

CAR -M

CONTINUING AIWORTHINESS REQUIREMENTS

08.09.2009

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(CAR -M)**M.1**

For the purpose of this CAR, the competent authority shall be DGCA.

1. for the oversight of the continuing airworthiness of individual aircraft and the issue of airworthiness review certificates.
2. for the oversight of a maintenance organisation as specified in M.A. Subpart F,
3. for the oversight of a continuing airworthiness management organisation as specified in M.A. Subpart G,
4. for the approval of maintenance programmes,

TECHNICAL REQUIREMENTS**SUBPART A*****GENERAL*****M.A.101 Scope**

This CAR establishes the measures to be taken to ensure that airworthiness is maintained, including maintenance. It also specifies the conditions to be met by the persons or organizations involved in such continuing airworthiness management.

SUBPART B***ACCOUNTABILITY*****M.A.201 Responsibilities**

- a) The owner is responsible for the continuing airworthiness of an aircraft and shall ensure that no flight takes place unless:
 1. the aircraft is maintained in an airworthy condition, and;
 2. any operational and emergency equipment fitted is correctly installed and serviceable or clearly identified as unserviceable, and;
 3. the airworthiness certificate remains valid, and;
 4. the maintenance of the aircraft is performed in accordance with the approved maintenance programme as specified in M.A.302.

b) When the aircraft is leased, the responsibilities of the owner are transferred to the lessee if:

1. the lessee is stipulated on the registration document, or;
2. detailed in the leasing contract.

When reference is made in this CAR to the 'owner', the term owner covers the owner or the lessee, as applicable.

- c) Any person or organisation performing maintenance shall be responsible for the tasks performed.
- d) The pilot-in-command or, in the case of commercial air transport, the operator shall be responsible for the satisfactory accomplishment of the pre-flight inspection. This inspection must be carried out by the pilot or another qualified person but need not be carried out by an approved maintenance organisation or maintenance license/approval holder certifying staff.
- e) In order to satisfy the responsibilities of paragraph (a) the owner of an aircraft may contract the tasks associated with continuing airworthiness to an approved continuing airworthiness management organisation as specified in M.A. Subpart G (continuing airworthiness management organisation hereinafter) in accordance with Appendix I. In this case, the continuing airworthiness management organisation assumes responsibility for the proper accomplishment of these tasks.
- f) In the case of large aircraft, in order to satisfy the responsibilities of paragraph (a) the owner of an aircraft shall ensure that the tasks associated with continuing airworthiness are performed by an approved continuing airworthiness management organisation. A written contract shall be made in accordance with Appendix I. In this case, the continuing airworthiness management organisation assumes responsibility for the proper accomplishment of these tasks.
- g) Maintenance of large aircraft, aircraft used for commercial air transport and components thereof shall be carried out by a CAR -145 approved maintenance organisation.
- h) In the case of commercial air transport the operator is responsible for the continuing airworthiness of the aircraft it operates and shall:
1. be approved, as part of the air operator certificate/permit issued by DGCA, pursuant to M.A. Subpart G for the aircraft it operates; and
 2. be approved in accordance with CAR 145 or contract such an organisation; and
 3. ensure that paragraph (a) is satisfied.

- i) When an operator is requested by DGCA to hold a certificate for its operational activities, other than for commercial air transport, it shall:
 1. be appropriately approved, pursuant to M.A. Subpart G, for the management of the continuing airworthiness of the aircraft it operates or contract such an organisation; and
 2. be appropriately approved in accordance with M.A. Subpart F or CAR-145, or contract such organisations; and
 3. ensure that paragraph (a) is satisfied.
- j) The owner/operator is responsible for granting the DGCA access to the organisation/aircraft to determine continued compliance with this CAR.

M.A.202 Occurrence reporting

- (a) Any person or organisation responsible under M.A.201 shall report to DGCA, the organisation responsible for the type design or supplemental type design, any identified condition of an aircraft or component that hazards seriously the flight safety.
- (b) Reports shall be made in a manner established by the DGCA and contain all pertinent information about the condition known to the person or organisation.
- (c) Where the person or organisation maintaining the aircraft is contracted by an owner or an operator to carry out maintenance, the person or the organisation maintaining the aircraft shall also report to the owner, the operator or the continuing airworthiness management organisation any such condition affecting the owner's or the operator's aircraft or component.
- (d) Reports shall be made as soon as practicable, but in any case within 72 hours of the person or organisation identifying the condition to which the report relates.

SUBPART C

CONTINUING AIRWORTHINESS

M.A.301 Continuing airworthiness tasks

The aircraft continuing airworthiness and the serviceability of both operational and emergency equipment shall be ensured by:

1. the accomplishment of pre-flight inspections;
2. the rectification to an officially recognised standard of any defect and damage affecting safe operation taking into account, for all large aircraft or aircraft used for commercial air transport, the minimum equipment list and configuration deviation list if applicable to the aircraft type;
3. the accomplishment of all maintenance, in accordance with the M.A.302

- approved aircraft maintenance programme;
4. for all large aircraft or aircraft used for commercial air transport the analysis of the effectiveness of the M.A.302 approved maintenance programme;
 5. the accomplishment of any applicable:
 - i airworthiness directive,
 - ii operational directive with a continuing airworthiness impact,
 - iii continued airworthiness requirement established by DGCA,
 - iv measures mandated by DGCA in immediate reaction to a safety problem;
 6. the accomplishment of modifications and repairs in accordance with M.A.304;
 7. for non-mandatory modifications and/or inspections, for all large aircraft or aircraft used for commercial air transport the establishment of an embodiment policy;
 8. maintenance check flights when necessary.

M.A.302 Maintenance programme

- (a) Every aircraft shall be maintained in accordance with a maintenance programme approved by DGCA, which shall be periodically reviewed and amended accordingly.
- (b) The maintenance programme and any subsequent amendments shall be approved by DGCA.
- (c) The maintenance programme must establish compliance with:
 1. instructions for continuing airworthiness issued by type certificate and supplementary type certificate holders and any other organisation that publishes such data in accordance with CAR -21, or
 2. instructions issued by DGCA, if they differ from subparagraph 1 or in the absence of specific recommendations, or
 3. instructions defined by the owner or the operator and approved by DGCA if they differ from subparagraphs 1 and 2.
- (d) The maintenance programme shall contain details, including frequency, of all maintenance to be carried out, including any specific tasks linked to specific operations. The programme must include a reliability programme when the maintenance programme is based:
 1. on Maintenance Steering Group logic, or;
 2. mainly on condition monitoring.
- (e) When the aircraft continuing airworthiness is managed by an M.A. Subpart G organisation the maintenance programme and its amendments may be approved through a maintenance programme procedure established by such organisation (hereinafter called indirect approval).

M.A.303 Airworthiness directives

Any applicable airworthiness directive must be carried out within the requirements of that airworthiness directive, unless otherwise specified by DGCA.

M.A.304 Data for modifications and repairs

Damage shall be assessed and modifications and repairs carried out using data approved by DGCA or by an approved CAR -21 design organisation, as appropriate.

M.A.305 Aircraft continuing airworthiness record system

- (a) At the completion of any maintenance, the associated M.A.801 certificate of release to service shall be entered in the aircraft continuing airworthiness records. Each entry shall be made as soon as practicable but in no event more than 30 days after the day of maintenance action.
- (b) The aircraft continuing airworthiness records shall consist of, as appropriate, an aircraft logbook, engine logbook(s) or engine module log cards, propeller logbook(s) and log cards, for any service life limited component and the operator's technical log.
- (c) The aircraft type and registration mark, the date, together with total flight time and/or flight cycles and/or landings, as appropriate, shall be entered in the aircraft logbooks.
- (d) The aircraft continuing airworthiness records shall contain the current:
1. status of airworthiness directives and measures mandated by the competent authority in immediate reaction to a safety problem;
 2. status of modifications and repairs;
 3. status of compliance with maintenance programme;
 4. status of service life limited components;
 5. mass and balance report;
 6. list of deferred maintenance.
- (e) In addition to the authorised release document, CA Form 1/FAA 8130 or equivalent, the following information relevant to any component installed shall be entered in the appropriate engine or propeller logbook, engine module or service life limited component log card:
1. identification of the component, and;
 2. the type, serial number and registration of the aircraft to which the particular component has been fitted, along with the reference to the installation and removal of the component, and;

3. the particular component accumulated total flight time and/or flight cycles and/or landings and/or calendar time, as appropriate, and;
 4. the current paragraph (d) information applicable to the component.
- (f) The person responsible for the management of continuing airworthiness tasks pursuant to M.A. Subpart B, shall control the records as detailed in this paragraph and present the records to DGCA upon request.
- (g) All entries made in the aircraft continuing airworthiness records shall be clear and accurate. When it is necessary to correct an entry, the correction shall be made in a manner that clearly shows the original entry.
- (h) An owner or operator shall ensure that a system has been established to keep the following records for the periods specified:
1. all detailed maintenance records in respect of the aircraft and any life-limited component fitted thereto, at least 24 months after the aircraft or component was permanently withdrawn from service, and;
 2. the total time and flight cycles as appropriate, of the aircraft and all life-limited components, at least 12 months after the aircraft or component has been permanently withdrawn from service, and;
 3. the time and flight cycles as appropriate, since last scheduled maintenance of the component subjected to a service life limit, at least until the component scheduled maintenance has been superseded by another scheduled maintenance of equivalent work scope and detail, and;
 4. the current status of compliance with maintenance programme such that compliance with the approved aircraft maintenance programme can be established, at least until the aircraft or component scheduled maintenance has been superseded by other scheduled maintenance of equivalent work scope and detail, and;
 5. the current status of airworthiness directives applicable to the aircraft and components, at least 12 months after the aircraft or component has been permanently withdrawn from service, and;
 6. details of current modifications and repairs to the aircraft, engine(s), propeller(s) and any other component vital to flight safety, at least 12 months after they have been permanently withdrawn from service.

M.A.306 Operator's technical log system

- (a) In the case of commercial air transport, in addition to the requirements of M.A.305, an operator shall use an aircraft technical log system containing the following information for each aircraft:
1. information about each flight, necessary to ensure continued flight safety, and;
 2. the current aircraft certificate of release to service, and;
 3. the current maintenance statement giving the aircraft maintenance status of what scheduled and out of phase maintenance is next due except that the competent authority may agree to the maintenance statement being kept elsewhere, and;
 4. all outstanding deferred defects rectifications that affect the operation of the aircraft, and;
 5. any necessary guidance instructions on maintenance support arrangements.
- (b) The aircraft technical log system and any subsequent amendment shall be approved by DGCA..
- (c) An operator shall ensure that the aircraft technical log is retained for 36 months after the date of the last entry.

M.A.307 Transfer of aircraft continuing airworthiness records

- (a) The owner or operator shall ensure when an aircraft is permanently transferred from one owner or operator to another that the M.A.305 continuing airworthiness records and, if applicable, M.A.306 operator's technical log are also transferred.
- (b) The owner shall ensure, when he contracts the continuing airworthiness management tasks to a continuing airworthiness management organisation, that the M.A.305 continuing airworthiness records are transferred to the organisation.
- (c) The time periods prescribed for the retention of records shall continue to apply to the new owner, operator or continuing airworthiness management organisation.

SUBPART D***MAINTENANCE STANDARDS*****M.A.401 Maintenance data**

- (a) The person or organisation maintaining an aircraft shall have access to and use only applicable current maintenance data in the performance of maintenance including modifications and repairs.
- (b) For the purposes of this CAR, applicable maintenance data is:
1. any applicable requirement, procedure, standard or information issued by the competent authority,
 2. any applicable airworthiness directive,
 3. applicable instructions for continuing airworthiness, issued by type certificate holders, supplementary type certificate holders and any other organisation that publishes such data in accordance with CAR 21.
 4. any applicable data issued in accordance with 145.A.45(d).
- (c) The person or organisation maintaining an aircraft shall ensure that all applicable maintenance data is current and readily available for use when required. The person or organisation shall establish a work card or worksheet system to be used and shall either transcribe accurately the maintenance data onto such work cards or worksheets or make precise reference to the particular maintenance task or tasks contained in such maintenance data.

M.A.402 Performance of maintenance

- (a) All maintenance shall be performed by qualified personnel, following the methods, techniques, standards and instructions specified in the M.A.401 maintenance data. Furthermore, an independent inspection shall be carried out after any flight safety sensitive maintenance task unless otherwise specified by CAR -145 or agreed by the DGCA.

All maintenance shall be performed using the tools, equipment and material specified in the M.A.401 maintenance data unless otherwise specified by CAR -145. Where necessary, tools and equipment shall be controlled and calibrated to an officially recognised standard.

The area in which maintenance is carried out shall be well organised and clean in respect of dirt and contamination.

All maintenance shall be performed within any environmental limitations specified in the M.A.401 maintenance data.

In case of inclement weather or lengthy maintenance, proper facilities shall be used.

After completion of all maintenance a general verification must be carried out to ensure the aircraft or component is clear of all tools, equipment and any other extraneous parts and material, and that all access panels removed have been refitted.

M.A.403 Aircraft defects

- (a) Any aircraft defect that hazards seriously the flight safety shall be rectified before further flight.
- (b) Only the authorised certifying staff, according to M.A.801(b)1, M.A.801(b)2 or CAR -145 can decide, using M.A.401 maintenance data, whether an aircraft defect hazards seriously the flight safety and therefore decide when and which rectification action shall be taken before further flight and which defect rectification can be deferred. However, this does not apply when:
 - 1. the approved minimum equipment list as mandated by the competent authority is used by the pilot; or,
 - 2. aircraft defects are defined as being acceptable by DGCA.
- (c) Any aircraft defect that would not hazard seriously the flight safety shall be rectified as soon as practicable, after the date the aircraft defect was first identified and within any limits specified in the maintenance data.
- (d) Any defect not rectified before flight shall be recorded in the M.A.305 aircraft maintenance record system or M.A.306 operator's technical log system as applicable.

SUBPART E

COMPONENTS

M.A.501 Installation

- (a) No component may be fitted unless it is in a satisfactory condition, has been appropriately released to service on an CA Form 1 or equivalent and is marked in accordance with CAR 21 Subpart Q, unless otherwise specified in CAR -145 and Subpart F.
- (b) Prior to installation of a component on an aircraft the person or approved maintenance organisation shall ensure that the particular component is eligible to be fitted when different modification and/or airworthiness directive configurations may be applicable.
- (c) Standard parts shall only be fitted to an aircraft or a component when the maintenance data specifies the particular standard part. Standard parts shall only be fitted when accompanied by evidence of conformity traceable to the applicable standard.

- (d) Material being either raw material or consumable material shall only be used on an aircraft or a component when the aircraft or component manufacturer states so in relevant maintenance data or as specified in CAR -145. Such material shall only be used when the material meets the required specification and has appropriate traceability. All material must be accompanied by documentation clearly relating to the particular material and containing a conformity to specification statement plus both the manufacturing and supplier source.

M.A.502 Component maintenance

- a) The maintenance of components shall be performed by appropriately approved Subpart F or CAR 145 maintenance organisations.
- b) Maintenance on any component may be performed by M.A.801(b)2 certifying staff only whilst such components are fitted to the aircraft. Such components, nevertheless, can be temporarily removed for maintenance when such removal is expressly permitted by the aircraft maintenance manual to improve access.

M.A.503 Service life limited components

Installed service life limited components shall not exceed the approved service life limit as specified in the approved maintenance programme and airworthiness directives.

M.A.504 Control of unserviceable components

- a) A component shall be considered unserviceable in any one of the following circumstances:
1. expiry of the service life limit as defined in the maintenance program;
 2. non-compliance with the applicable airworthiness directives and other continued airworthiness requirement mandated by DGCA;
 3. absence of the necessary information to determine the airworthiness status or eligibility for installation;
 4. evidence of defects or malfunctions;
 5. involvement in an incident or accident likely to affect its serviceability.
- b) Unserviceable components shall be identified and stored in a secure location under the control of the M.A.502 approved organisation until a decision is made on the future status of such component.
- c) Components which have reached their certified life limit or contain a non-repairable defect shall be classified as unsalvageable and shall not be permitted to re-enter the component supply system, unless certified life limits have been extended or a repair solution has been approved according to M.A.304.

- d) Any person or organisation accountable under CAR -M shall, in the case of a paragraph (c) unsalvageable components:
1. retain such component in the paragraph (b) location, or;
 2. arrange for the component to be mutilated in a manner that ensures that it is beyond economic salvage or repair before relinquishing responsibility for such component.
- e) Notwithstanding paragraph (d) a person or organisation accountable under CAR -M may transfer responsibility of components classified as unsalvageable to an organisation for training or research without mutilation.

SUBPART F

MAINTENANCE ORGANISATION

M.A.601 Scope

This Subpart establishes the requirements to be met by an organisation to qualify for the issue or continuation of an approval for the maintenance of aircraft and components not listed in M.A.201(f) and (g).

M.A.602 Application

An application for issue or variation of a maintenance organisation approval shall be made on a form and in a manner established by DGCA.

M.A.603 Extent of approval

- (a) The grant of approval is indicated by the issue of a certificate (included in Appendix 5) by the DGCA. The M.A.604 approved maintenance organisation's manual must specify the scope of work deemed to constitute approval.

The Appendix 4 to this CAR defines all classes and ratings possible under M.A. Subpart F.

- (b) An approved maintenance organisation may fabricate, in conformity with maintenance data, a restricted range of parts for the use in the course of undergoing work within its own facilities, as identified in the maintenance organisation manual.

M.A.604 Maintenance organisation manual

- a) The maintenance organisation shall provide a manual containing at least the following information:
1. a statement signed by the accountable manager to confirm that the organisation will continuously work in accordance

- with CAR M and the manual at all times, and;
 2. the organisation's scope of work, and;
 3. the title(s) and name(s) of person(s) referred to in M.A.606(b), and;
 4. an organisation chart showing associated chains of responsibility between the person(s) referred to in M.A.606(b), and;
 5. a list of certifying staff, and;
 6. a general description and location of the facilities, and;
 7. procedures specifying how the maintenance organisation ensures compliance with this Part, and;
 8. the maintenance organisation manual amendment procedure(s).
- b) The maintenance organisation manual and its amendments shall be approved by the DGCA Regional Office.
 - c) Notwithstanding paragraph (b) minor amendments to the manual may be approved through a procedure (hereinafter called indirect approval).

M.A.605 Facilities

The organisation shall ensure that:

- a) Facilities are provided for all planned work, specialised workshops and bays are segregated as appropriate, to ensure protection from contamination and the environment.
- b) Office accommodation is provided for the management of all planned work including in particular, the completion of maintenance records.
- c) Secure storage facilities are provided for components, equipment, tools and material. Storage conditions shall ensure segregation of unserviceable components and material from all other components, material, equipment and tools. Storage conditions shall be in accordance with the manufacturers' instructions and access shall be restricted to authorised personnel.

M.A.606 Personnel requirements

- a) The organisation shall appoint an accountable manager, who has corporate authority for ensuring that all maintenance required by the customer can be financed and carried out to the standard required by this CAR.
- b) A person or group of persons shall be nominated with the responsibility of ensuring that the organisation is always in compliance with this Subpart. Such person(s) shall be ultimately responsible to the accountable manager.
- c) All paragraph (b) persons shall be able to show relevant knowledge, background and appropriate experience related to aircraft and/or component maintenance.
- d) The organisation shall have appropriate staff for the normal expected contracted work. The use of temporarily sub-contracted staff is permitted in the case of higher than normally expected contracted work and only for personnel not issuing a certificate of release to service.

- e) The qualification of all personnel involved in maintenance shall be demonstrated and recorded.
- f) Personnel who carry out specialised tasks such as welding, non-destructive testing/inspection other than colour contrast shall be qualified in accordance with an officially recognised standard.
- k) The maintenance organisation shall have sufficient certifying staff to issue M.A.61 2 and M.A.61 3 certificates of release to service for aircraft and components. They shall comply with the requirements of maintenance license/ approval holder certifying staff.

g) .

M.A.607 Certifying staff

- a) In addition to M.A.606(g), certifying staff can only exercise their privileges, if the organisation has ensured:
 - 1. that certifying staff can demonstrate that in the preceding two-year period they have either had six months of relevant maintenance experience or, met the provision for the issue of the appropriate privileges; and,
 - 2. that certifying staff have an adequate understanding of the relevant aircraft and/or aircraft component(s) to be maintained together with the associated organisation procedures.
- b) In the following unforeseen cases, where an aircraft is grounded at a location other than the main base where no appropriate certifying staff is available, the maintenance organisation contracted to provide maintenance support may issue a one-off certification authorisation:
 - 1. to one of its employees holding type qualifications on aircraft of similar technology, construction and systems; or
 - 2. to any person with not less than five years maintenance experience and holding a valid ICAO aircraft maintenance licence rated for the aircraft type requiring certification provided there is no organisation appropriately approved under this CAR at that location and the contracted organisation obtains and holds on file evidence of the experience and the licence of that person.

All such cases must be reported to the DGCA within seven days of the issuance of such certification authorisation. The approved maintenance organisation issuing the one-off certification authorisation shall ensure that any such maintenance that could affect flight safety is re-checked.

- c) The approved maintenance organisation shall record all details concerning certifying staff and maintain a current list of all certifying staff.

M.A.608 Components, equipment and tools

- (a) The organisation shall:
1. hold the equipment and tools specified in the M.A.609 maintenance data or verified equivalents as listed in the maintenance organisation manual as necessary for day-to-day maintenance within the scope of the approval; and,
 2. demonstrate that it has access to all other equipment and tools used only on an occasional basis.
- (b) Tools and equipment shall be controlled and calibrated to an officially recognized standard. Records of such calibrations and the standard used shall be kept by the organisation.
- (c) The organisation shall inspect, classify and appropriately segregate all incoming components.

M.A.609 Maintenance data

The approved maintenance organisation shall hold and use applicable current maintenance data specified in M.A.401 in the performance of maintenance including modifications and repairs. In the case of customer provided maintenance data, it is only necessary to have such data when the work is in progress.

M.A.610 Maintenance work orders

Before the commencement of maintenance a written work order shall be agreed between the organisation and the customer to clearly establish the maintenance to be carried out.

M.A.611 Maintenance standards

All maintenance shall be carried out in accordance with the requirements of M.A. Subpart D.

M.A.612 Aircraft certificate of release to service

At the completion of all required aircraft maintenance in accordance with this Subpart an aircraft certificate of release to service shall be issued according to M.A.801.

