



CAR – M

CONTINUING AIRWORTHINESS REQUIREMENTS

Revision 1

15th February 2015

CONTINUING AIRWORTHINESS REQUIREMENTS Index

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CAR M

FOREWORD

Rule 50A of the Aircraft Rules 1937 stipulates the conditions necessary for a Certificate of Airworthiness to remaining in force i.e. to keep the aircraft in a state of continued airworthiness. This is ensured by issuing certificates of Airworthiness to an aircraft and subjecting the aircraft to annual airworthiness review certificates (ARC).

CAR-M specifies certain technical requirements to be complied by organisations and personnel involved in the maintenance of aircraft and aeronautical products, parts and appliances in order to demonstrate the capability and means of discharging the obligations and associated privileges thereof. The CAR-M also specifies conditions of issuing, maintaining, amending, suspending or revoking certificates attesting such compliance.

It is imperative that owners/operators and lessors/lessees are aware of their responsibility and accountability of keeping the aircraft in a continuing state of airworthiness. This CAR lays down the requirements of continuing airworthiness and which are harmonized with EASA Part M regulation.

The CAR M, is applicable to all operators of Indian registered aircraft irrespective of whether such aircraft are maintained by their own organization or by other approved maintenance organization. For organization operating aircraft, compliance with this CAR is mandatory. The compliance will also depend upon the size of the organization. The applicability will include private operators (General Aviation), flying training institutes state governments etc.,

CAR-M Revision 0 dated 2nd March 2010 was made effective from 31st July 2010

The CAR M Revision 0 was released after careful consideration of the comments received on the draft and meetings and workshops held with the aeronautical industry on the subject.

Rule 133B of the Aircraft Rules 1937 stipulates that organizations engaged in the managing the continuing airworthiness of aircraft shall be approved.

This CAR provides common technical standards and guidelines for continued airworthiness of an aircraft and its components and is issued under the provisions of Rule 133A of the Aircraft Rules 1937.

RECORD OF REVISIONS

Initial Issue (Revision 0)**31st July 2010**

This CAR M provides common technical standards and guidelines for continued airworthiness of aircraft and its components with an effective date of 31st July 2010.

Revision 1**15th February 2015**

The Revision-01 to CAR M is being issued to harmonise with regulations of EASA Part M issued after March 2010.

Salient features of the revision are:

Following are the highlights of the CAR M Revision 01:-

1. The requirements, related AMCs and GMs have been brought together for easy reference purposes.
2. Subsequent to the above arrangement, the Appendices have also been separated as "Appendices to CAR M" and "Appendices to AMCs and GMs".
3. Reference to AME licenses as pre- CAR 66 have been replaced with post CAR -66 terminologies.
4. Requirements for Critical Design Configuration Control Limitations (CDCCL) and training guide lines have been introduced.
5. Scope of components maintenance enhanced to include and "Indicating Recording System", "Water Ballast" and "Propulsion Augmentation system".
6. The scope of simple defect rectification, which can be accomplished by flight crew has been enhanced to include.
 - a) Inspection for and removal of de-icing/anti-icing fluid residues.
 - b) Removal/closure of panels, cowls or covers that is easily accessible but not requiring the use of special tools.
7. Specific reference to CAR Section 1 Series C Part I for implementation of SMS M.A 201 K (Management Responsibilities) has been added.
8. New AMC M.A 618 and M.A 715 have been added to provide better clarity about duration of approval in terms of calendar period.
9. New AMC 1, AMC 2, AMC 3 and GM 1 have been added for M.B 303 (b) Aircraft Continuing Airworthiness Monitoring (ACAM) to provide more clarity in the scope of inspection and Key Risk Elements (KREs).

10. Appendix III A to GM 303 (b) on Key Risk Elements (KRE) related to Aircraft Continuing Airworthiness Monitoring (ACAM) has been incorporated.
11. Appendix XII to AMC on Fuel Tank Safety Training has been added.

GENERAL

M.1

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

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.
 - (i) For aircraft registered in India.
 - (ii) For aircraft used in commercial transport by Indian Operator, if agreed by State of Registry.
 - (iii) By derogation from paragraph 4(i), when the continuing airworthiness of an aircraft not used in commercial air transport is managed by a continuing airworthiness management organisation approved in accordance with Section A, Subpart G of CAR-M not subject to the oversight of the State of registry, and only if agreed with the State of registry prior to the approval of the maintenance programme.

M.2 Objective

This CAR establishes common technical requirements and administrative procedures for ensuring the continuing airworthiness of aircraft, including any component for installation thereto, which are:

- (a) Registered in India; or
- (b) Registered in a foreign country and used by an Indian operator for which India ensures oversight of operations.

The provisions of this CAR related to commercial air transport are applicable to licensed air carriers as defined by Rule 134 of the Aircraft Rule.

M.3 Definitions

Within the scope of this CAR, the following definitions shall apply:

- (a) 'aircraft' means any machine that can derive support in the atmosphere from the reactions of the air other than reactions of the air against the earth's surface;

- (b) 'certifying staff' means personnel responsible for the release of an aircraft or a component after maintenance;
- (c) 'component' means any engine, propeller, part or appliance;
- (d) 'continuing airworthiness' means all of the processes ensuring that, at any time in its operating life, the aircraft complies with the airworthiness requirements in force and is in a condition for safe operation;
- (e) 'large aircraft' means an aircraft, classified as an aeroplane with a maximum take-off mass of more than 5700 kg, or a multi-engined helicopter;
- (f) 'maintenance' means any one or combination of overhaul, repair, inspection, replacement, modification or defect rectification of an aircraft or component, with the exception of pre-flight inspection;
- (g) *'organisation' means a natural person, a legal person or part of a legal person. Such an organisation may be established at more than one location whether or not within the territory of India;*
- (h) 'Pre-flight inspection' means the inspection carried out before flight to ensure that the aircraft is fit for the intended flight.
- (i) For the purpose of this CAR "Light Aircraft" means the following aircrafts
 - i an aeroplane, sailplane or powered sailplane with a Maximum Take-off Mass (MTOM) less than 1000 kg that is not classified as complex motor-powered aircraft;
 - ii a balloon with a maximum design lifting gas or hot air volume of not more than 3400 m³ for hot air balloons, 1050 m³ for gas balloons, 300 m³ for tethered gas balloons;
 - iii an airship designed for not more than two occupants and a maximum design lifting gas or hot air volume of not more than 2500 m³ for hot air airships and 1000 m³ for gas airships
- (j) For the purpose of this CAR "LSA aircraft" means a light sport aeroplane which has all of the following characteristics:
 - i. Maximum Take-off Mass (MTOM) of not more than 600 kg;
 - ii. Maximum stalling speed in the landing configuration (VS_0) of not more than 45 knots Calibrated Airspeed (CAS) at the aircraft's maximum certificated take-off mass and most critical centre of gravity;
 - iii. Maximum seating capacity of no more than two persons, including the pilot;

- iv. Single, non-turbine engine fitted with a propeller;
- v. Non-pressurized cabin.

M.4 Continuing Airworthiness Requirements

- (a) The continuing airworthiness of aircraft and components shall be ensured in accordance with the provisions of this CAR.
- (b) Organisations and personnel involved in the continuing airworthiness of aircraft and components, including maintenance, shall comply with the provisions of CAR-M, CAR145 and CAR Sec -2 Series L or CAR 66 as appropriate.
- (c) By derogation from paragraph (a), the continuing airworthiness of aircraft holding a ferry flight permit shall be ensured on the basis of the specific continuing airworthiness arrangements as defined in the permit to fly issued in accordance with CAR Sec-2, Series F Part VII.

M.5 Entry into Force

This CAR entered into force with effect from 31st July 2010.
Revision 1 to this CAR is effective from **30th June 2015**.

SECTION-A

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.
- Note:**-When reference is made in this CAR to the 'owner', the term owners/operators 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 organization or by DGCA Licensed Engineer.
- e) In order to satisfy the responsibilities of paragraph (a),
1. The owner of an aircraft may contract the tasks associated with continuing airworthiness to a continuing airworthiness management organisation approved in accordance with Section A, Subpart G of CAR-M. In this case, the continuing airworthiness management organisation assumes responsibility for the proper accomplishment of these tasks.
 2. An owner who decides to manage the continuing airworthiness of the aircraft under its own responsibility, without a contract in accordance with Appendix I, may nevertheless make a limited contract with a continuing airworthiness management organisation approved in accordance with Section A, Subpart G of CAR-M, for the development of the maintenance programme and its approval in accordance with point M.A.302. In that case, the limited contract transfers the

responsibility for the development and approval of the maintenance programme to the contracted continuing airworthiness management organisation.

- 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 required by DGCA to hold a certificate for commercial operations, 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 DGCA access to the organisation/aircraft to determine continued compliance with this CAR.
- k) The operator shall establish and follow safety management system as per CAR Section 1 Series C Part I.

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 maintenance organization approval. Nevertheless, inspection required to detect and when necessary eliminate de-icing and/or anti-icing fluids residues are considered maintenance. Such inspection may only be carried out by suitably authorised personnel.

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), airworthiness limitations fuel tank system airworthiness limitations including Critical Design Configuration Control Limitations (CDCCL), modifications, major repairs, operational equipment) and required and performed maintenance. The 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 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 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 II. Where arrangements are made with more than one organization the operator should demonstrate that 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 DGCA monitoring of the sub-contracted continuing airworthiness management tasks will be closed to the satisfaction of 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 to DGCA. Failure to do so may invalidate 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 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 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.

M.A.202 Occurrence Reporting

- (a) Any person or organisation responsible in accordance with point M.A.201 shall report to DGCA, the organisation responsible for the type design or supplemental type design and, if applicable, by Airworthiness Authority of the State of Registry, any identified condition of an aircraft or component which endangers flight safety.
- (b) Reports shall be made in a manner established by 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.

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 which endangers flight safety 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 organisation's 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.

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 in accordance with the data specified in point M.A. 304 and/or point M.A. 401, as applicable, 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 as 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.

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. and an assessment to confirm that, as the result of meteorological conditions and de-icing/anti-icing fluids have been previously applied on it, there are no fluid residues that could endanger air safety. Alternatively to this pre-flight assessment, when the type of aircraft and nature of operations allow for it, the build up of residues may be controlled through schedule maintenance inspections / cleanings identified in the approved maintenance programme.
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 is 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 directive with a continuing airworthiness impact include operating rules such as extended twin engine operations(ETOPS)/long range operations(LROPS),reduced vertical separation minimum(RVSM), MNPS,all weather operations(AWOPS), RNAV, etc. Any other continued airworthiness requirement made mandatory by DGCA includes TC related requirements such as: certification maintenance requirements (CMR), certification life limited parts, airworthiness limitations, fuel tank system airworthiness limitations including Critical Design Configuration Control Limitations (CDCCL), 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 that is produced for the aircraft and its components by an approved design organisation, the manufacturer or DGCA.

M.A.302 Aircraft Maintenance Programme

- (a) Maintenance of each aircraft shall be organised in accordance with an aircraft maintenance programme.
- (b) The aircraft maintenance programme and any subsequent amendments shall be approved by DGCA.
- (c) When the continuing airworthiness of the aircraft is managed by a continuing airworthiness management organisation approved in accordance with Section A, Subpart G of CAR-M, the aircraft maintenance programme and its amendments may be approved through an indirect approval procedure.
 - (i) In that case, the indirect approval procedure shall be established by the continuing airworthiness management organisation as part of the Continuing Airworthiness Management Exposition and shall be approved by DGCA.
 - (ii) The continuing airworthiness management organisation shall not use the indirect approval procedure when this organisation is not under the oversight of the State of Registry, unless an agreement exists in accordance with point M.1, paragraph 4(ii) or 4(iii), as applicable, transferring the responsibility for the approval of the aircraft maintenance programme to DGCA.
- (d) The aircraft maintenance programme must establish compliance with:
 - (i) instructions issued by DGCA.
 - (ii) instructions for continuing airworthiness
 - issued by the holders of the type certificate, restricted type-certificate, supplemental type-certificate, major repair design approval, TSO authorisation or any other relevant approval issued under CAR 21/EASA 21/FAR 21 and
 - (iii) additional or alternative instructions proposed by the owner or the continuing airworthiness management organisation once approved in accordance with point M.A.302, except for intervals of safety related tasks referred in paragraph (e), which may be escalated, subject to sufficient reviews carried out in accordance with paragraph (g) and only when subject to direct approval in accordance with point M.A.302(b).
- (e) The aircraft maintenance programme shall contain details, including frequency, of all maintenance to be carried out, including any specific tasks linked to the type and the specificity of operations.
- (f) For large aircraft, when the maintenance programme is based on maintenance steering group logic or on condition monitoring, the aircraft maintenance programme shall include a reliability programme.
- (g) The aircraft maintenance programme shall be subject to periodic reviews and amended accordingly when necessary. These reviews shall ensure that the programme continues to be valid in light of the operating experience and instructions from DGCA whilst taking into account new and/or modified maintenance instructions promulgated by the type certificate and supplementary

type certificate holders and any other organisation that publishes such data in accordance with CAR 21/EASA 21/FAR 21.

AMC M.A.302 Aircraft Maintenance Programme

1. The term “maintenance programme” is intended to include scheduled maintenance tasks the associated procedures and standard maintenance practices. 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 I to AMC M.A.302 provides detailed information on the contents of an approved aircraft maintenance programme.

5. Repetitive maintenance tasks derived from modifications and repairs should be incorporated into the approved maintenance programme.

AMC M.A.302 (a) Aircraft Maintenance Programme

A maintenance programme may indicate that it applies to several aircraft registrations as long as the maintenance programme clearly identifies the effectivity of the tasks and procedures that are not applicable to all of the listed registrations

AMC M.A.302 (d) 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. These instructions may be issued by the DGCA in the following cases:
 - in the absence of specific recommendations of the Type Certificate Holder.
 - to provide alternate instructions to those described in the subparagraph 1

above, with the objective of providing flexibility to the operator.

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 recommendations but will show the relationship to such recommendations
6. 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.
7. Alternate and/or additional instructions to those defined in paragraphs M.A.302(d)(i) and (ii), proposed by the owner or the operator, may include but are not limited to the following:
 - Escalation of the interval for certain tasks based on reliability data or other supporting information. Appendix I recommends that the maintenance programme contains the corresponding escalation procedures. The escalation of these tasks is directly approved by the DGCA, except in the case of ALLs (Airworthiness Limitations).
 - More restrictive intervals than those proposed by the TC holder as a result of the reliability data or because of a more stringent operational environment.
 - Additional tasks at the discretion of the operator.

AMC M.A.302 (f) 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 I to AMC M.A.302 and M.B.301 (d) gives further guidance.

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:

- (a) data approved by DGCA; or
- (b) by an approved CAR 21/ EASA Part 21/ FAA Part 21 design organization, as appropriate;

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/ EASA Part 21/FAA Part 21 and finally DGCA approval of the particular repair data. Procedure for modification and repairs has been described in Airworthiness Advisory Circular (AAC) No.2 of 2013.

M.A.305 Aircraft Continuing Airworthiness Record System

- (a) At the completion of any maintenance, the certificate of release to service required by point M.A.801 or point 145.A.50 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:
 - (i) an aircraft logbook, engine logbook(s) or engine module log cards, propeller logbook(s) and log cards for any service life limited component as appropriate, and,
 - (ii) when required in point M.A.306 for commercial air transport or by DGCA for commercial operations other than commercial air transport, 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 DGCA 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/ EASA Form1/ FAA 8130, the following information relevant to any component installed (engine , propeller , engine module or service life limited component) 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 ,as appropriate, of the aircraft, engine , propeller , engine module or service life limited component to which the particular component has been fitted, along with the reference to the installation and removal of the component; and
 3. the date together with the component's 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 service life-limited component fitted thereto, until such time as the information contained therein is superseded by the new information equivalent in scope and detail but not less than 36 months after the aircraft or component has been released to service; and
 2. the total time in service (hours,calander time,cycles and landings) 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 in service (hours,calander time, cycles and landings) 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.

AMC M.A.305 (d) Aircraft Continuing Airworthiness Record System

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 (d) (4) AND AMC M.A.305 (h) AIRCRAFT CONTINUING AIRWORTHINESS RECORD SYSTEM

The term 'service life-limited components' embraces: (i) components subject to a certified life limit after which the components should be retired, and (ii) components subject to a service life limit after which the components should undergo maintenance to restore their serviceability.

The current status of service life-limited aircraft components should indicate:

- i. for components subject to a certified life limit: 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;

ii. for components subject to a service life limit: the component service life limit, the hours, cycles or calendar time since the component has been restored back to their service life and the remaining service (hours, cycles, calendar time) life before the components need to undergo maintenance.

Any action that alters the components' life limit (certified or service) or changes the parameter of the life limit (certified or service) should be recorded.

When the determination of the remaining life requires knowledge of the different types of aircraft/engine on which the component has previously been installed, the status of all service-life limited aircraft components should additionally include a full installation history indicating the number of hours, cycles or calendar time relevant to each installation on these different types of aircraft/engine. The indication of the type of aircraft/engine should be sufficiently detailed with regard to the required determination of remaining life.

Recommendations from the type certificate holder on the procedures to record the remaining life may be considered.

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.

Continuing airworthiness records should be stored in a safe way with regard to damage, alteration and theft. Computer backup discs, tapes etc., should be stored in a different location from that containing the current working discs, tapes, etc. and in a safe environment. Reconstruction of lost or destroyed records can be done by reference to other records which reflect the time in service, research of records maintained by repair facilities and reference to records maintained by individual mechanics etc. When these things have been done and the record is still incomplete, the owner/operator may make a statement in the new record describing the loss and establishing the time in service based on the research and the best estimate of time in service. The reconstructed records should be submitted to DGCA for acceptance. The DGCA may require the performance of additional maintenance if not satisfied with the reconstructed records.

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.

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. The maintenance statement may be kept at the operators engineering office: 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.

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. A sample format of technical log system is described in CAR Section-2 Series X Part-VI.

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 checks as appropriate. Provision should be made to record aircraft performance parameters during stabilized cruise condition where applicable.

It is acceptable to use an alternate abbreviated certificate of release to service consisting of the statement 'CAR-145 release to service' instead of the full certification statement specified in AMC 145.A.50(b) paragraph 1. When the alternate abbreviated certificate of release to service is used, the introductory section of the technical log should include an example of the full certification statement from AMC 145.A.50(b) paragraph 1.

- 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 and any other information required by the operator procedures in order to allow the assessment on whether inspection for and/or eliminations of de-icing/anti-icing fluid residues that could endanger flight safety are required.
- 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;
- 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 so 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.

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 is also transferred.

- (b) The owner shall ensure, when he contracts the continuing airworthiness management task 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.

AMCM.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.

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 DGCA,
 - 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.

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 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. The workcard/worksheet system may take the form of, but is not limited to, the following:
 - a format where the AME writes the defect and the maintenance action taken together with information of the maintenance data used, including its revision status,
 - an aircraft log book that contains the reports of defects and the actions taken by authorised personnel together with information of the maintenance data used, including its revision status,
- for maintenance checks, the checklist issued by the manufacturer
5. 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.

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 DGCA.
- b) 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.
- c) The area in which maintenance is carried out shall be well organized and clean in respect of dirt and contamination.
- d) All maintenance shall be performed within any environmental limitations specified

in the M.A.401 maintenance data.

- e) In case of inclement weather or lengthy maintenance, proper facilities shall be used.
- f) 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.

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 shall hold relevant Certificate of Competency.
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 practices 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 the 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 manufacturer's 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 inspection should be carried out by at least two persons, to ensure correct assembly, locking and sense of operation. A technical record of the inspection 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.
- 4.6 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.

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 points M.A.801(b)1, M.A.801(b)2, M.A.801(c), M.A.801(d) 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 DGCA is used by the pilot; and AME; 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.

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.

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 a CA Form 1 or equivalent and is marked in accordance with CAR 21 Subpart Q, unless otherwise specified in CAR 21, CAR 145 or CAR-M Section A, 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 for fitment.
- (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 conformity to specification statement plus both the manufacturing and supplier source.

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 a CA Form 1 may be:

- a release document issued by an organisation under the terms of a bilateral agreement signed by DGCA
- EASA Form ONE
- FAA Form 8130-3
- Any other form acceptable to DGCA.

6. Any item in storage without CA Form 1 or equivalent cannot be installed on aircraft registered in India unless CA 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

1. The CA Form 1 identifies the airworthiness and eligibility status of an aircraft component. Block 12 "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
2. The fitment of a replacement components/material should only take place when the person referred to in M.A.801 or the M.A. Subpart F or CAR 145 maintenance organisation is satisfied that such components meet required standards in respect of manufacture or maintenance, as appropriate.
3. The person referred to under M.A.801 or the M.A. Subpart F or CAR 145 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 STC holder or manufacturer's parts catalogue or other approved data (i.e. Service Bulletin). Care should also be taken in ensuring compliance with applicable ADs 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. A 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 should not be issued for such material and therefore none should be expected. The material specification is normally identified in the (S)TC holder's data except in the case where DGCA has agreed otherwise.
6. Items purchased in batches (fasteners etc.) should be supplied in a package. The packaging should state the applicable specification/standard P/N, batch number and the quantity of the items. The documentation accompanying the material should contain the applicable specification/standard, P/N, batch number, supplied quantity, and the manufacturing sources. If the material is acquired from different batches, acceptance documentation for each batch should be supplied.
7. When using raw or consumable material on an aircraft or component near, or adjacent to, or that directly impacts an identified Critical Design Configuration Control Limitation item, it should be ensured that the CDCCL has not been compromised

M.A.502 Component Maintenance

- (a) The maintenance of components shall be performed by maintenance organisations appropriately approved in accordance with Section A, Subpart F of CAR M or with CAR145.
- (b) By derogation from paragraph (a), maintenance of a component in accordance with aircraft maintenance data or, if agreed by DGCA, in accordance with component maintenance data, may be performed by an A rated organisation approved in accordance with Section A, Subpart F of CAR-M or CAR 145 as well as by certifying staff referred to in point M.A.801(b)2 only whilst such components

are fitted to the aircraft. Nevertheless, such organisation or certifying staff may temporarily remove this component for maintenance, in order to improve access to the component, except when such removal generates the need for additional maintenance not eligible for the provisions of this paragraph. Component maintenance performed in accordance with this paragraph is not eligible for the issuance of a CA Form 1 and shall be subject to the aircraft release requirements provided for in point M.A.801.

- (c) By derogation from paragraph (a), maintenance of an engine / Auxiliary Power Unit (APU) component in accordance with engine/APU maintenance data or, if agreed by DGCA, in accordance with component maintenance data, may be performed by a B rated organisation approved in accordance with Section A, Subpart F of CAR-M or CAR 145 only whilst such components are fitted to the engine/APU. Nevertheless, such B rated organisation may temporarily remove this component for maintenance, in order to improve access to the component, except when such removal generates the need for additional maintenance not eligible for the provisions of this paragraph.
- (d) By derogation from paragraph (a) and point M.A.801(b)2, maintenance of a component while installed or temporarily removed from a Light aircraft not used in commercial air transport and performed in accordance with component maintenance data, may be performed by certifying staff referred to in point M.A.801(b)2, except for:
1. overhaul of components other than engines and propellers, and;
 2. overhaul of engines and propellers for aircraft other than CS-VLA, CS-22 and LSA.

Component maintenance performed in accordance with paragraph (d) is not eligible for the issuance of a CA Form 1 and shall be subject to the aircraft release requirements provided for in point M.A.801.

AMC M.A.502 Component maintenance

Component removal from and installation on an aircraft is considered to be aircraft maintenance and not component maintenance. As a consequence, M.A.502 requirements do not apply to this case.

AMC M.A.502(b) and (c) Component maintenance

M.A.502(b) and (c) allow the performance of certain component maintenance, in accordance with component maintenance data, to maintenance organisations not holding the corresponding B/C rating and to independent certifying staff, subject to the agreement of: DGCA

This should only be permitted by the DGCA in the case of simple component maintenance, where the DGCA is satisfied that the certifying staff are appropriately qualified and the proper tooling and facilities are available. It is important to note that for more complex component maintenance, special qualifications may be required and it is not enough with holding a CAR-66 aircraft maintenance licence.

M.A.503 Service Life Limited Components

- (a) Installed service life limited components shall not exceed the approved service life limit as specified in the approved maintenance programme and airworthiness directives, except as provided for in point M.A.504(c).
- (b) The approved service life is expressed in calendar time, flight hours, landings or cycles, as appropriate.
- (c) At the end the approved service life, the component must be removed from the aircraft for maintenance, or for disposal in the case of components with a certified life limit

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 an approved maintenance organisation until a decision is made on the future status of such component. Nevertheless, for aircraft not used in commercial air transport other than large aircraft, the person or organisation that declared the component unserviceable may transfer its custody, after identifying it as unserviceable, to the aircraft owner provided that such transfer is reflected in the aircraft logbook or engine logbook or component logbook.
- 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.

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

1. M.A.801(b)(2) and M A 801 (c) certifying staff or the Section A Subpart F approved maintenance organisation performing maintenance should ensure proper identification of any unserviceable components.
2. 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.
3. M.A.801(b)(2) and 801 (c) 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 or transfer the custody of the component to the owner itself under the conditions specified in M.A.504(b).

“A secure location under the control of an approved maintenance organisation” means a secure location for which security is the responsibility of the approved maintenance organisation. This may include facilities established by the approved maintenance organisation at locations different from the main maintenance facilities. These locations should be identified in the relevant procedures of the approved maintenance organisation.

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.

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 point M.A.201 (g).

AMC M.A.601 Scope

An approved maintenance organisation may be approved to maintain aircraft/aircraft components.

M.A.602 Application

An application for issue or variation of a maintenance organisation approval shall be made on a CA form 2 (Appendix IX)

AMC M.A.602 Application

An application for issue or variation of a maintenance organisation approval should be made on CA Form 2 (Appendix IX).

M.A.603 Extent of Approval

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

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

The following table identifies the ATA specification 2200 chapter for the category C

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 & Lights	24 – 33 -85
	C6 Equipment	25 - 38 – 44 – 45 – 50
	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	28- 47
	C10 Helicopters Rotors	62 - 64 - 66 – 67
	C11 Helicopter -Trans	63 – 65
	C12 Hydraulic Power	29
	C13 Indicating/Recording System	31-42-46
	C14 Landing Gear	32
	C15 Oxygen	35
	C16 Propellers	61
	C17 Pneumatic & Vacuum	36 – 37
	C18 Protection ice/rain/fire	26 – 30
	C19 Windows	56
	C20 Structural	53 - 54 - 57.10 - 57.20 - 57.30
	C21 Water Ballast	41
	C22 Propulsion Augmentation	84

component rating. If the maintenance manual (or equivalent document) does not follow the ATA Chapters, the corresponding subjects still apply to the applicable C rating.

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 should 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,

- (f) 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 inspection. 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.

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 organization chart showing associated chains of responsibility between the person(s) referred to in M.A.606(b), and;
 - 5. a list of certifying staff with their scope of approval, and;
 - 6. a list of locations where maintenance is carried out, together with a general descriptions of the facilities;
 - 7. procedures specifying how the maintenance organisation ensures compliance with this CAR, and;
 - 8. the maintenance organisation manual amendment procedure(s).

- b) The maintenance organisation manual and its amendments shall be approved by DGCA Regional Office.

- c) Notwithstanding paragraph (b) minor amendments to the manual may be approved through a procedure (hereinafter called indirect approval) provided the amendments are submitted to DGCA local office at least 15 days before their effectivity and the procedure is documented.

AMC M.A.604 Maintenance Organisation Manual

1. The manual contents should detail the procedure to qualify-material, personnel, upkeep of maintenance data, quality system, audit, CAR compliance verification etc. availed from other organisations. 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.

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.

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.

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 hold relevant certificate of competency.
- g) The maintenance organisation shall have sufficient certifying staff to issue M.A.612 and M.A.613 certificates of release to service for aircraft and components. They shall comply with the requirements of DGCA Aircraft Maintenance Engineers Licensing requirements.
- h) By derogation from paragraph (g), the organisation may use certifying staff qualified in accordance with the following provisions when providing maintenance support to operators involved in commercial operations, subject to appropriate procedures to be approved as part of the organisation's manual:
 - 1. For a repetitive pre-flight airworthiness directive which specifically states that the flight crew may carry out such airworthiness directive, the organisation may issue a limited certifying staff authorisation to the aircraft commander on the basis of the flight crew licence held, provided that the organisation ensures that sufficient practical training has been carried out to ensure that such person can accomplish the airworthiness directive to the required standard;
 - 2. In the case of aircraft operating away from a supported location the organisation may issue a limited certifying staff authorisation to the aircraft commander on the basis of the flight crew licence, provided that the organisation ensures that sufficient practical training has been carried out to ensure that such person can accomplish the task to the required standard.'

AMC M.A.606 (a) Personnel Requirements

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 Requirements

1. 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 CAR 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 DGCA 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 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 This knowledge may be demonstrated by documented evidence or by an assessment performed by the DGCAThis assessment should be recorded.

Training courses should be as a minimum at a level equivalent to CAR-66

Appendix III Level 1 General Familiarisation, and could be imparted by a Part-147 organisation, by the manufacturer, or by any other organisation accepted by the DGCA;

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 organization.

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.606(h)2 Personnel requirements

1. For the issue of a limited certification authorisation the commander should hold either a valid air transport pilot license (ATPL), or commercial pilots license (CPL), or a national equivalent acceptable to the competent authority on the aircraft type. In addition, the limited certification authorisation is subject to the maintenance organisation manual containing procedures to address the following:
 - a. Completion of adequate maintenance airworthiness regulation training.
 - b. Completion of adequate task training for the specific task on the aircraft. The task training should be of sufficient duration to ensure that the individual has a thorough understanding of the task to be completed and should involve training in the use of associated maintenance data.
 - c. Completion of the procedural training.

The above procedures should be specified in the maintenance organisation manual and be accepted by the DGCA.
2. Typical tasks that may be certified and/or carried out by the commander holding an ATPL or CPL are minor maintenance or simple checks included in the following list:
 - a. Replacement of internal lights, filaments and flash tubes.
 - b. Closing of cowlings and refitment of quick access inspection panels.

- c. Role changes, e.g., stretcher fit, dual controls, FLIR, doors, photographic equipment etc.
- d. Any check/replacement involving simple techniques consistent with this AMC and as agreed by the DGCA

3. The authorisation should have a finite life of twelve months subject to satisfactory recurrent training on the applicable aircraft type

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 they meet the requirements for issue of DGCA Aircraft maintenance Engineers license,
- 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 authorization as documented in their approved organisation exposition:

- 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 three 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 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 together with their scope of approval as part of the organisation's manual pursuant to point M.A.604 (a) 5.

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 staffs 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 authorization and personal authorization reference;
 - (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. DGCA should be granted access to the records as and when required.

M.A.608 Components, Equipment and Tools

- (a) The organisation shall:
1. hold the equipment and tools specified in the maintenance data described in point M.A.609 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.

AMC M.A.608 (a) Components, Equipment and Tools

1. Once the applicant for M.A. Subpart F approval has determined the intended scope of approval for consideration by DGCA, it will be necessary to show that all tools and equipment as specified in the maintenance data can be made available when needed.
2. 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.
3. 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 labeling 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.

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.

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.

M.A.610 Maintenance Work Orders

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

AMC M.A.610 Maintenance Work Orders

A written work order" may take the form of, but not limited to, the following:

- A formal document or form specifying the work to be carried out. This form may be provided by the continuing airworthiness management organization managing the aircraft, or by the maintenance organisation undertaking the work, or by the owner/operator himself
- An entry in the aircraft log book specifying the defect that needs to be corrected

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 in accordance with point M.A.802. CA Form 1 shall be issued except for those components maintained in accordance with points M.A.502(b), M.A.502(d) and components fabricated in accordance with point M.A.603 (b).
- (b) The component certificate of release to service document, CA Form 1 may be generated from a computer database.

AMC M.A.613 (a) Component Certificate of Release to Service

1. An aircraft component which has been maintained off the aircraft requires the issuance 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.

When an organisation maintains a component for use by the same organisation, an Form CA 1 may not be necessary depending upon the organisation's internal release procedures defined in the maintenance organisation exposition.

- 2 In the case of components in storage prior to CAR145, CAR M and CAR 21 and not released on a 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 a CA Form 1 may be issued .

2.1 A CA Form 1 may be issued for an aircraft component which has been:

- Maintained before CAR t-145, or CAR -M became effective or manufactured before CAR-21 became effective
- 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 a CA Form 1 as detailed in this AMC sub-paragraph 2.5 to 2.9, as appropriate, in accordance with the 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 a 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. A CA Form 1 issued in accordance with this paragraph 2 should be issued by signing in block 14 b and stating "Inspected" in block 11. In addition, block 12 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 12. 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 a 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 a CA Form 1 by an appropriately rated maintenance organisation approved under M.A. Subpart F. The CA Form1 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 subject 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 maintenance data to establish satisfactory condition and, if relevant, all seals, lubricants and life limited parts replaced. Upon satisfactory completion after reassembly a CA Form 1 may be issued stating what was carried out and the reference to the maintenance data included.

2.6. Used aircraft components removed from a serviceable aircraft.

2.6.1. Serviceable aircraft components removed from a DGCA registered aircraft may be issued a 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 maintenance data.
- (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 a 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 affect 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 a 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 a 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. A 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 DGCA registered aircraft withdrawn from service may be issued a 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 a 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 the manufacturer's recommendations.

2.8 Used aircraft components maintained by organizations not approved in accordance with M.A.Subpart F or CAR 145

For used components maintained by a maintenance organisation not approved under M.A. Subpart F or CAR 145, due care should be taken before acceptance of such components. In such cases an appropriately rated maintenance organisation approved under M A Subpart F should established satisfactorily 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 a 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 12.

1. A certificate should not be issued for any component when it is known that the component is unserviceable except in the case of a 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. In such a case, a clear statement of limitation should be endorsed in block 12.
2. 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. It should only be issued by organisations approved by DGCA as applicable within the scope of the approval.

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 under this paragraph shall be stored in a manner that ensures protection from damage, alteration 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 three years shall be distributed to the last owner or customer of the respective aircraft or component or shall be stored as specified by the DGCA.;

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 troubleshooting 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.

M.A.615-Privileges of the Organisation

The maintenance organisation approved in accordance with Section A, Subpart F of this CAR, may:

- (a) maintain any aircraft and/or component for which it is approved at the locations specified in the approval certificate and the maintenance organisation manual;
- (b) arrange for the performance of specialized services under the control of the maintenance organisation at another organisation appropriately qualified, subject to appropriate procedures being established as part of the Maintenance Organisation Manual approved by DGCA directly;
- (c) maintain any aircraft and/or component for which it is approved at any location subject to the need of such maintenance arising either from the un serviceability of the aircraft or from the necessity of supporting occasional maintenance, subject to the conditions specified in the Maintenance Organisation Manual;
- (d) issue certificates of release to service on completion of maintenance, in accordance with point M.A.612 or point M.A.613.

AMC M.A.615 (b) Privileges of the Organisation

M.A.615(b) refers to work carried out by another organisation which is not appropriately approved under M.A. Subpart F or CAR-145 to carry out such tasks.

The intent is to permit the acceptance of specialised maintenance services, such as, but not limited to, non-destructive testing, surface treatment, heat-treatment, welding, fabrication of specified parts for minor repairs and modifications, etc., without the need of Subpart F approval for those tasks.

The requirement that the organisation performing the specialised services must be “appropriately qualified” means that it should meet an officially recognised standard or, otherwise, it should be acceptable to the DGCA (through the approval of the Maintenance Organisation Manual).

“Under the control of the Subpart F organisation” means that the Subpart F organisation should investigate the capability of the subcontracted organization (including qualifications, facilities, equipment and materials) and ensure that such organisation:

- Receives appropriate maintenance instructions and maintenance data for the task to be performed.

- Properly records the maintenance performed in the Subpart F airworthiness records.

- Notifies the Subpart F organisation for any deviation or non-conformity, which has

arisen during such maintenance. The certificate of release to service may be issued either at the subcontractors or at the organisation facility by authorised certifying staff, and always under the M.A. Subpart F organisation reference. Such staff would normally come from the M.A. Subpart F organisation but may otherwise be a person from the subcontractor who meets the M.A. Subpart F organisation certifying staff standard which itself is approved by the DGCA via the Maintenance Organisation Manual.

