European Aviation Safety Agency

Notice of Proposed Amendment 2015-18 (B)

Update of the rules on air operations (Air OPS Regulation — all Annexes & related AMC/GM)

sub-NPA (B) 'Draft AMC/GM'

RMT.0516 & RMT.0517 — 27.11.2015

EXECUTIVE SUMMARY

This sub-Notice of Proposed Amendment (NPA) includes proposed changes to the acceptable means of compliance (AMC) and guidance material (GM) to Regulation (EU) No 965/2012. Sub-NPA (B) includes the following key changes:

— Editorial changes to AMC and GM to all Annexes;

— Amendment related to the management system of the authority;

— Proposed new AMC/GM on inspector qualifications;

— Amendments to AMC/GM related to RAMP inspections;

— Safety management in the AMC/GM related to organisation requirements (Part-ORO); and

— Proposed AMC/GM on leasing agreements between EU operators.

— Proposed change to AMC on carriage of the emergency medical kit for certain CAT operators, providing more flexibility to operators regarding a secure location of the EMK.

Sub-NPA (B) is the part of a series of three sub-NPAs (constituting NPA 2015-18) addressing a safety and regulatory coordination issue related to air operations. The main objective is to ensure an efficient and proportionate set of implementing rules (IRs), AMC and GM on air operations and to resolve any inconsistencies identified after the adoption of the air operations IRs. This is necessary to ensure that the EASA regulatory system includes state of the art IRs, AMC and GM and reflects best practices.

The following safety recommendations (SRs) were assessed during the development of this NPA: GERF-2006-009, UNK-2005-148, DENM-2012,004, HUNG-2012-004, ITAL-2012-009, SPAN-2009-025, and SWED-2011-013. The specific objective of this NPA is to maintain a high level of safety for air operations by ensuring a harmonised implementation of Regulation (EU) No 965/2012.

Sub-NPA (A): Explanatory Note and proposed changes to the IRs of Annexes I–VII.

Sub-NPA (B): Proposed changes to the existing AMC and GM text.

Sub-NPA (C): Proposed changes related to passenger seating and briefing.

Applicability		Process map	
Affected regulations and decisions:	AMC/GM to the Annexes to Regulation (EU) No 965/2012	Concept Paper:	No
		Terms of Reference:	6.10.2014
		Rulemaking group:	No
Affected stakeholders:	air operation organisations; national competent authorities	RIA type:	None
		Technical consultation during NPA drafting:	Yes
Driver/origin:	Safety; level-playing field; proportionality; RMT OPS.001	Duration of NPA consultation:	2 months
		Review group:	TBD
		Focused consultation:	Yes
Reference:	ICAO Doc 8335	Publication date of the Opinion:	2016/Q3
		Publication date of the Decision:	2017/Q3

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1. Procedural information

1.1. The rule development procedure

The European Aviation Safety Agency (hereinafter referred to as the 'Agency') developed this Notice of Proposed Amendment (NPA) in line with Regulation (EC) No 216/2008[1] (hereinafter referred to as the 'Basic Regulation') and the Rulemaking Procedure[2].

This rulemaking activity is included in the Agency's Rulemaking Programme for 2013–2016 under RMT.0516 & RMT.0517.

The text of this NPA has been developed by the Agency. It is hereby submitted for consultation of all interested parties[3].

The process map on the title page contains the major milestones of this rulemaking activity to date and provides an outlook of the timescale of the next steps.

1.2. The structure of this NPA and related documents

Due to the size of the documents to be published, it has been decided to split the NPA into sub-NPAs, namely (A), (B), and (C).

— **Sub-NPA (A):** Chapter 1 contains the procedural information related to this task. Chapter 2 'Explanatory Note' explains the core technical content of all parts (sub-NPAs) of the NPA. Chapter 3 contains the proposed text for the new requirements with the proposed changes included in the consolidated version provided by EASA of the Cover Regulation of Regulation (EU) No 965/2012, Annexes I–VIII including the amendments to Regulation (EU) No 965/2012[4] (hereinafter referred to as the 'Air OPS Regulation').

— **Sub-NPA (B)** contains the amendments to the AMC/GM material associated with the Air OPS Regulation.

— **Sub-NPA (C)** contains proposed changes related to passenger seating and briefing.

1.3. How to comment on this NPA

Please submit your comments using the automated **Comment-Response Tool (CRT)** available at **http://hub.easa.europa.eu/crt/**[5].

The deadline for the submission of comments is **27 January 2016**.

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1 Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC (OJ L 79, 19.3.2008, p. 1).

2 The Agency is bound to follow a structured rulemaking process as required by Article 52(1) of the Basic Regulation. Such process has been adopted by the Agency's Management Board and is referred to as the 'Rulemaking Procedure'. See Management Board Decision No 01-2012 of 13 March 2012 concerning the procedure to be applied by the Agency for the issuing of Opinions, Certification Specifications and Guidance Material (Rulemaking Procedure).

3 In accordance with Article 52 of the Basic Regulation and Articles 5(3) and 6 of the Rulemaking Procedure.

4 Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 296, 25.10.2012, p. 1).

5 In case of technical problems, please contact the CRT webmaster (crt@easa.europa.eu).

1.4. The next steps in the procedure

Whilst every effort has been made to include the new provisions contained in the amending Implementing Rules and related AMC/GM in this NPA, it has to be stated that this NPA is based on the consolidated version of the Implementing Rules and related AMC/GM (the so-called consolidated version).

Following the closure of the NPA public consultation period, the Agency will review all the comments and will establish a Review Group in order to perform a focused consultation, which will consist of a workshop complemented by group meetings, if required.

The outcome of the NPA public consultation, as well as the outcome of the focused consultation, will be reflected in the respective Comment-Response Document (CRD), which will be published (two months after the end of the public consultation period of the NPA) for further consultation (reactions period).

The related Opinion will be published one month after the end of the CRD consultation period. The Opinion containing proposed changes to the Air OPS Regulation will be addressed to the European Commission, which shall use it as a technical basis in order to prepare a legislative proposal.

The Decision containing AMC and GM will be published by the Agency when the related IR is adopted by the European Commission.

2. Explanatory Note

Please refer to NPA 201X-XX (A), including the Explanatory Note for the proposed Opinion (NPA 201x-xx (A)), as well as for the proposed Decision of this NPA.

2.1. Overview of the proposed amendments

2.1.1. GM to Annex I (Definitions)

The following change is proposed:

(1) Insertion of a new point (t) into **GM1 Annex I Definitions** to introduce new guidance on the meaning of 'mass' and 'weight' in the context of the Air OPS rules.

2.1.2. AMC/GM to Annex II (Part-ARO)

The following changes are proposed:

(2) Development of new **AMC ARO.GEN.120(e) Means of compliance** on *DEMONSTRATION OF COMPLIANCE* by the authority whenever the authority proposes an alternative means of compliance. This is proposed in order to ensure that the authority conducts a risk assessment similar to that of the AMC for operators contained in AMC to ORO.GEN.120.

(3) Development of new **GM1 ARO.GEN.125(b) Information to the Agency** on the *MEANING OF SAFETY-SIGNIFICANT INFORMATION STEMMING FROM OCCURRENCE REPORTS.*

(4) Development of new **GM2 ARO.GEN.125(b) Information to the Agency** on *RECOMMENDED CONTENT FOR A CONCLUSIVE SAFETY ANALYSIS*.

(5) Development of new **GM3 ARO.GEN.125(b) Information to the Agency** on *OCCURRENCES WHERE THE AGENCY IS THE COMPETENT AUTHORITY.*

(6) Amendment of **AMC1 ARO.GEN.200(a)(1) Management system** on *DOCUMENTED POLICIES AND PROCEDURES* to include a new point (e) to ensure that a copy of the procedures related to the management system and their amendments shall be made available not only to the Agency for the purpose of standardisation, but also to the organisations subject to the Air OPS Regulation, if so requested.

(7) Amendment of **AMC1 ARO.GEN.200(a)(2) Management system** to include a more detailed AMC on inspector qualifications. AMC1 ARO.GEN.200(a)(2) now also includes the text deleted from sub-paragraph (b) of AMC1 ARO.GEN.300(a);(b);(c) Oversight which reads 'It is essential that the competent authority has the full capability to adequately assess the continued competence of an organisation by ensuring that the whole range of activities is assessed by appropriately qualified personnel.'

(8) Amendment of **AMC2 ARO.GEN.200(a)(2) Management system** regarding inspectors initial and recurrent training programme and in order to ensure inspectors training on assessment of effectiveness of management systems.

(9) Development of a new **AMC3 ARO.GEN.200(a)(2) Management system** on *FLIGHT OPERATIONS INSPECTOR QUALIFICATION*.

(10) Development of a new **AMC4 ARO.GEN.200(a)(2) Management system** on *FATIGUE RISK MANAGEMENT INSPECTOR TRAINING.*

(11) Amendment of point (b)(1)(iv) of **GM1 ARO.GEN.200(a)(2) Management system** in order to ensure that authorities also take into account the estimated number of subcontracted organisations used by persons and organisations, when planning and determining the required personnel for oversight.

(12) Development of a new **GM2 ARO.GEN.200(a)(2) Management system** on *INSPECTOR COMPETENCY* defining and explaining the meaning of inspector competency and including a recommendation that the inspector should by their qualifications/competency command the professional respect of the inspected personnel.

(13) Development of a new **GM3 ARO.GEN.200(a)(2) Management system** on *FLIGHT OPERATIONS INSPECTOR (FOI) QUALIFICATION*.

(14) Development of a new **GM4 ARO.GEN.200(a)(2) Management system** on the content of inspector training programmes.

(15) A new **GM5 ARO.GEN.200(a)(2) Management system** on the content of **Fatigue risk management inspector training**

(16) Deletion of sub-paragraph (b) of **AMC1 ARO.GEN.300(a);(b);(c) Oversight**, because inspector qualification elements should be placed collectively in AMC/GM to ARO.GEN.200(a)(2) on inspector qualifications.

(17) Insertion of a new sub-paragraph (d) that specifies that oversight of the operator includes a review and assessment of the qualifications of nominated persons into **GM1 ARO.GEN.300(a);(b);(c) Oversight**.

(18) Insertion of a new point (a)(5) into **AMC1 ARO.GEN.305(b);(c);(d);(d1) Oversight programme** to ensure that the number of subcontractors is added to the list of items leading to considerations about the operator's size, nature and complexity.

(19) **AMC2 ARO.GEN.305(b) Oversight programme** on PROCEDURES FOR OVERSIGHT OF OPERATIONS has been amended in point (c) to clarify that the items in brackets are examples of inspections and to ensure that those inspections include not only flight operations, but also flight and ground training inspections.

(20) Development of a new **GM1 ARO.GEN.305(b);(c);(d);(d1) Oversight programme** on *STORAGE PERIODS OF RECORDS* to advise the competent authority that in the case of extended oversight cycles, minimum storage periods for records should be aligned with the extended oversight cycle.

(21) Amendment of **AMC2 ARO.GEN.305(c) Oversight programme** to replace the phrase 'reason to believe' with the word 'evidence' whenever an authority decides on an integrated oversight schedule.

(22) Amendment of point (a)(3) of **AMC1 ARO.GEN.310(a) Initial certification procedure — organisations** on *VERIFICATION OF COMPLIANCE* to ensure that the competent authority should require the conduct of one or more demonstration flights before issuing the AOC, or alternatively

an in-flight inspection should be conducted at the earliest opportunity. This is an alignment with the previous JAR requirements and ICAO Annex 6.

(23) **A new GM2 ARO.GEN.350(d) Findings and corrective actions — organisations** has been proposed on the corrective action implementation period to specify that the 3-month period of the corrective action implementation 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.

(24) Development of a new **GM1 ARO.OPS.100(b) Issue of the air operator certificate** to provide guidance for authorities when defining the area of operation in Appendix II (OPS SPECS) to Part-ARO. This GM is based on guidance from the JAA.

(25) Development of a new **GM2 ARO.OPS.110 Lease agreements** on *LONG-TERM LEASE AGREEMENTS BETWEEN OPERATORS REGISTERED IN AN EU MEMBER STATE* stating that in case of a long-term lease agreement between operators registered in an EU Member State, the competent authorities of the lessee and the lessor should consider a mutual exchange of all necessary information and the competent authority of the lessee should assess the operator's statement on how it intends to comply with ORO.GEN.205 on contracted activities during the long-term wet lease-in agreement.

(26) Amendment of **GM2 ARO.OPS.110 Lease agreements** to provide the correct references to the current Continuing Airworthiness Regulation (Regulation (EU) No 1321/2014).

(27) Amendment of **AMC1 ARO.RAMP.115(b)(2) Qualification of ramp inspectors** to clarify the requirements for initial appointment of senior ramp inspectors and the conditions for re-appointment.

(28) Development of a new **GM2 ARO.RAMP.115(b)(2) Qualification of ramp inspectors** to clarify the recency requirements for senior ramp inspectors.

(29) AMC1 ARO.RAMP.115(b)(3) Qualification of ramp inspectors has been amended to avoid repetition of existing rule text contained in ARO.RAMP.115(b)(3) and to include some editorial changes.

(30) AMC2 ARO.RAMP.115(b)(3) Qualification of ramp inspectors has been amended to clarify conditions for re-qualification of ramp inspectors.

(31) A new GM1 ARO.RAMP.115(b)(3) on Qualification of ramp inspectors indicating additional explanations on recent experience requirements.

2.1.3. AMC/GM to Annex III (Part-ORO)

The following changes are proposed:

(32) Amendment of **AMC1 ORO.GEN.110(e) Operator responsibilities** to provide the correct reference to the current Continuing Airworthiness Regulation.

(33) Amendment of **AMC1 ORO.GEN.130 Changes related to an AOC holder** to increase the notification period for changes of nominated persons from 10 to 20 days.

(34) Amendment of **GM1 ORO.GEN.130(a) Changes related to an AOC holder** on *GENERAL* to delete a reference to nominated postholders in point (a)(7) of this GM. Changes of nominated persons or postholders as described in ORO.GEN.210(b) do NOT constitute a change that affects the AOC or the operations specifications. Therefore, changes of nominated persons or postholders is NOT a change requiring prior approval, because it does not amend the scope of the operator's approval.

(35) Development of a new **AMC1 ORO.GEN.130(b) Changes related to an AOC holder** to ensure that for changes, the operator should provide the safety risk assessment to the competent authority upon request.

(36) Amendment of the title of **GM3 ORO.GEN.130(b) Changes related to an AOC holder** to now read GM1 ORO.GEN.130(b) since this is the first GM to ORO.GEN.130(b). In addition, the correct reference to Regulation (EU) No 1178/2011 (the Air Crew Regulation) has been provided. Finally, GM3 ORO.GEN.130(b) has been amended to delete wrong references to items not requiring prior approval:

- evacuation procedures with a reduced number of required cabin crew during ground operations or in unforeseen circumstances;
- helicopter operations — airborne radar approaches (IR ref. CAT.OP.MPA.120);
- helicopter operations — procedures for selecting off-shore alternates (IR ref. CAT.OP.MPA.181).

(37) **AMC1 ORO.GEN.200(a)(1);(2);(3);(5) Management system on NON-COMPLEX OPERATOR**S has been amended in paragraph (c) to ensure that the safety manager is responsible for the safety-management-related processes and tasks.

(38) A new **GM1 ORO.GEN.200(a) Management system on INTEGRATED MANAGEMENT SYSTEM** has been inserted to provide guidance on how to integrate a Management System for an organisation with several certificates.

(39) Amendment of point (d)(2) of **GM2 ORO.GEN.200(a)(1) Management system** to clarify the wording in relation to the safety action group, which should define strategies to mitigate the identified safety risks.

(40) Development of a new **GM3 ORO.GEN.200(a)(1) Management system** on the *MEANING OF THE TERMS 'ACCOUNTABILITY' AND 'RESPONSIBILITY'* has been inserted to clarify the difference between the notions of 'accountability' and 'responsibility' in the English language.

(41) **AMC1 ORO.GEN.200(a)(3) Management system on COMPLEX OPERATORS — SAFETY RISK MANAGEMENT** has been amended in paragraph (g) to ensure description of emergency training/drill as appropriate.

(42) A new **AMC2 ORO.GEN.200(a)(3) Management system on COMPLEX ORGANISATIONS — SAFETY RISK MANAGEMENT-INTERFACES BETWEEN ORGANISATIONS** was inserted to provide extensive guidance on setting-up effective safety risk management and managing the interfaces between organisations.

(43) Amendment of **GM1 ORO.GEN.200(a)(3) Management system** to now be an AMC, because internal reporting constitutes an important element of the organisation's management system.

The subtitle of the new AMC has been changed to read *INTERNAL SAFETY REPORTING SCHEME*, because this is more adequate to convey the message that reporting should include information on hazards and not only information on safety events.

(44) Development of a new **GM1 ORO.GEN.200(a)(3) Management system** to provide extensive guidance on setting up effective safety risk management.

(45) Amendment of sub-paragraph (a) of **GM1 ORO.GEN.200(a)(5) Management system** to delete the reference to training manuals, which are already included in Part-D of the Operations Manual (OM).

(46) Development of a new **GM5 ORO.GEN.200(a)(6)** on the organisational review programme as part of the management system for non-complex organisations.

(47) Development of a new **GM6 ORO.GEN.200(a)(6)** on the organisational review checklist as part of the management system for non-complex organisations.

(48) Amendment of **AMC1 ORO.GEN.200(b) Management system** to include a new sub-paragraph (c) to ensure that all non-commercial operators operating a maximum of two complex-motor-powered aircraft of the same type are to be considered as non-complex organisation by default.

(49) Development of a new **AMC2 ORO.GEN.205 Contracted activities** establishing conditions for the acceptance of audits from third-party audit providers, thus enabling the operator to pool audits of contracted organisations. The elements specifying the conditions under which a third-party provider can be used for those audits have been copied from the existing AMC related to pooling of audits of code-share agreements. This new AMC responds to a safety recommendation on pooled audits.

(50) Development of a new **AMC2 ORO.GEN.210(a) Personnel requirements** on *INFORMATION ON THE ACCOUNTABLE MANAGER* to mirror the existing Form 4 from the continuing airworthiness requirements in the Air OPS rules on the approval of the accountable manager without suggesting that an EASA Form 4 should be provided.

(51) Development of a new **GM1 ORO.GEN.210(a) Personnel requirements** on the *FUNCTION OF THE ACCOUNTABLE MANAGER* to explain the position and function of the accountable manager within the organisation.

(52) Development of a new **GM1 ORO.AOC.100(c) Application for an AOC** to explain the meaning of certificate of airworthiness in relation to the applicable requirements.

(53) Amendment of **AMC1 ORO.AOC.110 Leasing agreement** to cater for the scenario that some information regarding the leasing partner might not be available to the operator at the time of requesting the approval.

