European Aviation Safety Agency

Acceptable Means of Compliance (AMC)

and Guidance Material (GM)

to

Annex I (PART-M)

to Commission Regulation (EU) No 1321/2014¹

Issue 2 — Amendment 1

11.7.2016²

¹ Commission Regulation (EU) No 1321/2014 of 26 November 2014 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks (OJ L 362, 17.12.2014, p. 1), as last amended.

² For the date of entry into force of this Issue, please refer to Decision 2016/011/R in the <u>Official Publication</u> of the Agency.

1) The table of contents is replaced by the following:

'AMC M.1

SECTION A — TECHNICAL REQUIREMENTS

SUBPART A — GENERAL

SUBPART B — ACCOUNTABILITY

GM M.A.201 Responsibilities GM M.A.201(e) Responsibilities AMC M.A.201(e)(2) Responsibilities GM M.A.201(f) Commercial ATO AMC M.A.201(h) Responsibilities GM M.A.201(i), M.A.302(h) and M.A.901(l) GM M.A.201 (i) Responsibilities AMC M.A.201(i)(3) Responsibilities AMC M.A.202(a) Occurrence reporting AMC M.A.202(b) Occurrence reporting

SUBPART C — CONTINUING AIRWORTHINESS

AMC M.A.301(1) Continuing airworthiness tasks AMC M.A.301(2) Continuing airworthiness tasks AMC M.A.301(3) Continuing airworthiness tasks AMC M.A.301(4) Continuing airworthiness tasks AMC M.A.301(5) Continuing airworthiness tasks AMC M.A.301(7) Continuing airworthiness tasks AMC M.A.302 Aircraft maintenance programme GM M.A.302(a) Aircraft maintenance programme AMC M.A.302(d) Aircraft maintenance programme AMC M.A.302(e) Aircraft maintenance programme AMC M.A.302(f) Aircraft maintenance programme AMC M.A.302(h) Aircraft maintenance programme GM M.A.302(h) Aircraft maintenance programme AMC M.A.302(i) Aircraft maintenance programme AMC M.A.304 Data for modifications and repairs AMC M.A.305(d) Aircraft continuing airworthiness record system AMC M.A.305(d)(4) and M.A.305(h) Aircraft continuing airworthiness record system AMC M.A.305(h) Aircraft continuing airworthiness record system AMC M.A.305(h)6 Aircraft continuing airworthiness record system AMC M.A.306(a) Aircraft technical log system

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

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

SUBPART D — MAINTENANCE STANDARDS

- AMC M.A.401(b) Maintenance data
- AMC M.A.401(c) Maintenance data
- AMC M.A.402(a) Performance of maintenance
- GM M.A.402(a) Performance of maintenance
- AMC M.A.402(c) Performance of maintenance
- AMC M.A.402(d) Performance of maintenance
- AMC M.A.402(e) Performance of maintenance
- AMC M.A.402(f) Performance of maintenance
- AMC M.A.402(g) Performance of maintenance
- AMC1 M.A.402(h) Performance of maintenance
- AMC2 M.A.402(h) Performance of maintenance
- GM M.A.402(h) Performance of maintenance
- AMC M.A.403(b) Aircraft defects
- AMC M.A.403(d) Aircraft defects

SUBPART E — COMPONENTS

- AMC M.A.501(a) Installation
- AMC M.A.501(b) Installation
- AMC M.A.501(c) Installation
- AMC M.A.501(d) Installation
- AMC M.A.502 Component maintenance
- AMC M.A.502(b) and (c) Component maintenance
- AMC M.A.504(a) Control of unserviceable components
- AMC M.A.504(b) Control of unserviceable components
- AMC M.A.504(c) Control of unserviceable components unsalvageable components
- AMC M.A.504(d)(2) Control of unserviceable components
- AMC M.A.504(e) Control of unserviceable components

SUBPART F — MAINTENANCE ORGANISATION

- AMC M.A.602 Application
- AMC M.A.603(a) Extent of approval
- AMC M.A.603(c) Extent of approval
- AMC M.A.604 Maintenance organisation manual
- AMC M.A.605(a) Facilities
- AMC M.A.605(b) Facilities
- AMC M.A.605(c) Facilities
- AMC M.A.606(a) Personnel requirements

- AMC M.A.606(b) Personnel requirements
- AMC M.A.606(c) Personnel requirements
- AMC M.A.606(d) Personnel requirements
- AMC M.A.606(e) Personnel requirements
- AMC M.A.606(f) Personnel requirements
- AMC M.A.606(h)(2) Personnel requirements
- AMC M.A.607 Certifying staff and airworthiness review staff
- AMC M.A.607(c) Certifying staff and airworthiness review staff
- AMC M.A.608(a) Components, equipment and tools
- AMC M.A.608(b) Components, equipment and tools
- AMC M.A.609 Maintenance data
- AMC M.A.610 Maintenance work orders
- AMC M.A.613(a) Component certificate of release to service
- AMC M.A.614(a) Maintenance and airworthiness review records
- AMC M.A.614(c) Maintenance and airworthiness review records
- GM M.A.615 Privileges of the organisation
- GM M.A.615(a) Privileges of the organisation
- AMC M.A.615(b) Privileges of the organisation
- AMC M.A.616 Organisational review
- AMC M.A.617 Changes to the approved maintenance organisation

SUBPART G — CONTINUING AIRWORTHINESS MANAGEMENT ORGANISATION

- AMC M.A.702 Application
- AMC1 M.A.704 Continuing airworthiness management exposition
- AMC2 M.A.704 Continuing airworthiness management exposition
- AMC M.A.704(a)(2) Continuing airworthiness management exposition
- AMC M.A.705 Facilities
- AMC M.A.706 Personnel requirements
- AMC M.A.706(a) Personnel requirements
- AMC M.A.706(e) Personnel requirements
- AMC M.A.706(f) Personnel requirements
- AMC M.A.706(i) Personnel requirements
- AMC M.A.706(k) Personnel requirements
- AMC M.A.707(a) Airworthiness review staff
- AMC M.A.707(a)(1) Airworthiness review staff
- AMC M.A.707(a)(2) Airworthiness review staff
- AMC M.A.707(b) Airworthiness review staff
- AMC M.A.707(c) Airworthiness review staff
- AMC M.A.707(e) Airworthiness review staff

- GM M.A.708 Continuing airworthiness management
- AMC M.A.708(b)(3) Continuing airworthiness management
- GM M.A.708(b)(4) Continuing airworthiness management
- AMC1 M.A.708(c) Continuing airworthiness management
- AMC2 M.A.708(c) Continuing airworthiness management
- GM M.A.708(c) Continuing airworthiness management
- AMC M.A.708(d) Continuing airworthiness management
- AMC M.A.709 Documentation
- GM M.A.709 Documentation
- GM M.A.710 Airworthiness review
- AMC M.A.710(a) Airworthiness review
- AMC M.A.710(b) and (c) Airworthiness review
- AMC M.A.710(d) Airworthiness review
- AMC M.A.710(e) Airworthiness review
- AMC M.A.710(ga) Airworthiness review
- GM M.A.710(h) Airworthiness review
- AMC M.A.711(a)(3) Privileges of the organisation
- AMC M.A.711(b) Privileges of the organisation
- AMC M.A.711(c) Privileges of the organisation
- AMC M.A.712(a) Quality system
- AMC M.A.712(b) Quality System
- AMC M.A.712(f) Quality system
- AMC M.A.713 Changes to the approved continuing airworthiness organisation
- AMC M.A.714 Record-keeping

SUBPART H — CERTIFICATE OF RELEASE TO SERVICE (CRS)

AMC M.A.801 Aircraft certificate of release to service after embodiment of a Standard Change or a Standard Repair (SC/SR)

- AMC M.A.801(b) Aircraft certificate of release to service
- AMC M.A.801(d) Aircraft certificate of release to service
- AMC M.A.801(f) Aircraft certificate of release to service
- AMC M.A.801(g) Aircraft certificate of release to service
- AMC M.A.801(h) Aircraft certificate of release to service
- AMC M.A.802 Component certificate of release to service
- AMC M.A.803 Pilot-owner authorisation

SUBPART I — AIRWORTHINESS REVIEW CERTIFICATE

AMC M.A.901 Aircraft airworthiness review

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

- AMC M.A.901(c)(2), (e)(2) and (f) Aircraft airworthiness review
- AMC M.A.901(d) and (g) Aircraft airworthiness review
- AMC M.A.901(g) Aircraft airworthiness review
- AMC M.A.901(j) Aircraft airworthiness review
- AMC M.A.901(I)(1) Aircraft airworthiness review
- GM M.A.901(I)(5) Aircraft airworthiness review
- GM M.A.901(I)(7) Aircraft airworthiness review
- AMC M.A.903(a)(1) Transfer of aircraft registration within the EU
- AMC M.A.903(b) Transfer of aircraft registration within the EU
- AMC M.A.904(a)(1) Airworthiness reviews of aircraft imported into the EU
- AMC M.A.904 (a)(2) Airworthiness reviews of aircraft imported into the EU
- AMC M.A.904(b) Airworthiness review of aircraft imported into the EU

SECTION B — PROCEDURE FOR COMPETENT AUTHORITIES

SUBPART A — GENERAL

- AMC M.B.102(a) Competent authority General
- AMC1 M.B.102(c) Competent authority Qualification and training
- AMC2 M.B.102(c) Competent authority Qualification and training
- AMC M.B.102(d) Competent authority organisation Procedures
- AMC M.B.104(a) Record-keeping
- AMC M.B.104(f) Record-keeping
- AMC M.B.105(a) Mutual exchange of information

SUBPART B — ACCOUNTABILITY

SUBPART C — CONTINUING AIRWORTHINESS

- AMC M.B.301(a) Maintenance programme
- AMC M.B.301(b) Maintenance programme
- AMC M.B.301(c) Maintenance programme
- AMC M.B.301(d) Maintenance programme
- AMC1 M.B.303(a) Aircraft continuing airworthiness monitoring
- AMC2 M.B.303(a) Aircraft continuing airworthiness monitoring
- GM M.B.303(a) Aircraft continuing airworthiness monitoring
- AMC1 M.B.303(b) Aircraft continuing airworthiness monitoring
- AMC2 M.B.303(b) Aircraft continuing airworthiness monitoring
- AMC3 M.B.303(b) Aircraft continuing airworthiness monitoring
- GM M.B.303(b) Aircraft continuing airworthiness monitoring
- AMC M.B.303(d) Aircraft continuing airworthiness monitoring

SUBPART D — MAINTENANCE STANDARDS

SUBPART E — COMPONENTS

SUBPART F — MAINTENANCE ORGANISATION

AMC M.B.602(a) Initial approval

- AMC M.B.602(b) Initial approval
- AMC M.B.602(c) Initial approval
- AMC M.B.602(e) Initial approval
- AMC M.B.602(f) Initial approval
- AMC M.B.602(g) Initial approval
- AMC M.B.603(a) Issue of approval
- AMC M.B.603(c) Issue of approval
- AMC M.B.604(b) Continuing oversight
- AMC M.B.605(a)(1) Findings

AMC M.B.606 Changes

SUBPART G — CONTINUING AIRWORTHINESS MANAGEMENT ORGANISATION

- AMC M.B.701(a) Application
- AMC M.B.702(a) Initial approval
- AMC M.B.702(b) Initial approval
- AMC M.B.702(c) Initial approval
- AMC M.B.702(e) Initial approval
- AMC M.B.702(f) Initial approval
- AMC M.B.702(g) Initial approval
- AMC M.B.703 Issue of approval
- AMC M.B.703(a) Issue of approval
- AMC M.B.703(c) Issue of approval
- AMC M.B.704(b) Continuing oversight
- AMC M.B.705(a)(1) Findings
- AMC M.B.706 Changes

SUBPART H — CERTIFICATE OF RELEASE TO SERVICE (CRS)

SUBPART I — AIRWORTHINESS REVIEW CERTIFICATE

AMC M.B.901 Assessment of recommendations AMC M.B.902(b) Airworthiness review by the competent authority

AMC M.B.902(b)(1) Airworthiness review by the competent authority

AMC M.B.902(b)(2) Airworthiness review by the competent authority

AMC M.B.902(c) Airworthiness review by the competent authority

AMC AND GM TO THE APPENDICES TO PART-M

GM to Appendix I Continuing airworthiness management contract

AMC to Appendix II to Part-M Use of the EASA Form 1 for maintenance

GM to Appendix II to Part-M Use of the EASA Form 1 for maintenance

AMC to Appendix V to Part-M Maintenance organisation approval referred to in Annex I (Part-M) Subpart F

AMC to Appendix VI to Part-M Continuing airworthiness management organisation approval referred to in Annex I (Part-M) Subpart G

AMC to Appendix VII Complex maintenance tasks

AMC to Appendix VIII Limited pilot-owner maintenance

APPENDICES TO THE AMC AND GM

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

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

Appendix III to GM M.B.303(b) Key risk elements

Appendix IV to AMC M.A.604 Maintenance organisation manual

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

Appendix VI to AMC M.B.602(f) EASA Form 6F

Appendix VII to AMC M.B.702(f) EASA Form 13

Appendix VIII to AMC M.A.616 Organisational review

Appendix IX to AMC M.A.602 and AMC M.A.702 EASA Form 2

Appendix X to AMC M.B.602(a) and AMC M.B.702(a) EASA Form 4

Appendix XI to AMC M.A.708(c) Contracted maintenance

Appendix XII to AMC M.A.706(f) and AMC1 M.B.102(c) Fuel tank safety training

Appendix XIII to AMC M.A.712(f) Organisational review'

2) A new GM M.A.201 is added as follows:

GM M.A.201 Responsibilities

Quick summary table

		Complex		Other-than-complex		
Select your type of operation and your category of aircraft			motor-powe Is a CAMO required for the	ls maintenance by a	motor-powe Is a CAMO required for the	ls maintenance by a
			management of continuing airworthiness?	maintenance organisation required?	management of continuing airworthiness?	maintenance organisation required?
Commercial operations	CAT	Air carriers licensed in accordance with Regulation (EU) No 1008/2008	Yes, a CAMO is required and it shall be part of the AOC (M.A.201(e))	Yes, maintenance by a Part-145 organisation 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 organisation is required (M.A.201(e))
		CAT other than air carriers licensed in accordance with Regulation (EC) No 1008/2008	Yes, a CAMO is required (M.A.201(f))	Yes, maintenance by a Part-145 organisation 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 organisation is required (M.A.201(h))
	Commercial operations other than CAT	Commercial specialised operations	Yes, a CAMO is required (M.A.201(f))	Yes, maintenance by a Part-145 organisation 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 organisation is required (M.A.201(h))
		Commercial training organisations (ATOs)	Yes, a CAMO is required (M.A.201(f))	Yes, maintenance by a Part-145 organisation 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 organisation is required (M.A.201(h))
Other than commercial operations including limited operations as defined in Article 2(p)			Yes, a CAMO is required (M.A.201(g))	Yes, maintenance by a Part-145 organisation 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 organisation is not required (M.A.201(i))'

3) AMC M.A.201(e) is amended as follows:

'AMC M.A.201(ei)(3) Responsibilities'

4) GM M.A.201(e) is amended as follows:

'GM M.A.201(ei) Aircraft maintenance programme

If an owner decides not to make a contract in accordance with M.A.201(ei), 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.'

5) GM M.A.201(e), M.A.302(h) and M.A.901(l) is amended as follows:

'GM M.A.201(ei), M.A.302(h) and M.A.901(l)

Maintenance perogramme development and approval (for private aircraft other than large complex motor-powered aircraft*)

* This means aircraft for which M.A.201(e), (f), (g) and (h), and (i) do not apply.

The following table provides a summary of the provisions contained in M.A.201(ei), AMC M.A.201(ei)(3), and GM M.A.201(ei)(3):

	OPTION 1 (for private aircraft other than large complex motor-powered aircraft)	OPTION 2 (for private aircraft other than large complex motor-powered aircraft)	OPTION 3 (for ELA2 aircraft not involved in commercial operations)
Development and processing of the approval of the maintenance programme	Performed by the owner	Contracted to a CAMO (whether it is done through a full contract for the continuing airworthiness management of the aircraft or through a limited contract for the development and processing of the maintenance programme)	Contracted to a Part-145 or M.A. Subpart F maintenance organisation (see M.A.201(e)(ii)) M.A.201(i)(3))
Approval/Declaration of the maintenance programme	Direct approval by the NAA	Direct approval by the NAA	Direct approval by the NAA
	or Declaration by the owner (only for ELA1 aircraft not involved in commercial operations, see M.A.302(h))	or Indirect approval by the contracted CAMO or Declaration by the owner (only for ELA1 aircraft not	or Declaration by the owner (only for ELA1 aircraft not involved in commercial operations, see M.A.302(h))
		involved in commercial operations, see M.A.302(h))	

Maintenance perogramme content and airworthiness review (for all aircraft)

The following table provides a summary of the provisions contained in M.A.302 and AMC M.A.901 in relation to the content of the maintenance programme, its approval and its link with the airworthiness review:

	OPTION 1 (for all aircraft)	OPTION 2 (for ELA1 aircraft not involved in commercial operations)		
Basic information used for the maintenance programme		'Minimum Inspection Programme' (see M.A.302(h)2 and M.A.302(i)) (not applicable to airships)		
Customisation to a particular aircraft registration	Complying with M.A.302(e) or Using the template in AMC M.A.302(e) (only for other-than-complex motor- powered aircraft)	Using the template in AMC M.A.302(e)		
Approval/Declaration of the maintenance programme	Direct approval by NAA or Indirect approval by contracted CAMO or Declaration by the owner (see M.A.302(h)) (only for ELA1 aircraft not involved in commercial operations, see M.A.302(h))	Direct approval by NAA or Indirect approval by contracted CAMO or Declaration by the owner (see M.A.302(h)) (only for ELA1 aircraft not involved in commercial operations, see M.A.302(h))		
Performance of Airworthiness Review and issue of Airworthiness Review Certificate	CAMO or NAA	NAA or CAMO or Part-145/M.A. Subpart F maintenance organisation (when combined with annua inspection, see M.A.901(I))'		

6) A new GM M.A.201(e) is added as follows:

'GM M.A.201(e) Responsibilities

The performance of ground de-icing and anti-icing activities does not require a Part-145 maintenance organisation 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 authorised personnel.'

