

## **Acceptable Means of Compliance and Guidance Material to Annex IV (Part-147) to Commission Regulation (EU) No 1321/2014 — Issue 2, Amendment 3**

### **Annex III to ED Decision 2023/019/R**

#### **‘AMC and GM to Part-147 — Issue 2, Amendment 3’**

The text of the amendment is arranged to show deleted, new or amended text as follows:

- deleted text is ~~struck through~~;
- new or amended text is **highlighted**;
- an ellipsis ‘[...]’ indicates that the rest of the text is unchanged.

#### **Note to the reader**

*In amended, and in particular in existing (that is, unchanged) text, ‘Agency’ is used interchangeably with ‘EASA’. The interchangeable use of these two terms is more apparent in the consolidated versions. Therefore, please note that both terms refer to the ‘European Union Aviation Safety Agency (EASA)’.*

Annex IV to Decision 2015/029/R of 17 December 2015 of the Executive Director of the Agency is amended as follows:

## ANNEX IV (PART-147)

[...]

### SECTION A – TECHNICAL REQUIREMENTS

[...]

### SUBPART B – ORGANISATIONAL REQUIREMENTS

#### GM1 147.A.100 Facility requirements

The number of students undergoing training is expected to be adequate to the nature and the conditions of the training in order to ensure proper interaction between the instructor and the students, taking into account pedagogical and human factors principles.

#### AMC1 147.A.100(i) Facility requirements

For approved basic maintenance training courses

1. ~~For approved basic maintenance training courses this~~ means holding, and ensuring reasonable access to, copies of all relevant Parts EU regulations and the Member States' national aviation legislation, examples of typical aircraft maintenance manuals and service bulletins, Airworthiness Directives, aircraft and components records, release documentation, procedures manuals and aircraft maintenance programmes.
2. Except for the relevant Parts EU regulations and the Member States' national aviation regulations, the remainder of the documentation should represent typical examples for both large and small aircraft and cover both aeroplanes and helicopters as appropriate. Avionics documentation should cover a representative range of available equipment. All documentation should be reviewed and updated on a regular basis.

[...]

#### GM1 147.A.100(i) Facility requirements

Where the organisation has an existing library of regulations, manuals and documentation required by another EU regulation Part, it is not necessary to duplicate such a facility, subject to student access being under controlled supervision.

[...]

## AMC1 147.A.105 Personnel requirements

1. ~~The larger~~ Any maintenance training organisation (~~an organisation~~ with the capacity to **train, examine, and/or assess** ~~provide training for~~ 50 students or more) **at the same time** should appoint a training manager with the responsibility of managing the training organisation on a day-to-day basis. ~~This~~ ~~Such~~ person could also be the accountable manager. In addition, the organisation should appoint a quality manager with the responsibility of managing the quality system as specified in **point paragraph** 147.A.130(b), and an examination manager with the responsibility of managing the relevant Part-147 Subpart C or Subpart D examination system. ~~This (these)~~ ~~Such~~ person(s) may also be an instructor and/or examiner.
2. ~~The smaller~~ Any maintenance training organisation (~~an organisation~~ with the capacity to ~~provide training for~~ **train, examine, and/or assess fewer** ~~less than~~ 50 students **at the same time**) may combine any or all of the ~~sub-paragraph~~ **subparagraph** (1) positions subject to the competent authority verifying and being satisfied that all functions can be properly carried out in combination.

[...]

## AMC1 147.A.105(f) Personnel requirements

[...]

The instructors should be trained in the subject they deliver, including the appropriate training methods and tools, as applicable.

## GM1 ~~to~~ 147.A.105(f) Personnel requirements

~~It is recommended that potential instructors be trained in instructional techniques.~~

The instructor that uses new training technologies (e.g. e-tutor, tele-tutor, tele-trainer) should be trained in using these technologies, as well as in the coaching, guiding and assisting of e-learning students. It is important that the instructor understands the electronically based distance-learning process, has the competence to remotely evaluate the learning behaviour of e-learning students and is able to proactively support their learning process.

The following structure provides an example of such an instructor training, as applicable:

- changes and tendencies of today's training;
- fundamentals of methodology and didactics;
- basics and theory of e-learning and tele-tutoring;
- communication in virtual environments;
- the changed role of students and instructors;
- competence profile of a tele-tutor;

- practical guide to support learning processes;
- assessment of students' performance;
- the learning management system.

[...]

### AMC1 147.A.115(a) Instructional equipment

If the maintenance training organisation transfers knowledge through a virtually controlled environment (e.g. distance learning, computer-based training (CBT) or multimedia-based training (MBT)), the organisation should ensure that:

- the computer system requirements are made known to the end user;
- the students' activities are traceable, documented and recorded; and
- the computer system requirements of any third-party provider are covered by a written agreement concluded between the two parties and includes the terms of delivery, data security and data integrity.

### GM1 147.A.115(a);(d) Instructional equipment

~~1. — Synthetic training devices are working models of a particular system or component and include computer simulations.~~

~~2. — A synthetic training device is considered beneficial for complex systems and fault diagnostic purposes.~~

1. Refer to the GM to Section 3 of Appendix III to Part-66 for the description, and to point 7 of the AMC to Section 1 of Appendix III to Part-66 for the definitions.

2. It is acknowledged that situations could exist where the size and complexity of such MSTDs and/or MTDs may require dedicated infrastructure. Such instances should be acceptable provided that student access to, and the use of, the respective MSTDs/MTDs is appropriately ensured.

[...]

### AMC1 147.A.130(a) Training procedures and quality system

[...]

Table 1 lists existing training tools that may be selected for ~~basic~~ the training.

[...]

Table 2 lists existing training methods that may be selected for ~~basic~~ the training.

[...]

**Table 3 Combination of training methods and tools, and their use**

[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]								
<p>(1) Limited suitability. It means that the respective training method may be used but with limited results, thus requiring the support of a complementary training method to fulfil the learning objectives.</p> <p>NOTE: Instructor (human) involvement should be considered in Basic Knowledge Modules 9A/9B.</p>								
[...]								

### AMC1 147.A.145(c) Distance learning via uniform resource locator (URL) addresses

Distance training may also be delivered via URL addresses. When delivering distance training, the learning location is the responsibility of the student and need not be controlled by the training organisation. Refer to point 147.A.100(j).

Knowledge examinations may also be conducted by accessing the examination questions via uniform resource locator (URL) addresses, provided the knowledge examination environment is under the control of the maintenance training organisation.

[...]

### AMC1 147.A.200(f) Approved basic training course

- [...]
- ~~The minimum participation time for the trainee to meet the objectives of the course should not be less than 90 % of the tuition hours. Additional training may be provided by the training organisation in order to meet the minimum participation time. If the minimum participation defined for the course is not met, a certificate of recognition should not be issued.~~

The minimum participation criteria for the trainee in order to meet the objectives of the basic training course should not be less than 90 % of the tuition hours or 95 % completion of the content for student-centred methods in a theoretical training course. Additional training may be provided by the training organisation for the trainee to meet the minimum participation criteria. If the minimum participation that is defined for the basic training course is not met, a certificate of recognition (CoR) should not be issued.

[...]

### AMC1 147.A.300 Aircraft type / task training

[...]

- For task training, MBT methods may be used.

[...]

## SECTION B — PROCEDURES FOR COMPETENT AUTHORITIES

### SUBPART A — GENERAL

[...]

#### AMC1 147.B.10(b) Competent authority

[...]

3. [...]

3.2. knowledge of maintenance training standards

3.3. training methods and technologies.

[...]