

*European Union Aviation Safety Agency*

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**Acceptable Means of Compliance (AMC) and  
Guidance Material (GM) to Annex II  
Authority requirements for air operations  
[Part-ARO]**

**of Commission Regulation (EU) 965/2012 on air operations**

Consolidated version including Issue 3, Amendment 9<sup>1</sup>

March 2019<sup>2</sup>

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<sup>1</sup> For the date of entry into force of amendments 8 and 9, refer to ED Decisions 2018/012/R and 2019/007/R in the [Official Publication](#) of EASA.

<sup>2</sup> Date of publication of the consolidated version.

## Disclaimer

This consolidated document includes the initial issue of and all subsequent amendments to the AMC&GM associated with this Annex.

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## Summary of amendments

Chapter	Action	Issue no./ Amdt. no	Amended by ED Decision (stand-alone or following publication of a certain amending regulation)
GM1 ARO.RAMP.005	New	3/9	EDD 2019/007/R <b>APPLICABLE FROM 01 SEPT 2019 EXCEPT SEE BELOW.</b>
AMC1 ARO.RAMP.100	Deleted	3/9	
AMC1 ARO.RAMP.100(b)	Changed	3/9	<b>APPLICABLE FROM 1 JAN. 2020</b>
AMC1 ARO.RAMP.100(c)	New	3/9	
AMC1 ARO.RAMP.100(c)(1)	Deleted	3/9	
AMC2 ARO.RAMP.100(c)	Deleted	3/9	
AMC3 ARO.RAMP.100(c)	Deleted	3/9	
GM1 ARO.RAMP.100(c)	Deleted	3/9	
GM1 ARO.RAMP.100(c)(1)	Deleted	3/9	
AMC1 ARO.RAMP.115(a)	Deleted	3/9	
AMC1 ARO.RAMP.115(b)(1) → <b>AMC1 ARO.RAMP.115(a)(b)</b>	Renumbered & changed	3/9	
AMC2 ARO.RAMP.115(a)(b)	New	3/9	
AMC3 ARO.RAMP.115(a)(b)	New	3/9	
AMC4 ARO.RAMP.115(a)(b)	New	3/9	
AMC5 ARO.RAMP.115(a)(b)	New	3/9	
AMC6 ARO.RAMP.115(a)(b)	New	3/9	
AMC1 ARO.RAMP.115(b)(3) → <b>AMC7 ARO.RAMP.115(a)(b)</b>	Renumbered & changed	3/9	
AMC1 ARO.RAMP.115(b)(2) → <b>AMC8 ARO.RAMP.115(a)(b)</b>	Renumbered & changed	3/9	
GM1 ARO.RAMP.115(b)(1)	Deleted	3/9	
AMC2 ARO.RAMP.115(b)(2)	Deleted	3/9	
AMC3 ARO.RAMP.115(b)(2)	Deleted	3/9	
AMC4 ARO.RAMP.115(b)(2)	Deleted	3/9	
GM1 ARO.RAMP.115(b)(2)	Deleted	3/9	
GM2 ARO.RAMP.115(b)(2)	Deleted	3/9	
AMC1 ARO.RAMP.115(b)(2)(i)	Deleted	3/9	
AMC2 ARO.RAMP.115(b)(2)(i)	Deleted	3/9	
AMC2 ARO.RAMP.115(b)(3)	Deleted	3/9	

GM1 ARO.RAMP.115(b)(3)	Deleted	3/9	EDD 2019/007/R <b>APPLICABLE FROM 01 SEPT 2019</b>
GM1 ARO.RAMP.115(c)	Deleted	3/9	
GM2 ARO.RAMP.115(c)	Deleted	3/9	
GM3 ARO.RAMP.115(c)	Deleted	3/9	
AMC1 ARO.RAMP.120(a)	Changed	3/9	
AMC1 ARO.RAMP.120 → <b>AMC2 ARO.RAMP.120(a)</b>	Renumbered & changed	3/9	
AMC1 ARO.RAMP.120(a)(1)	Deleted	3/9	
AMC1 ARO.RAMP.120(a)(2)	Deleted	3/9	
AMC1 ARO.RAMP.120(a)(3)	Deleted	3/9	
AMC1 ARO.RAMP.120(a)(4)	Changed	3/9	
AMC1 ARO.RAMP.120(b)	Deleted	3/9	
AMC1 ARO.RAMP.125	Changed	3/9	
AMC2 ARO.RAMP.125	Deleted	3/9	
GM1 ARO.RAMP.125(a)	Deleted	3/9	
GM2 ARO.RAMP.125(a)	Deleted	3/9	
AMC1 ARO.RAMP.125(b)	Changed	3/9	
GM1 ARO.RAMP.125(b)	Deleted	3/9	
AMC1 ARO.RAMP.125(c)	Changed	3/9	
GM1 ARO.RAMP.130	Deleted	3/9	
GM2 ARO.RAMP.130	Deleted	3/9	
GM3 ARO.RAMP.130	Deleted	3/9	
GM4 ARO.RAMP.130	Deleted	3/9	
GM5 ARO.RAMP.130	Deleted	3/9	
GM6 ARO.RAMP.130	Deleted	3/9	
Appendix to GM5 and GM6 to ARO.RAMP.130	Deleted	3/9	
GM7 ARO.RAMP.130	Deleted	3/9	
GM8 ARO.RAMP.130	Deleted	3/9	
AMC1 ARO.RAMP.135(a)	Changed	3/9	
AMC1 ARO.RAMP.135(b)	Changed	3/9	
GM1 ARO.RAMP.135(b)	Deleted	3/9	
GM1 ARO.RAMP.140(a)	Deleted	3/9	
GM1 ARO.RAMP.140(d)(4)	Deleted	3/9	
GM1 ARO.RAMP.145(b)	Deleted	3/9	
AMC1 ARO.RAMP.145	New	3/9	
AMC1 ARO.RAMP.150(b)(4)(iii)	New	3/9	
GM1 ARO.RAMP.160(a)	Deleted	3/9	

AMC1 ARO.RAMP.106	New	3/8	EDD 2018/012/R and Reg. (EU) 2018/1042 (aircrew medical fitness) <b>APPLICABLE FROM 14 AUGUST 2020</b>
GM1 ARO.RAMP.106	New		
GM2 ARO.RAMP.106	New		
GM3 ARO.RAMP.106	New		
AMC4 ARO.RAMP.115(b)(2)	Changed		
AMC2 ARO.RAMP.125	New		
AMC1 ARO.RAMP.135(b)	Changed		
AMC1 ARO.OPS.110	Changed	3/7	EDD 2018/003/R and Reg. (EU) 2018/394 (deletion of balloon requirements)
AMC2 ARO.OPS.110	Changed		
GM1 ARO.OPS.110	Changed		
GM2 ARO.OPS.110	Changed		
AMC1 ARO.GEN.120(e)	New	3/6	EDD 2017/006/R (update of Ops rules, inspector qualifications, others)  <b>AMC4 ARO.GEN.200(a)(2) applicable from 30/03/2019</b>
AMC1 ARO.GEN.200(a)(2)	Changed		
AMC2 ARO.GEN.200(a)(2)	Changed		
AMC4 ARO.GEN.200(a)(2)	New		
AMC5 ARO.GEN.200(a)(2)	New		
GM1 ARO.GEN.200(a)(2)	Changed		
GM2 ARO.GEN.200(a)(2)	New		
GM3 ARO.GEN.200(a)(2)	New		
GM4 ARO.GEN.200(a)(2)	New		
GM5 ARO.GEN.200(a)(2)	New		
GM6 ARO.GEN.200(a)(2)	New		
GM7 ARO.GEN.200(a)(2)	New		
AMC1 ARO.GEN.300(a);(b);(c)	Changed		
GM1 ARO.GEN.300(a);(b);(c)	Changed		
AMC1 ARO.GEN.305(b);(d);(d1)	Changed		
AMC2 ARO.GEN.305(b)	Changed		
GM1 ARO.GEN.305(b);(c);(d);(d1)	New		
AMC2 ARO.GEN.305(c)	Changed		
AMC1 ARO.GEN.310(a)	Changed		
AMC1 ARO.GEN.330	Changed		

GM2 ARO.GEN.350(d)	New		
GM1 ARO.OPS.100(b)	New		
GM2 ARO.OPS.200	New		
GM1 ARO.OPS.235(b);(c)	New		
AMC1 ARO.RAMP.115(b)(2)	Changed		
GM2 ARO.RAMP.115(b)(2)	New		
AMC1 ARO.RAMP.115(b)(3)	Changed		
AMC2 ARO.RAMP.115(b)(3)	Changed		
GM1 ARO.RAMP.115(b)(3)	New		
AMC4 ARO.OPS.200	New	3/5	Reg. (EU) No 2017/363 and EDD 2017/004/R (SET-IMC)
AMC3 ARO.OPS.200	New	3/4	EDD 2016/022/R (HOFO) and Reg. (EU) No 2016/1199; – <b>applicable from 1/07/2018</b>
GM1 ARO.OPS.200	New		
GM1 ARO.OPS.240	New	3/3	ED Decision 2016/014/R and Reg. (EU) No 2016/1199 (PBN for OPS)
GM2 ARO.OPS.240	New		
GM4 ARO.GEN.300(a);(b);(c)	New	Issue 3, Amdt. 2	ED Decision 2016/008/R (OCC for MPL) and Reg. (EU) No 2016/539: aircrew requirements for PBN
AMC3 ARO.GEN.200(a)(2)	New	Issue 3, Amdt 1	ED Decision 2015/022/R (CRM training)
GM3 ARO.GEN.300(a);(b);(c)	New		
AMC1 ARO.RAMP.100(b)	Amended	Issue 3	ED Decision 2014/025/R (Ramp inspections – SAFA)
AMC1 ARO.RAMP.100(c)(1)	Amended		
AMC2 ARO.RAMP.100(c)	New		
AMC3 ARO.RAMP.100(c)	New		
GM1 ARO.RAMP.100(c)	New		
GM1 ARO.RAMP.105(b)(2)(i)	Deleted		
AMC1 ARO.RAMP.110	Amended		
AMC1 ARO.RAMP.115(b)(1)	Amended		
GM1 ARO.RAMP.115(b)(1)	New		
AMC1 ARO.RAMP.115(b)(2)	Amended		
AMC2 ARO.RAMP.115(b)(2)	Amended		
AMC3 ARO.RAMP.115(b)(2)	Amended		
AMC4 ARO.RAMP.115(b)(2)	Amended		
AMC1 ARO.RAMP.115(b)(3)	Amended		
AMC2 ARO.RAMP.115(b)(3)	Amended		
AMC1 ARO.RAMP.115(c)	Deleted		

GM1 ARO.RAMP.115(c)	Amended		
GM2 ARO.RAMP.115(c)	Amended		
AMC1 ARO.RAMP.120	New		
AMC1 ARO.RAMP.120	Deleted		
AMC1 ARO.RAMP.120(a)	New		
AMC2 ARO.RAMP.120(a)	New		
AMC1 ARO.RAMP.120(a)(2)	New		
AMC1 ARO.RAMP.120(a)(3)	New		
AMC1 ARO.RAMP.120(a)(4)	New		
AMC1 ARO.RAMP.120(b)	New		
AMC1 ARO.RAMP.125	New		
GMC1 ARO.RAMP.125(a)	New		
GM2 ARO.RAMP.125(a)	New		
AMC1 ARO.RAMP.125(b)	Amended		
GM1 ARO.RAMP.125(b)	Amended		
AMC1 ARO.RAMP.125(c)	New		
GM1 ARO.RAMP.130	New		
GM2 ARO.RAMP.130	New		
GM3 ARO.RAMP.130	New		
GM4 ARO.RAMP.130	New		
GM5 ARO.RAMP.130	New		
GM6 ARO.RAMP.130	New		
GM7 ARO.RAMP.130	New		
GM8 ARO.RAMP.130	New		
AMC1 ARO.RAMP.135(a)	New		
AMC1 ARO.RAMP.135(b)	New		
GM1 ARO.RAMP.135(b)	New		
GM1 ARO.RAMP.140(a)	new		
GM1 ARO.RAMP.140(d)(4)	New		
GM1 ARO.RAMP.145(b)	New		
GM1 ARO.RAMP.160(a)	New		
AMC1 ARO.GEN.200(a)	Amended	Issue 2	ED Decision 2014/014/R and Reg. (EU) 379/2014 (SPO, CAT sailplanes & balloons, CAT A-A)
GM1 ARO.GEN.200(a)(2)	Amended		
AMC1 ARO.GEN.200(d)	Amended		
GM1 ARO.GEN.205	Amended		
AMC1 ARO.GEN.220(a)(1);(2);(3)	Amended		
AMC1 ARO.GEN.220(a)(4)	Amended		
GM1 ARO.GEN.220 (a)(4a)	New		

AMC1 ARO.GEN.220(a)(6)	Amended		
GMC1 ARO.GEN.300(d)	Amended		
AMC1 ARO.GEN.305(b);(d)	Amended		
AMC1 ARO.GEN.305(b);(c);(d)	Amended		
AMC1 ARO.GEN.305(d1)	New		
GM1 ARO.GEN.305(d1)	New		
AMC1 ARO.GEN.310(a)	Amended		
AMC1 ARO.GEN.330	Amended		
AMC1 ARO.OPS.150	New		
AMC1 ARO.OPS.150(a);(b)	New		
GM1 ARO.OPS.150(b)	New		
GM1 ARO.OPS.150(c)	New		
AMC1 ARO.OPS.150(f)	New		
GM1 ARO.OPS.150(f)	New		
GM1 ARO.OPS.155	New		
GM2 ARO.OPS.155	New		
GM1 ARO.OPS.210	Amended		
AMC1 ARO.OPS.300	New		
GM1 ARO.OPS.300	New		
AMC1 ARO.GEN.305(d)	New	Amdt. 2	Corrigendum to ED Decision 2013/018/R
AMC2 ARO.GEN.305(d)	Deleted		
AMC1 ARO.GEN.200(a)	Amended		ED Decision 2013/018/R and Reg. (EU) 800/2013 (NCC, NCO)
GM1 ARO.GEN.200(a)(2)	Amended		
AMC1 ARO.GEN.220(a)(4)	Amended		
AMC1 ARO.GEN.300(a)(2)	New		
GM1 ARO.GEN.300(d)	Amended		
AMC1 ARO.GEN.305(b)	Amended		
AMC1 ARO.GEN.305(b);(c)	Amended		
AMC2 ARO.GEN.305(d)	New		
AMC1 ARO.GEN.305(d)	Amended		
AMC1 ARO.GEN.345	New		
GM1 ARO.GEN.345	New		
AMC2 ARO.RAMP.115(b)(2)	Amended		



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AMC4 ARO.RAMP.115(b)(2)	Amended		
AMC2 ARO.GEN.300(a);(b);(c)	New	Amdt. 1	ED Decision 2013/007/R (Volcanic ash)
GM2 ARO.GEN.300(a);(b)(c)	new	Amdt. 1	ED Decision 2013/007/R (Volcanic ash)

## SUBPART GEN: GENERAL REQUIREMENTS

### *SECTION I* *General*

#### **AMC1 ARO.GEN.120(d)(3) Means of compliance**

##### GENERAL

The information to be provided to other Member States following approval of an alternative means of compliance should contain a reference to the Acceptable Means of Compliance (AMC) to which such means of compliance provides an alternative, as well as a reference to the corresponding Implementing Rule, indicating as applicable the subparagraph(s) covered by the alternative means of compliance.

#### **GM1 ARO.GEN.120 Means of compliance**

##### GENERAL

Alternative means of compliance used by a competent authority or by organisations under its oversight may be used by other competent authorities or organisations only if processed again in accordance with ARO.GEN.120 (d) and (e).

#### **AMC1 ARO.GEN.120(e) Means of compliance**

##### DEMONSTRATION OF COMPLIANCE

In order to demonstrate that the implementing rules are met, a risk assessment should be completed and documented. The result of this risk assessment should demonstrate that an equivalent level of safety to that established by the acceptable means of compliance (AMC) adopted by the Agency is reached.

**SECTION II**  
**Management****AMC1 ARO.GEN.200(a) Management system**

## GENERAL

- (a) All of the following should be considered when deciding upon the required organisational structure:
- (1) the number of certificates, attestations, authorisations and approvals to be issued;
  - (2) the number of declared organisations;
  - (3) the number of certified or authorised persons and organisations exercising an activity within that Member State, including persons or organisations certified or authorised by other competent authorities;
  - (4) the possible use of qualified entities and of resources of other competent authorities to fulfil the continuing oversight obligations;
  - (5) the level of civil aviation activity in terms of:
    - (i) number and complexity of aircraft operated;
    - (ii) size and complexity of the Member State's aviation industry;
  - (6) the potential growth of activities in the field of civil aviation.
- (b) The set-up of the organisational structure should ensure that the various tasks and obligations of the competent authority do not rely solely on individuals. A continuous and undisturbed fulfilment of these tasks and obligations of the competent authority should also be guaranteed in case of illness, accident or leave of individual employees.

**GM1 ARO.GEN.200(a) Management system**

## GENERAL

- (a) The competent authority designated by each Member State should be organised in such a way that:
- (1) there is specific and effective management authority in the conduct of all relevant activities;
  - (2) the functions and processes described in the applicable requirements of Regulation (EC) No 216/2008<sup>3</sup> and its Implementing Rules and AMCs, Certification Specifications (CSs) and Guidance Material (GM) may be properly implemented;
  - (3) the competent authority's organisation and operating procedures for the implementation of the applicable requirements of Regulation (EC) No 216/2008 and its Implementing Rules are properly documented and applied;

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<sup>3</sup> 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, 19.3.2008, p. 1. Regulation as last amended by Commission Regulation (EU) No 6/2013 of 8 January 2013 (OJ L 4, 9.1.2013, p. 34).

- (4) all competent authority personnel involved in the related activities are provided with training where necessary;
  - (5) specific and effective provision is made for the communication and interface as necessary with the Agency and the competent authorities of other Member States; and
  - (6) all functions related to implementing the applicable requirements are adequately described.
- (b) A general policy in respect of activities related to the applicable requirements of Regulation (EC) No 216/2008 and its Implementing Rules should be developed, promoted and implemented by the manager at the highest appropriate level; for example the manager at the top of the functional area of the competent authority that is responsible for such activities.
- (c) Appropriate steps should be taken to ensure that the policy is known and understood by all personnel involved, and all necessary steps should be taken to implement and maintain the policy.
- (d) The general policy, whilst also satisfying additional national regulatory responsibilities, should in particular take into account:
- (1) the provisions of Regulation (EC) No 216/2008;
  - (2) the provisions of the applicable Implementing Rules and their AMCs, CSs and GM;
  - (3) the needs of industry; and
  - (4) the needs of the Agency and of the competent authority.
- (e) The policy should define specific objectives for key elements of the organisation and processes for implementing related activities, including the corresponding control procedures and the measurement of the achieved standard.

#### **AMC1 ARO.GEN.200(a)(1) Management system**

##### DOCUMENTED POLICIES AND PROCEDURES

- (a) The various elements of the organisation involved with the activities related to Regulation (EC) No 216/2008 and its Implementing Rules should be documented in order to establish a reference source for the establishment and maintenance of this organisation.
- (b) The documented procedures should be established in a way that facilitates their use. They should be clearly identified, kept up-to-date and made readily available to all personnel involved in the related activities.
- (c) The documented procedures should cover, as a minimum, all of the following aspects:
- (1) policy and objectives;
  - (2) organisational structure;
  - (3) responsibilities and associated authority;
  - (4) procedures and processes;
  - (5) internal and external interfaces;
  - (6) internal control procedures;
  - (7) training of personnel;
  - (8) cross-references to associated documents;

- (9) assistance from other competent authorities or the Agency (where required).
- (d) It is likely that the information is held in more than one document or series of documents, and suitable cross-referencing should be provided. For example, organisational structure and job descriptions are not usually in the same documentation as the detailed working procedures. In such cases, it is recommended that the documented procedures include an index of cross-references to all such other related information, and the related documentation should be readily available when required.

### **AMC1 ARO.GEN.200(a)(2) Management system**

#### QUALIFICATION AND TRAINING — GENERAL

- (a) It is essential that the competent authority has the full capability to adequately assess the continued competence of an organisation by ensuring that the whole range of activities is assessed by appropriately qualified personnel.
- (b) For each inspector, the competent authority should:
- (1) define the competencies required to perform the allocated certification and oversight tasks;
  - (2) define the associated minimum qualification requirements;
  - (3) establish initial and recurrent training programmes in order to maintain and to enhance inspector competency at the level necessary to perform the allocated tasks; and
  - (4) ensure that the training provided meets the established standards and is regularly reviewed and updated whenever necessary.
- (c) The competent authority may provide training through its own training organisation with qualified trainers or through another qualified training source.
- (d) When training is not provided through an internal training organisation, adequately experienced and qualified persons may act as trainers, provided their training skills have been assessed. If required, an individual training plan should be established covering specific training skills. Records should be kept of such training and of the assessment, as appropriate.

### **AMC2 ARO.GEN.200(a)(2) Management system**

#### QUALIFICATION AND TRAINING — INSPECTORS

- (a) Initial training programme:
- The initial training programme for inspectors should include, as appropriate to their role, current knowledge, experience and skills in at least all of the following:
- (1) aviation legislation organisation and structure;
  - (2) the Chicago Convention, relevant ICAO annexes and documents;
  - (3) overview of Regulation (EC) No 216/2008, its implementing rules and the related AMC, CS, and GM;
  - (4) Regulation (EU) No 965/2012 as well as other applicable requirements;
  - (5) management systems, including the assessment of the effectiveness of a management system, in particular hazard identification and risk assessment, and non-punitive reporting techniques in the context of the implementation of a 'just culture';

- (6) auditing techniques;
  - (7) competent authority procedures relevant to the inspectors' tasks;
  - (8) human factors principles;
  - (9) rights and obligations of inspecting personnel of the competent authority;
  - (10) 'on-the-job' training, relevant to the inspector's tasks;
  - (11) technical training, including training on aircraft-specific subjects, appropriate to the role and tasks of the inspector, in particular for those areas requiring approvals.
- (b) Recurrent training programme:
- Once qualified, the inspector should undergo training periodically as well as whenever deemed necessary by the competent authority in order to remain competent to perform the allocated tasks. The recurrent training programme for inspectors should include, as appropriate to their role, at least the following topics:
- (1) changes in aviation legislation, operational environment and technologies;
  - (2) competent authority procedures relevant to the inspector's tasks;
  - (3) technical training, including training on aircraft-specific subjects, appropriate to the role and tasks of the inspector; and
  - (4) results from past oversight.
- (c) An assessment of an inspector's competency should take place at regular intervals not exceeding three years.

### **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 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) 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.

This AMC shall apply from 30 March 2019

**AMC4 ARO.GEN.200(a)(2) Management system**

## INSPECTOR QUALIFICATION FOR CAT OPERATIONS

- (a) For CAT operations of aircraft with an MOPSC of more than 19 seats or with an MCTOM of more than 45 360 kg, an inspector who performs initial certification or oversight tasks relating to:
- (1) the flight crew operating procedures contained in Part B (e.g. Chapters B-2, B-3, and B-9) of the Operations Manual (OM), or
  - (2) the aircraft/FSTD part of the flight crew training syllabi and checking programmes contained in Part D of the OM,
- should have the following qualifications:
- (i) operational experience in air transport operations appropriate to the allocated tasks;
  - (ii) experience in either operational management within an air transport operation; or as an examiner; or as an instructor; and
  - (iii) hold or have held a valid type rating on the aircraft type concerned; or a class rating as appropriate; or a rating on aircraft types/classes with similar technical and operational characteristics.
- (b) For CAT operations with an MOPSC of 19 seats or less, the authority should establish the inspector qualifications required to perform the allocated initial certification and oversight tasks. The assigned inspector should undergo theoretical training on aircraft systems and operations.
- (c) For in-flight inspections of CAT operations, the inspector should have relevant knowledge of the route and area.

**AMC5 ARO.GEN.200(a)(2) Management system**

## FATIGUE RISK MANAGEMENT INSPECTOR TRAINING

An inspector involved in the approval process of operator's flight time specification schemes and fatigue risk management (FRM) should receive the following training:

- (a) Initial training
- (1) Theory and effects of fatigue
  - (2) Human factors related to fatigue
  - (3) Typical hazards and risks related to fatigue, their possible mitigation measures, and the maturity of hazard identification models (reactive, proactive and predictive)
  - (4) FRM training and promotion methodologies and how to support ongoing development of FRM
  - (5) Data collection and analysis methods related to FRM
  - (6) Integration of FRM into the Management System
  - (7) Fatigue management documentation, implementation and assurance methodologies
  - (8) Regulatory framework and current best practices
  - (9) Auditing and assessment of the effectiveness of an operator's FRM
- (b) Recurrent training (at least every 3 years)

- (1) Review of FRM implementation issues
- (2) Recent incidents related to fatigue
- (3) New FRM developments
- (4) Review of changes in legislation, and best practices.

## **GM1 ARO.GEN.200(a)(2) Management System**

### SUFFICIENT PERSONNEL

- (a) This GM on the determination of the required personnel is limited to the performance of certification, authorisation and oversight tasks, excluding personnel required to perform tasks subject to any national regulatory requirements.
- (b) The elements to be considered when determining required personnel and planning their availability may be divided into quantitative and qualitative elements:
  - (1) Quantitative elements:
    - (i) the estimated number of initial certificates to be issued;
    - (ii) the number of organisations certified by the competent authority;
    - (iii) the number of persons to whom the competent authority has issued a licence, certificate, rating, authorisation or attestation;
    - (iv) the estimated number of persons and organisations, as well as the estimated number of subcontracted organisations used by those persons and organisations, exercising their activity within the territory of the Member State and established or residing in another Member State;
    - (v) the number of organisations having declared their activity to the competent authority;
    - (vi) the number of organisations holding a specialised operations authorisation issued by the competent authority.
  - (2) Qualitative elements:
    - (i) the size, nature and complexity of activities of certified, authorised and declared organisations (cf. AMC1 ORO.GEN.200(b)), taking into account:
      - (A) privileges of the organisation;
      - (B) type of approval, scope of approval, multiple certification, authorisation and declared activities;
      - (C) possible certification to industry standards;
      - (D) types of aircraft/flight simulation training devices (FSTDs) operated;
      - (E) number of personnel; and
      - (F) organisational structure, existence of subsidiaries;
    - (ii) the safety priorities identified;
    - (iii) the results of past oversight activities, including audits, inspections and reviews, in terms of risks and regulatory compliance, taking into account:
      - (A) number and level of findings;



- (B) timeframe for implementation of corrective actions; and
  - (C) maturity of management systems implemented by organisations and their ability to effectively manage safety risks, taking into account also information provided by other competent authorities related to activities in the territory of the Member States concerned; and
  - (iv) the size and complexity of the Member State's aviation industry and the potential growth of activities in the field of civil aviation, which may be an indication of the number of new applications and changes to existing certificates and authorisations to be expected.
- (c) Based on existing data from previous oversight planning cycles and taking into account the situation within the Member State's aviation industry, the competent authority may estimate:
- (1) the standard working time required for processing applications for new certificates (for persons and organisations) and authorisations;
  - (2) the number of new declarations or changed declarations;
  - (3) the number of new certificates and authorisations to be issued for each planning period; and
  - (4) the number of changes to existing certificates and authorisations to be processed for each planning period.
- (d) In line with the competent authority's oversight policy, the following planning data should be determined specifically for each type of organisation certified by the competent authority as well as for declared organisations, including those being authorised:
- (1) standard number of audits to be performed per oversight planning cycle;
  - (2) standard duration of each audit;
  - (3) standard working time for audit preparation, on-site audit, reporting and follow-up, per inspector;
  - (4) standard number of ramp and unannounced inspections to be performed;
  - (5) standard duration of inspections, including preparation, reporting and follow-up, per inspector;
  - (6) minimum number and required qualification of inspectors for each audit/inspection.
- (e) Standard working time could be expressed either in working hours per inspector or in working days per inspector. All planning calculations should then be based on the same unit (hours or working days).
- (f) It is recommended to use a spreadsheet application to process data defined under (c) and (d), to assist in determining the total number of working hours/days per oversight planning cycle required for certification, authorisation, oversight and enforcement activities. This application could also serve as a basis for implementing a system for planning the availability of personnel.
- (g) For each type of organisation certified or high risk commercial specialised operation authorised by the competent authority, the number of working hours/days per planning period for each qualified inspector that may be allocated for certification, authorisation, oversight and enforcement activities should be determined, taking into account:
- (1) purely administrative tasks not directly related to oversight and certification/authorisation;

- (2) training;
  - (3) participation in other projects;
  - (4) planned absence; and
  - (5) the need to include a reserve for unplanned tasks or unforeseeable events.
- (h) The determination of working time available for certification, authorisation, oversight and enforcement activities should also consider:
- (1) the possible use of qualified entities; and
  - (2) possible cooperation with other competent authorities for approvals or authorisations involving more than one Member State.
- (i) Based on the elements listed above, the competent authority should be able to:
- (1) monitor dates when audits and inspections are due and when they have been carried out;
  - (2) implement a system to plan the availability of personnel; and
  - (3) identify possible gaps between the number and qualification of personnel and the required volume of certification/authorisation and oversight.

Care should be taken to keep planning data up-to-date in line with changes in the underlying planning assumptions, with particular focus on risk-based oversight principles.

### **GM2 ARO.GEN.200(a)(2) Management system**

#### INSPECTOR COMPETENCY

- (a) Competency is a combination of individual skills, practical and theoretical knowledge, attitude, training, and experience.
- (b) An inspector should, by his/her qualifications and competencies, command the professional respect of the inspected personnel.

### **GM3 ARO.GEN.200(a)(2) Management system**

#### SPECIFIC FLIGHT OPERATIONS INSPECTOR QUALIFICATION

- (a) The following characteristics should be considered in order to establish aircraft types/classes with similar technical and operational characteristics:
  - (1) Engine technology;
  - (2) Certification basis;
  - (3) Level of automation;
  - (4) Flight controls logic (e.g. fly-by-wire, conventional, etc.); and
  - (5) Size and mass of the aircraft (e.g. maximum take-off mass, wake turbulence category, etc.).
- (b) The following factors should be considered with regard to knowledge of the route and area:
  - (1) Climatological conditions, e.g. exceptionally cold weather;
  - (2) Availability of adequate aerodromes and their specific features, e.g. high elevation, poor English/communication capability, exceptional approach procedures;

- (3) Navigational procedures, including PBN requirements, ETOPS and extended diversion time requirements;
- (4) Communication procedures, including required communication performance, any specific and contingency procedures, e.g. loss of communication, drift down, oxygen escape; and
- (5) Equipment requirements related to search and rescue, e.g. polar, desert operations, oceanic, remote areas.

#### **GM4 ARO.GEN.200(a)(2) Management system**

##### INSPECTOR TRAINING PROGRAMMES

- (a) The competent authority may adapt the duration and depth of the individual training programme of an inspector, provided the required competencies are achieved and maintained.
- (b) The following documents, as appropriate to the role of the inspector, are relevant for the initial training programme for inspectors referred to in AMC2 ARO.GEN.200(a)(2):
  - (1) The Chicago Convention and relevant ICAO annexes and documents
  - (2) Regulation (EU) No 376/2014 (Occurrences in civil aviation)
  - (3) Regulation (EC) No 216/2008, and related implementing rules such as:
    - (i) Regulation (EU) No 1178/2011 (Air Crew Regulation);
    - (ii) Regulation (EU) No 1332/2011;(Part-AUR);
    - (iii) Regulation (EU) No 923/2012 (Part-SERA);
    - (iv) Regulation (EU) No 748/2012 (OSD); and
    - (v) Regulation (EU) No 1321/2014 (Part-M, Part-145).
- (c) The duration of the on-the-job training should take into account the scope and complexity of the inspector's tasks. The competent authority should assess whether the required competence has been achieved before an inspector is authorised to perform a task without supervision.

