

**NOTICE OF PROPOSED AMENDMENT (NPA) No 2007-08**

**DRAFT OPINION OF THE EUROPEAN AVIATION SAFETY AGENCY,**

**for a Commission Regulation amending Commission Regulation (EC) No 2042/2003 of 20 November 2003 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks**

**AND**

**DRAFT OPINION OF THE EUROPEAN AVIATION SAFETY AGENCY**

**for a Commission Regulation amending Commission Regulation (EC) No 1702/2003 of 24 September 2003 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations**

**AND**

**DRAFT DECISION OF THE EXECUTIVE DIRECTOR OF THE EUROPEAN  
AVIATION SAFETY AGENCY,**

**amending Annex I (AMC to Part-M) of Decision No 2003/19/RM of the Executive Director of the Agency of 28 November 2003 on acceptable means of compliance and guidance material to Commission Regulation (EC) No 2042/2003 of 20 November 2003 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks**

**Revised Part-M requirements for aircraft not used in Commercial Air Transport**

**AND**

**Pilot owner maintenance**

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## A. EXPLANATORY NOTE.

### I. General

1. The purpose of this Notice of Proposed Amendment (NPA) is to envisage amending Commission Regulation (EC) No 2042/2003<sup>1</sup> of 20 November 2003 laying down implementing rules for the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks, Commission Regulation (EC) No 1702/2003<sup>2</sup> of 24 September 2003 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations and the Decision of the Executive Director of the Agency No 2003/19/RM of 28 November 2003 on acceptable means of compliance and guidance material to Commission Regulation (EC) No 2042/2003. The scope of this rulemaking activity is outlined in the Terms of Reference M.005 and M.017 as described in more detail below.
2. The Agency is directly involved in the rule-shaping process. It assists the Commission in its executive tasks by preparing draft regulations, and amendments thereof, for the implementation of the Basic Regulation<sup>3</sup>, which are adopted as "Opinions" (Article 14(1)). It also adopts acceptable means of compliance (AMC) and guidance material (GM) for the application of Basic Regulation and its implementing rules (Article 14(2)).
3. When developing rules, the Agency is bound to following a structured process as required by Article 43(1) of the Basic Regulation. Such process has been adopted by the Agency's Management Board and is referred to as "The Rulemaking procedure"<sup>4</sup>.
4. This rulemaking activity is included in the Agency's 2007 programmes. It implements the following rulemaking tasks:
  - M.005: Pilot owner maintenance;
  - M.017: Revised Part-M requirements for aircraft not used in Commercial Air Transport.
5. The text of this NPA has been developed by two dedicated EASA rulemaking groups, appropriately coordinated to ensure consistency between the changes introduced by each group. It is submitted for consultation of all interested parties in accordance with Article 43 of the Basic Regulation and Articles 5(3) and 6 of the EASA Rulemaking procedure.

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<sup>1</sup> Commission Regulation (EC) No 2042/2003 of 20 November 2003 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 315*, 28.11.2003, p. 1. Regulation as last amended by Regulation (EC) No 376/2007 (*OJ L 94*, 4.4.2007, p. 18).

<sup>2</sup> Commission Regulation (EC) No 1702/2003 of 24 September 2003 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations, *OJ L 243*, 27.9.2003, p.6. Regulation as last amended by Regulation (EC) No 375/2007 (*OJ L 94*, 4.4.2007, p. 3).

<sup>3</sup> Regulation (EC) No 1592/2002 of the European Parliament and of the Council of 15 July 2002 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, *OJ L 240*, 7.9.2002, p.1. Regulation as last amended by Regulation (EC) No 334/2007 (*OJ L 88*, 29.3.2007, p. 39).

<sup>4</sup> Management Board decision concerning the procedure to be applied by the Agency for the issuing of opinions, certification specifications and guidance material ("Rulemaking procedure"), EASA MB/7/03, 27.6.2003.

## II. Consultation

6. To achieve optimal consultation, the Agency is publishing the draft decision of the Executive Director on its internet site. Comments should be provided within 3 months in accordance with Article 6(4) of the EASA Rulemaking procedure. Comments on this proposal should be submitted by one of the following methods:

**CRT:** Send your comments using the Comment-Response Tool (CRT) available at <http://hub.easa.europa.eu/crt/>

**E-mail:** In case the use of CRT is prevented by technical problems these should be reported to the [CRT webmaster](mailto:CRT_webmaster@easa.europa.eu) and comments sent by email to [NPA@easa.europa.eu](mailto:NPA@easa.europa.eu).

**Correspondence:** If you do not have access to internet or e-mail you can send your comment by mail to:  
Process Support  
Rulemaking Directorate  
EASA  
Postfach 10 12 53  
D-50452 Cologne  
Germany

Comments should be received by the Agency before 28 September 2007. If received after this deadline they might not be taken into account.

## III. Comment response document

7. All comments received in time will be responded to and incorporated in a comment response document (CRD). This may contain a list of all persons and/or organisations that have provided comments. The CRD will be widely available on the Agency's website and in the Comment-Response Tool (CRT).

#### IV. Content of the draft opinions and draft decision

##### A) Background information

8. On 20 November 2003 the European Commission adopted Regulation (EC) No 2042/2003 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks.
9. **Article 7(6) of (EC) No 2042/2003 required the Agency to make an evaluation of the implications of the provisions of Part-M. Such evaluation was performed through NPA 07/2005, and the resulting CRD 07/2005 was published on April 30<sup>th</sup>, 2007. This Comment Response Document is currently under external consultation and contains a Draft Opinion proposing, among others, the following changes:**
  - Clarification of the “indirect approval procedure” for the approval of the Maintenance Programme by a Continuing Airworthiness Management Organisation (CAMO) (M.A.302 (b)).
  - Clarification of the content of the Maintenance Programme (M.A.302 (c)).
  - Clarify that a Reliability Programme is not required for other than large aircraft (M.A.302 (e)).
  - Clarify that the operator’s technical log is only required for commercial air transport and also when required by the Member State in accordance with M.A.201(i) (M.A.305).
  - For certifying staff in Subpart F maintenance organisations, the six month experience requirement in every two year period has been changed to refer to the experience requirements of Part-66, which in the case of gliders and balloons refer to national rules (M.A.607 (a)).
  - For aircraft of 2730 Kg MTOM and below, which are not used in Commercial Air Transport, remove the concept of “recommendations” when the Airworthiness Review Certificate is issued by the Competent Authority. In this case, recommendations will be issued only for the import of an aircraft (M.A.711).
  - Add the possibility to use organisational reviews instead of a quality system for organisations issuing Airworthiness Review Certificates for aircraft of 2730 Kg MTOM and below (M.A.712).
  - For aircraft of 2730 Kg MTOM and below, which are not used in Commercial Air Transport, remove the need for 12 months under the management of a Continuing Airworthiness Management Organisation (CAMO) in order to have the Airworthiness Review Certificate issued by a CAMO (after a full airworthiness review). This requirement is maintained in order to have the Airworthiness Review Certificate extended (without airworthiness review) (M.A.901).

- Include in Appendix I “Continuing Airworthiness Arrangement”, the obligation of the owner to inform the Continuing Airworthiness Management Organisation (CAMO) about the flying hours and any other utilization data, as agreed with the CAMO.
  - The instructions for completing the EASA Form 1 by Subpart F organisations have been revised to include the need for a Release to Service Statement in Block 13, which is referenced in Block 19.
  - Appendix VIII “Limited Pilot Owner Maintenance” has been revised to include additional tasks.
10. Since Industry and NAAs demanded further changes to Part-M in order to alleviate the requirements imposed in non-commercial air transport operations, especially on light aircraft, and since it was necessary to develop Acceptable Means of Compliance (AMCs) and Guidance Material for the changes proposed in CRD 07/2005 and for the new changes envisaged in this NPA, the Agency created Working Group M.017. This group was also tasked to evaluate the comments received through NPA 07/2005 and to develop CRD 07/2005, as well as to evaluate maintenance related comments received from MDM.032.
11. In addition to Working Group M.017, Working Group M.005 was also created in order to address the issue of “Pilot Owner Maintenance” and to produce a revised Appendix VIII that would better adapt the needs of non-complex aircraft not involved in commercial air transport. The concept of “jointly owning” an aircraft has also been addressed.
- 12. This NPA contains the proposed changes resulting from the work of both groups (M.017 and M.005). These changes have been proposed as an amendment to the current Part-M, without creating a separate Part-M (light) specific for aircraft not involved in Commercial Air Transport. This latest option was the one preferred by most of the Industry. However, the Agency did not find enough justification in doing so because of the following reasons:**
- Most of the paragraphs of the current Part-M remain unchanged, and creating a separate Part-M (light) would have produced unnecessary duplication.
  - This duplication would have meant duplicated work when keeping both documents updated.
  - It would also have meant that owners/operators trying to move from non commercial air transport to commercial air transport would have needed to learn two separate regulations trying to identify the differences between each other. This difference is much more evident having a single regulation with some articles split in commercial and non-commercial air transport (with an appropriate weight limit).
13. In addition to the proposed changes, there is still ongoing work in relation to the possibility to create a “B3” aircraft maintenance license, specific for general aviation. A sub-group from M.017 has recently undertaken the task and several options are currently under evaluation.
- 14. Attachment 1 contains a consolidated version (for reference only) of the paragraphs changed in both the CRD 07/2005 and this NPA.**

**B) Envisaged changes resulting from Task M-017 “Revised Part-M requirements for aircraft not used in Commercial Air Transport”**

**i) Changes accepted and incorporated in the NPA**

15. Bearing in mind that the main objective of the task was to alleviate the regulatory burdens imposed on light aircraft not involved in commercial air transport, retaining at the same time a high level of safety, the group worked on defining the category of aircraft that would be eligible for most of the alleviations. Several options were identified:

i. Using the definition of “complex aircraft” contained in COM (2005) 579 “Proposal for Regulation of the European Parliament amending Regulation (EC) No 1592/2002 of 15 July 2002 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency”, which is:

*(a) an aeroplane:*

- *with a maximum certificated take-off mass exceeding 5,700kg or;*
- *with a maximum approved passenger seating configuration of more than 9 or;*
- *certificated for operation with a minimum crew of at least 2 pilots or;*
- *equipped with (a) turbojet engine(s); or*

*(b) a helicopter:*

- *with a maximum certificated take-off mass exceeding 3,175kg or;*
- *with a maximum approved passenger seating configuration of more than 5 or;*
- *certificated for operation with a minimum crew of at least 2 pilots; or*

*(c) a tilt rotor aircraft.*

ii. Using the 2000 Kg MTOM currently being discussed within MDM.032.

iii. Using the 2730 Kg MTOM already proposed in some paragraphs of CRD 07/2005.

The group considered that options (i) and (ii) were more in line with the complexity of the aircraft in terms of aircraft certification and pilot licensing issues. However, this does not necessarily mean that the aircraft is complex from a maintenance management standpoint.

The group also felt that the limit should be simple and clear enough that could be readily understood and implemented by the aviation community.

As a consequence, option (iii) was retained, which is the 2730 Kg MTOM.

16. The proposed changes to the regulations and the associated Acceptable Means of Compliance are the following:

**a) M.1**

17. Paragraph M.A.302 provides the possibility for the continuing airworthiness management organisation (CAMO) managing the aircraft to use an indirect approval procedure, approved by its competent authority, in order to approve and amend the maintenance programme. However, by default, the competent authority for a maintenance programme is the one from

the State of Registry. As a consequence, a provision in M.1 (as well as in M.A.302) has been introduced for those cases where the competent authority of the CAMO is not the same as the competent authority of the State of Registry.

18. AMC material has been introduced in M.1 in order to clarify what is the meaning of the term “competent authority” and in order to clarify that a Member State may designate more than one competent authority to cover different areas of responsibility, as long as there is only one competent authority responsible for each given area of responsibility.

#### **b) M.A.302 Maintenance programme**

19. Paragraph M.A.302 provides the possibility for the continuing airworthiness management organisation (CAMO) managing the aircraft to use an indirect approval procedure, approved by its competent authority, in order to approve and amend the maintenance programme. However, by default, the competent authority for a maintenance programme is the one from the State of Registry. As a consequence, a provision in M.A.302 (as well as in M.1) has been introduced for those cases where the competent authority of the CAMO is not the same as the competent authority of the State of Registry.
20. AMC M.A.302 has been revised in order to incorporate, for aircraft not involved in commercial air transport, the concept of “*baseline*” and “*generic*” maintenance programmes with the purpose of allowing the initial approval and/or the extension of the scope of an existing CAMO approval, without having any customers under contract for the requested scope of work. This issue is of great importance for independent CAMOs (those not linked to an operator).

#### **c) M.A.401 Maintenance data**

21. AMC M.A.401 has been amended in order to mention different formats that may qualify as “*workcard/worksheet*” for aircraft of 2730 Kg MTOM and below.

#### **d) M.A.502 Component maintenance**

22. M.A.502 has been revised and AMC material has been added in order to better explain what is meant by “*component maintenance*” and when such maintenance can be performed outside an approved organisation.

#### **e) M.A.504 Control of unserviceable components**

23. AMC material has been added to clarify the meaning of the term “*a secure location under the control of the M.A.502 approved organisation*” when dealing with storage of components that are in unserviceable condition. The purpose is to allow the possibility for the approved organisation to have storage locations outside their main facilities in order to facilitate those M.A.801(b)(2) certifying staff performing maintenance to keep unserviceable components under the control of the M.A.502 approved organisation.



**f) M.A.604 Maintenance Organisation Manual**

24. Appendix IV has been amended in order to include provisions for subcontracting specialised services.

**g) M.A.610 Maintenance work orders**

25. AMC material has been added in order to mention different formats that may qualify as “*work order*”.

**h) M.A.615 Privileges of the organisation**

26. Subpart F maintenance organisations do not have currently the privilege of subcontracting maintenance tasks, which could be justified by the fact that the regulation does not impose on them the obligation to have a Quality System. However, in the case of specialised services such as non destructive testing, surface treatment, heat-treatment, welding, etc, it may not be possible to find an appropriately approved maintenance organisation for the particular aircraft involved. This is particularly true in the case of very simple aircraft, which in fact affects deeper the very small organisations.

As a consequence, the privilege has been given to Subpart F maintenance organisations for subcontracting organisations performing specialised services, under the appropriate controls and provisions. In particular:

- The specialised service provider must be “*appropriately qualified*”.
- Subcontracting must be “*under the control of the Subpart F organisation*”, including the appropriate inspections and investigations.
- Procedures should be documented in the Maintenance Organisation Manual.
- Provisions have been incorporated for coverage in the applicable Organisational Reviews.

AMC material has been added to clarify the terms “*appropriately qualified*” and “*under the control of the Subpart F organisation*”.

**i) M.A.616 Organisational review**

27. Appendix VIII has been amended in order to include provisions for subcontracting specialised services, and to provide some flexibility regarding the training and experience of evaluators.

**j) M.A.706 Personnel requirements**

28. AMC material has been revised in order to clarify the level of training in different aircraft types for the nominated persons in a continuing airworthiness management organisation.

**k) M.A.707 Airworthiness review staff**

29. Alleviated requirements have been introduced for the airworthiness review staff for organisations managing aircraft of 2730 Kg MTOM and below not involved in commercial air transport.

30. AMC material has been developed in order to clarify the following terms:

- “*experience in continuing airworthiness*”;
- “*to hold a position with the appropriate responsibilities*”, including:
  - Independence from the airworthiness management process;
  - Overall authority on the airworthiness management process.
- “*formal aeronautical maintenance training*”;
- “*appropriate aeronautical maintenance training*”;
- “*performance of an airworthiness review under supervision*”;
- continuing experience needed to keep the validity of an airworthiness review authorisation;
- minimum content of the airworthiness review staff records.

#### **l) M.A.709 Documentation**

31. It has been clarified that availability of customer provided maintenance data is only necessary when there is a contract with the customer.

#### **m) M.A.710 Airworthiness review**

32. AMC material added to clarify the meaning of the term “*without a loss of continuity of the airworthiness review pattern*” in those cases where the airworthiness review is advanced up to 90 days for flexibility purposes.

#### **n) M.A.711 Privileges of the organisation**

33. The reference in the AMC M.A.711(b) to the possibility of contracting the airworthiness review to another CAMO appropriately approved, which in turn will issue a recommendation to the competent authority, has been removed. The reason is that this is not consistent because the recommendation has been removed in the case of aircraft of 2730 Kg MTOM and below not involved in commercial air transport. Nevertheless, the possibility of contracting the airworthiness review is still true as it is clearly described in M.A.901.

#### **o) M.A.712 Quality system**

34. In order to be in line with the requirement shown on M.A.712(e), which states that “*In the case of commercial air transport the M.A. Subpart G quality system shall be an integrated part of the operator’s quality system*”, paragraph M.A.712(f) has been amended to clearly state that organisational reviews are not possible when managing aircraft involved in commercial air transport.

35. M.A.712 (f) has been amended to clearly state that contracting continuing airworthiness management tasks is not possible without a quality system.

36. AMC material has been amended in order to change the criteria to qualify as a small organisation in order to be eligible for organisational reviews. The criteria have been changed from the number of managed aircraft, to the number of persons in the organisation, in order to

be in line with the criteria established for Subpart F organisations. The new limit is set at 5 persons, including M.A.706 and M.A.707 staff. As it is mentioned in the previous paragraph, this implies the impossibility for contracting continuing airworthiness management tasks to other organisations.

37. Appendix XII has been created in order to give guidelines on the performance of organisational reviews for small organisations.

**p) M.A.801 Aircraft certificate of release to service**

38. AMC material has been added to clarify the terms “3 years maintenance experience” and “holding the proper qualifications”.

**q) M.A.901 Aircraft airworthiness review**

39. For aircraft 2730 Kg MTOM and below that are not used in commercial air transport, M.A.901 is amended in order to give the possibility to the owner to choose between having the airworthiness review performed by the competent authority or by an appropriately approved continuing airworthiness management organisation (CAMO).
40. For aircraft 2730 Kg MTOM and below that are not used in commercial air transport, M.A.901 is also amended in order to remove the requirement of having maintenance performed only at approved maintenance organisations in order for a CAMO to be able to perform the airworthiness review and issue the airworthiness review certificate. As a consequence, any CAMO appropriately approved to perform airworthiness reviews, may be contracted to perform the airworthiness review and to issue the ARC without the need for having managed the aircraft before (the 12 month requirement was removed as part of CRD 07/2005), and without the need for having maintenance performed only at approved maintenance organisations (as long as maintenance is performed in accordance with the regulations). Basically, what it allows is maintenance performed by M.A.801(b)(2) certifying staff (except complex tasks in accordance with Appendix VII). However, those requirements (controlled environment) are still applicable for the extension (without airworthiness review) of the airworthiness review certificate.
41. AMC material has been added to address the language in which the recommendation sent by a continuing airworthiness management organisation (CAMO) to the competent authority of the State of Registry should be written. This issue was intended to be addressed by a future Working Group for Task M.011.

**r) M.B.102 Competent authority – Qualification and training**

42. AMC material has been revised in order to clarify the level of training in different aircraft types for the competent authority staff involved in Part-M activities.

**s) M.B.303 Aircraft continuing airworthiness monitoring**

43. AMC material has been created to give flexibility to the competent authority when creating the airworthiness survey programme for aircraft for which it delivers the airworthiness review certificate.

**t) M.B.606 Changes**

44. M.B.606 and its associated AMC have been amended in order to align with Part-145, paragraph 145.B.35.

**u) M.B.704 Continuing oversight**

45. AMC material has been revised to correct the period of time where back credit for specific item audits can be granted. It has been aligned with AMC 145.B.30(1).

**v) M.B.706 Changes**

46. M.B.706 and its associated AMC have been amended in order to align with Part-145, paragraph 145.B.35.

**w) M.B.902 Airworthiness review by the competent authority**

47. Alleviated requirements have been introduced for the competent authority staff involved in airworthiness reviews of aircraft of 2730 Kg MTOM and below not involved in commercial air transport.

48. AMC material has been developed in order to clarify the following terms:

- “*experience in continuing airworthiness*”;
- “*formal aeronautical maintenance training*”;
- “*appropriate aeronautical maintenance training*”.

**x) Appendix III – Airworthiness Review Certificate**

49. Form 15a has been amended in order to replace the sentence “*is considered to be airworthy at the time of the issue*” by the sentence “*is considered to be airworthy at the time of the review*”. This amendment has been introduced because the competent authority can not be aware of possible changes in the airworthiness status of the aircraft after the airworthiness review is performed, mainly in the case of receiving a recommendation from a continuing airworthiness management organisation.

This change will align the text with the one shown on Form 15b.

This amendment has implied the subsequent amendment of the Form 15a shown on Commission Regulation (EC) No 1702/2003, Annex (Part 21).

**y) Appendix VII – Complex Maintenance Tasks**

50. Appendix VII has been revised in order to incorporate complex maintenance tasks related to piston engines. In addition, it has been stated that the purpose of Appendix VII is to provide those tasks that need to be performed in an approved maintenance organisation because they are likely to involve the need for special tooling, equipment and facilities.

**ii) Changes rejected**

51. The following possible changes were also considered but could not be incorporated in the NPA because of different issues, as explained in the following paragraphs:

52. It was proposed to incorporate FAA AC 43-13 as an acceptable method for repair, inspection and modification of light aircraft not involved in commercial air transport. As it is expressed in AC 43-13, this would be limited to non-pressurised areas, as long as the repair is considered minor and subject to the non availability of appropriate data from the manufacturer.

However, the decision to classify a repair as minor or major has to be performed by a Part-21 approved design organisation, leaving no room for the maintenance engineer to decide it.

As a consequence, there is no legal basis to accept this proposal until Part-21 is appropriately changed. This change may not be necessary if EASA was to develop and approve a document similar to AC 43-13, which is part of a proposed rulemaking task scheduled to start in 2008.

53. It was also proposed to accept the FAA 8130-3 issued by an FAA repair station not approved under Part-145 as an acceptable document for maintained components for light aircraft not used in commercial air transport. This proposal came initially from the UK CAA and, after appropriate conversations, the UK CAA explained that the main concern was focused on maintained components already in stock before the entry into force date for Part-M (28 September 2008). At that point EASA clarified that this is not a problem for those components maintained prior to 28 September 2008, since AMC M.A.613(a) already allows the issuance of an EASA Form 1 by an organisation approved for the maintenance of the aircraft type where the component is installed, after performing the appropriate inspections. However, for components maintained after 28 September 2008 it is not currently possible to accept the 8130-3 issued by non-Part 145 organisations because the corresponding bilateral agreements do not allow it and, furthermore, the FAA would not reciprocally accept an EASA Form 1 issued by Part-145 organisations not approved by the FAA.

Nevertheless, the following considerations should reduce the impact significantly:

- MDM.032 Working Group is currently working on a proposal to reduce the number of components that require a Form 1 or equivalent (in addition to those already classified as standard parts for sailplanes as a consequence of ED Decision 2006/13/R). This group is also working on the possibility for the owner of the aircraft to fabricate certain non critical parts.
- Maintenance of such components may be performed either in Part-145 or Subpart-F organisations. For many components there are already Part-145 organisations available because there are commercial operators using those aircraft and subject already to the Part-M requirements.
- Many FAA repair stations may seek approval as Part-145 organisation under the provisions of the corresponding bilateral agreements as soon as they see a business opportunity. This is a fairly easy and inexpensive process.

**C) Envisaged changes resulting from Task M-005 “Pilot owner maintenance”**

54. Paragraph M.A.803 and Appendix VIII encompass provisions for limited pilot owner maintenance and for the issue of a subsequent Certificate of Release to Service (CRS). However, the Appendix was found too restrictive in scope and it was furthermore proposed to re-evaluate the applicability of each task in the Appendix to gliders, balloons, airships and light aircraft. The Agency agreed with such envisaged changes to enable the Member States not wishing to opt-out until September 2008 to implement Part M with a more adapted list of tasks suitable for pilot owner maintenance. Nonetheless, it was emphasised that paragraph M.A.803 and Appendix VIII were subject to further re-evaluation and assessment for consistency with Appendix VII (when comparison shows that complex maintenance tasks in Appendix VII were less restrictive than the requirements for Appendix VIII). Additionally, some coordination with the task M.010 working group might be required in order to determine a concept of pilot owner maintenance in the case of collectively owned aircraft. This task was expected to start later within the EASA rulemaking program for 2008 but would have impacted on the objectives of the rulemaking task M 005.
55. A drafting group, composed of Industry, National Aviation Authority and EASA representatives was formed to evaluate the situation, make proposals as outlined below and develop an opinion to change Part M and/or its related AMC/GM. The group known as M.005 accepted the terms of reference.
56. The first stage of the work was to evaluate the different concepts of “maintenance tasks authorised to be carried out by the pilot” which existed throughout Europe before the implementation of Part M. A wide variety of methods was discovered within the different Member States, ranging from “no limitation of tasks with a NAA inspection every six months” to “full ban of task performance by the pilot when not holding a national Aircraft Maintenance Licence”. In the absence of a common philosophy on pilot owner maintenance throughout Europe, the working group saw no fundamental reason to change the current Part M Appendix VIII in principle, although it was felt that the information it contained could be clarified and better presented.
57. In order to assess the best options to achieve this aim, based at least on the existing systems already implemented by the Member States, records of accidents and incidents were scrutinized. However, it was found that the statistics do not show critical information on cases where maintenance was badly performed by any pilot owners involved. Those figures should be viewed with caution as there is no ICAO recommendation for NAAs or pilot owners to report such accidents or incidents when light aircraft are not involved in commercial activities. For that reason, few databases are available around the world, and more especially in Europe where, in the past, different criteria would be used by different National Aviation Authorities: such comparison was therefore not possible before the recent implementation of ECCAIRS, the European Commission common database on aircraft accidents and incidents. On the other hand, the NTSB database (USA) constituted a sufficient tool to be considered for further search analysis using the key words “owner, mechanic and maintenance”. According to the US system, FAA document AC 43 authorises pilot owners to carry out certain maintenance activities according to a list of tasks from which the list at Appendix VIII of Part M originated. This database has been converted to ECCAIRS files but the structuring of the recorded events has not been checked by EASA. A total of 85 occurrences were found

to have met the search criteria during the last ten years (1996 – 2005), of which only seven were attributable to pilot owner maintenance; i.e. a rate of less than one per year from a light aircraft population of around 245.965 aircraft (as at August 2001). Moreover, further analysis shows that around 50% of the accident rate was engine task related and because of this, the possible adoption of pilot owner maintenance tasks in this area has been considered in detail. However, the accident and incident data currently available does not show any relationship between pilot owner maintenance and the number of accidents or incidents.

58. From the above accident and incident search analysis the group drew the following conclusions:

- Caution should be exercised when drawing conclusions from the statistics as all accidents and incidents may not be properly or systematically reported, especially when the pilot realized later that he had made a mistake;
- Notwithstanding the availability of good data on accidents and incidents, this alone should not be seen as a reason for further regulation or deregulation of pilot owner maintenance without detailed consideration of the tasks to be carried out.

59. Before drafting this NPA, the working group checked also the ICAO recommendations at Annex 6, Part II, Chapter 8.1.3 (Operations - aeroplane maintenance for general aviation), which recommends that when the maintenance release is not issued by a maintenance organisation approved in accordance with the ICAO recommendations, the person signing the maintenance release shall be licensed in accordance with ICAO Annex I. Annex I (Personnel licensing) Chapter 4 (licences and ratings for personnel other than flight crew members) recommends that an applicant for any licence or rating shall demonstrate in a manner determined by the Licensing Authority, such requirements in respect of knowledge and skill that are specified for that licence or rating. Furthermore, a signatory approved to ICAO requirements shall not be less than 18 years of age and shall have demonstrated a level of knowledge relevant to the privileges to be granted and appropriate to the responsibilities of an aircraft maintenance licence holder in at least air law and maintenance requirements as well as other subjects. Additionally, sub-chapter 4.2.4 authorises an approved maintenance organisation to appoint non-licensed personnel to exercise Certificate of Release to Service privileges provided that the above criteria are met.

Thus, an aircraft which has undergone pilot owner maintenance may need to have additional maintenance carried out to ensure full compliance with ICAO requirements, for example on export from the EU.

60. Therefore, using the existing provisions in Part M, the working group M.005 decided to create a list of basic principles to be met for the acceptance of pilot owner maintenance, irrespective of the category of aircraft involved. These principles were gathered in a revised Appendix VIII as a foreword because pilot owners may not be familiar with all aspects of Part M but are most likely to be knowledgeable about this appendix, which is dedicated to their specific privileges.

The following basic principles were developed:

- The scope of the applicable pilot owner maintenance tasks shall be defined and approved in the M.A.302 aircraft maintenance programme.

