipment used by the particular training organisation.

- He/she has sufficient English language proficiency.

Note: The above applies to the instructional staff permanently employed by the Maintenance Training Organisation AND to any sub-contracted or part-time instructor, examiner and assessor (such as independent instructors or contracted MRO's certifying staff being used as a Practical Instructor & Assessor).

4.2. Definitions

a) In the above general principles, "adequate" is to be understood as:

- Being in relation with the subjects to be taught & assessed.

- Being at the level of detail corresponding to the course to be taught (please refer to the description of levels (1, 2 & 3) in Part 66 appendices 1 and 3).

- Being recent, or complemented by "refreshers" and "updates".

b) In the above general principles, "relevant" is to be understood as:

- The postulant can demonstrate that he was actively involved into the performance of maintenance tasks similar in nature and complexity to the ones he/she will be tasked to teach and/or to assess.

- Being recent, or complemented by "refreshers" such as practical training or OJT.

4.3. Clarifications

4.3.1. Instructional techniques & pedagogy

Being an instructor is a specific job and it does require specific qualifications.

An expert perfectly knowledgeable on a specific subject may in fact be a very poor instructor and not be able to efficiently transfer his/her knowledge to others if he/she was not trained to instructional techniques by specialists. The same principle applies to examiners and assessors.

As a consequence, it is strongly recommended that instructors, examiners and assessors do attend dedicated trainings on instructional and assessment techniques ("Train-the-trainer" and "train-the-examiner / assessor").

Note: Regulations and policies do not provide with a specific curriculum for such "train-the-trainer" or "train-the-examiner / assessor" course, and it is up to the Part 147 training organisation to evaluate the quality of the training received by its instructors and, if necessary, to complement it through internal coaching, top-up training, etc....

Alternatively, the training organisation shall develop criteria to assess if the candidate owns the necessary skills; this could include a documented period of teaching under supervision and coaching by an experienced instructor of the training organisation.

MKCAA inspector will also verify by sampling the actual skills of instructors & assessors during routine audits, possibly resulting in teaching restrictions would the qualifications not having been properly evaluated by the Training Organisation.

4.3.2. "Invigilators"

Training organisations often delegate the invigilation of an examination to staff not listed as examiner for the particular subject.

These "invigilators" do not need to be qualified to the same extent 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.

5. Assessing the competency

The assessment of the competency and the subsequent nomination of instructional staff are key-steps and must be conducted in accordance with a procedure to be described into the MTOE.

The procedure should 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.

In order to assist in this task, guidelines detailed in Annexes A (Basic Training) and B (Type training) are proposing acceptable means of demonstrating that the candidate fulfils the conditions exposed in paragraph 1 “general principles”.

These were established with the aim of covering the majority of cases and should therefore be prioritized by the training organisation.

In some cases, alternative means may however be proposed by the organisation, and accepted by the inspector if he/she is convinced that these offer the same level of confidence in the competency of the proposed instructor, examiner or assessor.

Note: When the alternative means apply only occasionally and to a particular candidate, then a deviation to the established procedure / criteria should be requested to the inspector rather than amending the MTOE. In such case, the acceptance by the inspector (concession request) should be documented and archived by the organisation.

The procedure should include a face-to-face interview of the candidate and a review of his/her credentials such as training certificates or experience records. Where necessary, it shall be completed by an in-situation evaluation of the candidate (simulated training session or real class-teaching under supervision).

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, examiner or assessor. This is for instance in order to verify specific abilities or to verify the adherence to the organisation’s training / examination procedures.

The assessment should be verifiable by the authority and therefore be documented. Supporting documents (training certificates, working experience records, etc.…) should be kept in the staff file.

Note: The competency assessment is not a pre-employment interview usually based on credentials. The evaluation must in effect confirm that the candidate is familiar with the organisation’s procedures, instructional methods and techniques. It is also the opportunity to verify the candidate’s attitude and teaching abilities, and to ensure that he/she will deliver a quality course in-line with the organisation’s values and practices.

Important:

- It is often noted that organisations have a robust selection process for their own permanently employed staff, but do not apply the same rigor to occasional external staff. The role played by those in the overall quality of a course should however not be underestimated, and an adequate assessment of their competencies should

equally be enforced. The process can be tailored to better fit a particular category of staff, for instance an MRO technician proposed as a practical instructor & assessor could be evaluated more on the robustness of his/her working experience than on his/her pedagogical skills credentials.

An instructor or examiner previously -and recently- employed by another Part 147 organisation should equally be systematically assessed for his/her competency, although the assessment process could be lighter and consider credits due to his/her past experience.

In any case, the staff should be trained and assessed against their knowledge of the training's organisation instruction & assessment procedures & documents.

6. Extension of existing privileges:

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 company. A lighter assessment process essentially centered on the specialty knowledge would however be appropriate.

7. Approval & nomination of the staff:

The proposed candidates are formally accepted through the approval of the MTOE containing the organisation's list of instructors, examiners & practical assessors. The list should include contractors and part-timers as well.