- 7) AMC M.A.201(h) is deleted.
- 8) AMC M.A.201(h)(1) is deleted.

9) A new AMC M.A.201(e)(2) is added as follows:

'AMC M.A.201(e)(2) Responsibilities

- An air carrier licensed in accordance with Regulation (EC) No 1008/2008 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. The approval to carry out airworthiness reviews is optional.
- 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 (EC) No 1008/2008. 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.'
- 10) AMC M.A.201(h)(2) is deleted.
- 11) A new GM M.A.201(f) is added as follows:

GM M.A.201(f) Commercial ATO

'Commercial ATO' refers to 'training organisation(s)', as meant in Article 10a of Regulation (EU) No 1178/2011, which operate aircraft for commercial purposes in order to provide Part-FCL training courses.'

12) Point 3 of AMC M.A.301(1) is amended as follows:

'AMC M.A.301(1) Continuing airworthiness tasks

(...)

- 3. In the case of commercial air transport air carriers licensed in accordance with Regulation (EC) No 1008/2008, an operator the CAMO should publish guidance to maintenance and flight personnel and any other personnel performing pre-flight inspection tasks, as appropriate, defining responsibilities for these actions and, where tasks are contracted to other organisations, how their accomplishment is subject to the quality system of M.A.712. It should be demonstrated to the competent authority that pre-flight inspection personnel have received appropriate training for the relevant pre-flight inspection tasks. The training standard for personnel performing the pre-flight inspection should be described in the operator's continuing airworthiness management exposition.'
- 13) AMC M.A.301(2) is amended as follows:

'AMC M.A.301(2) Continuing airworthiness tasks

- 1. In the case of commercial air transport tThe operator should have a system to ensure that all defects affecting the safe operation of the aircraft are rectified within the limits prescribed by the approved minimum equipment list (MEL), or configuration deviation list (CDL) 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 competent authority.
- 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

should be considered. Whenever possible, deferred defect rectification should be made known to the pilot/flight crew prior to their arrival at the aircraft.

3. In the case of commercial air transport or large aircraft used by air carriers licensed in accordance with Regulation (EC) No 1008/2008 and of complex motor-powered aircraft, a system of assessment should be in operation to support the continuing airworthiness of an aircraft and to provide a continuous analysis of the effectiveness of the CAMO defect control system in use.

The system should provide for:

- (a) significant incidents and defects: monitor incidents and defects that have occurred in flight and defects found during maintenance and overhaul, highlighting any that appear significant in their own right.
- (b) repetitive incidents and defects: monitor on a continuous basis defects occurring in flight and defects found during maintenance and overhaul, highlighting any that are repetitive.
- (c) deferred and carried forward defects: Monitor on a continuous basis deferred and carried forward defects. Deferred defects are defined as those defects reported in operational service which are deferred for later rectification. Carried forward defects are defined as those defects arising during maintenance which are carried forward for rectification at a later maintenance input.
- (d) unscheduled removals and system performance: analyse unscheduled component removals and the performance of aircraft systems for use as part of the maintenance programme efficiency.

When deferring or carrying forward a defect the cumulative effect of a number of deferred or carried forward defects occurring on the same aircraft and any restrictions contained in the MEL should be considered. Whenever possible, deferred defects should be made known to the pilot/flight crew prior to their arrival at the aircraft.'

14) AMC M.A.301(4) is amended as follows:

'AMC M.A.301(4) Continuing airworthiness tasks

The operator or the contracted CAMO managing the continuing airworthiness of the aircraft as applicable should have a system to analyse the effectiveness of the maintenance programme, with regard to spares, established defects, malfunctions and damage, and to amend the maintenance programme accordingly.'

15) AMC M.A.301(7) is amended as follows:

'AMC M.A.301(7) Continuing airworthiness tasks

An operator or the contracted The CAMO managing the continuing airworthiness of the aircraft as applicable should 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 organisation, the manufacturer, the competent authority or the Agency.'

16) Point 3 of AMC M.A.302 is amended as follows:

'AMC M.A.302 Aircraft maintenance programme

(...)

3. The maintenance programme details should be reviewed at least annually. As a minimum revisions of documents affecting the programme basis need to be considered by the owner or operator for inclusion in the maintenance programme during the annual review. Applicable mandatory requirements for compliance with Part-21 should be incorporated into the owner or operator's aircraft maintenance programme as soon as possible.

(...)'

17) AMC M.A.302(a) is amended as follows:

'AMCGM M.A.302(a) Aircraft maintenance programme

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

18) Point 2 of AMC M.A.302(f) is amended as follows:

'AMC M.A.302(f) Aircraft maintenance programme

- (...)
- 2. Reliability programmes need not be developed for aircraft not considered as large complex motor-powered aircraft or that contain overhaul time periods for all significant aircraft system components.
- (...)′
- 19) GM M.A.302(h) is amended as follows:

'GM M.A.302(h) Aircraft maintenance programme

Responsibilities associated to maintenance programmes developed in accordance with M.A.302(h):

- If the owner has contracted an organisation in accordance with M.A.201(e)(i)(1) or M.A.201(i)(3) (whether it covers the full continuing airworthiness management or it is just for the development of the maintenance programme), this organisation is responsible for developing and proposing to the owner a maintenance programme which:
 - indicates whether the maintenance programme is based on the 'Minimum Inspection Programme' described in M.A.302(i);
 - identifies the owner and the specific aircraft, engine, and propeller (as applicable);
 - includes all mandatory maintenance information and any additional tasks derived from the assessment of the recommendations issued by the Design Approval Holder;
 - justifies any deviations from the recommendations issued by the Design Approval Holder;
 - does not go below the requirements of the Minimum Inspection Programme; and

• is customised to the particular aircraft type, configuration and operation, in accordance with paragraph M.A.302(h)3.

If the maintenance programme is going to be approved by the competent authority, such competent authority is responsible for evaluating the justifications provided in relation to deviations from the recommendations issued by the Design Approval Holder.

However, when issuing a declaration for the maintenance programme, the owner assumes full responsibility for any deviations introduced to the maintenance programme proposed by the contracted organisation. The organisation which developed the maintenance programme is not responsible for such deviations. These deviations do not need to be justified by the owner.

If the owner has not contracted an organisation in accordance with M.A.201(ei)(2) and has decided to develop the maintenance programme himself/herself, when issuing a declaration for the maintenance programme, the owner assumes full responsibility for its content, including any deviations introduced to the recommendations issued by the Design Approval Holder. In this case, these deviations do not need to be justified. However, the maintenance programme still needs to comply with the requirements contained in M.A.302(h), in particular with the obligation to not go below the requirements of the 'Minimum Inspection Programme' and to comply with the mandatory continuing airworthiness information.

If the maintenance programme is going to be approved by the competent authority, the owner needs to provide to such competent authority the justification for the deviations from the Design Approval Holder recommendations.

- The content of the declared (by the owner) maintenance programme cannot be initially challenged either by the competent authority, the contracted CAMO, or the contracted maintenance organisation. This declared maintenance programme is the basis for adequate planning of maintenance as well as for the airworthiness reviews and the content of the Aircraft Continuing Airworthiness Monitoring (ACAM) inspections in accordance with M.B.303. Nevertheless, the maintenance programme will be subject to periodic reviews at the occasion of the airworthiness review and the competent authority shall be notified in case of discrepancies linked to deficiencies in the content of the maintenance programme, as described in M.A.302(h)5, M.A.710(ga), M.A.710(h), M.A.901(l)5, and M.A.901(l)7. The owner shall amend the maintenance programme accordingly as required by M.A.302(h)5.
- When the competent authority is notified of deficiencies linked to the content of the declared maintenance programme for a particular aircraft, the competent authority should contact the owner, request a copy of the maintenance programme (if it was declared) and use the information received for the adequate planning of the ACAM programme. Based on the reported deficiencies and the risks identified, the competent authority will adapt the ACAM programme accordingly. This notification will also allow that the competent authority agrees on the changes required to the maintenance programme as required by M.A.302(h)5.
- Although there is no requirement for the owner to send a copy of the declared maintenance programme to the competent authority, this does not prevent the competent authority from requesting a copy to the owner at any time, even if deficiencies have not been reported.
- Since the maintenance programme has to identify the deviations introduced to the recommendations issued by the Design Approval Holder, the airworthiness reviews and ACAM inspections should place emphasis on the inspection of those areas affected by those deviations in order to make sure that the maintenance programme is effective.
- Since the competent authority is not responsible for the content of a declared maintenance programme, the competent authority cannot authorise deviations from its content. In such case, the owner can always declare an amended maintenance programme.'

20) AMC M.A.306(a) is amended as follows:

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

For CAT operations, commercial specialised operations and commercial ATO operations, commercial air transport the operator's aircraft technical log is a system for recording defects and malfunctions during the aircraft operation and for recording details of all maintenance carried out on an aircraft between scheduled base maintenance visits. In addition, it is used for recording flight safety and maintenance information the operating 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 operator's aircraft technical log system may range from a simple single section document to a complex system containing many sections but in all cases it should include the information specified for the example used here which happens to use a 5 section document/computer system:

Section 1 should contain details of the registered name and address of the operator the aircraft type and the complete international registration marks of the aircraft.

Section 2 should contain details of when the next scheduled maintenance is due, including, if relevant any out of phase component changes due before the next maintenance check. In addition this section should contain the current certificate of release to service (CRS), for the complete aircraft, issued normally at the end of the last maintenance check.

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

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

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

In the case of maintenance performed by a Part-145 maintenance organisation, # 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 specified in AMC 145.A.50(b) paragraph 1. When the alternate abbreviated certificate of release to service is used, the introductory section of the technical log should include an example of the full certification statement from AMC 145.A.50(b) paragraph 1.

(vi) the quantity of fuel and oil uplifted and the quantity of fuel available in each tank, or combination of

tanks, at the beginning and end of each flight; provision to show, in the same units of quantity, both the amount of fuel planned to be uplifted and the amount of fuel actually uplifted; provision for the time when ground de-icing and/or anti-icing was started and the type of fluid applied, including mixture ratio fluid/water and any other information required by the operator'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.

(vii) the pre-flight inspection signature.

In addition to the above, it may be necessary to record the following supplementary information:

- the time spent in particular engine power ranges where use of such engine power affects the life of the engine or engine module;
- the number of landings where landings affect the life of an aircraft or aircraft component;
- flight cycles or flight pressure cycles where such cycles affect the life of an aircraft or aircraft component.

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

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

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

Section 4 should contain details of all deferred defects that affect or may affect the safe operation of the aircraft and should therefore be known to the aircraft commander. Each page of this section should be pre-printed with the operator's name and page serial number and make provision for recording the following:

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

Section 5 should contain any necessary maintenance support information that the aircraft commander needs to know. Such information would include data on how to contact maintenance if problems arise whilst operating the routes etc.'

21) The title of AMC M.A.306(b) is amended as follows:

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

22) Point 1(a) of AMC M.A.401(b) is amended as follows:

'AMC M.A.401(b) Maintenance data

1. Except as specified in sub-paragraph 2, each person or organisation performing aircraft maintenance should have access to and use:

- (a) all maintenance related Parts the regulations on continuing airworthiness of aircraft, and associated AMC's together with the maintenance related guidance material and GM;'
- 23) AMC M.A.402(a) is replaced by the following:

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

- Maintenance should be performed by persons authorised to issue a certificate of release to service or under the supervision of persons authorised to issue a certificate of release to service. Supervision should be to the extent necessary to ensure that the work is performed properly and the supervisor should be readily available for consultation.
- 2. The person authorised to issue a certificate of release to service should 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 specialised tasks, such as welding, is qualified in accordance to an officially recognised standard.'
- 24) GM M.A.402(a) is added as follows:

'GM M.A.402 (a) Performance of maintenance

In the case of limited Pilot-owner maintenance, as specified in M.A.803, any person maintaining an aircraft which they own individually or jointly, provided they hold a valid pilot licence with the appropriate type or class rating, may perform the limited Pilot-owner maintenance tasks in accordance with Appendix VIII to Annex I (Part-M) to Regulation (EU) No 1321/2014.'

- 25) AMC M.A.402(b) is deleted.
- 26) AMC M.A.402(c) is added as follows:

'AMC M.A.402(c) Performance of maintenance

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

27) AMC M.A.402(d) is renumbered to AMC M.A.402(e) as follows:

'AMC M.A.402(de) Performance of maintenance

The working environment should provide...'

28) AMC M.A.402(e) is renumbered to AMC M.A.402(f) as follows:

'AMC M.A.402(ef) Performance of maintenance

Facilities should be provided ... '

29) A new AMC M.A.402(d) is added as follows:

'AMC 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 should be performed in accordance with the equipment manufacturers' instructions. All tools requiring calibration should be traceable to an acceptable standard.

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

If the organisation responsible for the type design involved recommends special equipment or test apparatuses, personnel should use the recommended equipment or apparatuses or equivalent equipment accepted by the competent authority.

All work should 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).'

30) AMC M.A.402(g) is added as follows:

'AMC M.A.402(g) Performance of maintenance

- (a) To minimise the risk of multiple errors and to prevent omissions, the person or organisation performing maintenance should ensure that:
 - (1) every maintenance task is signed off only after completion;
 - (2) the grouping of tasks for the purpose of sign-off allows critical steps to be clearly identified; and
 - (3) any work performed by personnel under supervision (i.e. temporary staff, trainees) is checked and signed off by an authorised person.
- (b) To minimise 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 organisation performing maintenance should plan different persons to perform identical tasks in different

systems. However, when only one person is available, then this person should perform reinspection of the tasks as described in AMC2 M.A.402(h).'

31) AMC1 M.A.402(h) is added as follows:

AMC1 M.A.402(h) Performance of maintenance CRITICAL MAINTENANCE TASKS

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

- 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.
- 32) AMC2 M.A.402(h) is added as follows:

'AMC2 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 'authorised person', taking into account that:

- the 'authorised 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;
- (2) 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 'authorised person' after the independent inspection has been carried out satisfactorily;
- (4) the work card system should 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
 - (1) When the work is performed by a Part-M Subpart F organisation, then the organisation should 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:

- holding a Part-66 licence in the same subcategory as the licence subcategory or equivalent necessary to release or sign off the critical maintenance task;
- holding a Part-66 licence 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 organisation:
 - (i) the 'independent qualified person' should hold:
 - (A) a Part-66 licence in any category or an equivalent national qualification when national regulations apply; or
 - (B) a valid pilot licence for the aircraft type issued in accordance with European Union regulations or an equivalent national qualification when national regulations apply;
 - (ii) additionally, the 'authorised person' should assess the qualifications and experience of the 'independent qualified person' taking into account that the 'independent qualified person' should have received training and have experience in the particular task. It should not be acceptable that the 'authorised person' shows to the 'independent qualified person' how to perform the inspection once work has been already finalised.
- (c) How should independent inspection be performed

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

- all those parts of the system that have actually been disconnected or disturbed should be inspected for correct assembly and locking;
- (2) the system as a whole should be inspected for full and free movement over the complete range;
- (3) cables should be tensioned correctly with adequate clearance at secondary stops;
- the operation of the control system as a whole should be observed to ensure that the controls are operating in the correct sense;
- (5) if different control systems are interconnected so that they affect each other, all the interactions should be checked through the full range of the applicable controls; and
- (6) software that is part of the critical maintenance task should 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 'authorised person' performing the maintenance task is also acting as 'independent qualified person' and performs the inspection.
- (2) For critical maintenance tasks, reinspection should 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 organisation has not assigned a suitable 'independent qualified person' to that particular task.

