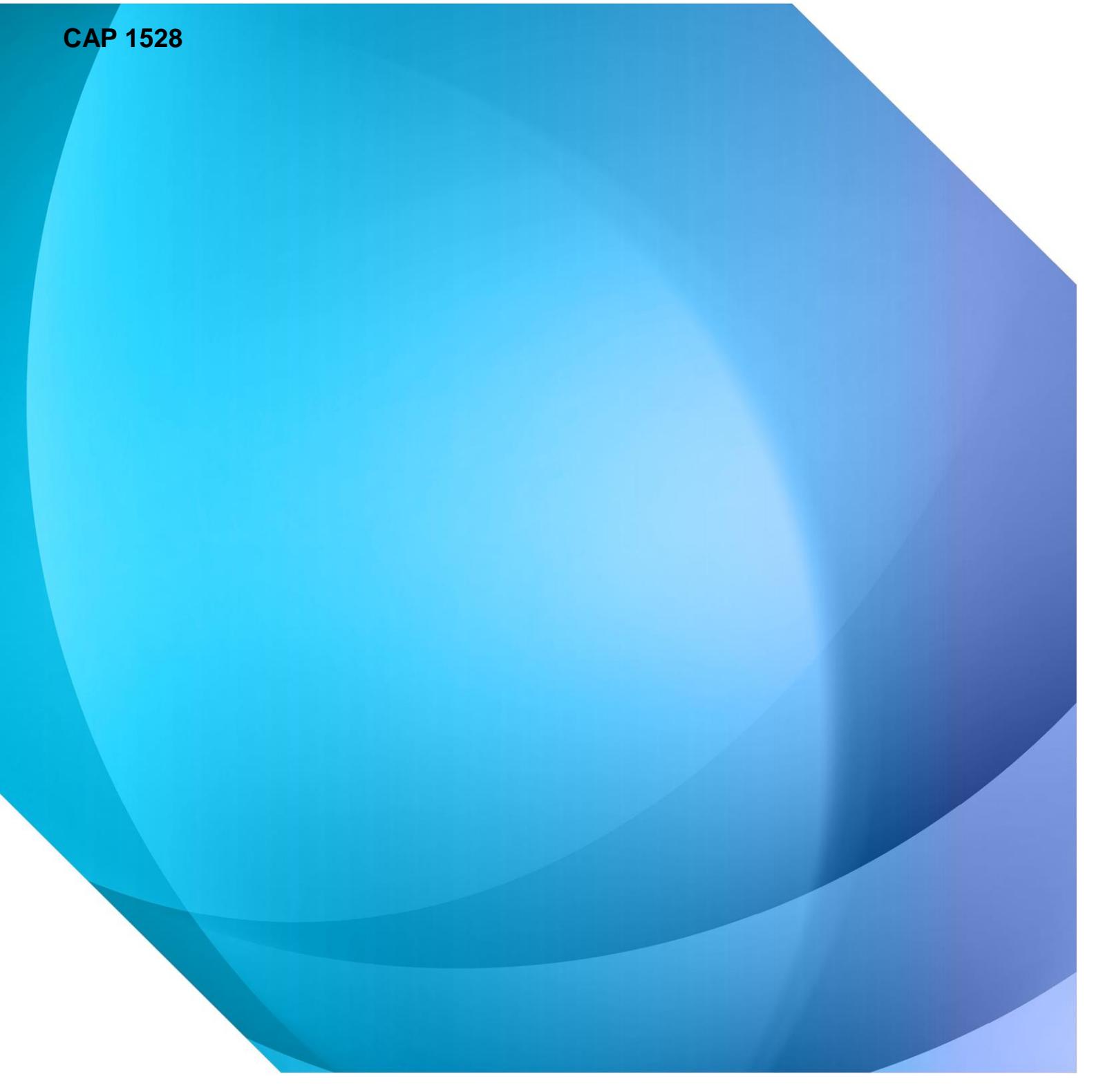


Guidance for Part-147 Maintenance Training Organisations:
Qualifications, Skills, Competency and the Revalidation of Part 147
Instructors, Knowledge Examiners, Exam Invigilators and Practical
Assessors

