

Considering the Challenge of Demonstrating Full Compliance with the Requirements of EASA Third Country Part 145 User Guide Related to Component Maintenance.

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Note this document contains a combination of EASA regulatory obligations together with the authors interpretation of best practice.

Introduction

EASA Serves the role of Competent Authority for Third Country Approval Holders including EASA Part 145. To provide industry with guidance EASA produces a number of documents which are called user guides

In the case of EASA Part 145 the reference document is - Foreign Part-145 approvals - Components, engines and APU certifying staff UG.CAO.00126-003 (Note – the current revision is dated Oct 2015)

The EASA Regulatory Environment Consists of

- Implementing Rules – High Level Regulation – issued by the European Commission (based on EASA Opinions)
- Acceptable Means of Compliance (AMC) – issued by EASA (based on EASA Decisions)
- Guidance Material – additional explanatory material regarding how to comply with AMC
- Certification Specification (equivalent to AMC Material) – Used in Support of Part 21 Objectives

Do I have to comply with AMC Requirements – The short answer is yes – the longer answer is that a possibility exists to develop an Alternate Means of Compliance (AMOC) – but this will have to be authorised by your Competent Authority and Registered and accepted by EASA

Do I have to comply with GM – In theory no, however in practice if you choose to ignore Guidance Material you should have evidence of an Analysis & Risk Assessment to show that your deviation is equal to or of higher value than the GM (rationally there is usually no business advantage of deviating – but multiple downsides – So the path of least resistance is to show full compliance

So what is the authority of the User Guide?

In fact they are something of an orphan in as much as they are produced by EASA, but only in the role of “competent authority” as such they should not exceed in scope or intent the IR/AMC/GM as provided by EASA in its role of “Manager” of the Regulatory Environment.

For its Part EASA as the competent authority producing “User Guides” should ensure the best practice and standards which they aspire to through the user guides are also to be found within EASA core material which is not always the case! (Such a Conflict does not in fact benefit our Industry)

Essentially the user guide is a “Best Practice” and as with GM above the path of least resistance is to show full compliance, however this is not always achievable in an effective way within the business framework and it is in such situations that alternative solutions can be considered

For example to undertake online training in respect of Part 66 Module 9 & Part 66 Module 10 for Third Country Certifying Staff including Component Certifying Staff.

The Importance of Managing Competence within an EASA Part 145 Environment

The management of competence is of pivotal importance see the following extract concerning assessment of Component Certifying Personnel

Assessment.

The aim of the assessment is to ensure compliance of the Component Certifying Staff with the relevant EASA Part 145 requirements, with the criteria defined in this user guide and to ensure that each CC/S possesses the expected competence(s) associated to his/her job function (proposed scope of work and level of maintenance), before granting him/her an

initial EASA Part-145 C/S individual authorisation, to renew or to extend the scope of his/her issued authorisation.

- This assessment shall also take into consideration attitude and behaviour
- As a consequence the maintenance organisation shall demonstrate through a competence assessment that the CC/S:
 - Meets the qualification criteria addressed above;
 - Has the relevant knowledge, skills and ability to perform the maintenance tasks related to his/her job function including the relevant language knowledge;
 - Is able to determine when the Component is ready to release to service and when it shall not be release to service.

Removing the Confusion regarding HF Training

Do Component Certifying Staff require HF Training – Twice? The simple answer is yes (but consider it is no different from Part 66 LAE how has passed Module 9 as part of their AMEL Qualification)

Component Certifying Staff require both training in EASA Mod 9 Human Factors as well as EASA Part 145 Human Factors Training I.A.W AMC2 145.A.30(e) Personnel requirements (ED Decision 2020/002/R)

Specific Comments concerning - UG.CAO_.00126-Components-engines-and-APU-certifying-staff.pdf

1.3.3.2. Human factor and aviation legislation training.

When selecting a non-EASA Part-147 AMTO to provide the Human Factor training and/or Aviation Legislation, the maintenance organisation quality department shall be in a position to demonstrate as a minimum that:

- The course is carried out according to a detailed syllabus including level of training as per EASA Part66 Module 9 and/or 10 as applicable (the duration of the course need to be specified to demonstrate the adequacy to cover all subjects);

How can the above criteria be demonstrated if online training is used?

The acceptance of this course whether delivered in the classroom / Webinar / Online is the responsibility of the receiving organisation and forms part of the management of competence of the certifying staff.