Note: NO Form 4 is to be submitted for the acceptance of instructional & examination staffs.

Application for additional staff or significant extension of their existing scope of authorization (i.e. to add another aircraft type, or to remove a limitation to certain basic (sub-) modules) shall therefore be submitted to the inspector via an MTOE amendment together with necessary supporting documents.

The list should detail in a precise manner and for each staff the authorized scope of activity (i.e. "type training, theoretical knowledge, A320 (CFM56) ATA 34, cat B2"), as well as any applicable limitations (i.e. "module 1 except sub-module 1.3"), and the expiry of the organisation's authorization when applicable.

The list should be built in a manner that the inspector 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, without any gap.

Note: The list may be managed as a separate standalone document referred to into the MTOE, provided a procedure to control such document and its revisions is in place. The standalone list is still considered as forming part of the MTOE and must be separately approved by the Authority unless a delegated approval privilege has been granted by the inspector (please see below).

The inspector may in some cases request to conduct a physical interview of the candidate before accepting him/her.

Once formally accepted, the candidate should be provided with a document issued by the training organisation and detailing the granted privileges (scope of instruction or examination, etc.…) and any applicable limitations. Such credentials should be kept in the staff file.

Delegation of approval of the list of instructors, examiners & practical assessors:

Once the inspector is satisfied with the efficiency of the organisation's procedures and with the oversight performed by the internal Quality Assurance department, then a delegation of approval of the amendments to the list may be granted to the training organisation. Such "indirect approval" process should be described in the MTOE.

The delegation of approval will normally not take place during the first "oversight cycle" (2 years following the initial approval of the organisation).

The assessment and the nomination of the candidates is then carried out under the responsibility of the training organisation. The inspector will however perform sample checks during routine audits. These may include interviews of instructors or the attendance to part of a lesson or examination. Would the sample checks reveal that the instructor is not fully qualified, the revocation or the limitation of the instruction/ assessment privileges granted by the organisation may be requested by the inspector and the delegation will be re-considered.

8. Continued qualification

The training organisation must develop and document a program to maintain the qualifications of nominated instructors, examiners and assessors. The recurrent training program shall as a minimum comply with Part 147.A.105 Personnel requirements:

"(h) Instructors and knowledge examiners 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 or examined."

The continued qualification should be documented and periodically verified by the Training Organisation.

The continued qualification program should be efficient and therefore be customized to each category of instructional staff so to better emphasize the areas relevant to the individuals. For instance, recurrent training on Human Factors could be emphasized for Type Training practical instructors whereas it could be considered as being of a limited added value for a Basic Training Module 1 instructor, for which an emphasis on instructional techniques or pedagogy would be considered as more valuable.

The training organisation should consider the need for practical instructors and assessors to maintain their own proficiency in performing maintenance on the product they are instructing. This could be achieved by the regular and documented participation to actual maintenance events in a real maintenance environment. Although active participation would be beneficial, it is not required that the staff performs maintenance tasks himself/herself but at least attend such events as an observer.

9. Annex A – Basic Training

- Theoretical elements instructors – Modules 1,2,3,4
- Theoretical elements instructors – Modules 5, 6, 8
- Theoretical elements instructors – Module 7
- Theoretical elements instructors – Module 9
- Theoretical elements instructors – Module 10
- Theoretical elements instructors – Modules 11, 12, 13, 14, 15, 16, 17
- Practical elements instructors
- Knowledge examiners
- Practical assessors

Basic Training – Theoretical elements instructors Modules 1,2,3,4		
Qualification/ experience	**Acceptable mean of compliance**	**Comments/ limitations**
Specialty knowledge	-**option 1**: Knowledge level attested by a school specialty diploma* that is recognized by the local Authorities, or an acceptable equivalent, or -**option 2**: Part 66 Basic License endorsing the category (i.e. B1 for B1 instructors) or -**option 3**: Part 147 Certificates of recognition (training + exam) for the modules to be taught, at the appropriate level (i.e. Module 1 level 2 for a B1/B2 instructor in module 1 class) **. The scope of instruction will be limited to the passed modules.	*i.e. college, university etc…. the diploma's specialty must be consistent with the modules to be taught (the curriculum must include the 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. **In order to avoid conflicts of interest, the Part 147 exam should not be attended in the Part 147 organisation where the instructor is to exercise its privileges unless specific measures are taken to demonstrate that the integrity of the examination is ensured. The assigned inspector shall be contacted for formal acceptance prior to examination.
Pedagogical skills	-**option 1**: Instructor Certificate delivered by a legal entity * or -**option 2**: completion of a "Train the trainer course" or -**option 3**: Assessment performed and documented by the Training Organisation's Training Manager if himself appropriately qualified as instructor and in accordance with an MTOE procedure. And Accepted by the Competent Authority following an in-situ audit in real training conditions.	*When the obtention of such a certificate is imposed by the national authority of the country where the instructor will exercise his privileges, it should be demonstrated that the certificate is acceptable for this authority, in particular when the certificate was issued in another country.
Other Knowledge	- A documented familiarization with the specific training procedures and requirements (i.e. organisation	

	of courses, attendance etc...) as described in the approved Training organization's exposition (MTOE).	
Specialty Experience	nil *	*: however practical experience in A/C 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 student must receive (i.e. for a mathematics instructor, the practical applications may be the reading of inflation charts, the conversation of units (metric system…) or determination of a center of gravity etc.…)