Subcontracted specialised services organisations should be listed in the Maintenance Organisation Manual of the Subpart F organisation together with their qualifications, and the associated control procedures.

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.

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.

M.A.617 Changes to the Approved Maintenance Organisation

In order to enable DGCA to determine continued compliance with this part of the CAR, the approved maintenance organisation shall notify 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.

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.

M.A.618 Continued Validity of Approval

- (a) An approval shall be issued for a maximum period of **five** years unless otherwise specified.

It shall remain valid subject to:

1. the organisation remaining in compliance with this part of CAR, in accordance with the provisions related to the handling of findings as specified under M.A.619, and;
2. DGCA being granted access to the organization to determine continued Compliance with this part 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 of 7 days and 30 days for level 1 & level 2 findings respectively including appropriate corrective action to prevent recurrence of the finding and its root cause.

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 CA Form 2 (Appendix IX to this CAR).

AMC M.A.702 Application

An application for issue, variations and renewal of a continuing airworthiness management organisation approval shall be made on a CA Form 2 (Appendix IX).

The CA Form 2 is valid for the application for M.A. Subpart F, CAR-145 and M.A. Subpart G organisations. Organisations applying for several approvals may do so using a single CA Form 2

M.A.703 Extent of Approval

- (a) The approval is indicated on a certificate included in Appendix VI issued by DGCA.
- (b) Notwithstanding paragraph (a), for commercial air transport, the approval shall be part of the air operator certificate/permit issued by DGCA, for the aircraft operated.
- (c) The scope of work deemed to constitute the approval shall be specified in the continuing airworthiness management exposition in accordance with point M.A.704.

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 Part of 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 points M.A.706(a), M.A.706(c), M.A.706(d) and M.A.706(i);
 4. an organisation chart showing associated chains of responsibility between all the person(s) referred to in points M.A.706(a), M.A.706(c), M.A.706(d) and M.A.706(i);
 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 CAR, and;
 8. the continuing airworthiness management exposition amendment procedures.
 9. the list of approved aircraft maintenance programmes, or, for aircraft not involved in commercial air transport, the list of “generic” and “baseline” maintenance programmes.
- (b) The continuing airworthiness management exposition and its amendments shall be approved by DGCA.
- (c) Notwithstanding paragraph (b), minor amendments to the exposition may be approved indirectly through an indirect approval procedure. Provided the amendments are submitted to DGCA local office at least 15 days before their effectivity and the procedure is documented.

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 CAR, the exposition or manual required by the other CAR 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 (See Equivalent paragraphs in AMC 145. A .&) (a)

Part 1 Management

Part 2 Maintenance procedures

Part L2 Additional line maintenance procedures

Part 3 Quality system and/or organisational review (as applicable). It should also cover the functions specified by M.A.712 quality system.

Part 4 Contracts with owners/operators. It should also cover contracted maintenance (for operators) – Management of maintenance (liaison with maintenance organisations in the case of non commercial air transport)

Part 5 Appendices (sample of documents)

Part 7 Other Regulatory supplement (if applicable)

Part 8 – Reserved

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 air transport)

Additional parts should be introduced covering the following: (see equivalent paragraphs in Appendix V to AMC M.A.704, which may have a different numbering system):

Part 0 General organisation

Part 6 Continuing airworthiness management procedures

Part 9 Airworthiness review procedures (if applicable)

Example for a combined M.A. Subpart F and M.A. Subpart G organization:

M.A. Subpart F Maintenance Organisation Manual (see equivalent paragraphs in Appendix IV to AMC M.A.604, which have a different numbering system)

Part 1 General

Part 2 Description

Part 3 General Procedures

Part 4 Working Procedures. This Part contains, among other things, procedures for Organisational Reviews.

Part 5 Appendixes

Part 4 should also cover the functions specified by M.A.712 quality system (or organisation review, as applicable).

Additional parts should be introduced covering the following (see equivalent paragraphs in Appendix V to AMC M.A.704, which may have a different numbering system):

Part 0 General organisation

Part 6 Continuing airworthiness management procedures

Part 7 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. 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 Operator'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 is 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 operator's 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)..... "

10. Whenever the accountable manager is changed it is important to ensure that the new accountable manager signs the paragraph 9 statement at the earliest opportunity as part of the acceptance by the DGCA.

Failure to carry out this action invalidates the M.A. Subpart G continuing airworthiness management approval or the air operator certificate.

11. The exposition should contain information as applicable, on how the continuing airworthiness management organisation complies with CDCCL instructions.

Appendix V contains an example of an exposition lay-out.

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.

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.

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 Part of 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.
- (i) For organisations extending airworthiness review certificates in accordance with points M.A.711 (a)4 and M.A.901(f), the organisation shall nominate persons authorised to do so, subject to approval by DGCA.
- (j) The organisation shall define and keep updated in the continuing airworthiness management exposition the title(s) and name(s) of person(s) referred to in points M.A.706 (a), M.A.706(c), M.A.706 (d) and M.A.706 (i).
- (k) For all large aircraft and for aircraft used for commercial air transport the organisation shall establish and control the competence of personnel involved in the continuing airworthiness management, airworthiness review and/or quality audits in accordance with a procedure and to a standard agreed by DGCA.

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, **EDTO/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;

The above recommendation may be replaced by 5 years of experience additional to those already recommended by paragraph 4.4 above. These 5 years should cover an appropriate combination of experience in tasks related to aircraft maintenance and/or continuing airworthiness management (engineering) and/or surveillance of such tasks.
 - 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; These courses should be at least at a level equivalent to CAR-66 Appendix III Level 1 General Familiarisation and could be imparted by CAR-147 organisation, by the manufacturer, or by any other organisation accepted by the DGCA.

"Relevant sample" means that these courses should cover typical systems embodied in those aircraft being within the scope of approval.

For all balloons and any other aircraft of 2730 Kg MTOM and below the formalised training courses may be replaced by demonstration of knowledge. This knowledge may be demonstrated by documented evidence or by an assessment performed by the competent authority. This assessment should be recorded
 - 4.8. knowledge of maintenance methods.
 - 4.9. knowledge of applicable regulations

AMC M.A.706(a) Personnel Requirements

Accountable manager is normally intended to mean the chief executive officer of the continuing airworthiness management organisation approved under M.A. Subpart G, 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 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 the chief executive officer and has a sufficiency of continuing airworthiness funding allocation.

AMC M.A.706 (e) Personnel Requirements

1. DGCA shall 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 operators are the same organisation.

AMC M.A.706 (f) Personnel Requirements

Additional training in fuel tank safety as well as associated inspection standards and maintenance procedures should be required of continuing airworthiness management organizations' technical personnel, especially the staff involved with the management of CDCCL, Service Bulletin assessment, work planning and maintenance programme management. DGCA guidance is provided for training to Continuing Airworthiness Management Organizations' continuing airworthiness personnel in **Appendix XII to AMC to M.A.706 (f) and M.B.102(c)**

AMC M.A.706 (i) Personnel Requirements

The approval by the DGCA of the exposition, containing in M.A.704(a)3 the list of M.A.706(i) personnel, constitutes their formal acceptance by DGCA and also their formal authorisation by the organisation.

Airworthiness review staff are automatically recognised as persons with authority to extend an airworthiness review certificate in accordance with M.A.711(a)4 and M.A.901(f).

AMC M.A.706 (k) Personnel Requirements

Adequate initial and recurrent training should be provided and recorded to ensure

continued competence

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 airworthiness review certificates or recommendations referred to in Subpart I, Section A of this CAR.
1. For all aircraft used in commercial air transport, and aircraft above 2730 kg MTOM, except balloons, these staff shall have acquired:
 - (a) at least five years experience in continuing airworthiness, and;
 - (b) an appropriate licence in compliance with DGCA Aircraft Maintenance Licence requirements or an aeronautical degree or equivalent, and;
 - (c) formal aeronautical maintenance training, and;
 - (d) a position within the approved organisation with appropriate responsibilities.
 - (e) Notwithstanding points “a” to “d”, the requirement laid down in point M.A.707(a)1b may be replaced by five years of experience in continuing airworthiness additional to those already required by point M.A.707(a)1a.
 2. For aircraft not used in commercial air transport of 2730 kg MTOM and below, and balloons, these staff shall have acquired:
 - (a) at least three years experience in continuing airworthiness, and;
 - (b) an appropriate licence in compliance with DGCA Aircraft Maintenance Licence requirements or an aeronautical degree or equivalent, and;
 - (c) appropriate aeronautical maintenance training, and;
 - (d) a position within the approved organisation with appropriate responsibilities;
 - (e) Notwithstanding points “a” to “d”, the requirement laid down in point M.A.707(a)2b may be replaced by four years of experience in continuing airworthiness additional to those already required by point M.A.707(a)2a.’
- (b) Airworthiness review staff nominated by the approved continuing airworthiness management organisation can only be issued an authorisation by the approved continuing airworthiness management organisation when formally accepted by 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.

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
2. "Experience in continuing airworthiness" means any appropriate combination of experience in tasks related to aircraft maintenance and/or continuing airworthiness management (engineering) and/or surveillance of such tasks.
3. A person qualified to the AMC M.A.706 subparagraph 4.5 should be considered as holding the equivalent to an aeronautical degree.
4. An appropriate licence in compliance with CAR-66 category B1 licence in the subcategory of the aircraft reviewed, or- a category B2 or C licence, It is not necessary to satisfy the experience requirements of CAR-66 at the time of the review.
5. 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.

Independence from the airworthiness management process may be achieved, among other ways, by:

- Being authorised to perform airworthiness reviews only on aircraft for which the person has not participated in their management. For example, performing airworthiness reviews on a specific model line, while being involved in the airworthiness management of a different model line.
- M.A. Subpart G organisations with CAR-145/M.A.Subpart F approval, may nominate maintenance personnel from their CAR-145/M.A. Subpart F organisation as airworthiness review staff, as long as they are not involved in the airworthiness management of the aircraft. These personnel should not have been involved in the release to service of that particular aircraft (other than maintenance tasks performed during the physical survey of the aircraft or performed as a result of findings discovered during such physical survey) to avoid possible conflict of interests.
- Nominating as airworthiness review staff personnel from the Quality Department of the continuing airworthiness management organisation.

Overall authority on the airworthiness management process of complete aircraft may be achieved, among other ways, by:

- Nominating as airworthiness review staff the Accountable Manager or the Maintenance Postholder.
- Being authorised to perform airworthiness reviews only on those particular aircraft for which the person is responsible for the complete continuing airworthiness management process.
- In the case of one-man organisations, this person has always overall authority. This means that this person can be nominated as airworthiness review staff.

AMC M.A.707 (a) (1) AIRWORTHINESS REVIEW STAFF

For all aircraft used in commercial air transport and any other aircraft, other than balloons, above 2730 kg MTOM, formal aeronautical maintenance training means training (internal or external) supported by evidence on the following subjects:

- Relevant parts of initial and continuing airworthiness regulations.
- Relevant parts of operational requirements and procedures, if applicable.
- The organisation's continuing airworthiness management exposition.
- Knowledge of a relevant sample of the type(s) of aircraft gained through a formalised training course. These courses should be at least at a level equivalent to CAR-66 Appendix III Level 1 General Familiarisation and could be imparted by a CAR-147 organisation, by the manufacturer, or by any other organization accepted by the DGCA.

“Relevant sample” means that these courses should cover typical systems embodied in those aircraft being within the scope of approval

- Maintenance methods.

AMC M.A.707 (a) (2) AIRWORTHINESS REVIEW STAFF

For all balloons and any other aircraft of 2730 Kg MTOM and below, not used in commercial air transport:

1. “experience in continuing airworthiness” can be full time or part-time, either as professional or on a voluntary basis.

2. Appropriate aeronautical maintenance training means demonstrated knowledge of the following subjects:

- Relevant parts of initial and continuing airworthiness regulations.
- Relevant parts of operational requirements and procedures, if applicable.
- The organisation’s continuing airworthiness management exposition.
- Knowledge of a relevant sample of the type(s) of aircraft gained through training and/or work experience. Such knowledge should be at least at a level equivalent to CAR-66 Appendix III Level 1 General Familiarisation and could be imparted by a CAR-147 organisation, by the manufacturer, or by any other organisation accepted by the DGCA.

“Relevant sample” means that these courses should cover typical systems embodied in those aircraft being within the scope of approval

- Maintenance methods.

This knowledge may be demonstrated by documented evidence or by an assessment performed by the DGCA or by other airworthiness review staff already authorised within the organisation in accordance with approved procedures. This assessment should be recorded.

AMC M.A.707 (b) AIRWORTHINESS REVIEW STAFF

The formal acceptance by the DGCA of the airworthiness review staff is granted through the corresponding CA Form 4.

An airworthiness review “under supervision” means under the supervision of the DGCA. If the organisation has already properly authorized airworthiness review staff, the DGCA may accept that the supervision be performed by this existing airworthiness review staff in accordance with an approved procedure. In such case, evidence of the airworthiness review performed under supervision should be provided to the DGCA together with the CA Form 4. If satisfied, the DGCA will issue the formal acceptance through the CA Form 4.

Once the airworthiness review staff has been accepted by the DGCA, the inclusion of their name in the exposition (refer to M.A.704(a)5) constitutes the formal authorisation by the organisation.

AMC M.A.707 (c) AIRWORTHINESS REVIEW STAFF

In order to keep the validity of the airworthiness review staff authorisation, the airworthiness review staff should have either:

- been involved in continuing airworthiness management activities for at least six months in every two year period, or
- conducted at least one airworthiness review in the last twelve month period.

In order to restore the validity of the authorisation, the airworthiness review staff should conduct at a satisfactory level an airworthiness review under the supervision of the DGCA or, if accepted by the DGCA, under the supervision of another currently valid authorised airworthiness review staff of the concerned continuing airworthiness management organisation in accordance with an approved procedure.

AMC M.A.707 (e) AIRWORTHINESS REVIEW STAFF

The minimum content of the airworthiness review staff record should be:

- Name,
- Date of Birth,
- Basic Education,
- Experience,

Aeronautical Degree and/or CAR-66 qualification and/or nationally-recognised maintenance personnel qualification,

- Initial Training received,
- Type of Training received,
- Continuation Training received,
- Experience in continuing airworthiness and within the organisation,
- Responsibilities of current role in the organisation,
- Copy of the authorisation.

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, unless covered by an indirect approval procedure in accordance with point M.A.302(c), and provide a copy of the programme to the owner of aircraft not involved in commercial air transport,
 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.
 11. Ensure the compliance of all applicable Airworthiness requirements covered in CAR Section -2 and other sections of CAR related to continuing Airworthiness.
- (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.712(b). The aircraft base, scheduled line maintenance and engine maintenance contracts, together with all amendments, shall be accepted by DGCA. 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.

AMC M.A.708 (b) 3 CONTINUING AIRWORTHINESS MANAGEMENT

When managing the approval of modifications or repairs the organisation should ensure that Critical Design Configuration Control Limitations are taken into account.

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 DGCA 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, 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 sending himself 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.

- Aircraft, 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 aircraft 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 DGCA 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

The intent of this paragraph is that maintenance contracts are not necessary when the operator's continuing airworthiness system, as approved by DGCA, 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 DGCA 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.

M.A.709 Documentation

- (a) The approved continuing airworthiness management organisation shall hold and use applicable current maintenance data in accordance with point M.A.401 for the performance of continuing airworthiness tasks referred to in point M.A.708. This data may be provided by the owner or the operator, subject to an appropriate contract being established with such an owner or operator. In such case, the continuing airworthiness management organisation only needs to keep such data

for the duration of the contract, except when required by point M.A.714.

- (b) For aircraft not involved in commercial air transport, the approved continuing airworthiness management organisation may develop “baseline” and/or “generic” maintenance programmes in order to allow for the initial approval and/or the extension of the scope of an approval without having the contracts referred to in Appendix I to CAR-M. These “baseline” and/or “generic” maintenance programmes however do not preclude the need to establish an adequate Aircraft Maintenance Programme in compliance with point M.A.302 in due time before exercising the privileges referred to in point M.A.711.’

AMC M.A.709 DOCUMENTATION

When using maintenance data provided by the customer, the continuing airworthiness management organisation is responsible for ensuring that this data is current. As a consequence, it should establish appropriate procedures or provisions in the contract with the customer.

The sentence “..., except when required by point M.A.714”, means, in particular, the need to keep a copy of the customer data which was used to perform continuing airworthiness activities during the contract period.

“Base line” maintenance programme: it is a maintenance programme developed for a particular aircraft type following, where applicable, the maintenance review board (MRB) report, the type certificate holder’s maintenance planning document (MPD), the relevant chapters of the maintenance manual or any other maintenance data containing information on scheduling.

“Generic” maintenance programme: it is a maintenance programme developed to cover a group of similar types of aircraft. These programmes should be based on the same type of instructions as the baseline maintenance programme. Examples of “generic” maintenance programmes could be Cessna 100 Series (covering Cessna 150, 172, 177, etc.).

“Base line” and “generic” maintenance programmes are not applicable to a particular aircraft registration mark, but to an aircraft type or group of types, and should be available to the DGCA prior to the initial approval and prior to the extension of the scope of an existing organisation approval. The intent is that the DGCA is aware of the scope and complexity of tasks that will be managed before granting an organisation approval or change of approval.

After this initial approval, when an owner/operator is contracted, the baseline or generic maintenance programme, as applicable, may be used to establish the M.A.302 aircraft maintenance programme, incorporating the additional maintenance tasks and indicating those which are not applicable to a particular aircraft registration mark. This may be achieved by adding an Annex to the baseline/generic maintenance programme for each aircraft registration, specifying which tasks are

added and which are not applicable. This will result in an aircraft maintenance programme specific for each customer.

However, this does not mean that this adaptation must be performed for each contracted aircraft registration. The reason is that the customer may already have an approved aircraft maintenance programme, which in that case should be used by the continuing airworthiness management organisation to manage the continuing airworthiness of such aircraft.

Continuing airworthiness management organisations may seek authorisation for indirect approval in order to amend the aircraft maintenance programme mentioned above in accordance with M.A.302(c). The indirect approval procedure should include provisions to notify to the DGCA that an aircraft maintenance programme specific for a customer has been created. The reason is that, according to M.A.704 (a) 9, for aircraft not involved in commercial air transport the Continuing Airworthiness Management Exposition (CAME) only needs to include the reference to the baseline/generic maintenance programme.

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 AAC No- 2 of 2013 , 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 Part of 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/ accepted by 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 licencing requirements shall be assisted by such qualified personnel.
- (c) Through the physical inspection 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.403, and;
 5. no inconsistencies can be found between the aircraft and the paragraph (a) documented review of records.
- (d) By derogation to M.A.901(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. 901 Airworthiness Review Certificate (CA Form 15B- Appendix-III) or a recommendation is issued by appropriate authorized 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.
1. by airworthiness review staff appropriately authorised in accordance with point M.A.707 on behalf of the approved continuing airworthiness management organisation or by certifying staff in cases provided for in point M.A.901(g), and
 2. when satisfied that the airworthiness review has been completely carried out and that there is no non-compliance which is known to endanger flight safety.
- (f) A copy of any airworthiness review certificate issued or extended for an aircraft shall be sent to State of Registry within 10 days.
- (g) Airworthiness review tasks shall not be sub-contracted.
- (h) Should the outcome of the airworthiness review be inconclusive, DGCA shall be informed.

AMC M.A.710 (a) Airworthiness Review

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 inspection could require actions categorized 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.

When the airworthiness review staff are not appropriately qualified to CAR-66 in order to release such maintenance, M.A.710(b) requires them to be assisted by such qualified personnel. However, the function of such CAR-66 personnel is limited to perform and release the maintenance actions requested by the airworthiness review staff, it not being their function to perform the physical survey of the aircraft. As stated in M.A.710(b), the airworthiness review staff shall carry out the physical survey of the aircraft, and this survey includes the verification that no inconsistencies can be found between the aircraft and the documented review of records.

This means that the airworthiness review staff who are going to sign the airworthiness review certificate or the recommendation should be the one performing both the documented review and the physical survey of the aircraft, it not being the intent of the rule to delegate the survey to CAR-66 personnel who are not airworthiness review staff. Furthermore, the provision of M.A.710(d) allowing a 90 days anticipation for the physical survey provides enough flexibility

to ensure that the airworthiness review staff are present.

2. The physical inspection 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 inspection has been carried out and found satisfactory.
4. To ensure compliance the physical inspection may include relevant sample checks of items.

AMC M.A.710(d) Airworthiness review

Without loss of continuity of the airworthiness review pattern” means that the new expiration date is set up one year after the previous expiration date. As a consequence, when the airworthiness review is anticipated, the validity or the airworthiness review certificate is longer than one year (up to 90 days longer).

This anticipation of up to 90 days also applies to the 12 month requirements shown in M.A.901(b), which means that the aircraft is still considered as being in a controlled environment if it has been continuously managed by a single organisation and maintained by appropriately approved organisations, as stated in M.A.901(b), from the date when the last airworthiness review certificate was issued until the date when the new airworthiness review is performed (this can be up to 90 days less than 12 months).

AMC M.A.710 (e) Airworthiness Review

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

M.A.711 Privileges of the Organization

A continuing airworthiness management organisation approved in accordance with Section A, Subpart G of CAR-M may:

1. manage the continuing airworthiness of , except those involved in commercial air transport, as listed on the approval certificate;
2. manage the continuing airworthiness of commercial air transport aircraft when listed both on its approval certificate and on its Air Operator Certificate (AOC);
3. arrange to carry out limited continuing airworthiness tasks with any contracted organisation, working under its quality system, as listed on the approval certificate;
4. extend, under the conditions of point M.A.901(f), an airworthiness review certificate that has been issued by DGCA or by another continuing airworthiness management organisation approved in accordance with Section A, Subpart G of CAR-M;

AMC M.A.711 (4) Privileges of the Organization

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.

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 Part of 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 CAR, 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 organisation not managing the continuing airworthiness of aircraft used in commercial air transport, the quality system may be replaced by regular organisational reviews subject to the approval of DGCA, except when the organisation issues airworthiness review certificates for aircraft above 2730 kg MTOM other than balloons. In the case where there is no quality system, the organization shall not contract continuing airworthiness management tasks to other parties.

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 annual 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 annual interval 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 DGCA 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 considered to be an organisation with up to 5 full-time staff (including all M.A.706 personnel) or equivalent proportional number when using part-time staff. The complexity of the organisation, 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.

Appendix XIII should be used to manage the organisational reviews.

M.A.713 Changes to the Approved Continuing Airworthiness Organisation

In order to enable DGCA to determine continued compliance with this Part of 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.

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 DGCA during negotiations about any of the specified changes. Without this paragraph the approval would automatically be suspended in all cases.

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 organization has the privilege referred to in point M.A.711(a) 4, it shall retain copy of each airworthiness review certificate and recommendation issued or, as applicable, extended, together with all supporting documents. In addition, the organisation shall retain a copy of any airworthiness review certificate that it has extended under the privilege referred to in point M.A.711(a)4.
- 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.

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 organization, MA 801 (b))2) certifying staff and/or from the Pilot-owner 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.

M.A.715 Continued Validity of Approval

- a) An approval shall be issued for a maximum period of **five** years unless otherwise specified. 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.B.705 and;
 2. DGCA being granted access to the organisation to determine continued compliance with this Part of CAR, and;
 3. the approval not being surrendered or revoked.
- (b) Upon surrender or revocation, the approval certificate shall be returned to DGCA.

AMC M.A. 715 Continued Validity of Approval

Validity period of one year means from 1st August of any calendar year to 31st July of next calendar year.

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 DGCA within a period of 7 days and 30 days for level 1 & level 2 findings respectively, including appropriate corrective action to prevent recurrence of the finding and its root cause.

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 maintenance organisation approved in accordance with CAR 145, the certificate of release to service shall be issued according to this Subpart;
- (b) No aircraft can be released to service unless a certificate of release to service is issued at the completion of any maintenance, when satisfied that all maintenance required has been properly carried out, by:
 - 1. appropriate certifying staff on behalf of the maintenance organisation approved in accordance with Section A, Subpart F of CAR-M; or
 - 2. certifying staff in compliance with requirements of DGCA Aircraft Maintenance Engineers Licensing requirements., except for complex maintenance tasks listed in Appendix VII to this CAR for which point 1 applies; or
 - 3. by the Pilot-owner in compliance with point M.A.803;
- (c) By derogation from point M.A.801(b)2 for Light aircraft not used in commercial air transport, aircraft complex maintenance tasks listed in Appendix VII may be released by certifying staff referred to in point M.A.801(b)2;
- (d) By derogation from point M.A.801(b), in the case of unforeseen situations, when an aircraft is grounded at a location where no approved maintenance organisation appropriately approved under Subpart F, Section A of CAR-M or CAR 145 and no appropriate certifying staff are available, the owner may authorise any person, with not less than three years of appropriate maintenance experience and holding the proper qualifications, to maintain according to the standards set out in Subpart D, Section A of CAR -M and release the aircraft. The owner shall in that case:
 - 1. obtain and keep in the aircraft records details of all the work carried out and of the qualifications held by that person issuing the certification; and
 - 2. ensure that any such maintenance is rechecked and released by an appropriately authorised person referred to in point M.A.801(b) or an organisation approved in accordance with Section A, Subpart F of CAR-M, or CAR 145 at the earliest opportunity but within a period not exceeding seven days; and
 - 3. notify the organisation responsible for the continuing airworthiness management of the aircraft when contracted in accordance with point M.A.201(e), or DGCA in the absence of such a contract, within seven days of the issuance of such certification authorisation;

- (e) In the case of a release to service in accordance with point M.A.801(b)2 or point M.A.801(c), the certifying staff may be assisted in the execution of the maintenance tasks by one or more persons subject to his/her direct and continuous control;
- (f) A certificate of release to service shall contain as a minimum:
 - 1. basic details of the maintenance carried out; and
 - 2. the date such maintenance was completed; and
 - 3. the identity of the organisation and/or person issuing the release to service, including:
 - (i) the approval reference of the maintenance organisation approved in accordance with Section A, Subpart F of CAR-M and the certifying staff issuing such a certificate; or
 - (ii) in the case of point M.A.801(b) (2) or M.A.801(c) certificate of release to service, the identity and if applicable licence number of the certifying staff issuing such a certificate;
 - 4. the limitations to airworthiness or operations, if any.
- (g) By derogation from paragraph (b) and notwithstanding the provisions of paragraph (h), when the maintenance prescribed cannot be completed, a certificate of release to service may be issued within the approved aircraft limitations. Such fact together with any applicable limitations of the airworthiness or the operations shall be entered in the aircraft certificate of release to service before its issue as part of the information required in paragraph (f) (4);
- (h) A certificate of release to service shall not be issued in the case of any known non-compliance which endangers flight safety.'

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. "3 years of appropriate maintenance experience" means 3 years working in an aircraft maintenance environment on at least some of the aircraft type systems corresponding to the aircraft endorsed on the aircraft maintenance license or on the certifying staff authorisation that the person holds.
- 2. "Holding the proper qualifications" means holding either:
 - a. a valid ICAO Annex 1 compliant maintenance license for the aircraft type requiring certification, or;

- b. a certifying staff authorisation valid for the work requiring certification, issued by an ICAO Annex 6 approved maintenance organisation.
3. A release in accordance with this paragraph does not affect the controlled environment of the aircraft as long as the M.A.801(d)2 recheck and release has been carried out by an approved maintenance organisation.

AMC M.A.801 (f) 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 to service.'
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, 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 (g) 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(h) Aircraft Certificate of Release to Service

‘Endangers 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.”

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 carried out on an aircraft component in accordance with point M.A.502.
- (b) The authorised release certificate identified as CA Form 1 constitutes the component certificate of release to service, except when such maintenance on aircraft components has been performed in accordance with point M.A.502(b), point M.A.502(d), in which case the maintenance is subject to aircraft release procedures in accordance with point M.A.801.’

AMC M.A.802 Component Certificate of Release to Service

When an approved organisation maintains an aircraft component for use by the organisation a 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.

M.A.803 Pilot Owner Authorization

- (a) To qualify as a Pilot-owner, the person must:
1. hold a valid pilot licence (or equivalent) issued or validated by DGCA for the aircraft type or class rating; and
 2. own the aircraft, either as sole or joint owner; that owner must be:
 - (i) one of the natural persons on the registration form; or
 - (ii) a member of a non-profit recreational legal entity, where the legal entity is specified on the registration document as owner or operator, and that member is directly involved in the decision making process of the legal entity and designated by that legal entity to carry out Pilot-owner maintenance.
- (b) For any privately operated non-complex motor-powered aircraft of 2730 kg MTOM and below, sailplane, powered sailplane or balloon, the Pilot-owner may issue a certificate of release to service after limited Pilot-owner maintenance as specified in Appendix VIII to this CAR.
- (c) The scope of the limited Pilot-owner maintenance shall be specified in the aircraft maintenance programme referred to in point M.A.302.
- (d) The certificate of release to service shall be entered in the logbooks and contain basic details of the maintenance carried out, the maintenance data used, the date on which that maintenance was completed and the identity, the signature and pilot licence number of the Pilot-owner issuing such a certificate.

AMC M.A.803 Pilot-Owner Authorization

1. The pilot-owner should hold a valid pilot license issued or validated by DGCA 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.

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 shall be carried out periodically.

- (a) An airworthiness review certificate is issued in accordance with Appendix III (CA Form 15a or 15b) on completion of a satisfactory airworthiness review. The airworthiness review certificate is valid for one year;
- (b) An aircraft in a controlled environment is an aircraft (i) continuously managed during the previous 12 months by a unique continuing airworthiness management organisation approved in accordance with Section A, Subpart G, of CAR-M, and (ii) which has been maintained for the previous 12 months by maintenance organisations approved in accordance with Section A, Subpart F of CAR - M, or with CAR 145. This includes maintenance tasks referred to in point M.A.803(b) carried out and released to service in accordance with point M.A.801(b)(2) or point M.A.801(b)(3);
- (c) For all aircraft used in commercial air transport, and aircraft above 2 730 kg MTOM, except balloons, that are in a controlled environment, the organisation referred to in (b) managing the continuing airworthiness of the aircraft may, if appropriately approved, and subject to compliance with paragraph (k):
 - 1. issue an airworthiness review certificate in accordance with point M.A.710, and;
 - 2. for the 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;
- (d) For all aircraft used in commercial air transport and aircraft above 2 730 kg MTOM, except balloons, that
 - (i) are not in a controlled environment, or
 - (ii) which continuing airworthiness is managed by a continuing airworthiness management organisation that does not hold the privilege to carry out airworthiness reviews, the airworthiness review certificate shall be issued by DGCA upon satisfactory assessment based on a recommendation made by a continuing airworthiness management organisation appropriately approved in accordance with Section A, Subpart G of CAR-M sent together with the application from the owner or operator. This recommendation shall be based on an airworthiness review carried out in accordance with point M.A.710;
- (e) For aircraft not used in commercial air transport of 2 730 kg MTOM and below, and balloons, continuing airworthiness management organisation

approved in accordance with Section A, Subpart G of CAR-M and appointed by the owner or operator may, if appropriately approved and subject to paragraph (k):

1. issue the airworthiness review certificate in accordance with point M.A.710, and;
 2. for airworthiness review certificates it has issued, when the aircraft has remained within a controlled environment under its management, extend twice the validity of the airworthiness review certificate for a period of one year each time;
- (f) By derogation from points M.A.901(c)2 and M.A.901(e) 2, for aircraft that are in a controlled environment, the organisation referred to in (b) managing the continuing airworthiness of the aircraft, subject to compliance with paragraph (k), may extend twice for a period of one year each time the validity of an airworthiness review certificate that has been issued by DGCA or by another continuing airworthiness management organisation approved in accordance with Section A, Subpart G of CAR-M.
- (g) By derogation from points M.A.901(e) and M.A.901(i)2, for Light aircraft not used in commercial air transport and not affected by point M.A.201(i), the airworthiness review certificate may also be issued by DGCA upon satisfactory assessment, based on a recommendation made by certifying staff formally approved by DGCA and complying with DGCA Aircraft Maintenance License requirements as well as requirements laid down in point M.A.707(a)2(a), sent together with the application from the owner or operator. This recommendation shall be based on an airworthiness review carried out in accordance with point M.A.710 and shall not be issued for more than two consecutive years
- (h) Whenever circumstances reveal the existence of a potential safety threat DGCA shall carry out the airworthiness review and issue the airworthiness review certificate itself.
- (i) In addition to paragraph (h), DGCA may also carry out the airworthiness review and issue the airworthiness review certificate itself in the following cases:
1. when the aircraft is managed by a continuing airworthiness management organisation approved in accordance with Section A, Subpart G of this CAR-M located outside India;
 2. for all balloons and any other aircraft of 2730 kg MTOM and below, if it is requested by the owner;
- (j) When DGCA carries out the airworthiness review and/or issues the airworthiness review certificate itself, the owner or operator shall provide DGCA with:
1. the documentation required by DGCA; and
 2. suitable accommodation at the appropriate location for its personnel;

and

3. when necessary, the support of personnel appropriately qualified in accordance with CAR 66 or equivalent personnel requirements laid down in point 145.A.30(j)(1) and (2) of CAR 145;
- (k) An airworthiness review certificate cannot be issued nor extended if there is evidence or reason to believe that the aircraft is not airworthy.'

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),(e) 2, and (f) 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.901 (b).

It is acceptable to anticipate the extension of the airworthiness review certificate by a maximum of 30 days without a loss of continuity of the airworthiness review pattern, which means that the new expiration date is set up one year after the previous expiration date. This anticipation of up to 30 days also applies to the 12 month requirements shown in M.A.901(b), meaning that the aircraft is still considered as being in a controlled environment if it has been continuously managed by a single organisation and maintained by appropriately approved organisations, as stated in M.A.901(b), from the date when the last airworthiness review certificate was issued until the date when the extension is performed (this can be up to 30 days less than 12 months).

It is also acceptable to perform the extension of an airworthiness review certificate after its expiration date, as long as all the conditions for the extension are met. However, this means the following:

- The aircraft could not fly since the airworthiness review certificate expired until it is extended, and

- The new expiration date (after extension) is set one year after the previous expiration date (not one year after the extension is performed).

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 inspection 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 inspected 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;
- 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(g) Aircraft airworthiness review

The words "certifying staff" mean that the personnel meet at the time of the airworthiness review all the CAR-66 requirements to be certifying staff for the aircraft subject to review (including also continuing experience requirements)

The formal acceptance of the certifying staff by the DGCA should only be granted after verification of the qualifications and after the satisfactory performance of an airworthiness review under supervision of the DGCA.

The sentence "shall not be issued for more than two consecutive years" means that every three years the airworthiness review has to be performed by the DGCA.

AMC M.A.901(j) 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.

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 certificate of registration is not valid 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 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 M.A.304.
- (c) Upon surrender or revocation, the airworthiness review certificate shall be returned to DGCA.
- (d) In case of leased aircraft, the period of validity of airworthiness review certificate shall be restricted to the date of validity of certificate of registration.

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 DGCA for the amendment of the Certificate of Registration in accordance with CAR Section-2, Series "F", Part I.
- (b) Notwithstanding Transfer of aircraft registration within India, the former airworthiness review certificate shall remain valid until its expiry date.

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

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

AMC M.A.903 (b) Transfer of Aircraft registration within India:

In case of transfer of aircraft registration within India, the aircraft owner/operator should verify that DGCA has entered the new aircraft registration, if any, on the existing airworthiness review certificate and validated the change.

M.A.904 Airworthiness Review of Aircraft Imported into India

- (a) When importing an aircraft into India, the applicant shall:
1. apply to DGCA for the issuance of a new airworthiness certificate in accordance with CAR Section-2, Series "F", Part III and
 2. for aircraft other than new, have an airworthiness review carried out satisfactorily in accordance with point M.A.901; and
 3. have all maintenance carried out to comply with the approved maintenance programme in accordance with point M.A.302.
- (b) When satisfied that the aircraft is in compliance with the relevant requirements, the continuing airworthiness management organisation, if applicable, 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 DGCA.
- (d) A new airworthiness certificate will be issued by DGCA when it is satisfied the aircraft complies with the requirements of CAR Section-2 Series "F" Part-III.
- (e) DGCA shall also issue the airworthiness review certificate valid normally for one year unless DGCA has safety reason to limit the validity.