CAP 1528



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Additional Guidance

Abbreviations	
AMC	Acceptable Means of Compliance
GM	Guidance Material
MTOE	Maintenance Training Organisation Exposition
NPA	Notice of Proposed Amendment
EASA	European Aviation Safety Agency
CAA	Civil Aviation Authority
TNA	Training Needs Analysis

Introduction

This document is intended to provide guidance to UK Part 147 training organisations, for the initial assessment of qualifications, competencies and skills for the appointment of engineering instructors, knowledge examiners and practical assessors in respect of compliance with EC Regulation 1321/2014. This document re-affirms the guidance given in EASA UG.CAO.00154-002. It also provides guidance for the continuance / revalidation of existing Part 147 instructors, knowledge examiners and practical assessors.

The assessment process and the continuance / revalidation process should be developed by the maintenance training organisation and referenced in the relevant maintenance training organisation exposition (MTOE).

Training organisations should retain a record of the instructors, knowledge examiners, practical assessors and invigilators training, qualifications and experience for an indefinite period as well as ensuring that ALL instructional staff are issued with copies of their personal authorisation certificates.

A record system should be established within the organisation to record the skills, proficiencies and competencies for the continuance / revalidation of instructors, knowledge examiners and practical assessors within the approved training organisation. Periodicity of these checks should be recorded and retained in the individual's personal training record file.

The UK Civil Aviation Authority (CAA) or any representative assigned by EASA shall have access to these records during compliance audits.

This document is subject to periodic revision.

Terminology

AMC	Acceptable means of compliance	Part 66	EASA Engineer Training Regulations
CAA	Civil Aviation Authority	Part 145	EASA Maintenance Regulations
CAP	Civil Aviation Publication	Part M	EASA Continued Airworthiness Regulations
CR	EU Commission Regulation	Part 21	EASA Design and Production Regulations
CS	EASA Certification Specification		
EASA	European Certification Specification		
MTO	Maintenance Training Organisation		
MTOE	Maintenance Training Organisation Exposition		
TNA	Training Needs Analysis		

Engineering Instructor Requirements

General

All aircraft basic skills and type training instructors whether permanently or temporally employed, must have undergone an instructional techniques training course to a nationally recognised standard e.g. ISO90001 or equivalent and be able to demonstrate a comprehensive understanding of the EASA 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.

Instructors, knowledge examiners, practical assessors and invigilators within the Part 147 must be listed in Part 1.5 of the MTOE.

EASA Form 4's are 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).

Instructors may with the approval of the CAA 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 certificates.

Basic Training Instructor/Examiners (Modules 1,2,3,4)

Basic Training - Theoretical Elements Instructors		
Modules 1,2,3,4		
Qualification/ Experience	Acceptable Means of Compliance	Comments/ Limitations
Specialty knowledge	<p>-Option 1: Knowledge level attested by a school specialty diploma* that is recognised by the local Authorities, or an acceptable equivalent,</p> <p>or</p> <p>-Option 2: EASA Part 66 Basic Licence endorsing the category (i.e. B1 for B1 instructors)</p> <p>or</p> <p>-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.</p>	<p>*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.</p> <p>**In order to avoid conflicts of interest, the Part 147 <u>exam</u> should not be attended in the Part 147 organisation where the instructor is to exercise its privileges unless specific measures are taken and accepted by the surveyor to demonstrate that the integrity of the examination is ensured.</p>
Pedagogical Skills	<p>-Option 1: Instructor Techniques Training delivered by a legal entity to a nationally recognised standard</p> <p>or</p> <p>-Option 2: completion of a "Train the trainer course" to a nationally recognized standard.</p> <p><u>and</u></p> <p>Accepted by the Competent Authority following an in-situ audit in real training conditions.</p>	<p>*When the detention 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.</p>
Other Knowledge	<p>- A documented familiarisation with the specific training procedures and requirements (i.e. organisation of courses, attendance etc...) as described in the approved Training organisation's</p>	

	exposition (MTOE).	
Specialty Experience		*: 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 centre of gravity etc....)

