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GOVERNMENT OF INDIA
CIVIL AVIATION DEPARTMENT
DIRECTOR GENERAL OF CIVIL AVIATION

AIRWORTHINESS ADVISORY CIRCULAR

Subject: Endorsement with Type Rating - CAR-66 Aircraft Maintenance Engineers Licence.

1. Introduction:

- 1.1 The CAR-66 establishes the eligibility, training, examination, knowledge, and experience requirements for the issue and extension of an aircraft maintenance engineer's license, conditions of its validity and use. Further, CAR 66. A.45 (c) requires satisfactory completion of the corresponding On the Job Training (OJT), as described in Appendix III to CAR-66 for the endorsement of the first aircraft type rating within a given category/sub-category.
- 1.2 This circular explains the procedures and guidelines to be followed by Approved Maintenance Organisation to provide OJT to the personnel engaged in the maintenance of the aircraft required to meet one of the criteria for the issue of licence.
- 1.3 The "CAR-66 Aircraft Maintenance Engineer's Licence Guidance Document" attached as **Appendix-A** explains the requirements for obtaining CAR 66 AME licence issued by DGCA, procedures for documentation of OJT tasks and maintenance of OJT records.
- 1.4 It should be noted that this circular and the attached document is for guidance only and the main reference points such as CAR-66, Airworthiness Advisory Circulars and DGCA web sites, should always be referred to obtain latest requirements related to CAR 66 Aircraft Maintenance Engineer Licence.
- 1.5 It is important to note that this circular on its own does not change, create, amend or permit deviations from regulatory requirements, nor does it establish minimum standards.

2. On the Job Training OJT):

- 2.1 Para 6 of Appendix III to CAR-66 requires that OJT be approved by the DGCA and it required to be conducted at and under the control of a maintenance organisation appropriately approved for the maintenance of the particular aircraft type and to be assessed by appropriately qualified and designated assessors.

- 2.2 **Objective:** The objective of OJT is to gain the required competence and experience in performing safe maintenance.
- 2.3 **Content:** OJT is required to cover a cross section of tasks as given in Appendix-II to AMC to CAR-66 and acceptable to the DGCA. The OJT tasks is required to be representative cross section of the aircraft and systems both in complexity and in the technical input required to complete that task. While relatively simple tasks may be included, other more complex maintenance tasks should also be incorporated and undertaken as appropriate to the aircraft type. Each task are required to be signed off by the student and countersigned by a designated supervisor. The tasks listed should refer to an actual job card/ work sheet, etc. It should have been started and completed within the 3 years preceding the application for a type rating endorsement
- 2.4 The final assessment of the completed OJT is mandatory and required to be performed by a designated assessor appropriately qualified.

3 Documentation of On the Job Training Programme :

- 3.4 The approved maintenance organisation should detail the procedures in their MOE (Part-3, Chapter 3.14 to 3.16), which should address the following:-
- a) procedures for on-the job training as per Section 6 of Appendix-III to CAR 66;
 - a) competence assessment of personnel;
 - b) procedure for the issue of the recommendation to DGCA for the issue of a CAR 66 licence;
 - c) Qualification and experience requirement of OJT Supervisor and Assessors;
 - d) Procedures for documentation of OJT.

4 OJT Supervisor / OJT Assessors.

- 4.1 The OJT supervisor and OJT assessor are required to be designated by the AMO and accepted by DGCA.
- 4.2 **OJT Supervisor** – The following minimum qualification and experience is recommended for acceptance by DGCA ;
- a) Type rated AME holding full scope authorization in applicable category (B1/B2) on applicable aircraft.
 - b) Minimum 3 years of maintenance certification experience on applicable family of aircraft.
 - c) Should be competent to perform the function.

4.3 **OJT Assessors** :- The following qualification is recommended for the OJT Assessors;

- a) Type rated AME holding full scope authorization in applicable category (B1/B2) on applicable aircraft.
- b) Minimum 5 years of maintenance certification experience on applicable family of aircraft.
- c) Should be competent to perform the function.

4.4 The Practical Assessor and OJT Assessor may be same person for assessment of Practical element as well as OJT elements for the organization holding MTO as well as AMO approvals.

4.5 Depending upon the size of the organization, the position of OJT Supervisor and OJT assessor may be same person.

5 **Approval of OJT Programme**

5.2 The maintenance organisation desirous of providing on the job training to the prospective candidates, should include procedure in details, in their exposition as specified in the para 3 above and submit the same to the Regional Airworthiness Office for approval. The proposal should also include the list of nominated OJT supervisors and assessors in accordance with Para 4 above along with their credentials

5.3 Upon receipt of the proposed amendment to MOE, the RAO may evaluate the proposal and if found satisfactory, should approve the amendments to MOE. The approval of amendment of MOE should be intimated in writing to the AMO.

5.4 The following items need to be evaluated by RAO before accepting the proposal:

- a) Adequacy of the proposal with regard to resources available with the AMO.
- b) The task defined are as per the appendix III to AMC of CAR 66 applicable to the specific type of aircraft.
- c) Procedure for issue of work order for specific on job training task is clearly documented by AMO.
- d) Qualifications and experience of OJT supervisors and OJT assessors are clearly defined and the proposed personnel should meet the requirements.
- e) Responsibility for record keeping and maintenance of AME log book is clearly documented.

5.5 The RAO may accept the proposed OJT Supervisor and OJT Assessors if he/she meeting the essential qualification and experience requirements and is considered competent to function as supervisor/ assessor as applicable. Further guidance on the assessment and assessor is detailed in Appendix-III to AMC of CAR 66.

