

Crew Resource Management (CRM) training

Compliance checklist

Scopo

This document provides the Operator/CAA with guidance on determining whether an operator applying for approval of CRM training course, is meeting compliance to requirements included in Reg.(EU) n.965/2012 and AMC/GM included in the Decision 2015/22/R of 25 september 2015.

Assessing the performance markers

- **Applicable (A)**

There is evidence that the 'marker' is **clearly visible and is documented** within the Organisation's Documentation (OM/D) .
The marker is suitable based on the size, nature, complexity and the inherent risk in the activity .

- **Not Applicable (N/A)**

The 'marker' is not applicable to the Operator, based on procedures, size or nature of the operations.

References

- Reg.(EU) n.965/2012, Sub Part ORO.FC, ORO.CC, ORO.TC
- Decision 2015/22/R del 25 settembre 2015

Information

- Requirements/AMC in ORO.FC/CC/TC.1XX are applicable to all commercial and non-commercial operators in accordance with ORO.FC.005.(CAT, NCC, SPO, SPO non-commercial SPO with complex motor-powered aircraft).
- Requirements/AMC in ORO.FC.2XX are applicable to commercial air transport operations (CAT) with the exception reported in ORO.FC.005(b) . Subjects in the checklist are grey shaded.
- Training programme for CAT Operations shall be approved by ENAC.
- Means of Compliance and guidance material included in Decision EASA 2015/22/R are applicable from **01 October 2016**.

Marker	A	N/A	OM Reference	Remarks
A	COMMON GENERAL REQUIREMENTS Flight Crew (AMC1 ORO.FC.115) & Cabin Crew (AMC1 ORO.CC.115(e))			
1	Elements of CRM training are included in: <ul style="list-style-type: none"> ✓ aircraft type or class training ✓ recurrent training ✓ the command course 			
2	CRM training is conducted in <ul style="list-style-type: none"> - non-operational environment (classroom and computer-based) and - operational environment (FSTD and/or aircraft) 			
3	Classroom training is conducted in a group session away from the pressures of the usual working environment.			
4	CRM Computer-based training is conducted as a complementary training method (not stand-alone)			
5	When practicable, relevant parts of Flight Crew CRM training are conducted in FSTDs			
6	Whenever practicable, relevant parts of Cabin Crew CRM training are conducted in representative cabin training devices that reproduce a realistic operational environment, or in the aircraft.			
7	CRM principles are integrated into relevant parts of flight and cabin crew training and operations including checklists, briefings, abnormal and emergency procedures.			
10	CRM training addresses hazards and risks identified by the operator's management system described in ORO.GEN.200.			
11	CRM training is an essential element of ATPQ/EBT.			
12	If the operator chooses not to establish its own CRM training (<i>initial & recurrent</i>), third party or a training organisation or another operator is contracted to provide the training in accordance with ORO.GEN.205 (<i>Contacted activities</i>).			
13	In case of contracted CRM training (i.a.w. ORO.GEN.205), the operator ensures that the content of the course covers the specific culture, the type of operations and the associated procedures of the operator reported in his OM.			

Marker	A	N/A	OM Reference	Remarks
14	CRM training is provided by: (1) classroom training by: flight crew CRM trainer (2) training in the operational environment by: instructor i.a.w. Reg 1178/2011 (3) computer-based training as : self-study training method (GM2 ORO.FC.115)			
B FLIGHT CREW INITIAL OPERATOR'S CRM TRAINING				
1	Before operating, the flight crew member receives CRM training, appropriate to his/her role, as specified in the OM (ORO.FC.115(a))			
2	The flight crew member completes the initial operator's CRM training once. If type of operation of a new operator is not different, it is not required to provide the initial operator's CRM training to this FCM a second time. (AMC1 ORO.FC.115(b))			
3	The initial training should cover all elements specified in Table 1 (AMC1 ORO.FC.115(g))			
4	Initial operator's CRM training appropriate time: - 18 h with a minimum of 12 h in classroom training for multi pilot ops. - 6 h for single pilot operations (GM3 ORO.FC.115(a))			
5	For single-pilot helicopter operations with technical crew, AMC1 ORO.FC.115 is applied including initial CRM training at point b). (AMC2 ORO.FC.115)			
6	For single-pilot helicopter operations with NO technical crew, training covers the relevant CRM training, including initial operator's training and focuses on the elements specified in Table 1 which are relevant to single-pilot operations.			
7	Initial CRM training (classroom CRM training) is conducted by one CRM trainer who is qualified as specified in AMC3 ORO.FC.115 and may be assisted by experts in order to address specific areas (ORO.FC.215 - AMC1 ORO.FC.215)			
8	The flight crew member has completed, before or combined with the initial CRM training, a theoretical course provided by the operator and based on the human performance and limitations syllabus for the ATPL as established in Annex I (Part-FCL) to Regulation (EU) No1178/2011 the ATPL level (If he/she has not previously received theoretical training in human factors to ATPL level only) (ORO.FC.215)			

