

**STATE OF LIBYA  
MINISTRY OF TRANSPORT  
CIVIL AVIATION AUTHORITY**



**دولة ليبيا  
وزارة المواصلات  
مصلحة الطيران المدني**

## **LIBYA CIVIL AVIATION REGULATIONS**

### **Air Operations**

**AMC (Acceptable Means of Compliance) & GM (Guidance Material)**

### **Part -ARO to LYCAR**

**AUTHORITY REQUIREMENTS FOR AIR OPERATIONS**

*New Issue - March 2025*

March 2025

---

## FOREWORD

1. The Acceptable Mean of Compliance (AMC) and Guidance Material (GM) for Civil Aviation Regulation Air Operations (LYCAR-AIR OPS) has been issued by Libyan Civil Aviation Authority (LYCAA) under the provisions of the Libyan Civil Aviation Law. The AMC/GM for LYCAR-AIR OPS-PART ARO contains Mean of Compliance and relevant Guidance Materials which are necessary to comply LYCAR-AIR OPS-PAT ARO Requirements. The AMC/GM contents are in accordance with relevant standards and recommended practices (SARPs) of ICAO Annex 6 Part I, II and III and its amendments. This is New Issue of Acceptable Means of Compliance (AMCs) and Guidance Materials (GMs) to Part ARO of LYCAR Air Operations.
2. The information contained herein is subject to constant review in the light of changing regulations and requirements. No subscriber or other reader should act on the basis of any such information without also referring to the applicable laws and regulations and/or without taking appropriate professional advice when/as indicated/required. Although, every effort has been made to ensure accuracy, the Libyan Civil Aviation Authority, shall not be held responsible for loss or damage caused by errors, omissions, misprints or misinterpretation of the contents hereof.
3. Copies of this publication can be obtained from the following address:  
Flight Safety Department  
Civil Aviation Authority  
Or downloaded from: [www.caa.gov.ly](http://www.caa.gov.ly)

Published on 17 March 2025, and signed by:

  
**Dr. Mohamed Mohamed Shlebik**  
**President of the Libyan Civil Aviation Authority**



## Table of Contents

Table of Contents .....	i
Record of Amendments .....	vii
SUBPART GEN: GENERAL REQUIREMENTS .....	1
SECTION I – GENERAL .....	1
AMC1 ARO.GEN.120(d)(3) Means of compliance.....	1
GM1 ARO.GEN.120 Means of compliance .....	1
SECTION II – MANAGEMENT .....	1
AMC1 ARO.GEN.200(a) Management system .....	1
GM1 ARO.GEN.200(a) Management system.....	2
AMC1 ARO.GEN.200(a)(1) Management system .....	3
AMC1 ARO.GEN.200(a)(2) Management system .....	3
AMC2 ARO.GEN.200(a)(2) Management system .....	4
AMC3 ARO.GEN.200(a)(2) Management system .....	5
AMC4 ARO.GEN.200(a)(2) Management system .....	5
AMC5 ARO.GEN.200(a)(2) Management system .....	6
GM1 ARO.GEN.200(a)(2) Management System.....	7
GM2 ARO.GEN.200(a)(2) Management system .....	9
GM3 ARO.GEN.200(a)(2) Management system .....	9
GM4 ARO.GEN.200(a)(2) Management system .....	10
GM5 ARO.GEN.200(a)(2) Management system .....	10
GM6 ARO.GEN.200(a)(2) Management system .....	11
GM7 ARO.GEN.200(a)(2) Management system .....	11
AMC1 ARO.GEN.220(a) Record-keeping .....	11
AMC1 ARO.GEN.220(a)(1);(2);(3) Record-keeping .....	12
AMC1 ARO.GEN.220(a)(4);(4a) Record-keeping.....	12
GM1 ARO.GEN.220(a)(4) Record-keeping .....	13
GM1 ARO.GEN.220(a)(4a) Record-keeping .....	13
GM1 ARO.GEN.220 Record-keeping.....	13
SECTION III – OVERSIGHT, CERTIFICATION AND ENFORCEMENT .....	13
AMC1 ARO.GEN.300(a);(b);(c) Oversight.....	13
AMC2 ARO.GEN.300(a);(b);(c) Oversight.....	13
GM1 ARO.GEN.300(a);(b);(c) Oversight.....	15
GM2 ARO.GEN.300(a);(b);(c) Oversight.....	15
GM3 ARO.GEN.300(a);(b);(c) Oversight.....	15

