## STATE OF LIBYA MINISTRY OF TRANSPORT CIVIL AVIATION AUTHORITY



دولة ليبيا وزارة المواصلات مصلحة الطيران المدني

## LYCAR Part-M

# Libyan Civil Aviation Regulation Part-M - CONTINUING AIRWORTHINESS REQUIREMENTS

Second issue, Mar 2025

Approved by and published under the authority of the President of LYCAA.

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#### **RECORD OF REVISIONS**

No.	Date	Description / Highlights
Issue 1	August 2016	Initial issue
Issue 2	Mar 2025	<ul> <li>Completing missing parts</li> <li>Adding Section B: Authority requirements</li> <li>Integrating AMCs &amp; GMs</li> <li>Applying e-regulation linking</li> </ul>

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#### **FOREWORD**

- 1. The regulation contained herein is adopted under the provision of Article N5 of Libyan Civil Aviation Law N6 of 2005 and issued and signed up by the Director General of Libyan Civil Aviation by virtue of powers vested from the Minister of Transport under the resolution N154 issued on 13.05.2015.
- 2. The Libyan Civil Aviation Regulation of Continuing Airworthiness establishes technical requirements and administrative procedures to ensure the continuing airworthiness of aircraft, components, parts and appliances as well as the approval of organizations and personnel involved in these tasks.
- This regulation is in compliance with ICAO Annexes and SARPs and it has also adapted regulation, associated compliance or interpretative material issued by EASA as Acceptable Means of Compliance (AMCs) and Guidance Materials (GMs) whenever possible.
- 4. The information contained herein is subject to constant review in the light of changing regulations and requirements. No subscriber or other reader should act on the basis of any such information without taking appropriate professional advice when/as indicated/required. Although, every effort has been made to ensure accuracy, the Libyan Civil Aviation Authority (LYCAA) shall not be held responsible for loss or damage caused by errors, omissions, misprints or misinterpretation of the content hereof.
- 5. The use of the male gender implies the female gender and vice versa.
- 6. Copies of this regulation can be obtained from the Safety Department of the LYCAA or can be downloaded on the official website: www.caa.gov.ly
- 7. Transition Period: The Libyan civil aviation industry is required to meet the compliancy requirements of this regulation within three months after its official publication. All new applications, after the publication of this regulation, will meet the requirements of this issue of regulation.

Published on 17 Mar 2025, And signed by:

Dr. Mohamed M. Shlebik ) President of Libyan Civil Aviation Authority

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#### **Definitions**

- (a) A complex motor-powered aircraft means:
  - (1) An airplane
    - (i) Above 5700 Kg MTOM, or
    - (ii) Certificated for more than 19 seated passengers, or
    - (iii) Certificated for operation with at least 2 pilots, or
    - (iv) Equipped with turbojet engine(s) or more than 1 turboprop engine.
  - (2) A helicopter
    - (i) Above 3175 Kg MTOM, or
    - (ii) Certificated for more than 9 seated passengers, or
    - (iii) Certificated for operation with at least 2 pilots, or
  - (3) A tilt rotor aircraft.
- (b) For the purpose of LYCAR, Category 1 "Light Aircraft" (LA1) means the following aircrafts:
  - i. an airplane, 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 m<sup>3</sup> for hot air balloons, 1050 m<sup>3</sup> for gas balloons, 300 m<sup>3</sup> 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 m<sup>3</sup> for hot air airships and 1000 m<sup>3</sup> for gas airships.
- (c) For the purpose of LYCAR, Category 2 "Light Aircraft" (LA2) means the following aircraft:
  - i. an airplane with a Maximum Take-off Mass (MTOM) of 2 000 kg or less that is not classified as complex motor-powered aircraft;
  - ii. a sailplane or powered sailplane of 2.000 kg MTOM or less;
  - iii. a balloon;
  - iv. a hot air ship;
  - v. a gas airship complying with all of the following characteristics:
    - 3 % maximum static heaviness,
    - non-vectored thrust (except reverse thrust),
    - conventional and simple design of structure, control system and ballonet system, and
    - non-power assisted controls;
  - vi. a very Light Rotorcraft.

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- (d) For the purpose of LYCAR, 'LSA aircraft' means a light sport airplane which has all of the following characteristics:
  - i. a Maximum Take-off Mass (MTOM) of not more than 600 kg;
  - ii. a maximum stalling speed in the landing configuration (VSO) of not more than 45 knots Calibrated Airspeed (CAS) at the aircraft's maximum certificated takeoff mass and most critical center of gravity;
  - iii. a maximum seating capacity of no more than two persons, including the pilot;
  - iv. a single, non-turbine engine fitted with a propeller;
  - v. a non-pressurized cabin;

'Certifying staff' means personnel responsible for the release of an aircraft or a component after maintenance;

'Commercial specialized operations' means those operations subject to the requirements of in LYCAR-OPS;

'Component' means any engine, propeller, part or appliance;

'Critical maintenance task' means a maintenance task that involves the assembly or any disturbance of a system or any part on an aircraft, engine or propeller that, if an error occurred during its performance, could directly endanger the flight safety;

'Large Aircraft' means an aircraft, classified as an airplane with a maximum takeoff mass of more than 5700 kg, or a multi-engined helicopter.

**'Limited operations'** means the operations of other-than-complex motor-powered aircraft for:

- (a) cost-shared flights by private individuals, on the condition that the direct cost is shared by all the occupants of the aircraft, pilot included and the number of persons sharing the direct costs is limited to six;
- (b) competition flights or flying displays, on the condition that the remuneration or any valuable consideration given for such flights is limited to recovery of direct costs and a proportionate contribution to annual costs, as well as prizes of no more than a value specified by LYCAA;
- (c) introductory flights, parachute dropping, sailplane towing or aerobatic flights performed either by an approved training organization having its principal place of business in Libya, or by an organization created with the aim of promoting aerial sport or leisure aviation, on the condition that the aircraft is operated by the organization on the basis of ownership or dry lease, that the flight does not generate profits distributed outside of the organization, and that whenever non-members of the organization are involved, such flights represent only a marginal activity of the organization;

For the purpose of LYCAR, "limited operations" are not considered as CAT operations or commercial specialized operations;

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'Maintenance' means any one or combination of overhaul, repair, inspection, replacement, modification or defect rectification of an aircraft or component, with the exception of preflight inspection;

'Organization' means a natural person, a legal person or part of a legal person.

'Pre-flight inspection' means the inspection carried out before flight to ensure that the aircraft is fit for the intended flight;

'Principal place of business' means the head office or the registered office of the undertaking within which the principal financial functions and operational control of the activities referred to in this Regulation are exercised;

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#### **SECTION A - TECHNICAL REQUIREMENTS**

#### Subpart A - General

#### M.A.101. Applicability

For the purpose of this Part, LYCAA is the competent authority for:

- (a) The oversight of the continuing airworthiness of aircraft and the issue of certificate of airworthiness for the aircraft registered in Libya.
- (b) The certification, approval and oversight of a maintenance organizations as specified in Section A, Subpart F of this Part.
- (c) The certification, approval and oversight of continuing airworthiness management organizations (CAMO) as specified in Section A, Subpart G of this Part.
- (d) The approval of aircraft maintenance programs.

#### M.A.102. Scope

This Section 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 should 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 aircraft is performed in accordance with the approved maintenance program as specified in point 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 LYCAR to the 'owner', the term owner covers the owner or the lessee, as applicable.

- (c) Any person or organization performing maintenance should be responsible for the tasks performed.
- (d) The pilot-in-command or, in the case of commercial air transport, the operator should 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 to be carried out by an approved maintenance organization or by Part-66 certifying staff, or equivalent approved by the LYCAA.
- (e) In the case of licensed air carriers, the operator is responsible for the continuing airworthiness of the aircraft it operates and should:
  - (1) ensure that no flight takes place unless the conditions defined in point (a) are met;
  - (2) be approved, as part of its Air Operator Certificate (AOC), as a continuing airworthiness management organization pursuant to M.A. Subpart G (CAMO) for the aircraft it operates; and
  - (3) be approved in accordance with LYCAR Part-145 or establish a contract in accordance with M.A.708(c) with such organization.

- (f) For complex motor-powered aircraft used for commercial specialized operations or CAT or commercial ATOs, the operator should ensure that:
  - (1) no flight takes place unless the conditions defined in paragraph (a) are met;
  - (2) the tasks associated with continuing airworthiness are performed by an approved CAMO. When the operator is not CAMO approved itself then the operator should establish a written contract in accordance with <a href="Appendix I">Appendix I</a> with such an organization, and
  - (3) the CAMO referred to in (2) above is approved in accordance with Part-145, or equivalent AMO approved by the LYCAA, for the maintenance of the aircraft and components for installation thereon, or it has established a contract in accordance with M.A.708(c) with such organizations.
- (g) For complex motor-powered aircraft not included in point (e) or point (f), the owner should ensure that:
  - (1) no flight takes place unless the conditions defined in paragraph (a) are met;
  - (2) the tasks associated with continuing airworthiness are performed by an approved CAMO. When the owner is not CAMO approved itself then the owner should establish a written contract in accordance with <a href="Appendix I">Appendix I</a> with such an organization, and;
  - (3) the CAMO referred to in (2) above is approved in accordance with Part-M <u>subpart</u> <u>F</u> or Part-145 for the maintenance of the aircraft and components for installation thereon, or it has established a contract in accordance with <u>M.A.708(c)</u> with such organizations.
- (h) For other than complex motor-powered aircraft, used for commercial specialized operations, or CAT other than those used by licensed air carriers, or commercial ATOs, the operator should ensure that:
  - (1) no flight takes place unless the conditions defined in point (a) are met;
  - (2) the tasks associated with continuing airworthiness are performed by an approved CAMO. When the operator is not CAMO approved itself then the operator should establish a written contract in accordance with <a href="Appendix I">Appendix I</a> with such an organization, and;
  - (3) the CAMO referred to in point (2) above is approved in accordance with Part-M Subpart F or Part-145 for the maintenance of the aircraft and components for installation thereon, or it has established a contract in accordance with M.A.708(c) with such organizations.
- (i) For other than complex motor-powered aircraft not included in point (e) or (h), or used for 'limited operations', the owner is responsible for ensuring that no flight takes place unless the conditions defined in point (a) are met. To that end, the owner should:

- (1) contract the tasks associated with continuing airworthiness to an approved CAMO through a written contract in accordance with <a href="Appendix I">Appendix I</a>, which will transfer the responsibility for the accomplishment of these tasks to the contracted CAMO, or;
- (2) manage the continuing airworthiness of the aircraft under its own responsibility, without contracting an approved CAMO, or;
- (3) manage the continuing airworthiness of the aircraft under its own responsibility and establish a limited contract for the development of the maintenance program and for processing its approval in accordance with point M.A.302 with:
  - (i) an approved CAMO, or;
  - (ii) in the case of category 2 Light Aircraft (LA2), a Part-145 or Part-M Subpart F maintenance organization.

This limited contract transfers the responsibility for the development and, except in the case where a declaration is issued by the owner in accordance with M.A.302(h), processing the approval of the maintenance program to the contracted organization.

- (j) The owner/operator should ensure that any person authorized by the Authority is granted continuous access to any of its facilities, aircraft or documents related to its activities, including any subcontracted activities or subscriptions, to determine compliance with this Regulation.
- (k) The owner/operator should monitor and assess maintenance and operational experience with respect to continuing airworthiness.
- (I) The owner/operator should ensure that it obtains and assesses continuing airworthiness information and recommendations from the organizations responsible for the type design. The owner/operator should timely update the LYCAA about information and recommendations.
- (m) The operator/owner should establish and follow a safety management system.

#### GM TO M.A.201 Responsibilities

#### Quick summary table

		Complex motor-powered aircraft		Other-than-complex motor- powered aircraft		
Select your type of operation and your category of aircraft			Is a CAMO required for the management of continuing airworthiness?	Is maintenance by a maintenance organization required?	Is a CAMO required for the management of continuing airworthiness?	Is maintenance by a maintenance organization required?
Commercial operations	CAT	Air carriers licensed in accordance with Regulation LYCAR OPS	Yes, a CAMO is required and it shall be part of the AOC (M.A.201(e))	Yes, maintenance by a Part-145 organization is required (M.A.201(e))	Yes, a CAMO is required and it shall be part of the AOC (M.A.201(e))	Yes, maintenance by a Part-145 organization is required (M.A.201(e))
		CAT other than air carriers licensed in accordance with Regulation	Yes, a CAMO is required (M.A.201(f))	Yes, maintenance by a Part-145 organization is required (M.A.201(f))	Yes, a CAMO is required (M.A.201(h))	Yes, maintenance by a Subpart F or by a Part 145 organization is required (M.A.201(h))
	Commercial operations other than CAT	Commercial specialized operations	Yes, a CAMO is required (M.A.201(f))	Yes, maintenance by an organization is required (M.A.201(f))	Yes, a CAMO is required (M.A.201(h))	Yes, maintenance by a Subpart F or by a Part 145 organization is required (M.A.201(h))
		Commercial training organizations (ATOs)	Yes, a CAMO is required (M.A.201(f))	Yes, maintenance by a Part-145 organization is required (M.A.201(f))	Yes, a CAMO is required (M.A.201(h))	Yes, maintenance by a Subpart F or by a Part- 145 organization is required (M.A.201(h))
Other than commercial operations including limited operations			Yes, a CAMO is required (M.A.201(g))	Yes, maintenance by a Part-145 organization is required (M.A.201(g))	No, a CAMO is not required (M.A.201(i))	No, maintenance by a Subpart F or Part-145 organization is not required (M.A.201(i))

#### GM TO M.A.201(e) Responsibilities

The performance of ground de-icing and anti-icing activities does not require a Part-145 maintenance organization approval. Nevertheless, inspections required to detect and, when necessary, remove deicing and/or anti-icing fluid residues are considered maintenance. Such inspections may only be carried out by suitably authorized personnel.

#### AMC TO M.A.201(e)(2) Responsibilities

- 1. An air carrier licensed in accordance with Regulation LYCAR-OPS only needs to hold a CAMO approval as part of its air operator certificate (AOC) for the management of the continuing airworthiness of the aircraft listed on its AOC.
- 2. Part-M does not provide for CAMOs to be independently approved to perform continuing airworthiness management tasks on behalf of air carriers licensed in accordance with Regulation LYCAR OPS. The approval of such activity is vested in the AOC.
- 3. The operator is ultimately responsible and, therefore, accountable for the airworthiness of its aircraft.

#### GM TO M.A.201(f) Commercial ATO

'Commercial ATO' refers to training organization, as meant in LYCAR, which operate aircraft for commercial purposes in order to provide flight crew training courses.

#### GM TO M.A.201(i) Aircraft Maintenance Program

If an owner decides not to make a contract in accordance with M.A.201(i), the owner is fully responsible for the proper accomplishment of the corresponding tasks. As a consequence, it is recommended that the owner properly self-assesses his/her own competence to accomplish them or otherwise seeks the proper expertise.

#### AMC TO M.A.201(i)(3) Responsibilities

The limited contract for the development and, when applicable, processing of the approval of the aircraft maintenance program shall cover the responsibilities related to  $\underline{\text{M.A.302(d)}}$ ,  $\underline{\text{M.A.302(g)}}$ .

In the case of LA1 aircraft not involved in commercial operations, the limited contract between the owner and the CAMO/maintenance organization shall cover the following aspects:

- Whether the maintenance program will be based on the 'Minimum Inspection Program' described in M.A.302(i);
- 2. The obligation for the CAMO/maintenance organization to develop and propose to the owner a maintenance program which:
  - identifies the owner and the specific aircraft, engine, and propeller (as applicable);

- includes all mandatory maintenance information and any additional tasks derived from the evaluation of the recommendations issued by the Design Approval Holder;
- does not go below the requirements of the Minimum Inspection Program; and
- is customized to the particular aircraft type, configuration and operation, in accordance with M.A.302(h)3.
- 3. Whether the maintenance program is going to be approved by the LYCAA or the owner is going to issue a declaration for the maintenance program.
- 4. In the case of approval by the competent authority, whether indirect approval by the CAMO is permitted or not.
- 5. In the case of declaration by the owner, a statement in the contract making clear that the owner assumes full responsibility for any deviations introduced to the maintenance program proposed by the CAMO/maintenance organization.

#### M.A.202. Occurrence reporting

- (a) Any person or organization responsible in accordance with M.A.201 shall report to LYCAA and to the organization responsible for the type design or supplemental type design, any identified condition of an aircraft or component which endangers flight safety.
- (b) Reports shall be made in a manner established by the LYCAA and contain all pertinent information about the condition known to the person or organization.
- (c) Where the person or organization maintaining the aircraft is contracted by an owner or an operator to carry out maintenance, the person or the organization maintaining the aircraft shall also report to the owner, the operator or the continuing airworthiness management organization 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 seventy-two (72) hours of the person or organization identifying the condition to which the report relates.

#### AMC TO M.A.202(a) Occurrence reporting

Accountable persons or organizations shall 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 organization shall assign responsibility for coordinating 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 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 TO M.A.202(b) Occurrence reporting

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

Each report shall contain at least the following information:

- reporter or organization'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 should be ensured by:

- (a) the accomplishment of pre-flight inspections;
- (b) the rectification in accordance with 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, the Minimum Equipment List (MEL) and Configuration Deviation List (CDL) as applicable to the aircraft type;
- (c) the accomplishment of all maintenance, in accordance with the M.A.302 aircraft maintenance program;
- (d) for all complex motor-powered aircraft or aircraft used by licensed air carriers, the analysis of the effectiveness of the M.A.302 approved aircraft maintenance program;
- (e) the accomplishment of any applicable:
  - (1) airworthiness directive;
  - (2) operational directive with a continuing airworthiness impact;
  - (3) continued airworthiness requirement established by the Authority;
  - (4) measures mandated by the Authority in immediate reaction to a safety problem;
- (f) the accomplishment of modifications and repairs in accordance with M.A.304;
- (g) for non-mandatory modifications and/or inspections, for all complex motor-powered aircraft or aircraft used by licensed air carriers, the establishment of an embodiment policy;
- (h) maintenance check flights when necessary.

#### AMC TO M.A.301(a) Continuing airworthiness tasks

- 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 shall 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 shall 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 having been previously applied on it, there are no fluid residues that could endanger flight 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 scheduled maintenance inspections/cleanings identified in the approved maintenance program.
- 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 shall 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 organization or certifying staff as appropriate.
- 3. In the case of commercial air transport , the operator/CAMO shall 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 organizations, how their accomplishment is subject to the quality system of M.A.712. It shall be demonstrated to the Authority that preflight inspection personnel have received appropriate training for the relevant pre-flight inspection tasks. The training standard for personnel performing the pre-flight inspection shall be described in the operator's continuing airworthiness management exposition.

#### AMC TO M.A.301(b) Continuing airworthiness tasks

- The operator shall 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), configuration deviation list (CDL) or maintenance data, as appropriate. Also, that such defect rectification cannot be postponed unless agreed by the operator and in accordance with a procedure approved by the LYCAA.
- 2. When deferring or carrying forward a defect rectification, the cumulative effect of a number of deferred or carried forward defects on a given aircraft and any restrictions contained in the MEL shall be considered. Whenever possible, deferred defect rectification shall be made known to the pilot/flight crew prior to their arrival at the aircraft.

3. In the case of aircraft used by licensed air carriers and of complex motor-powered aircraft, a system of assessment shall be in operation to support the continuing airworthiness of an aircraft and to provide a continuous analysis of the effectiveness of the CAMO defect control system in use.

The system shall 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.
- repetitive incidents and defects: monitor on a continuous basis defects occurring in flight and defects found during maintenance and overhaul, highlighting any that are repetitive.
- c. deferred and carried forward defects: monitor on a continuous basis deferred and carried forward defects. Deferred defects are defined as those defects reported in operational service which are deferred for later rectification. Carried forward defects are defined as those defects arising during maintenance which are carried forward for rectification at a later maintenance input.
- d. unscheduled removals and system performance: analyze unscheduled component removals and the performance of aircraft systems for use as part of the maintenance program 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 shall be considered. Whenever possible, deferred defects shall be made known to the pilot/flight crew prior to their arrival at the aircraft.

#### AMC TO M.A.301(c) Continuing airworthiness tasks

The operator (Owner) or CAMO, as applicable, shall have a system to ensure that all aircraft maintenance checks are performed within the limits prescribed by the approved aircraft maintenance program and that, whenever a maintenance check cannot be performed within the required time limit, its postponement is allowed in accordance with a procedure prescribed in the operators CAME and agreed by LYCAA.

#### AMC TO M.A.301(d) Continuing airworthiness tasks

The CAMO managing the continuing airworthiness of the aircraft shall have a system to analyze the effectiveness of the maintenance program, with regard to spares, established defects, malfunctions and damage and to amend the maintenance program accordingly.

#### AMC TO M.A.301(e) Continuing airworthiness tasks

Operational directives with a continuing airworthiness impact include operating rules such as extended twin-engine operations (ETOPS) / long range operations (LROPS), reduced vertical separation minima (RVSM), MNPS, all weather operations (AWOPS), RNAV, etc.

Any other continued airworthiness requirement made mandatory by the Authority 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 TO M.A.301(g) Continuing airworthiness tasks

The CAMO managing the continuing airworthiness of the aircraft shall establish and work according 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 organization, the manufacturer and competent Authorities.

#### M.A.302. Aircraft Maintenance Program

- (a) Maintenance of each aircraft should be organized in accordance with an aircraft maintenance program.
- (b) The aircraft maintenance program and any subsequent amendments should be approved by the LYCAA.
  - The CAMO/operator should provide, for the use and guidance of maintenance and operational personnel concerned, a maintenance program, approved by the Authority. The design and application of the operator's maintenance program should observe Human Factors Principles.
- (c) When the continuing airworthiness of the aircraft is managed by a continuing airworthiness management organization approved in accordance with <u>Section A, Subpart G</u> of this Part-M or when there is a limited contract between the owner and this organization in accordance with <u>M.A.201(i)(3)</u>, minor changes of the aircraft maintenance program and its amendments may be approved through an indirect approval procedure.
  - (1) In that case, the indirect approval procedure should be established by the continuing airworthiness management organization as part of the Continuing Airworthiness Management Exposition and should be approved by LYCAA.
  - (2) The continuing airworthiness management organization shall not use the indirect approval procedure when this organization is not under the oversight of LYCAA, unless an agreement exists transferring the responsibility for the approval of the aircraft maintenance program to the Authority responsible for the continuing airworthiness management organization.
- (d) The aircraft maintenance program must establish compliance with:
  - (1) instructions issued or accepted by LYCAA;
  - (2) instructions for continuing airworthiness:

- (i) issued by the holders of the type-certificate, restricted type-certificate, supplemental type-certificate, major repair design approval,
- (ii) any other relevant approval issued under Airworthiness and Environmental Certification Regulation,
- (3) additional or alternative instructions proposed by the owner or the continuing airworthiness management organization once approved in accordance with M.A.302, except for intervals of safety related tasks referred in point (e), which may be escalated, subject to sufficient reviews carried out in accordance with point (g) and only when subject to direct approval in accordance with point M.A.302(b).
- (e) The aircraft maintenance program 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 complex motor-powered aircraft, when the maintenance program is based on Maintenance Steering Group logic (MSG) or On Condition Monitoring, the aircraft maintenance program shall include a reliability program.
- (g) The aircraft maintenance program shall be subject to periodic reviews and amended accordingly when necessary. These reviews shall ensure that the program continues to be valid in light of the operating experience and instructions from LYCAA whilst taking into account new and/or modified maintenance instructions promulgated by the type certificate and supplementary type certificate holders and any other organization that publishes such data in accordance with continuing airworthiness regulations. Copies of all amendments to the maintenance program shall be furnished promptly to all organizations or persons to whom the maintenance program has been issued.
- (h) In the case of LA1 aircraft not involved in commercial operations, compliance with paragraphs (b), (c), (d), (e), and (g) may be replaced by compliance with all the following conditions:
  - (1) The aircraft maintenance program shall clearly identify the owner and the specific aircraft to which it refers, including any installed engine and propeller.
  - (2) The aircraft maintenance program shall either:
    - (i) comply with the Minimum Inspection Program contained in paragraph (i) below, corresponding to the particular aircraft, or;
    - (ii) comply with paras (d) and (e).

The maintenance program shall not be less restrictive than the Minimum Inspection Program.

(3) The aircraft maintenance program shall include all the mandatory continuing airworthiness requirements, such as repetitive Airworthiness Directives, the Airworthiness Limitation Section (ALS) of the Instructions for Continued

Airworthiness (ICA) or specific maintenance requirements contained in the Type Certificate Data Sheet (TCDS). In addition, the aircraft maintenance program shall identify any additional maintenance tasks to be performed because of the specific aircraft type, aircraft configuration and type and specificity of operation. The following elements shall be taken into consideration as a minimum:

- (i) Specific installed equipment and modifications of the aircraft.
- (ii) Repairs incorporated in the aircraft.
- (iii) Life Limited components and flight safety critical components.
- (iv) Maintenance recommendations, such as Time Between Overhaul (TBO) intervals, recommended through service bulletins, service letters, and other non-mandatory service information.
- (v) Applicable operational directives/requirements related to the periodic inspection of certain equipment.
- (vi) Special operational approvals.
- (vii) Use of the aircraft and operational environment.
- (viii) Pilot-owner maintenance (if applicable).
- (4) If the maintenance program is not approved by the LYCAA, the aircraft maintenance program shall contain a signed statement where the owner declares that this is the aircraft maintenance program for the particular aircraft registration and he/she declares to be fully responsible for its content and, in particular, for any deviations introduced as regards the Design Approval Holder recommendations.
- (5) The aircraft maintenance program shall be reviewed at least annually. This review of the maintenance program shall be performed either:
  - (i) by the person who performs the airworthiness review of the aircraft in accordance with M.A.710, or
  - (ii) by the M.A. Subpart G organization managing the continuing airworthiness of the aircraft in those cases where the review of the maintenance program is not performed in conjunction with an airworthiness review.

If the review shows discrepancies on the aircraft linked to deficiencies in the content of the maintenance program, the person performing the review shall inform the LYCAA and the owner shall amend the maintenance program as agreed with the Authority.

(i) In the case of LA1 aircraft, not involved in commercial operations, the Minimum Inspection Program referred to in para (h) shall comply with the following conditions:

- (1) It shall contain the following inspection intervals:
  - (i) For LA1 airplanes and LA1 Touring Motor Gliders (TMG), every annual or 100h interval, whichever comes first. A tolerance of one (1) month or ten (10) hours may be applied to that interval as long as the next interval is calculated from the date or hours originally scheduled.
  - (ii) For LA1 sailplanes, LA1 powered sailplanes other than TMG and LA1 balloons, every annual interval. A tolerance of one (1) month may be applied to that interval as long as the next interval is calculated from the date originally scheduled.
- (2) It should contain the following:
  - (i) Servicing tasks as required by the Design Approval Holder's requirements.
  - (ii) Inspection of markings.
  - (iii) Review of weighing records.
  - (iv) Operational test of transponder (if existing).
  - (v) Operational test of the pitot-static system.
  - (vi) In the case of LA1 airplanes:
    - Operational checks for power and RPM, magnetos, fuel and oil pressure, engine temperatures.
    - For engines equipped with automated engine control, the published run-up procedure.
    - For dry-sump engines, engines with turbochargers and liquid-cooled engines, an operational check for signs of disturbed fluid circulation.
  - (vii) Inspection of the condition and attachment of the structural items, systems and components corresponding to the following areas:

For LA1 airplanes:

- Airframe
- Cabin and cockpit
- Landing gear
- Wing and centre section
- Flight controls

- Empennage
- Avionics and electrics
- Powerplant
- Clutches and gearboxes
- Propeller
- Miscellaneous systems such as the ballistic rescue system

For LA1 sailplanes and LA1 powered sailplanes:

- Airframe
- Cabin and cockpit
- Landing gear
- Wing and centre section
- Empennage
- Avionics and electrics
- Powerplant (when applicable)
- Miscellaneous systems such as removable ballast, drag chute and controls, and water ballast system

For LA1 hot-air balloons:

- Envelope
- Burner
- Basket
- Fuel containers
- Equipment and instruments

For LA1 gas balloons:

- Envelope
- Basket
- Equipment and instruments

Until such time as this Regulation specifies a Minimum Inspection Program for airships, their maintenance program should comply with paragraphs (d) and (e).

#### AMC TO M.A.302 Aircraft Maintenance Program

Note: This AMC is not applicable to those LA1 aircraft not involved in commercial operations for which the owner has elected to apply the provisions of  $\underline{M.A.302(h)}$ . For those cases, refer to  $\underline{AMC\ M.A.302(h)}$ .

- 1. The term 'maintenance program' 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 shall only be maintained to one approved maintenance program at a given point in time. Where an owner or operator wishes to change from one approved program to other, a transfer check or inspection may need to be performed in order to implement the change.
- 3. The maintenance program details shall be reviewed at least annually. As a minimum, revision of documents affecting the program basis need to be considered by the owner or operator for inclusion in the maintenance program during the annual review. Applicable mandatory requirements for compliance with LYCAA Part-21 shall be incorporated into the aircraft maintenance program as soon as possible.
- 4. The aircraft maintenance program shall contain a preface which will define the maintenance program 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.
- 5. Repetitive maintenance tasks derived from modifications and repairs shall be incorporated into the approved maintenance program.
- 6. <u>Appendix I to AMC M.A.302</u> provides detailed information on the contents of an approved aircraft maintenance program.