#### **GM5 ARO.GEN.200(a)(2) Management system**

##### FATIGUE RISK MANAGEMENT INSPECTOR TRAINING

'Theory and effects of fatigue' refers to:

- (a) sleep;
- (b) circadian rhythm;
- (c) adaptation (acclimatisation) after time-jet zone crossing (westbound and eastbound) and jet lag;
- (d) shift work;
- (e) bio-mathematical fatigue models; and
- (f) measurement of fatigue.

**GM6 ARO.GEN.200(a)(2) Management system**

## FATIGUE RISK MANAGEMENT INSPECTOR TRAINING

Guidance on training for inspectors on fatigue risk management is contained in ICAO Doc 9966 (Manual for the Oversight of Fatigue Management Approaches).

**GM7 ARO.GEN.200(a)(2) Management system**

## INSPECTOR EXPERIENCE IN EITHER OPERATIONAL MANAGEMENT WITHIN AN AIR TRANSPORT OPERATION OR AS AN INSTRUCTOR OR AS AN EXAMINER

The inspector assigned to certification and oversight tasks should have sufficient experience in roles that enable a thorough understanding of the operational processes.

(a) Experience in operational management refers to previous appointments in functions of organisational relevance, such as in any of the areas below:

- (1) flight operations and operational control;
- (2) flight crew training; and
- (3) management system.

Such appointments should not be limited to senior management functions such as nominated persons in accordance with point (b) of ORO.GEN.210. It is important that the inspector assigned to certification and oversight tasks in accordance with AMC4 ARO.GEN.200(a)(2) have sufficient experience which enables a thorough understanding of the operational processes within air transport operations.

(b) In the context of the approval and oversight of aircraft specific flight crew training and checking, the inspector should have experience as an instructor.

**AMC1 ARO.GEN.200(d) Management system**

## PROCEDURES AVAILABLE TO THE AGENCY

(a) Copies of the procedures related to the competent authority's management system and their amendments to be made available to the Agency for the purpose of standardisation should provide at least the following information:

- (1) Regarding continuing oversight functions undertaken by the competent authority, the competent authority's organisational structure with description of the main processes. This information should demonstrate the allocation of responsibilities within the competent authority, and that the competent authority is capable of carrying out the full range of tasks regarding the size and complexity of the Member State's aviation industry. It should also consider overall proficiency and authorisation scope of competent authority personnel.
- (2) For personnel involved in oversight activities, the minimum professional qualification requirements and experience and principles guiding appointment (e.g. assessment).
- (3) How the following are carried out: assessing applications and evaluating compliance, issuance of certificates and authorisations, performance of continuing oversight, follow-up of findings, enforcement measures and resolution of safety concerns.
- (4) Principles of managing exemptions and derogations.

- (5) Processes in place to disseminate applicable safety information for timely reaction to a safety problem.
  - (6) Criteria for planning continuing oversight (oversight programme), including adequate management of interfaces when conducting continuing oversight (air operations, flight crew licensing, continuing airworthiness management for example).
  - (7) Outline of the initial training of newly recruited oversight personnel (taking future activities into account), and the basic framework for continuation training of oversight personnel.
- (b) As part of the continuous monitoring of a competent authority, the Agency may request details of the working methods used, in addition to the copy of the procedures of the competent authority's management system (and amendments). These additional details are the procedures and related guidance material describing working methods for competent authority personnel conducting oversight.
- (c) Information related to the competent authority's management system may be submitted in electronic format.

### **GM1 ARO.GEN.205 Allocation of tasks to qualified entities**

#### CERTIFICATION/AUTHORISATION TASKS

The tasks that may be performed by a qualified entity on behalf of the competent authority include those related to the initial certification, or specialised operations authorisation and continuing oversight of persons and organisations as defined in this Regulation, with the exclusion of the issuance of certificates, authorisations, licences, ratings or approvals.

### **AMC1 ARO.GEN.220(a) Record-keeping**

#### GENERAL

- (a) The record-keeping system should ensure that all records are accessible whenever needed within a reasonable time. These records should be organised in a way that ensures traceability and retrievability throughout the required retention period.
- (b) Records should be kept in paper form or in electronic format or a combination of both media. Records stored on microfilm or optical disc form are also acceptable. The records should remain legible and accessible throughout the required retention period. The retention period starts when the record has been created.
- (c) Paper systems should use robust material, which can withstand normal handling and filing. Computer systems should have at least one backup system, which should be updated within 24 hours of any new entry. Computer systems should include safeguards against unauthorised alteration of data.
- (d) All computer hardware used to ensure data backup should be stored in a different location from that containing the working data and in an environment that ensures they remain in good condition. When hardware or software changes take place, special care should be taken that all necessary data continue to be accessible at least through the full period specified in the relevant Subpart or by default in ARO.GEN.220 (c).

**AMC1 ARO.GEN.220(a)(1);(2);(3) Record-keeping**

## COMPETENT AUTHORITY MANAGEMENT SYSTEM

Records related to the competent authority's management system should include, as a minimum and as applicable:

- (a) the documented policies and procedures;
- (b) the personnel files of competent authority personnel, with supporting documents related to training and qualifications;
- (c) the results of the competent authority's internal audit and safety risk management processes, including audit findings and corrective actions; and
- (d) the contract(s) established with qualified entities performing certification, authorisation or oversight tasks on behalf of the competent authority.

**AMC1 ARO.GEN.220(a)(4);(4a) Record-keeping**

## ORGANISATIONS

Records related to an organisation certified or operations authorised by or having declared its activity to the competent authority should include, as appropriate to the type of organisation:

- (a) the application for an organisation approval, a specialised operation authorisation or the declaration received;
- (b) the documentation based on which the approval or authorisation has been granted and any amendments to that documentation;
- (c) the organisation approval certificate or specialised operation authorisation, including any changes;
- (d) a copy of the continuing oversight programme listing the dates when audits are due and when such audits were carried out;
- (e) continuing oversight records, including all audit and inspection records;
- (f) copies of all relevant correspondence;
- (g) details of any exemption and enforcement actions;
- (h) any report from other competent authorities relating to the oversight of the organisation; and
- (i) a copy of any other document approved by the competent authority.

**GM1 ARO.GEN.220(a)(4) Record-keeping**

## ORGANISATIONS — DOCUMENTATION

Documentation to be kept as records in support of the approval includes the management system documentation, including any technical manuals, such as the operations manual, and training manual, that have been submitted with the initial application, and any amendments to these documents.

**GM1 ARO.GEN.220(a)(4a) Record-keeping**

## AUTHORISATION HOLDERS — DOCUMENTATION

Documentation to be kept as records in support of the authorisation of a high risk commercial specialised operation include the risk assessment documentation and related standard operating procedures (SOP), as well as a description of the management system of the proposed operation and a statement that all the documentation sent to the competent authority has been verified by the operator and found in compliance with the applicable requirements. Any amendments to these documents should be documented.

**AMC1 ARO.GEN.220(a)(7) Record-keeping**

## ACTIVITIES PERFORMED IN THE TERRITORY OF A MEMBER STATE BY PERSONS OR ORGANISATIONS ESTABLISHED OR RESIDING IN ANOTHER MEMBER STATE

- (a) Records related to the oversight of activities performed in the territory of a Member State by persons or organisations established or residing in another Member State should include, as a minimum:
- (1) oversight records, including all audit and inspection records and related correspondence;
  - (2) copies of all relevant correspondence to exchange information with other competent authorities relating to the oversight of such persons/organisations;
  - (3) details of any enforcement measures and penalties; and
  - (4) any report from other competent authorities relating to the oversight of these persons/organisations, including any notification of evidence showing non-compliance with the applicable requirements.
- (b) Records should be kept by the competent authority having performed the audit or inspection and should be made available to other competent authorities at least in the following cases:
- (1) serious incidents or accidents;
  - (2) findings through the oversight programme where organisations certified or authorised by another competent authority are involved, to determine the root cause;
  - (3) an organisation being certified, authorised or having approvals in several Member States.
- (c) When records are requested by another competent authority, the reason for the request should be clearly stated.
- (d) The records can be made available by sending a copy or by allowing access to them for consultation.

**GM1 ARO.GEN.220 Record-keeping**

## GENERAL

Records are required to document results achieved or to provide evidence of activities performed. Records become factual when recorded. Therefore, they are not subject to version control. Even when a new record is produced covering the same issue, the previous record remains valid.

**SECTION III**  
***Oversight, certification and enforcement***

**AMC1 ARO.GEN.300(a);(b);(c) Oversight**

GENERAL

The competent authority should assess the organisation and monitor its continued competence to conduct safe operations in compliance with the applicable requirements. The competent authority should ensure that accountability for assessing organisations is clearly defined. This accountability may be delegated or shared, in whole or in part. Where more than one competent authority is involved, a responsible person should be appointed under whose personal authority organisations are assessed.

**AMC2 ARO.GEN.300(a);(b);(c) Oversight**

EVALUATION OF OPERATIONAL SAFETY RISK ASSESSMENT

As part of the initial certification or the continuing oversight of an operator, the competent authority should normally evaluate the operator's safety risk assessment processes related to hazards identified by the operator as having an interface with its operations. These safety risk assessments should be identifiable processes of the operator's management system.

As part of its continuing oversight, the competent authority should also remain satisfied as to the effectiveness of these safety risk assessments.

(a) General methodology for operational hazards

The competent authority should establish a methodology for evaluating the safety risk assessment processes of the operator's management system.

When related to operational hazards, the competent authority's evaluation under its normal oversight process should be considered satisfactory if the operator demonstrates its competence and capability to:

- (1) understand the hazards and their consequences on its operations;
- (2) be clear on where these hazards may exceed acceptable safety risk limits;
- (3) identify and implement mitigations, including suspension of operations where mitigation cannot reduce the risk to within safety risk limits;
- (4) develop and execute effectively robust procedures for the preparation and the safe operation of the flights subject to the hazards identified;
- (5) assess the competence and currency of its staff in relation to the duties necessary for the intended operations and implement any necessary training; and
- (6) ensure sufficient numbers of qualified and competent staff for such duties.

The competent authority should take into account that:

- (1) the operator's recorded mitigations for each unacceptable risk identified are in place;
- (2) the operational procedures specified by the operator with the most significance to safety appear to be robust; and
- (3) the staff on which the operator depends in respect of those duties necessary for the intended operations are trained and assessed as competent in the relevant procedures.



**EVALUATION OF OPERATORS' VOLCANIC ASH SAFETY RISK ASSESSMENT**

In addition to the general methodology for operational hazards, the competent authority's evaluation under its normal oversight process should also assess the operator's competence and capability to:

- (a) choose the correct information sources to use to interpret the information related to volcanic ash contamination forecast and to resolve correctly any conflicts among such sources; and
- (b) take account of all information from its type certificate holders (TCHs) concerning volcanic ash-related airworthiness aspects of the aircraft it operates, and the related pre-flight, in-flight and post flight precautions to be observed.

**GM1 ARO.GEN.300(a);(b);(c) Oversight****GENERAL**

- (a) Responsibility for the conduct of safe operations lies with the organisation. Under these provisions a positive move is made towards devolving upon the organisation a share of the responsibility for monitoring the safety of operations. The objective cannot be attained unless organisations are prepared to accept the implications of this policy, including that of committing the necessary resources to its implementation. Crucial to the success of the policy is the content of Part-ORO, which requires the establishment of a management system by the organisation.
- (b) The competent authority should continue to assess the organisation's compliance with the applicable requirements, including the effectiveness of the management system. If the management system is judged to have failed in its effectiveness, then this in itself is a breach of the requirements which may, among others, call into question the validity of a certificate, if applicable.
- (c) The accountable manager is accountable to the competent authority as well as to those who may appoint him/her. It follows that the competent authority cannot accept a situation in which the accountable manager is denied sufficient funds, manpower or influence to rectify deficiencies identified by the management system.
- (d) Oversight of the organisation includes a review and assessment of the qualifications of nominated persons.

**GM2 ARO.GEN.300(a);(b);(c) Oversight****VOLCANIC ASH SAFETY RISK ASSESSMENT — ADDITIONAL GUIDANCE**

Further guidance on the assessment of an operator's volcanic ash safety risk assessment is given in ICAO Doc 9974 (Flight safety and volcanic ash — Risk management of flight operations with known or forecast volcanic ash contamination).

**GM3 ARO.GEN.300(a);(b);(c) Oversight****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:
  - (1) classroom;
  - (2) flight simulation training device (FSTD);
  - (3) aircraft; and
  - (4) cabin training device;
- (e) training methods:
  - (1) classroom training (instructions, presentations and behavioural exercises);
  - (2) computer-based training (CBT);
  - (3) line-oriented flight training (LOFT); and
  - (4) check or test;
- (f) training analysis:
  - (1) pre-course reading and study;
  - (2) integration of the different training methods;
  - (3) competence and performance of the trainer or instructor;
  - (4) assessment of flight crew members; and
  - (5) effectiveness of training.

#### **GM4 ARO.GEN.300(a);(b);(c) Oversight**

##### OVERSIGHT OF AN OPERATOR CONVERSION COURSE (OCC) FOR MULTI-CREW PILOT LICENCE (MPL) HOLDERS

As part of the initial certification or the continuing oversight of an operator, the competent authority should include the assessment of the OCC provided to MPL holders, who undertake their first conversion course on a new type or at an operator other than the one that was involved in their training for the MPL.

The assessment of the OCC should evaluate whether the operator, in the process of development of the OCC, took the following aspects into account:

- the time elapsed after completion of the initial training, between base training and hiring, and the Line Flying Under Supervision (LIFUS);
- the necessary feedback loop between the Approved Training Organisation (ATO) and the operator involved in the licence training.

#### **AMC1 ARO.GEN.300(a)(2) Oversight**

##### OPERATIONAL APPROVALS ISSUED BY NON-EU STATE OF REGISTRY

When verifying continued compliance of non-commercial operators using an aircraft registered in a third country holding operational approvals for operations in PBN, MNPS and RVSM airspace issued by a non-EU State of Registry, the competent authority should at least assess if:

- (a) the State of registry has established an equivalent level of safety, considering any differences notified to the ICAO Standards for RVSM, RNP, MNPS and MEL; or

- (b) there are reservations on the safety oversight capabilities and records of the State of registry; or
- (c) operators of the State of registry are subject to an operating ban pursuant Regulation (EC) No 2111/2005; or
- (d) relevant findings on the State of registry from audits carried out under international conventions exist; or
- (e) relevant findings on the State of registry from other safety assessment programmes of States exist.

### **GM1 ARO.GEN.300(d) Oversight**

#### ACTIVITIES WITHIN THE TERRITORY OF THE MEMBER STATE

- (a) Activities performed in the territory of the Member State by persons or organisations established or residing in another Member State include:
  - (1) activities of:
    - (i) organisations certified or authorised by or declaring their activity to the competent authority of any other Member State or the Agency; or
    - (ii) persons performing operations with other-than-complex motor-powered aircraft; and
  - (2) activities of persons holding a licence, certificate, rating, or attestation issued by the competent authority of any other Member State.
- (b) Audits and inspections of such activities, including ramp and unannounced inspections, should be prioritised towards those areas of greater safety concern, as identified through the analysis of data on safety hazards and their consequences in operations.

### **AMC1 ARO.GEN.305(b);(d);(d1) Oversight programme**

#### SPECIFIC NATURE AND COMPLEXITY OF THE ORGANISATION, RESULTS OF PAST OVERSIGHT

- (a) When determining the oversight programme for an organisation, the competent authority should consider in particular the following elements, as applicable:
  - (1) the implementation by the organisation of industry standards, directly relevant to the organisation's activity subject to this Regulation;
  - (2) the procedure applied for and scope of changes not requiring prior approval;
  - (3) specific approvals held by the organisation;
  - (4) specific procedures implemented by the organisation related to any alternative means of compliance used; and
  - (5) number of subcontractors.
- (b) For the purpose of assessing the complexity of an organisation's management system, AMC1 ORO.GEN.200(b) should be used.
- (c) Regarding results of past oversight, the competent authority should also take into account relevant results of ramp inspections of organisations it has certified or authorised, persons and other organisation having declared their activity or persons performing operations with other-

than-complex motor-powered aircraft that were performed in other Member States in accordance with ARO.RAMP.

### **AMC2 ARO.GEN.305(b) Oversight programme**

#### PROCEDURES FOR OVERSIGHT OF OPERATIONS

- (a) Each organisation to which a certificate has been issued should have an inspector specifically assigned to it. Several inspectors should be required for the larger companies with widespread or varied types of operation. This does not prevent a single inspector being assigned to several companies. Where more than one inspector is assigned to an organisation, one of them should be nominated as having overall responsibility for supervision of, and liaison with, the organisation's management, and be responsible for reporting on compliance with the requirements for its operations as a whole.
- (b) Audits and inspections, on a scale and frequency appropriate to the operation, should cover at least:
- (1) infrastructure,
  - (2) manuals,
  - (3) training,
  - (4) crew records,
  - (5) equipment,
  - (6) release of flight/dispatch,
  - (7) dangerous goods,
  - (8) organisation's management system.
- (c) The following types of inspections should be envisaged, as part of the oversight programme:
- (1) flight inspection,
  - (2) ground inspection (e.g. documents and records),
  - (3) training inspection (e.g. ground, aircraft/FSTD),
  - (4) ramp inspection.

The inspection should be a 'deep cut' through the items selected, and all findings should be recorded. Inspectors should review the root cause(s) identified by the organisation for each confirmed finding.

The competent authority should be satisfied that the root cause(s) identified and the corrective actions taken are adequate to correct the non-compliance and to prevent re-occurrence.

- (d) Audits and inspections may be conducted separately or in combination. Audits and inspections may, at the discretion of the competent authority, be conducted with or without prior notice to the organisation.
- (e) Where it is apparent to an inspector that an organisation has permitted a breach of the applicable requirements, with the result that air safety has, or might have, been compromised, the inspector should ensure that the responsible person within the competent authority is informed without delay.
- (f) In the first few months of a new operation, inspectors should be particularly alert to any irregular procedures, evidence of inadequate facilities or equipment, or indications that management

control of the operation may be ineffective. They should also carefully examine any conditions that may indicate a significant deterioration in the organisation's financial management. When any financial difficulties are identified, inspectors should increase technical surveillance of the operation with particular emphasis on the upholding of safety standards.

- (g) The number or the magnitude of the non-compliances identified by the competent authority will serve to support the competent authority's continuing confidence in the organisation's competence or, alternatively, may lead to an erosion of that confidence. In the latter case, the competent authority should review any identifiable shortcomings of the management system.

### **GM1 ARO.GEN.305(b) Oversight programme**

#### FINANCIAL MANAGEMENT

Examples of trends that may indicate problems in a new organisation's financial management are:

- (a) significant lay-offs or turnover of personnel;
- (b) delays in meeting payroll;
- (c) reduction of safe operating standards;
- (d) decreasing standards of training;
- (e) withdrawal of credit by suppliers;
- (f) inadequate maintenance of aircraft;
- (g) shortage of supplies and spare parts;
- (h) curtailment or reduced frequency of revenue flights; and
- (i) sale or repossession of aircraft or other major equipment items.

### **GM1 ARO.GEN.305(b);(c);(d);(d1) Oversight programme**

#### STORAGE PERIODS OF RECORDS

If the organisation's oversight cycle has been extended, the minimum storage periods for records should be aligned with the extended oversight cycle to ensure that the competent authority has access to all relevant records.

### **AMC1 ARO.GEN.305(b)(1) Oversight programme**

#### AUDIT

- (a) The oversight programme should indicate which aspects of the approval will be covered with each audit.
- (b) Part of an audit should concentrate on the organisation's compliance monitoring reports produced by the compliance monitoring personnel to determine if the organisation is identifying and correcting its problems.
- (c) At the conclusion of the audit, an audit report should be completed by the auditing inspector, including all findings raised.

**AMC2 ARO.GEN.305(b)(1) Oversight programme**

## RAMP INSPECTIONS

- (a) When conducting a ramp inspection of aircraft used by organisations under its regulatory oversight, the competent authority should, as far as possible, comply with the requirements defined in ARO.RAMP.
- (b) When conducting ramp inspections on other-than-suspected aircraft, the competent authority should take into account the following elements:
  - (1) repeated inspections should be avoided of those organisations for which previous inspections have not revealed safety deficiencies;
  - (2) the oversight programme should enable the widest possible sampling rate of aircraft flying into their territory; and
  - (3) there should be no discrimination on the basis of the organisation's nationality, the type of operation or type of aircraft, unless such criteria can be linked to an increased risk.
- (c) For aircraft other than those used by organisations under its regulatory oversight, when conducting a risk assessment, the competent authority should consider aircraft that have not been ramp inspected for more than 6 months.

**AMC1 ARO.GEN.305(b);(c);(d);(d1) Oversight programme**

## INDUSTRY STANDARDS

- (a) For organisations having demonstrated compliance with industry standards, the competent authority may adapt its oversight programme, in order to avoid duplication of specific audit items.
- (b) Demonstrated compliance with industry standards should not be considered in isolation from the other elements to be considered for the competent authority's risk-based oversight.
- (c) In order to be able to credit any audits performed as part of certification in accordance with industry standards, the following should be considered:
  - (1) the demonstration of compliance is based on certification auditing schemes providing for independent and systematic verification;
  - (2) the existence of an accreditation scheme and accreditation body for certification in accordance with the industry standards has been verified;
  - (3) certification audits are relevant to the requirements defined in Annex III (Part-ORO) and other Annexes to this Regulation as applicable;
  - (4) the scope of such certification audits can easily be mapped against the scope of oversight in accordance with Annex III (Part-ORO);
  - (5) audit results are accessible to the competent authority and open to exchange of information in accordance with Article 15(1) of Regulation (EC) No 216/2008; and
  - (6) the audit planning intervals of certification audits i.a.w. industry standards are compatible with the oversight planning cycle.

**AMC1 ARO.GEN.305(c) Oversight programme**

## OVERSIGHT PLANNING CYCLE

- (a) When determining the oversight planning cycle and defining the oversight programme, the competent authority should assess the risks related to the activity of each organisation and adapt the oversight to the level of risk identified and to the organisation's ability to effectively manage safety risks.
- (b) The competent authority should establish a schedule of audits and inspections appropriate to each organisation's business. The planning of audits and inspections should take into account the results of the hazard identification and risk assessment conducted and maintained by the organisation as part of the organisation's management system. Inspectors should work in accordance with the schedule provided to them.
- (c) When the competent authority, having regard to an organisation's safety performance, varies the frequency of an audit or inspection, it should ensure that all aspects of the operation are audited and inspected within the applicable oversight planning cycle.
- (d) The section(s) of the oversight programme dealing with ramp inspections should be developed based on geographical locations, taking into account aerodrome activity, and focusing on key issues that can be inspected in the time available without unnecessarily delaying the operations.

**AMC2 ARO.GEN.305(c) Oversight programme**

## OVERSIGHT PLANNING CYCLE

- (a) For each organisation certified by the competent authority all processes should be completely audited at periods not exceeding the applicable oversight planning cycle. The beginning of the first oversight planning cycle is normally determined by the date of issue of the first certificate. If the competent authority wishes to align the oversight planning cycle with the calendar year, it should shorten the first oversight planning cycle accordingly.
- (b) The interval between two audits for a particular process should not exceed the interval of the applicable oversight planning cycle.
- (c) Audits should include at least one on-site audit within each oversight planning cycle. For organisations exercising their regular activity at more than one site, the determination of the sites to be audited should consider the results of past oversight, the volume of activity at each site, as well as main risk areas identified.
- (d) For organisations holding more than one certificate, the competent authority may define an integrated oversight schedule to include all applicable audit items. In order to avoid duplication of audits, credit may be granted for specific audit items already completed during the current oversight planning cycle, subject to four conditions:
  - (1) the specific audit item should be the same for all certificates under consideration;
  - (2) there should be satisfactory evidence on record that such specific audit items were carried out and that all corrective actions have been implemented to the satisfaction of the competent authority;
  - (3) the competent authority should be satisfied that there is no evidence that standards have deteriorated in respect of those specific audit items being granted a credit;
  - (4) the interval between two audits for the specific item being granted a credit should not exceed the applicable oversight planning cycle.

**AMC1 ARO.GEN.305(d) Oversight programme**

## OVERSIGHT DECLARED ORGANISATIONS

- (a) When determining the oversight programme of organisations having declared their activity, the competent authority should make a selection of operators to be inspected/audited based on the elements specified in ARO.GEN.305(d).
- (b) For each selected operator an inspection is a sample inspection of the pre-defined inspection criteria on the basis of key risk elements and the applicable requirements.
- (c) The results of past oversight activities should include information from approval activities, e.g. SPA or from other survey programmes such as ACAM.
- (d) The oversight programme should also include a certain percentage of unannounced inspections.
- (e) The oversight programme should be developed on a yearly basis. All operators should be considered for inclusion into the programme not later than 12 months after the date of the first declaration received. At least one inspection should be performed within each 48-month cycle starting with the date of the first declaration received.
- (f) Additional audit/inspections to specific operators may be included in the oversight programme on the basis of the assessment of associated risks carried out within the occurrences reporting scheme(s).

**AMC1 ARO.GEN.305(d1) Oversight programme**

## OVERSIGHT OF AUTHORISATION HOLDERS

- (a) When determining the oversight programme of high risk commercial specialised operators holding an authorisation specialised operations authorisation holders, the competent authority should assess the risks related to the type of activity carried out by each organisation and adapt the oversight to the level of risk identified and to the organisation's ability to effectively manage safety risks.
- (b) An oversight cycle not exceeding 24 months should be applied. The oversight planning cycle may be extended to a maximum of 48 months if the competent authority has established that during the previous 24 months the organisation has been able to effectively manage safety risks.
- (c) The competent authority should establish a schedule of audits and/or inspections, including unannounced inspections, appropriate to each organisation's business. The planning of audits and inspections should take into account the results of the hazard identification and risk assessment conducted and maintained by the organisation as part of the organisation's management system. Inspectors should work in accordance with the schedule provided to them.
- (d) If the specialised operations authorisation is time limited, the competent authority should adapt the schedule of audits and inspections to the duration of the specialised operation authorisation. Audits or inspections may not be necessary if an authorisation is issued for a single flight or event.
- (e) When scheduling audits and inspections, the competent authority should also take into account the activity conducted by authorised organisations in other Member States. In this case the competent authority should coordinate the audit and inspection schedule with the authority of the Member State in which territory the activity is taking place.
- (f) Additional audits or inspections to specific operators may be included in the oversight programme on the basis of the assessment of associated risks carried out within the occurrences reporting scheme(s).



**GM1 ARO.GEN.305(d1) Oversight programme**

## OVERSIGHT OF AUTHORISATION HOLDERS

Past and current authorisation process refers to relevant results of past and current authorisation and oversight activities.

**AMC1 ARO.GEN.305(e) Oversight programme**

## PERSONS HOLDING A LICENCE, CERTIFICATE, RATING OR ATTESTATION

The oversight of persons holding a licence, certificate, rating or attestation should normally be ensured as part of the oversight of organisations. Additionally, the competent authority should verify compliance with applicable requirements when endorsing or renewing ratings.

To properly discharge its oversight responsibilities, the competent authority should perform a certain number of unannounced verifications.

**AMC1 ARO.GEN.310(a) Initial certification procedure — organisations**

## VERIFICATION OF COMPLIANCE

- (a) Upon receipt of an application for an air operator certificate (AOC), the competent authority should:
- (1) assess the management system and processes, including the operator's organisation and operational control system;
  - (2) review the operations manual and any other documentation provided by the organisation; and
  - (3) for the purpose of verifying the organisation's compliance with the applicable requirements, conduct an audit at the organisation's facilities. The competent authority should require the conduct of one or more demonstration flights operated as if they were commercial flights, or an in-flight inspection should be conducted at the earliest opportunity.
- (b) The competent authority should ensure that the following steps are taken:
- (1) The organisation's written application for an AOC should be submitted at least 90 days before the date of intended operation, except that the operations manual may be submitted later, but not less than 60 days before the date of intended operation. The application form should be printed in language(s) of the competent authority's choosing.
  - (2) An individual should be nominated by the responsible person of the competent authority to oversee, to become the focal point for all aspects of the organisation certification process and to coordinate all necessary activity. The nominated person should be responsible to the responsible person of the competent authority for confirming that all appropriate audits and inspections have been carried out. He/she should also ensure that the necessary specific or prior approvals required by (b)(3) are issued in due course. Of particular importance on initial application is a careful review of the qualifications of the organisations' nominated persons. Account should be taken of the relevance of the nominee's previous experience and known record.
  - (3) Submissions that require the competent authority's specific or prior approval should be referred to the appropriate department of the competent authority. Submissions should

include, where relevant, the associated qualification requirements and training programmes.

- (c) The ability of the applicant to secure, in compliance with the applicable requirements and the safe operation of aircraft, all necessary training and, where required, licensing of personnel, should be assessed. This assessment should also include the areas of responsibility and the numbers of those allocated by the applicant to key management tasks.
- (d) In order to verify the organisation's compliance with the applicable requirements, the competent authority should conduct an audit of the organisation, including interviews of personnel and inspections carried out at the organisation's facilities.

The competent authority should only conduct such an audit after being satisfied that the application shows compliance with the applicable requirements.

- (e) The audit should focus on the following areas:
  - (1) detailed management structure, including names and qualifications of personnel required by ORO.GEN.210 and adequacy of the organisation and management structure;
  - (2) personnel:
    - (i) adequacy of number and qualifications with regard to the intended terms of approval and associated privileges;
    - (ii) validity of licences, ratings, certificates or attestations as applicable;
  - (3) processes for safety risk management and compliance monitoring;
  - (4) facilities — adequacy with regard to the organisation's scope of work;
  - (5) documentation based on which the certificate should be granted (organisation documentation as required by Part-ORO, including technical manuals, such as operations manual or training manual).
- (f) In case of non-compliance, the applicant should be informed in writing of the corrections that are required.
- (g) When the verification process is complete, the person with overall responsibility, nominated in accordance with (b)(2), should present the application to the person responsible for the issue of an AOC together with a written recommendation and evidence of the result of all investigations or assessments which are required before the operator certificate is issued. Approvals required should be attached to the recommendation. The competent authority should inform the applicant of its decision concerning the application within 60 days of receipt of all supporting documentation. In cases where an application for an organisation certificate is refused, the applicant should be informed of the right of appeal as exists under national law.

### **AMC1 ARO.GEN.330 Changes — organisations**

#### AOC HOLDERS

- (a) Changes to personnel specified in Part-ORO:
  - (1) Any changes to the accountable manager specified in ORO.GEN.210(a) that affect the certificate or terms of approval/approval schedule attached to it, require prior approval under ARO.GEN.330(a) and ORO.GEN.130(a) and (b).
  - (2) When an organisation submits the name of a new nominee for any of the persons nominated as per ORO.GEN.210(b), the competent authority should require the organisation to produce a written résumé of the proposed person's qualifications. The

competent authority should reserve the right to interview the nominee or call for additional evidence of his/her suitability before deciding upon his/her acceptability.