(54) Amendment of **AMC1 ORO.AOC.110(c) Leasing agreement** to clarify that this AMC only applies for WET LEASE-IN WITH A THIRD-COUNTRY OPERATOR and introduction of a new point (f) on retroactive airworthiness requirements contained in Part-26.

(55) Development of a new **AMC3 ORO.AOC.110(g) Leasing agreement** on *LONG-TERM WET LEASE-IN AGREEMENT BETWEEN OPERATORS REGISTERED IN AN EU MEMBER STATE* ensuring that the

lessee provides the competent authority with a statement on how it intends to comply with ORO.GEN.205 on contracted activities during the long-term wet lease-in agreement.

(56) Amendment of **GM1 ORO.AOC.110(c) Leasing agreement** to clarify that this GM only applies to *SHORT-TERM WET LEASE-IN WITH A THIRD-COUNTRY OPERATOR*.

(57) Amendment of **AMC2 ORO.AOC.115(b) Code-share agreements**, since the conditions applying to the acceptance of audits of third-party providers have now been moved to a new AMC2 ORO.GEN.205 Contracted activities. This new AMC to ORO.GEN.205 will apply not only to code-share agreements, but also to other contracted activities and will enable operators to pool audits of third parties.

(58) Amendment of **AMC3 ORO.MLR.100 Operations manual — general** to include a new point 7.3 on Fatigue Risk Management (FRM) under Chapter 7 on Flight Time Limitations (FTL).

(59) Amendment of sub-paragraph (a) of **AMC1 ORO.MLR.105(d)(3) Minimum equipment list** to provide the correct term 'specific approvals'.

(60) Amendment of **AMC1 ORO.MLR.105(g) Minimum equipment list** to provide the correct reference to the current Continuing Airworthiness Regulation.

(61) Amendment of **GM1 ORO.MLR.105(g) Minimum equipment list** to provide the correct reference to the current Continuing Airworthiness Regulation.

(62) Development of a new **GM1 ORO.MLR.115(c) Record-keeping** to clarify the meaning of personnel records in ORO.MLR.115(c).

(63) Development of a new **GM1 ORO.MLR.115(d) Record-keeping** to clarify the meaning of training, checking and qualification records in ORO.MLR.115(d).

2.1.4. AMC/GM to Annex IV (Part-CAT)

The following changes are proposed:

(64) Amendment of point (b)(4) of **AMC1 CAT.OP.MPA.115 Approach flight technique — aeroplanes** on *CONTINUOUS DESCENT FINAL APPROACH (CDFA)*, since point (b)(3) should only address operations in IMC and point (b)(4) operations in VMC.

(65) Amendment of the title of **AMC1 CAT.OP.MPA.140(c) Maximum distance from an adequate aerodrome for two-engined aeroplanes without an ETOPS approval** to include the correct reference of sub-paragraph (d) rather than (c) in the title of the AMC. In addition, a change has been made to provide the correct reference to the current Continuing Airworthiness Regulation.

(66) Amendment of sub-paragraph (d) of **AMC1 CAT.OP.MPA.195 Refuelling/defuelling with passengers embarking, on board or disembarking** for helicopters to ensure that the AMC specifies that procedures apply when rotors are either stopped or rotors are turning.

(67) Amendment of sub-paragraph (a) of **GM1 CAT.OP.MPA.295 Use of airborne collision avoidance system (ACAS)** to be aligned with ED Decision 2012/002/R on common airspace usage requirements and operating procedures.

(68) Amendment of **AMC2 CAT.IDE.A.225 Emergency medical kit** on carriage under secure conditions to provide operators more flexibility by removing the text referring to the EMK in a 'locked

compartment' and replacing it with the possibility to store the EMK also in a secure location in the cabin that prevents unauthorised access to it.

(69) Deletion of the third row of the table in **GM1 CAT.IDE.A.125 & CAT.IDE.A.130 Operations under VFR by day & Operations under IFR or at night — flight and navigational instruments and associated equipment**. This line is not necessary and may be taken erroneously as a reference to the IR paragraphs.

(70) Amendment of point (a)(4) of **AMC2 CAT.IDE.A.280 Emergency locator transmitter (ELT)** on *TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS* to clarify that a water-activated ELT(S) is not an ELT(AP).

(71) Deletion of the third row of the table in **GM1 CAT.IDE.H.125 & CAT.IDE.H.130 Operations under VFR by day & Operations under IFR or at night — flight and navigational instruments and associated equipment**. This line is not necessary and may be taken erroneously as a reference to the IR paragraphs.

(72) Amendment of point (a)(4) of **AMC2 CAT.IDE.H.280 Emergency locator transmitter (ELT)** on *TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS* to clarify that a water-activated ELT(S) is not an ELT(AP).

2.1.5. AMC/GM to Annex V (Part-SPA)

The following changes are proposed:

(73) Development of a new **AMC1 SPA.GEN.105(b)(2) Application for a specific approval** on *NON-MANDATORY (RECOMMENDATION) ELEMENTS OF OPERATIONAL SUITABILITY DATA*.

(74) Insertion of a new sub-paragraph (h) with regard to continuing airworthiness items into **AMC1 SPA.RVSM.105 RVSM operational approval** on the *CONTENT OF OPERATOR RVSM APPLICATION*.

(75) Development of a new **AMC3 SPA.RVSM.105 RVSM operational approval** on *CONTINUING AIRWORTHINESS* to ensure that AMCs to SPA.RVSM contain specific continuing airworthiness references for the application/approval of RVSM operations and to transpose Chapter 10 of JAA's TGL6 to the European Air OPS rules.

(76) Amendment of sub-paragraph (b) of **GM1 SPA.RVSM.105(d)(9) RVSM operational approval** on *SPECIFIC REGIONAL PROCEDURES* to delete the obsolete reference to EUROCONTROL Document ASM ET1.ST.5000 and replace it with the correct reference to ICAO EUR DOC 009 for the European RVSM airspace.

(77) Amendment of **GM1 SPA.LVO.120 Flight crew training and qualifications** on *FLIGHT CREW TRAINING* to include the correct reference to AMC1 SPA.LVO.120(f)(1) on the number of approaches regarding flight crew training.

(78) Amendment of sub-paragraph (f) of **AMC1 SPA.DG.105(a) Approval to transport dangerous goods** on *TRAINING PROGRAMME* to achieve alignment with the respective requirements in ICAO's Technical Instructions for the Safe Transport of Dangerous Goods (Part 1;4, in 4.2.3), to reward those operators who are planning in advance recurrent training on dangerous goods.

(79) Amendment of **AMC5 SPA.LVO.105 LVO approval** to provide the correct reference to the current Continuing Airworthiness Regulation.

2.1.6. AMC/GM to Annex VI (Part-NCC)

The following changes are proposed:

(80) Amendment of **AMC1 NCC.GEN.140(a)(3) Documents, manuals and information to be carried** on *CERTIFICATE OF AIRWORTHINESS* to delete the wrong reference to permit to fly (PtF). The reference to PtF has been deleted to avoid a misunderstanding of the relationship between a CofA and a PtF, since a PtF is not similar to a CofA.

(81) Development of a new **GM1 NCC.IDE.A.100(b) Instruments and equipment — general** on *REQUIRED INSTRUMENTS AND EQUIPMENT THAT DO NOT NEED TO BE APPROVED IN ACCORDANCE WITH THE APPLICABLE AIRWORTHINESS REQUIREMENTS*. This new GM mirrors the respective GM in Part-NCO and Part-SPO.

(82) Amendment of **GM1 NCC.IDE.A.100(b)&(c) Instruments and equipment — general**. The changes are on the numbering of the GM and on the subtitle, which now specifies that this GM only applies to *NON-REQUIRED INSTRUMENTS AND EQUIPMENT THAT DO NOT NEED TO BE APPROVED IN ACCORDANCE WITH THE APPLICABLE AIRWORTHINESS REQUIREMENTS, BUT ARE CARRIED ON A FLIGHT*.

(83) Amendment of point (a)(4) of **AMC2 NCC.IDE.A.215 Emergency locator transmitter (ELT)** on *TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS* to clarify that a water-activated ELT(S) is not an ELT(AP).

(84) Development of a new **GM1 NCC.IDE.H.100(b) Instruments and equipment — general** on *REQUIRED INSTRUMENTS AND EQUIPMENT THAT DO NOT NEED TO BE APPROVED IN ACCORDANCE WITH THE APPLICABLE AIRWORTHINESS REQUIREMENTS*. This new GM mirrors the respective GM in Part-NCO and Part-SPO.

(85) Amendment of **GM1 NCC.IDE.H.100(b)&(c) Instruments and equipment — general**. The changes are on the numbering of the GM and on the subtitle, which now specifies that this GM only applies to *NON-REQUIRED INSTRUMENTS AND EQUIPMENT THAT DO NOT NEED TO BE APPROVED IN ACCORDANCE WITH THE APPLICABLE AIRWORTHINESS REQUIREMENTS, BUT ARE CARRIED ON A FLIGHT*.

(86) Amendment of **AMC1 NCC.IDE.H.115 Operating lights** to clarify that the landing light should be trainable, at least in the vertical plane, or optionally be an additional fixed light or lights positioned to give a wide spread of illumination.

(87) Development of a new **GM1 NCC.IDE.H.125(a)(3) Operations under IFR — flight and navigational instruments and associated equipment**. This GM mirrors the respective GM in Part-NCO and Part-SPO and ensures consistency amongst the different Parts.

(88) Amendment of point (a)(4) of **AMC2 NCC.IDE.H.215 Emergency locator transmitter (ELT)** on *TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS* to clarify that a water-activated ELT(S) is not an ELT(AP).

(89) Amendment of **AMC1 NCC.IDE.H.235 All helicopters on flight over water – ditching** to introduce a subtitle to the AMC reading 'EMERGENCY FLOTATION EQUIPMENT'.

2.1.7. AMC/GM to Annex VII (Part-NCO)

The following changes are proposed:

(90) Development of a new **GM1 NCO.OP.200 Simulated situations in flight** on *DESIGNATION OF PERSONS AS CREW MEMBERS* to ensure that this item of the 'issues list' of December 2012 in response to the EASA GA Safety Strategy, identified by Europe Air Sports at the request of the General Aviation community, is included in the NPA. This GM ensures that an accompanying pilot can be considered as part of the crew.

(91) Amendment of point (a)(4) of **AMC2 NCO.IDE.A.170 Emergency locator transmitter (ELT)** on *TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS* to clarify that a water-activated ELT(S) is not an ELT(AP).

(92) Amendment of point (a)(4) of **AMC2 NCO.IDE.H.170 Emergency locator transmitter (ELT)** on *TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS* to clarify that a water-activated ELT(S) is not an ELT(AP).

2.1.8. AMC/GM to Annex VIII (Part-SPO)

The following changes are proposed:

(93) Development of a new **GM1 SPO.OP.185 Simulated situations in flight** on *DESIGNATION OF PERSONS AS CREW MEMBERS* to ensure that this item of the 'issues list' of December 2012 in response to the EASA GA Safety Strategy, identified by Europe Air Sports at the request of the General Aviation community, is included in the NPA. This GM ensures that an accompanying pilot can be considered as member of the crew.

(94) Amendment of point (a)(4) of **AMC2 SPO.IDE.A.190 Emergency locator transmitter (ELT)** on *TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS* to clarify that a water-activated ELT(S) is not an ELT(AP).

(95) Amendment of point (a)(4) of **AMC2 SPO.IDE.H.190 Emergency locator transmitter (ELT)** on *TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS* to clarify that a water-activated ELT(S) is not an ELT(AP).

3. Proposed amendments

The text of the amendment is arranged to show deleted text, new or amended text as shown below:

(a) deleted text is marked with ~~strike through~~;

(b) new or amended text is highlighted in grey;

(c) an ellipsis (…) indicates that the remaining text is unchanged in front of or following the reflected amendment.

3.1. Draft Acceptable Means of Compliance and Guidance Material (Draft EASA Decision)

As indicated in Chapter 1.2., **sub-NPA (B)** contains the amendments to existing AMC and GM to the Air OPS Regulation.

3.1.1. GM to Annex I (Definitions)

(1) Insertion of a new point (t) into GM1 Annex I Definitions to introduce new guidance on the meaning of 'mass' and 'weight' in the context of the Air OPS rules.

GM1 Annex I Definitions
DEFINITIONS FOR TERMS USED IN ACCEPTABLE MEANS OF COMPLIANCE AND GUIDANCE MATERIAL

For the purpose of Acceptable Means of Compliance and Guidance Material to Regulation (EU) No 965/2012, the following definitions should apply:

(…)

(l) 'Mass' and 'weight' means in accordance with ICAO Annex 5 and the International System of Units (SI), the actual and limiting masses of aeroplanes, the payload and its constituent elements, the fuel load, etc. These are expressed in units of mass (kg). However, in most approved Flight Manuals and other operational documentation, these quantities are published as weights in accordance with the common language. In the ICAO SI system, a weight is a force rather than a mass. Since the use of the term 'weight' does not cause any problem in the day-to-day handling of aircraft, its continued use in operational applications and publications is acceptable.

3.1.2. AMC/GM to Annex II (Part-ARO)

SUBPART GEN — GENERAL REQUIREMENTS

SECTION I — GENERAL

(2) Development of new *AMC ARO.GEN.120(e) Means of compliance* on DEMONSTRATION OF COMPLIANCE by the authority whenever the authority proposes an alternative means of compliance. This is proposed in order to ensure that the authority conducts a risk assessment similar to that of the AMC for operators contained in AMC to ORO.GEN.120.

(…)

AMC1 ARO.GEN.120(e) Means of compliance
DEMONSTRATION OF COMPLIANCE

In order to demonstrate that the Implementing Rules are met, a risk assessment should be completed and documented. The result of this risk assessment should demonstrate that an equivalent level of safety to that established by the Acceptable Means of Compliance (AMC) adopted by the Agency is reached.

(…)

(3) Development of new *GM1 ARO.GEN.125(b) Information to the Agency* on the MEANING OF SAFETY-SIGNIFICANT INFORMATION STEMMING FROM OCCURRENCE REPORTS.

GM1 ARO.GEN.125(b) Information to the Agency
MEANING OF SAFETY-SIGNIFICANT INFORMATION STEMMING FROM OCCURRENCE REPORTS

Safety-significant information stemming from occurrence reports means:

(a) a conclusive safety analysis that summarises individual occurrence data and provides an in-depth analysis of a safety issue, which might be relevant for future Agency rulemaking or safety promotion activities; or

(b) individual occurrence data where the Agency is the competent authority and fulfils the reporting criteria in GM3 ARO.GEN.125(b).

(4) Development of new *GM2 ARO.GEN.125(b) Information to the Agency* on RECOMMENDED CONTENT FOR A CONCLUSIVE SAFETY ANALYSIS.

GM2 ARO.GEN.125(b) Information to the Agency
RECOMMENDED CONTENT FOR A CONCLUSIVE SAFETY ANALYSIS

A conclusive safety analysis should contain the following content, as appropriate:

(a) A detailed description of the safety issue, containing the scenario in which the safety issue takes place;

(b) An indication of the users affected by the safety issue, including types of operations and organisations;

(c) A risk assessment quantifying the severity and frequency of the safety issue;

(d) Information about the existing safety barriers in place to prevent the safety issue from happening again;

(e) Any mitigating actions already in place or developed to deal with the safety issue;

(f) Recommendations for future actions to mitigate the reported safety issue; and

(g) Any other element the competent authority deems essential for the Agency to properly assess the safety issue.

(5) Development of new *GM3 ARO.GEN.125(b) Information to the Agency* on OCCURRENCES WHERE THE AGENCY IS THE COMPETENT AUTHORITY.

GM3 ARO.GEN.125(b) Information to the Agency
OCCURRENCES WHERE THE AGENCY IS THE COMPETENT AUTHORITY

Occurrences related to organisations or products, certified by the Agency, should be notified to the Agency if:

(a) the occurrence is defined as a reportable occurrence, because the Agency is the competent authority; and

(b) the authority has come to the conclusion that:

(1) the organisation certified by the Agency to which the occurrence relates has not been informed of the occurrence; or

(2) the occurrence has not been properly addressed or has been left unattended by the organisation certified by the Agency.

SECTION II – MANAGEMENT

(6) Amendment of *AMC1 ARO.GEN.200(a)(1) Management system* on DOCUMENTED POLICIES AND PROCEDURES to include a new point (e) to ensure that a copy of the procedures related to the management system and their amendments shall be made available not only to the Agency for the purpose of standardisation, but also to the organisations subject to the Air OPS Regulation, if so requested.

AMC1 ARO.GEN.200(a)(1) Management system
DOCUMENTED POLICIES AND PROCEDURES

(a) The various elements of the organisation involved with the activities related to Regulation (EC) No 216/2008 and its Implementing Rules should be documented in order to establish a reference source for the establishment and maintenance of this organisation.

(b) The documented procedures should be established in a way that facilitates their use. They should be clearly identified, kept up-to-date and made readily available to all personnel involved in the related activities.

(c) The documented procedures should cover, as a minimum, all of the following aspects:

(1) policy and objectives;

(2) organisational structure;

(3) responsibilities and associated authority;

(4) procedures and processes;

(5) internal and external interfaces;

(6) internal control procedures;

(7) training of personnel;

(8) cross-references to associated documents;

(9) assistance from other competent authorities or the Agency (where required).

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

(e) A copy of the procedures related to the management system and their amendments should be made available to the Agency for the purpose of standardisation and to the organisations subject to this Regulation, if so requested.

(…)

(7) Amendment of *AMC1 ARO.GEN.200(a)(2) Management system* to include a more detailed AMC on inspector qualifications. AMC1 ARO.GEN.200(a)(2) now also includes the text deleted from sub-paragraph (b) of *AMC1 ARO.GEN.300(a);(b);(c) Oversight* which reads 'It is essential that the competent authority has the full capability to adequately assess the continued competence of an organisation by ensuring that the whole range of activities is assessed by appropriately qualified personnel.'

AMC1 ARO.GEN.200(a)(2) Management system
QUALIFICATION AND TRAINING — GENERAL

(a) It is essential that the competent authority has the full capability to adequately assess the continued competence of an organisation by ensuring that the whole range of activities is assessed by appropriately qualified personnel.

(b) For each inspector, the competent authority should:

(1) define the competencies required to perform the allocated certification and oversight tasks;

(2) define the associated minimum qualification requirements;

(3) establish initial and recurrent training programmes in order to maintain and to enhance inspector competency at the level necessary to perform the allocated tasks; and

(4) ensure that the training provided meets the established standards and is regularly reviewed and updated whenever necessary.