#### GM TO M.A.302(a) Aircraft Maintenance Program

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

#### AMC TO M.A.302(d) Aircraft Maintenance Program

- 1. An aircraft maintenance program shall 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 aircraft maintenance program shall also take into account any maintenance data containing information on scheduling for components.
- 2. Instructions issued by the Authority 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 Authority 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 shall normally develop the initial aircraft maintenance program based upon the MRB report.
- 4. Where an aircraft is maintained in accordance with an aircraft maintenance program based upon the MRB report process, any associated program for the continuous surveillance of the reliability, or health monitoring of the aircraft shall be considered as part of the aircraft maintenance program.
- 5. Aircraft maintenance programs for aircraft types subjected to the MRB report process shall 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 program. This does not prevent the approved aircraft maintenance program 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 programs, not developed from the MRB process, utilize reliability programs. Such reliability programs shall be considered as a part of the approved maintenance program.
- 7. Alternate and/or additional instructions to those defined in paragraphs M.A.302(d)(1) and (2), 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. <u>Appendix I to AMC M.A.302 and M.B.301(b)</u> recommends that the maintenance program contains the corresponding escalation procedures. The escalation of these tasks is directly approved by LYCAA.
  - 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 TO M.A.302(f) Aircraft Maintenance Program

 Reliability program shall be developed for aircraft maintenance program 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 program need not be developed for aircraft not considered complex motor-powered aircraft or that contain overhaul time periods for all significant aircraft system components.
- 3. The purpose of a reliability program is to ensure that the aircraft maintenance program tasks are effective and their periodicity is adequate.
- 4. The reliability program 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 program provides an appropriate means of monitoring the effectiveness of the maintenance program.
- 6. It is the responsibility of the operator to report any exceedance in the alert level of the removal/failure rates of components as a result of the reliability monitoring to the LYCAA.
- 7. Appendix I to AMC M.A.302 and M.B.301(d) gives further guidance.

# AMC TO M.A.302(h) Aircraft Maintenance Program

Note: This AMC is applicable to those LA1 aircraft not involved in commercial operations for which the owner has elected to apply the provisions of  $\underline{M.A.302(h)}$ .

- 1. The aircraft shall only be maintained according to one maintenance program at a given point in time. Where an owner wishes to change from one program to another because of a change in the type of operation, a transfer check or inspection may need to be performed to implement the change.
- 2. During the annual review of the maintenance program, the following shall be taken into consideration:
  - The results of the maintenance performed during that year, which may reveal that the current maintenance program is not adequate.
  - The results of the airworthiness review performed on the aircraft, which may reveal that the current maintenance program is not adequate.
  - Revisions introduced in the documents affecting the program basis, such as the M.A.302(i) 'Minimum Inspection Program' or the Design Approval Holder data.
  - Applicable mandatory requirements for compliance with LYCAR Part-21, such as Airworthiness Directives, Airworthiness Limitations, Certification Maintenance Requirements and specific maintenance requirements contained in the TCDS.
- 3. For the purpose of reviewing the results of the maintenance performed during that year, the airworthiness review staff shall request the owner/CAMO to provide the records of all the maintenance performed during that year, including unscheduled maintenance.
- 4. When reviewing the results of the maintenance performed during that year and the results of the airworthiness review, attention shall be paid as to whether the defects found may

have been prevented by introducing in the maintenance program certain recommendations from the Design Approval Holder which were initially disregarded by the owner.

# M.A.303. Airworthiness Directives

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

# M.A.304. Data for modifications and repairs

Damage shall be assessed and modifications and repairs carried out using as appropriate:

- (a) data approved by LYCAA, or;
- (b) data approved by an EASA or FAA approved design organization, or;
- (c) Data approved by a design organization, or;
- (d) data contained in certification of specification issued by the State of design.

# AMC TO M.A.304 Data for modifications and repairs

A person or organization repairing an aircraft or component shall 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 organization approved in accordance with Part-21 and finally LYCAA approval of the particular repair data.

# 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 145.A.50 shall be entered in the aircraft continuing airworthiness records. Each entry should be made as soon as practicable but in no case more than thirty (30) days after the day of the maintenance action.
- (b) The aircraft continuing airworthiness records shall consist of:
  - 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,
  - (2) when required in M.A.306, the operator's technical log.
- (c) The aircraft type and registration mark, the date, together with total flight time and/or flight cycles and/or landings, as appropriate, shall be entered in the aircraft logbooks.
- (d) The aircraft continuing airworthiness records shall contain the current:

- (1) status of airworthiness directives and measures mandated by the Authority in immediate reaction to a safety problem;
- (2) status of modifications and repairs;
- (3) status of compliance with maintenance program;
- (4) status of service life limited components;
- (5) mass and balance report;
- (6) list of deferred maintenance.
- (e) In addition to the authorized release document, LYCAA Form 1 or equivalent, 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 point (d) information applicable to the component.
- (f) The person responsible for the management of continuing airworthiness tasks pursuant to Section A, Subpart B, shall control the records as detailed in this point and present the records to the LYCAA 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 should 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 lifelimited component fitted thereto, until such time as the information contained therein is superseded by new information equivalent in scope and detail but not less than thirty-six (36) months after the aircraft or component has been released to service, and;
  - (2) the total time in service (hours, calendar time, cycles and landings) of the aircraft and all service life-limited components, at least twelve (12) months after the aircraft or component has been permanently withdrawn from service, and;

- (3) the time in service (hours, calendar 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 program such that compliance with the approved aircraft maintenance program 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 at least twelve (12) months after the aircraft or component has been permanently withdrawn from service, and;
- (5) the current status of airworthiness directives applicable to the aircraft and components, at least twelve (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 twelve (12) months after they have been permanently withdrawn from service, and;
- (7) the detailed maintenance records to show that all requirements for the signing of maintenance release have been met for a minimum period of one (1) year after the signing of the maintenance release.

D

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

The current status of ADs shall identify the applicable ADs 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 shall be identified. The ADs status includes the date when the AD was accomplished, and where the AD is controlled by flight hours or flight cycles, it shall include the aircraft or engine or component total flight hours or cycles, as appropriate. For repetitive ADs, only the last application shall be recorded in the AD status. The status shall 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:

- 1. compliance program; and
- 2. master drawing or drawing list, production drawings, and installation instructions; and
- 3. engineering reports (static strength, fatigue, damage tolerance, fault analysis, etc.); and

- 4. ground and flight test program and results; and
- 5. mass and balance change data; and
- 6. maintenance and repair manual supplements; and
- 7. maintenance program changes and instructions for continuing airworthiness; and
- 8. 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 shall show compliance with any mandatory requirements pertaining to that module

AMC TO M.A.305(d)(4) & M.A.305(h) aircraft continuing airworthiness record system

The term 'service life-limited components' embraces:

- components subject to a certified life limit after which the components shall be retired, and
- 2. components subject to a service life limit after which the components shall undergo maintenance to restore their serviceability.

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

- 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;
- 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) shall 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 shall 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 shall 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 TO M.A.305(h) Aircraft continuing airworthiness record system

When an owner/operator arranges for the relevant maintenance organization 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 transferring the records to any other person who becomes the owner/operator of the aircraft.

Keeping continuing airworthiness records in a form acceptable to the LYCAA 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 shall remain legible throughout the required retention period.

Paper systems shall use robust material, which can withstand normal handling and filing.

Computer systems shall have at least one backup system, which shall be updated at least within twenty-four (24) hours of any maintenance. Each terminal is required to contain program safeguards against the ability of unauthorized personnel to alter the database.

Continuing airworthiness records shall be stored in a safe way with regard to damage, alteration and theft. Computer backup discs, tapes etc., shall 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 shall be submitted to the LYCAA for acceptance. The LYCAA may require the performance of additional maintenance if not satisfied with the reconstructed records.

# AMC TO 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. Aircraft technical log system

- (a) For CAT, commercial specialized operations and commercial ATO operations, in addition to the requirements of M.A.305, the operator shall use a technical log system containing the following information for each aircraft:
  - (1) information about each flight, necessary to ensure continued flight safety, and;

- (2) the current aircraft certificate of release to service, and;
- (3) the current maintenance statement giving the aircraft maintenance status of what scheduled and out of phase maintenance is next due, except that LYCAA may agree to the maintenance statement being kept elsewhere, and;
- (4) all outstanding deferred defects rectifications that affect the operation of the aircraft, and;
- (5) any necessary guidance instructions on maintenance support arrangements.
- (b) The aircraft technical log system and any subsequent amendment shall be approved by LYCAA.
- (c) An operator shall ensure that the aircraft technical log is retained for thirty-six (36) months after the date of the last entry.

# AMC TO M.A.306(a) Aircraft technical log system

For CAT operations, commercial specialized operations and commercial ATO operations, the 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 crew need to know.

Cabin or galley defects and malfunctions that affect the safe operation of the aircraft or the safety of its occupants are regarded as forming part of the aircraft log book, where recorded by another means.

The aircraft technical log system may range from a simple single section document to a complex system containing many sections but, in all cases, it shall include the information specified for the example used here which happens to use a 5 section document / computer system:

**Section 1**: shall 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**: shall 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 shall 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 the LYCAA.

**Section 3**: shall contain details of all information considered necessary to ensure continued flight safety. Such information includes:

- the aircraft type and registration mark,
- the date and place of take-off and landing,
- the times at which the aircraft took off and landed,
- 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 the LYCAA.
- 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 crew. Provision shall be made for the crew to date and sign such entries including, where appropriate, the nil defect state for continuity of the record. Provision shall 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 shall readily identify the defect(s) to which it relates or the particular maintenance check as appropriate.
- In the case of maintenance performed by a Part-145 maintenance organization, it is acceptable to use an alternate abbreviated certificate of release to service consisting of the statement 'Part-145 release to service' instead of the full certification statement. When the alternate abbreviated certificate of release to service is used, the introductory section of the technical log shall include an example of the full certification statement.
- 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's procedures in order to allow the assessment on whether inspections for and/or elimination of de-icing/anti-icing fluid residues that could endanger flight safety are required.
- 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 shall contain all of the foregoing information where appropriate.

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

Note 3: Section 3 layout shall 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**: shall contain details of all deferred defects that affect or may affect the safe operation of the aircraft and shall therefore be known to the aircraft crew. Each page of this section shall be pre-printed with the operator's name and page serial number and make provision for recording the following:

- a cross-reference for each deferred defect such that the original defect can be identified in the particular section 3 sector record page.
- the original date of occurrence of the defect deferred.
- brief details of the defect.
- 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**: shall contain any necessary maintenance support information that the aircraft crew needs to know. Such information would include data on how to contact maintenance if problems arise whilst operating the routes, etc.

#### M.A.307. Transfer of aircraft continuing airworthiness records

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

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

Where an owner/operator terminates his operation, all retained continuing airworthiness records shall 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 six (6) months. However, the LYCAA shall 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 organization maintaining an aircraft should 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 Part, applicable maintenance data is:
  - (1) any applicable requirement, procedure, standard or information issued by LYCAA;
  - (2) any applicable airworthiness directive;
  - (3) applicable instructions for continuing airworthiness, issued by type certificate holders, supplementary type certificate holders and any other organization that publishes such data in accordance with LYCAA Part 21 or equivalent regulations.
  - (4) any applicable data issued in accordance with LYCAR Part 145.A.45(d).
- (c) The person or organization maintaining an aircraft should ensure that all applicable maintenance data is current and readily available for use when required. The person or organization should establish a work card or worksheet system to be used and should 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 TO M.A.401(b) Maintenance data

- 1. Except as specified in sub-paragraph 2, each person or organization performing aircraft maintenance shall have access to and use:
  - a. the regulations on continuing airworthiness of aircraft, associated AMC and GM;
  - b. all applicable maintenance requirements and notices such as LYCAA standards and specifications that have not been superseded by a requirement, procedure or directive;
  - c. all applicable ADs;
  - d. the appropriate sections of the aircraft maintenance program, aircraft maintenance manual, repair manual, supplementary structural inspection document, corrosion control document, service bulletins, service sheets modification leaflets, nondestructive 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 organization performing aircraft maintenance shall 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 TO M.A.401(c) Maintenance data

- 1. Data being made available to personnel maintaining aircraft means that the data shall 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 shall be sufficient in relation to the size of the work program 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 shall 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 shall refer to particular maintenance tasks.
- 4. The work card/worksheet system may take the form of, but is not limited to, the following:
  - a format where the mechanic 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 authorized personnel together with information of the maintenance data used, including its revision status,
  - for maintenance checks, the checklist issued by the manufacturer (i.e., 100H checklist, Revision 5, Items 1 through 95)
- 5. Maintenance data shall 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

Except for maintenance performed by a maintenance organization approved in accordance with LYCAR Part 145, any person or organization performing maintenance should:

- (a) be qualified for the tasks performed, as required by this part;
- (b) ensure that the area in which maintenance is carried out is well organized and clean in respect of dirt and contamination;
- (c) use the methods, techniques, standards and instructions specified in <u>M.A.401</u> maintenance data;
- (d) use the tools, equipment and material specified in <u>M.A.401</u> maintenance data. If necessary, tools and equipment should be controlled and calibrated to an officially recognized standard;
- (e) ensure that maintenance is performed within any environmental limitations specified in the M.A.401 maintenance data;
- (f) ensure that proper facilities are used in case of inclement weather or lengthy maintenance;
- (g) ensure that the risk of multiple errors during maintenance and the risk of errors being repeated in identical maintenance tasks are minimized;
- (h) ensure that an error capturing method is implemented after the performance of any critical maintenance task; and
- (i) carry out a general verification after completion of maintenance to ensure the aircraft or component is clear of all tools, equipment and any extraneous parts or material, and that all access panels removed have been refitted.

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

- 1. Maintenance shall be performed by persons authorized to issue a certificate of release to service or under the supervision of persons authorized to issue a certificate of release to service. Supervision shall be to the extent necessary to ensure that the work is performed properly and the supervisor shall be readily available for consultation.
- 2. The person authorized to issue a certificate of release to service shall ensure that:
  - a. each person working under his/her supervision has received appropriate training or has relevant previous experience and is capable of performing the required task; and
  - b. each person who performs specialized tasks, such as welding, is qualified in accordance to an officially recognized standard.

#### GM TO M.A.402(a) Performance of maintenance

In the case of limited Pilot-owner maintenance, as specified in <u>M.A.803</u>, any person maintaining an aircraft which they own individually or jointly, provided they hold a valid pilot license with the appropriate type or class rating, may perform the limited Pilot-owner maintenance tasks in accordance with <u>Appendix VII to Part-M</u>.

# AMC TO M.A.402(c) Performance of maintenance

The general maintenance and inspection standards applied to individual maintenance tasks shall meet the recommended standards and practices of the organization responsible for the type design, which are normally published in maintenance manuals. In the absence of maintenance and inspection standards published by the organization responsible for the type design, maintenance personnel shall refer to the relevant aircraft airworthiness standards and procedures published or used as guidance by the LYCAA. The maintenance standards used shall contain methods, techniques and practices acceptable to the LYCAA for the maintenance of aircraft and its components.

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

When performing maintenance, personnel are required to use the tools, equipment and test apparatuses necessary to ensure completion of work in accordance with accepted maintenance and inspection standards. Inspection, service or calibration that is performed on a regular basis shall be performed in accordance with the equipment manufacturers' instructions. All tools requiring calibration shall be traceable to an acceptable standard.

In this context, 'officially recognized standards' means those standards established or published by an official body, being either a natural or legal person, and which are widely recognized by the air transport sector as constituting good practice.

If the organization responsible for the type design involved recommends special equipment or test apparatuses, personnel shall use the recommended equipment or apparatuses or equivalent equipment accepted by LYCAA.

All work shall be performed using materials of such quality and in such a manner that the condition of the aircraft or its components after maintenance is at least equal to its or their original or modified condition (with regard to aerodynamic function, structural strength, resistance to vibration, deterioration and any other qualities affecting airworthiness).

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

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

- a. Temperature shall be maintained such that personnel can perform the required tasks without undue discomfort.
- b. Airborne contamination (e.g., dust, precipitation, paint particles, filings) shall be kept to a minimum to ensure aircraft/components surfaces are not contaminated. If this is not

possible, all susceptible systems shall be sealed until acceptable conditions are reestablished.

- c. Lighting shall be adequate to ensure each inspection and maintenance task can be performed effectively.
- d. Noise levels shall not be allowed to rise to the level of distraction for inspection staff or if this is not possible, inspection staff shall be provided with personnel equipment to reduce excessive noise.

#### AMC TO M.A.402(f) performance of maintenance

Facilities shall 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 shall be large enough to accommodate the components that are planned to be maintained.

Protection from inclement weather means the hangar or component workshop structures shall be to a standard that prevents the ingress of rain, hail, ice, snow, wind and dust, etc.

# AMC TO M.A.402(g) Performance of maintenance

- 1. To minimize the risk of multiple errors and to prevent omissions, the person or organization performing maintenance shall ensure that:
  - a. every maintenance task is signed off only after completion;
  - b. the grouping of tasks for the purpose of sign-off allows critical steps to be clearly identified; and
  - c. any work performed by personnel under supervision (i.e., temporary staff, trainees) is checked and signed off by an authorized person.
- 2. To minimize the possibility of an error being repeated in identical tasks that involve removal/installation or assembly/disassembly of several components of the same type fitted to more than one system, whose failure could have an impact on safety, the person or organization performing maintenance shall plan different persons to perform identical tasks in different systems. However, when only one person is available, then this person shall perform reinspection of the tasks as described in AMC 2 M.A.402(h).

# AMC 1 TO M.A.402(h) Performance of maintenance

#### Critical maintenance tasks

The following maintenance tasks shall primarily be reviewed to assess their impact on safety:

- a. tasks that may affect the control of the aircraft, flight path and attitude, such as installation, rigging and adjustments of flight controls;
- b. aircraft stability control systems (autopilot, fuel transfer);
- c. tasks that may affect the propulsive force of the aircraft, including installation of aircraft engines, propellers and rotors; and
- d. overhaul, calibration or rigging of engines, propellers, transmissions and gearboxes.

#### AMC 2 TO M.A.402(h) Performance of maintenance

# **Independent inspection**

a. What is an independent inspection?

Independent inspection is one possible error-capturing method. It consists of an inspection performed by an 'independent qualified person' of a task carried out by an 'authorized person', taking into account that:

- 1. the 'authorized person' is the person who performs the task or supervises the task and assumes the full responsibility for the completion of the task in accordance with the applicable maintenance data;
- the 'independent qualified person' is the person who performs the independent inspection and attests the satisfactory completion of the task and that no deficiencies have been found. The 'independent qualified person' does not issue a certificate of release to service; therefore he/she is not required to hold certification privileges;
- 3. the certificate of release to service is issued by the 'authorized person' after the independent inspection has been carried out satisfactorily;
- 4. the work card system shall record the identification of each person, the date and the details of the independent inspection, as necessary, before the certificate of release to service is issued.
- b. Qualifications of personnel performing independent inspections.
  - When the work is performed by a Part-M Subpart F organization, then the
    organization shall have procedures to demonstrate that the 'independent qualified
    person' has been trained and has gained experience in the specific control systems
    to be inspected. This training and experience could be demonstrated, for example,
    by:

- i. holding a Part-66 license in the same subcategory as the license subcategory or equivalent necessary to release or sign off the critical maintenance task;
- ii. holding a Part-66 license in the same category and specific training in the task to be inspected; or
- iii. having received appropriate training and having gained relevant experience in the specific task to be inspected.
- 2. When the work is performed outside a Part-M Subpart F organization:
  - i. the 'independent qualified person' shall hold:
    - A. a Part-66 license in any category; or
    - B. a valid pilot license for the aircraft type issued in accordance with LYCAR;
  - ii. additionally, the 'authorized person' shall assess the qualifications and experience of the 'independent qualified person' taking into account that the 'independent qualified person' shall have received training and have experience in the particular task. It shall not be acceptable that the 'authorized person' shows to the 'independent qualified person' how to perform the inspection once work has been already finalized.
- c. How shall independent inspection be performed?

Independent inspection shall ensure for example correct assembly, locking and sense of operation. When inspecting control systems that have undergone maintenance, the 'independent qualified person' shall consider the following points independently:

- 1. all those parts of the system that have actually been disconnected or disturbed shall be inspected for correct assembly and locking;
- 2. the system as a whole shall be inspected for full and free movement over the complete range;
- 3. cables shall be tensioned correctly with adequate clearance at secondary stops;
- 4. the operation of the control system as a whole shall be observed to ensure that the controls are operating in the correct sense;
- 5. if different control systems are interconnected so that they affect each other, all the interactions shall be checked through the full range of the applicable controls; and
- 6. software that is part of the critical maintenance task shall be checked, for example version and compatibility with the aircraft configuration.
- d. What to do in unforeseen cases when only one person is available?

# Reinspection:

- 1. Reinspection is subject to the same conditions as the independent inspection is, except that the 'authorized person' performing the maintenance task is also acting as 'independent qualified person' and performs the inspection.
- 2. For critical maintenance tasks, reinspection shall only be used in unforeseen circumstances when only one person is available to carry out the task and perform the independent inspection. The circumstances cannot be considered unforeseen if the person or organization has not assigned a suitable 'independent qualified person' to that particular task.
- 3. The certificate of release to service is issued by the 'authorized person' after the reinspection has been performed satisfactorily.
- 4. The work card system shall record the identification of the 'authorized person' and the date and the details of the reinspection, as necessary, before the certificate of release to service is issued.

# GM TO M.A.402(h) Performance of maintenance

Several data sources may be used for the identification of critical maintenance tasks, such as:

- information from the design approval holder;
- accident reports;
- investigation and follow-up of incidents;
- occurrence reporting;
- flight data analysis;
- results of audits;
- normal operations monitoring schemes;
- feedback from training; and
- information exchange systems.

# M.A.403 Aircraft defects

- (a) Any aircraft defect that hazards seriously the flight safety shall be rectified before further flight.
- (b) Only the authorized certifying staff, according to points M.A.801(b)1, M.A.801(b)2, M.A.801(c), M.A.801(d) or Part 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 the MEL is used by the pilot or by the authorized certifying staff.
- (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 or the MEL.
- (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 TO 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 shall be made in order to initiate any necessary further investigation and analysis necessary to identify the root cause of the defect.

# AMC TO M.A.403(d) Aircraft defects

All deferred defects shall be made known to the pilot/flight crew, whenever possible, prior to their arrival at the aircraft.

Deferred defects shall be transferred on to worksheets at the next appropriate maintenance check, and any deferred defect which is not rectified during the maintenance check, shall be re-entered on to a new deferred defect record sheet. The original date of the defect shall be retained.

The necessary components or parts needed for the rectification of defects shall be made available or ordered on a priority basis, and fitted at the earliest opportunity.

# **Subpart E: Components**

# M.A.501 Classification and installation

- (a) All components shall be classified into the following categories:
  - (1) components which are in a satisfactory condition, released on an LYCAA Form 1 or equivalent, unless otherwise specified in LYCAR Part 21, LYCAR Part 145 or LYCAR Part-M.
  - (2) control of unserviceable components which shall be maintained in accordance with this Regulation.
  - (3) components categorized as unsalvageable because they have reached their certified life limit or contain a non-repairable defect.
  - (4) standard parts used on an aircraft, engine, propeller or other aircraft component when specified in the maintenance data and accompanied by evidence of conformity traceable to the applicable standard.
  - (5) material both raw and consumable used in the course of maintenance when the organization is satisfied that the material meets the required specification and has appropriate traceability. All materials must be accompanied by documentation clearly relating to the particular material and containing a conformity to specification statement plus both the manufacturing and supplier source.
- (b) Components, standard parts and material shall only be installed on an aircraft or a component when they are in a satisfactory condition, belong to one of the categories listed in point (a) and the applicable maintenance data specifies the particular component, standard part or material.

# AMC 1 M.A.501(a)(1) Classification and installation

# LYCAA Form 1 or equivalent

- (a) A document equivalent to a LYCAA Form 1 may be:
  - (1) A release document issued by an organization under the terms of a bilateral agreement signed by LYCAA;
  - (2) a release document acceptable to a Civil Aviation Authority according to the provisions of a bilateral agreement between the LYCAA and a third country.
  - (3) a release document issued under the conditions described in this Part.
- (b) Any item in storage without Form 1 (LYCAA/EASA/FAA) or equivalent cannot be installed on aircraft registered in Libya, unless an LYCAA Form 1 is issued for such item by an appropriately approved maintenance organization in accordance with <u>AMC M.A.613(a)</u>.

# GM TO M.A.501(a)(1) Classification and installation

- (a) The LYCAA Form 1 identifies the airworthiness status of an aircraft component in relation to the work being certified. Block 12 'Remarks' on the LYCAA Form 1 in some cases contains vital airworthiness related information (see also <a href="Part-M Appendix II">Part-M Appendix II</a>) which may need appropriate and necessary actions.
- (b) The fitment of replacement components shall only take place when the person referred to in M.A.801 or the M.A. Subpart F or Part-145 maintenance organization is satisfied that such components meet required standards in respect of manufacture or maintenance, as appropriate.
- (c) The person referred to under M.A.801 or the M.A. Subpart F or Part-145 approved maintenance organization shall 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 (S)TC holder or manufacturer's parts catalogue or other approved data (i.e., Service Bulletin). Care shall also be taken in ensuring compliance with applicable ADs and the status of any service life-limited parts fitted to the aircraft component.

# AMC TO M.A.501(a)(2) Classification and installation

#### Unserviceable components

- (a) The person or organization that performs maintenance shall ensure the proper identification of any unserviceable components. The unserviceable status of the component shall be clearly declared on a tag together with the component identification data and any information that is useful to define actions that are necessary to be taken. Such information shall state, as applicable, in-service times, maintenance status, preservation status, failures, defects or malfunctions reported or detected, exposure to adverse environmental conditions, and whether the component is installed on an aircraft that was involved in an accident or incident. In this case, means shall be provided to prevent unintentional separation of this tag from the component.
- (b) Unserviceable components shall typically undergo maintenance due to:
  - (1) expiry of the service life limit as defined in the aircraft maintenance program;
  - (2) non-compliance with the applicable airworthiness directives and other continuing airworthiness requirements mandated by the LYCAA;
  - (3) absence of the necessary information to determine the airworthiness status or eligibility for installation;
  - (4) evidence of defects or malfunctions;
  - (5) previously being installed on an aircraft that was involved in an incident or accident likely to affect the component's serviceability.

#### AMC TO M.A.501(a)(3) Classification and installation

#### Unsalvageable components

The following types of components shall 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 whose airworthy condition cannot be restored due to exposure to extreme forces, heat or adverse environmental conditions;
- (f) components for which conformity with an applicable airworthiness directive cannot be accomplished;
- (g) components for which maintenance records and/or traceability to the manufacturer cannot be retrieved.

# AMC TO M.A.501(a)(4) Classification and installation

# Standard parts

- (a) Standard parts are parts manufactured in complete compliance with an established industry, Agency, Civil Aviation Authority or other Government specification which includes design, manufacturing, test and acceptance criteria, and uniform identification requirements. The specification shall include all information necessary to produce and verify conformity of the part. It shall 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.
- (b) To designate a part as a standard part the TC holder may issue a standard parts manual accepted by the Authority of original TC holder or may make reference in the parts catalogue to the specification to be met by the standard part. Documentation accompanying standard parts shall 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 shall be included on the documentation and / or material packaging.
- (c) An LYCAA Form 1 or equivalent is not normally issued and, therefore, none shall be expected.

# AMC TO M.A.501(A)(5) CLASSIFICATION AND INSTALLATION

#### Material

- (a) Consumable material is any material which is only used once, such as lubricants, cements, compounds, paints, chemicals dyes and sealants, etc.
- (b) 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.
- (c) Material both raw and consumable shall only be accepted when satisfied that it is to the required specification. To be satisfied, the material and or its packaging shall be marked with the specification and where appropriate the batch number.
- (d) Documentation accompanying all material shall 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 shall be included on the documentation and/or material packaging.
- (e) The LYCAA Form 1 or equivalent shall not be issued for such material and therefore, none shall be expected. The material specification is normally identified in the (S)TC holder's data except in the case where the LYCAA has agreed otherwise.

#### GM1 TO M.A.501(b) Classification and installation

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

- (d) Items (e.g., fasteners) purchased in batches shall be supplied in a package. The packaging shall state the applicable specification/standard, P/N, batch number, and the quantity of the items. The documentation that accompanies the material shall contain the applicable specification/ standard, P/N, batch number, supplied quantity, and the manufacturing sources.
- (e) If the material is acquired from different batches, acceptance documentation for each batch shall be provided.

#### GM2 TO M.A.501(b) Classification and installation

# Installation of components

- (a) Components, standard parts and materials shall only be installed when they are specified in the applicable maintenance data. This could include parts catalogue (IPC), service bulletins (SBs), aircraft maintenance manual (AMM), component maintenance manual (CMM), etc. So, a component, standard part or material can only be installed after having checked the applicable maintenance data. This check shall ensure that the part number, modification status, limitations, etc., of the component, standard part or material are the ones specified in the applicable maintenance data of the particular aircraft or component (i.e., IPC, SB, AMM, CMM, etc.) where the component, standard part or material is going to be installed.
- (b) When the installation is performed outside a maintenance organization, that is by the persons referred to in M.A.801(b)(2), M.A.801(b)(3), M.A.801(c) or M.A.801(d), then these persons are responsible to perform this check before installation. When the installation is performed by a M.A Subpart F organization, then the organization has to establish procedures to ensure that this check is performed before installation.

