

EASA Decision 2015/22/R

ENAC experience

Part I

point of view of ENAC Regulation Dept

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Ente Nazionale Aviazione Civile



Cologne, 8 November 2016

DECISION 2015/22/R dated 25 september 2015



European Aviation Safety Agency

Explanatory Note to Decision 2015/022/R

Crew resource management (CRM) training

‘AMC and GM to Part-ARO — Issue 3, Amendment 1;
AMC and GM to Part-ORO — Issue 2, Amendment 3; and
AMC and GM to Part-SPA — Amendment 2’

RELATED NPA/CRD 2014-17 — RMT.0411 (OPS.094) — 25.9.2015

EXECUTIVE SUMMARY

This Decision addresses a safety issue related to crew resource management (CRM) training. The Safety Recommendations linked to this issue were addressed during the development of this proposal.

The objective of this proposal is to establish and maintain a high uniform level of safety in air operations by reviewing, amending and expanding the Acceptable Means of Compliance (AMC)/Guidance Material (GM) on CRM training.

This Decision introduces new items to be incorporated in the present applicable framework for CRM training. Such items are provisions for qualification and training of inspectors of competent authorities, expanded provisions for CRM trainers, provisions for computer-based training, CRM training and management system, competency-based CRM training, resilience development, surprise and startle effect, CRM training for single-pilot and single cabin crew operations, etc. In addition, with this Decision the present AMC/GM have been restructured and rephrased to improve the clarity and readability of the text.

The proposed amendments are considered to establish a more practicable and more effective framework for CRM training. These amendments will provide operators with more reliable tools to mitigate further CRM-related risks and hazards and, therefore, are expected to increase safety during all phases of flight.

This Decision is related to Part-ARO, Part-ORO and Part-SPA of Commission Regulation (EU) No 965/2012. In addition, Decision 2015/022/R amends the GM to Part-CC of Commission Regulation (EU) No 1178/2011 as regards CRM training.

DECISION 2015/22/R dated 25 september 2015

Measures to improve CRM trainings:

- Establishing a minimum level of training for FOI
- Reviewing, amending, expanding CRM AMC/GM
- Restructuring and rephrasing CRM AMC/GM
- Modernisation, incorporating new items
- Expanded to include all operations where part ORO applies



ENAC Regulation Department responsibilities:

- ✓ **Study and understand new subjects**
- ✓ **Assess differences with previous AMC/GM**
- ✓ **Update ENAC web page**
- ✓ **Establish required training for FOI**
- ✓ **Produce a tool for transition**
- ✓ **Standardize process & answer to questions from regional offices**

ENAC Regulation Department responsibilities

Study and understand new subjects:

AIR OPS rules, AMC/GM and CS-FTL.1 – rev. September 2014

Annex

AMC1 ORO.FC.115&215 Crew resource management (CRM)

CRM TRAINING — CAT OPERATIONS

(a) General

CANCELLED

AMC1.1 ORO.FC.115&.215 Crew resource management (CRM) training

CRM TRAINER

AMC1 ORO.CC.115(e) Conduct of training courses and associated checking

CREW RESOURCE MANAGEMENT-TRAINING PROGRAMMES AND CRM INSTRUCTORS

AMENDED:



ENAC Regulation Department responsibilities

Study and understand new subjects:

AMC1 ORO.FC.115 Crew resource management (CRM) training

CRM TRAINING — MULTI-PILOT OPERATIONS

(a) General

AMC2 ORO.FC.115 Crew resource management (CRM) training

CRM TRAINING — SINGLE-PILOT OPERATIONS

AMC3 ORO.FC.115 Crew resource management (CRM) training

FLIGHT CREW CRM TRAINER

AMC1 ORO.FC.215 Initial operator's crew resource management (CRM) training

TRAINING ELEMENTS AND TRAINER QUALIFICATION

AMC2 ORO.CC.115(e) Conduct of training courses and associated checking

CREW RESOURCE MANAGEMENT (CRM) TRAINING — SINGLE CABIN CREW OPERATIONS

AMC3 ORO.CC.115(e) Conduct of training courses and associated checking

CABIN CREW CRM TRAINER

AMC1 ORO.TC.110(a) Training and checking

CRM TRAINING

ENAC Regulation Department responsibilities

Assess differences with previous AMC/GM

- *New training requirements for Authority's FOI*
- *CRM training also applicable to NCC, SPO, NC SPO with Complex a/c,*
- *CRM training for single-pilot operations and for single CC operations*
- *Provisions concerning computer-based training;*
- *New training elements (resilience, surprise and startle effect, TEM)*
- *Qualification, training, assessment and recency of CRM trainer*
- *Expansion of combined CRM training*
- *CRM training and management system (SMS)*
- *Appropriate minimum training times*

ENAC Regulation Department responsibilities

Update ENAC web site



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[La Regolazione per la Sicurezza](#)

- Note Informative
- Art. 1.2 (a) Reg. (CE) n. 216/2008
- Sistemi Aeromobili a Pilotaggio Remoto (Droni)
- EASA Implementation Rules
- Acceptable Means of Compliance
- Alternative Means of Compliance
- Management System
- Navigabilità
- Operazioni di volo
- Licenze del Personale
- Medicina Aeronautica

Addestramento CRM

Il Crew Resource Management (CRM), incluso nel concetto di Human Factors, è definito come l'utilizzo effettivo di tutte le risorse operative disponibili (tecniche, umane, procedurali ed ambientali) finalizzate al raggiungimento di operazioni di volo sicure ed efficienti.