- (3) The certificate of release to service is issued by the 'authorised person' after the reinspection has been performed satisfactorily.
- (4) The work card system should record the identification of the 'authorised person' and the date and the details of the reinspection, as necessary, before the certificate of release to service is issued.'
- 33) GM M.A.402(h) is added as follows:

'GM 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.'
- 34) AMC M.A.704 is replaced by the following:

'AMC1 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 should comprise:
 - Part 0 General organisation
 - Part 1 Continuing airworthiness procedures
 - Part 2 Quality system or organisational review (as applicable)
 - Part 3 Contracted maintenance management of maintenance (liaison with maintenance organisations)
 - Part 4 Airworthiness review procedures (if applicable)
- 3. Personnel should be familiar with those parts of the continuing airworthiness management exposition that are relevant to their tasks.
- 4. The CAMO should specify in the exposition who is responsible for the amendment of the document. Unless otherwise agreed by the approving competent authority, the person

responsible for the management of the quality system or for the organisational review should be responsible for monitoring and amending the continuing airworthiness management exposition, including associated procedure's manuals, and the submission of proposed amendments to the competent authority. The competent authority 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 competent authority ('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 should be made available to the approving competent authority in a form acceptable to the latter. Attention should be paid to the compatibility of the EDP publication systems with the necessary dissemination, both internally and externally, of the continuing airworthiness management exposition.
- The continuing airworthiness management exposition should contain information, as applicable, on how the CAMO complies with CDCCL instructions.
- Appendix V to AMC M.A.704 contains an example of a continuing airworthiness management exposition layout.'
- 35) AMC2 M.A.704 is added as follows:

AMC2 M.A.704 Continuing airworthiness management exposition

EXPOSITION LAYOUT FOR A CAMO HOLDING A MAINTENANCE ORGANISATION APPROVAL

- Where a CAMO is also approved to another Part, the exposition or manual required by the other Part may form the basis of the continuing airworthiness management exposition in a combined document.
- 2. Example for a combined CAMO and Part-145 organisation:

Part-145 Exposition (see equivalent paragraphs in AMC 145.A.70(a))

- Part 0 General organisation
- Part 1 Management
- Part 2 Maintenance procedures
- Part L2 Additional line maintenance procedures
- Part 3 Quality system and/or organisational review (as applicable)

This chapter should cover the functions specified in M.A.712 'Quality system' and 145.A.65 'Safety and quality system'.

Part 4 Contracts

This chapter should include:

- the contracts of the CAMO with the owners/operators as per Appendix I to Part-M;
- the CAMO procedures for the management of maintenance and liaison with maintenance organisations.
- Part 5 Appendices (sample of documents)
- Part 6 Continuing airworthiness management procedures

- Part 7 FAA supplement (if applicable)
- Part 8 TCCA supplement (if applicable)
- Part 9 Airworthiness review procedures (if applicable)
- 3. Example for a combined CAMO and M.A. Subpart F organisation:
 - Part 0 General organisation
 - Part 1 General
 - Part 2 Description
 - Part 3 General procedures
 - Part 4 Working procedures

This part should contain, among other things, procedures for quality system or organisation review, as applicable.

- Part 5 Appendices
- Part 6 Continuing airworthiness management procedures
- Part 7 Airworthiness review procedures (if applicable)'
- 36) AMC M.A.704(a)(2) is added as follows:

'AMC M.A 704(a)(2) Continuing airworthiness management exposition

- Part 0 'General organisation' of the continuing airworthiness management exposition should 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 organisation's compliance with Part-M and will be complied with at all times.
- 2. The accountable manager's exposition statement should embrace the intent of the following paragraph, and in fact this statement may be used without amendment. Any amendment to the statement should not alter its intent:

'This exposition defines the organisation and procedures upon which the competent authority's* CAMO approval is based.

These procedures are approved by the undersigned and should be complied with, as applicable, in order to ensure that all continuing airworthiness tasks 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 competent authority* will approve this organisation whilst the competent authority* is satisfied that the procedures are followed and the work standard is maintained. It is understood that the competent authority* reserves the right to suspend, limit or revoke the CAMO approval or the air operator certificate, as applicable, if the competent authority* 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 organisation's name) ... '

*Where 'competent authority' is stated, please insert the actual name of the approving competent authority organisation or administration delivering the CAMO approval or the air operator certificate.'

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 approving competent authority. Failure to carry out this action invalidates the CAMO approval or the air operator certificate.'

37) AMC M.A.707(a)(1) is amended as follows:

'AMC M.A.707(a)(1) Airworthiness review staff

For all aircraft used in commercial air transport by air carriers licensed in accordance with Regulation (EC) No 1008/2008 and for any other aircraft, other than balloons, above 2 730 kg MTOM, formal aeronautical maintenance training means training (internal or external) supported by evidence on the following subjects:

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

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

- Maintenance methods.'
- 38) AMC M.A.707(a)(2) is amended as follows:

'AMC M.A.707(a)(2) Airworthiness review staff

For all balloons and any other aircraft of 2 730 Kg MTOM and below, not used in commercial air transport by air carriers licensed in accordance with Regulation (EC) No 1008/2008:

- 1. 'experience in continuing airworthiness' can be full-time or part-time, either as professional or on a voluntary basis.
- 2. Appropriate aeronautical maintenance training means demonstrated knowledge of the following subjects:

- Relevant parts of initial and continuing airworthiness regulations.
- Relevant parts of operational requirements and procedures, if applicable.
- The organisation's continuing airworthiness management exposition.
- Knowledge of a relevant sample of the type(s) of aircraft gained through training and/or work experience. Such knowledge should be at least at a level equivalent to Part-66 Appendix III Level 1 General Familiarisation and could be imparted by a Part-147 organisation, by the manufacturer, or by any other organisation accepted by the competent authority.
 - 'Relevant sample' means that these courses should cover typical systems embodied in those aircraft being within the scope of approval.
- Maintenance methods.

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

39) GM M.A.708 is added as follows:

'GM 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.

For CS-25 aeroplanes, adequate knowledge of the airworthiness limitations should cover those contained in CS-25 Book 1, Appendix H, paragraph H25.4 and fuel tank system airworthiness limitations including critical design configuration control limitations (CDCCL).²

40) GM M.A.708(b)(4) is added as follows:

'GM 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.'

- 41) AMC M.A.708(c) is deleted.
- 42) AMC1 M.A.708(c) is added as follows:

'AMC1 M.A.708(c) Continuing airworthiness management

1. In case of complex motor-powered aircraft, aircraft used for CAT operations, aircraft used for

commercial specialised 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 points (2), (3), (5) and (6). If the CAMO does not hold the appropriate maintenance organisation approval (Subpart F organisation approval or a Part-145 approval), then the CAMO should conclude a contract with the appropriate organisation(s).

- 2. The CAMO bears the responsibility for the airworthy condition of the aircraft for which it performs the continuing airworthiness management. Thus, it should be satisfied before the intended flight that all required maintenance has been properly carried out.
- The CAMO should agree with the operator on the process to select a maintenance organisation before concluding any contract with a maintenance organisation.
- 4. The fact that the CAMO has contracted a maintenance organisation approved under Subpart F or Part-145 should 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 organisation(s) should 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 should 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 should be paid to procedures and responsibilities to ensure that all maintenance work is performed, service bulletins are analysed 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.
- 8. Appendix XI to this AMC gives further details on the subject.'
- 43) AMC2 M.A.708(c) is added as follows:

'AMC2 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 organisation. It is possible to contract another operator/CAMO (secondary operator/CAMO) that does not hold a maintenance organisation 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 should include appropriate procedures to ensure that all maintenance is ultimately carried out on time by approved maintenance organisations in accordance with the CAMO's data. In particular, the quality system procedures should place great emphasis on monitoring compliance with the above. The list of approved maintenance organisations, or a reference to this list, should be included in the CAMO's continuing airworthiness management exposition.
- 2. This contract should not preclude the CAMO from ensuring that all maintenance is performed by appropriately approved organisations which comply with the M.A.201 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 organisations rather than sending themselves different types of components to various maintenance organisations approved under Part-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 organisations 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 aeroplane between operators where the parties, for consistency or continuity reasons (especially for short-term lease agreements), find it appropriate to keep the aeroplane under the current maintenance arrangement. Where this arrangement involves various 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.'

44) GM M.A.708(c) is added as follows:

GM 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.'

45) AMC M.A.708(c)(1) is amended as follows:

'AMC M.A.708(c)(1d) Continuing airworthiness management - unscheduled maintenance

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

46) AMC M.A.709 is amended as follows:

'AMC 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 should establish appropriate procedures or provisions in the contract with the customer.

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

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

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

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

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

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

Continuing airworthiness management organisations may seek authorisation for indirect approval in order to amend the aircraft maintenance programme mentioned above in accordance with M.A.302(c). The indirect approval procedure should include provisions to notify to the competent authority that an aircraft maintenance programme specific for a customer has been created. The reason is that, according to M.A.704(a)9, for aircraft not involved in commercial air transport used by air carriers licensed in accordance with Regulation (EC) No 1008/2008, the Continuing Airworthiness Management Exposition (CAME) only needs to include the reference to the baseline/generic maintenance programme.'

47) AMC M.A.710(a) is amended as follows:

'AMC M.A.710(a) Airworthiness review

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

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

- 2. The CAMO should develop procedures for the airworthiness review staff to produce a compliance report that confirms the above have been reviewed and found in compliance with Part-M.'
- 48) AMC M.A.711(a)(3) is added as follows:

AMC M.A.711(a)(3) Privileges of the organisation

SUBCONTRACTING OF CONTINUING AIRWORTHINESS TASKS

- The CAMO may subcontract certain continuing airworthiness management tasks to qualified persons or organisations. The subcontracted person or organisation 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 organisation (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 should be satisfied that the actions taken by the subcontracted person or organisation meet the standards required by Subpart G. Therefore, the CAMO management of such activities should be accomplished:
 - (a) by active control through direct involvement, and/or

- (b) by endorsing the recommendations made by the subcontracted person or organisation.
- In order to retain ultimate responsibility, the CAMO should 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 programme 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 should 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 organisations.
- 6. With the exception of engines and auxiliary power units, contracts would normally be limited to one organisation per aircraft type for any combination of the activities described in Appendix II. Where contracts are made with more than one organisation, the CAMO should demonstrate that adequate coordination controls are in place and that the individuals' responsibilities are clearly defined in the related contracts.
- 7. Contracts should not authorise the subcontracted organisation to subcontract to other organisations elements of the continuing airworthiness management tasks.
- 8. The competent authority should exercise oversight of the subcontracted activities through the CAMO approval. The contracts should be acceptable to the competent authority. The CAMO should only subcontract to organisations which are specified by the competent authority on EASA Form 14.
- 9. The subcontracted organisation should agree to notify the CAMO of any changes affecting the contract as soon as practical. The CAMO should then inform its competent authority. Failure to do so may invalidate the competent authority's acceptance of the contract.
- 10. Appendix II to AMC M.A.711(a)(3) provides information on the subcontracting of continuing airworthiness management tasks.'
- 49) AMC M.A.711(c) is amended as follows:

'AMC M.A.711(c) Privileges of the organisation

The sentence 'for the particular aircraft for which the organisation is approved to issue the airworthiness review certificate' contained in M.A.711(c) means that:

- For aircraft used in commercial air transport by air carriers licensed in accordance with Regulation (EC) No 1008/2008, and for aircraft above 2 730kg MTOM, except balloons, the permit to fly can only be issued for aircraft which are in a controlled environment and are managed by that CAMO.
- For aircraft not involved in commercial air transport of 2 730kg MTOM and below not used by air carriers licensed in accordance with Regulation (EC) No 1008/2008, and for all balloons, the permit to fly can be issued for any aircraft.'

50) AMC M.A.713 is replaced by the following:

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

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

51) In AMC M.A.801, point 5 is amended as follows:

'AMC M.A.801 Aircraft certificate of release to service after embodiment of a Standard Change or a Standard Repair (SC/SR)

(...)

5. Record-keeping

The legal or natural person responsible (see paragraph 1. above) for the embodiment of the change/repair should keep the records generated with the SC/SR as required by Part-M or Part-145 and CS-STAN.

In addition, M.A.305 requires that the aircraft owner (or CAMO, if a contract i.a.w. M.A.201(e) M.A.201 exists) keeps the status of the changes/repairs embodied in/on the aircraft in order to control the aircraft configuration and manage its continuing airworthiness.

With regard to SCs/SRs, the information provided to the owner or CAMO may be listed in Form 123 and should include, as required, a copy of any modified aircraft manual and/or instructions for continuing airworthiness. All this information should normally be consulted when the aircraft undergoes an airworthiness review, and, therefore, a clear system to record the embodiment of SCs/SRs, which is also easily traceable, would be of help during subsequent aircraft inspections.

(...)'

52) In AMC M.A.801, the section 'Notes' at the end of the EASA Form 123 is amended as follows:

'<u>Notes:</u>

Original remains with the legal or natural person responsible for the embodiment of the SC/SR.

The aircraft owner should retain a copy of this form.

The aircraft owner should be provided with copies of the documents referenced in boxes 5 and 7 and those in box 6 marked with an asterisk '*'.

The 'relevant paragraphs' in boxes 9a and 9b refer to the applicable paragraphs of 'Subpart A – General' of CS-STAN and those of the SC/SR quoted in box 2.

For box 12, when the aircraft owner has signed a contract i.a.w. M.A.201 M.A.201(e)(i), it is possible that the Continuing Airworthiness Management Organisation (CAMO) representative signs box 12 and provides all relevant information to the owner before next flight.'

53) In AMC M.A.803, point 1 is amended as follows:

'AMC M.A.803 Pilot-owner authorisation

- 1. Privately operated means the aircraft is not-operated pursuant to M.A.201(h) and (i).
- (...)′
- 54) AMC M.A.901(b) is amended as follows:

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

- 1. If the continuing airworthiness of the aircraft is not managed according to an Appendix I Continuing airworthiness arrangement contract, the aircraft should be considered to be outside a controlled environment. Nevertheless, such arrangement contract is not necessary when the operator and the CAMO are the same organisation.
- 2. The fact that limited pilot-owner maintenance as defined in M.A.803(b) is not carried out and released by an approved maintenance organisation does not change the status of an aircraft in a controlled environment providing the CAMO under contract has been informed of any such maintenance carried out.'
- 55) AMC M.B.102(a) is amended as follows:

'AMC M.B.102(a) Competent authority — General

- In deciding upon the required airworthiness organisational structure, the competent authority should review the number of certificates to be issued, the number and size of potential operators, the number of M.A. Subpart F approved maintenance organisations and M.A. Subpart G continuing airworthiness management organisations CAMOs within that Member State, as well as the level of civil aviation activity, number and complexity of aircraft and the size of the Member State's aviation industry.
- The competent authority should retain effective control of important inspection functions and not delegate them in such a way that aircraft owners, operators, M.A. Subpart F approved maintenance organisations and M.A. Subpart G continuing airworthiness management organisations -CAMOs, in effect, regulate themselves in airworthiness matters.
- 3. The set-up of the organisational structure should ensure that the various tasks and obligations of the competent authority are not relying on individuals. That means that a continuing and undisturbed fulfilment of these tasks and obligations of the competent authority should also be guaranteed in case of illness, accident or leave of individual employees.'
- 56) AMC M.B.102(c) is amended as follows:

'AMC1 M.B.102(c) Competent authority — Qualification and training

- 1. Competent authority inspectors should have:
 - 1.1. practical experience and expertise in the application of aviation safety standards and safe operating practices;

- 1.2. comprehensive knowledge of:
 - (a) relevant parts of implementing rules, certification specifications and guidance material;
 - (b) the competent authority's procedures;
 - (c) the rights and obligations of an inspector;
 - (d) quality systems;
 - (e) continuing airworthiness management;
 - (f) operational procedures when affecting the continuing airworthiness management of the aircraft or the maintenance.
- 1.3. training on auditing techniques.
- 1.4. five years relevant work experience to be allowed to work as an inspector independently. This may include experience gained during training to obtain the subparagraph 1.5 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 formalised training course including Fuel Tank Safety (FTS) training as described in Appendix XII to AMC to M.A.706(f) and AMC1 M.B.102(c). These courses should be at least at a level equivalent to Part-66 Appendix III Level 1 General Familiarisation.

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

- 1.7. knowledge of maintenance standards.
- 2. In addition to technical competency, inspectors should have a high degree of integrity, be impartial in carrying out their tasks, be tactful, and have a good understanding of human nature.
- 3. A programme for continuation training should be developed which provides for the inspectors, at regular intervals, to visit appropriate manufacturers and attend technical symposia as well as training or refresher courses to gain first-hand knowledge of new developments. As a general policy, it is not desirable for the inspectors to obtain technical qualifications from those entities under their direct regulatory jurisdiction.'
- 57) AMC2 M.B.102(c) is added as follows:

'AMC2 M.B.102(c) Competent authority — Qualification and training

AIRCRAFT CONTINUING AIRWORTHINESS MONITORING (ACAM) INSPECTORS

- 1. ACAM in-depth surveys should be performed by competent authority inspectors qualified in accordance with M.B.102(c).
- 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).'