GM4 ARO.GEN.300(a);(b);(c) Oversight.....	16
AMC1 ARO.GEN.300(a)(2) Oversight.....	16
AMC1 ARO.GEN.305(b);(d);(d1) Oversight programme .....	17
AMC2 ARO.GEN.305(b) Oversight programme .....	17
GM1 ARO.GEN.305(b) Oversight programme .....	18
GM1 ARO.GEN.305(b);(c);(d);(d1) Oversight programme.....	19
AMC1 ARO.GEN.305(b)(1) Oversight programme.....	19
AMC2 ARO.GEN.305(b)(1) Oversight programme.....	19
AMC1 ARO.GEN.305(b);(c);(d);(d1) Oversight programme .....	20
AMC1 ARO.GEN.305(c) Oversight programme .....	20
AMC2 ARO.GEN.305(c) Oversight programme .....	21
AMC1 ARO.GEN.305(d) Oversight programme .....	22
AMC1 ARO.GEN.305(d1) Oversight programme .....	22
GM1 ARO.GEN.305(d1) Oversight programme .....	23
AMC1 ARO.GEN.305(e) Oversight programme .....	23
AMC1 ARO.GEN.310(a) Initial certification procedure – organisations .....	23
AMC1 ARO.GEN.330 Changes – organisations .....	25
GM1 ARO.GEN.330 Changes – organisations.....	25
AMC1 ARO.GEN.345 Declaration – organisations.....	25
GM1 ARO.GEN.345 Declaration – organisations.....	26
GM1 ARO.GEN.350 Findings and corrective actions – organisations .....	26
GM2 ARO.GEN.350(d) Findings and corrective actions – organisations.....	26
GM1 ARO.GEN.355(b) Findings and enforcement measures – persons.....	26
SUBPART OPS: AIR OPERATIONS .....	26
SECTION I – CERTIFICATION OF COMMERCIAL AIR TRANSPORT OPERATORS .....	26
GM1 ARO.OPS.100(b) Issue of the air operator certificate .....	26
AMC1 ARO.OPS.105 Code-share arrangements .....	28
AMC2 ARO.OPS.105 Code-share arrangements .....	28
AMC1 ARO.OPS.110 Lease agreements for aeroplanes and helicopters .....	28
AMC2 ARO.OPS.110 Lease agreements for aeroplanes and helicopters .....	28
GM1 ARO.OPS.110 Lease agreements for aeroplanes and helicopters .....	29
GM2 ARO.OPS.110 Lease agreements for aeroplanes and helicopters .....	29
GM3 ARO.OPS.110 Lease agreement .....	29
SECTION IA – AUTHORISATION OF HIGH RISK COMMERCIAL SPECIALISED OPERATIONS.....	29

AMC1 ARO.OPS.150 Authorisation of high risk commercial specialised operations .....	29
AMC1 ARO.OPS.150(a);(b) Authorisation of high risk commercial specialised operations .....	29
GM1 ARO.OPS.150(b) Authorisation of high risk commercial specialised operations .....	30
GM1 ARO.OPS.150(c) Authorisation of high risk commercial specialised operations .....	30
GM1 ARO.OPS.155 Lease agreements.....	30
GM2 ARO.OPS.155 Lease agreements.....	30
SECTION II – APPROVALS .....	31
AMC1 ARO.OPS.200 Specific approval procedure .....	31
AMC2 ARO.OPS.200 SPECIFIC APPROVAL PROCEDURE .....	31
AMC3 ARO.OPS.200 Specific approval procedure .....	32
AMC4 ARO.OPS.200 Specific approval procedure .....	33
AMC5 ARO.OPS.200 Specific approval procedure .....	34
GM1 ARO.OPS.200 Specific approval procedure .....	34
GM2 ARO.OPS.200 Specific approval procedure .....	35
GM3 ARO.OPS.200 Specific approval procedure .....	35
GM1 ARO.OPS.205 Minimum equipment list approval .....	35
GM1 ARO.OPS.210 Determination of local area.....	35
AMC1 ARO.OPS.215 Approval of helicopter operations over a hostile environment located outside a congested area.....	35
AMC2 ARO.OPS.215 Approval of helicopter operations over a hostile environment located outside a congested area.....	36
GM1 ARO.OPS.215 Approval of helicopter operations over a hostile environment located outside a congested area.....	36
AMC1 ARO.OPS.220 Approval of helicopter operations to or from a public interest site .	36
AMC2 ARO.OPS.220 Approval of helicopter operations to or from a public interest site .	36
AMC3 ARO.OPS.220 Approval of helicopter operations to or from a public interest site .	37
GM1 ARO.OPS.220 Approval of helicopter operations to or from a public interest site ...	37
AMC1 ARO.OPS.225 Approval of fuel/energy schemes .....	37
GM1 ARO.OPS.225 Approval of fuel/energy schemes .....	38
GM2 ARO.OPS.225 Approval of fuel/energy schemes .....	38
AMC1 ARO.OPS.225(c) Approval of fuel/energy schemes .....	39
AMC2 ARO.OPS.225(c) Approval of fuel/energy schemes .....	39
GM1 ARO.OPS.225(c) Approval of fuel/energy schemes .....	40
AMC1 ARO.OPS.226(a) Approval and oversight of evidence-based training programmes .....	40

GM1 ARO.OPS.226(a) Approval and oversight of evidence-based training programmes	41
GM2 ARO.OPS.226(a) Approval and oversight of evidence-based training programmes	42
AMC1 ARO.OPS.226(c) Approval and oversight of evidence-based training programmes	42
AMC2 ARO.OPS.226(c) Approval and oversight of evidence-based training programmes	42
AMC1 ARO.OPS.226(d) Approval and oversight of evidence-based training programmes	42
GM1 ARO.OPS.226(d) Approval and oversight of evidence-based training programmes	43
GM2 ARO.OPS.226(d) Approval and oversight of evidence-based training programmes	43
GM1 ARO.OPS.235(b);(c) Approval of individual flight time specification schemes	44
GM1 ARO.OPS.240 Specific approval of RNP AR APCH	44
GM2 ARO.OPS.240 Specific approval of RNP AR APCH	44
SECTION III – OVERSIGHT OF OPERATIONS	44
AMC1 ARO.OPS.300 Introductory flights	44
GM1 ARO.OPS.300 Introductory flights	44
SUBPART RAMP: RAMP INSPECTIONS OF AIRCRAFT OF OPERATORS UNDER THE REGULATORY OVERSIGHT OF ANOTHER STATE	45
GM1 ARO.RAMP.005 Scope	45
AMC1 ARO.RAMP.100(b) General	45
AMC1 ARO.RAMP.100(c) General	45
AMC1 ARO.RAMP.106 Alcohol testing	46
GM1 ARO.RAMP.106 Alcohol testing	47
GM2 ARO.RAMP.106 Alcohol testing	48
GM3 ARO.RAMP.106 Alcohol testing	48
AMC1 ARO.RAMP.110 Collection of information	48
AMC1 ARO.RAMP.115(a)(b) Qualification of ramp inspectors	49
AMC2 ARO.RAMP.115(a)(b) Qualification of ramp inspectors	49
AMC3 ARO.RAMP.115(a)(b) Qualification of ramp inspectors	50
AMC4 ARO.RAMP.115(a)(b) Qualification of ramp inspectors	50
AMC5 ARO.RAMP.115(a)(b) Qualification of ramp inspectors	51
AMC6 ARO.RAMP.115(a)(b) Qualification of ramp inspectors	51
AMC7 ARO.RAMP.115(a)(b) Qualification of ramp inspectors	52
AMC8 ARO.RAMP.115(a)(b) Qualification of ramp inspectors	52
AMC1 ARO.RAMP.120(a) Approval of training organisations	53
AMC2 ARO.RAMP.120(a) Approval of training organisations	54