Basic Training Instructor/Examiners (Modules 5,6,8)

Basic Training - Theoretical Elements Instructors		
Modules 5,6,8		
Qualification/ Experience	Acceptable Means of Compliance	Comments/ Limitations
Specialty knowledge	<p>- Option 1: Knowledge level attested by a school specialty diploma* that is recognised by the local 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</p> <p>or</p> <p>-Option 2: Part 66 Basic Licence endorsing the category (i.e. B1 for B1 instructors)</p> <p>or</p> <p>-Option 3: Part 147 Certificates of Recognition (training + exam) for the modules to be taught, at the appropriate level **.</p>	<p>*: 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</p> <p>**In order to avoid conflicts of interest, the Part 147 <u>exam</u> should not be attended in the Part 147 organisation where the instructor is to exercise its privileges unless specific measures are taken and</p>

	The scope of instruction will be limited to the passed modules.	accepted by the surveyor to demonstrate that the integrity of the examination is ensured.
Pedagogical Skills	<p>-Option 1: Instructor Certificate delivered by a legal entity recognised by its local authorities and acceptable to the national authority where the instructor will exercise his privileges</p> <p>or</p> <p>-Option 2: completion of a “Train the trainer course”</p> <p>or</p> <p>-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.</p> <p><u>and</u></p> <p>Accepted by the Competent Authority following an in-situ audit in real training conditions.</p>	
Other Knowledge	- A documented familiarisation with the specific training procedures and requirements (i.e. organisation of courses, attendance etc...) as described in the approved Training organisation’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/Examiners (Module 7)

Basic Training - Theoretical Elements Instructors		
Module 7		
Qualification/ Experience	Acceptable Means of Compliance	Comments/ Limitations
Specialty knowledge	<p>-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)</p> <p><u>and</u></p> <p>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)</p> <p>or</p> <p>-Option 2: Part 66 Basic Licence endorsing the relevant category (i.e. B1.1 for B1.1 instructors)</p> <p><u>and</u></p> <p>at least an A/C type representative of the category/ sub category (i.e. B1.1) endorsed on the licence</p> <p>or</p> <p>-Option 3: Part 147 Certificates of recognition level 3 for the module 7 (training + exam)**</p> <p><u>and</u></p> <p>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)</p> <p>or</p> <p>-Option 4: Specialised training received from acceptable</p>	<p>*: curriculum must be consistent with the syllabus of module 7, level 3.</p> <p>** In order to avoid conflicts of interest, the Part 147 <u>exam</u> should not be attended in the Part 147 organisation where the instructor is to exercise its privileges unless specific measures are taken and accepted by the surveyor to demonstrate that the integrity of the examination is ensured.</p> <p>***: the purpose is to facilitate the use of instructors –non-maintenance specialised- providing a very specialised training (i.e. on welding) as part of the module7 training and</p>

	training organisations/ institutions for specialised services (i.e. for welding, NDT etc.)***	under the oversight of the module 7 maintenance instructor(s). The instruction will be limited to the concerned sub-modules.
Pedagogical Skills	<p>-Option 1: Instructor Certificate delivered by a legal entity recognised by its local authorities and acceptable to the national authority where the instructor will exercise his privileges</p> <p>or</p> <p>-Option 2: completion of a “Train the trainer course”</p> <p>or</p> <p>-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.</p> <p><u>and</u></p> <p>Accepted by the Competent Authority following an in-situ audit in real training conditions.</p>	
Other Knowledge	- A training on EASA regulation: part 66 (basic), 147 (basic) and 145 (detailed), and the Training Organisation procedures (MTOE etc.).	
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/Examiners (Module 9)

Basic Training - Theoretical Elements Instructors		
Module 9		
Qualification/ Experience	Acceptable Means of Compliance	Comments/ Limitations

Specialty knowledge	<p>-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.</p> <p>or</p> <p>-Option 2: a certificate of recognition for the module 9 at level 2 (training + exam).*</p>	<p>*In order to avoid conflicts of interest, the Part 147 <u>exam</u> should not be attended in the Part 147 organisation where the instructor is to exercise its privileges unless specific measures are taken and accepted by the surveyor to demonstrate that the integrity of the examination is ensured.</p>
Pedagogical Skills	<p>-Option 1: Instructor Certificate delivered by a legal entity recognised by its local authorities and acceptable to the national authority where the instructor will exercise his privileges*</p> <p>or</p> <p>-Option 2: completion of a “Train the trainer course”</p> <p>or</p> <p>-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.</p> <p><u>and</u></p> <p>Accepted by the Competent Authority following an in-situ audit in real training conditions.</p>	<p>*When the detention 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.</p>
Other Knowledge	<p>- training on EASA regulations: part 66 (basic) and 145 (detailed)</p> <p><u>and</u></p> <p>- A documented familiarisation with the specific training procedures and requirements (i.e. organisation of courses, attendance etc...) as described in the approved Training organisation’s exposition (MTOE).</p>	
Specialty Experience	<p>nil *</p>	<p>*: however, experience in an environment that is representative of human factors affecting aviation maintenance (i.e. Line & Base maintenance experience) is advantageous;</p>