M.A.613 Component certificate of release to service

- (a) At the completion of all required component maintenance in accordance with this Subpart a component certificate of release to service shall be issued according to M.A.802, CA Form 1 shall be issued except for those components fabricated in accordance with M.A.603(b).
- (b) The component certificate release to service document, CA Form 1 may be

generated from a computer database.

M.A.614 Maintenance records

- (a) The approved maintenance organisation shall record all details of work carried out. Records necessary to prove all requirements have been met for issuance of the certificate of release to service including the sub-contractor's release documents shall be retained.
- (b) The approved maintenance organisation shall provide a copy of each certificate of release to service to the aircraft owner, together with a copy of any specific approved repair/modification data used for repairs/modifications carried out.
- (c) The approved maintenance organisation shall retain a copy of all maintenance records and any associated maintenance data for three years from the date the aircraft or aircraft component to which the work relates was released from the approved maintenance organisation.
 1. The records shall be stored in a manner that ensures protection from damage and theft.
 2. All computer hardware used to ensure backup shall be stored in a different location from that containing the working data in an environment that ensures they remain in good condition.
 3. Where an approved maintenance organisation terminates its operation, all retained maintenance records covering the last two years shall be distributed to the last owner or customer of the respective aircraft or component or shall be stored as specified by DGCA.

M.A.615 Privileges of the organisation

The organisation may:

1. maintain any aircraft and/or component for which it is approved at the locations specified in the approval certificate and in the manual.
2. maintain any aircraft and/or component for which it is approved at any other location subject to such maintenance being only necessary to rectify arising defects. issue certificates of release to service on completion of maintenance, in accordance with M.A.612 or M.A.61 3.

M.A.616 Organisational review

To ensure that the approved maintenance organisation continues to meet the requirements of this Subpart, it shall organise, on a regular basis, organisational reviews.

M.A.617 Changes to the approved maintenance organisation

In order to enable DGCA to determine continued compliance with this CAR, the approved maintenance organisation shall notify it of any proposal to carry out any of the following changes, before such changes take place:

1. the name of the organisation;
2. the location of the organisation;
3. additional locations of the organisation;
4. the accountable manager;
5. any of the persons specified in paragraph M.A.606(b);
6. the facilities, equipment, tools, material, procedures, work scope and certifying staff that could affect the approval.

In the case of proposed changes in personnel not known to the management beforehand, these changes shall be notified at the earliest opportunity.

M.A.618 Continued validity of approval

- (a) An approval shall be issued for an unlimited duration. It shall remain valid subject to:
 1. the organisation remaining in compliance with this CAR, in accordance with the provisions related to the handling of findings as specified under M.A.619, and;
 2. the competent authority being granted access to the organization to determine continued compliance with this CAR, and;
 3. the approval not being surrendered or revoked;
- (b) Upon surrender or revocation, the approval certificate shall be returned to DGCA.

M.A.619 Findings

- (a) A level 1 finding is any significant non-compliance with CAR-M requirements which lowers the safety standard and hazards seriously the flight safety.
- (b) A level 2 finding is any non-compliance with the CAR-M requirements which could lower the safety standard and possibly hazard the flight safety.
- (c) After receipt of notification of findings according to M.B.605, the holder of the maintenance organisation approval shall define a corrective action plan

and demonstrate corrective action to the satisfaction of DGCA within a period agreed with DGCA.

SUBPART G

CONTINUING AIRWORTHINESS MANAGEMENT ORGANISATION

M.A.701 Scope

This Subpart establishes the requirements to be met by an organisation to qualify for the issue or continuation of an approval for the management of aircraft continuing airworthiness.

M.A.702 Application

An application for issue or variation of a continuing airworthiness management organisation approval shall be made on a form and in a manner established by DGCA.

M.A.703 Extent of approval

- (a) The grant of approval is indicated by the issue of the certificate included in Appendix VI by DGCA. The M.A.704 approved continuing airworthiness management exposition must specify the scope of work deemed to constitute approval.
- (b) Notwithstanding paragraph (a), for commercial air transport, the approval shall be part of the air operator certificate issued by DGCA, for the aircraft operated.

M.A.704 Continuing airworthiness management exposition

- (a) The continuing airworthiness management organisation shall provide a continuing airworthiness management exposition containing the following information:
 - 1. a statement signed by the accountable manager to confirm that the organisation will work in accordance with this CAR and the exposition at all times, and;
 - 2. the organisation's scope of work, and;
 - 3. the title(s) and name(s) of person(s) referred to in M.A.706(b) and M.A.706(c), and;
 - 4. an organisation chart showing associated chains of responsibility between the person(s) referred to in M.A.706(b) and M.A.706(c), and;
 - 5. a list of M.A.707 airworthiness review staff, and;
 - 6. a general description and location of the facilities, and;

7. procedures specifying how the continuing airworthiness management organisation ensures compliance with this Part, and;
 8. the continuing airworthiness management exposition amendment procedures.
- (b) The continuing airworthiness management exposition and its amendments shall be approved by DGCA

Notwithstanding paragraph (b) minor amendments to the exposition may be approved through an exposition procedure (hereinafter called indirect approval).

M.A.705 Facilities

The continuing airworthiness management organisation shall provide suitable office accommodation at appropriate locations for the personnel specified in M.A.706.

M.A.706 Personnel requirements

- (a) The organisation shall appoint an accountable manager, who has corporate authority for ensuring that all continuing airworthiness management activities can be financed and carried out in accordance with this CAR.
- (b) For commercial air transport the paragraph (a) accountable manager shall be the person who also has corporate authority for ensuring that all the operations of the operator can be financed and carried out to the standard required for the issue of an air operator's certificate.
- (c) A person or group of persons shall be nominated with the responsibility of ensuring that the organisation is always in compliance with this Subpart. Such person(s) shall be ultimately responsible to the accountable manager.
- (d) For commercial air transport, the accountable manager shall designate a nominated post holder. This person shall be responsible for the management and supervision of continuing airworthiness activities, pursuant to paragraph (c).
- (e) The nominated post holder referred to in paragraph (d) shall not be employed by a CAR -145 approved organisation under contract to the operator, unless specifically agreed by DGCA.
- (f) The organisation shall have sufficient appropriately qualified staff for the expected work.
- (g) All paragraph (c) and (d) persons shall be able to show relevant knowledge, background and appropriate experience related to aircraft continuing airworthiness.
- (h) The qualification of all personnel involved in continuing airworthiness management shall be recorded.

M.A.707 Airworthiness review staff

- (a) To be approved to carry out airworthiness reviews, an approved continuing

airworthiness management organisation shall have appropriate airworthiness review staff to issue M.A. Subpart I airworthiness review certificates or recommendations. In addition to M.A.706 requirements, these staff shall have acquired:

1. at least five years experience in continuing airworthiness, and;
 2. an appropriate DGCA maintenance license or an aeronautical degree or equivalent, and;
 3. formal aeronautical maintenance training, and;
 4. a position within the approved organisation with appropriate responsibilities.
- (b) Airworthiness review staff nominated by the approved continuing airworthiness organisation can only be issued an authorisation by the approved continuing airworthiness organisation when formally accepted by the DGCA after satisfactory completion of an airworthiness review under supervision.
- (c) The organisation shall ensure that aircraft airworthiness review staff can demonstrate appropriate recent continuing airworthiness management experience.
- (d) Airworthiness review staff shall be identified by listing each person in the continuing airworthiness management exposition together with their airworthiness review authorisation reference.
- (e) The organisation shall maintain a record of all airworthiness review staff, which shall include details of any appropriate qualification held together with a summary of relevant continuing airworthiness management experience and training and a copy of the authorisation. This record shall be retained until two years after the airworthiness review staff have left the organisation.

M.A.708 Continuing airworthiness management

- (a) All continuing airworthiness management shall be carried out according to the prescriptions of M.A Subpart C.
- (b) For every aircraft managed, the approved continuing airworthiness management organisation shall:
1. develop and control a maintenance programme for the aircraft managed including any applicable reliability programme,
 2. present the aircraft maintenance programme and its amendments to DGCA for approval and provide a copy of the programme to the owner of non commercially operated aircraft,
 3. manage the approval of modification and repairs,

4. ensure that all maintenance is carried out in accordance with the approved maintenance programme and released in accordance with M.A. Subpart H,
 5. ensure that all applicable airworthiness directives and operational directives with a continuing airworthiness impact, are applied,
 6. ensure that all defects discovered during scheduled maintenance or reported are corrected by an appropriately approved maintenance organisation,
 7. ensure that the aircraft is taken to an appropriately approved maintenance organisation whenever necessary,
 8. coordinate scheduled maintenance, the application of airworthiness directives, the replacement of service life limited parts, and component inspection to ensure the work is carried out properly,
 9. manage and archive all continuing airworthiness records and/or operator's technical log.
 10. ensure that the mass and balance statement reflects the current status of the aircraft.
- (c) In the case of commercial air transport, when the operator is not appropriately approved to CAR -145, the operator shall establish a written maintenance contract between the operator and a CAR 145 approved organisation or another operator, detailing the functions specified under M.A.301-2, M.A.301-3, M.A.301-5 and M.A.301-6, ensuring that all maintenance is ultimately carried out by a CAR 145 approved maintenance organisation and defining the support of the quality functions of M.A.71 2(b). The aircraft base, scheduled line maintenance and engine maintenance contracts, together with all amendments, shall be approved by the competent authority. However, in the case of:
1. an aircraft requiring unscheduled line maintenance, the contract may be in the form of individual work orders addressed to the CAR -145 maintenance organisation.
 2. component maintenance, including engine maintenance, the contract as referred to in paragraph (c) may be in the form of individual work orders addressed to the CAR -145 maintenance organisation.

M.A.709 Documentation

The approved continuing airworthiness management organisation shall hold and use applicable current M.A.401 maintenance data in the performance of M.A.708 continuing airworthiness tasks.

M.A.710 Airworthiness review

- (a) To satisfy the requirement for an M.A.902 airworthiness review of an aircraft, a full documented review of the aircraft records shall be carried out by the approved continuing airworthiness management organisation in order to be satisfied that:
1. airframe, engine and propeller flying hours and associated flight cycles

- have been properly recorded, and;
2. the flight manual is applicable to the aircraft configuration and reflects the latest revision status, and;
 3. all the maintenance due on the aircraft according to the approved maintenance programme has been carried out, and;
 4. all known defects have been corrected or, when applicable, carried forward in a controlled manner, and;
 5. all applicable airworthiness directives have been applied and properly registered, and;
 6. all modifications and repairs applied to the aircraft have been registered and are approved according to CAR 21, and;
 7. all service life limited components installed on the aircraft are properly identified, registered and have not exceeded their approved service life limit, and;
 8. all maintenance has been released in accordance with this CAR , and;
 9. the current mass and balance statement reflects the configuration of the aircraft and is valid, and;
 10. the aircraft complies with the latest revision of its type design approved by the DGCA.
- (b) The approved continuing airworthiness management organisation's airworthiness review staff shall carry out a physical survey of the aircraft. For this survey, airworthiness review staff not appropriately qualified to the licensing requirements shall be assisted by such qualified personnel.
- (c) Through the physical survey of the aircraft, the airworthiness review staff shall ensure that:
1. all required markings and placards are properly installed, and;
 2. the aircraft complies with its approved flight manual, and;
 3. the aircraft configuration complies with the approved documentation, and;
 4. no evident defect can be found that has not been addressed according to M.A.404, and;
 5. no inconsistencies can be found between the aircraft and the paragraph (a) documented review of records.
- (d) By derogation to M.A.902(a) the airworthiness review can be anticipated by a maximum period of 90 days without loss of continuity of the airworthiness review pattern, to allow the physical review to take place during a maintenance check.

- (e) An M.A.902 airworthiness review certificate (CA Form 1 5b) or a recommendation is issued by appropriately authorised M.A.707 airworthiness review staff on behalf of the approved continuing airworthiness management organisation when satisfied that the airworthiness review has been properly carried out.
- (f) A copy of any airworthiness review certificate issued or extended for an aircraft shall be sent to DGCA of that aircraft within 10 days.
- (g) Airworthiness review tasks shall not be sub-contracted.
- (h) Should the outcome of the airworthiness review be inconclusive, the competent authority shall be informed.

M.A.711 Privileges of the organisation

- (a) An approved continuing airworthiness management organisation, may:
 - 1. manage the continuing airworthiness of non-commercial air transport aircraft as listed on the approval certificate.
 - 2. manage the continuing airworthiness of commercial air transport aircraft when listed on its air operator certificate.
 - 3. arrange to carry out any task of continuing airworthiness within the limitation of its approval with another organisation that is working under its quality system.
- (b) An approved continuing airworthiness management organisation, may additionally be approved to:
 - 1. issue an airworthiness review certificate, or;
 - 2. make a recommendation for the airworthiness review to DGCA.
- (c) An organisation shall be registered in DGCA to be granted the privilege pursuant to paragraph (b).

M.A.712 Quality system

- (a) To ensure that the approved continuing airworthiness management organisation continues to meet the requirements of this Subpart, it shall establish a quality system and designate a quality manager to monitor compliance with, and the adequacy of, procedures required to ensure airworthy aircraft. Compliance monitoring shall include a feedback system to the accountable manager to ensure corrective action as necessary.
- (b) The quality system shall monitor M.A. Subpart G activities. It shall at least include the following functions:
 - 1. monitoring that all M.A. Subpart G activities are being performed in accordance with the approved procedures, and;

2. monitoring that all contracted maintenance is carried out in accordance with the contract, and;
 3. monitoring the continued compliance with the requirements of this CAR .
- (c) The records of these activities shall be stored for at least two years.
- (d) Where the approved continuing airworthiness management organisation is approved in accordance with another Part, the quality system may be combined with that required by the other CAR.
- (e) In case of commercial air transport the M.A. Subpart G quality system shall be an integrated part of the operator's quality system.
- (f) In the case of a small M.A. Subpart G organisation that does not have the privileges granted under M.A.71 1(b), the quality system can be replaced by performing organisational reviews on a regular basis.

M.A.713 Changes to the approved continuing airworthiness organisation

In order to enable the competent authority to determine continued compliance with this CAR, the approved continuing airworthiness management organisation shall notify it of any proposal to carry out any of the following changes, before such changes take place:

1. the name of the organisation.
2. the location of the organisation.
3. additional locations of the organisation.
4. the accountable manager.
5. any of the persons specified in M.A.706(c).
6. the facilities, procedures, work scope and staff that could affect the approval.

In the case of proposed changes in personnel not known to the management beforehand, these changes shall be notified at the earliest opportunity.

M.A.714 Record-keeping

- a) The continuing airworthiness management organisation shall record all details of work carried out. The records required by M.A.305 and if applicable M.A.306 shall be retained.
- b) If the continuing airworthiness management organisation has the privilege of M.A.711(b), it shall retain a copy of each airworthiness review certificate and recommendation issued, together with all supporting documents.
- c) The continuing airworthiness management organisation shall retain

a copy of all records listed in paragraph (b) until two years after the aircraft has been permanently withdrawn from service.

- d) The records shall be stored in a manner that ensures protection from damage, alteration and theft.
- e) All computer hardware used to ensure backup shall be stored in a different location from that containing the working data in an environment that ensures they remain in good condition.
- f) Where continuing airworthiness management of an aircraft is transferred to another organisation or person, all retained records shall be transferred to the said organisation or person. The time periods prescribed for the retention of records shall continue to apply to the said organisation or person.
- g) Where a continuing airworthiness management organisation terminates its operation, all retained records shall be transferred to the owner of the aircraft.

M.A.715 Continued validity of approval

- a) An approval shall be issued for an unlimited duration. It shall remain valid subject to:
 - 1. the organisation remaining in compliance with this CAR , in accordance with the provisions related to the hand-ling of findings as specified under M.B.705 and;
 - 2. the competent authority being granted access to the organisation to determine continued compliance with this CAR, and;
 - 3. the approval not being surrendered or revoked.
- (b) Upon surrender or revocation, the approval certificate shall be returned to DGCA.

M.A.716 Findings

- (a) A level 1 finding is any significant non-compliance with CAR -M requirements which lowers the safety standard and hazards seriously the flight safety.
- (b) A level 2 finding is any non-compliance with the CAR-M requirements which could lower the safety standard and possibly hazard the flight safety.
- (c) After receipt of notification of findings according to M.B.705, the holder of the continuing airworthiness management organisation approval shall define a corrective action plan and demonstrate

corrective action to the satisfaction of the competent authority within a period agreed with this authority.

SUBPART H

CERTIFICATE OF RELEASE TO SERVICE — CRS

M.A.801 Aircraft certificate of release to service

- (a) Except for aircraft released to service by a CAR -145 organisation, the certificate of release to service shall be issued according to this Subpart.
- (b) A certificate of release to service shall be issued before flight at the completion of any maintenance. When satisfied that all maintenance required has been properly carried out, a certificate of release to service shall be issued:
 - 1. By appropriate certifying staff on behalf of the M.A. Subpart F approved maintenance organisation; or
 - 2. Except for complex maintenance tasks listed in Appendix 7, by certifying staff in compliance with the DGCA licensing requirements; or
 - 3. By the M.A.803 pilot-owner.

In the case of a release to service under (b)2 the certifying staff may be assisted in the execution of the maintenance task by one or more persons under his direct and continuous control.

A certificate of release to service shall contain basic details of the maintenance carried out, the date such maintenance was completed and:

- 1. the identity including approval reference of the M.A. Subpart F approved maintenance organisation and certifying staff issuing such a certificate; or
- 2. in the case of subparagraph (b)2 certificate of release to service, the identity and if applicable licenses number of the certifying staff issuing a certificate. Notwithstanding paragraph (b) in the case of such incomplete maintenance, such fact shall be entered in the aircraft certificate of release to service before the issue of such certificate.

A certificate of release to service shall not be issued in the case of any known non-compliance which hazards seriously the flight safety.

M.A.802 Component certificate of release to service

- (a) A certificate of release to service shall be issued at the completion of any maintenance on an aircraft component whilst off the aircraft.

- (b) The authorised release certificate identified as CA Form 1 constitutes the aircraft component certificate of release to service.

M.A.803 Pilot-owner authorisation

- (a) The pilot-owner is the person who owns or jointly owns the aircraft being maintained and holds a valid pilot licence with the appropriate type or class rating.
- (b) For any privately operated aircraft of simple design with a maximum take-off mass of less than 2730 kg, glider and balloon, the pilot-owner may issue the certificate of release to service after limited pilot owner maintenance listed in Appendix VIII.
- (c) Limited pilot owner maintenance shall be defined in the M.A.302 aircraft maintenance programme.
- (d) The certificate of release to service must be entered in the logbooks and contain basic details of the maintenance carried out, the date such maintenance was completed and the identity and pilot licence number of the pilot-owner issuing such a certificate.

SUBPART I

AIRWORTHINESS REVIEW CERTIFICATE

M.A.901 Aircraft airworthiness review

To ensure the validity of the aircraft airworthiness certificate an airworthiness review of the aircraft and its continuing airworthiness records must be carried out periodically.

- (a) An airworthiness review certificate is issued in accordance with Appendix III (CA Form 1 5a or 1 5b) on completion of a satisfactory airworthiness review and is valid for one year.
- (b) An aircraft in a controlled environment is an aircraft continuously managed by an M.A. Subpart G approved continuing airworthiness management organisation, which has not changed organisations in the previous 12 months, and which is maintained by approved maintenance organisations. This includes M.A.803(b) maintenance carried out and released to service according to M.A.801(b)2 or M.A.801(b)3.
- (c) If an aircraft is within a controlled environment, the continuing airworthiness management organisation managing the aircraft may if appropriately approved:
 1. issue the airworthiness review certificate in accordance with M.A.710, and;
 2. for airworthiness review certificates it has issued, when the aircraft has remained within a controlled environment, extend twice the validity of the airworthiness review certificate for a period of one year

each time. An airworthiness review certificate shall not be extended if the organisation is aware or has reason to believe that the aircraft is unairworthy.

- (d) If an aircraft is not within a controlled environment, or managed by an M.A. Subpart G approved continuing airworthiness management organisation that does not hold the privilege to carry out airworthiness reviews, the airworthiness review certificate shall be issued by DGCA following a satisfactory assessment based on a recommendation made by an appropriately approved continuing airworthiness management organisation sent together with the application from the owner or operator. This recommendation shall be based on an airworthiness review carried out in accordance with M.A.710.
- (e) Whenever circumstances show the existence of a potential safety threat, the competent authority may decide to carry out the airworthiness review and issue the airworthiness review certificate itself. In this case, the owner or operator shall provide the competent authority with:
- the documentation required by the competent authority,
 - suitable accommodation at the appropriate location for its personnel, and
 - when necessary the support of personnel appropriately qualified in accordance with DGCA licensing requirements.

M.A.902 Validity of the airworthiness review certificate

- (a) An airworthiness review certificate becomes invalid if:
1. suspended or revoked; or
 2. the airworthiness certificate is suspended or revoked; or
 3. the aircraft is not on the aircraft register of DGCA; or
 4. the type certificate under which the airworthiness certificate was issued is suspended or revoked.
- (b) An aircraft must not fly if the airworthiness certificate is invalid or if:
1. the continuing airworthiness of the aircraft or any component fitted to the aircraft does not meet the requirements of this CAR, or;
 2. the aircraft does not remain in conformity with the type design approved/accepted by the DGCA; or
 3. the aircraft has been operated beyond the limitations of the approved flight manual or the airworthiness certificate, without appropriate action being taken; or
 4. the aircraft has been involved in an accident or incident that affects the airworthiness of the aircraft, without subsequent

appropriate action to restore airworthiness; or

5. a modification or repair has not been approved in accordance with F Part III.

Upon surrender or revocation, the airworthiness review certificate shall be returned to DGCA

M.A.903 Transfer of aircraft registration within India

- (a) When transferring an aircraft registration within India, the applicant shall:
 1. inform DGCA;
 2. apply to DGCAe for the issuance of a new airworthiness certificate in accordance with F Part III.
- (b) Notwithstanding M.A.902(a)(3), the former airworthiness review certificate shall remain valid until its expiry date.

M.A.904 Airworthiness review of aircraft imported into India

- (a) When importing an aircraft into India from a third country, the applicant shall:
 1. apply to DGCA of registry for the issuance of a new airworthiness certificate in accordance with F Part III ; and
 2. have an airworthiness review carried out by an appropriately approved continuing airworthiness management organisation; and
 3. have all maintenance as requested by the continuing airworthiness management organisation carried out.
- (b) When satisfied that the aircraft is in compliance with the relevant requirements, the continuing airworthiness management organisation shall send a documented recommendation for the issuance of an airworthiness review certificate to DGCA.
- (c) The owner shall allow access to the aircraft for inspection by the DGCA.
- (d) A new airworthiness certificate will be issued by the D.G.C.A of registry when it is satisfied the aircraft complies with the prescriptions of F Part III
- (e) DGCA shall also issue the airworthiness review certificate valid normally for one year unless the D.G.C.A has safety reason to limit the validity.