AMC M.A.904 (a) (1) Airworthiness Reviews of Aircraft Imported into India

In order to allow for possible participation, 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 exporting country authorities such as export certificates, primary authority information;
 - 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;
 - c) the information on aircraft such as aircraft, engine and propeller type certificate datasheets, noise and emission certificate data sheets, flight

- manual and supplements;
- 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;
 - e) the modification and repair status of the aircraft detailing elements such as owner/operator designed modifications and repairs, STCs, and parts needing approval;
 - f) the aircraft cabin configuration such as emergency equipment fitted, cockpit configuration, placards, instrument limitations, cabin layout;
 - 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;
 - h) the 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;
 - i) the compass compensation;
 - j) special operating rules such as extended twin-engine operations (EDTO/ETOPS)/ long range operations (LROPS), reduced vertical separation minima (RVSM), MNPS, all weather operations (AWOPS), RNAV;
 - k) the aircraft inspection 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,
 - l) check flight including check of control system / cockpit ground check / engine run up.
3. If there is no M.A. Subpart G organisation approved for specific aircraft type available, DGCA may carry out the airworthiness review in accordance with this paragraph and the provisions M.A.901 (h) 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.

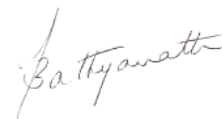
- (a) All the information set forth by AMC M.A 901(d) and (g)

- (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;
 - 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

M.A.905 Findings

- (a) A level 1 finding is any significant non-compliance with CAR -M requirements which lower 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 point M.B.903, the person or organisation accountable referred to in point M.A.201 shall define a corrective

action plan and demonstrate corrective action to the satisfaction of DGCA within a period agreed as agreed upon including appropriate corrective action to prevent reoccurrence of the finding and its root cause.



(M. Sathiyavathy)

Director General of Civil Aviation

SECTION B

PROCEDURES FOR DGCA

SUBPART A

GENERAL

M.B.101 Scope

This Section establishes the administrative requirements to be followed by DGCA for the application and the enforcement of of CAR M.

M.B.102 DGCA

(a) General

DGCA shall be responsible for the issuance, continuation, change, suspension or revocation of certificates and for the oversight of continuing airworthiness. DGCA shall establish documented procedures.

Resources

Appropriate staff has been designated to carry out the tasks as detailed in this Section B.

(b) Qualification and training

All staff involved in CAR-M activities have been appropriately qualified and have appropriate knowledge, experience, initial training and continuation training to perform their allocated tasks.

(c) Procedures

DGCA has established procedures detailing how compliance with this CAR is accomplished. The procedures shall be reviewed and amended to ensure continued compliance.

AMC M.B.102 (a) DGCA-General

1. In deciding upon the required airworthiness organizational structure, DGCA should review the number of certificates to be issued, the number and size of potential operators, the number of M.A. Subpart F approved maintenance organisations and M.A. Subpart G continuing airworthiness management organisations.
2. DGCA should retain effective control of important inspection functions and not delegate them in such a way that aircraft owners, operators, M.A. Subpart F approved maintenance organisations and M.A. Subpart G continuing airworthiness management organisations, in effect, regulate themselves in airworthiness matters.
3. The set-up of the organizational structure should ensure that the various tasks and obligations of DGCA are not relying on individuals. That means that a continuing and undisturbed fulfillment of these tasks and obligations of DGCA should also be guaranteed in case of illness, accident or leave of individual employees.

AMC M.B.102 (c) DGCA–Qualification and Training

1. DGCA inspectors should have:
 - 1.1 practical experience and expertise in the application of aviation safety standards and safe operating practices;
 - 1.2 comprehensive knowledge of:
 - (a) relevant parts of implementing rules, certification specifications and guidance material;
 - (b) DGCA's procedures;
 - (c) the rights and obligations of an inspector;
 - (d) quality systems;
 - (e) continuing airworthiness management.
 - (f) operational procedures when affecting the continuing airworthiness management of the aircraft or the maintenance.
 - 1.3 training on auditing techniques.
 - 1.4 five years relevant work experience to be allowed to work as an inspector independently. This may include experience gained during training to obtain the subparagraph 1.5 qualifications.
 - 1.5 a relevant engineering degree or an aircraft maintenance technician qualification with additional education. 'Relevant engineering degree' means an engineering degree from aeronautical, mechanical, electrical, electronic, avionic or equivalent or other studies relevant to the maintenance and continuing airworthiness of aircraft/aircraft components.
 - 1.6 knowledge of a relevant sample of the type(s) of aircraft gained through a formalized training course, including These courses should be at least at a level equivalent to CAR-66 Appendix III Level 1 General Familiarisation Fuel Tank Safety (FTS) training as described in Appendix XII to AMC to M.A.706(f) and M.B.102(c).

“Relevant sample” means that these courses should cover typical systems embodied in those aircraft being within the scope of approval
 - 1.7 knowledge of maintenance standards.
2. In addition to technical competency, inspectors should have a high degree of integrity, be impartial in carrying out their tasks, be tactful, and have a good understanding of human nature.
3. A programme for continuation training should be developed which provides for the inspectors, at regular intervals, to visit appropriate manufacturers and attend technical symposia as well as training or refresher courses to gain first-hand knowledge of new developments. As a general policy, it is not desirable for the

inspectors to obtain technical qualifications from those entities under their direct regulatory jurisdiction.

AMC M.B.102 (d) DGCA Organisation–Procedures

The documented procedures should contain the following information:

- (a) The title(s) and name(s) of the Officer(s) of DGCA and their duties and responsibilities.
- (b) Organisation chart(s) showing associated chains of responsibility of the senior persons.
- (c) A procedure defining the qualifications for staff together with a list of staff authorised to sign certificates.
- (d) A general description of the facilities.
- (e) Procedures specifying how DGCA ensures compliance with CAR M.

M.B.103 Acceptable Means of Compliance

When the acceptable means of compliance of this CAR are complied with, the related requirements of this CAR shall be considered as met.

M.B.104 Record-Keeping

- (a) DGCA has established a system of record-keeping that allows adequate traceability of the process to issue, continue, change, suspend or revoke each certificate.
- (b) The records for the oversight of CAR-M approved organisations shall include as a minimum:
 - 1. The application for an organisation approval.
 - 2. The organisation approval certificate including any changes.
 - 3. A copy of the audit program listing the dates when audits are due and when audits were carried out.
 - 4. Continued oversight records including all audit records.
 - 5. Copies of all relevant correspondence.
 - 6. Details of any exemption and enforcement actions.
 - 7. Any report relating to the oversight of the organisation.
 - 8. Organisation exposition or manual and amendments.
 - 9. Copy of any other document directly approved by DGCA.
- (c) The retention period for the paragraph (b) records shall be at least four years.
- (d) The minimum records for the oversight of each aircraft shall include, at least, a copy of:
 - 1. aircraft certificate of airworthiness,
 - 2. airworthiness review certificates,
 - 1. Section A Subpart G organisation recommendations,
 - 2. reports from the airworthiness reviews carried out directly by DGCA,
 - 1. all relevant correspondence relating to the aircraft,
 - 2. details of any exemption and enforcement action(s),
 - 3. any document directly approved by DGCA as referred to in M.B. Subpart B.
- (e) The records specified in paragraph (d) shall be retained until two years after the aircraft has been permanently withdrawn from service.
- (f) All records specified in M.B.104 shall be made available upon request by DGCA Hdqrs.

AMC M.B.104 (a) Record-Keeping

- 1. The record-keeping system should ensure that all records are accessible whenever needed within a reasonable time. These records should be organized in a consistent way throughout DGCA (chronological, alphabetical order, etc.).
- 2. All records containing sensitive data regarding applicants or organisations should

be stored in a secure manner with controlled access to ensure confidentiality of this kind of data.

3. All computer hardware used to ensure data backup should be stored in a different location from that containing the working data in an environment that ensures they remain in good condition. When hardware- or software-changes take place special care should be taken that all necessary data continues to be accessible at least through the full period specified in M.B.104 (c) and/or (e).

AMC M.B.104 (f) Record-Keeping

The cases, when records shall be made available should be limited to:

- incidents or accidents.
- findings through the aircraft continuing monitoring program where organizations approved by DGCA are involved, to determine the root cause.
- Aircraft mainly operated in another country,
- An aircraft previously operated in another country,
- An organisation having approvals in several countries.

When records are requested from another country, the reason for the request should be clearly stated. The records can be made available by sending a copy or by allowing their consultation.

SUBPART B
ACCOUNTABILITY

M.B.201 Responsibilities

DGCA is responsible for conducting inspections and investigations in order to verify that the requirements of this CAR are complied with.

SUBPART C

CONTINUING AIRWORTHINESS

M.B.301 Maintenance Programme

- (a) DGCA shall verify that the maintenance programme is in compliance with M.A.302.
- (b) Except where stated otherwise in M.A.302 (c) the maintenance programme and its amendments shall be approved directly by DGCA.
- (c) In the case of indirect approval, the maintenance programme procedure shall be approved by DGCA through the continuing airworthiness management exposition.
- (d) In order to approve a maintenance programme according to paragraph (b), DGCA shall have access to all the data required in M.A.302 (d), (e) and (f).

AMC M.B.301 (a) Maintenance Programme

For DGCA to verify compliance with M.A.302, the auditing officer should have received training on maintenance programme development and control.

AMC M.B.301 (b) Maintenance Programme

1. When assessing aircraft maintenance programmes for approval, DGCA should verify that the maintenance programme is acceptable for the continued airworthiness of the specific aircraft listed and it is appropriate for the proposed operating environment and scheduled utilization.
2. DGCA should assess the contents taking into account the origins of the document i.e. the manufacturers recommended maintenance programme, a MRB report, the operators own experience or another approved programme.
3. DGCA may elect to publish a proposed maintenance schedule for a piston engine aircraft type or a group of piston engine aircraft types below 2730Kgs maximum take off mass (MTOM). When owners/operators of piston engine aircraft below 2730Kgs MTOM elect to use a DGCA proposed maintenance schedule, all the out of phase manufacturer recommendations should be incorporated into the final maintenance programme in order for it to be approved.
4. A copy of the approved programme should be retained by DGCA, unless the programme is approved by a M.A. Subpart G approved organisation.

5. The documentation issued by DGCA to approve the operator's maintenance programme may include details of who may issue certificates of release to service in a particular situation and may define which tasks are considered as complex maintenance tasks or limited pilot owner maintenance according to appendix VIII to CAR-M.
6. In the case of commercial air transport or large aircraft, development of the approved operator's maintenance programme is dependent upon sufficient satisfactory in-service experience which has been properly processed. In general, the task being considered for escalation beyond the MRB limits should have been satisfactorily repeated at the existing frequency several times before being proposed for escalation. Appendix I to AMC M.A.302 and AMC M.B.301 (b) gives further information.
7. DGCA may approve an incomplete maintenance programme at the start of operation of an aircraft or an operator, subject to limiting the approval of the maintenance programme to a period that does not exceed any required maintenance not yet approved.
8. If DGCA is no longer satisfied that a safe operation can be maintained, the approval of a maintenance programme or part of it may be suspended or revoked. Events giving rise to such action include:
 - 8.1 An operator changing the utilization of an aircraft;
 - 8.2 The owner or M.A. Subpart G approved organisation has failed to ensure that the programme reflects the maintenance needs of the aircraft such that safe operation can be assured.

AMC M.B.301(c) Maintenance Programme

1. Approval of an aircraft maintenance programme through a procedure established by a M.A. Subpart G organisation should require the organisation to demonstrate to DGCA that it has competence, procedures and record keeping provisions, which will enable the organisation to analyze aircraft reliability, TC holder's instructions, and other related operating and maintenance criteria.
2. According to the complexity of the aircraft and the nature of the operation, the maintenance programme procedures should contain reliability centered maintenance and condition monitored maintenance programme procedures and have procedures relating to the programme control which contain the following provisions:
 - (a) task escalation or adjustment
 - (b) maintenance programme review
 - (c) SB or Service Information assessment
 - (d) component and structures in service performance review
 - (e) maintenance programme revision
 - (f) maintenance procedure effectiveness review and amendment

- (g) Maintenance review board report (MRBR) or Manufacturers maintenance planning document (MPD) review and assessment. As appropriate
 - (h) AD review and assessment
 - (i) owner/maintenance/M.A. Subpart G organisation liaison
 - (j) training
3. When DGCA requests, the organisation should make provision for the attendance a DGCA representative at meetings held to consider maintenance implications arising from reviews of the above provisions.

AMC M.B.301 (d) Maintenance Programme

Programmes and all associated airworthiness data, including that data used for substantiating the escalation of programmes should be made available to DGCA upon request.

M.B.302 Exemptions

All exemptions granted in accordance with Rules / CAR shall be recorded and retained by DGCA.

M.B.303 Aircraft Continuing Airworthiness Monitoring

- (a) DGCA shall develop an surveyinspection programme to monitor the airworthiness status of the fleet of aircraft on its register.
- (b) The survey inspection programme shall include sample product inspection of aircraft.
- (c) The programme shall be developed taking into account the number of aircraft on the register, experience and past surveillance activities.
- (d) The product surveyinspection shall focus on a number of key risks airworthiness elements and identify any findings. Furthermore, DGCA shall analyze each finding to determine its root cause.
- (e) All findings shall be confirmed in writing to the person or organisation accountable according to M.A.201.
- (f) DGCA shall record all findings, closure actions and recommendations.
- (g) If during aircraft inspection evidence is found showing non-compliance to a CAR-M requirement, DGCA shall take actions in accordance with M.B.903.
- (h) If the root cause of the finding identifies a non-compliance with any Subpart of CAR M or another CAR, the non-compliance shall be dealt with as prescribed by the relevant CAR.
- (i) In order to facilitate appropriate enforcement action, DGCA shall exchange information on non-compliances identified in accordance with paragraph (h).

AMC 1 M.B.303 (b) Aircraft Continuing Airworthiness Monitoring

Scope of Inspection

1. DGCA should undertake sample product inspection of aircraft on its register to verify that: -
 - (a) the condition of an aircraft as sampled is to a standard acceptable for the Certificate of Airworthiness/ Airworthiness Review Certificate to remain in force,
 - (b) the operator/owner's management of the airworthiness of their aircraft is effective,
 - (c) the approvals and licenses granted to organisations and persons continue to be applied in a consistent manner to achieve the required standards.

A physical inspection of the aircraft is necessary during each ACAM (ramp or In-depth)

2. Sample product inspection of aircraft include:
 - (a) in-depth inspection carried out during extensive maintenance that fully encompass selected aspects of an aircraft's airworthiness,
 - (b) ramp inspection carried out during aircraft operations to monitor the apparent condition of an aircraft's airworthiness.
3. When performing a ramp inspection, the officer(s) should make all possible efforts to avoid an unreasonable delay of the aircraft inspected.

AMC 2 M.B.303 (b) Aircraft Continuing Airworthiness Monitoring

In-Depth Inspection

1. An ACAM in-depth inspection is a sample inspection of the key risk elements (KREs) and should be performed during scheduled/extensive maintenance. Appendix III A to GM 1 to M.B.303(b) provides guidance on KREs that can be used for planning and/or analysis of the inspections.
2. The inspection should be a 'deep cut' through the elements or systems selected
3. The record of an ACAM inspection should identify which KREs were inspected.

AMC 3 M.B.303 (b) Aircraft Continuing Airworthiness Monitoring

Key Risk Elements

1. The following KREs should be used for aircraft continuing airworthiness monitoring
 - a) Type design and changes to type design
 - b) Airworthiness limitations
 - c) Airworthiness Directives

- d) Aircraft documents
- e) Flight Manual
- f) Mass & Balance
- g) Markings & placards
- h) Operational requirements
- i) Defect management
- j) Aircraft Maintenance Programme
- k) Component control
- l) Repairs
- m) Records

2. These KREs and their detailed components should be adapted to the complexity of the aircraft type being surveyed by retaining only those items that are applicable and relevant for the particular aircraft type.

GM1 M.B. 303(b) Aircraft continuing airworthiness monitoring*

Key Risk Elements

The KREs define the scope of continuing airworthiness. The list of KREs is intended to provide the basis for planning and control of the ACAM inspection programme. It will ensure that the programme covers all aspects of continuing airworthiness. While it is not required to cover all KREs during a given inspection, the ACAM survey programme needs to ensure that there is no omission, i.e. certain KRE are never inspected.

AMC M.B.303 (c) Aircraft Continuing Airworthiness Monitoring

DGCA should create an annual programme of inspection, selecting aircraft and/or operators depending on the maintenance environment, operating conditions, airworthiness standards and past surveillance experience. The programme should be used to identify the operator/fleet/aircraft, which are causing the greatest concern.

M.B.304 Revocation, Suspension and Limitation

DGCA shall:

- (a) suspend an airworthiness review certificate on reasonable grounds in the case of potential safety threat, or;
- (b) suspend, revoke or limit an airworthiness review certificate pursuant to M.B.303 (g).

SUBPART D
MAINTENANCE STANDARDS

M.B.401 Maintenance Standards

- (a) DGCA shall ensure that the maintenance data used by the operator is applicable and current. Such data will include mandatory airworthiness information, airworthiness directives, service bulletins, maintenance manuals etc. issued by the state of manufacture or the respective regulatory authorities.
- (b) DGCA in their sample checks will ensure that the work cards / work sheets, performance of maintenance, recording of aircraft defects by the operator are as per M.A. Subpart D.

SUBPART E

COMPONENTS

M.B.501 Components

- (a) DGCA shall ensure that the installation of components and the release of respective CA form 1 by the operator are performed in the manner as described in M.A. 501.
- (b) The component maintenance performed by the maintenance organisation is carried out when approved in accordance with Section A Subpart F of CAR M or with CAR 145.
- (c) DGCA shall ensure that the personnel certifying component installation and maintenance are adequately qualified.
- (d) DGCA through their sample checks shall ensure that the operator has a system of following service life limited components as required in M.A. 503.
- (e) DGCA shall ensure that the operator has a system to ensure control of unserviceable components.
- (f) DGCA shall ensure that the maintenance records of servicing and installation of components on the aircraft are retained for periods specified.

SUBPART F

MAINTENANCE ORGANISATION

M.B.601 Application

The investigation and continuous oversight of the maintenance facility shall be carried out by DGCA.

M.B.602 Initial Approval

- (a) Provided the requirements of M.A.606 (a) and (b) are complied with, DGCA shall formally indicate its acceptance of the M.A.606 (a) and (b) personnel to the applicant in writing.
- (b) DGCA shall establish that the procedures specified in the maintenance organisation manual comply with M.A Subpart F and ensure the accountable manager signs the commitment statement.
- (c) DGCA shall verify that the organisation is in compliance with the CAR-M.A Subpart F requirements.
- (d) A meeting with the accountable manager shall be convened at least once during the investigation for approval to ensure that he/she fully understands the significance of the approval and the reason for signing the commitment of the organisation to compliance with the procedures specified in the manual.
- (e) All findings shall be confirmed in writing to the applicant organisation.
- (f) DGCA shall record all findings, closure actions (actions required to close a finding) and recommendations.
- (g) For initial approval all findings shall be corrected by the organisation and closed by DGCA before the approval can be issued.

AMC M.B.602 (a) Initial Approval

1. 'Formally indicate in writing' means that a CA Form 4 (Appendix X) should be used for this activity. With the exception of the accountable manager, a CA Form 4 should be completed for each person nominated to hold a position required by M.A.606 (b)
2. In the case of the accountable manager approval of the maintenance organisation manual containing the accountable manager's signed commitment statement constitutes formal acceptance.

AMC M.B.602 (b) Initial Approval

DGCA should indicate approval of the maintenance organisation manual in writing.

AMC M.B.602 (c) Initial Approval

1. DGCA should determine by whom, and how the audit shall be conducted. For example, it will be necessary to determine whether one large team audit or a

short series of small team audits or a long series of single man audits are most appropriate for the particular situation.

2. The audit may be carried out on a product line type basis. For example, in the case of an organisation with Socata TB20 and Piper PA 28 ratings, the audit is concentrated on one type only for a full compliance check. Dependent upon the result, the second type may only require a sample check that should at least cover the activities identified as weak for the first type.
3. DGCA auditing officer should always ensure that he/she is accompanied throughout the audit by a senior technical member of the organisation. The reason for being accompanied is to ensure the organisation is fully aware of any findings during the audit.
4. The auditing officer should inform the senior technical member of the organisation at the end of the audit visit on all findings made during the audit.

AMC M.B.602 (e) Initial Approval

1. Findings should be recorded on an audit report form with a provisional categorization as a level 1 or 2. Subsequent to the audit visit that identified the particular findings, DGCA should review the provisional finding levels, adjusting them if necessary and change the categorization from 'provisional' to 'confirmed'.
2. All findings should be confirmed in writing to the applicant organisation within 2 weeks of the audit visit.
3. There may be occasions when DGCA finds situations in the applicant's organisation on which it is unsure about compliance. In this case, the organisation should be informed about possible non-compliance at the time and the fact that the situation will be reviewed within DGCA before a decision is made. If the review concludes that there is no finding then a verbal confirmation to the organisation will suffice.

AMC M.B.602 (f) Initial Approval

1. The audit report should be made on a CA Form 6F (see Appendix VI).
2. A quality review of the CA Form 6F audit report should be carried out by a competent independent person nominated by DGCA. The review should take into account the relevant paragraphs of M.A. Subpart F, the categorization of finding levels and the closure action taken. Satisfactory review of the audit form should be indicated by a signature on the CA Form 6F.

AMC M.B.602 (g) Initial Approval

The audit reports should include the date each finding was cleared together with reference to DGCA report or letter that confirmed the clearance.

M.B.603 Issue of Approval

- (a) DGCA shall issue to the applicant a CA Form 3 approval certificate (Appendix V to CAR M) which includes the extent of approval, when the maintenance organisation is in compliance with the applicable paragraphs of this CAR.

- (b) DGCA shall indicate the conditions attached to the approval on the CA Form 3 approval certificate.
- (c) The reference number shall be included on the CA Form 3 approval certificate in a manner specified by DGCA.

AMC M.B.603 (a) Issue of Approval

1. DGCA shall issue the approval for maintenance organizations. DGCA shall carry out the initial and subsequent audits in this regard.
2. The approval should be based upon the organizational capability relative to M.A. Subpart F compliance and not limited by reference to individual DGCA certificated products.

For example, if the organisation is capable of maintaining within the limitation of M.A. Subpart F the Cessna 100 series aircraft the approval schedule should state A2 Cessna 100 series and not Cessna 172 RG which is a particular designator for one of many Cessna 100 series.

AMC M.B.603 (c) Issue of Approval

The numeric sequence of the approval reference should be unique to the particular approved maintenance organisation.

M.B.604 Continuing Oversight

- (a) DGCA shall keep and update a program listing for each M.A Subpart F approved maintenance organisations under its supervision, the dates when audit visits are due and when such visits were carried out.
- (b) Each organisation shall be completely audited at periods not exceeding 12 months.
- (c) All findings shall be confirmed in writing to the applicant organisation.
- (d) DGCA shall record all findings, closure actions (actions required to close a finding) and recommendations.
- (e) A meeting with the accountable manager shall be convened at least once every 12 months to ensure he/she remains informed of significant issues arising during audits.

AMC M.B.604 (b) Continuing Oversight

1. Where DGCA has decided that a series of audit visits are necessary to arrive at a complete audit of an approved maintenance organisation, the program should indicate which aspects of the approval will be covered on each visit.
2. It is recommended that part of an audit concentrates on the organizations internal self monitoring reports produced by the organizational review to determine if the organisation is identifying and correcting its problems.
3. At the successful conclusion of the audit(s) including verification of the manual, an audit report form should be completed by the auditing officer including all recorded findings, closure actions and recommendation. A CA Form 6F should be used for this activity.

4. Credit may be claimed by DGCA Officer(s) for specific item audits completed during the preceding 23 months period subject to four conditions:
 - (a) the specific item audit should be the same as that required by M.A. Subpart F latest amendment, and
 - (b) there should be satisfactory evidence on record that such specific item audits were carried out and that all corrective actions have been taken, and
 - (c) DGCA Officer(s) should be satisfied that there is no reason to believe standards have deteriorated in respect of those specific item audits being granted a back credit;
 - (d) the specific item audit being granted a back credit should be audited not later than 12 months after the last audit of the item.

M.B.605 Findings

- (a) When during audits or by other means evidence is found showing non-compliance to the CAR-M requirement, DGCA shall take the following actions:
 1. For level 1 findings, immediate action shall be taken by DGCA to revoke, limit or suspend in whole or in part, depending upon the extent of the level 1 finding, the maintenance organisation approval, until successful corrective action has been taken by the organisation.
 2. For level 2 findings, DGCA shall grant a corrective action period appropriate to the nature of the finding that shall not be more than 30 days. In certain circumstances, at the end of this first period and subject to the nature of the finding, DGCA Regional Office may extend the 30 day period by 15 days subject to a satisfactory corrective action plan.
- (b) Action shall be taken by DGCA to suspend in whole or part the approval in case of failure to comply within the timescale granted by DGCA.

AMC M.B.605 (b)(1)-Findings

For a level 1 finding it may be necessary for DGCA to ensure that further maintenance and re-certification of all affected products is accomplished, dependent upon the nature of the finding.

M.B.606 Changes

- (a) DGCA shall comply with the applicable elements of the initial approval for any change to the organisation notified in accordance with point M.A.617.
- (b) DGCA may prescribe the conditions under which the approved maintenance organisation may operate during such changes, unless it determines that the approval should be suspended due to the nature or the extent of the changes.
- (c) For any change to the maintenance organisation manual:
 1. In the case of direct approval of changes in accordance with point M.A.604 (b), DGCA shall verify that the procedures specified in the manual are in compliance with this CAR-M before formally notifying the approved organisation of the approval.

2. In the case an indirect approval procedure is used for the approval of the changes in accordance with point M.A.604 (c), DGCA shall ensure
 - i. that the changes remain minor and
 - ii. that it has an adequate control over the approval of the changes to ensure they remain in compliance with the requirements of CAR-M.

AMC M.B.606 Changes

1. Changes in nominated persons

DGCA should have adequate control over any changes to personnel specified in M.A.606 (a) and (b). Such changes will require an amendment to the manual.

2. It is recommended that a simple manual status sheet is maintained which contains information on when an amendment was received by DGCA and when it was approved.
3. DGCA should define the minor amendments to the manual which may be incorporated through indirect approval. In this case a procedure should be stated in the amendment section of the maintenance organisation manual.

Changes notified in accordance with M.A.617 are not considered minor.

For all cases other than minor, the applicable part(s) of the CA Form 6F should be used for the change

4. The approved maintenance organisation should submit each manual amendment to DGCA whether it be an amendment for DGCA approval or an indirectly approved amendment. Where the amendment requires DGCA approval, DGCA when satisfied, should indicate its approval in writing. Where the amendment has been submitted under the indirect approval procedure DGCA should acknowledge receipt in writing.

M.B.607 Revocation, Suspension and Limitation of an Approval

DGCA shall:

- (a) suspend an approval on reasonable grounds in the case of potential safety threat, or;
- (b) suspend, revoke or limit an approval pursuant to M.B.605.

SUBPART G

CONTINUING AIRWORTHINESS MANAGEMENT ORGANISATION

M.B.701 Application

- (a) For commercial air transport DGCA shall receive for approval with the initial application for the air operator's certificate / permit and where applicable any variation applied for and for each aircraft type to be operated:
1. the continuing airworthiness management exposition;
 2. the operator's aircraft maintenance programmes;
 3. the aircraft technical log;
 4. where appropriate the technical specification of the maintenance contracts between the operator and CAR-145 approved maintenance organisation.
- (b) The investigation and continuous oversight of the facility shall be carried out by DGCA.

AMC M.B.701 (a) Application

1. DGCA should not expect the documents listed in M.B.701 (a) to be submitted in a completed state with the initial application for grant or change since each may require approval in its own right and may be subject to amendment as a result of DGCA assessment during the technical investigations. Draft documents should be submitted at the earliest opportunity so that investigation of the application can begin. Grant or change cannot be achieved until DGCA is in possession of completed documents.
2. This information is required to enable DGCA to conduct its investigation, to assess the volume of maintenance work necessary and the locations at which it will be accomplished.
3. The applicant should inform DGCA where base and scheduled line maintenance is to take place and give details of any contracted maintenance which is in addition to that provided in response to M.A.201 (h) 2 or M.A.708 (c).
4. At the time of application, the operator should have arrangements for all base and scheduled line maintenance in place for an appropriate period of time, as accepted to DGCA. The operator should establish further arrangements in due course before the maintenance is due.

Base maintenance contracts for high-life time checks may be based on one time contracts, when DGCA considers that this is compatible with the operator's fleet size.

M.B.702 Initial Approval

- (a) Provided the requirements of M.A.706 (a), (c), (d) and M.A.707 are complied with, DGCA shall formally indicate its acceptance of the M.A.706 (a), (c), (d) and M.A.707 personnel to the applicant in writing.

- (b) DGCA shall establish that the procedures specified in the continuing airworthiness management exposition comply with CAR-M.A. Subpart G and ensure the accountable manager signs the commitment statement.
- (c) DGCA shall verify the organisation's compliance with M.A. Subpart G requirements.
- (d) A meeting with the accountable manager shall be convened at least once during the investigation for approval to ensure that he/she fully understands the significance of the approval and the reason for signing the exposition commitment of the organisation to compliance with the procedures specified in the continuing airworthiness management exposition.
- (e) All findings shall be confirmed in writing to the applicant organisation.
- (f) DGCA shall record all findings, closure actions (actions required to close a finding) and recommendations.
- (g) For initial approval all findings shall be corrected by the organisation and closed by DGCA before the approval can be issued.

AMC M.B.702 (a) Initial Approval

1. 'Formally indicate in writing' means that a CA Form 4 should be used for this activity. With the exception of the accountable manager, a CA Form 4 should be completed for each person nominated to hold a position required by M.A.706 (b), (c) (d).and M A 707
2. In the case of the accountable manager approval of the continuing airworthiness management exposition containing the accountable manager's signed commitment statement constitutes formal acceptance. once the DGCA has held a meeting with the accountable manager and is satisfied with its results.

AMC M.B.702 (b) Initial Approval

1. DGCA should indicate approval of the continuing airworthiness management exposition in writing.
2. Contracts for sub-contracting continuing airworthiness management tasks by continuing airworthiness management organizations should be included in the continuing airworthiness management exposition. The competent authorities should verify that the standards set forth in AMC M.A.201 (h) 1 have been met when approving the exposition.
3. The DGCA while investigating the acceptability of the proposed subcontracted continuing airworthiness management tasks arrangements will take into account, in the subcontracted organisation, all other such contracts that are in place irrespective of state of registry in terms of sufficiency of resources, expertise, management structure, facilities and liaison between the contracting continuing airworthiness management organisation, the subcontracted organisation and where applicable contracted CAR-145 maintenance organisation(s).

AMC M.B.702 (c) Initial Approval

1. DGCA should determine by whom, and how the audit shall be conducted. For example, it will be necessary to determine whether one large team audit or a

short series of small team audits or a long series of single man audits are most appropriate for the particular situation.

2. The audit may be carried out on a product line type basis. For example, in the case of an organisation with Airbus A320 and Airbus A310 ratings, the audit is concentrated on one type only for a full compliance check. Dependent upon the result, the second type may only require a sample check that should at least cover the activities identified as weak for the first type.
3. When determining the scope of the audit and which activities of the organisation will be assessed during the audit, the privileges of the approved organisation should be taken into account, e.g. approval to carry out airworthiness reviews.
4. DGCA auditing officer should always ensure that he/she is accompanied throughout the audit by a senior technical member of the organisation. Normally this is the quality manager. The reason for being accompanied is to ensure the organisation is fully aware of any findings during the audit.
5. The auditing officer should inform the senior technical member of the organisation at the end of the audit visit on all findings made during the audit.

AMC M.B.702 (e) Initial Approval

1. Findings should be recorded on an audit report form with a provisional categorization as a level 1 or 2. Subsequent to the audit visit that identified the particular findings, DGCA should review the provisional finding levels, adjusting them if necessary and change the categorization from 'provisional' to 'confirmed'.
2. All findings should be confirmed in writing to the applicant organisation within 2 weeks of the audit visit.
3. There may be occasions when DGCA finds situations in the applicant's organisation on which it is unsure about compliance. In this case, the organisation should be informed about possible non-compliance at the time and the fact that the situation will be reviewed within DGCA before a decision is made. If the review concludes that there is no finding then a verbal confirmation to the organisation will suffice.

AMC M.B.702 (f) Initial Approval

1. The audit report form should be the CA Form 13 (Appendix VII).
2. A quality review of the CA Form 13 audit report should be carried out by a competent independent person nominated by DGCA. The review should take into account the relevant paragraphs of M.A. Subpart G, the categorization of finding levels and the closure action taken. Satisfactory review of the audit form should be indicated by a signature on the CA Form 13.

AMC M.B.702 (g) Initial Approval

The audit reports should include the date each finding was cleared together with reference to DGCA report or letter that confirmed the clearance.

M.B.703 Issue of Approval

- (a) DGCA shall issue to the applicant a CA Form 14 approval certificate (Appendix VI to CAR M) which includes the extent of approval, when the continuing airworthiness management organisation is in compliance with M.A. Subpart G.
- (b) DGCA shall indicate the validity of the approval on the CA Form 14 approval certificate.
- (c) The reference number shall be included on the CA Form 14 approval certificate in a manner specified by DGCA.
- (d) In the case of commercial air transport, the information contained on a CA Form 14 will be included on the air operator's certificate / permit.

AMC M.B.703 (a) Issue of Approval

The initial approval should be granted after an audit of the continuing airworthiness management organization facilities is carried out by DGCA.

AMC M.B.703(c) Issue of Approval

The numeric sequence should be unique to the particular M.A. Subpart G Continuing Airworthiness Management Organisation.

AMC M.B.703 (d) Issue of Approval

1. The approval of an operator's continuing airworthiness management organization should be indicated by means of a statement containing the following information:
 - (a) Air operator Certificate number;
 - (b) Name of the operator;
 - (c) Types(s) of aircraft for which the continuing airworthiness management organization has been approved;
 - (d) Reference identification of the operator's approved maintenance programme(s);
 - (e) Reference identification of the operator approved continuing airworthiness management exposition; and
 - (f) Any limitation imposed by DGCA of operator on the approval.
 - (g) Any subcontractor working under the operator's quality system.
2. The CA form 14 may be used for the subparagraph 1 statement.
3. In the case the continuing airworthiness management organization of the operator is approved to manage the continuing airworthiness of non commercial air transport aircraft under an arrangement with the owner, and/or to carry out airworthiness reviews, these privileges should be put on a CA Form 14.

M.B.704 Continuing Oversight

- (a) DGCA shall keep and update a program listing for each M.A. Subpart G approved continuing airworthiness organisations under its supervision, the dates when audit visits are due and when such visits were carried out.
- (b) Each organisation shall be completely audited at periods not exceeding 12 months.
- (c) A relevant sample of the aircraft managed by the M.B. Subpart G approved organisation shall be inspected in every 24 months period. The size of the sample will be decided by DGCA based on the result of prior audits and earlier product surveys.
- (d) All findings shall be confirmed in writing to the applicant organisation.
- (e) DGCA shall record all findings, closure actions (actions required to close a finding) and recommendations.
- (f) A meeting with the accountable manager shall be convened at least once every 24 months to ensure he/she remains informed of significant issues arising during audits.

AMC M.B.704 (b) Continuing Oversight

1. Where DGCA has decided that a series of audit visits are necessary to arrive at a complete audit of an approved continuing airworthiness management organisation, the program should indicate which aspects of the approval will be covered on each visit.
2. It is recommended that part of an audit concentrates on two ongoing aspects of the M.A. Subpart G approval, namely the organisations internal self monitoring quality reports produced by the quality monitoring personnel to determine if the organisation is identifying and correcting its problems and secondly the number of concessions granted by the quality manager.
3. At the successful conclusion of the audit(s) including verification of the exposition, an audit report form should be completed by the auditing officer including all recorded findings, closure actions and recommendation. A CA Form 13 should be used for this activity.
4. Credit may be claimed by DGCA Officer(s) for specific item audits completed during the preceding 11 month period subject to four conditions:
 - (a) the specific item audit should be the same as that required by M.A. Subpart G latest amendment, and
 - (b) there should be satisfactory evidence on record that such specific item audits were carried out and that all corrective actions have been taken, and
 - (c) DGCA Officer(s) should be satisfied that there is no reason to believe standards have deteriorated in respect of those specific item audits being granted a back credit;
 - (d) the specific item audit being granted a back credit should be audited not later than 12 months after the last audit of the item.
5. When an operator sub-contracts continuing airworthiness management tasks all

sub-contracted organisations should also be audited by DGCA at periods not exceeding 12 months to ensure they fully comply with M.A. Subpart G. For these audits, DGCA auditing officer should always ensure that he/she is accompanied throughout the audit by a senior technical member of the operator. All findings should be sent to and corrected by the operator.