- Before carrying out any of the maintenance tasks listed in Parts A to D of Appendix VIII, pilot owners must satisfy themselves that they are competent to carry out the task. It is the responsibility of pilot owners to familiarize themselves with the standard maintenance practices for their aircraft and with the specific requirements of their aircraft's maintenance programme.
  - The maintenance instructions of the TC holder as expressed in the aircraft maintenance manual and the instructions for continuing airworthiness are to be considered in developing the maintenance programme; but they cannot extend the scope of pilot owner maintenance beyond the generic task lists in Appendix VIII, Parts A to D.
  - The maintenance data as specified in M.A.401 must always be available during the conduct of pilot owner maintenance. Details of the data referred to in the conduct of each pilot owner maintenance task must be included in the Certificate of Release to Service IAW M.A.803(d).
  - The need to use special tools, carry out special testing (e.g. NDT) or any unscheduled special inspection (e.g. a heavy landing check) prevents the task from being carried out as pilot owner maintenance.
  - Any task described in the aircraft flight manual as preparing the aircraft for flight (e.g. assembling a glider's wings or a pre-flight check), is considered to be a pilot task and is not considered pilot owner maintenance; therefore, such tasks do not require a Certificate of Release to Service.
  - Any task related to an Airworthiness Directive (AD) is not considered as pilot owner maintenance, unless it is specifically allowed by the text of the AD.
  - The pilot owner must inform the Part M Subpart G Continuing Airworthiness Management Organisation (if applicable) not later than 30 days after completion of any pilot owner maintenance task, IAW M.A 305 (a).
  - Inspection tasks/checks of any periodicity included in an approved maintenance programme can be carried out providing that the specified tasks are included in the generic lists at Parts A through D of Appendix VIII.
  - In addition to the generic lists in Parts A through D, the pilot-owner may carry out very simple visual inspections for general condition and obvious damage of the airframe, engines and components as long as the task does not involve the removal of any component or element.
61. The aircraft maintenance programme will be approved either by the NAA or the Continuing Airworthiness Management Organisation (CAMO) when contracted. If the maintenance performed by approved organisations, or the airworthiness reviews performed by either the competent authority or a CAMO, reveal that pilot owner maintenance has not been performed properly, the maintenance programme should be revised in order to modify the list of tasks permitted as pilot-owner maintenance. Nevertheless, it should be clearly understood that at all times the responsibility for pilot owner maintenance remains that of the pilot. The pilot must make sure he/she is competent to carry out any pilot owner maintenance task. The responsibility of the NAA or CAMO is limited to identifying appropriate tasks in the aircraft maintenance programme and ensuring that the document is updated in a timely manner.
62. The fact that the pilot owner maintenance tasks are identified in the maintenance programme should raise the pilot owner's awareness of the responsibilities and the ability to carry out such tasks in a competent manner. It should also provide an opportunity for the NAA or the CAMO to establish that the pilot owner is familiar with the aircraft maintenance environment and its regulation.



63. Under the requirements of Part M, responsibilities have been better defined between the pilot owner and the CAMO when such an organisation is contracted. Appendix I has therefore been reviewed: clarification has been brought to the contract. Notwithstanding the fact that the CAMO must declare the tasks in the maintenance programme, it cannot prevent the pilot owner from performing pilot owner maintenance according to Appendix VIII. However, in the case of incorrect performance of pilot owner maintenance the CAMO may not be in a position to renew or extend the aircraft's Airworthiness Review Certificate (ARC).
64. A comparison was also made with other existing standard practices such as:
- ASTM F2483-05 for Light Sport Aircraft (US system);
  - FAR43 (FAA regulations);
  - CAP 520 (UK CAA – Light Aircraft Maintenance).

This comparison identified the following areas of debate:

#### Competence and Responsibility

An accurate assessment of the pilot owner's competence is not always possible because guidance may need to be sought either from the licensed aircraft maintenance engineer, the approved maintenance organization or the competent authority. It was accepted by the working group that by virtue of the pilot owner's possession of a pilots' licence valid for the aircraft, the pilots could be deemed competent to self-assess their competence to carry out the limited range of tasks proposed in Appendix VIII, Parts A to D. The working group therefore determined that no regulatory or administrative burden or legal responsibility should be left to external bodies: it must be made clear that the pilot is the one responsible for the conduct of pilot owner maintenance. Moreover, there was a view that there should be no requirement for the determination of the pilot owner's maintenance competence and that the lists as proposed should not be considered as restrictions against the performance of the tasks by an owner that is authorized to perform the said task by the competent authority. The lists give items that can be expected to be completed by a responsible owner who holds a current and valid pilot licence for the aircraft type involved but who has not received any specific formal maintenance training.

#### Technical Content of the Tasks List

The list of tasks as proposed in the current version of Part M or in the revision proposed by NPA 7/2005 did not address in a detailed manner the specific needs of the various aircraft categories: there was no difference made between aeroplanes, balloons, gliders and rotorcraft. Furthermore, the development of technology and the nature of the operations undertaken by these categories of aircraft had not been adequately considered.

65. Consequently, the M.005 working group decided to limit the list of pilot owner maintenance tasks to those that are generally not safety related and whose incorrect performance will not drastically affect the airworthiness of the aircraft. Thus, pilot owner competency does not need to be demonstrated as it does for the requirements of a licensed aircraft maintenance engineer because the lists of tasks do not contain "critical" items. In any case, the working group believed that the lists of tasks should remain as simple as possible.

66. It became clear that for rotorcraft, however, the list of pilot owner maintenance tasks would be more limited than for other categories of aircraft because the consequences of incorrect performance of maintenance actions will affect the airworthiness of a rotorcraft more than that of a fixed-wing aircraft. Indeed, many countries around the world have the same approach: pilot owner maintenance is not allowed or is very restricted for rotorcraft.
67. Whenever possible, the structure of the pilot owner maintenance task lists has been aligned to the ATA aircraft system classification.
68. The M.005 working group has sought consistency with the output of other EASA working groups, especially M.017 (implementation of further changes to Part M, AMC/GM amendment following regulatory impact assessment NPA 07/2005 for light aircraft) and MDM.032 (a better concept for general aviation – certification/maintenance/operations/licensing). In addition, the mass of an aircraft is also considered a discriminator in terms of pilot owner maintenance, especially for the aeroplane tasks list. The working group has therefore adopted an upper limit of 2730 kg for powered aircraft in order to fit the overall concept of Part M and the likely future simplified light aircraft certification procedures within Part 21.
69. From a legal perspective, the key issues behind M.A.803 for pilot owner maintenance are the following:
- There was a need to clarify the concept of joint ownership. An aircraft is either owned by a natural person or jointly owned by a group of natural persons, by a limited liability company or by a legal entity, accepted as the registered owner by the Member State of registry, irrespective of whether these owners are part of a non profit association, flying club/association, training schools etc.
  - A second aspect is that only the registered owner is authorised to perform pilot owner maintenance: this excludes legal owners that are not in the document for the registration of aircraft.
  - It is noted that only a natural person can possess a pilot licence. The pilot must hold a current licence, which must be valid for the aeroplane type concerned. Consequently, a company or a legal entity cannot hold a pilot licence and should designate the pilot authorised to perform limited pilot owner maintenance. The current Part M does not regulate this situation, the reason for which this proposal has been made.
  - Ultimately, only the pilot owner or the pilot designated by the company or the legal entity as mentioned above is authorized to issue a CRS for the maintenance tasks he/she has performed.
70. Following discussion that has taken place on the issue of “jointly owned aircraft”, the basic and legal principles described above were used as a guide for further consideration and clarification. Nevertheless, in the case of a legal entity (specifically, a not-for-profit registered organisation or a limited company), it is impossible to cover all the different legal forms and structures under which flying clubs and groups of aircraft owners are established in the various Member States. Therefore, the working group has recommended that these entities nominate specific individuals having the necessary competence to carry out their pilot owner maintenance task. These individuals would need to be members of the organisation

concerned, would also hold a valid pilot licence and their names would be entered in the aircraft maintenance programme. Some commentators to NPA 7/2005 wanted to see non-pilot licence holder members of these not-for-profit organisations authorised to perform pilot owner maintenance. Such a proposal is fully outside the terms of reference of M.005 and M.010. Moreover, such a new concept would challenge the system of approved maintenance organisations and the role of independent Part 66 licence holders. Moreover, this concept would need to be based on a system of competence assessment, with its attendant administrative burden (including the demonstration of competence, acceptance, record keeping and archive keeping). Additionally, in terms of safety, flying their own aircraft after performing maintenance tasks themselves reinforces the commitment and the meaningful self assessment of competence by the individual pilot.

71. M.A.501, regarding the installation of standard parts, has been considered by the group in the relevant task lists of Appendix VIII. Additionally, the new developments of pyrotechnic rescue systems have been discussed but due to the dangerous nature of this equipment it was considered that these maintenance tasks were not eligible for pilot owner maintenance.

72. As a result of the work performed by M.005 group, the following paragraphs have been revised:

**a) M.A.402 Performance of maintenance**

73. AMC M.A.402(a) has been revised in order to introduce the concept of jointly owning an aircraft in pilot owner maintenance.

**b) M.A.714 Record keeping**

74. AMC M.A.714 has been revised in order to include the need for the CAMO to receive the aircraft certificates of release to service issued by the pilot owner.

**c) M.A.803 Pilot-owner authorisation**

75. M.A.803 and AMC material have been revised in order to include the need for the pilot owner to introduce in the certificate of release to service the maintenance data used and to clarify the legal meaning of the following terms:

- *Pilot owner;*
- *Joint ownership.*

**d) Appendix I – Continuing Airworthiness Arrangement**

76. The following obligations have been included:

- The continuing airworthiness management organisation must include in the maintenance programme the tasks that are considered as pilot owner maintenance.
- The owner must enter the release to service in the logbooks and inform the continuing airworthiness management organisation.

**e) Appendix VIII – Limited Pilot-Owner Maintenance**

77. Appendix VIII has been completely revised including separate list of tasks for:

- Aeroplanes;
- Rotorcraft;
- Sailplanes and powered sailplanes;
- Hot air ships, hot air balloons and gas balloons.

AMC material has been added.

**V. Regulatory Impact Assessment for Task M-017 “Revised Part-M requirements for aircraft not used in Commercial Air Transport”**

78. In order to select the appropriate option the following issues have been subject to Regulatory Impact Assessment:

- Airworthiness Review Staff requirements for aircraft 2730 Kg and below not used in commercial air transport (M.A.707);
- Airworthiness Review Staff requirements for competent authorities for aircraft 2730 Kg and below not used in commercial air transport (M.B.902);
- Issuance and renewal of the Airworthiness Review Certificate (M.A.901);
- Subcontracting of specialised services by M.A. Subpart F approved maintenance organisations (M.A.615).

**79. Airworthiness Review Staff requirements for aircraft 2730 Kg and below not used in commercial air transport (M.A.707)**

Headings	Sub Headings
<b>1. Purpose and Intended Effect</b>	<p><b><u>a. Issue which the NPA is intended to address:</u></b> It is felt that the requirements for Airworthiness Review Staff specified in M.A.707 are too stringent for light aircraft not used in commercial air transport (general aviation).</p> <p><b><u>b. Scale of the issue (quantified if possible):</u></b> This is a major issue for those continuing airworthiness management organisations managing aircraft involved in general aviation and for the persons currently working on similar organisations under national requirements.</p> <p><b><u>c. Relevant decisions by EASA or other authorities that guide/constrain action:</u></b> NPA 07/2005 and CRD 07/2005</p> <p><b><u>d. Brief statement of NPA objectives:</u></b> Modify, if needed, the paragraphs related to the Airworthiness Review Staff requirements for aircraft of 2730 Kg MTOM and below not used in commercial air transport (M.A.707).</p>
<b>2. Options</b>	<p><b><u>a. The options identified and evaluated:</u></b></p> <p><u>1. Do nothing:</u> Retain the current requirements.</p> <p><u>2. Adapt the experience and training requirements to the general aviation environment:</u> Essentially, to reduce from 5 to 3 years experience in continuing airworthiness, include the possibility of using nationally recognized maintenance personnel qualifications and alleviate the requirement of aeronautical maintenance training from</p>

Headings	Sub Headings
	<p>formal to appropriate. Appropriate meaning demonstrated by documented evidence or by assessment by competent authority or by other airworthiness review staff.</p> <p><b><u>b. Equity and fairness issues identified:</u></b></p> <p>The current regulation seems to be unfair with the general aviation community because it is imposing the same requirements to all aircraft without considering the difference in complexity.</p> <p><b><u>c. The preferred option selected:</u></b></p> <p>In accordance with the Terms of Reference, the group preferred option 2 - adapting the experience and training requirements to the general aviation environment.</p>
<p><b>3. Impacts</b></p>	<p><b><u>a. Sectors affected:</u></b></p> <p>Organisations, including national aero clubs, and persons working on the maintenance management of light aircraft not used in commercial air transport</p> <p><b><u>b. All impacts identified:</u></b></p> <p><b><u>A Safety</u></b></p> <p><u>1. Do nothing:</u> No impact</p> <p><u>2. Adapt the experience and training requirements to the general aviation environment:</u> There should be no impact on safety since it is considered that 3 years is more than enough experience for the reduced complexity of the affected aircraft. Assessment of aeronautical maintenance training is also considered adequate.</p> <p><b><u>B Economic</u></b></p> <p><u>1. Do nothing:</u> No impact</p> <p><u>2. Adapt the experience and training requirements to the general aviation environment:</u> Very positive impact on the CAMOs since it is easier for them to find appropriate candidates for airworthiness review staff and there is no need to require an unreasonably vast experience and training. Through this measure the availability of appropriately qualified individuals will be increased. Positive impact on customers because of no need for increased fees resulting from overqualified staff.</p>

Headings	Sub Headings
	<p><b><u>C Environmental</u></b> None</p> <p><b><u>D Social</u></b> <u>1. Do nothing:</u> No impact</p> <p><u>2. Adapt the experience and training requirements to the general aviation environment:</u> Very positive impact, because personnel currently working in the general aviation field may be eligible to work as airworthiness review staff, not losing their jobs. This should also promote the introduction into the job market to young individuals, who may have difficulties getting into the system. If the requirements were the same for all type of aircraft, candidates may prefer to go to larger organisations working on larger aircraft because of better professional expectations. Further, the new requirements do not create a barrier for those individuals seeking advancement to larger organisations.</p> <p><b><u>E Other aviation requirements outside EASA scope, such as security, ATM, airports, etc.</u></b> None</p> <p><b><u>F Foreign comparable regulatory requirements</u></b> None</p> <p><b><u>G Equity and fairness</u></b> <u>1. Do nothing:</u> No impact</p> <p><u>2. Adapt the experience and training requirements to the general aviation environment:</u> The graded requirements for different categories of aircraft are justified by their varying complexity. This cannot be considered unfair treatment.</p>
4. Summary and Final Assessment	<p><b><u>a. Comparison of the positive and negative impacts for each option evaluated:</u></b> Refer to the Table of RIA results hereafter.</p> <p><b><u>b. A summary of who would be affected by these impacts and issues of equity and fairness:</u></b> Organisations, including national aero clubs, and persons</p>

Headings	Sub Headings
	<p>working on the maintenance management of light aircraft not used in commercial air transport</p> <p><b><u>c. Final assessment and recommendation of a preferred option:</u></b></p> <p><u>Option 2: Adapt the experience and training requirements to the general aviation environment:</u> Essentially, to reduce from 5 to 3 years experience in continuing airworthiness, include the possibility of using nationally-recognized maintenance personnel qualifications and alleviate the requirement of aeronautical maintenance training from formal to appropriate. Appropriate meaning demonstrated by documented evidence or by assessment by competent authority or by other airworthiness review staff.</p>

- 2 = very negative impact
- 1 = negative impact
- 0 = no impact
- + 1 = positive impact
- + 2 = very positive impact

	<b>Option 1 Do nothing</b>	<b>Option 2 Adapted requirements</b>		
Safety	0	0		
Economic	0	+2		
Environmental	0	0		
Social	0	+2		
Other aviation requirements	0	0		
Equity	0	0		
<b>Summary</b>	<b>0</b>	<b>+4</b>		



**80. Airworthiness Review Staff requirements for competent authorities for aircraft 2730 Kg and below not used in commercial air transport (M.B.902)**

Headings	Sub Headings
<p><b>1. Purpose and Intended Effect</b></p>	<p><b><u>a. Issue which the NPA is intended to address:</u></b> It is felt that the requirements for Airworthiness Review Staff specified in M.B.902 are too stringent for light aircraft not used in commercial air transport (general aviation).</p> <p><b><u>b. Scale of the issue (quantified if possible):</u></b> This is a major issue for the competent authorities when trying to find qualified personnel for airworthiness reviews and for the persons currently performing a similar function under national requirements.</p> <p><b><u>c. Relevant decisions by EASA or other authorities that guide/constrain action:</u></b> NPA07/2005 and CRD07/2005</p> <p><b><u>d. Brief statement of NPA objectives:</u></b> Modify, if needed, the paragraphs related to the Airworthiness Review Staff requirements for competent authorities for aircraft of 2730 Kg MTOM and below not used in commercial air transport (M.B.902).</p>
<p><b>2. Options</b></p>	<p><b><u>a. The options identified and evaluated:</u></b></p> <p><u>1. Do nothing:</u> Retain the current requirements.</p> <p><u>2. Adapt the experience and training requirements to the general aviation environment:</u> Essentially, to reduce from 5 to 3 years experience in continuing airworthiness and alleviate the requirement of aeronautical maintenance training from formal to appropriate. Appropriate meaning demonstrated by documented evidence or by assessment by competent authority or by other airworthiness review staff.</p> <p><b><u>b. Equity and fairness issues identified:</u></b> The current regulation seems to be unfair with the personnel performing airworthiness reviews on general aviation aircraft in the competent authority under national requirements because it is imposing the same requirements to all aircraft without considering the difference in complexity.</p> <p><b><u>c. The preferred option selected:</u></b> In accordance with the Terms of Reference, the group preferred option 2, adapting the experience and training requirements to the general aviation environment.</p>

Headings	Sub Headings
<b>3. Impacts</b>	<p><b><u>a. Sectors affected:</u></b> Competent authorities responsible for light aircraft not used in commercial air transport, and persons performing airworthiness reviews within the competent authority under national requirements for those aircraft</p> <p><b><u>b. All impacts identified:</u></b></p> <p><b><u>A Safety</u></b></p> <p><u>1. Do nothing:</u> No impact</p> <p><u>2. Adapt the experience and training requirements to the general aviation environment:</u> There should be no impact on safety since it is considered that 3 years is more than enough experience for the reduced complexity of the affected aircraft. Assessment of aeronautical maintenance training is also considered adequate.</p> <p><b><u>B Economic</u></b></p> <p><u>1. Do nothing:</u> No impact</p> <p><u>2. Adapt the experience and training requirements to the general aviation environment:</u> Very positive impact on the competent authority since it is easier for them to find appropriate candidates for airworthiness review staff and there is no need to require an unreasonably large experience and training. Through this measure the availability of appropriately qualified individuals will be increased. Positive impact on customers because of no need for increased fees resulting from overqualified staff.</p> <p><b><u>C Environmental</u></b> None</p> <p><b><u>D Social</u></b></p> <p><u>1. Do nothing:</u> No impact</p> <p><u>2. Adapt the experience and training requirements to the general aviation environment:</u> Very positive impact, because personnel currently working in</p>

Headings	Sub Headings
	<p>the general aviation field may be eligible to work as airworthiness review staff, not losing their jobs. This should also promote the introduction into the job market to young individuals, who may have difficulties getting into the system. If the requirements were the same for all type of aircraft, candidates may prefer to go to work in other departments within the competent authority, or even to CAMOs, working on larger aircraft because of better professional expectations. Further, the new requirements do not create a barrier for those individuals seeking advancement to larger organisations.</p> <p><b><u>E Other aviation requirements outside EASA scope, such as security, ATM, airports, etc.</u></b> None</p> <p><b><u>F Foreign comparable regulatory requirements</u></b> None</p> <p><b><u>G Equity and fairness</u></b> <u>1. Do nothing:</u> No impact</p> <p><u>2. Adapt the experience and training requirements to the general aviation environment:</u> The graded requirements for different categories of aircraft are justified by their varying complexity. This cannot be considered unfair treatment.</p>
4. Summary and Final Assessment	<p><b><u>a. Comparison of the positive and negative impacts for each option evaluated:</u></b> Refer to the Table of RIA results hereafter.</p> <p><b><u>b. A summary of who would be affected by these impacts and issues of equity and fairness:</u></b> Competent authorities responsible for light aircraft not used in commercial air transport, and persons performing airworthiness reviews within the competent authority under national requirements for those aircraft</p> <p><b><u>c. Final assessment and recommendation of a preferred option:</u></b> <u>Option 2: Adapt the experience and training requirements to the general aviation environment:</u> Essentially, to reduce from 5 to 3 years experience in continuing airworthiness, include the possibility of using nationally recognized maintenance</p>

Headings	Sub Headings
	personnel qualifications and alleviate the requirement of aeronautical maintenance training from formal to appropriate. Appropriate meaning demonstrated by documented evidence or by assessment by competent authority or by other airworthiness review staff.

- 2 = very negative impact

- 1 = negative impact

0 = no impact

+ 1 = positive impact

+ 2 = very positive impact

	Option 1 Do nothing	Option 2 Adapted requirements		
Safety	0	0		
Economic	0	+2		
Environmental	0	0		
Social	0	+2		
Other aviation requirements	0	0		
Equity	0	0		
<b>Summary</b>	<b>0</b>	<b>+4</b>		

**81. Issuance and renewal of the Airworthiness Review Certificate (ARC) (M.A.901)**

Headings	Sub Headings
<b>1. Purpose and Intended Effect</b>	<p><b><u>a. Issue which the NPA is intended to address:</u></b> It is felt that the conditions to be met in order for a CAMO to issue the ARC could be less restrictive compared to the current regulation.</p> <p><b><u>b. Scale of the issue (quantified if possible):</u></b> This is a major issue for those continuing airworthiness management organisations managing aircraft involved in general aviation and as well as for their owners. It is also a major issue for competent authorities.</p> <p><b><u>c. Relevant decisions by EASA or other authorities that guide/constrain action:</u></b> NPA 07/2005 and CRD 07/2005</p> <p><b><u>d. Brief statement of NPA objectives:</u></b> Modify, if needed, the paragraphs related to the issuance and renewal of the ARC (M.A.901).</p>
<b>2. Options</b>	<p><b><u>a. The options identified and evaluated</u></b> <u>All options are in respect to aircraft of 2730 Kg MTOM and below, which is not used in commercial air transport.</u></p> <p><u>1. Do nothing:</u></p> <ul style="list-style-type: none"> <li>• Retain the concept of controlled environment, with the same definition. The appropriately approved Subpart G + I organisation may issue and extend the ARC when the aircraft is in a controlled environment.</li> <li>• Outside the controlled environment or managed by a CAMO without Subpart I approval, in order to have the ARC issued by the authority the owner should have a recommendation issued by an appropriately approved CAMO.</li> </ul> <p><u>2. ARC issued / extended by the CAMO without involvement of the authority except in exceptional cases:</u></p> <ul style="list-style-type: none"> <li>• No controlled environment necessary for issuing the ARC: any Subpart G + I appropriately approved organisation may issue it.</li> <li>• Controlled environment still required for ARC extension: aircraft continuously managed by the CAMO who issued the ARC and maintenance performed by approved organisations.</li> <li>• Recommendations removed, except for the import of aircraft.</li> <li>• The authority will perform the Airworthiness Review and</li> </ul>

Headings	Sub Headings
	<p>issue ARC when no appropriately approved Subpart G + I organisation is available. The owner has no option to choose between a Subpart G + I organisation or the competent authority.</p> <p><u>3. Airworthiness review carried out by the competent authority or G+I organisation upon decision of the owner.</u> The same as option 2, except that the authority will perform the Airworthiness Review and issue ARC upon request of the owner. The owner has the option of choosing between a Subpart G+I organisation or the competent authority.</p> <p><u>4. Airworthiness review carried out by the owner with issuance of a recommendation to the authority:</u> ARC issued by the Competent Authority based on a recommendation issued by the owner (with physical survey performed by a Subpart F organisation).</p> <p><b><u>b. Equity and fairness issues identified:</u></b> None</p> <p><b><u>c. The preferred option selected:</u></b> No choice made beforehand.</p>
3. Impacts	<p><b><u>a. Sectors affected:</u></b> This is a major issue for those continuing airworthiness management organisations managing aircraft involved in general aviation and as well as for their owners. It is also a major issue for competent authorities.</p> <p><b><u>b. All impacts identified:</u></b></p> <p><b><u>A Safety</u></b></p> <p><u>1. Do nothing:</u> No impact</p> <p><u>2. ARC issued / extended by the CAMO without involvement of the authority except in exceptional cases:</u></p> <ul style="list-style-type: none"> <li>• No controlled environment necessary for issuing the ARC: any Subpart G + I appropriately approved organisation may issue it. <b><u>If the organisation is appropriately qualified the quality of the review should be of the same quality and confidence that a review performed by the competent authority. NO IMPACT.</u></b></li> <li>• Controlled environment still required for ARC extension: aircraft continuously managed by the CAMO who issued the ARC and maintenance performed by approved organisations. <b><u>Same as current rule. NO IMPACT.</u></b></li> </ul>

Headings	Sub Headings
	<ul style="list-style-type: none"> <li>Recommendations removed, except for the import of aircraft. <b><u>The review will be performed by the authority. NO IMPACT.</u></b></li> <li>The authority will perform the Airworthiness Review and issue ARC when no appropriately approved Subpart G + I organisation is available. The owner has no option to choose between a Subpart G + I organisation or the competent authority. <b><u>NO IMPACT.</u></b></li> </ul> <p><u>3. Airworthiness review carried out by the competent authority or G+I organisation upon decision of the owner:</u>  <u>The same as option 2,</u> except that the authority will perform the Airworthiness Review and issue ARC upon request of the owner. The owner has the option of choosing between a Subpart G + I organisation or the competent authority. <b><u>NO IMPACT.</u></b></p> <p><u>4. Airworthiness review carried out by the owner with issuance of a recommendation to the authority:</u>  ARC issued by the Competent Authority based on a recommendation issued by the owner (with physical survey performed by a Subpart F organisation). <b><u>Very negative impact as there is no control nor requirements imposed on the qualification and procedures used by the owner.</u></b></p> <p><b><u>B Economic</u></b></p> <p><u>1. Do nothing:</u>  No impact</p> <p><u>2. ARC issued/extended by the CAMO without involvement of the authority except in exceptional cases:</u></p> <ul style="list-style-type: none"> <li>OWNER: <p><b><u>Positive impact because:</u></b></p> <ul style="list-style-type: none"> <li>More flexibility because there is no need for controlled environment for re-issuing the ARC.</li> <li>The owner can still go to the authority when there is no organisation available.</li> <li>Recommendations have been removed, so there is no need to pay twice.</li> </ul> <p><b><u>Negative impact because of lack of flexibility for not being able to choose between a CAMO and the authority.</u></b></p> </li> <li>NAA: <p><b><u>Positive impact because:</u></b></p> <ul style="list-style-type: none"> <li>Better possibility for staff planning and no need to get overstaffed for an unexpected demand:</li> </ul> </li> </ul>

Headings	Sub Headings
	<ul style="list-style-type: none"> <li>▪ There is no choice for the owner. They have to go to a CAMO except in exceptional cases.</li> <li>▪ There is no influence in the NAA staffing needs because regardless of the number of aircraft outside controlled environment.</li> </ul> <p><b><u>It can be claimed that the number of ARC issued by the competent authority will be decreased reducing the incomes. However, the number of CAMOs to oversight may increase. The fees &amp; charges policies of each country may be adapted. So, it can not be claimed a positive or negative impact.</u></b></p> <ul style="list-style-type: none"> <li>• CAMO: <b><u>No impact because in both cases, in the current rule and in the proposal the owner has to go through the CAMO most of the times.</u></b></li> </ul> <p><b><u>OVERALL ECONOMIC IMPACT OPTION 2: POSITIVE</u></b></p> <p><b><u>3. Airworthiness review carried out by the competent authority or G + I organisation upon decision of the owner.</u></b></p> <ul style="list-style-type: none"> <li>• OWNER: <b><u>Very Positive impact because:</u></b> <ul style="list-style-type: none"> <li>○ Full flexibility because there is no need for controlled environment for re-issuing the ARC and owners can choose between CAMO and authority.</li> <li>○ The owner can still go to the authority when there is no organisation available.</li> <li>○ Recommendations have been removed, so there is no need to pay twice.</li> </ul> </li> <li>• NAA: <b><u>Negative impact because:</u></b> <ul style="list-style-type: none"> <li>○ Difficulty to plan the staffing needs and have to get overstaffed for an unexpected demand because the owner has the choice. Nevertheless, it is considered that the market should rapidly self-adjust to a stabilized level.</li> </ul> </li> <li>• CAMO: <b><u>Negative impact because in the current rule the owner has to go through the CAMO always (either ARC issuance or recommendation). With the proposal, the owner has the choice.</u></b></li> </ul> <p><b><u>4. Airworthiness review carried out by the owner with issuance of a recommendation to the authority:</u></b></p> <ul style="list-style-type: none"> <li>• OWNER: <b><u>The impact may be variable</u></b> depending on the country: The owner may save some money because he would be</li> </ul>