M.A.905 Findings

- (a) A level 1 finding is any significant non-compliance with CAR -M requirements which lowers the safety standard and hazards seriously the flight safety.
- (b) A level 2 finding is any non-compliance with the CAR -M requirements which could lower the safety standard and possibly hazard the flight safety.

- (c) After receipt of notification of findings according to M.B.303, the person or organisation accountable according to M.A.201 shall define a corrective action plan and demonstrate corrective action to the satisfaction of the DGCA office within a period agreed with this authority including appropriate corrective action to prevent reoccurrence of the finding and its root cause.

DRAFT

*Appendix I***Continuing Airworthiness Arrangement**

1. When an owner contracts an M.A. Subpart G approved continuing airworthiness organisation in accordance with M.A.201 to carry out continuing airworthiness management tasks, upon request by the competent authority a copy of the arrangement shall be sent by the owner to the competent authority of the D.G.C.A of registry once it has been signed by both parties.
2. The arrangement shall be developed taking into account the requirements of CAR M and shall define the obligations of the signatories in relation to continuing airworthiness of the aircraft.
3. It shall contain as a minimum the:
 - aircraft registration,
 - aircraft type,
 - aircraft serial number,
 - aircraft owner or registered lessee's name or company details including the address, M.A. Subpart G approved continuing airworthiness organisation details including the address.
4. It shall state the following:

‘The owner entrusts to the approved organisation the management of the continuing airworthiness of the aircraft, the development of a maintenance programme that shall be approved by the airworthiness authorities of the D.G.C.A where the aircraft is registered, and the organisation of the maintenance of the aircraft according to said maintenance programme in an approved organisation.

According to the present arrangement, both signatories undertake to follow the respective obligations of this arrangement.

The owner certifies, to the best of their belief that all the information given to the approved organisation concerning the continuing airworthiness of the aircraft is and will be accurate and that the aircraft will not be altered without prior approval of the approved organisation.

In case of any non-conformity with this arrangement, by either of the signatories, it will become null. In such a case, the owner will retain full responsibility for every task linked to the continuing airworthiness of the aircraft and the owner will undertake to inform the competent authorities of the D.G.C.A of registry within two full weeks.’

5. When an owner contracts an M.A. Subpart G approved continuing airworthiness organisation in accordance with M.A.201 the obligations of each party shall be shared as follows:

- 5.1. Obligations of the approved organisation:
1. have the aircraft's type in the scope of its approval;
 2. respect the conditions to maintain the continuing airworthiness of the aircraft listed below:
 - develop a maintenance programme for the aircraft, including any reliability programme developed,
 - organise the approval of the aircraft's maintenance programme,
 - once it has been approved, give a copy of the aircraft's maintenance programme to the owner,
 - organise a bridging inspection with the aircraft's prior maintenance programme,
 - organise for all maintenance to be carried out by an approved maintenance organisation,
 - organise for all applicable airworthiness directives to be applied,
 - organise for all defects discovered during scheduled maintenance or reported by the owner to be corrected by an approved maintenance organisation,
 - coordinate scheduled maintenance, the application of airworthiness directives, the replacement of life limited parts, and component inspection requirements,
 - inform the owner each time the aircraft shall be brought to an approved maintenance organisation,
 - manage all technical records,
 - archive all technical records;
 3. organize the approval of all and any modification to the aircraft according to CAR 21 before it is embodied;
 4. organize the approval of all and any repair to the aircraft according to CAR 21 before it is carried out;
 5. inform the airworthiness D.G.C.A of registry whenever the aircraft is not presented to the approved maintenance organisation by the owner as requested by the approved organisation;
 6. inform the airworthiness authorities of the D.G.C.A of registry whenever the present arrangement has not been respected;
 7. carry out the airworthiness review of the aircraft when necessary and fill the airworthiness review certificate or the recommendation to the D.G.C.A of registry;
 8. carry out all occurrence reporting mandated by applicable regulations;

9. inform the authorities of the D.G.C.A of registry whenever the present arrangement is denounced by either party.

5.2. Obligations of the owner:

1. have a general understanding of the approved maintenance programme;
2. have a general understanding of CAR M;
3. present the aircraft to the approved maintenance organisation agreed with the approved organisation at the due time designated by the approved organisation's request;
4. not modify the aircraft without first consulting the approved organisation;
5. inform the approved organisation of all maintenance exceptionally carried out without the knowledge and control of the approved organisation;
6. report to the approved organisation through the logbook all defects found during operations;
7. inform the authorities of the D.G.C.A of registry whenever the present arrangement is denounced by either party;
8. inform the authorities of the D.G.C.A of registry and the approved organisation whenever the aircraft is sold;
9. carry out all occurrence reporting mandated by applicable regulations.

*Use of the CA Form 1 for maintenance***1. GENERAL**

The certificate shall comply with the format attached including block numbers in that each block must be located as per the layout. The size of each block may however be varied to suit the individual application, but not to the extent that would make the certificate unrecognisable. The overall size of the certificate may be significantly increased or decreased so long as the certificate remains recognisable and legible. If in doubt consult your D.G.C.A.RAO.

All printing shall be clear and legible to permit easy reading.

The certificate, shall either be pre-printed or computer generated but in either case the printing of lines and characters must be clear and legible. Pre-printed wording is permitted in accordance with the attached model but no other certification statements are permitted.

Completion of the certificate may be in English

The details to be entered on the certificate can be either machine/computer printed or handwriting using block letters and must permit easy reading.

Abbreviations must be restricted to a minimum.

The space remaining on the reverse side of the certificate may be used by the originator for any additional information but must not include any certification statement.

The original certificate must accompany the items and correlation must be established between the certificate and the items. A copy of the certificate must be retained by the organisation that manufactured or maintained the item. Where the certificate format and data is entirely computer generated, subject to acceptance by the D.G.C.A, it is permissible to retain the certificate format and data on a secure database.

Where a single certificate was used to release a number of items and those items are subsequently separated out from each other, such as through a parts distributor, then a copy of the original certificate must accompany such items and the original certificate must be retained by the organisation that received the batch of items. Failure to retain the original certificate could invalidate the release status of the items.

NOTE: There is no restriction in the number of copies of the certificate sent to the customer or retained by the originator.

The certificate that accompanies the item may be attached to the item by being placed in an envelope for durability.

2. COMPLETION OF THE RELEASE CERTIFICATE BY THE ORIGINATOR

Except as otherwise stated, there must be an entry in all blocks to make the document a valid certificate.

Block 1 The name and country of the D.G.C.A under whose approval the certificate was issued. This information may be pre-printed.

Block 2 Pre-printed 'Authorised Release certificate/CA Form 1'.

Block 3 A unique number shall be pre-printed in this block for certificate control and traceability purposes except that in the case of a computer generated document, the unique number need not be pre-printed where the computer is programmed to produce the number.

Block 4 The full name and address plus mailing address if different of the approved organisation releasing the items covered by this certificate. This block may be pre-printed. Logos, etc., are permitted if the logo can be contained within the block.

Block 5 Its purpose is to reference work order/contract/invoice or any other internal organisational process such that a fast traceability system can be established.*Block 6* This block is provided for the convenience of the organisation issuing the certificate to permit easy cross-reference to the 'Remarks' Block 13 by the use of item numbers. Completion is not mandatory.

Where a number of items are to be released on the certificate, it is permissible to use a separate listing cross-referring certificate and list to each other.

Block 7 The name or description of the item shall be given. Preference shall be given to use of the Illustrated Parts Catalogue (IPC) designation.

Block 8 State the Part Number. Preference shall be given to use of the IPC number designation.

Block 9 Used to indicate the Type-Approved products for which the released items are eligible for installation. Completion of block is optional but if used, the following entries are permitted:

- (a) The specific or series aircraft, engine, propeller or auxiliary power unit model, or a reference to a readily available catalogue or manual which contains such information, for example: 'Cessna 150'.
- (b) 'Various', if known to be eligible for installation on more than one model of Type-Approved product, unless the originator wishes to restrict usage to a particular model installation when it shall so

state.

- (c) 'Unknown', if eligibility is unknown, this category being primarily for use by maintenance organisations

NOTE: Any information in Block 9 does not constitute authority to fit the item to a particular aircraft, engine, propeller or auxiliary power unit. The User/installer shall confirm via documents such as the Parts Catalogue, Service Bulletins, etc. that the item is eligible for the particular installation.

Block 10 State the number of items being released.

Block 11 State the item Serial Number and/or Batch Number if applicable, if neither is applicable, state 'N/A'.

Block 12 The following words in quotation marks, with their definitions, indicate the status of the item being released. One or a combination of these words shall be stated in this block:

1. OVERHAULED

The restoration of a used item by inspection, test and replacement in conformity with an approved standard (*) to extend the operational life.

2. INSPECTED/TESTED

The examination of an item to establish conformity with an approved standard (*).

3. MODIFIED

The alteration of an item in conformity with an approved standard (*).

4. REPAIRED The restoration of an item to a serviceable condition in conformity with an approved standard (*).

5. RETREADED The restoration of a used tyre in conformity with an approved standard (*).

6. REASSEMBLED

The reassembly of an item in conformity with an approved standard (*).

Example: A propeller after transportation.

NOTE: This provision shall only be used in respect of items which were originally fully assembled by the manufacturer in accordance with manufacturing requirements such as, but not limited to, Part-CAR 21.

(*) Approved standard means manufacturing / design /maintenance / quality standard approved by the competent authority

The above statements shall be supported by reference in Block 13 to the approved data/manual/specification used during maintenance.

Block 13 It is mandatory to state any information in this block either direct or by reference to supporting documentation that identifies particular data or limitations relating to the items being released that are necessary for the

User/ installer to make the final airworthiness determination of the item. Information shall be clear, complete, and provided in a form and manner which is adequate for the purpose of making such a determination.

Each statement shall be clearly identified as to which item it relates. If there is no statement, state 'None'.

Some examples of the information to be quoted are as follows:

- The identity and issue of maintenance documentation used as the approved standard.
- Airworthiness Directives carried out and/or found carried out, as appropriate.
- Repairs carried out and/or found carried out, as appropriate.
- Modifications carried out and/or found carried out, as appropriate.
- Replacement parts installed and/or parts found installed, as appropriate.
- Life limited parts history.
- Deviations from the customer work order.
- M.A. Subpart F approval reference.
- Identity of other regulation if not CAR 145 or CAR M Subpart F.
- Release statements to satisfy a foreign maintenance requirement.
- Release statements to satisfy the conditions of an international maintenance agreement such as, but not limited to, the Canadian Technical Arrangement Maintenance and the USA Bilateral Aviation Safety Agreement — Maintenance Implementation Procedure.

Blocks 14, 15, 16, 17 & 18: Must not be used for maintenance tasks by M.A. Subpart F approved maintenance organisations. These blocks are specifically reserved for the release/certification of newly manufactured items in accordance with CAR 21 and national aviation regulations in force prior to CAR 21 becoming fully effective.

Block 19 Contains the required release to service statement for all maintenance by M.A. Subpart F approved maintenance organisations. When non CAR M maintenance is being released block 13 shall specify the particular national regulation. In any case the appropriate box shall be 'ticked' to validate the release.

The certification statement 'except as otherwise specified in block 13' is intended to address the following situations;

- (a) The case where the maintenance could not be completed.
- (b) The case where the maintenance deviated from the standard required by CAR M.
- (c) The case where the maintenance was carried out in accordance with a non CAR M requirement. Whichever case or combination of cases shall be specified in block 13.

Block 20 For the signature of the certifying staff authorised by the M.A. Subpart F approved maintenance organisation. This signature can be computer printed subject to the D.G.C.A being satisfied that only the signatory can direct the computer and that a signature is not possible on a blank computer generated form.

Block 21 The M.A. Subpart F approved maintenance organisation reference number given by the D.G.C.A. *Block 22* The printed name of the Block 20 signatory and personal authorisation reference.

Block 23 The date of signing the Block 19 release to service. (d/m/y). The month shall appear in letters e.g. Jan, Feb, Mar etc. The release to service shall be signed at the 'completion of maintenance'.

Please note the User Responsibility Statements are on the reverse of this certificate. These statements may be added to the front of the certificate below the bottom line by reducing the depth of the form.

DGCA		2. AUTHORISED RELEASE CERTIFICATE CA Form 1				3.. Form Tracking Number	
4. Approved Organization Name and Address:						5. Work Order/ contract/ Invoice	
5. Item	7. Description	8. Part No	9. Eligibility	10. Qty	11. Serial/Branch No	12. Status/ Work	
3. Remark							
4. Certificate that items identified above were manufactured in conformity to: -approved design data and are in condition for safe operation non-approved design data specified in block 13.				19. CAR 145.A.50 Release to service Other regulation specified in block 13. Certifies that unless otherwise specified in block 13, the work identified in block 12 and described in block 13, was accomplished in accordance with CAR 145 and in respect to that work the items are considered ready for release to service.			
5. Authorized Signature		16. Approval/Authorization Number		20. Authorized Signature		21. Certificate/Approval Ref. No.	
7. Name		18. Date(d/m/y)		22. Name		23. Date (d/m/y)	

Authorised release certificate

CA Form I

USER/INSTALLER RESPONSIBILITIES

NOTE:

1. It is Important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly.
 2. Where the user/installer works in accordance with the national regulations of an airworthiness authority different from the airworthiness authority specified in block I it is essential that the user/installer ensures that his/her airworthiness authority accepts parts/components/assemblies from the airworthiness authority specified in block I.
 3. Statements 14 and 19 do not constitute installation certification. In all cases the aircraft maintenance record shall contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.
-

DGCA	AIRWORTHINESS REVIEW CERTIFICATE	ARC REFERENCE AA-G1- 000
-------------	---	-------------------------------------

Pursuant to DGCA regulations being in force.

[COMPANY NAME] CAR M SECTION A SUBPART G ORGANISATION
REFERENCE:MS-G1-000

has performed an airworthiness review according to M.A. 710 on the following aircraft.

Aircraft Manufacturer

Manufacturer's designation

Aircraft Registration

Aircraft serial Number

The aircraft is considered to be airworthy at the time of the review.

Date of issue Date of Expiry

Signed Authorisation No

1st Extension: The aircraft has remained in a controlled environment according to M.A.901 for the last year. The aircraft is considered to be airworthy at the time of the issue.

Date of Issue:Date of expiry:.....

Signed:.....Authorisation No:.....

2nd Extension: The aircraft has remained in a controlled environment according to M.A.901 for the last year. The aircraft is considered to be airworthy at the time of the issue.

Date of issue:.....Date of expiry:.....

Signed:.....Authorisation No:.....

DGCA

AIRWORTHINESS REVIEW CERTIFICATE

ARC REFERENCE:

Pursuant to DGCA regulations being in force

Aircraft Manufacturer

Manufacturer's designation

Aircraft Registration

Aircraft serial Number

is considered to be airworthy at the time of the issue.

Date of issue Date of Expiry

Signed Authorisation No

CA Form 15a

*Appendix IV***Approval Ratings****ORGANISATION APPROVAL CLASS AND RATING SYSTEM**

1. Except as stated otherwise for the smallest organisation in paragraph 11, Table 1 outlines the full extent of approval possible under M.A. Subpart F in a standardised form. An organisation must be granted an approval ranging from a single class and rating with limitations to all classes and ratings with limitations.
2. In addition to Table 1 the M.A. Subpart F approved maintenance organisation is required by Subpart-F to indicate scope of work in the maintenance organisation exposition. See also paragraph 10.
3. Within the approval class(es) and rating(s) granted by the D.G.C.A, the scope of work specified in the maintenance organisation exposition defines the exact limits of approval. It is therefore essential that the approval class(es) and rating(s) and the organisation's scope of work are compatible.
4. A category A class rating means that the M.A. Subpart F approved maintenance organisation may carry out maintenance on the aircraft and any component (including engines/APUs) only whilst such components are fitted to the aircraft except that such components can be temporarily removed for maintenance when such removal is expressly permitted by the aircraft maintenance manual to improve access for maintenance subject to a control procedure in the maintenance organisation exposition acceptable to the D.G.C.A The limitation section will specify the scope of such maintenance thereby indicating the extent of approval.
5. A category B class rating means that the M.A. Subpart F approved maintenance organisation may carry out maintenance on the uninstalled engine/APU ('Auxiliary Power Unit') and engine/APU components only whilst such components are fitted to the engine/APU except that such components can be temporarily removed for maintenance when such removal is expressly permitted by the engine/APU manual to improve access for maintenance. The limitation section will specify the scope of such maintenance thereby indicating the extent of approval. A M.A. Subpart F approved maintenance organisation with a category B class rating may also carry out maintenance on an installed engine during 'base' and 'line' maintenance subject to a control procedure in the maintenance organisation exposition. The maintenance organisation exposition scope of work shall reflect such activity where permitted by the D.G.C.A.
6. A category C class rating means that the M.A. Subpart F approved maintenance organisation may carry out maintenance on uninstalled components (excluding engines and APUs) intended for fitment to the aircraft or engine/APU. The limitation section will specify the scope of such maintenance thereby indicating the extent of approval. A Subpart-F approved maintenance organisation with a category C class rating may also carry out maintenance on an installed component during base and line maintenance or at an engine/APU maintenance facility subject to a control procedure in the maintenance organisation exposition. The maintenance organisation exposition scope of work shall reflect such activity where permitted by the D.G.C.A.

7. A category D class rating is a self contained class rating not necessarily related to a specific aircraft, engine or other component. The D1 — Non-Destructive Testing (NDT) rating is only necessary for a Subpart-F approved maintenance organisation that carries out NDT as a particular task for another organisation. A M.A. Subpart F approved maintenance organisation with a class rating in A or B or C category may carry out NDT on products it is maintaining subject to the maintenance organisation exposition containing NDT procedures, without the need for a D1 class rating.
8. The 'limitation' section is intended to give the D.G.C.A maximum flexibility to customise the approval to a particular organisation. Table 1 specifies the types of limitation possible and whilst maintenance is listed last in each class rating it is acceptable to stress the maintenance task rather than the aircraft or engine type or manufacturer, if this is more appropriate to the organisation. An example could be avionic systems installations and maintenance.
9. Table 1 makes reference to series, type and group in the limitation section of class A and B. Series means a specific type series such as Cessna 150 or Cessna 172 or Beech 55 series or continental O-200 series etc. Type means a specific type or model such as Cessna 1 72RG type. Any number of series or types may be quoted. Group means for example Cessna single piston engined aircraft or Lycoming non-supercharged piston engines etc.
10. When a lengthy capability list is used which could be subject to frequent amendment, then such amendment shall be in accordance with a procedure acceptable to the D.G.C.A and included in the maintenance organisation exposition. The procedure shall address the issues of who is responsible for capability list amendment control and the actions that need to be taken for amendment. Such actions include ensuring compliance with Subpart-F for products or services added to the list.
11. A M.A. Subpart F approved maintenance organisation which employs only one person to both plan and carry out all maintenance can only hold a limited scope of approval rating. The maximum permissible limits are:-

CLASS AIRCRAFT	RATING A2 AEROPLANES	PISTON ENGINED 5700 KG AND BELOW
CLASS AIRCRAFT	RATING A3 SINGLE ENGINED HELICOPTERS	PISTON ENGINED 3175 KG AND BELOW
CLASS AIRCRAFT	RATING A4 AIRCRAFT OTHER THAN A1, A2 AND A3	NO LIMITATION
CLASS ENGINES	RATING B2 PISTON	LESS THAN 450 HP
CLASS COMPONENTS RATING OTHER THAN COMPLETE ENGINES ORAPUs	C1 TO C20	AS PER CAPABILITY LIST
CLASS SPECIALISED	D1 NDT	NDT METHOD(S) TO BE SPECIFIED

It should be noted that such an organisation may be further limited by the competent authority in the scope of approval dependent upon the capability of the particular organisation.

Table 1

CLASS	RATING	LIMITATION
AIRCRAFT	A2 Aeroplanes 5 700 kg and below	Will state aeroplane manufacturer or group or series or type and/or the maintenance tasks
	A3 Single engined Helicopters	Will state helicopter manufacturer or group or series or type and/or the maintenance task(s)
	A4 Aircraft other than A1, A2 and A3	Will state aircraft series or type and/or the maintenance task(s)
ENGINES	B1 Turbine	Will state engine series or type and/or the maintenance task(s)
	B2 Piston	Will state engine manufacturer or group or series or type and/or the maintenance task(s)
	B3 APU	Will state engine manufacturer or series or type and/or the maintenance task(s)

CLASS	RATING	LIMITATION
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C1 Air Cond & Press	Will state aircraft type or aircraft manufacturer or component manufacturer or the particular component and/or cross refer to a capability list in the exposition and/or the maintenance task(s)
	C2 Auto Flight	
	C3 Comms and Nav	
	C4 Doors — Hatches	
	C5 Electrical Power	
	C6 Equipment	
	C7 Engine — APU	
	C8 Flight Controls	
	C9 Fuel — Airframe	
	C10 Helicopter — Rotors	
	C11 Helicopter — Trans	
	C12 Hydraulic	
	C13 Instruments	
	C14 Landing Gear	
	C15 Oxygen	
	C16 Propellers	
	C17 Pneumatic	
	C18 Protection ice/rain/	
	C19 Windows	
	C20 Structural	
SPECIALISED SERVICES	D1 Non- Destructive	Will state particular NDT method(s)

Appendix V

Approval Certificate CAR M Section A Subpart F Maintenance Organisation

Page 1 of

DGCA

APPROVAL CERTIFICATE

REFERENCE:

Pursuant to DGCA regulation for the time being in force and subject to the condition specified below, DGCA hereby certifies.

[COMPANY NAME] MAINTENANCE ORGANISATION

As a maintenance organization as referred to in CAR M Section A subpart F approved to maintain the products listed in the attached approval schedule and issue related certificates of release to service using the above reference.

CONDITION:

1. This approval is limited to that specified in the scope of approval section of the approved maintenance organization manual, and
2. This approval required compliance with the procedures specified in the approved maintenance organization manual, and
3. This approval is valid whilst, the approved maintenance organization remains in compliance with CAR M.
4. Subject to compliance with the foregoing conditions, this approval shall remain valid unless the approval has previously been surrendered, superseded, suspended or revoked.