~~(a) The competent authority should ensure appropriate and adequate training of its personnel to meet the standard that is considered necessary to perform the work. To ensure personnel remain qualified, arrangements should be made for initial and recurrent training as required.~~

~~(b) The basic capability of the competent authority's personnel is a matter of recruitment and normal management functions in selection of personnel for particular duties. Moreover, the competent authority should provide training in the basic skills as required for those duties. However, to avoid differences in understanding and interpretation, all personnel should be provided with further training specifically~~

~~related to Regulation (EC) No 216/2008, its Implementing Rules and related AMCs, CSs and GM, as well as related to the assessment of alternative means of compliance.~~

(c) The competent authority may provide training through its own training organisation with qualified trainers or through another qualified training source.

(d) When training is not provided through an internal training organisation, adequately experienced and qualified persons may act as trainers, provided their training skills have been assessed. If required, an individual training plan should be established covering specific training skills. Records should be kept of such training and of the assessment, as appropriate.

(8) Amendment of *AMC2 ARO.GEN.200(a)(2) Management system* regarding inspectors initial and recurrent training programme and in order to ensure inspectors training on assessment of effectiveness of management systems.

AMC2 ARO.GEN.200(a)(2) Management system
QUALIFICATION AND TRAINING — INSPECTORS

(a) Initial training programme:

The initial training programme for inspectors should include, as appropriate to their role, current knowledge, experience and skills in at least all of the following:

(1) aviation legislation organisation and structure;

(2) the Chicago Convention, relevant ICAO annexes and documents;

(3) overview of Regulation (EC) No 216/2008, its Implementing Rules and the related AMC, CS and GM ~~the applicable requirements and procedures~~;

(4) Regulation (EU) No 965/2012 as well as other applicable requirements;

(5) management systems, including ~~auditing~~, risk assessment, assessment of the effectiveness of management systems, in particular hazard identification and non-punitive reporting techniques in the context of implementation of a 'just culture';

(6) auditing techniques;

(7) competent authority procedures relevant to the inspector's tasks;

(8~~5~~) human factors principles;

(9 ~~6~~) rights and obligations of inspecting personnel of the competent authority;

(10~~7~~) 'on-the-job' training, relevant to the inspector's tasks;

(11~~8~~) ~~suitable~~ 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:

~~The recurrent training programme should reflect, at least, changes in aviation legislation and industry. The programme should also cover the specific needs of the inspectors and the competent authority.~~

Once qualified, an inspector should undergo training periodically as well as whenever deemed necessary by the competent authority in order to remain competent to perform the allocated tasks. The recurrent training programme for inspectors should include, as appropriate to their role, at least the following topics:

(1) changes in aviation legislation, operational environment and technologies;

(2) competent authority procedures relevant to the inspector's tasks;

(3) technical training, including training on aircraft-specific subjects, appropriate to the role and tasks of the inspector;

(4) feedback from past oversight experience; and

(5) An assessment of an inspector's competency should take place at regular intervals not exceeding three year.

(9) Development of a new *AMC3 ARO.GEN.200(a)(2) Management system* on FLIGHT OPERATIONS INSPECTOR QUALIFICATION.

AMC3 ARO.GEN.200(a)(2) Management system
SPECIFIC INSPECTOR QUALIFICATION

(a) An inspector performing tasks related to the assessment and oversight of aircraft-specific standard operating procedures (SOPs) of Subpart B of the Operations Manual (OM) and tasks related to flight crew training and checking programmes of Subpart D of the OM should:

(1) have operational experience in air transport operations appropriate to the allocated tasks;

(2) have experience in either operational management in air transport operations; or as an examiner; or as an instructor;

(3) hold or have held a valid type rating on the aircraft type concerned; or class rating as appropriate; or on aircraft types/classes with similar technical and operational characteristics.

(b) For in-flight inspections, the inspector should have relevant knowledge of the route and area.

(10) Development of a new *AMC4 ARO.GEN.200(a)(2) Management system* on FATIGUE RISK MANAGEMENT INSPECTOR TRAINING.

AMC4 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 and 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

(11) Amendment of point (b)(1)(iv) of *GM1 ARO.GEN.200(a)(2) Management system* in order to ensure that authorities also take into account the estimated number of subcontracted organisations used by persons and organisations, when planning and determining the required personnel for oversight.

GM1 ARO.GEN.200(a)(2) Management System
SUFFICIENT PERSONNEL

(a) This GM on the determination of the required personnel is limited to the performance of certification, authorisation and oversight tasks, excluding personnel required to perform tasks subject to any national regulatory requirements.

(b) The elements to be considered when determining required personnel and planning their availability may be divided into quantitative and qualitative elements:

(1) Quantitative elements:

(i) the estimated number of initial certificates to be issued;

(ii) the number of organisations certified by the competent authority;

(iii) the number of persons to whom the competent authority has issued a licence, certificate, rating, authorisation or attestation;

(iv) the estimated number of persons and organisations, as well as the estimated number of subcontracted organisations used by those persons and organisations, exercising their activity within the territory of the Member State and established or residing in another Member State;

(v) the number of organisations having declared their activity to the competent authority;

(vi) the number of organisations holding a specialised operations authorisation issued by the competent authority.

(2) Qualitative elements:

(i) the size, nature and complexity of activities of certified, authorised and declared organisations (cf. AMC1 ORO.GEN.200(b)), taking into account:

(A) privileges of the organisation;

(B) type of approval, scope of approval, multiple certification, authorisation and declared activities;

(C) possible certification to industry standards;

(D) types of aircraft/flight simulation training devices (FSTDs) operated;

(E) number of personnel; and

(F) organisational structure, existence of subsidiaries;

(ii) the safety priorities identified;

(iii) the results of past oversight activities, including audits, inspections and reviews, in terms of risks and regulatory compliance, taking into account:

(A) number and level of findings;

(B) timeframe for implementation of corrective actions; and

(C) maturity of management systems implemented by organisations and their ability to effectively manage safety risks, taking into account also information provided by other competent authorities related to activities in the territory of the Member States concerned; and

(iv) the size and complexity of the Member State's aviation industry and the potential growth of activities in the field of civil aviation, which may be an indication of the number of new applications and changes to existing certificates and authorisations to be expected.

(c) Based on existing data from previous oversight planning cycles and taking into account the situation within the Member State's aviation industry, the competent authority may estimate:

(1) the standard working time required for processing applications for new certificates (for persons and organisations) and authorisations;

(2) the number of new declarations or changed declarations;

(3) the number of new certificates and authorisations to be issued for each planning period; and

(4) the number of changes to existing certificates and authorisations to be processed for each planning period.

(d) In line with the competent authority's oversight policy, the following planning data should be determined specifically for each type of organisation certified by the competent authority as well as for declared organisations, including those being authorised:

(1) standard number of audits to be performed per oversight planning cycle;

(2) standard duration of each audit;

(3) standard working time for audit preparation, on-site audit, reporting and follow-up, per inspector;

(4) (standard number of ramp and unannounced inspections to be performed;

(5) standard duration of inspections, including preparation, reporting and follow-up, per inspector;

(6) minimum number and required qualification of inspectors for each audit/inspection.

(e) Standard working time could be expressed either in working hours per inspector or in working days per inspector. All planning calculations should then be based on the same unit (hours or working days).

(f) It is recommended to use a spreadsheet application to process data defined under (c) and (d), to assist in determining the total number of working hours/days per oversight planning cycle required for certification, authorisation, oversight and enforcement activities. This application could also serve as a basis for implementing a system for planning the availability of personnel.

(g) For each type of organisation certified or high risk commercial specialised operation authorised by the competent authority, the number of working hours/days per planning period for each qualified inspector that may be allocated for certification, authorisation, oversight and enforcement activities should be determined, taking into account:

(1) purely administrative tasks not directly related to oversight and certification/authorisation;

(2) training;

(3) participation in other projects;

(4) planned absence; and

(5) the need to include a reserve for unplanned tasks or unforeseeable events.

(h) The determination of working time available for certification, authorisation, oversight and enforcement activities should also consider:

(1) the possible use of qualified entities; and

(2) possible cooperation with other competent authorities for approvals or authorisations involving more than one Member State.

(i) Based on the elements listed above, the competent authority should be able to:

(1) monitor dates when audits and inspections are due and when they have been carried out;

(2) implement a system to plan the availability of personnel; and

(3) identify possible gaps between the number and qualification of personnel and the required volume of certification/authorisation and oversight.

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

(12) Development of a new *GM2 ARO.GEN.200(a)(2) Management system* on INSPECTOR COMPETENCY defining and explaining the meaning of inspector competency and including a recommendation that the inspector should by their qualifications/competency command the professional respect of the inspected personnel.

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.

(13) Development of a new *GM3 ARO.GEN.200(a)(2) Management system* on FLIGHT OPERATIONS INSPECTOR (FOI) QUALIFICATION.

GM3 ARO.GEN.200(a)(2) Management system
SPECIFIC 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.

(14) Development of a new *GM4 ARO.GEN.200(a)(2) Management system* on the content of inspector training programmes.

GM4 ARO.GEN.200(a)(2) Management system
INSPECTOR TRAINING PROGRAMMES

(a) The competent authority may adapt the duration and depth of the individual training programme of an inspector, provided the required competencies are achieved and maintained.

(b) The initial training programme for inspectors referred to in AMC2 ARO.GEN.200(a)(2) should include, as appropriate to their role, the following documents:

  (1) For items referring to aviation legislation organisation, structure, the Chicago Convention, relevant ICAO annexes and documents:

    (i) ICAO Doc 7300 (Convention on International Civil Aviation);

    (ii) ICAO Annex 1 (Personnel Licensing);

    (iii) ICAO Annex 2 (Rules of the Air);

(iv) ICAO Annex 6 (Operation of Aircraft);

(v) ICAO Annex 18 (The Safe Transport of Dangerous Goods by Air);

(vi) ICAO Annex 19 (Safety Management);

(vii) ICAO Doc 4444 (Air Traffic Management (PANS-ATM));

(viii) ICAO Doc 7030 (Regional Supplementary Procedures)

(ix) ICAO Doc 8335 (Manual of Procedures for Operations Inspection, Certification and Continued Surveillance);

(x) ICAO Doc 9284 (Technical Instructions for the Safe Transport of Dangerous Goods by Air);

(xi) ICAO Doc 9734(Safety Oversight Manual); and

(xii) ICAO Doc 9859 (Safety Management Manual (SMM)).

(2) Regulation (EU) No 376/2014 (Occurrences in civil aviation)

(3) For items referring to Regulation (EC) No 216/2008, related Implementing Rules and AMC, CS and GM:

(i) Regulation (EU) No 1178/2011 (Air Crew Regulation);

(ii) Regulation (EU) No 1332/2011;(Part-AUR);

(iii) Regulation (EU) No 923/2012 (Part-SERA);

(iv) Regulation (EU) No 748/2012 (OSD); and

(v) Regulation (EU) No 1321/2014 (Part-M, Part-145).

(c) The duration of the on-the-job training should take into account the scope and complexity of the inspector's tasks. The competent authority should assess whether the required competence has been achieved before an inspector is authorised to perform a task without supervision.

(15) A new *GM5 ARO.GEN.200(a)(2) Management system* on the content of Fatigue risk management inspector training

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 zone crossing (westbound and eastbound) and jet lag

(d) Shift work

(e) Bio-mathematical fatigue models

(f) Measurement of fatigue

(…)

SECTION III — OVERSIGHT, CERTIFICATION AND ENFORCEMENT

(16) Deletion of sub-paragraph (b) of AMC1 ARO.GEN.300(a);(b);(c) Oversight, because inspector qualification elements should be placed collectively in AMC/GM to ARO.GEN.200(a)(2) on inspector qualifications.

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

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

~~(b) It is essential that the competent authority has the full capability to adequately assess the continued competence of an organisation by ensuring that the whole range of activities is assessed by appropriately qualified personnel.~~

(…)

(17) Insertion of a new sub-paragraph (d) that specifies that oversight of the operator includes a review and assessment of the qualifications of nominated persons into *GM1 ARO.GEN.300(a);(b);(c) Oversight*.

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

(a) Responsibility for the conduct of safe operations lies with the organisation. Under these provisions a positive move is made towards devolving upon the organisation a share of the responsibility for monitoring the safety of operations. The objective cannot be attained unless organisations are prepared to accept the implications of this policy, including that of committing the necessary resources to its implementation. Crucial to the success of the policy is the content of Part-ORO, which requires the establishment of a management system by the organisation.

(b) The competent authority should continue to assess the organisation's compliance with the applicable requirements, including the effectiveness of the management system. If the management system is judged to have failed in its effectiveness, then this in itself is a breach of the requirements which may, among others, call into question the validity of a certificate, if applicable.

(c) The accountable manager is accountable to the competent authority as well as to those who may appoint him/her. It follows that the competent authority cannot accept a situation in which the accountable manager is denied sufficient funds, manpower or influence to rectify deficiencies identified by the management system.

(d) Oversight of the organisation includes review and assessment of the qualifications of nominated persons.

(…)

(18) Insertion of a new point (a)(5) into *AMC1 ARO.GEN.305(b);(c);(d);(d1) Oversight programme* to ensure that the number of subcontractors is added to the list of items leading to considerations about the operator's size, nature and complexity.

AMC1 ARO.GEN.305(b);(d);(d1) Oversight programme
SPECIFIC NATURE AND COMPLEXITY OF THE ORGANISATION, RESULTS OF PAST OVERSIGHT

(a) When determining the oversight programme for an organisation, the competent authority should consider in particular the following elements, as applicable:

(1) the implementation by the organisation of industry standards, directly relevant to the organisation's activity subject to this Regulation;

(2) the procedure applied for and scope of changes not requiring prior approval;

(3) specific approvals held by the organisation;

(4) specific procedures implemented by the organisation related to any alternative means of compliance used~~.~~; and

(5) number of subcontractors.

(b) For the purpose of assessing the complexity of an organisation's management system, AMC1 ORO.GEN.200(b) should be used.

(c) Regarding results of past oversight, the competent authority should also take into account relevant results of ramp inspections of organisations it has certified or authorised, persons and other organisation having declared their activity or persons performing operations with other than complex-motor-powered aircraft that were performed in other Member States in accordance with ARO.RAMP.

(…)

(19) *AMC2 ARO.GEN.305(b) Oversight programme* on PROCEDURES FOR OVERSIGHT OF OPERATIONS has been amended in point (c) to clarify that the items in brackets are examples of inspections and to ensure that those inspections include not only flight operations, but also flight and ground training inspections.

AMC2 ARO.GEN.305(b) Oversight programme
PROCEDURES FOR OVERSIGHT OF OPERATIONS

(a) Each organisation to which a certificate has been issued should have an inspector specifically assigned to it. Several inspectors should be required for the larger companies with widespread or varied types of operation. This does not prevent a single inspector being assigned to several companies. Where more than one inspector is assigned to an organisation, one of them should be nominated as having overall responsibility for supervision of, and liaison with, the organisation's management, and be responsible for reporting on compliance with the requirements for its operations as a whole.

(b) Audits and inspections, on a scale and frequency appropriate to the operation, should cover at least:

(1) infrastructure,

(2) manuals,

(3) training,

(4) crew records,

(5) equipment,

(6) release of flight/dispatch,

(7) dangerous goods,

(8) organisation's management system.

(c) The following types of inspections should be envisaged, as part of the oversight programme:

(1) flight inspection (e.g. flight operation and flight training),

(2) ground inspection (e.g. ground training, documents and records),

(3) 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.

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

(d) Audits and inspections may be conducted separately or in combination. Audits and inspections may, at the discretion of the competent authority, be conducted with or without prior notice to the organisation.

(e) Where it is apparent to an inspector that an organisation has permitted a breach of the applicable requirements, with the result that air safety has, or might have, been compromised, the inspector should ensure that the responsible person within the competent authority is informed without delay.

(f) In the first few months of a new operation, inspectors should be particularly alert to any irregular procedures, evidence of inadequate facilities or equipment, or indications that management control of the operation may be ineffective. They should also carefully examine any conditions that may indicate a significant deterioration in the organisation's financial management. When any financial difficulties are identified, inspectors should increase technical surveillance of the operation with particular emphasis on the upholding of safety standards.

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

(20) Development of a new *GM1 ARO.GEN.305(b);(c);(d);(d1) Oversight programme* on STORAGE PERIODS OF RECORDS to advise the competent authority that in the case of extended oversight cycles, minimum storage periods for records should be aligned with the extended oversight cycle.

GM1 ARO.GEN.305 (b);(c);(d);(d1) Oversight programme
STORAGE PERIODS OF RECORDS

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

(…)

(21) Amendment of *AMC2 ARO.GEN.305(c) Oversight programme* to replace the phrase 'reason to believe' with the word 'evidence' whenever an authority decides on an integrated oversight schedule.

AMC2 ARO.GEN.305(c) Oversight programme
OVERSIGHT PLANNING CYCLE

(a) For each organisation certified by the competent authority all processes should be completely audited at periods not exceeding the applicable oversight planning cycle. The beginning of the first oversight planning cycle is normally determined by the date of issue of the first certificate. If the competent authority wishes to align the oversight planning cycle with the calendar year, it should shorten the first oversight planning cycle accordingly.

(b) The interval between two audits for a particular process should not exceed the interval of the applicable oversight planning cycle.

(c) Audits should include at least one on-site audit within each oversight planning cycle. For organisations exercising their regular activity at more than one site, the determination of the sites to be audited should consider the results of past oversight, the volume of activity at each site, as well as main risk areas identified.

(d) For organisations holding more than one certificate, the competent authority may define an integrated oversight schedule to include all applicable audit items. In order to avoid duplication of audits, credit may be granted for specific audit items already completed during the current oversight planning cycle, subject to four conditions:

(1) the specific audit item should be the same for all certificates under consideration;

(2) there should be satisfactory evidence on record that such specific audit items were carried out and that all corrective actions have been implemented to the satisfaction of the competent authority;

(3) the competent authority should be satisfied that there is no ~~reason to believe~~ 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.

(22) Amendment of point (a)(3) of *AMC1 ARO.GEN.310(a) Initial certification procedure — organisations* on VERIFICATION OF COMPLIANCE to ensure that the competent authority should require the conduct of one or more demonstration flights before issuing the AOC, or alternatively an in-flight inspection should be conducted at the earliest opportunity. This is an alignment with the previous JAR requirements and ICAO Annex 6.

AMC1 ARO.GEN.310(a) Initial certification procedure — organisations
VERIFICATION OF COMPLIANCE

(a) Upon receipt of an application for an air operator certificate (AOC), the competent authority should:

(1) assess the management system and processes, including the operator's organisation and operational control system;

(2) review the operations manual and any other documentation provided by the organisation; and

(3) for the purpose of verifying the organisation's compliance with the applicable requirements, conduct an audit at the organisation's facilities. The competent authority ~~may~~ should require the conduct of one or more demonstration flights operated as if they were commercial flights, or alternatively an in-flight inspection should be conducted at the earliest opportunity.