Headings	Sub Headings
	<p>doing the review of the aircraft. They have to go to the authority in all cases and, because of the lack of demonstrated competence the authority may charge higher fees.</p> <ul style="list-style-type: none"> <li>• CAMO: <b><u>Negative impact because of the loss of business,</u></b></li> <li>• NAA: <b><u>No impact.</u></b></li> </ul> <p><b><u>C Environmental</u></b></p> <p>None</p> <p><b><u>D Social</u></b></p> <p><u>1. Do nothing:</u> No impact</p> <p><u>2. ARC issued / extended by the CAMO without involvement of the authority except in exceptional cases:</u></p> <ul style="list-style-type: none"> <li>• OWNER: Positive impact because of the social encouragement of General and Sport Aviation. There is a reduction in the burdens imposed by the rule.</li> <li>• NAA: There may be a negative impact because of the reduction of activity related to ARCs. However, it may be partially compensated by higher surveillance activity because the number of CAMOs may increase.</li> <li>• CAMO: <b>No impact because in both cases, the current rule and the proposal, the owner has to go through the CAMO always (either ARC issuance or recommendation).</b></li> </ul> <p><u>3. Airworthiness review carried out by the competent authority or G+I organisation upon decision of the owner:</u></p> <ul style="list-style-type: none"> <li>• OWNER: Positive impact because of the social encouragement of General and Sport Aviation. There is a reduction in the burdens imposed by the rule.</li> <li>• NAA: Impact would depend on the national policies, could be positive or negative.</li> <li>• CAMO: Negative impact because in the current rule the owner has to go through the CAMO always (either ARC</li> </ul>

Headings	Sub Headings
	<p>issuance or recommendation). With the proposal, the owner has the choice. There may be a loss of employment opportunities.</p> <p><u>4. Airworthiness review carried out by the owner (without competence requirements) and recommendation to the authority:</u></p> <ul style="list-style-type: none"> <li>• OWNER: More freedom for the owner.</li> <li>• CAMO: Limited negative impact because of the lower opportunities of employment.</li> <li>• NAA: The inspectors may not have confidence on the evaluation performed by the owner when addressing the recommendations.</li> </ul> <p><b><u>E Other aviation requirements outside EASA scope, such as security, ATM, airports, etc.</u></b></p> <p>None</p> <p><b><u>F Foreign comparable regulatory requirements</u></b></p> <p>None</p> <p><b><u>G Equity and fairness</u></b></p> <p>None</p>
<p><b>4. Summary and Final Assessment</b></p>	<p><b><u>a. Comparison of the positive and negative impacts for each option evaluated:</u></b></p> <p>Refer to the Table of RIA results hereafter.</p> <p><b><u>b. A summary of who would be affected by these impacts and issues of equity and fairness:</u></b></p> <p>Continuing airworthiness management organisations managing aircraft involved in general aviation and as well as for their owners and competent authorities.</p> <p><b><u>c. Final assessment and recommendation of a preferred option:</u></b></p> <p><u>Option 3: Airworthiness review carried out by the competent authority or G + I organisation upon decision of the owner:</u></p> <ul style="list-style-type: none"> <li>• No controlled environment necessary for issuing the ARC: any Subpart G + I appropriately approved organisation may issue it.</li> <li>• Controlled environment still required for ARC extension: aircraft continuously managed by the CAMO who issued the</li> </ul>

Headings	Sub Headings
	<p>ARC and maintenance performed by approved organisations.</p> <ul style="list-style-type: none"> <li>Recommendations removed, except for the import of aircraft. The authority will perform the Airworthiness Review and issue ARC upon request of the owner. The owner has the option of choosing between a Subpart G + I organisation or the competent authority.</li> </ul>

- 2 = very negative impact

- 1 = negative impact

0 = no impact

+ 1 = positive impact

+ 2 = very positive impact

	Option 1 Do nothing	Option 2	Option 3	Option 4
Safety	0	0	0	-2
Economic	0	+2	+1	-1
Environmental	-	-	-	-
Social	0	+1	+1	+1
Equity	0	0	0	0
<b>Summary</b>	<b>0</b>	<b>+3</b>	<b>+2</b>	<b>-2</b>

Despite the numerical result of the analysis, the group decided to select option 3 over option 2:

- Representatives of industry strongly favoured option 3;
- 2 representatives of NAAs favoured option 2;
- 1 NAA was neutral.

Arguments in favour of option 3:

- It gives more flexibility for the owner and further promotes general aviation;
- The market should rapidly self-adjust to a stabilized level. It was also felt that the NAAs and industry should adapt to the situation.

Arguments against option 3:

- May need for significant increase of staff in some NAAs in order to initially cope with the unexpected workload.
- It was also mentioned that it may decrease the interest for CAMOs because of the reduction in business prospects.

The NAA representative who remained neutral mentioned that his NAA will be providing the necessary service to the general aviation community. He did not have a particular preference.

EASA members of the group shared different positions but at the end option 3 was accepted.

## 82. Subcontracting of specialised services by M.A. Subpart F approved maintenance organisations (M.A.615).

Headings	Sub Headings
<b>1. Purpose and Intended Effect</b>	<p><b><u>a. Issue which the NPA is intended to address:</u></b>  Subpart F maintenance organisations do not currently have the privilege of subcontracting maintenance tasks, which could be justified by the fact that the regulation does not impose on them the obligation to have a Quality System. However, in the case of specialised services such as non destructive testing, surface treatment, heat-treatment, welding, etc., it may not be possible to find an appropriately approved maintenance organisation for the particular aircraft involved. This is particularly true in the case of very simple aircraft, which in fact affects deeper the very small organisations.</p> <p><b><u>b. Scale of the issue (quantified if possible):</u></b>  This is a major issue for Subpart F maintenance organisations since it can not be expected the availability of appropriately approved organisations for every specialised service.</p> <p><b><u>c. Relevant decisions by EASA or other authorities that guide/constrain action:</u></b>  NPA 07/2005 and CRD 07/2005</p> <p><b><u>d. Brief statement of NPA objectives:</u></b>  Modify, if needed, the paragraph related to the privileges of a Subpart F maintenance organisation (M.A.615).</p>
<b>2. Options</b>	<p><b><u>a. The options identified and evaluated:</u></b></p> <p><u>1. Do nothing:</u>  Retain the current requirements. No subcontracting allowed.</p> <p><u>2. Allow subcontracting of specialised services only:</u>  This would be limited to specialised service providers appropriately qualified (under an officially recognised standard or otherwise accepted by the authority) and under the control of the Subpart F maintenance organisation.</p> <p><u>3. Allow a wider scope of subcontracting, similar to the activities allowed in Part-145, paragraph 145.A.75(b)</u></p> <p><b><u>b. Equity and fairness issues identified:</u></b>  The current regulation seems to be unfair with the general aviation community because it does not allow any type of subcontracting.</p> <p><b><u>c. The preferred option selected:</u></b>  In order to alleviate the situation, the group preferred options 2 or 3.</p>

Headings	Sub Headings
<p><b>3. Impacts</b></p>	<p><b><u>a. Sectors affected:</u></b></p> <p>This is a major issue for Subpart F maintenance organisations since it can not be expected the availability of appropriately approved organisations for every specialised service.</p> <p><b><u>b. All impacts identified:</u></b></p> <p><b><u>A Safety</u></b></p> <p><u>1. Do nothing:</u> No impact</p> <p><u>2. Allow subcontracting of specialised services only:</u> This option should have <b>no impact</b> on safety, providing the appropriate controls are established, because the subcontracting capacity is very limited, the service provider is appropriately qualified, and there is not a lot of coordination required.</p> <p><u>3. Allow a wider scope of subcontracting, similar to the activities allowed in Part-145, paragraph 145.A.75(b)</u> This option may have a <b>negative impact</b> on safety because the subcontracting scope is much wider, the subcontracted organisation may not be appropriately qualified and much stronger control requirements should be imposed, which may not be possible without a formal Quality System.</p> <p><b><u>B Economic</u></b></p> <p><u>1. Do nothing:</u> No impact</p> <p><u>2. Allow subcontracting of specialised services only:</u> This option should have a <b>very positive impact</b>, because it would allow subcontracting of specialised services to appropriately qualified organisations. As a consequence there would be no need to qualify for all the envisaged specialised services needed, which from an economical point of view may not be economically viable for small organisations.</p> <p><u>3. Allow a wider scope of subcontracting, similar to the activities allowed in Part-145, paragraph 145.A.75(b)</u> The impact should be <b>very positive</b>. However, the need for more stringent controls <b>may offset this advantage</b>.</p> <p><b><u>C Environmental</u></b></p> <p>None</p>

Headings	Sub Headings
	<p><b><u>D Social</u></b> None</p> <p><b><u>E Other aviation requirements outside EASA scope, such as security, ATM, airports, etc.</u></b> None</p> <p><b><u>F Foreign comparable regulatory requirements</u></b> None</p> <p><b><u>G Equity and fairness:</u></b>  <u>1. Do nothing:</u>          No impact</p> <p><u>2. Allow subcontracting of specialised services only:</u>          This option has a <b>very positive impact</b>, because it removes the unfair treatment of not having any possibility of subcontracting.</p> <p><u>3. Allow a wider scope of subcontracting, similar to the activities allowed in Part-145, paragraph 145.A.75(b)</u>          This option has the <b>very positive impact</b> of removing the unfair treatment of not having any possibility of subcontracting. However, <b>this very positive impact is offset</b> by the fact that the same subcontracting privileges as in Part-145 are granted without the need of a formal Quality System.</p>
<p><b>4. Summary and Final Assessment</b></p>	<p><b><u>a. Comparison of the positive and negative impacts for each option evaluated:</u></b>          Refer to the Table of RIA results hereafter.</p> <p><b><u>b. A summary of who would be affected by these impacts and issues of equity and fairness:</u></b>          Subpart F maintenance organisations.</p> <p><b><u>c. Final assessment and recommendation of a preferred option:</u></b>  <u>2. Allow subcontracting of specialised services only:</u>          This would be limited to specialised service providers appropriately qualified (under an officially recognised standard or otherwise accepted by the authority) and under the control of the Subpart F maintenance organisation.</p>

- 2 = very negative impact
- 1 = negative impact
- 0 = no impact
- + 1 = positive impact
- + 2 = very positive impact

	<b>Option 1 Do nothing</b>	<b>Option 2 Limited subcontracting</b>	<b>Option 3 Subcontracting as in Part 145</b>	
Safety	0	0	-1	
Economic	0	+2	+1	
Environmental	0	0	0	
Social	0	0	0	
Other aviation requirements	0	0	0	
Equity	0	+2	0	
<b>Summary</b>	<b>0</b>	<b>+4</b>	<b>0</b>	

## VI. Regulatory Impact Assessment for Task M-005 “Pilot owner maintenance”

Headings	Sub Headings
<b>1. Purpose and Intended Effect</b>	<p><b><u>a. Issue which the NPA is intended to address:</u></b></p> <p>Paragraph M.A.803 and Appendix VIII encompass provisions for limited pilot owner maintenance and for issuance of a Certificate of Release to Service. The regulatory impact assessment of Part-M found this Appendix too limitative. It was proposed to re-evaluate airships and light aircraft. The Agency agreed with such change in the applicability of each task in Appendix VIII to gliders, balloons, so as to enable the Member States not wishing to opt-out until September 2008 to implement Part-M with a more adapted list of pilot owner maintenance. Nonetheless, it has to be emphasized that paragraph M.A.803 and Appendix VIII should be subject to further re-evaluation involving the general aviation community to complete the content of Appendix VIII and its interfaces with Appendix VII (complex maintenance tasks) if necessary. As some coordination with task M.010 working group (Jointly owned aircraft) might be required, the group could decide to encapsulate M.010 in this rulemaking task. The group also noted the emerging findings of rulemaking group MDM.032 (A better concept for general aviation).</p> <p><b><u>b. Scale of the issue (quantified if possible):</u></b></p> <p>This NPA is of significant issue for pilots owning an aircraft (not commercially operated) and willing to carry out maintenance on their own. Broadly speaking, the stakeholders are:</p> <ul style="list-style-type: none"> <li>- Pilot owners of privately operated aircraft with a MTOW below 2730 Kg;</li> <li>- Flying clubs or flying associations;</li> <li>- Part M subpart F and PART145 approved organisations;</li> <li>- Part M subpart G approved organisations;</li> <li>- B1/B2 licensed engineers (licence holders IAW PART 66);</li> <li>- NAAs;</li> <li>- TC holders.</li> </ul>



Headings	Sub Headings
	<p><b><u>c. Relevant decisions by EASA or other authorities that guide/constrain action:</u></b></p> <p>NPA 07/2005 and CRD 07/2005.</p> <p>JAA “top ten” issue (Guide).</p> <p>FAA is also in the process to review the equivalent list in PART 43 for light / sport aircraft.</p> <p>Similar concepts exist for some European Countries such as CAP 520.</p> <p>A comparison was also made with other existing standard practices such as:</p> <ul style="list-style-type: none"> <li>- ASTM F2483-05 for Light Sport Aircraft (US system);</li> <li>- CAP 520 (UK CAA – Light Aircraft Maintenance).</li> </ul> <p><b><u>d. Brief statement of NPA objectives:</u></b></p> <p>Re-evaluate the content of Appendix VIII which is sometimes found to be inappropriate and compare if it is not less restrictive than the requirements for complex maintenance tasks in Appendix VII, for consistency.</p>
<p><b>2. Options</b></p>	<p><b><u>a. The options identified and evaluated</u></b></p> <p>The options that have been addressed by the rulemaking group arise from a combination of the following criteria:</p> <ul style="list-style-type: none"> <li>- to extend or reduce the current task list of pilot owner maintenance as proposed by current Part M and its Appendix VIII; “extending” might mean “authorizing” tasks that may be related to safety;</li> <li>- to check or not the competency of the pilot owner;</li> <li>- to introduce a weight discriminator as a criterion for the complexity whenever possible, even if it is not always the most appropriate;</li> <li>- to include suggestions arising from the emerging MDM.032 (A better concept for general aviation); nevertheless 2730 Kg as proposed by the current Part M for pilot owner maintenance is considered as the upper limit.</li> <li>- to split the current Appendix VIII into four lists of aircraft: aeroplanes, gliders, balloons and airships and rotorcraft in order to better reflect the technology for each category.</li> </ul> <p><u>Option 0:</u> "Do nothing" – Leave Part M and its Appendix VIII as it is.</p> <p><u>Option 1:</u> Extend the list of pilot maintenance tasks (may include safety related tasks) and do not check the competency (self assessment by the pilot). Adapt the lists to the modern technology.</p> <p><u>Option 2:</u> Extend the list of pilot maintenance tasks (may include safety related tasks) and check the competency. Adapt the lists to the modern technology.</p>

Headings	Sub Headings
	<p><u>Option 3:</u> Reduce the list of pilot maintenance tasks without checking the competency (self assessment by the pilot). Adapt the lists to the modern technology.</p> <p><u>Option 4:</u> Reduce the list of pilot maintenance tasks and check the competency. Adapt the lists to the modern technology.</p> <p><u>Option 5:</u> Adapt the lists (means extending or reducing current Appendix VIII of Part M) to the modern technology and to the weight of aeroplanes, provided the lists do not contain critical safety items. Allow self assessment of the competency by the pilot.</p> <p><b><u>b. Equity and fairness issues identified:</u></b></p> <p>The more check points the concepts contain, the less fair they are because of different implementation throughout the Member States</p> <p><b><u>c. The preferred option selected:</u></b></p> <p>The group accepted the Terms of Reference: therefore <b><u>Option 0 (“Do nothing”) is rejected</u></b>. The impact assessment would be neutral.</p> <p><u>Option 1</u> is considered to open a breach in ICAO recommendations (see explanatory note - §16) and could jeopardize safety if a critical task is carried out by a pilot that does not have the necessary ability. Therefore, <b><u>Option 1 (“extension of tasks lists without check competency”) is therefore rejected</u></b>.</p> <p><u>Option 4</u> is considered to be the better way to enhance a level playing field throughout the Member States but may be found:</p> <ul style="list-style-type: none"> <li>- too restrictive for countries that have already implemented Appendix VIII of Part M or have a similar concept already implemented;</li> <li>- too burdensome for the check of pilot owner competency;</li> <li>- unfair if the competency check is not properly implemented.</li> </ul> <p>Efforts to sustain general aviation would vanish. Therefore, <b><u>Option 4 (reduction of task lists and check of competency) is abandoned</u></b>.</p> <p>Consequently, the following options are kept and submitted to the RIA process:</p> <p><u>Option 2:</u> Extend the list of pilot maintenance tasks (may include safety related tasks). Check the competency. Adapt the lists to the modern technology</p> <p><u>Option 3:</u> Reduce the list of pilot maintenance tasks without checking the competency (self assessment by the pilot).</p>

Headings	Sub Headings
	<p>Adapt the lists to the modern technology.</p> <p><u>Option 5:</u> Adapt the lists (means extending or reducing current Appendix VIII of Part M) to the modern technology and to the weight for aeroplanes, provided it does not contain critical safety items. Allow the self assessment of competency by the pilot.</p> <p>Option 5 appears to be an acceptable compromise between Options 2 and 3 and might be the preferred option.</p>
<p><b>3. Impacts</b></p>	<p><b><u>a. Sectors affected:</u></b></p> <p>The sectors of the EC regulated civil aviation community which will be affected and the number of organisations/ individuals/ aircraft affected:</p> <ul style="list-style-type: none"> <li>- Pilot owners of aircraft with a MTOW below 2730 Kg;</li> <li>- Flying clubs or flying associations;</li> <li>- Part M subpart F and PART145 approved organisations;</li> <li>- Part M subpart G approved organisations;</li> <li>- B1/B2 licensed engineers (licence holders IAW PART 66);</li> <li>- NAA;</li> <li>- TC holders.</li> </ul> <p><b><u>b. All impacts identified:</u></b></p> <p><b><u>Option 2: Extend the list of pilot maintenance tasks (may include safety related tasks). Check the competency. Adapt the lists to the modern technology.</u></b></p> <p><u>A. Safety</u></p> <p>This option may be considered provided that the correct measures are taken to check the competency of pilot owners: there will be no impact.</p> <p>A possible decrease in safety is expected due to reduced control of maintenance carried out. It may be critical if wrongly implemented when a pilot has not the ability to carry out a critical task.</p> <p>Pilots may have tendency to perform by themselves complex tasks that are expensive if previously performed by Part 66 staff or approved maintenance organisation: it could lead to a lower level of safety if the self assessment of competency has a weak point. The physical inspection of the aircraft during renewal of the Airworthiness Review Certificate (ARC) may come too late to detect tasks wrongly performed, putting at risk safety and incurring additional corrective maintenance costs.</p> <p><u>B. Economic:</u></p> <p>This option has “pros and cons”.</p> <p>Demonstration of competency means “training” or “examination”.</p>

Headings	Sub Headings
	<p>There may be costs associated with checking the competency of pilot owners; some “revenues” or “costs” may be generated for trainers, examiners, maintenance organisations Part M subpart G organisations or NAA staff.</p> <p>The option broadens the scope of aircraft tasks to which pilot owner maintenance applies:</p> <ul style="list-style-type: none"> <li>- Therefore there is a potential for costs of training to increase on the larger more complex aircraft or more complex tasks.</li> <li>- However the aircraft may be cheaper to operate because complex tasks that might be the most expensive ones would be performed by the pilot with no extra charge.</li> </ul> <p>A possible benefit to maintenance organisations and licensed engineers may be envisaged for light aircraft, where the pilot owner may not have the competency to do the maintenance himself.</p> <p><u>C. Harmonisation:</u></p> <p>Possible different implementations and interpretations by Member States could be expected, which will not achieve harmonisation throughout Europe.</p> <p><u>D. Environmental</u></p> <p>None</p> <p><u>E. Social</u></p> <p>There may be discontent within the general aviation community of some Member States due to:</p> <ul style="list-style-type: none"> <li>- further increase in bureaucracy for pilot owners (to demonstrate competency);</li> <li>- potential decrease in the number of Part 66 staff required.</li> </ul> <p><u>F. Other aviation requirements outside the EASA scope, such as security, ATM, airports, etc.</u></p> <p>None</p> <p><u>G. Foreign comparable regulatory requirements</u></p> <p>None</p> <p><u>H. Equity and Fairness issues</u></p> <p>Pilot owners in some Member States may have more privileges than others where provisions for competency check have not been correctly implemented.</p> <p><b><u>Option 3: Reduce the list of pilot maintenance tasks without checking the competency (self assessment by the pilot). Adapt the lists to the modern technology.</u></b></p> <p><u>A. Safety</u></p>

Headings	Sub Headings
	<p>No impact or light positive impact because only Part 66 licensed staff will perform most of the tasks (assuming such tasks will be correctly performed).</p> <p><u>B. Economic:</u> Increased economic burden for pilot owners of light aircraft may be expected because more or most of the tasks will have to be carried out by approved maintenance organisations and Part-66 licensed engineers, especially where Part M or an equivalent system of “pilot owner maintenance” has been already been implemented.</p> <p><u>C. Harmonisation</u> Such an option will offer a level playing field because the competency check will not be wrongly assessed.</p> <p><u>D. Environmental</u> None</p> <p><u>E. Social</u> There will be no bureaucracy system for pilot owners but they may complain about the increasing costs of the maintenance where the Member States have already implemented Part M or an equivalent system of “pilot owner maintenance”. Therefore, a potential increase in the number of Part 66 staff required may be expected.</p> <p><u>F. Other aviation requirements outside the EASA scope, such as security, ATM, airports, etc.</u> None</p> <p><u>G. Foreign comparable regulatory requirements</u> None</p> <p><u>H. Equity and Fairness issues</u> If fully implemented in all Member States, no impact</p> <p><b><u>Option 5: Adapt the lists (means extending or reducing current Appendix VIII of Part M) to the modern technology and to the weight of aeroplanes, provided it does not contain critical safety items and self assessment of the competency by the pilot.</u></b></p> <p><u>A. Safety</u> There will be no critical tasks that are adverse to aircraft safety if the task is wrongly carried out. This Option 5 has the potential to enhance safety of the current situation in some Member States because the list of pilot owner</p>

Headings	Sub Headings
	<p>maintenance tasks will be optimised for each aircraft type applicable for pilot owner maintenance.</p> <p>A non-formalised system of constraints is introduced: the pilot will have to assess their own ability to carry out such tasks in the maintenance program. Awareness will be highlighted.</p> <p>The Airworthiness Review Certificate (ARC) will be renewed at least once a year and recorded tasks that may have been wrongly performed will be detected during the physical inspection of the aircraft.</p> <p>It should be understood that pilot owner maintenance was not accepted by some Members States before the implementation of Part M.</p> <p><u>B. Economic</u></p> <p>The most important impact will concern Members States where pilot owner maintenance was not authorised before the implementation of Part M.</p> <p>The costs of the maintenance will be shared between the pilot owner, approved maintenance organisations and Part-66 licensed engineers: the impact is consequently balanced between pilot owner and Part 66 staff and/or approved maintenance organisations.</p> <p><u>C. Harmonisation</u></p> <p>Harmonisation will be achieved in all Member States because the assessment of the competency will not be a discriminator. The lists of tasks will be the same every where in Europe and the pilot owners will have to self-declare their competency in the maintenance program.</p> <p><u>D. Environmental</u></p> <p>None</p> <p><u>E. Social</u></p> <p>No further increase in bureaucracy for pilot owners.</p> <p>Potential decrease in the number of Part 66 staff required for Members States where pilot owner maintenance was not authorised before the implementation of Part M.</p> <p><u>F. Other aviation requirements outside the EASA scope, such as security, ATM, airports, etc.</u></p> <p>None</p> <p><u>G. Foreign comparable regulatory requirements</u></p> <p>None</p> <p><u>H. Equity and Fairness issues</u></p>

Headings	Sub Headings
	If fully implemented in all Member States, no impact.
<b>4. Summary and Final Assessment</b>	<p><b><u>a. Comparison of the positive and negative impacts for each option evaluated:</u></b></p> <p>Option 2 may potentially lower the level of safety whilst Option 5 is safety optimized. Option 3 has no safety impact or may have a light positive impact.</p> <p>Economically and socially speaking, there are pros and cons. The more maintenance responsibilities are given to Part 66 licensed staff and/or approved organisations, the more expensive the maintenance will be for the pilot owner. The more maintenance a pilot may be authorised to carry out, the more social impact it will induce for Part 66 licensed staff and/or approved organisations. Options 2 and 3 show drawbacks and advantages. Option 5 is more “balanced” for those at stake.</p> <p>The process of checking competency could be an administrative burden for stakeholders and will surely increase the costs for pilot owner (Option 2). Additionally, competency checking could be badly implemented.</p> <p>Option 5 sustains the development of general aviation in a balanced manner without putting at risk safety. Option 3 may be too limitative for pilots intended to own an aircraft.</p> <p>Options 3 and 5 enhance equity and fairness; harmonization should be easy to achieve.</p> <p><b><u>b. A summary of who would be affected by these impacts and issues of equity and fairness:</u></b></p> <p>Mostly pilot owners, Part 66 licensed staff and/or maintenance organisations are at stake.</p> <p><b><u>c. Final assessment and recommendation of a preferred option:</u></b></p> <p>Option 5 is the preferred option: the level of safety is maintained without creating too much administrative burden; it will sustain the growth of the general aviation; the social and economical impact is mitigated for stakeholders; maintenance costs are controlled.</p>

**B. DRAFT OPINIONS AND DRAFT DECISION.****NOTE:**

Text that does not exist in the current rule, but was introduced as part of CRD 07/2005 is identified as follows:

Underlined text means text introduced as part of CRD07/2005.

Text that exists in the current rule, but was removed as part of CRD 07/2005 is identified as follows:

~~Double strikethrough text means text removed as part of CRD07/2005.~~

Text that does not exist in the current rule but is introduced as part of this NPA is identified as follows:

**Grey highlighted text means text introduced as part of this NPA**

Text that exists in the current rule but is removed as part of this NPA is identified as follows:

~~**Grey highlighted strikethrough text means text removed as part of this NPA**~~

Text that was introduced in CRD 07/2007 but is removed as part of this NPA is identified as follows:

~~**Grey highlighted underlined strikethrough text means text introduced as part of CRD07/2005 that has been removed as part of this NPA**~~

**ONLY PARAGRAPHS AFFECTED BY THIS NPA ARE SHOWN**



**I. Draft Opinion (EC) No 1702/2003**

Commission Regulation (EC) No 1702/2003, Annex (Part 21) is hereby amended as follows:

**Airworthiness Review Certificate**

**In Form 15a, the sentence:**

~~“is considered to be airworthy at the time of the issue”~~

**is replaced by:**

“is considered to be airworthy at the time of the review”.

## **II. Draft Opinion (EC) No 2042/2003**

Commission Regulation (EC) No 2042/2003, Annex I (Part M) is hereby amended as follows:

A new subparagraph 4(iii) is added in M.1:

### **M.1**

3. ....

4. for the approval of maintenance programmes,

- (i) the authority designated by the Member State of registry.
- (ii) in the case of commercial air transport, when the Member State of the operator is different from the State of registry, the authority agreed by the above two States prior to the approval of the maintenance programme.
- (iii) for aircraft not involved in commercial air transport, when the Member State responsible for the oversight of the Part-M Subpart G organisation managing the aircraft is different from the State of registry, the authority designated by the Member State of registry unless agreed differently by the above two States prior to the approval of the maintenance programme.

Paragraph M.A.302(b) is amended by adding the following text:

### **M.A.302 Maintenance programme**

....

- (b) The maintenance programme and any subsequent amendments shall be approved by the competent authority. When the aircraft continuing airworthiness is managed by a Part-M, Subpart G organisation, the maintenance programme and its amendments may be approved by the Part-M, Subpart G organisation through an approval procedure (hereinafter called "indirect approval procedure"). This procedure shall be established by the Part-M, Subpart G organisation, included in the Continuing Airworthiness Management Exposition, and approved by the competent authority responsible for that Part-M, Subpart G organisation.

In the case of aircraft not involved in commercial air transport, the indirect approval procedure can not be applied to aircraft registered in a Member State different from the Member State responsible for the oversight of the Part-M Subpart G organisation, unless both Member States have an agreement in accordance with M.1.