Date of issue Signed

Date of attached schedule of Approval For DGCA

Page 2 of
APPROVAL SCHEDULE

Organisation name: **[COMPANY NAME] MAINTENANCE SCHEDULE]**

Reference:

CLASS	RATING	LIMITATION
AIRCRAFT	A2: Aeroplanes /	DHC 6 Twin Other Series
	A3: Single engined helicopters	Robinson R44
ENGINES	B1: Turbine	PT6a Series
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C1: Air Cond. & Press	DHC 6
	C2: Auto Flight	Sperry
	C5: Electrical Power	DHC 6
	C6: Equipment	DHC 6 Emergency
	C7: Engine -APU	PT6A Fuel Control
	C16: Propellers	Fixed pitch and DHC 6
SPECIALISED SERVICES	D1:Non-Destructive Inspection	All Types

This approval schedule is limited to those products and activities specified in the scope of approval section contained in CAR M Section A Subpart F approved maintenance organization manual,

Reference

Date of issue

Signed

For DGCA

Appendix VI

Approval certificate CAR M Section A Subpart G Continuing Airworthiness Management Organisation

DGCA

APPROVAL CERTIFICATE

REFERENCE

Pursuant to DGCA regulation for the time being in force and subject to the condition specified below, DGCA hereby certifies.

[COMPANY NAME] CONTINUING AIRWORTHINESS MANAGEMENT ORGANISATION

As a continuing airworthiness management organization as referred to CAR M Section A Subpart G approved to manage the continuing airworthiness of the following aircraft and to issue recommendations or airworthiness review certificate after an airworthiness Review as specified in M.A.710 when stipulated.

Aircraft type	Approved maintenance programme reference	Airworthiness review authorized	Organization(s) working under the quality system
	, As revised	Yes	
	, As revised	Yes	
	, As revised	Yes	
	, As revised	Yes	
	, As revised	No	
	, As revised	Yes	
	, As revised	Yes	
	, As revised	Yes	
	, As revised	Yes	
	, As revised	Yes	

CA Form 14

CONDITIONS:

1. This approval is limited to that specified in the scope of approval section of the approved continuing airworthiness management exposition as referred to in CAR M. Section A Subpart G, and
2. This approval requires compliance with the procedures specified in the approved continuing airworthiness management organization exposition, and
3. This approval is valid whilst the approved continuing airworthiness management organization remains in compliance with CAR M.
4. Subject to compliance with the foregoing conditions, this approval shall remain valid unless the approval has previously been surrendered, superseded, suspended or revoked.

If this form is also used for AOC holders, the AOC number shall be used as the reference and the following extra conditions shall be added:

5. This approval does not constitute an authorization to operate the types of aircraft listed above. the authorization to operate the aircraft is the Air Operator Certificate (AOC).
6. This approval is limited to the aircraft registrations specified in the AOC.
7. This approval is valid whilst the Operator remains in compliance with CAR M Section A Subpart G and that the applicable aircraft maintenance programme, M.E.L. and aircraft log-books remain approved.
8. Subject to compliance with the foregoing conditions, this approval shall remain valid unless the approval has previously been suspended or revoked.
9. Where the technical services organization is different to the Operator, this approval remains valid subject to such organization(s) fulfilling applicable contractual obligations.
10. Termination, suspension or revocation of the AOC automatically invalidates the present approval.

Date _____ of _____
issue:.....Signed.....
.....

Date _____ of _____ revision:.....For
DGCA.....

*Appendix VII***Complex Maintenance Tasks**

The following constitutes the complex maintenance tasks referred to in M.A.801(b), 2

1. The modification, repair or replacement by riveting, bonding, laminating, or welding of any of the following airframe parts:

- a) a box beam;
- b) a wing stringer or chord member;
- c) a spar;
- d) a spar flange;
- e) a member of a truss-type beam;
- f) the web of a beam;
- g) a keel or chine member of a flying boat hull or a float;
- h) a corrugated sheet compression member in a wing or tail surface;
- i) a wing main rib;
- j) a wing or tail surface brace strut;
- k) an engine mount;
- l) a fuselage longeron or frame;
- m) a member of a side truss, horizontal truss or bulkhead;
- n) a seat support brace or bracket;
- o) a seat rail replacement;
- p) a landing gear strut or brace strut;
- q) an axle;
- r) a wheel; and
- s) a ski or ski pedestal, excluding the replacement of a low-friction coating.

2. The modification or repair of any of the following parts:

- a) aircraft skin, or the skin of an aircraft float, if the work requires the use of a support, jig or fixture;
- b) aircraft skin that is subject to pressurization loads, if the damage to the skin measures more than 15 cm (6 inches) in any direction;
- c) a load-bearing part of a control system, including a control column, pedal, shaft, quadrant, bell crank, torque tube, control horn and forged or cast bracket, but excluding
 - i) the swaging of a repair splice or cable fitting, and
 - ii) the replacement of a push-pull tube end fitting that is attached by riveting; and
- (d) any other structure, not listed in (1), that a manufacturer has identified as primary structure in its maintenance manual, structural repair manual or instructions for continuing airworthiness.

Appendix VIII
Limited Pilot Owner Maintenance

The following constitutes the limited pilot maintenance referred to in M.A.803 provided it does not involve complex maintenance tasks and is carried out in accordance with M.A.402:

1. Removal, installation of wheels.
2. Replacing elastic shock absorber cords on landing gear.
3. Servicing landing gear shock struts by adding oil, air, or both.
4. Servicing landing gear wheel bearings, such as cleaning and greasing.
5. Replacing defective safety wiring or cotter keys.
6. Lubrication not requiring disassembly other than removal of non-structural items such as cover plates, cowlings, and fairings.
7. Making simple fabric patches not requiring rib stitching or the removal of structural parts or control surfaces. In the case of balloons, the making of small fabric repairs to envelopes (as defined in, and in accordance with, the balloon manufacturers' instructions) not requiring load tape repair or replacement.
8. Replenishing hydraulic fluid in the hydraulic reservoir.
9. Refinishing decorative coating of fuselage, balloon baskets, wings tail group surfaces (excluding balanced control surfaces), fairings, cowlings, landing gear, cabin, or cockpit interior when removal or disassembly of any primary structure or operating system is not required.
10. Applying preservative or protective material to components where no disassembly of any primary structure or operating system is involved and where such coating is not prohibited or is not contrary to good practices.
11. Repairing upholstery and decorative furnishings of the cabin, cockpit, or balloon basket interior when the repairing does not require disassembly of any primary structure or operating system or interfere with an operating system or affect the primary structure of the aircraft.
12. Making small simple repairs to fairings, non-structural cover plates, cowlings, and small patches and reinforcements not changing the contour so as to interfere with proper air flow.
13. Replacing side windows where that work does not interfere with the structure or any operating system such as controls, electrical equipment, etc.
14. Replacing safety belts.
15. Replacing seats or seat parts with replacement parts approved for the aircraft, not involving disassembly of any primary structure or operating system.
16. Trouble shooting and repairing broken circuits in landing light wiring

circuits.

17. Replacing bulbs, reflectors, and lenses of position and landing lights.
18. Replacing wheels and skis where no weight and balance computation is involved.
19. Replacing any cowling not requiring removal of the propeller or disconnection of flight controls.
20. Replacing or cleaning spark plugs and setting of spark plug gap clearance.
21. Replacing any hose connection except hydraulic connections.
22. Replacing prefabricated fuel lines.
23. Cleaning or replacing fuel and oil strainers or filter elements.
24. Replacing and servicing batteries.
25. Cleaning of balloon burner pilot and main nozzles in accordance with the balloon manufacturer's instructions.
26. Replacement or adjustment of non-structural standard fasteners incidental to operations.
27. The interchange of balloon baskets and burners on envelopes when the basket or burner is designated as inter-changeable in the balloon type certificate data and the baskets and burners are specifically designed for quick removal and installation.
28. The installations of anti-misfuelling devices to reduce the diameter of fuel tank filler openings provided the specific device has been made a part of the aircraft type certificate data by the aircraft manufacturer, the aircraft manufacturer has provided instructions for installation of the specific device, and installation does not involve the disassembly of the existing tank filler opening.
29. Removing, checking, and replacing magnetic chip detectors.
30. Removing and replacing self-contained, front instrument panel-mounted navigation and communication devices that employ tray-mounted connectors that connect the unit when the unit is installed into the instrument panel, (excluding automatic flight control systems, transponders, and microwave frequency distance measuring equipment (DME)). The approved unit must be designed to be readily and repeatedly removed and replaced, not require specialist test equipment and pertinent instructions must be provided. Prior to the unit's intended use, an operational check must be performed.
31. Updating self-contained, front instrument panel-mounted Air Traffic Control (ATC) navigational software databases (excluding those of automatic flight control systems, transponders, and microwave frequency distance measuring equipment (DME)) provided no disassembly of the unit is required and pertinent instructions are provided. Prior to the unit's intended use, an operational check must be performed.

32. Replacement of wings and tail surfaces and controls, the attachment of which are designed for assembly immediately before each flight and dismantling after each flight.
33. Replacement of main rotor blades that are designed for removal where specialist tools are not required.that identifies particular data or limitations relating to the items being released that are necessary for the User/ installer to make the final airworthiness determination of the item. Information shall be clear, complete, and provided in a form and manner which is adequate for the purpose of making such a determination.

Each statement shall be clearly identified as to which item it relates.

If there is no statement, state 'None'.

Some examples of the information to be quoted are as follows:

- The identity and issue of maintenance documentation used as the approved standard.
- Airworthiness Directives carried out and/or found carried out, as appropriate.
- Repairs carried out and/or found carried out, as appropriate.
- Modifications carried out and/or found carried out, as appropriate.
- Replacement parts installed and/or parts found installed, as appropriate.
- Life limited parts history.
- Deviations from the customer work order.
- Identity of other regulation if not CAR 145.
- Release statements to satisfy a foreign maintenance requirement.
- Release statements to satisfy the conditions of an international maintenance agreement such as, but not limited to, the Canadian Technical Arrangement Maintenance and the USA Bilateral Aviation Safety Agreement — Maintenance Implementation Procedure.

NOTE: The latter two statements allow the possibility of dual release against both CAR 145 and a foreign maintenance requirement or the single release by a CAR 145 approved maintenance organisation against a foreign maintenance requirement. However care should be exercised to tick the relevant box(es) in block 19 to validate the release. It should also be noted that the dual release requires the approved data to be approved/accepted by both the D.G.C.A and the appropriate foreign State and the single release requires the approved data to be approved/accepted only by the appropriate foreign State.

Blocks 14, 15, 16, 17 & 18: Must not be used for maintenance tasks by CAR 145 approved maintenance organisations. These blocks are specifically reserved for the release/certification of newly manufactured items in accordance with CAR 21 and national aviation regulations in force prior to CAR 21 becoming fully effective.

Block 19 Contains the required release to service statement for all maintenance by CAR 145 approved maintenance organisations. When non CAR 145 maintenance is being released block 13 shall specify the particular national regulation. In any case the appropriate box shall be 'ticked' to validate the release.

The certification statement 'except as otherwise specified in block 13' is intended to address the following situations;

- (a) The case where the maintenance could not be completed.
- (b) The case where the maintenance deviated from the standard required by CAR 145.
- (c) The case where the maintenance was carried out in accordance with a non CAR 145 requirement. Whichever case or combination of cases shall be specified in block 13.

Block 20 For the signature of the certifying staff authorised by the CAR 145 approved maintenance organisation. This signature can be computer printed subject to the D.G.C.A being satisfied that only the signatory can direct the computer and that a signature is not possible on a blank computer generated form.

Block 21 The CAR 145 approved maintenance organisation reference number given by the D.G.C.A.

Block 22 The printed name of the Block 20 signatory and personal authorisation reference.

Block 23 The date of signing the Block 19 release to service. (d/m/y). The month shall appear in letters e.g. Jan, Feb, Mar etc. The release to service shall be signed at the 'completion of maintenance'.

Please note the User Responsibility Statements are on the reverse of this certificate. These statements may be added to the front of the certificate below the bottom line by reducing the depth of the form.

x IV

Conditions for the use of staff not qualified to Rule 61 in accordance with 145A.30(J)1 and 2

1. Certifying staff in compliance with the following conditions will meet the intent of 145.A.30(j)(1) and
 - a) The person shall hold a licence or a certifying staff authorisation issued under the country's National regulations in compliance with ICAO Annex 1.
 - b) The scope of work of the person shall not exceed the scope of work defined by the National licence/certifying staff authorisation.
 - c) The person shall demonstrate he has received training on human factors and airworthiness regulations as detailed in Rule 61.
 - d) The person shall demonstrate five years maintenance experience for line maintenance certifying staff and eight years for base maintenance certifying staff. However, those persons whose authorised tasks do not exceed those of a Rule 61 category A certifying staff, need to demonstrate three years maintenance experience only.
 - e) Line maintenance certifying staff and base maintenance support staff shall receive type training at a level corresponding to Rule 61 Appendix III level 3 for every aircraft on which they are authorised to make certification. However those persons whose authorised tasks do not exceed those of a Rule 61 category A certifying staff may receive task training in lieu of complete type training.
 - f) Base maintenance certifying staff must receive type training at a level corresponding to at least Rule 61 Appendix III level 1 for every aircraft on which they are authorised to make certification.
2. Protected rights
 - a) 145.A.30(j)(1) and (2) personnel before the entry into force of Rule 61 may continue to exercise their privileges without the need to comply with paragraph 1(c) to 1(f).
 - b) However after that date any certifying staff willing to extend the scope of their authorisation to include additional privileges shall comply with paragraph 1 above.
 - c) Notwithstanding subparagraph 2(b) above, in the case of additional type training, compliance with paragraph 1(c) and 1(d) is not required.

Annex I

Acceptable Means of Compliance to Part- M

Section A

Subpart A General

Subpart B Accountability

AMC M.A.201 (h) Responsibilities

1. Reference to aircraft includes the components fitted to or intended to be fitted to the aircraft
2. The performance of ground de-icing and anti-icing activities does not require a CAR 145 approval.
3. The requirement means that the operator is responsible for determining what maintenance is required, when it has to be performed and by whom and to what standard, in order to ensure the continued airworthiness of the aircraft being operated.
4. An operator should therefore have adequate knowledge of the design status (type specification, customer options, airworthiness directives (AD), modifications, operational equipment) and required and performed maintenance. Status of aircraft design and maintenance should be adequately documented to support the performance of the quality system.
5. An operator should establish adequate co-ordination between flight operations and maintenance to ensure that both will receive all information on the condition of the aircraft necessary to enable both to perform their tasks.
6. The requirement does not mean that an operator himself Performs the maintenance (this is to be done by a maintenance organisation approved under CAR -145) but that the operator carries the responsibility for the airworthy condition of aircraft it operates and thus should be satisfied before the intended flight that all required maintenance has been properly carried out.
7. When an operator is not appropriately approved in accordance with CAR -145, the operator should provide a clear work order to the maintenance contractor. The fact that an operator has contracted a maintenance organisation approved under CAR -145 should not

prevent it from checking at the maintenance facilities on any aspect of the contracted work if he wishes to do so to satisfy his responsibility for the airworthiness of the aircraft.

AMC M.A.201 (h) 1- Responsibilities

1. An operator only needs to be approved for the management of the continuing airworthiness of the aircraft listed on its AOC. The approval to carry out airworthiness reviews is optional.
2. This approval does not prevent the operator subcontracting certain continuing airworthiness management tasks to competent persons or organisations. This activity is considered as an integral element of the operator's M.A. Subpart G approval. The regulatory monitoring is exercised through the operator's M.A. Subpart G. approval. The contracts should be acceptable to the DGCA.
3. The accomplishment of continuing airworthiness activities forms an important part of the operator's responsibility with the operator remaining accountable for satisfactory completion irrespective of any contract that may be established.
4. CAR M does not provide for organisations to be independently approved to perform continuing airworthiness management tasks on behalf of commercial air transport operators. The approval of such activity is vested in the operator's air operator's certificate (AOC). The sub-contracted organisation is considered to perform the continuing airworthiness management tasks as an integral part of the operator's continuing airworthiness management system, irrespective of any other approval held by the subcontractor including a M.A. Subpart G approval.
5. The operator is ultimately responsible and therefore accountable for the airworthiness of its aircraft. To exercise this responsibility the operator should be satisfied that the actions taken by sub-contracted organisations meet the standards required by M.A. Subpart G. The operator's management of such activities should therefore be accomplished
 - a) by active control through direct involvement and/or
 - b) by endorsing the recommendations made by the sub-contracted organisation.
6. In order to retain ultimate responsibility the operator should limit sub-contracted tasks to the activities specified below:
 - a) airworthiness directive analysis and planning
 - b) service bulletin analysis

- c) planning of maintenance
 - d) reliability monitoring, engine health monitoring
 - e) maintenance programme development and amendments
 - f) any other activities which do not limit the operators responsibilities as agreed by the DGCA.
7. The operator's management controls associated with sub-contracted continuing airworthiness management tasks should be reflected in the associated written contract and be in accordance with the operator's policy and procedures defined in his continuing airworthiness management exposition. When such tasks are sub-contracted the operator's continuing airworthiness management system is considered to be extended to the subcontracted organisation.
 8. With the exception of engines and auxiliary power units contracts would normally be limited to one organisation per aircraft type for any combination of the activities described in Appendix 2. Where arrangements are made with more than one organization the operator should demonstrate adequate coordination controls are in place and that the individual responsibilities are clearly defined in related contracts.
 9. Contracts should not authorize the sub-contracted organisation to sub-contract to other organisations elements of the continuing airworthiness management tasks.
 10. The operator should ensure that any findings arising from the DGCA monitoring of the sub-contracted continuing airworthiness management tasks will be closed to the satisfaction of the DGCA. This provision should be included in the contract.
 11. The sub-contracted organisation should agree to notify the respective operators of any changes affecting the contracts as soon as practical. The operator should then inform its DGCA. Failure to do so may invalidate the DGCA acceptance of the contract.
 12. Appendix II provides information on the sub-contracting of continuing airworthiness management tasks.
 13. The operator should only sub contract to organisations which are specified by the DGCA on the AOC or CA Form 14 as applicable.

AMC M.A.201 (h) 2- Responsibilities

1. The requirement is intended to provide for the possibility of the following three alternative options:

- a) an operator to be approved in accordance with CAR 145 to carry out all maintenance of the aircraft and components;
 - b) an operator to be approved in accordance with CAR 145 to carry out some of the maintenance of the aircraft and components. This, at minimum, could be limited line maintenance but may be considerably more but still short of option (a);
 - c) An operator not approved in accordance with CAR 145 to carry out any maintenance.
2. An operator or prospective operator may apply for any one of these options but it will be for DGCA to determine which option may be accepted in each particular case.
- 2.1 To make this determination DGCA will apply the primary criteria of relevant operator experience if carrying out some or all maintenance on comparable aircraft. Therefore where an operator applies for option (a) – all maintenance – DGCA will need to be satisfied that the operator has sufficient experience of carrying out all maintenance on a comparable type. For example, assuming that the experience is judged satisfactory, then it is reasonable from the maintenance viewpoint to add a different wide bodied aircraft to an existing wide bodied fleet. If the experience is not satisfactory or too limited, DGCA may choose either to require more experienced management and/or more experienced release to service staff or may refuse to accept the new wide bodied aircraft if extra experienced staff cannot be found. Option (b) or (c) may be possible alternatives.
 - 2.2 Where an operator applies for option (b) – some maintenance or DGCA has been unable to accept an application for option (a) – then satisfactory experience is again the key but in this case the satisfactory experience is related to the reduced maintenance of this option. If the experience is not satisfactory or too limited DGCA may choose to require more experienced staff or may refuse to accept the application if such staff cannot be found. Option (c) may be the possible alternative. Option (c) accepts that the operator either does not have satisfactory experience or has only limited experience of some maintenance.
 - 2.3 The DGCA will require an operator to enter into a contract with an appropriately approved CAR 145 organisation except in those cases where DGCA believes that it is possible to obtain sufficient satisfactorily experienced staff to provide the

minimal maintenance support for option (b), in which case option (b) would apply.

- 2.4 In respect of this paragraph, 'experience' means staff who have proven evidence that they were directly involved with at least line maintenance of similar aircraft types for not less than 12 months. Such experience should be demonstrated to be satisfactory. An operator is required to have enough personnel meeting the requirement of M.A.706 to manage the maintenance responsibility whichever option is used.

AMC M.A.202 (a) Occurrence reporting

Accountable persons or organisations should ensure that the type certificate (TC) holder receives adequate reports of occurrences for that aircraft type, to enable it to issue appropriate service instructions and recommendations to all owners or operators. Liaison with the TC holder is recommended to establish whether published or proposed service information will resolve the problem or to obtain a solution to a particular problem. An approved continuing airworthiness management or maintenance organisation should assign responsibility for co-ordinating action on airworthiness occurrences and for initiating any necessary further investigation and follow-up activity to a suitably qualified person with clearly defined authority and status. In respect of maintenance, reporting a condition that could seriously hazard the aircraft is normally limited to:

- serious cracks, permanent deformation, burning or serious corrosion of structure found during scheduled maintenance of the aircraft or component.
- failure of any emergency system during scheduled testing.

AMC M.A.202 (b) Occurrence reporting

The reports may be transmitted by any method i.e. electronically, by post or by facsimile.

Each report should contain at least the following information:

- Reporter or organisations name and approval reference if applicable,
- Information necessary to identify the subject aircraft and or component,
- date and time relative to any life or overhaul limitation in terms of flying hours/cycles/landings etc. as appropriate,
- details of the occurrence.

AMC M.A.301 -1- Continuing airworthiness tasks

1. With regard to the pre-flight inspection it is intended to mean all of the actions necessary to ensure that the aircraft is fit to make the intended flight. These should typically include but are not necessarily limited to:
 - a) a walk-around type inspection of the aircraft and its emergency equipment for condition including, in particular, any obvious signs of wear, damage or leakage. In addition, the presence of all required equipment including emergency equipment should be established.
 - b) an inspection of the aircraft continuing airworthiness record system or the operators technical log as applicable to ensure that the intended flight is not adversely affected by any outstanding deferred defects and that no required maintenance action shown in the maintenance statement is overdue or will become due during the flight.
 - c) a control that consumable fluids, gases etc. uplifted prior to flight are of the correct specification, free from contamination, and correctly recorded.
 - d) a control that all doors are securely fastened.
 - e) a control that control surface and landing gear locks, pitot/static covers, restraint devices and engine/aperture blanks have been removed.
 - f) a control that all the aircraft's external surfaces and engines are free from ice, snow, sand, dust etc.
2. Tasks such as oil and hydraulic fluid uplift and tyre inflation may be considered as part of the pre-flight inspection. The related pre-flight inspection instructions should address the procedures to determine where the necessary uplift or inflation results from an abnormal consumption and possibly requires additional maintenance action by the approved maintenance organisation or certifying staff as appropriate.
3. In the case of commercial air transport, an operator should publish guidance to maintenance and flight personnel and any other personnel performing pre-flight inspection tasks, as appropriate, defining responsibilities for these actions and, where tasks are contracted to other organisations, how their accomplishment is subject to the quality system of M.A.712. It should be demonstrated to DGCA that pre-flight inspection personnel have received appropriate training for the relevant pre-flight inspection tasks. The training standard for personnel

performing the pre-flight inspection should be described in the operator's continuing airworthiness management exposition.

