# FIJI AERONAUTICAL INFORMATION CIRCULAR



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This AIC replaces AIC 08/80, which is hereby cancelled.

# LICENSED AIRCRAFT MAINTENANCE ENGINEERS – CERTIFICATION RESPONSIBILITIES OF TYPE RATED/ AUTHORISED ENGINEERS IN RELATION TO AIR NAVIGATION REGULATIONS 14,15,16 AND FJAR 145

#### 1. Introduction

- 1.1 This purpose of this AIC is to describe the certification responsibilities of Fiji Licensed Aircraft Maintenance Engineers when issuing certifications either as a Type Rated Licence holder or an engineer holding a certification authorisation. It also describes the privileges of the various Type Rated Licences.
- NOTE: In the context of this Notice, reference to an authorisation means an authorisation issued by a CAAF Approved Maintenance Organisation (under the requirements of FJAR 145) to allow the holder to issue certifications within the limitations shown on the authorisation.

# 2. Certifications

2.1 The certificate referred to under Air Navigation Regulations 14 is a Certificate of Fitness for flight to be issued for the specified purposes enabling an aircraft to be flown without a Certificate of Airworthiness.

The Certificate referred to under Air Navigation Regulations 15 is a Certificate of Maintenance to be issued following completion of a review in order to certify that the aircraft including its engines together with its equipment and radio is maintained in accordance with the Approved Maintenance Schedule. The periods at which this is to occur are specified in the Maintenance Schedule Approval Document.

The Certificate referred to under Air Navigation Regulation 16 is a Certificate of Compliance to be issued on completion of maintenance of aircraft or components not required to be maintained under FJAR 145. Aircraft above 2730kg maximum take off weight and all aircraft operated for Commercial Air Transport on the Fiji Register are required to be maintained by Organizations

approved to the requirements of JAR 145 - these are identified in Fiji as FJAR 145 approved organizations.

The certificate referred to in JAR 145.50 is a Certificate of Release to Service to be issued on completion of maintenance of aircraft or components, which are required to be maintained under the provisions of FJAR 145. AIC 4/98 determines that the Certificate of Release to Service issued under the terms of FJAR 145 approval shall be taken as fulfilling the requirements for the Certificate of Compliance, specified in ANR 16.

- 2.2 In connection with the issue of Certificates of Release to Service, the following definitions stated in JAR 145-5 apply:
- a] **Maintenance** means any one or combination of overhaul, repair, inspection, replacement, modification or defect rectification of an aircraft/aircraft component.
- b] **Overhaul** means the restoration of an aircraft/aircraft component by inspection and replacement in conformity with an approved standard to extend the operational life.
- c] **Repair** means the restoration of an aircraft/aircraft component to a serviceable condition in conformity with an approved standard.
- d] **Inspection** means the examination of an aircraft/aircraft component to establish conformity with an approved specification.
- e] **Replacement** is any work operation, which involves the removal and replacement of the same part or the substitution of an approved alternative part.
- f] **Modification** means the alteration of an aircraft/aircraft component in conformity with an approved standard.
- NOTE 1: Defect rectification normally consists of an element of inspection and troubleshooting followed by repair and. replacement of the defective item.
- NOTE 2: Inspection includes:
  - *i*] Mandatory Inspection, an inspection classified as Mandatory by the CAA F where the inspection itself is the work.
  - *ii]* Scheduled Maintenance Inspection, an inspection or maintenance including tests required by the Approved Maintenance Schedule.
- 2.3 Although many terms in common usage describe the various aspects of aircraft engineering, the meanings assigned to such terms are not always the same. For the purpose of this Notice, in relation to airworthiness, the following definitions apply:

- a] **Condition** the physical state of an item.
- b] **Assembly** that items are fitted, assembled, attached, installed, connected, secured or adjusted in the approved manner.
- c] **Functioning** operation in the approved manner achieving such performance range of movement and freedom of movements as may be specified.

The certifying engineer shall be responsible for the condition, assembly and functioning of the aircraft or its components for maintenance that has been certified under the privileges of a Type Rated Licence or an authorization.

# 3. Responsibilities

- 3.1 The certifying engineer shall be responsible for ensuring that work is performed and recorded in a satisfactory manner taking into account the following:
  - a] Whenever work is carried out on an aircraft, it is the duty of all persons to whom this AIC applies to ensure that the work, for which they are responsible, progresses in a managed and controlled manner. Where they are supported by additional staff to carry out the work, consideration shall be given by them before starting the work to the manpower resource available and the abilities of the staff concerned. This is to ensure that the certifying engineer determines and exercises an adequate degree of supervision over such staff.

NOTE: Within a CAAF Approved Maintenance Organisation it is the responsibility of the Organisation to ensure the provision and management of the overall manpower resource.

b] In relation to work carried out on an aircraft, it is the duty of all persons to whom this Notice applies to ensure that an adequate record of the work carried out is maintained. This is particularly important where such work carries on beyond a working period or shift, or is handed over from one person to another. The work accomplished, particularly if only disassembly or disturbance of components or aircraft systems, should be recorded as the work progresses or prior to undertaking a disassociated task. In any event, records should be completed no later than the end of the work period or shift of the individual undertaking the work. Such records should include "open" entries to reflect the remaining actions necessary to restore the aircraft to a serviceable condition prior to release. In the case of the complex tasks which are undertaken frequently, consideration should be given to the use of preplanned stage sheets to assist in the control, management and recording of these tasks. Where such sheets are used, care must be taken to ensure that they accurately reflect the current requirements and recommendations of the manufacturer and that all key stages, inspections, or replacements are recorded.

