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European Aviation Safety Agency

Inspector's qualification and training – terms used in the AMC

CRM in practice – NAA workshop
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The issue

➤ Problem

- AMC3 ARO.GEN.200(a)(2) on qualification and training of inspectors as regards CRM causes difficulties
 - Certain terms are not understood

➤ Way forward

- To present initial explanation of terms
- To discuss with you
- To publish as safety promotion or GM (?)



(a) of AMC3 ARO.GEN.200(a)(2)

QUALIFICATION AND TRAINING — CREW RESOURCE MANAGEMENT (CRM)

For the oversight of the operator's CRM training, the inspectors of the competent authority should be qualified and trained as follows:

(a) Qualification

To fulfil the qualification provisions, inspectors should:

- (1) have adequate knowledge of the relevant flight operations;
- (2) have adequate **knowledge of human performance and limitations (HPL)**;
- (3) have completed initial CRM training;
- (4) have received additional **training in** the fields of **group management, group dynamics and personal awareness**; and
- (5) have **experience in the assessment of the effectiveness of training programmes and management systems**.



(b) of AMC3 ARO.GEN.200(a)(2)

(b) Training

The **training** of inspectors should be both theoretical and practical, and **should include**:

- (1) in-depth knowledge of the CRM training elements as laid down in Part-ORO; and
- (2) **specific skills for the oversight of the operator's CRM training including the assessment of non-technical skills using proper techniques and methodologies.**



No 1 - HPL

Term	Explanation
<p>‘... knowledge of human performance and limitations (HPL) ...’</p>	<p>Detailed syllabus for HPL in AMC/GM to Reg. 1178/2011:</p> <ul style="list-style-type: none">➤ Subpart D – commercial pilot licence – CPL<ul style="list-style-type: none">➤ AMC1 FCL.310; FCL.515 (b); FCL.615 (b)<ul style="list-style-type: none">➤ Learning Objectives (LOs)<ul style="list-style-type: none">➤ H. Subject 040 – human performance and limitations <p><i>Syllabus covers:</i></p> <ul style="list-style-type: none">• <i>human factors: basic concepts</i>• <i>basics of flight physiology</i>• <i>basic aviation psychology</i>



No 2 – group management

Term	Explanation
<p>‘... training in ... group management ...’</p>	<p>‘group management’ can be described as: training on the act, manner or practice of managing a group</p> <p><i>Examples of training topics:</i></p> <ul style="list-style-type: none">• <i>influencing and motivating others</i>• <i>situational leadership</i>• <i>preventing and managing conflicts</i>



No 3 – group dynamics

Term	Explanation
<p>‘... training in ... group dynamics ...’</p>	<p>‘group dynamics’ can be described as: training on the nature of human groups, their development, and their interactions with individuals and with other groups</p> <p><i>Examples of training topics:</i></p> <ul style="list-style-type: none">• <i>team building and team structures</i>• <i>techniques for collaborative working and collaborative decision making</i>• <i>preventing and managing conflicts</i>



No 4 – personal awareness

Term	Explanation
<p>‘... training in ... personal awareness ...’</p>	<p>‘personal awareness’ or ‘self-awareness’ can be described as:</p> <p>the accurate appraisal and understanding of your abilities and preferences and their implications for your behaviour and their impact on others</p> <p><i>Examples of training topics:</i></p> <ul style="list-style-type: none">• <i>developing emotional intelligence</i>• <i>developing self-critical attitude</i>• <i>accepting feedback from others</i>



No 5 – assessment of effectiveness (1)

Term	Explanation
<p>‘...experience in the assessment of the effectiveness of training programmes and management systems ...’</p>	<p>‘experience’ can be gained by starting as a trainee supporting an inspector during his or her inspections, including preparation and wrap-up</p> <p>The competent authority then decides when the trainee has the necessary qualification as regards experience</p>



No 5 – assessment of effectiveness (2)

Term	Explanation
<p>‘...experience in the assessment of the effectiveness of training programmes and management systems ...’</p>	<p>In the context of CRM skills, assessment is described as ‘the process of observing, recording, interpreting and debriefing’*</p> <p>In the present context the same approach should be applied</p> <p>* (h) of AMC1 ORO.FC.115</p>



No 5 – assessment of effectiveness (3)

Term	Explanation
<p>‘...experience in the assessment of the effectiveness of training programmes and management systems ...’</p>	<p>The effectiveness of training programmes can be assessed by:</p> <ul style="list-style-type: none">• using the checklist for CRM training oversight in GM3 ARO.GEN.300(a);(b);(c)• interviewing the operator and examining the appropriate operator’s documents <p><i>Indicators for effectiveness:</i></p> <ul style="list-style-type: none">• <i>quality of training itself</i>• <i>integration of CRM topics in the overall training context</i>



CHECKLIST FOR CRM TRAINING OVERSIGHT

The following list includes the major elements for the monitoring of the operator's CRM training:

- (a) development of CRM training considering the operator's management system;
- (b) content of the CRM training syllabus;
- (c) qualification of CRM trainer;
- (d) training facilities (classroom, FSTD, aircraft, cabin training device);
- (e) training methods (classroom training, computer-based training, line-oriented flight training, check or test);
- (f) training analysis (pre-course study, integration of different training methods, competence of trainer, assessment of crew, effectiveness of training).



No 5 – assessment of effectiveness (4)

Term	Explanation
<p>‘...experience in the assessment of the effectiveness of training programmes and management systems ...’</p>	<p>The effectiveness of management systems, related to CRM, can be assessed by interviewing the operator and examining the appropriate operator’s documents</p> <p><i>Indicators for effectiveness:</i></p> <ul style="list-style-type: none">• <i>hazards and risks identified by management system are addressed in CRM training</i>• <i>reporting culture</i>



No 6 – training of skills for the oversight

Term	Explanation
<p>‘... training of ... specific skills for the oversight of the operator’s CRM training ...’</p>	<p>Basis is the checklist for CRM training oversight in GM3 ARO.GEN.300(a);(b);(c)</p> <p><i>Possible options for such a training:</i></p> <ul style="list-style-type: none">• <i>Authority develops a detailed training syllabus, if needed with external support</i>• <i>Inspector attends such a training offered by a training organisation</i>



No 7 – training of assessment (1)

Term	Explanation
<p>‘... training of ... assessment of non-technical skills using proper techniques and methodologies.’</p>	<p>(h) of AMC1 ORO.FC.115: ‘Assessment of CRM skills is the process of observing, recording, interpreting and debriefing ...’</p> <p>GM6 ORO.FC.115 on non-technical skills assessment (NOTECHS)</p>



No 7 – training of assessment (2)

Term	Explanation
<p>‘... training of ... assessment of non-technical skills using proper techniques and methodologies.’</p>	<p><i>Possible options for such a training:</i></p> <ul style="list-style-type: none">• <i>Authority develops a detailed training syllabus, if needed with external support</i>• <i>Inspector attends such a training offered by a training organisation or an operator, which preferably offer trainings for CRM trainers</i>



- Initial explanation of terms hopefully clarifies to a certain extent
- Further input is appreciated
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The End

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