58) AMC M.B.301(b) is amended as follows:

'AMC M.B.301(b) Maintenance programme

- 1. When assessing aircraft maintenance programmes for approval, the competent authority should verify that the maintenance programme is acceptable for the continueding airworthiness of the specific aircraft listed and it is appropriate for the proposed operating environment and scheduled utilisation.
- 2. The competent authority should assess the contents taking into account the origins of the document, i.e. the manufacturer's recommended maintenance programme, an MRB report, the CAMO or operator's own experience or another approved programme.
- 3. A competent authority may elect to publish a proposed maintenance schedule for a piston engined engine aircraft type or a group of piston engine aircraft types below 2 730 kgKgs maximum take-off 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 a competent authority proposed maintenance schedule, all the out of phase manufacturer recommendations should be incorporated into the final maintenance programme in order for it to be approved.
- 4. A copy of the approved programme should be retained by the competent authority, unless the programme is approved by a CAMO.
- 5. The documentation issued by the competent authority to approve the operator's aircraft maintenance programme may include details of who may issue certificates of release to service in a particular situation and may define which tasks are considered as complex maintenance tasks or limited pilot owner maintenance according to Appendix VIII to Part-M.
- 6. In the case of commercial air transport aircraft used by air carriers licensed in accordance with Regulation (EC) No 1008/2008 or large complex motor-powered aircraft, the development of the approved operator's aircraft maintenance programme is dependent upon sufficient satisfactory in-service experience which has been properly processed. In general, the task being considered for escalation beyond the MRB limits should have been satisfactorily repeated at the existing frequency several times before being proposed for escalation. Appendix I to AMC M.A.302 and M.B.301(b) gives further information.
- 7. The competent authority may approve an incomplete maintenance programme at the start of operation of an aircraft or an operator, subject to limiting the approval of the maintenance programme to a period that does not exceed any required maintenance not yet approved.
- 8. If the competent authority is no longer satisfied that a safe operation can be maintained, the approval of a maintenance programme or part of it may be suspended or revoked. Events giving rise to such action include:
 - 8.1. An operator changing the utilisation of an aircraft;
 - 8.2. The owner or CAMO has failed to ensure that the programme reflects the maintenance needs of the aircraft such that safe operation can be assured.'
- 59) AMC M.B.303 is deleted.
60) AMC1 M.B.303(a) is added as follows:

'AMC1 M.B.303(a) Aircraft continuing airworthiness monitoring (ACAM)

ACAM SURVEY PROGRAMME — SCOPE

- 1. The competent authority should establish a programme covering in-depth surveys and ramp surveys.
- 2. The competent authority's survey programme should 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 programme should prioritise the operator/fleet/aircraft/key risk elements which are causing the greatest concern.
- 4. The survey programme should also include a certain percentage of unannounced ramp surveys.
- 5. The survey programme and changes thereto should be documented.'
- 61) AMC2 M.B.303(a) is added as follows:

'AMC2 M.B.303(a) Aircraft continuing airworthiness monitoring (ACAM)

ACAM SURVEY PROGRAMME — CREDITING

- 1. Where the ACAM survey can be linked to the oversight of an approved organisation, then credit can be granted in the monitoring process of that approved organisation.
- The competent authority may take credit of aircraft airworthiness inspections qualifying for the ACAM programme when these inspections are performed in accordance with the provisions of Regulation (EC) No 216/2008 and its implementing rules.'
- 62) GM M.B.303(a) is added as follows:

'GM M.B.303(a) Aircraft continuing airworthiness monitoring (ACAM) COMBINED SURVEYS

In the interest of efficient use of competent authority resources, aircraft inspection procedures may be established covering the combined scope of various aircraft survey tasks performed by a competent authority, 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 M.B.704(c);
- product audit in accordance with Part-145 or Part-M Subpart F;
- review under supervision for airworthiness review staff authorisation, provided it covers the full

scope of the physical survey in accordance with M.A.710(c); and

ramp inspections performed in accordance with ARO.OPS³ or ARO.RAMP⁴.

Depending on which type of survey is required, any actual survey performed may cover a subset of the combined scope.'

- 63) AMC M.B.303(c) is deleted.
- 64) AMC M.B.303(d) is added as follows:

'AMC M.B.303(d) Aircraft continuing airworthiness monitoring (ACAM)

FINDINGS ANALYSIS

- 1. The process should analyse 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 organisation(s) or individual(s) interacting with the continuing airworthiness of the aircraft or aircraft fleet.
- 2. The outcome of the analysis should be used for the further adjustment of the ACAM programme as well as for the purpose of M.B.303(e), (f) and (g).
- 3. The purpose of this process is not to analyse individual findings, but to address systemic issues or issues that become apparent at individual, corporate or aggregate level.'
- 65) AMC M.B.701(a) is replaced by the following:

AMC M.B.701(a) Application

- 1. The documents listed in M.B.701(a) points (1), (2) and (3) may require approval. Draft documents should be submitted at the earliest opportunity so that assessment of the application can begin. Grant or change cannot be effected until the competent authority has received the completed documents. This information is required to enable the competent authority to conduct its assessment in order to determine the volume of oversight work necessary and the locations at which it will be accomplished.
- 2. If considered appropriate for the assessment, the competent authority 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 organisations to demonstrate that arrangements are in place for all base and scheduled line maintenance for an appropriate period of time.'

⁴ Subpart RAMP of Part-ARO 'Authority requirements for air operations' to Commission Regulation (EU) No 965/2012.

³ Subpart OPS of Part-ARO 'Authority requirements for air operations' to Commission Regulation (EU) No 965/2012.

66) AMC M.B.702(b) is amended as follows:

'AMC M.B.702(b) Initial approval

- 1. The competent authority should indicate approval of the continuing airworthiness management exposition in writing.
- Contracts for subcontracting continuing airworthiness management tasks by operators CAMOs should be included in the continuing airworthiness organisation exposition. The competent authorities should verify that the standards set forth in AMC M.A.201(h)1711(a)(3) have been met when approving the exposition.
- 3. The competent authority while investigating the acceptability of the proposed subcontracted continuing airworthiness management tasks arrangements will take into account, in the subcontracted organisation, all other such contracts that are in place irrespective of state of registry in terms of sufficiency of resources, expertise, management structure, facilities and liaison between the contracting continuing airworthiness management organisation CAMO, the subcontracted organisation and, where applicable, the contracted Part-145 maintenance organisation(s).'
- 67) AMC M.B.704(b) is amended as follows:

'AMC M.B.704(b) Continuing oversight

- 1. Where the competent authority has decided that a series of audit visits are necessary to arrive at a complete audit of an approved continuing airworthiness management organisation, the program should indicate which aspects of the approval will be covered on each visit.
- 2. It is recommended that part of an audit concentrates on two ongoing aspects of the M.A. Subpart G approval, namely the organisations internal self-monitoring quality reports produced by the quality monitoring personnel to determine if the organisation is identifying and correcting its problems and secondly the number of concessions granted by the quality manager.
- 3. At the successful conclusion of the audit(s) including verification of the exposition, an audit report form should be completed by the auditing surveyor including all recorded findings, closure actions and recommendation. An EASA Form 13 should be used for this activity.
- 4. Credit may be claimed by the competent authority Ssurveyor(s) for specific item audits completed during the preceding 23 month period subject to four conditions:
 - (a) the specific item audit should be the same as that required by M.A. Subpart G latest amendment, and
 - (b) there should be satisfactory evidence on record that such specific item audits were carried out and that all corrective actions have been taken, and
 - (c) the competent authority surveyor(s) should be satisfied that there is no reason to believe standards have deteriorated in respect of those specific item audits being granted a back credit;
 - (d) the specific item audit being granted a back credit should be audited not later than 24 months after the last audit of the item.
- 5. When an operator CAMO subcontracts continuing airworthiness management tasks, all subcontracted organisations should also be audited by the competent authority of operator 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 competent authority auditing surveyor should

always ensure that he/she is accompanied throughout the audit by a senior technical member of the operatorCAMO. All findings should be sent to and corrected by the operatorCAMO.

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

68) AMC M.B.705(a)(1) is amended as follows:

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

- **1.** For a level 1 finding the competent authority should inform the owner/operator and the competent authority of any potentially affected aircraft in order that corrective action can be taken to ensure possible unsafe conditions on these aircraft are corrected before further flight.
- 2. Furthermore, a level 1 finding could lead to a non-compliance to be found on an aircraft as specified in M.B. 303(gf). In this case, proper action as specified in M.B.303(h) would be taken.'
- 69) In AMC M.B.706, point 5 is amended as follows:

'AMC M.B.706 Changes

(...)

- 5. The approved continuing airworthiness management organisation CAMO should submit each exposition amendment to the competent authority whether it be an amendment for competent authority approval or an indirectly approved amendment. Where the amendment requires competent authority approval, the competent authority when satisfied, should indicate its approval in writing. Where the amendment has been submitted under the indirect approval procedure the competent authority should acknowledge receipt in writing.'
- 70) AMC M.B.902(b)(1) is amended as follows:

'AMC M.B.902(b)(1) Airworthiness review by the competent authority

For all aircraft used in commercial air transport by air carriers licensed in accordance with Regulation (EC) No 1008/2008 and for any other aircraft, other than balloons, above 2 730 kg MTOM, formal aeronautical maintenance training means training (internal or external) supported by evidence on the following subjects:

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

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

71) AMC M.B.902(b)(2) is amended as follows:

'AMC M.B.902(b)(2) Airworthiness review by the competent authority

For all balloons and any other aircraft of 2 730 kg MTOM and below, not used in commercial air transport

by air carriers licensed in accordance with Regulation (EC) No 1008/2008, appropriate aeronautical maintenance training means demonstrated knowledge of the following subjects:

- Relevant parts of continuing airworthiness regulations.
- Relevant parts of operational requirements and procedures, if applicable.
- Knowledge of the internal procedures for continuing airworthiness.
- Knowledge of a relevant sample of the type(s) of aircraft gained through training and/or work experience. Such knowledge should be at least at a level equivalent to Part-66 Appendix III Level 1 General Familiarisation.
 - 'Relevant sample' means that these courses should cover typical systems embodied in those aircraft being within the scope of approval.

This knowledge may be demonstrated by documented evidence or by an assessment performed by the competent authority. This assessment should be recorded.'

72) GM to Appendix I is added as follows:

'GM to Appendix I 'Continuing airworthiness management contract'

An operator should establish adequate coordination between flight operations and the CAMO to ensure that both will receive all the necessary information on the condition of the aircraft to enable them perform their tasks.'

73) Appendix I to AMC M.A.302 and AMC M.B.301(b) is amended as follows:

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

1. General requirements

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

- (d) Repair Assessment.
- (e) Widespread Fatigue Damage.
- 1.1.14. If applicable, details of Critical Design Configuration Control Limitations together with appropriate 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 programme in 1.1.13.
- 1.1.16. The periods at which overhauls and/or replacements by new or overhauled components should be made.
- 1.1.17. A cross-reference to other documents approved by the Agency which contain the details of maintenance tasks related to mandatory life limitations, Certification Maintenance Requirements (CMR's) and ADs.

Note: To prevent inadvertent variations to such tasks or intervals these items should not be included in the main portion of the maintenance programme document, or any planning control system, without specific identification of their mandatory status.

- 1.1.18. Details of, or cross-reference to, any required reliability programme or statistical methods of continuous Surveillance.
- 1.1.19. A statement that practices and procedures to satisfy the programme should be to the standards specified in the TC holder's Maintenance Instructions. In the case of approved practices and procedures that differ, the statement should refer to them.
- 1.1.20. Each maintenance task quoted should be defined in a definition section of the programme.

2. Programme basis

2.1. An owner or a CAMO aircraft maintenance programme should normally be based upon the MRB report, where applicable, and the TC holder's maintenance planning document or Chapter 5 of the maintenance manual, (i.e. the manufacturer's recommended maintenance programme).

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

- 2.2. For a newly type-certificated aircraft where no previously approved maintenance programme exists, it will be necessary for the owner or the 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 programme for approval.
- 2.3. For existing aircraft types it is permissible for the operator owner or CAMO to make comparisons with maintenance programmes previously approved. It should not be assumed that a programme approved for one owner or the CAMO would automatically be approved for another.

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

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

2.4. Critical Design Configuration Control Limitations (CDCCL)

If CDCCL have been identified for the aircraft type by the TC/STC holder, maintenance instructions should be developed. CDCCL's are characterised by features in an aircraft installation or component that should be retained during modification, change, repair, or

scheduled maintenance for the operational life of the aircraft or applicable component or part.

3. Amendments

Amendments (revisions) to the approved maintenance programme should be made by the owner or the 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 programme with the approval of the competent authority or through a procedure developed in the maintenance programme and approved by the competent authority.

5. Periodic review of maintenance programme contents

- 5.1. The owner or the CAMO approved maintenance programmes should be subject to periodic review to ensure that they reflect current TC holder's recommendations, revisions to the MRB report if applicable, mandatory requirements and the maintenance needs of the aircraft.
- 5.2. The owner or the CAMO should review the detailed requirements at least annually for continued validity in the light of operating experience.

6. Reliability Programmes

- 6.1. Applicability
- 6.1.1. A reliability programme should be developed in the following cases:
 - (a) the aircraft maintenance programme is based upon MSG-3 logic;
 - (b) the aircraft maintenance programme includes condition monitored components;
 - (c) the aircraft maintenance programme 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 Programme need not be developed in the following cases:
 - (a) the maintenance programme is based upon the MSG-1 or 2 logic but only contains hard time or on condition items;
 - (b) the aircraft is not a large complex motor-powered aircraft according to Part-M;
 - (c) the aircraft maintenance programme provides overhaul time periods for all significant system components;
 - (d) 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 programme 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 6 aircraft of the same type.
- 6.2.2. The requirement for a reliability programme is irrespective of the CAMO fleet size.
- 6.2.3. Complex reliability programmes could be inappropriate for a small fleet. It is recommended that such CAMOs tailor their reliability programmes to suit the size and complexity of Page 45 of 117

operation.

- 6.2.4. One difficulty with a small fleet of aircraft consists in the amount of available data which can be processed: when this amount is too low, the calculation of alert level is very coarse. Therefore 'alert levels' should be used carefully.
- 6.2.5. A CAMO of a small fleet of aircraft, when establishing a reliability programme, should consider the following:
 - (a) The programme should focus on areas where a sufficient amount of data is likely to be processed.
 - (b) When the amount of available data is very limited, the CAMO engineering judgement is then a vital element. In the following examples, careful engineering analysis should be exercised before taking decisions:
 - A '0' rate in the statistical calculation may possibly simply reveal that enough statistical data is missing, rather 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 competent authority should impose additional restrictions on the MRB/MPD tasks intervals (e.g. no variations or only minor evolution are possible, and with the competent authority approval).
- 6.3. Engineering judgement
- 6.3.1. Engineering judgement is itself inherent to reliability programmes as no interpretation of data is possible without judgement. In approving the CAMO maintenance and reliability programmes, the competent authority is expected to ensure that the organisation which runs the programme (it may be CAMO, or an Part-145 organisation under contract) hires sufficiently qualified personnel with appropriate engineering experience and understanding of reliability concept (see AMC M.A.706).
- 6.3.2. It follows that failure to provide appropriately qualified personnel for the reliability programme may lead the competent authority to reject the approval of the reliability programme and therefore the aircraft maintenance programme.
- 6.4. Contracted maintenance
- 6.4.1. Whereas M.A.302 specifies that, the aircraft maintenance programme -which includes the associated reliability programme-, should be managed and presented by the CAMO to the competent authority, it is understood that the CAMO may delegate subcontract certain functions to the Part-145 maintenance organisation under contract, provided this organisation proves to have the appropriate expertise.
- 6.4.2. These functions are:

- (a) Developing the aircraft maintenance and reliability programmes,
- (b) Performing the collection and analysis of the reliability data,
- (c) Providing reliability reports, and
- (d) Proposing corrective actions to the CAMO.
- 6.4.3. Notwithstanding the above, decision to implement a corrective action (or the decision to request from the competent authority 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 should be justified and documented.
- 6.4.4. The arrangement between the CAMO and the Part-145 maintenance organisation should be specified in the maintenance contract (see Aappendix 11 XI to AMC M.A.708(c)) and the relevant CAME, and MOE maintenance organisation procedures.
- 6.5. Reliability programme

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

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

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

6.5.3. Terms and definitions.

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

- 6.5.4. Information sources and collection.
- 6.5.4.1. Sources of information should be listed and procedures for the transmission of information from the sources, together with the procedure for collecting and receiving it, should be set out in detail in the CAME or MOE as appropriate.
- 6.5.4.2. The type of information to be collected should be related to the objectives of the Programme and should be such that it enables both an overall broad based assessment of the information Page 47 of 117

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 should 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 should be stated. The format should be such that the identification of trends, specific highlights and related events would be readily apparent.

- 6.5.5.1. The above display of information should include provisions for 'nil returns' to aid the examination of the total information.
- 6.5.5.2. Where 'standards' or 'alert levels' are included in the programme, the display of information should be oriented accordingly.
- 6.5.6. Examination, analysis and interpretation of the information.

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

6.5.6.1. Examination.

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

6.5.6.2. Analysis and Interpretation.

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

- (a) Comparisons of operational reliability with established or allocated standards (in the initial period these could be obtained from in-service experience of similar equipment of aircraft types).
- (b) Analysis and interpretation of trends.
- (c) The evaluation of repetitive defects.
- (d) Confidence testing of expected and achieved results.
- (e) Studies of life-bands and survival characteristics.
- (f) Reliability predictions.
- (g) Other methods of assessment.
- 6.5.6.3. The range and depth of engineering analysis and interpretation should be related to the particular programme and to the facilities available. The following, at least, should be taken into account:
 - (a) Flight defects and reductions in operational reliability.
 - (b) Defects occurring on-line and at main base.
 - (c) Deterioration observed during routine maintenance.
 - (d) Workshop and overhaul facility findings.
 - (e) Modification evaluations.
 - (f) Sampling programmes.
 - (g) The adequacy of maintenance equipment and publications.
 - (h) The effectiveness of maintenance procedures.
 - (i) Staff training.
 - (j) Service bulletins, technical instructions, etc.
- 6.5.6.4. Where the CAMO relies upon contracted maintenance and/or overhaul facilities as an information input to the programme, the arrangements for availability and continuity of such information should be established and details should be included.
- 6.5.7. Corrective Actions.
- 6.5.7.1. The procedures and time scales both for implementing corrective actions and for monitoring the effects of corrective actions should be fully described. Corrective actions shall correct any reduction in reliability revealed by the programme and could take the form of:
 - (a) Changes to maintenance, operational procedures or techniques.
 - (b) Maintenance changes involving inspection frequency and content, function checks, overhaul requirements and time limits, which will require amendment of the scheduled maintenance periods or tasks in the approved maintenance programme. This may include escalation or de-escalation of tasks, addition, modification or deletion of tasks.
 - (c) Amendments to approved manuals (e.g. maintenance manual, crew manual).
 - (d) Initiation of modifications.
 - (e) Special inspections of fleet campaigns.
 - (f) Spares provisioning.