AMC M.A.301 - 2- Continuing airworthiness tasks

In the case of commercial air transport the operator should have a system to ensure that all defects affecting the safe operation of the aircraft are rectified within the limits prescribed by the approved minimum equipment list (MEL) or configuration deviation list (CDL) as appropriate. Also that such defect rectification cannot be postponed unless agreed by the operator and in accordance with a procedure approved by DGCA. In the case of commercial air transport or large aircraft, a system of assessment should be in operation to support the continuing airworthiness of an aircraft and to provide a continuous analysis of the effectiveness of the M.A. Subpart G approved continuing airworthiness management organisation's defect control system in use. The system should provide for:

- a) significant incidents and defects: monitor incidents and defects that have occurred in flight and defects found during maintenance and overhaul, highlighting any that appear significant in their own right.
- b) repetitive incidents and defects: monitor on a continuous basis defects occurring in flight and defects found during maintenance and overhaul, highlighting any that are repetitive.
- c) deferred and carried forward defects: Monitor on a continuous basis deferred and carried forward defects. Deferred defects are defined as those defects reported in operational service which are deferred for later rectification. Carried forward defects are defined as those defects arising during maintenance which are carried forward for rectification at a later maintenance input.
- d) unscheduled removals and system performance: analyse unscheduled component removals and the performance of aircraft systems for use as part of the maintenance programme efficiency. When deferring or carrying forward a defect the cumulative effect of a number of deferred or carried forward defects occurring on the same aircraft and any restrictions contained in the MEL should be considered. Whenever possible, deferred defects should be made known to the pilot/flight crew prior to their arrival at the aircraft.

AMC M.A.301 - 3- Continuing airworthiness tasks

The owner or the M.A. Subpart G approved continuing airworthiness management organisation as applicable should have a system to ensure that all aircraft maintenance checks are performed within the limits prescribed by the approved aircraft maintenance programme and that, whenever a maintenance check cannot be performed within the required time limit, its postponement is allowed in accordance with a procedure agreed by DGCA

AMC M.A.301 - 4- Continuing airworthiness tasks

The operator or the contracted M.A. Subpart G approved organisation as applicable should have a system to analyse the effectiveness of the maintenance programme, with regard to spares, established defects, malfunctions and damage, and to amend the maintenance programme accordingly

AMC M.A.301 -5- Continuing Airworthiness Tasks

Operational directives with a continuing airworthiness impact include operating rules such as extended twin-engine operations (ETOPS) / long range operations (LROPS), reduced vertical separation minima (RVSM), MNPS, all weather operations (AWOPS), RNAV, etc. Any other continued airworthiness requirement made mandatory by the DGCA includes TC related requirements such as: certification maintenance requirements (CMR), certification life limited parts, airworthiness limitations, etc.

AMC M.A.301 - 7- Continuing airworthiness tasks

An operator or a contracted M.A. Subpart G approved organisation as applicable should establish and work to a policy, which assesses non-mandatory information related to the airworthiness of the aircraft. Non mandatory information such as service bulletins, service letters and other information is that produced for the aircraft and its components by an approved design organisation, the manufacturer, DGCA

AMC M.A.302 Maintenance programme

1. The term “maintenance programme” is intended to include scheduled maintenance tasks the associated procedures and standard maintenance practises. The term “maintenance schedule” is intended to embrace the scheduled maintenance tasks alone.

2. The aircraft should only be maintained to one approved maintenance programme at a given point in time. Where an owner or operator wishes to change from one approved programme to other, a transfer check or inspection may need to be performed in order to implement the change.
3. The maintenance programme details should be reviewed at least annually. As a minimum revisions of documents affecting the programme basis need to be considered by the owner or operator for inclusion in the maintenance programme during the annual review. Applicable mandatory requirements for compliance with CAR 21 should be incorporated into the owner or operator's maintenance programme as soon as possible
4. The aircraft maintenance programme should contain a preface which will define the maintenance programme contents, the inspection standards to be applied, permitted variations to task frequencies and where applicable, any procedure to manage the evolution of established check or inspection intervals.
Appendix 1 to AMC M.A.302 provides detailed information on the contents of an approved aircraft maintenance programme.
5. The approved aircraft maintenance programme should reflect applicable mandatory regulatory requirements addressed in documents issued by the TC holder to comply with CAR 21.A.61
6. Repetitive maintenance tasks derived from modifications and repairs should be incorporated into the approved maintenance programme.

AMC M.A.302(c) Maintenance programme compliance

1. An owner or operator's maintenance programme should normally be based upon the maintenance review board (MRB) report where applicable, the maintenance planning document (MPD), the relevant chapters of the maintenance manual or any other maintenance data containing information on scheduling. Furthermore, an owner or operator's maintenance programme should also take into account any maintenance data containing information on scheduling for components.
2. Instructions issued by DGCA can encompass all types of instructions from a specific task for a particular aircraft to complete recommended maintenance schedules for certain

aircraft types that can be used by the owner/operator directly.

3. Where an aircraft type has been subjected to the MRB report process, an operator should normally develop the initial operator's aircraft maintenance programme based upon the MRB report.
4. Where an aircraft is maintained in accordance with an aircraft maintenance programme based upon the MRB report process, any associated programme for the continuous surveillance of the reliability, or health monitoring of the aircraft should be considered as part of the aircraft maintenance programme.
5. Aircraft maintenance programmes for aircraft types subjected to the MRB report process should contain identification cross reference to the MRB report tasks such that it is always possible to relate such tasks to the current approved aircraft maintenance programme. This does not prevent the approved aircraft maintenance programme from being developed in the light of service experience to beyond the MRB report
6. recommendations but will show the relationship to such recommendations
7. Some approved aircraft maintenance programmes, not developed from the MRB process, utilise reliability programmes. Such reliability programmes should be considered as a part of the approved maintenance programme.

AMC M.A.302 (d) Maintenance programme - reliability programmes.

1. Reliability programmes should be developed for aircraft maintenance programmes based upon maintenance steering group (MSG) logic or those that include condition monitored components or that do not contain overhaul time periods for all significant system components.
2. Reliability programmes need not be developed for aircraft not considered as large aircraft or that contain overhaul time periods for all significant aircraft system components.
3. The purpose of a reliability programme is to ensure that the aircraft maintenance programme tasks are effective and their periodicity is adequate.
4. The reliability programme may result in the escalation or deletion of a maintenance task, as well as the de-escalation or

addition of a maintenance task

5. A reliability programme provides an appropriate means of monitoring the effectiveness of the maintenance programme.
6. **Appendix 1 to AMC M.A.302 and M.B.301 (d) gives further guidance.**

AMC M.A.304 Data for modifications and repairs

A person or organisation repairing an aircraft or component should assess the damage against published approved repair data and the action to be taken if the damage is beyond the limits or outside the scope of such data. This could involve any one or more of the following options; repair by replacement of damaged parts, requesting technical support from the type certificate holder or from an organisation approved in accordance with CAR 21 and finally DGCA approval of the particular repair data.

AMC M.A.305 (d) Aircraft continuing airworthiness record system

Information on times, dates, cycles etc. should give an overall picture on the state of maintenance of the aircraft and its components. The current status of all service life-limited aircraft components should indicate the component life limitation, total number of hours, accumulated cycles or calendar time and the number of hours/cycles/time remaining before the required retirement time of the component is reached. The current status of AD should identify the applicable AD including revision or amendment numbers. Where an AD is generally applicable to the aircraft or component type but is not applicable to the particular aircraft or component, then this should be identified. The AD status includes the date when the AD was accomplished, and where the AD is controlled by flight hours or flight cycles it should include the aircraft or engine or component total flight hours or cycles, as appropriate. For repetitive ADs, only the last application should be recorded in the AD status. The status should also specify which part of a multi-part directive has been accomplished and the method, where a choice is available in the AD. The status of current modification and repairs means a list of embodied modification and repairs together with the substantiating data supporting compliance with the airworthiness requirements. This can be in the form of a Supplemental Type Certificate (STC), SB, Structural Repair Manual (SRM) or similar approved document. The substantiating data may include:

- a) compliance programme; and,

- b) master drawing or drawing list, production drawings, and installation instructions; and,
- c) engineering reports (static strength, fatigue, damage tolerance, fault analysis, etc.); and,
- d) ground and flight test programme and results; and,
- e) mass and balance change data; and,
- f) maintenance and repair manual supplements; and,
- g) maintenance programme changes and instructions for continuing airworthiness; and,
- h) aircraft flight manual supplement.

Some gas turbine engines are assembled from modules and a true total time in service for a total engine is not kept. When owners and operators wish to take advantage of the modular design, then total time in service and maintenance records for each module is to be maintained. The continuing airworthiness records as specified are to be kept with the module and should show compliance with any mandatory requirements pertaining to that module.

AMC M.A.305 (h) Aircraft continuing airworthiness record system

When an owner/operator arranges for the relevant maintenance organisation to retain copies of the continuing airworthiness records on their behalf, the owner/operator will continue to be responsible for the retention of records. If they cease to be the owner/operator of the aircraft, they also remain responsible for the transferring the records to any other person who becomes the owner/operator of the aircraft.

Keeping continuing airworthiness records in a form acceptable to DGCA normally means in paper form or on a computer database or a combination of both methods. Records stored in microfilm or optical disc form are also acceptable. All records should remain legible throughout the required retention period. Paper systems should use robust material, which can withstand normal handling and filing. Computer systems should have at least one backup system, which should be updated at least within 24 hours of any maintenance. Each terminal is required to contain programme safeguards against the ability of unauthorised personnel to alter the database. Details of current modifications and repairs include the data supporting compliance with the airworthiness requirements. This can be in the form of a STC, SB, SRM or similar document.

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NOTE: Additional maintenance may be required.

AMC M.A.305 (h) 6- Aircraft continuing airworthiness record system

For the purpose of this paragraph, a “component vital to flight safety” means a component that includes certified life limited parts or is subject to airworthiness limitations or a major component such as, undercarriage or flight controls.

AMC M.A.306 (a) Operators technical log system

For commercial air transport the operator’s aircraft technical log is a system for recording defects and malfunctions during the aircraft operation and for recording details of all maintenance carried out on an aircraft between scheduled base maintenance visits. In addition, it is used for recording flight safety and maintenance information the operating crews need to know. Cabin or galley defects and malfunctions that affect the safe operation of the aircraft or the safety

of its occupants are regarded as forming part of the aircraft log book where recorded by another means. The operator's aircraft technical log system may range from a simple single section document to a complex system containing many sections but in all cases it should include the information specified for the example used here which happens to use a 5 section document / computer system:

Section 1

should contain details of the registered name and address of the operator the aircraft type and the complete international registration marks of the aircraft.

Section 2

should contain details of when the next scheduled maintenance is due, including, if relevant any out of phase component changes due before the next maintenance check. In addition this section should contain the current certificate of release to service (CRS), for the complete aircraft, issued normally at the end of the last maintenance check.

NOTE: The flight crew do not need to receive such details if the next scheduled maintenance is controlled by other means acceptable to DGCA.

Section 3

should contain details of all information considered necessary to ensure continued flight safety. Such information includes:

- i the aircraft type and registration mark.
- ii the date and place of take-off and landing.
- iii the times at which the aircraft took off and landed.
- iv the running total of flying hours, such that the hours to the next schedule maintenance can be determined. The flight crew does not need to receive such details if the next scheduled maintenance is controlled by other means acceptable to DGCA.
- v details of any failure, defect or malfunction to the aircraft affecting airworthiness or safe operation of the aircraft including emergency systems, and any failure, defect or malfunctions in the cabin or galleys that affect the safe operation of the aircraft or the safety of its occupants that are known to the commander. provision should be made for the commander to date and sign such entries, including, where appropriate, the nil defect state for continuity of the record. Provision should be made for a CRS following rectification of a defect or any deferred defect or maintenance check carried out. Such a certificate appearing on each page of this section should readily identify the defect(s) to which it relates or the particular maintenance

- check as appropriate.
- vi the quantity of fuel and oil uplifted and the quantity of fuel available in each tank, or combination of tanks, at the beginning and end of each flight; provision to show, in the same units of quantity, both the amount of fuel planned to be uplifted and the amount of fuel actually uplifted; provision for the time when ground de-icing and/or anti-icing was started and the type of fluid applied, including mixture ratio fluid/water.
 - vii the pre-flight inspection signature.

In addition to the above it may be necessary to record the following supplementary information: The time spent in particular engine power ranges where use of such engine power affects the life of the engine or engine module. These are two examples thereof:

- the number of landings where landings affect the life of an aircraft or aircraft component.
- flight cycles or flight pressure cycles where such cycles affect the life of an aircraft or aircraft component.

NOTE 1: Where Section 3 is of the multi-sector 'part removable' type then such 'part removable' sections should contain all of the foregoing information where appropriate.

NOTE 2: Section 3 should be designed such that one copy of each page may remain on the aircraft and one other copy may be retained on the ground until completion of the flight to which it relates.

NOTE 3: Section 3 lay-out should be divided to show clearly what is required to be completed after flight and what is required to be completed in preparation for the next flight.

Section 4

should contain details of all deferred defects that affect or may affect the safe operation of the aircraft and should therefore be known to the aircraft commander. Each page of this section should be pre-printed with the operator's name and page serial number and make provision for recording the following:

- i a cross reference for each deferred defect such that the original defect can be identified in the particular section 3 sector record page.
- ii the original date of occurrence of the defect deferred.
- iii brief details of the defect.
- iv details of the eventual rectification carried out and its CRS or a clear cross-reference back to the

document that contains details of the eventual rectification.

Section 5

should contain any necessary maintenance support information that the aircraft commander needs to know. Such information would include data on how to contact maintenance engineering if problems arise whilst operating the routes etc.

AMC M.A.306 (b) Operators technical log system

The aircraft technical log system can be either a paper or computer system or any combination of both methods acceptable to DGCA. In case of a computer system, it should contain programme safeguards against the ability of unauthorised personnel to alter the database.

AMC M.A.307 (a) Transfer of aircraft continuing airworthiness records

Where an owner/operator terminates his operation, all retained continuing airworthiness records should be passed on to the new owner/operator or stored. A “permanent transfer” does not generally include the dry lease-out of an aircraft when the duration of the lease agreement is less than 6 months. However DGCA should be satisfied that all continuing airworthiness records necessary for the duration of the lease agreement are transferred to the lessee or made accessible to them.

AMC M.A.401 (b) Maintenance data

1. Except as specified in sub-paragraph 2, each person or organisation performing aircraft maintenance should have access to and use:
 - a) all maintenance related CAR's and associated AMC's, together with the maintenance related guidance material,
 - b) all applicable maintenance requirements and notices such as DGCA standards and specifications that have not been superseded by a requirement, procedure or directive,
 - c) all applicable airworthiness directives,
 - d) the appropriate sections of the aircraft maintenance programme, aircraft maintenance manual, repair manual, supplementary structural inspection document, corrosion control document, service bulletins, service sheets modification leaflets, non destructive inspection manual, parts catalogue, type certificate data sheets as

- required for the work undertaken and any other specific document issued by the type certificate or
- e) supplementary type certificate holder's maintenance data, except that in the case of operator or customer provided maintenance data it is not necessary to hold such provided data when the work order is completed.
2. In addition to sub-paragraph 1, for components each organisation performing aircraft maintenance should hold and use the appropriate sections of the vendor maintenance and repair manual, service bulletins and service letters plus any document issued by the type certificate holder as maintenance data on whose product the component may be fitted when applicable, except that in the case of operator or customer provided maintenance data it is not necessary to hold such provided data when the work order is completed.

AMC M.A.401(c) Maintenance data

1. Data being made available to personnel maintaining aircraft means that the data should be available in close proximity to the aircraft or component being maintained, for mechanics and certifying staff to perform maintenance.
2. Where computer systems are used, the number of computer terminals should be sufficient in relation to the size of the work programme to enable easy access, unless the computer system can produce paper copies. Where microfilm or microfiche readers/printers are used, a similar requirement is applicable.
3. Maintenance tasks should be transcribed onto the work cards or worksheets and subdivided into clear stages to ensure a record of the accomplishment of the maintenance task. Of particular importance is the need to differentiate and specify, when relevant, disassembly, accomplishment of task, reassembly and testing. In the case of a lengthy maintenance task involving a succession of personnel to complete such task, it may be necessary to use supplementary work cards or worksheets to indicate what was actually accomplished by each individual person. A worksheet or work card system should refer to particular maintenance tasks.
4. Maintenance data should be kept up to date by:
 - subscribing to the applicable amendment scheme,
 - checking that all amendments are being received,
 - monitoring the amendment status of all data.

AMC M.A.402 (a) Performance of maintenance

1. When working outside the scope of an approved maintenance organisation personnel not authorised to issue a CRS should work under the supervision of certifying personnel. They may only perform maintenance that their supervisor is authorised to release, if the supervisor personally observes the work being carried out to the extent necessary to ensure that it is being done properly and if the supervisor is readily available, in person, for consultation. In this case licensed engineers should ensure that each person maintaining an aircraft or component has had appropriate training or relevant previous experience and is capable of performing the task required, and that personnel who carry out specialised tasks such as welding are qualified in accordance with an officially recognized standard.
2. In the case of limited pilot owner maintenance as specified in M.A.803, any person maintaining an aircraft should have had appropriate training or relevant previous experience as accepted by DGCA and be capable of performing the task required.
3. The general maintenance and inspection standards applied to individual maintenance tasks should meet the recommended standards and practises of the organisation responsible for the type design which are normally published in the maintenance manuals. In the absence of maintenance and inspection standards published by organisation responsible for the type design maintenance personnel should refer to the relevant aircraft airworthiness standards and procedures published or used as guidance by DGCA. The maintenance standards used should contain methods, techniques and practices acceptable to DGCA for the maintenance of aircraft and its components.
4. Independent inspections.
 - 4.1 The manufactures instructions for continued airworthiness should be followed when determining the need for an independent inspection.
 - 4.2 In the absence of maintenance and inspection standards published by organization responsible for the type design, maintenance tasks that involve the assembly or any disturbance of a control system that, if errors occurred, could result in a failure, malfunction, or defect endangering the safe operation of the aircraft should be considered as flight safety sensitive maintenance tasks needing an independent inspection. A control system is an aircraft system by which the flight path, attitude, or propulsive force of the aircraft is changed,

including the flight, engine and propeller controls, the related system controls and the associated operating mechanisms.

- 4.3 Independent inspections should be carried out by at least two persons, to ensure correct assembly, locking and sense of operation. A technical record of the inspections should contain the signatures of both persons before the relevant CRS is issued.
- 4.3.1 An independent inspection is an inspection first made by an authorised person signing the maintenance release who assumes full responsibility for the satisfactory completion of the work, before being subsequently inspected by a second independent competent person who attests to the satisfactory completion of the work recorded and that no deficiencies have been found.
- 4.3.2 The second independent competent person is not issuing a maintenance release therefore is not required to hold certification privileges. However they should be suitably qualified to carry out the inspection.
- 4.4 When work is being done under the control of an approved maintenance organization the organisation should have procedures to demonstrate that the signatories have been trained and have gained experience on the specific control systems being inspected.
- 4.5. When work is being undertaken by an independent M.A.801 (b) 2 certifying staff, the qualifications and experience of the second independent competent person should be directly assessed by the person certifying for the maintenance, taking into account the individual's training and experience. It should not be acceptable for the certifying staff signing the release to show the person performing the independent inspection how to perform the inspection at the time the work is completed.

In summary the following maintenance tasks should primarily be considered when inspecting aircraft control systems that have been disturbed:

- installation, rigging and adjustment of flight controls.
- installation of aircraft engines, propellers and

rotors.

- overhaul, calibration or rigging of components such as engines, propellers, transmissions and gearboxes.

Consideration should also be given to:

- previous experience of maintenance errors, depending on the consequences of the failure.
- information arising from an 'occurrence reporting system'

4.7 When checking control systems that have undergone maintenance the person signing the maintenance release and the person performing the independent check should consider the following points independently:

- all those parts of the system that have actually been disconnected or disturbed should be inspected for correct assembly and locking.
- the system as a whole should be inspected for full and free movement over the complete range.
- cables should be tensioned correctly with adequate clearance at secondary stops.
- the operation of the control system as a whole should be observed to ensure that the controls are operating in the correct sense.
- if the control system is duplicated to provide redundancy, each system should be checked separately.

if different control systems are interconnected so that they affect each other, all the interactions should be checked through the full range of the applicable controls.

AMC M.A.402 (b) Performance of maintenance

When performing maintenance, personnel are required to use the tools, equipment and test apparatus necessary to ensure completion of work in

accordance with accepted maintenance and inspection standards. Inspection, service or calibration on a regular basis should be in accordance with the equipment manufacturers' instructions. All tools requiring calibration should be traceable to an acceptable standard.

If the organisation responsible for the type design involved recommends special equipment or test apparatus, personnel should use the recommended equipment or apparatus or equivalent equipment accepted by DGCA. All work should be performed using materials of such quality and in a manner, that the condition of the aircraft or its components after maintenance will be at least equal to its original or modified condition (with regard to aerodynamic function, structural strength, resistance to vibration, deterioration and any other qualities affecting airworthiness).

AMC M.A.402 (d) Performance of maintenance

The working environment should be appropriate for the maintenance task being performed such that the effectiveness of personnel is not impaired.

- a) Temperature should be maintained such that personnel can perform the required tasks without undue discomfort.
- b) Airborne contamination (e.g. dust, precipitation, paint particles, filings) should be kept to a minimum to ensure aircraft/components surfaces are not contaminated, if this is not possible all susceptible systems should be sealed until acceptable conditions are re-established.
- c) Lighting should be adequate to ensure each inspection and maintenance task can be performed effectively.
- d) Noise levels should not be allowed to rise to the level of distraction for inspection staff or if this is not possible inspection staff should be provided with personnel equipment to reduce excessive noise.