(b) The competent authority should ensure that the following steps are taken:

(1) The organisation's written application for an AOC should be submitted at least 90 days before the date of intended operation, except that the operations manual may be submitted later, but not less than 60 days before the date of intended operation. The application form should be printed in language(s) of the competent authority's choosing.

(2) An individual should be nominated by the responsible person of the competent authority to oversee, to become the focal point for all aspects of the organisation certification process and to coordinate all necessary activity. The nominated person should be responsible to the responsible person of the competent authority for confirming that all appropriate audits and inspections have been carried out. He/she should also ensure that the necessary specific or prior approvals required by (b)(3) are issued in due course. Of particular importance on initial application is a careful review of the qualifications of the 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 competent authority's specific or prior approval should be referred to the appropriate department of the competent authority. Submissions should include, where relevant, the associated qualification requirements and training programmes.

(c) The ability of the applicant to secure, in compliance with the applicable requirements and the safe operation of aircraft, all necessary training and, where required, licensing of personnel, should be assessed. This assessment should also include the areas of responsibility and the numbers of those allocated by the applicant to key management tasks.

(d) In order to verify the organisation's compliance with the applicable requirements, the competent authority should conduct an audit of the organisation, including interviews of personnel and inspections carried out at the organisation's facilities.

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

(f) 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).

(g) In case of non-compliance, the applicant should be informed in writing of the corrections that are required.

(h) When the verification process is complete, the person with overall responsibility, nominated in accordance with (b)(2), should present the application to the person responsible for the issue of an AOC together with a written recommendation and evidence of the result of all investigations or assessments which are required before the operator certificate is issued. Approvals required should be attached to the recommendation. The competent authority should inform the applicant of its decision concerning the application within 60 days of receipt of all supporting documentation. In cases where an application for an organisation certificate is refused, the applicant should be informed of the right of appeal as exists under national law.

(…)

(23) A new *GM2 ARO.GEN.350(d) Findings and corrective actions — organisations* has been proposed on the corrective action implementation period to specify that the 3-month period of the corrective action implementation 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.

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.

SUBPART OPS — AIR OPERATIONS

SECTION I — CERTIFICATION OF COMMERCIAL AIR TRANSPORT OPERATORS

(...)

(24) Development of a new *GM1 ARO.OPS.100(b) Issue of the air operator certificate* to provide guidance for authorities when defining the area of operation in Appendix II (OPS SPECS) to Part-ARO. This GM is based on guidance from the JAA.

GM1 ARO.OPS.110(b) Issue of the air operator certificate
AREA OF OPERATION

(a) If the area of operation within the operational specifications of Appendix II to Part-ARO is not defined as 'worldwide' or 'with no geographical limit', the competent authority should describe the boundaries of a permissible area of operation by listing for example:

(1) a continuous line between a list of coordinates (Lat./Long.);

(2) the national boundary of the State of issuance of the AOC;

(3) an FIR (Flight Information Region) boundary; or

(4) a combination of adjacent FIR boundaries.

(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

(v) 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 for example:

(i) the use of non-standard phraseology;

(ii) the use of altitude clearances in metres; and

(iii) the use of 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.

(…)

(25) Development of a new *GM2 ARO.OPS.110 Lease agreements* on LONG-TERM LEASE AGREEMENTS BETWEEN OPERATORS REGISTERED IN AN EU MEMBER STATE stating that in case of a long-term lease agreement between operators registered in an EU Member State, the competent authorities of the lessee and the lessor should consider a mutual exchange of all necessary information and the competent authority of the lessee should assess the operator's statement on how it intends to comply with ORO.GEN.205 on contracted activities during the long-term wet lease-in agreement.

GM2 ARO.OPS.110 Lease agreements
LONG-TERM LEASE AGREEMENTS BETWEEN OPERATORS REGISTERED IN AN EU MEMBER STATE

In case of a long-term lease agreement of more than 7 months between operators having their principal place of business in an EU Member States:

(a) the competent authorities of the lessee and the lessor should consider a mutual exchange of all necessary information in accordance with ARO.GEN.200(c); and

(b) the competent authority of the lessee should assess the operator's statement on how it intends to comply with ORO.GEN.205 on contracted activities during the long-term wet lease-in agreement.

(26) Amendment of *GM2 ARO.OPS.110 Lease agreements* to provide the correct references to the current Continuing Airworthiness Regulation (Regulation (EU) No 1321/2014).

GM2 ARO.OPS.110 Lease agreements
DRY LEASE-OUT

The purpose of the requirement for the competent authority to ensure proper coordination with the authority that is responsible for the oversight of the continuing airworthiness of the aircraft in accordance with Commission Regulation (EU~~C~~) No 1321/2014 ~~2042/2003~~[6] is to ensure that appropriate arrangements are in place to allow:

(a) the transfer of regulatory oversight over the aircraft, if relevant; or

(b) continued compliance of the aircraft with the requirements of Commission Regulation (EU~~C~~) No 1321/2014~~2042/2003~~.

6 ~~OJ L 315, 28.11.2003, p. 1.~~

Subpart RAMP – RAMP INSPECTIONS OF AIRCRAFT OF OPERATORS UNDER THE REGULATORY OVERSIGHT OF ANOTHER STATE

(27) Amendment of *AMC1 ARO.RAMP.115(b)(2) Qualification of ramp inspectors* to clarify the requirements for initial appointment of senior ramp inspectors and the conditions for re-appointment

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

(a) The competent authority ~~should~~ may appoint senior ramp inspectors provided the~~y~~ appointees meet the qualification criteria established by that competent authority. These qualification criteria should contain at least the following requirements:

(1) the appointee has been a qualified ramp inspector over the ~~3 years~~ 36 months prior to his/her appointment;

(2) during the period under (1), the appointee has performed a minimum of 72 ramp inspection, , with no less than 20 ramp inspections during each of the three ~~36~~ 12-month~~s~~ segments prior to the appointment~~, evenly spread over this period~~; and

(b) The senior ramp inspector will remain ~~qualified~~ appointed only if performing at least 24 ramp inspections during ~~any 12-month period after his/her appointment~~ each calendar year with no less than 12 ramp inspections during each half of that calendar year.

(~~b~~c) If the competent authority does not have senior ramp inspectors to conduct on-the-job training, such training ~~should~~ may be performed by a senior ramp inspector from another State.

(~~c~~d) Additional factors to be considered when nominating senior ramp inspectors include knowledge of training techniques, professionalism, maturity, judgment, integrity, safety awareness, communication skills, personal standards of performance and a commitment to quality.

(~~d~~e) ~~If~~ Should a senior ramp inspector ~~should~~ lose his/her ~~qualification~~ appointment as a result of failure to ~~reach~~ meet the conditions on minimum number of ramp inspections mentioned in paragraph (~~a~~b)~~(1) and/or (b)(2)~~ above, he/she ~~should~~ may be ~~re-qualified~~ reappointed by the ~~Member State~~ competent authority after performing the missing number of ramp inspections under the supervision of another senior ramp inspector. These ramp inspections should be performed during the next half calendar year in addition to the ones required for that period ~~by performing at least four inspections under the supervision of a senior ramp inspector, within a maximum period of 2 months~~.

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

(28) Development of a new *GM2 ARO.RAMP.115(b)(2) Qualification of ramp inspectors* to clarify the recency requirements for senior ramp inspectors.

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

(a) Before inspectors may be appointed as senior inspectors, they need to be qualified inspectors for at least 36 months and have performed 72 ramp inspections during that period. Ideally, those inspections should be evenly spread over the 36 months period. Where it is not possible to spread the inspections evenly during the 36 months period a minimum number of 20 ramp inspections can be

performed during no more than two segments, as long as the total number of ramp inspections required for the appointment remains 72. Regard to the recent experience, contrary to the requirements for non-senior inspectors, the mentioned number of inspections for senior inspectors are always ramp inspections, and may not be reduced by other inspections.

(b) The recent experience compliance should be measured on 1 January and 1 July. For the calendar year during which the senior inspector was firstly appointed, the recent experience criteria may be applied on a pro rata basis.

(29) AMC1 ARO.RAMP.115(b)(3) Qualification of ramp inspectors has been amended to avoid repetition of existing rule text contained in ARO.RAMP.115(b)(3) and to include some editorial changes.

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

~~a) Once qualified, ramp inspectors should undergo recurrent training in order to be kept up-to-date.~~(a~~b~~) The competent authority should ensure that all ramp inspectors undergo recurrent training at least once every 3 years after being qualified as ramp inspectors ~~or~~ and whenever deemed necessary by ~~the competent authority or~~ the Agency, e.g. after major changes in the inspection procedures. The Agency will inform the competent authority of such necessity and on the associated timeframe for implementation.

(b~~c~~) Recurrent training should be delivered by a competent authority or by an approved training organisation.

(c~~d~~) The recurrent training should cover at least the following elements:

(1) new regulatory and procedural developments;

(2) new operational practices;

(3) articulation review of other European processes and regulations (list of banned operators or aircraft pursuant to Regulation (EC) No 2111/2005, authorisation of third-country operators); using data collected through ramp inspections; and

(4) standardisation and harmonisation issues.

(d~~e~~) If a ramp inspector loses his/her qualification as a result of failure to undergo the recurrent training mentioned in paragraph (b) above, he/she should be re-qualified by the competent authority by providing him/her with the missing recurrent training.

(30) AMC2 ARO.RAMP.115(b)(3) Qualification of ramp inspectors has been amended to clarify conditions for re-qualification of ramp inspectors.

AMC2 ARO.RAMP.115(b)(3) Qualification of ramp inspectors
RECENT EXPERIENCE REQUIREMENTS

(a) The ~~minimum number of inspections required for~~ ramp inspector~~s~~ will remain qualified only if performing at least ~~to maintain their qualification should be conducted during any 12-month period after qualification, evenly spread during such intervals~~ 12 ramp inspections during each calendar year, after his/her qualification, with no less than 6 ramp inspections during each half of that calendar year.

(b) This number may be reduced up to a-half by the number of inspections on aircraft operated by domestic operators if the inspector is also a qualified flight operations, ramp or airworthiness inspector of a competent authority and is regularly engaged in the oversight of such operators.

(c) ~~If the inspector has performed some ramp inspections but he/she loses his/her qualification as a result of not reaching the minimum number of inspections during any 12-month period after qualification, he/she may be re-qualified by the competent authority by performing a number of inspections under the supervision of a senior ramp inspector. The number of supervised inspections should not be less than half the number of missed inspections according to the minimum requirement. All ramp inspections under supervision which are necessary for re-qualification should be performed within 90 calendar days.~~ Should a ramp inspector lose his/her qualification as a result of failure to meet the conditions on minimum number of ramp inspections mentioned in paragraphs (a) above, he/she may be requalified by the competent authority after performing the missing number of inspections under the supervision of a senior ramp inspector. These inspections should be performed as ramp inspections during the next half calendar year in addition to the ones required for that period.

(d) ~~If~~ Should the inspector lose~~s~~ his/her qualification because he/she has not been engaged in performing inspections on aircraft for more than ~~12 months~~ 6 consecutive halves of a calendar year, he/she may be requalified by the competent authority only after successfully completing on-the-job-training as prescribed in AMC2 ARO.RAMP.115(b)(2) and any required recurrent training ~~required~~.

(e) ~~If~~ Should the inspector lose~~s~~ his/her qualification because he/she has not been engaged in performing inspections on aircraft for more than ~~36 months~~ 3 calendar years, he/she should be fully requalified by successfully completing initial theoretical, practical and on-the-job training.

(f) The competent authority should ensure that all ramp inspectors undergo recurrent training at least once every 3 years after being qualified as ramp inspectors and whenever deemed necessary by the Agency due to significant changes of the ramp inspection programme.

(31) A new GM1 ARO.RAMP.115(b)(3) on Qualification of ramp inspectors indicating additional explanations on recent experience requirements.

GM1 ARO.RAMP.115(b)(3) Qualification of ramp inspectors
RECENT EXPERIENCE REQUIREMENTS

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

3.1.3. AMC/GM to Annex III (PART-ORO)

Subpart GEN — General requirements

Section I — General

(…)

(32) Amendment of *AMC1 ORO.GEN.110(e) Operator responsibilities* to provide the correct reference to the current Continuing Airworthiness Regulation.

AMC1 ORO.GEN.110(e) Operator responsibilities
MEL TRAINING PROGRAMME

(a) The operator should develop a training programme for ground personnel dealing with the use of the MEL and detail such training in the continuing airworthiness maintenance exposition CAME and OM as appropriate. Such training programme should include:

(1) the scope, extent and use of the MEL;

(2) placarding of inoperative equipment;

(3) deferral procedures;

(4) dispatching; and

(5) any other operator's MEL related procedures.

(b) The operator should develop a training programme for crew members and detail such training in the Operations Manual. Such training programme should include:

(1) the scope, extent and use of the MEL;

(2) the operator's MEL procedures;

(3) elementary maintenance procedures in accordance with Commission Regulation (EU~~C~~) No 1321/2014 ~~2042/2003~~; and

(4) pilot-in-command/commander responsibilities.

(…)

(33) Amendment of *AMC1 ORO.GEN.130 Changes related to an AOC holder* to increase the notification period for changes of nominated persons from 10 to 20 days.

AMC1 ORO.GEN.130 Changes related to an AOC holder
APPLICATION TIME FRAMES

(a) The application for the amendment of an air operator certificate (AOC) should be submitted at least 30 days before the date of the intended changes.

(b) In the case of a planned change of a nominated person, the operator should inform the competent authority at least ~~10~~ 20 days before the date of the proposed change.

(c) Unforeseen changes should be notified at the earliest opportunity, in order to enable the competent authority to determine continued compliance with the applicable requirements and to amend, if necessary, the AOC and related terms of approval.

(34) Amendment of *GM1 ORO.GEN.130(a) Changes related to an AOC holder on GENERAL* to delete a reference to nominated postholders in point (a)(7) of this GM. Changes of nominated persons or postholders as described in ORO.GEN.210(b) do NOT constitute a change that affects the AOC or the operations specifications. Therefore, changes of nominated persons or postholders is NOT a change requiring prior approval, because it does not amend the scope of the operator's approval.

GM1 ORO.GEN.130(a) Changes related to an AOC holder
GENERAL

(a) Typical examples of changes that may affect the AOC or the operations specifications or the operator's management system, as required in ORO.GEN.200 (a)(1) and (a)(2), are listed below:

(1) the name of the operator;

(2) a change of legal entity;

(3) the operator's principal place of business;

(4) the operator's scope of activities;

(5) additional locations of the operator;

(6) the accountable manager;

(7) any of the persons referred to in ORO.GEN.210 (a) ~~and (b)~~;

(8) the operator's documentation, as required by this Annex, safety policy and procedures;

(9) the facilities.

(b) Prior approval by the competent authority is required for any changes to the operator's procedure describing how changes not requiring prior approval will be managed and notified to the competent authority.

(c) Changes requiring prior approval may only be implemented upon receipt of formal approval by the competent authority.

(…)

(35) Development of a new *AMC1 ORO.GEN.130(b) Changes related to an AOC holder* to ensure that for changes, the operator should provide the safety risk assessment to the competent authority upon request.

AMC1 ORO.GEN.130(b) Changes related to an AOC holder
MANAGEMENT OF CHANGES

(a) The organisation should manage safety risks related to any changes to the organisation in accordance with AMC1 ORO.GEN.200(a)(3) point (e).

(b) For changes requiring prior approval, the operators should provide a safety risk assessment to the competent authority upon request.

(36) Amendment of the title of *GM3 ORO.GEN.130(b) Changes related to an AOC holder* to now read GM1 ORO.GEN.130(b) since this is the first GM to ORO.GEN.130(b). In addition, the correct reference to Regulation (EU) No 1178/2011 (the Air Crew Regulation) has been provided. Finally, GM3 ORO.GEN.130(b) has been amended to delete wrong references to items not requiring prior approval:

— **evacuation procedures with a reduced number of required cabin crew during ground operations or in unforeseen circumstances;**

— **helicopter operations — airborne radar approaches (IR ref. CAT.OP.MPA.120);**

— **helicopter operations — procedures for selecting off-shore alternates (IR ref. CAT.OP.MPA.181).**

GM1~~3~~ ORO.GEN.130(b) Changes related to an AOC holder
CHANGES REQUIRING PRIOR APPROVAL

The following GM is a non-exhaustive checklist of items that require prior approval from the competent authority as specified in the applicable Implementing Rules:

(a) alternative means of compliance;

(b) procedures regarding items to be notified to the competent authority;

(c) cabin crew:

~~(1) evacuation procedures with a reduced number of required cabin crew during ground operations or in unforeseen circumstances;~~

(1~~2~~) conduct of the training, examination and checking required by Annex V (Part-CC) to Commission Regulation (EU) No 1178/2011 ~~290/2012~~[7] and issue of cabin crew attestations;

(2~~3~~) procedures for cabin crew to operate on four aircraft types;

(3~~4~~) training programmes, including syllabi;

(d) leasing agreements;

(e) non-commercial operations by AOC holders;

(f) specific approvals in accordance with Annex V (Part-SPA);

(g) dangerous goods training programmes;

(h) flight crew:

(1) alternative training and qualification programmes (ATQPs);

(2) procedures for flight crew to operate on more than one type or variant;

(3) training and checking programmes, including syllabi and use of flight simulation training devices (FSTDs);

[7] ~~Commission Regulation (EU) No 290/2012 of 30 March 2012 amending Commission Regulation (EU) No 1178/2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council.~~

(i) fuel policy;

(j) helicopter operations:

~~(1) airborne radar approaches;~~

(1 ~~2~~) over a hostile environment located outside a congested area, unless the operator holds an approval to operate according to Subpart J of Annex V (SPA.HEMS);

~~(3) procedures for selecting off-shore alternates;~~

(2 ~~4~~) to/from a public interest site;

(3 ~~5~~) without an assured safe forced landing capability;

(k) mass and balance:

(1) standard masses for load items other than standard masses for passengers and checked baggage;

(2) use of on-board mass and balance computer systems;

(l) minimum equipment list (MEL):

(1) MEL;

(2) operating other than in accordance with the MEL, but within the constraints of the master minimum equipment list (MMEL);

(3) rectification interval extension (RIE) procedures;

(m) minimum flight altitudes:

(1) the method for establishing minimum flight altitudes;

(2) descent procedures to fly below specified minimum altitudes;

(n) performance:

(1) increased bank angles at take-off (for performance class A aeroplanes);

(2) short landing operations (for performance class A and B aeroplanes);

(3) steep approach operations (for performance class A and B aeroplanes);

(o) isolated aerodrome: using an isolated aerodrome as destination aerodrome for operations with aeroplanes;

(p) approach flight technique:

(1) all approaches not flown as stabilised approaches for a particular approach to a particular runway;

(2) non-precision approaches not flown with the continuous descent final approach (CDFA) technique for each particular approach/runway combination;

(q) maximum distance from an adequate aerodrome for two-engined aeroplanes without an extended range operations with two-engined aeroplanes (ETOPS) approval:

(1) air operations with two-engined performance class A aeroplanes with a maximum operational passenger seating configuration (MOPSC) of 19 or less and a maximum take-off mass less than

45 360 kg, over a route that contains a point further than 120 minutes from an adequate aerodrome, under standard conditions in still air;

(r) aircraft categories:

(1) Applying a lower landing mass than the maximum certified landing mass for determining the indicated airspeed at threshold (VAT).