The Quality Manager should audit the course to ensure it complies with all objectives. A course delivered at Level 2 will meet this objective - ***A general knowledge of the theoretical and practical aspects of the subject and an ability to apply that knowledge.***

It is ultimately the responsibility of the Quality Manager to ensure that the content of this training is fully compliant with the organisational requirement to meet EASA Part 145 Requirements.

Concerning the following

The Qualification criteria for instructors is defined;

Becomes Not Applicable for Online Training - Whilst this is relevant in the classroom – however in the case of Online Training the 145 Organisations Quality Manager Must assumes responsibility to ensure standards

A maximum number of training Hours per day is defined (HF principal to be considered);

For an online delivery the Quality Manager should ensure the student fully engages with the material this can be ensured by mandated supervised online access to the material, supervised completion of the examination together with competence assessment to ensure satisfactory completion

A maximum of trainees per group of trainees (28 person).

Additional Training Required per EASA Part 145 Requirements

AMC2 145.A.30(e) Personnel requirements

ED Decision 2020/002/R

In respect to the understanding of the application of human factors and human performance issues, all maintenance organisation personnel should have received an initial and continuation human factors training.

AMC3 145.A.30(e) Personnel requirements

ED Decision 2015/029/R

Additional training in fuel tank safety as well as associated inspection standards and maintenance procedures should be required for maintenance organisations' technical personnel, especially technical personnel involved in the compliance of CDCCL tasks.

EASA guidance is provided for training to maintenance organisation personnel in Appendix IV to AMC 145.A.30(e) and 145.B.10(3)

AMC4 145.A.30(e) Personnel requirements

ED Decision 2015/029/R

Competence assessment should include the verification for the need of additional EWIS training when relevant.

EASA guidance is provided for EWIS training programme to maintenance organisation personnel in AMC 20-22.

Component Related Training

Concerning the need for Component training

Where the Component Maintenance Organisation is fully supported by the OEM the situation is easier to manage in respect of Documentation and Training.

In other cases the practicality of OEM training due to high cost is often not feasible for several reasons and is compounded by the fact that OEM do not support competitor organisations and often treat their documentation as proprietary and refuse to supply either documentation or training to third part organisations.

Note regarding the documentation – Any operator of an aircraft containing such components is “entitled” to have access to all appropriate documentation and can choose who they share this information with. (This becomes a challenge when the OEM obliges the Operator to sign an agreement not to disclose to third parties)

Another interpretation is that a subcontractor working for the operator is an extension of the operator and therefore has entitlement to access to such documentation! (Authors View)

What Does EASA Say in the User Guide?

Depending on the complexity and the technology of the component,

- The CC/S shall be able to demonstrate he/she received appropriate theoretical and practical component training from:
 - the OEM or;
 - the OEM recognized training organization or;
 - An appropriately rated maintenance organisation provided:
 - The person nominated to carry out the training can demonstrate he/she has received training to an appropriate level for the subject component;
 - The person nominated to carry out the training is appropriately authorized by the maintenance organisation and is able to demonstrate a significant experience on the relevant component maintenance;
 - The training syllabus has been reviewed by the Engineering Manager and/or the Quality Manager;
 - The component is available for practical training purpose;

Consider Complexity - This is not defined – however a reasonable interpretation is that any component which can be disassembled and re assembled using “general tooling” and tested without the use of “proprietary” test equipment could be considered as none complex

So Does this mean no training is required ?

It is important that anyone performing any maintenance including “any” component maintenance, is fully competent & managed by the organisation which includes familiarity and awareness of all steps or elements , So YES training is required in all cases.

However it is important to ensure the correct level of training to meet the objectives both in respect of theoretical understanding and practical ability.

Regarding the Instructor / Assessor

It is important that the Instructor / Assessor is acceptable to the Quality Manager as being competent to

- Provide Instruction (Instructional Techniques)
- Has the level of knowledge and Competence to Deliver the required Subject Material?

Note in the case of Complex Components this would typically include OEM training whereas for Non Complex Components this will typically include completion of Formal Aeronautical Training together with Aircraft Maintenance Engineers Licence or other similar qualifications.

How to gain acceptance by EASA Inspectors

- To show that you have quality control of the process
- Fully documented Procedures
- To demonstrate that you are able to manage competence
- To show that training is appropriate to reach the required level of competence
- To show you have an Instructor / Assessor Control Process
- To show continuous auditing of all processes identified above

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