

# Airworthiness Procedure

Address: Civil Aviation Authority  
Alameda Dr. Carlos D'Assumpção, 336-342  
Centro Comercial Cheng Feng, 18º andar  
Macau, CHINA  
PHONE: (853) 2851 1213  
FAX: (853) 2833 8089  
AFTN: VMMCYAYI



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SUBJECT: *Initial Issue / Variation / Renewal of the MAR-66 Aircraft Maintenance Engineer Licences Procedures*

## 1. Introduction

- 1.1 Paragraph 11(1) of the Air Navigation Regulation of Macao (ANRM), as revised by Aeronautical Circular (AC) with ref. AC/AW/006R00 issued 30 June 06, establishes that the Civil Aviation Authority may grant aircraft maintenance engineer licences, subject to such conditions as it thinks fit, upon it being satisfied that the applicant is a fit person to hold the licence and has furnished such evidence and passed such examinations and tests as the Civil Aviation Authority may require of him for the purpose of establishing that he has sufficient knowledge, experience, competence and skill in aeronautical engineering.
- 1.2 The MAR-66 *Licensing of Aircraft Maintenance Engineer* sets out the minimum requirements for the issue of aircraft maintenance engineer licence mentioned in Paragraph 11 of ANRM.
- 1.3 The purpose of this Airworthiness Procedure (AP) is to establish the procedures in regard to the initial issue / variation / renewal of the MAR-66 aircraft maintenance engineer licences. Supplemental information is presented in Appendix No. 1.

## 2. Effective Date

01 February 2007

## 3. Cancellation

Airworthiness Procedure No. AP6 Issue 3 dated 30 Jun 06 will cease to be in force after the effective date of this AP.

## 4. Procedure for the initial issue of a MAR-66 aircraft maintenance engineer licence

- 4.1 The applicant, engineer/mechanic, must complete the application form provided and return it to Civil Aviation Authority Licensing Office together with any required fee, any relevant document as required in Para 4.2 to Para 4.4 and Appendix No. 2.

- 4.2 Maintenance experience must be written up as required by the application form provided that the reader has a reasonable understanding of where, when and what maintenance constitutes the experience. A task by task account is desirable but a blanket statement "X years maintenance experience completed" is not acceptable. Alternatively, any kind of personal log book of maintenance experience may be used as reference. It is acceptable to cross refer in the application form provided to other documents containing information on maintenance experience. A typical example of a log book page is shown in Appendix No. 3 of this AP.
- 4.3 Applicants claiming the maximum reduction in MAR 66.30(a) total experience based upon having successfully completed MAR 147.85 approved basic training, should include the MAR-147 certificate of recognition for approved basic training.
- 4.4 Applicants claiming the reduction in MAR 66.30(a) total experience based upon having successfully completed technical training in an organisation or institute recognised by the Civil Aviation Authority as a competent organisation or institute, should include the relevant certificate of successful completion of training.
- 4.5 Applicants claiming credit against the MAR 66.30(a) total experience requirement by virtue of MAR 66.30(e) non-civil experience, may only be granted such credit where the Civil Aviation Authority has recognised such non-civil aircraft maintenance experience. The Civil Aviation Authority in recognising non-civil aircraft maintenance experience will have specified who within the non-civil environment may make a statement that the applicant has met relevant maintenance experience. The applicant should include a detailed statement of such maintenance experience signed by the non-civil maintenance authority in accordance with the conditions specified in the Civil Aviation Authority letter of recognition.
- 4.6 On receipt of the application form provided and any supporting documentation submitted to the Civil Aviation Authority, it will be checked for completeness and ensure that the experience claimed meets the requirement of MAR-66 and that the experience record satisfies Para 4.2 in terms of content and the countersigning signature.
- 4.7 The Civil Aviation Authority will either conduct the examination or request that such examinations be carried out by a delegated examination organisation and/or an appropriately approved MAR-147 maintenance training organisation.
- 4.8 When satisfied that the applicant meets the standards of knowledge and experience required by MAR-66, the Civil Aviation Authority will issue a MAR-66 aircraft maintenance engineer licence. The original licence will be presented to the applicant and a copy is retained on Civil Aviation Authority file.