Marker	A	N/A	OM Reference	Remarks
9				
Flight crew member completes an initial CRM training course before commencing unsupervised line flying. (ORO.FC.215)				
C FLIGHT CREW OPERATOR'S CONVERSION COURSE - CRM TRAINING				
1				
When F.C.M. undertakes a conversion course with a change of aircraft type or change of operator, elements of CRM training are integrated into all appropriate phases of the OCC as specified in Table 1 of AMC1 ORO.FC.115 (ORO.FC.115(c))				
2				
Personnel integrating elements of CRM into conversion training are suitably qualified, as specified in AMC3 ORO.FC.115 - CRM trainers. (AMC1 ORO.FC.220(a)(5))				
3				
In planning OCC flight training , practice LOFT with emphasis on CRM, and use of crew coordination procedures, including incapacitation (AMC1 ORO.FC.220 (d)(2))				
4				
Threat and Error Management (TEM) and Crew Resource Management (CRM) principles are integrated into the UPRT . (surprise and startle effect, the importance of resilience development). (GM1 ORO.FC.220&230)				
D FLIGHT CREW RECURRET TRAINING & CHECKING				
1				
R.T. - Operators provides combined training for flight crew, cabin crew and technical crew during recurrent CRM training, expanded to include medical passengers, if applicable to the operation				
2				
Combined CRM training is conducted by flight crew CRM trainer or cabin crew CRM trainer.				
3				
R.T. - Operators updates CRM recurrent training programme over a period not exceeding 3 years. The revision of the programme takes into account information from the operator's management system including the results of the CRM assessment. (AMC1 ORO.FC.115(d))				
4				
R.T. - Minimum appropriate training time for combined CRM training is 6 h over a period of 3 years (GM3 ORO.FC.115)				
5				
R.T. - Elements of CRM as specified in Table 1 of AMC1 ORO.FC.115 are integrated into all appropriate phases of the recurrent training. - All CRM training elements are covered over a period not exceeding 3 years. (AMC1 ORO.FC.230)				

	Marker	A	N/A	OM Reference	Remarks
6	R.T. - Integration of CRM elements into all the phases of the R.T. is provided by all the personnel conducting R.T.; (AMC1 ORO.FC.230)				
7	R.T. - All personnel conducting recurrent training are suitably qualified to integrate elements of CRM into training; (AMC1 ORO.FC.230(d))				
8	R.T. - Crew Resource Management (CRM) principles are integrated into the UPRT (GM1 ORO.FC.220&230)				
9	Line checks are conducted by a suitably qualified commander nominated by the operator, trained in CRM concepts and in the assessment of CRM skills specified in the Operator's OM. (ORO.FC.230(c))				
10	Line check – The Flight Crew is assessed on CRM skills (NOTECHs) in accordance with the methodology described in AMC1 ORO.FC.115(h) and specified in the OM (AMC1 ORO.FC.230(b)(3))				
11	Line check - CRM assessment is not used as a reason for failure of line check, unless the observed behavior could lead to an unacceptable reduction in safety margin. (AMC1 ORO.FC.230(b)(3))				
12	Line check – The person conducting the line check assesses CRM based on observations made during the initial briefing, cabin briefing, flight crew compartment briefing and phases where he/she occupies the observer's seat (AMC1 ORO.FC.230(b)(3))				
13	OPC - OPC is conducted by a TRE/CRE or SFE trained in CRM concepts and the assessment of CRM skills (AMC1 ORO.FC.230(d)(5)(i))				
14	ATQP - CRM training is an essential element of the ATQP (if applied by the Operator). Operator's documentation details how the programme integrate CRM in all aspects of training (AMC1 ORO.FC.115(a)(8)(ii))				
15	ATQP - Personnel who perform training and checking of ATQP receive additional training on behavioral markers and the systemic assessment of CRM (AMC1 ORO.FC.A.245)				
16	Command Course includes CRM training as specified in Table 1 of AMC1 ORO.FC.115 (AMC1 ORO.FC.115(e))				
E	FLIGHT CREW - SINGLE PILOT OPERATIONS (AMC2 ORO.FC.115(a))				