- (g) Staff training.
- (h) Manpower and equipment planning.

<u>Note</u>: 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 programme should be described, and the associated documentation should include a planned completion date for each corrective action, where applicable.
- 6.5.8. Organisational Responsibilities.

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

6.5.9. Presentation of information to the competent authority.

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

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

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

- 6.5.10.1. Each Programme should contain procedures for monitoring and, as necessary, revising the reliability 'standards' or 'alert levels'. The organisational responsibilities for monitoring and revising the 'standards' should be specified together with associated time scales.
- 6.5.10.2. Although not exclusive, the following list gives guidance on the criteria to be taken into account during the review.
 - (a) Utilisation (high/low/seasonal).
 - (b) Fleet commonality.
 - (c) Alert Level adjustment criteria.
 - (d) Adequacy of data.
 - (e) Reliability procedure audit.
 - (f) Staff training.

- (g) Operational and maintenance procedures.
- 6.5.11. Approval of maintenance programme amendment

The competent authority may authorise the CAMO to implement in the maintenance programme changes arising from the reliability programme results prior to their formal approval by the authority when satisfied that;

- (a) the Reliability Programme monitors the content of the Maintenance Programme in a comprehensive manner, and
- (b) the procedures associated with the functioning of the 'Reliability Group' provide the assurance that appropriate control is exercised by the <u>Owner/operatorCAMO</u> over the internal validation of such changes.
- 6.6. Pooling Arrangements.
- 6.6.1. In some cases, in order that sufficient data may be analysed it may be desirable to 'pool' data: i.e. collate data from a number of CAMOs of the same type of aircraft. For the analysis to be valid, the aircraft concerned, mode of operation, and maintenance procedures applied should be substantially the same: variations in utilisation between two 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/utilisation, e.g. low/high/seasonal, etc./respective fleet size operating rules applicable (e.g. ETOPS/RVSM/All Weather etc.)/operating procedures/MEL and MEL utilisation.
 - (c) Maintenance factors, such as: aircraft age maintenance procedures; maintenance standards applicable; lubrication procedures and programme; MPD revision or escalation applied or maintenance programme applicable
- 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 should be taken by the competent authority on a case by case basis.
- 6.6.3. In case of a short term lease agreement (less than 6 month) more flexibility against the para 6.6.1 criteria may be granted by the competent authority, so as to allow the owner/operatorCAMO to operate the aircraft under the same programme during the lease agreement effectivity.
- 6.6.4. Changes by any one of the CAMO 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 competent authority should 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 programme managed by the aircraft manufacturer, when the competent authority is satisfied that the manufacturer manages a reliability programme which complies with the intent of this paragraph.'

74) Appendix II to AMC M.A.201(h)1 is replaced by the following:

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

1. SUBCONTRACTED CONTINUING AIRWORTHINESS MANAGEMENT TASKS

- 1.1. To actively control the standards of the subcontracted organisation, the CAMO should employ a person or group of persons who are trained and competent in the disciplines associated with M.A Subpart G. As such, they are responsible for determining what maintenance is required, when it has to be performed, by whom and to what standard in order to ensure the continuing airworthiness of the aircraft to be operated.
- 1.2. The CAMO should conduct a pre-subcontract audit to establish that the organisation 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 should ensure that the organisation to be subcontracted has sufficient and qualified personnel who are trained and competent in the functions to be subcontracted. In assessing the adequacy of personnel resources, the CAMO should consider the particular needs of those activities that are to be subcontracted, while taking into account the subcontracted organisations existing commitments.
- 1.4. To be appropriately approved to subcontract continuing airworthiness management tasks, the CAMO should have procedures for the management control of these arrangements. The continuing airworthiness management exposition should contain relevant procedures to reflect its control of those arrangements made with the subcontracted organisation.
- 1.5. Subcontracted continuing airworthiness management tasks should be addressed in a contract between the CAMO and the subcontracted organisation. The contract should also specify that the subcontracted organisation 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 organisation should 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 organisation or the CAMO.
- 1.7. Where the subcontracted organisation develops its own procedures, they should be compatible with the continuing airworthiness management exposition and the terms of the contract. These should be accepted by the competent authority as extended procedures of the CAMO and as such should be cross-referenced from the continuing airworthiness management exposition. One current copy of the subcontracted organisation's relevant procedures should be kept by the CAMO and should be accessible to the competent authority when needed.

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

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

The CAMO should nominate the person responsible for continued monitoring and acceptance of the subcontracted organisation's procedures and their amendments. The controls used to fulfil this function should be clearly set out in the amendment section of the continuing airworthiness management exposition detailing the level of CAMO involvement. 1.9. Whenever any elements of the continuing airworthiness management tasks are subcontracted, the CAMO personnel should 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 organisation.

1.10. The CAMO should ensure that the subcontracted organisation continues to have qualified technical expertise and sufficient resources to perform the subcontracted tasks while complying with the relevant procedures. Failure to do so may invalidate the CAMO approval.

- 1.11. The contract should provide for competent authority monitoring.
- 1.12. The contract should address the respective responsibilities to ensure that any findings arising from the competent authority 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 should be specified.

2.2. Maintenance programme development and amendment

The CAMO may subcontract the preparation of the draft maintenance programme and any subsequent amendments. However, the CAMO remains responsible for assessing that the draft proposals meet its needs and for obtaining competent authority approval; the relevant procedures should specify these responsibilities. The contract should also stipulate that any data necessary to substantiate the approval of the initial programme or an amendment to this programme should be provided for CAMO agreement and/or competent authority upon request.

2.3. Maintenance programme effectiveness and reliability

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

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

When providing reliability data, the subcontracted organisation is limited to working with primary data/documents provided by the CAMO or data provided by the CAMO's contracted maintenance organisation(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 programme

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

2.5. Scheduled maintenance

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

The planning control and documentation should be specified in the appropriate supporting procedures. These procedures should typically set out the 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 organisation 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 should 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 should 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 should therefore include a provision allowing the CAMO to perform a quality surveillance (including audits) of the subcontracted organisation. 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 competent authority.

2.7. Access to the competent authority

The contract should specify that the subcontracted organisation should always grant access to the competent authority.

2.8. Maintenance data

The maintenance data used for the purpose of the contract should be specified, together with those responsible for providing such documentation and the competent authority responsible for the acceptance/approval of such data, when applicable. The CAMO should ensure that such data, including revisions, is readily available to the CAMO personnel and to those in the subcontracted organisation who may be required to assess such data. The CAMO should 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 programme,
- 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 organisation, AD embodiment is performed by a maintenance organisation. 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 should 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 should specify:

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

To fulfil the above responsibility, the CAMO should 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 organisation 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 should be specified in the contract.

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

Where the subcontracted organisation performs planning activities, it should be specified that the organisation should 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 should be such that it allows the organisation to properly perform the subcontracted planning functions. It, therefore, follows that there will need to be adequate liaison between the CAMO, the contracted maintenance organisation(s) and the subcontracted organisation. Additionally, the contract should 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 organisation should 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 should also specify what kind of feedback information (such as engine limitation, appropriate technical advice, etc.) the organisation should provide to the CAMO.

2.13. Defect control

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

For all other defects identified during maintenance, the information should 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 organisation and contracted maintenance organisation should be ensured.

The subcontracted organisation should 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 organisations should liaise with the CAMO to get its agreement following this assessment.

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

2.14. Mandatory occurrence reporting

All incidents and occurrences that meet the reporting criteria defined in Part-M and Part-145 should be reported as required by the respective requirements. The CAMO should ensure that adequate liaison exists with the subcontracted organisation and the maintenance organisation.

2.15. Continuing airworthiness records

They may be maintained and kept by the subcontracted organisation on behalf of the CAMO, which remains the owner of these documents. However, the CAMO should be provided with the current status of AD compliance and service life-limited components in accordance with the agreed procedures. The CAMO should 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 should be met. Access to the records by duly authorised members of the competent authority should 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 organisation or contracted maintenance organisation should be agreed by the CAMO.

2.17. Communication between the CAMO and the subcontracted organisation

- 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 should specify what information should 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 should be used to establish good communication between the CAMO, the subcontracted organisation and the contracted maintenance organisation. The terms of the contract should 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 should 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 organised so that the tasks to be performed are commonly agreed.

(c) Technical meeting

Scheduled meetings should be organised 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 should be organised 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 programme exists, the contract should specify the involvement of the CAMO and of the subcontracted organisation in that programme, including their participation in reliability meetings. Provision to enable competent authority participation in the periodical reliability meetings should also be made.'

75) Appendix III to GM1 M.B.303(b) is amended as follows:

'Appendix III to GM1 M.B.303(b) KEY RISK ELEMENTS

	Title	Description		
А.	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 point 21A.90B or 21A.431B of the Annex (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 issued or adopted by the Agency, which mandates actions to be performed on a aircraft to restore an acceptable level of safety, when evidence shows that the safety level of this aircraft may otherwise compromised. (Part 21A.3B)			
в.	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 and placards are defined in the individual aircraft type design. Some information may also be found in the Type Certificate Markings & placards Data Sheet, the Supplemental Type Certificates, the Flight Manual, the Aircraft Maintenance Manual, the Illustrated Parts Cataloguetc.			
B.5	Operational requirements	Items required to be installed to perform a specific type of operation.		

	Title Description		
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.	
с.	AIRCRAFT MAINTENANC	Ε	
C.1	Aircraft Maintenance Programme	A document which describes or incorporates by reference the specific scheduled maintenance tasks and their frequency of completion, the associated maintenance procedures and related standard maintenance practices necessary for the safe operation of those aircraft to which it applies.	
		The component control should consider a twofold objective for components maintenance:	
C.2	Component control	- maintenance for which compliance is <u>mandatory</u> ;	
		- maintenance for which compliance is <u>recommended</u> .	
C.3	Repairs	All repairs and unrepaired damage/degradations need to comply with the instructions of the appropriate maintenance manual (e.g. the SRM, the AMM, the CMM). With the exception of repairs contained in the certification specifications referred to in Part 21 point 21A.90B or 21A.431B of the Annex (Part 21), all repairs not defined in the appropriate maintenance manual need to be appropriately approved and recorded with the reference to the approval.	
		This includes any damage or repairs to the aircraft/engine(s)/propeller(s), and their components.	
C.4	Records	Continuing Airworthiness records are defined in M.A.305 and M.A.306 and related AMCs.	

A.1	Type design and changes to type design	The type design is the part of the approved configuration of a product, as laid down in the TCDS, common to all products of that type. With the exception of changes contained in the certification specifications referred to in Part 21 point 21A.90B or 21A.431B of the Annex (Part 21) any changes to type design shall be approved and, for those embodied, shall be recorded with the reference to the approval.
Support	ng information	Typical inspection items
Supporting information The type design consists of: 1. the drawings and specifications, and a listing of those drawings and specifications, necessary to define the configuration and the design features of the product (i.e. the aircraft, its components, etc.) shown to comply with the applicable type-certification basis and environmental protection requirements; 2. information on materials and processes and on methods of manufacture and assembly of the product necessary to ensure the conformity of the product; 3. an approved Airworthiness Limitation Section (ALS) of the Instructions for Continued Airworthiness (ICA); and 4. any other data necessary to allow by comparison the determination of the airworthiness, the characteristics of noise, fuel venting, and exhaust emissions (where applicable) of later products of the same type. The individual aircraft design is made of the type design supplemented with changes to the type design (e.g. modifications) embodied on the considered aircraft. Depending on the product State of Design. Bilateral Agreements		 Use the current type certificate data sheets (airframe, engine, propeller as applicable) and check that the aircraft conforms to its type design (correct engine installed, seat configuration, etc.). Check that changes have been approved properly (approved data is used, and a direct relation to the approved data). Check for unintentional deviations from the approved type design, sometimes referred to as concessions, divergences, or non-conformances, Technical Adaptations, Technical Variations, etc. Check cabin configuration (LOPA). Check for embodiment of STC's, and, if any Airworthiness Limitations Section (ALS)/FM/MEL/WBM and revisions are needed, they have been approved and complied with. Aircraft S/N applicable Applicable engines Applicable engines Seating configuration Exits Check that the individual aircraft design/configuration is properly established and used as a reference.

Reference documents: EASA	- 21.A.31
	- 21.A.41
	- 21.A.61
	- 21.A.90A
	- 21.A.90B
	- M.A.304
	- M.A.305
	- M.A.401

A.2	Airworthiness limitations	An airworthiness limitation is a boundary beyond which an aircraft or a component thereof must not be operated, unless the instruction(s) associated with this airworthiness limitation is complied with.
Support	ing information	Typical inspection items
instructions whose compliance is mandatory as part of the type design. They apply to some scheduled or unscheduled instructions that have been developed to prevent and/or to detect the most		 Check that the Aircraft Maintenance Programme (AMP) reflects airworthiness limitations and associated instructions (standard or alternative) issued by the relevant design approval holders and is approved by the competent authority, if applicable. Check that the aircraft and the components thereof comply with the approved AMP.
severe f	ailure.	 Check the current status of life-limited parts. The current status of life-limited parts is to be
	nainly apply to maintenance (mandatory modification, nent, inspections, checks, etc., but can also apply to	maintained throughout the operating life of the part.
•	ons to control critical design configurations (for example	Typical Airworthiness Limitation items:
Critical I tank saf	Design Configuration Control Limitations (CDCCL) for the fuel	- Safe Life ALI (SL ALI)/Life-limited parts,
		- Damage Tolerant ALI (DT ALI)/Structure, including ageing aircraft structure,
		- Certification Maintenance Requirements (CMR),
		 Ageing Systems Maintenance (ASM), including Airworthiness Limitations for Electrical Wiring Interconnection System (EWIS),
		- Fuel Tank Ignition Prevention (FTIP)/Flammability Reduction Means (FRM),
		- CDCCL, check wiring if any maintenance carried out in same area - wiring separation,
		- Ageing fleet inspections mandated through ALS or AD are included in the AMP.
Referen	ce documents: EASA	- 21.A.31
		- 21.A.61
		- CS 22.1529
		- CS 23.1529, Appendix G, para. G25.4
		- CS 25.1529, Appendix H, para. H25.4

A.2	Airworthiness limitations	An airworthiness limitation is a boundary beyond which an aircraft or a component thereof must not be operated, unless the instruction(s) associated with this airworthiness limitation is complied with.
		- CS 27.1529, Appendix A, para. A27.4
		- CS 29.1529, Appendix A, para. A29.4
		- CS 31HB.82
		- CS-APU 30
		- CS-E 25
		- CS-P 40
		- CS VLR.1529, Appendix A, para. A.VLR.4
		- M.A.302
		- M.A.305
		- M.A.710(a)(7)

A.3	Airworthiness Directives	An Airworthiness Directive means a document issued or adopted by the Agency, 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 (Part 21A.3B).
Support	ing information	Typical inspection items
Any Airworthiness Directive issued by a State of Design for an aircraft imported from a third country, or for an engine, propeller, part or appliance imported from a third country and installed on an aircraft registered in a Member State, shall apply unless the Agency has issued a different Decision before the date of entry into force of that airworthiness directive.		 Check if all ADs applicable to the airframe, engine(s), propeller(s) and equipment have been incorporated in the AD-status, including their revisions. Check records for correct AD applicability (including ADs incorrectly listed as non-applicable). Check by sampling in the current AD status that applicable ADs have been or are planned to be (as appropriate) carried out within the requirements of these Airworthiness Directives, unless otherwise specified by the Agency (AMOC). Check that applicable ADs related to maintenance are included into the Aircraft Maintenance Programme. Check that task-cards correctly reflect AD requirements or refer to procedures and standard practises referenced in ADs. Sample during a physical survey some ADs for which compliance can be physically checked.
Reference documents: EASA		 21.A.3B 21.B.60 21.B.326 21.B.327 M.A.201 & AMC M.A.201(h) § 4 M.A.303 M.A.305(d) & (h) M.A.401(a) & (b) M.A.501(b) M.A.503(a)

-

- M.A.504(a) 2
- M.A.504 & AMC M.A.504(c) § 1 (f)
- M.A.613 & AMC M.A.613(a) § 2.4.3, 2.5.2, 2.6.1(h) & 2.8(b)
- M.A.708(b)8
- M.A.709(a)
- M.A.710(a)5
- M.A.801 & AMC M.A.801(h)

B.1	Aircraft documents	Aircr	aft certificates and documents necessary for operations.
Supporting information		Турі	cal inspection items
The aircraft certificates and documents necessary for operations may include, but are not necessarily limited to:		1.	Check that all certificates and documents pertinent to the aircraft and necessary for operations (or copies, as appropriate) are on board.
- Certifi	cate of Registration;	2.	Check C of A modification/Aircraft identification.
- Certifi	cate of Airworthiness;	3.	Check that noise certificate corresponds to aircraft configuration.
- Noise	certificate;	4.	Check Permit to fly and Flight Condition when necessary.
- Aircra	ft certificate of release to service;	5.	Check that there is an appropriate aircraft certificate of release to service.
- Techn	ical log book, if required;		
- Airwo	rthiness Review Certificate;		
- Etc.			
Reference	e documents: EASA	- Pa	art-21 Subpart H
		- 2	1.A.175
		- 2	1.A.177
		- 2	1.A.182
			art-21 Subpart I
			art-21 Subpart P
			art-21 Subpart Q
			1.A.801
			1.A.807
			1.A.201(a)(2 3)
		- IV	1.A.801