## **5. Procedure for the variation of a MAR-66 aircraft maintenance licence to include an additional basic category**

- 5.1 Application for additional basic categories, that is, MAR-66 category A or B1 or B2 or C to the MAR-66 aircraft maintenance engineer licence must follow the procedure of Para 4 except that, in addition, the applicant's current original licence should be presented to the Civil Aviation Authority with the application form provided.
- 5.2 At the completion of the Para 4 procedures, the Civil Aviation Authority will reissue the MAR-66 aircraft maintenance engineer licence to include the additional basic category. A copy of the reissued licence is retained on Civil Aviation Authority file.

## **6. Procedure for the variation of a MAR-66 aircraft maintenance licence to include an aircraft type**

- 6.1 Aircraft types are entered in the MAR-66 aircraft maintenance licence category B1 or B2 or C when the applicant first qualifies on the particular aircraft type as specified in MAR-66, in terms of having completed the particular aircraft type training course conducted by an appropriately approved MAR-147 maintenance training organisation or such an aircraft type training course approved by the Civil Aviation Authority and having been successfully examined on the aircraft type by either the Civil Aviation Authority or by a delegated examination organisation and/or an appropriately approved MAR-147 maintenance training organisation and also having completed the necessary type practical maintenance experience. Therefore application to include an aircraft type in the MAR-66 aircraft maintenance engineer licence must follow the procedure of this Para 6.
- 6.2 The MAR-145 approved maintenance organisation must ensure that the applicant meets the MAR-66 requirement for the aircraft type to be entered in the MAR-66 aircraft maintenance engineer licence before signing the application form recommendation. The MAR-145 organisation is used to recommend the applicant because of the need to endorse the aircraft practical experience but nothing prevents such a MAR-145 organisation from using its MAR-147 training department, if it has one, to co-ordinate the applicant's evidence of compliance on behalf of the organisation. The recording and countersigning of aircraft practical experience gained inside or outside the MAR-145 environment must satisfy the conditions specified in Para 4.2. The aircraft type practical experience can be demonstrated by means of a personal log book as described in Para 4.2 or any kind of acceptable means of compliance.
- 6.3 The acceptance standards for applicants who hold aircraft certification qualifications or have attended the aircraft type trainings that have not been accepted/approved by the Civil Aviation Authority are described in Appendix No. 4.

- 6.4 When in compliance with MAR-66 as summarised in Para 6.1, the MAR-66 aircraft maintenance engineer licence holder must complete the relevant aircraft type parts of application form, request the maintenance organisation to endorse the application form with an appropriate aircraft type recommendation and present the completed application form together with the holder's licence to the Civil Aviation Authority.
- 6.5 On receipt of a satisfactory application form, certificate of relevant aircraft type training, records of practical experience and the accompanying MAR-66 aircraft maintenance engineer licence, the Civil Aviation Authority will reissue the said licence to include the aircraft type. A copy of the reissued licence is retained on Civil Aviation Authority file.
- 6.6 Where a MAR-145 approved maintenance organisation qualifies an engineer or mechanic for MAR-66 aircraft maintenance licence aircraft type endorsement but chooses not to issue the MAR-145 certification authorisation for economic reasons, the Civil Aviation Authority will, on request of the applicant, still proceed with the endorsement of the MAR-66 aircraft maintenance engineer licence as per Para 6.4.

The purpose of this provision is to cover the case where the MAR-145 approved maintenance organisation is attempting to qualify more personnel than it may need to issue aircraft certificates of release to service on the basis that some personnel may fail to qualify and normal unpredicted staff turnover, such as those leaving the organisation at short notice, etc.