Basic Training – Theoretical elements instructors Modules 5,6,8		
Qualification/ experience	**Acceptable mean of compliance**	**Comments/ limitations**
Specialty knowledge	- **option 1**: Knowledge level attested by a school specialty diploma* that is recognized by the local Authorities, or an acceptable equivalent, and A training received to gain knowledge about the design, the function and the operation of relevant typical aircraft systems and components or -**option 2**: Part 66 Basic License endorsing the category (i.e. B1 for B1 instructors) or -**option 3**: Part 147 Certificates of Recognition (training + exam) for the modules to be taught, at the appropriate level **. The scope of instruction will be limited to the passed modules.	*: i.e. college, university etc.… curriculum must be consistent with the modules to be taught (the curriculum must include the 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. **In order to avoid conflicts of interest, the Part 147 exam should not be attended in the Part 147 organisation where the instructor is to exercise its privileges unless specific measures are taken to demonstrate that the integrity of the examination is ensured. The assigned inspector shall be contacted for formal acceptance prior to examination.
Pedagogical skills	-**option 1**: Instructor Certificate delivered by a legal entity recognized by its local authorities and acceptable to the national authority where the instructor will exercise his privileges or -**option 2**: completion of a “Train the trainer course” or -**option 3**: Assessment performed and documented by the Training Organization’s Training Manager if himself appropriately qualified as instructor and in accordance with an MTOE procedure. And Accepted by the Competent Authority following an in-situ audit in real training conditions.	

Other Knowledge	- A documented familiarization with the specific training procedures and requirements (i.e. organisation of courses, attendance etc...) as described in the approved Training organization's exposition (MTOE).	
Specialty Experience	nil*	*: however, practical experience in A/C 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 student must receive.

Basic Training – Theoretical elements instructors Module 7A, 7B		
Qualification/ experience	**Acceptable mean of compliance**	**Comments/ limitations**
Specialty knowledge	-**option 1**: Knowledge level attested by a school* accredited by the local Authorities to issue Aircraft Maintenance & engineering specialty diploma. The training syllabus should meet the Part 66 appendix 1 elements at the appropriate level and for the adequate category/ subcategory (i.e. B1.4) and at least a completed A/C type training iaw Part 66 standard, which must be representative of the category/ sub category (i.e. B1.4) or -**option 2**: Part 66 Basic License endorsing the relevant category (i.e. B1.1 for B1.1 instructors) and at least an A/C type representative of the category/ sub category (i.e. B1.1) endorsed on the license or -**option 3**: Part 147 Certificates of recognition level 3 for the module 7 (training + exam)** and at least a passed A/C Type Training iaw Part 66 standard, which must be representative of the category/ sub category (i.e. B1.1) or -**option 4**: Specialized training received from acceptable training organizations/ institutions for specialized services (i.e. for welding, NDT etc..)***	*: curriculum must be consistent with the syllabus of module 7, level 3. **In order to avoid conflicts of interest, the Part 147 exam should not be attended in the Part 147 organisation where the instructor is to exercise its privileges unless specific measures are taken to demonstrate that the integrity of the examination is ensured. The assigned inspector shall be contacted for formal acceptance prior to examination. ***: 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 module7 training and under the oversight of the module 7 maintenance instructor(s). The instruction will be limited to the concerned sub-modules.
	-**option 1**: Instructor Certificate delivered by a legal entity recognized by its local authorities and acceptable	

Pedagogical skills	to the national authority where the instructor will exercise his privileges or -**option 2**: completion of a "Train the trainer course" or -**option 3**: Assessment performed and documented by the Training Organization's Training Manager if himself appropriately qualified as instructor and in accordance with an MTOE procedure. And Accepted by the Competent Authority following an in-situ audit in real training conditions.	
Other Knowledge	-A level* of English compatible with the A/C maintenance activity and the "Foreign 147" specificity (instruction in an international environment); and - A training on regulation: part 66 (basic), 147 (basic) and 145 (detailed), and the Training Organisation procedures (MTOE etc...).	*: the level of English should be determined iaw: **option 1**: a valid certificate attesting a minimum level B1 iaw the Common European Framework of Reference for Languages (CEFR) or equivalent or -**option 2**: Assessment performed and documented by the Training Organization's Training Manager if himself appropriately qualified as instructor and in accordance with an MTOE procedure. The assessment should confirm skills corresponding to a minimum level B1 iaw the Common European Framework of Reference for Languages (CEFR) or equivalent.
Specialty Experience	- 3 years of relevant experience in civil aviation environment (aeronautical maintenance) or acceptable equivalent; The experience must be representative of the subject(s) to be taught.	