AMC1 ARO.RAMP.120(a)(4) Approval of training organisations.....	54
AMC1 ARO.RAMP.125 Conduct of Ramp Inspections & ARO.RAMP.130 Categorisation of findings.....	55
AMC1 ARO.RAMP.125(b) Conduct of ramp inspections.....	55
AMC1 ARO.RAMP.125(c) Conduct of ramp inspections.....	56
AMC1 ARO.RAMP.135(a) Follow-up actions on findings.....	56
AMC1 ARO.RAMP.135(b) Follow-up actions on findings.....	57
AMC1 ARO.RAMP.145 Safety reports.....	57
AMC1 ARO.RAMP.150(b)(4)(iii) Authority coordination tasks.....	58

**THE CIVIL AVIATION AUTHORITY,**

Having regard to Law No.6 of 2005 (as amended) on civil aviation in the State of Libya, and in particular the provisions of Article 5 and Article 10,

Having regard on the Re-organisation of the Civil Aviation Authority, defining the functions and responsibilities of the Flight Safety Department, Whereas:

- (1) The Civil Aviation Authority (hereinafter referred to as the 'Authority') is the competent authority having exclusive jurisdiction over civil aviation and civil aerodromes in the State of Libya, and being empowered to prescribe and promulgate rules, regulations and orders for the discharge of its functions.
- (2) It is necessary to establish and continuously update technical requirements and administrative procedures to amplify and implement the provisions of the Civil Aviation Law to ensure the safe operations of aircraft.
- (3) Requirements related to the introduction of support programmes, psychological assessment of flight crew, as well as systematic and random testing of psychoactive substances to ensure medical fitness of flight and cabin crew members are necessary for the alignment with global best practice and applicable international standards.
- (4) This amendment will contribute to the achievement of the overall objectives of the Authority by addressing current amendments to the ICAO Annex 6, Parts I, II and III and aligning with current EASA regulations where applicable.



**Record of Amendments**

<b>No.</b>	<b>Date Applicable</b>	<b>Date Entered</b>	<b>Entered by</b>

**SUBPART GEN: GENERAL REQUIREMENTS****SECTION I – GENERAL****AMC1 ARO.GEN.120(d)(3) Means of compliance****GENERAL**

The information to be provided by the Authority 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 requirement, 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 organisations under its oversight may be used by other organisations only if processed again in accordance with ARO.GEN.120(d).

**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 Libya, including persons or organisations certified or authorised by the Authority;
  - (4) the possible use of qualified entities and of resources of the Authority 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 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 Authority do not rely solely on individuals. A continuous and

undisturbed fulfilment of these tasks and obligations of the 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 Authority 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 Civil Aviation Law and its ensuing Regulations and AMCs, accepted Certification Specifications (CSs) and Guidance Material (GM) may be properly implemented;
  - (3) the Authority's organisation and operating procedures for the implementation of the applicable requirements of the Civil Aviation Law and its ensuing Regulations are properly documented and applied;
  - (4) all 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 other competent authorities of other contracting 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 Civil Aviation Law and its ensuing Regulations 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 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 Civil Aviation Law, as amended;
  - (2) the provisions of the applicable ensuing Regulations and their AMCs, accepted CSs and GMs;
  - (3) the needs of industry; and
  - (4) the needs of the 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 Civil Aviation Law and its ensuing Regulations 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 of other contracting States (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 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 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 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 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 Civil Aviation Law, its ensuing Regulations and the related AMC, accepted CS, and GM;
- (4) LYCARs 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) Authority procedures relevant to the inspectors' tasks;
- (8) human factors principles;
- (9) rights and obligations of inspecting personnel of the 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 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) 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 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.

### **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 Authority;
  - (iii) the number of persons to whom the 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 State of Libya;
  - (v) the number of organisations having declared their activity to the Authority;
  - (vi) the number of organisations holding a specialised operations authorisation issued by the 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 the Authority related to activities; and
  - (iv) the size and complexity of the 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 aviation industry, the 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 Authority's oversight policy, the following planning data should be determined specifically for each type of organisation certified by the 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 followup, per inspector;
  - (4) standard number of ramp and unannounced inspections to be performed;
  - (5) standard duration of inspections, including preparation, reporting and followup, 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 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 contracting State.
- (i) Based on the elements listed above, the 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 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) LYCAR Air operations (Occurrences in civil aviation)
  - (3) Civil Aviation Law and its related Regulations, as amended, such as:
    - (i) LYCAR Air Crew Regulation;
    - (ii) LYCAR Rules of the Air;
    - (iii) LYCAR Dangerous Goods;
    - (iv) LYCAR Airworthiness Certificates; and
    - (v) LYCAR 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 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.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**

#### **AUTHORITY MANAGEMENT SYSTEM**

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

- (a) the documented policies and procedures;
- (b) the personnel files of Authority personnel, with supporting documents related to training and qualifications;
- (c) the results of the 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 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 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 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 Authority has been verified by the operator and found in compliance with the applicable requirements. Any amendments to these documents should be documented.

