

**DEPARTMENT OF CIVIL AVIATION  
MALAYSIA  
AIRWORTHINESS NOTICE**

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**Date: 1 October 2002**

**REQUIREMENTS FOR MALAYSIAN REGISTERED AIRCRAFT IN RESPECT OF THE CERTIFICATION OF OVERHAUL, REPLACEMENT, REPAIR, MODIFICATION, MANDATORY INSPECTION AND SCHEDULED MAINTENANCE INSPECTIONS**

**1. Introduction**

- 1.1 The Malaysian Civil Aviation Regulations (MCAR) 1996 , supersedes the absolescent Air Navigation Order 1953 (Peninsular Malaysia) and Colonial Air Navigation Order 1961 (Sabah and Sarawak) together with their associated Regulations with effect from 1 April 1996.
- 1.2 The MCAR Regulation 30, introduces the concept of the Certificate of Release to Service (CRS) in relation to the certification of completion of overhauls, repairs, replacements, modification, mandatory inspections and maintenance checks. In a similar manner, in accordance with Regulation 28 (1)(b) the Certificate of Maintenance Review (CMR) is introduced in relation to certification that the requirements of a maintenance schedule approved by the DCA have been complied with.
- 1.3 Any aircraft issued with Certificate of Airworthiness in any category must be maintained in accordance with the maintenance schedule approved by the DCA and a technical log kept, regardless of the purpose for which the aircraft is being flown.
- 1.4 Cancelled.

**2. Certification Of Overhaul, Repair, Replacement, Modification, Mandatory Inspection Or Scheduled Maintenance Inspection**

**2.1 General**

- 2.1.1 The CRS is introduced to replace the Certificate of Compliance (C of C) in respect of certification of the completion of overhauls, repairs, replacement, modifications or mandatory inspections.
- 2.1.2 The CRS will also be used to certify the completion of maintenance checks where the check is classified as a Scheduled Maintenance Inspection (SMI).

**2.2 Certification of Overhaul, Repair, Replacement, Modification or Mandatory Inspection.**

- 2.2.1 The CRS is required on completion of overhaul, repair, replacement, modification or mandatory inspection. It should be noted that the CRS statement will always start with the words 'The work recorded above' which means the CRS releases the aircraft/equipment only in relation to the work recorded and does not mean the complete aircraft is fit for release to service.

**2.3 Certification of completion of Scheduled Maintenance Inspections.**

- 2.3.1 The CRS-SMI is required at the completion of Scheduled Maintenance Inspections. Certification is only required in the various licensed categories when there is work in that category during an SMI. The expression "Scheduled Maintenance Inspections" (SMI) means any group of inspections and tests called up by a maintenance schedule and currently more commonly known as "Check, Inspections, Periodic" etc. A CRS will not be required for any SMI scheduled at intervals of less than 45 hours or 28 days, these two limitations being applied separately.
- 2.3.2 It is not necessary to raise individual CRS (SMI) certifications on each work sheets/cards, but it is mandatory to raise one document at the completion of an SMI containing all the necessary CRS signatures and making references to the work carried out.