AMC M.A.402 (e) Performance of maintenance

Facilities should be provided appropriate for all planned maintenance. This may require aircraft hangars that are both available and large enough for the planned maintenance. Aircraft component workshops should be large enough to accommodate the components that are planned to be maintained. Protection from inclement weather means the hangar or component workshop structures should be to a standard that prevents the ingress of rain, hail, ice, snow, wind and dust etc.

AMC M.A.403 (b) Aircraft defects

An assessment of both the cause and any potentially hazardous effect of any defect or combination of defects that could affect flight safety should be made in order to initiate any necessary further investigation and analysis necessary to identify the root cause of the defect.

AMC M.A.403 (d) Aircraft defects

All deferred defects should be made known to the pilot/flight crew, whenever possible, prior to their arrival at the aircraft. Deferred defects should be transferred on to worksheets at the next appropriate maintenance check, and any deferred defect which is not rectified during the maintenance check, should be re-entered on to a new deferred defect record sheet. The original date of the defect should be retained. The necessary components or parts needed for the rectification of defects should be made available or ordered on a priority basis, and fitted at the earliest opportunity.

AMC M.A.501 (a) – Installation

1. To ensure a component is in a satisfactory condition, the person referred to under M.A.801 or the approved maintenance organisation should perform checks and verifications.
2. Performance of above checks and verifications should take place before the component is installed on the aircraft.
3. The following list, though not exhaustive, contains typical checks to be performed:
 - a) verify the general condition of components and their packaging in relation to damages that could affect the integrity of the components;
 - b) verify that the shelf life of the component has not expired;
 - c) verify that items are received in the appropriate package in respect of the type of component: e.g. correct ATA 300 or electrostatic sensitive devices packaging, when necessary;
 - d) verify that component has all plugs and caps appropriately installed to prevent damage or internal contamination. Tape should not be used to cover electrical connections or fluid fittings/openings because adhesive residues can insulate electrical connections and contaminate hydraulic or fuel units.

4. The purpose of the CA Form 1 (see also CAR M Appendix II) is to release components after manufacture and to release maintenance work carried out on such components under the approval of a DGCA and to allow components removed from one aircraft/component to be fitted to another aircraft/component.
5. For the purpose of CAR M, a document equivalent to an CA Form 1 may be:
- a) a release document issued by an organisation under the terms of a bilateral agreement signed by the **European Community;**
 - b) a release document issued by an organisation approved under the terms **of a DGCA maintenance bilateral agreement until superseded by the corresponding agreement signed by the European Community;**
 - (c) **a DGCA Form One issued prior to 28 September 2004 by a DGCA 145 organisation approved by a JAA Full D.G.C.A.;**
 - (d) **in the case of new aircraft components that were released from manufacturing prior to the CAR 21 compliance date the component should be accompanied by a DGCA Form One issued by a CAR 21 organisation approved by a DGCA Full Member Authority and within the DGCA mutual recognition system;**
 - (f) **a DGCA Form One issued prior to 28 September 2005 by a production organisation approved by a (DGCA) in accordance with its national regulations;**
 - (g) **a DGCA Form One issued prior to 28 September 2008 by a maintenance organisation approved by a (DGCA) in accordance with its national regulations;**
 - (h) **a release document acceptable to a (DGCA) according to the provisions of a bilateral agreement between the ((DGCA) and a third country until superseded by the corresponding agreement signed by the European Community. This provision is valid provided the above agreements between the DGCA and a third country are notified to the Commission and to the other (COMPETENT authorities in accordance with Article 9 of Regulation (EC) No 1592/2002.**
 - (i) **paragraphs (f) and (g) do not apply to the CAR 145 maintenance environment.**

6. **Any item in storage without an DGCA Form 1 or equivalent cannot be installed on aircraft registered in a D.G.C.A unless an DGCA Form 1 is issued for such item by an appropriately approved maintenance organisation in accordance with AMC M.A.613 (a)**

AMC M.A.501 (b) – Installation

The CA Form 1 identifies the airworthiness and eligibility status of an aircraft component. Block 13 "Remarks" on the CA Form 1 in some cases contains vital airworthiness related information (see also CAR M Appendix II) which may need appropriate and necessary actions

The fitment of a replacement components/material should only take place when the person referred to under M.A.801 or the M.A. Subpart F maintenance organisation is satisfied that such components/material meet required standards in respect of manufacture or maintenance, as appropriate.

The person referred to under M.A.801 or the M.A. Subpart F approved maintenance organisation should be satisfied that the component in question meets the approved data/standard, such as the required design and modification standards. This may be accomplished by reference to the TC holder or manufacturer's parts catalogue or other approved data (i.e. SB). Care should also be exercised in ensuring compliance with applicable AD and the status of any service life limited parts fitted to the aircraft component.

AMC M.A.501(c) – Installation

1. Standard parts are parts manufactured in complete compliance with an established industry, DGCA **or other Government** specification which includes design, manufacturing, test and acceptance criteria, and uniform identification requirements. The specification should include all information necessary to produce and verify conformity of the part. It should be published so that any party may manufacture the part. Examples of specifications are National Aerospace Standards (NAS), Army-Navy Aeronautical Standard (AN), Society of Automotive Engineers (SAE), SAE Sematec, Joint Electron Device Engineering Council, Joint Electron Tube Engineering Council, and American National Standards Institute (ANSI), EN Specifications etc...
2. To designate a part as a standard part the TC holder may issue a standard parts manual accepted by DGCA of original TC holder

or may make reference in the parts catalogue to a national/international specification (such as a standard diode/capacitor etc) not being an aviation only specification for the particular part.

3. Documentation accompanying standard parts should clearly relate to the particular parts and contain a conformity statement plus both the manufacturing and supplier source. Some material is subject to special conditions such as storage condition or life limitation etc. and this should be included on the documentation and / or material packaging.
4. An CA Form 1 or equivalent is not normally issued and therefore none should be expected.

AMC M.A.501 (d) – Installation

1. Consumable material is any material which is only used once, such as lubricants, cements, compounds, paints, chemicals dyes and sealants etc.
2. Raw material is any material that requires further work to make it into a component part of the aircraft such as metals, plastics, wood, fabric etc.
3. Material both raw and consumable should only be accepted when satisfied that it is to the required specification. To be satisfied, the material and or its packaging should be marked with the specification and where appropriate the batch number.
4. Documentation accompanying all material should clearly relate to the particular material and contain a conformity statement plus both the manufacturing and supplier source. Some material is subject to special conditions such as storage condition or life limitation etc. and this should be included on the documentation and / or material packaging.
5. CA form 1 or equivalent is not normally issued for such material and therefore none should be expected. The material specification is normally identified in the TC holder's data except in the case where DGCA has agreed otherwise.
6. Items purchased in batches (fasteners etc.) should be supplied intact in the original equipment manufacturer (OEM) package. Packaging should state the P/N, batch number and the quantity specified in the package. The documentation accompanying the material should contain P/N, lot number and the supplied quantity, and the

manufacturing sources. If the material is acquired from different lots, acceptance documentation for each lot should be supplied.

AMC M.A.504 (a) - Control of unserviceable components

A component continues to be unserviceable until a decision is taken pursuant to AMC M.A.605 (c) 6

AMC M.A.504 (b) - Control of unserviceable components

M.A.801(b)(2) certifying staff or the Section A Subpart F approved maintenance organisation performing maintenance should ensure proper identification of any unserviceable components.

The unserviceable status of the component should be clearly declared on a tag together with the component identification data and any information useful to define actions necessary to be taken. Such information should state, as applicable, in service times, maintenance status, preservation status, failures, defects or malfunctions reported or detected exposure to adverse environmental conditions, if the component has been involved in or affected by an accident/incident. Means should be provided to prevent unwanted separation of this tag from the component.

M.A.801(b)(2) certifying staff performing aircraft maintenance should send, with the agreement of the aircraft owner/lessee, any unserviceable component to a maintenance organisation approved under Section A Subpart F or CAR-145 for controlled storage.

AMC M.A.504 (c) - Control of unserviceable components – unsalvageable components

1. The following types of components should typically be classified as unsalvageable:
 - a) components with non-repairable defects, whether visible or not to the naked eye;
 - b) components that do not meet design specifications, and cannot be brought into conformity with such specifications;
 - c) components subjected to unacceptable modification or rework that is irreversible;
 - d) certified life-limited parts that have reached or exceeded their certified life limits, or have missing or incomplete records;
 - e) components that cannot be returned to airworthy condition due to exposure to extreme forces, heat or adverse environment;
 - f) components for which conformity with an applicable airworthiness directive cannot be accomplished;

- g) components for which continuing airworthiness records and/or traceability to the manufacturer can not be retrieved.
2. It is common practice for possessors of aircraft components to dispose of unsalvageable components by selling, discarding, or transferring such items. In some instances, these items have reappeared for sale and in the active parts inventories of the aviation community. Misrepresentation of the status of components and the practice of making such items appear serviceable has resulted in the use of unsalvageable nonconforming components. Therefore organisations disposing of unsalvageable aircraft components should consider the possibility of such components later being misrepresented and sold as serviceable components. Caution should be exercised to ensure that unsalvageable components are disposed of in a manner that does not allow them to be returned to service.

AMC M.A.504 (d) 2 - Control of unserviceable components

- 1) Mutilation should be accomplished in such a manner that the components become permanently unusable for their original intended use. Mutilated components should not be able to be reworked or camouflaged to provide the appearance of being serviceable, such as by re-plating, shortening and re-threading long bolts, welding, straightening, machining, cleaning, polishing, or repainting.
- 2) Mutilation may be accomplished by one or a combination of the following procedures:
- a) grinding,
 - b) burning,
 - c) removal of a major lug or other integral feature,
 - d) permanent distortion of parts,
 - e) cutting a hole with cutting torch or saw,
 - f) melting,
 - g) sawing into many small pieces,
 - h) any other method accepted by DGCA on a case by case basis.
- 3) The following procedures are examples of mutilation that are often less successful because they may not be consistently effective:
- a) stamping or vibro-etching,
 - b) spraying with paint
 - c) small distortions, incisions or hammer marks,
 - d) identification by tag or markings,

- e) drilling small holes,
 - f) sawing in two pieces only.
- 4) Since manufacturers producing approved aircraft components should maintain records of serial numbers for "retired" certified life-limited or other critical components, the organisation that mutilates a component should provide the original manufacturer with the data plate and/or serial number and final disposition of the component.

AMC M.A.504 (e) - Control of unserviceable components

A maintenance organisation may choose, in agreement with the component's owner, to release an unsalvageable component for legitimate non-flight uses, such as for training and education, research and development. In such instances, mutilation may not be appropriate. The following methods should be used to prevent the component re-entering the aviation supply system:

- a) permanently marking or stamping the component, as "NOT SERVICEABLE." (Ink stamping is not an acceptable method);
- b) removing original part number identification;
- c) removing data plate identification;
- d) maintaining a tracking or accountability system, by serial number or other individualised data, to record transferred unsalvageable aircraft component;
- e) including written procedures concerning disposal of such components in any agreement or contract transferring such components.

NOTE: Unsalvageable components should not be released to any person or organization that is known to return unsalvageable components back into the aviation supply system, due to the potential safety threat.

AMC M.A.601 Scope

An approved maintenance organisation may be approved to maintain aircraft/aircraft components not type certificated by **DGCA**.

AMC M.A.602 Application

An application should be made on an CA Form 2 (Appendix IX) or equivalent acceptable to DGCA.

AMC M.A.603 (a) Extent of Approval

The following table identifies the ATA specification 100 chapter for

the category C component rating.

CLASS RATING ATA CHAPTERS COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs

C1	Air Cond & Press	21
C2	Auto Flight	22
C3	Comms and Nav	23 - 34
C4	Doors - Hatches	52
C5	Electrical Power	24 - 33
C6	Equipment	25 - 38 - 45
C7	Engine – APU	49 - 71 - 72 - 73 - 74 - 75 – 76 - 77 - 78 - 79 - 80 - 81 - 82 -83
C8	Flight Controls	27 - 55 - 57.40 - 57.50 -57.60- 57.70
C9	Fuel - Airframe	28
C10	Helicopters Rotors	-62 - 64 - 66 - 67
C11	Helicopter - Trans	63 - 65
C12	Hydraulic	29
C13	Instruments	31
C14	Landing Gear	32
C15	Oxygen	35
C16	Propellers	61
C17	Pneumatic	36 - 37
C18	Protection ice/rain/fire	26 - 30
C19	Windows	56
C20	Structural	53 - 54 - 57.10 - 57.20 - 57.30

AMC M.A.603 (b) Extent of approval

- 1) The agreement by DGCA for the fabrication of parts by the approved maintenance organisation should be formalised through the approval of a detailed procedure in the maintenance organisation manual. This AMC contains principles and conditions to be taken into account for the preparation of an acceptable procedure.
- 2) Fabrication, inspection, assembly and test should be clearly within the technical and procedural capability of the approved maintenance organisation.
- 3) The approved data necessary to fabricate the part are those approved either by DGCA, the TC holder, CAR -21 design organisation approval holder, or STC holder
- 4) Items fabricated by an approved maintenance organisation may only be used by that organisation in the course of overhaul, maintenance, modifications, or repair of aircraft or components undergoing work within its own facility. The permission to

fabricate does not constitute approval for manufacture, or to supply externally and the parts do not qualify for certification on CA Form 1. This also applies to the bulk transfer or surplus inventory, in that locally fabricated parts are physically segregated and excluded from any delivery certification.

- 5) Fabrication of parts, modification kits etc for onward supply and/or sale may not be conducted under a M.A. Subpart F approval.
- 6) The data specified in paragraph 3 may include repair procedures involving the fabrication of parts. Where the data on such parts is sufficient to facilitate fabrication, the parts may be fabricated by an approved maintenance organisation. Care must be taken to ensure that the data include details of part numbering, dimensions, materials, processes, and any special manufacturing techniques, special raw material specification or/and incoming inspection requirement and that the approved organisation has the necessary capability. That capability should be defined by way of maintenance organisation manual content. Where special processes or inspection procedures are defined in the approved data which are not available at the approved maintenance organisation, that organisation can not fabricate the part unless the TC/STC-holder gives an approved alternative.
- 7) Examples of fabrication under the scope of an M.A. Subpart F approval can include but are not limited to the following:
 - a) fabrication of bushes, sleeves and shims,
 - b) fabrication of secondary structural elements and skin panels,
 - c) fabrication of control cables,
 - d) fabrication of flexible and rigid pipes,
 - e) fabrication of electrical cable looms and assemblies, formed or machined sheet metal panels for repairs.

Note: It is not acceptable to fabricate any item to pattern unless an engineering drawing of the item is produced which includes any necessary fabrication processes and which is accepted to DGCA.

- 8) Where a TC-holder or an approved production organisation is prepared to make available complete data which is not referred to in aircraft manuals or service bulletins but provides manufacturing drawings for items specified in parts lists, the fabrication of these items is not considered to be within the

scope of an M.A. Subpart F approval unless agreed otherwise by DGCA in accordance with a procedure specified in the maintenance organisation manual.

9) Inspection and Identification.

Any locally fabricated part should be subject to an inspection stage before, separately, and preferably independently from, any inspection of its installation. The inspection should establish full compliance with the relevant manufacturing data, and the part should be unambiguously identified as fit for use by stating conformity to the approved data. Adequate records should be maintained of all such fabrication processes including heat treatment and the final inspections. All parts, excepting those with inadequate space, should carry a part number which clearly relates it to the manufacturing/inspection data. Additional to the part number the approved maintenance organisation's identity should be marked on the part for traceability purposes.

AMC M.A.604 Maintenance organisation manual

1. Appendix IV to this AMC provides an outline of the format of an acceptable maintenance organisation manual for a small organisation with less than 10 maintenance staff.
2. The maintenance organisation exposition as specified in CAR - 145 provides an outline of the format of an acceptable maintenance organisation manual for larger organisations with more than 10 maintenance staff, dependent upon the complexity of the organisation.

AMC M.A.605 (a) Facilities

1. Where a hangar is not owned by the M.A. Subpart F organisation, it may be necessary to establish proof of tenancy. In addition, sufficiency of hangar space to carry out planned maintenance should be demonstrated by the preparation of a projected aircraft hangar visit plan relative to the aircraft maintenance programme. The aircraft hangar visit plan should be updated on a regular basis.
2. Protection from the weather elements relates to the normal prevailing local weather elements that are expected throughout any twelve-month period. Aircraft hangar and aircraft component workshop structures should be to a standard that prevents the ingress of rain, hail, ice, snow, wind and dust etc.

Aircraft hangar and aircraft component workshop floors should be sealed to minimise dust generation.

3. Aircraft maintenance staff should be provided with an area where they may study maintenance instructions and complete continuing airworthiness records in a proper manner.

AMC M.A.605 (b) Facilities

It is acceptable to combine any or all of the office accommodation requirements into one office subject to the staff having sufficient room to carry out assigned tasks.

AMC M.A.605 (c) Facilities

1. Storage facilities for serviceable aircraft components should be clean, well-ventilated and maintained at an even dry temperature to minimise the effects of condensation. Manufacturer's storage recommendations should be followed for those aircraft components identified in such published recommendations.
2. Adequate storage racks should be provided and strong enough to hold aircraft components and provide sufficient support for large aircraft components such that the component is not damaged during storage.
3. All aircraft components, wherever practicable, should remain packaged in their protective material to minimise damage and corrosion during storage. A shelf life control system should be utilised and identity tags used to identify components.
4. Segregation means storing unserviceable components in a separate secured location from serviceable components.
5. Segregation and management of any unserviceable component should be ensured according to the pertinent procedure approved to that organisation.
6. Procedures should be defined by the organisation describing the decision process for the status of unserviceable components. This procedure should identify at least the following:
 - role and responsibilities of the persons managing the decision process;
 - description of the decision process to choose between maintaining, storing or mutilating a

- component;
- traceability of decision

7. Once unserviceable components or materials have been identified as unsalvageable in accordance with M.A.504 (c), the organisation should establish secure areas in which to segregate such items and to prevent unauthorised access. Unsalvageable components should be managed through a procedure to ensure that these components receive the appropriate final disposal according to M.A.504 (d) or (e). The person responsible for the implementation of this procedure should be identified.

AMC M.A.606 (a) Personnel requirements

1. With regard to the accountable manager, it is normally intended to mean the chief executive officer of the maintenance organisation approved under M.A. Subpart F, who by virtue of position has overall (including in particular financial) responsibility for running the organisation. The accountable manager may be the accountable manager for more than one organisation and is not required to be necessarily knowledgeable on technical matters. When the accountable manager is not the chief executive officer, DGCA will need to be assured that such an accountable manager has direct access to chief executive officer and has a sufficiency of maintenance funding allocation. AMC M.A.606 (b) Personnel requirements¹. Dependent upon the size of the organisation, the functions may be subdivided under individual managers or combined in any number of ways.
2. The maintenance organisation should have, dependent upon the extent of approval, an aircraft maintenance manager, a workshop manager all of whom should report to the accountable manager. In small maintenance organisations any manager may also be the accountable manager, and may also be the aircraft maintenance manager or the workshop manager.
3. The aircraft maintenance manager is responsible for ensuring that all maintenance required to be carried out, plus any defect rectification carried out during aircraft maintenance, is carried out to the design and quality standards specified in this Part. The aircraft maintenance manager is also responsible for any corrective action resulting from the M.A.616 organisational review.

4. The workshop manager is responsible for ensuring that all work on aircraft components is carried out to the standards specified in this Part and also responsible for any corrective action resulting from the M.A.616 organisational review.
5. Notwithstanding the example sub-paragraphs 2 - 4 titles, the organisation may adopt any title for the foregoing managerial positions but should identify to the competent authority the titles and persons chosen to carry out these functions.

AMC M.A.606(c) Personnel requirements

1. All nominated persons should, in the normal way, be expected to satisfy the DGCA that they possess the appropriate experience and qualifications which are listed in paragraphs 2.1 to 2.5 below.
2. All nominated persons should have:
 - 2.1 practical experience and expertise in the application of aviation safety standards and safe maintenance practices;
 - 2.2 comprehensive knowledge of:
 - a) CAR M and any associated requirements and procedures;
 - b) the maintenance organisation manual;
 - 2.3 five years aviation experience of which at least three years should be practical maintenance experience;
 - 2.4 knowledge of the relevant type(s) of aircraft or components maintained;
 - 2.5. knowledge of maintenance standards.

AMC M.A.606 (d) Personnel requirements

1. All staff are subjected to compliance with the organisation's procedures specified in the maintenance organisation manual relevant to their duties.
2. To have sufficient staff means that the approved maintenance organisation employs or contracts staff directly, even on a volunteer basis, for the anticipated maintenance workload.
3. Temporarily sub-contracted means the person is employed by another organization and contracted by that organisation to the approved maintenance organisation.

AMC M.A.606(e) Personnel requirements

1. Personnel involved in maintenance should be assessed for competence by 'on the job' evaluation and/or by examination relevant to their particular job role within the organisation before unsupervised work is permitted.
2. Adequate initial and recurrent training should be provided and recorded to ensure continued competence.

AMC M.A.606 (f) Personnel requirements

1. Continued airworthiness non-destructive testing means such testing specified by the type certificate holder of the aircraft, engine or propeller in the M.A.304 (b) maintenance data for in service aircraft/ aircraft components for the purpose of determining the continued fitness of the product to operate safely.
2. Appropriately qualified means to level 1, 2 or 3 as defined by DGCA Standard dependant upon the non-destructive testing function to be carried out.
3. Notwithstanding the fact that level 3 personnel may be qualified via DGCA standard to establish and authorise methods, techniques, etc., this does not permit such personnel to deviate from methods and techniques published by the type certificate holder/manufacturer in the form of continued airworthiness data, such as in non-destructive test manuals or service bulletins, unless the manual or service bulletin expressly permits such deviation.
4. Notwithstanding the general references as per DGCA Standard all examinations should be conducted by personnel or organisations under the general control of DGCA
5. Particular non-destructive test means any one or more of the following: dye penetrant, magnetic particle, eddy current, ultrasonic and radiographic methods including X ray and gamma ray.
6. In addition it should be noted that new methods are and will be developed, such as, but not limited to thermography and shearography, which are not specifically addressed by DGCA Standard. Until such time as an agreed standard is established such methods should be carried out in accordance with the particular equipment manufacturers' recommendations

including any training and examination process to ensure competence of the personnel with the process.