**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 Authority should assess the organisation and monitor its continued competence to conduct safe operations in compliance with the applicable requirements. The 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 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 Authority should also remain satisfied as to the effectiveness of these safety risk assessments.

(a) General methodology for operational hazards

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

When related to operational hazards, the 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 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 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 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 Authority as well as to those who may appoint him/her. It follows that the 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 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 FOREIGN STATE OF REGISTRY**

When verifying continued compliance of non-commercial operators using an aircraft registered in a foreign country holding operational approvals for operations in PBN, MNPS and RVSM airspace issued by a foreign State of Registry, the 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) [reserved]; 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.

#### **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 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 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 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 included, 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 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 reoccurrence.

- (d) Audits and inspections may be conducted separately or in combination. Audits and inspections may, at the discretion of the 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 Authority is informed without delay.
- (f) In the first few months of a new operation, inspectors should carry out oversight activities with a particular focus on the operator's procedures, facilities, equipment, operational control and management system. 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 Authority will serve to support the Authority's continuing confidence in the organisation's competence or, alternatively, may lead to an erosion of that confidence. In the latter case, the 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 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 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 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 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 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 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 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 Part-ORO;
  - (5) audit results are accessible to the Authority and open to exchange of information in accordance with the Civil Aviation Law and its ensuing Regulations; 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 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 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 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 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 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 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 Authority;
  - (3) the 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 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 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 Authority has established that during the previous 24 months the organisation has been able to effectively manage safety risks.
- (c) The 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 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) [reserved]

- (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 CABIN CREW CERTIFICATE OF COMPETENCY**

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

To properly discharge its oversight responsibilities, the 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 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 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 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 Authority's choosing.
  - (2) An individual should be nominated by the responsible person of the 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 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 organisation's nominated persons. Account should be taken of the relevance of the nominee's previous experience and known record.

- (3) Submissions that require the Authority's specific or prior approval should be referred to the appropriate department of the 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 Authority should conduct an audit of the organisation, including interviews of personnel and inspections carried out at the organisation's facilities.

The 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 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 the Civil Aviation 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) or for a safety manager as defined under AMC1 ORO.GEN.200(a)(1), the Authority should require the organisation to produce a written résumé of the proposed person's qualifications. The Authority should reserve the right to interview the nominee or call for additional evidence of his or her suitability before deciding upon his or her acceptability.
- (b) A simple management system documentation status sheet should be maintained, which contains information on when an amendment was received by the Authority and when it was approved.
- (c) The organisation should provide each management system documentation amendment to the Authority, including for the amendments that do not require prior approval by the Authority. Where the amendment requires Authority approval, the Authority, when satisfied, should indicate its approval in writing. Where the amendment does not require prior approval, the 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 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 Authority should re-issue the certificate.
- (b) A name change alone does not require the 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 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 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 Authority to ensure that further training by the organisation is carried out and audited by the 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 Authority may not act on the licence or certificate. 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 the Civil Aviation Law and its ensuing Regulations who are not required to hold a licence or certificate; and
- (b) persons who are required to hold a licence, rating, or certificate, but who do not hold the appropriate licence, rating or certificate 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 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 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 foreign operator with the applicable ICAO standards.
- (b) The 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 Authority should verify if the third party provider meets the criteria established in AMC2 ORO.AOC.115(b).

**AMC1 ARO.OPS.110 Lease agreements for aeroplanes and helicopters****WET LEASE-IN**

- (a) Before approving a wet lease-in agreement, the Authority should assess available reports on ramp inspections performed on aircraft of the lessor.
- (b) The 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.
- (c) The wet leased aircraft must be of the same type and series as aircraft that are presently being operated by the AOC holder. The total number of non-Libyan registered aircraft to be operated under a Libyan AOC at any one time must not exceed 20 percent of the total Libyan registered aircraft listed on the Libyan AOC holder's Operations Specifications at the time of application.

**AMC2 ARO.OPS.110 Lease agreements for aeroplanes and helicopters****SHORT TERM WET LEASE-IN LESS THAN 15 DAYS**

The Authority may approve foreign operators individually or a framework contract with more than one foreign operator in anticipation of operational needs or to overcome operational difficulties. Objective of short-term wet lease-in is to reduce delays and/or inconvenience to passengers if an aircraft breaks down and the passengers have to be transported to their

destination in the shortest possible time. Short-term wet lease-in is explicitly not intended to expand capacity.

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

#### **APPROVAL**

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

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

#### **DRY LEASE-OUT**

The purpose of the requirement for the Authority to ensure proper coordination with the authority that is responsible for the oversight of the continuing airworthiness of the aircraft 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 LYCAR, as amended.

### **GM3 ARO.OPS.110 Lease agreement**

#### **LONG-TERM WET LEASE-IN AGREEMENTS BETWEEN OPERATORS REGISTERED IN DIFFERENT ICAO CONTRACTING STATES**

In case of a long-term wet lease-in agreement between operators having their principal place of business in different contracting States, the competent authorities of the lessee and the competent authority of the lessor may consider a mutual exchange of all necessary information in accordance with ARO.GEN.200(c).