B.2	Flight Manual	A manual, associated with the certificate of airworthiness, containing operational limitations, instructions and information necessary for the flight crew members for the safe operation of the aircraft.
Support	ing information	Typical inspection items
The Flight Manual needs to reflect the current status/configuration of the aircraft. When it does not, it may provide flight crew members with wrong information. This may lead to errors and/or to override limitations that could contribute to severe failure.		 Check the conformity of the Flight Manual (FM), latest issue, with aircraft configuration, including modification status, (AD, SB, STC etc.). Check: the FM approval, revision control, Supplement to FM; the impact of modification status on noise and weight & balance; additional required manuals (QRH/FCOM/OM-B etc.); FM limitations.
Reference documents: EASA		 21.A.174(b)2(iii), (b)3(ii) 21.A.204(b)1(ii), (b)2(i) M.A.305, AMC M.A.305(d) M.A.710(a)2 M.A.710(c)2 AMC M.A.710(a)1 AMC M.A.901(d) and (g) AMC M.A.902(b)3 AMC M.A.904(a)(2) points 2(c) and 2(k) AMC M.A.904(b) point (c)

B.3	Mass & balance	Mass and balance data is required to make sure the aircraft is capable of operating within the approved envelope.
Supporting in	ormation	Typical inspection items
The mass and balance report needs to reflect the actual configuration of the aircraft. When it does not, the aircraft might be operated outside the certified operating envelope.		 Check that mass and balance report is valid, considering current configuration. Make sure that modifications and repairs are taken into account in the report. Check that equipment status is recorded on the mass and balance report. Compare current mass and balance report with previous report for consistency.
Reference documents: EASA		 M.A.305(d)5 M.A.708(b)(10) M.A.710(a)(9), AMC M.A.710(a)1 Part-CAT: CAT.POL.MAB.100 and related AMCs/GM Part-NCC: NCC.POL.105 and related AMC/GM Part-NCO: NCO.POL.105 and related AMC/GM Part-SPO: SPO.POL.105 and related AMC/GM

B.4 Markings & placards	Markings and placards are defined in the individual aircraft type design. Some information may also be found in the TCDS, the Supplemental Type Certificates (STC), the FM, the AMM, the IPC, etc.
Supporting information	Typical inspection items
Markings and placards on instruments, equipment, controls, etc. shall include such limitations or information as necessary for the direct attention of the crew during flight. Markings and placards or instructions shall be provided to give any information that is essential to the ground handling in order to preclude the possibility of mistakes in ground servicing (e.g. towing, refuelling) that could pass unnoticed and that could ieopardise the safety of the aircraft in subsequent flights. Markings and placards or instructions shall be provided to give any information essential in the prevention of passenger injuries. National registration markings must be installed. They include registration, possible flag, fireproof registration plate. Product data plates must be installed. When markings and placards are missing, or unreadable, or not properly installed, mistakes or aircraft damages may occur and could subsequently contribute to a severe failure.	 emergency exit markings instructions and passenger information signs and placards. 2. Check that all installed placards are readable. 3. Check the Flight Manual versus the instruments. (General Aviation usually). 4. Check registration markings, including State of Registry fireproof nameplate. 5. Check product data plates. Examples of markings & placards: door means of opening, each compartment's weight/load limitation/placards stating limitation on contents, passenger information signs, including no smoking signs, emergency exit marking,

	 break-in markings, inflate tyres with nitrogen, RVSM + static markings.
Reference documents: EASA	 21.A.175 21.A.715 21.A.801 21.A.803 21.A.804 21.A.805 21.A.805 21.A.807 relevant CS for the aircraft type being inspected M.A.501 M.A.710(c) AMC M.A.504(e) AMC M.A.603(c) AMC M.A.904(a)(2) points 2(f) & 2(k)

B.5	Operational requirements	Requirements for the type of operation are complied with (e.g. equipment, documents, approvals).
Supporti	ng information	Typical inspection items
code incl In case	udes all equipment required by the applicable operational luding national requirements. of malfunction, it can create a hazardous situation. y emergency equipment needs attention during this on.	 Check permits & approvals required for type of operation. Check for the presence and serviceability of equipment required by operational approvals. Check safety equipment, check that emergency equipment is readily accessible.
Referenc	ce documents: EASA	 M.A.201(a)(2) Part-21 Subpart I Part-CAT, Part-NCC, Part-NCO, Part-SPO Subpart D 'Instruments, Data and Equipment'.

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 includes, amongst others, the MEL system, the CDL system and deferred defects management.
Supporting information		Typical inspection items
should also consider defects found during the physical inspection.		1. Check that the deferred defects have been identified, recorded, and rectified/deferred in accordance with approved procedures and within approved time limits.
		 Check that operations outside published approved data have only been performed under a Permit to Fly or under flexibility provisions (Article 14 of Regulation (EC) No 216/2008 Article 14). Sample on:
		a. TLB and hold item list,
		b. maintenance task cards,
		c. engine shop report,
	d. (major) component shop report,	
		 e. maintenance/repair/modification working party files after embodiment of modifications or repairs,
		f. occurrence reporting data,
		g. communications between the user of maintenance data and the maintenance data author in case of inaccurate, incomplete, ambiguous procedures and practices.
	3. Check that the consequences of the deferral have been managed with Operation/Crew.	
		 Check that defects are being deferred in accordance with approved data (current revision of the MEL, CDL, aircraft maintenance programme).
		 Compare physical location of parts/serial numbers with recorded locations to identify undocumented parts swaps for troubleshooting.
Referen	ice documents: EASA/EU	- M.A.301(2)
		- AMC M.A.301-2
 M.A.403 AMC M.A.710(a) 		

- 145.A.60		
- <u>145.A.45{c}</u> - AMC 20-8		
- Regulation (EU) No 376/2014		

C.1	Aircraft Maintenance Programme	of	ocument which describes the specific scheduled maintenance tasks and their frequency completion, related standard maintenance practices and the associated procedures essary for the safe operation of those aircraft to which it applies.
Supporti	ing information	Тур	ical inspection items
include procedu includes	craft Maintenance Programme (AMP) is intended to scheduled maintenance tasks, the associated res and standard maintenance practises. It also the reliability programme, when required. Included in the maintenance programme can originate	Rev 1. 2.	iew of AMP contents: Check that the AMP properly reflects mandatory continuing airworthiness instructions (ALIs, CMRs (the latest source documents' revision. Sample check that tasks are implemented within approved compliance times and that no tasks have been omitted. Check how recommended scheduled maintenance tasks (such as TBO intervals,
in re	 from: tasks for which compliance is <u>mandatory</u>: instructions specified in repetitive Airworthiness Directives (AD), or in the Airworthiness Limitations Section (ALS), which may include Certification Maintenance Requirements (CMRs). The ALS is included in the Instructions for Continuing Airworthiness (ICA) of a design approval holder; tasks for which compliance is <u>recommended</u>: additional instructions specified in the Maintenance Review Board Report (MRBR), the Maintenance Planning Document (MPD), Service Bulletins (SB), or any other non-mandatory continuing 	3.	recommended through Service Bulletins, Service Letters, etc, the latest source documents' revision) are considered when updating the AMP. If applicable, check embodiment policy as required by M.A.301 point 7. Check that the AMP properly reflects the maintenance tasks specified in repetitive ADs.
incluc of a d		4. 5.	Check that the AMP properly reflects additional instructions for continuing airworthiness resulting from specific installed equipment or modifications embodied. Check that the AMP properly reflects additional instructions for continuing airworthiness
instru (MRB Bullet		6.	resulting from repairs embodied. If applicable, check that the AMP properly reflects additional maintenance tasks required by specific approvals (e.g. RVSM, ETOPS, MNPS, B-RNAV).
		7.	Check for any additional scheduled maintenance measures required due to the use of the aircraft and the operational environment.
the c	ional or alternative instructions proposed by the owner or continuing airworthiness management organisation once oved in accordance with point M.A.302(d)(iii);	8.	If applicable, check for proper identification of pilot-owner maintenance tasks and identification of the pilot-owner(s) or the alternative procedure described in AMC M.A.803 point 3.
		9.	Check approval status of additional or alternative instructions (M.A.302(d)(iii)).
	maintenance to be carried out, including any specific tasks 10 linked to the type and the specificity of operations.		Check if a reliability programme is present and active when required. Check if the AMP is approved by the competent authority directly, or by the CAMO via

		indirect approval procedure, or if it is a self-declared maintenance programme.
		Review of aircraft compliance with an AMP:
	12.	11. Check if the AMP used is valid for the aircraft, is approved and is amended correctly reviewed annually.
	13.	$\ensuremath{\frac{12.}{12}}$ Check if tasks are performed within the value(s) quoted in AMP and the source documents
	14.	13. Sample check that no task has been omitted without justifications accepted by the Competent Authority (at the time of decision).
	15.	14. Check the reporting of performed scheduled maintenance into the records system.
	16.	15. Analyse the effectiveness of the AMP and reliability by reviewing the unscheduled tasks.
Reference documents: EASA	- 1	M.A.302 and its AMC.
	- 1	M.A.708(b)(1), (b)(2) and (b)(4)
	- 1	A.A.803 and its AMC

C.2	Component control	The -	ma	nponent control should consider a twofold objective for components maintenance: aintenance for which compliance is mandatory. aintenance for which compliance is recommended.
Support	ng information	Ту		inspection items
schedule Program Compon Life-limit - com - com removed is excee level (in Compon - com sche Refe to p assu dec rest - com	ng on each maintenance task, accomplishment is <u>d</u> or <u>unscheduled</u> . Refer to KRE C.1 'Aircraft Maintenance me'. ents affected by scheduled maintenance: red components are of two types: uponents subject to a certified life limit; uponents subject to a service life limit. ents with a certified life- limit must be <u>permanently</u> I from service when, or before, their operating limitation ded. The life limitation is controlled at the component opposition to aircraft level). ents subject to a service life ('time controlled ents') include the following: uponents for which removal and restoration are eduled, regardless of their level of failure resistance. erence is made to hard time components: They are subject periodic maintenance dealing with a deterioration that is uned to be <u>predictable</u> (the overall reliability invariably reases with age): Failure is less likely to occur before oration is necessary; uponents for which failure resistance can reduce and drop pow a defined level: Inspections are scheduled to detect ential failures. Reference is made to 'On-condition'	1. 2. 3.	a.	Check that the mandatory maintenance tasks are identified as such and managed separately from recommendations. Sample check installed components (PN and SN) against aircraft records: Correct Part Number and Serial Number installed. Correct authorised release document available. Check the current status of time-controlled components, with due consideration to deferred items. They must identify: The affected components (Part Number and Serial Number). For components subject to a repetitive task: the task description and reference, the applicable threshold/interval, the last accomplishment data (date, the component's total accumulated life in Hours, Cycles, Landings, Calendar time, as necessary) and the next planned accomplishment data. For components subject to an unscheduled task: the task description and reference, the accomplishment data (date, the component's total accumulated life in Hours, Cycles, Landings, Calendar time, as necessary) and the next planned accomplishment data. For components subject to an unscheduled task: the task description and reference, the accomplishment data (date, the component's total accumulated life in Hours, Cycles, Landings, Calendar time, as necessary). Pay attention to ETOPS and CDCCL components. Check current status of life-limited components. This status can be requested upon in transfer throughout the operating life of the part: The life limitation, the component's total accumulated life, and the life remaining before the component's life limitation is reached (indicating Hours, Cycles, Landings, Calendar time, as necessary). If relevant for the determination of the remaining life, a full installation history indicating the number of hours, cycles or calendar time relevant to each installation on

 components: They are called such because components, which are inspected, are left in service (no further maintenance action taken) on the condition that they continue to meet specified performance standards. Notes: Restoration tasks for hard time components are not the same as 'On-condition' tasks, since they do not monitor gradual deterioration, but are primarily done to ensure the item may continue to remain in service until the next planned restoration. Components subject to 'condition-monitoring' are permitted to remain in service without preventive maintenance until functional failure occurs. Reference is made to 'fly-to-failure'. Such components are subject to unscheduled tasks. 	 these different types of aircraft/engine. Check if the aircraft maintenance programme and reliability programme results impact the component control. Check that life-limited and time controlled components are correctly marked during a physical survey.
Reference documents: EASA	 21.A.805 M.A.302 M.A.305 M.A.501 M.A.503 M.A.710

C.3	Repairs	ap re 21 ne	repairs and unrepaired damage/degradations need to comply with the instructions of the propriate maintenance manual (e.g. the SRM, the AMM, the CMM). With the exception of pairs contained in the certification specifications referred to in Part 21 point 21A.90B or A.431B of the Annex (Part 21), all repairs not defined in the appropriate maintenance manual ed to be appropriately approved and recorded with the reference to the approval. is includes any damage or repairs to the aircraft/engine(s)/propeller(s), and their components.
Support	ing information	Ту	pical inspection items
the dam repair, t	substantiating repairs should include, but is not limited to, age assessment, the rationale for the classification of the he evidence the repair has been designed in accordance		Sample the repair <u>status</u> to confirm it appropriately traces repairs and un-repaired damage/deteriorations. Sample repair <u>files</u> (at least one file for each type of repaired items) to check that repaired
procedu	proved data, i.e. by reference to the appropriate manual, re or to a Part 21 repair design approval, the s/material and accomplishment instructions, as well as the	2	and unrepaired damage/deterioration have been assessed against the latest published approved repair data. Check that repair instructions detailed in the repair file comply with published approved
U U	ance and operational instructions.	э.	repair data.
- the r	tatus' means a list of: epairs embodied since the original delivery of (and still ent upon) the aircraft/engine/propeller/component; and	4.	Check that major repairs resulting in new or amended airworthiness limitations and associated mandatory instructions (including ageing aircraft programme) have been included in the aircraft maintenance programme.
	n-repaired damage/degradations.		Check that new or amended maintenance instructions resulting from repairs have been considered for inclusion in the aircraft maintenance programme.
docume	includes, either directly or by reference to supporting ntation (i.e. repair files), the substantiating data supporting nce with the applicable airworthiness requirements.	6.	Compare the repair status and the physical status of the repaired aircraft/engine(s)/propeller(s), and their repaired components (physical survey) in order to confirm the accuracy of the repair status. Sample embodied repairs to check their
classifica aircraft/ necessar item at damage,	ir status should identify the repair file reference, the repair tion, the repaired item (i.e. engine/propeller/component, and a precise location if y), and the date and total life in FH/FC accumulated by the the time of repair or finding of the un-repaired degradations. Cross-reference to the aircraft maintenance me should also be included, as necessary.		conformity against the repair files (physical survey).