- (c) The maintenance programme must establish compliance with:

1. instructions for continuing airworthiness issued by type certificate and supplementary type certificate holders and any other organisation that publishes such data in accordance with Part-21, or
2. instructions issued by the competent authority, if they differ from subparagraph 1 or in the absence of specific recommendations, ~~or~~
- ~~3. instructions defined by the owner or the operator and approved by the competent authority if they differ from subparagraphs 1 and 2,~~

The owner or the operator may propose to the competent authority alternate and/or additional instructions to those defined in paragraphs 1 and 2. These alternate and/or additional instructions may be included in the maintenance programme once they have been approved by the competent authority.

Notwithstanding paragraph (c) requirements above, for aircraft not involved in commercial air transport, in order to allow the initial approval and/or the extension of the scope of an existing continuing airworthiness management organisation approval without having any customers under contract for the requested scope of work, it is acceptable to develop “baseline” and/or “generic” maintenance programmes as follows:

- **“Baseline” maintenance programme:** it is a maintenance programme developed for a particular aircraft type following the maintenance review board (MRB) report, where applicable, and the TC 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 that may be developed to cover similar types of aircrafts. These programmes shall be based on the same type of instructions as the baseline maintenance programme.

....

Paragraph M.A.502(b) is amended by adding the following text:

#### **M.A.502 Component maintenance**

- (a) ....
- (b) Maintenance on any component in accordance with aircraft maintenance data may be performed by an A rated approved Subpart F or Part-145 organisation as well as by M.A.801(b)2 certifying staff only whilst such components are fitted to the aircraft. Such components, nevertheless, can be temporarily removed for maintenance when such removal is expressly permitted by the aircraft maintenance ~~manual~~ data to improve access. Component maintenance performed in accordance with this subparagraph shall be subject to the aircraft release requirements.

A new subparagraph 3 is inserted in M.A.615:

### **M.A.615 Privileges of the organisation**

The organisation may:

1. ....
2. ....
3. Arrange for the performance of specialized services at another organisation appropriately qualified and under the control of the Subpart F organisation in accordance with procedures described in its Maintenance Organisation Manual as directly approved by the competent authority. This refers to work carried out by a specialised service organisation not appropriately approved itself to carry out such tasks under Part-M or Part-145.
4. ~~3.~~ ....

Paragraph M.A.707(a) is amended as follows:

### **M.A.707 Airworthiness review staff**

- (a) To be approved to carry out airworthiness reviews, an approved continuing airworthiness management organisation shall have appropriate airworthiness review staff to issue M.A. Subpart I airworthiness review certificates or recommendations. ~~In addition to M.A.706 requirements,~~ These staff shall have acquired:

1. For aircraft used in commercial air transport and aircraft above 2730 kg MTOM:
  - a. at least five years experience in continuing airworthiness, and;
  - b. an appropriate Part-66 licence or an aeronautical degree or equivalent, and;
  - c. formal aeronautical maintenance training, and;
  - d. a position within the approved organisation with appropriate responsibilities.
2. For aircraft of 2730 Kg MTOM and below, that is not used in commercial air transport:
  - a. at least three years experience in continuing airworthiness, and;
  - b. an appropriate Part 66 licence, or a nationally recognized maintenance personnel qualification appropriate to the aircraft category (when Part-66 refers to national rules) or an aeronautical degree or equivalent, and;

- c. appropriate aeronautical maintenance training, and;
  - d. a position within the approved organisation with appropriate responsibilities
- (b) ....

Paragraph M.A.709 is amended by adding the following text:

#### **M.A.709 Documentation**

The approved continuing airworthiness management organisation shall hold and use applicable current M.A.401 maintenance data in the performance of M.A.708 continuing airworthiness tasks. In the case of customer provided maintenance data, it is only necessary to have such data when there is a contract with such a customer, with the exception of the need to comply with M.A.714.

Paragraph M.A.712(f) is amended by adding the following text:

#### **M.A.712 Quality system**

- (e) ....
- (f) In the case of a small M.A. Subpart G organisation not involved in commercial air transport ~~that does not have the privileges granted under M.A.711(b)~~, the quality system can be replaced by performing organisational reviews on a regular basis except when the organisation issues airworthiness review certificates for aircraft above 2730 kg MTOM. Contracting continuing airworthiness management tasks is not permitted without a Quality System.

Paragraph M.A.803 is amended as follows:

#### **M.A.803 Pilot-owner authorisation**

- (a) The pilot-owner is the person who owns or jointly owns the aircraft being maintained and holds a valid pilot license issued or validated by a Member State for the aircraft type or class rating ~~with the appropriate type or class rating.~~
1. An aircraft, as referred to above paragraph (a) may be jointly owned by:
    - (i) a number of natural persons on the registration form, or
    - (ii) a limited liability company or a legal entity accepted as registered owner under the applicable national laws pertaining to the registration of aircraft.
  2. Pilot owner maintenance shall be performed by:

- (i) the pilot owner or,
- (ii) in the case of joint ownership, the pilot owners designated by the registered owners of the aircraft being maintained or
- (iii) where the joint owner is a limited liability company or a legal entity, by a pilot who is a member of, and designated by, that company or legal entity.

- (b) ....
- (c) ....
- (d) The certificate of release to service must be entered in the logbooks and contain basic details of the maintenance carried out, the maintenance data used, the date such maintenance was completed and the identity and pilot licence number of the pilot-owner issuing such a certificate.

Paragraph M.A.901 is amended as follows:

#### **M.A.901 Aircraft airworthiness review**

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

- (a) An airworthiness review certificate is issued in accordance with Appendix III (EASA Form 15a or 15b) on completion of a satisfactory airworthiness review and is valid one year.
- (b) ~~An aircraft in a controlled environment is an aircraft~~ Aircraft used in commercial air transport and aircraft above 2730 kg MTOM are considered to be in a controlled environment when they have been continuously managed by an M.A. Subpart G approved continuing airworthiness management organisation, ~~which has~~ have not changed organisations in the previous 12 months, and ~~which is~~ are maintained by approved maintenance organisations. ~~This includes M.A.803(b) maintenance carried out and released to service according to M.A.801(b)2 or M.A.801(b)3.~~
- ~~(c) If an aircraft is within a controlled environment~~ In such cases, the continuing airworthiness management organisation managing the aircraft may if appropriately approved:
  1. issue the airworthiness review certificate in accordance with M.A.710, and;
  2. for airworthiness review certificates it has issued, when the aircraft has remained within a controlled environment, extend twice the validity of the airworthiness review certificate for a period of one year each time. An airworthiness review certificate shall not be extended if the organisation is aware or has reason to believe that the aircraft is ~~unairworthy~~ not airworthy.
- (c) ~~(d) If an aircraft is~~ Aircraft used in commercial air transport and aircraft above 2730 kg MTOM, which are not within a controlled environment, or managed by an M.A. Subpart G approved continuing airworthiness management organisation that does not hold the privilege to carry out airworthiness reviews, the airworthiness review certificate shall be

issued by the competent authority following a satisfactory assessment based on a recommendation made by an appropriately approved continuing airworthiness management organisation sent together with the application from the owner or operator. This recommendation shall be based on an airworthiness review carried out in accordance with M.A.710.

(d) For aircraft of 2730 Kg MTOM and below, that are not used in commercial air transport, any continuing airworthiness management organisation appointed by the owner may if appropriately approved

1. issue the airworthiness review certificate in accordance with M.A.710 ~~when the aircraft has been maintained by approved maintenance organisations since the last airworthiness review certificate issuance. This includes M.A.803(b) maintenance carried out and released to service according to M.A.801(b)2 or M.A.801(b)3, and;~~
2. for airworthiness review certificates it has issued, extend them twice for a period of one year each time when the aircraft has remained in a controlled environment as defined by the following conditions ~~are met:~~
  - a. the aircraft has remained managed by this continuing airworthiness management organisation since it issued the airworthiness review certificate, and
  - b. the aircraft has been maintained by approved maintenance organisations since this continuing airworthiness management organisation issued the airworthiness review certificate. This includes M.A.803(b) maintenance carried out and released to service according to M.A.801(b)2 or M.A.801(b)3.

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

(e) ~~Whenever circumstances show the existence of a potential safety threat, In addition to M.A.901(e), The competent authority may decide to~~ shall carry out the airworthiness review and issue the airworthiness review certificate itself in the following cases: ~~In this case, the owner or operator shall provide the competent authority with:~~

1. whenever circumstances show the existence of a potential safety threat, or
2. for aircraft of 2730 Kg MTOM and below, that are not used in commercial air transport; ~~when the aircraft has not been maintained by approved maintenance organisations in accordance with M.A.901(d)1, or when not managed by an M.A. Subpart G approved continuing airworthiness management organisation that holds the privilege to carry out airworthiness reviews;~~ whenever it is requested by the owner.

- ~~• the documentation required by the competent authority;~~
- ~~• suitable accommodation at the appropriate location for its personnel, and~~
- ~~• when necessary the support of personnel appropriately qualified in accordance with Part 66.~~

(f) When the competent authority carries out the airworthiness review and/or issues the airworthiness review certificate itself, the owner or operator shall provide the competent authority with:

- the documentation required by the competent authority,
- suitable accommodation at the appropriate location for its personnel, and
- when necessary the support of personnel appropriately qualified in accordance with Part-66.

Paragraph M.B.303(a) is amended as follows:

### **M.B.303 Aircraft continuing airworthiness monitoring**

- (a) ~~Every~~ The competent authority shall develop a survey programme to monitor the airworthiness status of the fleet of aircraft on its register.
- (b) ....

Paragraph M.B.606 is amended as follows:

### **M.B.606 Changes**

The competent authority shall comply with the applicable elements of the initial process paragraphs for any change to the organisation notified in accordance with M.A.617. The competent authority may prescribe the conditions under which the M.A. Subpart F approved maintenance organisation may operate during such changes unless it determines that the approval should be suspended

For any change to the maintenance organisation manual:

- (a) In the case of direct approval of amendments of the maintenance organisation manual, the competent authority shall verify that the procedures specified in the manual are in compliance with Part-M before formally notifying the approved organisation of the approval.
- (b) In the case of indirect approval of amendments of the maintenance organisation manual, the competent authority shall ensure that it has an adequate control over the approval of all manual amendments.
- ~~(c) The competent authority may prescribe the conditions under which the M.A. Subpart F approved maintenance organisation may operate during such changes unless it determines that the approval should be suspended.~~



Paragraph M.B.706 is amended as follows:

### **M.B.706 Changes**

The competent authority shall comply with the applicable elements of the initial process paragraphs for any change to the organisation notified in accordance with M.A.713.

The competent authority may prescribe the conditions under which the M.A. Subpart G approved continuing airworthiness management organisation may operate during such changes unless it determines that the approval should be suspended

For any change to the continuing airworthiness management exposition:

- (a) In the case of direct approval of the amendments of continuing airworthiness management exposition, the competent authority shall verify that the procedures specified in the exposition are in compliance with Part-M before formally notifying the approved organisation of the approval.
- (b) In the case of indirect approval of amendments of the continuing airworthiness management exposition, the competent authority shall ensure that it has an adequate control over the approval of all exposition amendments.
- ~~(c) The competent authority may prescribe the conditions under which M.A. Subpart G approved continuing airworthiness management organisation may operate during such changes.~~

Paragraph M.B.901 is amended as follows:

### **M.B.901 Assessment of recommendations**

Upon receipt of an application and associated airworthiness review certificate recommendation in accordance with ~~M.A.902(d)~~ M.A.901

....

Paragraph M.B.902 is amended as follows:

### **M.B.902 Airworthiness review by the competent authority**

- (a) When the competent authority ~~decides to carry out~~ carries out the airworthiness review and issue the airworthiness review certificate EASA Form 15a (Appendix III), the competent authority shall carry out an airworthiness review in accordance with the prescriptions of M.A.710.
- (b) The competent authority shall have appropriate airworthiness review staff to carry out the airworthiness reviews.

These staff shall have acquired:

1. at least five years experience in continuing airworthiness, and;
2. an appropriate Part 66 licence or an aeronautical degree or equivalent, and;
3. formal aeronautical maintenance training, and;
4. a position with appropriate responsibilities.

1. For aircraft used in commercial air transport and aircraft above 2730 Kg MTOM:

- a. at least five years experience in continuing airworthiness, and;
- b. an appropriate Part-66 licence or an aeronautical degree or equivalent, and;
- c. formal aeronautical maintenance training, and;
- d. a position with appropriate responsibilities.

2. For aircraft of 2730 Kg MTOM and below, that is not used in commercial air transport:

- a. at least three years experience in continuing airworthiness, and;
- b. an appropriate Part 66 licence, or a nationally recognized maintenance personnel qualification appropriate to the aircraft category (when Part-66 refers to national rules) or an aeronautical degree or equivalent, and;
- c. appropriate aeronautical maintenance training, and;
- d. a position with appropriate responsibilities

(c) ....

(d) ....

(e) The staff that carries out the airworthiness review shall issue the Form 15a after satisfactory completion of the airworthiness review.

Appendix I “Continuing Airworthiness Arrangement” is amended as follows:

### *Appendix I* **Continuing Airworthiness Arrangement**

5. ....

5.1. Obligations of the approved organisation:

1. ....
2. respect the conditions to maintain the continuing airworthiness of the aircraft listed below:
  - develop a maintenance programme for the aircraft, including any reliability programme developed,
  - declare the maintenance tasks (in the maintenance programme) that may be carried out IAW M.A.803 (c),
  - organise the approval of the aircraft's maintenance programme,
  - ....
3. ....
4. ....
5. inform the ~~airworthiness~~ competent authority of the Member State of registry whenever the aircraft is not presented to the approved maintenance organisation by the owner as requested by the approved organisation;
6. inform the ~~airworthiness authorities~~ competent authority of the Member State of registry whenever the present arrangement has not been respected;
7. carry out the airworthiness review of the aircraft when necessary and ~~fill~~ issue the airworthiness review certificate or the recommendation to the competent authority of the Member State of registry.  
For aircraft of 2730 Kg MTOM and below, that are not used in commercial air transport, the recommendation will be limited to the import of an aircraft in accordance with Part-21 and M.A.904.
8. carry out all occurrence reporting mandated by applicable regulations;
9. inform the ~~authorities~~ competent authority of the Member State of registry whenever the present arrangement is denounced by either party.

## 5.2. Obligations of the owner:

6. ....
7. inform the ~~authorities~~ competent authority of the Member State of registry whenever the present arrangement is denounced by either party.
8. inform the ~~authorities~~ competent authority of the Member State of registry and the approved organisation whenever the aircraft is sold.
9. carry out all occurrence reporting mandated by applicable regulations.

10. inform on a regular basis the approved organisation about the aircraft flying hours and any other utilization data, as agreed with the approved organisation.
11. enter the certificate of release to service in the logbooks as mentioned in M.A.803(d) when performing pilot owner maintenance without exceeding the limits of the maintenance tasks list as declared in the approved maintenance programme (M.A.803 (c)).
12. inform the M.A. Subpart G approved continuing airworthiness management organisation not later than 30 days after completion of the pilot owner maintenance task IAW M.A 305 (a).

Appendix III “Airworthiness Review Certificate” is amended as follows:

**In Form 15a, the sentence:**

~~“is considered to be airworthy at the time of the issue”~~

**is replaced by:**

“is considered to be airworthy at the time of the review”.

Appendix VII “Complex Maintenance Tasks” is amended as follows:

### *Appendix VII* **Complex Maintenance Tasks**

The following constitutes the complex maintenance tasks referred to in M.A.801(b)2. These tasks need to be performed within an approved maintenance organisation because they are likely to involve the need for special tooling, equipment and facilities.

1. ....
2. ....

3. The performance of the following maintenance on a piston engine:

(a) Dismantling of a piston engine other than:

- (i) to obtain access to the piston/cylinder assemblies;
- (ii) to remove the rear accessory cover to inspect and/or replace oil pump assemblies, where such work does not involve the removal and re-fitment of internal gears;

(b) The removal or dismantling of reduction gears;

## (c) Propeller balancing, except

(i) for the certification of static balancing where required by the maintenance manual;

(ii) dynamic balancing on installed propellers using electronic balancing equipment where permitted by the maintenance manual or other approved airworthiness data;

(d) Welding and brazing of joints, other than minor weld repairs to exhaust units carried out by a suitably approved or authorised welder but excluding component replacement;

(e) The disturbing of individual parts of units which are supplied as bench tested units, except for the replacement or adjustment of items normally replaceable or adjustable in service.

Appendix VIII “Limited Pilot Owner Maintenance” is completely replaced by the following text:

*Appendix VIII*  
**Limited Pilot Owner Maintenance**

The following lists constitute the scope of limited pilot owner maintenance referred to in M.A.803:

- Part A applies to aeroplanes;
- Part B applies to rotorcraft;
- Part C applies to sailplanes and powered sailplanes;
- Part D applies to hot air airships, hot air balloons and gas balloons.

In addition to Part M requirements and particularly to M.A.402, the following basic principles are to be complied with before any task is carried out under the terms of pilot owner maintenance:

- 1 Before carrying out any maintenance tasks as listed in this appendix, the pilot owner must satisfy himself that he is competent to do the task. It is the responsibility of pilot owners to familiarize themselves with the standard maintenance practices for their aircraft and with the aircraft maintenance programme.
- 2 The maintenance instructions of the TC holder as expressed in the maintenance manual and instructions for continuing airworthiness are to be considered in developing the maintenance programme; however, these requirements cannot override the generic lists in Part “A” to “D”.
- 3 The maintenance data as specified in M.A.401 must be always available during the conduct of pilot owner maintenance. Details of the data referred to in the conduct of pilot owner maintenance must be included in the Certificate of Release to Service IAW M.A.803(d).
4. The need to use special tools, carry out special testing (e.g. NDT) or any unscheduled special inspections (e.g. heavy landing check) prevents the task from being carried out as pilot owner maintenance.

- 6 Any task described in the aircraft flight manual as preparing the aircraft for flight (Example: assembling the glider wings or pre-flight), is considered to be a pilot task and is not considered pilot owner maintenance and therefore does not require a Certificate of Release to Service.
- 7 Any task related to an Airworthiness Directive is not considered as pilot owner maintenance, unless specifically allowed in the AD.
8. The pilot owner must inform the M.A. Subpart G Continuing Airworthiness Management Organisation (if applicable) not later than 30 days after completion of the pilot owner maintenance task IAW M.A 305 (a).
- 9 Inspection tasks/checks of any periodicity included in an approved maintenance programme can be carried out providing that the specified tasks are included in the generic lists at Parts A to D of Appendix VIII.
- 10 In addition to the generic lists in Parts “A” to “D”, the pilot-owner may carry out very simple visual inspections for general condition and obvious damage of the airframe, engines and components as long as the task does not involve the removal of any component or element.
- 11 Tasks in Appendix VIII Table A shown with \*\* exclude IFR operations following pilot owner maintenance. For these aircraft to operate under IFR operations, these tasks must be certified by an appropriate licensed engineer.

**Appendix VIII Part A / PILOT OWNER MAINTENANCE TASKS for POWERED AIRCRAFT (AEROPLANE)**

ATA	Area	Task	<1000kg	1000 – 2730 kg
09	Towing	Tow release unit and tow cable retraction mechanism – Cleaning, lubrication and tow cable replacement (including weak links).	Yes	Yes
		Mirror –Installation and replacement of mirrors.	Yes	Yes
11	Placards	Placards, Markings – Installation and renewal of placards and markings required by AFM and AMM.	Yes	Yes
12	Servicing	Lubrication – Not requiring a disassembly other than non structural items such as cover plates, cowlings and fairings.	Yes	Yes
20	Standard Practices	Safety Wiring – Replacement of defective wiring or cotter keys, excluding those in engine, transmission, flight control systems.	Yes	No
		Simple Non Structural Standard Fasteners – Replacement and adjustment, excluding the replacement of receptacles and anchor nuts requiring riveting.	Yes	Yes
21	Air Conditioning	Replacement of flexible hoses and ducts.	Yes	Yes
23	Communication.	Communication devices – Remove and replace self contained,	Yes**	Yes**

		front instrument panel mount communication devices with quick disconnect connectors, excluding IFR operations.		
24	Electrical power	Batteries – Replacement and servicing, excluding servicing of Ni-Cd batteries and IFR operations.	Yes**	Yes**
		Wiring – Repairing broken circuits in landing light and any other wiring for non critical equipment, excluding ignition system, primary generating system and required communication, navigation system and primary flight instruments.	Yes	Yes
		Bonding – Replacement of broken bonding cable.	Yes	Yes
		Fuses – Replacement with the correct rating.	Yes	Yes
25	Equipment	Safety Belts – Replacement of safety belts and harnesses excluding belts fitted with airbag systems.	Yes	Yes
		Seats – Replacement of seats or seat parts not involving disassembly of any primary structure or control system.	Yes	Yes
		Non essential instruments and/or equipment - Replacement of self contained, front instrument panel mount equipment with quick disconnect connectors.	Yes	Yes
		Oxygen System – Replacement of oxygen bottle and system in approved mountings	Yes	Yes
		ELT – Removal / Re-installation.	Yes	Yes
26	Fire Protection	Fire Warning – Replacement of sensors and indicators.	Yes	Yes
27	Flight controls	Removal or re-installation of co-pilot control column and rudder pedals where provision for quick disconnect is made by design.	Yes	Yes
28	Fuel System	Fuel lines – Replacement of prefabricated fuel lines fitted with self sealing couplings.	Yes	Yes
		Fuel Filter elements – Cleaning and/or replacement.	Yes	Yes
31	Instruments	Instrument Panel– Removal and re-installation provided this it is a design feature with quick disconnect connectors, excluding IFR operations.	Yes**	No
		Pitot Static System – Simple sense and leak check, excluding IFR operations.	Yes**	No
		Drainage – Drainage of water drainage traps or filters within the Pitot static system excluding IFR operations.	Yes**	Yes**
		Flexible tubes - Replacement of damaged tubes excluding IFR operations.	Yes**	No
32	Landing Gear	Wheels – Removal, replacement and servicing, including replacement of wheel bearings and lubrication.	Yes	Yes

		Hydraulic fluid – Replenishment of hydraulic fluid such as brake fluid.	Yes	Yes
		Shock Absorber – Replacement of elastic cords or rubber dampers.	Yes	Yes
		Shock Struts – Replenishment of oil or air.	Yes	No
		Skis – Changing between wheel and ski landing gear.	Yes	Yes
		Landing skids – Replacement of landing skids and skid shoes.	Yes	Yes
		Wheel fairings (spats) – Removal and re-installation.	Yes	Yes
		Mechanical brakes – Adjustment of simple cable operated systems.	Yes	No
		Brake – Replacement of worn brake pads.	Yes	No
33	Lights	Lights – Replacement of internal and external bulbs, filaments, reflectors and lenses.	Yes	Yes
34	Navigation	Software – Updating self contained, front instrument panel mount navigational software databases, excluding automatic flight control systems and transponders.	Yes	Yes
		Navigation devices – Removal and replacement of self contained, front instrument panel mount navigation devices with quick disconnect connectors, excluding automatic flight control systems, transponders, primary flight control system and IFR operations.	Yes**	Yes**
		Self contained data logger – Installation, data restoration.	Yes	Yes
51	Structure	Fabric patches – Simple patches extending over not more than one rib, not requiring rib stitching or removal of structural parts or control surfaces.	Yes	Yes
		Protective Coating – Applying preservative material or coatings where no disassembly of any primary structure or operating system is involved.	Yes	Yes
		Surface finish - Minor restoration where no disassembly of any primary structure or operating system is involved This includes application of signal coatings or thin foils as well as registration markings.	Yes	Yes
		Fairings – Simple repairs to non structural fairings and cover plates which do not change the contour.	Yes	Yes
52	Doors	Doors - Removal and re-installation.	Yes	Yes
53	Fuselage	Upholstery, furnishing – Minor repairs which do not require disassembly of primary structure or operating systems, or interfere with control systems.	Yes	Yes
56	Windows	Side Windows - Replacement if it does not require riveting, bonding or any special process.	Yes	Yes
61	Propeller	Spinner – Removal and re-installation.	Yes	Yes



71	Powerplant installation	Cowling – Removal and re-installation not requiring removal of propeller or disconnection of flight controls.	Yes	Yes
72	Engine	Chip detectors – Removal, checking and re-installation provided the chip detector is a self sealing type and not electrically indicated.	Yes	Yes
73	Engine fuel	Strainer or Filter elements – Cleaning and/or replacement.	Yes	Yes
		Fuel - Mixing of required oil into fuel.	Yes	Yes
74	Ignition	Spark Plugs – Removal, re-installation and adjustment.	Yes	Yes
75	Cooling	Coolant - Replenishment of coolant fluid.	Yes	Yes
77	Engine Indicating	Engine Indicating – Removal and replacement of self contained, front instrument panel mount indicators that do not employ direct reading connections.	Yes	No
79	Oil System	Strainer or filter elements – Cleaning and/or replacement.	Yes	Yes
		Oil – Changing or replenishment of engine oil and gearbox fluid.	Yes	Yes

### **Appendix VIII Part B / PILOT OWNER MAINTENANCE TASKS for ROTORCRAFT**

ATA	Area	Task	Single Engine Rotorcraft <2730 kg
11	Placards	Placards, Markings – Installation and renewal of placards and markings required by AFM and AMM.	Yes
12	Servicing	Fuel, oil, hydraulic, de-iced and windshield liquid replenishment.	Yes
		Lubrication – Not requiring a disassembly other than non structural items such as cover plates, cowlings and fairings.	Yes
20	Standard Practices	Simple non structural standard fasteners – Replacement and adjustment, excluding latches and the replacement of receptacles and anchor nuts requiring riveting.	Yes
21	Air Conditioning	Replacement of flexible hoses and ducts.	Yes
23	Communication	Communication devices – Remove and replace self contained, front instrument panel mount communication devices with quick disconnect connectors.	Yes
24	Electrical power	Batteries – Replacement and servicing, excluding servicing of Ni-Cd batteries.	Yes
		Bonding – Replacement of broken bonding cable excluding bonding on rotating parts and flying controls.	Yes

		Fuses – Replacement with the correct rating.	Yes
		Wiring – Repairing broken circuits in landing light and any other wiring for non critical equipment, excluding ignition system, primary generating system and required communication, navigation system and primary flight instruments.	Yes
25	Equipment	Safety Belts - Replacement of safety belts and harnesses excluding belts fitted with airbag systems.	Yes
		Seats – Replacement of seats or seat parts not involving disassembly of any primary structure or control system excluding flight crew seats.	Yes
		Removal / installation of emergency flotation gears with quick disconnect connectors.	Yes
		Non essential instruments and/or equipment - Replacement of self contained, front instrument panel mount equipment with quick disconnect connectors.	Yes
		ELT - Removal / Re-installation.	Yes
30	Ice and rain protection	Windshield wiper replacement	Yes
31	Instruments	Drainage – Drainage of water drainage traps or filters within the Pitot static system	Yes
32	Landing Gears	Wheels – Removal, Installation, and tyre inflation.	Yes
		Replacement of skid wear shoes.	Yes
		Fit and remove snow landing pads.	Yes
		Brakes - Replenishment of hydraulic brake fluid	Yes
		Brake – Replacement of worn brake pads	Yes
33	Lights	Lights – replacement of internal and external bulbs, filaments, reflectors and lenses	Yes
34	Navigation	Software – Updating self contained, front instrument panel mount navigational software databases, excluding automatic flight control systems and transponders.	Yes
		Navigation devices – Remove and replace self contained, front instrument panel mount navigation devices with quick disconnect connectors, excluding automatic flight control systems, transponders, primary flight control system.	Yes
		Self contained data logger – Installation, data restoration	Yes

51	Structure	Protective Coating – Applying preservative material or coatings where no disassembly of any primary structure or operating system is involved.	Yes
		Surface finish - Minor restoration where no disassembly of any primary structure or operating system is involved, excluding intervention on main and tail rotors. This includes application of signal coatings or thin foils as well as Registration markings.	Yes
		Fairings – Simple repairs to non structural fairings and cover plates which do not change the contour.	Yes
52	Doors	Doors - Removal and re-installation.	Yes
53	Fuselage	Upholstery, furnishing – Minor repairs which do not require disassembly of primary structure or operating systems, or interfere with control systems.	Yes
56	Windows	Side Windows - Replacement if it does not require riveting, bonding or any special process.	Yes
62	Main rotor	Removal/installation of main rotor blades that are designed for removal where special tools are not required (tail rotor blades excluded) limited to installation of the same blades previously removed refitted in the original position.	Yes
63 65	Transmission	Chip detectors – Remove, check and replace provided the chip detector is a self sealing type and not electrically indicated.	Yes
67	Flight control	Removal or re-installation of co-pilot cyclic and collective controls and yaw pedals where provision for quick disconnect is made by design.	Yes
71	Powerplant installation	Cowlings - Removal and re-fitment.	Yes
72	Engine	Chip detectors –removal, checking and re-installation provided the chip detector is a self sealing type and not electrically indicated	Yes
79	Oil System	Filter elements – Replacement, provided that the element is of the “spin on/off” type.	Yes
		Oil - Changing or replenishment of engine oil.	Yes

