

OPINION NO 02/2013 OF THE EUROPEAN AVIATION SAFETY AGENCY

of 22nd March 2013

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

'Aircraft Continuing Airworthiness Monitoring'

Executive Summary

As part of continuing airworthiness oversight, competent authorities are required to develop a survey programme to monitor the airworthiness status of the fleet of aircraft on their register, referred to as 'Aircraft Continuing Airworthiness Monitoring' (ACAM, cf. M.B.303). The survey programme shall be developed by selecting a relevant sample of aircraft and shall include an aircraft survey, focusing on a number of key risk elements.

Feedback from competent authorities and typical findings encountered during standardisation inspections indicate that ACAM requirements and key risk elements are not consistently and uniformly applied in all member states. The existing rule material and in particular related Acceptable Means of Compliance (AMC) and Guidance Material (GM) have been reviewed to propose changes that will improve clarity and consistency, as well as to include additional guidance on the use of Key Risk Elements (KREs). Main deliverables of this rulemaking task are in the form of additional AMC and GM which focus on more flexible, risk-based planning of inspections, the possibility to conduct combined surveys, clarification of the scope and different types of surveys and in particular prove detailed guidance on key risk elements to be used for the ACAM inspections.

These changes are intended to have a positive impact on safety and support standardisation.

I. General

- 1. The purpose of this Opinion is to suggest the Commission to amend Annex I to Commission Regulation (EC) No 2042/2003¹ (hereafter referred to as 'Part-M'). The scope of this rulemaking activity is outlined in Terms of Reference (ToR) RMT.0216 (M.027) published 4 October 2011 and is described in more detail below.
- 2. The Opinion has been adopted, following the procedure specified by the European Aviation Safety Agency's (hereafter referred to as the 'Agency') Management Board², in accordance with the provisions of Article 19 of Regulation (EC) No 216/2008³ (hereafter referred to as the 'Basic Regulation').
- 3. The proposed rule has taken into account the development of European Union and international law (ICAO), and the harmonisation with the rules of other authorities of the European Union main partners as set out in the objectives of article 2 of the Basic Regulation. The proposed rule considers a more risk-based approach to planning ACAM inspections and in this respect supports the implementation of ICAO State Safety Programme standards and recommended practices in the framework of the European Aviation Safety Programme.

II. Consultation

- 4. Notice of Proposed Amendment (NPA) 2011-19⁴ that contained the draft Opinion for a Commission Regulation amending Part-M was published on the Agency website on 29 November 2011. By the closing date of 1 March 2012 the Agency had received 82 comments from 19 National Aviation Authorities (NAAs), professional organisations and private companies.
- 5. All comments received have been acknowledged and incorporated into a Comment-Response Document (CRD), which was published on the Agency's web site on 19 July 2012. This CRD contains a list of all persons and/or organisations that have provided comments and the answers of the Agency. By the closing date of 19 September 2012 the Agency had received 11 reactions to the CRD from 6 NAAs and 5 professional organisations. Among these, three reactions expressed general support with the changes proposed; one reaction indicated that changes were noted without comments, and 7 reactions indicated specific concerns or suggested additional changes. The main issues raised in these reactions are described below:

a. <u>In-flight surveys as part of ACAM</u>

6. One NAA reiterated their comment made to the NPA, requesting that the possibility to conduct in-flight surveys as part of an ACAM inspection should be maintained. In line with the recommendations of the Review Group established for RMT.0216 (M.027) this reaction is not accepted:

¹ 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 Commission Regulation (EU) No 593/2012 of 5 July 2012 (OJ L 176, 6.7.2012, p.38).

² EASA MB Decision 01-2012 of 13 March 2012 amending and replacing MB Decision 08-2007 concerning the procedure to be applied by the Agency for the issuing of opinions, certification specifications and guidance material ('Rulemaking Procedure').

Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC. (OJ L 79, 19.03.2008, p. 1). Regulation as last amended by Commission Regulation (EU) No 6/2013 of 8 January 2013 (OJ L 4, 9.1.2013, p. 34-35).

⁴ See Rulemaking Archives at http://www.easa.europa.eu/ws prod/r/r archives.php.