# M.A.502 Component maintenance

- (a) Except for components referred to in LYCAR Part-21, the maintenance of components shall be performed by maintenance organizations appropriately approved in accordance with M.A Subpart F of this Part-M or with LYCAR Part 145.
- (b) By derogation from paragraph (a), maintenance of a component in accordance with aircraft maintenance data or, if agreed by LYCAA, in accordance with component maintenance data, may be performed by an A-rated organization approved in accordance with M.A Subpart F of this Part-M or with LYCAR Part 145 as well as by certifying staff referred to in M.A.801(b)2 only whilst such components are fitted to the aircraft. Nevertheless, such an A-rated organization 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 point. Component maintenance performed in accordance with this paragraph is not eligible for the issuance of an LYCAA Form 1 and shall be subject to the aircraft release requirements provided for in 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 LYCAA, in

accordance with component maintenance data, may be performed by an B-rated organization approved in accordance with M.A, Subpart F of this Part-M or with LYCAR Part 145 only whilst such components are fitted to the engine/APU. Nevertheless, such B-rated organization 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 point.

- (d) By derogation from paragraph (a) and M.A.801(b)2, maintenance of a component while installed or temporarily removed from an LA1 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 overhaul of components other than engines and propellers.
  - Component maintenance performed in accordance with paragraph (d) is not eligible for the issuance of a LYCAA Form 1 and shall be subject to the aircraft release requirements provided for in M.A.801.
- (e) Maintenance of components referred to in LYCAR Part-21shall be performed by an A-rated organization approved in accordance with M.A. Subpart F of this Part-M or Part 145, by certifying staff referred to in point M.A.801(b)2 or by the pilot/owner referred to in point M.A.801(b)3 while such a component is fitted to the aircraft or temporarily removed to improve access. Component maintenance performed in accordance with this point is not eligible for the issuance of an LYCAA Form 1 and should be subject to the aircraft release requirements provided for in M.A.801.

# AMC TO 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, <u>M.A.502</u> requirements do not apply to this case.

# AMC TO M.A.502(D) Component maintenance

Independent certifying staff may issue (as established in  $\underline{\mathsf{M.A.801(b)(2)}}$ ) a release to service for maintenance that is performed outside an approved maintenance organization. This is limited to the maintenance of aircraft that are not required by regulation to be maintained by a Part-145 or  $\underline{\mathsf{M.A.Subpart-F}}$  organization. For LA1 aircraft maintenance, this may include complex tasks.

# 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 program and airworthiness directives, except as provided for in point M.A.504(b).
- (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 Segregation of components

- (a) Unserviceable and unsalvageable components shall be segregated from serviceable components, standards parts and materials.
- (b) Unsalvageable components 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 in accordance with Part-21.

# AMC 1 TO M.A.504(a) Segregation of components

- (a) Unserviceable components shall be identified and stored in a separate secure location that is managed by the maintenance organization until a decision is made on the future status of such components. Certifying staff outside maintenance organizations (M.A.801(b)(2), M.A.801(c) or M.A.801(d)) that release aircraft maintenance shall send, with the agreement of the aircraft owner/lessee, any unserviceable component to a maintenance organization for controlled storage. Nevertheless, the person or organization that declared the component unserviceable may transfer its custody, after identifying it as unserviceable, to the aircraft owner/lessee provided that such transfer is reflected in the aircraft logbook, or engine logbook, or component logbook.
- (b) 'Secure location under the control of an approved maintenance organization' refers to a location that is managed by the approved maintenance organization that prevents the component from being reused or tampered with. This may include facilities that are established by the organization at locations different from the main maintenance facilities. These locations shall be identified in the relevant procedures of the organization.
- (c) In the case of unsalvageable components, the person or organization shall:
  - retain such components in the secure location referred to in paragraph (b);
  - (2) arrange for the component to be mutilated in a manner that ensures that it cannot be restored for use, before disposing it; or
  - (3) mark the component indicating that it is unsalvageable, when, in agreement with the component owner, the component is disposed of for legitimate non-flight uses (such as training and education aids, research and development), or for nonaviation applications, mutilation is often not appropriate. Alternatively, to marking, the original part number or data plate information can be removed, or a record kept of the disposal of the component for legitimate non-flight uses.

# AMC 2 TO M.A.504 Segregation of components

#### Mutilation of components

- (a) Mutilation shall be accomplished in such a manner that the components become permanently unusable for their originally intended use. Mutilated components shall not be able to be reworked or camouflaged to provide the appearance of being serviceable, such as by replating, shortening and rethreading long bolts, welding, straightening, machining, cleaning, polishing, or repainting.
- (b) Mutilation may be accomplished by one or a combination of the following procedures:
  - (1) grinding;
  - (2) burning;
  - (3) removal of a major lug or other integral feature;
  - (4) permanent distortion of parts;
  - (5) cutting a hole with cutting torch or saw;
  - (6) melting;
  - (7) sawing into many small pieces; and
  - (8) any other method accepted by LYCAA.
- (c) The following procedures are examples of mutilation that are often less successful because they may not be consistently effective:
  - (1) stamping or vibro-etching;
  - (2) spraying with paint;
  - (3) small distortions, incisions, or hammer marks;
  - (4) identification by tags or markings;
  - (5) drilling small holes; and
  - (6) sawing in two pieces only.
- (d) As the manufacturers producing approved aircraft components should maintain records of serial numbers for 'retired', certified, life-limited, or other critical components, the organization that mutilates a component shall provide the original manufacturer with the data plate and/or serial number and final disposition of those components.

# M.A.505 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 continuing airworthiness requirement mandated by the LYCAA;
  - (3) absence of the necessary information to determine the airworthiness status or eligibility for installation;
  - (4) evidence of defects or malfunctions, and;
  - (5) involvement in an incident or accident likely to affect its serviceability
- (b) Unserviceable components shall be identified and stored in a secure location under the control of the maintenance organization 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 organization 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) In the case of unsalvageable components, the organization shall:
  - (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.
- (d) Notwithstanding paragraph (c), the organization may transfer responsibility of components classified as unsalvageable to an organization for training or research without mutilation.

# AMC 1 TO M.A.505(b) Control of unserviceable components

- (a) The organization shall ensure proper identification of any unserviceable components.
- (b) The unserviceable status of the component shall 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 shall 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 shall be provided to prevent unwanted separation of this tag from the component.
- (c) 'A Secure location under the control of an approved maintenance organization' refers to a secure location whose security is the responsibility of the approved maintenance

organization. This may include facilities that are established by the organization at locations different from the main maintenance facilities. These locations shall be identified in the relevant procedures of the organization.

# AMC 2 TO M.A.504(c) Control of unserviceable components

- (a) The following types of components shall typically be classified as unsalvageable:
  - (1) Components with non-repairable defects, whether visible or not to the naked eye;
  - (2) Components that do not meet design specifications, and cannot be brought into conformity with such specifications;
  - (3) Components subjected to unacceptable modification or rework that is irreversible;
  - (4) Certified life-limited parts that have reached or exceeded their certified life limits, or have missing or incomplete records;
  - (5) Components that cannot be returned to airworthy condition due to exposure to extreme forces, heat or adverse environment;
  - (6) Components for which conformity with an applicable airworthiness directive cannot be accomplished;
  - (7) Components for which maintenance records and/or traceability to the manufacturer cannot be retrieved.
- (b) It is common practice for owners 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 have resulted in the use of unsalvageable nonconforming components.

Therefore, organizations disposing of unsalvageable aircraft components shall consider the possibility of such components later being misrepresented and sold as serviceable components. Caution shall be exercised to ensure that unsalvageable components are disposed of in a manner that does not allow them to be returned to service.

# **Subpart F: Maintenance organization**

# M.A.601 Scope

This Subpart establishes the requirements to be met by an organization to qualify for the issue or continuation of an approval for the maintenance of aircraft other than complex motor-powered aircraft and components to be installed therein not used by licensed air carriers.

# M.A.602 Application

An application for issue or change of a maintenance organization approval should be made on a form and in a manner established by LYCAA.

# AMC TO M.A.602 Application

An application shall be made on a form acceptable to the LYCAA.

The LYCAA Form 2 is valid for the application for M.A. Subpart F, Part-145 and M.A. Subpart G organizations. Organizations applying for several approvals may do so by using a single LYCAA Form 2.

# M.A.603 Extent of approval

- (e) An organization involved in activities subject to this Subpart should not exercise its activities unless approved by the LYCAA. <u>Appendix IV</u> to Part-M provides the template certificate for this approval.
- (f) The maintenance organization's manual referred to in point M.A.604 should specify the scope of work deemed to constitute approval. Appendix III to Part-M defines all classes and ratings possible under Subpart F of this Part-M.
- (g) An approved maintenance organization 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 organization manual.

#### AMC TO M.A.603(a) Extent of approval

The following table identifies the ATA Specification 2200 chapter for the category C 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.

CLASS	RATING	ATA CHAPTERS
Components other than complete engines or APU	C1 Air Condition & Press	21
	C2 Auto Flight C3 Comms and Nav	22 23 - 34
	C4 Doors - Hatches	52
	C5 Electrical Power & Light	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 - Rotor	62 - 64 - 66 - 67
	C11 Helicopter - Trans	63 - 65
	C12 Hydraulic Power	29
	C13 Indicating/Recording Systems	31 - 42 - 46
	C14 Landing Gear	32
	C15 Oxygen	35
	C16 Propeller	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

# AMC TO M.A.603(c) Extent of approval

- 1. The agreement by the LYCAA for the fabrication of parts by the approved maintenance organization shall be formalized through the approval of a detailed procedure in the maintenance organization 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 shall be clearly within the technical and procedural capability of the approved maintenance organization.

- 3. The approved data necessary to fabricate the part are those approved either by the LYCAA, the TC holder, Part-21 design organization approval holder or STC holder.
- 4. Items fabricated by an approved maintenance organization may only be used by that organization 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 LYCAA 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 this 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 organization. Care shall 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 organization has the necessary capability. That capability shall be defined by way of maintenance organization manual content. Where special processes or inspection procedures are defined in the approved data which are not available at the approved maintenance organization, that organization cannot fabricate the part unless the TC/STC holder gives an approved alternative.
- 7. Examples of fabrication under the scope of this 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 the LYCAA.

8. Where a TC holder or an approved production organization 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 the LYCAA in accordance with a procedure specified in the maintenance organization manual.

# 9. Inspection and Identification

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

# M.A.604 Maintenance Organization Manual

- (a) The maintenance organization shall provide a manual containing at least the following information:
  - (1) a statement signed by the accountable manager to confirm that the organization will continuously work in accordance with Part-M and the manual at all times, and;
  - (2) the organization's scope of work, and;
  - (3) the title(s) and name(s) of person(s) referred to in point M.A.606(b), and;
  - (4) an organization chart showing associated chains of responsibility between the person(s) referred to in point M.A.606(b), and;
  - (5) a list of certifying staff and, if applicable, airworthiness review staff and staff responsible for the development and processing of the maintenance program, with their scope of approval, and;
  - (6) a list of locations where maintenance is carried out, together with a general description of the facilities, and;
  - (7) procedures specifying how the maintenance organization ensures compliance with this Part, and;
  - (8) the maintenance organization manual amendment procedure(s).
- (b) The maintenance organization manual and its amendments should be approved by the LYCAA.
- (c) Notwithstanding point (b), minor amendments to the manual may be approved through a procedure (hereinafter called indirect approval).

# AMC TO M.A.604 Maintenance Organization Manual

- 1. <u>Appendix IV</u> to this AMC provides an outline of the format of an acceptable maintenance organization manual for a small organization with less than 10 maintenance staff.
- 2. The maintenance organization exposition as specified in Part-145 provides an outline of the format of an acceptable maintenance organization manual for larger organizations with more than 10 maintenance staff, dependent upon the complexity of the organization.

# M.A.605 Facilities

The organization should ensure that:

- (a) Facilities are provided for all planned work, specialized 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 should ensure segregation of unserviceable components and material from all other components, material, equipment and tools. Storage conditions should be in accordance with the manufacturers' instructions and access should be restricted to authorized personnel.

#### AMC TO M.A.605(a) Facilities

1. Where a hangar is not owned by the M.A. Subpart F organization, it may be necessary to establish proof of tenancy. In addition, sufficiency of hangar space to carry out planned maintenance shall be demonstrated by the preparation of a projected aircraft hangar visit plan relative to the aircraft maintenance program. The aircraft hangar visit plan shall be updated on a regular basis.

For balloons and airships, a hangar may not be required where maintenance of the envelope and bottom end equipment can more appropriately be performed outside, providing all necessary maintenance can be accomplished in accordance with M.A.402. For complex repairs or component maintenance requiring a LYCAA Form 1, suitable approved workshops shall be provided. The facilities and environmental conditions required for inspection and maintenance shall be defined in the Maintenance Organization Manual.

Depending on the scope of work of the maintenance organization, it may not be necessary to have a hangar available. For example, an organization maintaining LA2 aircraft (when not performing major repairs) may perform the work in alternative suitable facilities (and possibly at remote locations) as agreed by the LYCAA.

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 shall be to a standard that prevents the ingress of

rain, hail, ice, snow, wind and dust etc. Aircraft hangar and aircraft component workshop floors shall be sealed to minimize dust generation.

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

#### 4. Special case for LA2 aircraft

For LA2 aircraft, it is acceptable not to have access to a hangar or dedicated workshops. Depending on the scope of work, other facilities are acceptable as long as protection is ensured from inclement weather and contamination. This may include, for example, working in the field or in non-aviation premises (closed or not).

These facilities do not need to be individually approved by the LYCAA as long as the maintenance organization manual describes for each type of facility the scope of work, the tooling and equipment available, and the permitted environmental conditions (weather, contamination).

The organization shall include, as part of the periodic internal organizational review, a sampling of the compliance with these conditions during certain maintenance events.

# AMC TO 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 TO M.A.605(c) Facilities

- Storage facilities for serviceable aircraft components shall be clean, well-ventilated and maintained at an even dry temperature to minimize the effects of condensation. Manufacturer's storage recommendations shall be followed for those aircraft components identified in such published recommendations.
- 2. Adequate storage racks shall 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, shall remain packaged in their protective material to minimize damage and corrosion during storage. A shelf-life control system shall be utilized 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 shall be ensured according to the pertinent procedure approved to that organization.
- 6. Procedures shall be defined by the organization describing the decision process for the status of unserviceable components. This procedure shall 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 organization shall establish secure areas in which to segregate such items and to prevent unauthorized access. Unsalvageable components shall 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 shall be identified.

# M.A.606 Personnel requirements

- (a) The organization 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 LYCAR.
- (b) A person or group of persons shall be nominated with the responsibility of ensuring that the organization is always in compliance with this Subpart. Such person(s) should be ultimately responsible to the accountable manager.
- (c) All point (b) persons shall be able to show relevant knowledge, background and appropriate experience related to aircraft and/or component maintenance.
- (d) The organization 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, airworthiness reviews and development of maintenance programs shall be demonstrated and recorded.
- (f) Personnel who carry out specialized tasks such as welding, non-destructive testing/inspection other than color contrast should be qualified in accordance with an officially recognized standard.
- (g) The maintenance organization shall have sufficient certifying staff to issue certificates of release to service for aircraft and components provided for in points M.A.612 and M.A.613. They should comply with the requirements of Part-66.
- (h) By derogation from point (g), the organization 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 organization's manual:

- (1) For a repetitive pre-flight airworthiness directive which specifically states that the flight crew may carry out such airworthiness directive, the organization may issue a limited certifying staff authorization to the aircraft commander on the basis of the flight crew license held, provided that the organization 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 organization may issue a limited certifying staff authorization to the aircraft commander on the basis of the flight crew license, provided that the organization ensures that sufficient practical training has been carried out to ensure that such person can accomplish the task to the required standard.
- (i) If the organization performs CMR and issues the corresponding CMR for LA1 aircraft not involved in commercial operations, it shall have qualified airworthiness review staff.
- (j) If the organization is involved in the development and processing of approval of the maintenance program for LA2 aircraft not involved in commercial operations in accordance with M.A.201(e)(ii), it shall have qualified staff who should be able to show relevant knowledge and experience.

# AMC TO 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 organization approved under this M.A. Subpart F, who by virtue of position has overall (including in particular financial) responsibility for running the organization. The accountable manager may be the accountable manager for more than one organization and is not required to be necessarily knowledgeable on technical matters. When the accountable manager is not the chief executive officer, the LYCAA 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 TO M.A.606(b) Personnel requirements

- 1. Dependent upon the size of the organization, the functions may be subdivided under individual managers or combined in any number of ways.
- 2. The maintenance organization shall have, dependent upon the extent of approval, an aircraft maintenance manager, a workshop manager all of whom shall report to the accountable manager. In small maintenance organizations 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 organizational review.

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

# AMC TO M.A.606(c) Personnel requirements

- 1. All nominated persons shall, in the normal way, be expected to satisfy the LYCAA that they possess the appropriate experience and qualifications which are listed in paragraphs 2.1 to 2.5 below.
- 2. All nominated persons shall have:
  - 2.1. practical experience and expertise in the application of aviation safety standards and safe maintenance practices;
  - 2.2. comprehensive knowledge of:
    - a. Part-M and any associated requirements and procedures;
    - b. the maintenance organization manual;
  - 2.3. five years aviation experience of which at least three years shall 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 LYCAA. This assessment shall be recorded.
    - Training courses shall be as a minimum at a level equivalent to Part-66, and could be imparted by a Part-147 organization, by the manufacturer or by any other organization accepted by the LYCAA.
  - 2.5. knowledge of maintenance standards.

### AMC TO M.A.606(d) Personnel requirements

- 1. All staff are subjected to compliance with the organization's procedures specified in the maintenance organization manual relevant to their duties.
- To have sufficient staff means that the approved maintenance organization 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 organization to the approved maintenance organization.

## AMC TO M.A.606(e) Personnel requirements

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

# AMC TO M.A.606(f) Personnel requirements

- 1. 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 European Standard EN 4179 depending upon the non-destructive testing function to be carried out.
- 3. Notwithstanding the fact that level 3 personnel may be qualified via EN 4179 to establish and authorize 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 in EN 4179 to a national aerospace NDT board, all examinations shall be conducted by personnel or organizations under the general control of such a board. In the absence of a national aerospace NDT board, examinations shall be conducted by personnel or organizations under the general control of the LYCAA NDT board.
- 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 shall 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 EN 4179. Until such time as an agreed standard is established, such methods shall 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 organization that carries out continued airworthiness nondestructive testing shall 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 organization shall 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 this M.A. Subpart F are NOT listed in <u>Appendix III</u> to this Part-M under class rating D1.

9. The referenced standards, methods, training and procedures shall be specified in the maintenance organization manual.

### AMC TO M.A.606(h)(2) Personnel requirements

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

The above procedures shall be specified in the maintenance organization manual and be accepted by the LYCAA.

- 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. Inspection for and removal of de-icing/anti-icing fluid residues, including removal/closure of panels, cowls or covers that are easily accessible but not requiring the use of special tools.
  - e. Any check/replacement involving simple techniques consistent with this AMC and as agreed by the LYCAA.
- 3. The authorization shall 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 point  $\underline{M.A.606(g)}$ , certifying staff can only exercise their privileges, if the organization has ensured:

- (1) that certifying staff can demonstrate that they meet the requirements of Part-66, except when Part-66 refers to other Regulation, in which case they should meet the requirement of such regulation, and;
- (2) that certifying staff have an adequate understanding of the relevant aircraft and/or aircraft component(s) to be maintained together with the associated organization 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 organization contracted to provide maintenance support may issue a one-off certification authorization:
  - (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 license rated for the aircraft type requiring certification, provided there is no organization appropriately approved under this LYCAR at that location and the contracted organization obtains and holds on file evidence of the experience and the license of that person.
  - (3) All such cases must be reported to the LYCAA within seven days (07) after issuing such certification authorization. The approved maintenance organization issuing the one-off certification authorization should ensure that any such maintenance that could affect flight safety is re-checked.
- (c) The approved maintenance organization should 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 organization's manual pursuant to point M.A.604(a)5.

### AMC TO M.A.607 Certifying staff

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

3. The organization shall hold copies of all documents that attest to qualification and to recent experience.

### AMC TO M.A.607(c) Certifying staff

- 1. The following minimum information as applicable shall 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. specialized 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 authorization;
  - k. if appropriate expiry date of the authorization.
- 2. Persons authorized to access the system shall be maintained at a minimum to ensure that records cannot be altered in an unauthorized manner or that such confidential records become accessible to unauthorized persons.
- 3. The LYCAA shall be granted access to the records upon request.

## M.A.608 Components, equipment and tools

- (a) The organization 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 organization 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 should be kept by the organization.

(c) The organization shall inspect, classify and appropriately segregate all incoming components, standard parts and materials.

### AMC TO 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 the LYCAA, 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 shall be clearly identified and listed in a control register including any personal tools and equipment that the organization agrees can be used.
- 3. For tools required on an occasional basis, the organization shall ensure that they are controlled in terms of servicing or calibration as required.

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

- 1. The control of these tools and equipment requires that the organization has a procedure to inspect/service and, where appropriate, calibrate such items on a regular basis and indicate to users that the item is within any inspection or service or calibration time-limit. A clear system of labelling all tooling, equipment and test equipment is therefore necessary giving information on when the next inspection or service or calibration is due and if the item is unserviceable for any other reason where it may not be obvious. A register shall be maintained for all the organization's precision tooling and equipment together with a record of calibrations and standards used.
- 2. Inspection, service or calibration on a regular basis shall 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.
- 3. In this context, officially recognized standard means those standards established or published by an official body whether having legal personality or not, which are widely recognized by the air transport sector as constituting good practice.

# M.A.609 Maintenance data

The approved maintenance organization shall hold and use applicable current maintenance data specified in point 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 TO M.A.609 Maintenance data

When an organization uses customer provided maintenance data, the scope of approval, indicated in the maintenance organization manual, shall be limited to the individual aircraft covered by the contracts signed with those customers unless the organization 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 should be agreed between the organization and the organization requesting maintenance to clearly establish the maintenance to be carried out.

### AMC TO 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 organization 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 <u>Section A, Subpart</u> <u>D</u> of this Part-M.

## 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 (CRS) should be issued according to point 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 should be issued in accordance with point M.A.802. LYCAA Form 1 should be issued, except for those components maintained in accordance with points M.A.502(b), M.A.502(d) or M.A.502(e) and components fabricated in accordance with point M.A.603(c).
- (b) The component certificate release to service document, LYCAA Form 1 may be generated from a computer database.

#### AMC TO 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 CRS for such maintenance and another CRS in regard to being installed properly on the aircraft when such action occurs. When an organization maintains a component for use by the same organization, an LYCAA Form1, or equivalent acceptable by LYCAA, may not be necessary depending upon the organization's internal release procedures defined in the maintenance organization exposition.
- 2. In the case of components in storage prior to Part-145, Part-M and Part-21 and not released on an LYCAA Form 1 or equivalent in accordance with M.A.501(a) or removed serviceable from a serviceable aircraft which have been withdrawn from service, this paragraph provides additional guidance regarding the conditions under which a LYCAA Form 1 may be issued.

- 2.1. An LYCAA Form 1 may be issued for an aircraft component which has been:
  - Maintained before Part-145, or Part-M became effective or manufactured before Part-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 organization.
- 2.2. An appropriately rated M.A. Subpart F maintenance organization may issue an LYCAA Form 1 as detailed in this AMC subparagraph 2.5 to 2.9, as appropriate, in accordance with the procedures detailed in the manual as approved by the LYCAA. The appropriately rated M.A. Subpart F maintenance organization is responsible for ensuring that all reasonable measures have been taken to ensure that only approved and serviceable aircraft components are issued an LYCAA Form 1 under this paragraph.
- 2.3. For the purposes of this paragraph 2 only, 'appropriately rated' means an organization with an approval class rating for the type of component or for the product in which it may be installed.
- 2.4. An LYCAA Form 1 issued in accordance with this paragraph 2 shall be issued by signing in block 14b and stating 'Inspected/Tested' in block 11. In addition, block 12 shall 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 shall be included with the Form;
  - 2.4.3. a list of all ADs, repairs and modifications known to have been incorporated. If no ADs or repairs or modifications are known to be incorporated then this shall 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, shall be attached to the LYCAA Form 1.

### 2.5. New/unused aircraft components

2.5.1. Any unused aircraft component in storage without a LYCAA Form 1 up to the effective date(s) for Part-21 that was manufactured by an organization acceptable to the LYCAA at the time may be issued an LYCAA Form 1 by an appropriately rated maintenance organization approved under <a href="M.A. Subpart F">M.A. Subpart F</a>. The LYCAA Form 1 shall be issued in accordance with the following subparagraphs which shall be included in a procedure within the maintenance organization manual.

Note 1: It shall 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 Part-21. It is not intended to bypass the production release procedure for parts and subassemblies intended for fitment on the manufacturers own production line.

- (a) An acceptance test report or statement shall 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 shall 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 shall be inspected for damage, corrosion and leakage to ensure good condition.
- (c) The storage life used of any storage life-limited parts shall 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 shall be disassembled by an appropriately rated organization and subjected to a check for incorporated ADs, 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, an LYCAA 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 LYCAA registered aircraft may be issued an LYCAA Form 1 by an appropriately rated organization subject to compliance with this subparagraph.
  - a. The organization shall 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 or related system.

- c. The aircraft component shall be inspected for satisfactory condition including in particular damage, corrosion or leakage and compliance with any additional maintenance data.
- d. The aircraft record shall be researched for any unusual events that could affect the serviceability of the aircraft component such as involvement in accidents, incidents, heavy landings or lightning strikes. Under no circumstances may an LYCAA 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 shall be available for all used serialized aircraft components.
- f. Compliance with known modifications and repairs shall be established.
- g. The flight hours/cycles/landings as applicable of any service life-limited parts including time since overhaul shall be established.
- h. Compliance with known applicable airworthiness directives shall be established.
- Subject to satisfactory compliance with this subparagraph 2.6.1, an LYCAA
  Form 1 may be issued and shall 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 an aircraft which do not register in Libya may only be issued an LYCAA Form 1, if the components are leased or loaned from the maintenance organization approved under M.A. Subpart F who retains control of the airworthiness status of the components. An LYCAA Form 1 may be issued and shall 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 Libyan registered aircraft withdrawn from service may be issued an LYCAA Form 1 by a maintenance organization approved under M.A. Subpart F subject to compliance with this subparagraph.
  - a. Aircraft withdrawn from service are sometimes dismantled for spares. This is considered to be a maintenance activity and shall be accomplished under the control of an organization approved under <a href="M.A. Subpart F">M.A. Subpart F</a>, employing procedures approved by the LYCAA.
  - b. To be eligible for installation, components removed from such aircraft may be issued with an LYCAA Form 1 by an appropriately rated organization 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 shall, where known, include the possible need for the alignment of scheduled maintenance that may be necessary to comply with the maintenance program 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 organization responsible for certifying any removed component shall 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 shall be formulated to control the aircraft disassembly process. The disassembly is to be carried out by an appropriately rated organization 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 shall 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 shall 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 Part-145.

For used components maintained by a maintenance organization not approved under Part-M Subpart F or Part-145, due care shall be taken before acceptance of such components. In such cases an appropriately rated maintenance organization approved under M.A. Subpart F shall establish satisfactory conditions by:

a. dismantling the component for sufficient inspection in accordance with the appropriate maintenance data,

- replacing of all service life-limited 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 shall only be issued with an LYCAA Form 1 or equivalent acceptable to LYCAA 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 shall be referenced in block 12.

- 3. A certificate shall 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 organizations and the component needs a certificate for the previous maintenance process carried out for the next approved maintenance organization to accept the component for subsequent maintenance processes. In such a case, a clear statement of limitation shall be endorsed in block.
- 4. The certificate is to be used for export/import purposes, as well as for domestic purposes, and serves as an official certificate for components from the manufacturer/maintenance organization to users. It shall only be issued by organizations approved by the LYCAA, EASA or FAA as applicable within the scope of the approval.

### M.A.614 Maintenance records

- (a) The approved maintenance organization shall record all details of work carried out. Records necessary to prove all requirements have been met for the issue of the certificate of release to service including the subcontractor's release documents should be retained.
- (b) The approved maintenance organization shall provide a copy of each certificate of release to service to the aircraft owner, together with a copy of any specific repair/modification data used for repairs/modifications carried out.
- (c) The approved maintenance organization shall retain a copy of all maintenance records and any associated maintenance data for three (03) years from the date the aircraft or aircraft component to which the work relates was released from the approved maintenance organization.
  - (1) The records under this point 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 organization terminates its operation, all retained maintenance records covering the last three (03) years shall be distributed to the last owner or customer of the respective aircraft or component or shall be stored as specified by LYCAA.

#### AMC TO M.A.614(a) Maintenance records

- 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.
- 2. The prime objective is to have secure and easily retrievable records with comprehensive and legible contents. The aircraft record shall 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.
- 3. The maintenance record can be either a paper or computer system or any combination of both. The records shall remain legible throughout the required retention period.
- 4. Paper systems shall use robust material which can withstand normal handling and filing.
- 5. Computer systems may be used to control maintenance and/or record details of maintenance work carried out. Computer systems used for maintenance shall have at least one backup system which shall be updated at least within 24 hours of any maintenance. Each terminal is required to contain program safeguards against the ability of unauthorized personnel to alter the database.