- (b) A simple management system documentation status sheet should be maintained, which contains information on when an amendment was received by the competent authority and when it was approved.
- (c) The organisation should provide each management system documentation amendment to the competent authority, including for the amendments that do not require prior approval by the competent authority. Where the amendment requires competent authority approval, the competent authority, when satisfied, should indicate its approval in writing. Where the amendment does not require prior approval, the competent authority should acknowledge receipt in writing within 10 working days.
- (d) For changes requiring prior approval, in order to verify the organisation's compliance with the applicable requirements, the competent authority should conduct an audit of the organisation, limited to the extent of the changes. If required for verification, the audit should include interviews and inspections carried out at the organisation's facilities.

#### **GM1 ARO.GEN.330 Changes — organisations**

##### CHANGE OF NAME OF THE ORGANISATION

- (a) On receipt of the application and the relevant parts of the organisation's documentation as required by Part-ORO, the competent authority should re-issue the certificate.
- (b) A name change alone does not require the competent authority to audit the organisation, unless there is evidence that other aspects of the organisation have changed.

#### **AMC1 ARO.GEN.345 Declaration — organisations**

##### ACKNOWLEDGEMENT OF RECEIPT

The competent authority should acknowledge receipt of the declaration in writing within 10 working days.

#### **GM1 ARO.GEN.345 Declaration — organisations**

##### VERIFICATION — DECLARATION

The verification made by the competent authority upon receipt of a declaration does not imply an inspection. The aim is to check whether what is declared complies with applicable regulations.

#### **GM1 ARO.GEN.350 Findings and corrective actions — organisations**

##### TRAINING

For a level 1 finding it may be necessary for the competent authority to ensure that further training by the organisation is carried out and audited by the competent authority before the activity is resumed, dependent upon the nature of the finding.

**GM2 ARO.GEN.350(d) Findings and corrective actions — organisations**

## CORRECTIVE ACTION IMPLEMENTATION PERIOD

The 3-month period should commence from the date of the communication of the finding to the organisation in writing and requesting corrective action to address the non-compliance(s) identified.

**GM1 ARO.GEN.355(b) Findings and enforcement measures — persons**

## GENERAL

This provision is necessary to ensure that enforcement measures will be taken also in cases where the competent authority may not act on the licence, certificate or attestation. The type of enforcement measure will depend on the applicable national law and may include for example the payment of a fine or the prohibition from exercising.

It covers two cases:

- (a) persons subject to the requirements laid down in Regulation (EC) No 216/2008 and its Implementing Rules who are not required to hold a licence, certificate or attestation; and
- (b) persons who are required to hold a licence, rating, certificate or attestation, but who do not hold the appropriate licence, rating, certificate or attestation as required for the activity they perform.

## SUBPART OPS: AIR OPERATIONS

### SECTION I *Certification of commercial air transport operators*

#### **GM1 ARO.OPS.100(b) Issue of the air operator certificate**

##### AREA OF OPERATION

- (a) If the area of operation within the operational specifications of Appendix II to Part-ARO is not defined as 'worldwide' or 'with no geographical limit', the competent authority should describe the boundaries of a permissible area of operation by listing for example:
- (1) a continuous line between a list of coordinates (Lat./Long.);
  - (2) the national boundary of the State of issuance of the AOC;
  - (3) a flight information region (FIR) boundary;
  - (4) a combination of adjacent FIR boundaries;
  - (5) ICAO region(s) as per ICAO Doc 7030; and
  - (6) operations in the Inter-Tropical Convergence Zone (ICTZ).
- (b) The following factors should be taken into account when deciding the area of operation for CAT operations:
- (1) The adequacy of the operational control and maintenance arrangements within the proposed area of operation.
  - (2) The general suitability of the aircraft which are to be used and in particular:
    - (i) the performance capability of the aircraft with regard to the terrain;
    - (ii) the need for any special equipment;
    - (iii) the aircraft systems and the level of redundancy of those systems, with regard to extremes of weather or climate; and
    - (iv) the need for any special dispatch minima with regard to the content of the MEL.
  - (3) Any special training required for:
    - (i) weather or climatic conditions likely to be encountered; and
    - (ii) compliance with specific approvals under Part-SPA (MNPS, RVSM, etc.).
  - (4) The need for the flight crew to comply with non-standard ATC requirements such as the use of:
    - (i) non-standard phraseology;
    - (ii) altitude clearances in metres; and
    - (iii) altimeter settings in inches of mercury, wind speed in metres/sec, visibility in miles, etc.
  - (5) The navigation and communication facilities available over the routes proposed and the associated equipment of the aircraft.

- (6) The adequacy of aerodromes or operating sites available within the proposed area, and the availability of current maps, charts, associated documents or equivalent data.
- (7) The availability of adequate search and rescue facilities, and the need to carry special survival equipment and the need for training in the use of the survival equipment.
- (8) Survival equipment available for the operator and installed in the aircraft used.

#### **AMC1 ARO.OPS.105 Code-share arrangements**

##### SAFETY OF A CODE-SHARE AGREEMENT

- (a) When evaluating the safety of a code-share agreement, the competent authority should check that the:
  - (1) documented information provided by the applicant in accordance with ORO.AOC.115 is complete and shows compliance with the applicable ICAO standards; and
  - (2) operator has established a code-share audit programme for monitoring continuous compliance of the third country operator with the applicable ICAO standards.
- (b) The competent authority should request the applicant to make a declaration covering the above items.
- (c) In case of non-compliance, the applicant should be informed in writing of the corrections which are required.

#### **AMC2 ARO.OPS.105 Code-share arrangements**

##### AUDITS PERFORMED BY A THIRD PARTY PROVIDER

When audits are performed by a third party provider, the competent authority should verify if the third party provider meets the criteria established in AMC2 ORO.AOC.115(b).

Change of  
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applicable  
from  
8/04/2019

#### **AMC1 ARO.OPS.110 Lease agreements for aeroplanes and helicopters**

##### WET LEASE-IN

- (a) Before approving a wet lease-in agreement, the competent authority of the lessee should assess available reports on ramp inspections performed on aircraft of the lessor.
- (b) The competent authority should only approve a wet lease-in agreement if the routes intended to be flown are contained within the authorised areas of operations specified in the AOC of the lessor.

#### **AMC2 ARO.OPS.110 Lease agreements for aeroplanes and helicopters**

##### SHORT TERM WET LEASE-IN

The competent authority of the lessee may approve third country operators individually or a framework contract with more than one third country operator in anticipation of operational needs or to overcome operational difficulties taking into account the conditions defined in Article 13(3) of Regulation (EC) No 1008/2008.

Change of  
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applicable  
from  
8/04/2019

**GM1 ARO.OPS.110 Lease agreements for aeroplanes and helicopters**

## APPROVAL

- (a) Except for wet lease-out, approval for an EU operator to lease an aircraft of another operator should be issued by the competent authority of the lessee and the competent authority of the lessor.
- (b) When an EU operator leases an aircraft of an undertaking or person other than an operator, the competent authority of the lessee should issue the approval.

Change of  
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applicable  
from  
8/04/2019

**GM2 ARO.OPS.110 Lease agreements for aeroplanes and helicopters**

## DRY LEASE-OUT

The purpose of the requirement for the competent authority to ensure proper coordination with the authority that is responsible for the oversight of the continuing airworthiness of the aircraft in accordance with Commission Regulation (EC) No 2042/2003<sup>4</sup> is to ensure that appropriate arrangements are in place to allow:

- (a) the transfer of regulatory oversight over the aircraft, if relevant; or
- (b) continued compliance of the aircraft with the requirements of Commission Regulation (EC) No 2042/2003.

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<sup>4</sup> OJ L 315, 28.11.2003, p. 1.

**SECTION Ia**  
**Authorisation of high risk commercial specialised operations**

**AMC1 ARO.OPS.150 Authorisation of high risk commercial specialised operations**

GENERAL

The competent authority should make publicly available a list of activities of high risk commercial specialised operations so that operators are informed when to apply for an authorisation.

**AMC1 ARO.OPS.150(a);(b) Authorisation of high risk commercial specialised operations**

VERIFICATION OF COMPLIANCE

- (a) For the purpose of verifying the operator's standard operating procedures (SOPs), the competent authority may conduct an audit at the operator's facilities or require the conduct of one or more demonstration flights operated as if they were high risk commercial specialised operations.
- (b) An individual should be nominated by the competent authority to become the focal point for all aspects of the authorisation process and to coordinate all necessary activity. This nominated person should confirm to the responsible person of the competent authority issuing the authorisation that all appropriate audits and inspections have been carried out.
- (c) When the verification process is complete, the person, nominated in accordance with (b), should present the application to the person responsible for the issuance of an authorisation together with a written recommendation and evidence of the result of the review of the operator's risk assessment documentation and SOPs, which is required before the authorisation is issued. The competent authority should inform the applicant of its decision concerning the application. In cases where an application for an authorisation is refused, the applicant should be informed of the right of appeal as exists under national law.

**GM1 ARO.OPS.150(b) Authorisation of high risk commercial specialised operations**

LIMITATIONS

The competent authority may issue the authorisation for a limited duration, e.g. for a single event or a defined series of flights, or limit the operating area.

**GM1 ARO.OPS.150(c) Authorisation of high risk commercial specialised operations**

CHANGE OF NAME OF THE ORGANISATION

- (a) Upon receipt of the application for a change of the authorisation, the competent authority should re-issue the authorisation.
- (b) A name change alone does not require the competent authority to re-assess the risk assessment and SOPs, unless there is evidence that other aspects of the operation have changed.



**AMC1 ARO.OPS.150(f) Authorisation of high risk commercial specialised operations**

## AUTHORISATION OF CROSS-BORDER HIGH RISK COMMERCIAL SPECIALISED OPERATION

- (a) An authorisation for cross-border high risk commercial specialised operations should be issued by the competent authority, when both the competent authority itself and the competent authority of the place where the operation is planned to be conducted are satisfied that the risk assessment and SOPs are appropriate for the area overflown.
- (b) The authorisation should be amended to include those areas for which the operator has received the authorisation to conduct cross-border high risk commercial specialised operation.

**GM1 ARO.OPS.150(f) Authorisation of high risk commercial specialised operations**

## AUTHORISATION OF CROSS-BORDER HIGH RISK COMMERCIAL SPECIALISED OPERATION

Cross-border high risk commercial specialised operation means a high risk commercial specialised operation in a territory other than the Member State than where the operator has its principle place of business.

**GM1 ARO.OPS.155 Lease agreements**

## WET LEASE-IN

Since ICAO has not stipulated globally harmonised standards for specialised operators and their operation, the applicable requirements involving a third country registered aircraft of a third country operator will be of a local or national nature. Therefore, the competent authority approving a wet lease-in agreement is encouraged to collect information on the oversight system of the state of the operator or state of registry, if applicable, in order to have a better understanding of the operation.

**GM2 ARO.OPS.155 Lease agreements**

## LEASE AGREEMENTS BETWEEN OPERATORS REGISTERED IN AN EU MEMBER STATE

No approval is required for any lease agreements between operators having their principle place of business in an EU Member State.

**SECTION II**  
**Approvals****AMC1 ARO.OPS.200 Specific approval procedure**

## PROCEDURES FOR THE APPROVAL OF CARRIAGE OF DANGEROUS GOODS

When verifying compliance with the applicable requirements of SPA.DG.100, the competent authority should check that:

- (a) the procedures specified in the operations manual are sufficient for the safe transport of dangerous goods;
- (b) operations personnel are properly trained in accordance with the ICAO *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (ICAO Doc 9284-AN/905); and
- (c) a reporting scheme is in place.

**AMC2 ARO.OPS.200 Specific approval procedure**

## PROCEDURES FOR THE APPROVAL FOR REDUCED VERTICAL SEPARATION MINIMA (RVSM) OPERATIONS

- (a) When verifying compliance with the applicable requirements of Subpart D of Annex V (SPA.RVSM), the competent authority should verify that:
  - (1) each aircraft holds an adequate RVSM airworthiness approval;
  - (2) procedures for monitoring and reporting height keeping errors have been established;
  - (3) a training programme for the flight crew involved in these operations has been established; and
  - (4) operating procedures have been established.
- (b) Demonstration flight(s)

The content of the RVSM application may be sufficient to verify the aircraft performance and procedures. However, the final step of the approval process may require a demonstration flight. The competent authority may appoint an inspector for a flight in RVSM airspace to verify that all relevant procedures are applied effectively. If the performance is satisfactory, operation in RVSM airspace may be permitted.
- (c) Form of approval documents

Each aircraft group for which the operator is granted approval should be listed in the approval.
- (d) Airspace monitoring

For airspace, where a numerical target level of safety is prescribed, monitoring of aircraft height keeping performance in the airspace by an independent height monitoring system is necessary to verify that the prescribed level of safety is being achieved. However, an independent monitoring check of an aircraft is not a prerequisite for the grant of an RVSM approval.

  - (1) Suspension, revocation and reinstatement of RVSM approval

The incidence of height keeping errors that can be tolerated in an RVSM environment is small. It is expected of each operator to take immediate action to rectify the conditions

that cause an error. The operator should report an occurrence involving poor height keeping to the competent authority within 72 hours. The report should include an initial analysis of causal factors and measures taken to prevent repeat occurrences. The need for follow-up reports should be determined by the competent authority. Occurrences that should be reported and investigated are errors of:

- (i) total vertical error (TVE) equal to or greater than  $\pm 90$  m ( $\pm 300$  ft);
- (ii) altimeter system error (ASE) equal to or greater than  $\pm 75$  m ( $\pm 245$  ft); and
- (iii) assigned altitude deviation equal to or greater than  $\pm 90$  m ( $\pm 300$  ft).

Height keeping errors fall into two broad categories:

- errors caused by malfunction of aircraft equipment; and
- operational errors.

- (2) An operator that consistently experiences errors in either category should have approval for RVSM operations suspended or revoked. If a problem is identified that is related to one specific aircraft type, then RVSM approval may be suspended or revoked for that specific type within that operator's fleet.

- (3) Operators' actions:

The operator should make an effective, timely response to each height keeping error. The competent authority may consider suspending or revoking RVSM approval if the operator's responses to height keeping errors are not effective or timely. The competent authority should consider the operator's past performance record in determining the action to be taken.

- (4) Reinstatement of approval:

The operator should satisfy the competent authority that the causes of height keeping errors are understood and have been eliminated and that the operator's RVSM programmes and procedures are effective. At its discretion and to restore confidence, the competent authority may require an independent height monitoring check of affected aircraft to be performed.

### **AMC3 ARO.OPS.200 Specific approval procedure**

#### **APPROVAL OF HELICOPTER OFFSHORE OPERATIONS**

- (a) Approval

When verifying compliance with the applicable requirements of Subpart K of Annex V (Part-SPA) to Regulation (EU) No 965/2012, the competent authority should ensure prior to issuing an approval that:

- (1) the hazard identification, risk assessment and risk mitigation processes are in place;
- (2) operating procedures have been established applicable to the area of operation;
- (3) helicopters are appropriately certified and equipped for the area of operation;
- (4) flight crew involved in these operations are trained and checked in accordance with the training and checking programmes established by the operator; and
- (5) all requirements of Part-SPA, Subpart K are met.

- (b) Demonstration flight(s)

The final step of the approval process may require a demonstration flight performed in the area of operation. The competent authority may appoint an inspector for a flight to verify that all relevant procedures are applied effectively. If the performance is satisfactory, helicopter offshore operations may be approved.

#### **AMC4 ARO.OPS.200 Specific approval procedure**

PROCEDURES FOR THE APPROVAL OF COMMERCIAL AIR TRANSPORT OPERATIONS WITH SINGLE-ENGINE TURBINE AEROPLANES AT NIGHT OR IN INSTRUMENT METEOROLOGICAL CONDITIONS (SET-IMC)

- (a) When verifying compliance with the applicable requirements of Subpart L (SET-IMC) of Annex V (Part-SPA) to Regulation (EU) No 965/2012, the competent authority should check that:
- (1) the aeroplane is eligible for SET-IMC operations;
  - (2) the maintenance and operational procedures are adequate;
  - (3) a training programme for the flight crew involved in these operations has been established; and
  - (4) the operator has adequately assessed the risks of the intended operations.

In particular, the competent authority should assess the operator's safety performance, experience and flight crew training, as reflected in the data provided by the operator with its application, to ensure that the intended safety level is achieved.

With regard to the operator's specific SET-IMC flight crew training, the competent authority should ensure that it complies with the applicable requirements of Subpart FC (FLIGHT CREW) of Annex III (Part-ORO) and Subpart L (SET-IMC) of Annex V (Part-SPA) to Regulation (EU) No 965/2012, and that it is appropriate to the operations envisaged.

The competent authority should assess the operator's ability to achieve and maintain an acceptable level of power plant reliability by reviewing its engine-trend-monitoring programme and propulsion reliability programme, which are established in accordance with Annex I (Part-M) to Regulation (EU) No 1321/2014.

- (b) The competent authority may impose temporary restrictions to the operations (e.g. limitation to specific routes) until the operator is able to demonstrate that it has the capability to operate safely in compliance with all the applicable requirements.
- (c) When issuing the approval, the competent authority should specify:
- (1) the particular engine-airframe combination;
  - (2) the identification by registration of the individual aeroplanes designated for single-engine turbine aeroplane operations at night and/or in IMC; and
  - (3) the authorised areas and/or routes of operation.

#### VALIDATION OF OPERATIONAL CAPABILITY

Observation by the competent authority of a validation flight, simulating the proposed operation in the aeroplane, should be carried out before an approval is granted. This should include flight planning and preflight procedures, as well as a demonstration of the following simulated emergency procedures in simulated IMC/night:

- (a) total failure of the propulsion system; and

- (b) total loss of normally generated electrical power.

In order to mitigate the risks associated with the conduct of such emergency procedures, the following should be ensured:

- (a) in case of planned single-pilot operations, the crew should be composed of the commander using view-limiting devices for the purpose of simulating IMC/night and a second rated pilot whose responsibility is to help maintain visual separation from other aircraft, clouds, and terrain;
- (b) the flight should be conducted in visual meteorological conditions (VMC) by day, and additional, more restrictive weather minima may be established for the demonstration of the procedures involving higher risks; and
- (c) touch drills should be used when simulating a total failure of the propulsion system.

### **GM1 ARO.OPS.200 Specific approval procedure**

#### LIMITATIONS FOR HELICOPTER OFFSHORE OPERATIONS

The competent authority may impose limitations related to routes and areas of operation for offshore helicopter operations. Such limitations may be specified in the operations specifications (OPSSPEC) or specific approved documents or in the aeronautical information publication (AIP) or by other means.

For operations over sea areas, limitations may include a maximum significant wave height under which there is a good prospect of recovery of survivors. This should be linked with the available search and rescue capabilities in the different sea areas.

### **GM2 ARO.OPS.200 Specific approval procedure**

#### SPECIFIC APPROVALS FOR TRAINING ORGANISATIONS

The specific approvals, as established in Appendix V, for non-commercial operations and specialised operations, also apply to training organisations with a principal place of business in a Member State.

### **GM1 ARO.OPS.205 Minimum equipment list approval**

#### EXTENSION OF RECTIFICATION INTERVALS

The competent authority should verify that the operator does not use the extension of rectification intervals as a means to reduce or eliminate the need to rectify MEL defects in accordance with the established category limit. The extension of rectification intervals should only be considered valid and justifiable when events beyond the operator's control have precluded rectification.

### **GM1 ARO.OPS.210 Determination of local area**

#### GENERAL

The distance or local area should reflect the local environment and operating conditions.

**AMC1 ARO.OPS.215 Approval of helicopter operations over a hostile environment located outside a congested area**

## APPROVALS THAT REQUIRE ENDORSEMENT

- (a) Whenever the operator applies for an approval in accordance with CAT.POL.H.420 for which an endorsement from another State is required, the competent authority should only grant the approval once endorsement of that other State has been received.
- (b) The Operations Specification should be amended to include those areas for which endorsement was received.

**AMC2 ARO.OPS.215 Approval of helicopter operations over a hostile environment located outside a congested area**

## ENDORSEMENT BY ANOTHER STATE

- (a) Whenever the operator applies for an endorsement to operate over hostile environment located outside a congested area in another State in accordance with CAT.POL.H.420, the competent authority of that other State should only grant the endorsement once it is satisfied that:
  - (1) the safety risk assessment is appropriate to the area overflown; and
  - (2) the operator's substantiation that preclude the use of the appropriate performance criteria are appropriate for the area overflown.
- (b) The competent authority of that other State should inform the competent authority of the Member State responsible for issuing the approval.

**AMC1 ARO.OPS.220 Approval of helicopter operations to or from a public interest site**

## APPROVALS THAT REQUIRE ENDORSEMENT

Whenever the operator applies for an approval in accordance with CAT.POL.H.225 to conduct operations to or from a public interest site (PIS) for which an endorsement from another State is required, the competent authority should only grant such an approval once endorsement of that other State has been received.

**AMC2 ARO.OPS.220 Approval of helicopter operations to or from a public interest site**

## ENDORSEMENT BY ANOTHER STATE

- (a) Whenever the operator applies for an endorsement to operate to/from a public interest site in another State in accordance with CAT.POL.H.225, the competent authority of that other State should only grant the endorsement once it is satisfied that:
  - (1) the conditions of CAT.POL.H.225 (a)(1) through (5) can be met by the operator at those sites for which endorsement is requested; and
  - (2) the operations manual includes the procedures to comply with CAT.POL.H.225 (b) for these sites for which endorsement is requested.
- (b) The competent authority of that other State should inform the competent authority of the Member State responsible for issuing the approval.

**GM1 ARO.OPS.225 Approval of operations to an isolated aerodrome**

## GENERAL

The use of an isolated aerodrome exposes the aircraft and passengers to a greater risk than to operations where a destination alternate aerodrome is available. Whether an aerodrome is classified as an isolated aerodrome or not often depends on which aircraft are used for operating the aerodrome. The competent authority should therefore assess whether all possible means are applied to mitigate the greater risk.

**GM1 ARO.OPS.235(b);(c) Approval of individual flight time specification schemes**

ICAO DOC 9966 (MANUAL FOR THE OVERSIGHT OF FATIGUE MANAGEMENT APPROACHES)

Further guidance on fatigue risk management processes, appropriate fatigue management, the underlying scientific principles and operational knowledge may be found in ICAO Doc 9966 (Manual for the Oversight of Fatigue Management Approaches).

**GM1 ARO.OPS.240 Specific approval of RNP AR APCH**

## TEMPORARY LIMITATION ON RVR

Where operators are new to RNP AR APCH operations and their initial application is for RNP < 0.3, it is appropriate to establish a temporary limitation for RVR minima, until operational experience is gained. This period could be based upon time (e.g. 90 days) and a number of conducted operations, as agreed by the competent authority and the operator.

**GM2 ARO.OPS.240 Specific approval of RNP AR APCH**

## REFERENCES

Additional guidance material for the specific approval of PBN operations, when required, can be found in ICAO Doc 9997 Performance-Based Navigation (PBN) Operational Approval Manual. In particular, a job aid can be found in paragraph 4.7 therein for assessment of applications for RNP AR APCH.

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**SECTION III**  
***Oversight of operations***

**AMC1 ARO.OPS.300 Introductory flights**

MARGINAL ACTIVITY

The competent authority should publish criteria specifying to which extent it considers an activity marginal and how this is being overseen.

**GM1 ARO.OPS.300 Introductory flights**

ADDITIONAL CONDITIONS

For introductory flights carried out in the territory of the Member State, the competent authority may establish additional conditions such as defined area of the operation, time period during which such operations are to be conducted, safety risk assessments to be accomplished, aircraft to be used, specific operating procedures, notification requirements, maximum distance flown, pilot qualification, maximum number of passengers on-board, further restrictions on the maximum take-off mass.



## SUBPART RAMP: RAMP INSPECTIONS OF AIRCRAFT OF OPERATORS UNDER THE REGULATORY OVERSIGHT OF ANOTHER STATE

Applicable  
from  
1/09/2019

### GM1 ARO.RAMP.005 Scope

#### RAMP INSPECTION MANUAL

The following information may be found in the ramp inspection manual established by the Agency:

- (a) Additional guidance and best practices, in the manual and its attachments;
- (b) Additional provisions which are referenced in AMCs to this subpart, in its appendices.

Applicable  
until  
01/09/2019,  
then deleted.

### AMC1 ARO.RAMP.100 General

#### RAMP INSPECTIONS

- (a) The ramp inspection should normally be performed during a turn-around.
- (b) In addition to the applicable requirements, when inspecting the technical condition of the aircraft, it should be checked against the aircraft manufacturer's standard.

### AMC1 ARO.RAMP.100(b) General

#### SUSPECTED AIRCRAFT

In determining whether an aircraft is suspected of not being compliant with the applicable requirements, the following should be taken into account:

- (a) information regarding poor maintenance of, or obvious damage or defects to an aircraft;
- (b) reports that an aircraft has performed abnormal manoeuvres that give rise to serious safety concerns in the airspace of a Member State;
- (c) a previous ramp inspection that has revealed deficiencies indicating that the aircraft does not comply with the applicable requirements and where the competent authority suspects that these deficiencies have not been corrected;
- (d) lists, referred to in ARO.RAMP.105, indicating that the operator or the State of the operator has been suspected of non-compliance;
- (e) evidence that the State in which an aircraft is registered is not exercising proper safety oversight;
- (f) concerns about the operator of the aircraft that have arisen from occurrence reporting information and non-compliance recorded in a ramp inspection report on any other aircraft used by that operator;
- (g) information received from EASA Third-Country Operator (TCO) monitoring activities; or
- (h) any relevant information collected pursuant to ARO.RAMP.110.

**AMC1 ARO.RAMP.100(c) General**

Applicable  
from  
01/01/2020

**ANNUAL RAMP INSPECTION PROGRAMME**

- (a) The competent authority should establish an annual ramp inspection programme and determine the number of inspections for the upcoming calendar year.
- (b) To establish the annual ramp inspection programme, the competent authority should consider layer 1 and layer 2 operators as defined in AMC1 ARO.RAMP.150(b)(4)(iii).
- (c) For layer 1 operators, the annual ramp inspection programme should meet the target numbers of inspections as assigned by the Agency for the Member State territories in ICAO EUR region.

The assigned targets for layer 1 operators may be exceeded in the following cases:

- (1) operators recently considered in the lists provided by the Agency as per ARO.RAMP.105(a); or
- (2) safety reasons that were not identified in the annual programme.

The competent authority should keep records of the reasons leading to such over-inspections on layer 1 operators.

- (d) For layer 2 operators, the total planned number of inspections as defined in the annual ramp inspection programme should not be less than the layer 2 operators target assigned by the Agency for the Member State territories in ICAO EUR region.
- (e) The annual ramp inspection programme should take seasonal traffic patterns into account and, as far as possible, evenly distribute the inspections over the year.
- (f) The competent authority should ensure that the annual ramp inspection programme leaves appropriate time and resources to enable the inspections of aircraft operated by layer 2 operators suspected of not being compliant with the applicable requirements.
- (g) The competent authority should ensure that layer 2 operators, including unforeseen ones which cannot be a part of the established annual programme, receive inspections proportionate to the traffic pattern in the State. The following priority criteria should be considered before deciding to inspect the aircraft:
  - (1) prioritised ramp inspections as per ARO.RAMP.105(a);
  - (2) aircraft suspected of not being compliant with the applicable requirements; and
  - (3) inspection of an operator which was not inspected in accordance with ARO.RAMP in any State in the previous 12 months;
- (h) The competent authority should amend the annual ramp inspection programme as necessary to the extent possible:
  - (1) when new targets are assigned by the Agency;
  - (2) when new layer 2 operators start operations; or
  - (3) following the identification of a significant increase of the safety risks level as per ARO.RAMP.100(c)(1).

Applicable  
until  
01/09/2019,  
then deleted.

### AMC1 ARO.RAMP.100(c)(1) General

#### ANNUAL PROGRAMME

(a) Calculation methodology

The competent authority should calculate the number of points to be achieved in the following year. The number of points should be submitted to the Agency before the 1<sup>st</sup> of September prior to the year for which the points apply. For this purpose, the following formula should be used:

$Q = (Opr_{\geq 12}) + (0.2 * Opr_{< 12}) + (0.001 * Lnd)$ , where:

'Q' = annual quota;

' $Opr_{\geq 12}$ ' is the number of operators whose aircraft have landed in the previous year at aerodromes located in the Member State at least 12 times;

' $Opr_{< 12}$ ' is the number of operators whose aircraft have landed in the previous year at aerodromes in the territory of the Member State less than 12 times;

'Lnd' is the number of landings performed by those operators' aircraft at aerodromes located in the Member State in the previous year.

(b) Inspections should be valued differently in accordance with the following criteria:

- (1) prioritised ramp inspections and the first inspection of a new operator, i.e. who has not been inspected by the state during the past 12 months, conducted on an aerodrome located within a radius  $\leq 250$  km from the competent authority's main office have a value of 1.5 points;
- (2) prioritised ramp inspections and the first inspection of a new operator conducted on an aerodrome located within a radius  $> 250$  km from the competent authority's main office have a value of 2.25 points;
- (3) inspections conducted between the hours of 20:00 and 06:00 local time, during weekends or national holidays have a value of 1.25 points;
- (4) inspections conducted on operators for which the previous inspection was performed more than 8 weeks before have a value of 1.25 points;
- (5) any other inspections have a value of 1 point; and
- (6) for specific circumstances falling under two or more of the above situations, the above-mentioned factors may be combined by multiplication (e.g. prioritised inspection performed at an airport located at 600 km from the main office, during the weekend on an operator that was not inspected over the last 3 months will have a value of:  $2.25 * 1.25 * 1.25 = 3,52$  points).

Applicable  
until  
01/09/2019,  
then deleted.

### AMC2 ARO.RAMP.100(c) General

#### ANNUAL PROGRAMME – NATIONAL COORDINATOR

A national coordinator should be appointed by each competent authority and tasked with the day-to-day coordination of the programme at national level in order to facilitate the implementation of the programme carried out in the framework of Subpart RAMP within each Member State. The tasks of the national coordinator should include the following:

- (a) entering ramp inspection reports into the centralised database within the timeframe defined in ARO.RAMP.145(a);

- (b) prioritising ramp inspections in accordance with ARO.RAMP.105;
- (c) nominating national representatives for the ramp inspection working groups (on procedures, in-depth analysis, ad hoc analysis);
- (d) acting as a focal point for the training schedules (initial and recurrent training) for all involved national ramp inspection staff, e.g. inspectors, senior inspectors, database users, moderators;
- (e) ensuring that all staff involved in ramp inspections are properly trained and scheduled for recurrent training;
- (f) representing the Member State at the meetings of the European Steering Expert Group (ESSG) on ramp inspections and, when necessary, at other ramp inspection related meetings;
- (g) promoting and implementing the inspector exchange programme described in ARO.RAMP.115(e);
- (h) providing support in handling requests for disclosure of data related to information recorded and reported pursuant to ARO.RAMP.145;
- (i) ensuring distribution of new legislation and latest versions of procedures to ramp inspection staff;
- (j) organising regular meetings with all ramp inspection staff to maintain a high quality standard regarding:
  - (1) any changes/updates to requirements relating to ramp inspections of aircraft of operators under the regulatory oversight of another state;
  - (2) feedback on quality issues regarding reports, e.g. incorrect entries, mistakes, omissions, etc.;
- (k) implementing a national ramp inspection quality control system and, as far as practicable, making use of the workflow function which is available in the centralised database referred to in ARO.RAMP.150(b)(2);
- (l) managing the access of national operators and the competent authority's staff to the centralised database referred to in ARO.RAMP.150(b)(2);
- (m) act as a sectorial focal point in the domain of ramp inspections in the context of standardisation activities performed by the Agency pursuant to Regulation (EU) No 628/2013;
- (n) proposing appropriate team members for ramp inspection standardisation visits in accordance with Article 6.2 of Commission Regulation (EU) No 628/2013.
- (o) provide information to the Agency, the Commission and the Member States on contacts with authorities and operators.