6. When performing the oversight of organisations that hold both M.A. Subpart F and M.A. Subpart G approvals, the DGCA should arrange the audits to cover both approvals avoiding duplicated visit of a particular area.

M.B.705 Findings

- (a) When during audits or by other means evidence is found showing non-compliance to the CAR M requirement, DGCA shall take the following actions:
 1. For level 1 findings, immediate action shall be taken by DGCA to revoke, limit or suspend in whole or in part, depending upon the extent of the level 1 finding, the continuing airworthiness management organisation approval, until successful corrective action has been taken by the organisation.
 2. For level 2 findings, the corrective action period granted by DGCA must be appropriate to the nature of the finding but in any case initially must not be more than 30 days. In certain circumstances and subject to the nature of the finding, DGCA Regional Office may extend the 30 days period subject to a satisfactory corrective action plan.
- (b) Action shall be taken by DGCA to suspend in whole or part the approval in case of failure to comply within the timescale granted by DGCA.

AMC M.B.705 (a) 1- Findings

1. For a level 1 finding DGCA should inform the owner/operator of any other potentially affected aircraft in order that timely corrective action can be taken to ensure possible unsafe conditions on these aircraft are corrected before further flight.
2. Furthermore, a level 1 finding could lead to a non compliance to be found on an aircraft as specified in M.B. 303 (g). In this case, proper action as specified in M.B.303 (h) would be taken.

M.B.706 Changes

- (a) DGCA shall comply with the applicable elements of the initial approval for any change to the organisation notified in accordance with point M.A.713.
- (b) DGCA may prescribe the conditions under which the approved continuing airworthiness management organisation may operate during such changes unless it determines that the approval should be suspended due to the nature or the extent of the changes.

- (c) For any change to the continuing airworthiness management exposition:

1. In the case of direct approval of changes in accordance with M.A.704 (b), DGCA shall verify that the procedures specified in the exposition are in compliance with CAR-M before formally notifying the approved organisation of the approval.
2. In the case an indirect approval procedure is used for the approval of the changes in accordance with point M.A.704(c), DGCA shall ensure that
 - (i) the changes remain minor and
 - (ii) it has an adequate control over the approval of the changes to ensure they remain in compliance with the requirements of CAR-M.

AMC M.B.706 Changes

1. Changes in nominated persons
DGCA should have adequate control over any changes to the personnel specified in M.A.706 (a), (b), (c) and. Such changes will require an amendment to the exposition.
2. It is recommended that a simple exposition status sheet is maintained which contains information on when an amendment was received by DGCA and when it was approved.
3. DGCA should define the minor amendments to the exposition which may be incorporated through indirect approval. In this case a procedure should be stated in the amendment section of the approved continuing airworthiness organisation exposition.

Changes notified in accordance with M.A.713 are not considered minor.

For all cases other than minor, the applicable part(s) of the CA Form 13 should be used for the change
4. The approved continuing airworthiness management organisation should submit each exposition amendment to DGCA whether it be an amendment for DGCA approval or an indirectly approved amendment. Where the amendment requires DGCA approval, DGCA when satisfied, should indicate its approval in writing. Where the amendment has been submitted under the indirect approval procedure DGCA should acknowledge receipt in writing.

M.B.707 Revocation, Suspension and Limitation of an Approval

DGCA shall:

- (a) suspend an approval on reasonable grounds in the case of potential safety threat, or;
- (b) Suspend, revoke or limit an approval pursuant to M.B.705.

SUBPART H

CERTIFICATE OF RELEASE TO SERVICE — CRS

M.B.801 Certificate of Release to Service -CRS

DGCA shall:

- (a) ensure CRS has to be issued by the operator as required in M.A. 801.
- (b) ensure appropriate certifying staff used by the maintenance organisation.
- (c) ensure compliance of appropriate certification by the pilot – owner as required in M.A.803.
- (d) ensure that the record keeping of the operator for issue of CRS is up to date and records are retained for the specified periods.

SUBPART I**AIRWORTHINESS REVIEW CERTIFICATE****M.B.901 Assessment of Recommendations**

Upon receipt of an application and associated airworthiness review certificate recommendation in accordance with M.A.901:

1. Appropriate qualified personnel from DGCA shall verify that the compliance statement contained in the recommendation demonstrates that a complete M.A.710 airworthiness review has been carried out.
2. DGCA shall investigate and may request further information to support the assessment of the recommendation.

AMC M.B.901 Assessment of Recommendations

1. The result of the verification and the investigation of a recommendation should be sent to the applicant within 30 days. If corrective action has been requested before the issuance of an airworthiness review certificate, DGCA may decide a further period for the assessment of the requested corrective action.
2. The verification of the compliance statement required by M.B.901 does not mean repeating the airworthiness review itself. However DGCA should verify that the M.A. Subpart G organisation has carried out a complete and accurate assessment of the airworthiness of the aircraft.
3. Depending on the content of the recommendation, the history of the particular aircraft, and the knowledge of the M.A. Subpart G organization or M A 901 (g) making the recommendation in terms of experience, number and certifying staff correction of findings and previous recommendations the extent of the investigation will vary. Therefore, whenever possible the person carrying out the investigation should be involved in the oversight of the M.A. Subpart G organisation making the recommendation.
4. In some cases, the inspector may decide that it is necessary to organise:
 - a physical inspection of the aircraft, or;
 - a full or partial airworthiness review.

In this case, the officer should inform the M.A. Subpart G organization or M.A.901 (g) certifying staff making the recommendation with sufficient notice so that it may organize itself according to M.A.901 (j).

Furthermore, this part of the investigation should be carried out by appropriate airworthiness review staff in accordance with M.B.902 (b).

5. Only when satisfied the aircraft is airworthy, should the officer issue an airworthiness review certificate.

M.B.902 Airworthiness Review by DGCA

- (a) When DGCA carries out the airworthiness review and issues the airworthiness review certificate CA Form 15a (Appendix III to CAR M), it shall carry out the airworthiness review in accordance with point M.A.710.
- (b) DGCA shall have appropriate airworthiness review staff to carry out the airworthiness reviews.
1. For all aircraft used in commercial air transport, and aircraft above 2730 kg MTOM, except balloons, these staff shall have acquired:
 - (a) at least five years experience in continuing airworthiness, and
 - (b) an appropriate licence in compliance with DGCA Aircraft Maintenance Licence requirements or an aeronautical degree or equivalent, and;
 - (c) formal aeronautical maintenance training, and;
 - (d) a position with appropriate responsibilities.

Notwithstanding the points “a” to “d” above, the requirement laid down in point M.B.902 (b)1b may be replaced by five years of experience in continuing airworthiness additional to those already required by point M.B.902 (b)1a.
 2. For aircraft not used in commercial air transport of 2730 kg MTOM and below, and balloons, these staff shall have acquired:
 - (a) at least three years experience in continuing airworthiness, and;
 - (b) an appropriate licence in compliance with DGCA Aircraft Maintenance Licence requirements or an aeronautical degree or equivalent, and;
 - (c) appropriate aeronautical maintenance training, and;
 - (d) a position with appropriate responsibilities.

Notwithstanding the points “a” to “d” above, the requirement shown in point M.B.902 (b)2b may be replaced by four years of experience in continuing airworthiness additional to those already required by point M.B.902(b)2a.
- (c) DGCA 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.
- (d) DGCA shall have access to the applicable data as specified in points M.A.305, M.A.306 and M.A.401 in the performance of the airworthiness review.
- (e) The staff that carries out the airworthiness review shall issue a CA Form 15a after satisfactory completion of the airworthiness review.

AMC M.B.902 (b) Airworthiness Review by DGCA

1. A person qualified in accordance with AMC M.B.102 (c) subparagraph 1.5 should be considered as holding the equivalent to an aeronautical degree.
2. “experience in continuing airworthiness” means any appropriate combination of experience in tasks related to aircraft maintenance and/or continuingairworthiness management (engineering) and/or surveillance of such tasks.
3. An appropriate DGCA Aircraft Maintenance licence in the subcategory of the aircraft reviewed. It is not necessary to satisfy the recent experience requirements

of DGCA Aircraft Maintenance licence at the time of the review nor to hold the type rating on the particular aircraft.

4. To hold a position with appropriate responsibilities means the airworthiness review staff should have a position within DGCA that authorises that person to sign on behalf of DGCA.
5. A person in DGCA carrying out airworthiness reviews or airworthiness certificate renewal inspections prior to the date of entry into force of CAR-M should be considered as complying with M.B.902 (b).

AMC M.B.902 (b)1 Airworthiness Review by DGCA

For all aircraft used in commercial air transport and any other aircraft, other than balloons, above 2730 kg MTOM, formal aeronautical maintenance training means training (internal or external) supported by evidence on the following subjects:

- Relevant parts of continuing airworthiness regulations.
- Relevant parts of operational requirements and procedures, if applicable.
- Knowledge of the internal procedures for continuing airworthiness.
- Knowledge of a relevant sample of the type(s) of aircraft gained through a formalised training course. These courses should be at least at a level equivalent to CAR-66 Appendix III Level 1 General Familiarisation.

“Relevant sample” means that these courses should cover typical systems embodied in those aircraft being within the scope of approval

AMC M.B.902 (b)2 Airworthiness Review by DGCA

For all balloons and any other aircraft of 2730 Kg MTOM and below, not used in commercial air transport, appropriate aeronautical maintenance training means demonstrated knowledge of the following subjects:

- Relevant parts of continuing airworthiness regulations.
- Relevant parts of operational requirements and procedures, if applicable.
- Knowledge of the internal procedures for continuing airworthiness.
- Knowledge of a relevant sample of the type(s) of aircraft gained through training and/or work experience. Such knowledge should be at least at a level equivalent to CAR-66 Appendix III Level 1 General Familiarisation.

“Relevant sample” means that these courses should cover typical systems embodied in those aircraft being within the scope of approval.

This knowledge may be demonstrated by documented evidence or by an assessment performed by DGCA. This assessment should be recorded.

AMC M.B.902 (c) Airworthiness Review by DGCA

The minimum content of the airworthiness review staff record should be:

- Name,
- Date of Birth,
- Basic Education,
- Experience,
- Aeronautical Degree and/or CAR-66 qualification,
- Initial Training received,
- Type Training received,
- Continuation Training received,
- Experience in continuing airworthiness and within the organisation,
- Responsibilities of current job.

M.B.903 Findings

If during aircraft inspections or by other means evidence is found showing non-compliance to a CAR-M requirement, DGCA shall take the following actions:

1. for level 1 findings, DGCA shall require appropriate corrective action to be taken before further flight and immediate action shall be taken by DGCA to revoke or suspend the airworthiness review certificate.
2. for level 2 findings, the corrective action period granted by DGCA must be appropriate to the nature of the finding but in any case initially must not be more than 30 days. In certain circumstances and subject to the nature of the finding, DGCA Regional Office may extend the 30 days period by 15 days subject to a satisfactory corrective action plan.

APPENDICES to CAR M

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 DGCA a copy of the arrangement shall be sent by the owner to DGCA 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 DGCA, 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 DGCA 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 type in the scope of its approval;
 2. respect the conditions to maintain the continuing airworthiness of the aircraft listed below:
 - (a) develop a maintenance programme for the aircraft, including any reliability programme developed, if applicable;

- (b) declare the maintenance tasks (in the maintenance programme) that may be carried out by the pilot-owner in accordance with point M.A.803(c);
 - (c) organise the approval of the aircraft's maintenance programme;
 - (d) once it has been approved, give a copy of the aircraft's maintenance programme to the owner;
 - (e) organise a bridging inspection with the aircraft's prior maintenance programme;
 - (f) organise for all maintenance to be carried out by an approved maintenance organisation;
 - (g) organise for all applicable airworthiness directives to be applied;
 - (h) organise for all defects discovered during scheduled maintenance, airworthiness reviews or reported by the owner to be corrected by an approved maintenance organisation;
 - (i) coordinate scheduled maintenance, the application of airworthiness directives, the replacement of life limited parts, and component inspection requirements;
 - (j) inform the owner each time the aircraft shall be brought to an approved maintenance organisation;
 - (k) manage all technical records;
 - (l) archive all technical records;
3. organise the approval of any modification to the aircraft in accordance with CAR21/EASA 21 / FAR 21 before it is embodied;
 4. organise the approval of any repair to the aircraft in accordance with CAR 21/EASA 21 / FAR 21 before it is carried out;
 5. inform DGCA whenever the aircraft is not presented to the approved maintenance organisation by the owner as requested by the approved organisation;
 6. inform DGCA whenever the present arrangement has not been respected;
 7. carry out the airworthiness review of the aircraft when necessary and issue the airworthiness review certificate or the recommendation to DGCA;
 8. send within 10 days a copy of any airworthiness review certificate issued or extended to DGCA
 9. carry out all occurrence reporting mandated by applicable regulations;
 10. inform DGCA 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 the 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 DGCA whenever the present arrangement is denounced by either party;
8. inform DGCA and the approved organisation whenever the aircraft is sold;
9. carry out all occurrence reporting mandated by applicable regulations;
10. inform on a regular basis the approved organisation about the aircraft flying hours and any other utilisation data, as agreed with the approved organisation;
11. enter the certificate of release to service in the logbooks as mentioned in point M.A.803(d) when performing pilot-owner maintenance without exceeding the limits of the maintenance tasks list as declared in the approved maintenance programme as laid down in point M.A.803(c);
12. inform the approved continuing airworthiness management organisation responsible for the management of the continuing airworthiness of the aircraft not later than 30 days after completion of any pilot-owner maintenance task in accordance with point M.A.305(a).'

Appendix II

Authorised Release Certificate (CA Form 1)

These instructions relate only to the use of the CA Form 1 for maintenance purposes. Attention is drawn to Appendix I to CAR 21 which covers the use of the CA Form 1 for production purposes.

1. PURPOSE AND USE

- 1.1 The primary purpose of the Certificate is to declare the airworthiness of maintenance work undertaken on products, parts and appliances (hereafter referred to as 'item(s)').
- 1.2 Correlation must be established between the Certificate and the item(s). The originator must retain a Certificate in a form that allows verification of the original data.
- 1.3 The Certificate is acceptable to many airworthiness authorities, but may be dependent on the existence of bilateral agreements and/or the policy of the airworthiness authority. The 'approved design data' mentioned in this Certificate then means approved by the airworthiness authority of the importing country.
- 1.4 The Certificate is not a delivery or shipping note.
- 1.5 Aircraft are not to be released using the Certificate.
- 1.6 The Certificate does not constitute approval to install the item on a particular aircraft, engine, or propeller but helps the end user determine its airworthiness approval status.
- 1.7 A mixture of production released and maintenance released items is not permitted on the same Certificate.

2. GENERAL FORMAT

- 2.1 The Certificate must comply with the format attached including block numbers and the location of each block. 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.
- 2.2 The Certificate must be in 'landscape' format but the overall size may be significantly increased or decreased so long as the Certificate remains recognisable and legible. If in doubt consult DGCA.
- 2.3 The User/Installer responsibility statement can be placed on either side of the form.
- 2.4 All printing must be clear and legible to permit easy reading.
- 2.5 The Certificate may either be pre-printed or computer generated but in either case the printing of lines and characters must be clear and legible and in accordance with the defined format.
- 2.6 The Certificate should be in English, and if appropriate, in one or more other languages.
- 2.7 The details to be entered on the Certificate may be either machine/computer printed or hand-written using block letters and must permit easy reading.

- 2.8 Limit the use of abbreviations to a minimum, to aid clarity.
- 2.9 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. Any use of the reverse side of the Certificate must be referenced in the appropriate block on the front side of the Certificate.

3. COPIES

- 3.1 There is no restriction in the number of copies of the Certificate sent to the customer or retained by the originator.

4. ERROR(S) ON A CERTIFICATE

- 4.1 If an end-user finds an error(s) on a Certificate, he must identify it/them in writing to the originator. The originator may issue a new Certificate only if the error(s) can be verified and corrected.
- 4.2 The new Certificate must have a new tracking number, signature and date.
- 4.3 The request for a new Certificate may be honored without re-verification of the item(s) condition. The new Certificate is not a statement of current condition and should refer to the previous Certificate in block 12 by the following statement; "This Certificate corrects the error(s) in block(s) [enter block(s) corrected] of the Certificate [enter original tracking number] dated [enter original issuance date] and does not cover conformity/condition/release to service". Both Certificates should be retained according to the retention period associated with the first.

5. COMPLETION OF THE CERTIFICATE BY THE ORIGINATOR

Block 1 DGCA, India

This information may be pre-printed.

Block 2 "AUTHORISED RELEASE CERTIFICATE CA FORM 1"

This information may be pre-printed.

Block 3 Form Tracking Number

Enter the unique number established by the numbering system/procedure of the organisation identified in block 4; this may include alpha/numeric characters.

Block 4 Organisation Name and Address

Enter the full name and address of the approved organisation (refer to CA form 3) releasing the work covered by this Certificate. Logos, etc., are permitted if the logo can be contained within the block.

Block 5 Work Order/Contract/Invoice

To facilitate customer traceability of the item(s), enter the work order number, contract number, invoice number, or similar reference number.

Block 6 Item

Enter line item numbers when there is more than one line item. This block permits easy cross-referencing to the Remarks block 12.

Block 7 Description

Enter the name or description of the item. Preference should be given to the term used in the instructions for continued airworthiness or maintenance data (e.g. Illustrated Parts Catalogue, Aircraft Maintenance Manual, Service Bulletin, Component Maintenance Manual).

Block 8 Part Number

Enter the part number as it appears on the item or tag/packaging. In case of an engine or propeller the type designation may be used.

Block 9 Quantity

State the quantity of items.

Block 10 Serial Number

If the item is required by regulations to be identified with a serial number, enter it here. Additionally, any other serial number not required by regulation may also be entered. If there is no serial number identified on the item, enter "N/A".

Block 11 Status/Work

The following describes the permissible entries for block 11. Enter only one of these terms – where more than one may be applicable, use the one that most accurately describes the majority of the work performed and/or the status of the article.

- (i) *Overhauled*. Means a process that ensures the item is in complete conformity with all the applicable service tolerances specified in the type certificate holder's, or equipment manufacturer's instructions for continued airworthiness, or in the data which is approved or accepted by the Authority. The item will be at least disassembled, cleaned, inspected, repaired as necessary, reassembled and tested in accordance with the above specified data.
- (ii) *Repaired*. Rectification of defect(s) using an applicable standard (*).
- (iii) *Inspected/Tested*. Examination, measurement, etc. in accordance with an applicable standard (*) (e.g. visual inspection, functional testing, bench testing etc.).
- (iv) *Modified*. Alteration of an item to conform to an applicable standard (*).

*Applicable standard means a manufacturing/design/maintenance/quality standard, method, technique or practice approved by or acceptable to DGCA. The applicable standard shall be described in block 12.

Block 12 Remarks

Describe the work identified in Block 11, either directly or by reference to supporting documentation, necessary for the user or installer to determine the airworthiness of item(s) in relation to the work being certified. If necessary, a separate sheet may be used and referenced from the main CA Form 1. Each statement must clearly identify which item(s) in Block 6 it relates to.

Examples of information to be entered in block 12 are:

- (i) Maintenance data used, including the revision status and reference.
- (ii) Compliance with airworthiness directives or service bulletins.

- (iii) Repairs carried out.
- (iv) Modifications carried out.
- (v) Replacement parts installed.
- (vi) Life limited parts status.
- (vii) Deviations from the customer work order.
- (viii) Release statements to satisfy a foreign Civil Aviation Authority maintenance requirement.
- (ix) Information needed to support shipment with shortages or re-assembly after delivery.
- (x) For maintenance organisations approved in accordance with Subpart F of CAR M, the component certificate of release to service statement referred to in point M.A.613:

“Certifies that, unless otherwise specified in this block, the work identified in block 11 and described in this block was accomplished in accordance to the requirements of Section A, Subpart F of CAR M.”

If printing the data from an electronic CA Form 1, any appropriate data not fit for other blocks should be entered in this block.

Block 13a-13e

General Requirements for blocks 13a-13e: Not used for maintenance release. Shade, darken, or otherwise mark to preclude inadvertent or unauthorised use.

Block 14a

Mark the appropriate box(es) indicating which regulations apply to the completed work. If the box “other regulations specified in block 12” is marked, then the regulations of the other airworthiness authority(ies) must be identified in block 12. At least one box must be marked, or both boxes may be marked, as appropriate.

For all maintenance carried out by maintenance organisations approved in accordance with Section A, Subpart F of CAR M, the box “other regulation specified in block 12” shall be ticked and the certificate of release to service statement made in block 12. In that case, the certification statement “unless otherwise specified in this block” is intended to address the following cases;

- (a) Where the maintenance could not be completed.
- (b) Where the maintenance deviated from the standard required by CAR M.
- (c) Where the maintenance was carried out in accordance with a requirement other than that specified in CAR M. In this case block 12 shall specify the particular national regulation.

For all maintenance carried out by maintenance organisations approved in accordance with Section A of CAR145, the certification statement “unless otherwise specified in block 12” is intended to address the following cases;

- (a) Where the maintenance could not be completed.
- (b) Where the maintenance deviated from the standard required by CAR 145.

- (c) Where the maintenance was carried out in accordance with a requirement other than that specified in CAR 145. In this case block 12 shall specify the particular national regulation.

Block 14b Authorised Signature

This space shall be completed with the signature of the authorised person. Only persons specifically authorised under the rules and policies of DGCA are permitted to sign this block. To aid recognition, a unique number identifying the authorised person may be added.

Block 14c Certificate/Approval Number

Enter the Certificate/Approval number/reference. This number or reference is issued by DGCA.

Block 14d Name

Enter the name of the person signing block 14b in a legible form.

Block 14e Date

Enter the date on which block 14b is signed, the date must be in the format dd = 2 digit day, mmm = first 3 letters of the month, yyyy = 4 digit year.

User/Installer Responsibilities

Place the following statement on the Certificate to notify end users that they are not relieved of their responsibilities concerning installation and use of any item accompanied by the form:

“THIS CERTIFICATE DOES NOT AUTOMATICALLY CONSTITUTE AUTHORITY TO INSTALL. WHERE THE USER/INSTALLER PERFORMS WORK IN ACCORDANCE WITH REGULATIONS OF AN AIRWORTHINESS AUTHORITY DIFFERENT THAN THE AIRWORTHINESS AUTHORITY SPECIFIED IN BLOCK 1, IT IS ESSENTIAL THAT THE USER/INSTALLER ENSURES THAT HIS/HER AIRWORTHINESS AUTHORITY ACCEPTS ITEMS FROM THE AIRWORTHINESS AUTHORITY SPECIFIED IN BLOCK 1.

STATEMENTS IN BLOCKS 13A AND 14A DO NOT CONSTITUTE INSTALLATION CERTIFICATION. IN ALL CASES AIRCRAFT MAINTENANCE RECORDS MUST CONTAIN AN INSTALLATION CERTIFICATION ISSUED IN ACCORDANCE WITH THE NATIONAL REGULATIONS BY THE USER/INSTALLER BEFORE THE AIRCRAFT MAY BE FLOWN.”

1. DGCA INDIA		2. AUTHORISED RELEASE CERTIFICATE CA FORM- 1			3. FORM TRACKING NUMBER	
4. Approved Organisation Name and Address					5. Work Order/Contract/Invoice	
6. Item	7. Description	8. Part No	9. Qty	10. Serial No	11. Status/Work	
12. Remarks						
13 a. Certifies that the items identified above were manufactured in conformity to: <ul style="list-style-type: none"> • approved design data and are in condition for safe operation • non-approved design data specified in block 12 				14 a. CAR 145.A.50 Release to service		Other regulation specified in block 12
				Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, was accomplish in accordance with CAR-145 and in respect to that work the items are considered ready to release to service		
13 b . Authorised Signature		13 c. Approval/Authorisation Number		14 b. Authorised Signature		14 c. Certificate/Approval Ref No.
13 d.. Name		13 e. Date(d/m/y)		14.d. Name		14 e. Date(d/m/y)
User/Installer Responsibilities THIS CERTIFICATE DOES NOT AUTOMATICALLY CONSTITUTE AUTHORITY TO INSTALL. WHERE THE USER/INSTALLER PERFORMS WORK IN ACCORDANCE WITH REGULATIONS OF AN AIRWORTHINESS AUTHORITY DIFFERENT THAN THE AIRWORTHINESS AUTHORITY SPECIFIED IN BLOCK 1, IT IS ESSENTIAL THAT THE USER/INSTALLER ENSURES THAT HIS/HER AIRWORTHINESS AUTHORITY ACCEPTS ITEMS FROM THE AIRWORTHINESS AUTHORITY SPECIFIED IN BLOCK 1. STATEMENTS IN BLOCKS 13A AND 14A DO NOT CONSTITUTE INSTALLATION CERTIFICATION. IN ALL CASES AIRCRAFT MAINTENANCE RECORDS MUST CONTAIN AN INSTALLATION CERTIFICATION ISSUED IN ACCORDANCE WITH THE NATIONAL REGULATIONS BY THE USER/INSTALLER BEFORE THE AIRCRAFT MAY BE FLOWN						

CA Form 1

AMC to Appendix II to CAR M Use of the CA Form 1 for maintenance

1. The following formats of an issued CA Form 1 or equivalent certificate are acceptable:

- A paper certificate bearing a signature (both originals and copies are accepted);
- A paper certificate generated from an electronic system (printed from electronically stored data) when complying with the following subparagraph 2;
- An electronic CA Form 1 or equivalent when complying with the following subparagraph 2.

2. Electronic signature and electronic exchange of the CA Form 1

a) Submission to DGCA

Any organisation intending to implement an electronic signature procedure to issue CA Form 1 and/or to exchange electronically such data contained on the CA Form 1, should document it and submit it to DGCA as part of the documents attached to its exposition.

b) Characteristics of the electronic system generating the CA Form 1

The electronic system should:

- guarantee secure access for each certifying staff;
- ensure integrity and accuracy of the data certified by the signature on the form and be able to show evidence of the authenticity of the CA Form 1 (recording and record keeping) with suitable security, safeguards and backups;
- be active only at the location where the part is being released with an CA Form 1;
- not permit to sign a blank form;
- provide a high degree of assurance that the data has not been modified after signature (if modification is necessary after issuance, i.e., re-certification of a part, a new form with a new number and reference to the initial issuance should be made).
- provide for a 'personal' electronic signature, identifying the signatory. The signature should be generated only in presence of the signatory.

An electronic signature means data in electronic form which is attached to or logically associated with other electronic data and which serves as a method of authentication and should meet the following criteria:

- it is uniquely linked to the signatory;
- it is capable of identifying the signatory;
- it is created using means that the signatory can maintain under his sole control.

This electronic signature should be an electronically generated value based on cryptographic algorithm and appended to data in a way to enable the verification of the data's source and integrity.

Organisation(s) are reminded that additional national and/or European requirements may need to be satisfied when operating electronic systems. 'Directive 1999/93/EC of the European Parliament and of the Council of 13 December 1999 on a Community framework for electronic signatures', as last amended, may constitute a reference.

The electronic system should be based on a policy and management structure (Confidentiality, integrity and availability), such as:

- Administrators, signatories;
- Scope of authorisation, rights;
- Password and secure access, authentication, protections, confidentiality;
- Track changes;
- Minimum blocks to be completed, completeness of information;
- Archives;
- etc.

The electronic system generating the CA Form 1 may contain additional data such as;

- Manufacturer code;
- Customer identification code;
- Workshop report;
- Inspection results;
- etc.

- c) Characteristics of the CA Form 1 generated from the electronic system to facilitate understanding and acceptance of the CA Form 1 released with an electronic signature, the following statement should be in Block 14b: 'Electronic Signature on File'.

In addition to this statement, it is accepted to print or display a signature in any form, such as a representation of the hand-written signature of the person signing (i.e. scanned signature) or a representation of their name.

When printing the electronic form, the CA Form 1 should meet the general format as specified in Appendix II to CAR M. A watermark-type 'PRINTED FROM ELECTRONIC FILE' should be printed on the document.

When the electronic file contains a hyperlink to data required to determine the airworthiness of the item(s), the data associated to the hyperlink, when printed, should be in a legible format and be identified as a reference from the CA Form 1.

Additional information not required by the CA Form 1 completion instructions may be added to the printed copies of CA Form 1, as long as the additional data do not prevent a person from filling out, issuing, printing, or reading any portion of the CA Form 1. This additional data should be provided only in block 12 unless it is necessary to include it in another block to clarify the content of that block.

d) Electronic exchange of the electronic CA Form 1.

The electronic exchange of the electronic CA Form 1 should be accomplished on a voluntary basis. Both parties (issuer and receiver) should agree on electronic transfer of the CA Form 1.

For that purpose, the exchange needs to include:

- all data of the CA Form 1, including referenced data required by the CA Form 1 completion instructions;
- all data required for authentication of the CA Form 1.

In addition, the exchange may include:

- data necessary for the electronic format;
- additional data not required by the CA Form 1 completion instructions, such as manufacturer code, customer identification code.

The system used for the exchange of the electronic CA Form 1 should provide:

- A high level of digital security; the data should be protected, not altered or not corrupted;
- Traceability of data back to its source.

Trading partners wishing to exchange CA Form 1 electronically should do so in accordance with the means of compliance stated in this document. It is recommended that they use an established, common, industry method such as Air Transport Association (ATA) Spec 2000 Chapter 16.

The organisation(s) are reminded that additional national and/or European requirements may need to be satisfied when operating the electronic exchange of the electronic CA Form 1.

The receiver should be capable of regenerating the CA Form 1 from the received data without alteration; if not, the system should revert back to the paper system.

When the receiver needs to print the electronic form, refer to subparagraph c) here above.

GM to Appendix II to CAR-M

Use of the CA Form 1 for maintenance

CA Form 1 Block 12 'Remarks'

Examples of data to be entered in this block as appropriate:-

- Maintenance documentation used, including the revision status, for all work performed and not limited to the entry made in block 11. A statement such as 'in accordance with the CMM' is not acceptable.
- NDT methods with appropriate documentation used when relevant.
- Compliance with airworthiness directives or service bulletins.
- Repairs carried out.
- Modifications carried out.
- Replacement parts installed.
- Life-limited parts status.
- Shelf life limitations.
- Deviations from the customer work order.
- Release statements to satisfy a foreign Civil Aviation Authority maintenance requirement.
- Information needed to support shipment with shortages or re-assembly after delivery.
- References to aid traceability, such as batch numbers.”

Appendix III

Airworthiness Review Certificate

DGCA INDIA

AIRWORTHINESS REVIEW CERTIFICATE

ARC reference:

Pursuant to DGCA Regulations for the time being into force, DGCA hereby certifies that the following aircraft

Aircraft Manufacturer:.....

Manufacturer's designation:

Aircraft registration:

Aircraft Serial number :

Is considered airworthy at the time of this review.

Date of issue: Date of Expiry

Signed: Authorisation No

1st Extension: The Aircraft has remained in a controlled environment in accordance with point M.A 901 of CAR-M 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

Company Name Approval Reference

2nd Extension: The Aircraft has remained in a controlled environment in accordance with point M.A 901 of CAR-M 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

Company Name Approval Reference

**Appendix III
Airworthiness Review Certificate**

<p>DGCA INDIA AIRWORTHINESS REVIEW CERTIFICATE</p>	
<p>ARC reference:</p>	
<p>Pursuant to DGCA Regulations for the time being into force, the following continuing airworthiness management organization, approved in accordance with Section A, Subpart G of CAR M.</p>	
<p>[NAME OF THE ORGANISATION APPROVED AND ADDRESS]</p>	
<p>Approval Reference:</p>	
<p>has performed an airworthiness review in accordance with point M.A 710 of CAR-M on the following aircraft.</p>	
<p>Aircraft Manufacturer:.....</p>	
<p>Manufacturer's designation:</p>	
<p>Aircraft registration:</p>	
<p>Aircraft Serial number :</p>	
<p>and this aircraft is considered airworthy at the time of this review.</p>	
<p>Date of issue: Date of Expiry</p>	
<p>Signed: Authorisation No</p>	
<p>1st Extension: The Aircraft has remained in a controlled environment in accordance with point M.A 901 of CAR-M for the last year. The aircraft is considered to be airworthy at the time of the issue.</p>	
<p>Date of issue: Date of Expiry</p>	
<p>Signed: Authorisation No</p>	
<p>Company Name Approval Reference</p>	
<p>2nd Extension: The Aircraft has remained in a controlled environment in accordance with point M.A 901 of CAR-M for the last year. The aircraft is considered to be airworthy at the time of the issue.</p>	
<p>Date of issue: Date of Expiry</p>	
<p>Signed: Authorisation No</p>	
<p>Company Name Approval Reference</p>	

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 standardized 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 DGCA, 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 maintenance organisation approved in accordance with Section A, Subpart F of CAR-M may carry out maintenance on the aircraft and any component (including engines and/or Auxiliary Power Units (APUs), in accordance with aircraft maintenance data or, if agreed by DGCA, in accordance with component maintenance data, only whilst such components are fitted to the aircraft. Nevertheless, such A-rated approved maintenance organisation may temporarily remove a component for maintenance, in order to improve access to that component, except when such removal generates the need for additional maintenance not eligible for the provisions of this paragraph. This will be subject to a control procedure in the maintenance organisation exposition acceptable to DGCA. 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 maintenance organisation approved in accordance with Section A, Subpart F of CAR-M may carry out maintenance on the uninstalled engine and/or APU and engine and/or APU components, in accordance with engine and/or APU maintenance data or, if agreed by DGCA, in accordance with component maintenance data, only whilst such components are fitted to the engine and/or APU. Nevertheless, such B-rated approved maintenance organisation may temporarily remove a component for maintenance, in order to improve access to that component, except when such removal generates the need for additional maintenance not eligible for the provisions of this paragraph. The limitation section will specify the scope of such maintenance thereby indicating the extent of approval. A maintenance organisation approved in accordance with Section A, Subpart F of CAR M 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 DGCA.
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 DGCA.

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 DGCA 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 avionics 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 172 RG type. Any number of series or types may be quoted. Group means for example Cessna single piston engine 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 DGCA 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 OR APUs	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 DGCA in the scope of approval dependent upon the capability of the particular organisation.

Table 1

CLASS	RATING	LIMITATION
AIRCRAFT	A2 Aero planes 5700 kg and below 5700 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
	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)
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	
	C10 Helicopter — Rotors	
	C11 Helicopter — Trans	
	C12 Hydraulic	
	C13 Instruments	
	C14 Landing Gear	
	C15 Oxygen	
	C16 Propellers	
	C17 Pneumatic	
	C18 Protection ice/rain/Fire	
	C19 Windows	
	C20 Structural	
SPECIALISED SERVICES	D1 Non-Destructive Testing	Will state particular NDT method(s)

**Appendix V
Approval Certificate CAR M Section A Subpart F Maintenance Organisation**

**Directorate General of Civil Aviation
India**

APPROVAL CERTIFICATE

REFERENCE

Pursuant to DGCA Regulations for the time being in force and subject to the conditions 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 to service using the above reference

CONDITIONS:

- 1.This approval is limited to that specified in the scope of approval section of the approved maintenance organisation manual, and
- 2.This approval requires compliance with the procedures specified in the approved maintenance organisation 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 Original Issue: Signed:

Date of attached Schedule of Approval:.....For the use of DGCA only

APPROVAL SCHEDULE

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

Reference:

CLASS	RATING	LIMITATION
AIRCRAFT	A2: Aeroplanes/	
	A3: Single engine helicopters	
ENGINES	B1: Turbine	
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C1: Air Cond & Press	
	C2 : Auto Flight	
	C5 : Electrical Power	
	C6: Equipment	
	C7: Engine - APU	
SPECIALISED SERVICES	C16: Propellers	
	D1: Non- Destructive Inspection	

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 Directorate General of Civil Aviation

AMC to Appendix V to CAR -M Maintenance Organisation Approval referred to in CAR-M Subpart F

The following fields on page 2 “Maintenance Organisation Approval Schedule” of the maintenance organisation approval certificate should be completed as follows:

- Date of original issue: It refers to the date of the original issue of the maintenance organisation manual
- Date of last revision approved: It refers to the date of the last revision of the maintenance organisation manual affecting the content of the certificate. Changes to the maintenance organisation manual which do not affect the content of the certificate do not require the reissuance of the certificate.
- Revision No: It refers to the revision No of the last revision of the maintenance organisation manual affecting the content of the certificate. Changes to the maintenance organisation manual which do not affect the content of the certificate do not require the reissuance of the

Appendix VI

Continuing Airworthiness Management Organisation Approval Certificate referred to in CAR-M

Subpart G

<p>Directorate General of Civil Aviation India</p> <p>CONTINUING AIRWORTHINESS MANAGEMENT ORGANISATION APPROVAL CERTIFICATE</p> <p>Reference : XX.MG.XXX (ref. AOC XX.XXXX)</p>

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

[COMPANY NAME AND ADDRESS]

As a continuing airworthiness management organisation in compliance with CAR-M, Section A, Subpart G approved to manage the continuing airworthiness of the aircraft listed in the attached schedule of approval and to issue recommendations or airworthiness review certificates after an airworthiness review as specified in point M.A.710 of CAR-M when stipulated.