## **SECTION IA – AUTHORISATION OF HIGH RISK COMMERCIAL SPECIALISED OPERATIONS**

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

#### **GENERAL**

The 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 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 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 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 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 the Civil Aviation Law.

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

#### **LIMITATIONS**

The 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 Authority should re-issue the authorisation.
- (b) A name change alone does not require the Authority to re-assess the risk assessment and SOPs, unless there is evidence that other aspects of the operation have changed.

### **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 foreign registered aircraft of a foreign operator will be of a local or national nature. Therefore, the 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 LIBYA**

Prior approval is required for any lease agreements between operators having their principle place of business in Libya.

## 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 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 9284AN/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 Part SPA.RVSM, the 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 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 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 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 Authority may consider suspending or revoking RVSM approval if the operator's responses to height keeping errors are not effective or timely. The 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 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 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 Part-SPA to LYCAR, the 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 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-ENGINED 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 Part-SPA to LYCAR, the 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 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 Authority should ensure that it complies with the applicable requirements of Subpart FC (FLIGHT CREW) of Part-ORO and Subpart L (SET-IMC) of Part-SPA to LYCAR, and that it is appropriate to the operations envisaged.

The 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 Part-M to LYCAR.

- (b) The 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 Authority should specify:
- (1) the particular engine-airframe combination;

- (2) the identification by registration of the individual aeroplanes designated for single-engined 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 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 pre-flight 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.

### **AMC5 ARO.OPS.200 Specific approval procedure**

#### **PROCEDURES FOR THE APPROVAL OF LOW-VISIBILITY OPERATIONS**

Before issuing an approval for low-visibility operations (LVOs), the Authority should verify that the applicant has:

- (a) taken account of the relevant airworthiness requirements and limitations;
- (b) established the relevant aerodrome operating minima;
- (c) established and documented the relevant operating procedures;
- (d) established and conducted adequate training and checking programmes;
- (e) adopted the minimum equipment list (MEL) for the LVOs to be undertaken;
- (f) processes to ensure that only runways and instrument procedures suitable for the intended operations are used; and
- (g) established and conducted the relevant risk assessment and monitoring programmes.

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

#### **LIMITATIONS FOR HELICOPTER OFFSHORE OPERATIONS**

The 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 III, for non-commercial operations and specialised operations, also apply to training organisations with a principal place of business in another contracting State.

### **GM3 ARO.OPS.200 Specific approval procedure**

#### **INSERTION OF RELEVANT INFORMATION INTO THE OPERATIONS SPECIFICATIONS**

When issuing the operations specifications in accordance with Appendix II, where the operation does not include helicopter operations, the helicopter-related elements contained in the operations specifications may be omitted.

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

#### **EXTENSION OF RECTIFICATION INTERVALS**

The 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 contracting State is required, the Authority should only grant the approval once endorsement of that other contracting 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 operator shall ensure that 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, considering which of the following operations are relevant to the application:
    - (i) HEMS operations, in accordance with SPA.HEMS.125(a)(2);
    - (ii) HEMS operations, in accordance with SPA.HEMS.125(a)(3);
    - (iii) CAT operations, other than the above; and
  - (2) the operator's substantiation that preclude the use of the appropriate performance criteria are appropriate for the area overflown.
- (b) The operator shall furnish the Authority of the endorsement issued by the competent authority of that other State.

**GM1 ARO.OPS.215 Approval of helicopter operations over a hostile environment located outside a congested area****DESIGNATED AREAS**

The Authority may, based on its own assessment or on the substantiation of operators, designate different areas for the following operations:

- (a) HEMS operations, in accordance with SPA.HEMS.125(a)(2);
- (b) HEMS operations, in accordance with SPA.HEMS.125(a)(3);
- (c) CAT operations, other than the above.

**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 contracting State is required, the Authority should only grant such an approval once endorsement of that other contracting 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 operator shall ensure that 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 operator shall furnish the Authority of the endorsement issued by the competent authority of that other State.
  - (c) The operator should notify the Authority whenever the obstacle environment is known to have changed.

**AMC3 ARO.OPS.220 Approval of helicopter operations to or from a public interest site**  
**DIRECTORY OF PUBLIC INTEREST SITES**

The Authority should maintain a directory of all public interest sites that are subject to an approval or an endorsement in its territory. The directory should contain, for each site:

- (a) the dimensions;
- (b) any obstacle resulting in non-conformance to performance class 1 requirements of helicopter types using the site.

The Authority should either publish, or provide to operators and other competent authorities on their request, the point of contact of a person responsible at the public interest site, if available.

**GM1 ARO.OPS.220 Approval of helicopter operations to or from a public interest site**

- (a) A permanent obstacle is a natural or artificial obstacle which is expected to remain for 1 year or more. Constructions that are expected to be removed within 1 year are nonpermanent, temporary obstacles.
- (b) In the case of temporary changes to the obstacle environment, the Authority may take the appropriate temporary measures.
- (c) In the case of changes to the obstacle environment at a site located on the territory of another State, the Authority may liaise with the competent authority of that State.

**AMC1 ARO.OPS.225 Approval of fuel/energy schemes**

**OVERSIGHT — VERIFICATION OF COMPLIANCE OF FUEL SCHEMES FOR CAT OPERATIONS WITH AEROPLANES**

- (a) When approving a basic fuel scheme, the Authority should be satisfied that the operator fulfils the applicable criteria of point CAT.OP.MPA.180(a)(3)(i), taking into account the elements contained in the AMC applicable to the basic fuel scheme.
- (b) When approving a basic fuel scheme with variations, the Authority should be satisfied that the operator fulfils the applicable criteria of point CAT.OP.MPA.180(a)(3)(ii), taking into account the elements contained in the AMC applicable to the variation.