Applicable  
until  
01/09/2019,  
then deleted.

### AMC3 ARO.RAMP.100(c) General

#### ANNUAL PROGRAMME

- (a) The annual programme for the performance of ramp inspections should make use of information about prioritised aircraft (available in the centralised database and published regularly by the Agency). The annual programme should include:
  - (1) a long-term planning of inspections of those aircraft suspected of not being compliant with applicable requirements, for which the schedule is known to the competent authority. Information leading to a suspicion could originate from the elements described in AMC1 ARO.RAMP.100(b).

- (2) a short term planning of inspections, if information leading to the suspicion and/or information on the arrival date and time is not known well in advance. Such information might be originating from, but should not be limited to, the circumstances listed in AMC1 ARO.RAMP.100(b).
- (b) An inspector may also perform inspections of aircraft not being prioritised or aircraft not being suspected during random inspections (so called 'spot checks'), which are conducted in the absence of any suspicion of non-compliance, provided that the competent authority has established the relevant procedures. Such procedures should contain instructions taking into account the following principles:
- (1) Repetitive inspections of those operators where previous inspections have not revealed safety deficiencies should be avoided, unless they form part of a series of partial inspections (due to time limitations) with the intention to cover the complete checklist.
  - (2) A selection of the widest possible sampling rate of the operator population flying into the territory of the Member State. However, some operators operate flights only to one or a very limited number of Member States. The involved States should consider inspecting those operators regularly even more if these operators or aircraft are included in the list for prioritised ramp inspections referred to in ARO.RAMP.105;
  - (3) Non-discrimination based on the nationality of the operator, the type of operation or type of aircraft.
- (c) By using the information sources and the information specified in AMC1 ARO.RAMP.100(b) and AMC1 ARO.RAMP.110, competent authorities should use the database in order to enable inspectors to verify the rectification of previously found non-compliance and to select the items to be inspected if the time available does not permit full inspection.

Applicable until 01/09/2019, then deleted.

### GM1 ARO.RAMP.100(c) General

#### ANNUAL PROGRAMME

In addition to the ramp inspection national coordinator, the competent authority can appoint a coordinator for national operators to act as the focal point for other Member States regarding ramp inspections performed on operators under its oversight.

Applicable until 01/09/2019, then deleted.

### GM1 ARO.RAMP.100(c)(1) General

#### NUMBER OF INSPECTION POINTS

The quotation is a statistical assumption only and does not necessarily mean that operators in the group 'Opr<sub>≥12</sub>' always need to be inspected. As deemed necessary by the inspecting authorities, operators may be inspected more than once (taking into account AMC2 ARO.GEN.305(b)(1)) whilst sticking to the calculated number of points; as a result, some operators might not be inspected in any given year.

Applicable from 14/08/2020

### AMC1 ARO.RAMP.106 Alcohol testing

#### GENERAL — ALCOHOL TESTING METHODOLOGY

- (a) If alcohol testing is carried out by RAMP inspectors under the RAMP inspection programme, the following alcohol testing methodology should be used to ensure accurate testing results.
- (1) The alcohol test should be carried out with an appropriate and approved testing device in accordance with national requirements on alcohol testing of individuals.

- (2) The ramp inspector that carries out the alcohol test should be adequately trained and qualified.
  - (3) After an initial positive alcohol test, a further confirmation test should be carried out in accordance with national requirements on alcohol testing of individuals.
  - (4) Testing procedures should specify the following:
    - (1) Handling of test results, in order to determine a true positive test
    - (2) The process to be followed in case of a confirmed positive test result, including how to inform the crew member concerned about the actual testing result
- (b) Initial alcohol test
- (1) The initial alcohol test should be carried out using a breath alcohol analyser to ensure that initial alcohol testing is non-invasive.
  - (2) The breath alcohol concentration (BrAC), measured by a breath alcohol analyser during the initial alcohol test, should not exceed a level equivalent to 0.2 grams of blood alcohol concentration (BAC) per litre of blood or the lower of the national statutory limits, whichever is the lower.
- (c) During a confirmation alcohol test, the BAC should not exceed a level equivalent to 0.2 grams per litre of blood or the lower of the national statutory limits, whichever is the lower.
- (d) In case of a positive alcohol test following a confirmation alcohol test or in case of a refusal by the crew member to cooperate during an alcohol test, the competent authority should inform the crew member concerned, as well as the competent authority and the authority responsible for the crew concerned.
- (e) A refusal by a crew member to cooperate during an alcohol test should be regarded in the same way as a positive test and as such should be regarded as a refusal to grant access in accordance with ORO.GEN.140 in the case of an EU operator or in accordance with TCO.115 of Commission Regulation (EU) No 452/2014 in the case of a third-country operator.
- (f) The competent authority should provide information on its alcohol testing procedures in an easily accessible format.

Applicable from  
14/08/2020

### **GM1 ARO.RAMP.106 Alcohol testing**

#### CONDUCT OF THE ALCOHOL TEST

- (a) An alcohol test may be carried out at any time during a ramp inspection.
- (b) In order to ensure sufficient time in case of a confirmation test, following an initial test, the alcohol test should, where possible, be carried out at the start of the inspection.
- (c) At all times when carrying out an alcohol test, the inspector should ensure a testing environment as discreet as possible.

Applicable from  
14/08/2020

### **GM2 ARO.RAMP.106 Alcohol testing**

#### GUIDANCE ON CARRYING OUT A CONFIRMATION ALCOHOL TEST

- (a) The written information after a positive confirmation test provided to the crew member concerned, contains information on the time and date of the alcohol test, the equipment used, as well as the actual result of the alcohol test.

- (b) A further confirmation test may be carried out at least 15 minutes, but not more than 30 minutes, after the completion of the initial test. During this time, the inspector should observe that the flight and cabin crew member does not eat or drink or ingest something into their mouth, in order to prevent any accumulation of alcohol in the mouth from leading to an artificially high reading.

Applicable from  
14/08/2020

### **GM3 ARO.RAMP.106 Alcohol testing**

#### INFORMATION ON ALCOHOL TESTING

The information by the competent authority on its alcohol testing procedures should include information on the applicable national statutory limit.

### **AMC1 ARO.RAMP.110 Collection of information**

#### COLLECTION OF INFORMATION

The information should include:

- (a) important safety information available, in particular, through:
- (1) pilot reports;
  - (2) maintenance organisation report;
  - (3) incident reports;
  - (4) reports from other organisations, independent from the inspection authorities;
  - (5) complaints; and
  - (6) information received from whistleblowers (such as, but not limited to, ground handling or maintenance personnel) regarding poor maintenance, obvious damage or defects, incorrect loading, etc.
- (b) information on action(s) taken subsequent to a ramp inspection, such as:
- (1) aircraft grounded;
  - (2) aircraft or operator banned from the Member State pursuant to Article 6 of Regulation (EC) No 2111/2005 of the European Parliament and of the Council<sup>5</sup>;
  - (3) corrective action required;
  - (4) contacts with the operator's competent authority; and
  - (5) restrictions on flight operations.
- (c) follow-up information concerning the operator, such as:
- (1) implementation of corrective action(s); and
  - (2) recurrence of non-compliance.

<sup>5</sup> Regulation (EC) No 2111/2005 of the European Parliament and of the Council of 14 December 2005 on the establishment of a Community list of air carriers subject to an operating ban within the Community and on informing air transport passengers of the identity of the operating air carrier, and repealing Article 9 of Directive 2004/36/EC (OJ L 344, 27.12.2005, p. 15).

Applicable until 01/09/2019, then deleted.

### AMC1 ARO.RAMP.115(a) Qualification of ramp inspectors

#### BACKGROUND KNOWLEDGE AND EXPERIENCE

The background knowledge and/or working experience of the inspector determines the privileges of the inspector. The competent authority should determine what the inspector is entitled to inspect, taking into account the following considerations:

- (a) background knowledge;
- (b) working experience; and
- (c) interrelation of the inspection item with other disciplines (e.g. a former cabin crew member may require additional training on minimum equipment list (MEL) issues before being considered eligible for inspection of safety items in the cabin).

Changes applicable from 01/09/2019.

### AMC1 ARO.RAMP.115(a)(b) Qualification of ramp inspectors

#### ELIGIBILITY CRITERIA

- (a) The candidate should be considered eligible to become a ramp inspector provided he/she meets the following criteria:
  - (1) has good knowledge of the English language attested by a certificate, unless English was used as a medium of instruction during secondary or higher education; and
  - (2) relevant education or training and appropriate recent work experience (over the previous 5 years) in accordance with one of the following items:
    - (i) has successfully completed 3 years of post-secondary education followed by 2 years aeronautical experience in the field of aircraft operations and/or maintenance, and/or personnel licensing;
    - (ii) has or has had a commercial/airline transport pilot licence and carried out such duties;
    - (iii) has or has had a flight engineer licence and carried out such duties;
    - (iv) has been a cabin crew member and carried out such duties in commercial air transport;
    - (v) has been licensed as maintenance personnel and exercised the privileges of such a licence;
    - (vi) has successfully completed professional training in the field of air transport of dangerous goods, followed by experience in this field; or
    - (vii) has successfully completed post-secondary aeronautical education with a duration of at least 3 years, followed by aeronautical experience.

Applicable from 01/09/2019.

### AMC2 ARO.RAMP.115(a)(b) Qualification of ramp inspectors

#### QUALIFICATION PROCESS

- (a) The competent authority should ensure that its inspectors meet, at all times, the qualification criteria with regard to training and recent experience.
- (b) Any competent authority or ramp inspection training organisation (RITO) approved in accordance with ARO.RAMP.120(a) may provide the initial theoretical and practical training.



- (c) The senior ramp inspectors delivering the on-the-job training may be appointed by any competent authority.
- (d) The initial theoretical and practical training, as well as the on-the-job training as per ARO.RAMP.115(b)(2), should be completed within 12 months. If the qualification of the candidate is not completed within 12 months, the entire process should be re-initiated.
- (e) The competent authority should issue a formal qualification statement, including the inspection privileges, for each candidate who has successfully completed the initial theoretical, practical, and on-the-job-training, as demonstrated by:
  - (1) for theoretical and practical trainings, a satisfactory evaluation by the competent authority or by the RITO which has delivered the training;
  - (2) for on-the-job training, the positive assessment, made by the senior ramp inspectors who have provided the training, of the candidate's ability to effectively perform ramp inspections in an operational environment;
  - (3) a final assessment of the inspector's competency performed at the end of the initial training process by the competent authority.

Applicable  
from  
01/09/2019.

### **AMC3 ARO.RAMP.115(a)(b) Qualification of ramp inspectors**

#### INITIAL THEORETICAL AND PRACTICAL TRAINING

- (a) The initial theoretical and practical training for ramp inspectors should be developed on the basis of the syllabi that are established by the Agency and which are included as appendixes of the ramp inspection manual.
- (b) The duration of the initial theoretical training should be no less than 3 training days, except for cases when previous training can be credited to the candidate, following an assessment made by the competent authority.

In case of an integrated training course, intended to transfer both technical and specific ramp inspection knowledge, the duration of the course should be extended accordingly.

- (c) The duration of the initial practical training should be not less than 1 day. The competent authority of the candidate may decide to lengthen or shorten the training taking into account the level of expertise of the candidate.

Applicable  
from  
01/09/2019.

### **AMC4 ARO.RAMP.115(a)(b) Qualification of ramp inspectors**

#### ON-THE-JOB TRAINING

- (a) The on-the-job training (OJT) should be conducted within the scope defined by ARO.RAMP.005.
- (b) The content of the OJT should be established on the basis of the list of elements to be covered, which is included in appendixes of the ramp inspection manual.
- (c) The competent authority should ensure that only the candidates that have successfully completed the initial theoretical and practical trainings are undertaking the OJT.
- (d) The OJT should comprise 2 phases:
  - (1) Observation:

During this phase, the candidate should accompany and observe a senior ramp inspector performing a series of ramp inspections (including the preparation of the inspection and post-inspection activities such as reporting).

The senior inspector should also provide details on applicable follow-up activities.

(2) Under supervision:

During this phase, the candidate should perform ramp inspections under the supervision and guidance of a senior ramp inspector.

- (e) The duration of the OJT should be customised to the individual training needs of each candidate. As a minimum, the OJT should include at least 6 observed ramp inspections and 6 ramp inspections performed under the supervision of a senior ramp inspector, over a period of maximum of 6 months. Notwithstanding (a), up to 3 of these observed ramp inspections and 3 of these inspections under supervision may be performed on national operators, as long as they are performed in accordance with ARO.RAMP.
- (f) The OJT should cover in each phase all inspection items that the inspector will be privileged with, and it should be delivered by senior ramp inspectors who are privileged with the same items.
- (g) The OJT should be documented by the senior ramp inspectors who have provided the training, using OJT forms detailing the training content.
- (h) Certain OJT items may be replaced by alternative training using representative examples when no operational environment is required (e.g. documents, dangerous goods).

#### **AMC5 ARO.RAMP.115(a)(b) Qualification of ramp inspectors**

##### EXTENSION OF THE RAMP INSPECTOR PRIVILEGES

- (a) The competent authority may extend the privileges of a ramp inspector provided that the following conditions are met:
  - (1) the relevant knowledge of the ramp inspector has been satisfactorily complemented by additional theoretical and/or practical training relevant to the scope of the extension; and
  - (2) the ramp inspector has received OJT on the new inspection items that will be added to his/her privileges.
- (b) The competent authority should determine the necessary number of ramp inspections of the OJT on a case-by-case basis, taking into account both the complexity and the criticality of the new items to be covered during this training, as well as the inspector's aeronautical education and practical knowledge.
- (c) Certain OJT items may be replaced by alternative training using representative examples when no operational environment is required (e.g. document inspections, dangerous goods).

#### **AMC6 ARO.RAMP.115(a)(b) Qualification of ramp inspectors**

##### RECENT EXPERIENCE AND REQUALIFICATION

- (a) The minimum number of inspections to be performed by a ramp inspector to meet the recent experience requirement should be 12 per calendar year.
- (b) Up to half of these ramp inspections may be performed on national operators, as long as they are performed in accordance with ARO.RAMP.
- (c) In the calendar year during which the ramp inspector is qualified, the minimum number of inspections to meet the recent experience requirement should be determined on a pro rata basis.

- (d) When qualification is lost as a result of failure to perform the minimum number of inspections, the ramp inspector may be requalified by the competent authority after having performed at least half of the missing inspections under supervision of a senior inspector within the following calendar year. These inspections under supervision should not be counted for the recent experience requirements for that calendar year. Up to half of these inspections may be performed on national operators, as long as they are performed in accordance with ARO.RAMP.
- (e) If the ramp inspector cannot regain the qualification following the process described in (d), he/she should perform a complete OJT during the calendar year that follows.
- (f) If the ramp inspector fails to regain the qualification following the process described in (e), the conditions for initial qualification should apply.

Applicable  
from  
01/09/2019

### **AMC7 ARO.RAMP.115(a)(b) Qualification of ramp inspectors**

#### **RECURRENT TRAINING**

- (a) The competent authority should ensure that all ramp inspectors undergo recurrent training at least once every 3 calendar years.
- (b) In addition, the competent authority should ensure that additional training is provided to all ramp inspectors when information is received from the Agency about the necessity for ad hoc training. In developing such training, the competent authority should take into account any Agency instructions related to the training content and the associated timeframe for implementation. This ad-hoc training may be considered as recurrent training.
- (c) Recurrent training should be delivered by a competent authority, by a ramp inspection training organisation approved in accordance with ARO.RAMP.120(a) or by the Agency.
- (d) The recurrent training should cover at least the following elements:
  - (1) regulatory and procedural developments;
  - (2) operational practices;
  - (3) articulation with other European processes and regulations; and
  - (4) standardisation and harmonisation issues including those communicated by the Agency.

Applicable  
from  
01/09/2019.  
It is an  
amended  
version of  
previous  
AMC1  
ARO.RAMP.  
115(b)(2).

### **AMC8 ARO.RAMP.115(a)(b) Qualification of ramp inspectors**

#### **SENIOR RAMP INSPECTORS**

- (a) The competent authority may appoint senior ramp inspectors provided the appointees meet the following criteria:
  - (1) the appointee has been a qualified ramp inspector over the 36 months preceding his/her appointment; and
  - (2) during the period under (1), the appointee has performed a minimum of 72 ramp inspections, with no less than 24 ramp inspections during the last 12 months;
- (b) Senior ramp inspectors should maintain their seniority only if performing at least 24 ramp inspections during each calendar year. Up to 6 of these ramp inspections may be performed on national operators, as long as they are performed in accordance with ARO.RAMP.
- (c) For the calendar year during which the senior inspector was appointed, the recent experience requirements should be applied on a pro rata basis.

- (d) When seniority is lost, but not the ramp inspector qualification, as a result of failure to perform the minimum number of ramp inspections, it can be regained if:
- (1) the inspector performs 2 ramp inspections under the supervision of a senior ramp inspector; or
  - (2) the inspector performs the missing number of ramp inspections.
- These inspections should be performed within the following year, and should not be counted for the recent experience requirements for that year.
- The above provision should not be used for two consecutive years.
- (e) If the senior ramp inspector cannot regain his/her seniority following the provisions under (d), the conditions under (a)(2) apply.
- (f) For each appointed senior ramp inspector, the competent authority should establish, based on his/her experience, the privileges for which he/she may deliver OJT.

Applicable until 01/09/2019, then deleted.

#### GM1 ARO.RAMP.115(b)(1) Qualification of ramp inspectors

##### ENGLISH LANGUAGE PROFICIENCY CERTIFICATE

A valid language proficiency certificate means a certificate such as ICAO English Proficiency Level 4, Common European Framework of Reference for Languages: Level B2, or another equivalent certificate.

Applicable until 01/09/2019, then replaced with AMC8 ARO.RAMP.115(a)(b).

#### AMC1 ARO.RAMP.115(b)(2) Qualification of ramp inspectors

##### SENIOR RAMP INSPECTORS

- (a) The competent authority may appoint senior ramp inspectors provided the appointees meet the qualification criteria established by that competent authority. These qualification criteria should contain at least the following requirements:
  - (1) the appointee has been a qualified ramp inspector over the 36 months prior to his/her appointment;
  - (2) during the period under (1), the appointee has performed a minimum of 72 ramp inspections, with no less than 24 ramp inspections during each of the three 12-month segments prior to the appointment; and
- (b) the senior ramp inspector will remain appointed only if performing at least 24 ramp inspections during each calendar year with no less than 12 ramp inspections during each half of that calendar year.
- (c) If the competent authority does not have senior ramp inspectors to conduct on-the-job training, such training may be performed by a senior ramp inspector from another State.
- (d) Additional factors to be considered when nominating senior ramp inspectors include knowledge of training techniques, professionalism, maturity, judgment, integrity, safety awareness, communication skills, personal standards of performance and a commitment to quality.
- (e) Should a senior ramp inspector lose his/her appointment as a result of failure to meet the conditions on minimum number of ramp inspections mentioned in point (b) above, he/she may be reappointed by the competent authority after performing the missing number of ramp inspections under the supervision of another senior ramp inspector. These ramp inspections

should be performed during the next half calendar year in addition to the ones required for that period.

(f) Senior ramp inspectors, like any other inspectors, should also receive recurrent training according to the frequency mentioned in point (b) of AMC1 ARO.RAMP.115(b)(3).

Applicable  
until  
01/09/2019,  
then deleted.

### AMC2 ARO.RAMP.115(b)(2) Qualification of ramp inspectors

#### SCOPE AND DURATION OF INITIAL TRAINING

Initial training should encompass:

- initial theoretical training,
- practical training, and
- on-the-job training.

#### (a) Initial theoretical training

- (1) The scope of the initial theoretical training is to familiarise the inspectors with the framework and the European dimension of the Ramp Inspection Programme, and with the common inspection, finding categorisation, reporting and follow-up procedures. The primary scope of the theoretical training is not the transfer of technical (operational, airworthiness, etc.) knowledge. The trainees should possess such knowledge, either from previous work experience or through specialised training, prior to attending the theoretical course. The duration of the initial theoretical training should be no less than 3 training days.
- (2) In case an integrated course is delivered (consisting of both the transfer of technical knowledge and specific ramp inspection information), the duration of the course should be extended accordingly.
- (3) The initial theoretical training shall be conducted in accordance with the syllabus in AMC1 ARO.RAMP.115(b)(2)(i).

#### (b) Practical training

- (1) The scope of practical training is to instruct on inspection techniques and specific areas of attention without any interference with the flight crew. Preferably, this should be done in a non-operational environment (e.g. on an aircraft in a maintenance hangar). Alternatively, aircraft with an adequate turnaround time may be used. In the latter case, the flight and/or ground crew should be informed about the training character of the inspection.
- (2) The duration of the practical training should be no less than 1 training day. The competent authority may decide to lengthen the training based on the level of expertise of the attendees. Practical training may be split into several sessions provided an adequate training tracking system is in place.
- (3) The practical training should be conducted in accordance with the syllabus in AMC2 ARO RAMP.115(b)(2)(i).

#### ON-THE-JOB TRAINING

#### (c) Scope of on-the-job training

- (1) The objective of the on-the-job training should be to familiarise the trainees with the particularities of performing a ramp inspection in a real, operational environment. The

competent authority should ensure that on-the-job training is undertaken only by trainees that have successfully completed theoretical and practical training.

- (2) The competent authority should ensure that the area of expertise of the trainee is compatible with the one of the senior ramp inspector delivering on-the-job training.
  - (3) When selecting the operators to be inspected during the on-the-job training programme, the senior ramp inspector should ensure:
    - (i) that the training can be performed on a sufficient level but without undue hindrance or delay of the inspected operator; and
    - (ii) that the ramp inspections are conducted on different operators (i.e., EU operators, third country operators), different aircraft types and aircraft configurations (i.e., jet and propeller aircraft, single aisle and wide-body aeroplanes, passenger operations and cargo operations), different types of operations (i.e., commercial and non-commercial operations, long-haul and short-haul operations).
  - (4) On-the-job training should comprise two phases:
    - (i) observing inspector: during this phase the trainee should accompany and observe the senior ramp inspector when performing a series of ramp inspections (including the preparation of the inspection and post-inspection activities: reporting, follow-up); and
    - (ii) inspector under supervision: during this phase the trainee should gradually start to perform ramp inspections under the supervision and guidance of the senior ramp inspector.
- (d) Duration and conduct of on-the-job training
- (1) The duration of the on-the-job training should be customised to the particular training needs of every trainee. As a minimum, the on-the-job training programme should contain at least six observed ramp inspections and six ramp inspections performed under the supervision of the senior ramp inspector, over a period of a maximum of 6 months. In general, on-the-job training should start as soon as possible after the completion of the practical training and cover all inspection items that the inspector will be privileged to inspect.
- Appropriate records should be maintained for each trainee documenting the training received (when the trainee is observing the inspection) and his/her ability to effectively perform ramp inspections (under supervision). For this purpose, the senior ramp inspector should use a checklist containing the applicable elements presented in AMC4 ARO.RAMP.115(b)(2). The on-the-job training may be given by more than one senior ramp inspector.
- (2) Before starting on-the-job training the trainee should be briefed with regard to the general objectives and working methods of the training.
  - (3) Before every inspection the trainee should be briefed with regard to the particular objectives and lessons to be learned during this inspection.
  - (4) After every day of inspection the trainee should be debriefed with regard to his/her performance and progress and areas where improvement is needed.
- (e) Elements to be covered during the on-the-job training

On-the-job training should address the following elements. However, some of the situations described below do not happen very often (i.e. grounding of an aircraft) and should, therefore, be presented by the senior ramp inspector during one of the debriefings.

- (1) Preparation of an inspection:
  - (i) use of the centralised database to prepare an inspection;
  - (ii) other sources of information (such as passenger complaints, maintenance organisation reports, air traffic control (ATC) reports);
  - (iii) areas of concern and/or open findings;
  - (iv) retrieval of updated reference materials: Notices to Airmen (NOTAMs), navigation and weather charts;
  - (v) selection of operator(s) to be inspected (oversight programme, priority list);
  - (vi) task allocation among members of a ramp inspection team; and
  - (vii) daily/weekly/monthly ramp inspection schedule.
- (2) Administrative issues:
  - (i) ramp inspector's credentials, rights and obligations;
  - (ii) special urgency procedures (if any);
  - (iii) national (local) aerodrome access procedures;
  - (iv) safety and security airside procedures; and
  - (v) ramp inspector kit (electric torch, fluorescent vest, ear plugs, digital camera, checklists, etc.).
- (3) Cooperation with airport and air navigation services to obtain actual flight information, parking position, time of departure, etc.
- (4) Ramp inspection:
  - (i) introduction to the pilot-in-command/commander, flight crew, cabin crew, ground crew;
  - (ii) inspection items: according to the area of expertise of the trainee;
  - (iii) findings (identification, categorisation, reporting, evidencing);
  - (iv) corrective actions — class 2;
  - (v) corrective actions — class 3:
    - (A) Class 3a) enforcement of restriction(s) on aircraft flight operations (cooperation with other services/authorities to enforce a restriction);
    - (B) Class 3b) request of an immediate corrective action(s), satisfactory completion of an immediate corrective action;
    - (C) Class 3c) grounding of an aircraft: notification of the grounding decision to the aircraft commander; national procedures to prevent the departure of a grounded aircraft; communication with the State of operator/registry;
  - (vi) Proof of Inspection:
    - (A) completion and delivery of the Proof of Inspection report; and
    - (B) request of acknowledgement of receipt (document or a refusal to sign).

- (5) Human factors elements:
  - (i) cultural aspects;
  - (ii) resolution of disagreements and/or conflicts; and
  - (iii) crew stress.
- (f) Assessment of trainees

The assessment of the trainee should be done by the senior ramp inspector while the trainee is performing ramp inspections under supervision. The trainee should be considered to have successfully completed the on-the-job training only after demonstrating to the senior ramp inspector that he/she possess the professional capacity, knowledge, judgment and ability to perform ramp inspections in accordance with the requirements of this Subpart.

Applicable until 01/09/2019, then deleted.

### AMC3 ARO.RAMP.115(b)(2) Qualification of ramp inspectors

#### QUALIFICATION OF THE INSPECTOR AFTER SUCCESSFUL COMPLETION OF TRAINING

##### Qualification of the inspector after successful completion of training

- (a) Successful completion of theoretical training should be demonstrated by passing an evaluation by the competent authority or by the approved training organisation who has delivered the training.
- (b) Successful completion of practical and on-the-job training should be assessed by the senior ramp inspector providing on-the-job training, through evaluation of the trainee's ability to effectively perform ramp inspections in an operational environment.
- (c) The competent authority should issue a formal qualification statement for each qualified inspector listing the inspecting privileges.
- (d) The background knowledge and working experience of the inspector should determine the privileges of the inspector (the scope of his/her inspection; what he/she is entitled to inspect). The numerous varieties in backgrounds of the candidate inspectors make it impossible to issue a full set of templates showing the background-privileges relation. It is, therefore, up to the competent authority to determine the eligibility and the related privileges for the inspector, whereby the following should be considered:
  - (1) background knowledge;
  - (2) working experience; and
  - (3) interrelation of the inspection item with other disciplines (e.g. former cabin crew member may require additional training on MEL issues before being considered eligible for safety items in the cabin).
- (e) The competent authority should issue the qualification statement only after the candidate has successfully completed the theoretical, practical and on-the-job-training.
- (f) The competent authority should put in place a system that will ensure that their inspectors meet at all times the qualification criteria with regard to eligibility, training and recent experience.

Applicable until 01/09/2019, then deleted.