	Marker	A	N/A	OM Reference	Remarks
1	For single-pilot helicopter operations with TC , operator applies AMC1 ORO.FC.115 (CRM TRAINING — MULTI-PILOT OPERATIONS) .				
2	Training covers the relevant CRM training, i.e. initial operator's training, operator conversion course and recurrent training				
3	CRM training focus on the elements specified in Table 1 of (g) of AMC1 ORO.FC.115 which are relevant to single-pilot operations				
4	Computer-based training may be conducted as a stand-alone training method.				
5	For operations with ELA2 a/c the relevant CRM training and its duration is determined by the operator, based on the aircraft type and the complexity of the operation.				
F	FLIGHT CREW - ASSESSMENT OF CRM SKILLS (AMC1 ORO.FC.115(h))				
1	Assessment of CRM skills is the process of observing, recording, interpreting and debriefing crews and crew member's performance using an accepted methodology				
2	Flight CMs CRM skills are assessed in the operational environment (FSTD or aircraft)				
3	The assessment of CRM skills: (i) includes debriefing the crew and the individual crew member; (ii) serves to identify additional training, and (iii) used to improve CRM training by evaluating all de-identified CRM assessments.				
4	A detailed description of the CRM methodology, including the required CRM standards and the terminology used for the assessment, is published in the operations manual.				
5	The assessment is based on only observable behaviours and Includes behaviour that results in an unacceptable reduction in safety margins				
6	Operator establishes procedures, including additional training, in case FCM does not achieve or maintain the required CRM standards				
7	NOTECS markers are assessed by a rating scale established by operator (GM6)				
G	FLIGHT CREW - CRM TRAINER (responsible for classroom CRM training)				
1	Qualification - Operator establishes a training and standardisation programme for qualification of flight crew CRM trainers (AMC3 ORO.FC.115)				
2	Qualification - Fight crew CRM trainer is suitably qualified (AMC3 ORO.FC.115(b)(2)/(3)				

Marker	A	N/A	OM Reference	Remarks
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				

Marker	A	N/A	OM Reference	Remarks
15				
16				
17				
18				
19				
H CABIN CREW - OPERATOR'S CRM TRAINING				
1				
2				
3				
4				
I CABIN CREW - AIRCRAFT TYPE CONVERSION CRM TRAINING				

	Marker	A	N/A	OM Reference	Remarks
1	CC operator's conversion training on an aircraft type, the applicable CRM training elements are those specified in Table 1 of AMC1 ORO.CC.115 (g)				
2	CRM training covered during the operator aircraft type conversion training is conducted by at least one cabin crew CRM instructor <i>AMC1 ORO.CC.125(d),(h)</i>				
L	CABIN CREW - ANNUAL RECURRENT CRM TRAINING				
1	All CRM training elements specified for the "annual recurrent training" column in Table 1 of (g) are covered over a period not exceeding 3 years. <i>(AMC1 ORO.CC.115(e),(d)(1))</i>				
2	Operator updates recurrent CRM training programme over a period not exceeding 3 years. <i>(AMC1 ORO.CC.115(e),(d)(2))</i>				
3	Minimum appropriate training time for combined CRM training: 6 training hours over a period of 3 years <i>(GM2 ORO.CC.115(e))</i>				
M	CABIN CREW - SENIOR CABIN CREW MEMBER COURSE				
1	CRM training for SCCM consists in the application of knowledge gained in previous CRM training and operational experience relevant to the specific duties and responsibilities of a SCCM. <i>(AMC1 ORO.CC.115(e))</i>				
2	CRM training elements are integrated into the training, as specified in Table 1 of (g). <i>(AMC1 ORO.CC.115(e))</i>				
3	The SCCM training course shall cover all duties and responsibilities of SCCMs and shall include elements of human factors and CRM <i>(ORO.CC.200)</i>				
N	CABIN CREW - SINGLE CABIN CREW OPERATIONS				
1	CRM training is focus on the elements specified in Table 1 of AMC1 ORO.CC.115(e),(g) which are relevant to single cabin crew operations. <i>(AMC2 ORO.CC.115(e))</i>				
2	Computer-based training may be conducted as a stand-alone training method for a CCM operating on aircraft with a MOPSC of 19 or less. <i>(AMC2 ORO.CC.115(e))</i>				
3	CRM training for single cabin crew operations minimum appropriate time : - 4 training hours for a cabin crew member operating on aircraft with a MOPSC of 19 or less <i>(GM2 ORO.CC.115(e))</i>				