6 Recording of On Job Training Tasks

- 6.2 The approved maintenance organisation should ensure that every trainee should maintain an OJT booklet. A Sample format of OJT booklet is provided in Appendix-D of Chapter -9 of the Attached Document.
- 6.3 The OJT booklet should cover all representative tasks under ATA chapters, as reflected in Appendix II to AMC to CAR 66 covering type of aircraft such as Piston Engine/ Turbo Prop/ Turbofan/ Rotary wing aircraft as relevant. For endorsement with type rating, the candidate is required to complete at least 50% of the approved OJT syllabus for the applicable aircraft.
- 6.4 The following data should be addressed on the OJT worksheets/ logbook:
- a. Name of Trainee;
 - b. Date of Birth;
 - c. Approved Maintenance Organisation;
 - d. Location;
 - e. Name of supervisor(s) and assessor, (including licence number if applicable);
 - f. Date of task completion;
 - g. Description of task and job card/work order/tech log, etc.;
 - h. Aircraft type and aircraft registration;
 - i. Aircraft rating applied for.
- 6.5 In order to facilitate the verification by the DGCA, demonstration of the OJT shall consist of i) detailed worksheets/logbook and (ii) a compliance report demonstrating how the OJT meets the requirement of CAR-66.
- 6.6 Each AMO should customize this OJT booklet applicable to the scope of maintenance tasks on their fleet of aircraft.
- 6.7 In case of first AME licence endorsement type rating within a given category/ sub-category, this OJT booklet should serve as a compact and portable reference document, which would reflect the completion of the candidate's on job training, as applicable. This OJT booklet should be constructed in a way to guide the candidate to gain minimum relevant basic practical maintenance experience that represents a cross section of maintenance activities in applicable ATA chapters.
- 6.8 For endorsement of additional aircraft in same category the requirement of OJT will depend on the training need analysis. For endorsement of aircraft in additional category / sub category requires completion of On Job Training.

7 Accomplishment of On the Job Training Programme:

- 7.2 The AMO should clearly identify a nodal post holder who will be responsible for overall execution of the OJT Plan. The nodal post holder may be training manager/ base maintenance manager/ line maintenance manager or another person specifically designated for such role. The nodal post holder should make

complete plan of OJT before the start of same of trainee and assign the OJT Supervisor and Assessor. The nodal officer should monitor the progress of the on job training.

7.3 The OJT should include one-to-one supervision and should involve actual work task performance on aircraft/ components, covering line and/or base maintenance tasks.

7.4 The OJT for applicable task (ATA Chapter wise) on the aircraft should be completed by the trainee, under OJT Supervisor. Each OJT task is required to be completed and signed by the trainee and OJT supervisor.

7.5 In case of non-availability of adequately qualified OJT Supervisor / Assessors the OJT programme may be sub contracted to another appropriately approved maintenance organisation with prior approval of DGCA.

7.6 After completion of OJT, the candidate should submit the completed OJT booklet to OJT Assessor. The OJT assessor will scrutinize to ensure the following:

- a) The candidate has completed the applicable OJT tasks.
- b) The tasks have been signed by the candidate as well as the OJT supervisor.
- c) For the purpose of independent assessment, the trainee should carry out at least two core task randomly selected by the assessor, under the supervision of the assessor. The assessment may be carried out for the trainees as per the following weightage.
 - i. Adherence to the Warning and Cautions (weightage-10%)
 - ii. Performance of the two selected core tasks (B1/ B2) proficiently (weightage-70%)
 - iii. Use of Aircraft Maintenance Data, Documentation and completion of records (weightage-20%)

7.7 The OJT assessor will declare the candidate as pass, in case he/she has scored minimum 75% marks. The result will be recorded in the Assessment Sheet at the end of the OJT booklet.

7.8 In case the candidate has been declared as “Fail”, the OJT Assessor will identify the additional OJT task that need to be completed by the candidate before his re-assessment.

7.9 The successful candidates should submit the copy of OJT booklet and assessment result while submitting their application in DGCA for issue/ endorsement on AME licence, as applicable, through Quality Manager.

8 **Routine Audits by AMO:**

- 8.2 The Quality Manager of approved maintenance organisation should develop procedure to carry out periodical planned and unplanned audit to ensure proper implementation of the above procedures.
- 8.3 A report should be raised each time an audit is carried out describing what was checked and the resulting findings against applicable requirements, procedures etc.
- 8.4 If any finding of serious nature (Level-1) is detected during the routine audits, the same should be intimated to the concerned RAO immediately. The responsible manager should take appropriate action to mitigate the finding. The root cause analysis along with the measures taken to prevent such finding in future should be intimated in writing by Quality Manager to RAO.
- 8.5 In case there is any violation of the approved procedures, the Quality Manager is required to investigate the same and take necessary action under intimation to RAO.

9 **Oversight by DGCA:**

- 9.2 The respective Regional/ Sub-regional Airworthiness office will carry out planned and unplanned surveillance inspection to ensure proper implementation of the OJT procedures including functioning of OJT Supervisor and OJT Assessors.
- 9.3 A report should be raised each time an audit is carried out describing what was checked and the resulting findings against applicable requirements, procedures and products.
- 9.4 In case there is any violation of the approved procedures, the RAO should investigate the same and take necessary action as per the procedure detailed in the Enforcement Policy and Procedure manual against Nodal post holder, OJT Supervisors, OJT Assessors and the organisation responsible for the compliance of OJT plan as appropriate.

10 **Maintenance of Records :**

The RAO should maintain the records related to approval of MOE and documents related to Aircraft Maintenance Engineers and oversight of the organisation.

Sd/-

(K P Srivastava)
Deputy Director General of Civil Aviation
For Director General of Civil Aviation