Basic Training Instructor/Examiners (Modules 11,12,13,14,15,16,17)

Basic Training - Theoretical Elements Instructors		
Modules 11,12,13,14,15,16,17		
Qualification/ Experience	Acceptable Means of Compliance	Comments/ Limitations
Specialty knowledge	<p>-Option 1: Knowledge level attested by an aviation engineering diploma* recognised by the local Authorities and covering the subject to be taught, or an acceptable equivalent,</p> <p>or</p> <p>-Option 2: Part 66 Basic Licence endorsing the category (i.e. B1 for B1 instructors)</p> <p>or</p> <p>-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).</p> <p>or</p> <p>-Option 4: specialised training received from acceptable training organisations or institutions***</p>	<p>*: 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.</p> <p>**In order to avoid conflicts of interest, the Part 147 <u>exam</u> should not be attended in the Part 147 organisation where the instructor is to exercise its privileges unless specific measures are taken and accepted by the surveyor to demonstrate that the integrity of the examination is ensured.</p> <p>***: the purpose is to facilitate the use of specialised instructors providing a very specialised 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 specialised training may for instance include specialised training offered by A/C</p>

		manufacturers etc....
Pedagogical Skills	<p>-Option 1: Instructor Certificate delivered by a legal entity recognised by its local authorities and acceptable to the national authority where the instructor will exercise his privileges*</p> <p>or</p> <p>-Option 2: completion of a “Train the trainer course”</p> <p>or</p> <p>-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.</p> <p><u>and</u></p> <p>Accepted by the Competent Authority following an in-situ audit in real training conditions.</p>	*When the detention 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 familiarisation with the specific training procedures and requirements (i.e. organisation of courses, attendance etc...) as described in the approved Training organisation’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 Instructor/Assessors

Basic Training - Practical Elements Instructors		
Qualification/ Experience	Acceptable Means of Compliance	Comments/ Limitations
	<p>-Option 1: Part 66 Basic Licence endorsing the appropriate category/ sub. category (i.e. B1.1 for B1.1 instructors)</p> <p><u>and</u></p> <p>A/C type endorsed on the appropriate category / sub.</p>	**In order to avoid conflicts of

<p>Specialty knowledge</p>	<p>category of licence, for each aircraft type used for the training.</p> <p>or</p> <p>-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***.</p> <p><u>and</u></p> <p>Approved type training (theory + practical) passed in the appropriate category / sub. category for each aircraft type used for the purpose of the training.</p> <p>or</p> <p>-Option 3: Specialised training received from acceptable training organisations/ institutions to cover specialised services (i.e. welding, NDT inspections etc..). ****</p> <p>The instruction will be limited to the subjects/methods covered by the specialised training(s). NDT instructors should be holder of a valid licence iaw EN4179 (level 2 minimum) or acceptable equivalent.</p> <p>or</p> <p>-Option 4: A documented release to service authorisation (or an internal certification authorisation) granted by an approved Part 145 organisation iaw the approved MOE and covering the subjects to be taught. For aircraft maintenance instructors the authorisation 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 purpose of the training. For shop (i.e. structure, components) & specialised services the qualifications must meet the standard as exposed in the organisation's MOE. The instruction will be limited to the subjects covered by the AMO authorisation(s).</p>	<p>interest, the Part 147 <u>exam</u> should not be attended in the Part 147 organisation where the instructor is to exercise its privileges unless specific measures are taken and accepted by the surveyor to demonstrate that the integrity of the examination is ensured.</p> <p>***: the required level depends on the instructor' speciality (airframe or avionics).</p> <p>****: the purpose is to facilitate the use of instructors –non-maintenance specialised-providing a very specialised 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.</p>
	<p>-Option 1: Instructor Certificate delivered by a legal entity recognised by its local authorities and acceptable to the national authority where the instructor will exercise his privileges*</p> <p>or</p>	<p>*When the detention 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</p>