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.
2. This approval requires compliance with the procedures specified in the CAR-M approved continuing airworthiness management exposition.
3. This approval is valid whilst the approved continuing airworthiness management organization remains in compliance with CAR-M.
4. Subject to compliance with the conditions 1 to 3 above, this approval shall remain valid for an unlimited duration 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 added to the reference, in addition to the standard number, and the condition 4 shall be replaced by the following extra conditions :

5. This approval does not constitute an authorisation to operate the types of aircraft referred in paragraph 1. The authorisation to operate the aircraft is the Air Operator Certificate (AOC).
6. Where the continuing airworthiness management organization contracts under its Quality System the service of an/several organisation(s), this approval remains valid subject to such organisation(s) fulfilling applicable contractual obligations.
7. Termination, suspension or revocation of the AOC automatically invalidates the present approval in relation to the aircraft registrations specified in the AOC, unless otherwise explicitly stated by DGCA.
8. Subject to compliance with the previous conditions, this approval shall remain valid for the period as specified in Approval Validity sheet unless the approval has previously been surrendered, superseded, suspended or revoked.

Date of original issue :

Signed :

Date of this revision : Revision No. :

For Directorate General of Civil Aviation :

<p>CONTINUING AIRWORTHINESS MANAGEMENT ORGANISATION</p> <p>APPROVAL SCHEDULE</p> <p>Reference : XX.MG.XXX (ref. AOC XX.XXXX)</p> <p>Organisation : [COMPANY NAME AND ADDRESS]</p>

Aircraft type .series. group	Airworthiness review authorised	Organisation(s) working under quality system
	[YES/NO]	

<p>This approval Schedule is limited to that specified in the scope of approval contained in CAR-M, Section A, Subpart G approved Continuing Airworthiness Management Exposition section.....</p> <p>Continuing Airworthiness Management Exposition Reference:</p> <p>Date of original issue :</p> <p>Signed :</p> <p>Date of this revision : Revision No. :</p> <p>For Directorate General of Civil Aviation:</p> <p style="text-align: right;">Page 2 of 2</p>
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CA Form 14

AMC to Appendix VI to CAR-M Continuing Airworthiness Management Organisation Approval referred to in CAR-M Subpart G

The following fields on page 2 “Continuing Airworthiness Management Organisation Approval Schedule” of the continuing airwothiness management organisation approval certificate should be completed as follows:

- o Date of original issue: It refers to the date of the original issue of the continuing airworthiness management exposition
- o Date of last revision: It refers to the date of the last revision of the continuing airworthiness management exposition affecting the content of the certificate. Changes to the continuing airworthiness management exposition which do not affect the content of the certificate do not require the reissuance of the certificate.
- o Revision No: It refers to the revision No of the last revision of the continuing airworthiness management exposition affecting the content ofthe certificate. Changes to the continuing airworthiness management exposition which do not affect the content of the certificate do not require the reissuance of the certificate.

Appendix VII

Complex Maintenance Tasks

The following constitutes the complex maintenance tasks referred to in points M.A.801(b)2 and M.A.801(c):

1. The modification, repair or replacement by riveting, bonding, laminating, or welding of any of the following airframe parts:
 - a) box beam;
 - b) wing stringer or chord member;
 - c) spar;
 - d) spar flange;
 - e) member of a truss-type beam;
 - f) web of a beam;
 - g) keel or chine member of a flying boat hull or a float;
 - h) corrugated sheet compression member in a wing or tail surface;
 - i) wing main rib;
 - j) wing or tail surface brace strut;
 - k) engine mount;
 - l) fuselage longeron or frame;
 - m) member of a side truss, horizontal truss or bulkhead;
 - n) seat support brace or bracket;
 - o) seat rail replacement;
 - p) landing gear strut or brace strut;
 - q) axle;
 - r) wheel; and
 - s) 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.

3. The performance of the following maintenance on a piston engine:
 - a) dismantling and subsequent reassembling of a piston engine other than (i) to obtain access to the piston/cylinder assemblies; or (ii) to remove the rear accessory cover to inspect and/or replace oil pump assemblies, where such work does not involve the removal and re-fitment of internal gears;
 - b) dismantling and subsequent reassembling of reduction gears;
 - c) welding and brazing of joints, other than minor weld repairs to exhaust units carried out by a suitably approved or authorised welder but excluding

- component replacement;
- d) the disturbing of individual parts of units which are supplied as bench tested units, except for the replacement or adjustment of items normally replaceable or adjustable in service.
4. The balancing of a propeller, except:
- (a) for the certification of static balancing where required by the maintenance manual;
 - (b) dynamic balancing on installed propellers using electronic balancing equipment where permitted by the maintenance manual or other approved airworthiness data;
5. Any additional task that requires:
- (a) specialized tooling, equipment or facilities; or
 - (b) significant coordination procedures because of the extensive duration of the tasks and the involvement of several persons.'

AMC to Appendix VII “Complex Maintenance Tasks”

The sentence “suitably approved or authorised welder” contained in Appendix VII, paragraph 3(c), means that the qualification should C of C issued by DGCA

Appendix VIII

Limited Pilot-Owner Maintenance

In addition to the requirements laid down in CAR-M, the following basic principles are to be complied with before any maintenance task is carried out under the terms of Pilot-owner maintenance:

(a) Competence and responsibility

1. The Pilot-owner is always responsible for any maintenance that he performs.
2. Before carrying out any Pilot-owner maintenance tasks, the Pilot-owner must satisfy himself that he is competent to do the task. It is the responsibility of Pilot-owners to familiarize themselves with the standard maintenance practices for their aircraft and with the aircraft maintenance programme. If the Pilot-owner is not competent for the task to be carried out, the task cannot be released by the Pilot-owner.
3. The Pilot-owner (or his contracted continuing airworthiness management organisation referred to in Subpart G, Section A of CAR-M) is responsible for identifying the Pilot-owner tasks according to these basic principles in the maintenance programme and for ensuring that the document is updated in a timely manner.
4. The approval of the maintenance programme has to be carried out in accordance with point M.A.302.

(b) Tasks

The Pilot-owner may carry out simple visual inspections or operations to check for general condition and obvious damage and normal operation of the airframe, engines, systems and components.

Maintenance tasks shall not be carried out by the Pilot-owner when the task:

1. is critically safety related, whose incorrect performance will drastically affect the airworthiness of the aircraft or is a flight safety sensitive maintenance task as specified in point M.A.402(a) and/or;
2. requires the removal of major components or major assembly and/or;
3. is carried out in compliance with an Airworthiness Directive or an Airworthiness Limitation Item, unless specifically allowed in the AD or the ALI and/or;
4. requires the use of special tools, calibrated tools (except torque wrench and crimping tool) and/or;
5. requires the use of test equipments or special testing (e.g. NDT, system tests or operational checks for avionic equipment) and/or;
6. is composed of any unscheduled special inspections (e.g. heavy landing check) and/or;
7. is effecting systems essential for the IFR operations and/or;
8. is listed in Appendix VII or is a component maintenance task in accordance with point M.A.502.

The criteria 1 to 8 listed above cannot be overridden by less restrictive instructions issued in accordance with "M.A.302 (d) Maintenance Programme".

Any task described in the aircraft flight manual as preparing the aircraft for flight (Example: assembling the glider wings or pre-flight), is considered to be a pilot task and is not considered a Pilot-owner maintenance task and therefore does not require a Certificate of Release to Service.

(c) Performance of the maintenance Pilot-owner tasks and records

The maintenance data as specified in point M.A.401 must be always available during the conduct of Pilot-owner maintenance and must be complied with. Details of the data referred to in the conduct of Pilot-owner maintenance must be included in the Certificate of Release to Service in accordance with point M.A.803 (d).

The Pilot-owner must inform the approved continuing airworthiness management organisation responsible for the continuing airworthiness of the aircraft (if applicable) not later than 30 days after completion of the Pilot-owner maintenance task in accordance with point M.A.305 (a).

AMC to Appendix VIII “Limited Pilot Owner Maintenance”

1. The lists here below specify items that can be expected to be completed by an owner who holds a current and valid pilot licence for the aircraft type involved and who meets the competence and responsibility requirements of Appendix VIII to CAR-M.
2. The list of tasks may not address in a detailed manner the specific needs of the various aircraft categories. In addition, the development of technology and the nature of the operations undertaken by these categories of aircraft cannot be always adequately considered.

Appendices to AMCs

Appendix I to AMC M.A.302 and AMC M.B.301 (b)

Content of the Maintenance Programme

1 General Requirements

- 1.1 The maintenance programme should contain the following basic information.
 - 1.1.1 The type/model and registration number of the aircraft, engines and, where applicable, auxiliary power units and propellers
 - 1.1.2 The name and address of the owner, operator or M.A Subpart G approved organisation managing the aircraft airworthiness.
 - 1.1.3 The reference, the date of issue and issue number of the approved maintenance programme.
 - 1.1.4 A statement signed by the owner, operator or M.A Subpart G approved organisation managing the aircraft airworthiness to the effect that the specified aircraft will be maintained to the programme and that the programme will be reviewed and updated as required.
 - 1.1.5 Contents/list of effective pages and their revision status of the document.
 - 1.1.6 Check periods, which reflect the anticipated utilisation of the aircraft. Such utilisation should be stated and include a tolerance of not more than 25%. Where utilisation cannot be anticipated, calendar time limits should also be included.
 - 1.1.7 Procedures for the escalation of established check periods, where applicable and acceptable to DGCA.
 - 1.1.8 Provision to record the date and reference of approved amendments incorporated in the maintenance programme.
 - 1.1.9 Details of pre-flight maintenance tasks that are accomplished by maintenance staff.
 - 1.1.10 The tasks and the periods (intervals/frequencies) at which each part of the aircraft, engines, APU's, propellers, components, accessories, equipment, instruments, electrical and radio apparatus, together with the associated systems and installations should be inspected. This should include the type and degree of inspection required.
 - 1.1.11 The periods at which components should be checked, cleaned, lubricated, replenished, adjusted and tested.
 - 1.1.12 If applicable details of ageing aircraft system requirements together with any specified sampling programmes.
 - 1.1.13 If applicable details of specific structural maintenance programmes where issued by the type certificate holder including but not limited to:
 - a. Maintenance of structural Integrity by damage Tolerance and Supplemental Structural Inspection Programmes (SSID).
 - b. Structural maintenance programmes resulting from the SB review performed by the TC holder.

- c. Corrosion prevention and control.
- d. Repair Assessment.
- e. Widespread Fatigue Damage

- 1.1.14 If applicable, details of Critical Design Configuration Control Limitations together with appropriate procedure.
- 1.1.15 If applicable a statement of the limit of validity in terms of total flight cycles/calendar date/flight hours for the structural programme in 1.1.13.
- 1.1.16 The periods at which overhauls and/or replacements by new or overhauled components should be made.
- 1.1.17 A cross-reference to other documents approved by DGCA which contain the details of maintenance tasks related to mandatory life limitations, Certification Maintenance Requirements (CMR's) and ADs.

Note: To prevent inadvertent variations to such tasks or intervals these items should not be included in the main portion of the maintenance programme document, or any planning control system, without specific identification of their mandatory status.
- 1.1.18 Details of, or cross-reference to, any required reliability programme or statistical methods of continuous Surveillance.
- 1.1.19 A statement that practices and procedures to satisfy the programme should be to the standards specified in the TC holder's Maintenance Instructions. In the case of approved practices and procedures that differ, the statement should refer to them.
- 1.1.20 Each maintenance task quoted should be defined in a definition section of the programme.

2 Programme Basis

- 2.1 An owner or an M.A Subpart G approved organisation's aircraft maintenance programme should normally be based upon the MRB report, where applicable, and the TC holder's maintenance planning document or Chapter 5 of the maintenance manual, (i.e. the manufacturer's recommended maintenance programme).

The structure and format of these maintenance recommendations may be re-written by the owner or the M.A Subpart G approved organisation to better suit the operation and control of the particular maintenance programme.

- 2.2 For a newly type-certificated aircraft where no previously approved maintenance programme exists, it will be necessary for the owner or the M.A Subpart G approved organisation to comprehensively appraise the manufacturer's recommendations (and the MRB report where applicable), together with other airworthiness information, in order to produce a realistic programme for approval.
- 2.3 For existing aircraft types it is permissible for the operator to make comparisons with maintenance programmes previously approved. It should not be assumed that a programme approved for one owner or the M.A

Subpart G approved organisation would automatically be approved for another.

Evaluation should be made of the aircraft/fleet utilisation, landing rate, equipment fit and, in particular, the experience of the owner or the M.A Subpart G approved organisation when assessing an existing programme.

Where DGCA is not satisfied that the proposed maintenance programme can be used as is, DGCA should request appropriate changes such as additional maintenance tasks or de-escalation of check frequencies as necessary.

2.4 Critical Design Configuration Control Limitations (CDCCL) If CDCCL have been identified for the aircraft type by the TC/STC holder, maintenance instructions should be developed. CDCCL's are characterized by features in an aircraft installation or component that should be retained during modification, change, repair, or scheduled maintenance for the operational life of the aircraft or applicable component or part.

3 Amendments

Amendments (revisions) to the approved maintenance programme should be made by the owner or the M.A Subpart G approved organisation, to reflect changes in the TC holder's recommendations, modifications, service experience, or as required by DGCA.

4 Permitted Variations to Maintenance Periods

The owner or the M.A Subpart G approved organisation may only vary the periods prescribed by the programme with the approval of DGCA or through a procedure developed in the maintenance programme and approved by DGCA.

5 Periodic Review of Maintenance Programme Contents

5.1 The owner or the M.A Subpart G approved organisation's approved maintenance programmes should be subject to periodic review to ensure that they reflect current TC holder's recommendations, revisions to the MRB report if applicable, mandatory requirements and the maintenance needs of the aircraft.

5.2 The owner or the M.A Subpart G approved organisation should review the detailed requirements at least annually for continued validity in the light of operating experience.

6. Reliability Programmes

6.1 Applicability

6.1.1 A reliability programme should be developed in the following cases:

- the aircraft maintenance programme is based upon MSG-3 logic
- the aircraft maintenance programme includes condition monitored components

- the aircraft maintenance programme does not contain overhaul time periods for all significant system components
- when specified by the Manufacturer’s maintenance planning document or MRB.

6.1.2 A reliability Programme need not be developed in the following cases:

- the maintenance programme is based upon the MSG-1 or 2 logic but only contains hard time or on condition items
- the aircraft is not a large aircraft according to CAR-M
- the aircraft maintenance programme provides overhaul time periods for all significant system components.

Note: for the purpose of this paragraph, a significant system is a system the failure of which could hazard the aircraft safety.

6.1.3 Notwithstanding paragraphs 6.1.1 and 6.1.2 above, an M.A.Subpart G organisation may however, develop its own reliability monitoring programme when it may be deemed beneficial from a maintenance planning point of view.

6.2 Applicability for M.A.Subpart G organisation/operator of small fleets of aircraft

6.2.1 For the purpose of this paragraph, a small fleet of aircraft is a fleet of less than 6 aircraft of the same type.

6.2.2 The requirement for a reliability programme is irrespective of the M.A.Subpart G organisation’s fleet size.

6.2.3 Complex reliability programmes could be inappropriate for a small fleet. It is recommended that such M.A. Subpart G organisations tailor their reliability programmes to suit the size and complexity of operation.

6.2.4 One difficulty with a small fleet of aircraft consists in the amount of available data which can be processed: when this amount is too low, the calculation of alert level is very coarse. Therefore “alert levels” should be used carefully.

6.2.5 An M.A.Subpart G organisation of a small fleet of aircraft, when establishing a reliability programme, should consider the following:

- (a) The programme should focus on areas where a sufficient amount of data is likely to be processed.
- (b) When the amount of available data is very limited, the M.A. Subpart G organisation’s engineering judgement is then a vital element. In the following examples, careful engineering analysis should be exercised before taking decisions:
 - A “0” rate in the statistical calculation may possibly simply reveal that enough statistical data is missing, rather than there is no potential problem.

- When alert levels are used, a single event may have the figures reach the alert level. Engineering judgement is necessary so as to discriminate an artefact from an actual need for a corrective action.
- In making his engineering judgement, an M.A.Subpart G organisation is encouraged to establish contact and make comparisons with other M.A. Subpart G organisations of the same aircraft, where possible and relevant. Making comparison with data provided by the manufacturer may also be possible.

6.2.6 In order to obtain accurate reliability data, it should be recommended to pool data and analysis with one or more other M.A. Subpart G organisation(s). Paragraph 6.6 of this paragraph specifies under which conditions it is acceptable that M.A. Subpart G organisations share reliability data.

6.2.7 Notwithstanding the above there are cases where the M.A.Subpart G organisation will be unable to pool data with other M.A. Subpart G organisation, e.g. at the introduction to service of a new type. In that case DGCA should impose additional restrictions on the MRB/MPD tasks intervals (e.g. no variations or only minor evolution are possible, and with DGCA approval).

6.3 Engineering judgement

6.3.1 Engineering judgement is itself inherent to reliability programmes as no interpretation of data is possible without judgement. In approving the M.A. Subpart G organisation's maintenance and reliability programmes, DGCA is expected to ensure that the organisation which runs the programme (it may be the M.A.Subpart G organisation, or an CAR-145 organisation under contract) hires sufficiently qualified personnel with appropriate engineering experience and understanding of reliability concept (see AMC M.A.706)

6.3.2 It follows that failure to provide appropriately qualified personnel for the reliability programme may lead DGCA to reject the approval of the reliability programme and therefore the aircraft maintenance programme.

6.4 Contracted maintenance

6.4.1 Whereas M.A.302 specifies that, the aircraft maintenance programme - which includes the associated reliability programme-, should be managed and presented by the M.A. Subpart G organisation to DGCA, it is understood that the M.A.Subpart G organisation may delegate certain functions to the CAR-145 organisation under contract, provided this organisation proves to have the appropriate expertise.

6.4.2 These functions are:

- a. Developing the aircraft maintenance and reliability programmes,
- b. Performing the collection and analysis of the reliability data,
- c. Providing reliability reports, and
- d. Proposing corrective actions to the M.A. Subpart G organisation.

6.4.3 Notwithstanding the above decision to implement a corrective action (or the decision to request from DGCA the approval to implement a corrective action) remains the M.A.Subpart G organisation's prerogative and responsibility. In relation to paragraph 6.4.2(d) above, a decision not to implement a corrective action should be justified and documented.

6.4.4 The arrangement between the M.A. Subpart G organisation and the CAR145 organisation should be specified in the maintenance contract (see appendix XI) and the relevant CAME, and MOE procedures.

6.5 Reliability Programme

In preparing the programme details, account should be taken of this paragraph. All associated procedures should be clearly defined.

6.5.1 Objectives

6.5.1.1 A statement should be included summarising as precisely as possible the prime objectives of the programme. To the minimum it should include the following:

- to recognise the need for corrective action,
- to establish what corrective action is needed and,
- to determine the effectiveness of that action

6.5.1.2 The extent of the objectives should be directly related to the scope of the programme. Its scope could vary from a component defect monitoring system for a small M.A. Subpart G organisation, to an integrated maintenance management programme for a big M.A.Subpart G organisation. The manufacturer's maintenance planning documents may give guidance on the objectives and should be consulted in every case.

6.5.1.3 In case of a MSG-3 based maintenance programme, the reliability programme should provide a monitor that all MSG-3 related tasks from the maintenance programme are effective and their periodicity is adequate.

6.5.2 Identification of items.

The items controlled by the programme should be stated, e.g. by ATA Chapters. Where some items (e.g. aircraft structure, engines, APU) are controlled by separate programmes, the associated procedures (e.g. individual sampling or life development programmes, constructor's structure sampling programmes) should be cross referenced in the programme.

6.5.3 Terms and definitions.

The significant terms and definitions applicable to the programme should be clearly identified. Terms are already defined in MSG-3, CAR-145 and CAR-M.

6.5.4 Information sources and collection.

6.5.4.1 Sources of information should be listed and procedures for the transmission of information from the sources, together with the procedure for collecting and receiving it, should be set out in detail in the CAME or MOE as appropriate.

6.5.4.2 The type of information to be collected should be related to the objectives of the Programme and should be such that it enables both an overall broad based assessment of the information to be made and also allow for assessments to be made as to whether any reaction, both to trends and to individual events, is necessary. The following are examples of the normal prime sources:

- a. Pilots Reports.
- b. Technical Logs.
- c. Aircraft Maintenance Access Terminal / On-board Maintenance System readouts.
- d. Maintenance Worksheets.
- e. Workshop Reports.
- f. Reports on Functional Checks.
- g. Reports on Special Inspections
- h. Stores Issues/Reports.
- i. Air Safety Reports.
- j. Reports on Technical Delays and Incidents.
- k. Other sources: EDTO/ETOPS, RVSM, CAT II/III.

6.5.4.3 In addition to the normal prime sources of information, due account should be taken of continuing airworthiness and safety information promulgated under CAR-21

6.5.5 Display of information.

Collected information may be displayed graphically or in a tabular format or a combination of both. The rules governing any separation or discarding of information prior to incorporation into these formats should be stated. The format should be such that the identification of trends, specific highlights and related events would be readily apparent.

6.5.5.1 The above display of information should include provisions for “nil returns” to aid the examination of the total information.

6.5.5.2 Where “standards” or “alert levels” are included in the programme, the display of information should be oriented accordingly.

6.5.6 Examination, analysis and interpretation of the information.

The method employed for examining, analysing and interpreting the programme information should be explained.

6.5.6.1 Examination.

Methods of examination of information may be varied according to the content and quantity of information of individual programmes. These can range from examination of the initial indication of performance variations to formalised detailed procedures at specific periods, and the methods should be fully described in the programme documentation.

6.5.6.2 Analysis and Interpretation.

The procedures for analysis and interpretation of information should be such as to enable the performance of the items controlled by the programme to be measured; they should also facilitate recognition, diagnosis and recording of significant problems. The whole process should be such as to enable a critical assessment to be made of the effectiveness of the programme as a total activity. Such a process may involve:

- a. Comparisons of operational reliability with established or allocated standards (in the initial period these could be obtained from in-service experience of similar equipment of aircraft types).
- b. Analysis and interpretation of trends.
- c. The evaluation of repetitive defects.
- d. Confidence testing of expected and achieved results.
- e. Studies of life-bands and survival characteristics.
- f. Reliability predictions.
- g. Other methods of assessment.

6.5.6.3 The range and depth of engineering analysis and interpretation should be related to the particular programme and to the facilities available. The following, at least, should be taken into account:

- a. Flight defects and reductions in operational reliability.
- b. Defects occurring on-line and at main base.
- c. Deterioration observed during routine maintenance.
- d. Workshop and overhaul facility findings.
- e. Modification evaluations.
- f. Sampling programmes.
- g. The adequacy of maintenance equipment and publications.

- h. The effectiveness of maintenance procedures.
- i. Staff training.
- j. Service bulletins, technical instructions, etc.

6.5.6.4 Where the M.A. Subpart G organisation relies upon contracted maintenance and/or overhaul facilities as an information input to the programme, the arrangements for availability and continuity of such information should be established and details should be included.

6.5.7 Corrective Actions.

6.5.7.1 The procedures and time scales both for implementing corrective actions and for monitoring the effects of corrective actions should be fully described. Corrective actions shall correct any reduction in reliability revealed by the programme and could take the form of:

- a. Changes to maintenance, operational procedures or techniques.
- b. Maintenance changes involving inspection frequency and content, function checks, overhaul requirements and time limits, which will require amendment of the scheduled maintenance periods or tasks in the approved maintenance programme. This may include escalation or de-escalation of tasks, addition, modification or deletion of tasks.
- c. Amendments to approved manuals (e.g. maintenance manual, crew manual).
- d. Initiation of modifications.
- e. Special inspections of fleet campaigns.
- f. Spares provisioning.
- g. Staff training.
- h. Manpower and equipment planning.

Note: Some of the above corrective actions may need DGCA approval before implementation.

6.5.7.2 The procedures for effecting changes to the maintenance programme should be described, and the associated documentation should include a planned completion date for each corrective action, where applicable.

6.5.8 Organisational Responsibilities.

The organisational structure and the department responsible for the administration of the programme should be stated. The chains of responsibility for individuals and departments (Engineering, Production, Quality, Operations etc.) in respect of the programme, together with the information and functions of any programme control committees (reliability group), should be defined. Participation of DGCA should be stated. This information should be contained in the CAME or MOE as appropriate.

6.5.9 Presentation of Information to DGCA.

The following information should be submitted to DGCA for approval as part of the reliability programme:

- (a) The format and content of routine reports.
- (b) The time scales for the production of reports together with their distribution.
- (c) The format and content of reports supporting request for increases in periods between maintenance (escalation) and for amendments to the approved maintenance programme. These reports should contain sufficient detailed information to enable DGCA to make its own evaluation where necessary.

6.5.10 Evaluation and Review.

Each programme should describe the procedures and individual responsibilities in respect of continuous monitoring of the effectiveness of the programme as a whole. The time periods and the procedures for both routine and non-routine reviews of maintenance control should be detailed (progressive, monthly, quarterly, or annual reviews, procedures following reliability “standards” or “alert levels” being exceeded, etc.).

6.5.10.1 Each Programme should contain procedures for monitoring and, as necessary, revising the reliability “standards” or “alert levels”. The organisational responsibilities for monitoring and revising the “standards” should be specified together with associated time scales.

6.5.10.2 Although not exclusive, the following list gives guidance on the criteria to be taken into account during the review.

- (a) Utilisation (high/low/seasonal).
- (b) Fleet commonality.
- (c) Alert Level adjustment criteria.
- (d) Adequacy of data.
- (e) Reliability procedure audit.
- (f) Staff training.
- (g) Operational and maintenance procedures.

6.5.11 Approval of maintenance programme amendment

DGCA may authorise the M.A.Subpart G organisation to implement in the maintenance programme changes arising from the reliability programme results prior to their formal approval by the authority when satisfied that ;

- (a) the Reliability Programme monitors the content of the Maintenance Programme in a comprehensive manner, and
- (b) the procedures associated with the functioning of the “Reliability Group” provide the assurance that appropriate control is exercised by the Owner/operator over the internal validation of such changes.

6.6 Pooling Arrangements.

7.6.1 In some cases, in order that sufficient data may be analysed it may be desirable to “pool” data: i.e. collate data from a number of M.A. Subpart G organisations of the same type of aircraft. For the analysis to be valid, the aircraft concerned, mode of operation, and maintenance procedures applied should be substantially the same: variations in utilisation between two M.A. Subpart G organisations may more than anything, fundamentally corrupt the analysis. Although not exhaustive the following list gives guidance on the primary factors which need to be taken into account.

- (a) Certification factors, such as: aircraft TCDS compliance (variant) / modification status, including SB compliance.
- (b) Operational Factors, such as: operational environment / utilisation, e.g. low/high/seasonal etc / respective fleet size operating rules applicable (e.g. EDTO/ETOPS/RVSM/All Weather etc.) / operating procedures / MEL and MEL utilization.
- (c) Maintenance factors, such as: aircraft age maintenance procedures; maintenance standards applicable; lubrication procedures and programme; MPD revision or escalation applied or maintenance programme applicable.

7.6.2 Although it may not be necessary for all of the foregoing to be completely common, it is necessary for a substantial amount of commonality to prevail. Decision should be taken by DGCA on a case by case basis.

7.6.3 In case of a short term lease agreement (less than 6 month) more flexibility against the para 6.6.1 criteria may be granted by DGCA, so as to allow the owner/operator to operate the aircraft under the same programme during the lease agreement effectivity.

7.6.4 Changes by any one of the M.A.Subpart G organisation to the above, requires assessment in order that the pooling benefits can be maintained. Where an M.A.Subpart G organisation wishes to pool data in this way, the approval of DGCA should be sought prior to any formal agreement being signed between M.A. Subpart G organisations.

7.6.5 Whereas this paragraph 6.6 is intended to address the pooling of data directly between M.A.Subpart G organisations, it is acceptable that the M.A.Subpart G organisation participates in a reliability programme managed by the aircraft manufacturer, when DGCA is satisfied that the manufacturer manages a reliability programme which complies with the intent of this paragraph.

Appendix II to M.A. 201 (h) 1: Sub-contracting of Continuing Airworthiness Management Tasks

1. SUB-CONTRACTED OPERATOR'S CONTINUING AIRWORTHINESS MANAGEMENT TASKS

- 1.1 To actively control the standards of the sub-contracted organisation the operator should employ a person or group of persons who are trained and competent in the disciplines associated with M.A Subpart G. As such they are 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.
- 1.2 The operator should conduct a pre-contract audit to establish that the sub-contracted organisation can achieve the standards required by M.A Subpart G in connection with those activities to be sub-contracted.
- 1.3 The operator should ensure that the sub-contracted organisation has sufficient qualified personnel who are trained and competent in the functions to be subcontracted. In assessing the adequacy of personnel resources the operator should consider the particular needs of those activities that are to be sub-contracted, while taking into account the sub-contracted organisations existing commitments.
- 1.4 To be appropriately approved to contract out continuing airworthiness management tasks the operator should have procedures for the management control of these arrangements. The operator's continuing airworthiness management exposition should contain relevant procedures to reflect his control of those arrangements made with the sub-contracted organisation.
- 1.5 Sub-contracted continuing airworthiness management tasks should be addressed in a contract between the operator and the sub-contracted organisation. The contract should also specify that the sub-contracted organisation is responsible for informing the operator who is in turn responsible for notifying DGCA, of any subsequent changes that affect their ability to support the contract.
- 1.6 Organisations providing continuing airworthiness management tasks to support commercial air transport operators should use procedures which set out the manner by which the organisation fulfils its responsibility to those sub-contracted activities. Such procedures may be developed by either the sub-contracted organisation or the operator.
- 1.7 Where the sub-contracted organisation develops its own procedures these should be compatible with the operator's continuing airworthiness management exposition and the terms of the contract. These should be accepted by DGCA as extended procedures of the operator and as such should be cross-referenced from the continuing airworthiness management exposition. One current copy of the sub-contracted organisation's relevant procedures should be kept by the operator and should be accessible to DGCA where needed.

Note: Should any conflict arise between the sub-contracted organisation's procedures and those of the operator then the policy and procedures of the continuing airworthiness management exposition will prevail.

- 1.8 The contract should also specify that the sub-contracted organisation's procedures may only be amended with the agreement of the operator. The operator should ensure that these amendments are compatible with their continuing airworthiness management exposition and in compliance with M.A Subpart G.

The operator should nominate who will be responsible for continued monitoring and acceptance of the sub-contracted organisation procedures and their amendments. The controls used to fulfil this function should be clearly set out in the amendment section of the continuing airworthiness management exposition detailing the level of operator involvement.

- 1.9 Whenever any elements of continuing airworthiness management tasks are sub-contracted the operator's continuing airworthiness management personnel should have access to all relevant data in order to fulfil their responsibilities.

Note: The operator retains authority to override where necessary for the continuing airworthiness of their aircraft, any recommendation of the sub-contracted organisation.

- 1.10 The operator should ensure that the sub-contracted organisation continues to have qualified technical expertise and sufficient resources to perform the subcontracted tasks while in compliance with the relevant procedures. Failure to do so may invalidate the approval of the operators continuing airworthiness management system.
- 1.11 The contract should provide for DGCA monitoring.
- 1.12 The contract should address the respective responsibilities to ensure that any findings arising from DGCA monitoring will be closed to the satisfaction of DGCA.

2. ACCOMPLISHMENT

This paragraph describes topics, which may be applicable in such a sub-contract arrangements.

2.1 Scope of work

The type of aircraft and their registrations, engine types and/or component subject to the continuing airworthiness management tasks contract should be specified.

2.2 Maintenance programme development and amendment

The operator may sub-contract the preparation of the draft maintenance programme and any subsequent amendments. However, the operator remains responsible for assessing that the draft proposals meet his needs and obtaining DGCA approval; the relevant procedures should specify these responsibilities. The contract should also stipulate that any data

necessary to substantiate the approval of the initial programme or an amendment to this programme should be provided for operator agreement and/or DGCA upon request.

2.3 Maintenance programme effectiveness and reliability

The operator should have in place a system to monitor and assess the effectiveness of the maintenance programme based on maintenance and operational experience. The collection of data and initial assessment may be made by the sub-contracted organisation; the required actions are to be endorsed by the operator.

Where reliability monitoring is used to establish maintenance programme effectiveness, this may be provided by the sub-contracted organisation and should be specified in the relevant procedures. Reference should be made to the operators approved maintenance programme and reliability programme. Participation of the operator's personnel in reliability meetings with the sub-contracted organisation should also be specified.

In providing reliability data the sub-contracted organisation is limited to working with primary data/documents provided by the operator or data provided by the operators contracted maintenance organisation(s) from which the reports are derived. The pooling of reliability data is permitted if accepted by DGCA.

2.4 Permitted variations to maintenance programme.

The reasons and justification for any proposed variation to scheduled maintenance may be prepared by the sub-contracted organisation. Acceptance of the proposed variation should be granted by the operator. The means by which the operator acceptance is given should be specified in the relevant procedures. When outside the limits set out in the maintenance programme, the operator is required to obtain approval by DGCA.

2.5 Scheduled maintenance

Where the sub-contracted organisation plans and defines maintenance checks or inspections in accordance with the approved maintenance programme, the required liaison with the operator, including feedback should be defined.

The planning control and documentation should be specified in the appropriate supporting procedures. These procedures should typically set out the operator's level of involvement in each type of check. This will normally involve the operator assessing and agreeing to a work specification on a case by case for base maintenance checks. For routine line maintenance checks this may be controlled on a day-to-day basis by the sub-contracted organisation subject to appropriate liaison and operator controls to ensure timely compliance. This typically may include, but is not necessarily limited to:

(a) Applicable work package, including job cards,

- (b) Scheduled component removal list,
- (c) ADs to be incorporated,
- (d) Modifications to be incorporated

The associated procedures should ensure that the operator is advised in a timely manner on the accomplishment of such tasks.

2.6 Quality monitoring

The operator's quality system should monitor the adequacy of the sub-contracted continuing airworthiness management task performance for compliance with the contract and M.A Subpart G. The terms of the contract should therefore include a provision allowing the operator to perform a quality surveillance (including audits) upon the sub-contracted organisation. The aim of the surveillance is primarily to investigate and judge the effectiveness of those sub-contracted activities and thereby to ensure compliance with M.A Subpart G and the contract. Audit reports may be subject to review when requested by DGCA.

2.7 Access by DGCA

The contract should specify that the sub-contracted organisation should always grant access to DGCA.

2.8 Maintenance data

The maintenance data used for the purpose of the contract should be specified, together with those responsible for providing such documentation and DGCA responsible for the acceptance/approval of such data when applicable. The operator should ensure such data including revisions is readily available to the operator's continuing airworthiness management personnel and those in the sub-contracted organisation who may be required to assess such data. The operator should establish a 'fast track' means of ensuring that urgent data is transmitted to the sub-contractor in a timely manner. Maintenance data may include, but is not necessarily limited to:

- (a) Maintenance programme,
- (b) ADs,
- (c) Service Bulletins,
- (d) Major repairs/modification data,
- (e) Aircraft Maintenance Manual,
- (f) Engine overhaul manual,
- (g) Aircraft IPC,
- (h) Wiring diagrams,
- (i) Trouble shooting manual,

2.9 Airworthiness directives

While the various aspects of AD assessment, planning and follow-up may be accomplished by the sub-contracted organisation, embodiment is performed by a CAR-145 maintenance organisation. The operator is responsible for ensuring timely embodiment of applicable ADs and is to be provided with notification of compliance. It therefore follows that the operator should have

clear policies and procedures on AD embodiment supported by defined procedures which will ensure that the operator agrees to the proposed means of compliance.