7. Any approved maintenance organisation that carries out continued airworthiness non-destructive testing should establish qualification procedures for non-destructive testing.
8. Boroscoping and other techniques such as delamination coin tapping are non-destructive inspections rather than non-destructive testing. Notwithstanding such differentiation, approved maintenance organisation should establish a procedure to ensure that personnel who carry out and interpret such inspections are properly trained and assessed for their competence with the process. Non-destructive inspections, not being considered as non-destructive testing by M.A. Subpart F are not listed in Appendix IV to CAR M under class rating D1.
9. The referenced standards, methods, training and procedures should be specified in the maintenance organisation manual.
10. Any such personnel who intend to carry out and/or control a non-destructive test for which they were not qualified prior to the effective date of CAR M should qualify for such non-destructive test in accordance with DGCA Standard.

AMC M.A.607 Certifying staff

1. Adequate understanding of the relevant aircraft and/or aircraft component(s) to be maintained together with the associated organisation procedures means that the person has received training and has relevant maintenance experience on the product type and associated organisation procedures such that the person understands how the product functions, what are the more common defects with associated consequences.
2. All prospective certifying staff are required to be assessed for competence, qualification and capability related to intended certifying duties. Competence and capability can be assessed by having the person work under the supervision of another certifying person for sufficient time to arrive at a conclusion. Sufficient time could be as little as a few weeks if the person is fully exposed to relevant work. The person need not be assessed against the complete spectrum of intended duties. When the person has been recruited from another approved maintenance organisation and was a certifying person in that organisation then it is reasonable to accept a written confirmation from the

previous organisation.

3. The organisation should hold copies of all documents that attest to qualification, and to recent experience.
4. Relevant maintenance experience should be understood to mean that the person has worked in an aircraft or component maintenance environment and has either exercised the privileges of the certification authorisation and/or has actually carried out maintenance on at least some of the aircraft type systems specified in the particular certification authorisation.

AMC M.A.607 (c) Certifying staff

1. The following minimum information as applicable should be kept on record in respect of each certifying person:
 - a) name;
 - b) date of birth;
 - c) basic training;
 - d) type training;
 - e) recurrent training;
 - f) specialised training;
 - g) experience;
 - h) qualifications relevant to the approval;
 - i) scope of the authorisation;
 - j) date of first issue of the authorisation;
 - k) if appropriate - expiry date of the authorisation.
2. Persons authorised to access the system should be maintained at a minimum to ensure that records cannot be altered in an unauthorised manner or that such confidential records become accessible to unauthorised persons.
3. The DGCA should be granted access to the records upon request.

AMC M.A.608 (a) Components, equipment and tools

- a) Once the applicant for M.A. Subpart F approval has determined the intended scope of approval for consideration by the DGCA, it will be necessary to show that all tools and equipment as specified in the maintenance data can be made available when needed.
- b) All such tools should be clearly identified and listed in a control register including any personal tools and equipment that the

organisation agrees can be used.

- c) For tools required on an occasional basis, the organisation should ensure that they are controlled in terms of servicing or calibration as required.

AMC M.A.608 (b) Components, equipment and tools

1. The control of these tools and equipment requires that the organisation has a procedure to inspect/service and, where appropriate, calibrate such items on a regular basis and indicate to users that the item is within any inspection or service or calibration time-limit. A clear system of labelling all tooling, equipment and test equipment is therefore necessary giving information on when the next inspection or service or calibration is due and if the item is unserviceable for any other reason where it may not be obvious. A register should be maintained for all the organisation's precision tooling and equipment together with a record of calibrations and standards used.
2. Inspection, service or calibration on a regular basis should be in accordance with the equipment manufacturers' instructions except where the M.A. Subpart F organization can show by results that a different time period is appropriate in a particular case.

AMC M.A.609 Maintenance Data

When an organisation uses customer provided maintenance data, the scope of approval indicated in the maintenance organisation manual should be limited to the individual aircraft covered by the contracts signed with those customers unless the organisation also holds its own complete set of maintenance data for that type of aircraft.

AMC M.A.613 (a) Component certificate of release to service

1. aircraft component which has been maintained off the aircraft requires the issue of a certificate of release to service for such maintenance and another CRS to service in regard to being installed properly on the aircraft when such action occurs.
2. In the case of components in storage prior to CAR145, CAR M and CAR 21 and not released on an CA Form 1 or equivalent in accordance with M.A.501(a) or removed serviceable from active aircraft which have been withdrawn from service, this paragraph provides additional guidance regarding the conditions under which an CA Form 1 may be issued .

- 2.1 An CA Form 1 may be issued for an aircraft component which has been:
- released without an CA Form 1 or equivalent
 - Used on an aircraft and removed in a serviceable condition. Examples include leased and loaned aircraft components.
 - Removed from aircraft which have been withdrawn from service, or from aircraft which have been involved in abnormal occurrences such as accidents, incidents, heavy landings or lightning strikes.
 - Components maintained by an unapproved organisation.
- 2.2. An appropriately rated M.A. Subpart F maintenance organisation may issue an CA Form 1 as detailed in this AMC sub-paragraph 2.5 to 2.9, as appropriate, in accordance with procedures detailed in the manual as approved by DGCA. The appropriately rated M.A. Subpart F maintenance organisation is responsible for ensuring that all reasonable measures have been taken to ensure that only approved and serviceable aircraft components are issued an CA Form 1 under this paragraph.
- 2.3. For the purposes of this paragraph 2 only, appropriately rated means an organization with an approval class rating for the type of component or for the product in which it may be installed.
- 2.4. An CA Form 1 issued in accordance with this paragraph 2 should be issued by signing in block 20 and stating "Inspected" in block 12. In addition, block 13 should specify:
- 2.4.1. when the last maintenance was carried out and by whom;
 - 2.4.2. if the component is unused, when the component was manufactured and by whom with a cross reference to any original documentation which should be included with the Form;

- 2.4.3. a list of all airworthiness directives, repairs and modifications known to have been incorporated. If no airworthiness directives or repairs or modifications are known to be incorporated then this should be so stated
- 2.4.4. detail of life used for service life limited parts being any combination of fatigue, overhaul or storage life;
- 2.4.5. for any aircraft component having its own maintenance history record, reference to the particular maintenance history record as long as the record contains the details that would otherwise be required in block 13. The maintenance history record and acceptance test report or statement, if applicable, should be attached to the CA Form 1.
- 2.5. New / unused aircraft components
- 2.5.1 Any unused aircraft component in storage without an CA Form 1 up to the effective date(s) for CAR 21 that was manufactured by an organisation acceptable to DGCA at the time may be issued an CA Form 1 by an appropriately rated maintenance organisation approved under M.A. Subpart F. The CA Form 1 should be issued in accordance with the following subparagraphs which should be included in a procedure within the maintenance organisation manual.

Note 1: It should be understood that the release of a stored but unused aircraft component in accordance with this paragraph represents a maintenance release under M.A. Subpart F and not a production release under CAR 21. It is not intended to bypass the production release procedure agreed by DGCA for parts and subassemblies intended for fitment on the manufacturers own production line.

- a) An acceptance test report or statement should be available for all used and unused aircraft components that are subjected to acceptance testing after manufacturing or maintenance as

appropriate.

- b) The aircraft component should be inspected for compliance with the manufacturer's instructions and limitations for storage and condition including any requirement for limited storage life, inhibitors, controlled climate and special storage containers. In addition or in the absence of specific storage instructions the aircraft component should be inspected for damage, corrosion and leakage to ensure good condition.
- c) The storage life used of any storage life limited parts should be established. 2.5.2. If it is not possible to establish satisfactory compliance with all applicable conditions specified in subparagraph 2.5.1 (a) to (c) inclusive the aircraft component should be disassembled by an appropriately rated organisation and subjected to a check for incorporated airworthiness directives, repairs and modifications and inspected/tested in accordance with the manufacturers maintenance instructions to establish satisfactory condition and, if relevant, all seals, lubricants and life limited parts replaced. On satisfactory completion after reassembly an CA Form 1 may be issued stating what was carried out and the reference of the manufacturers maintenance instructions included.

2.6. Used aircraft components removed from a serviceable aircraft.

2.6.1. Serviceable aircraft components removed from a **D.G.C.A** registered aircraft may be issued an CA Form 1 by an appropriately rated organisation subject to compliance with this subparagraph.

- a) The organisation should ensure that the component was removed from the aircraft by an appropriately qualified person.
- b) The aircraft component may only be deemed serviceable if the last flight operation with the component fitted revealed no faults on that component/related system.
- c) The aircraft component should be inspected for satisfactory condition including in particular damage, corrosion or leakage and compliance with any additional manufacturer's maintenance

instructions.

- d) The aircraft record should be researched for any unusual events that could affect the serviceability of the aircraft component such as involvement in accidents, incidents, heavy landings or lightning strikes. Under no circumstances may an CA Form 1 be issued in accordance with this paragraph 2.6 if it is suspected that the aircraft component has been subjected to extremes of stress, temperatures or immersion which could effect its operation.
- e) A maintenance history record should be available for all used serialised aircraft components.
- f) Compliance with known modifications and repairs should be established.
- g) The flight hours/cycles/landings as applicable of any service life limited parts including time since overhaul should be established.
- h) Compliance with known applicable airworthiness directives should be established.
- i) Subject to satisfactory compliance with this subparagraph 2.6.1 an CA Form 1 may be issued and should contain the information as specified in paragraph 2.4 including the aircraft from which the aircraft component was removed.

2.6.2. Serviceable aircraft components removed from a non DGCA registered aircraft may only be issued an CA Form 1 if the components are leased or loaned from the maintenance organisation approved under M.A. Subpart F who retains control of the airworthiness status of the components. An CA Form 1 may be issued and should contain the information as specified in paragraph 2.4 including the aircraft from which the aircraft component was removed.

2.7 Used aircraft components removed from an aircraft withdrawn from service.

Serviceable aircraft components removed from a D.G.C.A registered aircraft withdrawn from service may be issued an CA Form 1 by a maintenance organization approved under M.A. Subpart F subject to compliance with this sub paragraph.

- a) Aircraft withdrawn from service are sometimes dismantled for spares. This is considered to be a maintenance activity and should be accomplished under the control of an organisation approved under M.A. Subpart F, employing procedures approved by DGCA.
- b) To be eligible for installation components removed from such aircraft may be issued with an CA Form 1 by an appropriately rated organisation following a satisfactory assessment.
- c) As a minimum the assessment will need to satisfy the standards set out in paragraphs 2.5 and 2.6 as appropriate. This should where known, include the possible need for the alignment of scheduled maintenance that may be necessary to comply with the maintenance programme applicable to the aircraft on which the component is to be installed.
- d) Irrespective of whether the aircraft holds a certificate of airworthiness or not, the organisation responsible for certifying any removed component should satisfy itself that the manner in which the components were removed and stored are compatible with the standards required by M.A. Subpart F.
- e) A structured plan should be formulated to control the aircraft disassembly process. The disassembly is to be carried out by an appropriately rated organisation under the supervision of certifying staff, who will ensure that the aircraft components are removed and documented in a structured manner in accordance with the appropriate maintenance data and disassembly plan.
- f) All recorded aircraft defects should be reviewed and the possible effects these may have on both normal and standby functions of removed components are to be considered.
- g) Dedicated control documentation is to be used as detailed

by the disassembly plan, to facilitate the recording of all maintenance actions and component removals performed during the disassembly process. Components found to be unserviceable are to be identified as such and quarantined pending a decision on the actions to be taken. Records of the maintenance accomplished to establish serviceability are to form part of the component maintenance history.

- h) Suitable M.A. Subpart F facilities for the removal and storage of removed components are to be used which include suitable environmental conditions, lighting, access equipment, aircraft tooling and storage facilities for the work to be undertaken. While it may be acceptable for components to be removed, given local environmental conditions, without the benefit of an enclosed facility subsequent disassembly (if required) and storage of the components should be in accordance with manufacturer's recommendations.

2.8. Used aircraft components maintained by organisations not approved in accordance with M.A. Subpart F. For used components maintained by a maintenance organisation unapproved under M.A. Subpart F, due care should be exercised before acceptance of such components. In such cases an appropriately rated maintenance organisation approved under CAR 145 should establish satisfactory conditions by:

- a) dismantling the component for sufficient inspection in accordance with the appropriate maintenance data,
- b) replacing of all service life limit components when no satisfactory evidence of life used is available and/or the components are in an unsatisfactory condition,
- c) reassembling and testing as necessary the component,
- d) completing all certification requirements as specified in M.A.613

2.9. Used aircraft components removed from an aircraft involved in an accident or incident. Such components should only be issued with an CA Form 1 when processed in accordance with paragraph 2.7 and a specific work order including all additional necessary tests and inspections made necessary by the accident or incident. Such a work order may require input from the TC holder or original manufacturer as appropriate. This work order should be referenced in block 13.

3. A certificate should not be issued for any component when it is known that the component is unserviceable except in the case of an component undergoing a series of maintenance processes at several approved maintenance organisations and the component needs a certificate for the previous maintenance process carried out for the next approved maintenance organisation to accept the component for subsequent maintenance processes. A clear statement of limitation should be endorsed in block 13.
4. The certificate is to be used for export/import purposes, as well as for domestic purposes, and serves as an official certificate for components from the manufacturer/maintenance organisation to users. The certificate is not a delivery or shipping note. It should only be issued by organisations approved by DGCA as applicable within the scope of the approval.

AMC M.A.614 (a) Maintenance records

1. Properly executed and retained records provide owners, operators and maintenance personnel with information essential in controlling unscheduled and scheduled maintenance, and trouble shooting to eliminate the need for re-inspection and rework to establish airworthiness. The prime objective is to have secure and easily retrievable records with comprehensive and legible contents. The aircraft record should contain basic details of all serialized aircraft components and all other significant aircraft components installed, to ensure traceability to such installed aircraft component documentation and associated M.A.304 maintenance data.
2. The maintenance record can be either a paper or computer system or any combination of both. The records should remain legible throughout the required retention period.
3. Paper systems should use robust material which can withstand normal handling and filing.
4. Computer systems may be used to control maintenance and/or record details of maintenance work carried out. Computer systems used for maintenance should have at least one backup system which should be updated at least within 24 hours of any maintenance. Each terminal is required to contain programme safeguards against the ability of unauthorised personnel to alter the database.

AMC M.A.614 (c) Maintenance records

Associated maintenance data is specific information such as repair and modification data. This does not necessarily require the retention of all aircraft maintenance manual, component maintenance manual, parts catalogues etc issued by the TC holder or STC holder. Maintenance records should refer to the revision status of the data used.

AMC M.A.616 Organisational review

1. The primary objectives of the organisational review are to enable the approved maintenance organisation to ensure that it can deliver a safe product and that approved maintenance organisation remains in compliance with the requirements.
2. The approved maintenance organisation should identify:
 - 2.1. The person responsible for the organisational review, and;
 - 2.2. The frequency of the reviews, and;
 - 2.3. The scope and content of the reviews, and;
 - 2.4. The persons accomplishing the reviews, and;
 - 2.5. The procedure for planning, performing and processing review findings.
 - 2.6. The procedure for ensuring corrective actions are carried out in the appropriate time frame.
3. The organisation quality system as specified in CAR 145 provides an acceptable basic structure for the organisational review system for organisations with more than 10 maintenance staff, dependent upon the complexity of the organisation.
4. Appendix VIII should be used to manage the organisational reviews.

AMC M.A.617 Changes to the approved maintenance organization

DGCA should be given adequate notification of any proposed changes in order to enable the maintenance organisation to remain approved if agreed by DGCA during negotiations about any of the specified changes. Without this paragraph the approval would automatically be suspended in all cases.

AMC M.A.704 Continuing airworthiness management exposition

1. The purpose of the continuing airworthiness management exposition is to set forth the procedures, means and methods of

the M.A. Subpart G organisation. Compliance with its contents will assure compliance with CAR M requirements.

2. A continuing airworthiness management exposition should comprise:
 - Part 0 General organisation
 - Part 1 Continuing airworthiness procedures
 - Part 2 Quality system or organisational review (as applicable)
 - Part 3 Contracted maintenance (for operators) – management of maintenance (liaison with maintenance organisations in the case of non commercial air transport)
 - Part 4 Airworthiness review procedures (if applicable)
3. Where a M.A. Subpart G organisation is also approved to another Part, the exposition or manual required by the other Part may form the basis of the continuing airworthiness management exposition in a combined document. Follows the example for a combined CAR -145 and M.A. Subpart G organisation:

CAR -145 Exposition

 - Part 1 Management
 - Part 2 Maintenance procedures
 - Part L2 Additional line maintenance procedures
 - Part 3 Quality system and/or organisational review (as applicable)
 - Part 4 Contracts with owners/operators
 - Part 5 Appendices (sample of documents)
 - Part 7 FAA supplement (if applicable)
 - Part 8 TCCA supplement (if applicable)

Part 3 should also cover the functions specified by M.A.712 quality system.

Part 4 should also cover contracted maintenance (for operators) – Management of maintenance (liaison with maintenance organisations in the case of non commercial airtransport)

Additional parts should be introduced covering the following:

 - Part 0 General organisation
 - Part 6 Continuing airworthiness procedures
 - Part 9 Airworthiness review procedures (if applicable)
4. Personnel should be familiar with those parts of the exposition that are relevant to their tasks.
5. The M.A. Subpart G organisation should specify in the

exposition who is responsible for the amendment of the document.

6. Unless otherwise agreed by DGCA, the person responsible for the management of the quality system or for the organisational review should be responsible for monitoring and amending the exposition, including associated procedures manuals, and the submission of proposed amendments to DGCA. The DGCA may agree a procedure, which will be stated in the amendment control section of the exposition, defining the class of amendments which can be incorporated without the prior consent of DGCA.
7. The operator may use electronic data processing (EDP) for publication of the continuing airworthiness management exposition. The continuing airworthiness management exposition should be made available to DGCA in a form acceptable to DGCA. Attention should be paid to the compatibility of EDP publication systems with the necessary dissemination of the continuing airworthiness management exposition, both internally and externally.
8. Part 0 “General organisation” of the continuing airworthiness management exposition should include a corporate commitment by the M.A Subpart G organisation, signed by the accountable manager confirming that the continuing airworthiness management exposition and any associated manuals define the organisation compliance with CAR M and will be complied with at all times.
9. The accountable manager's exposition statement should embrace the intent of the following paragraph and in fact this statement may be used without amendment. Any modification to the statement should not alter the intent:

This exposition defines the organisation and procedures upon which DGCA M.A. Subpart G continuing airworthiness management approval is based. These procedures are approved by the undersigned and should be complied with, as applicable, in order to ensure that all continuing airworthiness tasks of.... (Quote operators's name)..... fleet of aircraft and/or of all aircraft under contract in accordance with M.A.201 (e) with.... (Quote organisation's name)..... are carried out on time to an approved standard.

It is accepted that these procedures do not override the necessity of complying with any new or amended regulation

published from time to time where these new or amended regulations are in conflict with these procedures. It is understood that DGCA will approve this organisation whilst DGCA is satisfied that the procedures are being followed and the work standard maintained. It is understood that DGCA reserves the right to suspend, vary or revoke the M.A. Subpart G continuing airworthiness management approval of the organisation or the air operators certificate, as applicable, if DGCA has evidence that the procedures are not followed and the standards not upheld.

Signed

Dated

Accountable Manager and ...(quote position).....

For and on behalf of(quote organisation's name)..... "

AMC M.A.705 Facilities

Office accommodation should be such that the incumbents, whether they be continuing airworthiness management, planning, technical records or quality staff, can carry out their designated tasks in a manner that contributes to good standards. In the smaller M.A. Subpart G organisations, DGCA may agree to these tasks being conducted from one office subject to being satisfied that there is sufficient space and that each task can be carried out without undue disturbance. Office accommodation should also include an adequate technical library and room for document consultation

AMC M.A.706 Personnel requirements

1. The person or group of persons should represent the continuing airworthiness management structure of the organisation and be responsible for all continuing airworthiness functions. Dependent on the size of the operation and the organisational set-up, the continuing airworthiness functions may be divided under individual managers or combined in nearly any number of ways. However, if a quality system is in place it should be independent from the other functions.
2. The actual number of persons to be employed and their necessary qualifications is dependent upon the tasks to be performed and thus dependent on the size and complexity of the organisation (general aviation aircraft, corporate aircraft, number of aircraft and the aircraft types, complexity of the aircraft and their age and for commercial air transport, route network, line or charter, ETOPS) and the amount and complexity of maintenance contracting. Consequently, the

number of persons needed, and their qualifications may differ greatly from one organisation to another and a simple formula covering the whole range of possibilities is not feasible.

3. To enable DGCA to accept the number of persons and their qualifications, an organisation should make an analysis of the tasks to be performed, the way in which it intends to divide and/or combine these tasks, indicate how it intends to assign responsibilities and establish the number of man/hours and the qualifications needed to perform the tasks. With significant changes in the aspects relevant to the number and qualifications of persons needed, this analysis should be updated.
4. Nominated person or group of persons should have:
 - 4.1. practical experience and expertise in the application of aviation safety standards and safe operating practices;
 - 4.2. a comprehensive knowledge of:
 - (a). relevant parts of operational requirements and procedures;
 - (b). the AOC holder's Operations Specifications when applicable;
 - (c). the need for, and content of, the relevant parts of the AOC holder's Operations Manual when applicable;
 - 4.3. knowledge of quality systems;
 - 4.4. five years relevant work experience of which at least two years should be from the aeronautical industry in an appropriate position;
 - 4.5. a relevant engineering degree or an aircraft maintenance technician qualification with additional education acceptable to DGCA. 'relevant engineering degree' means an engineering degree from aeronautical, mechanical, electrical, electronic, avionic or other studies relevant to the maintenance and continuing airworthiness of aircraft/aircraft components;
 - 4.6. thorough knowledge with the organisation's continuing airworthiness management exposition;
 - 4.7. knowledge of a relevant sample of the type(s) of aircraft gained through a formalised training course;
 - 4.8. knowledge of maintenance methods.

AMC M.A.706 (e) Personnel requirements

1. DGCA of the operator should only accept that the nominated post holder be employed by the organisation approved under

CAR 145 when it is manifest that he/she is the only available competent person in a position to exercise this function, within a practical working distance from the operator's offices.

2. This paragraph only applies to contracted maintenance and therefore does not affect situations where the organisation approved under CAR 145 and the operator are the same organisation.