(…)

(37) *AMC1 ORO.GEN.200(a)(1);(2);(3);(5) Management system on NON-COMPLEX OPERATORS* has been amended in paragraph (c) to ensure that the safety manager is responsible for the safety-management-related processes and tasks.

AMC1 ORO.GEN.200(a)(1);(2);(3);(5) Management system
NON-COMPLEX OPERATORS — GENERAL

(a) Safety risk management may be performed using hazard checklists or similar risk management tools or processes, which are integrated into the activities of the operator.

(b) The operator should manage safety risks related to a change. The management of change should be a documented process to identify external and internal change that may have an adverse effect on safety. It should make use of the operator's existing hazard identification, risk assessment and mitigation processes.

(c) The operator should identify a person who fulfils the role of safety manager and who is responsible for coordinating the safety management ~~system~~ related processes and tasks. This person may be the accountable manager or a person with an operational role within the operator.

(d) Within the operator, responsibilities should be identified for hazard identification, risk assessment and mitigation.

(e) The safety policy should include a commitment to improve towards the highest safety standards, comply with all applicable legal requirements, meet all applicable standards, consider best practices and provide appropriate resources.

(f) The operator should, in cooperation with other stakeholders, develop, coordinate and maintain an emergency response plan (ERP) that ensures orderly and safe transition from normal to emergency operations and return to normal operations. The ERP should provide the actions to be taken by the operator or specified individuals in an emergency and reflect the size, nature and complexity of the activities performed by the operator.

(38) A new *GM1 ORO.GEN.200(a) Management system* on *INTEGRATED MANAGEMENT SYSTEM* has been inserted to provide guidance on how to integrate a Management System for an organisation with several certificates.

GM1 ORO.GEN.200(a) Management system
INTEGRATED MANAGEMENT SYSTEM

Where the organisation holds one or more additional organisation certificates within the scope of Regulation (EC) No 216/2008, the management system may be combined or integrated with that required under the additional certificate(s) held.

(39) Amendment of point (d)(2) of *GM2 ORO.GEN.200(a)(1) Management system* to clarify the wording in relation to the safety action group, which should define strategies to mitigate the identified safety risks.

GM2 ORO.GEN.200(a)(1) Management system
COMPLEX OPERATORS — SAFETY ACTION GROUP

(a) A safety action group may be established as a standing group or as an ad-hoc group to assist or act on behalf of the safety review board.

(b) More than one safety action group may be established depending on the scope of the task and specific expertise required.

(c) The safety action group should report to and take strategic direction from the safety review board and should be comprised of managers, supervisors and personnel from operational areas.

(d) The safety action group should:

(1) monitor operational safety;

(2) ~~resolve identified risks~~ define strategies to mitigate the identified safety risks;

(3) assess the impact on safety of operational changes; and

(4) ensure that safety actions are implemented within agreed timescales.

(e) The safety action group should review the effectiveness of previous safety recommendations and safety promotion.

(40) Development of a new *GM3 ORO.GEN.200(a)(1) Management system* on the *MEANING OF THE TERMS 'ACCOUNTABILITY' AND 'RESPONSIBILITY'* has been inserted to clarify the difference between the notions of 'accountability' and 'responsibility' in the English language.

GM3 ORO.GEN.200(a)(1) Management system
MEANING OF THE TERMS 'ACCOUNTABILITY' AND 'RESPONSIBILITY'

In the English language, the notion of accountability is different from the notion of responsibility. Whereas 'accountability' refers to an obligation which cannot be delegated, 'responsibility' refers to an obligation that can be delegated.

(…)

(41) *AMC1 ORO.GEN.200(a)(3) Management system on COMPLEX OPERATORS — SAFETY RISK MANAGEMENT* has been amended in paragraph (g) to ensure description of emergency training/drill as appropriate.

AMC1 ORO.GEN.200(a)(3) Management system
COMPLEX OPERATORS — SAFETY RISK MANAGEMENT

(a) Hazard identification processes

(1) Reactive and proactive schemes for hazard identification should be the formal means of collecting, recording, analysing, acting on and generating feedback about hazards and the associated risks that affect the safety of the operational activities of the operator.

(2) All reporting systems, including confidential reporting schemes, should include an effective feedback process.

(b) Risk assessment and mitigation processes

(1) A formal risk management process should be developed and maintained that ensures analysis (in terms of likelihood and severity of occurrence), assessment (in terms of tolerability) and control (in terms of mitigation) of risks to an acceptable level.

(2) The levels of management who have the authority to make decisions regarding the tolerability of safety risks, in accordance with (b)(1), should be specified.

(c) Internal safety investigation

(1) The scope of internal safety investigations should extend beyond the scope of occurrences required to be reported to the competent authority.

(d) Safety performance monitoring and measurement

(1) Safety performance monitoring and measurement should be the process by which the safety performance of the operator is verified in comparison to the safety policy and objectives.

(2) This process should include:

(i) safety reporting, addressing also the status of compliance with the applicable requirements;

(ii) safety studies, that is, rather large analyses encompassing broad safety concerns;

(iii) safety reviews including trends reviews, which would be conducted during introduction and deployment of new technologies, change or implementation of procedures, or in situations of structural change in operations;

(iv) safety audits focussing on the integrity of the operator's management system, and periodically assessing the status of safety risk controls; and

(v) safety surveys, examining particular elements or procedures of a specific operation, such as problem areas or bottlenecks in daily operations, perceptions and opinions of operational personnel and areas of dissent or confusion.

(e) The management of change

The operator should manage safety risks related to a change. The management of change should be a documented process to identify external and internal change that may have an adverse effect on safety. It should make use of the operator's existing hazard identification, risk assessment and mitigation processes.

(f) Continuous improvement

The operator should continuously seek to improve its safety performance. Continuous improvement should be achieved through:

(1) proactive and reactive evaluations of facilities, equipment, documentation and procedures through safety audits and surveys;

(2) proactive evaluation of individuals' performance to verify the fulfilment of their safety responsibilities; and

(3) reactive evaluations in order to verify the effectiveness of the system for control and mitigation of risk.

(g) The emergency response plan (ERP)

(1) An ERP should be established that provides the actions to be taken by the operator or specified individuals in an emergency. The ERP should reflect the size, nature and complexity of the activities performed by the operator.

(2) The ERP should ensure:

(i) an orderly and safe transition from normal to emergency operations;

(ii) safe continuation of operations or return to normal operations as soon as practicable; and

(iii) coordination with the emergency response plans of other organisations, where appropriate.

(iv) description of emergency training/drill as appropriate

(42) A new *AMC2 ORO.GEN.200(a)(3) Management system* on COMPLEX ORGANISATIONS — SAFETY RISK MANAGEMENT — INTERFACES BETWEEN ORGANISATIONS was inserted to provide extensive guidance on setting-up effective safety risk management and managing the interfaces between organisations.

AMC2 ORO.GEN.200(a)(3) Management system
COMPLEX ORGANISATIONS — SAFETY RISK MANAGEMENT — INTERFACES BETWEEN ORGANISATIONS

(a) Safety risk management processes should specifically address the planned implementation of, or participation in, any complex multi-tier contracting/subcontracting arrangements between an operator, one or more continuing airworthiness management organisations and different maintenance organisations or their subcontractors.

(b) Hazard identification and risk assessment should start with an identification of all parties involved in the arrangement, including independent experts and non-approved organisations. It should extend to the overall control structure, assessing in particular the following elements across all subcontract levels and all parties within such arrangements:

(1) coordination and interfaces between the different parties;

(2) applicable procedures;

(3) communication between all parties involved, including reporting and feedback channels;

(4) task allocation responsibilities and authorities; and

(5) qualifications and competency of key personnel with reference to M.A.706.

(c) Safety risk management should focus on the following aspects:

(1) clear assignment of accountability and allocation of responsibilities;

(2) only one party is responsible for a specific aspect of the arrangement — no overlapping or conflicting responsibilities, in order to eliminate coordination errors;

(3) existence of clear and un-bureaucratic reporting lines, both for occurrence reporting and progress reporting;

(4) possibility for front-line staff in any of the parties to directly notify the operator of any hazard suggesting an obvious unacceptable safety risk as a result of the potential consequences of this hazard.

(d) Regular communication between all parties to discuss work progress, risk mitigation actions, changes to the arrangement, as well as any other significant issues should be ensured.

(…)

(43) Amendment of *GM1 ORO.GEN.200(a)(3) Management system* to now be an AMC, because internal reporting constitutes an important element of the organisation's management system. The subtitle of the new AMC has been changed to read INTERNAL SAFETY REPORTING SCHEME, to ensure that reporting should include information on hazards and not only information on safety events.

AMC2~~GM1~~ ORO.GEN.200(a)(3) Management system
INTERNAL SAFETY ~~OCCURRENCE~~ REPORTING SCHEME

(a) The overall purpose of the internal safety reporting scheme is to use reported information to improve the level of safety performance of the operator and not to attribute blame.

(b) The objectives of the scheme are to:

(1) enable an assessment to be made of the safety implications of each relevant incident and accident, including previous similar occurrences, so that any necessary action can be initiated; and

(2) ensure that knowledge of relevant incidents and accidents is disseminated, so that other persons and operators may learn from them.

(c) The scheme is an essential part of the overall monitoring function and it is complementary to the normal day-to-day procedures and 'control' systems and is not intended to duplicate or supersede any of them. The scheme is a tool to identify those instances where routine procedures have failed.

(d) All occurrence reports judged reportable by the person submitting the report should be retained as the significance of such reports may only become obvious at a later date.

(44) Development of a new *GM1 ORO.GEN.200(a)(3) Management system* to provide extensive guidance on setting-up effective safety risk management.

GM1 ORO.GEN.200(a)(3) Management system
SAFETY RISK MANAGEMENT

(a) Purpose

(1) This GM provides one method to help organisations with little or no previous experience in safety risk assessment to familiarise themselves with the concept, and to serve as a reference document for the definition of the related safety management procedures. It should be adapted to the nature and complexity of the organisation. As an organisation gathers experience, the method may be further developed or adapted to suit individual needs.

(2) This GM can be used for different purposes, such as but not limited to:

(i) the assessment of an organisation's existing management system and processes, and of changes thereto;

(iii) the development of alternative means of compliance where risk assessment will support the demonstration that an equivalent safety level can be met; and

(v) the selection of suppliers and contracting to organisations not themselves certified to perform the tasks

(b) Scope

This GM only addresses the assessment of aviation safety risks. This does not mean that financial, legal or economic aspects do not need to be considered in the risk assessment process. The organisation should be able to identify all significant influences that may impact on aviation safety, in particular when determining contributing factors for the analysis of consequences of a hazard, and deciding on risk mitigation measures.

(c) Elements that will influence the safety risk assessment

(1) Communication and consultation

Good communication within the organisation and, where relevant, with external parties (such as customers, partners or contractors) should help ensure access to all relevant information, and assist in ensuring support from all those that may be affected by the risk assessment conclusions and recommendations. Communication and consultation should take place at all relevant stages of the process.

(2) Regulatory requirements

Regulations are generally developed to control common safety risks that stem from specific or general hazards through prescriptive, technical standards in the areas of technology, training or task performance. Such hazards controlled by regulations do not need to be further addressed in the organisation's risk assessment unless evidence exists that the regulatory treatment is not sufficient. If the regulation is not specific, has several options or directly calls for a risk assessment, the hazard should obviously be assessed, and the appropriate treatment implemented.

(3) Organisation's resources

Available resources are relevant with respect both to capacity and competence:

(i) for the risk assessment process itself (see below); and

(ii) for the activity being assessed (aircraft, equipment, personnel, finances, etc.).

The organisation's current resources in terms of equipment and personnel are normally considered in the risk assessment. One outcome of a risk assessment may be that the operator does not possess the right equipment or personnel for the activity.

(4) Risk acceptance criteria

Risk acceptance criteria should be established based on the organisation's safety policy and objectives. Furthermore, management responsibility for the acceptability of safety risks should be defined as part of the management system. Risk acceptance criteria may be fixed targets or refer to accepted methods, standards and norms, such as regulations, certification specifications, AMC or

GM. The maximum acceptable risk is in most cases directly or indirectly influenced or determined by regulations which either specify a target or an acceptable means of how to achieve the minimum required safety level.

Safety risk acceptance criteria should, at least, address the following, as applicable to the organisation's scope of work:

(i) third parties;

(ii) maintenance personnel;

(iii) the natural environment; and

(v) corporate well-being.

As Low As Reasonably Practicable (ALARP) is a commonly used risk acceptance criterion that is not exclusively based on fixed risk level targets, but on a systematic and documented process to reduce safety risk below the maximum allowed by regulations or standards, or when the risk is otherwise considered unacceptable.

ALARP means that the safety risk is managed to a level as low as reasonably practicable whilst at all times staying below the maximum allowed risk. It also implies that the risk level should be monitored, and ALARP considerations applied to any new identified risk mitigation measures to contribute to a further reduction in the risk level. An increase in the risk level at any time should be considered unacceptable even if the safety risk is below the maximum allowed.

Consideration should be given both to the technical feasibility of further reducing the safety risk and the cost. Acceptance criteria with regard to the costs of implementing mitigation measures, and the expected benefits are to be defined by senior management. Showing that the safety risk is ALARP means that any further risk reduction is either impracticable or grossly outweighed by the cost. It should, however, be borne in mind that when an organisation 'accepts' a safety risk, this does not mean that the safety risk has been completely eliminated. In the case where a residual safety risk remains, the organisation has accepted that this residual safety risk is sufficiently low that it is outweighed by the benefits.

Related responsibilities and decisions should be documented to justify why no further risk reduction measures have been implemented, and that the risk finally retained is still acceptable.

(d) Risk assessment process steps

(1) Planning

Proper planning should be considered in the case of extensive risk assessments, in particular when assessing an organisation's existing management system and processes, and changes thereto. In such cases, the following may be considered.

The safety risk assessment should be initiated in time for the results to be available before the decisions regarding the activity have to be made. The person responsible for the risk assessment should be made aware of the background, objectives, conditions and the context for the assessment, and of the risk acceptance criteria in order to be able to determine the resources required.

The following should be documented:

(i) background;

(ii) purpose; and, if relevant,

(iii) needs and expectations of third parties with whom the organisation interacts.

(2) System description

The scope of what should be analysed should be described in terms of system and processes. The system includes the organisational structures, processes and procedures, including people, equipment and facilities. To enable effective safety risk assessment, the system description should explain the interfaces between the different processes and components, and the nature of the interactions between them.

The system description should make use of the elements already described in the operator management system documentation and related procedures.

(3) Working group

The person responsible for performing the risk assessment should determine the need for a dedicated working group, or existing safety action group comprised of suitable subject matter experts and personnel that will be involved in the activity.

For complex issues, the person(s) involved in the risk assessment should have:

(i) knowledge of and experience in the use of relevant risk analysis methods;

(ii) knowledge of the scope of work and associated hazards;

(iii) knowledge of the relationship between the activity and relevant internal and external factors;

(iv) knowledge of human factors principles; and

(v) familiarity with all relevant disciplines associated with the activity.

It should be determined to what extent, and how third parties with which the organisation interacts (customers, partners, and suppliers) and other business areas of the organisation should be involved. The safety risk exposure of those interactions should be particularly considered.

(4) Selection of methods and data basis

The objective is to perform a basic analysis to determine, record, assess, and mitigate safety risk. This method may be complemented by other methods when the analysis in hand dictates so. Methods to determine causes and likelihood (e.g. failure mode, effects and criticality analysis (FMECA), influence diagrams) as well as consequences (e.g. event tree analysis, bow-tie diagrams) of hazards may be useful.

Data sources should be assessed for suitability in terms of relevance, currency, representative amount of data and accuracy.

The organisation should ensure that its own experience is available and considered. Data containing relevant safety information from investigation of internal occurrences, accident and incident reports, hazards, near-misses and errors reported internally, if available, would support accurate analysis. Whenever possible, it should be supported with similar data exchanged with other organisations. Analysis of relevant experience data should provide input to a risk assessment.

A risk assessment can often build upon parts of existing risk assessments. For example, for an assessment of the extension of the scope of work to a new type of aircraft, the organisation might already have a risk assessment for similar aircraft types. What would be required for a complete new risk assessment is the assessment of new features.

(5) Hazard identification

Through the hazard identification, a list of all hazards relevant to the activity and the causes that could instigate them should be established. Consequences will be described based on the hazard information, specifying the place, time, extent, nature, etc. of the event as required.

It must be noted that the absence of past incidents/accidents does not mean absence of risk. It is also important to group similar events to find the underlying hazards.

Potential aids to the identification of possible consequences are the following:

(i) other risk assessments;

(ii) occurrence and accident reports;

(iii) audits/non-compliance reports;

(iv) internal reviews;

(vi) brainstorming; and

(vii) threat assessments.

(6) Analysis of likelihood

Each possible consequence of a hazard should be analysed to establish causes, contributing factors and existing barriers. Causes, contributing factors, and existing barriers should then be analysed to determine likelihood of occurrence.

The causal analysis should normally be of a descriptive (qualitative) nature but where relevant calculations (quantitative) exist, they should be applied. A qualitative analysis describes the hazards and the chains of events that could lead to the consequence. Quantitative analysis calculates the probability of the consequence.

In the causal analysis of each consequence, human and organisational factors should always be considered for their possible contributing effects. It is normally necessary to consider direct causes (‘unsafe acts’), workplace factors, and organisational factors (‘error provoking or latent conditions’).

The effects of existing defences and barriers that reduce the likelihood of events occurring should be considered and documented, taking into account the following:

(i) certification requirements;

(ii) maintenance procedures;

(iii) technical measures/equipment;

(iv) training; and

(vi) other human and organisational factors.

Likelihood may be expressed using terminology such as 'very low', 'low', 'medium', 'high' and 'very high'. In such cases, the terms should be explained to indicate their meaning. The meaning of each term could be expressed in words and/or numbers/ranges.

Causal analysis should be performed to the level of detail necessary to establish relevant probabilities.

Below are examples of methods that may be used for causal and likelihood analysis:

(i) Failure Mode, Effects and Criticality Analysis (FMECA);

(ii) influence diagrams;

(iii) bow-tie diagrams; and

(iv) brainstorming.

When using such methods, care should be taken not to oversimplify causality.

(7) Analysis of severity

The severity of consequence resulting from the hazards identified should be analysed. The analysis should consider both short-term and long-term consequences.