The relevant procedures should specify:

- What information (e.g. AD publications, continuing airworthiness records, flight hours/cycles, etc.) the sub-contracted organisation needs from the operator.
- What information (e.g. AD planning listing, detailed engineering order, etc) the operator needs from the sub-contracted organisation in order to ensure timely compliance with ADs.

To fulfill their above responsibility, operators should ensure that they are in receipt of current mandatory continued airworthiness information for the aircraft and equipment that they operate.

2.10 Service bulletin/modifications

The sub-contracted organisation may be required to review and make recommendations on embodiment of an SB and other associated non-mandatory material based on a clear operator policy. This should be specified in the contract.

2.11 Service life limit controls & component control/removal forecast.

Where the sub-contracted organisation performs planning activities, it should be specified that the organisation should be in receipt of the current flight cycles; flight hours; landings and/or calendar controlled details as applicable, at a frequency to be specified in the contract. The frequency should be such that it allows the organisation to properly perform the sub-contracted planning functions. It therefore follows that there will need to be adequate liaison between the operator, his CAR-145 maintenance organisation(s) and the sub-contracted organisation. Additionally the contract should specify how the operator will be in possession of all current flight cycles, flight hours, etc. in order that the operator may assure the timely accomplishment of the required maintenance.

2.12 Engine health monitoring

If the operator sub- contracts the on wing engine health monitoring, the sub-contracted organisation should be in receipt of all the relevant information to perform this task, including any parameter reading deemed necessary to be supplied by the operator for this control. The contract should also specify what kind of feedback information (such as engine limitation, appropriate technical advice, etc.) the organisation should provide to the operator.

2.13 Defect control

Where the operator has sub-contracted the day-to-day control of technical log deferred defects this should be specified in the contract and should be adequately described in the appropriate procedures. The operator's MEL/CDL provides the basis for establishing which defects may be deferred and associated limits. The procedures should also define the responsibilities and actions to be taken for defects such as AOG situations, repetitive defects, and damage beyond type certificate holder's limits.

For all other defects identified during maintenance, the information should be brought to the attention of the operator who dependant upon the procedural authority granted by DGCA may determine that some defects can be deferred. Therefore, adequate liaison between the operator, his sub-contracted organisation and contracted CAR-145 maintenance organisation should be ensured.

The sub-contracted organisation should make a positive assessment of potential deferred defects and consider potential hazards arising from the cumulative effect of any combination of defects. The sub-contracted organisations should liaise with the operator to gain his agreement following this assessment.

Deferment of MEL/CDL allowable defects can be accomplished by a contracted CAR- 145 organisation in compliance with the relevant technical log procedures, subject to the acceptance by the aircraft commander.

2.14 Mandatory occurrence reporting

All incidents and occurrences that fall within the reporting criteria defined in CAR-M and CAR-145 should be reported as required by the respective requirements. The operator should ensure adequate liaison exists with the sub-contracted organisation and the CAR-145 organisation.

2.15 Continuing airworthiness records

These may be maintained and kept by the sub-contracted organisation on behalf of the operator who remains the owner of these documents. However, the operator should be provided with the current status of AD compliance and service life limited components in accordance with agreed procedures. The operator should also be provided with unrestricted and timely access to original records as and when needed. On-line access to the appropriate information systems is acceptable.

The record keeping requirements of CAR-M should be satisfied. Access to the records by duly authorised members of DGCA should be arranged upon request.

2.16 Check flight procedures

Check Flights are carried out under the control of the operator. Check flight requirements from the sub-contracted organisation or contracted CAR-145 maintenance organisations should be agreed by the operator.

2.17 Communication between the operator and sub-contracted organization

2.17.1 To exercise airworthiness responsibility the operator needs to be in receipt

of all relevant reports and relevant maintenance data. The contract should specify what information should be provided and when.

2.17.2 Meetings provide one important corner stone whereby the operator can exercise part of its responsibility for ensuring the airworthiness of the operated aircraft. They should be used to establish good communications between the operator, the sub-contracted organisation and, where different to the foregoing, the contracted CAR-145 organisation. The terms of contract should include whenever appropriate the provision for a certain number of meetings to be held between involved parties. Details of the types of liaison meetings and associated terms of reference of each meeting should be documented. The meetings may include but are not limited to all or a combination of:

(a) Contract review

Before the contract is applicable, it is very important that the technical personnel of both parties that are involved in the application of the contract meet in order to be sure that every point leads to a common understanding of the duties of both parties.

(b) Work scope planning meeting

Work scope planning meetings may be organised so that the tasks to be performed may be commonly agreed.

(c) Technical meeting

Scheduled meetings should be organised in order to review on a regular basis and agree actions on technical matters such as ADs, SBs, future modifications, major defects found during shop visit, reliability, etc...

(d) Quality meeting

Quality meetings should be organised in order to examine matters raised by the operator's quality surveillance and DGCA's monitoring activity and to agree upon necessary corrective actions.

(e) Reliability meeting

When a reliability programme exists, the contract should specify the operator's and CAR-145 approved organisation's respective involvement in that programme, including the participation to reliability meetings. Provision to enable DGCA participation in the periodical reliability meetings should also be provided.

Appendix III to AMC M.B. 303(d)

CAR M

ACAM											SHEET OF										
AIRCRAFT CONTINUING AIRWORTHINESS MONITORING											PLANNING & RECORDING DOCUMENT										
OWNER/OPERATORS NAME										SUBPART G1 REFERENCE											
MAINTENANCE PROVIDER										MAINTENANCE PROVIDER REF											
AIRCRAFT TYPE					FLEET SIZE				INSPECTING OFFICER												
SECONDARY OFFICE										PLANNING PERIOD		From to									
Notes						Aircraft Assessment	Airworthiness Directives	Maintenance Programme	Type Design	Reliability Programme	Mass & Balance	Flight Manual	Minimum Equipm	Operational Equipment	Structural Repair Manual	Ultimate service Life	Configuration Control	Records	Markings & Placards	Airworthiness Limitations	Periodic Review, Signature & Comments
Registration	Planned	Completed	Closed	Officer																	
1						√															
2						√															
3						√															

Appendix III A to AMC M.B 303(d) ‘KEY RISK ELEMENTS’

	Title	Description
A. AIRCRAFT CONFIGURATION		
A.1	Type design and changes to type design	The type design is the part of the approved configuration of a product, as laid down in the TCDS, common to all products of that type. With the exception of changes contained in the certification specifications referred to in any changes to type design shall be approved and, for those embodied, shall be recorded with the reference to the approval.
A.2	Airworthiness limitations	An airworthiness limitation is a boundary beyond which an aircraft or a component thereof must not be operated, unless the instruction(s) associated to this airworthiness limitation is (are) complied with.
A.3	Airworthiness Directives	An Airworthiness Directive means a document issued or adopted by State of Design, which mandates actions to be performed on an aircraft to restore an acceptable level of safety, when evidence shows that the safety level of this aircraft may otherwise be compromised.
B. AIRCRAFT OPERATION		
B.1	Aircraft documents	Aircraft certificates and documents necessary for operations.
B.2	Flight Manual	A manual, associated with the certificate of airworthiness, containing limitations within which operation of the aircraft is to be considered airworthy and, instructions and information necessary to the flight crew members for the safe operation of the aircraft.
B.3	Mass & balance	Mass and balance data is required to make sure the aircraft is capable of operating within the approved envelope.
B.4	Markings & placards	Markings and placards are defined in the individual aircraft type design. Some information may also be found in the Type Certificate Data Sheet, the Supplemental Type Certificates, the Flight Manual, the Aircraft Maintenance Manual, the Illustrated Parts Catalogue, etc.
B.5	Operational requirements	Items required to be installed to perform a specific type of operation
B.6	Defect management	Defect management requires a system whereby information on faults, malfunctions, defects and other occurrences that cause or might cause adverse effects on the continuing airworthiness of the aircraft is captured. This system should be properly documented. It may include, amongst others, the Minimum Equipment List system, the Configuration Deviation List system and deferred defects management
C. AIRCRAFT MAINTENANCE		
C.1	Aircraft Maintenance Programme	A document which describes or incorporates by reference the specific scheduled maintenance tasks and their frequency of completion, the associated maintenance procedures and related standard maintenance practices necessary for the safe operation of those aircraft to which it applies.

C.2	Component control	The component control should consider a two fold objective for components maintenance: - maintenance for which compliance is mandatory; - maintenance for which compliance is recommended
	Title	Description
C.3	Repairs	All repairs and unrepaired damage/degradations need to comply with the instructions of the appropriate maintenance manual (e.g. the SRM, the AMM, the CMM) . With the exception of repairs contained in the certification specifications. All repairs not defined in the appropriate maintenance manual need to be appropriately approved in accordance with AAC 02 of 2013 and recorded with the reference to the approval. This includes any damage or repairs to the aircraft/engine(s)/propeller(s), and their components.
C.4	Records	Continuing Airworthiness records are defined in M.A.305 and M.A.306 and related AMCs.
A.1	Type design and changes to type design	The type design is the part of the approved configuration of a product, as laid down in the TCDS, common to all products of that type. With the exception of changes contained in the certification specifications referred to in CAR 21 any changes to type design shall be approved and, for those embodied, shall be recorded with the reference to the approval.
Supporting information		Typical inspection items
<p>The type design consists of:</p> <ol style="list-style-type: none"> 1. the drawings and specifications, and a listing of those drawings and specifications, necessary to define the configuration and the design features of the product (i.e. the aircraft, its components, etc.) shown to comply with the applicable type-certification basis and environmental protection requirements; 2. information on materials and processes and on methods of manufacture and assembly of the product necessary to ensure the conformity of the product; 3. an approved Airworthiness Limitation Section (ALS) of the Instructions for Continued Airworthiness (ICA); and 4. any other data necessary to allow by comparison the determination of the airworthiness, the characteristics of noise, fuel venting, and exhaust emissions (where applicable) of later products of the same type. <p>The individual aircraft design is made of the type design supplemented with changes to the type design (e.g. modifications) embodied on the considered aircraft.</p> <p>Depending on the product State of Design,</p>		<ol style="list-style-type: none"> 1. Use the current type certificate data sheets (airframe, engine, propeller as applicable) and check that the aircraft conforms to its type design (correct engine installed, seat configuration, etc.). 2. Check that changes have been approved properly (approved data is used, and a direct relation to the approved data). 3. Check for unintentional deviations from the approved type design, sometimes referred to as concessions, divergences, or non-conformances, Technical Adaptations, Technical Variations, etc. 4. Check cabin configuration (LOPA). 5. Check for embodiment of STC's, and, if any Airworthiness Limitations Section (ALS)/ FM/MEL/WBM and revisions are needed, they have been approved and complied with. <ol style="list-style-type: none"> a. Aircraft S/N applicable b. Applicable engines c. Applicable APU d. Max. certified weights e. Seating configuration f. Exits

Bilateral Agreements and/or EASA Decisions on acceptance of certification findings exist and should be taken into account		6. Check that the individual aircraft design/configuration is properly established and used as a reference.
A.2	Airworthiness limitations	An airworthiness limitation is a boundary beyond which an aircraft or a component thereof must not be operated, unless the instruction(s) associated with this airworthiness limitation is complied with.
Supporting information		Typical inspection items
<p>Airworthiness limitations are exclusively associated with instructions whose compliance is mandatory as part of the type design. They apply to some scheduled or unscheduled instructions that have been developed to prevent and/or to detect the most severe failure.</p> <p>They mainly apply to maintenance (mandatory modification, replacement, inspections, checks, etc.), but can also apply to instructions to control critical design configurations (for example Critical Design Configuration Control Limitations (CDCCL) for the fuel tank safety).</p>		<p>1. Check that the Aircraft Maintenance Programme (AMP) reflects airworthiness limitations and associated instructions (standard or alternative) issued by the relevant design approval holders and is approved by DGCA</p> <p>2. Check that the aircraft and the components thereof comply with the approved AMP.</p> <p>3. Check the current status of life-limited parts. The current status of life-limited parts is to be maintained throughout the operating life of the part.</p> <p>Typical Airworthiness Limitation items:</p> <ul style="list-style-type: none"> - Safe Life ALI (SL ALI)/Life limited parts, - Damage Tolerant ALI (DT ALI)/Structure, including ageing aircraft structure, - Certification Maintenance Requirements (CMR), - Ageing Systems Maintenance (ASM), including Airworthiness Limitations for Electrical Wiring Interconnection System (EWIS), - Fuel Tank Ignition Prevention (FTIP)/Flammability Reduction Means (FRM), - CDCCL, check wiring if any maintenance carried out in same area - wiring separation, - Ageing fleet inspections mandated through ALS or AD are included in the AMP.
A.3	Airworthiness Directives	An Airworthiness Directive means a document issued or adopted by the State of Design, which mandates actions to be performed on an aircraft to restore an acceptable level of safety, when evidence shows that the safety level of this aircraft may otherwise be compromised.
Supporting information		Typical inspection items
Any Airworthiness Directive issued by a State of Design for an aircraft, or for an engine, propeller, part or appliance and installed on an aircraft registered in India shall applicable.		<p>1. Check if all ADs applicable to the airframe, engine(s), propeller(s) and equipment have been incorporated in the AD-status, including their revisions.</p> <p>2. Check records for correct AD applicability (including ADs incorrectly listed as non-applicable).</p> <p>3. Check by sampling in the current AD status that applicable ADs have been or are planned to be (as appropriate) carried out within the requirements of these Airworthiness Directives.</p> <p>4. Check that applicable ADs related to maintenance are included into the Aircraft Maintenance Programme.</p> <p>5. Check that task-cards correctly reflect AD requirements or refer to procedures and standard practises referenced in ADs.</p> <p>6. Sample during a physical inspection some ADs for which compliance can be physically checked.</p>

B.1	Aircraft documents	Aircraft certificates and documents necessary for operations
Supporting information		Typical inspection items
<p>The aircraft certificates and documents necessary for operations may include, but are not necessarily limited to:</p> <ul style="list-style-type: none"> - Certificate of Registration; - Certificate of Airworthiness; - Noise certificate; - Aircraft certificate of release to service; - Technical log book, if required; - Airworthiness Review Certificate; - Etc. 		<ol style="list-style-type: none"> 1. Check that all certificates and documents pertinent to the aircraft and necessary for operations (or attested copies, as appropriate) are on board. 2. Check C of A ,modification/Aircraft identification. 3. Check that noise certificate corresponds to aircraft configuration. 4. Check Certificate of Airworthiness/Airworthiness Review Certificate and Flight Condition when necessary. 5. Check that there is an appropriate aircraft certificate of release to service.
B.2	Flight Manual	A manual, associated with the certificate of airworthiness, containing operational limitations, instructions and information necessary for the flight crew members for the safe operation of the aircraft.
Supporting information		Typical inspection items
<p>The Flight Manual needs to reflect the current status/configuration of the aircraft. When it does not, it may provide flight crew members with wrong information. This may lead to errors and/or to override limitations that could contribute to severe failure.</p>		<ol style="list-style-type: none"> 1. Check the conformity of the Flight Manual (FM), latest issue, with aircraft configuration, including modification status, (AD, SB, STC etc.). 2. Check: <ul style="list-style-type: none"> - the FM approval, revision control, Supplement to FM; - the impact of modification status on noise and weight & balance; - additional required manuals (QRH/FCOM/OM-B etc.); - FM limitations.
B.3	Mass & balance	Mass and balance data is required to make sure the aircraft is capable of operating within the approved envelope.
Supporting information		Typical inspection items
<p>The mass and balance report needs to reflect the actual configuration of the aircraft. When it does not, the aircraft might be operated outside the certified operating envelope.</p>		<ol style="list-style-type: none"> 1. Check that mass and balance report is valid, considering current configuration. 2. Make sure that modifications and repairs are taken into account in the report. 3. Check that equipment status is recorded on the mass and balance report. 4. Compare current mass and balance report with previous report for consistency.
B.4	Markings & placards	Markings and placards are defined in the individual aircraft type design. Some information may also be found in the TCDS, the Supplemental Type Certificates (STC), the FM, the AMM, the IPC, etc.
Supporting information		Typical inspection items
<p>Markings and placards on instruments, equipment, controls, etc. shall include such limitations or information as necessary for the direct attention of the crew during flight. Markings and placards or instructions shall</p>		<ol style="list-style-type: none"> 1. Check that the required markings and placards are installed on the aircraft, especially the emergency exit markings instructions and passenger information signs and placards. 2. Check that all installed placards are readable.

	<p>be provided to give any information that is essential to the ground handling in order to preclude the possibility of mistakes in ground servicing (e.g. towing, refuelling) that could pass unnoticed and that could jeopardise the safety of the aircraft in subsequent flights.</p> <p>Markings and placards or instructions shall be provided to give any information essential in the prevention of passenger injuries.</p> <p>National registration markings must be installed. They include registration, possible flag, fireproof registration plate.</p> <p>Product data plates must be installed.</p> <p>When markings and placards are missing, or unreadable, or not properly installed, mistakes or aircraft damages may occur and could subsequently contribute to a severe failure.</p>	<p>3. Check the Flight Manual versus the instruments. (General Aviation usually).</p> <p>4. Check registration markings, including Owner's fireproof nameplate.</p> <p>5. Check product data plates.</p> <p>Examples of markings & placards:</p> <ul style="list-style-type: none"> - door means of opening, - each compartment's weight/load limitation/placards stating limitation on contents, - passenger information signs, including no smoking signs, - emergency exit marking, - pressurised cabin warning, - calibration placards, - cockpit placards and instrument markings, - O² system information data, - accesses to the fuel tanks with flammability reduction means (CDCCL), - fuelling markings (fuel vent, fuel dip stick markings), - EWIS identification, - towing limit markings, - break-in markings, - inflate tyres with nitrogen, - RVSM + static markings.
<p>B.5</p>	<p>Operational requirements</p>	<p>Requirements for the type of operation are complied with (e.g. equipment, documents, approvals).</p>
<p>Supporting information</p>		<p>Typical inspection items</p>
<p>This includes all equipment required by the applicable operational code including DGCA requirements.</p> <p>In case of malfunction, it can create a hazardous situation. Especially emergency equipment needs attention during this inspection.</p>		<ol style="list-style-type: none"> 1. Check permits & approvals required for type of operation. 2. Check for the presence and serviceability of equipment required by operational approvals. 3. Check safety equipment, check that emergency equipment is readily accessible.
<p>B.6</p>	<p>Defect management</p>	<p>Defect management requires a system whereby information on faults, malfunctions, defects and other occurrences that cause or might cause adverse effects on the continuing airworthiness of the aircraft is captured. This system should be properly documented.</p> <p>It includes, amongst others, the MEL system, the CDL system and deferred defects management.</p>
<p>Supporting information</p>		<p>Typical inspection items</p>
<p>This KRE addresses the effectiveness of defect management, it should also consider defects found during the physical inspection.</p>		<ol style="list-style-type: none"> 1. Check that the deferred defects have been identified, recorded, and rectified/deferred in accordance with approved procedures and within approved time limits. 2. Check that operations outside published approved data have only been performed under special approval if any Sample on: <ol style="list-style-type: none"> a. TLB and hold item list, b. maintenance task cards, c. engine shop report, d. (major) component shop report, e. maintenance/repair/modification working party files after embodiment of modifications or repairs, f. occurrence reporting data,

		<p>g. communications between the user of maintenance data and the maintenance data author in case of inaccurate, incomplete, ambiguous procedures and practices.</p> <p>3. Check that the consequences of the deferral have been managed with Operation/Crew.</p> <p>4. Check that defects are being deferred in accordance with approved data (current revision of the MEL, CDL, aircraft maintenance programme).</p> <p>5. Compare physical location of parts/serial numbers with recorded locations to identify undocumented parts swaps for troubleshooting.</p>
<p>C.1</p>	<p>Aircraft Maintenance Programme</p>	<p>A document which describes the specific scheduled maintenance tasks and their frequency of completion, related standard maintenance practices and the associated procedures necessary for the safe operation of those aircraft to which it applies.</p>
<p>Supporting information</p>		<p>Typical inspection items</p>
<p>The Aircraft Maintenance Programme (AMP) is intended to include scheduled maintenance tasks, the associated procedures and standard maintenance practises. It also includes the reliability programme, when required.</p> <p>Tasks included in the maintenance programme can originate from:</p> <ul style="list-style-type: none"> - tasks for which compliance is mandatory: instructions specified in repetitive Airworthiness Directives (AD), or in the Airworthiness Limitations Section (ALS), which may include Certification Maintenance Requirements (CMRs). The ALS is included in the Instructions for Continuing Airworthiness (ICA) of a design approval holder; - tasks for which compliance is recommended: additional instructions specified in the Maintenance Review Board Report (MRBR), the Maintenance Planning Document (MPD), Service Bulletins (SB), or any other non-mandatory continuing airworthiness information issued by the design approval holder; - additional or alternative instructions proposed by the owner or the continuing airworthiness management organisation once approved in accordance with point M.A.302(d)(iii); <p>The AMP shall contain details, including frequency, of all maintenance to be carried out, including any specific tasks linked to the type and the specificity of operations.</p>		<p>Review of AMP contents:</p> <ol style="list-style-type: none"> 1. Check that the AMP properly reflects mandatory continuing airworthiness instructions (ALIs, CMRs (the latest source documents' revision. Sample check that tasks are implemented within approved compliance times and that no tasks have been omitted. 2. Check how recommended scheduled maintenance tasks (such as TBO intervals, recommended through Service Bulletins, Service Letters, etc..., the latest source documents' revision) are considered when updating the AMP. If applicable, check embodiment policy as required by M.A.301 point 7. 3. Check that the AMP properly reflects the maintenance tasks specified in repetitive ADs. 4. Check that the AMP properly reflects additional instructions for continuing airworthiness resulting from specific installed equipment or modifications embodied. 5. Check that the AMP properly reflects additional instructions for continuing airworthiness resulting from repairs embodied. 6. If applicable, check that the AMP properly reflects additional maintenance tasks required by specific approvals (e.g. RVSM, ETOPS, MNPS, B-RNAV). 7. Check for any additional scheduled maintenance measures required due to the use of the aircraft and the operational environment. 8. If applicable, check for proper identification of pilot-owner maintenance tasks and identification of the pilot-owner(s) or the alternative procedure described in AMC M.A.803 point 3. 9. Check approval status of additional or alternative instructions (M.A.302(d)(iii)).

	<p>10. Check if a reliability programme is present and active when required.</p> <p>Review of aircraft compliance with an AMP:</p> <p>11. Check if the AMP used is valid for the aircraft, is approved and is amended correctly.</p> <p>12. Check if tasks are performed within the value(s) quoted in AMP and the source documents</p> <p>13. Sample check that no task has been omitted without justifications accepted by DGCA.</p> <p>14. Check the reporting of performed scheduled maintenance into the records system.</p> <p>14. Analyse the effectiveness of the AMP and reliability by reviewing the unscheduled tasks</p>
C.2	<p>Component control</p> <p>The component control should consider a twofold objective for components maintenance:</p> <ul style="list-style-type: none"> - maintenance for which compliance is mandatory. - maintenance for which compliance is recommended.
Supporting information	Typical inspection items
<p>Depending on each maintenance task, accomplishment is scheduled or unscheduled. Refer to KRE C.1 'Aircraft Maintenance Programme'.</p> <p>Components affected by scheduled maintenance:</p> <p>Life-limited components are of two types:</p> <ul style="list-style-type: none"> - components subject to a certified life limit; - components subject to a service life limit. <p>Components with a certified life-limit must be permanently removed from service when, or before, their operating limitation is exceeded. The life limitation is controlled at the component level (in opposition to aircraft level).</p> <p>Components subject to a service life ('time controlled components') include the following:</p> <ul style="list-style-type: none"> - components for which removal and restoration are scheduled, regardless of their level of failure resistance. Reference is made to hard time components: They are subject to periodic maintenance dealing with a deterioration that is assumed to be predictable (the overall reliability invariably decreases with age): Failure is less likely to occur before restoration is necessary; 	<p>1. Check that the mandatory maintenance tasks are identified as such and managed separately from recommendations.</p> <p>2. Sample check installed components Part Number and Serial Number against aircraft records:</p> <ul style="list-style-type: none"> a. Correct Part Number and Serial Number installed. b. Correct authorised release document available. <p>3. Check the current status of time-controlled components, with due consideration to deferred items. They must identify:</p> <ul style="list-style-type: none"> a. The affected components (Part Number and Serial Number). b. For components subject to a repetitive task: the task description and reference, the applicable threshold/interval, the last accomplishment data (date, the component's total accumulated life in Hours, Cycles, Landings, Calendar time, as necessary) and the next planned accomplishment data. c. For components subject to an unscheduled task: the task description and reference, the accomplishment data (date, the component's total accumulated life in Hours, Cycles, Landings, Calendar time, as necessary). Pay attention to ETOPS and CDCCL components. <p>4. Check current status of life-limited components. This status can be requested upon each transfer throughout the operating life of the part:</p> <ul style="list-style-type: none"> a. The life limitation, the component's total accumulated life, and the life remaining before the component's life limitation is reached (indicating Hours, Cycles, Landings, Calendar time, as necessary).

<p>- components for which failure resistance can reduce and drop below a defined level: Inspections are scheduled to detect potential failures. Reference is made to 'On-condition' components: They are called such because components, which are inspected, are left in service (no further maintenance action taken) on the condition that they continue to meet specified performance standards.</p> <p>Note:</p> <ol style="list-style-type: none"> 1. Restoration tasks for hard time components are not the same as 'On-condition' tasks, since they do not monitor gradual deterioration, but are primarily done to ensure the item may continue to remain in service until the next planned restoration. 2. Components subject to 'condition-monitoring' are permitted to remain in service without preventive maintenance until functional failure occurs. Reference is made to 'fly-to-failure'. Such components are subject to unscheduled tasks. 	<p>b. If relevant for the determination of the remaining life, a full installation history indicating the number of hours, cycles or calendar time relevant to each installation on these different types of aircraft/engine.</p> <ol style="list-style-type: none"> 5. Check if the aircraft maintenance programme and reliability programme results impact the component control. 6. Check that life-limited and time controlled components are correctly marked during a physical inspection. 	
<p>C.3</p>	<p>Repairs</p>	<p>All repairs and unrepaired damage/degradations need to comply with the instructions of the appropriate maintenance manual (e.g. the SRM, the AMM, the CMM). With the exception of repairs contained in the certification specifications. All repairs not defined in the appropriate maintenance manual need to be appropriately approved and recorded with the reference to the approval. This includes any damage or repairs to the aircraft/engine(s)/propeller(s), and their components.</p>
<p>Supporting information</p>		<p>Typical inspection items</p>
<p>The data substantiating repairs should include, but is not limited to, the damage assessment, the rationale for the classification of the repair, the evidence the repair has been designed in accordance with approved data, i.e. by reference to the appropriate manual, procedure or to a CAR 21 repair design approval, the drawings/material and accomplishment instructions, as well as the maintenance and operational instructions.</p> <p>'Repair status' means a list of:</p> <ul style="list-style-type: none"> - the repairs embodied since the original delivery of (and still existent upon) the aircraft/engine/propeller/component; and - the un-repaired damage/degradations. <p>It also includes, either directly or by reference to supporting documentation (i.e. repair files), the substantiating data supporting compliance with the applicable</p>		<ol style="list-style-type: none"> 1. Sample the repair status to confirm it appropriately traces repairs and un-repaired damage/deteriorations. 2. Sample repair files (at least one file for each type of repaired items) to check that repaired and unrepaired damage/deterioration have been assessed against the latest published approved repair data. 3. Check that repair instructions detailed in the repair file comply with published approved repair data. 4. Check that major repairs resulting in new or amended airworthiness limitations and associated mandatory instructions (including ageing aircraft programme) have been included in the aircraft maintenance programme. 5. Check that new or amended maintenance instructions resulting from repairs have been considered for inclusion in the aircraft maintenance programme. 6. Compare the repair status and the physical status of the repaired aircraft/engine(s)/propeller(s), and their repaired components (physical survey) in order to confirm the

<p>airworthiness requirements. The repair status should identify the repair file reference, the repair classification, the repaired item (i.e. aircraft/engine/propeller/component, and a precise location if necessary), and the date and total life in FH/FC accumulated by the item at the time of repair or finding of the un-repaired damage/degradations. Cross-reference to the aircraft maintenance programme should also be included, as necessary. Depending on the product EASA Decisions on acceptance of certification findings exist and should be taken into account for the determination of acceptable data for repairs.</p>	<p>accuracy of the repair status. Sample embodied repairs to check their conformity against the repair files (physical survey).</p>
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C.4	Records	Continuing Airworthiness records are defined in M.A.305 and M.A.306 and related AMCs.
Supporting information		Typical inspection items
<p>Retention/Transfer of the records is required so that the status of the aircraft and its components can be readily established at any time. Task accomplishment is scheduled (one time or periodically), or unscheduled (e.g. following an event). Aircraft continuing airworthiness records (refer to logbooks, technical logbooks, component log cards or task cards) shall provide the status with regard to:</p> <ul style="list-style-type: none"> - scheduled tasks: -one-time: life-limited parts status, modification status, repair status. -repetitive: maintenance programme status. - unscheduled tasks. 		<p>1. Check the aircraft continuing airworthiness record system: M.A.305 and M.A.306, as applicable, require that certain records are kept for defined periods.</p> <p>Pay attention to the continuity, integrity and traceability of records:</p> <ul style="list-style-type: none"> a. integrity: Check the data recorded is legible, b. continuity: Check that records are available for the applicable retention period, c. traceability: Check the link between operator/CAMO and maintenance documentation, traceability to approved data, traceability to appropriate release documents, etc. <p>2. If applicable, make sure that the tech log system is used correctly, including:</p> <ul style="list-style-type: none"> a. current aircraft release to service (including the maintenance statement) issued and b. pre-flight inspections signed-off by authorised persons; <p>3. Check that any maintenance required following abnormal operation/event (such as overspeed, overweight operation, hard landing, excessive turbulence, and operation outside of Flight Manual limitations) has been performed, as applicable.</p>

Appendix IV to AMC M.A.604 Maintenance Organisation Manual

1. Purpose

The maintenance organisation manual is the reference for all the work carried out by the approved maintenance organisation. It should contain all the means established by the organisation to ensure compliance with CAR-M according to the extent of approval and the privileges granted to the organisation.

The maintenance organisation manual should define precisely the work that the approved maintenance organisation is authorised to carry out and the subcontracted work. It should detail the resources used by the organisation, its structure and its procedures.

2. Content

A typical Maintenance Organisation Manual for a small organisation (less than 10 maintenance staff) should be designed to be used directly on a day to day basis. The working documents and lists should be directly included into the manual. It should contain the following:

Part A — General

- **Table of content**
- **List of effective pages**
- **Record of amendments**
- **Amendment procedure**
 - Drafting
 - Amendments requiring direct approval by DGCA
 - Approval
- **Distribution**
 - Name or title of each person holding a copy of the manual
- **Accountable manager statement**
 - Approval of the manual
 - Statement that the maintenance organisation manual and any incorporated document identified therein reflect the organisation's means of compliance with CAR-M
 - Commitment to work according to the manual
 - Commitment to amend the manual when necessary

Part B — Description

- **Organisation's scope of work**
 - Description of the work carried out by the organisation (type of product, type of work) and subcontracted work
 - Identification of the level of work which can be performed at each facility.
- **General presentation of the organisation**
 - Legal name and social status
- **Name and title of management personnel**
 - Accountable manager
 - Senior managers
 - Duties and responsibilities
- **Organisation chart**
- **Certifying staff**
 - Minimum qualification and experience
 - List of authorised certifying staff their scope of qualification and the personal authorisation reference
 -
- **Personnel**
 - Technical personnel (number, qualifications and experience)
 - Administrative personnel (number)
- **General description of the facility**
 - Geographical location (map)
 - Plan of hangars
 - Specialised workshops
 - Office accommodation
 - Stores
 - Availability of all leased facilities.
- **Tools, equipment and material**
 - List of tools, equipment and material used (including access to tools used on occasional basis)
 - Test apparatus
 - Calibration frequencies
- **Maintenance data**
 - List of maintenance data used in accordance with M.A.402, and appropriate amendment subscription information (including access to data used on occasional basis).

Part C — General Procedures

- **Organisational review**

- Purpose (to insure that the approved maintenance organisation continues to meet the requirements of CAR-M)
- Responsibility
- Organisation, frequency, scope and content (including processing of findings)
- Planning and performance of the review
- Organisational review checklist and forms
- Processing and correction of review findings
- Reporting
- Review of subcontracted work

- **Training**

- Description of the methods used to ensure compliance with the personnel qualification and training requirements (certifying staff training, specialised training)
- Description of the personnel records to be retained

- **Sub contracting of specialised services**

- Selection criteria and control
- Nature of sub contracted work
- List of sub contractors
- Nature of arrangements
- Assignment of responsibilities for the certification of the work performed

- **One time authorisations**

- Maintenance checks
- Certifying staff

Part D — Working Procedures

- **Work order acceptance**

- **Preparation and issue of the work package**

- Control of the work order
- Preparation of the planned work
- Work package content (copy of forms, work cards, procedure for their use, distribution)
- Responsibilities and signatures needed for the authorisation of the work

- **Logistics**
 - Persons/functions involved
 - Criteria for choosing suppliers
 - Procedures used for incoming inspection and storage of parts, tools and materials
 - Copy of forms and procedure for their use and distribution
- **Execution**
 - Persons/functions involved and respective role
 - Documentation (work package and work cards)
 - Copy of forms and procedure for their use and distribution
 - Use of work cards or manufacturer's documentation
 - Procedures for accepting components from stores including eligibility check
 - Procedures for returning unserviceable components to stores
- **Release to Service – Certifying staff**
 - Authorised certifying staff functions and responsibilities.
- **Release to Service - Supervision**
 - Detailed description of the system used to ensure that all maintenance tasks, applicable to the work requested of the approved maintenance organisation, have been completed as required.
 - Supervision content
 - Copy of forms and procedure for their use and distribution
 - Control of the work package
- **Release to Service – Certificate of release to service**
 - Procedure for signing the CRS (including preliminary actions)
 - Certificate of release to service wording and standardised form
 - Completion of the aircraft continuing airworthiness record system
 - Completion of CA Form 1
 - Incomplete maintenance
 - Check flight authorisation
 - Copy of CRS and CA Form 1
- **Records**
- **Special procedures**

Such as specialised tasks, disposal of unsalvageable components, re-certification of parts not having a CA Form 1, etc.

- **Occurrence reporting**
 - Occurrences to be reported
 - Timeframe of reports
 - Information to be reported
 - Recipients
- **Management of indirect approval of the manual**
 - Amendments content eligible for indirect approval
 - Responsibility
 - Traceability
 - Information to DGCA
 - Final validation

Part E – Appendices

- **Sample of all documents used.**
- **List of maintenance locations.**
- **List of CAR 145 or M.A. Subpart F organisations.**
- **List of Sub contracting of specialised services**

3. Approval

DGCA should approve the manual in writing. This will normally be done by approving a list of effective pages.

Minor amendments, or amendments to a large capability list, can be approved indirectly, through a procedure approved by DGCA.

4. Continuous compliance with CAR-M

When a maintenance organisation manual no longer meets the requirements of this CAR-M, whether through a change in CAR-M, a change in the organisation or its activities, or through an inadequacy shown to exist by verification inspections conducted under the organisational review, or any other reason that affects the manuals conformity to requirements, the approved maintenance organisation is responsible to prepare and have approved an amendment to its manual.

5. Distribution

The manual describes how the organisation works therefore the manual or relevant parts thereof need to be distributed to all concerned staff in the organisation and contracted organisations.