## AMC TO 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 shall refer to the revision status of the data used.

# M.A.615 Privileges of the organization

The maintenance organization approved in accordance with <u>Section A, Subpart F</u> of this Part-M, may:

(a) maintain any aircraft and/or component for which it is approved at the locations specified in the approval certificate and the maintenance organization manual;

- (b) arrange for the performance of specialized services under the control of the maintenance organization at another organization appropriately qualified, subject to appropriate procedures being established as part of the Maintenance Organization Manual approved by LYCAA 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 unserviceability of the aircraft or from the necessity of supporting occasional maintenance, subject to the conditions specified in the Maintenance Organization Manual;
- (d) issue certificates of release to service on completion of maintenance, in accordance with point M.A.612 or point M.A.613;
- (e) develop the maintenance program and process its approval in accordance with point M.A.302 for LA2 aircraft not involved in commercial operations, under the conditions specified in point M.A.201(e)(ii), and limited to the aircraft ratings listed in the approval certificate.
- (f) The organization shall only maintain an aircraft or component for which it is approved when all the necessary facilities, equipment, tooling, material, maintenance data and certifying staff are available.

## GM TO M.A.615 Privileges of the organization

<u>M.A.615</u> states that the organization shall only maintain an aircraft or component for which it is approved when all the necessary facilities, equipment, tooling, material, maintenance data, and certifying staff are available.

This provision is intended to cover the situation where the larger organization may temporarily not hold all the necessary tools, equipment, etc. for an aircraft type or variant specified in the organization's approval. This paragraph means that the LYCAA need not amend the approval to delete the aircraft type or variants on the basis that it is a temporary situation and there is a commitment from the organization to re-acquire tools, equipment, etc. before maintenance on the type may recommence.

### GM TO M.A.615(a) Privileges of the organization

M.A.615(a) applies also to facilities which may not be individually approved by the LYCAA, such as those described in AMC M.A.605(a) for LA2 aircraft.

# AMC TO M.A.615(b) Privileges of the organization

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

The intent is to permit the acceptance of specialized 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 organization performing the specialized services must be 'appropriately qualified' means that it shall meet an officially recognized standard or, otherwise, it shall be acceptable to the LYCAA (through the approval of the Maintenance Organization Manual).

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

- 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 organization for any deviation or non-conformity, which has arisen during such maintenance.

The CRS may be issued either at the subcontractors or at the organization facility by authorized certifying staff, and always under the M.A. Subpart F organization reference. Such staff would normally come from the M.A. Subpart F organization but may otherwise be a person from the subcontractor who meets the M.A. Subpart F organization certifying staff standard which itself is approved by the LYCAA via the Maintenance Organization Manual.

Subcontracted specialized services organizations shall be listed in the Maintenance Organization Manual of the Subpart F organization together with their qualifications, and the associated control procedures.

### M.A.616 Organizational review

To ensure that the approved maintenance organization continues to meet the requirements of this Subpart, it should organize, on a regular basis, organizational reviews.

### AMC TO M.A.616 Organizational review

- 1. The primary objectives of the organizational review are to enable the approved maintenance organization to ensure that it can deliver a safe product and that approved maintenance organization remains in compliance with the requirements.
- 2. The approved maintenance organization shall identify:
  - a. the person responsible for the organizational review;
  - b. the frequency of the reviews;
  - c. the scope and content of the reviews;
  - d. the persons accomplishing the reviews;
  - e. the procedure for planning, performing and processing review findings; and,

- f. the procedure for ensuring corrective actions are carried out in the appropriate time frame.
- 3. The organization quality system as specified in Part-145 provides an acceptable basic structure for the organizational review system for organizations with more than 10 maintenance staff, dependent upon the complexity of the organization.
- 4. Appendix VII to AMC to M.A.712(f) shall be used to manage the organizational reviews.

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

In order to enable LYCAA to determine continued compliance with this Part, the approved maintenance organization should notify it of any proposal to carry out any of the following changes, before such changes take place:

- (a) the name of the organization;
- (b) the location of the organization;
- (c) additional locations of the organization;
- (d) the accountable manager;
- (e) any of the persons specified in point M.A.606(b);
- (f) the facilities, equipment, tools, material, procedures, work scope, certifying staff and airworthiness review staff that could affect the approval.

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

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

The LYCAA shall be given adequate notification of any proposed changes in order to enable the maintenance organization to remain approved if agreed by the LYCAA 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 an unlimited duration. It should remain valid subject to:
  - the organization remaining in compliance with this Part, in accordance with the provisions related to the handling of findings as specified under point <u>M.A.619</u>, and;
  - (2) the LYCAA being granted access to the organization to determine continued compliance with this Part, and;
  - (3) the approval not being surrendered or revoked;

(b) Upon surrender or revocation, the approval certificate should be returned to the LYCAA.

# M.A.619 Findings

- (a) A level 1 finding is any significant non-compliance with Part-M requirements which lowers the safety standard and hazards seriously the flight safety.
- (b) A level 2 finding is any non-compliance with Part-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.605, the holder of the maintenance organization approval should define a corrective action plan and demonstrate corrective action to the satisfaction of the LYCAA within a period agreed with LYCAA.

# Subpart G: Continuing Airworthiness Management Organization

## M.A.701 Scope

This Subpart establishes the requirements to be met by an organization 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 change of a continuing airworthiness management organization approval should be made on a form and in a manner established by the LYCAA.

# AMC TO M.A.702 Application

An application shall be made on a form acceptable to the LYCAA.

The LYCAA Form 2 is valid for the application for M.A. Subpart F, Part-145 and M.A. Subpart G organizations. Organizations applying for several approvals may do so using a single LYCAA Form 2.

# M.A.703 Extent of approval

- (a) The approval is indicated on a certificate issued by LYCAA and included in Appendix V of this Part-M.
- (b) Notwithstanding point (a), for licensed air carriers, the approval shall be part of the Air Operator Certificate (AOC) issued by LYCAA, for the aircraft operated.
- (c) The scope of work deemed to constitute the approval should 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 organization or operator shall provide a continuing airworthiness management exposition containing the following information:
  - (1) a statement signed by the accountable manager to confirm that the organization will work in accordance with this Part and the exposition at all times, and;
  - (2) the organization'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), and;
  - (4) an organization 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), and;
  - (5) a general description and location of the facilities, and;

- (6) procedures specifying how the continuing airworthiness management organization ensures compliance with this Part, and;
- (7) the continuing airworthiness management exposition amendment procedures, and;
- (8) the list of approved aircraft maintenance programs or, for aircraft not used by licensed air carriers, the list of 'generic' and 'baseline' maintenance programs.
- (b) The continuing airworthiness management exposition and its amendments shall be approved by the LYCAA. The CAMO/Operator shall ensure the continuing airworthiness management exposition amended as necessary to keep the information contained therein up to date. Copies of all amendments to the operator's continuing airworthiness management exposition shall be furnished promptly to all organizations or persons to whom the manual has been issued.
- (c) Notwithstanding point (b), minor amendments to the exposition may be approved indirectly through an indirect approval procedure. The indirect approval procedure shall define the minor amendment eligible, be established by the continuing airworthiness management organization as part of the exposition and be approved by LYCAA.
- (d) The design and application of the continuing airworthiness management exposition shall observe Human Factor principles.

## AMC TO M.A.704 Continuing Airworthiness Management Exposition

- The purpose of the continuing airworthiness management exposition is to set forth the procedures, means and methods of the CAMO. Compliance with its contents will assure compliance with Part-M requirements.
- 2. A continuing airworthiness management exposition shall comprise:
  - Part 0. General organization
  - Part 1. Continuing airworthiness procedures
  - Part 2. Quality system or organizational review (as applicable)
  - Part 3. Contracted maintenance management of maintenance (liaison with maintenance organizations)
- 3. Personnel shall be familiar with those parts of the continuing airworthiness management exposition that are relevant to their tasks.
- 4. The CAMO shall specify in the exposition who is responsible for the amendment of the document. Unless otherwise agreed by the LYCAA, the person responsible for the management of the quality system or for the organizational review shall be responsible for monitoring and amending the continuing airworthiness management exposition, including associated procedure's manuals, and the submission of proposed amendments to the LYCAA. The LYCAA may agree to a procedure, and its agreement will be stated in the

amendment control section of the continuing airworthiness management exposition defining the class of amendments, which can be incorporated without the prior consent of the LYCAA ('indirect approval procedure').

- 5. The CAMO may use electronic data processing (EDP) for the publication of the continuing airworthiness management exposition. The continuing airworthiness management exposition shall be made available to the LYCAA in a form acceptable to the latter. Attention shall be paid to the compatibility of the EDP publication systems with the necessary dissemination, both internally and externally, of the continuing airworthiness management exposition.
- 6. The continuing airworthiness management exposition shall contain information, as applicable, on how the CAMO complies with CDCCL instructions.
- 7. <u>Appendix V to AMC M.A.704</u> contains an example of a continuing airworthiness management exposition layout.

# AMC TO M.A.704(a)(2) Continuing Airworthiness Management Exposition

- Part 0 'General organization' of the continuing airworthiness management exposition shall include a corporate commitment by the CAMO, signed by the accountable manager, confirming that the continuing airworthiness management exposition and any associated manuals define the organization's compliance with Part-M and will be complied with at all times.
- 2. The accountable manager's exposition statement shall embrace the intent of the following paragraph, and in fact this statement may be used without amendment. Any amendment to the statement shall not alter its intent:

'This exposition defines the organization and procedures upon which the LYCAA CAMO approval is based.

These procedures are approved by the undersigned and shall be complied with, as applicable, in order to ensure that all continuing airworthiness tasks 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 the LYCAA will approve this organization whilst the LYCAA is satisfied that the procedures are followed and the work standard is maintained. It is understood that the LYCAA reserves the right to suspend, limit or revoke the CAMO approval or the Air Operator Certificate, as applicable, if the LYCAA has evidence that the procedures are not followed and standards not upheld.

Signed	 •••••	 
Dated	 	 

Accountable manager and ... (quote position) ...

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

3. Whenever the accountable manager is changed, it is important to ensure that the new accountable manager signs the paragraph 2 statement at the earliest opportunity as part of the acceptance by the LYCAA. Failure to carry out this action invalidates the CAMO approval or the Air Operator certificate.

# M.A.705 Facilities

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

### AMC TO M.A.705 Facilities

Office accommodation shall 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 CAMO, the LYCAA 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 shall also include an adequate technical library and room for document consultation.

## M.A.706 Personnel requirements

- (a) The organization 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.
- (b) For licensed air carriers, the accountable manager referred to in point (a) 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 organization is always in compliance with this Subpart. Such person(s) shall be ultimately responsible to the accountable manager.
- (d) For licensed air carriers, 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 point (c).
- (e) The nominated post holder referred to in point (d) shall not be employed by a Part-145 approved organization under contract to the operator.
- (f) The organization shall have sufficient appropriately qualified staff for the expected work.

- (g) All point (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) The organization 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) and M.A.706(d).
- (j) For complex motor-powered aircraft, the organization shall establish and control the competence of personnel involved in the continuing airworthiness management and/or quality audits in accordance with a procedure and to a standard agreed by LYCAA. In addition to the necessary expertise related to the job function, competence must include an understanding of the application of human factors principles and human performance issues appropriate to that person's function and responsibilities in the organization.

### AMC TO M.A.706 Personnel requirements

- The person or group of persons shall represent the continuing airworthiness management structure of the organization and be responsible for all continuing airworthiness functions. Dependent on the size of the operation and the organizational 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 shall 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 organization (general aviation aircraft, corporate aircraft, number of aircraft and the aircraft types, complexity of the aircraft and their age and for commercial air transport, route network, line or charter, ETOPS) and the amount and complexity of maintenance contracting. Consequently, the number of persons needed, and their qualifications may differ greatly from one organization to another and a simple formula covering the whole range of possibilities is not feasible.
- 3. To enable the LYCAA to accept the number of persons and their qualifications, an organization shall 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 shall be updated.
- 4. Nominated person or group of persons shall 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 shall 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 the LYCAA. '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 shall cover an appropriate combination of experience in tasks related to aircraft maintenance and/or continuing airworthiness management and/or surveillance of such tasks;
- 4.6. thorough knowledge with the organization's continuing airworthiness management exposition;
- 4.7. knowledge of a relevant sample of the type(s) of aircraft gained through a formalized training course. These courses shall be imparted by a CAR-147 organization or equivalent accepted by the LYCAA, by the manufacturer, or by any other organization accepted by LYCAA.

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

For all balloons and any other aircraft of 2 730 kg MTOM and below, the formalized training courses may be replaced by demonstration of knowledge. This knowledge may be demonstrated by documented evidence or by an assessment performed by the LYCAA. This assessment shall be recorded.

- 4.8. knowledge of maintenance methods.
- 4.9. knowledge of applicable regulations.

# AMC TO M.A.706(a) Personnel requirements

Accountable manager is normally intended to mean the chief executive officer of the CAMO, who by virtue of position has overall (including in particular financial) responsibility for running the organization. The accountable manager may be the accountable manager for more than

one organization and is not required to be knowledgeable on technical matters. When the accountable manager is not the chief executive officer, the LYCAA 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 TO M.A.706(f) Personnel requirements

Additional training in fuel tank safety as well as associated inspection standards and maintenance procedures shall be required of CAMO technical personnel, especially the staff involved with the management of CDCCL, Service Bulletin assessment, work planning and maintenance program management.

## AMC TO M.A.706(j) Personnel requirements

Adequate initial and recurrent training shall be provided and recorded to ensure continued competence.

# M.A.707 Airworthiness review staff

Not Applicable.

# 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 organization should:
  - (1) develop and control a maintenance program for the aircraft managed including any applicable reliability program,
  - (2) present the aircraft maintenance program and its amendments to LYCAA for approval, unless covered by an indirect approval procedure in accordance with point M.A.302(d), and for aircraft not used by licensed air carriers provide a copy of the program to the owner or operator responsible in accordance with M.A.201,
  - (3) manage the approval of modification and repairs,
  - (4) ensure that all maintenance is carried out in accordance with the approved maintenance program and released in accordance with <u>Section A, Subpart H</u> of this Part-M,
  - (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 organization,

- (7) ensure that the aircraft is taken to an appropriately approved maintenance organization whenever necessary,
- (8) coordinate scheduled maintenance, the application of airworthiness directives, the replacement of service life limited parts, and component inspection to ensure the work is carried out properly,
- (9) manage and archive all continuing airworthiness records and/or operator's technical log,
- (10) ensure that the mass and balance statement reflects the current status of the aircraft.
- (c) In the case of complex motor-powered aircraft or aircraft used for CAT or aircraft used for commercial specialized operations or commercial ATO operations, when the continuing airworthiness management organization is not appropriately approved to Part 145 or Part-M.A. Subpart F, the organization should in consultation with the operator, establish a written maintenance contract with a Part 145 or Part-M.A. Subpart F approved organization 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 Part 145 or Part-M.A. Subpart F approved maintenance organization and defining the support of the quality functions of M.A.712(b).
- (d) Notwithstanding point (c), the contract may be in the form of individual work orders addressed to the Part 145 or Part-M.A. Subpart F maintenance organization in the case of:
  - (1) an aircraft requiring unscheduled line maintenance,
  - (2) component maintenance, including engine maintenance.
- (e) The organization shall ensure that human factors and human performance limitations are taken into account during continuing airworthiness management, including all contracted and subcontracted activities.

### GM TO M.A.708 Continuing airworthiness management

The CAMO should have adequate knowledge of the design status (type specification, customer options, airworthiness directives (ADs), airworthiness limitations contained in the aircraft instructions for continuing airworthiness, modifications, major repairs, operational equipment) and of the required and performed maintenance. The status of aircraft design and maintenance should be adequately documented to support the performance of the quality system.

#### AMC TO M.A.708(b)3 Continuing airworthiness management

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

# GM TO M.A.708(b)(4) Continuing airworthiness management

This requirement means that the CAMO is responsible for determining what maintenance is required, when it has to be performed, by whom and to what standard in order to ensure the continued airworthiness of the aircraft.

# AMC 1 M.A.708(c) Continuing airworthiness management

- In case of complex motor-powered aircraft, aircraft used for CAT operations, aircraft used for commercial specialized operations and aircraft used by commercial ATO, the provisions of M.A.201 establish that a CAMO is required. This CAMO is in charge of the continuing airworthiness management and this includes the tasks specified in M.A.301 paras (2), (3), (5) and (6). If the CAMO does not hold the appropriate maintenance organization approval (Subpart F organization approval or a CAR-145 approval), then the CAMO shall conclude a contract with the appropriate organization(s).
- 2. The CAMO bears the responsibility for the airworthy condition of the aircraft for which it performs the continuing airworthiness management. Thus, it shall be satisfied before the intended flight that all required maintenance has been properly carried out.
- 3. The CAMO shall agree with the operator on the process to select a maintenance organization before concluding any contract with a maintenance organization.
- 4. The fact that the CAMO has contracted a maintenance organization approved under Subpart F or Part-145 shall not prevent it from checking at the maintenance facilities on any aspect of the contracted work to fulfil its responsibility for the airworthiness of the aircraft.
- 5. The contract between the CAMO and the maintenance organization(s) shall specify in detail the responsibilities and the work to be performed by each party.
- 6. Both the specification of work and the assignment of responsibilities shall be clear, unambiguous and sufficiently detailed to ensure that no misunderstanding arises between the parties concerned that could result in a situation where work that has an effect on the airworthiness or serviceability of aircraft is not or will not be properly performed.
- 7. Special attention shall be paid to procedures and responsibilities to ensure that all maintenance work is performed, service bulletins are analyzed and decisions are taken on their accomplishment, airworthiness directives are accomplished on time and that all work, including non-mandatory modifications, is carried out to approved data and to the latest standards.

#### AMC 2 M.A.708(C) Continuing airworthiness management

#### Maintenance contract with another CAMO/operator

- 1. The purpose of M.A.708(c) is to ensure that all maintenance is carried out by an appropriately approved maintenance organization. It is possible to contract another operator/CAMO (secondary operator/CAMO) that does not hold a maintenance organization approval when it proves that such a contract is in the interest of the CAMO by simplifying the management of its maintenance, and the CAMO keeps an appropriate control of it. In this case the continuing airworthiness management exposition shall include appropriate procedures to ensure that all maintenance is ultimately carried out on time by approved maintenance organizations in accordance with the CAMO's data. In particular, the quality system procedures shall place great emphasis on monitoring compliance with the above. The list of approved maintenance organizations, or a reference to this list, shall be included in the CAMO's continuing airworthiness management exposition.
- 2. This contract shall not preclude the CAMO from ensuring that all maintenance is performed by appropriately approved organizations which comply with the <u>M.A.201</u> continuing airworthiness responsibility requirements. Typical examples of such arrangements are the following:
  - Component maintenance:

The CAMO may find it more appropriate to have a primary contractor (the secondary operator/CAMO) dispatching the components to appropriately approved organizations rather than sending themselves different types of components to various maintenance organizations approved under CAR-145. The benefit for the CAMO is that the management of maintenance is simplified by having a single point of contact for component maintenance. The CAMO remains responsible for ensuring that all maintenance is performed by maintenance organizations approved under Part-145 and in accordance with the approved standards.

Aircraft, engine and component maintenance:

The CAMO may wish to have a maintenance contract with a secondary operator/CAMO not approved under Part-145 for the same type of aircraft. A typical case is that of a dry-leased airplane between operators where the parties, for consistency or continuity reasons (especially for short-term lease agreements), find it appropriate to keep the airplane under the current maintenance arrangement. Where this arrangement involves various Part-145 approved contractors, it might be more manageable for the lessee CAMO to have a single maintenance contract with the lessor operator/CAMO. Whatever type of acceptable maintenance contract is concluded, the CAMO 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.

# GM TO M.A.708(c) Continuing airworthiness management

For line maintenance, the actual layout of the IATA Standard Ground Handling Agreement may be used as a basis, but this does not preclude the CAMO from ensuring that the content of the contract is acceptable and especially that the contract allows the CAMO to properly exercise its maintenance responsibility. Those parts of the contract that have no effect on the technical or operational aspects of airworthiness are outside the scope of this paragraph.

# AMC M.A.708(d) Continuing airworthiness management

The intent of this paragraph is that maintenance contracts are not necessary when the continuing airworthiness management exposition specifies that the relevant maintenance activity may be ordered through one-time work orders. This includes unscheduled line maintenance and may also include component maintenance up to engines, as long as the maintenance is manageable through work orders, both in terms of volume and complexity. It shall be noted that this paragraph implies that even where base maintenance is ordered on a case-by-case basis, there shall be a written maintenance contract.

### M.A.709 Documentation

- (a) The approved continuing airworthiness management organization shall hold and use applicable current maintenance data in accordance with <u>M.A.401</u> for the performance of continuing airworthiness tasks referred to in <u>M.A.708</u>. 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 organization only needs to keep such data for the duration of the contract, except when required by point <u>M.A.714</u>.
- (b) For aircraft not used by licensed air carriers, the approved continuing airworthiness management organization may develop 'baseline' and/or 'generic' maintenance programs 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 <a href="Appendix I">Appendix I</a> to this Part-M. These 'baseline' and/or 'generic' maintenance programs however do not preclude the need to establish an adequate Aircraft Maintenance Program in compliance with point <a href="M.A.302">M.A.302</a> in due time before exercising the privileges referred to in point <a href="M.A.711">M.A.711</a>.

## AMC TO M.A.709 Documentation

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

The sentence '..., except when required by point  $\underline{M.A.714}$ ', 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.

### 'Baseline' maintenance program:

it is a maintenance program 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 program:

it is a maintenance program developed to cover a group of similar types of aircraft. These programs shall be based on the same type of instructions as the baseline maintenance program. Examples of 'generic' maintenance programs could be Cessna 100 Series (covering Cessna 150, 172, 177, etc.).

'Baseline' and 'generic' maintenance programs are not applicable to a particular aircraft registration mark, but to an aircraft type or group of types, and shall be available to the LYCAA prior to the initial approval and prior to the extension of the scope of an existing organization approval. The intent is that the LYCAA is aware of the scope and complexity of tasks that will be managed before granting an organization approval or change of approval.

After this initial approval, when an owner/operator is contracted, the baseline or generic maintenance program, as applicable, may be used to establish the M.A.302 aircraft maintenance program, 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 program for each aircraft registration, specifying which tasks are added and which are not applicable. This will result in an aircraft maintenance program 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 program, which in that case shall be used by the continuing airworthiness management organization to manage the continuing airworthiness of such aircraft.

Continuing airworthiness management organizations may seek authorization for indirect approval in order to amend the aircraft maintenance program mentioned above in accordance with  $\underline{\text{M.A.302(c)}}$ . The indirect approval procedure shall include provisions to notify to the LYCAA that an aircraft maintenance program specific for a customer has been created.

The reason is that, according to M.A.704(a)8, for aircraft not used by licensed air carriers, the Continuing Airworthiness Management Exposition (CAME) only needs to include the reference to the baseline/generic maintenance program.

# M.A.710 Airworthiness review

Reserved.

# M.A.711 Privileges of the organization

A continuing airworthiness management organization approved in accordance with Section A, Subpart G of this Part-M may:

- (1) manage the continuing airworthiness of aircraft as listed on the approval certificate;
- (2) manage the continuing airworthiness of aircraft used by licensed air carriers, 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 organization, working under its quality system, as listed on the approval certificate.

# AMC TO M.A.711(a)(3) Privileges of the organization

Subcontracting of continuing airworthiness tasks

- 1. The CAMO may subcontract certain continuing airworthiness management tasks to qualified persons or organizations. The subcontracted person or organization performs the continuing airworthiness management tasks as an integral part of the CAMO's continuing airworthiness management system, irrespective of any other approval held by the subcontracted person or organization (including CAMO or Part-145 approval).
- 2. The CAMO remains accountable for the satisfactory completion of the continuing airworthiness management tasks irrespective of any contract that may be established.
- 3. In order to fulfil this responsibility, the CAMO shall be satisfied that the actions taken by the subcontracted person or organization meet the standards required by Subpart G. Therefore, the CAMO management of such activities shall be accomplished:
  - a. by active control through direct involvement, and/or
  - b. by endorsing the recommendations made by the subcontracted person or organization.
- 4. In order to retain ultimate responsibility, the CAMO shall limit subcontracted 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 program development and amendments;
- f. any other activities, which do not limit the CAMO responsibilities, as agreed by the competent authority.
- 5. The CAMO's controls associated with subcontracted continuing airworthiness management tasks shall be reflected in the associated contract and be in accordance with the CAMO policy and procedures defined in the continuing airworthiness management exposition. When such tasks are subcontracted, the continuing airworthiness management system is considered to be extended to the subcontracted persons or organizations.
- 6. With the exception of engines and auxiliary power units, contracts would normally be limited to one organization per aircraft type for any combination of the activities described in <a href="Appendix II to AMC to M.A 711(a)3">Appendix II to AMC to M.A 711(a)3</a>. Where contracts are made with more than one organization, the CAMO shall demonstrate that adequate coordination controls are in place and that the individuals' responsibilities are clearly defined in the related contracts.
- 7. Contracts shall not authorize the subcontracted organization to subcontract to other organizations elements of the continuing airworthiness management tasks.
- 8. The LYCAA shall exercise oversight of the subcontracted activities through the CAMO approval. The contracts shall be acceptable to the LYCAA. The CAMO shall only subcontract to organizations which are specified by the LYCAA on its approval certificate (CAMO LYCAA Certificate).
- 9. The subcontracted organization shall agree to notify the CAMO of any changes affecting the contract as soon as practical. The CAMO shall then inform LYCAA. Failure to do so may invalidate the LYCAA acceptance of the contract.
- 10. <u>Appendix II to AMC M.A.711(a)(3)</u> provides information on the subcontracting of continuing airworthiness management tasks.

### M.A.712 Quality system

- (a) To ensure that the approved continuing airworthiness management organization 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 activities carried out under <u>Section A, Subpart G</u> of Part-M. It should at least include the following functions:
  - (1) monitoring that all activities carried out under Section A, Subpart G of this Part-M 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.
- (c) The records of these activities shall be stored for at least two (2) years.
- (d) Where the approved continuing airworthiness management organization is approved in accordance with another Part, the quality system may be combined with that required by the other Part.
- (e) For licensed air carriers, 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 organization not managing the continuing airworthiness of aircraft used by licensed air carriers, the quality system may be replaced by regular organizational reviews subject to the approval of the authority.

# AMC TO M.A.712(a) Quality system

- 1. Procedures shall be held current such that they reflect best practice within the organization. It is the responsibility of all employees to report any difficulties with the procedures via their organization's internal occurrence reporting mechanisms.
- 2. All procedures, and changes to the procedures, shall be verified and validated before use where practicable.
- 3. The feedback part of the system shall 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 shall lead to the accountable manager specified in M.A.706.
- 4. The independent quality audit reports, referenced in <u>AMC M.A.712(b)</u>, shall be sent to the relevant department for rectification action giving target rectification dates. Rectification dates shall 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 shall hold regular meetings with staff to check progress on rectification except that in the large organizations 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 TO M.A.712(b) Quality system

- 1. The primary objectives of the quality system are to enable the CAMO to ensure airworthy aircraft and to remain in compliance with the Part-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 CAMO 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.
- 5. The independent audit shall 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 shall be rechecked against other product lines until the findings have been rectified after which the independent audit procedure may revert back to the 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 the LYCAA.
- 6. Where the organization has more than one location approved, the quality system shall describe how these are integrated into the system and include a plan to audit each location every year.
- 7. A report shall 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 shall be established by always ensuring that audits are carried out by personnel not responsible for the function, procedure or products being checked.
- 9. An organization shall establish a quality plan acceptable to the LYCAA to show when and how often the activities as required by M.A. Subpart G will be audited.

# AMC TO M.A.712(f) Quality system

A small organization is considered to be an organization 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 organization, combination of aircraft and aircraft types, the utilization of the aircraft and the number of approved locations of the organizations shall also be considered before replacing the quality system by an organizational review.

Appendix VII to this AMC shall be used to manage the organizational reviews.

The following activities shall not be considered as subcontracting and, as a consequence, they may be performed without a quality system, although they need to be described in the continuing airworthiness management exposition and be approved by the LYCAA:

- Subscription to a technical publisher that provides maintenance data (Aircraft Maintenance Manuals, Illustrated Parts Catalogues, Service Bulletins, etc.), which may be applicable to a wide range of aircraft. These data may include maintenance schedules recommended by different manufacturers that can be afterwards used by the continuing airworthiness management organization in order to produce customized maintenance programs.
- Contracting the use of a software tool for the management of continuing airworthiness data and records, under the following conditions (in addition to M.A.714(d) and (e)):
- If the tool is used by several organizations, each organization shall have access to its own data only.
- Introduction of data can only be performed by personnel of the continuing airworthiness management organization.
- The data can be retrieved at any time.

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

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

- 1. the name of the organization.
- 2. the location of the organization.
- 3. additional locations of the organization.
- 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 TO M.A.713 Changes to the approved continuing airworthiness organization

This paragraph covers scheduled changes to the CAMO approval. The primary purpose of this paragraph is to enable the CAMO to remain approved if agreed by the LYCAA 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 organization shall record all details of work carried out. The records required by <u>M.A.305</u> and if applicable <u>M.A.306</u> should be retained.
- (b) The continuing airworthiness management organization shall retain a copy of all records referred to in points (a) until two (2) years after the aircraft has been permanently withdrawn from service.
- (c) The records shall be stored in a manner that ensures protection from damage, alteration and theft.
- (d) 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.
- (e) Where continuing airworthiness management of an aircraft is transferred to another organization or person, all retained records shall be transferred to the said organization or person. The time periods prescribed for the retention of records shall continue to apply to the said organization or person.
- (f) Where a continuing airworthiness management organization terminates its operation, all retained records shall be transferred to the owner of the aircraft.