Consequences could be grouped as loss or damage of life/health, environment, material values/assets, functions and reputation.

The determination of severity should normally be of a descriptive (qualitative) nature. A qualitative analysis describes the chains of events that could follow from the hazard, and its possible consequences. Quantitative analysis could calculate the extent of damage that could be caused.

The effects of existing recovery controls and barriers that influence the consequence itself or the consequence chain should be considered, as applicable:

(i) certification requirements (e.g. fire protection);

(ii) technical measures/equipment;

(iii) training;

(iv) human and organisational factors; and

(vi) emergency preparedness.

Severity may be expressed using terminology like 'negligible', 'minor', 'major', 'hazardous', and 'catastrophic'. In such cases, the terms should be further explained to indicate their meaning.

(8) Risk assessment

Risk should be classified as a combination of the likelihood of occurrence and the associated severity. If a hazard has more than one consequence, the risk may be expressed as a combination of the likelihood and severity for each of the consequences.

Depending on the analysis method and the risk acceptance criteria, the description could be qualitative and/or quantitative. The level of detail will depend on the level of detail in the likelihood and severity analysis.

Uncertainties in the risk assessment should be identified and documented. If the analysis is based on critical assumptions or other conditions that could affect the assessment, they should be identified and documented.

One method that may be used for risk classification is a risk assessment matrix combining likelihood and severity.

An example of a risk assessment matrix is included below:

Risk likelihood	Risk severity				
	Catastrophic A	Hazardous B	Major C	Minor D	Negligible E
frequent 5	5A	5B	5C	5D	5E
occasional 4	4A	4B	4C	4D	4E
remote 3	3A	3B	3C	3D	3E
improbable 2	2A	2B	2C	2D	2E
extremely improbable 1	1A	1B	1C	1D	1E

(9) Risk evaluation

The results of the risk analysis may be categorised using a risk tolerability matrix using appropriate risk acceptance criteria.

Suggested criteria	Assessment risk index	Suggested criteria
intolerable	5A, 5B, 5C, 4A, 4B, 3A	Unacceptable under the existing circumstances
tolerable	5D, 5E, 4C, 4D, 4E, 3B, 3C, 3D, 2A, 2B, 2C, 1A	Acceptable based on risk mitigation requiring a management decision.
acceptable	3E, 2D, 2E, 1B, 1C, 1D, 1E	Acceptable

(10) Identification of risk mitigation actions

The risk evaluation forms the basis for deciding on mitigating actions, and assessing the effects of these actions.

Risk mitigation actions should be identified for consequences with an unacceptable risk, and for consequences where further risk reduction actions are feasible and reasonable. Identification of possible mitigation should be based on the risk assessment and tolerability evaluation considering in particular any uncertainties identified and critical assumptions made. Actions that could eliminate the consequence of a hazard, likelihood-reducing actions and severity-reducing actions should be identified. These actions could be related to human factors (e.g. training and competence), equipment, or organisational factors (e.g. procedures).

Risk mitigation actions should be implemented based on the following priorities with respect to possible outcomes:

(i) elimination of the consequences of the hazard;

(ii) reduction of the likelihood of occurrence; and

(iii) reduction of the severity.

The following are examples of risk controls:

(i) passive technical controls (e.g. system redundancy);

(ii) active technical controls (e.g. automatic fire-extinguishing system); and

(iii) controls by procedure (e.g. duplicate inspections).

The risk mitigating effect of the controls should be assessed with respect to:

(i) functionality (does the measure influence the ability to perform the activity?);

(ii) robustness (will the measure be effective under varying conditions and over time?); and

(iii) possible other effects such as introduction of new risks.

When identifying risk mitigation actions, the organisation needs to consider any new risks that may arise from the implementation of such actions (sometimes called 'substitution risks'). For example, if the action consists of acquiring different equipment or employing and/or training personnel, the organisation needs to assess the risks related to the delivery and certification/approval of new equipment, and of the effects of employing or training personnel to accommodate, for example, the more advanced and complex technology.

(11) Conclusions and documentation

The risk assessment should contain conclusions. The conclusions should be unambiguous, precise and robust in order to enable decision makers to accept the risk assessment.

The risk assessment should be documented. Any references to other documents should be specified. Any need for further work should be pointed out. The risk assessment documentation should include, or reference, as required, descriptions of the following:

(i) the purpose of the risk assessment;

(ii) the system/activity/issue analysed;

(iii) involvement of personnel and other parties with whom the organisation interacts;

(iv) context/framework for the activity/issue;

(v) the assessment of who is affected by the activity/issue, and how;

(vi) data used;

(vii) the analysis method;

(viii) the hazard(s);

(ix) the contributing factors and consequences;

(x) uncertainties and assumptions made for the assessment;

(xi) the likelihood and severity;

(xii) the risk mitigation measures;

(xiii) the risk evaluation; and

(xiv) the conclusions.

It is recommended that organisations establish and maintain a register of significant hazards, and the corresponding risk assessments and mitigations. This 'risk register' should be a valuable source of information on the various hazards that are inherent in a particular activity, and how these were addressed in the past, and are currently treated in existing activities. Any future risk assessment may then draw upon the information already available.

The risk register should reflect that different types of activities may be exposed to different hazards. It may also reflect that different mitigation measures could be required and that different risk levels may be acceptable.

(f) Continued validity

The validity of the conclusions of a risk assessment exercise may be affected by:

(1) significant changes in the preconditions and context;

(2) new knowledge of risks involved (experience from accidents and occurrences, reporting of safety concerns, research, better risk analysis methods, internal inspections, audits and reviews, and hazard reporting);

(3) significant changes in the underlying data used for the assessment;

(4) significant organisational changes that could affect the assessment because of their effect on risk mitigation; and

(5) several smaller changes that together might constitute a significant change.

Depending on the type of activity affected, and the nature and extent of the changes, it may be necessary to reassess the safety risk.

(…)

(45) Amendment of sub-paragraph (a) of *GM1 ORO.GEN.200(a)(5) Management system* to delete the reference to training manuals, which are already included in Part-D of the Operations Manual (OM).

GM1 ORO.GEN.200(a)(5) Management system
MANAGEMENT SYSTEM DOCUMENTATION — GENERAL

(a) It is not required to duplicate information in several manuals. The information may be contained in any of the operator manuals (e.g. operations manual~~, training manual~~), which may also be combined.

(b) The operator may also choose to document some of the information required to be documented in separate documents (e.g. procedures). In this case, it should ensure that manuals contain adequate references to any document kept separately. Any such documents are then to be considered an integral part of the operator's management system documentation.

(…)

(46) Development of a new *GM5 ORO.GEN.200(a)(6)* on the organisational review programme as part of the management system for non-complex organisations

GM5 ORO.GEN.200(a)(6) Management system
NON-COMPLEX ORGANISATIONS — ORGANISATIONAL REVIEW PROGRAMME

(a) The organisational review programme may consist of:

(1) checklist(s) covering all the items necessary to be addressed in order to ensure that the organisation ensures effective compliance with the applicable requirements. These should address all the procedures described in the management system documentation and training manual; and

(2) a schedule for the accomplishment of the different checklist items, with each item being checked at least once within any 12-month period. The organisation may choose to conduct one full review annually or to conduct several partial reviews.

(b) Performance of organisational reviews

Each review item may be addressed using an appropriate combination of:

(1) review of records and documentation;

(2) interview of the personnel involved; and

(3) feedback provided by contractors and customers.

(47) Development of a new *GM6 ORO.GEN.200(a)(6)* on the organisational review checklist as part of the management system for non-complex organisations.

GM6 ORO.GEN.200(a)(6) Management system
NON-COMPLEX ORGANISATIONS — ORGANISATIONAL REVIEW CHECKLIST

The following is a typical checklist for an organisational review, to be adapted as necessary to cover all relevant procedures described in the management system documentation and operations manual:

ORGANISATIONAL REVIEW CHECKLIST Year:			
Subject	Date checked	Checked by	Comments/Non-compliance Report No.
Declaration and Specific Approvals (SPA), Change management			
Operations have been performed in accordance with the Declaration and any Specific Approval (SPA)			
Changes have been properly managed in accordance with the defined process			
Flight Operations			
Aircraft checklists checked for accuracy and validity			
Flight plans checked for proper and correct information			
Ground Handling			
Instructions regarding fuelling and de-icing issued, if applicable			
Instructions regarding dangerous goods issued and known by all relevant personnel, if applicable			
Mass & Balance			
Load sheets checked for proper and correct information, if applicable			
Pilot Training			
Training records updated and accurate			
Pilot licences current, correct ratings and valid medical certificates			
Pilots received recurrent training			
Training facilities & Instructors approved			
Pilots received pre-flight inspection training, as applicable			
Documentation related to operations			
Operations Manual (OM) checked for correct amendment status			
Crew flight and duty time record updated, if applicable			

Flight documents record checked and updated			
Personnel			
Current accountable manager and other nominated persons correctly identified			
Organisation chart accurately indicating lines of responsibility and accountability throughout the organisation			
New personnel (or personnel with new functions): all qualifications assessed			
Staff involved in any safety-management-related processes and tasks: proper training provided			
Training provided to staff, as necessary, to cover changes in regulations, in competent authority publications, in the organisation, its management system documentation and in associated procedures, etc.			
Contracted activities (if applicable)			
New providers: assessment performed prior to the establishment of any contract			
Existing providers approved for such activities: authorisation and approval status of the contracted organisation checked			
Existing providers not approved for such activities: checked that the service provided conforms to the applicable requirements of this Annex			
Training and communication on safety			
Awareness of safety management policies, processes and tasks checked for all personnel			
Availability of safety-related documentation and publications checked			
Safety-critical information derived from internal safety or occurrence reporting and hazard identification: check timely communication to all staff concerned			
Management system documentation			
Documentation: adequate and updated			

Check that staff can easily access such documentation when needed			
Record-keeping			
Check that records cover all the activities and management system processes			
Check compliance with minimum record-keeping periods (random checks)			
Emergency Response Plan (ERP)			
ERP: up to date and readily available			
ERP: check awareness of staff (random checks)			
Internal safety or occurrence reporting procedures			
Number of reports received since the last review checked			
Internal reporting and external occurrence reporting checked for compliance with the reporting procedures			
Check that safety or occurrence reports are analysed			
Check that feedback is provided to reporters			

(48) Amendment of AMC1 ORO.GEN.200(b) Management system to include a new sub-paragraph (c) to ensure that all non-commercial operators operating a maximum of two complex-motor-powered aircraft of the same type are to be considered as non-complex organisation by default.

AMC1 ORO.GEN.200(b) Management system
SIZE, NATURE AND COMPLEXITY OF THE ACTIVITY

(a) An operator should be considered as complex when it has a workforce of more than 20 full time equivalents (FTEs) involved in the activity subject to Regulation (EC) No 216/2008[8] and its Implementing Rules.

(b) Operators with up to 20 FTEs involved in the activity subject to Regulation (EC) No 216/2008 and its Implementing Rules may also be considered complex based on an assessment of the following factors:

(1) in terms of complexity, the extent and scope of contracted activities subject to the approval;

(2) in terms of risk criteria, whether any of the following are present:

[8] Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC. *OJ L* 79, 19.3.2008, p. 1.

(i) operations requiring the following specific approvals: performance-based navigation (PBN), low visibility operation (LVO), extended range operations with two-engined aeroplanes (ETOPS), helicopter hoist operation (HHO), helicopter emergency medical service (HEMS), night vision imaging system (NVIS) and dangerous goods (DG);

(ii) commercial specialised operations requiring an authorisation;

(iii) different types of aircraft used;

(iv) the environment (offshore, mountainous area, etc.).

(c) Notwithstanding (a) and (b), non-commercial operators operating a maximum of two complex-motor-powered aircraft of the same type should be considered as a non-complex organisation by default.

(…)

(49) Development of a new *AMC2 ORO.GEN.205 Contracted activities* establishing conditions for the acceptance of audits from third-party audit providers, thus enabling the operator to pool audits of contracted organisations. The elements specifying the conditions under which a third-party provider can be used for those audits have been copied from the existing AMC related to pooling of audits of code-share agreements. This new AMC responds to a safety recommendation on pooled audits.

AMC2 ORO.GEN.205 Contracted activities
THIRD-PARTY PROVIDERS

(a) In order to enable operators to pool audits of contracted organisations, the initial audit and/or the continuous monitoring of those contracted organisations may be performed by a third-party provider on behalf of the operator when it is demonstrated that:

(1) a documented arrangement has been established with the third-party provider;

(2) the audit standards applied by the third-party provider addresses the scope of this Regulation in sufficient detail;

(3) the third-party provider uses an evaluation system, designed to assess the operational, management and control systems of the contracted organisation;

(4) the independence of the third-party provider, its evaluation system as well as the impartiality of the auditors is ensured;

(5) the auditors are appropriately qualified and have sufficient knowledge, experience and training, including on-the-job training, to perform their allocated tasks;

(6) audits are performed on-site;

(7) access to the relevant data and facilities is granted to the level of detail necessary to verify compliance with the applicable requirements;

(8) access to the full audit report is granted to the EU operator;

(9) procedures have been established for monitoring continued compliance of the contracted organisation with the applicable requirements; and

(10) procedures have been established to notify the contracted organisation of any non-compliance with the applicable requirements, the corrective actions to be taken, the follow up of these corrective actions and closure of findings.

(b) The use of a third-party provider for the initial audit or the monitoring of continuous compliance of the contracted organisation does not exempt the EU operator from its responsibility under the applicable requirements.

(c) The EU operator should maintain a list of the contracted organisations monitored by the third-party provider. This list and the full audit report prepared by the third-party provider should be made available to the competent authority upon request.

(…)

(50) Development of a new *AMC2 ORO.GEN.210(a) Personnel requirements* on INFORMATION ON THE ACCOUNTABLE MANAGER to mirror the existing Form 4 from the continuing airworthiness requirements in the Air OPS rules on the approval of the accountable manager without suggesting that an EASA Form 4 should be provided.

AMC1 ORO.AOC.100(b) Application for an air operator certificate
INFORMATION ON THE ACCOUNTABLE MANAGER

As part of granting the air operator certificate (AOC), the CAT operator should provide the competent authority with detailed information regarding the accountable manager in accordance with EASA Form 4.

[Competent Authority]

1. Details of Management Personnel required to be accepted as specified in Part-

2. Title/First Name/Surname:

To complete a text box, right click the box, choose 'Text Box Object>Edit' then type your response.

3. Position within the organisation:

4. Qualifications relevant to the item (3) position:

Use Shift+Return to start a new line in the text box.

5. Work experience relevant to the item (3) position:

6. Organisation:

7. Approval Number relevant to item (1):

Signature: **Date:**

Competent Authority use only

Name and signature of authorised competent authority staff member accepting this person:

Signature: **Date:**

Name: **Office:**

(…)

(51) Development of a new *GM1 ORO.GEN.210(a) Personnel requirements* on the FUNCTION OF THE ACCOUNTABLE MANAGER to explain the position and function of the accountable manager within the organisation.

GM1 ORO.GEN.210 Personnel requirements
FUNCTION OF THE ACCOUNTABLE MANAGER

(a) 'Accountable manager' is normally intended to mean the chief executive officer of the operator, who by virtue of his/her position has overall (including in particular financial) responsibility for running the organisation.

(b) The accountable manager may be the accountable manager for more than one organisation and is not required to be knowledgeable on technical matters.

(c) When the accountable manager is not the chief executive officer, the competent authority will need to be assured that such an accountable manager has direct access to the chief executive officer and has a sufficient air operations funding allocation.

(…)

Subpart AOC — Air operator certification

(…)

(52) Development of a new *GM1 ORO.AOC.100(c) Application for an AOC* to explain the meaning of certificate of airworthiness in relation to the applicable requirements.

GM1 ORO.AOC.100(c) Application for an AOC
MEANING OF CERTIFICATE OF AIRWORTHINESS

A certificate of airworthiness means either a certificate of airworthiness issued in accordance with Part-21.B.326, or a restricted certificate of airworthiness issued in accordance with Part-21.B.327.

(53) Amendment of *AMC1 ORO.AOC.110 Leasing agreement* to cater for the scenario that some information regarding the leasing partner might not be available to the operator at the time of requesting the approval

AMC1 ORO.AOC.110 Leasing agreement
GENERAL

(a) The operator intending to lease-in an aircraft should provide the competent authority with the following information:

(~~a~~1) the aircraft type, registration markings and serial number, once available;

(~~b~~2) the name and address of the registered owner;

(~~c~~3) a copy of the valid certificate of airworthiness;

(~~d~~4) a copy of the lease agreement or description of the lease provisions, except financial arrangements; and

(~~e~~5) duration of the lease;.

(b) (~~f~~) iIn case of wet lease-in, a copy of the AOC of the third-country operator and the areas of operation.

(c) The information mentioned above should be accompanied by a statement signed by the lessee that the parties to the lease agreement fully understand their respective responsibilities under the applicable regulations.

(54) Amendment of *AMC1 ORO.AOC.110(c) Leasing agreement* to clarify that this AMC only applies for WET LEASE-IN WITH A THIRD-COUNTRY OPERATOR and introduction of a new point (f) on retroactive airworthiness requirements contained in Part-26.

AMC1 ORO.AOC.110(c) Leasing agreement
WET LEASE-IN WITH A THIRD-COUNTRY OPERATOR

If the operator is not intending to apply EU safety requirements for air operations and continuing airworthiness when wet leasing-in an aircraft registered in a third country, it should demonstrate to the competent authority that the standards complied with are equivalent to the following requirements:

(a) Annex IV (Part-CAT);

(b) Part-ORO:

(1) ORO.GEN.110 and Section 2 of Subpart GEN;

(2) ORO.MLR, excluding ORO.MLR.105;

(3) ORO.FC;

(4) ORO.CC, excluding ORO.CC.200 and ORO.CC.210(a);

(5) ORO.TC;

(6) ORO.FTL, including related CS-FTL; and

(7) ORO.SEC;

(c) Annex V (Part-SPA), if applicable;

(d) for continuing airworthiness management of the third country operator, Part-M[9] Subpart-B, Subpart-C and Subpart-G, excluding M.A.707, and M.A.710;

(e) for the maintenance organisation used by the third country operator during the lease period: Part-145[10]; ~~and~~

(f) retroactive airworthiness requirements in accordance with Part-26; and

(g~~f~~) the operator should provide the competent authority with a full description of the flight time limitation scheme(s), operating procedures and safety assessment demonstrating compliance with the safety objectives set out in points (b) (1)-(6).

(…)

(55) Development of a new *AMC3 ORO.AOC.110(g) Leasing agreement* on LONG-TERM WET LEASE-IN AGREEMENT BETWEEN OPERATORS REGISTERED IN AN EU MEMBER STATE ensuring that the lessee provides the competent authority with a statement on how it intends to comply with ORO.GEN.205 on contracted activities during the long-term wet lease-in agreement.