**Appendix V to AMC M.A.704
Continuing Airworthiness Management Organisation Exposition**

CONTINUING AIRWORTHINESS MANAGEMENT EXPOSITION

	TABLE OF CONTENT
Part 0	General Organisation
0.1	Corporate commitment by the accountable manager.
0.2	General information.
0.3	Management personnel.
0.4	Management organisation chart.
0.5	Notification procedure to DGCA regarding changes to the organisation's activities / approval / location / personnel.
0.6	Exposition amendment procedures.
Part 1	Continuing Airworthiness Management Procedures
1.1	Aircraft technical log utilisation and MEL application (commercial air transport). Aircraft continuing airworthiness record system utilisation (non commercial air transport).
1.2	Aircraft maintenance programmes – development amendment and approval.
1.3	Time and continuing airworthiness records, responsibilities, retention, access.
1.4	Accomplishment and control of airworthiness directives.
1.5	Analysis of the effectiveness of the maintenance programme(s).
1.6	Non mandatory modification embodiment policy.
1.7	Major modification standards.
1.8	Defect reports.
1.9	Engineering activity.
1.10	Reliability programmes.
1.11	Pre-flight inspections.
1.12	Aircraft weighing.
1.13	Check flight procedures.
Part 2	Quality System
2.1	Continuing airworthiness quality policy, plan and audits procedure.
2.2	Monitoring of continuing airworthiness management activities.
2.3	Monitoring of the effectiveness of the maintenance programme(s).
2.4	Monitoring that all maintenance is carried out by an appropriate maintenance Organisation
2.5	Monitoring that all contracted maintenance is carried out in accordance with the contract, including sub-contractors used by the maintenance contractor.
2.6	Quality audit personnel.

Part 3	Contracted Maintenance
3.1	Maintenance contractor selection procedure.
3.2	Quality audit of aircraft.
Part 4	Airworthiness Review Procedures
4.1	Airworthiness review staff.
4.2	Review of aircraft records.
4.3	Physical inspection.
4.4	Additional procedures for recommendations to DGCA for the import of aircraft
4.5	Recommendations to DGCA for the issue of ARC.
4.6	Issuance of ARC.
4.7	Airworthiness review records, responsibilities, retention and access.
Part 5	Appendices
5.1	Sample documents.
5.2	List of airworthiness review staff.
5.3	List of sub-contractors as per AMC M.A.201 (h) 2 and M.A.711 (a) 3.
5.4	List of approved maintenance organisations contracted.
5.5	Copy of contracts for sub-contracted work [appendix II to AMC M.A.201(h) 2].
5.6	Copy of contracts with approved maintenance organisations.

LIST OF EFFECTIVE PAGES

Page	Revision
1	Original
2	Original

Page	Revision
3	Original
4	Original

Page	Revision
5	Original
....

DISTRIBUTION LIST

(The document should include a distribution list to ensure proper distribution of the manual and to demonstrate to DGCA that all personnel involved in continuing airworthiness has access to the relevant information. This does not mean that all personnel have to be in receipt of a manual but that a reasonable amount of manuals are distributed within the organisation(s) so that the concerned personnel may have quick and easy access to this manual.

Accordingly, the continuing airworthiness management exposition should be distributed to:

- 1** *the operator's or the organisation's management personnel and any person at a lower level as necessary; and,*
- 2** *the CAR-145 or M.A. Subpart F contracted maintenance organisation(s) ; and,*
- 3** *DGCA*

PART 0 GENERAL ORGANISATION

0.1 Corporate commitment by the accountable manager

(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 the M.A. Subpart G approval of XXX under CAR-M is based.

These procedures are approved by the undersigned and must be complied with, as applicable; in order to ensure that all the continuing airworthiness activities including maintenance for aircraft managed by XXX is 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 by DGCA from time to time where these new or amended regulations are in conflict with these procedures.

DGCA will approve this organisation whilst DGCA is satisfied that the procedures are being followed. 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, as applicable, if DGCA has evidence that the procedures are not followed and the standards not upheld.

In the case of commercial air transport, suspension or revocation of the approval of the CAR- M Subpart G continuing airworthiness management approval would invalidate the AOC.

0.2 General Information

a) Brief description of the organisation

(This paragraph should describe broadly how the whole organisation [i.e. including the whole operator in the case of commercial air transport or the whole organisation when other approvals are held] is organised under the management of the accountable manager, and should refer to the organisation charts of paragraph 0.4.)

b) Relationship with other organisations

(This paragraph may not be applicable to every organisation.)

(1) Subsidiaries / Mother Company

(For clarity purpose, where the organisation belongs to a group, this paragraph should explain the specific relationship the organisation may have with other members of that group - e.g. links between XXX Airlines, XXX Finance, XXX Leasing, XXX Maintenance, etc...)

(2) Consortiums

(Where the organisation belongs to a consortium, it should be indicated here. The other members of the consortium should be specified, as well as the scope of organisation of the consortium [e.g. operations, maintenance, design (modifications and repairs), production etc...]. The reason for specifying this is that consortium maintenance may be controlled through specific contracts and through consortium's policy and/or procedures manuals that might unintentionally override the maintenance contracts. In addition, in respect of international consortiums, the respective competent authorities should be consulted and their agreement to the arrangement clearly stated. This paragraph should then make reference to any consortium's continuing airworthiness related manual or procedure and to any DGCA agreement that would apply.)

c) Aircraft managed – Fleet composition

(This paragraph should quote the aircraft types and the number of aircraft of each type. The following is given as an example :)

XXX manages, as of 28 November 2003, the following:

- 3 B737-300
- 3 B737-400
- 1 A 320-200

For commercial air transport, the fleet composition reference with the aircraft registrations is given by XXX Airlines' current AOC (or else where e.g. in the Operation Manual, by agreement of DGCA)

(Depending on the number of aircraft, this paragraph may be updated as follows:

1. *the paragraph is revised each time an aircraft is removed from or added in the list.*
2. *the paragraph is revised each time a type of aircraft or a significant number of aircraft is removed from or added to the list. In that case the paragraph should explain where the current list of aircraft managed is available for consultation.)*

d) Type of operation

(This paragraph should give broad information on the type of operations such as: commercial, aerial work, non commercial, long haul/short haul/regional, scheduled/charter, regions/countries/continents flown, etc)

0.3 Management personnel

a) Accountable manager

(This paragraph should address the duties and responsibilities of the accountable manager as far as CAR M.A. subpart G is concerned and demonstrate that he has corporate authority for ensuring that all continuing airworthiness activities can be financed and carried out to the required standard.)

b) Nominated post holder for continuing airworthiness (for commercial air transport)

(This paragraph should:- Emphasise that the nominated post holder for continuing airworthiness is responsible to ensure that all maintenance is carried out on time to an approved standard.

- Describe the extent of his authority as regards his CAR-M responsibility for continuing airworthiness.

This paragraph is not necessary for organisations not holding an AOC)

c) Continuing airworthiness coordination

(This paragraph should list the job functions that constitute the "group of persons" as required by M.A.706(c) in enough detail so as to show that all the continuing airworthiness responsibilities as described in CAR-M are covered by the persons that constitute that group. In the case of small operators, where the "Nominated Post holder for continuing airworthiness constitutes himself the "group of persons", this paragraph may be merged with the previous one.)

d) Duties and responsibilities

(This paragraph should further develop the duties and responsibilities of:

- the personnel listed in paragraphs c): "Continuing airworthiness coordination",
- the quality manager, as regards the quality monitoring of the maintenance system [which includes the approved maintenance organisation(s)]

e) Manpower resources and training policy

(1) Manpower resources

(This paragraph should give broad figures to show that the number of people dedicated to the performance of the approved continuing airworthiness activity is adequate. It is not necessary to give the detailed number of employees of the whole company but only the number of those involved in continuing airworthiness. This could be presented as follows:)

As of 28 November 2003, the number of employees dedicated to the performance of the continuing airworthiness management system is the following:

	Full Time	Part Time in equivalent full time
Quality monitoring	AA	aa = AA'
Continuing airworthiness management	BB	bb = BB'
<i>(Detailed information about the management group of persons)</i>	BB1	bb1 = BB1'
	BB2	bb2 = BB2'
Other...	CC	cc =CC'
Total	TT	tt = TT'
Total Man hours	TT + TT'	

(Note: According to the size and complexity of the organisation, this table may be further developed or simplified)

(2) Training policy

(This paragraph should show that the training and qualification standards for the personnel quoted above are consistent with the size and complexity of the organisation. It should also explain how the need for recurrent training is assessed and how the training recording and follow-up is performed)

0.4 Management Organisation Charts

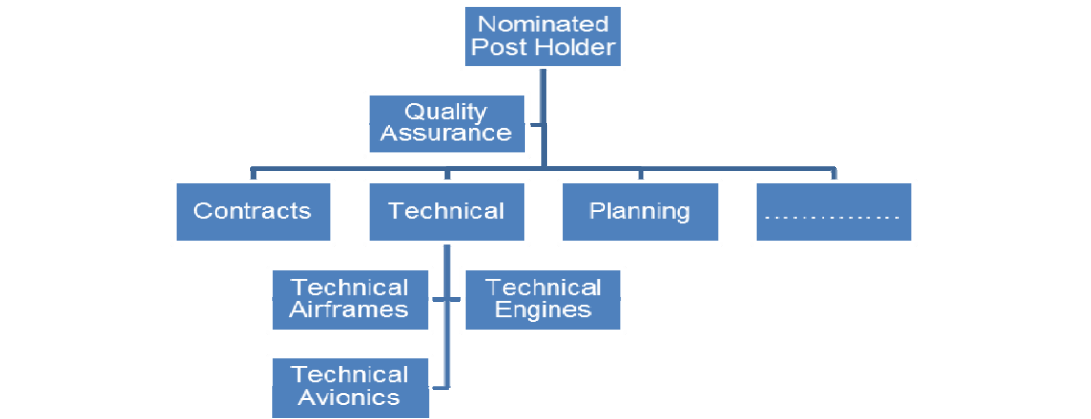
a) General Organisation Chart

This flow chart should provide a comprehensive understanding of the whole company's organisation. For example in the case of an AOC holder:



b) Continuing airworthiness management organisation chart

This flow chart should give further details on the continuing airworthiness Management system, and should clearly show the independence of the quality monitoring system, including the links between the quality assurance department and the other departments (see example below). This flow chart may be combined with the one above or subdivided as necessary, depending on the size and the complexity of the organisation. For example in the case of an AOC holder:



0.5 Notification procedure to DGCA regarding changes to the organisation's activities / approval / location / personnel

(This paragraph should explain in which occasion the company should inform DGCA prior to incorporating proposed changes; for instance:

The accountable manager (or any delegated person such as the engineering director or the quality manager) will notify to DGCA any change concerning:

- 1.1 the company's name and location(s)*
- 1.2 the group of person as specified in paragraph 0.3.c)*
- 1.3 operations, procedures and technical arrangements, as far as they may affect the approval.*

XXX will not incorporate such change until the change have been assessed and approved by DGCA.)

0.6 Exposition amendment procedure

(This paragraph should explain who is responsible for the amendment of the exposition and submission to DGCA for approval. This may include, if agreed by DGCA the possibility for the approved organisation to approve internally minor changes that have no impact on the approval held. The paragraph should then specify what types of changes are considered as minor and major and what the approval procedures for both cases are.)

PART 1

CONTINUING AIRWORTHINESS MANAGEMENT PROCEDURES

1.1 Aircraft technical log utilisation and MEL application

or

1.1 Aircraft continuing airworthiness record system utilisation

a) Aircraft technical log and/or continuing airworthiness record system

(1) General

(It may be useful to remind, in this introduction paragraph, the purpose of the aircraft technical log system and/or continuing airworthiness record system, with special care to the options of M.A.305 and M.A.306 For that purpose, paragraphs of M.A.305 and M.A.306 may be quoted or further explained.)

(2) Instructions for use

(This paragraph should provide instructions for using the aircraft technical log and/or continuing airworthiness record system. It should insist on the respective responsibilities of the maintenance personnel and operating crew. Samples of the technical log and/or continuing airworthiness record system should be included in Part 5 "Appendices" in order to provide enough detailed instructions.)

(3) Aircraft technical log approval (For commercial air transport)

(This paragraph should explain who is responsible for submitting the aircraft technical log any subsequent amendment to DGCA for approval and what is the procedure to be followed)

b) M.E.L. application

(Although the MEL is a document that is normally not controlled by the continuing airworthiness management system, and that the decision of whether accepting or not a MEL tolerance normally remains the responsibility of the operating crew, this paragraph should explain in sufficient detail the MEL application procedure, because the MEL is a tool that the personnel involved in maintenance have to be familiar with in order to ensure proper and efficient communication with the crew in case of a defect rectification to be deferred.)

(This paragraph does not apply to those types of aircraft that do not have an MEL or are not used for commercial air transport and that are not required to have one.)

(1) General

(This paragraph should explain broadly what a MEL document is. The information could be extracted from the aircraft flight manual.)

(2) MEL categories

(Where an owner/operator uses a classification system placing a time constraint on the rectification of such defect, it should be explained here what are the general principles of such a system. It is essential for the personnel involved in maintenance to be familiar with it for the management of MEL's deferred defect rectification.)

(3) Application

(This paragraph should explain how the maintenance personnel identify a MEL limitation to the crew. This should refer to the technical log procedures)

(4) Acceptance by the crew (For commercial air transport)

(This paragraph should explain how the crew notifies his acceptance or non acceptance of the MEL deferment in the technical log)

(5) Management of the MEL time limits

(After a technical limitation is accepted by the crew, the defect must be rectified within the time limit specified in the MEL. There should be a system to ensure that the defect will actually be corrected before that limit. This system could be the aircraft technical log for those [small] operators that use it as a planning document, or a specific follow-up system, in other cases, where control of the maintenance time limit is ensured by another means such as data processed planning systems.)

(6) MEL Time Limitation Overrun

(DGCA may grant the owner/operator to overrun MEL time limitation under specified conditions. Where applicable this paragraph should describe the specific duties and responsibilities for controlling these extensions.)

1.2 Aircraft maintenance programmes - development and amendment**a) General**

(This introductory paragraph should remind that the purpose of a maintenance programme is to provide maintenance planning instructions necessary for the safe operation of the aircraft.)

b) Content

(This paragraph should explain what is [are] the format[s] of the company's aircraft maintenance programme[s]. Appendix I to AMC M.A.302 (a) and M.B.301(d) should be used as a guideline to develop this paragraph.)

c) Development**(1) Sources**

(This paragraph should explain what are the sources [MRB, MPD, Maintenance Manual, etc.] used for the development of an aircraft maintenance programme.)

(2) Responsibilities

(This paragraph should explain who is responsible for the development of an aircraft maintenance programme)

(3) Manual amendments

(This paragraph should demonstrate that there is a system for ensuring the continuing validity of the aircraft maintenance programme. Particularly, it should show how any relevant information is used to update the aircraft maintenance programme. This should include, as applicable, MRB report revisions, consequences of modifications, manufacturers and DGCA recommendations, in service experience, and reliability

reports.)

(4) Acceptance by the authority

(This paragraph should explain who is responsible for the submission of the maintenance programme to DGCA and what the procedure to follow is. This should in particular address the issue of DGCA approval for variation to maintenance periods. This may include, if agreed by DGCA the possibility for the approved organisation to approve internally certain changes. The paragraph should then specify what types of changes are concerned and what the approval procedures are.)

1.3 Time and continuing airworthiness records, responsibilities, retention, access

a) Hours and cycles recording

(The recording of flight hours and cycles is essential for the planning of maintenance tasks. This paragraph should explain how the continuing airworthiness management organisation has access to the current flight hours and cycle information and how it is processed through the organisation.)

b) Records

(This paragraph should give in detail the type of company documents that are required to be recorded and what are the recording period requirements for each of them. This can be provided by a table or series of tables that would include the following:

- *Family of document [if necessary],*
- *Name of document,*
- *Retention period,*
- *Responsible person for retention,*
- *Place of retention,)*

c) Preservation of records

(This paragraph should set out the means provided to protect the records from fire, floods, etc.. as well as the specific procedures in place to guarantee that the records will not be altered during the retention period [especially for the computer record].)

d) Transfer of continuing airworthiness records

(This paragraph should set out the procedure for the transfer of records, in case of purchase/lease-in, sale/lease-out and transfer to another organisation of an aircraft. In particular, it should specify which records have to be transferred and who is responsible for the coordination [if necessary] of the transfer.)

1.4 Accomplishment and control of Airworthiness Directives

(This paragraph should demonstrate that there is a comprehensive system for the management of airworthiness directives. This paragraph may for instance include the following Sub-paragraphs:)

a) Airworthiness directive information

(This paragraph should explain what the AD information sources are and who receives them in the company. Where available, redundant sources [e.g. DGCA+manufacturer or association] may be useful.)

b) Airworthiness directive decision

(This paragraph should explain how and by whom the AD information is analysed and what kind of information is provided to the contracted maintenance organisations in order to plan and to perform the airworthiness directive. This should as necessary include a specific procedure for emergency airworthiness directive management)

c) Airworthiness directive control

(This paragraph should specify how the organisation manages to ensure that all the applicable airworthiness directives are performed and that they are performed on time. This should include a close loop system that allows verifying that for each new or revised airworthiness directive and for each aircraft:

- *the AD is not applicable or,*
- *if the AD is applicable:*
 - *the Airworthiness Directive is not yet performed but the time limit is not overdue,*
 - *the Airworthiness Directive is performed, and any repetitive inspection are identified and performed.*

This may be a continuous process or may be based on scheduled reviews.)

1.5 Analysis of the effectiveness of the maintenance programme

(this paragraph should show what tools are used in order to analyse the efficiency of the maintenance programme, such as:

- *PIREPS,*
- *air turn backs*
- *spare consumption,*
- *repetitive technical occurrence and defect,*
- *technical delays analysis [through statistics if relevant],*
- *technical incidents analysis [through statistics if relevant], -etc...*

The paragraph should also indicate by whom and how these data are analysed, what is the decision process to take action and what kind of action could be taken. This may include:

- *amendment of the maintenance programme,*
- *amendment of maintenance or operational procedures,*
- *etc..)*

1.6 Non-mandatory modification embodiment policy

(This paragraph should specify how the non-mandatory modification information are processed through the organisation, who is responsible for their assessment against the operator's/owner's own need and operational experience, what are the main criteria for decision and who takes the decision of implementing [or not] a non-mandatory modification)

1.7 Major repair modification standards

(This paragraph should set out a procedure for the assessment of the approval status of any major modification before embodiment. This will include the assessment of the need of an Agency or design organisation approval. It should also identify the type of approval required, and the procedure to follow to have a modification approved by DGCA or design organisation)

1.8 Defect reports

a) Analysis

(This paragraph should explain how the defect reports provided by the contracted maintenance organisations are processed by the continuing airworthiness management organisation. Analysis should be conducted in order to give elements to activities such as maintenance programme evolution and non mandatory modification policy.)

b) Liaison with manufacturers and regulatory authorities

(Where a defect report shows that such defect is likely to occur to other aircraft, a liaison should be established with the manufacturer and the certification DGCA, so that they may take all the necessary action.)

c) Deferred defect policy

(Defects such as cracks and structural defect are not addressed in the MEL and CDL. However, it may be necessary in certain cases to defer the rectification of a defect. This paragraph should establish the procedure to be followed in order to be sure that the deferment of any defect will not lead to any safety concern. This will include appropriate liaison with the manufacturer.)

1.9 Engineering activity

(Where applicable, this paragraph should expose the scope of the organisation's engineering activity in terms of approval of modification and repairs. It should set out a procedure for developing and submitting a modification/repair design for approval to DGCA and include reference to the supporting documentation and forms used. It should identify the person in charge of accepting the design before submission to the DGCA.

Where the organisation has a DOA capability under CAR 21, it should be indicated here and the related manuals should be referred to.)

1.10 Reliability programmes

(This paragraph should explain appropriately the management of a reliability programme. It should at least address the following:

- extent and scope of the operator's reliability programmes,*
- specific organisational structure, duties and responsibilities,*
- establishment of reliability data,*
- analysis of the reliability data,*
- corrective action system (maintenance programme amendment),*
- scheduled reviews (reliability meetings, the participation of DGCA.)*

(This paragraph may be, where necessary, subdivided as follows:)

- a) Airframe
- b) Propulsion
- c) Component

1.11 Pre-flight inspections

(This paragraph should show how the scope and definition of pre-flight inspection, that are usually performed by the operating crew, is kept consistent with the scope of the maintenance performed by the contracted maintenance organisations. It should show how the evolution of the pre-flight inspection content and the maintenance programme are concurrent, each time necessary.)

(The following paragraphs are self explanatory. Although these activities are normally not performed by continuing airworthiness personnel, these paragraphs have been placed here in order to ensure that the related procedures are consistent with the continuing airworthiness activity procedures.)

- a) Preparation of aircraft for flight
- b) Sub-contracted ground handling function
- c) Security of Cargo and Baggage loading
- d) Control of refueling, Quantity/Quality
- e) Control of snow, ice, residues from de-icing or anti-icing operations, dust and sand contamination to an approved standard.

1.12 Aircraft weighing

(This paragraph should state in which occasion an aircraft has to be weighed [for instance after a major modification because of weight and balance operational requirements, etc.] who performs it, according to which procedure, who calculates the new weight and balance and how the result is processed into the organisation.)

1.13 Check flight procedures

(The criteria for performing a check flight are normally included in the aircraft maintenance programme. This paragraph should explain how the check flight procedure is established in order to meet its intended purpose [for instance after a heavy maintenance check, after engine or flight control removal installation, etc.], and the release procedures to authorise such a check flight.)

PART 2

QUALITY SYSTEM

2.1 Continuing airworthiness quality policy, plan and audits procedure

a) Continuing airworthiness quality policy

(This paragraph should include a formal Quality Policy statement; that is a commitment on what the Quality System is intended to achieve. It should include at the minimum monitoring compliance with CAR- M and any additional standards specified by the organisation.)

b) Quality plan

(This paragraph should show how the quality plan is established. The quality plan will consist of a quality audit and sampling schedule that should cover all the areas specific to CAR M in a definite period of time. However, the scheduling process should also be dynamic and allow for special evaluations when trends or concerns are identified. In case of sub-contracting, this paragraph should also address the planning of the auditing of subcontractors at the same frequency as the rest of the organisation.)

c) Quality audit procedure

(The quality audit is a key element of the quality system. Therefore, the quality audit procedure should be sufficiently detailed to address all the steps of an audit, from the preparation to the conclusion, show the audit report format [e.g. by ref. to paragraph 5.1 "sample of document"], and explain the rules for the distribution of audits reports in the organisation [e.g.: involvement of the Quality Manager, Accountable Manager, Nominated Post holder, etc...].)

d) Quality audit remedial action procedure

(This paragraph should explain what system is put in place in order to ensure that the corrective actions are implemented on time and that the result of the corrective action meets the intended purpose. For instance, where this system consists in periodical corrective actions review, instructions should be given how such reviews should be conducted and what should be evaluated.)

2.2 Monitoring of continuing airworthiness management activities

(This paragraph should set out a procedure to periodically review the activities of the maintenance management personnel and how they fulfil their responsibilities, as defined in Part 0.)

2.3 Monitoring of the effectiveness of the maintenance programme(s)

(This paragraph should set out a procedure to periodically review that the effectiveness of the maintenance programme is actually analysed as defined in Part 1.)

2.4 Monitoring that all maintenance is carried out by an appropriate maintenance organisation

(This paragraph should set out a procedure to periodically review that the approval of the contracted maintenance organisations are relevant for the maintenance being performed on the operator's fleet. This may include feed back information from any

contracted organisation on any actual or contemplated amendment, in order to ensure that the maintenance system remains valid and to anticipate any necessary change in the maintenance agreements.

If necessary, the procedure may be subdivided as follows:

- a. Aircraft maintenance*
- b. Engines*
- c. Components*

2.5 Monitoring that all contracted maintenance is carried out in accordance with the contract, including sub-contractors used by the maintenance contractor

(This paragraph should set out a procedure to periodically review that the continuing airworthiness management personnel are satisfied that all contracted maintenance is carried out in accordance with the contract. This may include a procedure to ensure that the system allows all the personnel involved in the contract [including the contractors and his subcontractors] to be acquainted with its terms and that, for any contract amendment, relevant information is dispatched in the organisation and at the contractor.)

2.6 Quality audit personnel

(This paragraph should establish the required training and qualification standards of auditors. Where persons act as a part time auditor, it should be emphasized that this person must not be directly involved in the activity he/she audits.)

PART 3

CONTRACTED MAINTENANCE

3.1 Maintenance contractor selection procedure

(This paragraph should explain how a maintenance contractor is selected by the continuing airworthiness management organisation. Selection should not be limited to the verification that the contractor is appropriately approved for the type of aircraft, but also that the contractor has the industrial capacity to undertake the required maintenance. This selection procedure should preferably include a contract review process in order to insure that:

- the contract is comprehensive and that no gap or unclear area remains,*
- every one involved in the contract [both at the continuing airworthiness management organisation and at the maintenance contractor] agrees with the terms of the contract and fully understand his responsibility.*
- that functional responsibilities of all parties are clearly identified.*
- is signed by the owner/lessee of the aircraft in the case of non-commercial air transport.*

In the case of non commercial air transport, this activity should be carried in agreement with the owner.)

3.2 Quality audit of aircraft

(This paragraph should set out the procedure when performing a quality audit of an aircraft. It should set out the differences between an airworthiness review and quality audit. This procedure may include:

- *compliance with approved procedures;*
- *contracted maintenance is carried out in accordance with the contract;*
- *continued compliance with CAR- M.)*

PART 4

AIRWORTHINESS REVIEW PROCEDURES

4.1 Airworthiness review staff

(This paragraph should establish the working procedures for the assessment of the airworthiness review staff. The assessment addresses experience, qualification, training etc. A description should be given regarding the issuance of authorisations for the airworthiness review staff and how records are kept and maintained.)

4.2 Review of aircraft records

(This paragraph should describe in detail the aircraft records that are required to be reviewed during the airworthiness review. The level of detail that needs to be reviewed should be described and the number of records that need to be reviewed during a sample check.)

4.3 Physical Survey

(This paragraph should describe how the physical inspection needs to be performed. It should list the topics that need to be reviewed, the physical areas of the aircraft to be inspected, which documents onboard the aircraft that need to be reviewed etc.)

4.4 Additional procedures for recommendations to competent authorities for the import of aircraft

(This paragraph should describe the additional tasks regarding the recommendation for the issuance of an airworthiness review certificate in the case of an import of an aircraft. This should include: communication with DGCA, additional items to be reviewed during the airworthiness review of the aircraft, specification of maintenance required to be carried out etc.)

4.5 Recommendations to competent authorities for the issue of airworthiness review certificates

(This paragraph should stipulate the communication procedures with the competent authorities in case of a recommendation for the issuance of an airworthiness review certificate. In addition the content of the recommendation should be described.)

4.6 Issuance of airworthiness review certificates

(This paragraph should set out the procedures for the issuance of the ARC. It should address record keeping, distribution of the ARC copies etc. This procedure should ensure that only after an airworthiness review that has been properly carried out, an ARC will be issued.)

4.7 Airworthiness review records, responsibilities, retention and access

(This paragraph should describe how records are kept, the periods of record

keeping, location where the records are being stored, access to the records and responsibilities.)

PART 5 APPENDICES

5.1 Sample documents

(A self explanatory paragraph)

5.2 List of airworthiness review staff

(A self explanatory paragraph)

5.3 List of sub-contractors as per AMC M.A.201 (h) 1 and M.A.711 (a) 3.

(A self explanatory paragraph, in addition it should set out that the list should be periodically reviewed)

5.4 List of approved maintenance organisations contracted

(A self explanatory paragraph, in addition it should set out that the list should be periodically reviewed)

5.5 Copy of contracts for sub-contracted work (appendix II to AMC M.A.201(h)(1))

(A self explanatory paragraph)

5.6 Copy of contracts with approved maintenance organizations

(A self explanatory paragraph)

M.A SUBPART F APPROVAL RECOMMENDATION REPORT		CA FORM 6F									
Part 2: M.A Subpart F Compliance Audit Review											
The five columns may be labeled & used as necessary to record the approval product line or facility, including subcontractor's, reviewed. Against each column used of the following M.A. Subpart F, sub-paragraphs please either tick(√) the box of satisfied with compliance or cross(X) the box if not satisfied with compliance and specify the reference of the part 4 finding next to the box or enter N/A where an item is not applicable, or N/R when applicable but not reviewed											
Para	Subject										
M.A. 603	Extent of approval										
M.A. 604	MOM See Part 3										
M.A. 605	Facilities										
M.A. 606	Personnel requirements										
M.A. 607	Certifying staff										
M.A. 608	Components , Equipment and tools										
M.A. 609	Maintennace data										
M.A. 610	Maintenance work orders										
M.A. 611	Maintenance standards										
M.A. 612	Aircraft CRS										
M.A. 613	Component CRS										
M.A. 614	Continuing airworthiness records										
M.A. 615	Privileges of the organisation										
M.A. 616	Organizational review										
M.A. 617	Changes										
M A 619	Findings										
DGCA Officer(s): Signature(s): DGCA office : Date of Form 6F part 2 completion:											

M.A SUBPART F APPROVAL RECOMMENDATION REPORT	CA FORM 6F	
PART 3: Compliance with M.A Subpart F maintenance organization manual(MOM)		
Please either tick (√) the box if satisfied with compliance; or cross (X) if not satisfied with compliance and specify the reference of the part 4 finding; or enter N/A where an item is not applicable; or N/R when applicable but not reviewed.		
Part A General		
1.1	<input type="checkbox"/>	Table of content
1.2	<input type="checkbox"/>	List of effective pages
1.3	<input type="checkbox"/>	Record of Amendments
1.4	<input type="checkbox"/>	Amendment procedure
1.5	<input type="checkbox"/>	Distribution
1.6	<input type="checkbox"/>	Accountable manager's statement
Part B Description		
2.1	<input type="checkbox"/>	Organisation's scope of work
2.2	<input type="checkbox"/>	General presentation of the organization
2.3	<input type="checkbox"/>	Name and title of management personnel
2.4	<input type="checkbox"/>	Organisation chart
2.5	<input type="checkbox"/>	Certifying staff
2.6	<input type="checkbox"/>	Personnel
2.7	<input type="checkbox"/>	General description of facility
2.8	<input type="checkbox"/>	Tools , equipment and material
2.9	<input type="checkbox"/>	Maintenance date
Part C General Procedures		
3.1	<input type="checkbox"/>	Organizational review
3.2	<input type="checkbox"/>	Training
3.3	<input type="checkbox"/>	Contracting
3.4	<input type="checkbox"/>	One time authorisations

M.A. SUBPART F APPROVAL RECOMMENDATION REPORT

CA FORM 6F

PART 3 : Compliance with M.A. Subpart F Maintenance Organization Exposition (MOE)

Part D Working Procedures

- | | | |
|------|--|---|
| 4.1 | | Work order acceptance. |
| 4.2 | | Preparation and issue of work package. |
| 4.3 | | Logistics. |
| 4.4 | | Execution. |
| 4.5 | | Release to service – Certifying staff. |
| 4.6 | | Release to service – Supervision. |
| 4.7 | | Release to service – Certificate of release to service. |
| 4.8 | | Records. |
| 4.9 | | Special procedures. |
| 4.10 | | Occurrence reporting. |
| 4.11 | | Management of indirect approval of the manual. |

Part E Appendices

- | | | |
|-----|--|--|
| 5.1 | | Sample of all documents used. |
| 5.2 | | List of sub-contractors. |
| 5.3 | | List of maintenance locations. |
| 5.4 | | List of CAR 145 or M.A. Subpart F organizations. |

MOM reference :

MOM amendment :

DGCA audit staff :

Signature(s) :

DGCA office :

Date of Form 6F Part 3 completion:

CA Form 6F

M.A. SUBPART F APPROVAL RECOMMENDATION REPORT				CA FORM 6F	
<p>Part 4 : Findings regarding M.A. Subpart F compliance status</p> <p>Each level 1 and 2 finding should be recorded whether it has been rectified or not and should be identified by a simple cross reference to the Part 2 requirement. All non-rectified findings should be copied in writing to the organization for the necessary corrective action.</p>					
Part 2 or 3 ref.	Audit reference(s) : Findings	Level	Corrective action		
			Date Due	Date Closed	Reference

CA Form 6F

M.A. SUBPART F APPROVAL RECOMMENDATION REPORT

CA FORM 6F

Part 5: M.A. Subpart F Approval or Continued Approval or Change Recommendation

Name of organization :

Approval reference :

Audit reference(s) :

The following M.A. Subpart F scope of approval is recommended for this organization :

Or, it is recommended that the M.A. Subpart F scope of approval specified in CA Form 3 referenced be continued.

Name of recommending DGCA Officer :

Signature of recommending DGCA Officer :

DGCA office :

Date of recommendation :

Form 6F review (quality check) :

Date :

Part 2: M.A Subpart G Compliance Audit Review

The five columns may be labeled & and used as necessary to record the approval product line or facility, including subcontractor's, reviewed. Against each column used of the following M.A. Subpart G, subparagraphs please either tick(√) the box of satisfied with compliance or cross(X) the box if not satisfied with compliance and specify the reference of the part 4 finding next to the box or enter N/A where an item is not applicable, or N/R when applicable but not reviewed

Para	Subject									
M.A. 703	Extent of approval									
M.A. 704	CAME See Part 3									
M.A. 705	Facilities									
M.A. 706	Personnel requirements									
M.A. 707	Airworthiness review staff									
M.A. 708	Continuing Airworthiness management									
M.A. 201	Responsibilities									
M A 202	Occurrence reporting									
M.A. 302	Aircraft Maintenance Programme									
M.A. 303	Airworthiness Directives									
M.A. 304	Data for Modifications and Repair									
M.A. 305	Aircraft Continuing Airworthiness record system									
M.A. 306	Operator technical Log system									
M A 307	Transfer of aircraft Continuing airworthiness record									
M.A. 709	Documentation									
M.A. 710	Airworthiness review									
M.A. 711	Privileges of the organisation									
M.A. 712	Quality System									
M.A. 713	Changes to the approved continuing airworthiness organisation									
M.A. 714	Record keeping									
M A 716	Finding									

DGCA Officer(s):

Signature(s):

DGCA Office:

Date of Form 13 part 2 completion:

M.A SUBPART G APPROVAL RECOMMENDATION REPORT		CA FORM 13
PART 3: Compliance with M.A Subpart G Continuing Airworthiness Management Exposition(CAME)		
Please either tick (√) the box if satisfied with compliance; or cross (X) if not satisfied with compliance and specify the reference of the part 4 finding; or enter N/A where an item is not applicable; or N/R when applicable but not reviewed.		
Part 0	General organisation	
0.1	<input type="checkbox"/>	Corporate commitment by the accountable manager
0.2	<input type="checkbox"/>	General information
0.3	<input type="checkbox"/>	Management personnel
0.4	<input type="checkbox"/>	Management Organisation Chart
0.5	<input type="checkbox"/>	Notification procedure to the DGCA regarding changes to the organisation's activities/approval/location/personnel
0.6	<input type="checkbox"/>	Exposition amendment procedures
Part 1	Continuing airworthiness management procedures	
1.1	<input type="checkbox"/>	Aircraft technical log utilization and Mel application(commercial air transport). Aircraft continuing airworthiness record system utilization(non commercial air transport
1.2	<input type="checkbox"/>	Aircraft maintenance programmes-development amendment and approval
1.3	<input type="checkbox"/>	Time and continuing airworthiness records, responsibilities, retention, access
1.4	<input type="checkbox"/>	Accomplishment and control of airworthiness directives
1.5	<input type="checkbox"/>	Analysis of the effectiveness of the maintenance programme(s)
1.6	<input type="checkbox"/>	Non mandatory modification embodiment policy
1.7	<input type="checkbox"/>	Major Modifications standards
1.8	<input type="checkbox"/>	Defect reports
1.9	<input type="checkbox"/>	Engineering activity
1.10	<input type="checkbox"/>	Reliability programme
1.11	<input type="checkbox"/>	Pre-flight inspections
1.12	<input type="checkbox"/>	Aircraft Weighing
1.13	<input type="checkbox"/>	Check flight procedures
Part 2	Quality system	
2.1	<input type="checkbox"/>	Continuing airworthiness quality policy, plan and audits procedures
2.2	<input type="checkbox"/>	Monitoring of Continuing airworthiness management activities
2.3	<input type="checkbox"/>	Monitoring of the effectiveness of the maintenance programme(s)
2.4	<input type="checkbox"/>	Monitoring that all maintenance is carried out by an appropriate maintenance

M.A SUBPART G APPROVAL RECOMMENDATION REPORT		CA FORM 13
PART 3: Compliance with M.A Subpart G Continuing Airworthiness Management Exposition (CAME)		
Part 2 Quality system		
2.5		Monitoring that all contracted maintenance is carried out in accordance with the contract, including sub contractors used by the maintenance contractor
2.6		Quality Audit Personnel
Part 3 Contracted Maintenance		
3.1		Maintenance Contractor selection Procedure
3.2		Detailed list of maintenance contractors
3.3		Quality Audit of aircraft
Part 4 Airworthiness review Procedures		
4.1		Airworthiness review staff
4.2		Review of Aircraft records
4.3		Physical Survey
4.4		Additional procedures for recommendations to DGCA for the import of aircraft
4.5		Recommendations to DGCA for the issue of airworthiness review
4.6		Issuance of airworthiness review certificates
4.7		Airworthiness review records, responsibilities, retention and access
Part 5 Appendices		
5.1		Sample Documents
5.2		List of Airworthiness review staff
5.3		List of Subcontractors as per M.A.711(a) and AMC M.A. 201(h) 2
5.4		List of approved maintenance organizations contracted
5.5		Copy of contracts for sub-contracted work(appendix II to AMC M.A 201(h)(1)
5.6		Copy of contracts with approved maintenance organisation
CAME Reference:		CAME Amendment:
DGCA Audit Staff:		
Signatures(s):		DGCA Office:
Date of Form 13 part 3 completion:		

M.A. SUBPART G APPROVAL RECOMMENDATION REPORT

CA FORM 13

Part 4 : Findings regarding M.A. Subpart F compliance status

Each level 1 and 2 finding should be recorded whether it has been rectified or not and should be identified by a simple cross reference to the Part 2 requirement. All non-rectified findings should be copied in writing to the organization for the necessary corrective action.