### AMC4 ARO.RAMP.115(b)(2) Qualification of ramp inspectors

#### CHECKLIST ON-THE-JOB TRAINING OF INSPECTORS

##### On-the-Job Training of Ramp Inspection Inspectors



Competent Authority		Senior ramp inspector:		
Name of trainee:		Place:		
Date:		Ramp Inspection Number:		
Operator:		A/C Registration:	A/C Type:	
<b>A</b>	<b>Flight deck</b>	<b>Check: (Description/ notes)</b>	<b>Observation</b>	<b>Under Supervision</b>
<b>General</b>				
1	General condition	<ul style="list-style-type: none"> <li>inappropriately pulled circuit breakers</li> <li>reinforced flight crew compartment door, if required</li> <li>crew baggage</li> <li>flight crew seats</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
2	Emergency exit	<ul style="list-style-type: none"> <li>Are exits serviceable (if not, check MEL limitations)</li> <li>Possible obstacles</li> <li>emergency exits (serviceability)</li> <li>escape ropes (secured or not)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
3	Equipment	<b>ACAS II/TCAS:</b> <ul style="list-style-type: none"> <li>Presence</li> <li>System test/passed</li> </ul> 8.33 kHz: (if required) <ul style="list-style-type: none"> <li>Radio channel spacing</li> </ul> <b>RNAV:</b> <ul style="list-style-type: none"> <li>Authorisation to perform operations in RNAV airspace.</li> </ul> <b>TAWS/E-GPWS:</b> <ul style="list-style-type: none"> <li>Presence</li> <li>TAWS/SRPBZ for forward looking terrain avoidance function</li> <li>Data Base of system (content and update)</li> <li>System test (if possible)</li> </ul> <b>MNPS</b> <ul style="list-style-type: none"> <li>Special authorisation</li> <li>Cockpit Voice Recorder</li> <li>System test (if possible)</li> </ul> <b>RVSM: (if required)</b> <ul style="list-style-type: none"> <li>Presence</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		

		<ul style="list-style-type: none"> <li>• Serviceability</li> </ul>		
		<b>Note:</b>		
<b>Documentation</b>				
4	Manuals	<ul style="list-style-type: none"> <li>• Presence of the applicable parts of the operations manual</li> <li>• Up-to-date</li> <li>• Competent authority approval where applicable content (complies with the requirements)</li> <li>• Presence of aircraft flight manual / performance data</li> <li>• Differences regarding manuals of aircraft of ex-Soviet design (e.g. Rukowodstwo on former Commonwealth of Independent States (CIS) built aircraft.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
5	Checklists	<ul style="list-style-type: none"> <li>• Available/within reach</li> <li>• Tidiness/cleanness</li> <li>• Normal</li> <li>• Abnormal</li> <li>• Emergency</li> <li>• Up-to-date/not for training, etc.</li> <li>• Content (compliance with the operator procedures)</li> <li>• Appropriate for aircraft configuration being used</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
6	Radio navigation/ instrument charts	<ul style="list-style-type: none"> <li>• Presence of instrument approach charts (available/within reach/ up-to-date)</li> <li>• Presence of en-route charts (available/within reach/up-to-date)</li> <li>• Route covering</li> <li>• FMS/GPS database validity</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
7	Minimum equipment list	<ul style="list-style-type: none"> <li>• Presence of instrument approach charts (available/w within reach/ up-to-date)</li> <li>• Presence of en-route charts (available/within reach/up-to-date)</li> <li>• Route covering</li> <li>• FMS/GPS database validity</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		

8	Certificate of registration	<ul style="list-style-type: none"> <li>On-board</li> <li>Accuracy (Reg. mark, A/C type and S/N)</li> <li>Format</li> <li>English translation when needed</li> <li>Identification plate (S/N)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
9	Noise certificate	<ul style="list-style-type: none"> <li>On-board</li> <li>Approval (state of registry)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
10	AOC or equivalent	<ul style="list-style-type: none"> <li>Accuracy</li> <li>Content (operator identification, validity, date of issue, A/C type, OPS SPECS)</li> <li>EASA TCO authorisation (if applicable)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
11	Radio licence	<ul style="list-style-type: none"> <li>On-board</li> <li>Accuracy with installed equipment</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
12	Certificate of airworthiness (C of A)	<ul style="list-style-type: none"> <li>On-board (original or certified true copy)</li> <li>Accuracy</li> <li>Validity</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
<b>Flight data</b>				
13	Flight preparation	<ul style="list-style-type: none"> <li>Operational flight plan on board</li> <li>Proper filling</li> <li>Signed by pilot-in-command/commander (and where applicable, Dispatch)</li> <li>Fuel calculation</li> <li>Fuel monitoring/management</li> <li>NOTAMs</li> <li>Updated meteorological information</li> <li>Letter Y in flight plan</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
14	Mass and balance calculation	<ul style="list-style-type: none"> <li>On-board</li> <li>Accuracy (calculations/ limits)</li> <li>Pilots acceptance</li> <li>Load and trim sheet/ actual load distribution</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
<b>Safety equipment</b>				
15	Hand fire extinguishers	<ul style="list-style-type: none"> <li>On-board</li> <li>Condition/pressure indicator</li> <li>Mounting (secured)</li> <li>Expiry date (if any)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>

		<ul style="list-style-type: none"> <li>• Access</li> <li>• Sufficient number</li> </ul>		
		<b>Note:</b>		
16	Life jackets/flotation devices	<ul style="list-style-type: none"> <li>• On-board</li> <li>• Access/within reach</li> <li>• Condition</li> <li>• Expiry date (where applicable)</li> <li>• Sufficient number</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
17	Harness	<ul style="list-style-type: none"> <li>• On-board (no seatbelt)</li> <li>• Condition</li> <li>• Sufficient number (one for each crew member)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
18	Oxygen equipment	<ul style="list-style-type: none"> <li>• On-board</li> <li>• Condition</li> <li>• Cylinder pressure (minimum acc. to operations manual)</li> <li>• Ask crew to perform the operational function check of combined oxygen and communication system</li> <li>• Follow practice of the flight crew</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
19	Independent Portable light	<ul style="list-style-type: none"> <li>• On-board</li> <li>• Appropriate quantities</li> <li>• Condition</li> <li>• Serviceability</li> <li>• Access/within reach</li> <li>• The need for an independent portable light (departure or arrival at night time)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		

Flight crew				
20	Flight crew licence/composition	<ul style="list-style-type: none"> <li>• On-board</li> <li>• Form/content/English translation when needed</li> <li>• Validity</li> <li>• Ratings (appropriate type) (pilot-in-command (PIC)/ATPL)</li> <li>• Pilots' age</li> <li>• Possible difference with ICAO Annex 1 (concerning the age of pilots)</li> <li>• In case of validation (all documents needed)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>

		<ul style="list-style-type: none"> <li>• Medical assessment/ check interval</li> <li>• Spare eye glasses if applicable</li> <li>• Minimum flight crew requirements</li> <li>• Alcohol testing, where applicable</li> </ul>		
		<b>Note:</b>		
<b>Journey log book / Technical log or equivalent</b>				
21	Journey log book or equivalent	<ul style="list-style-type: none"> <li>• On-board</li> <li>• Content</li> <li>• Filling (carefully and properly)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
22	Maintenance release	<ul style="list-style-type: none"> <li>• Validity</li> <li>• When need of maintenance, technical log has been complied with</li> <li>• When ETOPS, requirement are met</li> <li>• Signed off</li> <li>• Verify that maintenance release has not expired</li> <li>• Ex-Soviet built A/C</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
23	Defect notification and rectification	<ul style="list-style-type: none"> <li>• Number of deferred defects</li> <li>• All defects been notified</li> <li>• Defect deferments include time limits and comply with the stated time limits</li> <li>• All the defects are notified</li> <li>• Technical log markings (should be understandable by captain)</li> <li>• Ex-Soviet built A/C</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
24	Pre-flight inspection	<ul style="list-style-type: none"> <li>• Performed (inbound/ outbound flight)</li> <li>• Signed off</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
B	<b>Cabin Safety</b>			

1	General internal condition	<ul style="list-style-type: none"> <li>• General condition</li> <li>• Possible loose carpets</li> <li>• Possible loose or damaged floor panels</li> <li>• Possible loose or damaged wall panels</li> <li>• Seats</li> <li>• Markings of unserviceable seats</li> <li>• Lavatories</li> <li>• Lavatory smoke detectors</li> <li>• Safety and survival equipment (shall be reliable, readily accessible and easily identified. Instructions for operation shall be clearly marked)</li> <li>• Possible obstacles to perform normal and abnormal duties</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
2	Cabin crew stations and crew rest area	<ul style="list-style-type: none"> <li>• Presence of cabin crew seats and compliance with the requirement</li> <li>• Sufficient number</li> <li>• Condition (seatbelt, harness)</li> <li>• Emergency equipment (independent portable light, fire extinguishers, portable breathing equipment ...)</li> <li>• Cabin preparation list</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
3	First-aid kit/ emergency medical kit	<ul style="list-style-type: none"> <li>• On-board</li> <li>• Condition</li> <li>• Expiry date</li> <li>• Location (as indicated)</li> <li>• Identification</li> <li>• Adequacy</li> <li>• Access</li> <li>• Operating instructions (clear)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
4	Hand fire extinguishers	<ul style="list-style-type: none"> <li>• On-board</li> <li>• Condition (pressure indicator)</li> <li>• Expiry date (if available)</li> <li>• Mounting and access</li> <li>• Number</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
5	Life jackets/ flotation devices	<ul style="list-style-type: none"> <li>• On-board</li> <li>• Easy access</li> <li>• Condition</li> <li>• Expiry dates as applicable</li> <li>• Sufficient number</li> <li>• Infant vest</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		

6	Seat belt and seat condition	<ul style="list-style-type: none"> <li>• On-board</li> <li>• Sufficient number</li> <li>• Condition</li> <li>• Availability of extension belts</li> <li>• Cabin seats (verify the condition)</li> <li>• If unserviceable check U/S-tag.</li> <li>• Restraint bars</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
7	Emergency exit, lightning and marking, independent portable light	<ul style="list-style-type: none"> <li>• Emergency exits (condition)</li> <li>• Emergency exit signs/ presence (condition)</li> <li>• Operation instructions (markings and passenger emergency briefing cards)</li> <li>• Floor path markings (ask to switch on). Possible malfunction/MEL</li> <li>• Lighting</li> <li>• Independent Portable light and batteries (condition)</li> <li>• Sufficient number of Independent Portable light (night operations)</li> <li>• Availability on each cabin attendant's station.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
8	Slides/life-rafts (as required), ELT	<ul style="list-style-type: none"> <li>• Slides on-board</li> <li>• Condition</li> <li>• Expiry date</li> <li>• Sufficient number</li> <li>• Location and mounting</li> <li>• Bottle pressure gauge</li> <li>• ELT on board</li> <li>• ELT (condition and date)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
9	Oxygen supply (cabin crew and passengers)	<ul style="list-style-type: none"> <li>• Presence</li> <li>• Sufficient quantity of masks (cabin crew and passengers)</li> <li>• Drop-out panels are free to fall</li> <li>• Passenger instructions (passenger emergency briefing cards)</li> <li>• Portable cylinder supply and medical oxygen, check pressure and mounting</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
10	Safety instructions	<ul style="list-style-type: none"> <li>• On-board</li> <li>• Tidiness</li> <li>• Accuracy/content (A/C type)</li> <li>• Sufficient numbers (passenger emergency briefing card for each passenger)</li> <li>• Cards for flight crew (check emergency equipment locations)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>

		<b>Note:</b>		
11	Cabin crew members	<ul style="list-style-type: none"> <li>• General overview of cabin crew (conditions)</li> <li>• The sufficient number of cabin crew (appropriate)</li> <li>• How the duty stations are manned</li> <li>• Follow practice of the cabin crew</li> <li>• When refuelling with passengers on-board check procedures</li> <li>• Alcohol testing, where applicable</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
12	Access to emergency exits	<ul style="list-style-type: none"> <li>• Access areas</li> <li>• Possible obstacles for evacuation (foldable jump seat or seat backrest table)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
13	Stowage of passenger baggage	<ul style="list-style-type: none"> <li>• Hand baggage storages in cabin</li> <li>• Size of hand baggage</li> <li>• Quantity of hand baggage</li> <li>• Weight of hand baggage</li> <li>• Placed under seat (restraint bar)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
14	Seat capacity	<ul style="list-style-type: none"> <li>• Number of passengers/ permitted</li> <li>• Sufficient seat capacity</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
<b>C</b>	<b>Aircraft condition</b>			
1	General external condition	<ul style="list-style-type: none"> <li>• Radom (latches/painting)</li> <li>• Windshields</li> <li>• Wipers</li> <li>• Static ports/areas</li> <li>• AoA probes</li> <li>• Pitot tubes</li> <li>• TAT probe</li> <li>• Crew oxygen discharge indicator (if exist)</li> <li>• Ground power connection (condition)</li> <li>• Wings (general condition, ice/snow contamination)</li> <li>• Fairings</li> <li>• Leading edge (dents)</li> <li>• Winglets</li> <li>• Trailing edge/static dischargers</li> <li>• Look for hydraulic leaks</li> <li>• Look for fuel leak</li> <li>• Fuselage</li> <li>• Tail section/static dischargers</li> <li>• APU cooling air inlet</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>

Applicable from 14/08/2020



		<ul style="list-style-type: none"> <li>• APU exhaust air/surge</li> <li>• Look at APU area for leaks</li> <li>• Tail bumper (contact markings)</li> <li>• Maintenance and service panels (water / waste / hydraulic maintenance panels / refuel panels / cargo door control panel / RAT door)</li> <li>• Cabin windows</li> <li>• Exterior lights</li> <li>• Painting (condition)</li> <li>• Cleanliness</li> <li>• Markings/operational instructions and registration</li> <li>• Obvious repairs</li> <li>• Obvious damage</li> </ul>		
		<b>Note:</b>		
2	Doors and hatches	<ul style="list-style-type: none"> <li>• Passenger doors (condition)</li> <li>• Emergency exits (condition)</li> <li>• Cargo doors (condition)</li> <li>• Avionics compartment doors (condition)</li> <li>• Accessory compartment doors (condition)</li> <li>• Operation instructions of all doors</li> <li>• Lubrications of all doors</li> <li>• Door seals</li> <li>• Handles</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
3	Flight controls	<ul style="list-style-type: none"> <li>• Ailerons (condition)</li> <li>• Slats/Krueger flaps/Notch flap (condition)</li> <li>• Spoiler panels (condition)</li> <li>• Flaps/track fairings (condition)</li> <li>• Rudder (condition)</li> <li>• Elevators (condition)</li> <li>• Stabiliser (condition)</li> </ul> <p><i>Note! Check for leaks, flap drooping, wearing, corrosion, disbonding, dents, loose fittings and obvious damages.</i></p>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
4	Wheels, tyres and brakes	<ul style="list-style-type: none"> <li>• Wheels (assembly condition, bolts and paint markings)</li> <li>• Tires (condition and pressure). Check for cuts, groove cracks, worn out shoulders, blister, bulges, flat spots)</li> <li>• Worn tire areas (measure the tread depth)</li> <li>• If cuts measure depth</li> <li>• Brakes (condition, wearing pins)</li> <li>• Measure and familiarise length of the pin/check for the limits.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		

5	Undercarriage	<ul style="list-style-type: none"> <li>• Landing gear/hinges (general condition/leaks)</li> <li>• Struts</li> <li>• Locking mechanisms</li> <li>• Hydraulic (or pneumatic) lines (condition)</li> <li>• Strut pressure (visual check/piston length)</li> <li>• Lubrication</li> <li>• Electric lines and plugs.</li> <li>• Bonding</li> <li>• Cleanliness</li> <li>• FOD (foreign object damage)</li> <li>• Surface (plasma) and paintings</li> <li>• Check for corrosion</li> <li>• Placards and markings (nitrogen pressure table)</li> <li>• Dampers and bogie cylinders (check for leaks)</li> <li>• Landing gear strut doors</li> <li>• Use independent portable light and mirror</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
6	Wheel well	<ul style="list-style-type: none"> <li>• General condition (structures)</li> <li>• Possible corrosion</li> <li>• Cleanliness</li> <li>• Installations (wiring, piping, hoses, hydraulic containers and devices)</li> <li>• Check for leaks</li> <li>• Wheel well doors (hinges)</li> <li>• Check for maintenance safety pins</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
7	Powerplant and pylon	<ul style="list-style-type: none"> <li>• Air intake ring (general condition/inner skin and acoustic panels)</li> <li>• Engine cowlings (panels aligned, handles aligned, vortex generators/access doors)</li> <li>• Intake area fasteners</li> <li>• Sensors</li> <li>• Thrust reverses (ring and inner doors or thrust reverser doors)</li> <li>• Reverser duct inner skin and acoustic panels</li> <li>• Outlet guide vanes (from behind/reverser duct)</li> <li>• Exhaust barrel (inner and outer skin)</li> <li>• Drain mast/leaks</li> <li>• Pylons (sealants, panels, doors and blow-out-doors, possible leaks)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
8	Fan blades, propellers, rotors (main/tail)	<ul style="list-style-type: none"> <li>• Fan blades: general condition (check for foreign object damage, cracks, nicks, cuts, corrosion and erosion)</li> <li>• Fan blade:                         <ul style="list-style-type: none"> <li>○ Leading edge</li> <li>○ Mid-span shroud (no stacked)</li> <li>○ Tip</li> </ul> </li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>

		<ul style="list-style-type: none"> <li>○ Contour surface</li> <li>○ Root area</li> <li>○ platform</li> </ul> <p><i>Note! Wait until rotation stop! Use independent portable light and mirror for the backside of the blades.</i></p> <ul style="list-style-type: none"> <li>● Spinner (damages/bolts)</li> <li>● Fan outlet vanes (thorough the fan)</li> <li>● FOD (foreign object damage)</li> <li>● Split fairing</li> <li>● Blades (general condition)</li> <li>● Tip and mid area (75 % from root)</li> <li>● Check for nicks, dents, cracks, leakages etc.</li> <li>● Hub/spinner</li> <li>● Looseness of blades in hub</li> </ul>		
		<b>Note:</b>		
9	Obvious repairs	<ul style="list-style-type: none"> <li>● During the inspection of C-items notify unusual design and repairs obviously not carried out in accordance with the applicable AMM/SRM</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
10	Obvious damages unrepaired	<ul style="list-style-type: none"> <li>● During the inspection of C-items notify unassessed and unrecorded damages and corrosion (lightning strike, bird strikes, FODs, etc.)</li> <li>● Check damage charts</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
11	Leakage	<ul style="list-style-type: none"> <li>● During the inspection of C-items notify all the leaks:</li> <li>● Fuel leaks</li> <li>● Hydraulic leaks</li> <li>● Toilet liquid leaks</li> <li>● When leak: measure the leak rate and check the leak rates from AMM etc. if it is allowable and within normal operation limits or not.</li> <li>● Wear eye protection and use proper inspection gears for inspection</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
D	Cargo			
1	General condition of cargo compartment	<ul style="list-style-type: none"> <li>● Cleanliness</li> <li>● Lightning</li> <li>● Fire protection/detection/ extinguishing systems and smoke detectors</li> <li>● Floor panels</li> <li>● Wall panels/markings</li> <li>● Blow-out-panels</li> <li>● Ceilings</li> <li>● Wall and ceiling panel sealants</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>

		<ul style="list-style-type: none"> <li>• Cargo nets/door nets</li> <li>• Fire extinguishers</li> <li>• Cargo roller and driving system and control panel</li> </ul>		
		<b>Note:</b>		
2	Dangerous goods	<ul style="list-style-type: none"> <li>• Operations manual/ information required by ICAO Annex 18</li> <li>• Technical Instructions (ICAO Doc. 9284-AN/905) are applied</li> </ul> If dangerous goods on-board: <ul style="list-style-type: none"> <li>• Pilots' notification</li> <li>• Stowing of dangerous goods cargo</li> <li>• Packaging (condition, leaks, damage)</li> <li>• Labelling</li> </ul> If leak or damage of dangerous goods cargo: <ul style="list-style-type: none"> <li>• Condition of other cargo</li> <li>• Follow removal</li> <li>• Follow cleaning of contamination</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>		
3	Secure stowage of cargo	<ul style="list-style-type: none"> <li>• Load distribution (floor limits, pallets and containers/maximum gross weight)</li> <li>• Flight kit/spare wheel/ ladders (secured)</li> <li>• Cargo (secured)</li> <li>• Condition and presence of:                             <ul style="list-style-type: none"> <li>• Lockers</li> <li>• Restraints</li> <li>• Pallets</li> <li>• Nets</li> <li>• Straps</li> <li>• Containers</li> <li>• Container locks on the floor</li> <li>• Heavy items securing inside containers</li> </ul> </li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
		<b>Note:</b>	<input type="checkbox"/>	<input type="checkbox"/>
E	General			
1	General	<b>Note:</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Additional elements (O) observed/performed (P) during On the Job Training</b>				
<i>(Please List)</i>				
<b>Assessment</b>				
- Was the inspection carried out in a satisfactory manner regarding:				

- preparation of the inspection	<input type="checkbox"/> Yes <input type="checkbox"/> No (provide further details below*)
- ramp inspection	<input type="checkbox"/> Yes <input type="checkbox"/> No (provide further details below*)
- proof of inspection	<input type="checkbox"/> Yes <input type="checkbox"/> No (provide further details below*)
- human factors elements	<input type="checkbox"/> Yes <input type="checkbox"/> No (provide further details below*)
Further training needed:	
Additional Remarks:*	
Signature of the trainee:	Signature of the senior ramp inspector:

Applicable until 01/09/2019, then deleted.

## GM1 ARO.RAMP.115(b)(2) Qualification of inspectors

### PRIVILEGES OF EXPERIENCED INSPECTORS

- (a) The following example shows the typical privileges of an experienced commercial pilot licence/airline transport pilot licence (CPL/ATPL) holder and of an experienced aircraft maintenance engineer:

**Example:**

*Typical inspection privileges of a CPL/ATPL holder could include the following inspection checklist items in Appendices III and IV of this section:*

*A items*

*B items*

*C items*

*D1/D3 items*

*Typical inspection privileges of an aircraft maintenance licence (AML) holder could include the following inspection checklist items:*

*A items except for A3, A4, A5, A6, A13, A14, A20*

*B items except for B11, B14*

*C items*

*D1 items*

- (b) The competent authority may decide to enlarge the privileges of the inspector if the basic knowledge of the inspector has been satisfactorily enlarged by additional theoretical trainings and/or practical trainings. This may require the subsequent following of the relevant module of the ramp inspection training in order to obtain the necessary knowledge to exercise that new privilege. As an example: if an AML holder has acquired knowledge on the operational items of the 'A' section (flight crew compartment items) of the checklist (e.g. because he/she obtained his/her CPL), the privileges may be expanded. He/she should be required, however, to receive the theoretical, practical and on-the-job training on how to inspect those new items. Considering that the inspector is already qualified, the OJT could:

- (1) be performed in a classroom environment using various (representative) examples when no aircraft is required for the training. E.g.: normally the interaction with the flight crew is part of the OJT. However, if the inspector is privileged on other A-items on the checklist

and therefore familiar with interviewing the flight crew in the flight crew compartment, the OJT of inspection items A13 and A14 could be done in a classroom; or

- (2) be limited in terms of number of inspections depending on the number of new inspection items to be trained; the minimum number of OJT inspections, as described in AMC2-ARO.RAMP 115(b)(2) point (d)(1), does not apply since the number of 6 observer and 6 supervised inspections is aiming at a 50 % average coverage of all inspection items during these inspections. For the limited OJT, the number of inspections should be reasonable and should be determined by the senior inspector whereby the new items should be inspected at least 3 times as an observer and 3 times under supervision.

Applicable until 01/09/2019, then deleted.

### GM2 ARO.RAMP.115(b)(2) Qualification of ramp inspectors

#### SENIOR RAMP INSPECTORS

- (a) Before ramp inspectors may be appointed as senior ramp inspectors, they need at least to be qualified inspectors for 36 months and to have performed 72 ramp inspections during that period. Ideally, those inspections should be evenly spread over the 36-month period. If the qualification of the ramp inspector was temporarily lost during the 36-month period, but regained in accordance with AMC2 ARO.RAMP.115(b)(3)(c), the ramp inspector should be considered as qualified. Regarding the recent experience, contrary to the requirements for non-senior inspectors, the mentioned number of inspections for senior inspectors are always ramp inspections, and may not be reduced by other inspections.
- (b) The recent experience compliance should be reviewed on 1 January and 1 July. In case the senior inspector does not meet the minimum number of inspections, the inspector may be reappointed as soon as the missing number of inspections as referred to in AMC1 ARO.RAMP.115(b)(2)(e) have been performed. There is no need to wait until the next measuring date. For the calendar year during which the senior inspector was firstly appointed, the recent experience criteria may be applied on a pro rata basis.

Applicable until 01/09/2019, then deleted.

### AMC1 ARO.RAMP.115(b)(2)(i) Qualification of ramp inspectors

#### SYLLABUS OF THEORETICAL KNOWLEDGE FOR RAMP INSPECTORS

##### INITIAL (THEORETICAL) TRAINING COURSE

- Module (GEN): General overview (legal)
- Module (A): Flight crew compartment inspection items
- Module (B): Cabin safety inspection items
- Module (C): Aircraft condition inspection items
- Module (D): Cargo inspection items

##### MODULE (GEN)

###### a. Overview of the safety assessment of aircraft

<p>i. Introduction</p> <ul style="list-style-type: none"> <li>• The Ramp Inspection Programme Overview</li> <li>• Role and responsibilities of the Agency — Overview</li> </ul> <p>ii. The EU Ramp Inspection programme — ICAO basic references</p> <ul style="list-style-type: none"> <li>• ICAO convention</li> <li>• Annex 1 – Personnel Licensing</li> <li>• Annex 6 – Operations of Aircraft</li> <li>• Annex 8 – Airworthiness of Aircraft — Main features</li> <li>• Application by all participating States</li> <li>• Dissemination of inspection results</li> <li>• Bottom-up approach</li> <li>• Focused attention</li> <li>• Compliance with ICAO standards</li> </ul> <p>iii. Principles of the EU Ramp Inspection Programme</p> <ul style="list-style-type: none"> <li>• EU Member State Role</li> <li>• States on safety assessment of foreign aircraft (SAFA) working arrangements with the Agency</li> <li>• Common procedures and common reporting format</li> <li>• The centralised data base –introduction</li> <li>• The legal obligation to inspect</li> </ul> <p>iv. The European Commission</p> <ul style="list-style-type: none"> <li>• Role and responsibility</li> <li>• Legislative power</li> </ul> <p>v. The European Aviation Safety Agency</p> <ul style="list-style-type: none"> <li>• Role and responsibilities</li> <li>• The executive tasks</li> <li>• Collection of inspection reports</li> <li>• Maintenance of the centralised database</li> <li>• Analysis of relevant information</li> <li>• Reporting to European Commission and Member States</li> <li>• Advising the European Commission and Member States on follow-up actions</li> <li>• Developing training programmes and fostering the organisation and implementation of training courses and workshops</li> </ul> <p>vi. EU and non-EU Member States</p> <ul style="list-style-type: none"> <li>• Role and responsibilities</li> <li>• EU Member States</li> <li>• Non-EU States that have signed the Working Arrangement</li> </ul> <p>vii. Eurocontrol</p> <ul style="list-style-type: none"> <li>• Role and responsibilities</li> </ul> <p>viii. The Air Safety Committee – (ASC)</p> <ul style="list-style-type: none"> <li>• Role and responsibilities</li> <li>• Representation of EU Member States</li> <li>• Legislative advisory role</li> </ul> <p>ix. The European SAFA Steering Expert Group – (ESSG)</p> <ul style="list-style-type: none"> <li>• Role and responsibilities</li> <li>• Representation of EU Member States and non-EU Member States technical advisory role</li> </ul>	<p>Objectives:</p> <ol style="list-style-type: none"> <li>1. Trainees should know the background of the EU Ramp Inspection Programme</li> <li>2. Trainees should be able to identify the main elements of the Programme</li> <li>3. Trainees should understand the role of ramp inspections in the general safety oversight context</li> </ol>
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b. The EU ramp inspection programme’s legal framework	
<p>i. Regulation (EC) No 2111/2005 <i>Scope and relevance</i></p> <p>ii. Regulation (EC) No 474/2006<sup>6</sup> and subsequent amendments <i>Scope and relevance</i></p> <ul style="list-style-type: none"> <li>• Regulation (EC) No 216/2008 – General overview</li> <li>• Article 10 – oversight and enforcement</li> </ul>	<p>Objectives:</p> <ol style="list-style-type: none"> <li>1. Trainees should fully understand the legal instruments of the Programme</li> <li>2. Trainees should be able to identify the stakeholders and their responsibilities</li> <li>3. Trainees should be capable to define the relationship between the Ramp Inspection Programme and the EU List of Banned air carriers</li> </ol>

<sup>6</sup> Commission Regulation (EC) No 474/2006 of 22 March 2006 establishing the Community list of air carriers which are subject to an operating ban within the Community referred to in Chapter II of Regulation (EC) No 2111/2005 of the European Parliament and of the Council (Text with EEA relevance), As last amended by Commission Regulation (EC) No 619/2009 of 13 July 2009, *OJ L 182, 15.7.2009, p. 4–24.*



c. The ICAO framework	
<p>i. International Requirements</p> <ul style="list-style-type: none"> <li>• The Chicago Convention – general overview</li> <li>• The ICAO general overview</li> <li>• The Convention – key ramp inspection-related Articles</li> <li>• Article 11 – Applicability of air regulations</li> <li>• Article 12 – Rules of the air</li> <li>• Article 16 – Search of aircraft</li> <li>• Article 29 – Documents carried on aircraft</li> <li>• Article 30 – Aircraft radio equipment</li> <li>• Article 31 – Certificate of airworthiness</li> <li>• Article 32 – Licences of personnel</li> <li>• Article 33 – Recognition of certificates and licences</li> <li>• Article 37 – Adoption of international standards and recommended practices</li> <li>• Article 38 – Departures from international standards and procedures</li> <li>• Article 83 <i>bis</i> – Transfer of certain functions and duties</li> </ul> <p>ii. Ramp inspection (RI) and ICAO — Annex 7 (Aircraft Nationality and Registration Marks) – Overview</p> <ul style="list-style-type: none"> <li>• The Certificate of Registration</li> <li>• Example of Certificate of Registration</li> <li>• The identification plate</li> </ul> <p>iii. RI and ICAO — Annex 8 (Airworthiness of Aircraft) – Overview</p> <ul style="list-style-type: none"> <li>• Validity of the Certificate of Airworthiness</li> <li>• Standard form of Certificate of Airworthiness</li> <li>• Emergency exits, markings and lights</li> <li>• Safety and survival equipment</li> </ul> <p>iv. RI and ICAO — Annex 1 (Personnel Licensing) – Overview</p> <ul style="list-style-type: none"> <li>• General rules concerning licenses</li> </ul> <p>v. RI and ICAO — Annex 6 (Operation of Aircraft) — Overview</p> <ul style="list-style-type: none"> <li>• Part I, International commercial air transport aeroplanes</li> <li>• Part II, International general aviation aeroplanes</li> <li>• Part III, International operations helicopter</li> </ul> <p>vi. RI and ICAO — Annex 16 (Environmental Protection) – Overview</p> <ul style="list-style-type: none"> <li>• Noise Certificate (applicability to SAFA programme)</li> </ul> <p><b>RI &amp; ICAO — Annex 18 (The Safe Transport of Dangerous Goods by Air)</b></p> <ul style="list-style-type: none"> <li>• Overview</li> <li>• Dangerous goods Technical Instructions for the safe transport of dangerous goods by air (Doc 9284)</li> </ul> <p><b>RI &amp; ICAO Doc 7030 (Regional Supplementary procedures)</b></p> <ul style="list-style-type: none"> <li>• Overview</li> <li>• Applicability</li> </ul>	<p>Objectives:</p> <ol style="list-style-type: none"> <li>1. Trainees should be able to outline ICAO’s role and responsibilities within the international civil aviation context.</li> <li>2. Trainees should understand the obligations of the signatory States.</li> <li>3. Trainees should understand the direct relationship between ICAO standards and ramp inspection.</li> </ol>
d. Safety assessment technical aspects overview	
<p>i. Preparation of the inspection</p> <p>ii. Subjects of the inspection:</p> <ul style="list-style-type: none"> <li>• Aircraft used by third country operators or used by operators under the regulatory oversight of another Member State.</li> <li>• Technical considerations</li> <li>• Experience/feedback from previous checks</li> </ul>	

- 'Intelligence' (centralised database, ATC, passenger complaints, etc.)
  - Prioritisation
- iii. Elements to be inspected:
- In principle, all RI checklist items; but:
  - Other considerations for a limited inspection:
  - Time available (stop duration, slot, no unreasonable delay)
  - Inspector privileges
  - Areas of concern (based upon previous checks and/or centralised database)
  - Context (recent/old aircraft, new airline, new type of aircraft)
  - Intelligence information
- iv. Planning the inspection:
- Efficient use of the time available
  - Considerations for inspections on arrival or departure
  - Any day in a week, any time in a day
- v. Short transit times:
- Walk around check during off boarding
  - Segmented inspections
- vi. Toolkit for the RI inspector:
- Inspector's documentation (RI procedures, regulations, updated reference material, etc.)
  - Inspector's tools (vest, Independent Portable light, camera, telephone, protective personal equipment, etc.)
  - Inspector's identification (authority ID, airport badge)
  - Airline documentation available
- Vii. Teamwork:
- Preferably two inspectors covering all fields of expertise
  - Briefing on task allocation
- viii. The ramp inspection checklist:
- Aspects to be covered by the ramp inspection
  - The ramp inspection checklist (format/structure and overview of contents)
- ix. Starting the Inspection:
- Introduction to the crew (flight crew/technical staff/airline representative/translator)
  - Determination of available inspection time
  - Explain that any operator is subject to inspections (ramp inspection principle)
- x. Code of conduct:
- Human factor principle (inspection = intrusion)
  - Cooperation with the crew
  - Time efficiency
  - Collection of evidence
- xi. Categorisation of findings:
- Definition of finding: Deviation from the standards
  - Category 3 finding with major influence on safety
  - Category 2 finding with significant influence on safety
  - Category 1 finding with minor influence on safety
- xii. Follow-up actions:
- Relationship between finding and action
  - Class 1 action
  - Class 2 action
  - Class 3 actions
- xiii. Concluding the inspection:

- Debriefing of inspection results
- Delivery of proof of inspection to the pilot-in-command/commander/airline representative/sub-contractors

**e. Ramp inspection centralised database — Hands-on training**

<ul style="list-style-type: none"> <li>• Purpose of the database</li> <li>• The database as inspectors’ tool</li> <li>• RI database – input</li> <li>• RI database – output</li> <li>• RI database – search</li> <li>• Focused inspection module</li> <li>• Follow-up actions: operator logging</li> <li>• Database analytical tools and reports</li> </ul>	<p>Objectives:</p> <ol style="list-style-type: none"> <li>1. Trainees should have the relevant knowledge to input and retrieve data from the RI centralised database.</li> <li>2. Trainees should know the analysis process and its deliverables.</li> <li>3. Trainees should understand the analysis dependability on the accuracy of the inspection reports.</li> </ol>
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**2. MODULE (A)**  
**a. Ramp inspection items (A)**