Depending on the product State of Design, Bilateral Agreements and/or Agency Decisions on acceptance of certification findings exist and should be taken into account for the determination of acceptable data for repairs.	
Reference documents: EASA	- 21.A.431A
	- 21.A.431B
	- M.A.304
	- AMC M.A.304
	- M.A.305
	- AMC s M.A.305
	- M.A.401
	- AMC s M.A.401

C.4	Records	Continuing Airworthiness records are defined in M.A.305 and M.A.306 and related AMCs.		
Supporting information		Typical inspection items		
the aircr time. Task acc unsched airworth compon regard t - schee - on re - re	on/Transfer of the records is required so that the status of raft and its components can be readily established at any complishment is scheduled (one time or periodically), or luled (e.g. following an event). Aircraft continuing niness records (refer to logbooks, technical logbooks, ent log cards or task cards) shall provide the status with o: duled tasks: ne-time: life-limited parts status, modification status, epair status. epetitive: maintenance programme status. heduled tasks.	 Check the aircraft continuing airworthiness record system: M.A.305 and M.A.306, as applicable, require that certain records are kept for defined periods. Pay attention to the continuity, integrity and traceability of records: a. integrity: Check the data recorded is legible, b. continuity: Check that records are available for the applicable retention period, c. traceability: Check the link between operator/CAMO and maintenance documentation, traceability to approved data, traceability to appropriate release documents, etc. If applicable, make sure that the tech log system is used correctly, including: a. current aircraft release to service (including the maintenance statement) issued and b. pre-flight inspections signed-off by authorised persons; Check that any maintenance required following abnormal operation/event (such as overspeed, overweight operation, hard landing, excessive turbulence, and operation outside of Flight Manual limitations) has been performed, as applicable. 		
Referen	ce documents: EASA	 M.A.305 M.A.306 M.A.307 M.A.801 AMC\$ M.A.305 AMC\$ M.A.306 AMC \$ M.A.307 		

Abbreviations used:

A/C	Aircraft
ACAM	Aircraft Continuous Airworthiness Monitoring
AD	Airworthiness Directive
ALI	Airworthiness Limitation Items
ALS	Airworthiness Limitations Section
AMM	Aircraft Maintenance Manual
AMP	Aircraft Maintenance Programme
APU	Auxiliary Power Unit
ASM	Ageing Systems Maintenance
B-RNAV	Basic Area Navigation
CAMO	Continuing Airworthiness Management Organisation
CDL	Configuration Deviation List
CDCCL	Critical Design Configuration Control Limitations
CMM	Component Maintenance Manual
CMR	Certification Maintenance Requirement
DT	Damage Tolerant
ED	Executive Director of EASA
ETOPS	Extended Range Operations with Two-engined aeroplanes
ETSO	European Technical Standard Order
EWIS	Electrical Wiring Interconnection System
EZAP	Enhanced Zonal Analysis Procedure
FCOM	Flight Crew Operations Manual
FDR	Flight Data Recorder
FM	Flight Manual
FRM	Flammability Reduction Means
FTIP	Fuel Tank Ignition Prevention
GA	General Aviation
ICA	Instructions for Continuing Airworthiness
IPC	Illustrated Parts Catalogue
KRE	Key Risk Element
LHIRF	Lightning High Intensity Radiated Field
LOPA	Layout of Passenger Accommodation
MCAI	Mandatory Continuing Airworthiness Information
MEL	Minimum Equipment List
MNPS	Minimum Navigation Performance Specification
MRB	Maintenance Review Board
MRBR	Maintenance Review Board Report
MPD	Maintenance Planning Document
NAA	National Aviation Authority
OEM	Original Equipment Manufacturer

OM	Operations Manual
OM-B	Operations Manual Part-B
PN	Part Number
QRH	Quick Reference Handbook
PWR	Power
RVSM	Reduced Vertical Separation Minima
SN	Serial Number
SB	Service Bulletin
SM	Service Manual
SRM	Structural Repair Manual
STC	Supplemental Type Certificate
ТВО	Time Between Overhauls
тс	Type Certificate
TCDS	Type Certificate Data Sheet
TLB	Technical Logbook
TSO	Technical Standard Order'

76) Appendix V to AMC M.A.704 is replaced by the following:

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

CONTINUING AIRWORTHINESS MANAGEMENT EXPOSITION (CAME)

TABLE OF CONTENTS

Part 0	General organisation
0.1	Corporate commitment by the accountable manager
0.2	General information
0.3	Management personnel
0.4	Management organisation chart
0.5	Procedure to notify the competent authority of changes to the organisation's activities/approval/location/personnel
0.6	Exposition amendment procedures
Part 1	Continuing airworthiness management procedures
1.1	Aircraft technical log utilisation and MEL application
	Aircraft continuing airworthiness record system utilisation
1.2	Aircraft maintenance programmes — 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 programme(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 programmes
1.11	Pre-flight inspections
1.12	Aircraft weighing
1.13	Check flight procedures
Part 2	Quality system
2.1	Continuing airworthiness quality policy, plan and audit procedure
2.2	Monitoring of continuing airworthiness management activities
2.3	Monitoring of the effectiveness of the maintenance programme(s)
2.4	Monitoring that all maintenance is carried out by an appropriate maintenance organisation

2.5	Monitoring that all contracted maintenance is carried out in accordance with the contract, including 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	Airworthiness review procedures
4.1	Airworthiness review staff
4.2	Review of aircraft records
4.3	Physical survey
4.4	Additional procedures for recommendations to competent authorities for the import of aircraft
4.5	Recommendations to competent authorities for the issue of ARC
4.6	Issue of ARC
4.7	Airworthiness review records, responsibilities, retention and access
Part 4B	Permit to fly procedures
4B.1	Conformity with approved flight conditions
4B.2	Issue of the permit to fly under the CAMO privilege
4B.3	Permit to fly authorised signatories
4B.4	Interface with the local authority for the flight
4B.5	Permit to fly records, responsibilities, retention and access
Part 5	Appendices
5.1	Sample documents
5.2	List of airworthiness review staff
5.3	List of subcontractors as per M.A.711(a)(3)
5.4	List of contracted approved maintenance organisations
5.5	Copy of contracts for subcontracted work (Appendix II to AMC M.A.711(a)(3))

LIST OF EFFECTIVE PAGES

Page	Revision	Page	Revision	Page	Revision
1	Original	3	Original	5	Original
2	Original	4	Original		

DISTRIBUTION LIST

(The document should include a distribution list to ensure proper distribution of the manual and to demonstrate to the competent authority that all personnel involved in continuing airworthiness activities have access to the relevant information. This does not mean that <u>all</u> personnel have to receive a manual, but that a reasonable amount of manuals is distributed within the organisation(s) so that personnel concerned have quick and easy access to the manual.

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

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

PART 0 — GENERAL ORGANISATION

0.1 Corporate commitment by the accountable manager

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

'This exposition defines the organisation and procedures upon which the M.A. Subpart G approval of Joe Bloggs 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 Joe Bloggs, 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 Agency or the competent authority from time to time where these new or amended regulations are in conflict with these procedures.

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

In the case of air carriers licensed in accordance with Regulation (EC) No 1008/2008, suspension or revocation of the approval of the M.A. Subpart G continuing airworthiness management organisation would invalidate the AOC.'

0.2 General Information

a) Brief description of the organisation

(This paragraph should describe broadly how the whole organisation (i.e. including the whole operator in the case of air carriers licensed in accordance with Regulation (EC) No 1008/2008 or the whole organisation when other approvals are held) is organised under the management of the accountable manager, and should refer to the organisation charts of paragraph 0.4.)

b) Relationship with other organisations

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

(1) Subsidiaries/mother company

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

(2) Consortia

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

continuing airworthiness related manual or procedure and to any competent authority agreement that would apply.)

c) Scope of work — Aircraft managed

(This paragraph should 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. The following is given as an example.)

Aircraft type/series	Date included in the scope of work	Aircraft maintenance programme or 'generic/baseline' maintenance programme	Aircraft registration(s)	Owner/ operator	CAMO contract reference

For air carriers licensed in accordance with Regulation (EC) No 1008/2008, this paragraph can make reference to the operations specifications or operations manual where the aircraft registrations are listed.

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

1) the paragraph is revised each time an aircraft is removed from or added in the list;

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

d) Type of operation

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

0.3 Management personnel

a) Accountable manager

(This paragraph should address the duties and responsibilities of the accountable manager as regards M.A. Subpart G approvals and should 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 should:

- emphasise 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 should 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 should 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 should 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 of 28 November 2003, the number of employees assigned to the performance of the continuing airworthiness management system is the following:

	Full-time	Part-time in equivalent full-time		
Quality monitoring	AA	aa = AA'		
Continuing airworthiness management	BB	bb = BB'		
(Detailed information about the	BB1	bb1 = BB1'		
management of group of persons)	BB2	bb2 = BB2'		
Other	CC	cc =CC'		
Total	Π	tt = TT'		
Total man-hours	TT + TΤ'			

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

(2) Training policy

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

0.4 Management organisation charts

a) General organisation chart



b) Continuing airworthiness management organisation chart

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



0.5 Procedure to notify the competent authority of changes to the organisation's activities/approval/location/personnel

(This paragraph should explain the cases where the company should inform the competent authority 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 competent authority of any change concerning:

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.

Joe Bloggs will not incorporate such changes until they have been assessed and approved by the competent authority.)

0.6 Exposition amendment procedure

(This paragraph should explain who is responsible for the amendment of the exposition and its submission to the competent authority for approval. This may include, if agreed by the competent authority, the possibility for the approved organisation to approve internally minor amendments that have no impact on the approval held. The paragraph should 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 utilisation and MEL application

or

1.1 Aircraft continuing airworthiness record system utilisation

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

(1) General

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

(3) Aircraft technical log approval

(This paragraph should explain who is responsible for submitting the aircraft technical log, and any subsequent amendment thereto, to the competent authority 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 should 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 should 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 should 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 should explain how the continuing airworthiness and maintenance personnel make the flight crew aware of an MEL limitation. This should refer to the technical log procedures.)

(4) Acceptance by the crew

(This paragraph should 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 should 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 competent authority may allow the owner/operator to overrun the MEL time limitation under specific conditions. Where applicable, this paragraph should describe the specific duties and responsibilities with regard to controlling these extensions.)

1.2 Aircraft maintenance programme — development and amendment

a) General

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

b) Content

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

c) Development

(1) Sources

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

(2) Responsibilities

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

(3) Manual amendments

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

(4) Acceptance by the authority

(This paragraph should explain who is responsible for the submission of the maintenance programme to the competent authority and what the procedure to follow is. This should in particular address the issue of the approval for variation to maintenance periods either by the competent authority or by a procedure in the maintenance programme for the organisation 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 should explain how the continuing airworthiness management organisation has access to the current flight hours and cycles information and how it is processed through the organisation.)

b) Records

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

- family of document (if necessary),
- name of document,
- retention period,
- responsible person for retention,
- place of retention.)
- c) Preservation of records

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

d) Transfer of continuing airworthiness records

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

1.4 Accomplishment and control of airworthiness directives

(This paragraph should demonstrate that there is a comprehensive system in place for the management of airworthiness directives. This paragraph may, for instance, include the following subparagraphs:)

a) Airworthiness directive information

(This paragraph should explain what the AD information sources are and who receives them in the company. Where available, multiple sources (e.g. Agency + competent authority + manufacturer or association) may be useful.)

b) Airworthiness directive decision

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

c) Airworthiness directive control

(This paragraph should specify how the organisation manages to ensure that all the applicable airworthiness directives are accomplished and that they are accomplished on time. This should 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:

- 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 programme

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

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

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

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

1.6 Non-mandatory modification embodiment policy

(This paragraph should specify how non-mandatory modification information is processed through the organisation, 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 should 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 Agency or design organisation approval. It should also identify the type of approval required, and the procedure to follow to have a repair or modification approved by the Agency or design organisation.)

1.8 Defect reports

a) Analysis

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

b) Liaison with manufacturers and regulatory authorities

(Where a defect report shows that such defect is likely to occur to other aircraft, a liaison should be established with the manufacturer and the certification competent authority 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 should establish the procedure to be followed in order to be sure that the deferment of any defect will not lead to any safety concern. This will include appropriate liaison with the manufacturer.)

1.9 Engineering activity

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

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

1.10 Reliability programmes

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

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

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

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

1.11 Pre-flight inspections

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

1.13 Check flight procedures

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

PART 2 — QUALITY SYSTEM

2.1 Continuing airworthiness quality policy, plan and audit procedure

a) Continuing airworthiness quality policy

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

b) Continuing airworthiness quality plan

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

c) Continuing airworthiness quality audit procedure

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

d) Continuing airworthiness quality audit remedial action procedure

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

2.2 Monitoring of continuing airworthiness management activities

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

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

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

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

(This paragraph should set out a procedure to periodically review that the approval of the contracted maintenance organisations is relevant for the maintenance of the operator's fleet. This may include feedback information from any contracted organisation on any actual or contemplated amendment in order to ensure that the maintenance system remains valid and to anticipate any necessary change in the maintenance agreements.

If necessary, the procedure may be subdivided as follows:

- a) Aircraft maintenance
- b) Engines
- c) Components)

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

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

2.6 Quality audit personnel

(This paragraph should establish the required training and qualification standards for auditors. Where persons act as part-time auditors, it should be emphasised 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 should explain the procedures that the organisation follows to develop the maintenance contract. The CAMO processes to implement the different elements described in Appendix XI to AMC M.A.708(c) should be explained. In particular, it should cover responsibilities, tasks and interaction with the maintenance organisation and with the owner/operator.

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

b) Maintenance contractor selection procedure

(This paragraph should explain how a maintenance contractor is selected by the CAMO. Selection should 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 should 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 organisation 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 should agree with the operator on the process to select a maintenance organisation before concluding any contract with a maintenance organisation.)

3.2 Quality audit of aircraft

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

PART 4 — AIRWORTHINESS REVIEW PROCEDURES

4.1 Airworthiness review staff

(This paragraph should establish the working procedures for the assessment of the airworthiness review staff. The assessment addresses experience, qualification, training, etc. A description should be given regarding the issue of authorisations for the airworthiness review staff and how records are kept and maintained.)

4.2 Review of aircraft records

(This paragraph should describe in detail the aircraft records that are required to be reviewed during the airworthiness review. The level of detail that needs to be reviewed as well as the number of records that needs to be reviewed during a sample check should be described.)

4.3 Physical survey

(This paragraph should describe how the physical survey needs to be performed. It should list the topics that need to be reviewed, the physical areas of the aircraft to be inspected, which documents on board the aircraft need to be reviewed, etc.)

4.4 Additional procedures for recommendations to competent authorities for the import of aircraft

(This paragraph should describe the additional tasks regarding the recommendation for the issue of an airworthiness review certificate in the case of import of aircraft. This should include: communication with the competent authority of registry, additional items to be reviewed during the airworthiness review of the aircraft, specification of maintenance required to be carried out, etc.)

4.5 Recommendations to competent authorities for the issue of airworthiness review certificates (ARCs)

(This paragraph should stipulate the communication procedures with the competent authorities in case of a recommendation for the issue of an airworthiness review certificate. In addition, the content of the recommendation should be described.)

4.6 Issue of airworthiness review certificates (ARCs)

(This paragraph should set out the procedure for the issue of ARCs. It should address record-keeping, distribution of ARC copies, etc. The procedure should ensure that an ARC is issued only after an airworthiness Page 99 of 117 review has been properly carried out.)

4.7 Airworthiness review records, responsibilities, retention and access

(This paragraph should describe how records are kept, duration of record-keeping, location where records are stored, access to records, and responsibilities.)

PART 4B — PERMIT TO FLY PROCEDURES

4B.1 Conformity with approved flight conditions

(The procedure should indicate how conformity with approved flight conditions is established, documented and attested by an authorised person.)

4B.2 Issue of the permit to fly under the CAMO privilege

(The procedure should describe the process to complete the EASA Form 20b (see Appendix IV to Part-21) and how compliance with 21.A.711(d) and (e) is established before signing off the permit to fly. It should also describe how the organisation ensures compliance with 21.A.711(g) for the revocation of the permit to fly.)

4B.3 Permit to fly authorised signatories

(The person(s) authorised to sign off the permit to fly under the privilege of M.A.711(c) should be identified (name, signature and scope of authority) in the procedure, or in an appropriate document linked to the CAME.)

4B.4 Interface with the local authority for the flight

(The procedure should include provisions describing the communication with the local authority for flight clearance and compliance with the local requirements, since those elements are outside the scope of the conditions of 21.A.708(b) (see Part 21.A.711(e)).)

4B.5 Permit to fly records, responsibilities, retention and access

(This paragraph should describe how records are kept, duration of record-keeping, location where records are stored, access to records, and responsibilities.)

PART 5 — APPENDICES

5.1 Sample documents

(A self-explanatory paragraph.)

5.2 List of airworthiness review staff

(A self-explanatory paragraph.)

5.3 List of subcontractors as per M.A.711(a)(3)

(A self-explanatory paragraph; in addition, it should set out that the list should be periodically reviewed.)

5.4 List of approved maintenance organisations contracted

(This paragraph should include the list of contracted maintenance organisations, detailing the scope of the contracted work. In addition, it should set out that the list should be periodically reviewed.)

5.5 Copy of contracts for subcontracted work (Appendix II to AMC M.A.711 (a)(3))

(A self-explanatory paragraph.)'

77) Appendix VII to AMC M.B.702(f) is amended as follows:

'Appendix VII to AMC M.B.702(f) EASA Form 13

M.A. SUBPART G APPROVAL REG	COMMENDATION REPORT	EASA FORM 13
Part 1: General		
Name of organisation:		
Approval reference:		
Requested approval rating/		
EASA Form 14 or AOC dated*:		
Other approvals held (if app.)		
Address of facility(ies) audited:		
Audit period: from to		
Date(s) of audit(s):		
Audit reference(s):		
Persons interviewed:		
Competent authority surveyor:	Signature(s):	
Competent authority office:	Date of EASA Form 13 P p art 1 co	ompletion:
	*delete	e as where applicable appropriate

M.A. SUBPART G APPROVAL RECOMMENDATION REPORT

EASA FORM 13

Part 2: M.A. Subpart G Compliance Audit Review

The five columns may be labelled and used as necessary to record the approval product line or facility, including subcontractor's, reviewed. Against each column used of the following M.A. Subpart G subparagraphs please either tick ($\sqrt{}$) the box if satisfied with compliance, or cross (X) the box if not satisfied with compliance and specify the reference of the Part 4 finding next to the box, or enter N/A where an item is not applicable, or N/R when applicable but not reviewed.