## **Appendix VIII Part C / PILOT OWNER MAINTENANCE TASKS for SAILPLANES AND POWERED SAILPLANES**

### **Abbreviations applicable to this Part:**

N/A	not applicable for this category
SP	sailplane
SSPS	self sustained powered sailplane
SLPS/TM	self launching powered sailplane/touring motorglider

ATA	Area	Task	SP	SSPS	SLPS/ TM
08	Weighing	Recalculation – Small changes of the Trim plan without needing a reweighing.	Yes	Yes	Yes

09	Towing	Tow release unit – Cleaning, lubrication and replacement of unit not involving disassembly of any primary structure, control system or additional adjusting.	Yes	Yes	Yes
		Mirror –Removal and re-installation of mirrors.	N/A	N/A	Yes
11	Placards	Placards, Markings – Installation and renewal of placards and markings required by AFM and AMM.	Yes	Yes	Yes
12	Servicing	Lubrication – Not requiring a disassembly other than non structural items such as cover plates, cowlings and fairings.	Yes	Yes	Yes
20	Standard Practices	Safety Wiring – Replacement of defective wiring or cotter keys.	Yes	Yes	Yes
		Simple Non Structural Standard Fasteners – Replacement and adjustment, excluding the replacement of receptacles and anchor nuts requiring riveting.	Yes	Yes	Yes
		Free play – Measurement of the free play in the control system and the wing to fuselage attachment including minor adjustments by simple means provided by the manufacturer.	Yes	Yes	Yes
21	Air Conditioning	Replacement of flexible hoses and ducts.	Yes	Yes	Yes
23	Communication	Communication devices – Remove and replace self contained, front instrument panel mount communication devices with quick disconnect connectors.	Yes	Yes	Yes
24	Electrical power	Batteries and solar panels – Replacement and servicing.	Yes	Yes	Yes
		Wiring - Installation of simple wiring connections to the existing wiring for additional equipment such as electric variometers, flight computers but excluding communication, navigation systems and engine wiring.	Yes	Yes	Yes
		Wiring – Repairing broken circuits in landing light and any other wiring for non critical equipment, excluding ignition system, primary generating system and required communication, navigation system and primary flight instruments.	Yes	Yes	Yes
		Bonding – Replacement of broken bonding cable.	Yes	Yes	Yes
		Switches – Replacement without soldering.	Yes	Yes	Yes
		Fuses – Replacement with the correct rating.	Yes	Yes	Yes
25	Equipments	Safety Belts – Replacement of safety belt and harnesses.	Yes	Yes	Yes
		Seats – Replacement of seats or seat parts not involving disassembly of any primary structure or control system.	Yes	Yes	Yes
		Non essential instruments and/or equipments - Replacement of self contained, front instrument panel mount equipment with quick disconnect connectors.	Yes	Yes	Yes

		Removal and installation of non required instruments and/or equipment.	Yes	Yes	Yes
		Wing Wiper, Cleaner – Servicing, removal and re-installation not involving disassembly or modification of any primary structure, control	Yes	Yes	Yes
		Static Probes – Removal or re-installation of variometer static and total energy compensation probes.	Yes	Yes	Yes
		Oxygen System – Replacement of Oxygen Bottle and System.	Yes	Yes	Yes
		Air Brake Chute – Installation and servicing	Yes	Yes	Yes
		ELT – Removal / Re-installation.	Yes	Yes	Yes
26	Fire Protection	Fire Warning – Replacement of sensors and indicators.	N/A	Yes	Yes
27	Flight Control	Gap Seals – Installation and servicing if it does not require complete flight control removal.	Yes	Yes	Yes
		Control System – Measurement of the control system travel without removing the control surfaces.	Yes	Yes	Yes
		Control Cables – Simple optical Inspection for Condition.	Yes	Yes	Yes
		Gas Dampener – Replacement of Gas Dampener in the Control or Air Brake System.	Yes	Yes	Yes
		Co-pilot stick and pedals - Removal or re-installation where provision for quick disconnect is made by design.	Yes	Yes	Yes
28	Fuel System	Fuel lines – Replacement of prefabricated fuel lines fitted with self sealing couplings.	N/A	Yes	Yes
		Fuel Filter – Cleaning and/or replacement.	N/A	Yes	Yes
31	Instruments	Instrument Panel– Removal and re-installation provided this is a design feature with quick disconnect, excluding IFR operations.	Yes	Yes	Yes
		Pitot Static System – Simple sense and leak check.	Yes	Yes	Yes
		Instrument Panel vibration damper / shock absorbers- Replacement.	Yes	Yes	Yes
		Drainage – Drainage of water drainage traps or filters within the Pitot static system.	Yes	Yes	Yes
		Flexible tubes - Replacement of damaged tubes.	Yes	Yes	Yes
32	Landing Gear	Wheels – Removal, replacement and servicing, including replacement of wheel bearings and lubrication.	Yes	Yes	Yes

		Hydraulic fluid – Replenishment of hydraulic fluid such as brake fluid.	Yes	Yes	Yes
		Shock Absorber – Replacement or servicing of elastic cords or rubber dampers.	Yes	Yes	Yes
		Shock Struts – Replenishment of oil or air.	Yes	Yes	Yes
		Landing gear doors - Removal or re-installation and repair including operating straps.	Yes	Yes	Yes
		Skis – Changing between wheel and ski landing gear.	Yes	Yes	Yes
		Skids – Removal or re-installation and servicing of main, wing and tail skids.	Yes	Yes	Yes
		Wheels fairing (spats) – Removal and re-installation.	Yes	Yes	Yes
		Mechanical brakes – Adjustment of simple cable operated systems.	Yes	Yes	Yes
		Brake – Replacement of worn brake pads.	Yes	Yes	Yes
		Springs – Replacement of worn or aged springs.	Yes	Yes	Yes
		Gear Warning –Removal or re-installation of simple gear warning systems.	Yes	Yes	Yes
33	Lights	Lights – Replacement of internal and external bulbs, filaments, reflectors and lenses.	N/A	N/A	Yes
34	Navigation	Software – Updating self contained, front instrument panel mount navigational software databases, excluding automatic flight control systems and transponders and including update of non required instruments / equipments.	Yes	Yes	Yes
		Navigation devices – Removal and replacement of self contained, front instrument panel mount navigation devices with quick disconnect connectors, excluding automatic flight control systems, transponders, primary flight control system.	Yes	Yes	Yes
		Self contained data logger – Installation, data restoration	Yes	Yes	Yes
51	Structure	Fabric patches – Simple patches extending over not more than one rib, not requiring rib stitching or removal of structural parts or control surfaces.	Yes	Yes	Yes
		Protective Coating – Applying preservative material or coatings where no disassembly of any primary structure or operating system is involved.	Yes	Yes	Yes
		Surface finish - Minor restoration where no disassembly of any primary structure or operating system is involved This includes application of signal coatings or thin foils as well as Registration markings.	Yes	Yes	Yes

		Fairings – Simple repairs to non structural fairings and cover plates which do not change the contour.	Yes	Yes	Yes
52	Doors	Doors - Removal and re-installation.	Yes	Yes	Yes
53	Fuselage	Upholstery, furnishing – Minor repairs which do not require disassembly of primary structure or operating systems, or interfere with control systems.	Yes	Yes	Yes
56	Windows	Side Windows - Replacement if it does not require riveting, bonding or any special process.	Yes	Yes	Yes
		Canopies - Removal and re-fitment.	Yes	Yes	Yes
		Gas dampener – Replacement of Canopy Gas dampener.	Yes	Yes	Yes
57	Wings	Wing Skids – Removal or re-installation and service of lower wing skids or wing roller including spring assembly.	Yes	Yes	Yes
		Water ballast – Removal or re-installation of flexible tanks.	Yes	Yes	Yes
		Turbulator and sealing tapes – Removal or re-installation of approved sealing tapes and turbulator tapes.	Yes	Yes	Yes
61	Propeller	Spinner – Removal and re-installation.	N/A	Yes	Yes
71	Power Plant	Removal or installation of power plant unit including engine and propeller.	N/A	Yes	NO
		Cowling - Removal and re-installation not requiring removal of propeller or disconnection of flight controls.	N/A	Yes	Yes
72	Engine	Chip detectors – Removal, checking and re-installation provided the chip detector is a self sealing type and not electrically indicated.	N/A	Yes	Yes
73	Engine fuel	Strainer or Filter elements – Cleaning and/or replacement.	N/A	Yes	Yes
		Fuel - Mixing of required oil into fuel.	N/A	Yes	Yes
74	Ignition	Spark Plugs – Removal, re-installation and adjustment.	N/A	Yes	Yes
75	Cooling	Coolant – Replenishment of coolant fluid.	N/A	Yes	Yes
76	Engine Controls	Controls – Minor adjustments of non-flight or propulsion controls whose operation is not critical for any phase of flight.	N/A	Yes	NO
77	Engine Indicating	Engine Indicating – Removal and replacement of self contained, front instrument panel mount indicators that do not employ direct reading connections.	N/A	Yes	Yes
79	Oil System	Strainer or Filter elements – Cleaning and/or replacement.	N/A	Yes	Yes
		Oil – Changing or replenishment of engine oil and gearbox fluid.	N/A	Yes	Yes

## **Appendix VIII Part D / PILOT OWNER MAINTENANCE TASKS for BALLOONS / AIRSHIPS**

### **Specific basic principles for hot air airships, hot air balloons and gas balloons:**

In addition to the basic principles, no task that is considered “complex” may be carried out by the pilot owner of the balloon or hot air airship.

A complex task is considered as any maintenance or repair to the envelope or to the basket primary suspension system that requires the re-manufacture of any joint and/or component.

Any repair carried out to the envelope cannot include the repair or replacement of load tapes. Welding to the basket frame or burner frame or repairs to the pressure lines of the burners or the fuel cylinders are also prohibited.

<b>Area and Task</b>	<b>Hot Air Airship</b>	<b>Hot Air Balloon</b>	<b>Gas Balloon</b>
<b>A) ENVELOPE</b>			
1- Fabric repairs- excluding complete panels (as defined in, and in accordance with, Type Certificate holders' instructions) not requiring load tape repair or replacement.	Yes	Yes	No
2- Nose line - Replacement	Yes	N/A	N/A
3- Banners- fitment, replacement or repair (without sewing).	Yes	Yes	Yes
4- Melting link (temperature flag) - replacement.	Yes	Yes	N/A
5-Temperature transmitter and temperature indication cables - removal or reinstallation	Yes	Yes	N/A
6- Valve and rip line- replacement.	No	No	No
7- Crown line- replacement (where permanently attached to the crown ring )	No	Yes	N/A
8- Scoop or skirt-replacement or repair of (including fasteners).-	No	Yes	N/A
<b>B) BURNER</b>			
9- Burner-cleaning and lubrication	Yes	Yes	No
10-Piezo igniters- adjustment.	Yes	Yes	No
11-Burner jets-cleaning and replacement.	Yes	Yes	No
12-Burner frame corner buffers-replacement or reinstallation.	Yes	Yes	No



<b>C) BASKET AND GONDOLA</b>			
13- Basket frame trim-repair or replacement	No	Yes	Yes
14- Basket runners-repair or replacement	No	Yes	Yes
15- External rope handles-repair.	No	Yes	Yes
16- Replacement of seat covers - upholsteries and safety belts.	Yes	No	No
<b>D) FUEL CYLINDER</b>			
17-Liquid valve-replacement of O-rings.	Yes	Yes	No
<b>E) INSTRUMENTS AND EQUIPMENT</b>			
18-Batteries-replacement of for self contained instruments and communication equipment.	Yes	Yes	Yes
19-Communication, navigation devices, instruments and/or equipment – Remove and replace self contained, instrument panel mounted communication devices with quick disconnect connectors.	Yes	Yes	Yes
<b>F) ENGINES</b>			
20-Cleaning and Lubrication not requiring disassembly other than removal of non-structural items such as cover plates, cowlings and fairings.	Yes	N/A	N/A
21-Cowling-removal and re-fitment not requiring removal of the propeller	Yes	N/A	N/A
22- Fuel and oil strainers and/or filter elements- Removal, cleaning and/or replacement	Yes	N/A	N/A
23-Batteries-replacing and servicing excluding Ni-Cd batteries	Yes	N/A	N/A
24-Windows and canopies-making minor repairs to direct vision windows.	Yes	N/A	N/A
25-Propeller Spinner – removal and installation for inspection	Yes	N/A	N/A
26-Power plant - Removal or installation of power plant unit including engine and propeller	Yes	N/A	N/A
27-Engine- Chip detectors – remove, check and replace	Yes	N/A	N/A
28-Ignition Spark Plug – removal or installation and adjustment including gap clearance	Yes	N/A	N/A
29- Coolant fluid-replenishment	Yes	N/A	N/A
30-Engine Controls-minor adjustments of non-flight or propulsion controls whose operation is not critical for any phase of flight	Yes	N/A	N/A
31- Engine instruments-removal and replacement.	Yes	N/A	N/A
32-Lubrication oil – changing or replenishment of engine oil and gearbox fluid	Yes	N/A	N/A
33- Fuel lines-replacement of prefabricated hoses with self sealing couplings	Yes	N/A	N/A

### III. Draft Decision AMC to Part M

Decision No 2003/19/RM Annex I is hereby amended as follows:

New AMC M.1 is added:

#### **AMC M.1**

A competent authority may be a ministry, an aviation national authority, or any aviation body designated by the Member State. A Member State may designate more than one competent authority to cover different areas of responsibility, as long as there is only one competent authority responsible for each given area of responsibility.

A new subparagraph 7 is added in AMC M.A.302:

#### **AMC M.A.302 Maintenance programme**

6. ....

7. Examples of “generic” maintenance programmes could be UK LAMS, Cessna 100 Series....

“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.

After this initial approval, when an owner/operator is contracted, the baseline or generic maintenance programme, as applicable, is amended in order to incorporate the additional maintenance tasks and to indicate those that are not applicable to a particular aircraft registration mark. This may be performed by means of an Annex to the baseline/generic maintenance programme for each aircraft registration, specifying which tasks are added and which are not applicable.

Continuing airworthiness management organisations may seek authorisation for indirect approval in order to perform the amendments to the maintenance programme mentioned above. There is no need to change the applicable Form 14 each time a maintenance programme is amended. Only the reference to the baseline/generic maintenance programme should be included in Form 14.

AMC M.A.302(d) is renumbered to AMC M.A.302(e):

#### **AMC M.A.302(e) Maintenance programme – reliability programmes**

....

A new subparagraph 4 is inserted in AMC M.A.401(c):

#### **AMC M.A.401(c) Maintenance data**

3. ....

4. In the case of aircraft of 2730 Kg MTOM and below, the workcard/worksheet system may take the form of, but not limited to, the following:

- A format where the mechanic writes the defect and the maintenance action taken together with information of the maintenance data used.
- An aircraft log book that contains the pilot reports of defects and the actions taken by authorised personnel together with information of the maintenance data used.
- For maintenance checks, the checklist issued by the manufacturer (i.e., 100H checklist).

5. ~~4.~~ ....

AMC M.A.402(a) paragraph 2 is amended as follows:

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

1. ....

2. In the case of limited pilot owner maintenance as specified in M.A.803, any person maintaining an aircraft which they own or jointly own, provided they hold a valid pilot licence with the appropriate type or class rating, may perform the limited pilot owner maintenance tasks IAW Part-M Appendix VIII. ~~should have had appropriate training or relevant previous experience as accepted by the competent authority and be capable of performing the task required~~

3. ....

A new AMC M.A.502 is added:

#### **AMC M.A.502 Component maintenance**

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

A new AMC M.A.502(b) is added:

#### **AMC M.A.502(b) Component maintenance**

1. Paragraph M.A.502(b) does not refer to cases where a component is temporarily removed in order to improve the access to other areas of the aircraft but to improve access to carry out maintenance on such component.
2. “Expressly permitted” means that the aircraft maintenance data describes or permits the removal and installation of such component, even if it is for other purposes than doing maintenance on such component.
3. “Subject to the aircraft release requirements” implies that the component is not eligible for the issuance of a Form 1.

AMC M.A.504(b) is amended by adding the following text:

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

1. ....
2. ....
3. M.A.801(b)(2) certifying staff performing aircraft maintenance should send, with the agreement of the aircraft owner/lessee, any unserviceable component to a maintenance organisation approved under Section A Subpart F or Part-145 for controlled storage. “A secure location under the control of the M.A.502 approved organisation” means a secure location described in the relevant procedures of the approved maintenance organisation for which security is the responsibility of the approved maintenance organisation. This may include facilities established by approved maintenance organisation at locations different from the main maintenance facilities.

Appendix IV to AMC M.A.604 is amended as follows:

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

....

Part C – General Procedures

**- Organisational review**

....

**- Training**

....

**- Contracting Subcontracting of specialised services**

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

....

Part E – Appendices

**- Sample of all documents used.**

**- List of maintenance locations.**

**- List of Part 145 or M.A. Subpart F organisations.**

**- List of subcontracted specialised services.**

....

AMC M.A.607(c) is renumbered to AMC M.A.607(b)

**AMC M.A.607(e)(b) Certifying staff**

1. The following minimum information ....

A new AMC M.A.610 is added:

**AMC M.A.610 Maintenance work orders**

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

- A formal document or form specifying the work to be carried out. This form may be provided by the continuing airworthiness management organisation managing the

aircraft, or by the maintenance organisation undertaking the work, or by the owner/operator himself.

- An entry in the aircraft log book specifying the defect that needs to be corrected.

A new AMC M.A.615(3) is added:

#### **AMC M.A.615(3) Privileges of the organisation**

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

The requirement that the organisation performing the specialised services must be “appropriately qualified” means that it should meet an officially recognised standard or, otherwise, it should be formally accepted by the competent authority.

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

- Receives appropriate maintenance instructions and maintenance data for the task to be performed.
- Properly records the maintenance performed in the Subpart F airworthiness records.
- Notifies the Subpart F organisation for any deviation or non-conformity, which have arisen during such maintenance.

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

Appendix VIII to AMC M.A.616 is amended as follows:

#### **Appendix VIII to AMC M.A.616**

....

#### **1. Organisational review features.**

....

b. The organisational review should cover ....

....

(5) ....

- (6) Supplier and specialised services selection, approval and surveillance, as applicable.  
 (7) ....

....

## 2. Organisational review program.

....

## 3. Training and experience of evaluators.

The evaluators that are used by the maintenance organisation should have a perfect thorough knowledge of the maintenance organisation manual.

~~General experience only is usually insufficient therefore~~ Evaluators should be current be trained on the techniques that can be used for organisational reviews such as regulations, auditing, interview techniques, evaluation principles, and system analysis techniques.

Recurrent training - A programme for continuation training should be developed for evaluators. It should provide for evaluators, at regular intervals, to attend technical training and specific review training to gain first hand knowledge of new developments.

....

AMC M.A.706, subparagraph 4.7, is amended as follows:

### AMC M.A.706 Personnel requirements

4.6. ....

4.7. knowledge of a relevant sample of the type(s) of aircraft gained through a formalised training course. These courses should be at least at the Level 1 General Familiarization as specified in Part-66, Appendix III and should cover at least one aircraft type for each subcategory (i.e. helicopter piston, helicopter turbine, aeroplane piston, aeroplane turbine) and for each type of turbine propulsion system (turbofan, turboprop).

4.8. ....

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

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

1. Airworthiness review staff are only required if the M.A. Subpart G organisation wants to be granted M.A.711 (b) airworthiness review privileges.

2. “experience in continuing airworthiness” means experience in tasks related to aircraft maintenance and/or maintenance management (engineering) and/or surveillance of such tasks, which may be combined.

~~2.~~ 3. A person qualified to the AMC M.A.706 subparagraph 4.5 should be considered as holding the equivalent to an aeronautical degree.

~~3.~~ 4. An appropriate Part-66 licence is a category B or C licence in the sub-category of the aircraft reviewed. It is not necessary to satisfy the experience requirements of Part-66 at the time of the review.

~~4.~~ 5. To hold a position with appropriate responsibilities means the airworthiness review staff should have a position in the organisation independent from the airworthiness management process or with overall authority on the airworthiness management process of complete aircraft.

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

- Having authorisation to perform airworthiness reviews only on aircraft which have not been managed by that person. For example, performing airworthiness reviews on a specific model line, while being involved in the management of a different model line.
- In the case of organisations with Subpart F, Subpart G and Subpart I approval, maintenance personnel from the Subpart F organisation may be nominated as airworthiness review staff, as long as they are only involved in the maintenance of the aircraft but not involved in its maintenance management.
- Nominating as airworthiness review staff personnel from the Quality Department of the continuing airworthiness management organisation.

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

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

A new AMC M.A.707(a)(1) is added:

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

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

- Relevant parts of continuing airworthiness regulations.
- The operator’s Operations Specifications when applicable.



- Relevant parts of the operator's Operations Manual when applicable.
- 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 the Level 1 General Familiarization as specified in Part-66, Appendix III and should cover at least one aircraft type for each subcategory (i.e. helicopter piston, helicopter turbine, aeroplane piston, aeroplane turbine) and for each type of turbine propulsion system (turbofan, turboprop).
- Maintenance methods.

A new AMC M.A.707(a)(2) is added:

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

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

1. "experience in continuing airworthiness" can be full time or part-time, either as professional or on a voluntary basis.
2. Appropriate aeronautical maintenance training means demonstrated knowledge of the following subjects:
  - Relevant parts of 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 courses / experience should be at least at the Level 1 General Familiarization as specified in Part-66, Appendix III or equivalent, and should cover at least one aircraft type for each subcategory (i.e. helicopter piston, helicopter turbine, rotorcraft, aeroplane piston, aeroplane turbine, gliders and balloons) and for each type of turbine propulsion system (turbofan, turboprop).
  - 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. This assessment should be recorded.

A new AMC M.A.707(b) is added:

#### **AMC M.A.707 (b) Airworthiness review staff**

An airworthiness review "under supervision" means under the supervision of the competent authority. If the organisation already has properly authorised airworthiness review staff, the

competent authority may accept that the supervision be performed by this existing airworthiness review staff in accordance with an approved procedure. In such case, evidence of the airworthiness review performed under supervision should be provided to the competent authority together with the EASA Form 4.

A new AMC M.A.707(c) is added:

#### **AMC M.A.707 (c) Airworthiness review staff**

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

- been involved in continuing airworthiness management activities for at least six months in every two year period for each subcategory (i.e. helicopter piston, helicopter turbine, rotorcraft, aeroplane piston, aeroplane turbine, gliders and balloons), or,
- conducted at least one airworthiness review in the last twelve month period.

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

A new AMC M.A.707(e) is added:

#### **AMC M.A.707(e) Airworthiness review staff**

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

- Name,
- Date of Birth,
- Basic Education,
- Experience,
- Aeronautical Degree and/or part-66-qualification and/or nationally-recognized maintenance personnel qualification,
- Initial Training received,
- Type of Training received,
- Continuation Training received,
- Experience in continuing airworthiness and within the organisation,
- Responsibilities of current role in the organisation.

A new AMC M.A.710(d) is added:

#### **AMC M.A.710(d) Airworthiness review**

“Without loss of continuity of the airworthiness review pattern” means that the new expiration date is set up one year after the previous expiration date.

AMC M.A.711(b) is amended as follows:

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

It is not necessary for an organisation to be approved to carry out airworthiness reviews.

~~This can be contracted to another appropriately approved organisation. In this case, the airworthiness review should be carried out every year and the ARC issued by the competent authority following a recommendation.~~

AMC M.A.712(f) is amended as follows:

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

A small organisation is considered to be an organisation with up to 5 staff (including M.A.706 and M.A.707 personnel) ~~managing less than 10 aircraft. This number should be decreased by 50% in the case of large aircraft.~~ The complexity of the organisation, combination of aircraft and aircraft types, the utilisation of the aircraft and the number of approved locations of the organisation should also be considered before replacing the quality system by an organisational review.

Appendix XII should be used to manage the organisational reviews.

A new Appendix XII to AMC M.A.712(f) is added:

#### **Appendix XII to AMC M.A.712(f)**

**This is only applicable to continuing airworthiness management organisations (CAMO) eligible for organisational reviews in accordance with M.A.712(f). For other organisations, the principles and practices of an independent quality assurance system should be used.**

##### **1. Organisational review features.**

An organisational review program should be organised as an overall internal evaluation program that has written descriptions of the key elements of the program. The program should have a structured and planned series of evaluations that are designed to improve the quality of all steps

and functions in the process that leads to a final safe product while ensuring that the subpart G and I approved CAMO remains in compliance with the requirements:

- a. The organisational review program should not be misunderstood as a program that replaces existing competent authority auditing requirements, such as the continuing oversight programs cited in M.B.704. It is comprehensive and includes identifying corrective actions, verifying that those actions have taken place, and ensuring that problems do not re-occur. Further, one of the most critical aspects of an organisational review program is the regular involvement of management, which typically distinguishes it from the normal checks and verifications that each person in the organisation is requested to carry out on work performed to ensure a final safe product and continuous compliance with rules.
- b. The organisational review should cover all systems, processes, and products that are basic components of the CAMOs activities. There is no set list of items to be covered since each operation is unique, but a representative list of areas to be evaluated would include:
  - (1) Aircraft continuing airworthiness record system utilisation. Aircraft technical log utilisation and MEL application (if applicable).
  - (2) Aircraft maintenance programmes - development amendment and approval.
  - (3) Time and continuing airworthiness records, responsibilities, retention and access.
  - (4) Accomplishment and control of Airworthiness Directives.
  - (5) Analysis of effectiveness of the maintenance programme(s) (if applicable per M.A.301).
  - (6) Non mandatory modification embodiment policy (if applicable per M.A.301).
  - (7) Major modification standards.
  - (8) Defect reporting.
  - (9) Engineering activity.
  - (10) Reliability programmes (if applicable per M.A.302).
  - (11) Aircraft weighing.
  - (12) Check/test flight procedures.
  - (13) Maintenance contractor selection procedure.
  - (14) Personnel qualifications, training and staffing levels.
  - (15) Communication to the competent authority.
  - (16) Review of aircraft records.
  - (17) Physical survey of aircraft.
  - (18) Additional procedures for recommendations to competent authorities for the import of aircraft.
  - (19) Recommendations to competent authority for the issue of ARC.
  - (20) Issuance of ARC.
  - (21) Airworthiness review records, responsibilities, retention and access.

Items (16) through (21) are only applicable when the CAMO has Subpart I privileges.

## **2. Organisational review program.**

The following are essential elements of an organisational review program. Each of these should be described in a program document.

- a. As a part of identifying organisational review responsibility, the CAMO should identify resources and personnel that conduct the organisational reviews within the company. A

CAMO may decide to use outside resources in support of, or to accomplish organisational reviews.

A CAMO's organisational review program should identify the person and/or a group within the organisation who has the responsibility and authority to:

- (i) Perform organisational reviews.
- (ii) Identify and record any findings and the evidence necessary to substantiate those findings.
- (iii) Recommend or assist with the development of corrective actions to findings.
- (iv) Verify the implementation of corrective actions consistent with an action plan and validate that corrective actions are effective.
- (v) Communicate and coordinate activities with competent authorities on a regular basis.

Having a well-structured organisational review programme ensures that all areas of operation are covered at appropriate intervals. It also institutionalises the process so that a change in personnel does not adversely affect the program.

The accountable manager is responsible for the organisational review program. He may formally delegate this responsibility to one of the M.A.706 (c) persons. An organisational review program might consist of developing simplified checklist/s and a schedule (monthly, quarterly, semi-annual, or annual) for accomplishing checklist items. The review should at least include a written statement acknowledging the completion of the checklist items and the signature of the person conducting the organisational review. Under these conditions, occasional independent oversight of checklist development and accomplishment should be considered.

#### b. Reporting to the accountable manager

To be effective, the results of the organisational review program should be submitted to the accountable manager on a regular basis. The accountable manager should analyse the organisational review results to verify that satisfactory corrective actions have been implemented.

#### c. Follow up process

A follow up process is needed to verify whether findings are isolated instances or actual symptoms of policy, procedural, or managerial problems. A follow up process should include scheduled evaluations, follow-up evaluations as necessary and special evaluations when trends are identified.