- Requesting an in-flight survey in response to serious ACAM findings would not be the adequate response under Part-M: Serious findings should be addressed by taking action on the Airworthiness Review Certificate.
- In-flight surveys are not considered airworthiness review tasks in accordance with M.A.710 and are not the focus of the continuing airworthiness management process defined in Part-M.
- Provisions on operational flight inspections both for the initial certification and oversight of AOC holders are defined as part of EASA Part-ARO Subpart-OPS⁵.

b. <u>Proportionality of the rules – general aviation</u>

7. Four professional organisations through their reactions to the CRD reiterated comments made during the NPA consultation to suggest that the Agency reconsiders the applicability of ACAM in the area of general aviation aircraft, by exempting certain categories of aircraft from the ACAM inspection programmes. This proposed change is not covered in the Terms of Reference of rulemaking task M.027. Therefore, the related NPA comments and reactions had been provided to the Part-M General Aviation Task Force for consideration in Phase II of their activity (cf. ToRs RMT.0463 and RMT.0547 'Review of Part-M for General aviation'6). Moreover, it is the opinion of the Agency that exempting certain categories of small aircraft from the ACAM inspection programme would have a negative effect on safety: Depending on the type of aircraft and type of operations, under the current Part-M provisions it is not required to have maintenance and/or continuing airworthiness management performed by an approved organisation. For those specific cases, the ACAM inspections in accordance with M.B.303 constitute the 'last resort' for the competent authorities to perform its oversight. Therefore, any exemption in this area would require a full regulatory impact assessment.

A specific reaction made by one professional organisation suggested that a more cooperative approach should be adopted by competent authorities when performing ACAM inspections on privately operated aircraft or aircraft operated by aero-clubs or sport federations: It is felt that competent authority inspectors generally apply the same logic as for ACAM inspections on large aircraft used for commercial air transport. This reaction suggested that ACAM inspectors better communicate with those subject to ACAM inspections and use this opportunity to better explain the applicable Part-M rules. According to this source this would lead to creating better partnership between authorities and owners/operators in this segment of aviation, which would have a positive effect on safety, whereas requiring more control would be seen as counterproductive. A possible means to create such a partnership between ACAM inspectors and owners/operators in the recreational aviation community would be to conduct ACAM inspections mainly as pre-announced events with the objective to review and explain all associated documents, more as a 'workshop', rather than an inspection only, with possible participation from air sport federations and/or aero-clubs. Such events would contribute to a better understanding of the applicable requirements and their correct implementation on both sides.

c. <u>Aircraft sampling</u>

A specific reaction made by one professional organisation suggested that aircraft sampling should be done across all 31 EASA states to replace the current system with sampling by each member State of Registry, and that for the purpose of such sampling a

Commission Regulation (EU) No 965/2012 of 05/10/2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council. (OJ L 296, 25.10.2012, p.1-148)

http://easa.europa.eu/rulemaking/docs/tor/RMT/ToR%20RMT.0463%20and%20RMT.0547.pdf

common database should be created, with EASA randomly selecting the aircraft to be inspected by the respective national authority. It is the opinion of the Agency that samples should not be selected randomly, but taking a risk based approach, which must rely on the experience and knowledge of the local authority.

According to this reaction such sampling database should also form the basis for creating a common database on ACAM findings, in a second stage. This proposal cannot be accommodated under M.027, it would require a new rulemaking task with a full regulatory impact assessment.

Based on the experience gained with the SAFA findings database, putting in place a common database of findings would require significant resources and therefore would need the full support of all EASA states. This would entail the definition of common data formats and a common taxonomy for the classification and categorisation of findings. Should this idea find support, considering the resources that it would require, such common findings database should then not be limited to ACAM findings. Nevertheless, the absence of such common database does not prevent competent authorities from exchanging information derived from ACAM inspections in cases where a representative sample size cannot be reached in one member state alone.

Finally, implementing such system would require a change in the mandate of the Agency and it would affect the rights and obligations of Member States of Registry.

8. In line with Review Group recommendations, the changes to the implementing rules (M.B.303 and M.B.304) as proposed with CRD 2011-19 have not been further amended following the analysis of the 11 reactions received.

III. Content of the Opinion of the Agency

- 9. This Opinion is aimed at amending M.B.303 and M.B.304 of Part-M. The proposed changes will provide for a more risk-based, flexible approach to the planning of ACAM inspections and will further improve clarity and consistency, thus supporting standardisation. These changes at implementing rule level will be complemented with changes at AMC/GM level, including a number of new AMCs and GM that mainly focus on ensuring a common understanding and consistent implementation of ACAM inspections. Detailed guidance for key airworthiness risk elements to be checked during ACAM inspections will be included.
- 10. It is proposed that this KRE guidance (Appendix III to GM1 M.B.303(b)) be subject to annual updates through a recurrent rulemaking task, to ensure references remain up to date and to assess the appropriateness of all supporting information and typical inspection items included. This shall ensure that the information remains pertinent with regard to the airworthiness key risk areas identified. The first review shall be initiated one year after the adoption of this Opinion.

a. Changes to M.B.303

11. M.B.303 is amended to better clarify the intent of the rule. Former paragraph (c) is removed; the items to be considered for the development of the ACAM programme are now detailed in the new AMC1 to M.B.303(a). In former paragraph (d) of M.B.303 the requirement for a root-cause determination for each finding has been replaced by a requirement to analyse findings in terms of safety significance. Provisions for the analysis of findings are now included with the new AMC1 M.B.303(d) 'Findings analysis'. This removes the obligation to perform a root-cause analysis of each finding. Instead, competent authorities should decide on the need for a root-cause analysis on the basis of the safety significance of a finding or combination of findings.

The new paragraph (f) is derived from former paragraph (g) and reworded to make it more generic. It focuses on the processing of the findings, as opposed to the categorisation of findings against the requirements, which is addressed in paragraph (d).

Former paragraph (i), now included as (g), is amended to clarify that an exchange of information on non-compliances identified is only required when necessary to ensure proper enforcement action.

Additional editorial changes have been made:

- In paragraph (b) 'key risk elements' a reference to 'airworthiness' has been added.
- In paragraph (e) the reference to 'recommendations' has been deleted, as these are not defined in M.B.903.

b. Changes to M.B.304

12. M.B.304 is amended as a result of the deletion of M.B.303(g) and to ensure consistency with M.B.903 'Findings'. The reference to 'limitation' is deleted, as this option is not provided for in M.B.903.

IV. Regulatory Impact Assessment⁷

Issue analysis and risk assessment

13. The issue at stake is primarily relevant to competent authorities. Owners/operators are indirectly affected, when their aircraft is sampled by the competent authority for an ACAM ramp or in-depth inspection. The proposed changes are expected to provide a positive safety impact and support standardisation.

M.B.303 requires competent authorities to develop a survey programme to monitor the airworthiness status of the fleet of aircraft on their register. Such survey programme shall include a product survey, focusing on a number of KREs. Appendix III to AMC M.B.303(d) 'Aircraft Continuing Airworthiness Monitoring – Planning & Recording Document' defines those KREs for the product surveys to be conducted by competent authorities. The AMCs issued for M.B.303, however, do not provide a detailed description of these KREs, nor do they contain a list of items to inspect.

This has resulted in a non-standardised application of the requirements in M.B.303.

14. The main risk of inadequate ACAM is that any airworthiness hazards that could affect flight safety of an individual aircraft or affect a whole fleet are not properly identified and acted upon. Ultimately, inadequate ACAM directly affects the efficiency of continuing oversight performed by the competent authority, which may lower the level of safety. Based on past standardisation results, the probability of this risk is assumed to be occasional. As regards severity, considering on one hand that ACAM is only one element in the oversight system and on the other hand that the airworthiness of individual aircraft is generally monitored by an approved Part-M Subpart G organisation, it is assumed to be minor.

Objectives

- 15. The specific objective of this Opinion is to reduce the identified safety risks and implementation problems by clarifying the requirements, in order to:
 - contribute to promoting a risk-based, flexible approach for the ACAM programme;
 - contribute to ensuring a common understanding among competent authorities of the proper use of KREs for the ACAM product surveys;

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⁷ See also NPA 2011-19 Section V 'Regulatory Impact Assessment'

- facilitate the exchange of information between authorities on non-compliances identified in the context of the ACAM programmes.

This should enhance the efficiency of the ACAM survey programmes, support standardisation, ensure uniform application, also for equal treatment of owners/operators subject to ACAM product surveys, facilitate cooperative oversight and ultimately contribute to improving the level of safety.

Analysis of the impacts

16. The changes proposed do not have any significant social, economic or environmental impacts and do not affect regulatory coordination and harmonisation.

Proportionality issues have been identified in relation to general aviation, in particular in the area of privately operated aircraft, or aircraft operated by aero-clubs or sport federations. The proposed changes, by allowing a more flexible, risk-based approach and removing the obligation for a root-cause analysis of all findings, are expected to reduce the burden as related to such aircraft. Exempting certain categories of aircraft from the ACAM requirements would require a separate rulemaking task, including a full regulatory impact assessment.

Cologne, dd Month YYYY

P. GOUDOU

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