Marker	A	N/A	OM Reference	Remarks
O CABIN CREW CRM TRAINER (responsible for classroom CRM training)				
1				Qualification - Operator establishes a training and standardization programme for qualification of cabin crew CRM trainers (AMC3 ORO.CC.115(e))
2				Qualification - Cabin crew CRM trainer is suitably qualified i.a.w. points (i) to (vi) in AMC3 ORO.CC.115(e),(b)(2)
3				Qualification – An experience CRM trainer may become CC CRM training if demonstrates requirement in AMC3 ORO.CC.115(b)(2)
4				Qualification - Trainers (or instructors) who integrate CRM elements into the aircraft type training, R.T. or SCCM training do not need to fulfill the CRM trainer requirements but have acquired relevant knowledge of human performance and limitations, and have completed appropriate CRM training. (AMC3 ORO.CC.115(e),(a)(2))
5				Training of cabin crew CRM trainers is both theoretical and practical including the development of specific trainer skills, particularly the integration of CRM into line operations (AMC2 ORO.CC.115(e),(c))
6				Basic Training of CC CRM trainers includes training elements for CC as specified in Table 1 of AMC1 ORO.CC.115(e) and, in addition, the training training elements at point (i) to (iii) of AMC3 ORO.CC.115(e),(c)(2).
7				Training of cabin crew CRM trainers is conducted by cabin crew CRM trainers with a minimum of 3 years' experience. (AMC3 ORO.CC.115(e),(c)(4)).
8				Training - Minimum appropriate training times basic training : - 18 h when the operator can justify that the trainee already has received sufficient and suitable instruction on training skills in order to conduct CRM training courses , or - 30 h for trainees not fulfilling <i>previous point</i> (GM3 ORO.FC.115)
9				Assessment - Cabin crew CRM trainer is assessed by the operator when conducting the first CRM training course. This first assessment is valid for a period of 3 years. (AMC3 ORO.CC.115(e),(d)(1))
10				Assessment – Operator describes the assessment process in the O.M. (methods for observing, recording, interpreting and debriefing the flight crew CRM trainer (AMC3 ORO.CC.115(e),(d)(2))

	Marker	A	N/A	OM Reference	Remarks
11	Assessment - Operator has a method/tool (checklist) to assess CRM trainer (GM5 ORO.CC.115(e))				
12	Assessment - All personnel involved in assessment must be credible and competent in their role (AMC3 ORO.CC.115(e),(d)(2))				
13	Assessment - For assessing flight crew CRM trainers, the operator nominates experienced flight crew CRM trainers who have demonstrated continued compliance with the provisions for a flight crew CRM trainer and capability in that role for at least 3 years or may employ a contractor(GM5 ORO.CC.115(e))				
14	Assessment - operator does not have the resources to conduct the assessment and employs a contractor. (GM5 ORO.CC.115(e))				
15	Recency of the 3-year validity period: <ul style="list-style-type: none"> - conduct at least 2 CRM training events in any 12-month period; - be assessed within the last 12 months of the 3-year validity period by the operator; and - complete CRM trainer refresher training within the 3-year validity period. (AMC3 ORO.FC.115(e))				
16	Renewal (when not fulfilling recency provisions) <ul style="list-style-type: none"> - comply with the qualification and assessment provisions as in AMC3 ORO.CC.115(e),(b)&(d) - complete CRM trainer refresher training as in AMC3 ORO.CC.115(e),(c)(3) (AMC3 ORO.FC.115(e))				
17	The refresher training of flight crew CRM trainers includes new methodologies, procedures and lessons learned. (AMC3 ORO.CC.115(e),(c)(3))				
18	Refresher training - Minimum appropriate training times: - 6 training hours (GM2 ORO.CC.115(e))				
P	TECHNICAL CREW				
1	The technical crew training programme for initial, operator conversion and recurrent training includes relevant CRM training elements as specified in AMC1 ORO.FC.115 (AMC1 ORO.TC.110(a))				



Compliance checklist for EASA Crew Resource Management (CRM) training

Ed. n. 1
30/08/2016

	Marker	A	N/A	OM Reference	Remarks
2	Initial training - Before undertaking the operator conversion training, each technical crew member completes initial training, including communication and relevant CRM elements of ORO.FC.115 and ORO.FC.215 (<i>ORO.TC.115</i>)				
3	Operator conversion training - Each technical crew member completes operator conversion training, including relevant CRM elements before being first assigned by the operator or when changing to a different aircraft type or class (<i>ORO.TC.120</i>)				
4	R.T. - Within every 12-month period, each technical crew member undergoes recurrent training. Elements of CRM are integrated into all appropriate phases of the recurrent training . (<i>ORO.TC.135</i>)				
5	R.T. - All major topics of the initial CRM training are covered over a period not exceeding 3 years (<i>ORO.TC.135</i>)				

OPERATOR :	DATE:	SIGNATURE CMM : Nominated Person CREW TRAINING:
-------------------	--------------	--