#### d. A plan for scheduling organisational reviews

It is essential for a CAMO's organisational review program to include a defined schedule of activities. This planned schedule will serve to verify that the organisational review program is comprehensive, well controlled, and timely. A schedule also provides a vehicle for keeping management and the entire organisation informed. The scheduling process should also be dynamic and allow for special organisational reviews. In addition, follow-up organisational reviews should be scheduled as necessary.

All key areas should be reviewed at least once each year

**e. Corrective Action Plan**

Corrective action plans should be developed in response to findings. The corrective action plans should be monitored to verify their timely and effective implementation.

**f. Records**

The organisational reviews should be documented in reports and other appropriate records.

The organisational review program files should include: scheduled organisational review reports; special organisational review reports, including the trends or other reasons for scheduling a special evaluation; corrective action plans; and results of follow-up evaluations.

The CAMO should maintain and secure these records and provide them upon competent authority request.

**3. Training and experience of evaluators.**

The evaluators that are used by the CAMO should have a thorough knowledge of the organisation's exposition.

Evaluators should be current on the techniques that can be used for organisational reviews such as regulations, auditing, interview techniques, evaluation principles, and system analysis techniques.

Recurrent training - A programme for continuation training should be developed for evaluators.

**4. Organisational reviews implementation.**

During organisational reviews, the following basic steps should be followed:

**Step 1: Understanding the System and its procedures.**

The evaluator should analyse the CAMO's manual to review how the organisation intends to work in a given field.

**Step 2: Identifying Controls.**

Once the evaluators have developed a good understanding of how the system operates, the next step is to identify the critical elements which ensure that the organisation remains in compliance with the CAMO's manual.

**Step 3: Evaluation Controls**

An evaluation of whether the CAMO works in accordance with its exposition should be conducted using following techniques:

- review of records, documentation, discrepancies reports, etc.;
- sample check of products maintained;
- sample check of actual practices;
- interview of personnel involved.

#### Step 4: Reporting of results.

A standardised form should be developed for an organisational review report. The report should include at least the following.

- (i) Scope of the evaluation. This should include the areas evaluated, personnel interviewed (to be done in general terms to provide management an indication as to the scope and depth of the review without violating any confidentiality), records examined, sampling plans, etc.
- (ii) Results. Descriptions of each finding presented in such a manner as to indicate the relative importance of each. This will allow responsible personnel to set priorities for developing responses.  
A classification as provided in M.B.705 could be followed.
- (iii) Agreed corrective actions.
- (iv) Positive results. (Some might be shared between different units within the maintenance organisation.)

#### Step 5: Developing corrective action plans.

Corrective action plans should be developed principally by the person responsible for implementing the corrective action; however, if the evaluator has properly conducted its evaluation, it will have a detailed understanding of the systems and procedures underlying the problems and should be able to assist with the analysis of alternatives. The evaluator should ensure that a corrective action plan is developed in a timely manner and includes all the key elements, particularly when the corrective action is to be implemented and who is responsible for implementation.

#### Step 6: Follow-up Evaluations.

To be effective, the organizational review program should have follow-up reviews any time a significant corrective action is planned. The purpose is two-fold: to confirm that the action has taken place as planned and to verify that the corrective action has been effective. If a properly implemented corrective action does not work, new alternatives should be developed as soon as possible. Keeping management aware of the results of follow-up reviews is an essential part of the program.

AMC M.A.714 is amended as follows :

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

1. The M.A. Subpart G organisation should ensure that it always receives a complete CRS from the approved maintenance organisation and/or from the pilot owner such that the required records

can be retained. The system to keep the continuing airworthiness records should be described in the organisation continuing airworthiness management exposition.

2. ....

A new AMC M.A.801(c) is added:

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

1. “3 years maintenance experience” means 3 years working in an aircraft maintenance environment on at least some of the aircraft type systems corresponding to the aircrafts endorsed on the aircraft maintenance license or on the certifying staff authorisation that the person holds.

2. “Holding the proper qualifications” means holding either:

- a. a valid ICAO compliant maintenance license for the aircraft type requiring certification, or;
- b. a certifying staff authorisation valid for the work requiring certification, issued by a maintenance organisation approved in accordance with ICAO Annex 6, Part II, paragraph 8.1.3.

AMC M.A.801(d) is renumbered to AMC M.A.801(e):

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

1. The aircraft certificate of release to service should contain the following statement:

.....

AMC M.A.801(e) is renumbered to AMC M.A.801(f):

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

1. Being unable to establish full compliance ....

AMC M.A.801(f) is renumbered to AMC M.A.801(g):

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

“Hazard seriously the flight safety” means ....



AMC M.A.803 is amended as follows :

### **AMC M.A.803 Pilot-owner authorisation**

~~1. The pilot owner should hold a valid pilot license issued or validated by a member state for the aircraft type being maintained.~~

~~2.~~ **1.** Privately operated means the aircraft is not operated pursuant to M.A.201 (h) and (i).

~~3.~~ **2.** A pilot owner ~~should~~ **may** only issue a certificate of release to service for maintenance he/she has performed by the pilot owner. ~~and after demonstrating the competency to carry out such maintenance tasks.~~

**3.** In the case of a jointly owned aircraft, the maintenance program should list the names of all pilots designated to perform pilot owner maintenance and the limited maintenance tasks they may perform.

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 a Part-M appendix I arrangement between the owner and the M.A. Subpart G organisation, the aircraft should be considered to be outside a controlled environment.

~~2. The fact that limited pilot owner maintenance as defined in M.A.803 (b) is not carried out and released by an approved maintenance organisation does not change the status of an aircraft in a controlled environment providing the M.A. Subpart G organisation under contract has been informed of any such maintenance carried out.~~

AMC M.A.901(c)2 is renumbered to AMC M.A.901(b)2:

### **AMC M.A.901**(e)(b)**2 Aircraft airworthiness review**

....

AMC M.A.901(d) is renumbered to AMC M.A.901(c) and amended as follows:

### **AMC M.A.901**(d)(c)** Aircraft airworthiness review**

The recommendation sent by a continuing airworthiness management organisation (CAMO) to the competent authority of the State of registry should be, at least, in English when the Member State of registry is different from the CAMO's Member State. Otherwise it can be completed in the official language(s) of the CAMO's Member State.

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

....

A new AMC M.A.901(d)2 is added:

#### **AMC M.A.901 (d)2 Aircraft airworthiness review**

1. The extension of the validity of the airworthiness review certificate does not require an airworthiness review but only a verification of the continuous compliance with M.A.901(d)(2).

2. The fact that limited pilot-owner maintenance as defined in M.A.803 (b) is not carried out and released by an approved maintenance organisation does not change the status of an aircraft in a controlled environment providing the M.A. Subpart G organisation has been informed of any such maintenance carried out.

AMC M.A.901(e) is renumbered to AMC M.A.901(f):

#### **AMC M.A.901 ~~(e)~~(f) Aircraft airworthiness review**

Suitable accommodation should include:

....

AMC M.B.102(c), subparagraph 1.6, is amended as follows:

#### **AMC M.B.102(c) Competent authority – Qualification and training**

1.5. ....

1.6. knowledge of a relevant sample of the type(s) of aircraft gained through a formalised training course. These courses should be at least at the Level 1 General Familiarization as specified in Part-66, Appendix III and should cover at least one aircraft type for each subcategory (i.e. helicopter piston, helicopter turbine, aeroplane piston, aeroplane turbine) and for each type of turbine propulsion system (turbofan, turboprop).

## 1.7. ....

A new AMC M.B.303 is added:

### **AMC M.B.303**

The competent authority may create an adapted airworthiness survey programme for the aircraft to which it delivers the airworthiness review certificate.

AMC M.B.606 is amended as follows:

### **AMC M.B.606 Changes**

1. Changes in nominated persons.  
The competent authority should have adequate control over any changes to personnel specified in M.A.606 (a) and (b). Such changes will require an amendment to the manual.
2. It is recommended that a simple manual status sheet is maintained which contains information on when an amendment was received by the competent authority and when it was approved.
3. The competent authority should define the class of amendments to the manual which may be incorporated through indirect approval. In this case a procedure should be stated in the amendment section of the maintenance organisation manual.  
Changes notified in accordance with M.A.617 should not be subject to the indirect approval procedure. In this case, the applicable part(s) of the EASA Form 6F should be used for the change.
4. The approved maintenance organisation should submit each manual 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.
5. ~~The following changes to the M.A. Subpart F approval should not be subject to the indirect approval procedure:~~
  - . Name change
  - . Change of accountable manager
  - . Address change
  - . Approval scope and rating
  - . New facility
  - . Any other change to the approval designated by the competent authority

AMC M.B.704(b) is amended as follows:

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

....

4. Credit may be claimed by the competent authority Surveyor(s) for specific item audits completed during the preceding ~~11~~ **23** month period subject to four conditions:

....

- d the specific item audit being granted a back credit should be audited not later than ~~12~~ **24** months after the last audit of the item.

....

AMC M.B.706 is amended as follows:

#### **AMC M.B.706 Changes**

1. Changes in nominated persons.  
The competent authority should have adequate control over any changes to the personnel specified in M.A.706 (a), (b), (c) and (d). Such changes will require ~~an~~ amendment to the exposition.
2. It is recommended that a simple exposition status sheet is maintained which contains information on when an amendment was received by the competent authority and when it was approved.
3. The competent authority should define the class of amendments to the exposition which may be incorporated through indirect approval. In this case a procedure should be stated in the amendment section of the approved continuing airworthiness **management** organisation exposition.  
Changes notified in accordance with M.A.713 should not be subject to the indirect approval procedure. In this case, the applicable part(s) of the EASA Form 13 should be used for the change.
4. The approved continuing airworthiness **management** organisation 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.
- ~~5. The following changes to the M.A. Subpart G approval should not be subject to the indirect approval procedure:~~

- Name change
- Change of accountable manager
- Address change
- Approval scope and rating
- New facility
- Any other change to the approval designated by the competent authority

AMC M.B.901 is amended as follows:

### **AMC M.B.901 Assessment of recommendations**

3. ....

4. In some cases, the inspector may decide that it is necessary to organise:

- a physical survey of the aircraft, or;
- a full or partial airworthiness review.

In this case, the inspector should inform the M.A.Subpart G organisation making the recommendation with sufficient notice so that it may organise itself according to M.A.901(e)(f).

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

5. ....

A new paragraph 2 is inserted in AMC M.B.902(b):

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

1. A person qualified in accordance with AMC M.B.102 (c) subparagraph 1.5 should be considered as holding the equivalent to an aeronautical degree.

2. “experience in continuing airworthiness” means experience in tasks related to aircraft maintenance and/or maintenance management (engineering) and/or surveillance of such tasks, which may be combined.

~~2.3.~~ An appropriate Part-66 licence is a category B or C licence in the subcategory of the aircraft reviewed. It is not necessary to satisfy the recent experience requirements of Part 66 at the time of the review nor to hold the type rating on the particular aircraft.

~~3.~~ 4. To hold a position with appropriate responsibilities means the airworthiness review staff should have a position within the competent authority that authorises that person to sign on behalf that competent authority.

4. 5. A person in the competent authority carrying out airworthiness reviews or airworthiness certificate renewal inspections in a Member State, prior to the date of entry into force of Part-M should be considered as complying with M.B.902(b).

A new AMC M.B.902(b)(1) is added:

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

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

- Relevant parts of continuing airworthiness regulations.
- Relevant parts of operational requirements and procedures, if applicable.
- Knowledge of the internal procedures for continuing airworthiness.
- Knowledge of a relevant sample of the type(s) of aircraft gained through a formalised training course. These courses should be at least at the Level 1 General Familiarization as specified in Part-66, Appendix III and should cover at least one aircraft type for each subcategory (i.e. helicopter piston, helicopter turbine, aeroplane piston, aeroplane turbine) and for each type of turbine propulsion system (turbofan, turboprop).

A new AMC M.B.902(b)(2) is added:

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

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

- Relevant parts of continuing airworthiness regulations.
- Relevant parts of operational requirements and procedures, if applicable.
- Knowledge of the internal procedures for continuing airworthiness.
- Knowledge of a relevant sample of the type(s) of aircraft gained through training and/or work experience. Such courses / experience should be at least at the Level 1 General Familiarization as specified in Part-66, Appendix III or equivalent, and should cover at least one aircraft type for each subcategory (i.e. helicopter piston, helicopter turbine, rotorcraft, aeroplane piston, aeroplane turbine, gliders and balloons) and for each type of turbine propulsion system (turbofan, turboprop).

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. This assessment should be recorded.

A new AMC to Appendix VIII “Limited Pilot Owner Maintenance” is added

**AMC to Appendix VIII “Limited Pilot Owner Maintenance”**

Regarding Basic principles N° 9 and N° 10 shown in Appendix VIII, the following applies:

The content of periodic inspections/checks as well as their periodicity is not regulated or standardized in an aviation specification. It is the decision of the manufacturer/Type Certificate Holder (TCH) to recommend a schedule for each specific type of inspection/check.

For an inspection/check with the same periodicity for different TCHs, the content may differ, and in some cases may be critically safety related and may need the use of special tools or knowledge and thus would not qualify for pilot owner maintenance. Therefore the maintenance carried out by the pilot owner cannot be generalised to specific inspections such as 50 Hrs, 100 Hrs or 6 Month periodicity.

The Inspections to be carried out are limited to those areas and tasks listed in the Appendix; this allows flexibility in the development of the maintenance programme and does not limit the inspection to certain specific periodic inspections. A 50 Hrs /6 Month periodic inspection for a fixed wing aeroplane as well as the one-year inspection on a glider may normally be covered in the maintenance programme.

**ATTACHMENT 1:**

**Consolidated version of the paragraphs affected by CRD 07/2005 and this NPA**

**(for reference only)**



**(EC) No 1702/2003**  
**Annex (Part-21)**

**In Form 15a, the sentence:**

“is considered to be airworthy at the time of the issue”

**is replaced by:**

“is considered to be airworthy at the time of the review”.

**(EC) No 2042/2003**  
*Article 5*  
**Certifying staff**

1. Certifying staff shall be qualified in accordance with the provisions of Annex III, except as provided for in M.A.801 (c) and M.A.803 of Annex I and in 145.A.30 (j) of and Appendix IV to Annex II.
2. ....

**M.1**

....

4. for the approval of maintenance programmes,
  - (i) the authority designated by the Member State of registry.
  - (ii) in the case of commercial air transport, when the Member State of the operator is different from the State of registry, the authority agreed by the above two States prior to the approval of the maintenance programme.
  - (iii) for aircraft not involved in commercial air transport, when the Member State responsible for the oversight of the Part-M Subpart G organisation managing the aircraft is different from the State of registry, the authority designated by the Member State of registry unless agreed differently by the above two States prior to the approval of the maintenance programme.

**AMC M.1**

A competent authority may be a ministry, an aviation national authority, or any aviation body designated by the Member State. A Member State may designate more than one competent authority to cover different areas of responsibility, as long as there is only one competent authority for each given area of responsibility.

**M.A.201 Responsibilities**

....

- (e) In order to satisfy the responsibilities of paragraph (a) the owner of an aircraft shall ensure the proper accomplishment of the tasks associated with the continuing airworthiness. Alternatively, the owner of an aircraft may contract the tasks associated with the continuing airworthiness to an approved continuing airworthiness management organisation as specified in M.A. Subpart G (continuing airworthiness management organisation hereinafter) in accordance with Appendix I. In this case, the continuing airworthiness management organisation assumes responsibility for the proper accomplishment of these tasks.

....

**M.A.202 Occurrence reporting**

- (a) Any person or organisation responsible under M.A.201 shall report to the competent authority of the State of registry, the organisation responsible for the type design or supplemental type design and, if applicable, the Member State of operator, any identified condition of an aircraft or component that hazards seriously the flight safety.

....

**M.A.302 Maintenance programme**

- (a) The maintenance of the aircraft shall be organized in accordance with a maintenance programme, which shall be periodically reviewed and amended accordingly.
- (b) The maintenance programme and any subsequent amendments shall be approved by the competent authority. When the aircraft continuing airworthiness is managed by a Part-M, Subpart G organisation, the maintenance programme and its amendments may be approved by the Part-M, Subpart G organisation through an approval procedure (hereinafter called “indirect approval procedure”). This procedure shall be established by the Part-M, Subpart G organisation, included in the continuing airworthiness management exposition, and approved by the competent authority responsible for that Part-M Subpart G organisation.

In the case of aircraft not involved in commercial air transport, the indirect approval procedure can not be applied to aircraft registered in a Member State different from the Member State responsible for the oversight of the Part-M Subpart G organisation, unless both Member States have an agreement in accordance with M.1.

(c) The maintenance programme must establish compliance with:

1. instructions for continuing airworthiness issued by type certificate and supplementary type certificate holders and any other organisation that publishes such data in accordance with Part-21, or
2. instructions issued by the competent authority, if they differ from subparagraph 1 or in the absence of specific recommendations.

The owner or the operator may propose to the competent authority alternate and/or additional instructions to those defined in paragraphs 1 and 2. These alternate and/or additional instructions may be included in the maintenance programme once they have been approved by the competent authority.

Notwithstanding paragraph (c) requirements above, for aircraft not involved in commercial air transport, in order to allow the initial approval and/or the extension of the scope of an existing continuing airworthiness management organisation approval without having any customers under contract for the requested scope of work, it is acceptable to develop “baseline” and/or “generic” maintenance programmes as follows:

- **“Baseline” maintenance programme:** it is a maintenance programme developed for a particular aircraft type following the maintenance review board (MRB) report, where applicable, and the TC 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 that may be developed to cover similar types of aircrafts. These programmes shall be based on the same type of instructions as the baseline maintenance programme.

(d) The maintenance programme shall contain details, including frequency, of all maintenance to be carried out, including any specific tasks linked to specific operations.

(e) For large aircraft, when the maintenance programme is based on:

1. Maintenance Steering Group logic, or,
2. mainly on condition monitoring

the programme must include a reliability programme.

(f) The maintenance programme must be subject to periodic reviews and amended when necessary. The reviews will ensure that the programme continues to be valid in light of

operating experience whilst taking into account new and/or modified maintenance instructions promulgated by the Type Certificate holder.

- (g) The maintenance programme must reflect applicable mandatory regulatory requirements addressed in documents issued by the Type Certificate holder to comply with Part 21.A.61.

### **AMC M.A.302 Maintenance programme**

....

7. Examples of “generic” maintenance programmes could be UK LAMS, Cessna 100 Series....

“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.

After this initial approval, when an owner/operator is contracted, the baseline or generic maintenance programme, as applicable, is amended in order to incorporate the additional maintenance tasks and to indicate those that are not applicable to a particular aircraft registration mark. This may be performed by means of an Annex to the baseline/generic maintenance programme for each aircraft registration, specifying which tasks are added and which are not applicable.

Continuing airworthiness management organisations may seek authorisation for indirect approval in order to perform the amendments to the maintenance programme mentioned above. There is no need to change the applicable Form 14 each time a maintenance programme is amended. Only the reference to the baseline/generic maintenance programme should be included in Form 14.

### **AMC M.A.302(d)(e) Maintenance programme – reliability programmes**

....

### **M.A.305 Aircraft continuing airworthiness record system**

....

- (b) The aircraft continuing airworthiness records shall consist of, as appropriate, an aircraft logbook, engine logbook(s) or engine module log cards, propeller logbook(s) and log cards for any service life limited component and, when required by the Member State in accordance with M.A.201(i), the operator's technical log.

....

**M.A.401 Maintenance data**

....

(b) For the purposes of this Part, applicable maintenance data is:

1. any applicable requirement, procedure, standard or information issued by the competent authority, and;
2. any applicable airworthiness directive, and;
3. applicable instructions for continuing airworthiness, issued by type certificate holders, supplementary type certificate holders and any other organisation that publishes such data in accordance with Part 21, and;
4. any applicable data issued in accordance with 145.A.45(d).

....

**AMC M.A.401(c) Maintenance data**

3 ....

4. In the case of aircraft of 2730 Kg MTOM and below, the workcard / worksheet system may take the form of, but not limited to, the following:
  - A format where the mechanic writes the defect and the maintenance action taken together with information of the maintenance data used.
  - An aircraft log book that contains the pilot reports of defects and the actions taken by authorised personnel together with information of the maintenance data used.
  - For maintenance checks, the checklist issued by the manufacturer (i.e, 100H checklist).
5. Maintenance data should be kept up to date by:
  - Subscribing to the applicable amendment scheme,
  - Checking that all amendments are being received,
  - Monitoring the amendment status of all data

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

....

2. In the case of limited pilot owner maintenance as specified in M.A.803, any person maintaining an aircraft which they own or jointly own, provided they hold a valid pilot

licence with the appropriate type or class rating, may perform the limited pilot owner maintenance tasks IAW Part-M Appendix VIII.

....

### **M.A.502 Component maintenance**

- (a) The maintenance of components shall be performed by appropriately approved Subpart F or Part-145 maintenance organisations.
- (b) Maintenance on any component in accordance with aircraft maintenance data may be performed by an A rated approved Subpart F or Part-145 organisation as well as by M.A.801(b)2 certifying staff only whilst such components are fitted to the aircraft. Such components, nevertheless, can be temporarily removed for maintenance when such removal is expressly permitted by the aircraft maintenance data to improve access. Component maintenance performed in accordance with this subparagraph shall be subject to the aircraft release requirements.

### **AMC M.A.502 Component maintenance**

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

### **AMC M.A.502(b) Component maintenance**

1. Paragraph M.A.502(b) does not refer to cases where a component is temporarily removed in order to improve the access to other areas of the aircraft but to improve access to carry out maintenance on such component.
2. “Expressly permitted” means that the aircraft maintenance data describes or permits the removal and installation of such component, even if it is for other purposes that doing maintenance on such component.
3. “Subject to the aircraft release requirements” implies that the component is not eligible for the issuance of a Form 1.

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

....

3. M.A.801(b)(2) certifying staff performing aircraft maintenance should send, with the agreement of the aircraft owner/lessee, any unserviceable component to a maintenance organisation approved under Section A Subpart F or Part-145 for controlled storage. “A secure location under the control of the M.A.502 approved organisation” means a secure location described in the relevant procedures of the approved maintenance organisation for which security is the responsibility of the approved maintenance organisation. This may include facilities established by approved maintenance organisation at locations different from the main maintenance facilities.

## **M.A.601 Scope**

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

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

....

#### **Part C – General Procedures**

##### **- Organisational review**

....

##### **- Training**

....

##### **- ~~Contracting~~ Subcontracting of specialised services**

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

....

#### **Part E – Appendices**

##### **- Sample of all documents used.**

##### **- List of maintenance locations.**

##### **- List of Part 145 or M.A. Subpart F organisations.**

##### **- List of subcontracted specialised services.**

....

### **M.A.607 Certifying staff**

- (a) In addition to M.A.606(g), certifying staff can only exercise their privileges, if the organisation has ensured:
1. that certifying staff can demonstrate that they have the experience required by Part-66, and,
  2. that certifying staff have an adequate understanding of the relevant aircraft and/or aircraft component(s) to be maintained together with the associated organisation procedures.
- (b) The approved maintenance organisation shall record all details concerning certifying staff and maintain a current list of all certifying staff.

### **AMC M.A.607(e)(b) Certifying staff**

1. The following minimum information....

### **M.A.610 Maintenance work orders**

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

### **AMC M.A.610 Maintenance work orders**

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

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

### **M.A.615 Privileges of the organisation**



The organisation may:

2. ....
3. arrange for the performance of specialized services at another organisation appropriately qualified and under the control of the Subpart F organisation in accordance with procedures described in its Maintenance Organisation Manual as directly approved by the competent authority. This refers to work carried out by a specialised service organisation not appropriately approved itself to carry out such tasks under Part-M or Part-145.
4. issue certificates of release to service on completion of maintenance, in accordance with M.A.612 or M.A.613.

### **AMC M.A.615(3) Privileges of the organisation**

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

The requirement that the organisation performing the specialised services must be “appropriately qualified” means that it should meet an officially recognised standard or, otherwise, it should be formally accepted by the competent authority.

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

- Receives appropriate maintenance instructions and maintenance data for the task to be performed.
- Properly records the maintenance performed in the Subpart F airworthiness records.
- Notifies to the Subpart F organisation any deviation or non conformity arisen during such maintenance.

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

## **Appendix VIII to AMC M.A.616**

....

### **1. Organisational review features.**

....

b. The organisational review should cover ....

....

(5) ....

(6) Supplier and specialised services selection, approval and surveillance, as applicable.

(7) ....

....

## **2. Organisational review program.**

....

## **3. Training and experience of evaluators.**

The evaluators that are used by the maintenance organisation should have a thorough knowledge of the maintenance organisation manual.

Evaluators should be current on the techniques that can be used for organisational reviews such as regulations, auditing, interview techniques, evaluation principles, and system analysis techniques.

Recurrent training - A programme for continuation training should be developed for evaluators.

... ..

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

4.6. ....

4.7. knowledge of a relevant sample of the type(s) of aircraft gained through a formalised training course. These courses should be at least at the Level 1 General Familiarization as specified in Part-66, Appendix III and should cover at least one aircraft type for each subcategory (i.e. helicopter piston, helicopter turbine, aeroplane piston, aeroplane turbine) and for each type of turbine propulsion system (turbofan, turboprop).

4.8. ....

## **M.A.707 Airworthiness review staff**

(a) To be approved to carry out airworthiness reviews, an approved continuing airworthiness management organisation shall have appropriate airworthiness review staff to issue M.A. Subpart I airworthiness review certificates or recommendations. These staff shall have acquired:

1. For aircraft used in commercial air transport and aircraft above 2730 kg MTOM:
  - a. at least five years experience in continuing airworthiness, and;
  - b. an appropriate Part-66 licence or an aeronautical degree or equivalent, and;
  - c. formal aeronautical maintenance training, and;
  - d. a position within the approved organisation with appropriate responsibilities.
2. For aircraft of 2730 Kg MTOM and below, that are not used in commercial air transport:
  - a. at least three years experience in continuing airworthiness, and;
  - b. an appropriate Part 66 licence, or a nationally-recognized maintenance personnel qualification appropriate to the aircraft category (when Part-66 refers to national rules) or an aeronautical degree or equivalent, and;
  - c. appropriate aeronautical maintenance training, and;
  - d. a position within the approved organisation with appropriate responsibilities

(b) ....

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

1. Airworthiness review staff are only required if the M.A. Subpart G organisation wants to be granted M.A.711 (b) airworthiness review privileges.
2. “experience in continuing airworthiness” means experience in tasks related to aircraft maintenance and/or maintenance management (engineering) and/or surveillance of such tasks, which may be combined.
3. A person qualified to the AMC M.A.706 subparagraph 4.5 should be considered as holding the equivalent to an aeronautical degree.
4. An appropriate Part-66 licence is a category B or C licence in the sub-category of the aircraft reviewed. It is not necessary to satisfy the experience requirements of Part-66 at the time of the review.
5. To hold a position with appropriate responsibilities means the airworthiness review staff should have a position in the organisation independent from the airworthiness management process or with overall authority on the airworthiness management process of complete aircraft.

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

- Having authorisation to perform airworthiness reviews only on aircraft which have not been managed by that person. For example, performing airworthiness reviews on a specific model line, while being involved in the management of a different model line.
- In the case of organisations with Subpart F, Subpart G and Subpart I approval, maintenance personnel from the Subpart F organisation may be nominated as airworthiness review staff, as long as they are only involved in the maintenance of the aircraft but not involved in its maintenance management.
- Nominating as airworthiness review staff personnel from the Quality Department of the continuing airworthiness management organisation.

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

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

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

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

- Relevant parts of continuing airworthiness regulations.
- The operator's Operations Specifications when applicable.
- Relevant parts of the operator's Operations Manual when applicable.
- 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 the Level 1 General Familiarization as specified in Part-66, Appendix III and should cover at least one aircraft type for each subcategory (i.e. helicopter piston, helicopter turbine, aeroplane piston, aeroplane turbine) and for each type of turbine propulsion system (turbofan, turboprop).
- Maintenance methods.

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

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

1. "experience in continuing airworthiness" can be full time or part-time, either as professional or in a voluntary basis.
2. 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.
- 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 courses / experience should be at least at the Level 1 General Familiarization as specified in Part-66, Appendix III or equivalent, and should cover at least one aircraft type for each subcategory (i.e. helicopter piston, helicopter turbine, rotorcraft, aeroplane piston, aeroplane turbine, gliders and balloons) and for each type of turbine propulsion system (turbofan, turboprop).
- 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. This assessment should be recorded.

#### **AMC M.A.707 (b) Airworthiness review staff**

An airworthiness review “under supervision” means under the supervision of the competent authority. If the organisation already has properly authorised airworthiness review staff, the competent authority may accept that the supervision be performed by this existing airworthiness review staff in accordance with an approved procedure. In such case, evidence of the airworthiness review performed under supervision should be provided to the competent authority together with the EASA Form 4.

