

Information and Advisory Notice No. 23

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Qualification and Authorisation of Components and Engines Certifying Staff

1. Introduction

Initial and continued competence assessment and authorisation of certifying staff are requirements in Regulation (EU) No 1321/2014 Annex II Part-145.A.30 (e) and Part-145.A.35. Part-145.A.65 requires the Part-145 AMO to establish technical procedures taking into consideration human factors and performance.

AMC and GM 145.A.30(e) provide means of compliance and guidance material on competence assessment of certifying staff.

Authorisation of component/engine certifying staff is not currently tied to Part-66 AML as basic qualification and Part-145 AMOs have to define qualification criteria for component / engines certifying staff.

TM CAD has already issued IAN 22 'Competence Assessment of CAMO Personnel' for further guidance.

2. Scope

The scope of this notice is to provide guidance to Aircraft Maintenance Organisations subject to the oversight of TM-CAD (Airworthiness Inspectorate) to formulate qualification and authorisation criteria for certifying staff of components and engines/APU.

Certification of maintenance with the issue of an EASA Form 1 (overhaul, repair, modification, scheduled or unscheduled inspection and troubleshooting) of components and engines removed from the aircraft is usually performed by certifying staff that are issued by a company authorisation under the provisions Part-145.A.35 in accordance with a procedure in the Part-145 AMO Maintenance Organisation Exposition MOE approved by TM CAD (the competent authority).

For those Part-145 AMO that have already their authorisation system of their personnel under the Class Rating B, C or D1 in their EASA Form 3 (approval certificate) scope, this notice is not intended to drive drastic changes to well-established procedures but rather to address any gaps in the procedures and practices associated with the initial and continuation of the authorisation of certifying staff.

3. Process

3.1 MOE Procedures

The MOE procedure shall cover the following:

- Initial Authorisation
- Continuation of the Authorisation
- Suspension and revocation of the authorisation
- Re-authorisation

The process for the initial, continuation and suspension/revocation of the authorisation shall take into consideration the following issues:

- The basic theoretical and practical training of the staff
- The specialised theoretical and practical training and experience of the staff
- The Competence assessment criteria and methodology
- The responsible personnel for the assessment and authorisation of the prospective certifying staff
- The recording of the process
- The issue of the authorisation certificates and stamps
- Recurrency issues and re-authorisation

3.2 Basic theoretical training and qualifications

The Part-145 AMO shall ensure that entry qualifications of technical personnel are defined. It is expected that the academic level of the personnel satisfies minimum criteria. These criteria should be based on academic qualifications as well as internal verification and testing.

Technical qualifications and English language proficiency have to be defined. Acceptable technical qualifications should be of the level of:

Higher Technical Diploma;
BTEC Aerospace;
Advanced Diploma MQF Level 3 or 4 (Mechanical / Electrical / Electronic Engineering / Manufacturing etc.);
Part-66 Category A or B1/B2;
Technical Apprenticeship course;
Relevant University Degree in Engineering.

3.3 Minimum Basic Experience

A minimum of 2 years basic technical experience working in a Part-145, or in an aircraft maintenance organisation / production organisation has to be demonstrated.

In the case of complex systems and components the duration of basic work experience would have to be increased.

3.4 Specialised Training

The Part-145 organisation has to define the training needs of the prospective certifying staff by conducting a training needs analysis, especially in the case of complex work processes and components. This training shall include theoretical and practical training in the form of type or product courses supplemented by OJT. This training may have to be sourced out to the TC Holder/OEM.

Additional training covering EWIS, FTS, HF, applicable legislation (Part-145/21), and MOE procedures as applicable shall also be provided.

3.5 Language Proficiency

The Part-145 AMO has to ensure staff can properly read approved data and instructions in English and be able to properly express themselves verbally and in writing the working language. This can be done by proper proficiency checking/testing and/or review of academic qualifications.

3.6 Assessment of Personnel

Supervisors Competence must include the ability to ensure that all required maintenance tasks have been carried out. The ability to assess tasks which have not been completed, or where it is not possible to complete tasks to the manufacturer's instructions is also essential, reporting such problems to the manager. Also important is the ability to determine rectification action for defects found, and to ensure that any deviations are adequately controlled by the company's (written) requirements.

Certifying Personnel Part-145.A.35 requires that personnel involved in certifying Release to Service must show competence in being able to determine that the component, or aircraft, is in a fit condition to be released to service.

Equally important is the ability to determine that the component, or aircraft, is not safe to return to service. In making these judgements competence needs to be shown in the assessment of manufacturer's and regulatory authority's requirements and company procedures.

Supporting Staff Competence must include the ability to carry out required inspection tasks using specified inspection aids, showing the ability to assess airworthiness and compliance with specifications and to recognise and record defects.