<p><b>A1 General condition (flight crew compartment)</b></p> <ul style="list-style-type: none"> <li>• Circuit breakers (C/B) (inappropriately pulled/popped)</li> <li>• Secure stowage of interior equipment (incl. baggage)</li> <li>• Crew seats (manual or electrical)</li> <li>• Security/reinforced flight crew compartment door</li> <li>• General condition of flight crew compartment</li> </ul> <p><b>A2 Emergency Exit (flight crew compartment)</b></p> <ul style="list-style-type: none"> <li>• Access (easy/no blockings)</li> <li>• Escape ropes (secured)</li> <li>• Emergency exits (flight crew compartment)</li> </ul> <p><b>A3 Equipment</b></p> <ul style="list-style-type: none"> <li>• Awareness of different design philosophies of A/C systems (BITE, message displays/status)</li> <li>• Proper functioning (system test)</li> </ul> <p><b>GPWS — TAWS</b></p> <ul style="list-style-type: none"> <li>• General (basic principles)</li> <li>• Forward looking terrain avoidance function (7-channel SRPBZ ICAO compliant)</li> <li>• Presence of the equipment</li> <li>• Validity of GPWS database</li> <li>• System test — passed</li> <li>• CIS built A/C systems (SSOS, SPPZ and SRPBZ)</li> </ul> <p><b>ACAS/TCAS II</b></p> <ul style="list-style-type: none"> <li>• General (applicability and principles)</li> <li>• Mode S transponder and ACAS II (general)</li> <li>• System test</li> </ul> <p><b>8.33 kHz radio channel spacing</b></p> <ul style="list-style-type: none"> <li>• Selection of an 8.33 kHz channel</li> <li>• Presence of 6 or 5 digits (132.055 or 32.055)</li> <li>• Letter Y in field 10 of the flight plan</li> </ul> <p><b>RNAV — BRNAV — PRNAV</b></p> <ul style="list-style-type: none"> <li>• General (applicability and principles)</li> </ul>	<p>Objectives:</p> <p>Trainees should possess the relevant knowledge enabling them to inspect each item.</p>
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<ul style="list-style-type: none"> <li>• Special authorisation</li> <li>• Required equipment</li> <li>• Flight planning and completion of the flight</li> </ul> <p><b>RVSM</b></p> <ul style="list-style-type: none"> <li>• General (applicability and principles)</li> <li>• Special authorisation</li> <li>• Required equipment</li> <li>• Flight planning and completion of the flight</li> </ul> <p><b>MNPS</b></p> <ul style="list-style-type: none"> <li>• General (applicability and principles)</li> <li>• Special authorisation</li> <li>• Required equipment</li> <li>• Flight planning and completion of the flight</li> </ul> <p><b>A4 Manuals</b></p> <ul style="list-style-type: none"> <li>• Operation manual (structure)</li> <li>• Aircraft flight manual (structure)</li> <li>• Competent Authority approval</li> <li>• Update status</li> <li>• Ex-Soviet-built aircraft Rukowodstwo or RLE</li> <li>• Electronic flight bag (EFB class 1, 2 and 3)</li> <li>• Content in relation to flight preparation</li> </ul> <p><b>A5 Checklists</b></p> <ul style="list-style-type: none"> <li>• Availability: within reach and update status</li> <li>• Compliance with operator procedures (normal, abnormal and emergency)</li> <li>• Appropriateness of checklist used (aircraft checklists)</li> <li>• A/C system integrated checklists</li> <li>• Ex-Soviet-built aircraft issues (pilot's checklist and flight engineer's checklist)</li> </ul> <p><b>A6 Radio navigation/instrument charts</b></p> <ul style="list-style-type: none"> <li>• Required charts (departure, en-route, destination and alternate):</li> <li>• within reach and update status</li> <li>• Validity of FMS database</li> <li>• Electronic maps and charts</li> <li>• The AIRAC Cycle</li> </ul> <p><b>A7 Minimum equipment list (MEL)</b></p> <ul style="list-style-type: none"> <li>• Availability: approval and update status</li> <li>• Content: MEL reflects installed equipment</li> <li>• Ex-Soviet-built aircraft: 'Rukowodstwo' content</li> <li>• Relationship MEL/Master MEL</li> <li>• CDL (configuration deviation list)</li> </ul> <p><b>A8 Certificate of Registration</b></p> <ul style="list-style-type: none"> <li>• Availability and accuracy</li> <li>• Original documents and certified copies acceptability</li> <li>• Presence of mandatory information on the certificate:</li> <li>• Identification plate (type — location)</li> </ul> <p><b>A9 Noise certificate</b></p> <ul style="list-style-type: none"> <li>• Availability (if applicable)</li> <li>• Multiple noise certification</li> <li>• Approval status</li> </ul>	
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<p><b>A10 AOC or equivalent</b></p> <ul style="list-style-type: none"> <li>• Availability (original or copy) and accuracy</li> <li>• Content in compliance with requirements/format</li> <li>• Content of operational specifications</li> </ul> <p><b>A11 Radio (station) license</b></p> <ul style="list-style-type: none"> <li>• Availability and accuracy</li> <li>• Original documents and certified copies acceptability</li> </ul> <p><b>A12 Certificate of Airworthiness (C of A)</b></p> <ul style="list-style-type: none"> <li>• Format of Certificate of Airworthiness</li> <li>• Original documents and certified copies acceptability</li> <li>• Presence, accuracy and validity</li> </ul> <p><b>A13 Flight preparation</b></p> <ul style="list-style-type: none"> <li>• Presence and accuracy of operational flight plan</li> <li>• Performance calculations</li> <li>• Proper fuel calculation and monitoring</li> <li>• Special considerations for ETOPS operations</li> <li>• Availability and update of meteorological information</li> <li>• Availability and update of NOTAMS</li> </ul> <p><b>A14 Mass and balance calculation</b></p> <ul style="list-style-type: none"> <li>• Availability and accuracy</li> <li>• Data available for a verification by crew</li> </ul> <p><b>A15 Hand fire extinguishers</b></p> <ul style="list-style-type: none"> <li>• Validity, access and locations</li> <li>• Mounting</li> <li>• Types</li> </ul> <p><b>A16 Life-jackets/flotation devices</b></p> <ul style="list-style-type: none"> <li>• Validity, access and locations</li> <li>• Applicability</li> </ul> <p><b>A17 Harness</b></p> <ul style="list-style-type: none"> <li>• Presence (and usage)</li> <li>• Availability for all flight crew members</li> <li>• Requirements for different crew positions</li> <li>• Conditions (wearing)</li> </ul> <p><b>A18 Oxygen equipment</b></p> <ul style="list-style-type: none"> <li>• Presence, access and condition</li> <li>• Oxygen cylinder pressure</li> <li>• Minimum required according to the operations manual (in case of low pressure)</li> <li>• Operational functional check of the combined oxygen and communication system (crew)</li> </ul> <p><b>A19 Independent portable light</b></p> <ul style="list-style-type: none"> <li>• Number of required independent portable light(s) (day/night)</li> <li>• Condition, serviceability and access</li> </ul> <p><b>A20 Flight crew licences</b></p> <ul style="list-style-type: none"> <li>• Validity of crew licences and appropriate ratings</li> <li>• Validation of foreign licences</li> </ul>	
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<ul style="list-style-type: none"> <li>• Validity of medical certificate</li> <li>• Special medical conditions (spare glasses, etc.)</li> <li>• Age limitations</li> <li>• Minimum crew requirements</li> </ul> <p><b>A21 Journey Log book</b></p> <ul style="list-style-type: none"> <li>• Content of journey log book (recommendation/roman numerals)</li> <li>• Examples of journey log books</li> </ul> <p><b>A22 Maintenance Release</b></p> <ul style="list-style-type: none"> <li>• Applicable requirements and duties of the PIC/ commander</li> </ul> <p><b>A23 Defect notification and rectification (incl. technical log)</b></p> <ul style="list-style-type: none"> <li>• Defects notification</li> <li>• Cross check with MEL</li> <li>• History of defects/notification (incl. hold item list)</li> </ul> <p><b>A24 Pre-flight inspection</b></p> <ul style="list-style-type: none"> <li>• Applicable requirements and duties of the PIC</li> </ul>	
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<b>MODULE (B)</b>	
<b>a. Ramp inspection items (b)</b>	
<p><b>B1 General internal condition</b></p> <ul style="list-style-type: none"> <li>• General condition</li> <li>• Safety and survival equipment</li> <li>• Design and construction</li> </ul> <p><b>B2 Cabin Crew Stations and Crew Rest Area</b></p> <ul style="list-style-type: none"> <li>• Cabin crew seats (number, material/fire resistant and condition, upright position/safety hazard)</li> <li>• Equipment</li> </ul> <p><b>B3 First-aid kit/emergency medical kit</b></p> <ul style="list-style-type: none"> <li>• Recommendation on contents (validity)</li> <li>• Locations of kits</li> <li>• Adequacy</li> <li>• Readily/access</li> <li>• Identifications/markings/seals</li> </ul> <p><b>B4 Hand fire extinguishers</b></p> <ul style="list-style-type: none"> <li>• Validity, access and locations</li> <li>• Mounting</li> <li>• Types</li> </ul> <p><b>B5 Life-jackets/flotation devices</b></p> <ul style="list-style-type: none"> <li>• Validity, access and locations</li> <li>• Applicability</li> <li>• Different models of jackets and/or flotation devices on-board</li> <li>• Instructions for passengers (written and demonstration)</li> </ul> <p><b>B6 Seat belt and seat condition</b></p> <ul style="list-style-type: none"> <li>• Seats and belts (material/condition/installation)</li> <li>• Portable light (cabin crew)</li> <li>• Instructions for passengers (written and demonstration)</li> </ul>	<p>Objectives: Trainees should possess the relevant knowledge enabling them to inspect each item.</p>

<ul style="list-style-type: none"> <li>• Opening assistance systems</li> </ul> <p><b>B7 Emergency exit, lighting and marking, independent portable light</b></p> <ul style="list-style-type: none"> <li>• Evacuation signs</li> <li>• Lighting and marking (passenger compartment)</li> <li>• Independent Portable light</li> </ul> <p><b>B8 Slides/life-rafts/ELTs</b></p> <ul style="list-style-type: none"> <li>• Slides/rafts general (locations, types)</li> <li>• Serviceability — pressure gauge/green band</li> <li>• Instructions for passengers (written and demonstration)</li> <li>• Emergency locator transmitter (ELT) (general/types/location)</li> </ul> <p><b>B9 Oxygen supply (cabin crew and passengers)</b></p> <ul style="list-style-type: none"> <li>• Oxygen supply: cylinders and generators</li> <li>• Serviceability — pressure gauge/green band</li> <li>• Models/A/C types</li> <li>• Drop-out panels/storage of masks</li> </ul> <p><b>B10 Safety instructions</b></p> <ul style="list-style-type: none"> <li>• Availability and accuracy</li> </ul> <p><b>B11 Cabin crew members</b></p> <ul style="list-style-type: none"> <li>• Appropriate number of cabin crew (A/C type)</li> <li>• Refuelling with passengers on-board (crew positions)</li> </ul> <p><b>B12 Access to emergency exits</b></p> <ul style="list-style-type: none"> <li>• Number and location of exits</li> <li>• Different models and sizes (A/C type)</li> <li>• Obstructions</li> <li>• Instructions for passengers (written and demonstration)</li> </ul> <p><b>B13 Stowage of passenger baggage's (cabin luggage)</b></p> <ul style="list-style-type: none"> <li>• Proper storage (size, weight and number)</li> <li>• Safety risks</li> </ul> <p><b>B14 Seat capacity</b></p> <ul style="list-style-type: none"> <li>• Numbers of seats (A/C type)</li> <li>• Max number of passengers (A/C type)</li> </ul>	
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MODULE (C)	
RAMP INSPECTION ITEMS (C)	
<p><b>C1 General External Condition</b></p> <ul style="list-style-type: none"> <li>• Corrosion (different corrosion types)</li> <li>• Cleanliness and contamination (fuselage and wings)</li> <li>• Windows and windshields (delamination)</li> <li>• Exterior lights (landing lights, NAV-lights, strobes, beacon, etc.)</li> <li>• Markings</li> <li>• De-icing requirements</li> </ul> <p><b>C2 Doors and hatches</b></p> <ul style="list-style-type: none"> <li>• Door types (normal — emergency — cargo doors)</li> <li>• Markings and placards of doors</li> <li>• Operating instructions of doors</li> <li>• Condition and possible damages</li> </ul> <p><b>C3 Flight controls</b></p> <ul style="list-style-type: none"> <li>• Condition and possible damages, corrosion and loose parts</li> <li>• Rotor head condition</li> <li>• Leakage</li> </ul> <p><b>C4 Wheels, tyres and brakes</b></p> <ul style="list-style-type: none"> <li>• Tyre pressure (cockpit indications/wheel integrated gauge)</li> <li>• Brake condition</li> <li>• Condition and possible damages, leaking and loose parts</li> </ul> <p><b>C5 Undercarriage</b></p> <ul style="list-style-type: none"> <li>• Condition and possible damages, corrosion and loose parts</li> <li>• Strut (and tilt cylinder) pressure</li> </ul> <p><b>C6 Wheel well</b></p> <ul style="list-style-type: none"> <li>• Condition and possible damages, corrosion, leaks and loose parts</li> </ul> <p><b>C7 Powerplant and pylon</b></p> <ul style="list-style-type: none"> <li>• Cowlings, cowling doors and blow-out doors</li> <li>• Condition and possible damages, corrosion, leaks and loose parts</li> <li>• Pylon, pylon doors, blow-out panels and missing rivets</li> <li>• Condition and possible damages, corrosion, leaks and loose parts</li> <li>• Reversers' condition</li> </ul> <p><b>C8 Fan blades, propellers, rotors</b></p> <ul style="list-style-type: none"> <li>• Types of fan blades/propellers/rotors</li> </ul>	<p>Objectives:                      Trainees should possess the relevant knowledge enabling them to inspect each item.</p>



<ul style="list-style-type: none"> <li>• Foreign object damage (FOD), (dents, nicks, blade bending)</li> <li>• De-icing (boots and heating elements)</li> </ul> <p><b>C9 Obvious repairs</b></p> <ul style="list-style-type: none"> <li>• Obvious repairs/maintenance release, technical log</li> </ul> <p><b>C1.0 Obvious unprepared damage</b></p> <ul style="list-style-type: none"> <li>• Damages/missing maintenance release, technical log</li> <li>• Assessment of damage</li> </ul> <p><b>C11 Leakage</b></p> <ul style="list-style-type: none"> <li>• Obvious leakage, technical log</li> <li>• Types and assessment of leakage</li> <li>• Toilet leaks/blue ice, etc.</li> </ul>	
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<b>MODULE (D)</b>	
<b>Ramp inspections items (D)</b>	
<p><b>D1 General condition of cargo compartment</b></p> <ul style="list-style-type: none"> <li>• Structures, wall panels, wall sealing</li> <li>• Fire detection &amp; extinguishing systems</li> <li>• Blow-out panels</li> <li>• 9G-net</li> <li>• Containers</li> <li>• Loading instructions/door instructions</li> <li>• Damage</li> </ul> <p><b>D2 Dangerous goods</b></p> <ul style="list-style-type: none"> <li>• Notification to the pilot-in-command/commander</li> <li>• Segregation and accessibility</li> <li>• Packaging and labelling</li> <li>• Limitations/restrictions (cargo aircraft ) goods)</li> </ul> <p><b>D3 Cargo stowage</b></p> <ul style="list-style-type: none"> <li>• Loading instructions (placards, wall markings)</li> <li>• Flight kit (secured)</li> <li>• Pallets, nets, straps, containers (secured)</li> <li>• Loading limitations (weight, size and height)</li> </ul> <p><b>E1 General</b></p> <ul style="list-style-type: none"> <li>• All the general items that may have a direct relation with the safety of the aircraft or its occupants</li> </ul>	<p>Objectives: Trainees should possess the relevant knowledge enabling them to inspect each item.</p>

Applicable until 01/09/2019, then deleted.

**AMC2 ARO.RAMP.115(b)(2)(i) Qualification of ramp inspectors**

**SYLLABUS OF PRACTICAL TRAINING FOR RAMP INSPECTORS — INITIAL (PRACTICAL) TRAINING COURSE**

- Module (A): Flight crew compartment inspection items
- Module (B): Cabin safety inspection items
- Module (C): Aircraft condition inspection items

— Module (D): Cargo inspection items

MODULE A (Flight crew compartment inspection items)	
	<p>Objectives:</p> <p>Trainees should be able to use their technical knowledge and ramp inspection techniques in a satisfactory manner during the subsequent on-the-job training</p>

<p><b>A1 General condition (of flight crew compartment)</b></p> <ul style="list-style-type: none"> <li>• Security/reinforced door (how to recognise)</li> <li>• Reinforced flight crew compartment door installations/locking functions (with a real example)</li> <li>• C/Bs/circuit breakers (recognise pulled/popped)</li> <li>• Crew seats/serviceability (functions of seats/manual — electrical)</li> <li>• Examples of storage of flight cases and crew luggage (possible safety hazards)</li> <li>• Check cleanness of flight crew compartment</li> </ul> <p><b>A2 Emergency exit (flight crew compartment)</b></p> <ul style="list-style-type: none"> <li>• Recognise easy access (no blockings)</li> <li>• Escape ropes (check if secured)</li> </ul> <p><b>A3 Equipment</b></p> <p><b>GPWS-TAWS:</b></p> <ul style="list-style-type: none"> <li>• GPWS, locate instruments in cockpit</li> <li>• Aural warning test demonstrating: Sounds/display patterns</li> <li>• Recognise CIS-built A/C systems (if possible): SSOS — SPPZ — SRPBZ</li> </ul> <p><b>ACAS/TCAS II</b></p> <ul style="list-style-type: none"> <li>• Locate instruments in cockpit</li> <li>• Mode S transponder and ACAS II (locate and check the model)</li> <li>• System warning test/indications</li> </ul> <p><b>8.33 kHz radio channel spacing</b></p> <ul style="list-style-type: none"> <li>• Indication in the flight plan (examples)</li> <li>• How to check real channel spacing during the inspection (performed with real radios or approved training devices)</li> </ul> <p><b>A4 Manuals (flight manuals only)</b></p> <ul style="list-style-type: none"> <li>• Operations manual: (content/handling exercise)</li> <li>• Aircraft flight manual (examples)</li> <li>• Electronic manuals (lap-tops)/integrated systems</li> </ul> <p><b>A5 Checklists</b></p> <ul style="list-style-type: none"> <li>• Check validity normal-, abnormal-, emergency checklists and ‘quick reference handbook’</li> <li>• Meaning of ‘available’/within reach (case study/ examples)</li> <li>• A/C sys integrated checklists (demonstration of system)</li> <li>• Ex-Soviet-built A/C checklists (recognise/examples)</li> </ul> <p><b>A6 Radio navigation/instrument charts</b></p> <ul style="list-style-type: none"> <li>• Check the covering of charts</li> <li>• En-route and instruments approach charts (view examples)</li> <li>• Locations in the flight crew compartment</li> <li>• Electronic maps and charts (examples)</li> <li>• Check updating markings of the charts and folders.</li> <li>• FMS navigation data-base (check the ‘INIT’ page for validity)</li> </ul> <p><b>A7 Minimum equipment list (MEL)</b></p> <ul style="list-style-type: none"> <li>• Check the deferred defects are in accordance with the MEL instructions</li> <li>• Inspect MEL according the current MMEL</li> <li>• Approval (check)</li> <li>• ‘Rukowodstwo’ (examples)</li> </ul> <p><b>A8 Certificate of Registration (CoR)</b></p> <ul style="list-style-type: none"> <li>• Content and accuracy of the Certificate of Registration (various examples/check)</li> <li>• Requirements of certified true copy (examples of copies)</li> </ul>	
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<ul style="list-style-type: none"> <li>• Common location in the A/C</li> <li>• Identification plate/show various locations in A/C</li> </ul> <p><b>A9 Noise certificate</b></p> <ul style="list-style-type: none"> <li>• Format of the noise certificate</li> <li>• Content of noise certificate/approval/(check)</li> </ul> <p><b>A10 Air Operator Certificate (AOC) or equivalent</b></p> <ul style="list-style-type: none"> <li>• Format of the air operator certificate</li> <li>• Content and accuracy of AOC/approval (check compliance with the requirement)</li> <li>• Show location (A/C documents or door)</li> </ul> <p><b>A11 Radio (station) licence</b></p> <ul style="list-style-type: none"> <li>• Format of the radio station licence (examples)</li> <li>• Show location (a/c documents or door)</li> </ul> <p><b>A12 Certificate of Airworthiness (C of A)</b></p> <ul style="list-style-type: none"> <li>• Check certificate and content (recognise standard form)</li> <li>• Accuracy and validity (check)</li> <li>• Show location (A/C documents or door)</li> </ul> <p><b>A13 Flight preparation</b></p> <ul style="list-style-type: none"> <li>• Check operational flight plan, proper filling and relevant documents</li> <li>• Proper fuel calculation and monitoring (demonstration of various examples)</li> <li>• NOTAMs/check validity (examples)</li> <li>• Weather information/available and within reach (demonstrate updated reports/examples)</li> </ul> <p><b>A14 Mass and balance calculation</b></p> <ul style="list-style-type: none"> <li>• Check examples of different type weight and balance sheets/A/C types (manual and computerised)</li> </ul> <p><b>A15 Hand fire extinguishers</b></p> <ul style="list-style-type: none"> <li>• Locations/access (flight crew compartment visit)</li> <li>• Condition and pressure gauge</li> <li>• Familiarise with different date markings (inspection date or expiry date)</li> <li>• Mountings (review examples)</li> <li>• Types (review examples)</li> </ul> <p><b>A16 Life-jackets/flotation devices</b></p> <ul style="list-style-type: none"> <li>• Locations</li> <li>• Familiarise with date markings</li> <li>• Extra raft location in flight crew compartment (installation, pressure gauge)</li> </ul> <p><b>A17 Harness</b></p> <ul style="list-style-type: none"> <li>• Worn out (examples)</li> <li>• Locks (common problems)</li> </ul> <p><b>A18 Oxygen equipment</b></p> <ul style="list-style-type: none"> <li>• Storage of masks (Quick Donning/Balloon)</li> <li>• Pressure gauge (check green band)</li> <li>• Radio boom — mask check</li> </ul> <p><b>A19 Independent Portable light</b></p> <ul style="list-style-type: none"> <li>• Locations</li> <li>• Operational check</li> </ul> <p><b>A20 Flight crew licences</b></p> <ul style="list-style-type: none"> <li>• Licenses of personnel:</li> </ul>	
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<ul style="list-style-type: none"> <li>— endorsement of certificates and licenses</li> <li>— validity of endorsed certificates and licenses</li> <li>— language proficiency</li> <li>— medical certificate (spare glasses, etc.)</li> <li>— validity of licences</li> <li>• Aeroplane flight crew:                         <ul style="list-style-type: none"> <li>— composition of the flight crew</li> <li>— age limitations</li> </ul> </li> </ul> <p><b>A21 Journey logbook</b></p> <ul style="list-style-type: none"> <li>• Content of journey log book (check markings and comply with the requirement)</li> <li>• Responsibility of signing log book (example)</li> </ul> <p><b>A22 Maintenance release</b></p> <ul style="list-style-type: none"> <li>• Aeroplane maintenance (maintenance record)</li> <li>• Maintenance release, general (checkmark or sign)</li> <li>• Relevant release for service (examples)</li> </ul> <p><b>A23 Defect notification and rectification (incl. Tech Log)</b></p> <ul style="list-style-type: none"> <li>• Open defects</li> <li>• History of defects (including hold item list)</li> </ul> <p><b>A24 Pre-flight inspection</b></p> <ul style="list-style-type: none"> <li>• Pre-flight inspection sheet and journey log book (presence and signed off)</li> </ul>	
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<b>MODULE B (Cabin Safety)</b>	
<p><b>B1 General internal condition (cabin)</b></p> <ul style="list-style-type: none"> <li>• Safety and survival equipment (cabin visit for the locations)</li> <li>• Design and construction (familiarise with different type cabins)</li> <li>• Recognise loose carpet and damaged floor panel</li> <li>• System design features:                         <ul style="list-style-type: none"> <li>— recognise right materials (<i>Cabin visit</i>)</li> <li>— lavatory smoke detection system/<i>Cabin visit for the locations</i></li> <li>— built-in fire extinguisher system for each receptacle intended for disposal of towels, paper or waste (how to check extinguishers)/<i>Cabin visit for the locations</i></li> </ul> </li> <li>• Check that normal and abnormal duties by cabin crew may be performed without hindrance (<i>Guided tour in cabin for demonstration of duties</i>)</li> </ul> <p><b>B2 Cabin crew stations and crew rest area</b></p> <ul style="list-style-type: none"> <li>• Cabin crew seats (cabin visit for number, material and condition)</li> <li>• Cabin crew seats upright position (case study/ recognise safety hazard)</li> <li>• Familiarise with problems with belt wearing and fast locks</li> <li>• Familiarise with seat attachment to the floor or wall</li> <li>• Easy access to emergency equipment (cabin visit for locations and condition)</li> </ul> <p><b>B3 First-aid kit/emergency medical kit</b></p> <ul style="list-style-type: none"> <li>• Cabin visit for locations (readily/access)</li> <li>• Adequacy (how to determine)</li> <li>• Confirmation that contents match the relevant checklist</li> <li>• Identifications/markings/seals (examples)</li> </ul> <p><b>B4 Hand fire extinguishers</b></p> <ul style="list-style-type: none"> <li>• Cabin visit for locations (readily/access)</li> <li>• Checking serviceability</li> </ul> <p><b>B5 Life-jackets/flotation devices</b></p>	<p>Objectives:</p> <p>Trainees should be able to use their technical knowledge and ramp inspection techniques in a satisfactory manner during the subsequent on-the-job training</p>

<ul style="list-style-type: none"> <li>• Different models of life- jackets and flotation devices</li> <li>• Instructions for passengers</li> <li>• Condition and serviceability</li> </ul> <p><b>B6 Seat belt and seat condition</b></p> <ul style="list-style-type: none"> <li>• Seat belt material/condition (examples)</li> <li>• Recognise common problems with fast locks</li> <li>• Recognise common problems with seat belt wearing</li> <li>• Installation of seat belts (hazard to block evacuation)</li> <li>• Extra belts (locations)</li> <li>• Passenger seats (number and condition)</li> <li>• Passenger seat materials/fire resistant (recognise right materials)</li> <li>• Seat attach to the cabin floor (how to check)</li> </ul> <p><b>B7 Emergency exit, lighting and marking, independent portable light</b></p> <ul style="list-style-type: none"> <li>• Lighting and marking (cabin visit for locations and condition)</li> <li>• Condition and serviceability of exits</li> <li>• Instructions for passengers</li> <li>• Availability, serviceability and easy access of independent Portable light</li> </ul> <p><b>B8 Slides/life-rafts/ELT's</b></p> <ul style="list-style-type: none"> <li>• Slides/rafts general (cabin visit for locations and condition)</li> <li>• Check pressure gauge and recognise green band</li> <li>• Recognise condition of slides and rafts and familiarise with expiry date markings</li> <li>• Emergency locator transmitter (ELT) (cabin visit for locations and condition)</li> <li>• Automatic fixed ELT (examples/how to recognise)</li> <li>• Automatic portable ELT (examples/how to recognise)</li> <li>• Automatic deployable ELT (examples/how to recognise)</li> </ul> <p><b>B9 Oxygen supply (cabin crew and passengers)</b></p> <ul style="list-style-type: none"> <li>• Check oxygen supply (cylinders and generators) (cabin visit for locations and condition)</li> <li>• Check the cylinder pressure gauge and recognise green band</li> <li>• Drop-out panels (cabin visit for locations and condition)</li> <li>• Storage of masks/serviceability</li> </ul> <p><b>B10 Safety instructions</b></p> <ul style="list-style-type: none"> <li>• The meaning of available (within reach)</li> <li>• The meaning of accuracy/A/C types (recognise difference in instructions)</li> <li>• Content of instructions</li> </ul> <p><b>B11 Cabin crew members</b></p> <ul style="list-style-type: none"> <li>• Appropriate number of cabin crew (how to check)</li> <li>• Refuelling with passengers on board (check cabin crew positions)</li> <li>• Cabin crew member's type training document (familiarise with different types)</li> </ul> <p><b>B12 Access to emergency exits</b></p> <ul style="list-style-type: none"> <li>• Number and location of exits</li> <li>• Different models and sizes (A/C type)</li> <li>• Instructions for passengers (written and demonstration)</li> <li>• Obstructions (requirement on the projected opening)</li> </ul> <p><b>B13 Stowage of passenger baggage (cabin luggage)</b></p> <ul style="list-style-type: none"> <li>• Recognise proper storage (size, weight and number)</li> <li>• Familiarise and recognise safety risks (case study)</li> </ul> <p><b>B14 Seat capacity</b></p> <ul style="list-style-type: none"> <li>• Max number of passengers according to the cabin configuration</li> <li>• Compare the numbers of passenger and the number of serviceable seats</li> </ul>	
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<ul style="list-style-type: none"> <li>• Interrelation with other inspection items: maximum number of passengers influenced by: B6 (inoperative seat) and/or B7 (inoperative exit)</li> </ul>	
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MODULE C (aircraft condition)	
<p><b>C1 General external condition</b></p> <ul style="list-style-type: none"> <li>• Recognise presence of ice, snow and frost</li> <li>• Condition of paint (familiarise when loose of painting is problem)</li> <li>• Recognise legibility of aircraft’s markings (registration)</li> <li>• Corrosion (familiarise and recognise different corrosion types)</li> <li>• Cleanliness and contamination of fuselage and wings (familiarise and recognise)</li> <li>• Windshields (recognise delaminating)</li> <li>• Windows (recognise damages and problems)</li> <li>• Exterior lights (landing lights, NAV-lights, strobes, beacon, etc.) (check the condition)</li> <li>• Recognise marks of lightning strike</li> </ul> <p><b>C2 Doors and hatches</b></p> <ul style="list-style-type: none"> <li>• Familiarise with different door types/structures (aircraft visit for locations)</li> <li>• Cockpit indications of doors (flight crew compartment visit)</li> <li>• Familiarise with markings and placards of doors</li> <li>• Operating instructions of doors (recognise hazards if lack of markings)</li> <li>• Recognise normal condition and possible damages/loosing parts</li> </ul> <p><b>C3 Flight controls</b></p> <ul style="list-style-type: none"> <li>• Condition and possible damages, corrosion and loose parts</li> <li>• Recognise marks of lightning strike</li> <li>• Familiarise with static dischargers (recognise when missing)</li> <li>• Recognise possible defects and damages</li> </ul> <p><b>C4 Wheels, tyres and brakes</b></p> <ul style="list-style-type: none"> <li>• Familiarise with different tyre models</li> <li>• Familiarise with different brake assemblies</li> <li>• Familiarise with maintenance manual limits</li> <li>• Recognise brake wearing indicator ‘pin’ (examples/locations)</li> <li>• Recognise normal condition and possible damages, leaking and loose parts</li> <li>• Tyre wear/tyre pressure (check)</li> </ul> <p><b>C5 Undercarriage</b></p> <ul style="list-style-type: none"> <li>• Condition and possible damages, corrosion and loose parts</li> <li>• Proper strut (and tilt cylinder pressure)</li> <li>• Lubrication (recognise signs of lubrication)</li> <li>• Familiarise with marking placards</li> <li>• Recognise bonding wires</li> <li>• Possible defects and damages</li> </ul> <p><b>C6 Wheel well</b></p> <ul style="list-style-type: none"> <li>• Condition and possible damages, corrosion and loose parts</li> <li>• Lubrication (recognise signs of lubrication)</li> <li>• Familiarise with marking placards</li> <li>• Recognise bonding wires</li> </ul>	<p>Objectives:                      Trainees should be able to use their technical knowledge and ramp inspection techniques in a satisfactory manner during the subsequent on-the-job training</p>