Para	Subject					
M.A.703	Extent of approval					
M.A.704	Continuing airworthiness management exposition (see Part 3)					
M.A.705	Facilities					
M.A.706	Personnel requirements					
M.A.707	Airworthiness review staff					
M.A.708	Continuing airworthiness management					
M.A.201	Responsibilities					
M.A.202	Occurrence reporting					
M.A.302	Aircraft maintenance programme					
M.A.303	Airworthiness directives					

M.A.304	Data for modifications and repairs							
M.A.305	Aircraft continuing airworthiness record system							
M.A.306	Operator's Aircraft technical log system							
M.A.307	Transfer of aircraft continuing airworthiness records							
M.A.709	Documentation							
M.A.710	Airworthiness review							
M.A.711	Privileges of the organisation							
M.A.712	Quality system							
M.A.713	Changes to the approved continuing airworthiness organisation							
M.A.714	Record-keeping							
M.A.716	Findings							
Competent surveyor(s):	authority		S	ignature(s	;):			

Competent	authorit	y office: Date of EASA Form 13 P p art 2 completion:							
N	M.A. SUBPART G APPROVAL RECOMMENDATION REPORT EASA FORM 13								
PART 3: Compliance with M.A. Subpart G continuing airworthiness management exposition (CAME) Please either tick ($$) the box if satisfied with compliance; or cross (x) if not satisfied with compliance and specify the reference of the Part 4 finding; or enter N/A where an item is not applicable; or N/R when applicable but not reviewed.									
Part 0	Genera	al organisation							
0.1		Corporate commitment by the accountable manager							
0.2		General information							
0.3		Management personnel							
0.4		Management organisation chart							
0.5		Notification procedure to the competent authority regarding changes to the organisation's activities/approval/location/personnel							
0.6		Exposition amendment procedures							
Part 1	Contin	uing airworthiness management procedures							
1.1		Aircraft technical log utilisation and MEL application (commercial air transport) Aircraft continuing airworthiness record system utilisation (non commercial air transport)							
1.2		Aircraft maintenance programme – development amendment and approval							
1.3		Time and continuing airworthiness records, responsibilities, retention, access							
1.4		Accomplishment and control of airworthiness directives							
1.5		Analysis of the effectiveness of the maintenance programme(s)							
1.6		Non mandatory modification embodiment policy							
1.7		Major repair and modification standards							
1.8		Defect reports							
1.9		Engineering activity							

1.10		Reliability programmes
1.11		Pre-flight inspections
1.12		Aircraft weighing
1.13		Check flight procedures
Part 2	Quality	/ system
2.1		Continuing airworthiness quality policy, plan and audits procedure
2.2		Monitoring of continuing airworthiness management activities
2.3		Monitoring of the effectiveness of the maintenance programme(s)
2.4		Monitoring that all maintenance is carried out by an appropriate maintenance organisation
2.5		Monitoring that all contracted maintenance is carried out in accordance with the contract, including subcontractors used by the maintenance contractor
2.6		Quality audit personnel
Part 3	Contra	cted Maintenance
3.1		Maintenance contractor selection pProcedures for contracted maintenance
3.2		Quality audit of aircraft
Part 4	Airwor	thiness review procedures
4.1		Airworthiness review staff
4.2		Review of aircraft records
4.3		Physical survey
4.4		Additional procedures for recommendations to competent authorities for the import of aircraft
4.5		Recommendations to competent authorities for the issue of airworthiness review certificates
4.6		Issuance of airworthiness review certificates
4.7		Airworthiness review records, responsibilities, retention and access
Part 4B	Permit	to fly procedures

4B.1		Conformity with approved flight conditions					
4B.2		ssue of permit to fly under the CAMO privilege					
4B.3		Permit to fly authorised signatories					
4B.4		Interface with the local authority for the flight					
4B.5		Permit to fly records, responsibilities, retention and access .					
Part 5	Appen	dices					
5.1		Sample Documents					
5.2		List of airworthiness review staff					
5.3		List of subcontractors as per M.A.711(a)(3) and AMC M.A.201(h)1					
5.4		List of approved maintenance organisations contracted					
5.5		Copy of contracts for subcontracted work (aAppendix 2II to AMC M.A.201(h)1711(a)(3))					
5.6		Copy of contracts with approved maintenance organisations					
CAME Refere	CAME Reference: CAME Amendment:						
Competent authority audit staff: Signature(s):							
Competent a	authority	office: Date of EASA Form 13 P p art 3 completion:					

M.A. SUBPART G APPROVAL RECOMMENDATION REPORT

EASA FORM 13

Part 4: Findings regarding M.A. Subpart G compliance status

Each level 1 and 2 finding should be recorded whether it has been rectified or not and should be identified by a simple cross reference to the Part 2 requirement. All non-rectified findings should be copied in writing to the organisation for the necessary corrective action.

Part	Audit reference(s):		Corrective action			
2 or 3 ref.	Findings	v e I	Date Due	Date Closed	Reference	

M.A. SUBPART G APPROVAL RECOMMENDATION F	REPORT	EASA FORM 13					
Part 5: M.A. Subpart G approval or continued approval or ch	ange recommendation*						
Name of organisation:							
Approval reference:							
Audit reference(s):							
The following M.A. Subpart G scope of approval is recommended for this organisation:							
Or, it is recommended that the M.A. Subpart G scope be continued.	of approval specified in E	ASA Form 14 referenced					
Name of recommending competent authority surveyor:							
Signature of recommending competent authority surveyor:							
Competent authority office:							
Date of recommendation:							
EASA Form 13 review (quality check):	Date:						
		*delete as appropriate'					

78) Appendix XI to AMC M.A.708(c) is replaced by the following:

'Appendix XI to AMC M.A.708(c) Contracted maintenance

1. Maintenance contracts

The following paragraphs are not intended to provide a standard maintenance contract, but to provide a list of the main points that should be addressed, when applicable, in a maintenance contract between the CAMO and the maintenance organisation. 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 organisation (for example, aircraft base maintenance to X, engine maintenance to Y, and line maintenance to Z1, Z2 and Z3), attention should be paid to the consistency of the different maintenance contracts.

A maintenance contract is not normally intended to provide appropriate detailed work instructions to personnel. Accordingly, there should be established organisational responsibilities, procedures and routines in the CAMO and the maintenance organisation 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 organisation's manual/MOE, or can consist in separate procedures. In other words, procedures and routines should 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 organisation should be specified unambiguously. In case of line and/or base maintenance, the contract should specify the aircraft type and, preferably, should include the aircraft's registrations.

In case of engine maintenance, the contract should 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 should be specified. The certificate held by the maintenance organisation at the place(s) where maintenance will be performed should be referred to in the contract. If necessary, the contract may address the possibility of performing maintenance at any location subject to the need for such maintenance arising either from the unserviceability of the aircraft or from the necessity to support occasional line maintenance.

2.3. Subcontracting

The maintenance contract should specify under which conditions the maintenance organisation may subcontract tasks to a third party (regardless if this third party is approved or not). At least the contract should make reference to M.A.615 and 145.A.75. Additional guidance is provided by the associated AMC/GM. In addition, the CAMO may require the maintenance organisation to obtain the CAMO approval before subcontracting to a third party. Access should be given to the CAMO to any

information (especially the quality monitoring information) about the maintenance organisation's subcontractors involved in the contract. It should, however, be noted that under the CAMO responsibility both the CAMO and its competent authority are entitled to be fully informed about subcontracting, although the competent authority will normally only be concerned with aircraft, engine and APU subcontracting.

2.4. Maintenance programme

The maintenance programme, under which maintenance has to be performed, has to be specified. The CAMO should have that maintenance programme approved by its competent authority.

2.5. Quality monitoring

The terms of the contract should include a provision allowing the CAMO to perform a quality surveillance (including audits) of the maintenance organisation. The maintenance contract should specify how the results of the quality surveillance are taken into account by the maintenance organisation (see also paragraph 2.22. 'Meetings').

2.6. Competent authority involvement

The contract should identify the competent authority(ies) responsible for the oversight of the aircraft, the operator, the CAMO, and the maintenance organisation. Additionally, the contract should allow competent authority(ies) access to the maintenance organisation.

2.7. Maintenance data

The contract should 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 organisation).

This may include but is not limited to:

- maintenance programme,
- 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 should specify in which condition the aircraft should be made available to the maintenance organisation. For extensive maintenance, it may be beneficial that a work scope planning meeting be organised so that the tasks to be performed may be commonly agreed (see also paragraph

2.23 'Meetings').

2.9. Airworthiness directives and service bulletins/modifications

The contract should specify the information that the CAMO is responsible to provide to the maintenance organisation, 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 should 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 should specify how the CAMO should provide the current hours and cycles to the maintenance organisation and whether the maintenance organisation should receive the current flight hours and cycles on a regular basis so that it may update the records for its own planning functions (see also paragraph 2.22 'Exchange of information').

2.11. Service life-limited components

The control of service life-limited components is the responsibility of the CAMO. The contract should specify whether the CAMO should provide the status of service life-limited parts to the maintenance organisation, and the information that the approved organisation 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 should specify whether a particular type of material or component is supplied by the CAMO or by the maintenance organisation, which type of component is pooled, etc. The contract should clearly state that it is the maintenance organisation'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 145.A.42.

2.13. Pooled parts at line stations

If applicable, the contract should specify how the subject of pooled parts at line stations should be addressed.

2.14. Scheduled maintenance

For planning scheduled maintenance checks, the support documentation to be given to the maintenance organisation should 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 organisation 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 should be addressed, where

applicable, in the maintenance contract.

2.15. Unscheduled maintenance/defect rectification

The contract should specify to which level the maintenance organisation may rectify a defect without reference to the CAMO. It should describe, as a minimum, the management of approval of repairs and the incorporation of major repairs. The deferment of any defect rectification should 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 should 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 programme. The contract should specify the support the maintenance organisation 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 should 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 should specify the acceptability criterion and whether a representative of the CAMO should witness an engine undergoing test.

2.20. Release to service documentation

The release to service has to be performed by the maintenance organisation in accordance with its maintenance organisation procedures. The contract should, however, specify which support forms have to be used (aircraft technical log, maintenance organisation's release format, etc.) and the documentation that the maintenance organisation should 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 organisation 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 M.A.711(a)(3) apply.

2.22. Exchange of information

Each time exchange of information between the CAMO and the maintenance organisation is necessary, the contract should specify what information should 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 should include the provision for a certain number of meetings to be held between the CAMO and the maintenance organisation.

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 organised so that the tasks to be performed may be commonly agreed.

2.23.3. Technical meeting

Scheduled meetings may be organised in order to review on a regular basis technical matters such as ADs, SBs, future modifications, major defects found during maintenance check, aircraft and component reliability, etc.

2.23.4. Quality meeting

Quality meetings may be organised 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 programme exists, the contract should specify the CAMO's and maintenance organisation's respective involvement in that programme, including the participation in reliability meetings.'

79) Appendix XII to AMC M.A.706(f) and M.B.102(c) is amended as follows:

'Appendix XII to AMC to M.A.706(f) and AMC1 M.B.102(c) Fuel Tank Safety training

This appendix includes general instructions for providing training on Fuel Tank Safety issues.

A) B) Effectivity:

- Large aeroplanes as defined in Decision 2003/11/RM of the Executive Director of the Agency (CS-25) and certified after 1 January 1958 with a maximum type certified passenger capacity of 30 or more or a maximum certified payload capacity of 7 500 lbs (3 402kg) cargo or more, and
- Large aeroplanes as defined in Decision 2003/11/RM of the Executive Director of the Agency (CS-25) which contains CS-25 amendment 1 or later in their certification basis.

B) C) Affected organisations:

• CAMOs involved in the continuing airworthiness management of aeroplanes specified in paragraph A).

• Competent authorities responsible for the oversight as per M.B.704 of aeroplanes specified in paragraph A) and for the oversight of the CAMOs specified in this paragraph B).

C) D) Persons from affected organisations who should receive training:

Phase 1 only:

- The quality manager and quality personnel.
- Personnel of the competent authorities responsible for the oversight as per M.B.704 of aeroplanes specified in paragraph A) and in the oversight of CAMOs specified in paragraph B).

Phase 1 + Phase 2 + Continuation training:

• Personnel of the CAMO involved in the management and review of the continuing airworthiness of aircraft specified in paragraph A).

D) E) General requirements of the training courses:

Phase 1 – Awareness

The training should be carried out before the person starts to work without supervision but not later than 6 months after joining the organisation. The persons who have already attended the Level 1 Familiarisation course in compliance with ED Decision 2007/001/R Appendix XII are already in compliance with Phase 1.

- <u>Type:</u> Should be an awareness course with the principal elements of the subject. It may take the form of a training bulletin, or other self-study or informative session. Signature of the reader is required to ensure that the person has passed the training.
- <u>Level:</u> It should be a course at the level of familiarisation with the principal elements of the subject.

Objectives:

The trainee should, after the completion of the training:

- 1. Be familiar with the basic elements of the fuel tank safety issues.
- 2. Be able to give a simple description of the historical background and the elements requiring a safety consideration, using common words and showing examples of non-conformities.
- 3. Be able to use typical terms.

Content: The course should include:

- a short background showing examples of FTS accidents or incidents,
- the description of concept of fuel tank safety and CDCCL,
- some examples of manufacturers documents showing CDCCL items,
- typical examples of FTS defects,
- some examples of TC holders repair data
- some examples of maintenance instructions for inspection.

Phase 2 - Detailed training

A flexible period may be allowed by the competent authorities to allow organisations to set the necessary courses and impart the training to the personnel, taking into account the organisation's

training schemes/means/practices. This flexible period should not extend beyond 31 December 2010.

The persons who have already attended the Level 2 Detailed training course in compliance with ED Decision 2007/001/R Appendix XII either from a CAMO or from a Part-147 training organisation are already in compliance with Phase 2 with the exception of continuation training.

Staff should have received Phase 2 training by 31 December 2010 or within 12 months of joining the organisation, whichever comes later.

- <u>Type</u>: Should be a more in-depth internal or external course. It should not take the form of a training bulletin or other self-study. An examination should be required at the end, which should be in the form of a multi choice question, and the pass mark of the examination should be 75 %.
- Level: It should be a detailed course on the theoretical and practical elements of the subject.

The training may be made either:

- in appropriate facilities containing examples of components, systems and parts affected by Fuel Tank Safety (FTS) issues. The use of films, pictures and practical examples on FTS is recommended; or
- by attending a distance course (e-learning or computer based training) including a film when such film meets the intent of the objectives and content here below. An e-learning or computer based training should meet the following criteria:
 - A continuous evaluation process should ensure the effectiveness of the training and its relevance;
 - Some questions at intermediate steps of the training should be proposed to ensure that the trainee is authorized to move to the next step;
 - The content and results of examinations should be recorded;
 - Access to an instructor in person or at distance should be possible in case support is needed.

A duration of 8 hours for phase 2 is an acceptable compliance.

When the course is provided in a classroom, the instructor should be very familiar with the data in Objectives and Guidelines. To be familiar, an instructor should have attended himself a similar course in a classroom and made additionally some lecture of related subjects.

Objectives:

The attendant should, after the completion of the training:

- have knowledge of the history of events related to fuel tank safety issues and the theoretical and practical elements of the subject, have an overview of the FAA regulations known as SFAR (Special FAR) 88 of the FAA and of JAA Temporary Guidance Leaflet TGL 47, be able to give a detailed description of the concept of fuel tank system ALI (including Critical Design Configuration Control Limitations CDCCL, and using theoretical fundamentals and specific examples;

- have the capacity to combine and apply the separate elements of knowledge in a logical and comprehensive manner;
- have knowledge on how the above items affect the aircraft;
- be able to identify the components or parts or the aircraft subject to FTS from the manufacturer's documentation,
- be able to plan the action or apply a service bulletin and an airworthiness directive.
- <u>Content:</u> Following the guidelines described in paragraph E).

Continuation training:

The organisation should ensure that the continuation training is performed in each two years period. The syllabus of the training programme referred to in the Training policy of the Continuing Airworthiness Management Exposition (CAME) should contain the additional syllabus for this continuation training.

The continuation training may be combined with the phase 2 training in a classroom or at distance.

The continuing training should be updated when new instructions are issued which are related to the material, tools, documentation and manufacturer's or competent authority's directives.

E) **F)** Guidelines for preparing the content of Phase 2 courses:

The following guidelines should be taken into consideration when the phase 2 training programme are being established:

- a) understanding of the background and the concept of fuel tank safety,
- b) how the mechanics can recognise, interpret and handle the improvements in the instructions for continuing airworthiness that have been made or are being made regarding fuel tank systems,
- c) awareness of any hazards especially when working on the fuel system, and when the Flammability Reduction System using nitrogen is installed.

Paragraphs a) b) and c) above should be introduced in the training programme addressing the following issues:

- The theoretical background behind the risk of fuel tank safety: the explosions of mixtures of fuel and air, the behaviour of those mixtures in an aviation environment, the effects of temperature and pressure, energy needed for ignition, etc., the 'fire triangle', - Explain 2 concepts to prevent explosions:
 - (1) ignition source prevention and
 - (2) flammability reduction,
- ii) The major accidents related to fuel tank systems, the accident investigations and their conclusions,
- iii) SFAR 88 of the FAA and JAA Interim Policy INT POL 25/12: ignition prevention program initiatives and goals, to identify unsafe conditions and to correct them, to systematically improve fuel tank maintenance),
- iv) Explain briefly the concepts that are being used: the results of SFAR 88 of the FAA and JAA INT/POL 25/12: modifications, airworthiness limitations items and CDCCL,

- v) Where relevant information can be found and how to use and interpret this information in the various instructions for continuing airworthiness (aircraft maintenance manuals, component maintenance manuals, etc....),
- vi) Fuel Tank Safety during maintenance: fuel tank entry and exit procedures, clean working environment, what is meant by configuration control, wire separation, bonding of components etc.,
- vii) Flammability reduction systems when installed: reason for their presence, their effects, the hazards of a Flammability Reduction System (FRS) using nitrogen for maintenance, safety precautions in maintenance/working with an FRS,
- viii) Recording maintenance actions, recording measures and results of inspections.

The training should include a representative number of examples of defects and the associated repairs as required by the TC/STC holders maintenance data.

F) G) Approval of training:

For CAMOs the approval of the initial and continuation training programme and the content of the examination can be achieved by the change of the CAME exposition. The modification of the CAME should be approved as required by M.A.704(b). The necessary changes to the CAME to meet the content of this decision should be made and implemented at the time requested by the competent authority.'