Basic Training – Theoretical elements instructors Module 9		
Qualification/ experience	**Acceptable mean of compliance**	**Comments/ limitations**
Specialty knowledge	-**option 1**: A documented training on Human Factors in Aviation, of a minimum of 2 days. The syllabus of the training must comply with Part 66 appendix 1. Or -**option 2**: a certificate of recognition for the module 9 at level 2 (training + exam).*	*In order to avoid conflicts of interest, the Part 147 exam should not be attended in the Part 147 organisation where the instructor is to exercise its privileges unless specific measures are taken to demonstrate that the integrity of the examination is ensured. The assigned inspector shall be contacted for formal acceptance prior to examination.
Pedagogical skills	-**option 1**: Instructor Certificate delivered by a legal entity recognized by its local authorities and acceptable to the national authority where the instructor will exercise his privileges* or -**option 2**: completion of a "Train the trainer course" or -**option 3**: Assessment performed and documented by the Training Organization's Training Manager if himself appropriately qualified as instructor and in accordance with an MTOE procedure. And Accepted by the Competent Authority following an in-situ audit in real training conditions.	*When the obtention of such a certificate is imposed by the national authority of the country where the instructor will exercise his privileges, it should be demonstrated that the certificate is acceptable for this authority, in particular when the certificate was issued in another country.
Other Knowledge	- training on regulations: part 66 (basic) and 145 (detailed) and - A documented familiarization with the specific training procedures and requirements (i.e. organisation of courses, attendance etc...) as described in the approved Training organization's exposition (MTOE).	

Specialty Experience	N/A *	*:however experience in an environment that is representative of human factors affecting aviation maintenance (i.e. Line & Base maintenance experience) is advantageous;

Basic Training – Theoretical elements instructors Module 10		
Qualification/ experience	**Acceptable mean of compliance**	**Comments/ limitations**
Specialty knowledge	- a documented training on regulations described in Appendix 1, module 10 and - A documented familiarization with the specific training procedures and requirements (i.e. organisation of courses, attendance etc...) as described in the approved Training organization's exposition (MTOE).	
Pedagogical skills	-**option 1**: Instructor Certificate delivered by a legal entity recognized by its local authorities and acceptable to the national authority where the instructor will exercise his privileges* or -**option 2**: completion of a "Train the trainer course" or -**option 3**: Assessment performed and documented by the Training Organization's Training Manager if himself appropriately qualified as instructor and in accordance with an MTOE procedure. And Accepted by the Competent Authority following an in-situ audit in real training conditions.	*When the obtention of such a certificate is imposed by the national authority of the country where the instructor will exercise his privileges, it should be demonstrated that the certificate is acceptable for this authority, in particular when the certificate was issued in another country.
Other Knowledge	nil	
Specialty Experience	-**option 1**: Experience in an aviation maintenance environment where these regulations are applicable (i.e. Part 145 AMO)	

Basic Training – Theoretical elements instructors Modules 11A, 11B,12,13,14,15,16,17		
Qualification/ experience	**Acceptable mean of compliance**	**Comments/ limitations**
Specialty knowledge	-**option 1**: Knowledge level attested by an aviation engineering diploma* recognized by the local Authorities and covering the subject to be taught, or an acceptable equivalent, or -**option 2**: Part 66 Basic License endorsing the category (i.e. B1 "airplane turbine" for B1airplane turbine instructors) or -**option 3**: Part 147 Certificates of recognition (training + exam) for the modules to be taught, at the appropriate level **. Scope of instruction will be limited to the passed module(s). or -**option 4**: specialized training received from acceptable training organizations or institutions***	*: Diploma's specialty must be consistent with the modules to be taught (the curriculum must include the 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. **In order to avoid conflicts of interest, the Part 147 exam should not be attended in the Part 147 organisation where the instructor is to exercise its privileges unless specific measures are taken to demonstrate that the integrity of the examination is ensured. The assigned inspector shall be contacted for formal acceptance prior to examination. ***: the purpose is to facilitate the use of specialized instructors providing a very 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 A/C manufacturers etc.…
Pedagogical skills	-**option 1**: Instructor Certificate delivered by a legal entity recognized by its local authorities and acceptable to the national authority where the instructor will exercise his privileges* or -**option 2**: completion of a "Train the trainer course" or -**option 3**: Assessment performed and documented by the Training Organization's Training Manager if himself	*When the obtention of such a certificate is imposed by the national authority of the country where the instructor will exercise his privileges, it should be demonstrated that the certificate is acceptable for this authority, in particular when the certificate was issued in another country.

	appropriately qualified as instructor and in accordance with an MTOE procedure. And Accepted by the Competent Authority following an in-situ audit in real training conditions.	
Other Knowledge	- A documented familiarization with the specific training procedures and requirements (i.e. organisation of courses, attendance etc…) as described in the approved Training organization's exposition (MTOE).	
Specialty Experience	-**option 1**: 1 years of relevant experience in a civil aviation environment. The experience must be adapted to cover the subject to be taught and gained in an aviation engineering dept. or in base maintenance AMO.	