## **7. Procedure for the renewal of a MAR-66 aircraft maintenance engineer licence**

- 7.1 The MAR-66 aircraft maintenance engineer licence is valid for two years and will be renewed for further two year periods subject to confirmation that the requirements stated in MAR 66.40 are met, and the MAR-66 aircraft maintenance engineer licence held by Civil Aviation Authority has the same endorsements as contained in the holder's copy of the document and the licence holder is not under investigation for possible revocation, suspension or variation of the MAR-66 aircraft maintenance engineer licence in accordance with MAR 66.65, AC and AP.
- 7.2 The holder of a MAR-66 aircraft maintenance engineer licence must complete the relevant parts of application form provided and submit it with the holder's licence to the Civil Aviation Authority. A licence may be renewed provided that the holder is in compliance with the requirements specified in MAR 66.40.
- 7.3 The Civil Aviation Authority will compare the MAR-66 aircraft maintenance engineer licence from the holder with the licence held on file and check for any pending MAR 66.65 revocation, suspension or variation action. If the documents are the same and there is no pending MAR 66.65 action, the maintenance experience is satisfied then the holder's copy will be renewed for two years and the copy held on file updated accordingly. The Civil Aviation Authority will not be carrying out any investigation to ensure that the licence holder is in current aircraft type maintenance practice as this is a matter for the MAR-145 approved maintenance organisation in ensuring validity of the MAR-145 certification authorisation.

- 7.4 If the licence copy held by Civil Aviation Authority is different from that held by the licence holder, the Civil Aviation Authority will investigate the reasons for such differences and act accordingly.
- 7.5 To act accordingly in the case where the Civil Aviation Authority is unable to establish that the different endorsements were properly obtained to the standard of MAR-66 means that the Civil Aviation Authority may not renew the MAR-66 aircraft maintenance engineer licence and will inform both the licence holder and the affected MAR-145 approved maintenance organisation of such a fact and may need to consider MAR 66.65 revocation, suspension or variation action.

### **7. Request for Application Form**

The MAR-66 Aircraft Maintenance Engineer Licence Application Form shall be provided upon request from the Licensing Office of Civil Aviation Authority.

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**MAR-66 AIRCRAFT MAINTENANCE ENGINEER LICENCE**

- 1 Each licence holder should have a unique licence number based upon a numeric designator.
- 2 The licence will have the initial issue date, expiry date, last expiry date and this issue date printed. The name, date of birth, address and nationality of the licence holder will also be stated. The licence holder should sign the document in ink after having checked the correctness of the information contained. The aircraft type rating need not be issued until the first type endorsement is included.
- 3 The MAR-66 aircraft maintenance engineer licence once issued is required to be kept by the person to whom it applies in good condition and who shall remain accountable for ensuring that no unauthorised entries are made.
- 4 Failure to comply with Para 3 may invalidate the licence and could lead to the holder not being permitted to hold any MAR-145 certification authorisation and may result in prosecution under the law.
- 5 It is important to understand that the existence of the MAR-66 aircraft maintenance engineer licence alone does not permit the holder to issue a MAR 145.50 certificate of release to service. To issue a MAR 145.50 certificate of release to service requires a valid MAR-66 aircraft maintenance engineer licence type rated for the aircraft **AND** an appropriate valid MAR-145 certification authorisation. The MAR-145 certification authorisation is issued by the MAR-145 approved maintenance organisation.  
  
A type rated MAR-66 aircraft maintenance engineer licence does not normally confer any certification privileges on the holder in their own right. Such licences must be used in conjunction with a certification authorisation.
- 6 A type rated MAR-66 aircraft maintenance engineer licence may only be used to make certification(s) where the licence is endorsed to permit this.