#### AMC TO M.A.714 Record-keeping

- 1. The CAMO shall ensure that it always receives a complete CRS from the approved maintenance organization M.A.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 shall be described in the organization continuing airworthiness management exposition.
- 2. When an organization arranges for the relevant maintenance organization 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 organization of the aircraft, it also remains responsible for transferring the records to any other person or organization managing continuing airworthiness of the aircraft.
- 3. Keeping continuing airworthiness records in a form acceptable to the LYCAA 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 shall remain legible throughout the required retention period.
- 4. Paper systems shall use robust material which can withstand normal handling and filing.

5. Computer systems shall have at least one backup system which shall be updated within twenty-four (24) hours of any new entry. Each terminal is required to contain program safeguards against the ability of unauthorized personnel to alter the database.

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

# M.A.712 Continued validity of approval

- (a) An approval shall be issued for a limited duration not exceeding one (1) year. It should remain valid subject to:
  - the organization remaining in compliance with this Part, in accordance with the provisions related to the handling of findings as specified under point <u>M.B.705</u>, and;
  - (2) the LYCAA being granted access to the organization to determine continued compliance with this Part, and;
  - (3) the approval not being surrendered or revoked.
- (b) Upon surrender or revocation, the approval certificate should be returned to the LYCAA.

# M.A.713 Findings

- (a) A level 1 finding is any significant non-compliance with Part-M requirements which lowers the safety standard and hazards seriously the flight safety.
- (b) A level 2 finding is any non-compliance with Part-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.705, the holder of the continuing airworthiness management organization approval should define a corrective action plan and demonstrate corrective action to the satisfaction of the LYCAA within a period agreed with this Authority.

# **Subpart H: Certificate of Release to Service (CRS)**

#### M.A.801 Aircraft Certificate of Release to Service

- (a) Except for aircraft released to service by a maintenance organization approved in accordance with Part 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 organization approved in accordance with <u>Section A, Subpart F</u> of this Part-M, or;
  - (2) certifying staff in compliance with the requirements laid down in Part 66, except for complex maintenance tasks listed in <u>Appendix VI</u> to this Annex 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 LA1 aircraft not used in CAT or not used in commercial specialized operations or not used in commercial ATO operations, aircraft complex maintenance tasks listed in <a href="mailto:Appendix VI">Appendix VI</a> 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 organization appropriately approved under this Part-M or Part 145 and no appropriate certifying staff are available, the owner may authorize any person, with no less than three (3) years of appropriate maintenance experience and holding the proper qualifications, to maintain according to the standards set out in <a href="Subpart D">Subpart D</a> of this Part 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 authorized person referred to in point M.A.801(b) or an organization approved in accordance with Section A, Subpart F of this Part-M, or with Part 145 at the earliest opportunity but within a period not exceeding seven (7) days, and;
  - (3) notify the organization responsible for the continuing airworthiness management of the aircraft when contracted in accordance with point M.A.201(i), or LYCAA in the absence of such a contract, within seven (7) days of the issuance of such certification authorization.

- (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 organization and/or person issuing the release to service, including:
    - (i) the approval reference of the maintenance organization approved in accordance with Section A, Subpart F of this Part-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 license number of the certifying staff issuing such a certificate;
  - (4) the limitations to airworthiness or operations, if any.
- (g) By derogation from point (b) and notwithstanding the provisions of point (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 should be entered in the aircraft certificate of release to service before its issue as part of the information required in point (f)4;
- (h) A certificate of release to service should not be issued in the case of any known non-compliance which endangers flight safety.

#### AMC TO 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 TO M.A.801(d) Aircraft Certificate of Release to Service

- 1. '3 years of appropriate maintenance experience' means three (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 authorization 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 authorization valid for the work requiring certification, issued by an ICAO Annex 6 approved maintenance organization.
- 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 organization.

## AMC TO M.A.801(f) Aircraft Certificate of Release to Service

- 1. The aircraft certificate of release to service shall contain the following statement:
  - a. 'Certifies that the work specified, except as otherwise specified, was carried out in accordance with Part-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 shall contain the following statement:
    - 'Certifies that the limited pilot-owner maintenance specified, except as otherwise specified, was carried out in accordance with Part-M and in respect to that work the aircraft is considered ready for release to service'.
- 2. The certificate of release to service shall relate to the task specified in the manufacturer's or operator's instruction or the aircraft maintenance program 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 shall 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 summarize the maintenance so long as there is a unique cross-reference to the work-pack containing full details of maintenance carried out. Dimensional information shall be retained in the work-pack record.
- 5. The person issuing the certificate of release to service shall use his normal signature except in the case where a computer release to service system is used. In this latter case the LYCAA 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. At the completion of all maintenance, owners, certifying staff, operators and maintenance organizations shall 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 shall retain all records necessary to prove that all requirements have been met for the issuance of a certificate of release to service.

#### AMC TO 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 CAMO 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 CAMO is responsible for ensuring that all required maintenance has been carried out before flight. Therefore, an aircraft owner or CAMO shall be informed and agree to the deferment of full compliance with <a href="M.A.801(b">M.A.801(b</a>). The certificate of release to service may then be issued subject to details of the deferment, including the aircraft owner or CAMO authorization, being endorsed on the certificate.
- 3. If a CRS is issued with incomplete maintenance, a record shall be kept stating what action the mechanic, supervisor and certifying staff shall take to bring the matter to the attention of the relevant aircraft owner or CAMO so that the issue may be discussed and resolved with the aircraft owner or CAMO.

## AMC TO 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 AD 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 authorized release certificate identified as LYCAA Form 1 constitutes the component certificate of release to service, except when such maintenance on aircraft components has been performed in accordance with M.A.502(b), M.A.502(d) or M.A.502(e) in which case the maintenance is subject to aircraft release procedures in accordance with point M.A.801.

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

When an approved organization maintains an aircraft component for use by the organization itself, an LYCAA Form 1 may not be necessary depending upon the organization's internal release procedures; however, all the information normally required for the LYCAA Form 1 shall 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 license (or equivalent) issued or validated by the LYCAA 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 non-complex motor-powered aircraft of 2,730 kg MTOM and below, sailplane, powered sailplane or balloon, that are not used in CAT, or not used in commercial specialized operations or not used in commercial ATO operations, the pilot-owner may issue a certificate of release to service after limited pilot-owner maintenance as specified in <a href="Appendix VII">Appendix VII</a> of this Part-M.
- (c) The scope of the limited Pilot-owner maintenance shall be specified in the aircraft maintenance program 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 license number of the Pilot-owner issuing such a certificate.

#### AMC TO M.A.803 Pilot-owner authorization

- 1. Privately operated means the aircraft is operated pursuant to M.A.201(i).
- 2. A Pilot-owner may only issue a CRS for maintenance he/she has performed.
- 3. In the case of a jointly-owned aircraft, the maintenance program shall list:
  - The names of all Pilot-owners competent and designated to perform Pilot-owner maintenance in accordance with the basic principles described in <u>Appendix VII of</u> <u>this Part-M</u>. An alternative would be the maintenance program to contain a procedure to ensure how such a list of competent Pilot-owners shall be managed separately and kept current.
  - The limited maintenance tasks they may perform.
- 4. An equivalent valid pilot license may be any document attesting a pilot qualification recognized by the LYCAA.

5. Not holding a valid medical examination does not invalidate the pilot license (or equivalent) required under M.A.803(a)1 for the purpose of the Pilot-owner authorization.

# **Subpart I: Airworthiness Review Certificate**

(Not Applicable).

#### SECTION B: PROCEDURE FOR LYCAA

# **Subpart A: General**

# M.B.101 Scope

This Section establishes the administrative requirements to be followed by the LYCAA who should be in charge of the application and the enforcement of Section A of this LYCAR.

## M.B.102 Libyan Civil Aviation Authority (LYCAA)

#### (a) General

The LYCAA shall be responsible for the issuance, continuation, change, suspension or revocation of certificates and for the oversight of continuing airworthiness. The LYCAA shall establish documented procedures and an organizational structure.

## (b) Resources

The number of staff shall be appropriate to carry out the requirements as detailed in this Section.

## (c) Qualification and training

All staff involved in activities dealt with in this Part-M shall be appropriately qualified and have appropriate knowledge, experience, initial training and continuation training to perform their allocated tasks.

#### (d) Procedures

The LYCAA shall establish procedures detailing how compliance with this Part-M is accomplished.

The procedures shall be reviewed and amended to ensure continued compliance.

# AMC TO M.B.102(a) Libyan Civil Aviation Authority (LYCAA) - General

- In deciding upon the required airworthiness organizational structure, the LYCAA shall review the number of certificates to be issued, the number and size of potential operators, the number of M.A. Subpart F approved maintenance organizations and CAMOs within Libya, as well as the level of civil aviation activity, number and complexity of aircraft and the size of the country's aviation industry.
- 2. The LYCAA shall 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 organizations and CAMOs, in effect, regulate themselves in airworthiness matters.
- 3. The set-up of the organizational structure shall ensure that the various tasks and obligations of the LYCAA are not relying on individuals. That means that a continuing and

undisturbed fulfilment of these tasks and obligations of the LYCAA shall also be guaranteed in case of illness, accident or leave of individual employees.

## AMC 1 M.B.102(C) Libyan Civil Aviation Authority (LYCAA) - Qualification & training

- 1. LYCAA inspectors shall 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. the LYCAA 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 qualification.
  - 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 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. 'Relevant sample' means that these courses shall 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 shall 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 program for continuation training shall 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 2 M.B.102(c) Libyan Civil Aviation Authority (LYCAA) - Qualification & training

Aircraft continuing airworthiness monitoring (ACAM) inspectors

- 1. ACAM in-depth surveys shall be performed by LYCAA inspectors qualified in accordance with M.B.102(c).
- 2. ACAM ramp surveys may be performed by inspectors qualified for the technical tasks of ramp inspections in accordance with other Parts, or by inspectors qualified in accordance with M.B.102(c).

# AMC M.B.102(d) Libyan Civil Aviation Authority (LYCAA) - Procedures

The documented procedures shall contain the following information:

- a. The designation of the LYCAA.
- b. The title(s) and name(s) of the manager(s) of the LYCAA and their duties and responsibilities.
- c. Organization chart(s) showing associated chains of responsibility of the airworthiness staff.
- d. A procedure defining the qualifications for staff together with a list of staff authorized to sign certificates.
- e. A general description of the facilities.
- f. Procedures specifying how the LYCAA ensures compliance with Part-M.

#### M.B.104 Record-keeping

- (a) The LYCAA shall establish 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 Part-M approved organizations shall include as a minimum:
  - (1) the application for an organization approval.
  - (2) the organization 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) the LYCAA continued oversight records including all audit records.
  - (5) copies of all relevant correspondence.

- (6) details of any exemption and enforcement actions.
- (7) any report from other competent authorities relating to the oversight of the organization.
- (8) organization exposition or manual and amendments.
- (9) copy of any other document directly approved by the LYCAA.
- (c) The retention period for the point (b) records shall be at least four (04) years.
- (d) The minimum records for the oversight of each aircraft shall include, at least, a copy of:
  - (1) aircraft certificate of airworthiness,
  - (2) reports from the airworthiness reviews carried out directly by the LYCAA,
  - (3) all relevant correspondence relating to the aircraft,
  - (4) details of any exemption and enforcement action(s),
  - (5) any document approved by the LYCAA pursuant to Part-M or LYCAR-OPS.
- (e) The records specified in point (d) shall be retained until two (02) years after the aircraft has been permanently withdrawn from service.
- (f) All records specified in point M.B.104 shall be made available upon request by other competent authorities, when legal.

#### AMC TO M.B.104(a) Record-keeping

- 1. The record-keeping system shall ensure that all records are accessible whenever needed within a reasonable time. These records shall be organized in a consistent way throughout the LYCAA (chronological, alphabetical order, etc.).
- 2. All records containing sensitive data regarding applicants or organizations shall 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 shall 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 shall 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 TO M.B.104(f) Record-keeping

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

- incidents or accidents,
- findings through the aircraft continuing monitoring program where organizations approved by another ICAO member state are involved, to determine the root cause,
- aircraft mainly operated in another ICAO member State,
- aircraft previously operated in another ICAO Member State,
- organization having approvals in several ICAO Member States.

## M.B.105 Mutual exchange of information

- (a) In order to contribute to the improvement of air safety, LYCAA may participate in a mutual exchange of all necessary information with other competent authorities or international bodies.
- (b) Without prejudice to the competencies of the ICAO Member States, in the case of a potential safety threat involving other ICAO member states, LYCAA should assist in carrying out the necessary oversight action.

# **Subpart B: Accountability**

# M.B.201 Responsibilities

LYCAA should be responsible for conducting inspections and investigations in order to verify that the requirements of this Part are complied with.

# **Subpart C: Continuing Airworthiness**

## M.B.301 Maintenance Program

- (a) Except for those cases where the owner has issued a declaration for the maintenance program in accordance with M.A.302(h), LYCAA shall verify that the maintenance program is in compliance with M.A.302.
- (b) Except where stated otherwise in paragraphs M.A.302(c) and M.A.302(h), the maintenance program and its amendments shall be approved directly by the LYCAA.
- (c) In the case of indirect approval, the maintenance program procedure shall be approved by the Authority through the continuing airworthiness management exposition.
- (d) In order to approve a maintenance program according to paragraph (b), LYCAA shall have access to all the data required in M.A.302(d), (e) and (f).

### AMC TO M.B.301(a) Maintenance Program

To verify compliance with M.A.302, LYCAA auditing surveyor/inspector shall have received training on maintenance program development and control.

#### AMC TO M.B.301(b) Maintenance Program

- 1. When assessing aircraft maintenance programs for approval, the LYCAA shall verify that the maintenance program is acceptable for the continuing airworthiness of the specific aircraft listed and it is appropriate for the proposed operating environment and scheduled utilization.
- 2. The LYCAA shall assess the contents taking into account the origins of the document, i.e., the manufacturer's recommended maintenance program, an MRB report, the CAMO or operator's own experience or another approved program.
- 3. LYCAA may elect to publish a proposed maintenance schedule for a piston engine aircraft type or a group of piston engine aircraft types below 2,730 kg maximum takeoff mass (MTOM) or for a sailplane, powered sailplane or balloon type or for a group of sailplanes, powered sailplanes or balloon types. When owners/operators of the aircraft mentioned above elect to use an LYCAA proposed maintenance schedule, all the out of phase manufacturer recommendations shall be incorporated into the final maintenance program in order for it to be approved.
- 4. A copy of the approved program shall be retained by the LYCAA, unless the program is approved by a CAMO.
- 5. The documentation issued by the LYCAA to approve the aircraft maintenance program 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 <a href="Appendix VII to Part-M">Appendix VII to Part-M</a>.

- 6. In the case of aircraft used by air carriers licensed in accordance with LYCAR-OPS or complex motor-powered aircraft, the development of the aircraft maintenance program 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 shall have been satisfactorily repeated at the existing frequency several times before being proposed for escalation. <a href="Appendix I to AMC M.A.302">Appendix I to AMC M.A.302</a> and <a href="M.B.301(b)">M.B.301(b)</a> gives further information.
- 7. The LYCAA may approve an incomplete maintenance program at the start of operation of an aircraft or an operator, subject to limiting the approval of the maintenance program to a period that does not exceed any required maintenance not yet approved.
- 8. If the LYCAA is no longer satisfied that a safe operation can be maintained, the approval of a maintenance program 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 CAMO has failed to ensure that the program reflects the maintenance needs of the aircraft such that safe operation can be assured.

#### AMC TO M.B.301(c) Maintenance Program

- Approval of an aircraft maintenance program through a procedure established by a CAMO, indirect approval, shall require the organization to demonstrate to the LYCAA that it has competence, procedures and record keeping provisions, which will enable the organization 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 program procedures shall contain reliability centered maintenance and condition monitored maintenance program procedures and have procedures relating to the program control which contain the following provisions:
  - a. task escalation or adjustment,
  - b. maintenance program review,
  - c. SB or Service Information assessment,
  - d. component and structures in service performance review,
  - e. maintenance program revision,
  - f. maintenance procedure effectiveness review and amendment,
  - g. maintenance review board report (MRBR) or manufacturer maintenance planning document (MPD) review and assessment, as appropriate,
  - h. AD review and assessment,

- i. owner/maintenance/CAMO liaison,
- j. training.
- 3. When the LYCAA requests it, the organization shall make provision for the attendance of a representative of the LYCAA at meetings held to consider maintenance implications arising from reviews of the above provisions.

## AMC TO M.B.301(d) Maintenance Program

Programs and all associated airworthiness data, including that data used for substantiating the escalation of programs shall be made available to the LYCAA upon request.

# M.B.302 Exemptions

All exemptions granted shall be recorded and retained by the LYCAA.

## M.B.303 Aircraft Continuing Airworthiness Monitoring (ACAM)

- (a) LYCAA shall develop a survey program to monitor the airworthiness status of the fleet of aircraft on its register.
- (b) The survey program shall include sample product surveys of aircraft and should cover all aspects of airworthiness key risk elements.
- (c) The product survey shall sample the airworthiness standards achieved, on the basis of the applicable requirements and identify any findings.
- (d) Any findings identified shall be categorized against the requirements of this Part and confirmed in writing to the person or organization accountable according to M.A.201. LYCAA will have a process in place to analyze findings for their safety significance.
- (e) LYCAA shall record all findings and closure actions.
- (f) If during aircraft surveys evidence is found showing non-compliance with this Part or with any other Part, the finding shall be dealt with as prescribed by the relevant regulation.
- (g) If so required to ensure appropriate enforcement action, LYCAA shall exchange information on non-compliances identified in accordance with point (f) with other competent authorities.

## AMC1 TO M.B.303(a) Aircraft Continuing Airworthiness Monitoring (ACAM)

ACAM survey program - Scope

- 1. The LYCAA shall establish a program covering in-depth surveys and ramp surveys.
- 2. LYCAA survey program shall select aircraft and/or operators depending on the number and complexity of aircraft on the national register, the diversity of aircraft types, local

- knowledge of the maintenance environment and operating conditions, airworthiness standards and past surveillance experience.
- 3. The program shall prioritize the operator/fleet/aircraft/key risk elements which are causing the greatest concern.
- 4. The survey program shall also include a certain percentage of unannounced ramp surveys.
- 5. The survey program and changes thereto shall be documented.

## AMC2 TO M.B.303(a) Aircraft Continuing Airworthiness Monitoring (ACAM)

#### ACAM survey program - Crediting

- 1. Where the ACAM survey can be linked to the oversight of an approved organization, then credit can be granted in the monitoring process of that approved organization.
- 2. The LYCAA may take credit of aircraft airworthiness inspections qualifying for the ACAM program when these inspections are performed in accordance with the provisions of LYCAR-OPS and its implementing rules.

#### GM TO M.B.303(a) Aircraft Continuing Airworthiness Monitoring (ACAM)

#### Combined surveys

- 1. In the interest of efficient use of LYCAA resources, aircraft inspection procedures may be established covering the combined scope of various aircraft survey tasks performed by LYCAA, such as but not limited to:
  - ACAM in-depth survey;
  - airworthiness review;
  - permit to fly physical inspection;
  - Export Certificate of Airworthiness inspection;
  - product survey in accordance with <u>M.B.704(c)</u>;
  - product audit in accordance with Part-145 or Part-M Subpart F;
  - ramp inspections performed.
- 2. Depending on which type of survey is required, any actual survey performed may cover a subset of the combined scope.

#### AMC1 TO M.B.303(b) Aircraft Continuing Airworthiness Monitoring (ACAM)

#### Scope of surveys

- 1. The LYCAA shall undertake sample product surveys 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 to remain in force,
  - b. the operator/owner's management of the airworthiness of the aircraft is effective,
  - c. the approvals and licenses granted to organizations 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 survey (ramp or indepth).

- 2. Sample product surveys of aircraft include:
  - a. in-depth surveys carried out during extensive maintenance that fully encompass selected aspects of an aircraft's airworthiness,
  - b. ramp surveys carried out during aircraft operations to monitor the apparent condition of an aircraft's airworthiness.
- 3. When performing a ramp survey, the inspector(s) shall make all possible efforts to avoid an unreasonable delay of the aircraft inspected.
- 4. The further information on 'Key Risk Elements' can be found in <u>Appendix III to GM</u> M.B.303(b).

## AMC2 TO M.B.303(b) Aircraft Continuing Airworthiness Monitoring (ACAM)

#### In-depth survey

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

#### AMC3 TO M.B.303(b) Aircraft Continuing Airworthiness Monitoring (ACAM)

### Key Risk Elements (KREs)

- 1. The following KREs shall 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 Program
- k. Component control
- I. Repairs
- m. Records
- 2. These KREs and their detailed components shall 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.
- 3. Further information regarding 'Key Risk Elements' can be found in <a href="Appendix III to GM">Appendix III to GM</a>
  <a href="M.B.303(b)">M.B.303(b)</a>.

#### GM TO M.B.303(b) Aircraft Continuing Airworthiness Monitoring (ACAM)

Key Risk Elements (KREs)

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 survey program. It will ensure that the program covers all aspects of continuing airworthiness. While it is not required to cover all KREs during a given inspection, the ACAM survey program needs to ensure that there is no omission, i.e., certain KRE are never inspected.

Further information regarding 'Key Risk Elements' can be found in <u>Appendix III to GM M.B.303(b)</u>.

#### AMC TO M.B.303(d) Aircraft Continuing Airworthiness Monitoring (ACAM)

#### Findings analysis

- 1. The process shall analyze the findings, or combination thereof, in order to identify:
  - a. the root causes and their recurrence;

- b. the potential impact on flight safety of the individual aircraft or aircraft fleet on the national register, including hazard identification and risk mitigation; and
- c. further necessary actions at the level of the organization(s) or individual(s) interacting with the continuing airworthiness of the aircraft or aircraft fleet.
- 2. The outcome of the analysis shall be used for the further adjustment of the ACAM program as well as for the purpose of M.B.303(e), (f) and (g).
- 3. The purpose of this process is not to analyze individual findings, but to address systemic issues or issues that become apparent at individual, corporate or aggregate level.

#### M.B.304 Revocation and suspension

The Authority shall:

- (a) suspend an airworthiness certificate on reasonable grounds in the case of potential safety threat, or;
- (b) suspend or revoke an airworthiness certificate pursuant to M.B.903(1).

# **Subpart D: Maintenance standards**

(To be developed as appropriate).

# **Subpart E: Components**

(To be developed as appropriate).

# **Subpart F: Maintenance organization**

# M.B.601 Application

Where maintenance facilities are located outside Libya, the investigation and continued oversight of the approval shall be carried out where the maintenance facilities are located.

# M.B.602 Initial approval

- (a) Provided the requirements of M.A.606(a) and (b) are complied with, LYCAA shall formally indicate its acceptance of the M.A.606(a) and (b) personnel to the applicant in writing.
- (b) LYCAA shall establish that the procedures specified in the maintenance organization manual comply with M.A Subpart F and ensure the accountable manager signs the commitment statement.
- (c) LYCAA shall verify that the organization is in compliance with the M.A Subpart F of Part-M 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 organization to compliance with the procedures specified in the manual.
- (e) All findings shall be confirmed in writing to the applicant organization.
- (f) LYCAA 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 organization and closed by LYCAA before the approval can be issued.

#### AMC TO M.B.602(a) Initial approval

- 1. 'Formally indicate in writing' means that an LYCAA Form 4 (<u>Appendix VIII to AMC M.B.602(a) and AMC M.B.702(a)</u>) shall be used for this activity. With the exception of the accountable manager, an LYCAA Form 4 shall be completed for each person nominated to hold a position required by <u>M.A.606(b)</u>.
- 2. In the case of the accountable manager, approval of the maintenance organization manual containing the accountable manager's signed commitment statement constitutes formal acceptance.

#### AMC TO M.B.602(b) Initial approval

The LYCAA shall indicate approval of the maintenance organization manual in writing.

## AMC TO M.B.602(c) Initial approval

- The LYCAA shall 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.
- The audit may be carried out on a product line type basis. For example, in the case of an
  organization with Socata TB20 and Piper PA28 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 shall at least cover the activities identified as weak for the
  first type.
- 3. The LYCAA auditing surveyor shall always ensure that he/she is accompanied throughout the audit by a senior technical member of the organization. The reason for being accompanied is to ensure the organization is fully aware of any findings during the audit.
- 4. The auditing surveyor shall inform the senior technical member of the organization at the end of the audit visit on all findings made during the audit.

## AMC TO M.B.602(e) Initial approval

- 1. Findings shall 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, the LYCAA shall review the provisional finding levels, adjusting them if necessary and change the categorization from 'provisional' to 'confirmed'.
- 2. All findings shall be confirmed in writing to the applicant organization within two (2) weeks of the audit visit.
- 3. There may be occasions when the LYCAA finds situations in the applicant's organization on which it is unsure about compliance. In this case, the organization shall be informed about possible non-compliance at the time and the fact that the situation will be reviewed within the LYCAA before a decision is made. If the review concludes that there is no finding then a verbal confirmation to the organization will suffice.

#### AMC TO M.B.602(f) Initial approval

A quality review of the LYCAA audit report shall be carried out by a competent independent person nominated by the LYCAA. The review shall take into account the relevant paragraphs of M.A. Subpart F, the categorization of finding levels and the closure action taken.

## AMC TO M.B.602(g) Initial approval

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

# M.B.603 Issue of approval

- (a) LYCAA shall issue to the applicant an LYCAA approval certificate (<u>Appendix IV to Part-M</u>) which includes the extent of approval, when the maintenance organization is in compliance with the applicable paragraphs of this Part.
- (b) LYCAA shall indicate the conditions attached to the approval on the approval certificate.
- (c) The reference number shall be included on the LYCAA approval certificate in a manner specified by the LYCAA.

### AMC TO M.B.603(c) Issue of approval

The numeric sequence of the approval reference shall be unique to the particular approved maintenance organization.

# M.B.604 Continuing oversight

- (a) LYCAA shall keep and update a program listing for each M.A Subpart F approved maintenance organizations under its supervision, the dates when audit visits are due and when such visits were carried out.
- (b) Each organization shall be completely audited at periods not exceeding 24 months.
- (c) All findings shall be confirmed in writing to the applicant organization.
- (d) LYCAA 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 24 months to ensure he/she remains informed of significant issues arising during audits.

#### AMC TO M.B.604(b) Continuing oversight

- 1. Where the LYCAA has decided that a series of audit visits are necessary to arrive at a complete audit of an approved maintenance organization, the program shall 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 organization is identifying and correcting its problems.
- 3. At the successful conclusion of the audit(s) including verification of the manual, an audit report shall be completed by the auditing surveyor including all recorded findings, closure actions and recommendation.

- 4. Credit may be claimed by the LYCAA surveyor(s) for specific item audits completed during the preceding 23-month period subject to four conditions:
  - a. the specific item audit shall be the same as that required by M.A. Subpart F latest amendment, and
  - b. there shall be satisfactory evidence on record that such specific item audits were carried out and that all corrective actions have been taken, and
  - c. the LYCAA surveyor(s) shall 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 shall be audited not later than 24 months after the last audit of the item.
- 5. When performing the oversight of organizations that hold both M.A. Subpart F and M.A. Subpart G approvals, the LYCAA shall arrange the audits to cover both approvals avoiding duplicated visit of a particular area.

## M.B.605 Findings

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

#### AMC M.B.605(A)(1) FINDINGS

For a level 1 finding, it may be necessary for the LYCAA 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) LYCAA shall comply with the applicable elements of the initial approval for any change to the organization notified in accordance with M.A.617.
- (b) LYCAA may prescribe the conditions under which the approved maintenance organization may operate during such changes, unless it determines that the approval shall be suspended due to the nature or the extent of the changes.
- (c) For any change to the maintenance organization manual:
  - (1) In the case of direct approval of changes in accordance with point M.A.604(b), LYCAA shall verify that the procedures specified in the manual are in compliance with Part-M before formally notifying the approved organization 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), LYCAA shall ensure that the changes remain minor and that it has an adequate control over the approval of the changes to ensure they remain in compliance with the requirements of this Part-M.

#### AMC TO M.B.606 Changes

1. Changes in nominated persons

The LYCAA shall 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.

- It is recommended that a simple manual status sheet is maintained which contains information on when an amendment was received by the LYCAA and when it was approved.
- 3. The LYCAA shall define the minor amendments to the manual which may be incorporated through indirect approval. In this case a procedure shall be stated in the amendment section of the maintenance organization manual.
  - Changes notified in accordance with M.A.617 are not considered minor.
- 4. The approved maintenance organization shall submit each manual amendment to the LYCAA whether it be an amendment for LYCAA approval or an indirectly approved amendment. Where the amendment requires LYCAA approval, the LYCAA when satisfied, shall indicate its approval in writing. Where the amendment has been submitted under the indirect approval procedure the LYCAA shall acknowledge receipt in writing.

#### M.B.607 Revocation, suspension and limitation of an approval

#### LYCAA shall:

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

# Subpart G: Continuing Airworthiness Management Organization

# M.B.701 Application

- (a) For licensed air carriers, LYCAA shall receive for approval with the initial application for the air operator's certificate, 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 programs;
  - (3) the aircraft technical log;
  - (4) where appropriate, the technical specification of the maintenance contracts between the CAMO and Part-145 approved maintenance organization.
- (b) Where facilities are located outside Libya, the investigation and continued oversight of the approval shall be carried out where the facilities are located.