<ul style="list-style-type: none"> <li>• Possible defects and damages</li> </ul> <p><b>C7 Powerplant and pylon</b></p> <ul style="list-style-type: none"> <li>• Powerplants (type of engines)</li> <li>• Cowlings, cowling doors and blow-out doors</li> <li>• Leaks (hydraulic, fuel, oil)</li> <li>• Condition and possible damages, corrosion, leaks and loose parts</li> <li>• Recognise engine sensors (condition)</li> <li>• Possible defects and damages</li> <li>• Pylon (types of pylons) — Recognise pylon doors, panels and blow-out panels and loose rivets — bolts</li> <li>• Reverser's condition (broken hinges and proper closure)</li> </ul> <p><b>C8 Fan blades, propellers, rotors</b></p> <ul style="list-style-type: none"> <li>• Typical foreign object damages (FOD), (examples of dents, nicks and blade bending)</li> <li>• Recognise looseness of blades in hub</li> <li>• Possible defects and damages (familiarise with procedures related to compliance with engine maintenance manual)</li> <li>• Check de-icing boots</li> </ul> <p><b>C9 Obvious repairs</b></p> <ul style="list-style-type: none"> <li>• Recognise obvious repairs (examples)</li> <li>• Maintenance release/technical log</li> </ul> <p><b>C10 Obvious unrepaired damage</b></p> <ul style="list-style-type: none"> <li>• Recognise obvious damages (examples)</li> <li>• Damages/maintenance release/technical log</li> <li>• Recognise assessment of damage (examples)</li> </ul> <p><b>C11 Leakage</b></p> <ul style="list-style-type: none"> <li>• Fluid leaks outside of limits (examples fuel, hydraulic, oil)</li> <li>• Obvious leak: check the maintenance release, technical log</li> <li>• Recognise toilet leaks (blue ice examples)</li> <li>• Recognise de-icing fluids on the A/C (aircraft visit for locations)</li> </ul>	
<p><b>MODULE D (Cargo)</b></p>	
<p><b>D1 General condition of cargo compartment</b></p> <ul style="list-style-type: none"> <li>• Cargo compartment (aircraft visit for locations)</li> <li>• Check wall panels</li> <li>• Recognise wall sealing</li> <li>• Familiarise with A/C systems in cargo compartment:                         <ul style="list-style-type: none"> <li>— fire containment, detection and extinguishing systems</li> <li>— ventilation</li> <li>— heating</li> <li>— loading systems (rollers)</li> <li>— lighting</li> </ul> </li> <li>• Recognise blow-out panels</li> <li>• Familiarise with 9G-net</li> <li>• Cargo restraining devices</li> <li>• Check cargo door sealing for ETOPS</li> <li>• Containers</li> <li>• Loading instructions/door instructions</li> <li>• Damages in cargo compartment</li> <li>• Recognise obvious repairs in cargo compartment</li> </ul> <p><b>D2 Dangerous goods (DG)</b></p> <ul style="list-style-type: none"> <li>• How to recognise the special authorisation to transport DG</li> <li>• Assessing the scope of the authorisation (different classes)</li> </ul>	

<ul style="list-style-type: none"> <li>• Notification to Captain (NOTOC) format and content</li> <li>• Segregation and accessibility</li> <li>• Examples of packaging and labelling of DG</li> <li>• Identifying limitations and restrictions for certain (sub)classes of DG</li> <li>• Identification and removal of contamination with DG</li> </ul> <p><b>D3 Secure cargo stowage</b></p> <ul style="list-style-type: none"> <li>• Cargo bay (guided visit for locations)</li> <li>• Loading instructions (placards, wall markings/tidiness)</li> <li>• Familiarise with flight kit/spare wheel (secured)</li> <li>• Familiarise with pallets, nets, straps, containers (secured)</li> <li>• Recognising loading limits (weight and height)</li> </ul>	
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Applicable until 01/09/2019, then replaced by AMC7 ARO.RAMP.115 (a)(b)

### AMC1 ARO.RAMP.115(b)(3) Qualification of ramp inspectors

#### RECURRENT TRAINING

- (a) The competent authority should ensure that all ramp inspectors undergo recurrent training at least once every 3 years after being qualified as ramp inspectors and whenever deemed necessary by the Agency, e.g. after major changes in the inspection procedures. The Agency will inform the competent authority of such necessity and on the associated timeframe for implementation.
- (b) Recurrent training should be delivered by a competent authority or by an approved training organisation.
- (c) The recurrent training should cover at least the following elements:
- (1) new regulatory and procedural developments;
  - (2) new operational practices;
  - (3) articulation review of other European processes and regulations (list of banned operators or aircraft pursuant to Regulation (EC) No 2111/2005, authorisation of third-country operators); using data collected through ramp inspections; and
  - (4) standardisation and harmonisation issues.
- (d) If a senior ramp inspector loses his/her qualification as a result of failure to undergo the recurrent training mentioned in point (b) above, he/she should be re-qualified by the competent authority by providing him/her with the missing recurrent training.

Applicable until 01/09/2019, then deleted.

### AMC2 ARO.RAMP.115(b)(3) Qualification of ramp inspectors

#### RECENT EXPERIENCE REQUIREMENTS

- (a) The ramp inspector will remain qualified only if performing at least 12 ramp inspections during each calendar year, after their qualification, with no less than 6 ramp inspections during each half of that calendar year.
- (b) This number may be reduced up to a half by the number of inspections on aircraft operated by domestic operators if the inspector is also a qualified flight operations, ramp or airworthiness inspector of a competent authority and is regularly engaged in the oversight of such operators.
- (c) Should a ramp inspector lose his/her qualification as a result of failure to meet the conditions on the minimum number of ramp inspections mentioned in point (a) above, he/she may be requalified by the competent authority after performing the missing number of inspections under the supervision of a senior ramp inspector. These inspections should be performed as

ramp inspections during the next half calendar year in addition to the ones required for that period.

- (d) Should the inspector loses his/her qualification because he/she has not been engaged in performing inspections on aircraft for a period of 2 to 6 consecutive halves of a calendar year, he/she may be requalified by the competent authority only after successfully completing on-the-job-training as prescribed in AMC2 ARO.RAMP.115(b)(2) and any required recurrent training.
- (e) Should the inspector lose his/her qualification because he/she has not been engaged in performing inspections on aircraft for more than 6 consecutive halves of a calendar year, he/she should be fully requalified by successfully completing initial theoretical, practical and on-the-job training.
- (f) The competent authority should ensure that all ramp inspectors undergo recurrent training at least once every 3 years after being qualified as ramp inspectors and whenever deemed necessary by the Agency due to significant changes to the ramp inspection programme.

Applicable until 01/09/2019, then deleted.

### GM1 ARO.RAMP.115(b)(3) Qualification of ramp inspectors

#### RECENT EXPERIENCE REQUIREMENTS

The recent experience requirements should be reviewed on 1 January and 1 July. For the half calendar year during which the inspector was firstly qualified, the recent experience criteria may be applied on a pro rata basis.

Applicable until 01/09/2019, then deleted.

### GM1 ARO.RAMP.115(c) Qualification of ramp inspectors

#### COMPETENT AUTHORITY'S TRAINING PROGRAMME

The competent authority should ensure that its training programmes are amended accordingly to reflect any recommendations arising from the standardisation audits conducted by the Agency in accordance with Regulation (EU) No 7628/2013<sup>7</sup>.

<sup>7</sup> OJ L 179, 29.6.2013, p.46

**GM2 ARO.RAMP.115(c) Qualification of ramp inspectors**

## CHECKLIST FOR THE EVALUATION OF A THIRD PARTY TRAINING ORGANISATION

## CHECKLIST FOR THE VERIFICATION OF A THIRD PARTY TRAINING ORGANISATION

1. ORGANISATIONAL STRUCTURE				
No.	Description	Yes	No	Remarks
1	Has a manager with corporate authority been appointed?			
2	Has the training provider contracted enough staff to develop and deliver the envisaged training?			
3	Is the development and delivery of training in accordance with the technical criteria required by the Agency?			
2. FACILITIES AND OFFICE ACCOMMODATION				
No.	Description	Yes	No	Remarks
1	Does the size and structure of the available training facilities ensure adequate protection against weather elements?			
2	Does the size and structure of the available training facilities provide proper training activities?			
3	As alternate means of compliance has the training organisation a procedure containing the applicable criteria when selecting the training facilities to be used, and are these criteria in compliance with the technical requirements provided by the Agency?			
3. INSTRUCTIONAL EQUIPMENT				
No.	Description	Yes	No	Remarks
1	Is the presentation equipment appropriate for the training to be delivered?			
2	Can the trainees easily read the presented material from any position in the classroom?			
3	As alternate means of compliance has the training organisation a procedure containing the applicable criteria when selecting the training facilities to be used, and are these criteria in compliance with the technical requirements provided by the Agency?			
4	Does the training organisation ensure that a suitable aircraft is available for practical training for an adequate period?			

4. TRAINING PROCEDURE				
No.	Description	Yes	No	Remarks
1	Has the training provider established appropriate procedures to ensure proper training standards?			
2	Has the training provider established a system to control the training preparation and delivery process?			
3	Is the course material written in the English language and will the course be given in the English language?			
4	Has the training provider demonstrated how compliance with Agency's technical criteria is maintained current and kept in line with the training syllabi?			
5	Has the training provider developed a system to evaluate the effectiveness of training provided?			
6	Has the training provider developed a system to evaluate the effectiveness of the training based upon the feedback received?			
5. INSTRUCTORS – QUALIFICATION CRITERIA				
No.	Description	Yes	No	Remarks
1	Does the training organisation have an instructors' recruitment procedure?			
2	Does the recruitment procedure contain applicable selection criteria which are in compliance with the technical requirements provided by the Agency?			
3	Do the instructors possess knowledge of the ramp inspection programmes?			
4	Do the instructors have the knowledge on training methods and techniques?			
5	Do the instructors delivering training on inspection items/practical training meet the eligibility and inspection experience requirements?			
6	Do the other instructors meet the working experience criteria?			
6. INSTRUCTORS – QUALIFICATION RECORDS				
No.	Description	Yes	No	Remarks
1	Has the training organisation created and maintained an adequate instructors' qualification tracking system that ensures their continuous competence at all times?			

	2	Are the criteria used for the maintenance of the instructors' continuous competence in compliance with the technical requirements provided by the Agency?			
<b>7. INSTRUCTORS – RECENT EXPERIENCE AND RECURRENT TRAINING</b>					
<b>No.</b>	<b>Description</b>		<b>Yes</b>	<b>No</b>	<b>Remarks</b>
	1	Do the instructors meet, if applicable, the requirements on recent experience?			
	2	Do the instructors meet the requirements on recurrent training?			
<b>8. RECORDS KEEPING SYSTEM</b>					
<b>No.</b>	<b>Description</b>		<b>Yes</b>	<b>No</b>	<b>Remarks</b>
	1	Has the training organisation put in place a records keeping system that ensures the appropriate collection, storage, protection, confidentiality of data related to training materials developed, associated updates, examinations of the trainees, etc.?			
<b>9. QUALITY SYSTEM</b>					
<b>No.</b>	<b>Description</b>		<b>Yes</b>	<b>No</b>	<b>Remarks</b>
	1	Has the training organisation put in place a quality system that ensures adequate control of the training development, preparation, delivery process and records keeping?			
<b>10. TRAINING MATERIAL</b>					
<b>No.</b>	<b>Description</b>		<b>Yes</b>	<b>No</b>	<b>Remarks</b>
	1	Are the overview items covered during the theoretical training?			
	2	Is the legal framework covered during the theoretical training?			
	3	Is the ICAO framework covered during the theoretical training?			
	4	Is the EU framework covered during the theoretical training?			
	5	Are the technical aspects covered during the theoretical training?			
	6	Is the 'Hands-on' training of the Database covered during the theoretical training?			

	7	Are all A inspection items covered during the theoretical training?			
	8	Are all A inspection items covered during the practical training?			
	9	Are all B inspection items covered during the theoretical training?			
	10	Are all B inspection items covered during the practical training?			
	11	Are all C inspection items covered during the theoretical training?			
	12	Are all C inspection items covered during the practical training?			
	13	Are all D and E inspection items covered during the theoretical training?			
	14	Are all D and E inspection items covered during the practical training?			
	15	Does the training organisation provide to all course participants a copy of the complete training course material and the relevant EU aviation legislation, as well as relevant examples of technical information?			

**11. ADDITIONAL REMARKS**

Applicable until 01/09/2019, then deleted.

**GM3 ARO.RAMP.115(c) Qualification of ramp inspectors**

CHECKLIST FOR THE EVALUATION OF RAMP INSPECTIONS TRAINING INSTRUCTORS

1 Qualification Criteria				
No.	DESCRIPTION	YES	NO	REMARKS
1	Do the instructors possess knowledge of the EU Ramp Inspection Programme?			
	Do the instructors have the knowledge on training methods and techniques?			
	Do the instructors delivering training on inspection items/practical training meet the eligibility and inspection experience requirements?			
	Do the other instructors meet the working experience criteria?			
2 Qualification records				
No.	DESCRIPTION	YES	NO	REMARKS
1	Has the training organisation created and maintained proper records on their instructors?			
3 Recent experience and recurrent training				
No.	DESCRIPTION	YES	NO	REMARKS
1	Do the instructors meet, if applicable, the requirements on recent experience?			
	Do the instructors meet the requirements on recurrent training?			
ADDITIONAL REMARKS				



**AMC1 ARO.RAMP.120 - Approval of training organisations**

## OVERSIGHT OF APPROVED TRAINING ORGANISATION

- (a) When determining the oversight programme of ramp inspector training organisations, the competent authority should assess the risks related to the type of activity carried out by the training organisation and adapt the oversight to the level of risk identified and to the organisation's ability to effectively manage safety risks.
- (b) An oversight cycle not exceeding 24 months should be applied. The oversight planning cycle may be extended to a maximum of 48 months if the competent authority has established that during the previous 24 months the organisation has been able to effectively manage safety risks.

**AMC1 ARO.RAMP.120(a) Approval of training organisations**

## APPROVAL OF A RAMP INSPECTION TRAINING ORGANISATION BY THE COMPETENT AUTHORITY

- (a) When evaluating the ramp inspection training organisation's capability to deliver training, the competent authority should verify that the training organisation:
- (1) Has established a detailed description of:
    - (i) the organisational structure;
    - (ii) the facilities and office accommodation;
    - (iii) the instructional equipment;
    - (iv) the instructor recruitment and maintenance of their continuing competence;
    - (v) the record keeping system;
    - (vi) the process for the development of the training course material and its continuous update; and
    - (vii) additional means and methods used to fulfil its tasks,

The documents and information specified above may be included into an organisation manual.
  - (2) Has developed the training course materials adequate for all types of training to be delivered;
  - (3) Ensures compliance with its own procedures on adequate control of the training development, preparation, delivery process and records keeping, as well as compliance with the legal requirements. The training organisation should evaluate the effectiveness of the training provided, based upon written feedbacks collected from course participants after each training delivery.
  - (4) Conducts the training in English with the aim to train trainees in the jargon used during ramp inspections;
- (b) The competent authority should issue the approval for an unlimited duration.

Applicable until  
01/09/2019, then  
replaced by  
AMC2  
ARO.RAMP.120(a)

Changes  
applicable  
from  
01/09/2019.

Applicable  
from  
01/09/2019.

**AMC2 ARO.RAMP.120(a) Approval of training organisations**

## OVERSIGHT OF APPROVED RAMP INSPECTION TRAINING ORGANISATION

- (a) The oversight programme of ramp inspection training organisations should be developed taking into account the scope of the approval, the size of the organisation, and the results of past certification and/or oversight activities.
- (b) An oversight cycle not exceeding 24 months should be applied. The oversight planning cycle may be extended to a maximum of 48 months if the competent authority has established that during the previous 24 months:
  - (1) all corrective actions have been implemented within the time period accepted or extended by the competent authority; and
  - (2) no level 1 findings as described in ARO.GEN.350 have been issued.

Applicable  
until  
01/09/2019,  
then deleted.

**AMC1 ARO.RAMP.120(a)(1) Approval of training organisations**

## ORGANISATIONAL STRUCTURE

The competent authority should verify that the training organisation has appointed a head of training with corporate authority to ensure that the training organisation:

- (a) has a sufficient number and properly qualified instructors to develop, update and deliver the training courses referred to in ARO.RAMP.115(b)(2)(i);
- (b) makes use of adequate training facilities and properly equipped office accommodation;
- (c) has established training procedures in accordance with AMC4 ARO.RAMP.120(a);
- (d) delivers training developed in accordance with the syllabi developed by the Agency;
- (e) periodically evaluates the effectiveness of the training provided; and
- (f) makes available to the competent authority an annual review summarising the results of the feedback system together with the training organisation's corrective actions (if any).

**AMC1 ARO.RAMP.120(a)(2) Approval of training organisations**

## FACILITIES, OFFICE ACCOMODATION AND INSTRUCTIONAL EQUIPMENT

- (a) The competent authority should verify that:
  - (1) the size and structure of the training facilities and office accommodation ensures protection from the prevailing weather elements and proper development, record keeping and delivery of all planned training on any particular day;
  - (2) the accommodation is separated from other facilities and appropriate to provide training;
  - (3) a suitable aircraft is available for practical training for an adequate period;
  - (4) classrooms have appropriate presentation equipment ensuring that students can easily read presentation text/drawings/diagrams and figures from any position in the classroom. Where necessary, audio amplification should be available to assist instructors in verbal communication. Internet access should also be available to enable instructors to use the online applications used in the EU Ramp Inspection programme.
- (b) If the training organisation does not possess its own training facilities, office accommodation and instructional equipment, the competent authority should verify the system put in place by

the training organisation to ensure full access to and use of training facilities, office accommodation and instructional equipment in accordance with this paragraph.

#### AMC1 ARO.RAMP.120(a)(3) Approval of training organisations

##### TRAINING COURSE

To assess training courses and training course materials, the competent authority should:

- (a) request from the training organisation a compliance checklist cross-referencing the training course content and the relevant syllabus developed by the Agency;
- (b) verify that the content of the training courses to be delivered complies with the syllabi developed by the Agency, also by attending at least one initial theoretical and practical training course;
- (c) ensure that the training course is reflecting any recommendations arising from the standardisation audits conducted by the Agency in accordance with Regulation (EU) No 628/2013<sup>8</sup>;
- (d) verify that the training course material is accurate and up to date and has been developed for the type of training to be delivered (including course slides, reference documents, etc);
- (e) verify that the training organisation provides to all course participants a copy of the complete training course material and the relevant EU aviation legislation, as well as relevant examples of technical information.

#### AMC1 ARO.RAMP.120(a)(4) Approval of training organisations

##### TRAINING INSTRUCTORS

- Change applicable from 01/09/2019.
- (a) The competent authority should verify that:
    - (1) the training organisation has a sufficient number of instructors with at least adequate:
      - (i) aviation knowledge and experience;
      - (ii) knowledge of the EU ramp inspection programme;
      - (iii) knowledge of training delivery techniques; and
      - (iv) English language communication skills.
  - (b) Instructors delivering training on inspection items and/or delivering practical training should:
    - (1) have been a qualified ramp inspector for 36 months before being nominated as instructors and have performed a minimum of 72 ramp inspections during this period;
    - (2) have conducted at least 24 inspections as qualified ramp inspectors in the calendar year prior to the year in which the training is delivered; and
    - (3) deliver training only on those inspection items which they are entitled to inspect;
  - (c) Notwithstanding (a), for the delivery of the theoretical and practical training on Dangerous Goods, the competent authority may accept instructors who are certified in accordance with the Technical Instructions for the latest effective edition of the Safe Transport of Dangerous

<sup>8</sup> Commission Implementing Regulation (EU) No 628/2013 of 28 June 2013 on working methods of the European Aviation Safety Agency for conducting standardisation inspections and for monitoring the application of the rules of Regulation (EC) No 216/2008 of the European Parliament and of the Council and repealing Commission Regulation (EC) No 736/2006 OJ L 179, 29.6.2013, p.46.

Goods by Air (ICAO Doc 9284-AN/905), provided that they possess adequate English language communication skills.

Applicable  
until  
01/09/2019,  
then deleted.

#### AMC1 ARO.RAMP.120(b) Approval of training organisations

#### VERIFICATION OF THE TRAINING ORGANISATION'S COMPLIANCE AND CONTINUOUS COMPLIANCE BY THE AGENCY

- (a) When the competent authority requests the Agency to verify a training organisation's compliance or continuous compliance with the applicable requirements, the following should be taken into account:
  - (1) the request should be submitted to the Agency at least 90 days prior to the intended date of issuing the approval or to the intended date of ending the continuous compliance verification; and
  - (2) the training organisation should be notified that the verification of compliance will be performed by the Agency, and, therefore, full cooperation and unimpeded access to the organisation staff, documentation, records and facilities should be ensured.
- (b) Verification may include an on-site audit and/or unannounced inspection of the training organisation.
- (c) The Agency should provide the requesting competent authority with a report containing the results of the compliance verification as soon as the process is finalised, but no later than 10 days prior to the anticipated date of approval.
- (d) When the Agency identifies a non-compliance with the applicable requirements, it should:
  - (i) immediately inform the competent authority concerned of non-compliance and indicate the level of finding(s), providing all the supporting evidence available;
  - (ii) provide the training organisation concerned with all the necessary information on the identified non-compliance indicating that the certifying competent authority has been informed in order to take action.
- (e) The competent authority may approve that organisation, if the results of the Agency's report indicate that the training organisation meets the applicable requirements.
- (f) When verifying continuous compliance with the applicable requirements, the Agency may:
  - (1) request the training organisation to provide updated versions of information, evidences and documents related to the training.
  - (2) sample the training course material delivered during any training session to candidates or qualified ramp inspectors;
  - (3) use the results of the standardisation inspections.

**AMC1 ARO.RAMP.125 Conduct of Ramp Inspections & ARO.RAMP.130 Categorisation of findings**

## INSPECTION INSTRUCTIONS ON THE CATEGORISATION OF FINDINGS

Inspectors should follow the inspection instructions as defined in the ramp inspection manual on the categorisation of findings established by the Agency for inspections performed on aircraft used by third country operators (SAFA) and on aircraft used by operators under the regulatory oversight of another Member State (SACA).

**AMC2 ARO.RAMP.125 Proof of ramp inspection checklist**

## CHECKLIST TO REPORT ON THE RESULTS OF A RAMP INSPECTION

Changes applicable from 01/09/2019.

Applicable until 01/09/2019 then deleted.



	1 Information to PIC/operator representative 0 No Findings
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PIC / operator representative (comments / feedback)	Name & Signature*	SAFA inspector(s) name(s) or number(s):
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(\* Signature by any member of the crew or other representative of the inspected operator does in no way imply acceptance of the listed findings but simply a confirmation that the aircraft has been inspected on the date and at the place indicated on this document. This report represents an indication of what was found on this occasion and must not be construed as a determination that the aircraft is fit for the intended flight. Data submitted in this report can be subject to change upon entering into the centralised database.

CA Document Number xxx

Applicable  
until  
01/09/2019  
then deleted.

**GM1 ARO.RAMP.125(a) Conduct of ramp inspections**

## STANDARDISED PERFORMANCE OF RAMP INSPECTIONS

- (a) When preparing a ramp inspection, the following should be taken into account:
- (1) Selection of the aircraft/operator to be inspected and gathering of general information about the aircraft and operator;
  - (2) Obtaining the last update of the operating schedule for the selected operator from the operator, airport authorities, or ground-handling agents. In general, operators submit operating schedules twice per year. However, there might be 'last-minute changes' to these schedules. Therefore, inspecting team members should ensure that they have the latest schedule update. The internet can be a valuable source of information, and most airports have a website displaying information on arrival and departure times of scheduled flights. Schedule information on special flights, such as cargo and unscheduled or private flights, may need to be specifically requested from airports.
  - (3) Distribution of the tasks between ramp inspectors involved, especially in the case of limited inspection time and/or size and complexity of the aircraft.
  - (4) Co-operation with security, ground, and all other officials involved in airport activities, to enable the inspecting team to reach the aircraft to be inspected. When officials from different organisations (i.e. customs, security, Dangerous Goods inspectorate) have to work in co-operation during the inspection, a procedure on co-operation might need to be developed at a national level. Since most Member States have different airport procedures for inspectors, there is no standardised method, but Member States should provide inspectors with the respective credentials in order to ensure an unrestricted and unimpeded access.
  - (5) Obtaining relevant flight information on targeted operators from EUROCONTROL by using the application form to request access to EUROCONTROL's Central Flow Management Unit (CFMU) system.
  - (6) As a general rule, ramp inspections should be performed by at least two inspectors. Inspections performed by solo inspectors should be limited to exceptional cases, such as last minute unavailability of a team member, very short time to prepare a spot inspection, etc. The authority should provide inspectors with the necessary tools (e.g. flashlights, digital camera, mobile phone) and protective clothing suitable for environmental circumstances (e.g. fluorescent vests, ear protection, anti-static clothing).
  - (7) Depending on the items to be inspected, a ramp inspection may be performed on landing or on departure of the aircraft. The remaining fuel and cargo area (overloading, restraining, segregation, etc.) are examples of items that could be checked on landing. Flight preparation and storage of baggage in the cabin could be checked on departure. An inspection after landing should not jeopardise the total resting time of the flight crew.
  - (8) Any unnecessary contact with passengers should be avoided and the inspection should not interfere, as much as possible, with the normal boarding/de-boarding procedures. However, inspecting certain elements in the cabin may be justified, for example such as:
    - (i) proper stowage of cabin baggage under the seat;
    - (ii) excessive overweight in overhead luggage bins;
    - (iii) baggage in front of emergency exit;



- (iv) infants/children over the minimum age determined by the State of operator should have their own seat;
  - (v) allocation of passengers in the cabin, compared to the loadsheet data;
  - (vi) sufficient number of seats;
  - (vii) observing the boarding process during normal operations and/or during refuelling in process;
  - (viii) attempting to establish the commercial nature of a flight which is suspected to be performed illegally.
- (9) When circumstances (time, manpower, etc.) prevent inspection of all checklist items, inspectors should try to inspect those elements which, according to the inspectors' preparation and experience, are likely to be more safety critical depending on the particularities of the inspected flight. For this purpose, the following should be taken into account:
- (i) Certain elements are less safety critical, and should, therefore, be given lower priority (e.g. a noise certificate has far less impact on safety than incorrectly completed mass and balance documentation, or incorrect calculation).
  - (ii) Differences in aircraft configuration: whereas for a cargo configuration the securing of the cargo and the segregation of dangerous goods is important; for a passenger configuration, checking the refuelling procedures with passengers on board could have higher priority.
  - (iii) Previous ramp inspection results: if serious and/or recurrent findings were raised during previous inspections on e.g. the Minimum Equipment List (MEL), this might be more important than the flight preparation on which previously no non-compliances were found.
  - (iv) Type and age of the aircraft: some aircraft types are known to have issues with e.g. leakages or missing screws, therefore, the age of the aircraft should also be taken into consideration.
- (10) If deemed appropriate, the inspector could contact the operator's representative at the airport so that he or she can be present during the ramp inspection. Experience shows that the operator's representative may be helpful in providing support, especially in facilitating communication with the crew or the operator's home base.
- (11) Inspecting authorities might consider informing operators and authorities about the EU Ramp Inspection programme and explain to them what is expected from them when an inspection is being performed.

## GM2 ARO.RAMP.125(a) Conduct of ramp inspections

### DEFICIENCIES UNDER THE CONTROL OF THE OPERATOR

Deficiencies under the control of operators in accordance with applicable requirements are not to be considered as non-compliance: e.g. if an aircraft diverted because of a technical defect is inspected upon arrival, such defect should not be considered as a non-compliance and no finding should be raised, as long as the defect is properly reported (e.g. through the Technical Log Book) and subsequently assessed.

Applicable until 01/09/2019 then replaced with the version below.

**AMC1 ARO.RAMP.125(b) Conduct of ramp inspections****GENERAL**

- (a) Ramp inspections should be performed by inspectors possessing the necessary knowledge relevant to the area of inspection whereby technical, airworthiness and operational knowledge must be represented in case all items of the checklist are being verified. When a ramp inspection is performed by two or more inspectors, the main elements of the inspection — the visual inspection of the aircraft exterior, the inspection in the flight deck and the inspection of the passenger cabin and/or cargo compartments — may be divided among the inspectors, according to their privileges granted in accordance with ARO.RAMP.115.
- (b) The competent authority should put in place appropriate procedures to allow them unrestricted access to the aircraft to be inspected. In this respect ramp inspectors should possess adequate credentials.
- (c) Inspectors should identify themselves to the pilot-in-command/commander of the aircraft or, in his/her absence, to a member of the flight crew or to the most senior representative of the operator prior to commencing the on-board part of their ramp inspection. When it is not possible to inform any representative of the operator or when there is no such representative present in or near the aircraft, the general principle should be not to perform a ramp inspection. In special circumstances it may be decided to perform a ramp inspection but this should be limited to a visual check of the aircraft exterior.
- (d) The inspection should be as comprehensive as possible within the time and resources available. This means that if only a limited amount of time or resources is available, not all inspection items but a reduced number may be verified. According to the time and resources available for a ramp inspection, the items that are to be inspected should be selected accordingly in conformity with the objectives of the ramp inspection programme. Items not being inspected may be inspected during a next inspection.
- (e) Inspectors should show tact and diplomacy when performing a ramp inspection. A certain amount of inconvenience to flight and cabin crews, handling agents and other personnel involved in ground handling activities may arise but inspectors should try to reduce it to the minimum. Unnecessary contact with passengers should be avoided.
- (f) Ramp inspectors should not open any hatches, doors or panels themselves nor should they operate or interfere with any aircraft controls or equipment. When such actions are required for the scope of the inspection, the ramp inspectors should request the assistance of the operator's personnel (flight crew, cabin crew, ground crew).
- (g) The items to be inspected should be selected from the ramp inspection checklist (see Appendices III and IV). The ramp inspection checklist contains a total of 53 items. Of these, 24 relate to operational requirements (A-items) to be checked on the flight crew compartment, 14 items address safety and cabin items (B-items), 11 items are concerning the aircraft condition (C-items) and three items (D-items) are related to the inspection of cargo (including dangerous goods) and the cargo compartment. In case of any general inspection items not addressed by the other items of the checklist, they may be administered by the E-item (General) of the checklist.
- (h) Items which have been inspected as well as any possible findings and observations will be recorded in the Ramp Inspections Report (see Appendices III and IV).
- (i) ARO.RAMP.125(c) requires that the operator is informed about the results of every ramp inspection by providing it with a copy of the Proof of Inspection (see Appendix III). A signed

acknowledgement of receipt should be requested from the recipient and retained by the inspector. Refusal to sign by the recipient should be recorded in the document.