#### **AMC M.A.707 (c) Airworthiness review staff**

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

- been involved in continuing airworthiness management activities for at least six months in every two year period for each subcategory (i.e. helicopter piston, helicopter turbine, rotorcraft, aeroplane piston, aeroplane turbine, gliders and balloons), or,
- conducted at least one airworthiness review in the last twelve month period.

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

#### **AMC M.A.707(e) Airworthiness review staff**

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

- Name,
- Date of Birth,

- Basic Education,
- Experience,
- Aeronautical Degree and/or part-66-qualification and/or nationally-recognized maintenance personnel qualification,
- Initial Training received,
- Type Training received,
- Continuation Training received,
- Experience in continuing airworthiness and within the organisation,
- Responsibilities of current role in the organisation.

### **M.A.708 Continuing airworthiness management**

....

- (b) For every aircraft managed, the approved continuing airworthiness management organisation shall:
1. develop and control a maintenance programme for the aircraft managed including any applicable reliability programme,
  2. present the aircraft maintenance programme and its amendments to the competent authority for approval (unless covered by an indirect approval procedure in accordance with M.A.302) and provide a copy of the programme to the owner of non commercially operated aircraft,

....

### **M.A.709 Documentation**

The approved continuing airworthiness management organisation shall hold and use applicable current M.A.401 maintenance data in the performance of M.A.708 continuing airworthiness tasks. In the case of customer provided maintenance data, it is only necessary to have such data when there is a contract with such customer, with the exception of the need to comply with M.A.714.

### **AMC M.A.710(d) Airworthiness review**

“Without loss of continuity of the airworthiness review pattern” means that the new expiration date is set up one year after the previous expiration date.

**M.A.711 Privileges of the organisation**

....

- (b) An approved continuing airworthiness management organisation, may additionally be approved to carry out M.A.710 airworthiness reviews and:
1. issue the related airworthiness review certificate, and,
  2. make a recommendation for the airworthiness review to a Member State of Registry. In the case of aircraft of 2730 Kg MTOM and below, that are not used in commercial air transport, the recommendation shall be issued only on the import of an aircraft in accordance with Part-21 and M.A.904.

....

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

It is not necessary for an organisation to be approved to carry out airworthiness reviews.

**M.A.712 Quality system**

(e) ....

- (f) In the case of a small M.A. Subpart G organisation not involved in commercial air transport the quality system can be replaced by performing organisational reviews on a regular basis except when the organisation issues airworthiness review certificates for aircraft above 2730 kg MTOM.  
Contracting continuing airworthiness management tasks is not permitted without a Quality System.

**AMC M.A.712 (f) Quality system**

A small organisation is considered to be an organisation with up to 5 staff (including M.A.706 and M.A.707 personnel). The complexity of the organisation, combination of aircraft and aircraft types, the utilisation of the aircraft and the number of approved locations of the organisation should also be considered before replacing the quality system by an organisational review. Appendix XII should be used to manage the organisational reviews.

## Appendix XII to AMC M.A.712(f)

**This is only applicable to continuing airworthiness management organisations (CAMO) eligible for organisational reviews in accordance with M.A.712(f). For other organisations, the principles and practices of an independent quality assurance system should be used.**

### 1. Organisational review features.

An organisational review program should be organised as an overall internal evaluation program that has written descriptions of the key elements of the program. The program should have a structured and planned series of evaluations that are designed to improve the quality of all steps and functions in the process that leads to a final safe product while ensuring that the subpart G and I approved CAMO remains in compliance with the requirements:

- a. The organisational review program should not be misunderstood as a program that replaces existing competent authority auditing requirements, such as the continuing oversight programs cited in M.B.704. It is comprehensive and includes identifying corrective actions, verifying that those actions have taken place, and ensuring that problems do not re-occur. Further, one of the most critical aspects of an organisational review program is the regular involvement of management, which typically distinguishes it from the normal checks and verifications that each person in the organisation is requested to carry out on work performed to ensure a final safe product and continuous compliance with rules.
- b. The organisational review should cover all systems, processes, and products that are basic components of the CAMOs activities. There is no set list of items to be covered since each operation is unique, but a representative list of areas to be evaluated would include:
  - (1) Aircraft continuing airworthiness record system utilisation. Aircraft technical log utilisation and MEL application (if applicable).
  - (2) Aircraft maintenance programmes - development amendment and approval.
  - (3) Time and continuing airworthiness records, responsibilities, retention and access.
  - (4) Accomplishment and control of Airworthiness Directives.
  - (5) Analysis of effectiveness of the maintenance programme(s) (if applicable per M.A.301).
  - (6) Non mandatory modification embodiment policy (if applicable per M.A.301).
  - (7) Major modification standards.
  - (8) Defect reporting.
  - (9) Engineering activity.
  - (10) Reliability programmes (if applicable per M.A.302).
  - (11) Aircraft weighing.
  - (12) Check/test flight procedures.
  - (13) Maintenance contractor selection procedure.
  - (14) Personnel qualifications, training and staffing levels.
  - (15) Communication to the competent authority.
  - (16) Review of aircraft records.
  - (17) Physical survey of aircraft.
  - (18) Additional procedures for recommendations to competent authorities for the import of aircraft.
  - (19) Recommendations to competent authority for the issue of ARC.
  - (20) Issuance of ARC.



(21) Airworthiness review records, responsibilities, retention and access.

Items (16) through (21) are only applicable when the CAMO has Subpart I privileges.

## **2. Organisational review program.**

The following are essential elements of an organisational review program. Each of these should be described in a program document.

- a. As a part of identifying organisational review responsibility, the CAMO should identify resources and personnel that conduct the organisational reviews within the company. A CAMO may decide to use outside resources in support of, or to accomplish organisational reviews.

A CAMO's organisational review program should identify the person and/or a group within the organisation who has the responsibility and authority to:

- (i) Perform organisational reviews.
- (ii) Identify and record any findings and the evidence necessary to substantiate those findings.
- (iii) Recommend or assist with the development of corrective actions to findings.
- (iv) Verify the implementation of corrective actions consistent with an action plan and validate that corrective actions are effective.
- (v) Communicate and coordinate activities with competent authorities on a regular basis.

Having a well-structured organisational review programme ensures that all areas of operation are covered at appropriate intervals. It also institutionalises the process so that a change in personnel does not adversely affect the program.

The accountable manager is responsible for the organisational review program. He may formally delegate this responsibility to one of the M.A.706 (c) persons. An organisational review program might consist of developing simplified checklist/s and a schedule (monthly, quarterly, semi-annual, or annual) for accomplishing checklist items. The review should at least include a written statement acknowledging the completion of the checklist items and the signature of the person conducting the organisational review. Under these conditions, occasional independent oversight of checklist development and accomplishment should be considered.

- b. Reporting to the accountable manager

To be effective, the results of the organisational review program should be submitted to the accountable manager on a regular basis. The accountable manager should analyse the organisational review results to verify that satisfactory corrective actions have been implemented.

- c. Follow up process

A follow up process is needed to verify whether findings are isolated instances or actual symptoms of policy, procedural, or managerial problems. A follow up process should include

scheduled evaluations, follow-up evaluations as necessary and special evaluations when trends are identified.

d. A plan for scheduling organisational reviews

It is essential for a CAMO's organisational review program to include a defined schedule of activities. This planned schedule will serve to verify that the organisational review program is comprehensive, well controlled, and timely. A schedule also provides a vehicle for keeping management and the entire organisation informed. The scheduling process should also be dynamic and allow for special organisational reviews. In addition, follow-up organisational reviews should be scheduled as necessary.

All key areas should be reviewed at least once each year

e. Corrective Action Plan

Corrective action plans should be developed in response to findings. The corrective action plans should be monitored to verify their timely and effective implementation.

f. Records

The organisational reviews should be documented in reports and other appropriate records.

The organisational review program files should include: scheduled organisational review reports; special organisational review reports, including the trends or other reasons for scheduling a special evaluation; corrective action plans; and results of follow-up evaluations.

The CAMO should maintain and secure these records and provide them upon competent authority request.

### **3. Training and experience of evaluators.**

The evaluators that are used by the CAMO should have a thorough knowledge of the organisation's exposition.

Evaluators should be current on the techniques that can be used for organisational reviews such as regulations, auditing, interview techniques, evaluation principles, and system analysis techniques.

Recurrent training - A programme for continuation training should be developed for evaluators.

### **4. Organisational reviews implementation.**

During organisational reviews, the following basic steps should be followed:

Step 1: Understanding the System and its procedures.

The evaluator should analyse the CAMO's manual to review how the organisation intends to work in a given field.

## Step 2: Identifying Controls.

Once the evaluators have developed a good understanding of how the system operates, the next step is to identify the critical elements which ensure that the organisation remains in compliance with the CAMO's manual.

## Step 3: Evaluation Controls

An evaluation of whether the CAMO works in accordance with its exposition should be conducted using following techniques:

- review of records, documentation, discrepancies reports, etc.;
- sample check of products maintained;
- sample check of actual practices;
- interview of personnel involved.

## Step 4: Reporting of results.

A standardised form should be developed for an organisational review report. The report should include at least the following.

- (i) Scope of the evaluation. This should include the areas evaluated, personnel interviewed (to be done in general terms to provide management an indication as to the scope and depth of the review without violating any confidentiality), records examined, sampling plans, etc.
- (ii) Results. Descriptions of each finding presented in such a manner as to indicate the relative importance of each. This will allow responsible personnel to set priorities for developing responses.  
A classification as provided in M.B.705 could be followed.
- (iii) Agreed corrective actions.
- (iv) Positive results. (Some might be shared between different units within the maintenance organisation.)

## Step 5: Developing corrective action plans.

Corrective action plans should be developed principally by the person responsible for implementing the corrective action; however, if the evaluator has properly conducted its evaluation, it will have a detailed understanding of the systems and procedures underlying the problems and should be able to assist with the analysis of alternatives. The evaluator should ensure that a corrective action plan is developed in a timely manner and includes all the key elements, particularly when the corrective action is to be implemented and who is responsible for implementation.

## Step 6: Follow-up Evaluations.

To be effective, the organizational review program should have follow-up reviews any time a significant corrective action is planned. The purpose is two-fold: to confirm that the action has taken place as planned and to verify that the corrective action has been effective. If a properly implemented corrective action does not work, new alternatives should be developed as soon as

possible. Keeping management aware of the results of follow-up reviews is an essential part of the program.

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

1. The M.A. Subpart G organisation should ensure that it always receives a complete CRS from the approved maintenance organisation and/or from the pilot owner such that the required records can be retained. The system to keep the continuing airworthiness records should be described in the organisation continuing airworthiness management exposition.

2. ....

### **M.A.801 Aircraft certificate of release to service**

(b) ....

(c) By derogation to M.A.801(b) in the case of unforeseen situations, where an aircraft is grounded at a location other than the principle place of business where no appropriate certifying staff is available, the owner may authorise any person, with not less than 3 years maintenance experience and holding the proper qualifications, to maintain according to the standards set out in subpart D and release the aircraft, provided there is no organisation appropriately approved under this Part or Part 145 at that location.

The owner shall:

1. obtain and keep in the aircraft records details of all the work carried out and of the qualifications held by that person issuing the certification, and
2. ensure that any such maintenance is rechecked and released by an appropriately authorised M.A.801(b) person or a Subpart F organisation or a Part-145 organisation at the earliest opportunity but within a period not exceeding 7 days, and
3. notify the Subpart G organisation responsible for continuing airworthiness management when contracted in accordance with M.A.201(e), or the competent authority in the absence of such a contract, within 7 days of the issuance of such certification authorisation.

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

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

1. the identity including approval reference of the M.A. Subpart F approved maintenance organisation and certifying staff issuing such a certificate; or
  2. in the case of subparagraph (b)2 certificate of release to service, the identity and if applicable licence number of the certifying staff issuing such a certificate.
- (f) Notwithstanding paragraph (b) in the case of incomplete maintenance, such fact shall be entered in the aircraft certificate of release to service before the issue of such certificate.
- (g) A certificate of release to service shall not be issued in the case of any known non-compliance which hazards seriously the flight safety.

#### **AMC M.A.801(c) Aircraft certificate of release to service**

1. “3 years maintenance experience” means 3 years working in an aircraft maintenance environment on at least some of the aircraft type systems corresponding to the aircrafts endorsed on the aircraft maintenance license or certifying staff authorisation that the person holds.
2. “Holding the proper qualifications” means holding either:
  - a. a valid ICAO compliant maintenance license for the aircraft type requiring certification, or;
  - b. a certifying staff authorisation valid for the work requiring certification, issued by a maintenance organisation approved in accordance with ICAO Annex 6, Part II, paragraph 8.1.3.

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

1. The aircraft certificate of release to service should contain the following statement:

....

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

1. Being unable to establish full compliance ....

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

“Hazard seriously the flight safety” means ....

**M.A.803 Pilot-owner authorisation**

- (a) The pilot-owner is the person who owns or jointly owns the aircraft being maintained and holds a valid pilot license issued or validated by a Member State for the aircraft type or class rating.
  - 1. An aircraft, as referred to above paragraph (a) may be jointly owned by:
    - (i) a number of natural persons on the registration form, or
    - (ii) a limited liability company or a legal entity accepted as registered owner under the applicable national laws pertaining to the registration of aircraft.
  - 2. Pilot owner maintenance shall be performed by:
    - (i) the pilot owner, or
    - (ii) in the case of joint ownership, the pilot owners designated by the registered owners of the aircraft being maintained, or
    - (iii) where the joint owner is a limited liability company or a legal entity, by a pilot who is a member of, and designated by, that company or legal entity.
- (b) ....
- (c) ....
- (d) The certificate of release to service must be entered in the logbooks and contain basic details of the maintenance carried out, the maintenance data used, the date such maintenance was completed and the identity and pilot licence number of the pilot-owner issuing such a certificate.

**AMC M.A.803 Pilot-owner authorisation**

- 1. Privately operated means the aircraft is not operated pursuant to M.A.201 (h) and (i).
- 2. A pilot owner may only issue a certificate of release to service for maintenance he/she has performed.
- 3. In the case of a jointly owned aircraft, the maintenance program should list the names of all pilots designated to perform pilot owner maintenance and the limited maintenance tasks they may perform.

**M.A.901 Aircraft airworthiness review**

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

- (a) An airworthiness review certificate is issued in accordance with Appendix III (EASA Form 15a or 15b) on completion of a satisfactory airworthiness review and is valid one year.

- (b) Aircraft used in commercial air transport and aircraft above 2730 kg MTOM are considered to be in a controlled environment when they have been continuously managed by an M.A. Subpart G approved continuing airworthiness management organisation, have not changed organisations in the previous 12 months, and are maintained by approved maintenance organisations.

In such cases, the continuing airworthiness management organisation managing the aircraft may if appropriately approved:

1. issue the airworthiness review certificate in accordance with M.A.710, and;
2. for airworthiness review certificates it has issued, when the aircraft has remained within a controlled environment, extend twice the validity of the airworthiness review certificate for a period of one year each time. An airworthiness review certificate shall not be extended if the organisation is aware or has reason to believe that the aircraft is not airworthy.

- (c) Aircraft used in commercial air transport and aircraft above 2730 kg MTOM, which are not within a controlled environment, or managed by an M.A. Subpart G approved continuing airworthiness management organisation that does not hold the privilege to carry out airworthiness reviews, the airworthiness review certificate shall be issued by the competent authority following a satisfactory assessment based on a recommendation made by an appropriately approved continuing airworthiness management organisation sent together with the application from the owner or operator. This recommendation shall be based on an airworthiness review carried out in accordance with M.A.710.

- (d) For aircraft of 2730 Kg MTOM and below, that are not used in commercial air transport, any continuing airworthiness management organisation appointed by the owner may if appropriately approved

1. issue the airworthiness review certificate in accordance with M.A.710, and;
2. for airworthiness review certificates it has issued, extend them twice for a period of one year each time when the aircraft has remained in a controlled environment as defined by the following conditions:
  - a. the aircraft has remained managed by this continuing airworthiness management organisation since it issued the airworthiness review certificate, and
  - b. the aircraft has been maintained by approved maintenance organisations since this continuing airworthiness management organisation issued the airworthiness review certificate. This includes M.A.803(b) maintenance carried out and released to service according to M.A.801(b)2 or M.A.801(b)3.

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

- (e) The competent authority shall carry out the airworthiness review and issue the airworthiness review certificate itself in the following cases:

1. whenever circumstances show the existence of a potential safety threat, or
  2. for aircraft of 2730 Kg MTOM and below, that are not used in commercial air transport, whenever it is requested by the owner.
- (f) When the competent authority carries out the airworthiness review and/or issues the airworthiness review certificate itself, the owner or operator shall provide the competent authority with:
- the documentation required by the competent authority,
  - suitable accommodation at the appropriate location for its personnel, and
  - when necessary the support of personnel appropriately qualified in accordance with Part-66.

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

If the continuing airworthiness of the aircraft is not managed according to a Part-M appendix I arrangement between the owner and the M.A. Subpart G organisation, the aircraft should be considered to be outside a controlled environment.

#### **AMC M.A.901 ~~(e)~~(b)2 Aircraft airworthiness review**

When the aircraft has remained within a controlled environment....

#### **AMC M.A.901 ~~(d)~~(c) Aircraft airworthiness review**

The recommendation sent by a continuing airworthiness management organisation (CAMO) to the competent authority of the State of Registry should be, at least, in English when the Member State of Registry is different from the CAMO's Member State. Otherwise it can be completed in the official language(s) of the CAMO's Member State.

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

(a) ....

#### **AMC M.A.901 (d)2 Aircraft airworthiness review**



1. The extension of the validity of the airworthiness review certificate does not require an airworthiness review but only a verification of the continuous compliance with M.A.901(d)(2).
2. The fact that limited pilot-owner maintenance as defined in M.A.803 (b) is not carried out and released by an approved maintenance organisation does not change the status of an aircraft in a controlled environment providing the M.A. Subpart G organisation has been informed of any such maintenance carried out.

#### **AMC M.A.901 ~~(e)~~(f) Aircraft airworthiness review**

Suitable accommodation should include:

....

#### **AMC M.B.102(c) Competent authority – Qualification and training**

1.5. ....

1.6. knowledge of a relevant sample of the type(s) of aircraft gained through a formalised training course. These courses should be at least at the Level 1 General Familiarization as specified in Part-66, Appendix III and should cover at least one aircraft type for each subcategory (i.e. helicopter piston, helicopter turbine, aeroplane piston, aeroplane turbine) and for each type of turbine propulsion system (turbofan, turboprop).

1.7. ....

#### **M.B.303 Aircraft continuing airworthiness monitoring**

- (a) The competent authority shall develop a survey programme to monitor the airworthiness status of the fleet of aircraft on its register.

....

#### **AMC M.B.303**

The competent authority may create an adapted airworthiness survey programme for the aircraft to which it delivers the airworthiness review certificate.

#### **M.B.606 Changes**

The competent authority shall comply with the applicable elements of the initial process paragraphs for any change to the organisation notified in accordance with M.A.617.

The competent authority may prescribe the conditions under which the M.A. Subpart F approved maintenance organisation may operate during such changes unless it determines that the approval should be suspended

For any change to the maintenance organisation manual:

- (a) In the case of direct approval of amendments of the maintenance organisation manual, the competent authority shall verify that the procedures specified in the manual are in compliance with Part-M before formally notifying the approved organisation of the approval.
- (b) In the case of indirect approval of amendments of the maintenance organisation manual, the competent authority shall ensure that it has an adequate control over the approval of all manual amendments.

### **AMC M.B.606 Changes**

1. Changes in nominated persons.  
The competent authority should have adequate control over any changes to personnel specified in M.A.606 (a) and (b). Such changes will require an amendment to the manual.
2. It is recommended that a simple manual status sheet is maintained which contains information on when an amendment was received by the competent authority and when it was approved.
3. The competent authority should define the class of amendments to the manual which may be incorporated through indirect approval. In this case a procedure should be stated in the amendment section of the maintenance organisation manual.  
Changes notified in accordance with M.A.617 should not be subject to the indirect approval procedure. In this case, the applicable part(s) of the EASA Form 6F should be used for the change.
4. The approved maintenance organisation should submit each manual 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.

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

....

4. Credit may be claimed by the competent authority Surveyor(s) for specific item audits completed during the preceding 23 month period subject to four conditions:

....

- 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.

....

### **M.B.706 Changes**

The competent authority shall comply with the applicable elements of the initial process paragraphs for any change to the organisation notified in accordance with M.A.713.

The competent authority may prescribe the conditions under which the M.A. Subpart G approved continuing airworthiness management organisation may operate during such changes unless it determines that the approval should be suspended

For any change to the continuing airworthiness management exposition:

- (a) In the case of direct approval of the amendments of continuing airworthiness management exposition, the competent authority shall verify that the procedures specified in the exposition are in compliance with Part-M before formally notifying the approved organisation of the approval.
- (b) In the case of indirect approval of amendments of the continuing airworthiness management exposition, the competent authority shall ensure that it has an adequate control over the approval of all exposition amendments.

### **AMC M.B.706 Changes**

1. Changes in nominated persons.  
The competent authority should have adequate control over any changes to the personnel specified in M.A.706 (a), (b), (c) and (d). Such changes will require an amendment to the exposition.
2. It is recommended that a simple exposition status sheet is maintained which contains information on when an amendment was received by the competent authority and when it was approved.
3. The competent authority should define the class of amendments to the exposition which may be incorporated through indirect approval. In this case a procedure should be stated in the amendment section of the approved continuing airworthiness management organisation exposition.  
Changes notified in accordance with M.A.713 should not be subject to the indirect approval procedure. In this case, the applicable part(s) of the EASA Form 13 should be used for the change.

4. The approved continuing airworthiness management organisation 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.

### **M.B.901 Assessment of recommendations**

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

....

### **AMC M.B.901 Assessment of recommendations**

3. ....

4. In some cases, the inspector may decide that it is necessary to organise:

- a physical survey of the aircraft, or;
- a full or partial airworthiness review.

In this case, the inspector should inform the M.A.Subpart G organisation making the recommendation with sufficient notice so that it may organise itself according to M.A.901(f).

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

5. ....

### **M.B.902 Airworthiness review by the competent authority**

- (a) When the competent authority carries out the airworthiness review and issue the airworthiness review certificate EASA Form 15a (Appendix III), the competent authority shall carry out an airworthiness review in accordance with the prescriptions of M.A.710.

- (b) The competent authority shall have appropriate airworthiness review staff to carry out the airworthiness reviews.

These staff shall have acquired:

1. For aircraft used in commercial air transport and aircraft above 2730 kg MTOM:

- a. at least five years experience in continuing airworthiness, and;

- b. an appropriate Part-66 licence or an aeronautical degree or equivalent, and;
  - c. formal aeronautical maintenance training, and;
  - d. a position with appropriate responsibilities.
2. For aircraft of 2730 Kg MTOM and below, that are not used in commercial air transport:
- a. at least three years experience in continuing airworthiness, and;
  - b. an appropriate Part 66 licence, or a nationally-recognized maintenance personnel qualification appropriate to the aircraft category (when Part-66 refers to national rules) or an aeronautical degree or equivalent, and;
  - c. appropriate aeronautical maintenance training, and;
  - d. a position with appropriate responsibilities
- (c) ....
- (d) ....
- (e) The staff that carries out the airworthiness review shall issue the Form 15a after satisfactory completion of the airworthiness review.

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

1. A person qualified in accordance with AMC M.B.102 (c) subparagraph 1.5 should be considered as holding the equivalent to an aeronautical degree.
2. “experience in continuing airworthiness” means experience on tasks related to aircraft maintenance and/or maintenance management (engineering) and/or surveillance of such tasks, which may be combined.
3. An appropriate Part-66 licence is a category B or C licence in the subcategory of the aircraft reviewed. It is not necessary to satisfy the recent experience requirements of Part 66 at the time of the review nor to hold the type rating on the particular aircraft.
4. To hold a position with appropriate responsibilities means the airworthiness review staff should have a position within the competent authority that authorises that person to sign on behalf that competent authority.
5. A person in the competent authority carrying out airworthiness reviews or airworthiness certificate renewal inspections in a Member State, prior to the date of entry into force of Part-M should be considered as complying with M.B.902(b).

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

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

- Relevant parts of continuing airworthiness regulations.
- Relevant parts of operational requirements and procedures, if applicable.
- Knowledge of the internal procedures for continuing airworthiness,
- Knowledge of a relevant sample of the type(s) of aircraft gained through a formalised training course. These courses should be at least at the Level 1 General Familiarization as specified in Part-66, Appendix III and should cover at least one aircraft type for each subcategory (i.e. helicopter piston, helicopter turbine, aeroplane piston, aeroplane turbine) and for each type of turbine propulsion system (turbofan, turboprop).

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

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

- Relevant parts of continuing airworthiness regulations.
- Relevant parts of operational requirements and procedures, if applicable.
- Knowledge of the internal procedures for continuing airworthiness,
- Knowledge of a relevant sample of the type(s) of aircraft gained through training and/or work experience. Such courses / experience should be at least at the Level 1 General Familiarization as specified in Part-66, Appendix III or equivalent, and should cover at least one aircraft type for each subcategory (i.e. helicopter piston, helicopter turbine, rotorcraft, aeroplane piston, aeroplane turbine, gliders and balloons) and for each type of turbine propulsion system (turbofan, turboprop).

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. This assessment should be recorded.

*Appendix I*  
**Continuing Airworthiness Arrangement**

5. ....

5.1. Obligations of the approved organisation:

1. ....

2. respect the conditions to maintain the continuing airworthiness of the aircraft listed below:
  - develop a maintenance programme for the aircraft, including any reliability programme developed,
  - declare the maintenance tasks (in the maintenance programme) that may be carried out IAW M.A.803 (c),
  - organise the approval of the aircraft's maintenance programme,
  - ....
3. ....
4. ....
5. inform the competent authority of the Member State of registry whenever the aircraft is not presented to the approved maintenance organisation by the owner as requested by the approved organisation;
6. inform the competent authority of the Member State of registry whenever the present arrangement has not been respected;
7. carry out the airworthiness review of the aircraft when necessary and issue the airworthiness review certificate or the recommendation to the competent authority of the Member State of registry.  
For aircraft of 2730 Kg MTOM and below, that are not used in commercial air transport, the recommendation will be limited to the import of an aircraft in accordance with Part-21 and M.A.904.
8. carry out all occurrence reporting mandated by applicable regulations;
9. inform the competent authority of the Member State of registry whenever the present arrangement is denounced by either party.

#### 5.2. Obligations of the owner:

6. ....
7. inform the competent authority of the Member State of registry whenever the present arrangement is denounced by either party.
8. inform the competent authority of the Member State of registry and the approved organisation whenever the aircraft is sold.
9. carry out all occurrence reporting mandated by applicable regulations.

10. inform on a regular basis the approved organisation about the aircraft flying hours and any other utilization data, as agreed with the approved organisation.
11. enter the certificate of release to service in the logbooks as mentioned in M.A.803(d) when performing pilot owner maintenance without exceeding the limits of the maintenance task list as declared in the approved maintenance programme (M.A.803 (c)).
12. inform the M.A. Subpart G approved continuing airworthiness management organisation not later than 30 days after completion of the pilot owner maintenance task IAW M.A 305 (a).

## *Appendix II*

### **EASA Form 1**

#### *Use of the EASA Form 1 for maintenance*

*Block 12 .....*

*Block 13* It is mandatory to state any information in this block either direct or by reference to supporting documentation that identifies particular data or limitations relating to the items being released that are necessary for the User/installer to make the final airworthiness determination of the item. Information shall be clear, complete, and provided in a form and manner which is adequate for the purpose of making such a determination.

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

If there is no statement, state 'None'.

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

- The identity and issue of maintenance documentation used as the approved standard.
- Airworthiness Directives carried out and/or found carried out, as appropriate.
- Repairs carried out and/or found carried out, as appropriate.
- Modifications carried out and/or found carried out, as appropriate.
- Replacement parts installed and/or parts found installed, as appropriate.
- Life limited parts history.
- Deviations from the customer work order.
- The M.A.613 Certificate of Release to Service statement.
- Identity of other regulation if not Part-145 or Part-M Subpart F.
- Release statements to satisfy a foreign maintenance requirement.
- Release statements to satisfy the conditions of an international maintenance agreement such as, but not limited to, the Canadian Technical Arrangement Maintenance and the USA Bilateral Aviation Safety Agreement — Maintenance Implementation Procedure.



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

*Block 19* For all maintenance by M.A. Subpart F approved maintenance organisations the box “other regulation specified in block 13” shall be ticked and the certificate of release to service statement made in block 13.