Basic Training – Practical elements instructors		
Qualification/ experience	**Acceptable mean of compliance**	**Comments/ limitations**
Specialty knowledge	-**option 1**: Part 66 Basic License endorsing the appropriate category/ sub. Category (i.e. B1.1 for B1.1 instructors) and A/C type endorsed on the appropriate category / sub. Category of license, for each aircraft type used for the training. or -**option 2**: Part 147 Certificates of recognition** (Cat B1 or B2 as applicable) covering training & exam at level 3 for the module 7, level 2 for modules 9 and 10, and at the level defined by part 66 appendix 1 for module 11 to 17***. And Approved type training (theory + practical) passed in the appropriate category / sub. Category for each aircraft type used for the training. or -**option 3**: Specialized training received from acceptable training organizations/ institutions to cover specialized services (i.e. welding, NDT inspections etc...). **** The instruction will be limited to the subjects/methods covered by the specialized training(s). NDT instructors should be holder of a valid license iaw EN4179 (level 2 minimum) or acceptable equivalent. Or -**option 4**: A documented release to service authorization (or an internal certification authorization) granted by an approved Part 145 organisation iaw the approved MOE and covering the subjects to be taught. For aircraft maintenance instructors the authorization should include privileges for A/C certification that are comparable to B1 or B2 C/S as applicable and include each aircraft type used for the training. For shop (i.e. structure, components) & specialized services, the qualifications must meet the standard as exposed in the	**In order to avoid conflicts of interest, the Part 147 exam should not be attended in the Part 147 organisation where the instructor is to exercise its privileges unless specific measures are taken to demonstrate that the integrity of the examination is ensured. The assigned inspector shall be contacted for formal acceptance prior to examination. ***: the required level depends on the instructor' specialty (airframe or avionics). ****: 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 module7 training and under the oversight of the module 7 maintenance instructor(s). The instruction will be limited to the concerned sub-modules.

	organization's MOE. The instruction will be limited to the subjects covered by the AMO authorization(s).	
Pedagogical skills	-**option 1**: Instructor Certificate delivered by a legal entity recognized by its local authorities and acceptable to the national authority where the instructor will exercise his privileges* or -**option 2**: completion of a "Train the trainer course" or -**option 3:** a practical instructor privilege (documented) granted by the Maintenance organisation when this part is contracted out (note: an administrative assessment of the competency is still required to be completed and documented by the Part 147 training organisation to determine how the maintenance organisation qualifies internal instructors) or -**option 4**: Assessment performed and documented by the Training Organization's Training Manager (if himself appropriately qualified as practical instructor and in accordance with an MTOE procedure). <u>And</u> Accepted by the Competent Authority following an in-situ audit in actual training conditions.	*When the obtention of such a certificate is imposed by the national authority of the country where the instructor will exercise his privileges, it should be demonstrated that the certificate is acceptable for this authority, in particular when the certificate was issued in another country.
Other Knowledge	-A level* of English compatible with the A/C maintenance activity and the "Foreign 147" specificity (instruction in an international environment); and - A training on regulation: part 66 (basic), 147 (basic) and 145 (detailed), and the Training Organisation procedures (MTOE etc...).	*: the level of English should be determined iaw: option 1: a valid certificate attesting a minimum level B1 iaw the Common European Framework of Reference for Languages (CEFR) or equivalent or -option 2: Assessment performed and documented by the Training Organization's Training Manager if himself appropriately qualified as instructor and in accordance with an MTOE procedure. The assessment should confirm skills corresponding to a

		minimum level B1 iaw the Common European Framework of Reference for Languages (CEFR) or equivalent and Accepted by the Competent Authority following an in-situ audit in real training conditions.
Specialty Experience	- 3 years of relevant experience. The experience must be representative of the subject(s) to be taught and gained as following: 1) A/C maintenance instructor: experience to be gained in a regulated* civil aviation environment or acceptable equivalent, including line and/ or hangar maintenance experience; 2) shop maintenance instructors (component/structural elements etc….): experience to be gained in approved civil aviation workshops and adequate to the component maintenance to be taught. 3) For specialized services (welding, NDT etc.…): relevant experience to be gained in industry*	* Care should be exercised that the experience gained in a non-aeronautical industry is relevant and transferable to aviation maintenance practices.