<p>Pedagogical Skills</p>	<p>-Option 2: completion of a “Train the trainer course” to a nationally recognised standard</p> <p>or</p> <p>-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)</p> <p>or</p> <p>-Option 4: Assessment performed and documented by the Training Organisation’s Training Manager (if himself appropriately qualified as practical instructor and in accordance with an MTOE procedure).</p> <p><u>and</u></p> <p>Accepted by the Competent Authority following an in-situ audit in actual training conditions.</p>	<p>acceptable for this authority, in particular when the certificate was issued in another country.</p>
<p>Qualification/ Experience</p>	<p>Acceptable Means of Compliance</p>	<p>Comments/ Limitations</p>
<p>Specialty Experience</p>	<p>- 3 years of relevant experience. The experience must be representative of the subject(s) to be taught and gained as following:</p> <p>1) <u>A/C Maintenance</u> instructor: experience to be gained in a regulated* civil aviation environment or acceptable equivalent, including line and/ or hangar maintenance experience;</p> <p>2) <u>Shop Maintenance</u> instructors (component/structural elements etc....): experience to be gained in approved civil aviation workshops and adequate to the component maintenance to be taught.</p> <p>3) <u>For Specialised Services</u> (Welding, NDT etc....): relevant experience to be gained in industry*</p>	<p>* Care should be exercised that the experience gained in a non-aeronautical industry is relevant and transferable to aviation maintenance practices.</p> <p>If the proposed instructor is from the military, this experience may be considered acceptable providing the organisation can evidence suitable training on the civil environment and regulations</p>

Type Training Theory Instructor/Knowledge Examiners

Type Training - Theoretical Elements Instructors and Knowledge Examiners		
Qualification/ Experience	Acceptable Means of Compliance	Comments/ Limitations
Specialty knowledge	<p>-Option 1: A Part 147 Certificate of Recognition** (training + exam) issued by a Part 147 training organisation for a type training (level 3) successfully received on the relevant A/C(s) and including theory & practical. The Certificate of recognition should address the category of licence corresponding to the speciality of the instructor (i.e. B2 for an avionic instructor)</p> <p><u>and</u></p> <p>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.</p> <p>or</p> <p>-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 to the satisfaction of the competent authority.</p> <p><u>and</u></p> <p>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.</p> <p>or</p> <p>-Option 3: a specialised 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 speciality.</p> <p><u>and</u></p> <p>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</p>	<p>**In order to avoid conflicts of interest, the Part 147 <u>exam</u> should not be attended in the Part 147 organisation where the instructor is to exercise its privileges unless specific measures are taken and accepted by the surveyor to demonstrate that the integrity of the examination is ensured.</p>

	two years preceding its employment in the current 147 organisation.	
Pedagogical Skills	<p>-Option 1: Instructor Certificate delivered by a legal entity recognised by its local authorities and acceptable to the national authority where the instructor will exercise his privileges*</p> <p>or</p> <p>-Option 2: completion of a “Train the trainer course” to a nationally recognised standard</p> <p>or</p> <p>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.</p> <p><u>and</u></p> <p>Accepted by the Competent Authority following an in-situ audit in real training conditions.</p>	*When the detention 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.
Qualification/ Experience	Acceptable mean of compliance	Comments/ Limitations
Other Knowledge	<p>- A documented familiarisation with the specific training procedures and requirements (i.e. organisation of courses, attendance etc...) as described in the approved Training organisation’s exposition (MTOE)</p> <p>and</p> <p>- A training on specific instructional methods or training devices used by the training organisation (i.e. simulators, synthetic trainers etc...)</p>	Accepted by the Competent Authority following an in-situ audit in real training conditions.
Specialty Experience	<p>- 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.)</p> <p>- 3 years of experience on similar aircraft types **</p>	<p>* does not apply for new type certified aircraft. Contact UK CAA for these specific cases.</p> <p>** For Practical Instructors</p>

	And Additional experience on the particular type gained through type trainings etc....	
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Type Training Practical Instructors

Type Training – Practical Assessors		
Qualification/ Experience	Acceptable Means 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 <u>and</u> - an assessment performed and documented by the Training Organisation’s Examination’s Manager (if himself appropriately qualified as practical assessor and in accordance with an MTOE procedure).	
Other Knowledge	-Training to the Organisations procedures (MTOE) addressing practical assessments <u>and</u> -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;	

English Language Proficiency

All instructional staff should be able to meet the **Common European Framework of Reference for Languages: Learning, Teaching, Assessment**, abbreviated as CEFR. The minimum level required for such staff is B1 however all schools should progressively bring their staff proficiency to a B2 level or above.

