



ECA
Piloting Safety

CREW RESOURCE MANAGEMENT (CRM) TRAINING

A VIEW ON EASA NPA-2014-17

Updating EASA's rules on Crew Resource Management (CRM) training is an important and necessary step to further enhance flight safety. Representing over 38.000 commercial pilots from 37 European countries, ECA therefore strongly supports this endeavour and, since 2011, actively contributed to EASA's rule-making group on CRM Training.

EASA's **NPA 2014-17 contains important improvements**, both in terms of content and in terms of consistency. This is very welcome. At the same time **some of the proposed changes are problematic and need to be urgently addressed**.

CRM Training – an important but not an easy subject

The CRM concept is crucial to aviation safety; and recent accident investigation reports made this even more evident. At the same time CRM training is not an easy subject. It is hard to quantify, there is often a degree of confusion on definitions and meanings, and not least, it is prone to subjective assessments, resulting in differing interpretations and conclusions. If applied badly, it can be counter-productive at best, and be abused for non-safety related purposes at worst.

Successful CRM training – and its application in real-life operations – is therefore dependent on the buy-in of all related parties and a high level of trust in the system, especially from the pilots – who are the ones to be trained, and to apply CRM.

3 Pillars of CRM Training

To generate and maintain this trust and to set an adequate framework that allows CRM training to function (incl. in companies with a less mature safety culture, or in new start-ups), EASA's CRM training rules contain a number of crucial provisions:

- CRM training should not be 'check-relevant', i.e. must not lead to a failure during a check ride, when a pilot's license is at stake;
- CRM assessments should not be based on subjective terms, but must be linked to clearly understood terms like 'technical failure' to avoid subjective treatment.
- CRM methodology should be set up and maintained in close cooperation with the pilots and must therefore be agreed with flight crew representatives.

These three core provisions have proven to work very well over the past years, provide a clear framework, and helped to build and maintain trust in the system. To maintain the trust also in future, and to prevent that CRM gradually loses acceptance within the pilot community – and thereby its effectiveness as a safety-enhancement tool – maintaining these 3 ‘pillars’ is a prerequisite for a successful CRM training in future.

Removing the foundation of CRM training

Regretfully, EASA’s NPA-2014-17 proposes to remove these 3 pillars and thereby opens the door for the CRM concept to lose credibility, trust and support.

While proposing to remove these pillars, EASA does not provide convincing reasons as to why their removal is required. Furthermore, while there are welcome improvements contained in the NPA elsewhere, these improvements do not compensate the removal of the very foundations upon which CRM has been built.

Once CRM assessments become check-relevant, i.e. leading a pilot to fail a check ride and lose his/her pilot license, based on subjective terms and interpretations, and without a requirement for flight crew representatives to agree to the CRM training methodology, CRM will become open to (ab)use for other than safety-purposes.

This would be a major step backwards in the concepts of safety culture and ‘Just Culture’. Both concepts still have some way to go to be fully applied and rooted in the aviation sector. With commercial pressure and competition growing in the sector, it becomes even more important to strengthen the regulatory safety barriers that prevent safety margins from being eroded. The 3 above mentioned provisions are part of this ‘safety barrier’ and must therefore remain solidly enshrined in Europe’s future CRM training rules.

Commenting on NPA-2014-17

Europe’s pilots are convinced that CRM and the CRM-related training need to be strengthened to further enhance aviation safety in Europe. To do so, and to ensure CRM training benefits from the trust of those who are trained on CRM and who apply the concept in their daily operations – the pilots – the three pillars upon which CRM training has been built need to be maintained.

On behalf of Europe’s pilots, ECA therefore calls upon stakeholders to:

- comment on EASA’s NPA-2014-17 (deadline: 10 Oct. 2014);
- reject the proposed removal of the 3 pillars; and to
- request the related current rules to remain unchanged.