Basic Training – Knowledge examiners		
Qualification/ experience	**Acceptable mean of compliance**	**Comments/ limitations**
Specialty Knowledge	Knowledge examiners should meet the same criteria as the theoretical instructor of the concerned modules (i.e. examiner for module 11 meet the criteria of instructor module 11)	
Pedagogical skills	- completion of a "Train the examiner course" and - Assessment performed and documented by the Training Organization Examination Manager (if himself appropriately qualified as knowledge examiner and in accordance with an MTOE procedure).	
Other Knowledge	Training to the Organization's procedures (MTOE) addressing examinations and to the Part 66 examination standard	
Specialty Experience	N/A however practical experience in A/C maintenance, design or production activities is advantageous	

Basic Training – Practical assessors		
Qualification/ experience	**Acceptable mean of compliance**	**Comments/ limitations**
Specialty knowledge	Practical assessors should meet the same criteria as the practical instructor of the concerned modules (i.e. examiner for module 11 meet the criteria of instructor module 11)	
Pedagogical skills	- completion of a "Train the assessor "course and - Assessment performed and documented by the Training Organization's Examination Manager (if himself appropriately qualified as practical assessor and in accordance with an MTOE procedure).	
Other Knowledge	Training to the Organization's procedures (MTOE) addressing practical assessments	
Specialty Experience	- 3 years of relevant experience. The experience must be representative of the subject(s) to be taught and gained as following: 1) A/C maintenance instructor: experience to be gained in approved civil aviation environment or acceptable equivalent, including line and/ or hangar maintenance experience; **2)** shop maintenance instructors (component/structural elements etc.…): experience to be gained in approved civil aviation workshops and adequate to the component maintenance to be taught. **3)** For specialized services (welding, NDT etc.…): experience to be gained in industry*	*Care should be exercised that the experience gained in a non-aeronautical industry is relevant and transferable to aviation maintenance practices.

10. Annex B – Aircraft Type/ Task Training

- Theoretical elements instructors
- Practical elements instructors
- Knowledge examiners
- Practical assessors

Type training – Theoretical elements instructors		
Qualification/ experience	**Acceptable mean of compliance**	**Comments/ limitations**
Specialty knowledge	-**option 1**: A Part 147 Certificate of Recognition* (Theory+Practical) issued by a Part 147 training organisation for a type training (level 3) successfully received on the relevant A/C(s). The Certificate of recognition should address the category of license corresponding to the specialty of the instructor (i.e. B2 for an avionic instructor) and A refresher/update course on the concerned A/C type if the instructor has not instructed the concerned A/C type(s) in a Part 147 environment during the two years preceding its employment in the current 147 organisation. Or -**option 2**: a type training (theory + practical) received in a non-Part 147 organisation. The curriculum/ level of the course must be equivalent to Part 66 appendix 3. The equivalency of the course shall be demonstrated and documented by the training organisation as detailed in § 10.1 of this document. And A refresher/update course on the concerned A/C type if the instructor has not instructed the concerned A/C type(s) in a Part 147 environment during the two years preceding its employment in the current 147 organisation. Or -**option 3**: a specialized training (i.e. hydraulics) on the relevant A/C type(s). The curriculum/ level of the course must comply with at least with Part 66 appendix 3. The scope of instruction must be limited to the relevant specialty. And	*In order to avoid conflicts of interest, the Part 147 type training should not be attended in the Part 147 organisation where the instructor is to exercise its privileges unless specific measures are taken to demonstrate that the integrity of the examinationand is ensured. The assigned inspector shall be contacted for formal acceptance prior to the type training.

	A refresher/update course on the concerned A/C type or A/C type concerned systems if the instructor has not instructed the concerned A/C type(s) in a Part 147 environment during the two years preceding its employment in the current 147 organisation.	
Pedagogical skills	-**option 1**: Instructor Certificate delivered by a legal entity recognized by its local authorities and acceptable to the national authority where the instructor will exercise his privileges* or -**option 2**: completion of a "Train the trainer course" or -**option 3**: Assessment performed and documented by the Training Organization's Training Manager if himself appropriately qualified as instructor and in accordance with an MTOE procedure. And Accepted by the Competent Authority following an in-situ audit in real training conditions.	*When the obtention of such a certificate is imposed by the national authority of the country where the instructor will exercise his privileges, it should be demonstrated that the certificate is acceptable for this authority, in particular when the certificate was issued in another country.
Other Knowledge	A level* of English compatible with the A/C maintenance activity and the "Foreign 147" specificity (instruction in an international environment); and - A documented familiarization with the specific training procedures and requirements (i.e. organisation of courses, attendance etc...) as described in the approved Training organization's exposition (MTOE). And - A training on specific instructional methods or training devices used by the training organisation (i.e. simulators, synthetic trainers etc.…)	*: the level of English should be determined i.e. Option 1: a valid certificate attesting a minimum level B1 i.e. the Common European Framework of Reference for Languages (CEFR) or equivalent or -option 2: Assessment performed and documented by the Training Organization's Training Manager if himself appropriately qualified as instructor and in accordance with an MTOE procedure. The assessment should confirm skills corresponding to a minimum level B1 i.e. the Common European Framework of Reference for Languages (CEFR) or equivalent.
Specialty Experience	**-option 1:** - 3 years of relevant experience, including 1 year of experience on the relevant A/C type(s)*. The experience must be representative of the elements(s) to be taught and gained in civil aviation environment or acceptable equivalent (maintenance, engineering, design organisation etc...)	* does not apply for new type certified aircraft. Contact EASA for these specific cases.

	or **-option 2:** 3 years of experience on similar aircraft types And Implementation of Technical Check procedure by the training organisation when the experience on the relevant A/C type is less than 1 year as detailed in § 10.2 of this document. Or **-option 3:** The instructors currently holds a valid Part 145 release to service authorisation on the relevant aircfrat type.	