Level	Description
B1	Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc. Can deal with most situations likely to arise whilst travelling in an area where the language is spoken. Can produce simple connected text on topics which are familiar or of personal interest. Can describe experiences and events, dreams, hopes & ambitions and briefly give reasons and explanations for opinions and plans.
B2	Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialisation. Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party. Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options

Competency of Instructional Staff

The instructors (basic & type) should attend a number of lesson “sit-ins” of the type-training course on the material he or she is to deliver prior to attaining their authorisation. This number may vary with each organisation, depending upon the experience of the instructor and their approved procedures.

The instructor should also as part of the initial assessment, prepare and deliver a training session in a monitored environment, attended and assessed either by the training manager and/or his delegated representative as part of the organisation’s assessment process, prior to the instructor being approved to deliver a course, (commonly referred to as a competency assessment. ([CAP 1742](#) provides more detail for competency).

After the initial assessment 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 students on technical matters.

Acceptance of other type-training courses and their Accreditation

Other type-training courses received in a non-Part 147 organisation (including theory and practical elements) can only be considered for acceptance when the curriculum/level of the course is equivalent to Part 66 Appendix III.

To get these courses accredited for the purpose of satisfying qualification requirements, the equivalency of the course shall be demonstrated by the maintenance training organization by following these principles:

When a Part 147 maintenance training organisation intends to nominate training staff not having attended the relevant type training course in an approved Part 147 maintenance training organisation (so the instructor does not hold a Part 147 type training certificate), the internal Quality system of the Part 147 organisation must demonstrate the equivalency of the other course by reviewing and assessing the following items:

1. Type training syllabus:

Syllabus levels for the type training should be assessed for equivalence to Part 66 Appendix III for the relevant licence-category;

2. Type training course length:

Verify that the course length is equivalent to an EASA Part 147 course for the same or similar aircraft type.

3. Type training course provider:

Record the course provider. Assess as far as it is possible that the training documentation/material came from a reputable source.

4. Category of type training:

Ensure that course completed by the Type instructor is relevant to the scope of the licence category intended for the course that is to be included in the individual's approval (e.g. avionics = avionics type training course and not Airframe/power plant).

5. Theoretical and practical training:

Verify that the course covered the theoretical and practical elements. If the training covered only the theoretical aspect, then the practical training shall be justified separately. In this case it should be noted that the practical training may have been carried out in the past as a structured OJT when the applicant was under the control of an approved maintenance organisation before CR(EU)1149/2011 became effective.

6. 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, etc.).

This process will be the responsibility of the Training Organisation and it is down to them to develop a process to the satisfaction of the competent authority on how they qualify their staff.

Part 147 Requirements

All Part 147 basic and type instructors should be listed in Part 1.5 of the MTOE. (List of training instructors, knowledge examiners and practical assessors). This list should identify the scope of authorisation for each instructor e.g. B1, B2, B757, B777, Airbus 340 etc and should include specific types/ engines and variants and should also clearly state theory, practical or both. The Part 147 organisation should ensure that the scope of authorisation for each instructor, including any sub-contracted instructor, is current and applicable to the subject being taught.

The Part 147 organisations should ensure that all staff remain conversant with the requirements of Part 66 / 147 and associated AMC's, Guidance notes and Notices of Proposed Amendments (NPA's) via update training.