AMC M.A.707 (a) Airworthiness review staff

1. Airworthiness review staff are only required if the M.A. Subpart G organization wants to be granted M.A.711 (b) airworthiness review privileges.
2. A person qualified to the AMC M.A.706 subparagraph 4.5 should be considered as holding the equivalent to an aeronautical degree.
3. An appropriate Rule 61 licence is a category B or C licence in the sub-category of the aircraft reviewed. It is not necessary to satisfy the experience requirements of Rule 61 at the time of the review.
4. To hold a position with appropriate responsibilities means the airworthiness review staff should have a position in the organisation independent from the airworthiness management process or with overall authority on the airworthiness management process of complete aircraft.

AMC M.A.708 (c) Continuing airworthiness management

1. Where an operator is not approved under CAR -145 or an operator's maintenance organisation is an independent organisation, a contract should be agreed between the operator and a maintenance organisation approved under CAR -145, which specifies, in detail, the work to be performed by the maintenance organisation. Appendix XI to this AMC gives further details on the subject.
2. Both the specification of work and the assignment of responsibilities should be clear, unambiguous and sufficiently detailed to ensure that no misunderstanding should arise between the parties concerned (operator, maintenance organisation and DGCA) that could result in a situation where work that has a bearing on the airworthiness or serviceability of

aircraft is not or will not be properly performed.

3. Special attention should be paid to procedures and responsibilities to ensure that all maintenance work is performed, service bulletins are analysed and decisions taken on accomplishment, airworthiness directives are completed on time and that all work, including non-mandatory modifications is carried out to approved data and to the latest standards.
4. For line maintenance, the actual layout of the contract the IATA Standard Ground Handling Agreement may be used as a basis, but this does not preclude the competent authority of operator from ensuring that the content of the contract is acceptable to them, and especially that the contract allows the operator to properly exercise its maintenance responsibility. Those parts of a contract that have no bearing on the technical or operational aspects of airworthiness are outside the scope of this paragraph.
5. It is possible to contract another operator that is not directly approved under CAR -145. In this case the operator's continuing airworthiness management exposition should include appropriate procedures to ensure that all this contracted maintenance is ultimately performed on time by organisations approved under CAR-145 in accordance with the contracting operator's data. In particular the quality system procedures should place great emphasis on monitoring compliance with the above. The list of CAR -145 approved contractors, or a reference to this list, should be included in the operator's continuing airworthiness management exposition.
6. Such a maintenance arrangement does not absolve the operator from its overall continuing airworthiness responsibility. Specifically, in order to accept the maintenance arrangement, the DGCA should be satisfied that such an arrangement allows the operator to ensure full compliance with responsibilities pursuant to M.A.201.
7. The purpose of M.A.708(c) is to ensure that all maintenance is carried out by properly approved CAR 145 organisations. This does not preclude a primary maintenance arrangement with an operator that is not such an organisation, when it proves that such an arrangement is in the interest of the operator by simplifying the management of its maintenance, and the operator keeps an appropriate control of it. Such an arrangement should not preclude the operator from ensuring

that all maintenance is performed by a CAR 145 approved organisation and complying with the M.A.201 continuing airworthiness responsibility requirements. Typical examples of such arrangements follow:

- **Component maintenance:**
The operator may find it more appropriate to have a primary contractor that would despatch the components to appropriately approved organisations, rather than himself sending different types of components to various maintenance organisations approved under CAR 145. The benefit for the operator is that the management of maintenance is simplified by having a single contact point for component maintenance. The operator remains responsible for ensuring that all maintenance is performed by maintenance organisations approved under CAR 145 and in accordance with the approved standard.

- **Aeroplane, engine and component maintenance:**
The operator may wish to have a maintenance contract with another operator of the same type of aircraft not approved under CAR 145. A typical case is that of a dry-leased aeroplane between operators, where the parties, for consistency or continuity reasons (especially for short term lease agreements) find it appropriate to keep the aeroplane under the current maintenance arrangement. Where this arrangement involves various CAR 145 approved contractors, it might be more manageable for the lessee operator to have a single contract with the lessor operator. Such an arrangement should not be understood as a transfer of responsibility to the lessor operator: the lessee operator, being the approved operator of the aircraft, remains responsible for the continuing airworthiness of the aeroplane in performing the M.A.708 functions, and employing the M.A.706 continuing airworthiness management group of persons and staff. In essence, this does not alter the intent of M.A.201 (h) in that it also requires that the operator has to establish a written maintenance contract acceptable to the competent authority of operator and, whatever type of acceptable arrangement is made, the operator is required to exercise the same level of control on contracted maintenance, particularly through the M.A.706 (c) continuing airworthiness management group of persons and quality system as referred to in

M.A.712.

AMC M.A.708 (c) (1) Continuing airworthiness management – unscheduled maintenance

The intent of this paragraph is that maintenance contracts are not necessary when the operator's continuing airworthiness system, as approved by DGCA of operator, specifies that the relevant maintenance activity may be ordered through one time work orders. This includes for obvious reasons unscheduled line maintenance and may also include aeroplane component maintenance up to engines, so long as the competent authority of operator considers that the maintenance is manageable through work orders, both in term of volume and complexity. It should be noted that this paragraph implies that even where base maintenance is ordered on a case-by-case basis, there should be a written maintenance contract.

AMC M.A.710 (a) Airworthiness review

1. A full documented review is a check of at least the following categories of documents:
 - registration papers
 - M.A.305 aircraft continuing airworthiness record system
 - M.A.306 operator's technical log system
 - list of deferred defects, minimum equipment list and configuration deviation list if applicable
 - aircraft flight manual including aircraft configuration
 - aircraft Maintenance programme
 - maintenance Data
 - relevant work packages
 - AD status
 - modification and SB status
 - modification and repair approval sheets
 - list of service life limited component
 - relevant DGCA Form 1 or equivalent
 - mass and balance report and equipment list
 - aircraft, engine and propeller TC Data Sheets

As a minimum, sample checks within each document category should be carried out.

The M.A. Subpart G organisation should develop procedures for the airworthiness review staff to produce a compliance report that confirms the above have been reviewed and found in compliance with CAR-M.

AMC M.A.710 (b) and (c) Airworthiness review

1. The physical survey could require actions categorised as maintenance (e.g. operational tests, tests of emergency equipment, visual inspections requiring panel opening etc.). In this case, after the airworthiness review a release to service should be issued in accordance with CAR M.
2. The physical survey may include verifications to be carried out during flight.
3. The M.A. Subpart G organisation should develop procedures for the airworthiness review staff to produce a compliance report that confirms the physical survey has been carried out and found satisfactory.
4. To ensure compliance the physical survey may include relevant sample checks of items.

AMC M.A.710 (e) Airworthiness review

A copy of both physical survey and document review compliance reports stated above should be sent to DGCA together with any recommendation issued.

AMC M.A.711 (b) Privileges of the organisation

It is not necessary for an organisation to be approved to carry out airworthiness reviews. This can be contracted to another appropriately approved organisation. In this case, the airworthiness review should be carried out every year and the ARC issued by DGCA following a recommendation.

AMC M.A.712 (a) Quality system

1. Procedures should be held current such that they reflect best practice within the organisation. It is the responsibility of all employees to report any difficulties with the procedures via their organisation's internal occurrence reporting mechanisms.
2. All procedures, and changes to the procedures, should be verified and validated before use where practicable.
3. The feedback part of the system should address who is required to rectify any non-compliance in each particular case and the

procedure to be followed if rectification is not completed within appropriate timescales. The procedure should lead to the accountable manager specified in M.A.706

4. The independent quality audit reports referenced in AMC M.A.712 (b) should be sent to the relevant department for rectification action giving target rectification dates. Rectification dates should be discussed with such department before the quality department or nominated quality auditor confirms such dates in the report. The relevant department is required to rectify findings and inform the quality manager or the quality auditor of such rectification.
5. The accountable manager should hold regular meetings with staff to check progress on rectification except that in the large organisations such meetings may be delegated on a day to day basis to the quality manager subject to the accountable manager meeting at least twice per year with the senior staff involved to review the overall performance and receiving at least a half yearly summary report on findings of non-compliance.

AMC M.A.712 (b) Quality System

1. The primary objectives of the quality system are to enable the M.A. Subpart G organisation to ensure airworthy aircraft and to remain in compliance with the CAR M requirements.
2. An essential element of the quality system is the independent audit.
3. The independent audit is an objective process of routine sample checks of all aspects of the M.A. Subpart G organisation's ability to carry out continuing airworthiness management to the required standards. It includes some product sampling as this is the end result of the process.
4. The independent audit represents an objective overview of the complete continuing airworthiness management related activities. It is intended to complement the M.A.902 requirement for an airworthiness review to be satisfied that all aircraft managed by the organisation remain airworthy.
5. The independent audit should ensure that all aspects of M.A. Subpart G compliance are checked annually, including all the sub-contracted activities, and may be carried out as a complete single exercise or subdivided over the year period in accordance

with a scheduled plan. The independent audit does not require each procedure to be checked against each product line when it can be shown that the particular procedure is common to more than one product line and the procedure has been checked every year without resultant findings. Where findings have been identified, the particular procedure should be rechecked against other product lines until the findings have been rectified after which the independent audit procedure may revert back to year for the particular procedure. Provided that there are no safety related findings, the audit time periods specified in this AMC may be increased by up to 100% subject to agreement by DGCA.

6. Where the organisation has more than one location approved the quality system should describe how these are integrated into the system and include a plan to audit each location every year.
7. 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.
8. The independence of the audit should be established by always ensuring that audits are carried out by personnel not responsible for the function, procedure or products being checked.
9. An organisation should establish a quality plan acceptable to the competent authority of approval to show when and how often the activities as required by M.A. Subpart G will be audited.

AMC M.A.712 (f) Quality system

A small organisation is an organisation managing less than 10 aircraft. This number should be decreased by 50% in the case of large aircraft. The combination of aircraft and aircraft types, the utilisation of the aircraft and the number of approved locations of the organisations should also be considered before replacing the quality system by an organisational review.

AMC M.A.713 Changes to the approved continuing airworthiness organization

1. This paragraph covers scheduled changes to the continuing airworthiness organisation's approval. Whilst the requirements relating to air operator certificates, including their issue, variation and continued validity, are prescribed in the appropriate regulation, operators should be aware this paragraph is included in CAR M and may affect continued acceptance of the continuing airworthiness management.
2. The primary purpose of this paragraph is to enable the continuing airworthiness organisation to remain approved if agreed by the DGCA during negotiations about any of the specified changes. Without this paragraph the approval would automatically be suspended in all cases.

AMC M.A.714 Record-keeping

1. The M.A. Subpart G organisation should ensure that it always receives a complete CRS from the approved maintenance organisation such that the required records can be retained. The system to keep the continuing airworthiness records should be described in the organisation continuing airworthiness management exposition.
2. When an organisation arranges for the relevant maintenance organisation to retain copies of the continuing airworthiness records on its behalf, it will nevertheless continue to be responsible for the records under M.A.714 relating to the preservation of records. If it ceases to be the organisation of the aircraft, it also remains responsible for transferring the records to any other person or organisation managing continuing airworthiness of the aircraft.
3. Keeping continuing airworthiness records in a form acceptable to DGCA means in paper form or on a computer database or a combination of both methods. Records stored in microfilm or optical disc form are also acceptable. The record should remain legible throughout the required retention period.
4. Paper systems should use robust material which can withstand normal handling and filing.
5. Computer systems should have at least one backup system which should be updated within 24 hours of any new entry. Each terminal is required to contain programme safeguards against the ability of unauthorised personnel to alter the database.

6. Microfilming or optical storage of continuing airworthiness records may be carried out at any time. The records should be as legible as the original record and remain so for the required retention period.

AMC M.A. 801 (b) Aircraft certificate of release to service

A certificate of release to service is necessary before flight, at the completion of any defect rectification, whilst the aircraft operates a flight between scheduled maintenance checks.

AMC M.A.801 (d) Aircraft certificate of release to service

1. The aircraft certificate of release to service should contain the following statement:
 - (a) 'Certifies that the work specified except as otherwise specified was carried out in accordance with CAR M and in respect to that work the aircraft is considered ready for release to service'.
 - (b) For a Pilot-owner a certificate of release to service should contain the following statement:

'Certifies that the limited pilot-owner maintenance specified except as otherwise specified was carried out in accordance with CAR M and in respect to that work the aircraft is considered ready for release'.
2. The certificate of release to service should relate to the task specified in the manufacturer's or operator's instruction or the aircraft maintenance programme which itself may cross-refer to a manufacturer's/ operator's instruction in a maintenance manual, service bulletin etc.
3. The date such maintenance was carried out should include when the maintenance took place relative to any life or overhaul limitation in terms of date/flying hours/cycles/landings etc., as appropriate.
4. When extensive maintenance has been carried out, it is acceptable for the certificate of release to service to summarise the maintenance so long as there is a unique cross-reference to the work-pack containing full details of maintenance carried out. Dimensional information should be retained in the work-pack record.

5. The person issuing the certificate of release to service should use his normal signature except in the case where a computer release to service system is used. In this latter case the ((DGCA) will need to be satisfied that only the particular person can electronically issue the release to service. One such method of compliance is the use of a magnetic or optical personal card in conjunction with a personal identity number (PIN) known only to the individual, which is keyed into the computer. A certification stamp is optional.
6. the completion of all maintenance, owners, certifying staff, operators and maintenance organisations should ensure they have a clear, concise, legible record of the work performed.
7. In the case of an M.A.801 (b) 2 release to service, certifying staff should retain all records necessary to prove that all requirements have been met for the issuance of a certificate of release to service.

AMC M.A.801 (e) Aircraft certificate of release to service

1. Being unable to establish full compliance with sub-paragraph M.A.801 (b) means that the maintenance required by the aircraft owner or M.A. Subpart G organisation could not be completed due either to running out of available aircraft maintenance downtime for the scheduled check or by virtue of the condition of the aircraft requiring additional maintenance downtime.
2. The aircraft owner or M.A. Subpart G organisation is responsible for ensuring that all required maintenance has been carried out before flight. Therefore an aircraft owner or M.A. Subpart G organisation should be informed and agree to the deferment of full compliance with M.A. 801(b). The certificate of release to service may then be issued subject to details of the deferment, including the aircraft owner or M.A. Subpart G organisation authorisation, being endorsed on the certificate.
3. If a certificate of release to service is issued with incomplete maintenance a record should be kept stating what action the mechanic, supervisor and certifying staff should take to bring the matter to the attention of the relevant aircraft owner or M.A. Subpart G organisation so that the issue may be discussed and resolved with the aircraft owner or M.A. Subpart G organisation.

AMC M.A.801 (f) Aircraft certificate of release to service

'Hazard seriously the flight safety' means any instance where safe operation could not be assured or which could lead to an unsafe condition. It typically includes, but is not limited to, significant cracking, deformation, corrosion or failure of primary structure, any evidence of burning, electrical arcing, significant hydraulic fluid or fuel leakage and any emergency system or total system failure. An airworthiness directive overdue for compliance is also considered a hazard to flight safety.

AMC M.A.802 Component certificate of release to service

When an approved organisation maintains an aircraft component for use by the organisation an CA Form 1 may not be necessary depending upon the organisation's internal release procedures, however all the information normally required for the CA Form 1 should be adequately detailed in the certificate of release to service.

AMC M.A.803 Pilot-owner authorization

1. The pilot-owner should hold a valid pilot license issued or validated by a D.G.C.A for the aircraft type being maintained.
2. Privately operated means the aircraft is not operated pursuant to M.A.201 (h) and (i).
3. A pilot owner should only issue a certificate of release to service for maintenance performed by the pilot owner and after demonstrating the competence to carry out such maintenance tasks.

AMC M.A.901 (a) Aircraft airworthiness review

CA Form 15a is issued by DGCA while CA Form 15b is issued by a M.A. Subpart G organisation.

AMC M.A.901 (b) Aircraft airworthiness review

1. If the continuing airworthiness of the aircraft is not managed according to a CAR M appendix I arrangement between the owner and the M.A. Subpart G organisation, the aircraft should be considered to be outside a controlled environment.
2. The fact that limited pilot-owner maintenance as defined in M.A.803 (b) is not carried out and released by an approved

maintenance organisation does not change the status of an aircraft in a controlled environment providing the M.A. Subpart G organisation under contract has been informed of any such maintenance carried out.

AMC M.A.901 (c) 2 Aircraft airworthiness review

When the aircraft has remained within a controlled environment, the extension of the validity of the airworthiness review certificate does not require an airworthiness review but only a verification of the continuous compliance with M.A.902 (b).

AMC M.A.901 (d) Aircraft airworthiness review

The recommendation sent to DGCA should contain at least the items described below.

- (a) General information
 - M.A. Subpart G organisation information
 - owner/lessee information
 - date and place the document review and the aircraft survey were carried out
 - period and place the aircraft can be seen if required by DGCA
- (b) Aircraft information
 - registration
 - type
 - manufacturer
 - serial number
 - flight manual reference
 - weight and centre of gravity data
 - maintenance programme reference
- (c) Documents accompanying the recommendation
 - copy of registration papers
 - copy of the owners request for a new airworthiness review certificate
- (d) Aircraft status
 - aircraft total time and cycles
 - list of persons or organisations having carried out continuing airworthiness activities including maintenance tasks on the aircraft and its components since the last airworthiness review certificate
- (e) Aircraft survey

- a precise list of the areas of the aircraft that were surveyed and their status
- (f) Findings
- a list of all the findings made during the airworthiness review with the corrective action carried out
- (g) Statement
- A statement signed by the airworthiness review staff recommending the issue of an airworthiness review certificate. The statement should confirm that the aircraft in its current configuration complies with the following:
- airworthiness directives up to the latest published issue, and;
 - type certificate datasheet, and;
 - maintenance programme, and;
 - component service life limitations, and;
 - the valid weight and centre of gravity schedule reflecting the current configuration of the aircraft, and;
 - CAR 21 for all modifications and repairs, and;
 - the current flight manual including supplements, and;
 - operational requirements.

The above items should clearly state the exact reference of the data used in establishing compliance; for instance the number and issue of the type certificate data sheet used should be stated. The statement should also confirm that all of the above is properly entered and certified in the aircraft continuing airworthiness record system and/or in the operator's technical log.

AMC M.A.901 (e) Aircraft airworthiness review

Suitable accommodation should include:

- a) an office with normal office equipment such as desks, telephones, photocopying machines etc. whereby the continuing airworthiness records can be reviewed.
- b) a hangar when needed for the physical survey. The support of personnel appropriately qualified in accordance with Rule 61 is necessary when DGCA's airworthiness review staff is not appropriately qualified.

AMC M.A.903 (a) - 1 Transfer of aircraft registration within

the India. The applicant should notify to DGCA so as to allow the proper transfer of information to DGCA during the aircraft transfer process.

AMC M.A.903 (b) Transfer of aircraft registration within the DGCA In case of transfer of aircraft registration within India the aircraft owner/ operator should verify that DGCA has entered the new aircraft registration on the existing airworthiness review certificate and validated the change.

AMC M.A.904 (a)-1 Airworthiness reviews of aircraft imported into India

In order to allow for possible participation of authority personnel, the applicant should inform DGCA at least 10 working days in advance of the time and location of the airworthiness review.

AMC M.A.904 (a)-2 Airworthiness reviews of aircraft imported into India

1. When performing an airworthiness review of aircraft imported into the country the aircraft and the relevant records should be reviewed to determine the work to be undertaken to establish the airworthiness of the aircraft.
2. In determining the work to be undertaken during the airworthiness review on the aircraft, the following should be taken into consideration:
 - a) the information from third country authorities such as export certificates, primary authority information; and,
 - b) the information on aircraft maintenance history such as continuing airworthiness records, aircraft, engine, propeller, rotor and life limited part log books or cards as appropriate, tech log / flight log / cabin log, list of deferred defects, total flight times and cycles, times and cycles since last maintenance, accident history, former maintenance schedule, former AD compliance status; and,
 - c) the information on aircraft such as aircraft, engine and propeller type certificate datasheets, noise and emission certificate data sheets, flight manual and supplements; and,

- d) the aircraft continuing airworthiness status such as the aircraft and component AD status, the SB status, the maintenance status, the status of all service life limited components, weight and centre of gravity schedule including equipment list; and,
 - e) the modification and repair status of the aircraft detailing elements such as owner/operator designed modifications and repairs, STCs, and parts needing European parts approval (EPA); and,
 - f) the aircraft cabin configuration such as emergency equipment fitted, cockpit configuration, placards, instrument limitations, cabin layout; and,
 - g) the maintenance needed for import, such as embodiment of modifications needed to comply with the DGCA type certificate, bridging check to comply with the new maintenance programme; and,
 - h) avionics such as, but not limited to, radio and navigation equipment, instrument flight rules (IFR) equipment, digital flight data recorder (DFDR) /cockpit voice recorder (CVR) test, ELT 406 MHz code and identification; and,
 - i) the compass compensation; and,
 - j) special operating rules such as extended twin-engine operations (ETOPS)/ long range operations (LROPS), reduced vertical separation minima (RVSM), MNPS, all weather operations (AWOPS), RNAV; and,
 - k) the aircraft survey including verification of conformity with the flight manual and the datasheet, presence of fire proof identification plates, conformity of markings including registration, presence and serviceability of emergency equipment, internal and external lighting systems, and,
- check flight including check of control system / cockpit ground check / engine run up.
If there is no M.A. Subpart G organisation approved for the specific aircraft type available, DGCA may carry out the airworthiness review in accordance with this paragraph and the provisions M.A.902 (e) and M.B.902. In this case, the airworthiness review should

be requested to DGCA with a 30-day notice.

AMC M.A.904 (b) Airworthiness review of aircraft imported into India

The recommendation sent to DGCA should contain at least the items described below.

- (a) All the information set forth by AMC M.A 902(d)
- (b) Aircraft information
- aircraft assigned registration
 - state of manufacturer
 - previous registration
 - export certificate number
 - TC and TC data sheet numbers
 - noise and emissions TC and TC data sheet numbers
 - comparison of prior maintenance programme with the proposed new maintenance programme.
- (c) Documents accompanying the recommendation
- copy of the application, and;
 - original export certificate, and;
 - copy of the approvals of the flight manual and its supplements, and;
 - list of ADs incorporated up to the latest published issue, and;
 - proposed new maintenance programme, and;
 - status of all service life limited components, and;
 - the valid weight and centre of gravity schedule reflecting the current configuration of the aircraft, and; CAR -21 approval reference for all modifications and repairs.
- (d) Maintenance
- a copy of the work packages requested by the subpart G organisation including details of any bridging check to ensure all the necessary maintenance has been carried out.
- (e) Aircraft check flight
- a copy of the check flight report