AMC3 ORO.AOC.110(g) Leasing agreement
LONG-TERM WET LEASE-IN AGREEMENT BETWEEN OPERATORS REGISTERED IN AN EU MEMBER STATE

In case of a long-term wet lease-in agreement of more than 7 months between operators having their principal place of business in an EU Member State, the lessee should provide the competent authority with a statement explaining how it intends to comply with ORO.GEN.205 on contracted activities during the long-term wet lease-in agreement.

9 Commission Regulation (EU~~C~~) No 1321/2014 ~~2042/2003~~.

10 Commission Regulation (EU~~C~~) No 1321/2014 ~~2042/2003~~

(56) Amendment of *GM1 ORO.AOC.110(c) Leasing agreement* to clarify that this AMC only applies to SHORT-TERM WET LEASE-IN WITH A THIRD-COUNTRY OPERATOR.

GM1 ORO.AOC.110(c) Leasing agreement
SHORT-TERM WET LEASE-IN WITH A THIRD-COUNTRY OPERATOR

In anticipation of an operational need the operator may enter into a framework agreement with more than one third-country operator provided that these operators comply with ORO.AOC.110 (c). These third-country operators should be placed in a list maintained by the lessee.

(…)

(57) Amendment of *AMC2 ORO.AOC.115(b) Code-share agreements*, since the conditions applying to the acceptance of audits of third-party providers have now been moved to a new *AMC2 ORO.GEN.205 Contracted activities*. This new AMC to ORO.GEN.205 will apply not only to code-share agreements, but also to other contracted activities and will enable operators to pool audits of third parties.

AMC2 ORO.AOC.115(b) Code-share agreements
THIRD-PARTY PROVIDERS

(a) The initial audit and/or the continuous monitoring may be performed by a third-party provider on behalf of the EU operator in accordance with AMC2 ORO.GEN.205 on contracted activities. ~~when it is demonstrated that:~~

~~(1) a documented arrangement has been established with the third party provider;~~

~~(2) the audit standards applied by the third party provider addresses the scope of the regulation in sufficient detail;~~

~~(3) the third party provider uses an evaluation system, designed to assess the operational, management and control systems of the third country code-share operator;~~

~~(4) independence of the third party provider, its evaluation system as well as the impartiality of the auditors is ensured;~~

~~(5) the auditors are appropriately qualified and have sufficient knowledge, experience and training, including on-the-job training, to perform their allocated tasks;~~

~~(6) audits are performed on-site;~~

~~(7) access to the relevant data and facilities is granted to the level of detail necessary to verify compliance with the applicable requirements;~~

~~(8) access to the full audit report is granted to the EU operator;~~

~~(9) procedures have been established for monitoring continued compliance of the third country code-share operator with the applicable requirements, taking into account the timelines in AMC1 ORO.AOC.115(b)(b) and (c);~~

~~(10) procedures have been established to notify the third country code-share operator of any non-compliance with the applicable requirements, the corrective actions to be taken, the follow up of these corrective actions and closure of findings.~~

(b) The use of a third-party provider for the initial audit or the monitoring of continuous compliance of the third-country code-share operator does not exempt the EU operator from its responsibility under ORO.AOC.115.

~~(c) The EU operator should maintain a list of the third country code-share operators monitored by the third party provider. This list and the full audit report prepared by the third party provider should be made available to the competent authority upon request.~~

(…)

SUBPART MLR — MANUALS, LOGS AND RECORDS

(…)

(58) Amendment of AMC3 ORO.MLR.100 Operations manual — general to include a new point 7.3 on Fatigue Risk Management (FRM) under Chapter 7 on Flight Time Limitations (FTL).

AMC3 ORO.MLR.100 Operations manual — general
CONTENTS — CAT OPERATIONS

(a) The OM should contain at least the following information, where applicable, as relevant for the area and type of operation:

A GENERAL/BASIC

0 ADMINISTRATION AND CONTROL OF OPERATIONS MANUAL

0.1 Introduction:

(a) A statement that the manual complies with all applicable regulations and with the terms and conditions of the applicable AOC.

(b) A statement that the manual contains operational instructions that are to be complied with by the relevant personnel.

(c) A list and brief description of the various parts, their contents, applicability and use.

(d) Explanations and definitions of terms and words needed for the use of the manual.

0.2 System of amendment and revision:

(a) Details of the person(s) responsible for the issuance and insertion of amendments and revisions.

(b) A record of amendments and revisions with insertion dates and effective dates.

(c) A statement that handwritten amendments and revisions are not permitted, except in situations requiring immediate amendment or revision in the interest of safety.

(d) A description of the system for the annotation of pages or paragraphs and their effective dates.

(e) A list of effective pages or paragraphs.

(f) Annotation of changes (in the text and, as far as practicable, on charts and diagrams).

(g) Temporary revisions.

(h) A description of the distribution system for the manuals, amendments and revisions.

1 ORGANISATION AND RESPONSIBILITIES

1.1 Organisational structure. A description of the organisational structure, including the general organogram and operations departments' organograms. The organogram should depict the relationship between the operations departments and the other departments of the operator. In particular, the subordination and reporting lines of all divisions, departments, etc., which pertain to the safety of flight operations, should be shown.

1.2 Nominated persons. The name of each nominated person responsible for flight operations, crew training and ground operations, as prescribed in ORO.AOC.135. A description of their function and responsibilities should be included.

1.3 Responsibilities and duties of operations management personnel. A description of the duties, responsibilities and authority of operations management personnel pertaining to the safety of flight operations and the compliance with the applicable regulations.

1.4 Authority, duties and responsibilities of the pilot-in-command/commander. A statement defining the authority, duties and responsibilities of the pilot-in-command/commander.

1.5 Duties and responsibilities of crew members other than the pilot-in-command/commander.

2 OPERATIONAL CONTROL AND SUPERVISION

2.1 Supervision of the operation by the operator. A description of the system for supervision of the operation by the operator (see ORO.GEN.110(c)). This should show how the safety of flight operations and the qualifications of personnel are supervised. In particular, the procedures related to the following items should be described:

(a) licence and qualification validity,

(b) competence of operations personnel,

(c) control, analysis and storage of the required records.

2.2 System and responsibility for promulgation of additional operational instructions and information. A description of any system for promulgating information which may be of an operational nature, but which is supplementary to that in the OM. The applicability of this information and the responsibilities for its promulgation should be included.

2.3 Operational control. A description of the procedures and responsibilities necessary to exercise operational control with respect to flight safety.

2.4 Powers of the authority. A description of the powers of the competent authority and guidance to staff on how to facilitate inspections by authority personnel.

3 MANAGEMENT SYSTEM

A description of the management system, including at least the following:

(a) safety policy;

(b) the process for identifying safety hazards and for evaluating and managing the associated risks;

(c) compliance monitoring system;

(d) allocation of duties and responsibilities;

(e) documentation of all key management system processes.

4 CREW COMPOSITION

4.1 Crew composition. An explanation of the method for determining crew compositions, taking account of the following:

(a) the type of aircraft being used;

(b) the area and type of operation being undertaken;

(c) the phase of the flight;

(d) the minimum crew requirement and flight duty period planned;

(e) experience (total and on type), recency and qualification of the crew members;

(f) the designation of the pilot-in-command/commander and, if necessitated by the duration of the flight, the procedures for the relief of the pilot-in-command/commander or other members of the flight crew (see ORO.FC.105);

(g) the designation of the senior cabin crew member and, if necessitated by the duration of the flight, the procedures for the relief of the senior cabin crew member and any other member of the cabin crew.

4.2 Designation of the pilot-in-command/commander. The rules applicable to the designation of the pilot-in-command/commander.

4.3 Flight crew incapacitation. Instructions on the succession of command in the event of flight crew incapacitation.

4.4 Operation on more than one type. A statement indicating which aircraft are considered as one type for the purpose of:

(a) flight crew scheduling; and

(b) cabin crew scheduling.

5 QUALIFICATION REQUIREMENTS

5.1 A description of the required licence, rating(s), qualification/competency (e.g. for routes and aerodromes), experience, training, checking and recency for operations personnel to conduct their duties. Consideration should be given to the aircraft type, kind of operation and composition of the crew.

5.2 Flight crew:

(a) pilot-in-command/commander,

(b) pilot relieving the pilot-in-command/commander,

(c) co-pilot,

(d) pilot relieving the co-pilot,

(e) pilot under supervision,

(f) system panel operator,

(g) operation on more than one type or variant.

5.3 Cabin crew:

(a) senior cabin crew member,

(b) cabin crew member:

(i) required cabin crew member,

(ii) additional cabin crew member and cabin crew member during familiarisation flights,

(c) operation on more than one type or variant.

5.4 Training, checking and supervision personnel:

(a) for flight crew; and

(b) for cabin crew.

5.5 Other operations personnel (including technical crew and crew members other than flight, cabin and technical crew).

6 CREW HEALTH PRECAUTIONS

6.1 Crew health precautions. The relevant regulations and guidance to crew members concerning health, including the following:

(a) alcohol and other intoxicating liquids,

(b) narcotics,

(c) drugs,

(d) sleeping tablets,

(e) anti-depressants,

(f) pharmaceutical preparations,

(g) immunisation,

(h) deep-sea diving,

(i) blood/bone marrow donation,

(j) meal precautions prior to and during flight,

(k) sleep and rest,

(l) surgical operations.

7 FLIGHT TIME LIMITATIONS

7.1 Flight and duty time limitations and rest requirements.

7.2 Exceedance of flight and duty time limitations and/or reductions of rest periods. Conditions under which flight and duty time may be exceeded or rest periods may be reduced, and the procedures used to report these modifications.

7.3 Description of the Fatigue Risk Management

8 OPERATING PROCEDURES

8.1 Flight preparation instructions. As applicable to the operation:

8.1.1 Minimum flight altitudes. A description of the method of determination and application of minimum altitudes including:

(a) a procedure to establish the minimum altitudes/flight levels for visual flight rules (VFR) flights; and

(b) a procedure to establish the minimum altitudes/flight levels for instrument flight rules (IFR) flights.

8.1.2 Criteria and responsibilities for determining the adequacy of aerodromes to be used.

8.1.3 Methods and responsibilities for establishing aerodrome operating minima. Reference should be made to procedures for the determination of the visibility and/or runway visual range (RVR) and for the applicability of the actual visibility observed by the pilots, the reported visibility and the reported RVR.

8.1.4 En-route operating minima for VFR flights or VFR portions of a flight and, where single-engined aircraft are used, instructions for route selection with respect to the availability of surfaces that permit a safe forced landing.

8.1.5 Presentation and application of aerodrome and en-route operating minima.

8.1.6 Interpretation of meteorological information. Explanatory material on the decoding of meteorological (MET) forecasts and MET reports relevant to the area of operations, including the interpretation of conditional expressions.

8.1.7 Determination of the quantities of fuel, oil and water methanol carried. The methods by which the quantities of fuel, oil and water methanol to be carried are determined and monitored in-flight. This section should also include instructions on the measurement and distribution of the fluid carried on board. Such instructions should take account of all circumstances likely to be encountered on the flight, including the possibility of in-flight re-planning and of failure of one or more of the aircraft's power plants. The system for maintaining fuel and oil records should also be described.

8.1.8 Mass and centre of gravity. The general principles of mass and centre of gravity including the following:

(a) definitions;

(b) methods, procedures and responsibilities for preparation and acceptance of mass and centre of gravity calculations;

(c) the policy for using standard and/or actual masses;

(d) the method for determining the applicable passenger, baggage and cargo mass;

(e) the applicable passenger and baggage masses for various types of operations and aircraft type;

(f) general instructions and information necessary for verification of the various types of mass and balance documentation in use;

(g) last-minute changes procedures;

(h) specific gravity of fuel, oil and water methanol;

(i) seating policy/procedures;

(j) for helicopter operations, standard load plans.

8.1.9 Air traffic services (ATS) flight plan. Procedures and responsibilities for the preparation and submission of the ATS flight plan. Factors to be considered include the means of submission for both individual and repetitive flight plans.

8.1.10 Operational flight plan. Procedures and responsibilities for the preparation and acceptance of the operational flight plan. The use of the operational flight plan should be described, including samples of the operational flight plan formats in use.

8.1.11 Operator's aircraft technical log. The responsibilities and the use of the operator's aircraft technical log should be described, including samples of the format used.

8.1.12 List of documents, forms and additional information to be carried.

8.2 Ground handling instructions. As applicable to the operation:

8.2.1 Fuelling procedures. A description of fuelling procedures, including:

(a) safety precautions during refuelling and defueling including when an auxiliary power unit is in operation or when rotors are running or when an engine is or engines are running and the prop-brakes are on;

(b) refuelling and defuelling when passengers are embarking, on board or disembarking; and

(c) precautions to be taken to avoid mixing fuels.

8.2.2 Aircraft, passengers and cargo handling procedures related to safety. A description of the handling procedures to be used when allocating seats, embarking and disembarking passengers and when loading and unloading the aircraft. Further procedures, aimed at achieving safety whilst the aircraft is on the ramp, should also be given. Handling procedures should include:

(a) special categories of passengers, including children/infants, persons with reduced mobility, inadmissible passengers, deportees and persons in custody;

(b) permissible size and weight of hand baggage;

(c) loading and securing of items in the aircraft;

(d) positioning of ground equipment;

(e) operation of aircraft doors;

(f) safety on the aerodrome/operating site, including fire prevention and safety in blast and suction areas;

(g) start-up, ramp departure and arrival procedures, including, for aeroplanes, push-back and towing operations;

(h) servicing of aircraft;

(i) documents and forms for aircraft handling;

(j) special loads and classification of load compartments; and

(k) multiple occupancy of aircraft seats.

8.2.3 Procedures for the refusal of embarkation. Procedures to ensure that persons who appear to be intoxicated, or who demonstrate by manner or physical indications that they are under the influence of drugs, are refused embarkation. This does not apply to medical patients under proper care.

8.2.4 De-icing and anti-icing on the ground. A description of the de-icing and anti-icing policy and procedures for aircraft on the ground. These should include descriptions of the types and effects of icing and other contaminants on aircraft whilst stationary, during ground movements and during take-off. In addition, a description of the fluid types used should be given, including the following:

(a) proprietary or commercial names,

(b) characteristics,

(c) effects on aircraft performance,

(d) hold-over times,

(e) precautions during usage.

8.3 Flight Procedures:

8.3.1 VFR/IFR Policy. A description of the policy for allowing flights to be made under VFR, or for requiring flights to be made under IFR, or for changing from one to the other.

8.3.2 Navigation Procedures. A description of all navigation procedures, relevant to the type(s) and area(s) of operation. Special consideration should be given to:

(a) standard navigational procedures, including policy for carrying out independent cross-checks of keyboard entries where these affect the flight path to be followed by the aircraft; and

(b) required navigation performance (RNP), minimum navigation performance specification (MNPS) and polar navigation and navigation in other designated areas;

(c) in-flight re-planning;

(d) procedures in the event of system degradation; and

(e) reduced vertical separation minima (RVSM), for aeroplanes.

8.3.3 Altimeter setting procedures, including, where appropriate, use of:

(a) metric altimetry and conversion tables; and

(b) QFE operating procedures.

8.3.4 Altitude alerting system procedures for aeroplanes or audio voice alerting devices for helicopters.

8.3.5 Ground proximity warning system (GPWS)/terrain avoidance warning system (TAWS), for aeroplanes. Procedures and instructions required for the avoidance of controlled flight into terrain, including limitations on high rate of descent near the surface (the related training requirements are covered in OM-D 2.1).

8.3.6 Policy and procedures for the use of traffic collision avoidance system (TCAS)/airborne collision avoidance system (ACAS) for aeroplanes and, when applicable, for helicopters.

8.3.7 Policy and procedures for in-flight fuel management.

8.3.8 Adverse and potentially hazardous atmospheric conditions. Procedures for operating in, and/or avoiding, adverse and potentially hazardous atmospheric conditions, including the following:

(a) thunderstorms,

(b) icing conditions,

(c) turbulence,

(d) windshear,

(e) jet stream,

(f) volcanic ash clouds,

(g) heavy precipitation,

(h) sand storms,

(i) mountain waves,

(j) significant temperature inversions.

8.3.9 Wake turbulence. Wake turbulence separation criteria, taking into account aircraft types, wind conditions and runway/final approach and take-off area (FATO) location. For helicopters, consideration should also be given to rotor downwash.

8.3.10 Crew members at their stations. The requirements for crew members to occupy their assigned stations or seats during the different phases of flight or whenever deemed necessary in the interest of safety and, for aeroplane operations, including procedures for controlled rest in the flight crew compartment.

8.3.11 Use of restraint devices for crew and passengers. The requirements for crew members and passengers to use safety belts and/or restraint systems during the different phases of flight or whenever deemed necessary in the interest of safety.

8.3.12 Admission to flight crew compartment. The conditions for the admission to the flight crew compartment of persons other than the flight crew. The policy regarding the admission of inspectors from an authority should also be included.

8.3.13 Use of vacant crew seats. The conditions and procedures for the use of vacant crew seats.

8.3.14 Incapacitation of crew members. Procedures to be followed in the event of incapacitation of crew members in-flight. Examples of the types of incapacitation and the means for recognising them should be included.

8.3.15 Cabin safety requirements. Procedures:

(a) covering cabin preparation for flight, in-flight requirements and preparation for landing, including procedures for securing the cabin and galleys;

(b) to ensure that passengers are seated where, in the event that an emergency evacuation is required, they may best assist and not hinder evacuation from the aircraft;

(c) to be followed during passenger embarkation and disembarkation;

(d) when refuelling/defuelling with passengers embarking, on board or disembarking;

(e) covering the carriage of special categories of passengers;

(f) covering smoking on board;

(g) covering the handling of suspected infectious diseases.

8.3.16 Passenger briefing procedures. The contents, means and timing of passenger briefing in accordance with Annex IV (Part-CAT).

8.3.17 Procedures for aircraft operated whenever required cosmic or solar radiation detection equipment is carried.

8.3.18 Policy on the use of autopilot and autothrottle for aircraft fitted with these systems.

8.4 Low visibility operations (LVO). A description of the operational procedures associated with LVO.

8.5 Extended-range operations with two-engined aeroplanes (ETOPS). A description of the ETOPS operational procedures. (Refer to EASA AMC 20-6)

8.6 Use of the minimum equipment and configuration deviation list(s).

8.7 Non-revenue flights. Procedures and limitations, for example, for the following:

(a) non-commercial operations by AOC holders, a description of the differences to commercial operations,

(b) training flights,

(c) test flights,

(d) delivery flights,

(e) ferry flights,

(f) demonstration flights,

(g) positioning flights, including the kind of persons who may be carried on such flights.