Part 2 or 3 ref.	Audit reference(s) : Findings	Level	Corrective action		
			Date Due	Date Closed	Reference

This is only applicable to organisations with less than 10 maintenance staff members. For larger organisations, the principles and practices of an independent quality system should be used.

Depending on the complexity of the small organisation (number and type of aircraft, number of different fleets, subcontracting of specialised services, etc.), the organisational review system may vary from a system using the principles and practices of a quality system (except for the requirement of independence) to a simplified system adapted to the low complexity of the organisation and the aircraft managed.

As a core minimum, the organisational review system should have the following features, which should be described in the Maintenance Organisation Manual (MOM):

a. Identification of the person responsible for the organisational review programme.

By default, this person should be the accountable manager, unless he delegates this responsibility to (one of) the M.A.606(b) person(s).

b. Identification and qualification criteria for the person(s) responsible for performing the organisational reviews.

These persons should have a thorough knowledge of the regulations and of the maintenance organisation procedures. They should also have knowledge of audits, acquired through training or through experience (preferably as an auditor, but also possibly because they actively participated in several audits conducted by the DGCA).

c. Elaboration of the organisational review programme:

- Checklist(s) covering all items necessary to be satisfied that the organisation delivers a safe product and complies with the regulation. All procedures described in the MOM should be addressed.
- A schedule for the accomplishment of the checklist items. Each item should be checked at least every 12 months. The organisation may choose to conduct one full review annually or to conduct several partial reviews.

d. Performance of organisational reviews

Each checklist item should be answered using an appropriate combination of:

- review of records, documentation, etc.
- sample check of aircraft under contract or being maintained under a work order.
- interview of personnel involved.
- review of discrepancies and difficulty internal reports (e.g. notified difficulties in using current procedures and tools, systematic deviations from procedures, etc.).
- review of complaints filed by customers after delivery.

e. Management of findings and occurrence reports.

- All findings should be recorded and notified to the affected persons.

- All level 1 findings, in the sense of M.A.619(a), should be immediately notified to the competent authority and all necessary actions on aircraft in service should be immediately taken.
- All occurrence reports should be reviewed with the aim for continuous improvement of the system by identifying possible corrective and preventive actions. This should be done in order to find prior indicators (e.g., notified difficulties in using current procedures and tools, systematic deviations from procedures, unsafe behaviours, etc.), and dismissed alerts that, had they been recognised and appropriately managed before the event, could have resulted in the undesired event being prevented.
- Corrective and preventive actions should be approved by the person responsible for the organisational review programme and implemented within a specified time frame.
- Once the person responsible for the organisational review programme is satisfied that the corrective action is effective, closure of the finding should be recorded along with a summary of the corrective action.
- The accountable manager should be notified of all significant findings and, on a regular basis, of the global results of the organisational review programme.

Following is a typical example of a simplified organisational review checklist, **to be adapted as necessary to cover the MOM procedures:**

1 – Scope of work

Check that:

- All aircraft and components under maintenance or under contract are covered in the Form 3.
- The scope of work in the MOM does not disagree with the Form 3.
- No work has been performed outside the scope of the Form 3 and the MOM.

2 - Maintenance data

- Check that maintenance data to cover the aircraft in the scope of work of the MOM are present and up-to-date.
- Check that no change has been made to the maintenance data from the TC holder without being notified.

3 – Equipment and Tools

- Check the equipment and tools against the lists in the MOM and check if still appropriate to the TC holder's instructions.
- Check tools for proper calibration (sample check).

4 – Stores

- Do the stores meet the criteria in the procedures of the MOM?

- Check by sampling some items in the store for presence of proper documentation and any overdue items.

5 – Certification of maintenance

- Has maintenance on products and components been properly certified?
- Have implementation of modifications/repairs been carried out with appropriate approval of such modifications/repairs (sample check).

6 – Relations with the owners/operators

- Has maintenance been carried out with suitable work orders?
- When a contract has been signed with an owner/operator, has the obligations of the contracts been respected on each side?

7 – Personnel

- Check that the current accountable manager and other nominated persons are correctly identified in the approved MOM.
- If the number of personnel has decreased or if the activity has increased, check that the staff are still adequate to ensure a safe product.
- Check that the qualification of all new personnel (or personnel with new functions) has been appropriately assessed.
- Check that the staff have been trained, as necessary, to cover changes in:
 - o regulations,
 - o competent authority publications,
 - o the MOM and associated procedures,
 - o the products in the scope of work,
 - o maintenance data (significant ADs, SBs, etc.).

8 – Maintenance contracted

- Sample check of maintenance records:
 - o Existence and adequacy of the work order,
 - o Data received from the maintenance organisation:
 - Valid CRS including any deferred maintenance,
 - List of removed and installed equipment and copy of the associated Form 1 or equivalent.
- Obtain a copy of the current approval certificate (Form 3) of the maintenance organisations contracted.

9 – Maintenance sub-contracted

- Check that subcontractors for specialised services are properly controlled by the organisation;

10 – Technical records and record-keeping

- Have the maintenance actions been properly recorded?
- Have the certificates (Form 1 and Conformity certificates) been properly collected and recorded?
- Perform a sample check of technical records to ensure completeness and storage during the appropriate periods.
- Is storage of computerised data properly ensured?

11 – Occurrence reporting procedures

- Check that reporting is properly performed.
- Actions taken and recorded.

Appendix IX to AMC M.A. 602 and M.A. 702 - CA Form 2

DGCA	Application for			Initial grant
	CAR -M	CAR 145	Subpart F	Change
		Subpart G		Renewal
<p>1. Registered name of applicant:</p> <p>2. Trading name (if different):</p> <p>3. Address requiring approval:</p> <p>4. Tel..... Fax..... E-mail.....</p> <p>5. Scope of approval relevant to this application: see page 2 for possibilities in the case of a Subpart F CAR 145 Approval:</p> <p>6. Position and name of the (proposed*) Accountable Manager:</p> <p>7. Signature of the (proposed*) Accountable Manager:.....</p> <p>8. Place:.....</p> <p>9. Date:.....</p> <p>Note(1): A note giving the address(es) to which the forms should be sent</p> <p>Note(2): An optional note to give information on any fee payable</p> <p>*delete as applicable</p>				
CA Form 2			Page 1 of 2	

SCOPE OF APPROVAL AVAILABLE

CLASS	RATING	LIMITATION
AIRCRAFT	A2 Aeroplanes / airships 5700 Kg and below	Quote aeroplane/airship manufacturer or group or type
	A3 Helicopters	Quote helicopter manufacturer or group or type
	A 4 Aircraft other than A1, A2 or A3	Quote aircraft type or group
ENGINES	B1 Turbine	Quote engine type
	B2 Piston	Quote engine manufacturer or group or type
	B3 APU	Quote engine manufacturer or type
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C1 Air Cond & Press	Quote aircraft type or aircraft manufacturer or component manufacturer or the particular component and or cross refer to a capability list in the exposition
	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/fire	
	C19 Windows	
	C20 Structures	
	C21 Water Ballast	
	C22 Propulsion augmentation	
SPECIALISED SERVICES	D1 Non destructive insp.	Quote particular NDT method
<p>With reference to the above scope of approval and item 5 on page 1, please complete in the following example style, but relevant to your organization.</p> <p>A2 Piper PA34 A2 Cessna Piston Twins A3 Bell 47 B1 Turbomeca Artoust</p> <p>B2 Lycoming Piston B3 Garrett GTCP85 C2 SFENA C4 Socata TB 20 D1 Eddy Current</p> <p>CA Form 2 Page 2 of 2</p>		

Appendix X to AMC M.B.602 (a) and AMC M.B.702 (a)-CA Form 4

DGCA

Details of Management Personnel required to be accepted as specified in

.....

1. Name:

2. Position:

3. Qualification relevant to the item(2) position:

4. Work experience relevant to the item(2) position

Signature:

Date:

On completion, please send this form under confidential cover to DGCA

For DGCA use only

Name and signature of authorized DGCA Officer(s) accepting this person:

Signature:

Date:

Name:

DGCA Office:

Appendix XI to AMC M.A.708(c)

CONTRACTED MAINTENANCE

1. Maintenance Contracts

The following paragraphs are not intended to provide a standard maintenance contract but to provide a list of the main points that should be addressed, when applicable, in a maintenance contract between an Operator and a CAR-145 approved organisation. As only the technical parts of the maintenance contracts have to be acceptable to DGCA, the following paragraphs only address technical matters and exclude matters such as costs, delay, warranty, etc...

When maintenance is contracted to more than one CAR-145 approved organisation (for example aircraft base maintenance to X, engine maintenance to Y and line maintenance to Z1, Z2&Z3), attention should be paid to the consistency of the different maintenance contracts.

A maintenance contract is not normally intended to provide appropriate detailed work instruction to the personnel (and is not normally distributed as such). Accordingly there should be established organisational responsibility, procedures and routines in the operator's M.A. Subpart G & CAR-145 organisations to take care of these functions in a satisfactory way such that any person involved is informed about his/her responsibility and the procedures which apply. These procedures and routines can be included/appended to the operator's CAME and maintenance organisation's MOE or consist in separate procedures. In other words procedures and routines should reflect the conditions of the contract.

2. Aircraft /Engine Maintenance

The type of maintenance to be performed by the CAR-145 approved organisation should be specified unambiguously. In case of line and/or base maintenance, the contract should specify the aircraft type and, preferably include the aircraft's registrations.

In case of engine maintenance, the contract should specify the engine scope of Work

2.1 Locations Identified for the Performance of Maintenance/Certificates Held

The place(s) where base, line or engine maintenance, as applicable, will be performed should be specified. The certificate held by the maintenance organisation at the place(s) where the maintenance will be performed should be referred to in the contract. If necessary the contract may address the possibility of performing maintenance at any location subject to the need for such maintenance arising either from the unserviceability of the aircraft or from the necessity of supporting occasional line maintenance

2.2 Subcontracting

The maintenance contract should specify under which conditions the CAR-145 approved organisation may subcontract tasks to a third party (whether this third party is CAR-145 approved or not). At least the contract should make reference to

145.A.75. Additional guidance is provided by the AMC 145.A.75. In addition the operator may require the CAR-145 approved organisation to obtain the operator's approval before subcontracting to a third party. Access should be given to the operator to any information (especially the quality monitoring information) about the CAR-145 approved organisation's subcontractors involved in the contract. It should however be noted that under operators responsibility both the operator and DGCA are entitled to be fully informed about subcontracting, although DGCA will normally only be concerned with aircraft, engine and APU subcontracting.

2.3 Maintenance Programme

The maintenance programme under which the maintenance has to be performed has to be specified. The operator must have that maintenance Programme approved by DGCA. When the maintenance programme is used by several operators, it is important to remember that it is the responsibility of each operator to have that maintenance programme approved under its own name by DGCA.

2.4 Quality Monitoring

The terms of the contract should include a provision allowing the operator to perform a quality surveillance (including audits) upon the CAR-145 approved organisation. The maintenance contract should specify how the results of the quality surveillance are taken into account by the CAR-145 approved organisation (See also paragraph 2.22. 'Meetings').

2.5 DGCA involvement

When the operator's and the CAR-145 approved organisation's competent authorities are not the same, the operator and the CAR-145 approved organisation have to ensure together with their DGCA that the respective competent authority's responsibilities are properly defined and that, if necessary, delegations have been established.

2.6 Airworthiness Data

The airworthiness data used for the purpose of this contract as well as the authority responsible for the acceptance/approval should be specified. This may include, but may not be limited to:

- maintenance programme,
- airworthiness directives,
- major repairs/modification data,
- aircraft maintenance manual,
- aircraft IPC,
- wiring diagrams,
- trouble shooting manual,
- Minimum Equipment List (normally on board the aircraft),
- operators manual,
- Flight Manual,
- engine maintenance manual,

- engine overhaul manual.

2.7 Incoming Conditions

The contract should specify in which condition the operator should send the aircraft to the CAR-145 approved organisation. For checks of significance i.e. 'C' checks and above, it may be beneficial that a work scope planning meeting be organised so that the tasks to be performed may be commonly agreed (see also paragraph 2.22: 'Meetings').

2.8 Airworthiness Directives and Service Bulletin/Modifications

The contract should specify what information the operator is responsible to provide to the CAR-145 approved organisation, such as the due date of the airworthiness directives (ADs), the selected means of compliance, the decision to embody Service Bulletins (SBs) or modification, etc. In addition the type of information the operator will need in return to complete the control of ADs and modification status should be specified.

2.9 Hours & Cycles Control.

Hours and cycles control is the responsibility of the operator, but there may be cases where the CAR-145 approved organisation should receive the current flight hours and cycles on a regular basis so that it may update the records for its own planning functions (see also paragraph 2.21: 'Exchange of information').

2.10 Service Life- limited Parts

Service life-limited components control is the responsibility of the operator.

The CAR-145 approved organisation will have to provide the operator with all the necessary information about the service life-limited components removal/installation so that the operator may update its records (see also paragraph 2.21 'Exchange of information').

2.11 Supply of Parts.

The contract should specify whether a particular type of material or component is supplied by the operator or by the contracted CAR-145 approved organisation, which type of component is pooled, etc. The CAR-145 competence and responsibility to be in any case satisfied that the component in question meets the approved data/standard and to ensure that the aircraft component is in a satisfactory condition for installation. In other words, there is definitely no way for a CAR-145 organisation to accept whatever is supplied by the operator. Additional guidance is provided by 145.A.42 for acceptance of components.

2.12 Pooled Parts at Line Stations.

If applicable the contract should specify how the subject of pooled parts at line stations should be addressed.

2.14 Scheduled Maintenance

For planning scheduled maintenance checks, the support documentation to be given to the CAR-145 approved organisation should be specified. This may include, but may not be limited to:

- applicable work package, including job cards;
- scheduled component removal list;
- modifications to be incorporated.

When the CAR-145 approved organisation determines, for any reason, to defer a maintenance task, it has to be formally agreed with the operator. If the deferment goes beyond an approved limit, refer to paragraph 2.17: 'Deviation from the maintenance schedule'. This should be addressed, where applicable, in the maintenance contract.

2.15 Unscheduled Maintenance/Defect Rectification.

The contract should specify to which level the CAR-145 approved organisation may rectify a defect without reference to the operator. As a minimum, the approval and incorporation of major repairs should be addressed. The deferment of any defect rectification should be submitted to the operator and, if applicable, to DGCA.

2.16 Deferred Tasks.

See paragraphs 2.14 and 2.15 above and AMC 145.A.50(e). In addition, for aircraft line and base maintenance the use of the operator's MEL and the relation with the operator in case of a defect that cannot be rectified at the line station should be addressed.

2.17 Deviation from the Maintenance Schedule.

Deviations have to be requested by the operator to DGCA or granted by the operator in accordance with a procedure acceptable to DGCA. The contract should specify the support the CAR-145 approved organisation may provide to the operator in order to substantiate the deviation request.

2.18 Test Flight.

If any test flight is required, it shall be performed in accordance with the operator's Continuing Airworthiness Management Exposition.

2.19 Release to Service Documentation.

The release to service has to be performed by the CAR-145 approved organisation in accordance with its MOE procedures. The contract should, however, specify which support forms have to be used (Operator's technical log, CAR-145 approved organisation's maintenance visit file, etc.) and the documentation the CAR-145 approved organisation should provide to the operator upon delivery of the aircraft. This may include, but may not be limited to:

- Certificate of release to service — mandatory,
- flight test report,
- list of modifications embodied,

- list of repairs,
- list of ADs incorporated,
- maintenance visit report,

2.20 Maintenance Recording.

The Operator may contract the CAR-145 approved organisation to retain some of the maintenance records required by CAR-M Subpart C. It should be ensured that every requirement of CAR-M Subpart C is fulfilled by either the operator or the CAR-145 approved organisation. In such a case, free and quick access to the above mentioned records should be given by the CAR-145 approved organisation to the operator and DGCA (incase of two different regulatory authorities involved, see paragraph 2.6 "*DGCA involvement*").

2.21 Exchange of Information.

Each time exchange of information between the operator and the CAR-145 approved organisation is necessary, the contract should specify what information should be provided and when (i.e. on what occasion or at what frequency), how, by whom and to whom it has to be transmitted.

2.22 Meetings.

For DGCA to be satisfied that a good communication system exists between the operator and the CAR-145 approved organisation, the terms of the maintenance contract should include the provision for a certain number of meetings to be held between both parties.

2.22.1 Contract Review.

Before the contract is applicable, it is very important for the technical personnel of both parties that are involved in the application of the contract to meet in order to be sure that every point leads to a common understanding of the duties of both parties.

2.22.2 Workscope Planning Meeting.

Work scope planning meetings may be organised so that the tasks to be performed may be commonly agreed.

2.22.3 Technical Meeting.

Scheduled meetings may be organised in order to review on a regular basis technical matters such as ADs, SBs, future modifications, major defects found during maintenance check, reliability, etc.

2.22.4 Quality Meeting.

Quality meetings may be organised in order to examine matters raised by the operator's quality surveillance and to agree upon necessary corrective actions.

2.22.5 Reliability Meeting.

When a reliability programme exists, the contract should specify the operator's and CAR-145 approved organisation's respective involvement in that programme, the participation in reliability meetings.

3. Engine Maintenance.

This paragraph deals with engine shop maintenance. "On wing" engine maintenance should be covered by paragraph 2 above.

3.1 Scope of Work.

The type of engine subject to the maintenance contract must be specified.

The type of maintenance to be performed by the CAR-145 approved organisation should be specified unambiguously.

3.2 Location Identified for the Performance of Maintenance/ Certificates Held.

The place(s) where base and line maintenance will be performed should be specified. The certificate held by the maintenance organisation at the place(s) where the maintenance will be performed has to be referred to in the contract.

3.3 Subcontracting.

The maintenance contract should specify under which conditions the CAR-145 approved organisation may subcontract tasks to a third party (whether this third party is CAR-145 approved or not). At least the contract should make reference to CAR-145.75. Additional guidance is provided by the AMC to 145.A.75. In addition the Operator may require the CAR-145 approved organisation to request the operator's approval before subcontracting to a third party. Access should be given to the operator to any information (especially the quality monitoring information) about the CAR-145 approved organisation's subcontractors involved in the contract. It should however be noted that under operators responsibility both the operator and DGCA are entitled to be fully informed about subcontracting, although DGCA will normally only be concerned with aircraft, engine and APU subcontracting.

3.4 Maintenance Programme.

The maintenance programme under which the maintenance has to be performed has to be specified. The operator must have that maintenance Programme approved by DGCA. When the maintenance programme is used by several operators, it is important to remember that it is the responsibility of each operator to have that maintenance programme approved under its own name by DGCA.

3.5 Quality Monitoring.

The terms of the contract should include a provision allowing the operator to perform a quality surveillance (including audits) upon the CAR-145 approved organisation. The maintenance contract should specify how the results of the Quality surveillance are taken into account by the CAR-145 approved organisation (See also para.3.21. "Meetings").

3.6 DGCA Involvement

When the operator's and the CAR-145 approved organisation's competent authorities are not the same, the operator and the CAR-145 approved organisation have to ensure together with their DGCA that the respective competent authority's responsibilities are properly defined and that, if necessary, delegations have been established.

3.7 Airworthiness Data.

The airworthiness data used for the purpose of this contract as well as the authority responsible for the acceptance/approval must be specified. This may include, but may not be limited to:

- Maintenance Programme;
- AD's;
- major repairs/modification data;
- Engine overhaul manual;
- other?...

3.8 Incoming Conditions.

The contract should specify in which condition the Operator's must send the aircraft to the CAR-145 approved organisation. For instance it is important to specify the configuration of the engine, e.g. including the list of the components that remain fitted to the engine before sending it to the CAR-145 approved organisation. It may also be valuable that a workscope planning meeting be organised so that the tasks to be performed may be commonly agreed (see also paragraph 3.21: "*Meetings*").

3.9 Airworthiness Directives and Service Bulletin/Modifications

The contract should specify what information the operator is responsible to provide to the CAR-145 approved organisation, such as the due date of the AD, the selected means of compliance, the decision to embody Service Bulletins (SB's) or modification, etc... In addition the type of information the operator will need in return to complete the control of ADs and modification-status should be specified.

3.10 Hours & Cycles Control.

Hours and cycles control is the responsibility of the operator, but there may be cases where the CAR-145 approved organisation must be in receipt of the current flight hours and cycles on a regular basis so that it may update the records for its own planning functions (see also paragraph 3.20: "*Exchange of information*").

3.11 Life Limited Parts.

Life Limited Parts control is the responsibility of the Operator.

The CAR-145 approved organisation will have to provide the operator with all the necessary information about the LLP removal/installation so that the Operator may update its records (see also paragraph 3.20 "*Exchange of information*").

3.12 Supply of Parts.

The contract should specify whether a particular type of material or component comes from the operator's or the CAR-145 approved organisation's store, which type of component is pooled, etc...Attention should be paid on the fact that it is the CAR-145 competence and responsibility to be in any case satisfied that the component in question meets the approved data/standard and to ensure that the aircraft component is in a satisfactory condition for fitment. In other words, there is definitely no way for a CAR-145 organisation to accept whatever he receives from the operator. For the certification of parts, additional guidance is provided by 145.A.42.

3.13 Scheduled Maintenance.

For planning scheduled maintenance checks, the support documentation to be given to the CAR-145 approved organisation should be specified. This may include, but may not be limited to:

- applicable work package, including job cards;
- scheduled component removal list;
- modifications to be incorporated; etc.

When the CAR-145 approved organisation determines, for any reason, to defer a maintenance task, it has to be formally agreed by the Operator. If the deferment goes beyond an approved limit, refer to paragraph 3.16: "*Deviation from the maintenance Schedule*". This should be addressed, where applicable, in the maintenance contract.

3.14 Unscheduled Maintenance/Defect Rectification.

The contract should specify to which level the CAR-145 approved organisation may rectify a defect without reference to the operator. As a minimum, the approval and incorporation of major repairs should be addressed. The deferment of any defect rectification shall be submitted to the operator and, if applicable, to its DGCA.

3.15 Deferred Tasks.

See paragraphs 3.13 and 3.14 above and AMC to 145.A.50 (e).

3.16 Deviation from the Maintenance Schedule.

Deviations have to be requested by the operator to DGCA or granted by the Operator in accordance with the procedure acceptable to DGCA. The contract should specify the support, the CAR-145 approved organisation may provide to the operator in order to substantiate the deviation request.

3.17 Test Bench.

The contract should specify the acceptability criterion and whether a representative of the operator should witness an engine undergoing test.

3.18 Release to Service Documentation.

The contract should specify the documentation the CAR-145 approved organisation should provide to the operator upon delivery of the aircraft/engine. This may include but may not be limited to:

- Component Release Certificate as appropriate –*mandatory*,
- test bench report,
- list of modifications embodied,
- list of repairs,
- list of AD's performed,
- etc...

3.19 Maintenance Recording.

The Operator may contract the CAR-145 approved organisation to retain some of the maintenance records required by CAR-M Subpart C. It should be ensured that every requirement of CAR-M Subpart C is fulfilled by either the operator or the CAR-145 approved organisation. In such a case, free and quick access to the above mentioned records should be given by the CAR-145 approved organisation to the operator and DGCA representative (in case of two different regulatory authorities involved, see paragraph 3.6 "*DGCA involvement*").

3.20 Exchange of Information.

Each time exchange of information between the Operator and the CAR-145 approved organisation is necessary, the contract should specify what information should be provided and when (i.e. on what occasion or at what frequency), how, by whom and to whom it has to be transmitted.

3.21 Meetings.

In order that DGCA may be satisfied that a good communication system exists between the Operator and the CAR-145 approved organisation, the terms of the maintenance contract should include the provision for a certain number of meetings to be held between both parties.

3.21.1 Contract Review.

Before the contract is applicable, it is very important that the technical personnel of both parties that are involved in the application of the contract meet in order to be sure that every point leads to a common understanding of the duties of both parties

3.21.2 Work scope Planning Meeting.

Workscope planning meetings may be organised so that the tasks to be performed may be commonly agreed.

3.21.3 Technical Meeting

Scheduled meetings may be organised in order to review on a regular basis technical matters such as AD's, SB's, future modifications, major defects found during shop visit, reliability, etc...

3.21.4 Quality Meeting

Quality meetings may be organised in order to examine matters raised by the operator's quality surveillance and to agree upon necessary corrective actions.

3.21.5 Reliability Meeting.

When a reliability programme exists, the contract should specify the Operator's and CAR-145 approved/accepted Organisation's respective involvement in that programme, including the participation to reliability meetings.

4. Aircraft line Maintenance.

This paragraph applies to maintenance contract that includes line maintenance but excludes base maintenance activities.

4.1 Scope of Work.

The type of aircraft subject to the maintenance contract must be specified. It should include the aircraft's registration numbers.

The extent of maintenance to be performed by the CAR-145 approved organisation should be specified unambiguously.

4.2 Location Identified for the Performance of Maintenance/Certificates Held.

The place(s) where line maintenance will be performed should be specified. The certificate held by the maintenance organisation at the place(s) where the maintenance will be performed has to be referred to in the contract.

4.3 Subcontracting.

The maintenance contract should specify under which conditions the CAR-145 approved organisation may subcontract tasks to a third party (whether this third party is CAR-145 approved or not). At least the contract should make reference to CAR-145.75. Additional guidance is provided by the AMC to 145.A.75. In addition the Operator may require the CAR-145 approved organisation to request the operator's approval before subcontracting to a third party. Access should be given to the operator to any information (especially the quality monitoring information) about the CAR-145 approved organisation's subcontractors involved in the contract. It should however be noted that under operators responsibility both the operator and the operator's DGCA are entitled to be fully informed about subcontracting, although the operator's DGCA will normally only be concerned with aircraft, engine and APU subcontracting.

4.4 Quality monitoring.

The fact that the operator's contractor is appropriately approved in accordance with CAR-145, does not preclude the Operator from performing a quality surveillance (including audits) upon the CAR-145 approved organisation.

4.5 Airworthiness data.

The airworthiness data used for the purpose of this contract as well as the authority responsible for the acceptance/approval must be specified. This may include, but may not be limited to:

- aircraft Maintenance Manual;
- aircraft IPC;
- Wiring diagrams;
- Trouble shooting manual;
- Minimum Equipment List (normally on board the aircraft);
- Operations Manual;
- Flight Manual.

4.6 Supply of parts.

The contract should specify whether a particular type of material or component is supplied by the operator or the CAR-145 approved organisation. Attention should be paid on the fact that it is the CAR-145 competence and responsibility to be in any case satisfied that the component in question meets the approved data/standard and to ensure that the aircraft component is in a satisfactory condition for fitment. In other words, there is definitely no way for a CAR-145 organisation to accept whatever he receives from the operator. Storage conditions should also be addressed.

4.7 Pooled parts.

The contract should specify how the subject of pooled parts at line stations should be addressed.

4.8 Unscheduled maintenance/Defect rectification.

The contract should specify to which level the CAR-145 approved organisation may rectify a defect without reference to the operator, and what action should be taken in case the defect rectification may not be performed by the CAR-145 approved organisation.

4.9 Deferred tasks.

The use of the operator's MEL and the relation with the operator in case of a defect that cannot be rectified at the line station should be addressed.

4.10 Release to service.

The release to service has to be performed by the CAR-145 approved organisation in accordance with its MOE procedures. The contract should however specify which support forms have to be used (operator's technical log, etc...).

4.11 Exchange of information.

Each time exchange of information between the operator and CAR-145 approved organisation is necessary, the contract should specify what information should be provided and when, how, by whom and to whom it has to be transmitted.

4.12 Meetings.

Before the contract is applicable, it may be beneficial that the technical personnel of both parties that are involved in the application of the contract meet in order to be sure that every point leads to a common understanding of both parties' duties.

APPENDIX XII to AMC to M.A. 706(f) Fuel Tank Safety Training

This appendix includes general instructions for providing training on Fuel Tank Safety issues.

A) Effectivity:

- Large aeroplanes type certified for passenger capacity of 30 or more or a maximum certified payload capacity of 7500 lbs (3402 kg) cargo or more, and

B) Affected organizations:

- M.A. Subpart G approved organizations involved in the continuing airworthiness management of aeroplanes specified in paragraph A.

DGCA responsible for the oversight as per M.B.704 of aeroplanes specified in paragraph A and for the oversight of the M.A. Subpart G approved organizations.

C) Persons from affected organizations who should receive training:

Phase 1 only:

- The quality manager and quality personnel.
- Officers of DGCA responsible for the oversight as per M.B.704 of aeroplanes specified in paragraph A and in the oversight of M.A. Subpart G approved organizations specified in paragraph B.

Phase 1 + Phase 2 + Continuation training:

- Personnel of the M.A. Subpart G organization involved in the management and review of the continuing airworthiness of aircraft specified in paragraph A.

D) General requirements of the training courses

Phase 1 – Awareness:

The training should be carried out before the person starts to work without supervision but not later than 6 months after joining the organization. The persons who have already attended the Level 1 Familiarisation are considered already in compliance with Phase 1.

Type:

Should be an awareness course with the principal elements of the subject. It may take the form of a training bulletin, or other self study or informative session. Signature of the reader is required to ensure that the person has passed the training.

Level: It should be a course at the level of familiarization with the principal elements of the subject.

Objectives:

The trainee should, after the completion of the training:

1. Be familiar with the basic elements of the fuel tank safety issues.
2. Be able to give a simple description of the historical background and the elements requiring a safety consideration, using common words and showing examples of

- non-conformities.
3. Be able to use typical terms.

Content:

The course should include:

- a short background showing examples of FTS accidents or incidents,
- the description of concept of fuel tank safety and CDCCL
- some examples of manufacturers documents showing CDCCL items,
- typical examples of FTS defects,
- some examples of TC holders repair data,
- some examples of maintenance instructions for inspection.

Phase 2- Detailed training

A flexible period may be allowed by DGCA to allow organizations to set the necessary courses and impart the training to the personnel, taking into account the organisation's training schemes / means/practices. This flexible period should not extend beyond **30th June 2015**.

The persons who have already attended the Level 2 Detailed training course either from a M.A. Subpart G approved organization or from a CAR-147 training organization are already in compliance with Phase-2 with the exception of continuation training.

Staff should have received Phase 2 training by **30th June 2015** or within 12 months of joining the organization, whichever comes later.

Type: Should be a more in-depth internal or external course. It should not take the form of a training bulletin or other self study. An examination should be required at the end, which should be in the form of a multi-choice question, and the pass mark of the examination should be 75%.

Level: It should be a detailed course on the theoretical and practical elements of the subject

The training may be made either:

- in appropriate facilities containing examples of components, systems and parts affected by Fuel Tank Safety (FTS) issues. The use of films, pictures and practical examples on FTS is recommended; or
- by attending a distance course (e-learning or computer based training) including a film when such film meets the intent of the objectives and content here below. An e-learning or computer based training should meet the following criteria:
 - A continuous evaluation process should ensure the effectiveness of the training and its relevance;
 - Some questions at intermediate steps of the training should be proposed to ensure that the trainee is authorized to move to the next step;
 - The content and results of examinations should be recorded;
 - Access to an instructor in person or at distance should be possible incase support is needed.

A duration of 8 hours for phase 2 is an acceptable compliance.

When the course is provided in a classroom, the instructor should be very familiar with the data in Objectives and Guidelines. To be familiar, an instructor should have attended himself a similar course in a classroom and made additionally some lecture of related subjects.

Objectives

The attendant should, after the completion of the training:

- have knowledge of the history of events related to fuel tank safety issues and the theoretical and practical elements of the subject, have an overview of the FAA regulations known as SFAR (Special FAR) 88 of the FAA and of JAA Temporary Guidance Leaflet TGL 47, be able to give a detailed description of the concept of fuel tank system ALI (including Critical Design Configuration Control Limitations CDCCL, and using theoretical fundamentals and specific examples;
- have the capacity to combine and apply the separate elements of knowledge in a logical and comprehensive manner;
- have knowledge on how the above items affect the aircraft;
- be able to identify the components or parts of the aircraft, subject to FTS from the manufacturer's documentation;
- be able to plan the action or apply a Service Bulletin and an Airworthiness Directive.

Content: Following the guidelines described in paragraph E.

Continuation training:

The organisation should ensure that the continuation training is performed in each two years period. The syllabus of the training programme referred to in the Training policy of the Continuing Airworthiness Management Exposition (CAME) should contain the additional syllabus for this continuation training.

The continuation training may be combined with the phase 2 training in a classroom or at distance.

The continuing training should be updated when new instructions are issued which are related to the material, tools, documentation and manufacturer's or Airworthiness Directives.

E) Guidelines for preparing the content of Phase 2 courses

The following guidelines should be taken into consideration when the phase 2 training programmes are being established:

- a) understanding of the background and the concept of fuel tank safety;
- b) how the mechanics can recognize, interpret and handle the improvements in the instructions for continuing airworthiness that have been made or are being made regarding fuel tank systems.
- c) awareness of any hazards especially when working on the fuel system, and when the Flammability Reduction System using nitrogen is installed.

Paragraph a), b) and c) above should be introduced in the training programme

addressing the following issues:

- i) The theoretical background behind the risk of fuel tank safety: the explosions of mixtures of fuel and air, the behavior of those mixtures in an aviation environment, the effects of temperature and pressure, energy needed for ignition etc, the 'fire triangle', - Explain 2 concepts to prevent explosions:
 - 1) Ignition source prevention and
 - 2) Flammability reduction,
- ii) The major accidents related to fuel tank systems, the accident investigations and their conclusions,
- iii) SAFR 88 of the FAA and JAA Interim Policy INT POL 25/12: ignition prevention program initiatives and goals, to identify unsafe conditions and to correct them, to systematically improve fuel tank maintenance,
- iv) Explain briefly the concepts that are being used: the results of SAFR 88 of the FAA and JAA INT/POL 25/12: modifications, airworthiness limitations items and CDCCL,
- v) Where relevant information can be found and how to use and interpret this information in the various instructions for continuing airworthiness (aircraft maintenance manuals, component maintenance manuals...)
- vi) Fuel Tank Safety during maintenance: fuel tank entry and exit procedures, clean working environment, what is meant by configuration control, wire separation, bonding of components etc.,
- vii) Flammability reduction systems when installed: reason for their presence, their effects, the hazards of an Flammability Reduction System (FRS) using nitrogen for maintenance, safety precautions in maintenance / working with an FRS,
- viii) Recording maintenance actions, recording measures and results of inspections.

The training should include a representative number of examples of defects and the associated repairs as required by the TC/ STC holder's maintenance data.

F) Approval of training

For M.A.Subpart G approved organizations the approval of the initial and continuation training programme and the content of the examination can be achieved by the change of the CAME exposition. The modification of the CAME should be approved as required by M.A. 704(b). The necessary changes to the CAME to meet the content of this paragraph should be made and implemented at the time requested by DGCA.