NOTE: Within a CAAF Approved Maintenance Organisation it is the responsibility of the Organisation to control the preparation of such preplanned worksheets and to put in place a managed document control system.

- c] It is also the duty of all persons to whom this AIC applies to consider the effect such work may have, directly or indirectly, on items which are the responsibility of other such persons. In all cases where an overlap of responsibility between licence categories occurs, the person primarily responsible for the item must involve all other trade disciplines affected. Every person to whom this AIC applies must therefore be conversant with all other relevant paragraphs of this AIC. Certificate of Release to Service for each relevant trade category must be issued by all persons concerned, each assuming responsibility of and certifying those aspects of the work for which the licence/authorization holder is entitled to assume responsibility.
- 3.2 A Certificate of Release to Service shall only be issued on completion of maintenance when the signatory is (signatories are) satisfied that the work has been properly carried out and accurately recorded, having due regard to the use of:
  - a] up-to-date instructions and approved airworthiness data (including manuals, drawings, specifications, modifications and inspections, declared mandatory by the CAAF and where applicable, company procedures).
  - b] recommended tooling and test equipment, which is currently calibrated where applicable.
  - c] a working environment appropriate to the work being carried out.

When issuing a Certificate of Release to Service for work performed by others, the certifying engineer assumes responsibility. The certifying engineer must have inspected a sufficiently representative sample of the work and the associated documentation, and be satisfied with the competence of the persons who have performed the work. For complex tasks this may require progressive inspections to be carried out as the work proceeds.

NOTE: Licensed engineers certifying under the privileges of their licence may not deviate from the manufacturer's maintenance instruction or approved airworthiness data, nor use alternative parts, components or assemblies unless such deviation is supported by the written agreement of the manufacturer, approved as a modification or agreed by the CAAF who should be consulted in cases of difficulty. Authorized engineers shall comply with all company procedures covering such issues.

- 3.3 a] When the work involves the assembly or any disturbance of a vital point defined in BCAR Section A, Chapter A5-3 or control system, the duplicate inspection required must be completed and certified in accordance with BCAR Section A/B Chapter A/B 6-2 before the relevant Certificate of Release to Service is issued.
  - b] The holder of a Type Rated Licence in Category A and/or C may make certification on aircraft (or their engines, as appropriate) below 5700kg MTWA for Duplicate Inspections of minor adjustments to control systems on other types within the Category in which the licence is type rated.

NOTE: A minor adjustment is considered to be a single point adjustment or re-assembly of a control.

# 4. Non Destructive Inspections

- 4.1 The holder of an appropriately Type Rated Aircraft Maintenance Engineer's Licence in Categories A, B, C or D, or the holder of an aircraft Type Authorization in Categories A or C, may issue a Certificate of Release to Service to cover Non Destructive Inspections on aircraft or components, within the privileges of the licence or authorization held, subject to the work being carried out as follows:
  - a] Inspection requiring the use of Field Kit for the Colour Contrast Dye Penetrant technique may be carried out by persons either Type Rated or Type Authorized as above.
  - b] Non Destructive Inspections requiring any other technique, including Fluorescent Penetrant Dye, shall be carried out and signed for by persons appropriately qualified and approved for the purpose by the CAAF.

# 5. Validity

5.1 Use of either a Type Rated Licence or an authorization to issue a certification requires that, during the 24 months preceding the date of the certification, the holder has been engaged, for periods totalling at least 6 months, on work affording experience comparable with that required for the grant of the Licence/Authorization.

# 6. Limitations

6.1 A Type Rated Licensed Engineer may issue the Certificates identified below in relation to aircraft for which the licence is Type Rated and in accordance with the privileges detailed in CAA UK airworthiness Notice No. 3. An authorized

engineer may only issue certificates as permitted within the limits of the authorization.

- a] Certificate of Compliance for aircraft not required to be maintained under FJAR 145 - the holder of an appropriately Type Rated Licence may issue Certificates of Release to Service subject to compliance with the requirements of ANR 16.
- b] Certificate of Maintenance the holder of an appropriately Type Rated Licence in at least two Categories (other than Category "X" Compasses) may issue a Certificate of Maintenance subject to compliance with the requirements of ANR 15 and the Maintenance Schedule Approval Document.
- c] Certificates of Fitness for Flight the holder of an appropriately Type Rated licence may issue Certificates of Fitness for Flight subject to compliance with the requirements of ANR 14.

NOTE: For aircraft listed in Paragraph 14 of CAA UK Airworthiness Notice No. 10 certificates shall only he issued by appropriately authorized engineers.

# 7. Authorisations

7.1 Both Aircraft Maintenance Engineer Licences Without Type Rating and Type Rated Licences may be used to allow the grant of an authorization (in some cases a licence is pre-requisite). In addition to the foregoing paragraphs, when working within a CAAF Approved Maintenance Organisation, the licensed engineer should be aware that he/she is a part of a comprehensive maintenance system. It is therefore important to realize that company procedures may further define, or require specific actions, as to how certain issues are to be dealt with and these procedures must be adhered to. It is also important to realize that when working within a CAAF Approved Maintenance Organisation and certifying under the privileges of an authorization the licensed engineer is not certifying under the privileges of the licence.

# 8. Cancellation

- 8.1 This AIC is issued for guidance and information; it replaces Part 1 of AIC 8/80 which is now cancelled. Part 2 of AIC 8/80 was replaced by AIC 6/98.
- 8.2 AIC 8/80 is hereby cancelled.