In any case the personnel shall be able to read and interpret OEM.TC Holder instructions in the form of SB's, SIL's, CMM's, Overhaul Manuals etc.

3.7 Skills and Aptitude

Trainee and prospective certifying staff shall have the aptitude and skill to perform the job. Skill can be developed through solid training, whilst having the proper aptitude and attitude to perform the job.

3.8 Experience Criteria

A minimum level of experience for each job should be established by the organisation. Experience levels required will vary with the significance and complexity of the task, in terms of its relation to the airworthiness of the finished product, and need not be extensive in many cases. The required experience for certifying personnel will be as required by the particular requirement/regulation.

3.9 Initial and Continuation Training

In respect of training, under Part-145 and Part-147 requirements there is a clear and distinct policy on training in respect of both theoretical and practical. The level of training required will also vary with the nature of the work involved. Some tasks will lend themselves to combine on the job training and evaluation, the trainee being shown how

to do the job and his/her performance simultaneously monitored until the supervisor/instructor is satisfied that the job is fully understood. As the "weight" of the job increases so the degree of formal training will increase until the need for dedicated periods of "classroom" instruction emerges.

The organisation should identify the training associated with each task in its training programme. The organisation must have a procedure in place to control and record work required to be carried out under supervision before the individual is allowed to work unsupervised. Where a job includes a number of functions - as most will - supervised work should cover at least the key functions and also a cross-section of other functions making up the job. Supervision should be shown to include an element of training where a formal training requirement does not exist.

Training shall also take into consideration specific human factors and human performance aspects associated with the job.

Training may be conducted in-house within the organisation (department, section, workshop or training school or contracted to training organisations, as deemed necessary by the Part-145 AMO.

3.9.1 Recognition of Training Given by Previous Employer

An organisation may take advantage of personnel authorisation and the associated qualification training given by previous employers, under certain conditions, in determining the competence of a new employee. The following points give general guidance on how this process may be acceptable to the new employer.

- a. When assessing the training received during earlier employment the company must obtain sufficient details of the course content, given by the previous employer, to enable them to ascertain that it was to a standard commensurate with the authorisation which they wish to grant. The organisation should obviously consider when the training was conducted and the employee's recent experience on the type/category under consideration.
- b. Where the previous employer issued an authorisation certificate which defined the scope and limitations of the authorisation, it should be confirmed that this is acceptable in relation to the scope of approval which they intend to grant.
- c. Taking the previous training, recent experience and authorisations into account the maintenance organisation should devise an interface training package for the individual in the nature of continuation training, with which to establish the required competence and to make the person fit for the intended job.
- d. In all instances training on the appropriate procedures of the new employer should be given before company authorisation is issued.
- e. Recurrency / recency of training and experience (**6 months in any 24 months period**) as well as any **limitations** or **grandfather rights** in the Part-66 licence held and the Part-145 authorisations shall be verified.

Part-145.A.35 includes the requirement for certifying personnel to receive continuation training. The frequency of this may vary according to specific individual/organisation's needs but will typically not exceed 2 year intervals. A procedure to achieve this should be in place when the organisation receives its approval.

Typical subjects to be addressed by continuation training should include:-

- (a) Technical Changes –
Airworthiness Directives or Service Bulletins.
Experience gained from the feedback of problems arising during maintenance and operational service.
Changes to the engine and components scope of the approved maintenance organisation.
- (b) Changes in practices and procedures;
- (c) Human Factor, Human Performance and Error Management System issues.
- (d) Lessons learnt from events and occurrences, including case studies.
- (e) Changes in legislation and requirements.

3.10 Assessment Method

In its simplest terms the assessment of competence is accomplished during on the job training. For more significant tasks, however, a formal test or examination is essential if a permanent record of the individual's grasp of the training received is to be kept.

The initial need for competent personnel will arise in the part of the organisation responsible for accomplishing the task concerned. The manner in which the respective manager then resolves this need will vary between organisations but, in general, the "production" side of the organisation will employ, train and prepare the individual to perform the required task, using whatever training facilities the organisation has established or contracts with.

3.11 Authorisation

The Compliance/Quality Nominated Person may issue the authorisation based upon a report from the nominated assessors to make the final determination of competence, by assessment, test or examination.

Continued authorisation of component certifying staff shall take into consideration Part-145.A.35(c) by ensuring recency of component maintenance experience (**at least 6 months in any consecutive 2 year period**).

In case where recency of experience and recurrent training requirements are not met, the AMO shall have in place training/assessment procedures for re-authorisation of personnel.

3.12 Records

Recording of Competency assessment and authorisation should be kept according to the needs of an organisation and performed on a recurrent basis. Records shall include copies of all documents that attest to qualifications and experience, a competence assessment form and authorisations granted.