Type training – practical elements instructors		
Qualification/ experience	**Acceptable mean of compliance**	**Comments/ limitations**
Specialty knowledge	-**option 1**: A Part 147 Certificate of Recognition* (Theory+Practical) issued by a Part 147 training organisation for a type training (level 3) successfully received on the relevant A/C(s). The Certificate of recognition should address the category of license corresponding to the specialty of the instructor (i.e. B2 for an avionic instructor) and A refresher/update course on the concerned A/C type if the instructor has not instructed the concerned A/C type(s) in a Part 147 environment during the two years preceding its employment in the current 147 organisation. Or -**option 2**: a type training (theory + practical) received in a non-Part 147 organisation. The curriculum & level of the course must be equivalent to Part 66 appendix 3. The equivalency of the course shall be demonstrated and documented by the organisation as detailed in § 10.1 of this document. And A refresher/ update course on the concerned A/C type if the instructor has not instructed the concerned A/C type(s) or has not been actively involved into relevant maintenance of the aircraft type(s) (case of contracted MRO staff) during the two years preceding its employment by the 147 organisation, or -**option 3**: a specialized training (i.e. hydraulics) on the relevant A/C type(s). The curriculum & level of the course must comply with at least with Part 66 appendix 3. The scope of instruction must be limited to the relevant specialty and A refresher/update course on the concerned A/C type or A/C type concerned systems if the instructor has not instructed the concerned A/C type(s) in a Part 147	**In order to avoid conflicts of interest, the Part 147 type training should not be attended in the Part 147 organisation where the instructor is to exercise its privileges unless specific measures are taken to demonstrate that the integrity of the examinationand is ensured. The assigned inspector shall be contacted for formal acceptance prior to the type training.

	environment during the two years preceding its employment in the current 147 organisation.	
Pedagogical skills	-**option 1**: Instructor Certificate delivered by a legal entity recognized by its local authorities and acceptable to the national authority where the instructor will exercise his privileges* or -**option 2**: completion of a "Train the trainer course" or -**option 3:** a practical instructor privilege (documented) granted by the Maintenance organisation when this part is contracted out (note: an administrative assessment of the competency is still required to be completed and documented by the Part 147 training organisation to determine how the maintenance organisation qualifies internal instructors) or -**option 4**: Assessment performed and documented by the Training Organization's Training Manager (if himself appropriately qualified as practical instructor and in accordance with an MTOE procedure).	*When the obtention of such a certificate is imposed by the national authority of the country where the instructor will exercise his privileges, it should be demonstrated that the certificate is acceptable for this authority, in particular when the certificate was issued in another country.
Specialty Experience	**-option 1:** 3 years of relevant experience including 1 year of experience on the relevant A/C type(s)*. The experience must be representative of the tasks to be instructed and gained in approved civil aviation environment or acceptable equivalent, including line and/ or hangar maintenance experience; or **-option 2:** 3 years of experience on similar aircraft types and Implementation of Technical Check procedure by the training organisation when the experience on the relevant A/C type is less than 1 year as detailed in § 10.2 of this document. Or	* does not apply for new type certified aircraft. Contact EASA for these specific cases.

	-option 3: The instructors currently holds a valid Part 145 release to service authorisation on the relevant aircfrat type.	

Type training – knowledge examiners		
Qualification/ experience	**Acceptable mean of compliance**	**Comments/ limitations**
Specialty knowledge	Knowledge examiners should meet the same criteria as the theoretical instructor of the concerned elements (i.e. examiner for navigation meet the criteria of navigation elements instructor)	
Pedagogical skills	- completion of a "Train the examiner course" or - An Assessment performed and documented by the Training Organization Examination's Manager (if himself appropriately qualified as knowledge examiner and in accordance with an MTOE procedure).	
Other Knowledge	Training to the Organization's procedures (MTOE) addressing examinations and to the Part 66 examination standard	
Specialty Experience	nil	however practical experience in A/C maintenance, design or production activities is advantageous