#### AMC TO M.B.701(a) Application

- 1. The documents listed in M.B.701(a) points (1), (2) and (3) may require approval. Draft documents shall be submitted at the earliest opportunity so that assessment of the application can begin. Grant or change cannot be affected until the LYCAA has received the completed documents. This information is required to enable the LYCAA to conduct its assessment in order to determine the volume of oversight work necessary and the locations at which it will be accomplished.
- If considered appropriate for the assessment, the LYCAA may request that at the time of
  initial application or change of the approval schedule, the CAMO applicant provides a copy
  of the technical specifications of the contracts with Part-145 organizations to demonstrate
  that arrangements are in place for all base and scheduled line maintenance for an
  appropriate period of time.

# M.B.702 Initial approval

- (a) Provided the requirements of M.A.706(a), (c), (d) and M.A.707 are complied with, LYCAA shall formally indicate its acceptance of the M.A.706(a), (c), (d) and M.A.707 personnel to the applicant in writing.
- (b) LYCAA shall establish that the procedures specified in the continuing airworthiness management exposition comply with <u>Section A, Subpart G</u> of this Part-M and ensure the accountable manager signs the commitment statement.
- (c) LYCAA shall verify the organization's compliance with Section 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 organization to

- compliance with the procedures specified in the continuing airworthiness management exposition.
- (e) All findings shall be confirmed in writing to the applicant organization.
- (f) LYCAA 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 organization and closed by the LYCAA before the approval can be issued.

# AMC TO M.B.702(a) Initial approval

- 1. 'Formally indicate in writing' means that an LYCAA Form 4 (Appendix VIII to AMC M.B.602(a) and AMC M.B.702(a)) shall be used for this activity. With the exception of the accountable manager, an LYCAA Form 4 shall be completed for each person nominated to hold a position required by M.A.706(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 authority has held a meeting with the accountable manager and is satisfied with its results.

#### AMC TO M.B.702(b) Initial approval

- 1. The LYCAA shall indicate approval of the continuing airworthiness management exposition in writing.
- 2. Contracts for sub-contracting continuing airworthiness management tasks by CAMOs shall be included in the continuing airworthiness organization exposition. The competent authorities shall verify that the standards set forth in <a href="AMC M.A.711(a)(3)">AMC M.A.711(a)(3)</a> have been met when approving the exposition.
- 3. The LYCAA while investigating the acceptability of the proposed subcontracted continuing airworthiness management tasks arrangements will take into account, in the subcontracted organization, 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 CAMO, the subcontracted organization and, where applicable, the contracted maintenance organization(s).

#### AMC TO M.B.702(c) Initial approval

- The LYCAA shall 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 organization 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 shall 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 organization will be assessed during the audit, the privileges of the approved organization shall be taken into account.
- 4. The LYCAA auditing surveyor shall always ensure that he/she is accompanied throughout the audit by a senior technical member of the organization. Normally this is the quality manager. The reason for being accompanied is to ensure the organization is fully aware of any findings during the audit.
- 5. The auditing surveyor shall inform the senior technical member of the organization at the end of the audit visit on all findings made during the audit.

## AMC TO M.B.702(e) Initial approval

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

#### AMC TO M.B.702(f) Initial approval

A quality review of the audit report shall be carried out by a competent independent person nominated by the LYCAA. The review shall 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 shall be indicated by a signature on the audit report.

#### AMC TO M.B.702(g) Initial approval

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

# M.B.703 Issue of approval

- (a) The Authority shall issue to the applicant an approval certificate (<u>Appendix V to Part-M</u>) which includes the extent of approval, when the continuing airworthiness management organization is in compliance with <u>M.A. Subpart G</u>.
- (b) The Authority shall indicate the validity of the approval on the approval certificate.
- (c) The reference number shall be included on the approval certificate in a manner specified by the LYCAA.
- (d) In the case of licensed air carriers, the information contained on CAMO approval certificate will be included on the air operator's certificate.

#### AMC TO M.B.703 Issue of approval

The table shown for the Approval Schedule includes a field designated as 'Aircraft type/series/group'.

The intention is to give maximum flexibility to the LYCAA to customize the approval to a particular organization.

Possible alternatives to be included in this field are the following:

- A specific type designation that is part of a type certificate, such as Airbus 340-211 or Cessna 172R.
- A type rating (or series), which may be further subdivided, such as Boeing 737-600/700/800, Boeing 737-600, Cessna 172 Series.
- An aircraft group such as, for example, 'all sailplanes and powered sailplanes' or 'Cessna single piston engined aircraft' or 'Group 3 aircraft' or 'aircraft below 2 730 kg MTOM'.

Reference to the engine type installed in the aircraft may or may not be included, as necessary.

It is important to note that the scope of work defined in the approval certificate is further limited to the one defined in the Continuing Airworthiness Management Exposition (CAME). It is this scope of work in the CAME which ultimately defines the approval of the organization. As a consequence, it is possible for a LYCAA to endorse in the approval certificate, for example, a scope of work for Group 3 aircraft while the detailed scope of work defined in the CAME does not include all Group 3 aircraft.

Nevertheless, in all cases, the LYCAA shall be satisfied that the organization has the capability to manage the types/groups/series endorsed in the approval certificate.

Since the activities linked to continuing airworthiness management are mainly processoriented rather than facility/tooling-oriented, changes to the detailed scope of work defined in the CAME (either directly or through a capability list), within the limits already included in the approval certificate, may be considered as not affecting the approval and not subject to

 $\underline{\text{M.A.713}}$ . As a consequence, for these changes the LYCAA may allow the use by the CAMO of the indirect approval procedure defined in  $\underline{\text{M.A.704(c)}}$ .

In the example mentioned above, before endorsing the Group 3 in the approval certificate for the first time, the LYCAA shall make sure that the organization is capable of managing this category of aircraft as a whole. In particular, the LYCAA shall ensure that Baseline/Generic Maintenance Programs or individual maintenance programs (for contracted customers) are available for all the aircraft which are intended to be initially included in the scope of work detailed in the CAME. Later on, if changes need to be introduced in the detailed scope of work detailed in the CAME to include new aircraft types (within Group 3), this may be done by the CAMO through the use of the indirect approval procedure.

Since, as mentioned above, the LYCAAs shall make sure that the organization is capable of managing the requested category as a whole, it is not reasonable to grant a full Group 3 approval based on an intended scope of work which is limited to, for example, a Cessna 172 aircraft. However, it may be reasonable to grant such full Group 3 approval, after showing appropriate capability, for an intended scope of work covering several aircraft types or series of different complexity and which are representative of the full Group 3.

Special case for LA1 aircraft:

In order to promote standardization, for this category of aircraft the following approach is recommended:

Possible ratings to be endorsed in approval certificate:

- LA1 sailplanes;
- LA1 powered sailplanes and LA1 airplanes;
- LA1 balloons;
- LA1 airships.
- Before endorsing any of those ratings (for example, LA1 sailplanes) in LYCAA approval certificate, the LYCAA shall audit that the organization is capable of managing at least one aircraft type (for example, one type of sailplanes within the LA1 category), including the availability of the necessary facilities, data, maintenance programs, and staff.
- It is acceptable that the detailed scope of work in the CAME contains the same ratings endorsed in approval certificate (for example, LA1 sailplanes), without a need to further limit them. However, the CAMO will only be able to manage a certain aircraft type when all the necessary facilities, data, maintenance programs and staff are available.

#### AMC TO M.B.703(c) Issue of approval

The numeric sequence shall be unique to the particular CAMO.

## M.B.704 Continuing oversight

- (a) LYCAA shall keep and update a program listing for each M.A. Subpart G approved continuing airworthiness organizations under its supervision, the dates when audit visits are due and when such visits were carried out.
- (b) Each organization shall be completely audited at periods not exceeding 24 months.
- (c) A relevant sample of the aircraft managed by the M.B. Subpart G approved organization shall be surveyed in every twenty-four (24) month period. The size of the sample will be decided by the LYCAA based on the result of prior audits and earlier product surveys.
- (d) All findings shall be confirmed in writing to the applicant organization.
- (e) LYCAA 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 twenty-four (24) months to ensure he/she remains informed of significant issues arising during audits.

## AMC TO M.B.704(b) Continuing oversight

- 1. Where the LYCAA has decided that a series of audit visits are necessary to arrive at a complete audit of an approved continuing airworthiness management organization, the program shall 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 organizations internal self-monitoring quality reports produced by the quality monitoring personnel to determine if the organization 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 shall be completed by the auditing surveyor including all recorded findings, closure actions and recommendation.
- 4. Credit may be claimed by the LYCAA surveyor(s) for specific item audits completed during the preceding twenty-three (23) month period subject to four conditions:
  - a. the specific item audit shall be the same as that required by M.A. Subpart G latest amendment, and
  - b. there shall be satisfactory evidence on record that such specific item audits were carried out and that all corrective actions have been taken, and
  - the LYCAA surveyor(s) shall 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 shall be audited not later than twenty-four (24) months after the last audit of the item.
- 5. When a CAMO sub-contracts continuing airworthiness management tasks, all sub-contracted organizations shall also be audited by the LYCAA at periods not exceeding 24 months (credits per paragraph 4 above are permitted) to ensure they fully comply with M.A. Subpart G. For these audits, the LYCAA auditing surveyor shall always ensure that he/she is accompanied throughout the audit by a senior technical member of the CAMO. All findings shall be sent to and corrected by the CAMO.
- 6. When performing the oversight of organizations that hold both M.A. Subpart F and M.A. Subpart G approvals, the LYCAA shall 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 Part-M requirement, LYCAA shall take the following actions:
  - (1) For level 1 findings, immediate action shall be taken by the LYCAA to revoke, limit or suspend in whole or in part, depending upon the extent of the level 1 finding, the continuing airworthiness management organization approval, until successful corrective action has been taken by the organization.
  - (2) For level 2 findings, the LYCAA shall grant a corrective action period appropriate to the nature of the finding that shall not be more than three months. In certain circumstances, at the end of this first period, and subject to the nature of the finding, the LYCAA can extend the three-month period subject to a satisfactory corrective action plan.
- (b) Action shall be taken by the LYCAA to suspend in whole or part the approval in case of failure to comply within the timescale granted by the LYCAA.

#### AMC TO M.B.705(a)(1) Findings

For a level 1 finding, the LYCAA shall inform the owner/operator in order that corrective action can be taken to ensure possible unsafe conditions on these aircraft are corrected before further flight.

Furthermore, a level 1 finding could lead to a non-compliance to be found on an aircraft as specified in M.B.303(f).

# M.B.706 Changes

- (a) LYCAA shall comply with the applicable elements of the initial approval for any change to the organization notified in accordance with point M.A.713.
- (b) LYCAA may prescribe the conditions under which the approved continuing airworthiness management organization may operate during such changes, unless it determines that the approval shall 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), LYCAA shall verify that the procedures specified in the exposition are in compliance with Part-M before formally notifying the approved organization of the approval.
  - (2) In the case an indirect approval procedure is used for the approval of the changes in accordance with point CAR-M.A.704(c), LYCAA 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 Part-M.

#### AMC TO M.B.706 Changes

- 1. Changes in nominated persons. The LYCAA shall have adequate control over any changes to the personnel specified in M.A.706(a), (c), (d) and (i). 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 the LYCAA and when it was approved.
- 3. The LYCAA shall define the minor amendments to the exposition which may be incorporated through indirect approval. In this case a procedure shall be stated in the amendment section of the approved continuing airworthiness management exposition.
- 4. Changes notified in accordance with M.A.713 are not considered minor.
- 5. The CAMO shall submit each exposition amendment to the LYCAA whether it be an amendment for LYCAA approval or an indirectly approved amendment. Where the amendment requires LYCAA approval, the LYCAA when satisfied, shall indicate its approval in writing. Where the amendment has been submitted under the indirect approval procedure, the LYCAA shall acknowledge receipt in writing.

#### M.B.707 Revocation, suspension and limitation of an approval

The Authority 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)**

(To be developed as appropriate).

### **Subpart I: Airworthiness Review Certificate**

(Not Applicable).

### **Appendices to Part-M**

### Appendix I Continuing airworthiness management contract

- 1. When an owner/operator contracts, in accordance with M.A.201, a continuing airworthiness organization approved pursuant Part-M Subpart G (CAMO) to carry out continuing airworthiness management tasks, upon request by the LYCAA, a copy of the contract shall be sent by the owner/operator to the LYCAA once it has been signed by both parties.
- 2. The contract shall be developed taking into account the requirements of Part-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,
  - CAMO details including the address.
  - type of operation

### 4. It shall state the following:

"The owner/operator entrusts to the CAMO the management of the continuing airworthiness of the aircraft, the development of a maintenance program that shall be approved by the LYCAA and the organization of the maintenance of the aircraft according to said maintenance program.

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

The owner/operator declares, to the best of its belief that all the information given to the CAMO 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 CAMO.

In case of any non-conformity with this contract, by either of the signatories, it will become null. In such a case, the owner/operator will retain full responsibility for every task linked to the continuing airworthiness of the aircraft and the owner will undertake to inform the LYCAA within two full weeks."

- 5. When an owner/operator contracts a CAMO in accordance with M.A.201 the obligations of each party shall be shared as follows:
- 5.1. Obligations of the CAMO:
  - 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 program for the aircraft, including any reliability program developed, if applicable;
    - (b) declare the maintenance tasks (in the maintenance program) that may be carried out by the pilot-owner in accordance with point M.A.803(c);
    - (c) organize the approval of the aircraft's maintenance program;
    - (d) once it has been approved, give a copy of the aircraft's maintenance program to the owner/operator;
    - (e) organize a bridging inspection with the aircraft's prior maintenance program;
    - (f) organize for all maintenance to be carried out by an approved maintenance organization;
    - (g) organize for all applicable airworthiness directives to be applied;
    - (h) organize for all defects discovered during scheduled maintenance, airworthiness reviews or reported by the owner to be corrected by an approved maintenance organization, coordinate scheduled maintenance, the application of airworthiness directives, the replacement of life limited parts, and component inspection requirements;
    - (i) inform the owner each time the aircraft shall be brought to an approved maintenance organization;
    - (j) manage all technical records;
    - (k) archive all technical records;
  - 3. organize the approval of any modification to the aircraft in accordance with Part-21 before it is embodied;
  - 4. organize the approval of any repair to the aircraft in accordance with the Part-21 before it is carried out;

- 5. inform the LYCAA whenever the aircraft is not presented to the approved maintenance organization by the owner as requested by the approved organization;
- 6. inform the LYCAA whenever the present contract has not been respected;
- 7. carry out all occurrence reporting mandated by applicable regulations;
- 8. inform the LYCAA whenever the present contract is denounced by either party.
- 5.2. Obligations of the owner/operator:
  - 1. have a general understanding of the approved maintenance program;
  - 2. have a general understanding of this Part-M;
  - 3. present the aircraft to the approved maintenance organization agreed with the CAMO at the due time designated by the CAMO's request;
  - 4. not modify the aircraft without first consulting the CAMO;
  - 5. inform the CAMO of all maintenance exceptionally carried out without the knowledge and control of the CAMO;
  - 6. report to the CAMO through the logbook all defects found during operations;
  - 7. inform the LYCAA whenever the present contract is denounced by either party;
  - 8. inform the CAMO and LYCAA whenever the aircraft is sold;
  - 9. carry out all occurrence reporting mandated by applicable regulations;
  - 10. inform, on a regular basis, the CAMO about the aircraft flying hours and any other utilization data, as agreed with the CAMO;
  - 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 program as laid down in point M.A.803(c);
  - 12. inform the CAMO not later than thirty (30) days after completion of any pilotowner maintenance task in accordance with point M.A.305(a).

### Appendix II Authorized Release Certificate (LYCAA Form 1)

These instructions relate only to the use of the LYCAA Form 1 for maintenance 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 unrecognizable.
- 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 recognizable and legible. If in doubt consult the Competent Authority.
- 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 handwritten 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 shall 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 shall be retained according to the retention period associated with the first.

### 5. Completion of the certificate by the originator

### Block 1 Approving Competent Authority/Country

LYCAA/ State of Libya

### Block 2 LYCAA Form 1 header

#### 'AUTHORISED RELEASE CERTIFICATE

### LYCAA FORM 1'

### **Block 3 Form Tracking Number**

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

### Block 4 Organization name and address

Enter the full name and address of the approved organization 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 shall 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 (1).
(iii)	Inspected/ Tested	Examination, measurement, etc. in accordance with an applicable standard (1) (e.g., visual inspection, functional testing, bench testing etc.).
(iv)	Modified	Alteration of an item to conform to an applicable standard (1).

<sup>(1)</sup> Applicable standard means a manufacturing/design/maintenance/quality standard, method, technique or practice approved by or acceptable to the Competent Authority. 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 LYCAA 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 organizations approved in accordance with Subpart F of Part-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 with the requirements of Section A, Subpart F of Part-M and in respect to that work the item is considered ready for release to service. THIS IS NOT A RELEASE UNDER Part-145"

If printing the data from an electronic LYCAA Form 1, any appropriate data not fit for other blocks shall 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 unauthorized 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 organizations approved in accordance with Section A, Subpart F of Part-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 Part-M.

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

For all maintenance carried out by maintenance organizations approved in accordance with Part-145, 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 Part-145.
- (c) Where the maintenance was carried out in accordance with a requirement other than that specified Part-145. In this case block 12 shall specify the particular regulation.

### **Block 14b Authorized Signature**

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

### Block 14c Certificate/Approval Number

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

### 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.'

Appendix III Class and ratings system to be used for the Approval of Maintenance Organizations referred to Part-M Subpart F and Part-145

- 1. Except as stated otherwise for the smallest organizations in point 12, the table referred to in point 13 provides the standard system for the approval of maintenance organization under Subpart F of Part-M and Part-145. An organization 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 the table referred to in point 13, the approved maintenance organization is required to indicate its scope of work in its maintenance organization manual/exposition. See also point 11.
- 3. Within the approval class(es) and rating(s) granted by the competent authority, the scope of work specified in the maintenance organization exposition defines the exact limits of approval. It is therefore essential that the approval class(es) and rating(s) and the organizations scope of work are matching.
- 4. A category A class rating means that the approved maintenance organization 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 the competent authority, in accordance with component maintenance data, only whilst such components are fitted to the aircraft. Nevertheless, such A-rated approved maintenance organization 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 point. This will be subject to a control procedure in the maintenance organization exposition to be approved by the competent authority. 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 approved maintenance organization 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 the competent authority, in accordance with component maintenance data, only whilst such components are fitted to the engine and/or APU. Nevertheless, such Brated approved maintenance organization 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 point. The limitation section will specify the scope of such maintenance thereby indicating the extent of approval. A maintenance organization approved 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

- organization exposition to be approved by the competent authority. The maintenance organization exposition scope of work shall reflect such activity where permitted by the competent authority.
- 6. A category C class rating means that the approved maintenance organization 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 maintenance organization approved 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 organization exposition to be approved by the LYCAA. The maintenance organization exposition scope of work shall reflect such activity, where permitted by the LYCAA.
- 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 an approved maintenance organization that carries out NDT as a particular task for another organization. A maintenance organization approved with a class rating in A or B or C category may carry out NDT on products it is maintaining subject to the maintenance organization exposition containing NDT procedures, without the need for a D1 class rating.
- 8. In the case of maintenance organizations approved in accordance with Part-145, category A class ratings are subdivided into 'Base' or 'Line' maintenance. Such an organization may be approved for either 'Base' or 'Line' maintenance or both. It shall be noted that a 'Line' facility located at a main base facility requires a 'Line' maintenance approval.
- 9. The limitation section is intended to give the competent authority the flexibility to customize the approval to any particular organization. Ratings shall be mentioned on the approval only when appropriately limited. The table referred to in point 13 specifies the types of limitation possible. 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 organization (an example could be avionic systems installations and related maintenance). Such mention in the limitation section indicates that the maintenance organization is approved to carry out maintenance up to and including this particular type/task.
- 10. When reference is made to series, type and group in the limitation section of class A and B, series means a specific type series such as Airbus 300 or 310 or 319 or Boeing 737-300 series or RB211-524 series or Cessna 150 or Cessna 172 or Beech 55 series or continental O-200 series, etc.; type means a specific type or model such as Airbus 310-240 type or RB 211-524 B4 type or Cessna 172RG 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.
- 11. When a lengthy capability list is used which could be subject to frequent amendment, then such amendment may be in accordance with the indirect approval procedure referred to in points M.A.604(c) and M.B.606(c) or Part-145 as applicable.
- 12. A maintenance organization 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	RATING	LIMITATION
CLASS AIRCRAFT	RATING A2 AEROPLANES	PISTON ENGINE 5700 KG
CLASS AIRCRAFT	5700 KG AND BELOW	AND BELOW
CLASS AIRCRAFT	RATING A3 HELICOPTERS	SINGLE PISTON ENGINE 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 APU'S	C1 TO C22	AS PER CAPABILITY LIST
CLASS SPECIALISED	D1 NDT	NDT METHOD(S) TO BE SPECIFIED.

It shall be noted that such an organization may be further limited by the LYCAA in the scope of approval, dependent upon the capability of the particular organization.

### 13. Table

CLASS	RATING	LIMITATION	BASE	LINE
	A1 Airplanes above 5700 Kg	[Rating reserved to maintenance Organizations approved in accordance with Part-145] [ shall state airplane manufacturer or group or	[YES/NO]*	[YES/NO]*
AIRCRAFT		series or type and/or the maintenance tasks] Example: Airbus A320 Series		
	A2 Airplanes 5700 Kg and below	[ shall state airplane manufacturer or group or series or type and/or the maintenance tasks] Example: DHC Twin Otter Series	[YES/NO]*	[YES/NO]*

	A3 Helicopters	[ shall state helicopter manufacturer or group or series or type and/or the maintenance task(s)] Example: Robinson R44	[YES/NO]*	[YES/NO]*
	A4 Aircraft other than A1, A2 and A3	[ shall state aircraft series or type and/or the maintenance task(s)]	[YES/NO]*	[YES/NO]*
	B1 Turbine	[ shall state engine manufacture or group or type and/or the maintenance task(s)] Example: PT6A Series	[YES/NO]*	[YES/NO]*
Engines	B2 Piston	[ shall state aircraft series or type and/or the maintenance task(s)]	[YES/NO]*	[YES/NO]*
	B3 APU	[ shall state aircraft series or type and/or the maintenance task(s)] [ shall state aircraft type or aircraft manufacturer or component manufacturer or	[YES/NO]*	[YES/NO]*
	C1 Air Condition & Press	the particular component and/or cross refer to a capability list in the exposition and/or the maintenance task (s).] Example PT6A Fuel Control		
	C2 Auto Flight C3 Comms and	·		
Components other than complete engines or APU	Nav C4 Doors - Hatches C5 Electrical Power & Light C6 Equipment C7 Engine – APU C8 Flight Controls C9 Fuel C10 Helicopters - Rotor C11 Helicopter – Trans C12 Hydraulic Power C13 Indicating/Rec	[ shall state aircraft type or air component manufacturer or t and/or cross refer to a capabil and/or the maintenance task Example PT6A Fuel Control	he particular clity list in the e	omponent

ording

Systems

C14 Landing

Gear

C15 Oxygen

C16 Propeller

C17

Pneumatic &

Vacuum

C18 Protection

ice/rain/fire

C19 Windows

C20 Structural

C21 Water

Ballast

C22

Propulsion

Augmentation

SPECIALISED

D1 Non-

SERVICES Destructive

[ shall state particular NDT method(s)]

**Testing** 

(\*) Delete as appropriate

### Appendix IV Maintenance organization approval referred in Part-M Subpart F

# MAINTENANCE ORGANIZATION APPROVAL CERTIFICATE

Reference N: XXXX/XXX-XXX/YY

Pursuant to the Civil Aviation Law and the Civil Aviation regulation of the State of Libya for the time being in force and subject to the condition specified below, the Directorate General of Libyan Civil Aviation Authority of hereby certifies:

### Company Name Address Country

as a maintenance organization in compliance with Section A, Subpart F of Part-M, approved to maintain the products, parts and appliances listed in the attached approval schedule and issue related certificates of release to service using the above references and, when stipulated,

#### **CONDITIONS**

- 1. This approval is limited to that specified in the scope of work section of the approved maintenance organization manual as referred to in Section A of Subpart F of Part-M, and
- 2. This approval requires compliance with the procedures specified in the approved maintenance organization manual, and
- 3. This approval is valid whilst the approved maintenance organization remains in compliance with Part-M
- 4. Subject to compliance with the foregoing conditions, this approval shall remain valid for one year unless the approval has previously been surrendered, superseded, suspended or revoked.

Date of Original issue: Date of current issue: Director General of LYCAA Signature:

# MAINTENANCE ORGANIZATION APPROVAL SCHEDULE Reference N: XXXX/XXX-xxx/yy

Company Name Address Country

CLASS	RATING	Limitation
Aircraft		

Components other than complete engines or APUs

**Engines** 

Specialized services D1 Non-Destructive Testing

This approval schedule is limited to those products, parts and appliances and to the activities specified in the scope of work section of the approved continuing airworthiness management exposition.

Continuing Airworthiness Management Exposition Reference: At latest amendment.

Date of Original issue: Date of current issue: Director General of LYCAA Signature:

Appendix V Continuing airworthiness management organization approval referred to in Part-M Subpart G

# CONTINUING AIRWORTHINESS MANAGEMENT ORGANIZATION APPROVAL CERTIFICATE Reference N: CAMO/XXX-XXX/YY

AOC Reference No: XXX YYY

Pursuant to the Civil Aviation Law and the Civil Aviation regulation of Libya for the time being in force and subject to the condition specified below, the Directorate General of Libyan Civil Aviation Authority hereby certifies:

### [COMPAGNY NAME] [ADDRESS]

As a continuing airworthiness management organization in compliance with Part-M Subpart G, approved to manage the continuing airworthiness of the aircraft listed in the attached schedule of approval.

### **Conditions:**

- 1. This approval is limited to that specified in the scope of approval section of the approved continuing airworthiness management exposition.
- 2. This approval requires compliance with the approved continuing airworthiness management exposition procedures.
- 3. This approval is valid whilst the approved continuing airworthiness management organization remains in compliance with Part-M.
- 4. Where the continuing airworthiness management organization contracts under its Quality System the service of an/several organization(s), this approval remains valid subject to such organization(s) fulfilling applicable contractual obligations.
- 5. This approval does not constitute an authorization to operate the types of aircraft referred in paragraph 1.

The authorization to operate the aircraft is the Air Operator Certificate (AOC).

- 6.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 the LYCAA.
- 7.Subject to compliance with the previous conditions, this approval shall remain valid till the date of expiry of attached Approval Schedule unless the approval has previously been surrendered, superseded, suspended or revoked.

Date of original issue:

Date of current issue:

Director General of Libyan Civil Aviation Authority

Signature

# CONTINUING AIRWORTHINESS MANAGEMENT ORGANIZATION APPROVAL SCHEDULE

Reference N: CAMO/XXX-XXX/YY

AOC Reference No: XXX YYY

Organization: [ COMPAGNY NAME AND ADDRESS]

AIRCRAFT	Limitations	ORGANIZATION(S) WORKING
TYPE/SERIES/GROUP	Limitations	UNDER THE QUALITY SYSTEM

This approval schedule is limited to those products, parts and appliances and to the activities specified in the scope of work section of the approved continuing airworthiness management exposition.

Continuing Airworthiness Management Exposition Reference: At latest amendment.

Date of original issue:

Date of current issue:

Director General of Libyan Civil Aviation Authority

Signature

### Appendix VI Complex Maintenance Tasks

(r) a wheel; and

The following constitutes the complex maintenance tasks referred to in points  $\underline{\text{M.A.801(b)2 \& M.A.801(c)}}$ :

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

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(s) a ski or ski pedestal, excluding the replacement of a low-friction coating.

- 2. The modification or repair of any of the following parts:
  - (a) aircraft skin, or the skin of an aircraft float, if the work requires the use of a support, jig or fixture;
  - (b) aircraft skin that is subject to pressurization loads, if the damage to the skin measures more than 15 cm (6 inches) in any direction;
  - (c) a load-bearing part of a control system, including a control column, pedal, shaft, quadrant, bell crank, torque tube, control horn and forged or cast bracket, but excluding:
    - (i) the swaging of a repair splice or cable fitting, and;
    - (ii) the replacement of a push-pull tube end fitting that is attached by riveting;
  - (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 authorized 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.

### Appendix VII Limited Pilot-owner maintenance

In addition to the requirements laid down in Part-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 program. 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 organization referred to in Subpart G, Section A of this Part-M) is responsible for identifying the Pilot-owner tasks according to these basic principles in the maintenance program and for ensuring that the document is updated in a timely manner.
- 4. The approval of the maintenance program 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 a critical maintenance task;
- 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 equipment 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 affecting systems essential for the IFR operations and/or;
- 8. is listed in Appendix VII to this Part-M or is a component maintenance task in accordance with points M.A.502(a), (b), (c) or (d) and/or;
- 9. is part of the annual or 100h check contained in the Minimum Inspection Program described in M.A.302(i).

The criteria 1 to 9 cannot be overridden by less restrictive instructions issued in accordance with M.A.302(d) Maintenance Program.

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 <u>M.A.401</u> 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 organization responsible for the continuing airworthiness of the aircraft (if applicable) not later than thirty (30) days after completion of the Pilot-owner maintenance task in accordance with point M.A.305(a).