- 2.3.3 This certification shall only be made when all work actions associated with the particular group of SMI's being certified have been satisfactorily carried out unless a company procedure acceptable to the DCA permits the certification to be made before all such work actions have been completed. Where such associated work involves deferment, then such deferment must be carried out in accordance with approved company procedures before the signatory issues the CRS-SMI.
- 2.3.4 Whilst the requirement states that a signature is required in each category of work actually carried out, the DCA may allow some Category 'X' alleviation in appropriate cases. Aircraft classified in Airworthiness Notice No. 10 paragraphs 5.1 to 5.3 inclusive may not normally require certification in Category 'X' Electrical, Autopilot or Instruments, but clearly the right is reserved for the special case to require some or all such certifications, dependent on the particular system fitted. Thus for these aircraft, despite the fact that the maintenance schedule will normally contain SMI in Category 'X', certification by appropriately licensed engineers may not be required. In this case the Category 'A' licensed engineers will exercise Category C privileges relevant to the airframe when making a certification in Category 'A'. Similar intention exists in respect of the Category 'C' licensed engineers.
- 2.3.5 For those aircraft maintained in accordance with the, Approval for Maintenance Scheme (refer BCAR Chapter ,48-13), which requires certification in all categories, advantage can be taken of the "limited and simple" concept (refer BCAR Chapter A8-13, Supplement No: 2) provided agreement has been obtained from the DCA Where an SMI include tasks in, for example, the instrument discipline, then the CRS-SMI must include the 'X' Instrument Category and must be signed by an appropriately authorised person. It follows that if all the instrument tasks within the SMI have been categorised as limited and simple, then the signatory need only be authorised for those limited and simple tasks. If however, any one or more of the tasks is not considered limited and simple, then the CRS-SMI in the Instrument Category must be signed by' a person fully authorised for the most complex instrument task of the SMI. The same situation applies to all other categories but it is important to appreciate that if there are no tasks in the particular category, then no signature is required.
- 2.3.6 It should be noted that for aircraft other than those in the Approval for Maintenance Scheme, engineers will be required to be appropriately type-licensed. Where an organisation uses approved personnel then such personnel should possess an appropriate Type Rated licence. In cases of difficulty, the DCA will be prepared to give consideration to some alleviation of the requirement
- 2.4 Conditions for Issue of a Certificate of Release to Service**
- 2.4.1 A CRS should only be issued when the signatory is satisfied that the work has been properly carried out, having due regard to the use of:
- (a) Up to date instructions, including manuals, drawings, specifications, DCA mandatory modifications/inspections and 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, and
  - (d) appropriately trained personnel.
- 2.4.2 The CRS shall contain particulars of the work done or the inspection completed and the organisation and place at which the work was carried out. Depending upon the application of the certificate, details of the aircraft type, registration, component type, part number, batch number and serial number shall be recorded as applicable. The certification shall be worded in the following manner:-  
 "The work recorded above has been carried out in accordance with the requirements of the Malaysian Civil Aviation Regulations for the time being in force and in that respect the aircraft/equipment is considered fit for release to service."
- 2.4.3 The CRS shall be signed and dated by a licensed or approved person holding an appropriate type rating (refer also to paragraph 2.3.6 in respect of CRS- SMI); the signatory shall also record his licence or approval number, as appropriate. The DCA may give a direction as to who shall sign a CRS in a particular case and the DCA Approval Document for the maintenance schedule concerned will specify the signatories for all required certifications.

### 3. Certification Of The Completion Of the Requirements Of An Approved Maintenance Schedule

#### 3.1 General

3.1.1 The issue of a CMR provides evidence that, at the date of issue, the aircraft was in compliance with the requirements of the maintenance schedule approved by the DCA and that all modifications and inspections classified as mandatory had been satisfied. A copy of the current CMR must be carried on board the aircraft to which it relates.

3.1.2 The CMR signatory is required to be given access to such information as is necessary in order that he may carry out his obligations. It is therefore incumbent on the CMR signatory that he does research the records to the extent necessary to confidently issue the CMR. Thus the following records must be at his disposal: the maintenance schedule, associated reliability and maintenance programmes, the technical log, technical records, and the mandatory information listed in Airworthiness Notice No.4. In the case of appropriately approved organisations, CMR signatories work on behalf of the "Corporate Body" and as such, procedures should be agreed with the DCA as to how the signatory will comply with the requirement. For instance, it is accepted that there are problems of how a signatory will assess a reliability programme of a large transport aircraft subjected to MRB procedures. It is accepted that the signatory be able to accept authorised reports from various sections and rely on "no adverse comments" from quality audits, but he must have the right of access, questions and query to any relevant information, including quality audits, in order to carry out his task. It would be untenable if the signatory accepted reports without question from a reliability group if there were critical quality audits on that group of which he was not aware.

3.1.3 It will be clear from paragraph 3.1.2 that the DCA will not accept any procedure which prevents access to all relevant records.

In the absence of specific procedures, full access to all records will be required. It also follows that for large transport aircraft, the signatory must be of a caliber and experience to ask the right questions and understands the situation from the responses received.

3.1.4 Extensions of the CMR periodicity requirements will not be considered except in the most exceptional circumstances.