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Annex: Detailed comments on NPA-2014-17

24/09/2014

Annex: Detailed comments on the 3 Pillars in NPA-2014-17

Specific provision	Text proposed by EASA	ECA text suggestion	Justification / Reasoning
<p>AMC1 ORO.FC.115 &215 (h)</p>	<p>(Text deleted): <i>The assessment of CRM should not include any testing or checking of the flight crew or flight crew member's CRM performance</i></p>	<p>THE <u>CURRENT WORDING</u> IS TO BE MAINTAINED (BY REINSTATING THIS PARAGRAPH):</p> <p><i>The assessment of CRM should not include any testing or checking of the flight crew or flight crew member's CRM performance.</i></p>	<p>We strongly disagree with the deletion of the paragraph: “<i>The assessment of CRM should not include any testing or checking of the flight crew or flight crew member's CRM performance</i>” AMC1 ORO.FC.115&215 (h);</p> <p>CRM training is not an easy subject. It is hard to quantify, there is often some confusion on definitions and meanings and not at the least, it is prone to subjective assessments. It is obviously difficult for anyone to accept an evaluation which is subjective, rather than based on clearly defined criteria, concepts and terms. So the highest care must be taken that this does not happen when the license of a pilot is at stake during a check ride.</p> <p>This is not to say that there cannot be improvements flagged up to a pilot as regard to CRM, but CRM assessments – which will always contain subjective elements – should not be check-relevant, i.e. not lead to a failure during a check ride.</p> <p>This was an essential element built into the current system and must be maintained.</p>
<p>AMC1 ORO.FC.115 &215 (h) (6) (iii)</p>	<p>(...) <i>assessments should include behavior that contributes to a <u>significant reduction in safety margins.</u></i></p>	<p>THE <u>CURRENT WORDING</u> IS TO BE MAINTAINED (INSTEAD OF THE NEWLY PROPOSED ONE):</p> <p><i>(...) assessments should include behavior that contributes to a technical failure, such technical failure being errors leading to an event that requires debriefing by the person conducting the line check.</i></p>	<p>The current system based on the wording “<i>assessments should include behavior that contributes to a technical failure, such technical failure being errors leading to an event that requires debriefing by the person conducting the line check</i>” has worked and continues to work properly. Therefore there is no need to change it. ‘If not broken, don't fix it’.</p> <p>In addition the current proposal to amend it to “<i>assessments should include behavior that contributes to a reduction in safety margins, leading to an event that requires debriefing by the person conducting the test or check</i>” is highly problematic and would have negative consequences</p> <p>First, it detaches the CRM assessment from a clearly understood concept– a ‘technical failure’. It replaces ‘technical failure’ with a very subjective “reduction in safety margins”.</p> <p>Second, this “reduction in safety margins” is undefined and wide open for different interpretation, leading to potentially differing and contested conclusions and uneven implementation. (see also our comment on AMC1 ORO.FC 230 b) (3) iii) re. “subjective assessments”)</p> <p>Therefore, the newly proposed text makes the CRM evaluation subjective and hence difficult to implement, to apply uniformly and without opening to door to contested interpretations and potential abuse.</p> <p>Hence, the current wording is to be maintained.</p>