### Appendices to AMCs & GMs to Part-M

Appendix I to AMC to M.A.302 and AMC M.B.301(b) - Content of the maintenance program

### 1. General requirements

- 1.1. The maintenance program shall 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 CAMO managing the aircraft airworthiness.
  - 1.1.3. The reference, the date of issue and issue number of the approved maintenance program.
  - 1.1.4. A statement signed by the owner, operator or CAMO managing the aircraft airworthiness to the effect that the specified aircraft will be maintained to the program and that the program 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 utilization of the aircraft. Such utilization shall be stated and include a tolerance of not more than 25%. Where utilization cannot be anticipated, calendar time limits shall also be included.
  - 1.1.7. Procedures for the escalation of established check periods, where applicable and acceptable to the competent authority of registry.
  - 1.1.8. Provision to record the date and reference of approved amendments incorporated in the maintenance program.
  - 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 shall be inspected. This shall include the type and degree of inspection required.
  - 1.1.11. The periods at which components shall be checked, cleaned, lubricated, replenished, adjusted and tested.

- 1.1.12. If applicable details of ageing aircraft system requirements together with any specified sampling programs.
- 1.1.13. If applicable details of specific structural maintenance programs where issued by the type certificate holder including but not limited to:
  - (a) Maintenance of structural Integrity by damage Tolerance and Supplemental Structural Inspection Programs (SSID).
  - (b) Structural maintenance programs 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 procedures.
- 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 program in 1.1.13.
- 1.1.16. The periods at which overhauls and/or replacements by new or overhauled components shall be made.
- 1.1.17. A cross-reference to other documents approved by the LYCAA which contain the details of maintenance tasks related to mandatory life limitations and ADs.

Note: To prevent inadvertent variations to such tasks or intervals, these items shall not be included in the main portion of the maintenance program 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 program or statistical methods of continuous Surveillance.
- 1.1.19. A statement that practices and procedures to satisfy the program 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 shall refer to them.
- 1.1.20. Each maintenance task quoted shall be defined in a definition section of the program.

### 2. Program basis

2.1. An owner or a CAMO aircraft maintenance program shall 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 program).

The structure and format of these maintenance recommendations may be re-written by the owner or the CAMO to better suit the operation and control of the particular maintenance program.

- 2.2. For a newly type-certificated aircraft where no previously approved maintenance program exists, it will be necessary for the owner or the CAMO to comprehensively appraise the manufacturer's recommendations (and the MRB report where applicable), together with other airworthiness information, in order to produce a realistic program for approval.
- 2.3. For existing aircraft types, it is permissible for the owner or CAMO to make comparisons with maintenance programs previously approved. It shall not be assumed that a program approved for one owner or the CAMO would automatically be approved for another.

Evaluation shall be made of the aircraft/fleet utilization, landing rate, equipment fit and, in particular, the experience of the owner or the CAMO when assessing an existing program.

Where the LYCAA is not satisfied that the proposed maintenance program can be used as is, the LYCAA shall request appropriate changes such as additional maintenance tasks or deescalation 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 shall be developed. CDCCL's are characterized by features in an aircraft installation or component that shall 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 program shall be made by the owner or the CAMO, to reflect changes in the TC holder's recommendations, modifications, service experience, or as required by the competent authority.

### 4. Permitted variations to maintenance periods

The owner or the CAMO may only vary the periods prescribed by the program with the approval of the LYCAA or through a procedure developed in the maintenance program and approved by the Authority.

### 5. Periodic review of maintenance program contents

- 5.1. The owner or the CAMO approved maintenance programs shall 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 CAMO shall review the detailed requirements at least annually for continued validity in the light of operating experience.

### 6. Reliability Program

### 6.1. Applicability

- 6.1.1. A reliability program shall be developed in the following cases:
  - (a) the aircraft maintenance program is based upon MSG-3 logic;
  - (b) the aircraft maintenance program includes condition monitored components;
  - (c) the aircraft maintenance program does not contain overhaul time periods for all significant system components;
  - (d) when specified by the Manufacturer's maintenance planning document or MRB.
- 6.1.2. A reliability Program need NOT be developed in the following cases:
  - (a) the maintenance program is based upon the MSG-1 or 2 logics but only contains hard time or on condition items;
  - (b) the aircraft is not a complex motor-powered aircraft according to Part-M;
  - (c) the aircraft maintenance program 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, a CAMO may however, develop its own reliability monitoring program when it may be deemed beneficial from a maintenance planning point of view.
- 6.2. Applicability for CAMO/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 Six (6) aircrafts of the same type.
  - 6.2.2. The requirement for a reliability program is irrespective of the CAMO fleet size.
  - 6.2.3. Complex reliability programs could be inappropriate for a small fleet. It is recommended that such CAMOs tailor their reliability programs 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' shall be used carefully.
  - 6.2.5. A CAMO of a small fleet of aircraft, when establishing a reliability program, shall consider the following:
    - (a) The program shall 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 CAMO engineering judgement is then a vital element. In the following examples, careful engineering analysis shall be exercised before taking decisions:
      - A '0' rate in the statistical calculation may possibly simply reveal that enough statistical data is missing, rather that 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, a CAMO is encouraged to establish contact and make comparisons with other CAMOs 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 CAMO(s). Paragraph 6.6 of this paragraph specifies under which conditions it is acceptable that CAMOs share reliability data.

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

### 6.3. Engineering judgement

- 6.3.1. Engineering judgement is itself inherent to reliability programs as no interpretation of data is possible without judgement. In approving the CAMO maintenance and reliability programs, the LYCAA is expected to ensure that the organization which runs the program (it may be CAMO, or a Part-145 organization under contract) hires sufficiently qualified personnel with appropriate engineering experience and understanding of reliability concept (see AMC to M.A.706).
- 6.3.2. It follows that failure to provide appropriately qualified personnel for the reliability program may lead the LYCAA to reject the approval of the reliability program and therefore the aircraft maintenance program.

### 6.4. Contracted maintenance

6.4.1. Whereas M.A.302 specifies that, the aircraft maintenance program, which includes the associated reliability program, shall be managed and presented by the CAMO to the competent authority, the CAMO may subcontract certain functions to the maintenance organization under contract, provided this organization proves to have the appropriate expertise.

### 6.4.2. These functions are:

- (a) Developing the aircraft maintenance and reliability programs,
- (b) Performing the collection and analysis of the reliability data,
- (c) Providing reliability reports, and,
- (d) Proposing corrective actions to the CAMO.
- 6.4.3. Notwithstanding the above decision, to implement a corrective action (or the decision to request from the LYCAA the approval to implement a corrective action) remains the CAMO prerogative and responsibility. In relation to paragraph 6.4.2(d) above, a decision not to implement a corrective action shall be justified and documented.
- 6.4.4. The arrangement between the CAMO and the maintenance organization shall be specified in the maintenance contract (see <u>Appendix VI to AMC M.A.708(c)</u>) and the relevant CAME and maintenance organization procedures.

### 6.5. Reliability program

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

### 6.5.1. Objectives

- 5.1.1.1. A statement shall be included summarizing as precisely as possible the prime objectives of the program. To the minimum it shall include the following:
  - (a) to recognize the need for corrective action,
  - (b) to establish what corrective action is needed and,
  - (c) to determine the effectiveness of that action.
- 5.1.1.2. The extent of the objectives shall be directly related to the scope of the program. Its scope could vary from a component defect monitoring system for a small CAMO, to an integrated maintenance management program for a big CAMO. The manufacturer's maintenance planning documents may give guidance on the objectives and shall be consulted in every case.
- 5.1.1.3. In case of an MSG-3 based maintenance program, the reliability program shall provide a monitor that all MSG-3 related tasks from the maintenance program are effective and their periodicity is adequate.

### 6.5.2. Identification of items

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

### 6.5.3. Terms and definitions

The significant terms and definitions applicable to the Program shall be clearly identified. Terms are already defined in MSG-3, Part-145 and Part-M.

### 6.5.4. Information sources and collection

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

6.5.4.2. The type of information to be collected shall be related to the objectives of the Program and shall 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: ETOPS, RVSM, CAT II/III.

6.5.4.3. In addition to the normal prime sources of information, due account shall be taken of continuing airworthiness and safety information promulgated under Part-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 shall be stated. The format shall 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 shall 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 program, the display of information shall be oriented accordingly.

### 6.5.6. Examination, analysis and interpretation of the information

The method employed for examining, analyzing and interpreting the program information shall 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 programs. These can range from examination of the initial indication of performance variations to formalized detailed procedures at specific periods, and the methods shall be fully described in the program documentation.

### 6.5.6.2. Analysis and Interpretation

The procedures for analysis and interpretation of information shall be such as to enable the performance of the items controlled by the program to be measured; they shall also facilitate recognition, diagnosis and recording of significant problems. The whole process shall be such as to enable a critical assessment to be made of the effectiveness of the program 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 shall be related to the particular program and to the facilities available. The following, at least, shall 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 programs.
- (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 CAMO relies upon contracted maintenance and/or overhaul facilities as an information input to the program, the arrangements for availability and continuity of such information shall be established and details shall 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 shall be fully described. Corrective actions shall correct any reduction in reliability revealed by the program 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 program.

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 the competent authority's approval before implementation.

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

## 6.5.8. Organizational Responsibilities

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

## 6.5.9. Presentation of information to the LYCAA

The following information shall be submitted to the LYCAA for approval as part of the reliability program:

- (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 program. These reports shall contain sufficient detailed information to enable the LYCAA to make its own evaluation where necessary.

#### 6.5.10. Evaluation and review

Each program shall describe the procedures and individual responsibilities in respect of continuous monitoring of the effectiveness of the program as a whole. The time periods and the procedures for both routine and non-routine

reviews of maintenance control shall be detailed (progressive, monthly, quarterly, or annual reviews, procedures following reliability 'standards' or 'alert levels' being exceeded, etc.).

- 6.5.10.1. Each Program shall contain procedures for monitoring and, as necessary, revising the reliability 'standards' or 'alert levels'. The organizational responsibilities for monitoring and revising the 'standards' shall 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) Utilization (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 program amendment

The LYCAA may authorize the CAMO to implement in the maintenance program changes arising from the reliability program results prior to their formal approval by the authority when satisfied that;

- (a) the Reliability Program monitors the content of the Maintenance Program 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 CAMO over the internal validation of such changes.

#### 6.6. Pooling Arrangements

6.6.1. In some cases, in order that sufficient data may be analyzed, it may be desirable to 'pool' data: i.e., collate data from a number of CAMOs of the same type of aircraft. For the analysis to be valid, the aircraft concerned, mode of operation, and maintenance procedures applied shall be substantially the same: variations in utilization between two CAMOs 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/utilization, e.g., low/high/seasonal, etc./respective fleet size operating rules applicable (e.g., 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 program, MPD revision or escalation applied or maintenance program applicable.
- 6.6.2. 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 shall be taken by the LYCAA on a case-by-case basis.
- 6.6.3. In case of a short-term lease agreement (less than six (6) months), more flexibility against the paragraph 6.6.1 criteria may be granted by the competent authority, so as to allow the owner/CAMO to operate the aircraft under the same program during the lease agreement effectivity.
- 6.6.4. Changes by any one of the CAMOs to the above, requires assessment in order that the pooling benefits can be maintained. Where a CAMO wishes to pool data in this way, the approval of the LYCAA shall be sought prior to any formal agreement being signed between CAMOs.
- 6.6.5. Whereas this paragraph 6.6 is intended to address the pooling of data directly between CAMOs, it is acceptable that the CAMO participates in a reliability program managed by the aircraft manufacturer, when the LYCAA is satisfied that the manufacturer manages a reliability program which complies with the intent of this paragraph.

Appendix II to AMC to M.A.711(a)(3) Sub-contracting of continuing airworthiness management tasks

## 1. Subcontracted continuing airworthiness management tasks

- 1.1. To actively control the standards of the subcontracted organization, the CAMO shall 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, by whom and to what standard in order to ensure the continuing airworthiness of the aircraft to be operated.
- 1.2. The CAMO shall conduct a pre-subcontract audit to establish that the organization to be subcontracted can achieve the standards required by M.A. Subpart G in connection with those activities to be subcontracted.
- 1.3. The CAMO shall ensure that the organization to be subcontracted has sufficient and qualified personnel who are trained and competent in the functions to be sub-contracted. In assessing the adequacy of personnel resources, the CAMO shall consider the particular needs of those activities that are to be subcontracted, while taking into account the subcontracted organization's existing commitments.
- 1.4. To be appropriately approved to subcontract continuing airworthiness management tasks, the CAMO shall have procedures for the management control of these arrangements. The continuing airworthiness management exposition shall contain relevant procedures to reflect its control of those arrangements made with the sub-contracted organization.
- 1.5. Subcontracted continuing airworthiness management tasks shall be addressed in a contract between the CAMO and the subcontracted organization. The contract shall also specify that the subcontracted organization is responsible for informing the CAMO, that is in turn responsible for notifying the respective competent authority, of any subsequent changes that affect their ability to fulfil the contract.
- 1.6. The subcontracted organization shall use procedures which set out the manner of fulfilling its responsibilities with regard to the subcontracted activities. Such procedures may be developed by either the subcontracted organization or the CAMO.
- 1.7. Where the subcontracted organization develops its own procedures, they shall be compatible with the continuing airworthiness management exposition and the terms of the contract. These shall be accepted by the LYCAA as extended procedures of the CAMO and as such shall be cross-referenced from the continuing airworthiness management exposition. One current copy of the subcontracted organization's relevant procedures shall be kept by the CAMO and shall be accessible to the LYCAA when needed.

Note: Should any conflict arise between the subcontracted organization's procedures and those of the CAMO, then the policy and procedures of the continuing airworthiness management exposition will prevail.

1.8. The contract shall also specify that the subcontracted organization's procedures may only be amended with the agreement of the CAMO. The CAMO shall ensure that these amendments are compatible with its continuing airworthiness management exposition and comply with M.A. Subpart G.

The CAMO shall nominate the person responsible for continued monitoring and acceptance of the subcontracted organization's procedures and their amendments. The controls used to fulfil this function shall be clearly set out in the amendment section of the continuing airworthiness management exposition detailing the level of CAMO involvement.

1.9. Whenever any elements of the continuing airworthiness management tasks are subcontracted, the CAMO personnel shall have access to all relevant data in order to fulfil their responsibilities.

Note: The CAMO retains the authority to override, whenever necessary for the continuing airworthiness of their aircraft, any recommendation of the subcontracted organization.

- 1.10. The CAMO shall ensure that the subcontracted organization continues to have qualified technical expertise and sufficient resources to perform the sub-contracted tasks while complying with the relevant procedures. Failure to do so may invalidate the CAMO approval.
- 1.11. The contract shall be provided to the Authority for monitoring.
- 1.12. The contract shall address the respective responsibilities to ensure that any findings arising from the LYCAA monitoring will be closed to the satisfaction of the competent authority.

#### 2. Accomplishment

This paragraph describes the topics which may be applicable to such subcontracting arrangements.

#### 2.1. Scope of work

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

2.2. Maintenance program development and amendment

The CAMO may subcontract the preparation of the draft maintenance program and any subsequent amendments. However, the CAMO remains responsible for assessing that the

draft proposals meet its needs and for obtaining LYCAA approval; the relevant procedures shall specify these responsibilities. The contract shall also stipulate that any data necessary to substantiate the approval of the initial program or an amendment to this program shall be provided for CAMO agreement and/or LYCAA upon request.

## 2.3. Maintenance program effectiveness and reliability

The CAMO shall have a system in place to monitor and assess the effectiveness of the maintenance program based on maintenance and operational experience. The collection of data and initial assessment may be made by the subcontracted organization; the required actions are to be endorsed by the CAMO.

Where reliability monitoring is used to establish the effectiveness of the maintenance program, this may be provided by the subcontracted organization and shall be specified in the relevant procedures. Reference shall be made to the approved maintenance and reliability program. Participation of the CAMO's personnel in reliability meetings with the subcontracted organization shall also be specified.

When providing reliability data, the subcontracted organization is limited to working with primary data/documents provided by the CAMO or data provided by the CAMO's contracted maintenance organization(s) from which the reports are derived. The pooling of reliability data is permitted if it is acceptable to the competent authority.

#### 2.4. Permitted variations to the maintenance program

The reasons and justification for any proposed variation to scheduled maintenance may be prepared by the subcontracted organization. Acceptance of the proposed variation should be granted by the CAMO. The means by which the CAMO acceptance is given shall be specified in the relevant procedures. When outside the limits set out in the maintenance program, the CAMO is required to obtain approval by the LYCAA.

#### 2.5. Scheduled maintenance

Where the subcontracted organization plans and defines maintenance checks or inspections in accordance with the approved maintenance program, the required liaison with the CAMO, including feedback, shall be defined.

The planning control and documentation shall be specified in the appropriate supporting procedures. These procedures shall typically set out the CAMO's level of involvement in each type of check. This will normally involve the CAMO assessing and agreeing to a work specification on a case-by-case basis for base maintenance checks. For routine line maintenance checks, this may be controlled on a day-to-day basis by the subcontracted organization subject to appropriate liaison and CAMO controls to ensure timely compliance.

This may typically include but is not necessarily limited to:

- applicable work package, including job cards;
- scheduled component removal list;
- ADs to be incorporated;
- modifications to be incorporated.

The associated procedures shall ensure that the CAMO is informed in a timely manner on the accomplishment of such tasks.

## 2.6. Quality monitoring

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

#### 2.7. Access to the LYCAA

The contract shall specify that the subcontracted organization shall always grant access to the LYCAA.

#### 2.8. Maintenance data

The maintenance data used for the purpose of the contract shall be specified, together with those responsible for providing such documentation and the competent authority responsible for the acceptance/approval of such data, when applicable. The CAMO shall ensure that such data, including revisions, is readily available to the CAMO personnel and to those in the subcontracted organization who may be required to assess such data. The CAMO shall establish a 'fast track' means to ensure that urgent data is transmitted to the subcontractor in a timely manner.

Maintenance data may include but is not necessarily limited to:

- the maintenance program,
- airworthiness directives,
- service bulletins,

- major repairs/modification data,
- aircraft maintenance manual,
- engine overhaul manual,
- aircraft illustrated parts catalogue (IPC),
- wiring diagrams,
- troubleshooting manual.

## 2.9. Airworthiness directives (ADs)

While the various aspects of AD assessment, planning and follow-up may be accomplished by the subcontracted organization, AD embodiment is performed by a maintenance organization. The CAMO is responsible for ensuring timely embodiment of the applicable ADs and is to be provided with notification of compliance. It, therefore, follows that the CAMO shall have clear policies and procedures on AD embodiment supported by defined procedures which will ensure that the CAMO agrees to the proposed means of compliance.

The relevant procedures shall specify:

- what information (e.g., AD publications, continuing airworthiness records, flight hours/cycles, etc.) the subcontracted organization needs from the CAMO;
- what information (e.g., AD planning listing, detailed engineering order, etc.) the CAMO needs from the subcontracted organization in order to ensure timely compliance with the ADs.

To fulfil the above responsibility, the CAMO shall ensure that it receives current mandatory continued airworthiness information for the aircraft and equipment it is managing.

#### 2.10. Service bulletin (SB) modifications

The subcontracted organization may be required to review and make recommendations on the embodiment of an SB and other associated non-mandatory material based on a clear policy established by the CAMO. This shall be specified in the contract.

#### 2.11. Service life limit controls and component control/removal forecast

Where the subcontracted organization performs planning activities, it shall be specified that the organization shall receive 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 shall be such that it allows the organization to properly perform the subcontracted planning functions. It, therefore, follows that there will need to be adequate liaison between the

CAMO, the contracted maintenance organization(s) and the subcontracted organization. Additionally, the contract shall specify how the CAMO will be in possession of all current flight cycles, flight hours, etc., so that it may assure the timely accomplishment of the required maintenance.

## 2.12. Engine health monitoring

If the CAMO subcontracts the on-wing engine health monitoring, the subcontracted organization shall receive all the relevant information to perform this task, including any parameter reading deemed necessary to be supplied by the CAMO for this control. The contract shall also specify what kind of feedback information (such as engine limitation, appropriate technical advice, etc.) the organization shall provide to the CAMO.

#### 2.13. Defect control

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

For all other defects identified during maintenance, the information shall be brought to the attention of the CAMO which, depending upon the procedural authority granted by the competent authority, may determine that some defects can be deferred. Therefore, adequate liaison between the CAMO, its subcontracted organization and contracted maintenance organization shall be ensured.

The subcontracted organization shall make a positive assessment of potential deferred defects and consider the potential hazards arising from the cumulative effect of any combination of defects. The subcontracted organizations shall liaise with the CAMO to get its agreement following this assessment.

Deferment of MEL/CDL allowable defects can be accomplished by a contracted maintenance organization 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 meet the reporting criteria defined in Part-M and Part-145 shall be reported as required by the respective requirements. The CAMO shall ensure that adequate liaison exists with the subcontracted organization and the maintenance organization.

## 2.15. Continuing airworthiness records

They may be maintained and kept by the subcontracted organization, on behalf of the CAMO, which remains the owner of these documents. However, the CAMO shall be provided with the current status of AD compliance and service life-limited components in accordance with the agreed procedures. The CAMO shall also be granted unrestricted and timely access to the original records as and when needed. Online access to the appropriate information systems is acceptable.

The record-keeping requirements of Part-M shall be met. Access to the records by duly authorized members of the LYCAA shall be granted upon request.

## 2.16. Check flight procedures

Check flights are performed under the control of the CAMO. Check flight requirements from the subcontracted organization or contracted maintenance organization shall be agreed by the CAMO.

## 2.17. Communication between the CAMO and the subcontracted organization

2.17.1. In order to fulfil its airworthiness responsibility, the CAMO needs to receive all the relevant reports and relevant maintenance data. The contract shall specify what information shall be provided and when.

2.17.2. Meetings provide one important cornerstone whereby the CAMO can fulfil part of its responsibility for ensuring the airworthiness of the operated aircraft. They shall be used to establish good communication between the CAMO, the subcontracted organization and the contracted maintenance organization. The terms of the contract shall include, whenever appropriate, the provision for a certain number of meetings to be held between the involved parties. Details of the types of liaison meetings and associated terms of reference of each meeting shall be documented. The meetings may include but are not limited to all or a combination of:

#### (a) Contract review

Before the contract is enforced, it is very important that the technical personnel of both parties, that are involved in the fulfilment 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 organized so that the tasks to be performed are commonly agreed.

## (c) Technical meeting

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

## (d) Quality meeting

Quality meetings shall be organized in order to examine matters raised by the CAMO's quality surveillance and the competent authority's monitoring activity and to agree on necessary corrective actions.

## (e) Reliability meeting

When a reliability program exists, the contract shall specify the involvement of the CAMO and of the subcontracted organization in that program, including their participation in reliability meetings. Provision to enable LYCAA participation in the periodical reliability meetings shall also be made.

## Appendix III to GM to M.B.303(b) Key Risk Element

	Title	Description				
A. AIR	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 Part 21, 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 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.				

	Title	Description			
C. AIR	CRAFT MAINTENANCE	AFT MAINTENANCE			
C.1	Aircraft Maintenance Program	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 twofold objective for components maintenance: - maintenance for which compliance is mandatory; - maintenance for which compliance is recommended.			
C.3	Repairs	All repairs and unrepaired damage/degradations need to comply with the instructions of the appropriate maintenance manual. With the exception of repairs contained in the certification specifications referred to in Part 21, all repairs not defined in the appropriate maintenance manual need to be appropriately approved and recorded with the reference to the approval.			
C.4	Records	Continuing Airworthiness records are defined in M.A.305 and M.A.306 and related AMC.			

## Appendix IV to AMC to M.A.604 Maintenance organization manual

## 1. Purpose

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

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

#### 2 Content

A typical Maintenance Organization Manual for a small organization (less than 10 maintenance staff) shall be designed to be used directly on a day-to-day basis. The working documents and lists shall be directly included into the manual.

It shall contain the following:

#### Part A. General

- Table of contents
- List of effective pages
- Record of amendments
- Amendment procedure
  - Drafting
  - Amendments requiring direct approval by the LYCAA
  - 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 organization manual and any incorporated document identified therein reflect the organization's means of compliance with Part-M
  - Commitment to work according to the manual
  - Commitment to amend the manual when necessary

#### Part B. Description

- Organization's scope of work
  - Description of the work carried out by the organization (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 organization
  - Legal name and social status
- Name and title of management personnel
  - Accountable manager
  - Senior managers
  - Duties and responsibilities
- Organization chart
  - Certifying staff and airworthiness review staff
  - o Minimum qualification and experience
  - List of authorized certifying staff and airworthiness review staff, their scope of qualification and the personal authorization reference
- Personnel
  - Technical personnel (number, qualifications and experience)
  - Administrative personnel (number)
- General description of the facility
  - Geographical location (map)
  - Plan of hangars
  - Specialized 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

- Organizational review
  - Purpose (to ensure that the approved maintenance organization continues to meet the requirements of Part-M)
  - Responsibility
  - Organization, frequency, scope and content (including processing of authority's findings)

- Planning and performance of the review
- Organizational review checklist and forms
- o 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, specialized training)
- Description of the personnel records to be retained
- Subcontracting of specialized services
  - Selection criteria and control
  - Nature of subcontracted work
  - List of subcontractors
  - Nature of arrangements
  - Assignment of responsibilities for the certification of the work performed
- One-time authorizations
  - 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 authorization of the work

#### Logistics

- Persons/functions involved
- Criteria for choosing suppliers
- Procedures used for incoming inspection and storage of parts, tools and materials
- o 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
- o Procedures for returning unserviceable components to stores
- Release to Service Certifying staff
  - Authorized 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 organization, 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 standardized form
  - Completion of the aircraft continuing airworthiness record system
  - o Completion of LYCAA Form 1
  - Incomplete maintenance
  - Check flight authorization
  - Copy of CRS and LYCAA Form 1
- Records
  - Airworthiness review procedures and records for LA1 aircraft not involved in commercial operations
  - Development and approval processing for maintenance programs for LA2 aircraft not involved in commercial operations
- Special procedures
  - Such as specialized tasks, disposal of unsalvageable components, re-certification of parts not having an LYCAA Form 1, etc.
- Occurrence reporting
  - o Occurrences to be reported
  - Timeframe of reports
  - o Information to be reported
  - Recipients
- Management of indirect approval of the manual
  - o Amendments content eligible for indirect approval
  - Responsibility
  - Traceability
  - Information to the LYCAA

#### Final validation

## Part E. Appendices

- Sample of all documents used
- List of maintenance locations
- List of Part-145 or M.A. Subpart F organizations
- List of subcontracted specialized services.

## 3. Approval

The LYCAA shall 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 the Authority.

## 4. Continuous compliance with Part-M

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

#### 5. Distribution

The manual describes how the organization works; therefore, the manual or relevant parts thereof need to be distributed to all concerned staff in the organization and contracted organizations.

# Appendix V to AMC to M.A.704 Continuing airworthiness management exposition

## **CONTINUING AIRWORTHINESS MANAGEMENT EXPOSITION (CAME)**

#### **Table of content**

## Part 0 General organization

- 0.1 Corporate commitment by the accountable manager
- 0.2 General information
- 0.3 Management personnel
- 0.4 Management organization chart
- 0.5 Procedure to notify the LYCAA of changes to the organization's activities/approval/location/personnel
- 0.6 Exposition amendment procedures

## Part 1 Continuing airworthiness management procedures

- 1.1 Aircraft technical log utilization and MEL application
  Aircraft continuing airworthiness record system utilization
- 1.2 Aircraft maintenance programs development, amendment and approval
- 1.3 Time and continuing airworthiness records, responsibilities, retention and access
- 1.4 Accomplishment and control of airworthiness directives
- 1.5 Analysis of the effectiveness of the maintenance program(s)
- 1.6 Non-mandatory modification embodiment policy
- 1.7 Major repair and modification standards
- 1.8 Defect reports
- 1.9 Engineering activity
- 1.10 Reliability programs
- 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 audit procedure
- 2.2 Monitoring of continuing airworthiness management activities
- 2.3 Monitoring of the effectiveness of the maintenance program(s)
- 2.4 Monitoring that all maintenance is carried out by an appropriate maintenance organization

- 2.5 Monitoring that all contracted maintenance is carried out in accordance with the contract, including subcontractors 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 Appendices

- 4.1 Sample documents
- 4.2 List of subcontractors as per M.A.711(a)(3)
- 4.3 List of contracted approved maintenance organizations
- 4.4 Copy of contracts for subcontracted work (<u>Appendix II to AMC M.A.711(a)(3)</u>)

## List of effective pages

#### Distribution list

The document shall include a distribution list to ensure proper distribution of the manual and to demonstrate to the LYCAA that all personnel involved in continuing airworthiness activities have access to the relevant information. This does not mean that all personnel have to receive a manual, but that a reasonable number of manuals is distributed within the organization(s) so that personnel concerned have quick and easy access to the manual.

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

- the operator's or the organization's management personnel and to any person at a lower level as necessary, and;
- the Part-145 or M.A. Subpart F contracted maintenance organization(s), and;
- the LYCAA.

## **PART 0. General organization**

## 0.1 Corporate commitment by the accountable manager

(The accountable manager's exposition statement shall embrace the intent of the following paragraph, and in fact, this statement may be used without amendment. Any amendment to the statement shall not alter its intent.)

'This exposition defines the organization and procedures upon which the M.A. Subpart G approval of (company name) under Part-M is based.

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

The LYCAA will approve this organization whilst it is satisfied that the procedures are followed. It is understood that the LYCAA reserves the right to suspend, limit or revoke the M.A. Subpart G continuing airworthiness management approval of the organization, as applicable, if the LYCAA has evidence that the procedures are not followed and the standards not upheld.

In the case of air carriers licensed in accordance with Regulation LYCAR-OPS, suspension or revocation of the approval of the M.A. Subpart G continuing airworthiness management organization would invalidate the AOC.'