Type training –practical assessors		
Qualification/ experience	**Acceptable mean of compliance**	**Comments/ limitations**
Specialty Knowledge	Practical assessors should meet the same criteria as the practical instructor of the concerned elements (i.e. assessor for landing gear tasks meet the criteria of landing gear elements practical instructor)	
Pedagogical skills	- completion of a "Train the assessor "course or - An Assessment performed and documented by the Training Organization Examination's Manager (if himself appropriately qualified as practical assessor and in accordance with an MTOE procedure).	
Other Knowledge	-Training to the Organization's procedures (MTOE) addressing practical assessments and -Training on specific assessment methods or devices used by the training organisation (i.e. simulators, synthetic task trainers etc….)	
Specialty Experience	**-option 1**: 3 years of relevant experience including 1 year* of experience on the relevant A/C type(s). The experience must be representative of the tasks to be assessed and gained in approved civil aviation environment or acceptable equivalent, including line and/ or hangar maintenance experience; or **-option 2:** 3 years of experience on similar aircraft types and Implementation of Technical Check procedure by the training organisation when the experience on the relevant A/C type is less than 1 year as detailed in § 10.2 of this document. Or	* does not apply for new type certified aircraft. Contact EASA for these specific cases.

	-option 3: The instructors currently holds a valid Part 145 release to service authorisation on the relevant aircfrat type.	

10.1. Assessment of the type training received at a non-Part 147 organisation.

This part is used for demonstration that the type training is at a level corresponding to Part 66 Appendix III; following checks have to be carried-out and documented:

1. **Type training syllabus:**
   - Syllabus levels for the type training should be assessed for equivalence to Part 66 Appendix 3 for the relevant license discipline (B1.1, B1.2, etc.…).

2. **Type training course length:**
   - Verification that the course length is equivalent to an Part 147 course for the same or similar aircraft type (please refer to minimum durations stated in Part 66 appendix 3).

3. **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.

4. **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.

5. **Examination:**
   - Verify that individual training course certificates and the associated examination results are available.
   - Verification that the exam result is at least equivalent to Part-66 requirements;
   - 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).

Notes:

For staff holding a valid Release to Service authorization for the aircraft type that was issued by an organisation approved under Part 145, the assessment of specialty knowledge is considered having been performed by this organisation. The training organisation can therefore replace the assessment by a verification of this authorization and document the individual's file with a copy.

For instructors who were trained to the type in a non-Part 147 environment, the assessment of the training's equivalency to Part 66 may be replaced by a Part 147 examination, conducted by the Part 147 training organisation, provided measures are in place to ensure the integrity of the examination. If the integrity cannot be sufficiently demonstrated then an independent examination performed in another Part 147 organisation would be necessary. In both cases, examination's rules described in Part 66 appendix 3 must be applied.

10.2. Technical Check by the training organization.

When the Type training Theoretical instructor or the Practical instructor/assessor cannot demonstrate a minimum experience on the relevant A/C type of 1 year, the training organisation may implement a Technical check procedure as detailed below:

1. Technical Check of the candidate 38nstructor is conducted by a senior instructor holding a valid Part 147 authorisation on the relevant aircraft and justifying more than 2 years of experience on the relevant aircraft and 5 years or relevant experience

2. The candidate instructor has to pass both theoretical and practical Part 147 type training prior to undergo the Technical Check

3. The candidate instructor shall demonstrate 3 years experience on similar aircraft. Similarity of aircraft types is based on 4 aspects: type of avionics system, flight controls system, propulsion system and structure system, , as detailed in AMC 66.A.20(b)(2)2

4. The technical check process is organised in 2 phases: mentoring and assessment. The assessment consist in a competency review of the candidate instructor on selected topics. Refer also to Appendix III to AMC to Part 66 - Evaluation of the competence: assessment and assessors

5. Selected topics shall be relevant to B1 category type training, or B2 category type training or or both B1 and B2 categories for B1+B2 type training

6. Total number of selected topics of the technical check is determined based on the following criteria:
    - the amount of missing experience on the relevant aircraft type and the experience on similar aircraft types
    - the candidate instrcutor is already an approved instructor in the organisation or a new instructor
    - the candidate instructor holds an aircraft maintenance licence on the appropriate category

7. Selected topics shall cover significant theoretical and practical topics related to the aircraft type. This could be selected from ADs, SBs, HF feedback following significant occurrences, typical Maintenance tips, New technologies introduced on the aircfrat type etc…

8. For each of the applicable speciality airframe, engine, electrical and avionics, the number of topics varies from 1 to 3 topics for the theoretical part and 1 to 3 topics for the practical parts

9. Adequate time has to be allocated to allow the mentoring of the candidate instructor on the selected topics

10. The candidate instrcutor is given access to the relevant aircraft documentation and is given sufficient time to prepare the assessment

11. The technical check process has to be sufficiently documented and recorded, e.g. Ttechnical Check assessment form, topics selected for assessment..

12. The outcome of the technical check may result in requiring additional training of the candidate instructor

13. In case of failed assessment, only one attempt is allowed after completing additional training. In case the second assessment is failed, the candiate instructor will have to demonstrate 1 year experience requirement on the relevant aircraft.

14. Personnel approved through Technical Check will be mentored during the delivery of the first type training on the relevant aircfrat type