The following M.A.613 Certificate of Release to Service statement shall be included in block 13: “Certifies that, unless otherwise specified in this block, the work identified in block 12 and described in this block was accomplished in accordance with Part-M, Subpart F requirements and in respect to that work the item is considered ready for release to service”

The certification statement “unless otherwise specified in this block” is intended to address the following cases;

- (a) Where the maintenance could not be completed.
- (b) Where the maintenance deviated from the standard required by Part-M.
- (c) Where the maintenance was carried out in accordance with a non Part-M requirement. In this case block 13 shall specify the particular national regulation.

Whichever case or combination of cases shall be specified in block 13.

*Block 20* .....

### *Appendix III* **Airworthiness Review Certificate**

**In Form 15a, the sentence:**

“is considered to be airworthy at the time of the issue”

**is replaced by:**

“is considered to be airworthy at the time of the review”.

### *Appendix VII* **Complex Maintenance Tasks**

The following constitutes the complex maintenance tasks referred to in M.A.801(b)2. These tasks need to be performed within an approved maintenance organisation because they are likely to involve the need for special tooling, equipment and facilities.

1. ....
2. ....
3. The performance of the following maintenance on a piston engine:
  - (a) Dismantling of a piston engine other than:
    - (i) to obtain access to the piston/cylinder assemblies;
    - (ii) to remove the rear accessory cover to inspect and/or replace oil pump assemblies, where such work does not involve the removal and re-fitment of internal gears;
  - (b) The removal or dismantling of reduction gears;
  - (c) Propeller balancing, except
    - (i) for the certification of static balancing where required by the maintenance manual;
    - (ii) dynamic balancing on installed propellers using electronic balancing equipment where permitted by the maintenance manual or other approved airworthiness data;
  - (d) Welding and brazing of joints, other than minor weld repairs to exhaust units carried out by a suitably approved or authorised welder but excluding component replacement;
  - (e) The disturbing of individual parts of units which are supplied as bench tested units, except for the replacement or adjustment of items normally replaceable or adjustable in service.

### *Appendix VIII* **Limited Pilot Owner Maintenance**

The following lists constitute the scope of limited pilot owner maintenance referred to in M.A.803:

- Part A applies to aeroplanes;
- Part B applies to rotorcraft;
- Part C applies to sailplanes and powered sailplanes;
- Part D applies to hot air airships, hot air balloons and gas balloons.

In addition to PART M requirements and particularly to M.A.402, the following basic principles are to be complied with before any task is carried out under the terms of pilot owner maintenance:

- 1 Before carrying out any maintenance tasks as listed in this appendix, the pilot owner must satisfy himself that he is competent to do the task. It is the responsibility of pilot owners to

familiarize themselves with the standard maintenance practices for their aircraft and with the aircraft maintenance programme.

- 2 The maintenance instructions of the TC holder as expressed in the maintenance manual and instructions for continuing airworthiness are to be considered in developing the maintenance programme; however, these requirements cannot override the generic lists in Part “A” to “D”.
- 3 The maintenance data as specified in M.A.401 must be always available during the conduct of pilot owner maintenance. Details of the data referred to in the conduct of pilot owner maintenance must be included in the Certificate of Release to Service IAW M.A.803(d).
4. The need to use special tools, carry out special testing (eg. NDT) or any unscheduled special inspections (eg. heavy landing check) prevents the task from being carried out as pilot owner maintenance.
- 6 Any task described in the aircraft flight manual as preparing the aircraft for flight (Example: assembling the glider wings or pre-flight), is considered to be a pilot task and is not considered pilot owner maintenance and therefore does not require a Certificate of Release to Service.
- 7 Any task related to an Airworthiness Directive is not considered as pilot owner maintenance, unless specifically allowed in the AD.
8. The pilot owner must inform the M.A. Subpart G Continuing Airworthiness Management Organisation (if applicable) not later than 30 days after completion of the pilot owner maintenance task IAW M.A 305 (a).
- 9 Inspection tasks/checks of any periodicity included in an approved maintenance programme can be carried out providing that the specified tasks are included in the generic lists at Parts A to D of Appendix VIII.
- 10 In addition to the generic lists in Parts “A” to “D”, the pilot-owner may carry out very simple visual inspections for general condition and obvious damage of the airframe, engines and components as long as the task does not involve the removal of any component or element.
- 11 Tasks in Appendix VIII Table A shown with \*\* exclude IFR operations following pilot owner maintenance. For these aircraft to operate under IFR operations, these tasks must be certified by an appropriate licensed engineer.

#### **Appendix VIII Part A / PILOT OWNER MAINTENANCE TASKS for POWERED AIRCRAFT (AEROPLANE)**

ATA	Area	Task	<1000kg	1000 – 2730 kg
09	Towing	Tow release unit and tow cable retraction mechanism – Cleaning, lubrication and tow cable replacement (including weak links).	Yes	Yes

		Mirror –Installation and replacement of mirrors.	Yes	Yes
11	Placards	Placards, Markings – Installation and renewal of placards and markings required by AFM and AMM.	Yes	Yes
12	Servicing	Lubrication – Not requiring a disassembly other than non structural items such as cover plates, cowlings and fairings.	Yes	Yes
20	Standard Practices	Safety Wiring – Replacement of defective wiring or cotter keys, excluding those in engine, transmission, flight control systems.	Yes	No
		Simple Non Structural Standard Fasteners – Replacement and adjustment, excluding the replacement of receptacles and anchor nuts requiring riveting.	Yes	Yes
21	Air Conditioning	Replacement of flexible hoses and ducts.	Yes	Yes
23	Communication.	Communication devices – Remove and replace self contained, front instrument panel mount communication devices with quick disconnect connectors, excluding IFR operations.	Yes**	Yes**
24	Electrical power	Batteries – Replacement and servicing, excluding servicing of Ni-Cd batteries and IFR operations.	Yes**	Yes**
		Wiring – Repairing broken circuits in landing light and any other wiring for non critical equipment, excluding ignition system, primary generating system and required communication, navigation system and primary flight instruments.	Yes	Yes
		Bonding – Replacement of broken bonding cable.	Yes	Yes
		Fuses – Replacement with the correct rating.	Yes	Yes
25	Equipment	Safety Belts – Replacement of safety belts and harnesses excluding belts fitted with airbag systems.	Yes	Yes
		Seats – Replacement of seats or seat parts not involving disassembly of any primary structure or control system.	Yes	Yes
		Non essential instruments and/or equipment - Replacement of self contained, front instrument panel mount equipment with quick disconnect connectors.	Yes	Yes
		Oxygen System – Replacement of oxygen bottle and system in approved mountings	Yes	Yes
		ELT – Removal / Re-installation.	Yes	Yes
26	Fire Protection	Fire Warning – Replacement of sensors and indicators.	Yes	Yes
27	Flight controls	Removal or re-installation of co-pilot control column and rudder pedals where provision for quick disconnect is made by design.	Yes	Yes
28	Fuel System	Fuel lines – Replacement of prefabricated fuel lines fitted with self sealing couplings.	Yes	Yes

		Fuel Filter elements – Cleaning and/or replacement.	Yes	Yes
31	Instruments	Instrument Panel– Removal and re-installation provided this it is a design feature with quick disconnect connectors, excluding IFR operations.	Yes**	No
		Pitot Static System – Simple sense and leak check, excluding IFR operations.	Yes**	No
		Drainage – Drainage of water drainage traps or filters within the Pitot static system excluding IFR operations.	Yes**	Yes**
		Flexible tubes - Replacement of damaged tubes excluding IFR operations.	Yes**	No
32	Landing Gear	Wheels – Removal, replacement and servicing, including replacement of wheel bearings and lubrication.	Yes	Yes
		Hydraulic fluid – Replenishment of hydraulic fluid such as brake fluid.	Yes	Yes
		Shock Absorber – Replacement of elastic cords or rubber dampers.	Yes	Yes
		Shock Struts – Replenishment of oil or air.	Yes	No
		Skis – Changing between wheel and ski landing gear.	Yes	Yes
		Landing skids – Replacement of landing skids and skid shoes.	Yes	Yes
		Wheel fairings (spats) – Removal and re-installation.	Yes	Yes
		Mechanical brakes – Adjustment of simple cable operated systems.	Yes	No
		Brake – Replacement of worn brake pads.	Yes	No
33	Lights	Lights – Replacement of internal and external bulbs, filaments, reflectors and lenses.	Yes	Yes
34	Navigation	Software – Updating self contained, front instrument panel mount navigational software databases, excluding automatic flight control systems and transponders.	Yes	Yes
		Navigation devices – Removal and replacement of self contained, front instrument panel mount navigation devices with quick disconnect connectors, excluding automatic flight control systems, transponders, primary flight control system and IFR operations.	Yes**	Yes**
		Self contained data logger – Installation, data restoration.	Yes	Yes
51	Structure	Fabric patches – Simple patches extending over not more than one rib, not requiring rib stitching or removal of structural parts or control surfaces.	Yes	Yes
		Protective Coating – Applying preservative material or coatings where no disassembly of any primary structure or operating system is involved.	Yes	Yes

		Surface finish - Minor restoration where no disassembly of any primary structure or operating system is involved This includes application of signal coatings or thin foils as well as registration markings.	Yes	Yes
		Fairings – Simple repairs to non structural fairings and cover plates which do not change the contour.	Yes	Yes
52	Doors	Doors - Removal and re-installation.	Yes	Yes
53	Fuselage	Upholstery, furnishing – Minor repairs which do not require disassembly of primary structure or operating systems, or interfere with control systems.	Yes	Yes
56	Windows	Side Windows - Replacement if it does not require riveting, bonding or any special process.	Yes	Yes
61	Propeller	Spinner – Removal and re-installation.	Yes	Yes
71	Powerplant installation	Cowling – Removal and re-installation not requiring removal of propeller or disconnection of flight controls.	Yes	Yes
72	Engine	Chip detectors – Removal, checking and re-installation provided the chip detector is a self sealing type and not electrically indicated.	Yes	Yes
73	Engine fuel	Strainer or Filter elements – Cleaning and/or replacement.	Yes	Yes
		Fuel - Mixing of required oil into fuel.	Yes	Yes
74	Ignition	Spark Plugs – Removal, re-installation and adjustment.	Yes	Yes
75	Cooling	Coolant - Replenishment of coolant fluid.	Yes	Yes
77	Engine Indicating	Engine Indicating – Removal and replacement of self contained, front instrument panel mount indicators that do not employ direct reading connections.	Yes	No
79	Oil System	Strainer or filter elements – Cleaning and/or replacement.	Yes	Yes
		Oil – Changing or replenishment of engine oil and gearbox fluid.	Yes	Yes

### **Appendix VIII Part B / PILOT OWNER MAINTENANCE TASKS for ROTORCRAFT**

ATA	Area	Task	Single Engine Rotorcraft <2730 kg
11	Placards	Placards, Markings – Installation and renewal of placards and markings required by AFM and AMM.	Yes
12	Servicing	Fuel, oil, hydraulic, de-iced and windshield liquid replenishment.	Yes

		Lubrication – Not requiring a disassembly other than non structural items such as cover plates, cowlings and fairings.	Yes
20	Standard Practices	Simple non structural standard fasteners – Replacement and adjustment, excluding latches and the replacement of receptacles and anchor nuts requiring riveting.	Yes
21	Air Conditioning	Replacement of flexible hoses and ducts.	Yes
23	Communication	Communication devices – Remove and replace self contained, front instrument panel mount communication devices with quick disconnect connectors.	Yes
24	Electrical power	Batteries – Replacement and servicing, excluding servicing of Ni-Cd batteries.	Yes
		Bonding – Replacement of broken bonding cable excluding bonding on rotating parts and flying controls.	Yes
		Fuses – Replacement with the correct rating.	Yes
		Wiring – Repairing broken circuits in landing light and any other wiring for non critical equipment, excluding ignition system, primary generating system and required communication, navigation system and primary flight instruments.	Yes
25	Equipment	Safety Belts - Replacement of safety belts and harnesses excluding belts fitted with airbag systems.	Yes
		Seats – Replacement of seats or seat parts not involving disassembly of any primary structure or control system excluding flight crew seats.	Yes
		Removal / installation of emergency flotation gears with quick disconnect connectors.	Yes
		Non essential instruments and/or equipment - Replacement of self contained, front instrument panel mount equipment with quick disconnect connectors.	Yes
		ELT - Removal / Re-installation.	Yes
30	Ice and rain protection	Windshield wiper replacement	Yes
31	Instruments	Drainage – Drainage of water drainage traps or filters within the Pitot static system	Yes
32	Landing Gears	Wheels – Removal, Installation, and tyre inflation.	Yes
		Replacement of skid wear shoes.	Yes
		Fit and remove snow landing pads.	Yes
		Brakes - Replenishment of hydraulic brake fluid	Yes

		Brake – Replacement of worn brake pads	Yes
<b>33</b>	Lights	Lights – replacement of internal and external bulbs, filaments, reflectors and lenses	Yes
<b>34</b>	Navigation	Software – Updating self contained, front instrument panel mount navigational software databases, excluding automatic flight control systems and transponders.	Yes
		Navigation devices – Remove and replace self contained, front instrument panel mount navigation devices with quick disconnect connectors, excluding automatic flight control systems, transponders, primary flight control system.	Yes
		Self contained data logger – Installation, data restoration	Yes
<b>51</b>	Structure	Protective Coating – Applying preservative material or coatings where no disassembly of any primary structure or operating system is involved.	Yes
		Surface finish - Minor restoration where no disassembly of any primary structure or operating system is involved, excluding intervention on main and tail rotors. This includes application of signal coatings or thin foils as well as Registration markings.	Yes
		Fairings – Simple repairs to non structural fairings and cover plates which do not change the contour.	Yes
<b>52</b>	Doors	Doors - Removal and re-installation.	Yes
<b>53</b>	Fuselage	Upholstery, furnishing – Minor repairs which do not require disassembly of primary structure or operating systems, or interfere with control systems.	Yes
<b>56</b>	Windows	Side Windows - Replacement if it does not require riveting, bonding or any special process.	Yes
<b>62</b>	Main rotor	Removal/installation of main rotor blades that are designed for removal where special tools are not required (tail rotor blades excluded) limited to installation of the same blades previously removed refitted in the original position.	Yes
<b>63</b> <b>65</b>	Transmission	Chip detectors – Remove, check and replace provided the chip detector is a self sealing type and not electrically indicated.	Yes
<b>67</b>	Flight control	Removal or re-installation of co-pilot cyclic and collective controls and yaw pedals where provision for quick disconnect is made by design.	Yes
<b>71</b>	Powerplant installation	Cowlings - Removal and re-fitment.	Yes
<b>72</b>	Engine	Chip detectors –removal, checking and re-installation provided the chip detector is a self sealing type and not electrically indicated	Yes
<b>79</b>	Oil System	Filter elements – Replacement, provided that the element is of the “spin on/off” type.	Yes
		Oil - Changing or replenishment of engine oil.	Yes



## **Appendix VIII Part C / PILOT OWNER MAINTENANCE TASKS for SAILPLANES AND POWERED SAILPLANES**

### **Abbreviations applicable to this Part:**

N/A not applicable for this category  
 SP sailplane  
 SSPS self sustained powered sailplane  
 SLPS/TM self launching powered sailplane/touring motorglider

ATA	Area	Task	SP	SSPS	SLPS/ TM
08	Weighing	Recalculation – Small changes of the Trim plan without needing a reweighing.	Yes	Yes	Yes
09	Towing	Tow release unit – Cleaning, lubrication and replacement of unit not involving disassembly of any primary structure, control system or additional adjusting.	Yes	Yes	Yes
		Mirror –Removal and re-installation of mirrors.	N/A	N/A	Yes
11	Placards	Placards, Markings – Installation and renewal of placards and markings required by AFM and AMM.	Yes	Yes	Yes
12	Servicing	Lubrication – Not requiring a disassembly other than non structural items such as cover plates, cowlings and fairings.	Yes	Yes	Yes
20	Standard. Practices	Safety Wiring – Replacement of defective wiring or cotter keys.	Yes	Yes	Yes
		Simple Non Structural Standard Fasteners – Replacement and adjustment, excluding the replacement of receptacles and anchor nuts requiring riveting.	Yes	Yes	Yes
		Free play – Measurement of the free play in the control system and the wing to fuselage attachment including minor adjustments by simple means provided by the manufacturer.	Yes	Yes	Yes
21	Air Conditioning	Replacement of flexible hoses and ducts.	Yes	Yes	Yes
23	Communication	Communication devices – Remove and replace self contained, front instrument panel mount communication devices with quick disconnect connectors.	Yes	Yes	Yes
24	Electrical power	Batteries and solar panels – Replacement and servicing.	Yes	Yes	Yes
		Wiring - Installation of simple wiring connections to the existing wiring for additional equipment such as electric variometers, flight computers but excluding communication, navigation systems and engine wiring.	Yes	Yes	Yes
		Wiring – Repairing broken circuits in landing light and any other wiring for non critical equipment, excluding ignition system, primary generating system and required communication, navigation system and primary flight instruments.	Yes	Yes	Yes

		Bonding – Replacement of broken bonding cable.	Yes	Yes	Yes
		Switches – Replacement without soldering.	Yes	Yes	Yes
		Fuses – Replacement with the correct rating.	Yes	Yes	Yes
25	Equipments	Safety Belts – Replacement of safety belt and harnesses.	Yes	Yes	Yes
		Seats – Replacement of seats or seat parts not involving disassembly of any primary structure or control system.	Yes	Yes	Yes
		Non essential instruments and/or equipments - Replacement of self contained, front instrument panel mount equipment with quick disconnect connectors.	Yes	Yes	Yes
		Removal and installation of non required instruments and/or equipment.	Yes	Yes	Yes
		Wing Wiper, Cleaner – Servicing, removal and re-installation not involving disassembly or modification of any primary structure, control	Yes	Yes	Yes
		Static Probes – Removal or re-installation of variometer static and total energy compensation probes.	Yes	Yes	Yes
		Oxygen System – Replacement of Oxygen Bottle and System.	Yes	Yes	Yes
		Air Brake Chute – Installation and servicing	Yes	Yes	Yes
		ELT – Removal / Re-installation.	Yes	Yes	Yes
26	Fire Protection	Fire Warning – Replacement of sensors and indicators.	N/A	Yes	Yes
27	Flight Control	Gap Seals – Installation and servicing if it does not require complete flight control removal.	Yes	Yes	Yes
		Control System – Measurement of the control system travel without removing the control surfaces.	Yes	Yes	Yes
		Control Cables – Simple optical Inspection for Condition.	Yes	Yes	Yes
		Gas Dampener – Replacement of Gas Dampener in the Control or Air Brake System.	Yes	Yes	Yes
		Co-pilot stick and pedals - Removal or re-installation where provision for quick disconnect is made by design.	Yes	Yes	Yes
28	Fuel System	Fuel lines – Replacement of prefabricated fuel lines fitted with self sealing couplings.	N/A	Yes	Yes
		Fuel Filter – Cleaning and/or replacement.	N/A	Yes	Yes
31	Instruments	Instrument Panel– Removal and re-installation provided this is a design feature with quick disconnect, excluding IFR operations.	Yes	Yes	Yes

		Pitot Static System – Simple sense and leak check.	Yes	Yes	Yes
		Instrument Panel vibration damper / shock absorbers- Replacement.	Yes	Yes	Yes
		Drainage – Drainage of water drainage traps or filters within the Pitot static system.	Yes	Yes	Yes
		Flexible tubes - Replacement of damaged tubes.	Yes	Yes	Yes
32	Landing Gear	Wheels – Removal, replacement and servicing, including replacement of wheel bearings and lubrication.	Yes	Yes	Yes
		Hydraulic fluid – Replenishment of hydraulic fluid such as brake fluid.	Yes	Yes	Yes
		Shock Absorber – Replacement or servicing of elastic cords or rubber dampers.	Yes	Yes	Yes
		Shock Struts – Replenishment of oil or air.	Yes	Yes	Yes
		Landing gear doors - Removal or re-installation and repair including operating straps.	Yes	Yes	Yes
		Skis – Changing between wheel and ski landing gear.	Yes	Yes	Yes
		Skids – Removal or re-installation and servicing of main, wing and tail skids.	Yes	Yes	Yes
		Wheels fairing (spats) – Removal and re-installation.	Yes	Yes	Yes
		Mechanical brakes – Adjustment of simple cable operated systems.	Yes	Yes	Yes
		Brake – Replacement of worn brake pads.	Yes	Yes	Yes
		Springs – Replacement of worn or aged springs.	Yes	Yes	Yes
		Gear Warning –Removal or re-installation of simple gear warning systems.	Yes	Yes	Yes
33	Lights	Lights – Replacement of internal and external bulbs, filaments, reflectors and lenses.	N/A	N/A	Yes
34	Navigation	Software – Updating self contained, front instrument panel mount navigational software databases, excluding automatic flight control systems and transponders and including update of non required instruments / equipments.	Yes	Yes	Yes
		Navigation devices – Removal and replacement of self contained, front instrument panel mount navigation devices with quick disconnect connectors, excluding automatic flight control systems, transponders, primary flight control system.	Yes	Yes	Yes
		Self contained data logger – Installation, data restoration	Yes	Yes	Yes

51	Structure	Fabric patches – Simple patches extending over not more than one rib, not requiring rib stitching or removal of structural parts or control surfaces.	Yes	Yes	Yes
		Protective Coating – Applying preservative material or coatings where no disassembly of any primary structure or operating system is involved.	Yes	Yes	Yes
		Surface finish - Minor restoration where no disassembly of any primary structure or operating system is involved This includes application of signal coatings or thin foils as well as Registration markings.	Yes	Yes	Yes
		Fairings – Simple repairs to non structural fairings and cover plates which do not change the contour.	Yes	Yes	Yes
52	Doors	Doors - Removal and re-installation.	Yes	Yes	Yes
53	Fuselage	Upholstery, furnishing – Minor repairs which do not require disassembly of primary structure or operating systems, or interfere with control systems.	Yes	Yes	Yes
56	Windows	Side Windows - Replacement if it does not require riveting, bonding or any special process.	Yes	Yes	Yes
		Canopies - Removal and re-fitment.	Yes	Yes	Yes
		Gas dampener – Replacement of Canopy Gas dampener.	Yes	Yes	Yes
57	Wings	Wing Skids – Removal or re-installation and service of lower wing skids or wing roller including spring assembly.	Yes	Yes	Yes
		Water ballast – Removal or re-installation of flexible tanks.	Yes	Yes	Yes
		Turbulator and sealing tapes – Removal or re-installation of approved sealing tapes and turbulator tapes.	Yes	Yes	Yes
61	Propeller	Spinner – Removal and re-installation.	N/A	Yes	Yes
71	Power Plant	Removal or installation of power plant unit including engine and propeller.	N/A	Yes	NO
		Cowling - Removal and re-installation not requiring removal of propeller or disconnection of flight controls.	N/A	Yes	Yes
72	Engine	Chip detectors – Removal, checking and re-installation provided the chip detector is a self sealing type and not electrically indicated.	N/A	Yes	Yes
73	Engine fuel	Strainer or Filter elements – Cleaning and/or replacement.	N/A	Yes	Yes
		Fuel - Mixing of required oil into fuel.	N/A	Yes	Yes
74	Ignition	Spark Plugs – Removal, re-installation and adjustment.	N/A	Yes	Yes
75	Cooling	Coolant – Replenishment of coolant fluid.	N/A	Yes	Yes

76	Engine Controls	Controls – Minor adjustments of non-flight or propulsion controls whose operation is not critical for any phase of flight.	N/A	Yes	NO
77	Engine Indicating	Engine Indicating – Removal and replacement of self contained, front instrument panel mount indicators that do not employ direct reading connections.	N/A	Yes	Yes
79	Oil System	Strainer or Filter elements – Cleaning and/or replacement.	N/A	Yes	Yes
		Oil – Changing or replenishment of engine oil and gearbox fluid.	N/A	Yes	Yes

### **Appendix VIII Part D / PILOT OWNER MAINTENANCE TASKS for BALLOONS / AIRSHIPS**

#### **Specific basic principles for hot air airships, hot air balloons and gas balloons:**

In addition to the basic principles, no task that is considered “complex” may be carried out by the pilot owner of the balloon or hot air airship.

A complex task is considered as any maintenance or repair to the envelope or to the basket primary suspension system that requires the re-manufacture of any joint and/or component.

Any repair carried out to the envelope cannot include the repair or replacement of load tapes. Welding to the basket frame or burner frame or repairs to the pressure lines of the burners or fuel cylinders are also prohibited.

<b>Area and Task</b>	<b>Hot Air Airship</b>	<b>Hot Air Balloon</b>	<b>Gas Balloon</b>
<b>A) ENVELOPE</b>			
1- Fabric repairs- excluding complete panels (as defined in, and in accordance with, Type Certificate holders' instructions) not requiring load tape repair or replacement.	Yes	Yes	No
2- Nose line - Replacement	Yes	N/A	N/A
3- Banners- fitment, replacement or repair (without sewing).	Yes	Yes	Yes
4- Melting link (temperature flag) - replacement.	Yes	Yes	N/A
5-Temperature transmitter and temperature indication cables - removal or reinstallation	Yes	Yes	N/A
6- Valve and rip line- replacement.	No	No	No
7- Crown line- replacement (where permanently attached to the crown ring )	No	Yes	N/A
8- Scoop or skirt-replacement or repair of (including fasteners).-	No	Yes	N/A
<b>B) BURNER</b>			
9- Burner-cleaning and lubrication	Yes	Yes	No
10-Piezo igniters- adjustment.	Yes	Yes	No
11-Burner jets-cleaning and replacement.	Yes	Yes	No
12-Burner frame corner buffers-replacement or reinstallation.	Yes	Yes	No

<b>C) BASKET AND GONDOLA</b>			
13- Basket frame trim-repair or replacement	No	Yes	Yes
14- Basket runners-repair or replacement	No	Yes	Yes
15- External rope handles-repair.	No	Yes	Yes
16- Replacement of seat covers - upholsteries and safety belts.	Yes	No	No
<b>D) FUEL CYLINDER</b>			
17-Liquid valve-replacement of O-rings.	Yes	Yes	No
<b>E) INSTRUMENTS AND EQUIPMENT</b>			
18-Batteries-replacement of for self contained instruments and communication equipment.	Yes	Yes	Yes
19-Communication, navigation devices, instruments and/or equipment – Remove and replace self contained, instrument panel mounted communication devices with quick disconnect connectors.	Yes	Yes	Yes
<b>F) ENGINES</b>			
20-Cleaning and Lubrication not requiring disassembly other than removal of non-structural items such as cover plates, cowlings and fairings.	Yes	N/A	N/A
21-Cowling-removal and re-fitment not requiring removal of the propeller	Yes	N/A	N/A
22- Fuel and oil strainers and/or filter elements- Removal, cleaning and/or replacement	Yes	N/A	N/A
23-Batteries-replacing and servicing excluding Ni-Cd batteries	Yes	N/A	N/A
24-Windows and canopies-making minor repairs to direct vision windows.	Yes	N/A	N/A
25-Propeller Spinner – removal and installation for inspection	Yes	N/A	N/A
26-Power plant - Removal or installation of power plant unit including engine and propeller	Yes	N/A	N/A
27-Engine- Chip detectors – remove, check and replace	Yes	N/A	N/A
28-Ignition Spark Plug – removal or installation and adjustment including gap clearance	Yes	N/A	N/A
29- Coolant fluid-replenishment	Yes	N/A	N/A

30-Engine Controls-minor adjustments of non-flight or propulsion controls whose operation is not critical for any phase of flight	Yes	N/A	N/A
31- Engine instruments-removal and replacement.	Yes	N/A	N/A
32-Lubrication oil – changing or replenishment of engine oil and gearbox fluid	Yes	N/A	N/A
33- Fuel lines-replacement of prefabricated hoses with self sealing couplings	Yes	N/A	N/A

### **AMC to Appendix VIII “Limited Pilot Owner Maintenance”**

Regarding Basic principles N° 9 and N° 10 shown in Appendix VIII, the following applies:

The content of periodic inspections/checks as well as their periodicity is not regulated or standardized in an aviation specification. It is the decision of the manufacturer/Type Certificate Holder (TCH) to recommend a schedule for each specific type of inspection/check.

For an inspection/check with the same periodicity for different TCHs, the content may differ, and in some cases may be critically safety related and may need the use of special tools or knowledge and thus would not qualify for pilot owner maintenance. Therefore the maintenance carried out by the pilot owner cannot be generalised to specific inspections such as 50 Hrs, 100 Hrs or 6 Month periodicity.

The Inspections to be carried out are limited to those areas and tasks listed in the Appendix; this allows flexibility in the development of the maintenance programme and does not limit the inspection to certain specific periodic inspections. A 50 Hrs /6 Month periodic inspection for a fixed wing aeroplane as well as the one-year inspection on a glider may normally be covered in the maintenance programme.