- (c) When approving an individual fuel scheme that deviates, fully or partly, from the basic fuel scheme, the Authority should be satisfied that the operator fulfils the applicable criteria of point CAT.OP.MPA.180(a)(3)(iii), taking into account the elements contained in the AMC applicable to the individual fuel scheme.

Before issuing the approval of an individual fuel scheme, the Authority should verify the following:

- (1) the maturity, capability, and suitability of the operator's management system;
- (2) the adequacy of this system for exercising operational control;
- (3) the adequacy of the operator's SOPs;
- (4) the resolution of significant findings in the areas that support the application of the individual fuel scheme;
- (5) the suitability of the communications and navigation equipment of the aircraft fleet to which the individual fuel scheme will apply;
- (6) the areas of operation where the individual fuel scheme will be used;
- (7) the operator's ability to provide reliable and accurate aircraft-specific fuel data;
- (8) the suitability of the relevant training programmes, including those for flight crew and operational control personnel;
- (9) the experience of the personnel concerned, particularly of the flight crew, in the use of the procedures and systems that support the individual fuel scheme;
- (10) any low-fuel events (including emergency fuel conditions) in the operator's safety records; and
- (11) the maintenance of the fleet in terms of reliability of the fuel system, including the accuracy of the fuel-measurement systems.

### **GM1 ARO.OPS.225 Approval of fuel/energy schemes**

#### **OPERATIONS TO AN ISOLATED AERODROME - GENERAL**

The use of an isolated aerodrome exposes both the aircraft and passengers to a greater risk than in operations where a destination alternate aerodrome is available. The Authority should, therefore, assess whether all possible means are applied to mitigate that greater risk.

### **GM2 ARO.OPS.225 Approval of fuel/energy schemes**

#### **ASSESSMENT AND OVERSIGHT OF POLICIES ASSOCIATED WITH FUEL SCHEMES**

The Authority's assessment and oversight of:

- the fuel planning and in-flight re-planning policy;
- the selection-of-aerodromes policy; and
- the in-flight fuel management policy

may follow a two-step process: firstly, assess and oversee each policy individually, and secondly, and more importantly, assess and oversee all the policies together.

The Authority should be satisfied with regard to the following:

- the robustness of the operator’s management system, particularly with regard to safety risk management; and
- in case of basic fuel schemes with variations and individual fuel schemes, the operator’s processes for performance monitoring and measurement.

### **AMC1 ARO.OPS.225(c) Approval of fuel/energy schemes**

#### **APPROVAL OF INDIVIDUAL FUEL SCHEMES — QUALIFICATION OF PERSONNEL**

- (a) In accordance with point ARO.GEN.200(a)(2), the Authority is required to have qualified personnel to perform the tasks under their responsibility. To approve individual fuel schemes, the Authority’s inspectors should have the necessary knowledge and expertise to understand, monitor, and validate the criteria of point (c) of AMC1 ARO.OPS.225.
- (b) For this purpose, the inspectors should be able to understand the relevance and meaningfulness of the operator’s safety performance indicators (SPIs), targets, and means by which these targets are achieved.
- (c) The Authority should develop guidance to be used by its inspectors when approving and verifying individual fuel schemes.

### **AMC2 ARO.OPS.225(c) Approval of fuel/energy schemes**

#### **APPROVAL OF INDIVIDUAL FUEL SCHEMES — APPLICATION OF INDIVIDUAL FUEL SCHEMES — GUIDANCE TO PERSONNEL**

According to points ARO.GEN.115 and ARO.GEN.200(a)(1), the Authority is required to develop guidance on the application of individual fuel schemes to be used by its inspectors. Such guidance should cover the following:

- (a) the operator’s responsibilities:
  - (1) operational control systems (organisational control over internal processes);
  - (2) policies and procedures;
  - (3) qualified personnel:
    - (i) competence and experience of both flight crew and operational control personnel; and
    - (ii) their training;
  - (4) SOP compliance and suitability;
  - (5) monitoring of the effectiveness of individual fuel scheme processes; and
  - (6) continuous improvement;
- (b) operational characteristics:



- (1) of the aircraft: current aircraft-specific data derived from a fuel consumption monitoring system; and
  - (2) of the area of operations:
    - (i) aerodrome technologies;
    - (ii) meteorological information capabilities;
    - (iii) ATM infrastructure; and
    - (iv) aerodrome capabilities and ATS characteristics;
  - (3) a suitable computerised flight plan;
  - (4) flight monitoring or flight watch capabilities, as applicable;
  - (5) communications systems: ground-based and airborne systems;
  - (6) navigation systems: ground-based and airborne systems; and
  - (7) reliable meteorological and aerodrome information; and
- (c) safety risk management:
- (1) agreed SPIs;
  - (2) risk register;
  - (3) identification of hazards;
  - (4) risk monitoring; and
  - (5) compliance monitoring.

When collecting statistically relevant data, the Authority inspectors should consider the specificities of the operations of each operator. As a minimum, the data should be collected for a period of 2 years.

Note: Further guidance is provided in ICAO Doc 9976 *Flight Planning and Fuel Management (FPFM) Manual*, Appendix 7 to Chapter 5 *A performance-based approach job-aid for an approving authority* (1st Edition, 2015).

### **GM1 ARO.OPS.225(c) Approval of fuel/energy schemes**

#### **INDIVIDUAL FUEL SCHEMES — RESOLUTION OF SIGNIFICANT FINDINGS**

The approval of an individual fuel scheme may be rejected, suspended or revoked when the operator has not resolved the relevant findings, or when there are unacceptable open findings that affect the areas that support individual fuel schemes (e.g. operational control, safety management system, safety risk assessment processes, availability of data, SPIs, pilot training, etc.).