<p>AMC1 ORO.FC 230 b) (3) iii)</p>	<p><i>CRM assessment alone should not be used as a reason for a failure of the line check, unless the observed behavior contributed to a significant reduction in safety margins.</i></p>	<p>THE CURRENT WORDING IS TO BE MAINTAINED (WITHOUT THE NEWLY PROPOSED ADDITION):</p> <p><i>CRM assessment alone should not be used as a reason for a failure of the line check.</i></p>	<p>If EASA's proposed additional wording is used, CRM may be used to fail or pass a pilot without a clear, objective impact of the overall performance (and based only upon a subjective, non-defined "safety margins").</p> <p>This change repeats one of the changes to 'Assessment of CRM skills' in paragraph (h) of AMC1 ORO.FC.115.</p> <p>The CRM concept is hard to quantify, there is often some confusion on definitions and meanings and not at the least, it is prone to subjective assessments.</p> <p>In fact the term "subjective assessments" already beholds one of our main concerns. It is obviously difficult for anyone to accept an evaluation which is subjective, rather than based on clearly defined criteria, concepts and terms. So the highest care must be taken that this does not happen when the license of a pilot is at stake during a check ride.</p> <p>This is not to say that there cannot be improvements flagged up to a pilot as regard to CRM, but CRM assessments – which will always contain subjective elements – should not be check-relevant, i.e. not lead to a failure during a check ride. This was an essential element built into the current system and must be maintained.</p> <p>We therefore strongly oppose using CRM to fail or pass a pilot without a clear, objective impact on the overall performance and based only upon a subjective "safety margins" definition. Hence, the proposed additional wording should be deleted.</p>
<p>AMC1 ORO.FC.115 &215 (h)</p>	<p>(Text deleted): <i>In order to enhance the effectiveness of the program, this methodology should, where possible, be agreed with flight crew representatives.</i></p>	<p>THE CURRENT TEXT IS TO BE MAINTAINED (INSTEAD OF THE NEWLY PROPOSED ONE):</p> <p><i>In order to enhance the effectiveness of the program, this methodology should, where possible, be agreed with flight crew representatives.</i></p>	<p>We strongly disagree with the deletion of the paragraph "In order to enhance the effectiveness of the program, this methodology should, where possible, be agreed with flight crew representatives." AMC1 ORO.FC.115&215 (h).</p> <p>The proposal to exclude Flight Crew Representatives, i.e., Pilots, from the process of developing an effective method of assessment of CRM skills is a major step backwards in the concepts of Safety and Just Cultures, especially combined with the requirement to assess pilots in CRM skills regardless of the outcome of the operation.</p> <p>The combination of a subjective assessment (based on an undefined term of 'reduction is safety margins' which is open to subjective interpretations), the check-relevance of CRM assessments, and the exclusion of pilots from the whole process in which the methodology is developed is in our view a very counter-productive proposal of this NPA.</p> <p>The provision that "<i>methodology, should, where possible, be agreed with flight crew representatives</i>" was a key requirement when CRM was introduced.</p> <p>All stakeholders were very much aware that a successful CRM introduction would only be possible if there was enough trust in the system. In order to guarantee that trust the requirement to involve flight crew representatives had</p>

			<p>been included on purpose. This requirement has shown its benefit since.</p> <p>There are some who may argue that CRM is now well established and thus such a requirement might no longer be necessary. Although there are indeed airlines where CRM is nowadays uncontested, this regrettably is not the case everywhere. Even in well established companies, the safety culture and Just Culture environment are not always as developed as they should be. In particular in such an environment, this provisions remains key to ensure CRM is widely accepted, is seen as a safety tool and is not abused to 'get rid of the rotten apples'. This provision is still very necessary to build and keep the trust in the CRM system.</p> <p>Also, new start-ups that cannot bank on a long-built trust and an established mature safety culture within the company. They will have to go through the process from scratch and the provision will therefore be necessary.</p> <p>Furthermore, we do not see a contradiction with the fact that "State laws regulate agreements between company owners and employee representatives". The requirement to include flight crew representatives in the process of developing an effective method of assessment of CRM skills, is not an industrial issue but a technical one, which is necessary to ensure CRM is understood and used as a safety tool and benefits from the trust of all involved.</p> <p>Finally, in companies where the current system of consulting flight crew representatives works well and has shown its benefits, the retention of the current text will not entail any disadvantages (while the deletion might well have negative consequences over time). In companies where the system does not work properly, or in newly set-up companies, the retention of this wording will make a significant positive difference.</p> <p>For these reasons we strongly recommend to leave this essential requirement in the text. If we pull out the guarantee that ensures trust, we risk damaging all the benefits that CRM brings to the aviation safety system.</p>
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