#### 3.2 All Aircraft except Aircraft in paragraph 3.3.

3.2.1 The CMR is required to be issued for a maximum period of four calendar months in the case of all aircraft except aircraft in paragraph 3.3. Nothing prevents the CMR from being reissued as many times as necessary during each year, but its validity must never exceed four (4) months. This flexibility of applications of the CMR is intended to allow maintenance organisations to align its issue with an SMI if they wish to do so.

3.2.2 whilst alignment of the maintenance review with a maintenance input has many advantages, it does suffer the problem of reviewing records at a time when paperwork is, incomplete and the aircraft may be required for service. Thus, where as a result of this situation a decision is taken not to align the review, the following points should be considered.

(a) Basically with the aircraft in service it is not possible to review the latest technical log or place the new CMR on board the aircraft Therefore it is considered reasonable to review the technical log sector record sheets and the deferred defect system at the maintenance facility as long as such records are reasonably up to date in relation to the aircraft operation. There is no objection to the signatory endorsing the CMR with the date of the last technical log sector record sheet seen.

(b) It would be prudent to carry out the maintenance review a little before the expiry of the current CMR in case the review identifies a maintenance shortfall and to permit the new CMR to be placed on board the aircraft in time.

#### 3.3 Aircraft in Private Category Below 2730 kg MTWA.

3.3.1 The CMR is required to be issued for a maximum period of one (1) year in the case of aircraft in Private Category below 2730 kg. MTWA Unless otherwise agreed or directed by the DCA , the CMR must be aligned with the renewal of the Certificate of Airworthiness.

3.4 **Conditions for Issue of a Certificate of Maintenance Review (All Aircraft)**

3.4.1 The signatory shall only issue a CMR when satisfied, at the time of the review, that the following aspects of maintenance have been carried out:

- (a) all maintenance specified in the maintenance schedule approved by the DCA has been carried out within the prescribed time period and any extension to limiting periods is in accordance with procedures approved by the DCA.
- (b) all modifications and inspections deemed mandatory by the DCA have been carried out within the prescribed time periods and any extension to limiting periods has been authorised by the DCA.
- (c) all defects entered in the Technical Log have been rectified or deferred in accordance with procedures approved by the DCA.
- (d) all CRS required by this Notice have been issued.

3.4.2 The signatory for the CMR shall be:

- (a) for aircraft maintained to the requirements of BCAR Chapter A8-13, an engineer approved for the purpose by the DCA
- (b) for all other aircraft an engineer type licensed in at least two categories (excluding 'X' Compasses) appropriate to the aircraft type.

The DCA Approval Document for the maintenance schedule concerned will specify the signatories for all required certifications.

3.4.3 The CMR shall be issued in the following format-

“CERTIFICATE OF MAINTENANCE REVIEW”

AIRCRAFT TYPE .....

NATIONALITY & REGISTRATION MARKS .....

Certified that a maintenance review of this aircraft and such of its equipment as is necessary for its airworthiness has been carried out in accordance with the requirements of the Malaysian Civil Aviation Regulations for the time being in force.

The next maintenance review is due .....

Signed .....

DCA Approval/License No .....

Date .....

Firm .....

4. **Requirements**

4.1 The DCA requires that the following procedures be introduced in relation to the operation of Malaysian registered aircraft:

- (a) Certificates of Release to Service shall be issued in respect of overhauls, replacements, repairs, modifications, mandatory inspections and Scheduled Maintenance inspections.
- (b) Certificates of Maintenance Review shall be issued to certify completion of the requirements of a maintenance schedule approved by the DCA
- (c) Any aircraft issued with Certificate of Airworthiness in any category shall be maintained in accordance with the requirements of a maintenance schedule approved by the DCA irrespective of the purpose for which it is flown.
- (d) A Technical Log shall be kept in respect of any aircraft issued with Certificate of Airworthiness in Transport or Aerial Work categories, irrespective of the purpose for which it is flown. However, owners or operators of aircraft in other category are also required to keep a Technical Log for each aircraft. The Technical Log shall be in a format approved by the DCA and entries shall be made in it as directed.

4.2 Operators should note that a failure to comply with the requirements of paragraphs 4.1 (a) to (d) may invalidate the Certificate of Airworthiness of the aircraft concerned.

#### 5. Cancellation

This Notice cancels Airworthiness Notice No. 12, Issue 3, dated 4 July 1997, which should be destroyed.

DIRECTOR GENERAL  
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MALAYSIA