### **AMC1 ARO.OPS.226(a) Approval and oversight of evidence-based training programmes**

#### **QUALIFICATION AND TRAINING — INSPECTORS**

- (a) For the initial approval and oversight of an operator's EBT programme, the inspector of the Authority should undertake EBT training as part of their required technical

training (see AMC2 ARO.GEN.200(a)(2)). At the conclusion of the inspector training, the inspector should:

- (1) know the principles of EBT, including the following underlying principles:
    - (i) competency-based training;
    - (ii) learning from positive performance;
    - (iii) building resilience; and;
    - (iv) data-driven training;
  - (2) know the structure of an EBT module;
  - (3) know the method of training delivery for each phase of an EBT module;
  - (4) know the principles of adult learning and how they relate to EBT;
  - (5) recognise effective observations based on a competency framework, and document evidence of observed performance;
  - (6) recognise and relate specific performance observations of competencies;
  - (7) recognise trainee performance to determine competency-based training needs and recognise strengths;
  - (8) understand methods for the evaluation of performance using a competencybased grading system;
  - (9) recognise appropriate teaching styles during simulator training to accommodate trainee learning needs;
  - (10) recognise facilitated trainee learning, focusing on specific competency-based training needs; and
  - (11) understand how to conduct a debrief using facilitation techniques.
- (b) The objective of such training is to ensure that the inspector:
- (1) attains the adequate level of knowledge in the principles of approval and oversight of the EBT programmes; and
  - (2) acquires the ability to recognise the EBT programme suitability.

**GM1 ARO.OPS.226(a) Approval and oversight of evidence-based training programmes**  
**QUALIFICATION AND TRAINING — PRINCIPLES OF EBT — DATA-DRIVEN TRAINING**

EBT is a data-driven programme and proper oversight requires the inspector to have a good understanding of all features where data plays an important role in the EBT programme:

- (a) Flight crew training data
  - (1) Data related to grading of competencies (level 1), data related to OBs (level 2) and how it can be used to drive the design of the operator's EBT programme. Other training data (level 3) and how it is used in the contextualisation of an example scenario element.
  - (2) Individual flight crew training data — understand how it is used:

- (i) In regard to licence revalidation and renewal; and
  - (ii) to provide tailored training and additional FSTD training.
- (b) Data from the management system — understand how it may be used for the selection of the example scenario element(s) and the contextualisation of the example scenario element(s).
- (c) Instructor standardisation and concordance data
  - (1) How the EBT data is used to standardise the instructor and how, at the same time, the operator ensures the necessary just culture and a non-jeopardy environment for the instructors (referred to in the instructor concordance assurance programme).
  - (2) Understand the importance of quality in the data – the feedback loop of the EBT programme.

**GM2 ARO.OPS.226(a) Approval and oversight of evidence-based training programmes  
QUALIFICATION AND TRAINING — OPERATOR'S EBT PROGRAMME SUITABILITY**

To recognise and evaluate the suitability of an operator's EBT programme, the inspector's training programme may include those features as training objectives. AMC1 ORO.FC.231(a) provides the list of features of a suitable EBT programme.

**AMC1 ARO.OPS.226(c) Approval and oversight of evidence-based training programmes  
INITIAL APPROVAL — VERIFICATION OF COMPLIANCE**

When approving an EBT programme, the Authority should ensure that the operator fulfils all the applicable criteria of ORO.FC.231 and its associated AMC. In particular, it should recognise the suitability of the operator's EBT programme (AMC1 ORO.FC.231(a)).

**AMC2 ARO.OPS.226(c) Approval and oversight of evidence-based training programmes  
EBT PROGRAMME SUITABILITY**

As regards the suitability of the EBT programme, please refer to AMC1 ORO.FC.231(a).

**AMC1 ARO.OPS.226(d) Approval and oversight of evidence-based training programmes**

**OVERSIGHT PLAN — PERIODIC ASSESSMENT TO VERIFY THE COMPLIANCE OF THE EBT PROGRAMME**

- (a) After issuing the approval of the operator's EBT programme, the Authority should have a process to verify the operator's continuing compliance.
- (b) Each organisation to which an EBT approval has been issued should have an inspector (or inspectors) assigned to it who is (are) trained and qualified for EBT (see AMC1 ARO.OPS.226(a)).

- (c) Audits and inspections, on a scale and frequency appropriate to the operation, should cover at least:
- (1) management supervision of the EBT programme;
  - (2) ongoing identification of operational risks and inclusion into the operator's EBT programme;
  - (3) relevance of the operator's EBT programme to address its operational and training needs;
  - (4) effectiveness of the operator's EBT programme to improve pilot competencies. When there is an ineffective programme, the Authority should examine the operator processes which identify the lack of effective results;
  - (5) compliance with all requirements of ORO.FC.231;
  - (6) delivery of instructor initial training in accordance with AMC1 ORO.FC.146(c), including inspections of the training delivery;
  - (7) conduct of assessments of competence for EBT instructors, including periodic inspections of FSTD training;
  - (8) maintenance of crew records;
  - (9) administration of programme enrolment and compliance with the requirements of Annex I (Part-FCL) for licence revalidation and renewal;
  - (10) continuing standardisation of EBT instructors; and
  - (11) inspection of the training delivery.