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**DOCUMENTATION REQUIRED FOR APPLICATION OF  
MAR-66 AIRCRAFT MAINTENANCE ENGINEER LICENCE**

- 1 The applicant must submit together with the following documentation:
  - Completed application form provided by the Licensing Office;
  - Original of a valid ICAO AME license if applicable; (Application with non-ICAO license will be considered in case by case basis.)
  - Original of Passport or identification document;
  - Employment letter or contract;
  - Resume / Curriculum Vitae;
  - Original documents confirming the successful completion of an appropriate type training course, as well as details of the course on the type, if required;
  - Two recent photos;
  - Other supplementary information as required by the AACM;

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**SAMPLE OF A PERSONAL LOG BOOK PAGE**

Name: _____ ATA Chapter No. _____ Page No. _____				
Registration & Type	Item	Details of Work Undertaken	Date(s) & Place Work Undertaken	Signature Name & Status of Person in charge & Date(s)

- END -

**MAR-66 AIRCRAFT MAINTENANCE ENGINEER LICENCE  
TYPE RATING ENDORSEMENT –  
ACCEPTANCE OF AIRCRAFT MAINTENANCE QUALIFICATION & TYPE TRAINING  
NOT ISSUED / APPROVED BY THE CIVIL AVIATION AUTHORITY**

**1. Introduction**

- 1.1 In accordance with the MAR 66.45 requirement, the endorsement of a type rating to an MAR-66 Aircraft Maintenance Engineer Licence (AMEL) requires the applicant to complete an approved aircraft type knowledge and practical training process.
- 1.2 Aircraft maintenance qualifications (e.g. type rated licence and maintenance authorisation), which are not issued by the Civil Aviation Authority, do not automatically meet the MAR-66 requirements for the type endorsement to the MAR-66 AMEL. Neither does the type training, which is not approved by the Civil Aviation Authority.
- 1.3 It should be reminded that the type endorsement on the MAR-66 AMEL does not provide the licence holder the certification privilege on commercial air transport aircraft. As per MAR 145.35(e), the MAR-145 approved maintenance organisation (AMO) must establish the competence and qualification of all prospective certifying staff for certification authorisation. The assessment, performed by the MAR-145 AMO, on competence and qualification may result in requiring additional training.
- 1.4 The Civil Aviation Authority has evaluated the situation and has defined the acceptance standards and the competence test requirements for type endorsement applications made in accordance with this Appendix No. 4.

**2. Acceptance Standards**

- 2.1 The Civil Aviation Authority accepts the certification authorisations issued before 01 August 2006, by maintenance organisations holding MAR-145 approval. Competence tests are not required for such type rating endorsements.
- 2.2 Except as provided in Para 2.1 above, other type rating endorsement applications, which are based on aircraft maintenance qualifications not issued by the Civil Aviation Authority or type training equivalent to Level 3 of ATA 104 Specification but not approved by the Civil Aviation Authority, the applicant must satisfy the competence test process, as stipulated in Para 3 of this Appendix.
- 2.3 Type ratings will only be endorsed to MAR-66 AMEL with appropriate Basic Category / Sub-category.
- 2.4 When the privileges of the certification qualification are not equivalent to the full privileges of the MAR-66 Category / Sub-category applied, the type rating endorsement, if granted, will have appropriate limitations on the MAR-66 AMEL.

- 2.5 The Civil Aviation Authority will normally not consider the type rating endorsement application if the applicant's aircraft type training has been completed for more than five years and without evidence of recent certification experience on the particular aircraft / engine type.

### **3. Competence Test Process**

- 3.1 The competence test will have 20 multiple-choice (MC) questions. Each MC question will have three choices and the allowed nominal completion time of 90 seconds. The pass mark of the examination is 75% with no penalty marking. An applicant who fails the competence test twice within a ninety day period may not re-sit that competence test until ninety days after the date of the last failed examination.
- 3.2 The competence test can be conducted by the Civil Aviation Authority or by a delegated examination organisation and/or an appropriately approved MAR-147 training organisation.
- 3.3 For aircraft / engine types of less complexity, the Civil Aviation Authority may waive the competence test requirement.

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