#### 0.2 General Information

## a) Brief description of the organization

(This paragraph shall describe broadly how the whole organization (i.e. including the whole operator in the case of air carriers licensed in accordance with Regulation LYCAR-OPS or the whole organization when other approvals are held) is organized under the management of the accountable manager, and shall refer to the organization charts of paragraph 0.4.)

#### b) Relationship with other organizations

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

## (1) Subsidiaries/mother company

For clarity purposes, where the organization belongs to a group, this paragraph shall explain the specific relationship the organization may have with other members of that group, e.g. links between X Airlines, X Finance, X Leasing, X Maintenance, etc.

#### (2) Consortia

Where the organization belongs to a consortium, it shall be indicated here. The other members of the consortium shall be specified, as well as the scope of organization 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 consortia, the respective competent authorities shall be consulted and their agreement to the arrangement shall be clearly stated. This paragraph shall then make reference to any consortium's continuing airworthiness related manual or procedure and to any LYCAA agreement that would apply.

## c) Scope of work - Aircraft managed

This paragraph shall specify the scope of the work for which the CAMO is approved. This paragraph may include aircraft type/series, aircraft registrations, owner/operator, contract references, etc.

For air carriers licensed in accordance with Regulation LYCAR-OPS, this paragraph can make reference to the operations specifications or operations manual where the aircraft registrations are listed.

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

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

#### d) Type of operation

This paragraph shall give broad information on the type of operations such as: commercial air transport operations, (commercial) specialized operations, training organization, long haul/short haul/regional, scheduled/charter, regions/countries/continents flown, etc.)

#### 0.3 Management personnel

## a) Accountable manager

This paragraph shall address the duties and responsibilities of the accountable manager as regards M.A. Subpart G approvals and shall demonstrate that he/she has corporate authority for ensuring that all continuing airworthiness activities can be financed and carried out to the required standard.

b) Nominated postholder for continuing airworthiness referred to in M.A.706(d)

## This paragraph shall:

- emphasize that the nominated postholder for continuing airworthiness is responsible to ensure that all maintenance is carried out on time and to an approved standard; and
- describe the extent of his/her authority as regards his/her Part-M responsibility for continuing airworthiness.

## c) Continuing airworthiness coordination

This paragraph shall list in sufficient detail the job functions that constitute the 'group of persons' as required by M.A.706(c) so as to show that all the continuing airworthiness responsibilities as described in Part-M are covered by the persons that constitute that group. In the case of small operators where the 'nominated postholder' for continuing airworthiness constitutes himself/herself the 'group of persons', this paragraph may be merged with the previous one.

## d) Duties and responsibilities

This paragraph shall further elaborate the duties and responsibilities of all the nominated persons and of any other management personnel.

## e) Manpower resources and training policy

#### (1) Manpower resources

This paragraph shall give broad figures to show that the number of people assigned 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 per date (date), the number of employees assigned to the performance of the continuing airworthiness management system is the following:

	Full-time	Part-time in equivalent
	run-ume	full-time
Quality monitoring	AA	aa = AA'
Continuing airworthiness	ВВ	bb = BB'
management		
(Detailed information about the	BB1	bb1 = BB1'
management of group of persons)	BB2	bb2 = BB2'

Other	СС	cc =CC'
Total	π	tt = ∏′
Total man-hours	TT + TT'	

Note: According to the size and complexity of the organization, this table may be further developed or simplified.

## (2) Training policy

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

## 0.4 Management organization charts

## a) General organization chart

This flow chart shall provide a comprehensive understanding of the whole company's organization. For example, the case of an air carrier licensed in accordance with Regulation LYCAR-OPS.

## b) Continuing airworthiness management organization chart

This flow chart shall give further details on the continuing airworthiness management system, and shall clearly show the independence of the quality monitoring system, including the links between the quality department and the other departments. This flow chart may be combined with the one above or subdivided as necessary, depending on the size and complexity of the organization.

# 0.5 Procedure to notify the LYCAA of changes to the organization's activities/approval/location/personnel

This paragraph shall explain the cases where the company shall inform the LYCAA prior to incorporating proposed changes, for instance:

The accountable manager (or any nominated person such as the nominated postholder or the quality manager) will notify the LYCAA of any change concerning:

- (1) the company's name and location(s);
- (2) the group of persons as specified in paragraph 0.3.c); and
- (3) operations, procedures and technical arrangements, as far as they may affect the approval.

X will not incorporate such changes until they have been assessed and approved by the LYCAA.

## 0.6 Exposition amendment procedure

This paragraph shall explain who is responsible for the amendment of the exposition and its submission to the LYCAA for approval. This may include, if agreed by the LYCAA, the possibility for the approved organization to approve internally minor amendments that have no impact on the approval held. The paragraph shall then specify what types of amendments are considered minor and major, and what the approval procedures for both cases are.

## PART 1. Continuing airworthiness management procedures

- 1.1 Aircraft technical log utilization and MEL application or
- 1.1 Aircraft continuing airworthiness record system utilization
  - a) Aircraft technical log and/or continuing airworthiness record system

## (1) General

It may be useful to recall, in this introductory paragraph, the purpose of the aircraft technical log system and/or the continuing airworthiness record system, with special attention to the options of M.A.305 and M.A.306.

For that purpose, the paragraphs M.A.305 and M.A.306 may be quoted or further explained.

## (2) Instructions for use

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

## (3) Aircraft technical log approval

This paragraph shall explain who is responsible for submitting the aircraft technical log, and any subsequent amendment thereto, to the LYCAA for approval and what is the procedure to be followed.

## b) MEL application

The MEL is a document not controlled by the CAMO and the decision of whether accepting or not the operation with a defect deferred in accordance with the MEL is normally the responsibility of the operating crew. This paragraph shall explain in sufficient detail the MEL application procedure, because the MEL is a tool that the personnel involved in continuing airworthiness and 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.)

## (1) General

This paragraph shall explain broadly what an 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 defects, it shall be explained here what are the general principles of such a system. It is essential for the personnel involved in continuing airworthiness and maintenance to be familiar with it for the management of the MEL's deferred defect rectification.

## (3) Application

This paragraph shall explain how the continuing airworthiness and maintenance personnel make the flight crew aware of an MEL limitation. This shall refer to the technical log procedures.

## (4) Acceptance by the crew

This paragraph shall explain how the crew notifies their acceptance or non-acceptance of the MEL deferment in the technical log.

#### (5) Management of the MEL time limits

Once a technical limitation is accepted by the crew, the defect must be rectified within the time limit specified in the MEL. There shall be a system to ensure that the defect will actually be rectified before that time 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 where control of the

maintenance time limit is ensured by other means such as data processed planning systems.

## (6) MEL time limitation overrun

The LYCAA may allow the owner/operator to overrun the MEL time limitation under specific conditions. Where applicable, this paragraph shall describe the specific duties and responsibilities with regard to controlling these extensions.

## 1.2 Aircraft maintenance program - development and amendment

#### a) General

This introductory paragraph shall recall that the purpose of a maintenance program is to provide maintenance planning instructions necessary for the safe operation of the aircraft.

## b) Content

This paragraph shall explain what is (are) the format(s) of the aircraft maintenance program(s). <u>Appendix I to AMC M.A.302(a) and M.B.301(b)</u> shall be used as a guideline to develop this paragraph.

## c) Development

## (1) Sources

This paragraph shall explain what are the sources (MRB, MPD, maintenance manual, etc. used for the development of an aircraft maintenance program.

#### (2) Responsibilities

This paragraph shall explain who is responsible for the development of an aircraft maintenance program.

#### (3) Manual amendments

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

## (4) Acceptance by the authority

This paragraph shall explain who is responsible for the submission of the maintenance program to the LYCAA and what the procedure to follow is. This shall in particular address the issue of the approval for variation to maintenance periods either by the LYCAA or by a procedure in the maintenance program for the organization to approve internally certain changes.

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

## a) Hours and cycles recording

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

## b) Records

This paragraph shall 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 shall set out the means provided to protect the records from fire, flood, etc., as well as the specific procedures in place to ensure that the records will not be altered during the retention period (especially computer records).

#### d) Transfer of continuing airworthiness records

This paragraph shall set out the procedure for the transfer of records in case of purchase/lease-in, sale/lease-out and transfer of an aircraft to another organization. In particular, it shall 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 shall demonstrate that there is a comprehensive system in place for the management of airworthiness directives. This paragraph may, for instance, include the following subparagraphs:

## a) Airworthiness directive information

This paragraph shall explain what the AD information sources are and who receives them in the company. Where available, multiple sources (e.g., EASA, FAA, LYCAA, manufacturer or association) may be useful.

## b) Airworthiness directive decision

This paragraph shall explain how and by whom the AD information is analyzed and what kind of information is provided to the contracted maintenance organizations in order to plan and perform the airworthiness directive. This shall include as necessary a specific procedure for the management of emergency airworthiness directives.

## c) Airworthiness directive control

This paragraph shall specify how the organization manages to ensure that all the applicable airworthiness directives are accomplished and that they are accomplished on time. This shall include a closed-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:
  - o the AD is not yet accomplished but the time limit is not overdue,
  - the AD is accomplished and any repetitive inspection is 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 program

This paragraph shall show what tools are used in order to analyze the efficiency of the maintenance program, such as:

- pilot reports (PIREPS),
- air turnback,
- spare consumption,
- repetitive technical occurrence and defect,
- technical delays analysis (through statistics, if relevant),
- technical incidents analysis (through statistics, if relevant),

#### etc.

This paragraph shall also indicate by whom and how this data is analyzed, what is the decision process to take action and what kind of action could be taken. This may include amendment of the maintenance program amendment of maintenance or operational procedures, etc.

## 1.6 Non-mandatory modification embodiment policy

This paragraph shall specify how non-mandatory modification information is processed through the organization, who is responsible for its assessment against the operator's/owner's own needs 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 and modification standards

This paragraph shall set out a procedure for the assessment of the approval status of any major repair or modification before embodiment. This will include the assessment of the need of an Authority or design organization approval. It shall also identify the type of approval required, and the procedure to follow to have a repair or modification approved by the Authority based on the approval of the design organization.

## 1.8 Defect reports

## a) Analysis

This paragraph shall explain how the defect reports provided by the contracted maintenance organizations are processed by the continuing airworthiness management organization. Analysis shall be conducted in order to give elements to activities such as maintenance program 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 shall be established with the manufacturer and the LYCAA so that they may take all the necessary action.

#### c) Deferred defect policy

Defects such as cracks and structural defects 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 shall 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 shall present the scope of the organization's engineering activity in terms of approval of modifications and repairs. It shall set out a procedure for developing and submitting a modification/repair design for approval to LYCAA and include reference to the supporting documentation and forms used. It shall identify the person in charge of accepting the design before submission to the LYCAA.

## 1.10 Reliability programs

This paragraph shall explain appropriately the management of a reliability program. It shall at least address the following:

- extent and scope of the reliability program,
- specific organizational structure, duties and responsibilities,
- establishment of reliability data,
- analysis of reliability data,
- corrective action system (maintenance program amendment),
- scheduled reviews (reliability meetings and when the participation of the LYCAA is needed.)

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

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

## 1.11 Pre-flight inspections

This paragraph shall show how the scope and definition of pre-flight inspection, that is usually performed by the operating crew, are kept consistent with the scope of the maintenance performed by the contracted maintenance organizations. It shall show how the evolution of the content of the pre-flight inspection and of the maintenance program are concurrent.

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) Subcontracted 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 shall state the cases where 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 in the organization.

## 1.13 Check flight procedures

The criteria for performing a check flight are normally included in the aircraft maintenance program. This paragraph shall 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 authorize such a check flight.

## PART 2. Quality system

- 2.1 Continuing airworthiness quality policy, plan and audit procedure
  - a) Continuing airworthiness quality policy

This paragraph shall include a formal quality policy statement - that is a commitment to what the quality system is intended to achieve. It shall include as a minimum the monitoring compliance with Part-M and with any additional standards specified by the organization.

b) Continuing airworthiness quality plan

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

c) Continuing airworthiness quality audit procedure

Quality audit is a key element of the quality system. Therefore, the quality audit procedure shall be sufficiently detailed to address all the steps of an audit from preparation to conclusion; it shall show the audit report format (e.g. by reference to paragraph 5.1 'Sample of document'), and shall explain the rules for the distribution of audit reports in the organization (e.g. involvement of the quality manager, accountable manager, nominated postholder, etc.).

d) Continuing airworthiness quality audit remedial action procedure

This paragraph shall 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 actions meets the intended purpose. For instance, where this system consists in periodical corrective actions review, instructions shall be given on how such reviews shall be conducted and what shall be evaluated.

2.2 Monitoring of continuing airworthiness management activities

This paragraph shall set out a procedure to periodically review the activities of the continuing airworthiness management personnel and how they fulfil their responsibilities, as defined in Part 0.

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

This paragraph shall set out a procedure to periodically review that the effectiveness of the maintenance program(s) is actually analyzed as defined in Part 1.

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

This paragraph shall set out a procedure to periodically review that the approval of the contracted maintenance organizations is relevant for the maintenance of the operator's fleet. This may include feedback information from any contracted organization 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 subcontractors used by the maintenance contractor

This paragraph shall 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 their subcontractors) to familiarize themselves with its terms and that, for any contract amendment, relevant information is distributed in the organization and to the contractor.

## 2.6 Quality audit personnel

This paragraph shall establish the required training and qualification standards for auditors. Where persons act as part-time auditors, it shall be emphasized that they must not be directly involved in the activity they are auditing.

#### **PART 3. Contracted maintenance**

#### 3.1 Procedures for contracted maintenance

## a) Procedures for the development of maintenance contracts

This paragraph shall explain the procedures that the organization follows to develop the maintenance contract. The CAMO processes to implement the different elements described in <u>Appendix VI to AMC M.A.708(c)</u> shall be explained. In particular, it shall cover responsibilities, tasks and interaction with the maintenance organization and with the owner/operator.

This paragraph shall also describe, when necessary, the use of work orders for unscheduled line maintenance and component maintenance as per M.A.708(d). The organization may develop a work order template to ensure that the applicable elements of Appendix VI to AMC M.A.708(c) are considered. Such a template shall be included in Part 5.1.

## b) Maintenance contractor selection procedure

This paragraph shall explain how a maintenance contractor is selected by the CAMO. Selection shall not be limited to the verification that the contractor is appropriately approved for the specific type of aircraft, but also that the contractor has the industrial capacity to undertake the required maintenance. The selection procedure shall preferably include a contract review process in order to ensure that:

- the contract is comprehensive and that it has no gaps or unclear areas,
- everyone involved in the contract (both at the continuing airworthiness management organization and at the maintenance contractor) agrees with the terms of the contract and fully understands their responsibilities,
- that functional responsibilities of all parties are clearly identified.

The CAMO shall agree with the operator on the process to select a maintenance organization before concluding any contract with a maintenance organization.

## 3.2 Quality audit of aircraft

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

- compliance with approved procedures;
- contracted maintenance is carried out in accordance with the contract;
- continued compliance with Part-M.

## Appendix VI to AMC to 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 shall be addressed, when applicable, in a maintenance contract between the CAMO and the maintenance organization. The following paragraphs only address technical matters and exclude matters such as costs, delay, warranty, etc.

When maintenance is contracted to more than one maintenance organization (for example, aircraft base maintenance to X, engine maintenance to Y, and line maintenance to Z1, Z2 and Z3), attention shall be paid to the consistency of the different maintenance contracts.

A maintenance contract is not normally intended to provide appropriate detailed work instructions to personnel. Accordingly, there shall be established organizational responsibilities, procedures and routines in the CAMO and the maintenance organization to cover these functions in a satisfactory way such that any person involved is informed about his/her responsibilities and the procedures that apply. These procedures and routines can be included/appended to the CAME and to the maintenance organization's manual/MOE, or can consist in separate procedures. In other words, procedures and routines shall reflect the conditions of the contract.

## 2. Aircraft/engine maintenance

The following subparagraphs may be adapted to a maintenance contract that applies to aircraft base maintenance, aircraft line maintenance and engine maintenance.

Aircraft maintenance also includes the maintenance of the engines and APU while they are installed on the aircraft.

## 2.1. Scope of work

The type of maintenance to be performed by the maintenance organization shall be specified unambiguously. In case of line and/or base maintenance, the contract shall specify the aircraft type and, preferably, shall include the aircraft's registrations.

In case of engine maintenance, the contract shall specify the engine type.

#### 2.2. Locations identified for the performance of maintenance/certificates held

The place(s) where base, line or engine maintenance, as applicable, will be performed shall be specified. The certificate held by the maintenance organization at the place(s) where maintenance will be performed shall 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 to support occasional line maintenance.

## 2.3. Subcontracting

The maintenance contract shall specify under which conditions the maintenance organization may subcontract tasks to a third party (regardless if this third party is approved or not). At least the contract shall make reference to M.A.615 and Part-145. Additional guidance is provided by the associated AMC/GM. In addition, the CAMO may require the maintenance organization to obtain the CAMO approval before subcontracting to a third party. Access shall be given to the CAMO to any information (especially the quality monitoring information) about the maintenance organization's subcontractors involved in the contract. It shall, however, be noted that under the CAMO responsibility, both the CAMO and its Authority are entitled to be fully informed about subcontracting, although the LYCAA will normally only be concerned with aircraft, engine and APU subcontracting.

## 2.4. Maintenance program

The maintenance program, under which maintenance has to be performed, has to be specified.

The CAMO shall have that maintenance program approved by its competent authority.

#### 2.5. Quality monitoring

The terms of the contract shall include a provision allowing the CAMO to perform a quality surveillance (including audits) of the maintenance organization. The maintenance contract shall specify how the results of the quality surveillance are taken into account by the maintenance organization (see also paragraph 2.22. 'Meetings').

## 2.6. Authority involvement

The contract shall identify the competent authority(ies) responsible for the oversight of the aircraft, the operator, the CAMO, and the maintenance organization. Additionally, the contract shall allow competent authority(ies) access to the maintenance organization.

#### 2.7. Maintenance data

The contract shall specify the maintenance data and any other manual required for the fulfilment of the contract, and how these data and manuals are made available and kept current (regardless if they are provided by the CAMO or by the maintenance organization).

This may include but is not limited to:

- maintenance program,

- airworthiness directives,
- major repairs/modification data,
- aircraft maintenance manual,
- aircraft illustrated parts catalogue (IPC),
- wiring diagrams,
- troubleshooting manual,
- Minimum Equipment List (normally on board the aircraft),
- operator's manual,
- flight manual,
- engine maintenance manual,
- engine overhaul manual.

## 2.8. Incoming conditions

The contract shall specify in which condition the aircraft shall be made available to the maintenance organization. For extensive maintenance, it may be beneficial that a work scope planning meeting be organized so that the tasks to be performed may be commonly agreed (see also paragraph 2.23 'Meetings').

## 2.9. Airworthiness directives and service bulletins/modifications

The contract shall specify the information that the CAMO is responsible to provide to the maintenance organization, such as:

- the status of the ADs including due date and the selected means of compliance, if applicable; and
- status of modifications and the decision to embody a modification or an SB.

In addition, the contract shall specify the type of information the CAMO will need in return to complete the control of ADs and modification status.

## 2.10. Hours and cycles control

Hours and cycles control is the responsibility of the CAMO, and the contract shall specify how the CAMO shall provide the current hours and cycles to the maintenance organization and whether the maintenance organization shall 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 2.22 'Exchange of information').

## 2.11. Service life-limited components

The control of service life-limited components is the responsibility of the CAMO. The contract shall specify whether the CAMO shall provide the status of service life-limited parts to the maintenance organization, and the information that the approved organization will have to provide to the CAMO about the service life-limited components' removal/installation so that the CAMO may update its records (see also paragraph 2.22 'Exchange of information').

## 2.12. Supply of parts

The contract shall specify whether a particular type of material or component is supplied by the CAMO or by the maintenance organization, which type of component is pooled, etc. The contract shall clearly state that it is the maintenance organization's 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. Additional guidance on the acceptance of components is provided in M.A.402 and Part-145.

## 2.13. Pooled parts at line stations

If applicable, the contract shall specify how the subject of pooled parts at line stations shall be addressed.

## 2.14. Scheduled maintenance

For planning scheduled maintenance checks, the support documentation to be given to the maintenance organization shall be specified. This may include but is not limited to:

- applicable work package, including job cards;
- scheduled component removal list;
- modifications to be incorporated.

When the maintenance organization determines, for any reason, to defer a maintenance task, it has to be formally agreed with the CAMO. If the deferment goes beyond an approved limit, please refer to paragraph 2.17 'Deviation from the maintenance schedule'. This shall be addressed, where applicable, in the maintenance contract.

## 2.15. Unscheduled maintenance/defect rectification

The contract shall specify to which level the maintenance organization may rectify a defect without reference to the CAMO. It shall describe, as a minimum, the management of approval

of repairs and the incorporation of major repairs. The deferment of any defect rectification shall be submitted to the CAMO.

#### 2.16. Deferred tasks

See paragraphs 2.14 and 2.15 above, as well as 145.A.50(e) and M.A.801(g). In addition, for aircraft line and base maintenance, the use of the operator's MEL and the liaison with the CAMO in case of a defect that cannot be rectified at the line station shall be addressed.

#### 2.17. Deviation from the maintenance schedule

Deviations from the maintenance schedule have to be managed by the CAMO in accordance with the procedures established in the maintenance program. The contract shall specify the support the maintenance organization may provide to the operator in order to substantiate the deviation request.

## 2.18. Test flight

If any test flight is required after aircraft maintenance, it shall be performed in accordance with the procedures established in the continuing airworthiness management exposition or the operator's manual.

#### 2.19. Bench test

The contract shall specify the acceptability criterion and whether a representative of the CAMO shall witness an engine undergoing test.

#### 2.20. Release to service documentation

The release to service has to be performed by the maintenance organization in accordance with its maintenance organization procedures. The contract shall, however, specify which support forms have to be used (aircraft technical log, maintenance organization's release format, etc.) and the documentation that the maintenance organization shall provide to the CAMO upon delivery of the aircraft. This may include but is not limited to:

- certificate of release to service,
- flight test report,
- list of modifications embodied,
- list of repairs,
- list of ADs accomplished,
- maintenance visit report,

- test bench report.

## 2.21. Maintenance record-keeping

The CAMO may subcontract the maintenance organization to retain some of the maintenance records required by Part-M Subpart C. This means that the CAMO subcontracts under its quality system part of its record-keeping tasks and, therefore, the provisions of <u>M.A.711(a)(3)</u> apply.

## 2.22. Exchange of information

Each time exchange of information between the CAMO and the maintenance organization is necessary, the contract shall specify what information shall be provided and when (i.e., in which case or at what frequency), how, by whom and to whom it has to be transmitted.

## 2.23. Meetings

The maintenance contract shall include the provision for a certain number of meetings to be held between the CAMO and the maintenance organization.

#### 2.23.1. Contract review

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

## 2.23.2. Work scope planning meeting

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

#### 2.23.3. Technical meeting

Scheduled meetings may be organized in order to review on a regular basis technical matters, such as ADs, SBs, future modifications, major defects found during maintenance check, aircraft and component reliability, etc.

## 2.23.4. Quality meeting

Quality meetings may be organized in order to examine matters raised by the CAMO's quality surveillance and to agree upon necessary corrective actions.

## 2.23.5. Reliability meeting

When a reliability program exists, the contract shall specify the CAMO's and maintenance organization's respective involvement in that program, including the participation in reliability meetings.

## Appendix VII to AMC to M.A.712(f) Organizational review

Organizational reviews may replace a full quality system in accordance with the provisions of M.A.712(f) and AMC M.A.712(f) and as described in the continuing airworthiness management exposition (CAME)

Depending on the complexity of the small organization (number and type of aircraft, number of different fleets, privilege to perform airworthiness reviews, etc.), the organizational 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 organization and the aircraft managed.

As a core minimum, the organizational review system shall have the following features, which shall be described in the CAME:

## a. Identification of the person responsible for the organizational review program:

By default, this person shall be the accountable manager, unless he delegates this responsibility to (one of) the M.A.706(c) person(s).

## b. Identification and qualification criteria for the person(s) responsible for performing the organizational reviews:

These persons shall have a thorough knowledge of the regulations and of the continuing airworthiness management organization (CAMO) procedures. They shall 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 competent authority).

## c. Elaboration of the organizational review program:

- Checklist(s) covering all items necessary to be satisfied that the organization delivers a safe product and complies with the regulation. All procedures described in the CAME shall be addressed.
- A schedule for the accomplishment of the checklist items. Each item shall be checked at least every 12 months. The organization may choose to conduct one full review annually or to conduct several partial reviews.

#### d. Performance of organizational reviews:

Each checklist item shall be answered using an appropriate combination of:

- review of records, documentation, etc.

- sample check of aircraft under contract.
- 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.

## e. Management of findings and occurrence reports:

- All findings shall be recorded and notified to the affected persons.
- All level 1 findings, in the sense of M.A.716(a), shall be immediately notified to the LYCAA and all necessary actions on aircraft in service shall be immediately taken.
- All occurrence reports shall be reviewed with the aim for continuous improvement of the system by identifying possible corrective and preventive actions. This shall be done in order to find prior indicators (e.g., notified difficulties in using current procedures and tools, systematic deviations from procedures, unsafe behaviors, etc.), and dismissed alerts that, had they been recognized and appropriately managed before the event, could have resulted in the undesired event being prevented.
- Corrective and preventive actions shall be approved by the person responsible for the organizational review program and implemented within a specified time frame.
- Once the person responsible for the organizational review program is satisfied that the corrective action is effective, closure of the finding shall be recorded along with a summary of the corrective action.
- The accountable manager shall be notified of all significant findings and, on a regular basis, of the global results of the organizational review program.

Following is a typical example of a simplified organizational review checklist, to be adapted as necessary to cover the CAME procedures:

## 1 – Scope of work

- All aircraft under contract are covered in the approval certificate.
- The scope of work in the CAME does not disagree with the approval certificate.
- No work has been performed outside the scope of the approval certificate and the CAME.

- Is it justified to retain in the approved scope of work aircraft types for which the organization has no longer aircraft under contract?

#### 2 – Airworthiness situation of the fleet

- Does the continuing airworthiness status (AD, maintenance program, life limited components, deferred maintenance, ARC validity) show any expired items? If so, are the aircraft grounded?

## 3 – Aircraft maintenance program

- Check that all revisions to the TC/STC holders Instructions for Continuing Airworthiness, since the last review, have been (or are planned to be) incorporated in the maintenance program, unless otherwise approved by the Competent Authority.
- Has the maintenance program been revised to take into account all modifications or repairs impacting the maintenance program?
- Have all maintenance program amendments been approved at the right level (LYCAA or indirect approval)?
- Does the status of compliance with the maintenance program reflect the latest approved maintenance program?
- Has the use of maintenance program deviations and tolerances been properly managed and approved?

# 4 – Airworthiness Directives (and other mandatory measures issued by the competent authority)

- Have all ADs issued since the last review been incorporated into the AD status?
- Does the AD status correctly reflect the AD content: applicability, compliance date, periodicity, etc.? (Sample check on ADs)

## 5 – Modifications/repairs

- Are all modifications/repairs listed in the corresponding status approved in accordance with M.A.304? (Sample check on modifications/repairs)
- Have all the modifications/repairs which have been installed since the last review been incorporated in the corresponding status? (Sample check from the aircraft/component logbooks)

## 6 – Relations with the owners/operators

- Has a contract (in accordance with <u>Appendix I to Part-M</u>) been signed with each external owner/operator, covering all the aircraft whose airworthiness is managed by the CAMO?
- Have the owners/operators under contract fulfilled their obligations identified in the contract? As appropriate:
- Are the pre-flight checks correctly performed? (Interview of pilots)
- Are the technical log or equivalent correctly used (record of flight hours/cycles, defects reported by the pilot, identification of what maintenance is next due etc.)?
- Did flights occur with overdue maintenance or with defects not properly rectified or deferred? (Sample check from the aircraft records)
- Has maintenance been performed without notifying the CAMO (sample check from the aircraft records, interview of the owner/operator)?

#### 7 - Personnel

- Check that the current accountable manager and other nominated persons are correctly identified in the approved CAME.
- If the number of personnel has decreased or if the activity has increased, check that the organization still has sufficient staff.
- Check that the qualification of all new personnel (or personnel with new functions) has been appropriately assessed.
- Check that the staff has been trained, as necessary, to cover changes in:
- regulations,
- LYCAA publications,
- the CAME and associated procedures,
- the approved scope of work,
- maintenance data (significant ADs, SBs, ICA amendments, etc.).

## 8 - Maintenance contracted

- Sample check of maintenance records:
- Existence and adequacy of the work order,
- Data received from the maintenance organization:
- 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 organizations contracted.

## 9 - Technical records and record-keeping

- 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 computerized data properly ensured?

## **10 – Occurrence reporting procedures**

- Check that reporting is properly performed,
- Actions taken and recorded.

## Appendix VIII to AMC to M.B.602(a) and AMC M.B.702(a) - LYCAA Form 4

Organization:	Approval Number:
1. Details of Management P	ersonnel required to be accepted as specified in Part-M/145
2. Title / First Name / Surna	me:
3. Position within the Organization:	
4. Qualifications relevant to the item (3) position:	
5. Work experience relevant to the item (3) position:	
(Information on work experience can be provided in a separate document (i.e., Curriculum Vitae) attached to this form).	
Certification of Accountable Manager:  I hereby certify that the above-nominated person is qualified for the appropriate task(s) and conversant with LYCAA requirements and procedures on matter for which he is responsible.	
Signature:	Date:
LYCAA use only Name and signature of authorized LYCAA staff member Accepting / Approving /Rejecting this person:	

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Date:

Signature: