



European Aviation Safety Agency Rulemaking Directorate

EXPLANATORY NOTE to

Decisions 2009/006/R, 2009/007/R and 2009/008/R

1. GENERAL

The AMC to Part-M, Part-145 and Part-66 published in the Executive Director Decision 2003/19/RM are amended by Decision 2009/006/R, Decision 2009/007/R and Decision 2009/008/R, to modify instructions for training of continuing airworthiness management organisation and maintenance organisation personnel for Fuel Tank Safety.

Note: These new Decisions do not replace the Decisions 2007/001/R, 2007/002/R and 2007/003/R previously published on 13/03/2007. They amend the AMC published under Decision 2003/019/RM as amended by all Decisions since published.

The Notice of Proposed Amendment (NPA 2008-16) has been subject to consultation in accordance with Article 52 of the Basic Regulation¹ and Article 15 of the Rulemaking Procedure established by the Management Board². For detailed information on the proposed changes and their justification please consult the above NPA which is available on the Agency's website.

The Agency has addressed and responded to the comments received to the NPA. The responses are contained in a comment-response document (CRD) which has been produced for this NPA (CRD 2008-16) and which is also available on the Agency's web-site.

The purpose of this Explanatory Note is to present the responses of the Agency to some reactions made further to the publication of the CRD.

2. CRD REACTIONS

In response to the CRD 2008-16, the Agency received the following reactions, which are reproduced below together with the Agency's response:

NPA Page(s)	Reaction to	Reaction by	Reaction:	Response:
0	(general reactions)	KLM Engineering & Maintenance	<p>General comments to CRD 2008-16 Fuel tank safety</p> <p>KLM Engineering & Maintenance refrains from commenting on a paragraph by paragraph basis and prefers to provide a general comment.</p> <p>Although we understand the necessity to take action in the aviation industry in the</p>	<p>This reaction questions the need for issuing instructions for the training of personnel based on the fact that it may seem disproportionate to ask for special training for maintenance personnel.</p> <p>This reaction should be more related to the NPA 22-2005 than to this NPA, because the training was introduced by this first NPA in 2005,</p>

¹ 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).


² Decision MB/08/2007 of the Management Board of the Agency of 13 June 2007 amending and replacing Decision MB/07/2003 concerning the procedure to be applied by the Agency for the issuing of Opinions, Certification Specifications and Guidance Material ("Rulemaking Procedure").

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			<p>wake of the TWA 800 accident , we feel the rulemaking that has been drafted up to now after so many years is <u>improper</u> , <u>inefficient</u> and even <u>counterproductive</u> from a safety point of view.</p> <p>We will elaborate on this below:</p> <p style="text-align: center;"><u>Improper:</u></p> <p>we believe the design of the fuel system and the associated instructions for continued airworthiness are of paramount importance in the prevention of unsafe system behaviour. The primary instruments at our disposal are the issuance of AD's, amendment of CS25 for newly built aircraft and amending the current maintenance program .</p> <p>Part 145 organisations have appropriately qualified Part 66 certifying staff that comply with the basic knowledge requirements and uphold their company license by being exposed to the relevant maintenance activities and the recurrent and continuous training on technical - organisational - and human factors issues. This licensed staff is pivotal in the proper execution of maintenance, inclusive maintenance on fuel systems; this licensed staff is also overseeing and mentoring non-certifying staff that in addition to that are already kept competent under Part 145.A.30(e) .</p> <p>Part 145 personnel can only use approved data which is reflected in the current maintenance program, translated into jobcards. It is already regulated in Part 145 that information on AD's, system layout- and configuration changes and changes in the maintenance program is mandatorily provided to Certifying Staff , which is , as already mentioned, pivotal staff in the proper execution of maintenance. E.g: No additional emphasis on fuel tank safety maintenance is needed.</p> <p>So why do we believe the rulemaking to be improper?: the proposed rulemaking under NPA2008-16 and the ED's 2007/001,-/002 and -003 is improper since it implicitly demands awareness and training on fuel system maintenance which in Part 145 is automatically provided for in the training processes that guarantee the Cert. Staff license validity and non -Cert. Staff competence.</p> <p>The rulemaking is also improper since these duplicate training requirements are regulated thru AMC material without corresponding rule change under 2042/2003 (as was done for Human</p>	<p>the CRD have been on consultation, commented and reacted. And at that time EASA had no comment from KLM engineering. Ref to the CRD 22-2005 at the following link: http://www.easa.europa.eu/ws_prod/r/doc/CRD-22-2005.pdf</p> <p>Therefore, EASA would have considered such opinion if it had been published at this time, but these instructions for a training were already published by Decisions 2007/001, 002 and 003 on March 2007. This NPA aimed only at alleviating the instructions for training following the publication of the decisions and following various remarks from stakeholders on practical aspects of the training.</p> <p>In addition, the Agency organised a workshop on 23 November 2007 in Cologne, which results are published on the web site at "Events", ref at the link: http://www.easa.europa.eu/ws_prod/g/g_events.php</p> <p>Two representatives of KLM Engineering as well as some representatives of AEA attended the workshop. No comment was made by KLM during the workshop nor by AEA representatives, refer to the slides "action from the workshop". It is understandable that EASA is confused by this reaction.</p> <p>Subsequently to this workshop EASA continued having regular meetings with the AEA association, in which the agency believe that KLM is represented, till December 2008. The purpose of the meeting was to finalise the content and the form of the training.</p> <p>The issue of fuel tank safety is a concern with the safety of aircraft. The Agency position is supported by the following. The accident occurred on TWA 800, as you mentioned, on 11 May 1990 a centre fuel tank explosion occurred on a Boeing 737-300 at Nimoy Aquino in the Philippines. On 3rd March 2001 there was an explosion aboard a Boeing 737-400 aeroplane that resulted in one fatality, a further explosion occurred in May 2006 on a Boeing 727 in India. Wiring fault or fuel pumps are each time suspected to be the fault of the ignition source.</p> <p>The table in NPA 2008/19 shows the list of 5 different aircraft involved in</p>

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			<p>factor training). There is no consultation of the Parliament and the Commission, in fact giving the Agency a free hand in dictating burdensome , unfair and inconsistent rulemaking without an obligation on the part of the Agency to explain why. Repeatedly in the CRD document the Agency states: <i>"The opinion of the Agency is that CDCCL needs a specific training to Part-145 personnel as described in the Appendix IV to AMC to Part-145"</i> (no reason given). And also : <i>"Although we agree that CDCCL warrants the same treatment as e.g. critical tasks, duplicate inspections etc., the opinion of the Agency is that knowledge on CDCCL should be imparted to the CAMO and maintenance organisation personnel, but with some degree of training depending on the position of the person in the organisations"</i> (no reason given).</p> <p>Also, since Local NAA's are given a free hand in their oversight of maintenance organisations on how to impart the "should" on CDCCL training, a non-level palying field will be the result across the EU member states. Of course , EASA's Standardization Directorate will have to check on the NAA's on conformity, by then it will however be too late for the Maintenance organisations.</p> <p>With this precedent in rulemaking we are , we believe, righteously concerned that nothing kan prevent the Agency in future to add an Appendix 5 to AMC 145.A.30 (e) on Flight Control maintenance and an Appendix 6 on Hydraulic system maintenance and so on. We believe the singling out of safety issues in the regulations is a very unwanted phenomenon and this has nothing to do with proper rulemaking, but is the product out of an emotional , irrational and political context in fact flouting , denying and weakening the current high standard of rulemaking under Part 145.</p> <p><u>Inefficient:</u></p> <p>The (proposed) rulemaking under NPA 2008-16 and mentioned ED's is inefficient since it proposes to train a large population in the part 145 organisation that does not have a "need to know" . For instance Accountable manager and maintenance management structure. We also do not train these persons for instance on Critical Tasks, FAA RII's , ETOPS requirements and so on. As already said , under the current maintenance organisation procedures information on more stringent design requirements and system awareness is</p>	<p>fuel tank explosion.</p> <p>The position of the Agency was not to remain passive in front of these accidents, but to take actions that would cover all aspects that may intervene on the safety of these aircraft. Design aspects have already been covered by instructions to the designers and operators by means of Airworthiness Directives, the NPA 2008/19 intends to provide new instructions to reduce the flammability of fuel tanks. The TC holder's maintenance data already provide instructions on these aspects, but it had been decided within the agency to cover these instructions with criteria for these training to the personnel in the CAMO and the maintenance organisations involved in the maintenance of these aircraft and components in order to ensure a reasonable training to these personnel.</p> <p>This is to say that for the reasons developed in this response, the Agency will not modify the next changes to AMCs, as they have been subject of intensive discussions already.</p> <p>However, as a result of these discussions with AEA, the last change brought in these instructions are the reduction of the course phase 2 to one day, therefore the Agency is convinced that this would not impact severely the work-plan of the organisations.</p>

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			<p>already transferred to the right technical people with a "need to know" .</p> <p>If an Agency decision of Fuel System Safety was really needed, why did the Agency not follow the same route as taken under Opinion 04-2008 on EWIS awareness and training for Cat A/B/C staff for Part 145 and Part 66 ? This is exactly the route we as KLM Engineering & Maintenance would have accepted on Fuel System Safety. Embedding CDCCL information in the Part 66 basic knowledge requirements and in the Part 145 Continuation Training process also would do away with the very burdensome and prohibitive two days training requirement for a much larger population .</p> <p style="text-align: center;"><u>Counterproductive:</u></p> <p>Singling out Fuel System Safety awareness and training imparts a special aura to this issue to the detriment of all the other structures- and systems items and tasks that need the same level of attention. This is an inherently unsafe situation.</p>	
0	(general reactions)	UK CAA	CRD to NPA 2008-16 – Fuel tank safety. Please be advised that the UKCAA has no comments on the above referenced document.	Thank you for this comment.
3	the response to comment #17 by Air Berlin on segment "A. EXPLANATORY NOTE - I. General"	Air Berlin	Such a response is not acceptable. If to EASA it "seems" not to be detailed enough, we would like to comment that to us it DOES seem detailed enough. In a democratic discussion, FACTS should be used instead of possibilities and personal attitudes. By the way, the feedback from our engineers and inspectors to the Fuel Tank Safety training programme is that it is a waste of time and money without any safety benefit. If there are EU member states where this is regarded differently, EASA should focus its standardisation efforts on these countries instead of creating ever more bureaucratic burden to those organisations who already took care a lot about the qualification of their employees.	Please refer to the response provided by the Agency here below at the response to comment #19 by Air Berlin on segment "B. DRAFT DECISIONS - II. Draft Decision on Annex II - AMC Part-145 - Appendix IV to AMC.
3	the response to comment #18 by Air Berlin on segment "A. EXPLANATORY NOTE - I. General"	Air Berlin	<p>The response does not really refer to the concerns raised. So again, it is personal attitude instead of facts. Changing an MOE is nothing you do for fun, no matter whether it is a minor amendment or whether it needs to be approved by the competent authority. By the way, this decision (what is minor and what needs to be approved) is not made by EASA, but by the NAA, so your comment does not help at all.</p> <p>Furthermore, you comment that a "hesitant organisation" does not comply with an AMC - ok, but it does not need to.</p>	<p>The new text states that <i>The persons who have already attended the Level 2 Detailed training course in compliance with ED decision 2007/002/R Appendix IV are already in compliance with Phase 2 with the exception of continuation training.</i></p> <p>The impact on training programme is therefore minimal.</p> <p>The indirect procedure initially proposed has finally been removed and the MOE needs being revised.</p>

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			<p>AMCs are non-binding material. So, if EASA wants to set-up CDCCL as a real standard, it should better not change on it too much.</p> <p>Finally, for obvious reasons we believe, there is no comment on our suggestion to launch some EASA funded programmes for a better motivation of persons and organisations (such as free training).</p>	<p>When referring to EASA funded programmes, we assume that you refer to training made by EASA? Some training is provided by EASA on Fuel Tank Safety to NAA personnel of accredited NAAs. See web page at:</p> <p>http://www.easa.europa.eu/ws_pr od/s/s_technicaltrainingoverview.p hp</p>
8-10	<p>the response to comment #52 by AEA</p> <p>on segment "B. DRAFT DECISIONS - I. Draft Decision on Annex I - AMC to Part-M - AMC M.A.706(f) Personnel requirements - Appendix XII to AMC to M.A.706(f) and M.B.102(c)"</p>	AEA	<p>We welcome the decision to allow the option of attending the course at distance with a film or an e-training method. However the final text does not reflect this, as it still states the following:</p> <p>(quote) "<i>Type: Should be a more in-depth internal or external course imparted by an instructor</i>" (endquote)</p> <p>We acknowledge that later in the text it is added:</p> <p>(quote) "<i>by attending a distance course including a film</i>" (endquote)</p> <p>Further more it is stated that</p> <p>(quote) "<i>the instructor must be very familiar with the content of (E)</i>" (endquote))</p> <p>Proposal:</p> <p>this wording is confusing and that the words "<i>imparted by an instructor</i>" and should be removed.</p> <p>For the last paragraph the requirement for the instructor should be preceded of "if imparted by an instructor"</p>	Agreed; the text of the Appendixes has been modified to link the qualification of the instructor to only the case where the training is provided in a classroom.
8-10	<p>comment #53 by AEA</p> <p>on segment "B. DRAFT DECISIONS - I. Draft Decision on Annex I - AMC to Part-M - AMC M.A.706(f) Personnel requirements - Appendix XII to AMC to M.A.706(f) and M.B.102(c)"</p>	AEA	<p>We welcome the decision to allow the use of a film as practical replacement of the requirement to access to aircraft and components to show CDCCL, as described in our comments not all the operators will have access to relevant components at the very time the trainings take place.</p>	Noted. The introduction of this flexibility was agreed during the meetings between the agency and AEA.
8-10	<p>the response to comment #45 by CAANL</p> <p>on segment "B. DRAFT DECISIONS - I. Draft Decision on</p>	AEA	<p>We welcome the decision to introduce such flexibility</p>	Noted. The introduction of this flexibility was agreed during the meetings between the agency and AEA.

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	Annex I - AMC to Part-M - AMC M.A.706(f) Personnel requirements - Appendix XII to AMC to M.A.706(f) and M.B.102(c)"			
8-10	the response to comment #8 by CAA-Norway on segment "B. DRAFT DECISIONS - I. Draft Decision on Annex I - AMC to Part-M - AMC M.A.706(f) Personnel requirements - Appendix XII to AMC to M.A.706(f) and M.B.102(c)"	EAMTC	Gentlemen please see comments from EAMTC in the attached file MCQ Alternatives.pdf (208.5kb) 	The Agency modified the Appendixes to AMC so that the number of answers to each question is left at the decision of operators and organisations to be decided between 3 and 4. However operators and organisations must be informed that EASA intends to create a central data bank for Part-66 which requires 4 answers per questions, which is already the case in the examination for JAR-OPS.
8-10	the response to comment # by (no commentator id specified) on segment "B. DRAFT DECISIONS - I. Draft Decision on Annex I - AMC to Part-M - AMC M.A.706(f) Personnel requirements - Appendix XII to AMC to M.A.706(f) and M.B.102(c)"	Juan Ramon MATEOS CASADO	Response given by EASA to comment 8 should not be acceptable because: Future Question Data Bank (QDB) is thought to be used only for BASIC TRAINING. Fuel Tank Safety training is required for Part-145 approved maintenance organisations. Most of Part-145 approved maintenance organisations have no relationship with basic training on their daily activities. Qualification training for the new endorsements of certifying staff and Part-145 continuation training, is taken over by associated Part-147 maintenance training organisations. Therefore, the examination standard commonly used by Part-145 approved maintenance organisations is the current type training standard based on three alternative answers. The impact of introducing a new question standard, only for FTS training, has not been analysed on NPA 2008-16. The use of questions with four alternative answers has a very expensive cost, because the software of current examination databases for all current type training organisations need to be upgraded to introduce this new standard. Additionally, an extension of period for FTS training to enter into force will be required to adapt the current examination software.	See answer brought to EAMTC here below.
8-10	the response to comment #78 by RECCHIA	AEA	AEA welcomed the additional guidance to develop the training material, however does not support the prescriptive	Further to the discussion that the Agency had with AEA related to this issue and the CRD, the agency

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	<p>Giuseppe Guido</p> <p>on segment "B. DRAFT DECISIONS - I. Draft Decision on Annex I - AMC to Part-M - AMC M.A.706(f) Personnel requirements - Appendix XII to AMC to M.A.706(f) and M.B.102(c)"</p>		<p>approach to set a minimum duration for the training.</p> <p>It is our opinion that the overall objective of the training is to convey the content of the proposed FTS training syllabus to individuals in the most efficient manner, if the guidance is too prescriptive it will delay this information getting out, ruining the whole purpose.</p> <p>Due to the numbers of mechanics (hundreds / thousands with some AEA members) to be trained, and because of the tight compliance time, many operators might choose to do an e-learning (or mixed in-classroom/e-learning, or progressive e-learning) course, for these cases we consider that 2 day duration requirement - as currently stated in the modified text does not make sense.</p> <p>According our education experts a 2 day training per e-learning is to much and the results will be minimal or even insufficient, therefore this requirement would invalidate the (much needed) possibility for e-learning.</p> <p>A 2 day minimum duration is way too prescriptive, and many small operators would find it very hard to comply with.</p> <p>Proposal</p> <p>The final text should not contained a minimum duration but a minimum syllabus, if the regulator feels that a minimum duration should be mandated, it should not exceed 1 day (or 8 hours).</p> <p>It is important to note that for e-learning the minimum duration should not imply that the required hours are performed within a natural day.</p>	<p>agreed to modify the text to ask for:</p> <ul style="list-style-type: none"> - a training which can be provided by attending a course in a classroom, - or by attending a distance course (e-learning) including a film. <p>The content of the course is described in the objectives and the guidelines, but it has been considered not acceptable that no recommended minimum duration was set, therefore it should be such that the course should not be less than a full day, or 8 hours.</p> <p>This was discussed during the meeting with AEA.</p>
12-14	<p>the response to comment #64 by AEA</p> <p>on segment "B. DRAFT DECISIONS - II. Draft Decision on Annex II - AMC Part-145 - Appendix IV to AMC 145.A.30(e) and 145.B.10(3)"</p>	AEA	<p>AEA still believes that dates should not be included in the body AMC text but rather in the introductory note, with the applicability provisions.</p>	<p>We agree that dates are usually introduced in Articles of the implementing rules, but when they are added as acceptable means of compliance, there is no contradiction in introducing dates in AMCs.</p> <p>Dates are already introduced in AMC in other paragraph, as AMC M.A.501 or 145.A.42.</p>
12-14	<p>the response to comment #19 by Air Berlin</p> <p>on segment "B. DRAFT DECISIONS - II. Draft Decision on Annex II - AMC Part-145</p>	Air Berlin	<p>The response is unacceptable. There is absolutely no benefit in renaming the "levels" to "phases", just bureaucracy.</p> <p>If it is basic working principle of EASA to reply to facts by "opinions", we should stop this whole process of NPAs and CRDs.</p>	<p>The changes brought by this NPA 2008-16 are the result of European concerns submitted by stakeholders following publication of Decisions 2007/001, 002 and 003R. This was the reason for the workshop at Cologne on 23 November 2007 to which AEA and European authorities were invited and participated. At</p>

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	- Appendix IV to AMC 145.A.30(e) and 145.B.10(3)"		It is not a democratic instrument then.	this workshop, concerns were raised about the terms "level" and some requests were made to modify the Decisions to clarify the sequential steps of training.