A record of instructor / examiner recency check should be retained, by the Part 147 training organisation, demonstrating at least 35 hours of update training carried out over a 24-month period, in both **THEORY & PRACTICAL** skills (as applicable). And be able to be produced during audit by the competent authority. (see section 5 Continuation / Update training)

Examination Invigilator Requirements

Nomination of an Invigilator

An examination invigilator is understood to be someone, who is appointed by the maintenance training organisation for ensuring the proper conduct of a particular examination in accordance with the examination procedures of the organisation. The nomination of such a person can be either permanent, for those examinations taking place within an approved training address, or 'ad-hoc' for those venues where an examination is taking place away from the approved address ('one-off' remote site). The non-permanent "ad-hoc" nomination is understood to be valid only when the Maintenance Training Organisation includes an acceptable procedure in the MTOE to control the suitability of the nominated person in terms of integrity and independence. Accordingly, permanently appointed examination invigilators should be listed in Part 1.5 of the MTOE and a paragraph detailing their duties and responsibilities should be included in Part 1 of the MTOE. It should be noted that the individual can also hold other positions within the training organisations, (i.e. knowledge examiner, practical assessor, instructor); these other roles must be clearly defined against the individual within the relevant MTOE. The procedure for conducting examinations at either approved addresses or locations not listed in the MTOE should be included at 2.12 and 2.16 of the MTOE.

Invigilator Training

In all cases, invigilators must be conversant with the Part 147 requirements related to the integrity of examinations and the security of exam questions; and, with the specific procedures approved for the maintenance training organisation for the conduct of examinations.

All invigilators should be trained by either an approved examiner, examinations manager, training manager or the quality manager on the duties and responsibilities of the invigilator using the training organisation's approved procedure.

After the training, an assessment should be recorded, by the quality manager or training manager. The record should have the date and assessor's name. The record is to be retained on the individual's personnel file. A recurrent training assessment is not required providing the invigilator remains current i.e. invigilates at least once in each subsequent 12-month period.

The invigilator training should include, but is not limited to, addressing the following areas:

- a) The preparation of the classroom / examination room in accordance with the requirements of the approval under which the course is being delivered.
- b) Particular attention is to be drawn towards the spacing between candidates. Ensuring that desks are spaced so that each student cannot copy from another student, there should be a minimum of 1 metre between students and each student should be within direct line of sight (facing the front of the room) of the invigilator. The invigilator should be able to see every student face-on.
- c) Students should be prevented from entering the room until it is properly prepared.
- d) Each student's identity is to be confirmed prior to the examination. If necessary copies of passports should be reviewed to confirm. In cases whereby outside attendees are sitting the examination an example of the student's signature should also be checked.
- e) Adequate security of the examination papers is to be maintained throughout. Only the correct number of examination papers is to be taken into the examination room. Under no circumstances is the examination marking sheet to be taken into the examination room, and at no time should an examination be marked in the vicinity of the students.
- f) Students are to be clearly briefed before the exam. The brief should consist of a prepared statement and should be addressed to ALL the students at the beginning of ALL examinations. The brief is to outline the procedures and conditions of the examination process. This is to include actions to be taken if the examination has to be stopped for any reason.
- g) It is to be made clear that the invigilator should not engage in any form of dialog with the students during the examination, this should be outlined in the opening brief.
- h) The exam is to be conducted in a manner in keeping with the briefing. The invigilator is not to conduct any other work whilst monitoring the examination.

Invigilators selected for a temporary approval should be nominated by the customer's quality manager or deputy, who hold a form 4 or equivalent. They should be trained by a representative of the training organisation who is on-site (instructor). In some cases, it may be appropriate for the instructor to sit at the rear of the classroom to ensure that the training organisations procedures are adhered to. However, they must not take part in the examination procedure.

The training should be conducted using the procedure detailed in the MTOE, detailing the duties and responsibilities of the invigilator, with particular emphasis on points a) – h) above and the Part 147 requirements related to the integrity of examinations and the security of exam questions. (See section 5 for continuation / update training for staff)

Examination Misconduct

The invigilator training should include the procedure detailing the physical actions to be taken in the event of an Invigilator witnessing or suspecting that cheating is or has taken place during an examination.

Note: A knowledge examiner shall not issue an examination paper or invigilate an examination in a subject area where he/she has acted as an instructor.

The continuation of an Instructor, Knowledge Examiner and Practical Assessors authorisation

General

Part 147.A.105 Personnel Requirements, state: "Instructors and knowledge examiners shall undergo update 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". This should also be supported with a valid competency review for that period.