**GM1 ARO.OPS.226(d) Approval and oversight of evidence-based training programmes  
EFFECTIVENESS OF THE OPERATOR'S EBT PROGRAMME**

- (a) The effectiveness of the operator's EBT programme can be determined by periodically reviewing pilot competencies across several domains, such as role, fleet (e.g. CPT/FO, A320, B737) and airline so that the continuing improvement of the EBT programme is linked to an improvement of the pilot competencies.
- (b) The analysis of the pilot competencies across the domains should also take into account the operator's experience in the EBT programme and the level of difficulty contained within the scenario elements of the programme, which may result in variations of the grading results and those variations may be acceptable.

**GM2 ARO.OPS.226(d) Approval and oversight of evidence-based training programmes  
STANDARDISATION OF EBT INSTRUCTORS — ACCEPTABLE INSTRUCTOR  
CONCORDANCE**

The Authority may require a minimum acceptable level of concordance. This may be a nonexhaustive list:

- (a) Set a minimum acceptable level of concordance per aircraft fleet or by group of instructors.

- (b) Set a minimum acceptable level of concordance per competency.
- (c) Set a minimum acceptable level of concordance for all operators under its oversight, or a minimum acceptable level of concordance per operator (or type of operator) based on the risk of the operator.

### **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 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.

## **SECTION III – OVERSIGHT OF OPERATIONS**

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

#### **MARGINAL ACTIVITY**

The 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 Libya, the 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**

### **GM1 ARO.RAMP.005 Scope**

#### **RAMP INSPECTION MANUAL**

The following information may be found in the ramp inspection manual established or adopted by the Authority:

- (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.

### **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 Libya or a contracting State;
- (c) a previous ramp inspection that has revealed deficiencies indicating that the aircraft does not comply with the applicable requirements and where the Authority suspects that these deficiencies have not been corrected;
- (d) (reserved)
- (e) evidence that the contracting 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 foreign Operator's competent authority monitoring activities; or
- (h) any relevant information collected pursuant to ARO.RAMP.110.

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

#### **ANNUAL RAMP INSPECTION PROGRAMME**

- (a) The 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 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 Authority for the contracting State territories in ICAO EUR region.

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

- (1) (reserved)
- (2) safety reasons that were not identified in the annual programme.

The 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 Authority for the contracting 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 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 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 Libya. The following priority criteria should be considered before deciding to inspect the aircraft:
- (1) (reserved)
  - (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 the state of Libya in the previous 12 months;
- (h) The Authority should amend the annual ramp inspection programme as necessary to the extent possible:
- (1) when new targets are assigned by the Authority;
  - (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).

### **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 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.
- (f) The Authority should provide information on its alcohol testing procedures in an easily accessible format.

### **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.



**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.

**GM3 ARO.RAMP.106 Alcohol testing****INFORMATION ON ALCOHOL TESTING**

The information by the 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 whistle-blowers (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 other contracting State;
  - (3) corrective action required;
  - (4) contacts with the operator's 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.

### **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.

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

#### **QUALIFICATION PROCESS**

- (a) The Authority should ensure that its inspectors meet, at all times, the qualification criteria with regard to training and recent experience.
- (b) Any 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 reinitiated.

- (e) The 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 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 Authority.

### **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 or adopted by the Authority 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 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 Authority may decide to lengthen or shorten the training taking into account the level of expertise of the candidate.

### **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 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 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 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 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.

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

#### **RECURRENT TRAINING**

- (a) The Authority should ensure that all ramp inspectors undergo recurrent training at least once every 3 calendar years.
- (b) In addition, the Authority should ensure that additional training is provided to all ramp inspectors when it is determined that an ad hoc training is necessary. In developing such training, the Authority should take into account any relevant 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 Authority.
- (d) The recurrent training should cover at least the following elements:
  - (1) regulatory and procedural developments;
  - (2) operational practices;
  - (3) articulation with other processes and regulations; and
  - (4) standardisation and harmonisation issues including those communicated by other competent authority.

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

#### **SENIOR RAMP INSPECTORS**

- (a) The 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 Authority should establish, based on his/her experience, the privileges for which he/she may deliver OJT.

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

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

- (a) When evaluating the ramp inspection training organisation's capability to deliver training, the 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 Authority should issue the approval for an unlimited duration.

### **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 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 Authority; and
  - (2) no level 1 findings as described in ARO.GEN.350 have been issued.

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

#### **TRAINING INSTRUCTORS**

- (a) The 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 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 Authority may accept instructors who are certified in accordance with the Technical Instructions for the latest effective edition of the Safe Transport of Dangerous Goods by Air (ICAO Doc 9284-AN/905), provided that they possess adequate English language communication skills.

### **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 or adopted by the Authority for inspections performed on aircraft used by foreign operators (SAFA) and on aircraft used by operators under the regulatory oversight of another contracting state.

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

#### **GENERAL**

- (a) The 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 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.



**AMC1 ARO.RAMP.125(c) Conduct of ramp inspections****PROOF OF INSPECTION**

- (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).

**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 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) 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 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'.

### **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 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 or contrary to applicable provisions of the Civil Aviation Law. The 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.

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

#### **IMPORTANT SAFETY INFORMATION**

- (a) When the Authority receives safety-related information that could be of interest in the implementation of its safety assessment of foreign aircraft in Libya, 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 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'.

**AMC1 ARO.RAMP.150(b)(4)(iii) Authority coordination tasks****COORDINATION OF RAMP INSPECTIONS WITH OTHER COMPETENT AUTHORITIES**

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

- (a) Such targets should only be established for operators flying into Libya;
- (b) The targets for the upcoming year should be established at the latest by 1 December and updated at least once during the upcoming year; and
- (c) The targets should be established 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 is beyond a threshold defined by the Authority, 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').