**AMC1 ARO.RAMP.125(b) Conduct of ramp inspections****GENERAL**

- (a) The competent authority should put in place appropriate procedures to allow the inspecting team unrestricted access to the aircraft to be inspected. In this respect ramp inspectors should possess adequate credentials.
- (b) The inspection should start as soon as possible and be as comprehensive as possible within the time and resources available. This means that if only a limited amount of time or resources is available, not all inspection items but a reduced number of them, may be verified. According to the time and resources available for a ramp inspection, the items that are to be inspected should be selected accordingly, in conformity with the objectives of the ramp inspection programme. Items not being inspected may be inspected during a next inspection.
- (c) During the inspection, ramp inspectors should verify the rectification of previously identified non-compliances. Whenever the time available does not permit a full inspection, the items affected by such non-compliances should be prioritised over other items.
- (d) Ramp inspectors should not open by themselves any hatches, doors or panels, which are not intended to be operated by passengers during normal operations, nor should they operate or interfere with any aircraft controls or equipment. When such actions are required for the scope of the inspection, the ramp inspectors should request the assistance of the operator's personnel (flight crew, cabin crew, ground crew).
- (e) During an inspection prior to departure, the competent authority should inform the operator of any potential non-compliance with manufacturer's standards after the crew has confirmed that the pre-flight inspection has been performed.
- (f) The items to be inspected should be selected from the Proof of Inspection (POI).
- (g) Items which have been inspected, as well as any possible findings and observations, should be recorded on the POI and in the ramp inspection tool.

**GM1 ARO.RAMP.125(b) Conduct of ramp inspections****UNREASONABLE DELAY**

- (a) The inspector intending to conduct the ramp inspection should be able to start the inspection immediately. The inspector should ensure that the inspection can be carried out expeditiously. Delays related to the availability of the inspector or the necessary inspection documentation or similar avoidable reasons of delay caused by the inspector, which are not directly related to safety, should be avoided without exception.
- (b) The inspector should carefully consider that flight and cabin crew distraction during the flight preparation phase as this might be a significant safety hazard and should, therefore, be avoided as much as possible. In order to minimise distraction to the flight and cabin crew, the inspector should:
  - (1) try to be as precise and complete as possible when requesting aircraft documents from flight crew. This should result in a minimum of discussion time, thus allowing the flight crew to deal with their primary task of flight preparation;

- (2) ask the senior cabin crew member to assign a crew member to assist them with their inspection tasks;
  - (3) inform cargo loading staff of possible hindrance due to inspection task in cargo compartment;
  - (4) give priority to staff directly involved in the flight preparation, when carrying out inspections on the flight deck (e.g. fuel master, load-planning agent, handling agent, etc.).
- (c) A delay of the aircraft might be justified for safety reasons, such as whenever non-compliances are detected and either need a corrective action before departure, or need proper identification/assessment by the operator, for example if:
- (1) tyres appear to be worn beyond the limits (central groove no longer visible). However, reference is to be made to the applicable Aircraft Maintenance Manual (AMM) to determine the actual limit;
  - (2) oil leakage (e.g. 5 drops per minute) is to be checked against the applicable AMM to determine the actual limit;
  - (3) a flight crew member cannot produce a valid licence. Clarification is to be sought from the operator to confirm that the flight crew member has a valid licence by requesting, for instance, a copy of the licence to be sent to the inspectors for verification.
  - (4) missing relevant flight operational data (e.g. missing or incorrect performance calculation, incorrect operational flight plan, incorrect weight and balance calculation).

#### AMC1 ARO.RAMP.125(c) Conduct of ramp inspections

##### PROOF OF RAMP INSPECTION

- Changes applicable from 01/09/2019.
- (a) On completion of the ramp inspection, information about its results should be provided to the pilot-in-command/commander or, in his/her absence, to another member of the flight crew or a representative of the operator, using the Proof of Inspection (POI) form provided as an appendix to the ramp inspection manual, regardless of whether or not findings have been identified. When completing the Proof of Inspection (POI), the following should be taken into account:
    - (1) Only the remarks mentioned in the POI should be reported as findings in the final ramp inspection report. Any other relevant information which was not included in the POI should only be reported in the final report as a general remark under 'G' or in the additional information box.
    - (2) When handing over the POI to the pilot-in-command/commander or operator representative, the inspector should ask him/her to sign the POI whilst explaining that the signature does in no way imply acceptance of the listed findings. The signature only confirms that the POI has been received by the pilot-in-command/operator representative, and that the aircraft has been inspected on the date and at the place indicated. A refusal to sign by the recipient should be recorded in the document.
  - (b) POIs may be completed electronically, including the required signatures, and may be printed on site or delivered electronically (e.g. by e-mail).

Applicable  
until  
01/09/2019  
then deleted.

**GM1 ARO.RAMP.130 Categorisation of findings**

## APPLICABLE REQUIREMENTS

- (a) For aircraft used by third country operators, applicable requirements are the ICAO international standards.
- (b) The relevant EU requirements apply to aircraft used by operators under the regulatory oversight of another Member State.
- (c) Manufacturers' standards should be used for checking the technical condition of the aircraft.
- (d) Published national standards (e.g. Aeronautical Information Publications (AIPs)) that are declared applicable to all operators flying to that State may also be checked. Deviations from national standards should be reported as findings only if they have an impact on safety. For such findings, the report should indicate 'N' in the column 'Std.' and the appropriate reference should be included in the column 'Ref.'. Any other deviation from national standards which does not have an impact on safety (e.g. insurance certificate in USD instead of SDR) should be recorded as category G (General Remark). Member States should develop guidance for the use of their inspectors on the enforcement of national standards.

**GM2 ARO.RAMP.130 Categorisation of findings**

## ASSESSMENT OF NON-COMPLIANCES

- (a) When a non-compliance with the applicable requirements is identified, the inspector should be certain that the finding is applicable to the specific circumstances of the inbound and/or outbound flight. (e.g. for third country operators, no electric torch on board is, a finding, but only during night-flight operations; or insufficient number of life-vests, but only if the flight is overwater on a distance greater than 50 NM from the shore or when taking off or landing at an aerodrome where the take-off or approach path is so disposed over water that there would be a likelihood of a ditching). Nevertheless, such information should be reported as a general remark.
- (b) When a contracting state finds it impracticable to comply with an international standard, it is entitled to notify a difference to ICAO in accordance with Article 38 of the Chicago Convention. However, this right has its boundaries within the sovereign territory of other contracting States. It is not 'exportable' into other Contracting States. More precisely, there is no legal obligation for other Contracting States to accept within their territory an activity, organisation or object which has been certified or approved by a Contracting State according to such lower standards. So, for third country operators, a notification to ICAO of a difference in accordance with Article 38 of the Chicago Convention has no effect within the territory of another Contracting State. Therefore, in another State's territory the operator is obliged to:
  - (1) either comply with the ICAO standard (Art. 37 in conjunction with Art. 33 of the Chicago Convention); or
  - (2) comply with the mitigating measures accepted by the Agency in accordance with Regulation (EU) No 452/2014<sup>9</sup>.

Notified differences may, however, be taken into account in the follow-up process of the ramp inspection report (as detailed in the follow-up procedures).

<sup>9</sup> Commission Regulation (EU) No 452/2014 of 29 April 2014 laying down technical requirements and administrative procedures related to air operations of third country operators pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council.

- (c) Compliance with the applicable requirements of aircraft and their crew is not only a responsibility of the operator. The State of operator, the State of licensing, and the State of registry are also responsible. The inspected operator might not be the responsible entity for certain non-compliances (e.g. related to the issuance of certificates of registration, of the AOC and/or personnel licences). Such non-compliances pertaining to the authority should be raised by the inspector as part of the ramp inspection process in accordance with ARO.RAMP and recorded as non-compliance in the ramp inspection report.
- (d) Non-compliances detected should, as much as possible, be documented and recorded as follows:
- (1) pictures of the deficiency itself;
  - (2) pictures of the manufacturer references used to assess the technical defects;
  - (3) pictures or copy of the technical logbook entries performed.

Such documents or records could be very useful in the follow-up phases of the ramp inspection either to explain in detail and illustrate detected findings or to be able to exchange appropriate documented evidence when findings are challenged.

### GM3 ARO.RAMP.130 Categorisation of findings

#### NON-COMPLIANCES WITH MANUFACTURER STANDARDS

- (a) A finding against manufacturer standards should always be demonstrated in relation to aircraft technical documentation such as: Aircraft Maintenance Manual (AMM), Structural Repair Manual (SRM), Configuration Deviation List (CDL), Wiring Diagram Manual (WDM), Standard Wiring Practices Manual (SWPM), etc., and MEL references. If significant defects are suspected, the operator should be asked to demonstrate compliance with the standards. Deviations from these standards can only be acceptable if the operator's competent authority has issued a formal waiver or concession detailing conditions and/or limitations to allow the aircraft to continue to operate for a specific period of time before final repair, or if the aircraft will perform a non-commercial flight (with less prescriptive standards and requirements), provided that the validity of the CofA is not affected.
- (b) With regard to non-compliances on missing fasteners, findings can only be raised if the maintenance documentation contains clear limits and/or dispatch conditions. In the absence of such clear manufacturer standards, inspectors should only raise findings if their expert judgement (possibly supported by licensed maintenance personnel) is such that similar circumstances on comparable aircraft would be considered to be out of limits.
- (c) In exceptional cases, a single fault may give rise to more than one finding under different inspection items, for example: a tyre worn beyond limits whilst the pilot-in-command refuses to enter the defect in the Technical Log (or equivalent) would trigger raising findings under both C04 and A23.

### GM4 ARO.RAMP.130 Categorisation of findings

#### INSPECTION INSTRUCTIONS

- (a) The inspection instructions include the description, categorisation and reference to the applicable requirement.
- (b) Findings on arrival flights being identical to the findings raised for departure flights should lead to the same categorisation, although the corrective action might not be possible when the flight

has been completed. For example, an incorrect mass and balance sheet (outside operational limits) found on arrival should be categorised as a category 3. Obviously, this cannot be corrected, however, the appropriate class 3 action could be to confirm that the mass and balance calculations are within operational limits for the outbound flight.

- (c) In exceptional cases, where multiple findings are inter-related and the impact on safety is higher, the category of such findings may be increased to reflect the impact on safety. The increase in category should be explained in the detailed description of the finding.

### GM5 ARO.RAMP.130 Categorisation of findings

#### DETECTION, REPORTING AND ASSESSMENT OF SIGNIFICANT TECHNICAL DEFECTS

- (a) A technical defect is considered to be any material fault pertaining to the aircraft, its systems or components. Minor defects are typically without influence on safety and, therefore, the operator is deemed to be compliant. However, minor defects should be brought to the attention of the operator using general remarks as described in GM8 ARO.RAMP.130. Those defects which are potentially out of limits are considered to be significant defects. Further assessment is needed to determine if the significant defect is within or outside the applicable limits. Such defects should be known to the operator since they should have been detected during regular maintenance, aircraft acceptance procedure or pre-flight inspections.

- (b) Technical defects which were not detected by the operator, because the Approved Maintenance Programme (AMP) did not require the operator to detect such defects during turn-around inspections, do not necessarily qualify as a finding under A23/A24. Examples of such defects, which are not supposed to be part of the pre-flight inspection, are:

- (1) missing fasteners,
- (2) bonding wires,
- (3) the cabin emergency lighting,

Manufacturer's data often contain limits on certain defects. Those data are normally to be used during scheduled maintenance. It is generally accepted that, in between scheduled maintenance, defects that are beyond those manufacturer's limit might appear. Inspectors should, therefore, be reluctant in using such limits during ramp inspections. However, where the manufacturer has specified dispatch limits, and the defect is beyond the dispatch limits, a category 3 finding should be raised.

- (c) Significant defects might have appeared during the inbound flight. If time allows the inspector should delay his/her own inspection of the aircraft condition until the operator has completed the pre-flight inspection, in order to give the operator the opportunity to identify and assess such a defect during the pre-flight inspection.
- (d) A 'defect within limits but not recorded' should not be considered as a technical non-compliance. Such discrepancies should be brought to the attention of the operator using general remarks as described in GM8 ARO.RAMP.130. If the significant defect appeared to be within limits, the safety focus changes from the defect itself to the non-compliance of the defect not being detected/assessed by the operator.

**GM6 ARO.RAMP.130 Categorisation of findings**

## DETECTION, REPORTING AND ASSESSMENT OF SIGNIFICANT TECHNICAL DEFECTS

- (a) Before findings can be categorised, an assessment of the encountered situation should be made. The inspector can only allocate a proper category to the finding, if the extent of the non-compliance is clear. This implies that inspectors should not raise category 3 findings with the only intent to perform a further investigation/assessment. The Appendix to this GM provides a flowchart that can be used as guidance for the steps to be taken.
- (b) The following procedure should be used when inspecting Aircraft Condition (C-items) or, if appropriate, items A, B and D.
- (1) The inspector should delay the inspection of the aircraft until the operator has completed the pre-flight inspection, if time allows. However, he/she should always start with a quick check on the cargo compartment(s) after arrival of the aircraft.
  - (2) When the inspector performs the aircraft condition inspection in advance of the operator's pre-flight inspection, reporting defects identified should not be done before the operator has completed the pre-flight inspection.
  - (3) The inspector should subsequently check if the operator detected the significant defects found by the inspector, such as:
    - (i) leaks;
    - (ii) dents in pressurised areas of the fuselage; and
    - (iii) damages to emergency systems (e.g., escape hatches, escape slides, RAT, cargo compartment blow out panels).
  - (4) A single fastener missing in the middle of a fairing, traces of old leaks and non-structural damages to e.g. fairings can, in many cases, be considered as 'minor defects'. Such defects need to be pre-assessed by the inspector in accordance with the relevant manufacturer limitation instruction (e.g. AMM, SRM etc.)
  - (5) If the operator detected the significant defect, but did not report and/or assess it in accordance with the applicable procedures, the operator should assess the defect. If the defect appears to be within limits, a finding should be raised under A23 (Defect notification and rectification) mentioning 'Known defect not reported/assessed'. However, when collecting evidence for this finding, the inspector should take into account the reporting system used by the operator. For instance, if the operator uses a Technical Logbook and/or a damage chart, a finding could be raised if the defect was not entered. Additionally, a general remark should be created for such defect. If the defect is outside limits, a category 3 finding should be raised under the respective inspection item. In this case no supplementary finding related to this defect should be raised under A23.
  - (6) If the operator did not detect the significant defect, the inspector should inform the crew of the non-identified defects. Subsequently, the operator should assess the defect in order to determine if the defect is within or outside dispatch limits. If the defect is within limits, a category 2 finding mentioning 'Pre-flight inspection performed but without identifying significant defects' should be raised under A24 (pre-flight inspection) addressing the deficiency that the defect was not detected. Additionally, a general remark should be made for the defect. If the defect is outside limits, a category 3 finding should be raised under the respective inspection item. In this case, no supplementary finding related to this defect should be raised under A24.



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- (7) Multiple findings related to the same system or item should be grouped and reported as one finding. Examples of such findings are:
- (i) Multiple category 2 findings raised under A23 or A24, if such findings concern the same system as per ATA system taxonomy (e.g. hydraulic leakage, fuel leakage,) and the non-compliance was not identified, reported or assessed); examples requiring regrouping hydraulic leakages which were identified but not assessed. Nonetheless, situations such as a fuel leakage on the left wing which was not identified and a fuel leakage on engine #2 which was reported but not assessed, should be noted as two separate findings.
  - (ii) Findings on missing fasteners.
- (8) If an operator performs the pre-flight inspection procedures (aircraft acceptance) only briefly before the departure of the aircraft, the inspector should wait until completion of the inspection before reporting identified defects to the operator. Although an assessment, which may cause a delay, might subsequently be needed once the inspector has informed the operator of those non-detected technical defects, the procedure established by the operator would have resulted in the same delays if the flight crew would have identified the defect requiring the associated assessment. Therefore, a pre-flight inspection performed by the operator close to departure entails risk of a delay.



Applicable  
until  
01/09/2019  
then deleted.

### GM7 ARO.RAMP.130 Categorisation of findings

#### ASSESSMENT OF FINDINGS ON CERTIFICATES AND LICENSES PRIOR TO CATEGORISATION

- (a) The principle described in GM6 ARO.RAMP.130 should be applied for the assessment of findings on certificates and licenses prior to their categorisation.
- (b) Whenever a licence or a certificate is not carried on board (including AOC and OPS Specs), it may become clear that the impact on safety is less than initially foreseen after receiving a copy of a missing licence or certificate before departure. In this case, a category 1 finding should be raised and the relevant pre-described findings (PDFs) should be used regarding certificates and licenses not carried on board at the time of the inspection. If evidence is not provided before departure, a higher category of finding should be raised (for a missing certificate of registration or radio station license, the appropriate category 2 PDF should be used; for all other cases, the relevant category 3 PDF should be used. Under no circumstances should a flight crew member be permitted to perform flying duties without receiving confirmation that he/she has been issued an appropriate and valid licence.

### GM8 ARO.RAMP.130 Categorisation of findings

#### USE OF GENERAL REMARKS

- (a) Although not classified as a non-compliance, any relevant safety issues identified during ramp inspections should be reported as a General Remark (category G) under each inspection item. For example:
  - (1) insufficient number of life jackets/flotation devices, however the flight was/will be over land;
  - (2) any non-compliance not recorded in the Proof of Inspection (POI), as well as any other relevant information;
  - (3) minor defects;
  - (4) non-compliances with operator/national standards whereas regulatory standards are met (e.g. smoke goggles at the work station in the cockpit unserviceable).
- (b) General remarks (as well as category 1 findings) do not require any follow-up action, either from the inspecting authority or for the operator/relevant oversight authority.

**AMC1 ARO.RAMP.135(a) Follow-up actions on findings**

## FOLLOW-UP ACTIONS FOR CATEGORY 2 OR 3 FINDINGS

- (a) Exceptionally, where multiple category 2 findings have been raised and the accumulation of these findings or their interaction justifies corrective action before the flight takes place, the class of action may be increased to the actions foreseen by ARO.RAMP.135(b).
- (b) When communicating findings to the operator, the inspecting authority should:
- (1) use the ramp inspection tool as the primary communication channel with the operator and limit communication via other channels;
  - (2) request evidence of corrective actions taken, or alternatively the submission of a corrective action plan followed by evidence that planned corrective actions have been taken;
  - (3) communicate findings to the operator's focal points, the operational department or the management or, failing this, the quality department.
  - (4) monitor if the operator has provided a response to the findings, as required, and if such response gives sufficient reason, or if further information is needed to close findings, evidence of corrective actions taken might be the actual implementation of a corrective action plan. It is then for the inspecting authority to decide, based on the related risk and impact, whether or not a finding may be closed based on proposed corrective actions and taking into account the severity and previous recurrence of detected findings. Depending on the severity and recurrence of the findings raised, the inspecting authority may consider the actual closure of the findings in other report(s) containing the same findings only after having received satisfactory documented evidence of appropriate implementation of actions meant to prevent the reoccurrence of the non-compliance.
  - (3) inform the operator's competent authority and the operator no later than 15 calendar days after the inclusion of the report in the ramp inspection tool in order to permit appropriate action to be taken, as well as to confirm to the operator the findings raised;
  - (4) upload in the ramp inspection tool information on actions taken and responses provided by the operator following the RAMP inspection and send a communication to the operator only if the operator's actions have not been satisfactory;
  - (5) give the operator a period of 30 calendar days to reply. If the operator does not react to the initial communication within this period, a second request should be sent, including a period of another 30 calendar days to reply whilst copying the operator's competent authority. If the second attempt is also unsuccessful, the operator's competent authority should be requested to encourage the operator to reply. The inspecting authority should indicate in such request that no reaction from the operator could be interpreted as a 'lack of ability and/or willingness of an operator to address safety deficiencies' under Regulation (EC) No 2111/2005.
- (c) In general, no reply is expected when informing the State(s) of oversight. However, findings which indicate possible shortcomings at State level should be emphasised, e.g. when the medical certificate does not indicate the medical class or type/instrument rating validation/expiration date is not mentioned. For such findings, which are out of the control of the operator, the State of oversight should be asked for corrective actions. When assessing the operator's corrective action (plan), it should be accepted that, for such non-compliances, the issue should be escalated to the oversight authority.

Changes applicable from 01/09/2019.

Grey paragraphs applicable until 01/09/2019 then deleted.

Grey paragraphs applicable until 01/09/2019 then deleted.

- (d) The following are examples requiring a confirmation of the inspecting authority regarding its acceptance of the corrective actions taken by the operator:
- (1) identification of a high number of non-compliances;
  - (2) repetition of same findings;
  - (3) lack of an adequate response from the operator;
  - (4) evidence of consistent non-compliance with a particular standard also detected during ramp inspections of other operators from that State;
  - (5) action by the competent authority may be required given the severity of the findings.
- The inspecting authority should monitor if the State(s) of oversight has replied to any requests for confirmation made and if the response is satisfactory. Should the response be unsatisfactory, the communication should be re-launched following the procedure described in (b)(6) above.
- (e) Any follow-up communication from operators and States of oversight should be acknowledged, and they should be informed about the closure of findings. Requests for clarification should be responded by the inspecting authority. Acknowledgement or clarifications from the inspecting authority should be given within 30 working days after receipt of communications or requests.
- (f) When communicating a finding to the operator, and in any further correspondence from the inspecting authority, the operator's competent authority should, as much as possible, be copied in the communication, as it might contain relevant information for its oversight activities. This is particularly the case for information on the closure of ramp inspections findings sent by the inspecting authority (sent either by e-mail or by official letter).
- (g) Findings should remain 'open' as long as no satisfactory response of the operator and/or the State(s) of oversight was received. However, findings could be closed if it could be confirmed, as an example by means of additional inspection(s), that appropriate corrective action was taken. Whenever there is further communication to the operator, evidence of such could be uploaded as report attachments.
- (h) If the inspecting authority received evidence from a relevant oversight authority showing that the operator does not exist anymore, all related findings should be closed and the reason for closure explained in the justification.
- (i) A finding raised during a ramp inspection to which the inspecting authority has not received detailed corrective and/or preventive actions from the operator concerned or from its State(s) of oversight, should be considered as closed in the follow-up part of the ramp inspection process, if the acceptance of mitigating measures in accordance with Regulation (EU) No 452/2014 ensures an equivalent level of safety to that achieved by the standards to which differences have been notified to ICAO by non-EU Member States.

Applicable until 01/09/2019 then replaced by the version below.

#### AMC1 ARO.RAMP.135(b) Follow-up actions on findings

##### CLASSES OF CATEGORY 3 FINDINGS

- (a) In the case of a category 3 finding, the action(s) taken before departure of the aircraft should be verified.
- (b) Whenever restrictions on the aircraft flight operation (Class 3a action) have been imposed, it is appropriate to conduct appropriate verification of adherence to such restrictions. Examples of Class 3a actions, and related verification, are, but not limited to:

- (1) restrictions on flight altitudes if oxygen system deficiencies have been found. This might be verified by checking the ATC flight plans and/or the actual altitude flown as reported by the EUROCONTROL CFMU system;
  - (2) a non-commercial flight to the home base, if allowed by applicable requirements and the MEL (provided that the validity of the CofA is not affected);
  - (3) seats that may not be used by passengers might be verified just before departure to confirm that seats are not occupied;
  - (4) a cargo area that may not be used;
  - (5) operational restrictions mandating the use of specific runways;
  - (6) restrictions to specific environmental conditions (such as departure under visual meteorological conditions (VMC) only).
- (c) Whenever the operator is required to take corrective actions before departure (Class 3b), inspectors should verify that the operator has taken such actions. Examples of immediate corrective actions to be taken before departure are:
- (1) (temporary) repairs to defects according to the manufactures definitions (e.g. AMM and/or SRM);
  - (2) recalculation of mass and balance, performance calculations and/or fuel figures;
  - (3) a copy of a missing licence/document to be sent by fax or other electronic means;
  - (4) proper restraining of cargo; and
  - (5) removal from duty of a crew member after a positive alcohol test or where the crew member has refused to cooperate during a test in accordance with AMC1 ARO.RAMP.106.

If inspectors have imposed corrective actions, they should be mentioned in the 'Class of actions' field on the ramp inspection report. If the operator took voluntarily corrective actions to address a category 1 or a category 2 finding before the flight, it should be reported in the 'Additional information' field only.

- (d) An aircraft following a Class 3c finding should be grounded only if the crew refuses to take the necessary corrective actions or to respect imposed restrictions on the aircraft flight operation. However, grounding might be appropriate if an operator refuses to grant access in accordance with ORO.GEN.140 (in case of an EU operator) or contrary to Regulation (EU) 452/2014 (in case of a third country operator). The inspecting authority should then ensure that the aircraft will not depart as long as the reasons for the grounding remain. Any records of communication undertaken pursuant to ARO.RAMP.140(b), as well as other evidences, should be collected and kept as evidential material.
- (e) Evidence related to findings on licences and certificates should be provided by the authority that issued the licence or certificate. However, if that authority is not able to provide such evidence in time, the inspecting authority may accept evidence from other sources, provided that it seeks confirmation of the validity of such evidence at the earliest opportunity with the authority that issued the licence or certificate. The ramp inspection report should mention which evidence was provided and by whom, including when necessary subsequent confirmation from the authority that issued the licence or certificate.
- (f) In exceptional cases it might not be necessary to verify if the restrictions resulting from a category 3 finding are followed or if corrective actions have been taken (e.g. if the inspector has indications that appropriate actions will be taken), or if they are possible (e.g. for flight segments outside the EUROCONTROL area). The inspecting authority should determine on a case by case

basis if it is necessary or feasible to verify that restrictions are respected or if corrective actions have been taken.

Applicable  
from  
01/09/2019.

### **AMC1 ARO.RAMP.135(b) Follow-up actions on findings**

#### CLASSES OF ACTIONS FOR CATEGORY 3 FINDINGS

- (a) Whenever restrictions on the aircraft flight operation (Class 3a action) have been imposed, the competent authority should conduct appropriate verification of adherence to such restrictions.
- (b) Whenever the operator is required to take corrective actions before departure (Class 3b action), inspectors should verify that the operator has taken such actions. Depending on the circumstances, this verification may take place after the departure.
- (c) Whenever a category 3 finding is raised, the aircraft should be grounded only (Class 3c action) if the crew refuses to take the necessary corrective actions or to respect imposed restrictions on the aircraft flight operation. However, grounding might be appropriate if an operator refuses to grant access in accordance with ORO.GEN.140 (in case of an EU operator) or contrary to Regulation (EU) 452/2014 (in case of a third country operator). The inspecting authority should then ensure that the aircraft will not depart as long as the reasons for the grounding remain. Any records of communication undertaken pursuant to ARO.RAMP.140(b), as well as other evidences, should be collected and kept as evidential material.
- (d) If inspectors have imposed any restrictions and/or corrective actions, these should be mentioned in the ramp inspection report.

Applicable  
until  
01/09/2019  
then deleted.

### **GM1 ARO.RAMP.135(b) Follow-up actions on findings**

#### CLASSES OF CATEGORY 3 FINDINGS

- (a) The inspecting authority could impose an immediate operating ban (Class 3d) on an operator under Article 6 of Regulation (EC) No 2111/2005. A Class 3d action is usually imposed in addition to a Class 3a, 3b or 3c action. Therefore, its further follow-up as regards the EU Ramp Inspection Programme, is considered to be covered by the follow-up of those actions.
- (b) If category 3 findings that have been raised concern non-compliances that affect the validity of the certificate of airworthiness of the aircraft, this should be communicated immediately to the State responsible for overseeing the airworthiness of the aircraft. Although the first contact may be, as a matter of urgency, accomplished by telephone, it is advisable to inform the state concerned in writing. For ICAO guidance on this matter, refer to ICAO Annex 8, Part II, Chapter 3.5 — Temporary Loss of Airworthiness.
- (c) If the a posteriori verification shows that the operator did not respect the restrictions imposed, this information should be mentioned in the final ramp inspection report or should be reported in accordance with ARO.RAMP.145(b) and (c).

Applicable  
until  
01/09/2019  
then deleted.

### **GM1 ARO.RAMP.140(a) Grounding of aircraft**

#### AIRCRAFT LIKELY TO BE FLOWN WITHOUT COMPLETION OF APPROPRIATE CORRECTIVE ACTION

Should an operator refuse to permit the performance of a ramp inspection without valid reasons, the inspecting authority should consider grounding of the aircraft. In such a case, the inspecting authority must immediately undertake the relevant communication in accordance with ARO.RAMP.140(b).

**GM1 ARO.RAMP.140(d)(4) Grounding of aircraft**

## LIFTING OF A GROUNDING

Aircraft with a permit to fly issued by a competent authority of an EASA State of registry do not need permission from other EASA Member States to be overflown.

Applicable  
until  
01/09/2019  
then deleted.

**GM1 ARO.RAMP.145(b) Reporting**

## IMPORTANT SAFETY INFORMATION

- (a) Safety-related information should be verified by the reporting authority, as far as possible, before insertion in the centralised database pursuant to ARO.RAMP.110. However, credible safety information received voluntarily (e.g. whistleblower reports) which can be verified by means of ramp inspections should also be reported.
- (b) If available, any relevant information contained in documents and pictures should be attached to the 'Standard report' available in the centralised database.
- (c) Significant safety-related occurrences where, in addition to the follow-up required by occurrence reporting requirements, ramp checks of an aircraft or operator are desirable include (among others):
  - (1) ATC reports on level-busts;
  - (2) communication failure or difficulties;
  - (3) non-standard take-off lengths;
  - (4) information received from maintenance organisations with regard to lack of AD compliance or maintenance work performed incorrectly;
  - (5) reports from the general public/whistleblower concerning perceived unsafe situations;
  - (6) reports from airport personnel on observed unsafe practices; or
  - (7) factual information concerning accidents and serious incidents which occurred in Member States' airspace.

Applicable  
from  
01/09/2019.

**AMC1 ARO.RAMP.145 Safety reports**

## IMPORTANT SAFETY INFORMATION

- (a) When the competent authority receives safety-related information that could be of interest to the entire RAMP community, it should create a 'safety report' and insert it into the ramp inspection tool pursuant to ARO.RAMP.110.
- (b) Safety-related information should be verified by the reporting authority, as far as possible, before insertion in the ramp inspection tool.
- (c) If available, any relevant information contained in documents and pictures should be attached to the 'safety report'.



Applicable  
from  
01/09/2019.

**AMC1 ARO.RAMP.150(b)(4)(iii) Agency coordination tasks****SYSTEM-WIDE COORDINATION OF RAMP INSPECTIONS**

In order to ensure a coordinated approach in establishing a risk-based number of ramp inspections for operators, the Agency should establish annual targets. When doing so, the following should be taken into account:

- (a) Such targets should only be established for operators flying to Member States' territories located in the ICAO EUR region;
- (b) The targets for the upcoming year should be distributed to the Member States at the latest by 1 December and updated at least once during the upcoming year; and
- (c) The targets should be established per Member State for two layers of operators as follows:
  - (1) a target number of inspections for each operator for which the average number of commercial flights for the previous 12 months in each Member State is beyond a threshold defined by the Agency, based on an assessment of the safety risks and the number of flights ('layer 1');
  - (2) an overall target number of inspections for those operators not covered by (1) ('layer 2').

Applicable  
until  
01/09/2019  
then deleted.

**GM1 ARO.RAMP.160(a) Information to the public and protection of information****PROTECTION OF INFORMATION FROM RAMP INSPECTIONS**

In accordance with their national legislation on freedom of information, Member States can disclose information from ramp inspections that they have conducted. When a request for access to information regarding a ramp inspection conducted by another State is made, the Member State receiving the request should forward it to the inspecting State and inform the requester accordingly.