This training should consist of a minimum of 35 hours within the 24-month period; in addition, training school personnel are to remain conversant with the latest revision of the EASA Part 147 regulations, AMC's, Guidance notes and NPA's. They should also be conversant with the respective organisations MTOE and associated training procedures.

Part 147 training organisations 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 a Part 147 organisation and its instructional staff should be able to evidence recency as part of the continuation of an approval. 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 the competent authority.

The organisation should deliver continuation training to all its staff in some form or another depending upon their scope and authorisation. e.g. invigilators and examiners need to be familiar with exam process, Instructors and assessors the training and assessment process. See [CAP 1742](#) for additional guidance as to what should be included in continuation training and how it should be developed.

Revalidation of Authorisation

General

In order for an instructor, knowledge examiner or practical assessor's authorisation to be revalidated following renewal / expiry / withdrawal. The maintenance training organisation 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.

The criteria for reinstating should take into consideration the length of time the individual has been away from that specific training environment or discipline.

Any instructor, knowledge examiner or practical assessor who has passed 24-month period without exercising the privileges of his authorisation, as a minimum, must comply with the table below:

Inactive Period	Recovery Action
24 to 30 months	35 hours update training + continuation training + training school procedures/processes + 2 monitored training sessions with another instructor covering both theory and practical aspects.
30 to 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 to the current National/European standard.

The competent authority has the authority to challenge and where necessary refuse any applicant's approval to be named as an instructor, assessor or examiner. This is regardless of whether the applicant has held an instructional position previously (i.e. where an organisation may be wishing to claim 'grandfather' privileges).

Distance Learning – Delivery of Training

Training managers should ensure instructors are familiar and competent with all methods of training delivery used by their organisation. Where courses are delivered via distance learning, training should be given as to the most appropriate delivery method and how the instructor may have to adapt the delivery style to not only utilise technologies, but to also ensure the delegate is engaged and receives a good experience.

The TNA should be updated reflect the delivery methodologies/technologies to be used. CAP 1933 provides further guidance on distance learning.

‘Grandfathering’

General

1. Instructors, examiners and assessors accepted by an organisation via their approved MTOE prior to the entry into force of the revision of this document and Commission Regulation EU1149/2011(repealed by EU1321/2014), and exercising their privileges, or part thereof, at the entry into force of this standard, are considered as fulfilling the knowledge and experience requirements.
2. However, an assessment of the gap between actual training qualifications and this standard in order to identify deficiencies in the qualification should be performed by the Part 147 maintenance training organisation, and a corrective-plan should be provided to the competent Authority within a reasonable timeframe.

With respect to para: 3.2.1(c) and 3.5.1(b) & (c) of this document, “Grandfather” provisions accepting full compliance with the above criteria at the time of the entry into force of the revision of this document cannot be considered as transferrable between different Part 147 maintenance training approvals. Any Instructors, examiners and assessors qualifying in respect of Section 9(1) above within an organisation after this must comply with the requirements of Annex IV (Part 147) EU1321/2014

Permanent Instructors V Contract Instructors

Part 147.A.105(c) requires organisation to have a nucleus of permanently employed staff sufficient to undertake the minimum required to maintain the organisations scope of approval. Such staff should therefore be directly employed by the organisation and to giving the necessary capacity and stability with regards to permanently employed instructors, assessors & examiners to ensure the continued stability of the organisation. Therefore, ensuring the organisations ability to meet the requirements of its approval and any subsequent scope. The CAA recently released [IN 2017/015](#) and whilst the document focuses on Part 145, the principles apply also to Part 147. Any staff on zero hours

contracts will be considered as contractors unless the organisation can satisfy to the CAA that an individual:

- i) Meets the requirements for an [employee](#);
- ii) Is required to report for work when requested;
- iii) Does not perform any work for another aviation maintenance training organisation.

A failure to meet any of the requirements above is considered to be a failure of the organisation to fulfil its obligations under Part 147. Findings of the appropriate level will be raised in accordance with Part 147.A.160. Where this impacts on the capability of the organisation to perform its approved scope of work the CAA may decide to suspend, limit or revoke the affected parts of the approval.

The use of contract instructors is permitted providing the organisation can evidence that without the use of the contractors they can still support the organisations scope of approval.

Additional Guidance

For Additional guidance organisations may refer to [EASA UG.CAO.00154-002](#)