Lo scopo del CRM è migliorare la comunicazione e le abilità gestionali degli equipaggi di volo con particolare enfasi sugli aspetti non-tecnici delle performance. Negli ultimi anni ICAO ed alcune organizzazioni di promozione della sicurezza del volo hanno individuato la necessità di sviluppare programmi di addestramento al CRM più appropriati ai complessi ambienti di lavoro in cui si trovano ad operare gli equipaggi di volo degli aeromobili moderni.

Secondo uno studio statistico sviluppato da Airbus, in più del 70% di incidenti ed inconvenienti che si sono verificati durante le fasi di avvicinamento ed atterraggio, sono stati individuati problemi relativi a CRM ed ogni incidente o inconveniente ha visto comunque coinvolti elementi di CRM in più livelli di gravità. EASA ha recentemente creato un gruppo di lavoro per la revisione dei programmi di addestramento CRM per gli equipaggi di volo che ha sviluppato una serie emendamenti alle AMC/GM relative al Regolamento AirOps, pubblicate tramite la EASA Decision 2015/22/R. EASA non ha ritenuto opportuno modificare il quadro normativo dei requisiti relativi al CRM inclusi nel Regolamento AirOps (Implementing Rules), che, pertanto, rimangono invariati.

Con le modifiche apportate alle AMC/GM, EASA ha ritenuto di:

- modernizzare la materia inserendo nuovi argomenti relativi a recenti sviluppi ed esperienze conseguite anche in seguito a raccomandazioni di sicurezza generate a seguito di drammatici incidenti di volo;
- riprogettare la materia dell'addestramento CRM per gli equipaggi di volo all'interno delle AMC in modo da migliorare la leggibilità e la chiarezza;
- estendere la materia dell'addestramento CRM per gli equipaggi di volo non solo al trasporto commerciale (CAT), ma a tutte le operazioni dove la Part-ORO del Reg.(EU) 965/2012 è applicabile (per l'applicabilità della Part-ORO si veda il requisito ORO.GEN.005 AirOps).

I metodi di rispondenza (AMC) e il materiale guida (GM) relativi all'addestramento CRM contenuti nella EASA Decision 2015/22/R sono applicabili a tutti i soggetti interessati dal 01 ottobre 2016.

Da quella data tutti gli Operatori interessati dovranno modificare i programmi di addestramento CRM dei loro equipaggi di volo (Flight Crew, Cabin Crew, Technical Crew) inserendo nell'Operations Manual i nuovi argomenti o modificandoli.

Operazioni di volo

- Note Informative
- Art. 1.2 (a) Reg. (CE) n. 216/2008
- Sistemi Aeromobili a Pilotaggio Remoto (Droni)
- EASA Implementation Rules
- Acceptable Means of Compliance
- Alternative Means of Compliance
- Management System
- Navigabilità
- Operazioni di volo
 - Certificato di Operatore Aereo
 - Certificato di Operatore di Lavoro Aereo
 - Operazioni non commerciali - aeromobili complessi
 - AirMOC-Operazioni di Volo
 - Aeromobili stranieri - art 83 bis Convenzione ICAO
 - Simulatori di volo
 - Prescrizioni Operative

New and updated CRM training web page

ENAC Regulation Department responsibilities

Establish required training for FOI

AMC3 ARO.GEN.200(a)(2) Management system

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 (both theoretical and practical)”*

All FOI : - refresh training on CRM principles
- training on assessment of CRM training



ENAC Regulation Department responsibilities

Produce a tool for transition

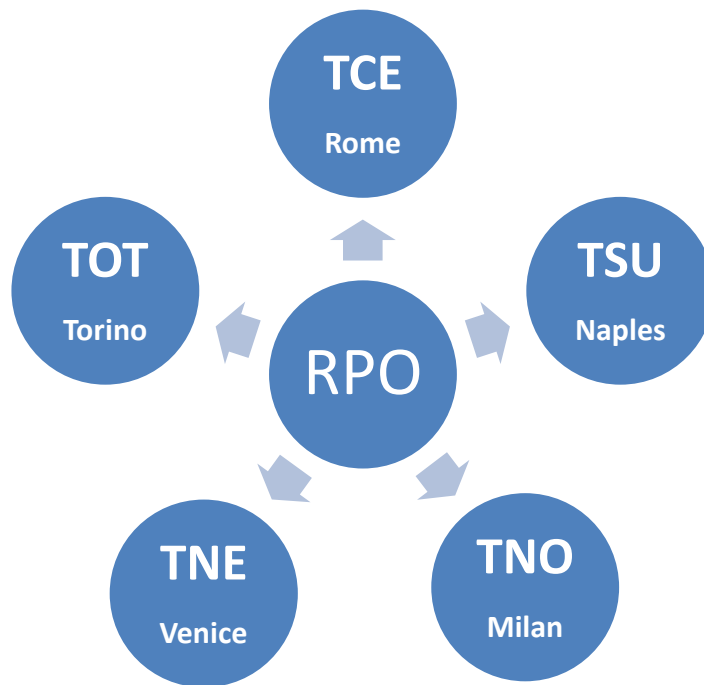
		Compliance checklist for EASA Crew Resource Management (CRM) training			Ed. n. 1 30/08/2016
	Marker	A	N/A	OM Reference	Remarks
A	COMMON GENERAL REQUIREMENTS Flight Crew (AMC1 ORO.FC.115) & Cabin Crew (AMC1 ORO.CC.115(e))				
1	Elements of CRM training are included in: <ul style="list-style-type: none"> ✓ 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 (<i>classroom and computer-based</i>) and - operational environment (<i>FSTD and/or aircraft</i>) 				
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.				

Compliance Checklist:

- mandatory for CAT Operators
- optional for NCC/SPO Operators

ENAC Regulation Department responsibilities

Standardize process



End of Part 1