8.8 Oxygen requirements:

8.8.1 An explanation of the conditions under which oxygen should be provided and used.

8.8.2 The oxygen requirements specified for the following persons:

(a) flight crew;

(b) cabin crew;

(c) passengers.

9 DANGEROUS GOODS AND WEAPONS

9.1 Information, instructions and general guidance on the transport of dangerous goods, in accordance with Subpart G of Annex V (SPA.DG), including:

(a) operator's policy on the transport of dangerous goods;

(b) guidance on the requirements for acceptance, labelling, handling, stowage and segregation of dangerous goods;

(c) special notification requirements in the event of an accident or occurrence when dangerous goods are being carried;

(d) procedures for responding to emergency situations involving dangerous goods;

(e) duties of all personnel involved; and

(f) instructions on the carriage of the operator's personnel on cargo aircraft when dangerous goods are being carried.

9.2 The conditions under which weapons, munitions of war and sporting weapons may be carried.

10 SECURITY

Security instructions, guidance, procedures, training and responsibilities, taking into account Regulation (EC) No 300/2008[11]. Some parts of the security instructions and guidance may be kept confidential.

11 HANDLING, NOTIFYING AND REPORTING ACCIDENTS, INCIDENTS AND OCCURRENCES

Procedures for handling, notifying and reporting accidents, incidents and occurrences. This section should include the following:

(a) definition of accident, incident and occurrence and of the relevant responsibilities of all persons involved;

(b) illustrations of forms to be used for reporting all types of accident, incident and occurrence (or copies of the forms themselves), instructions on how they are to be completed, the addresses to which they should be sent and the time allowed for this to be done;

(c) in the event of an accident, descriptions of which departments, authorities and other organisations have to be notified, how this will be done and in what sequence;

(d) procedures for verbal notification to air traffic service units of incidents involving ACAS resolution advisories (RAs), bird hazards, dangerous goods and hazardous conditions;

(e) procedures for submitting written reports on air traffic incidents, ACAS RAs, bird strikes, dangerous goods incidents or accidents, and unlawful interference;

(f) reporting procedures. These procedures should include internal safety-related reporting procedures to be followed by crew members, designed to ensure that the pilot-in-command/commander is informed immediately of any incident that has endangered, or may have endangered, safety during the flight, and that the pilot-in-command/commander is provided with all relevant information.

(g) Procedures for the preservation of recordings following a reportable event.

12 RULES OF THE AIR

(a) Visual and instrument flight rules,

(b) Territorial application of the rules of the air,

(c) Communication procedures, including communication-failure procedures,

[11] OJ L 97, 11.3.2008, p. 72.

(d) Information and instructions relating to the interception of civil aircraft,

(e) The circumstances in which a radio listening watch is to be maintained,

(f) Signals,

(g) Time system used in operation,

(h) ATC clearances, adherence to flight plan and position reports,

(i) Visual signals used to warn an unauthorised aircraft flying in or about to enter a restricted, prohibited or danger area,

(j) Procedures for flight crew observing an accident or receiving a distress transmission,

(k) The ground/air visual codes for use by survivors, and description and use of signal aids,

(l) Distress and urgency signals.

13 LEASING/CODE-SHARE

A description of the operational arrangements for leasing and code-share, associated procedures and management responsibilities.

B AIRCRAFT OPERATING MATTERS — TYPE RELATED

Taking account of the differences between types/classes, and variants of types, under the following headings:

0 GENERAL INFORMATION AND UNITS OF MEASUREMENT

0.1 General information (e.g. aircraft dimensions), including a description of the units of measurement used for the operation of the aircraft type concerned and conversion tables.

1 LIMITATIONS

1.1 A description of the certified limitations and the applicable operational limitations should include the following:

(a) certification status (e.g. EASA (supplemental) type certificate, environmental certification, etc.);

(b) passenger seating configuration for each aircraft type, including a pictorial presentation;

(c) types of operation that are approved (e.g. VFR/IFR, CAT II/III, RNP, flights in known icing conditions, etc.);

(d) crew composition;

(e) mass and centre of gravity;

(f) speed limitations;

(g) flight envelope(s);

(h) wind limits, including operations on contaminated runways;

(i) performance limitations for applicable configurations;

(j) (runway) slope;

(k) for aeroplanes, limitations on wet or contaminated runways;

(l) airframe contamination;

(m) system limitations.

2 NORMAL PROCEDURES

The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include the following:

(a) pre-flight,

(b) pre-departure,

(c) altimeter setting and checking,

(d) taxi, take-off and climb,

(e) noise abatement,

(f) cruise and descent,

(g) approach, landing preparation and briefing,

(h) VFR approach,

(i) IFR approach,

(j) visual approach and circling,

(k) missed approach,

(l) normal landing,

(m) post-landing,

(n) for aeroplanes, operations on wet and contaminated runways.

3 ABNORMAL AND/OR EMERGENCY PROCEDURES

The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The abnormal and/or emergency procedures and duties should include the following:

(a) crew incapacitation,

(b) fire and smoke drills,

(c) for aeroplanes, un-pressurised and partially pressurised flight,

(d) for aeroplanes, exceeding structural limits such as overweight landing,

(e) lightning strikes,

(f) distress communications and alerting ATC to emergencies,

(g) engine/burner failure,

(h) system failures,

(i) guidance for diversion in case of serious technical failure,

(j) ground proximity warning, including for helicopters audio voice alerting device (AVAD) warning,

(k) ACAS/TCAS warning for aeroplanes/audio voice alerting device (AVAD) warning for helicopters,

(l) windshear,

(m) emergency landing/ditching,

(n) for aeroplanes, departure contingency procedures.

4 PERFORMANCE

4.0 Performance data should be provided in a form that can be used without difficulty.

4.1 Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following:

(a) take-off climb limits — mass, altitude, temperature;

(b) take-off field length (for dry, wet and contaminated runway conditions);

(c) net flight path data for obstacle clearance calculation or, where applicable, take-off flight path;

(d) the gradient losses for banked climb-outs;

(e) en-route climb limits;

(f) approach climb limits;

(g) landing climb limits;

(h) landing field length (for dry, wet and contaminated runway conditions) including the effects of an in-flight failure of a system or device, if it affects the landing distance;

(i) brake energy limits;

(j) speeds applicable for the various flight stages (also considering dry, wet and contaminated runway conditions).

4.1.1 Supplementary data covering flights in icing conditions. Any certified performance related to an allowable configuration, or configuration deviation, such as anti-skid inoperative.

4.1.2 If performance data, as required for the appropriate performance class, are not available in the AFM, then other data should be included. The OM may contain cross-reference to the data contained in the AFM where such data are not likely to be used often or in an emergency.

4.2 Additional performance data for aeroplanes. Additional performance data, where applicable, including the following:

(a) all engine climb gradients,

(b) drift-down data,

(c) effect of de-icing/anti-icing fluids,

(d) flight with landing gear down,

(e) for aircraft with 3 or more engines, one-engine-inoperative ferry flights,

(f) flights conducted under the provisions of the configuration deviation list (CDL).

5 FLIGHT PLANNING

5.1 Data and instructions necessary for pre-flight and in-flight planning including, for aeroplanes, factors such as speed schedules and power settings. Where applicable, procedures for engine(s)-out operations, ETOPS (particularly the one-engine-inoperative cruise speed and maximum distance to an adequate aerodrome determined in accordance with Annex IV (Part-CAT)) and flights to isolated aerodromes should be included.

5.2 The method for calculating fuel needed for the various stages of flight.

5.3 When applicable, for aeroplanes, performance data for ETOPS critical fuel reserve and area of operation, including sufficient data to support the critical fuel reserve and area of operation calculation based on approved aircraft performance data. The following data should be included:

(a) detailed engine(s)-inoperative performance data, including fuel flow for standard and non-standard atmospheric conditions and as a function of airspeed and power setting, where appropriate, covering:

(i) drift down (includes net performance), where applicable;

(ii) cruise altitude coverage including 10 000 ft;

(iii) holding;

(iv) altitude capability (includes net performance); and

(v) missed approach;

(b) detailed all-engine-operating performance data, including nominal fuel flow data, for standard and non-standard atmospheric conditions and as a function of airspeed and power setting, where appropriate, covering:

(i) cruise (altitude coverage including 10 000 ft); and

(ii) holding;

(c) details of any other conditions relevant to ETOPS operations which can cause significant deterioration of performance, such as ice accumulation on the unprotected surfaces of the aircraft, ram air turbine (RAT) deployment, thrust-reverser deployment, etc.; and

(d) the altitudes, airspeeds, thrust settings, and fuel flow used in establishing the ETOPS area of operations for each airframe-engine combination should be used in showing the corresponding terrain and obstruction clearances in accordance with Annex IV (Part-CAT).

6 MASS AND BALANCE

Instructions and data for the calculation of the mass and balance, including the following:

(a) calculation system (e.g. index system);

(b) information and instructions for completion of mass and balance documentation, including manual and computer generated types;

(c) limiting masses and centre of gravity for the types, variants or individual aircraft used by the operator;

(d) dry operating mass and corresponding centre of gravity or index.

7 LOADING

Procedures and provisions for loading and unloading and securing the load in the aircraft.

8 CONFIGURATION DEVIATION LIST

The CDL(s), if provided by the manufacturer, taking account of the aircraft types and variants operated, including procedures to be followed when an aircraft is being dispatched under the terms of its CDL.

9 MINIMUM EQUIPMENT LIST (MEL)

The MEL for each aircraft type or variant operated and the type(s)/area(s) of operation. The MEL should also include the dispatch conditions associated with operations required for a specific approval (e.g. RNAV, RNP, RVSM, ETOPS). Consideration should be given to using the ATA number system when allocating chapters and numbers.

10 SURVIVAL AND EMERGENCY EQUIPMENT INCLUDING OXYGEN

10.1 A list of the survival equipment to be carried for the routes to be flown and the procedures for checking the serviceability of this equipment prior to take-off. Instructions regarding the location, accessibility and use of survival and emergency equipment and its associated checklist(s) should also be included.

10.2 The procedure for determining the amount of oxygen required and the quantity that is available. The flight profile, number of occupants and possible cabin decompression should be considered.

11 EMERGENCY EVACUATION PROCEDURES

11.1 Instructions for preparation for emergency evacuation, including crew coordination and emergency station assignment.

11.2 Emergency evacuation procedures. A description of the duties of all members of the crew for the rapid evacuation of an aircraft and the handling of the passengers in the event of a forced landing, ditching or other emergency.

12 AIRCRAFT SYSTEMS

A description of the aircraft systems, related controls and indications and operating instructions. Consideration should be given to use the ATA number system when allocating chapters and numbers.

C ROUTE/ROLE/AREA AND AERODROME/OPERATING SITE INSTRUCTIONS AND INFORMATION

1 Instructions and information relating to communications, navigation and aerodromes/operating sites, including minimum flight levels and altitudes for each route to be flown and operating minima for each aerodrome/operating site planned to be used, including the following:

(a) minimum flight level/altitude;

(b) operating minima for departure, destination and alternate aerodromes;

(c) communication facilities and navigation aids;

(d) runway/final approach and take-off area (FATO) data and aerodrome/operating site facilities;

(e) approach, missed approach and departure procedures including noise abatement procedures;

(f) communication-failure procedures;

(g) search and rescue facilities in the area over which the aircraft is to be flown;

(h) a description of the aeronautical charts that should be carried on board in relation to the type of flight and the route to be flown, including the method to check their validity;

(i) availability of aeronautical information and MET services;

(j) en-route communication/navigation procedures;

(k) aerodrome/operating site categorisation for flight crew competence qualification;

(l) special aerodrome/operating site limitations (performance limitations and operating procedures, etc.).

D TRAINING

1 Description of scope: Training syllabi and checking programmes for all operations personnel assigned to operational duties in connection with the preparation and/or conduct of a flight.

2 Content: Training syllabi and checking programmes should include the following:

2.1 for flight crew, all relevant items prescribed in Annex IV (Part-CAT), Annex V (Part-SPA) and ORO.FC;

2.2 for cabin crew, all relevant items prescribed in Annex IV (Part-CAT), Annex V (Part-CC) ~~of~~ to Commission Regulation (EU) No 1178/2011 and ORO.CC;

2.3 for technical crew, all relevant items prescribed in Annex IV (Part-CAT), Annex V (Part-SPA) and ORO.TC;

2.4 for operations personnel concerned, including crew members:

(a) all relevant items prescribed in SPA.DG Subpart G of Annex IV (SPA.DG); and

(b) all relevant items prescribed in Annex IV (Part-CAT) and ORO.SEC; and

2.5 for operations personnel other than crew members (e.g. dispatcher, handling personnel, etc.), all other relevant items prescribed in Annex IV (Part-CAT) and in this Annex pertaining to their duties.

3 Procedures:

3.1 Procedures for training and checking.

3.2 Procedures to be applied in the event that personnel do not achieve or maintain the required standards.

3.3 Procedures to ensure that abnormal or emergency situations requiring the application of part or all of the abnormal or emergency procedures, and simulation of instrument meteorological conditions (IMC) by artificial means are not simulated during CAT operations.

4 Description of documentation to be stored and storage periods.

(b) Notwithstanding (a), an OM that is compiled in accordance with JAR-OPS 3 amendment 5 may be considered to be compliant.

(c) If there are sections that, because of the nature of the operation, do not apply, it is recommended that operators maintain the numbering system described in ORO.MLR.101 and above and insert 'Not applicable' or 'Intentionally blank' where appropriate.

(…)

(59) Amendment of sub-paragraph (a) of *AMC1 ORO.MLR.105(d)(3) Minimum equipment list* to include the correct term 'specific approvals'.

AMC1 ORO.MLR.105(d)(3) Minimum equipment list
SCOPE OF THE MEL

The MEL should include:

(a) The dispatch conditions associated with flights conducted in accordance with ~~special~~ specific approvals held by the operator in accordance with Part-SPA.

(b) Specific provision for particular types of operations carried out by the operator in accordance with ORO.AOC.125.

(…)

(60) Amendment of *AMC1 ORO.MLR.105(g) Minimum equipment list* to provide the correct reference to the current Continuing Airworthiness Regulation.

AMC1 ORO.MLR.105(g) Minimum equipment list
OPERATIONAL AND MAINTENANCE PROCEDURES

(a) The operational and maintenance procedures referenced in the MEL should be based on the operational and maintenance procedures referenced in the MMEL. Modified procedures may, however, be developed by the operator when they provide the same level of safety, as required by the MMEL. Modified maintenance procedures should be developed in accordance with Commission Regulation (EU~~C~~) No 1321/2014 ~~2042/2003~~.

(b) Providing appropriate operational and maintenance procedures referenced in the MEL, regardless of who developed them, is the responsibility of the operator.

(c) Any item in the MEL requiring an operational or maintenance procedure to ensure an acceptable level of safety should be so identified in the 'remarks' or 'exceptions' column/part/section of the MEL. This will normally be '(O)' for an operational procedure, or '(M)' for a maintenance procedure. '(O)(M)' means both operational and maintenance procedures are required.

(d) The satisfactory accomplishment of all procedures, regardless of who performs them, is the responsibility of the operator.

(61) Amendment of *GM1 ORO.MLR.105(g) Minimum equipment list* to provide the correct reference to the current Continuing Airworthiness Regulation.

GM1 ORO.MLR.105(g) Minimum equipment list
OPERATIONAL AND MAINTENANCE PROCEDURES

(a) Operational and maintenance procedures are an integral part of the compensating conditions needed to maintain an acceptable level of safety, enabling the competent authority to approve the MEL. The

competent authority may request presentation of fully developed (O) and/or (M) procedures in the course of the MEL approval process.

(b) Normally, operational procedures are accomplished by the flight crew; however, other personnel may be qualified and authorised to perform certain functions.

(c) Normally, maintenance procedures are accomplished by the maintenance personnel; however, other personnel may be qualified and authorised to perform certain functions in accordance with Commission Regulation (EU~~C~~) No 1321/2014 ~~2042/2003~~.

(d) Operator's manuals may include the OM, the continued airworthiness management organisation manual (CAME) or other documents. Operational and maintenance procedures, regardless of the document where they are contained, should be readily available for use when needed for the application of the MEL.

(e) Unless specifically permitted by a maintenance procedure, an inoperative item may not be removed from the aircraft.

(…)

(62) Development of a new *GM1 ORO.MLR.115(c) Record-keeping* to clarify the meaning of personnel records in ORO.MLR.115(c).

GM1 ORO.MLR.115(c) Record-keeping
PERSONNEL RECORDS

'Personnel records' in ORO.MLR.115(c) means detailed crew member training, checking and qualification records. These records include detailed examination papers.

(…)

(63) Development of a new *GM1 ORO.MLR.115(d) Record-keeping* to clarify the meaning of training, checking and qualification records in ORO.MLR.115(d).

GM1 ORO.MLR.115(d) Record-keeping
TRAINING, CHECKING AND QUALIFICATION RECORDS

Training, checking and qualification records include records of all training, checking and qualifications of each crew member, as prescribed in Part-ORO.

3.1.4. AMC/GM to Annex IV (Part-CAT)

(…)

(64) Amendment of point (b)(4) of *AMC1 CAT.OP.MPA.115 Approach flight technique — aeroplanes* on CONTINUOUS DESCENT FINAL APPROACH (CDFA), since point (b)(3) should only address operations in IMC and point (b)(4) operations in VMC.

AMC1 CAT.OP.MPA.115 Approach flight technique — aeroplanes
CONTINUOUS DESCENT FINAL APPROACH (CDFA)

(a) Flight techniques:

(1) The CDFA technique should ensure that an approach can be flown on the desired vertical path and track in a stabilised manner, without significant vertical path changes during the final segment descent to the runway. This technique applies to an approach with no vertical guidance and controls the descent path until the DA/DH. This descent path can be either:

(i) a recommended descent rate, based on estimated ground speed;

(ii) a descent path depicted on the approach chart; or

(iii) a descent path coded in the flight management system in accordance with the approach chart descent path.

(2) The operator should either provide charts which depict the appropriate cross check altitudes/heights with the corresponding appropriate range information, or such information should be calculated and provided to the flight crew in an appropriate and usable format. Generally, the MAPt is published on the chart.

(3) The approach should be flown as an SAp.

(4) The required descent path should be flown to the DA/H, observing any step-down crossing altitudes if applicable.

(5) This DA/H should take into account any add-on to the published minima as identified by the operator's management system and should be specified in the OM (aerodrome operating minima).

(6) During the descent, the pilot monitoring should announce crossing altitudes as published fixes and other designated points are crossed, giving the appropriate altitude or height for the appropriate range as depicted on the chart. The pilot flying should promptly adjust the rate of descent as appropriate.

(7) The operator should establish a procedure to ensure that an appropriate callout is made when the aeroplane is approaching DA/H. If the required visual references are not established at DA/H, the missed approach procedure is to be executed promptly.

(8) The descent path should ensure that little or no adjustment of attitude or thrust/power is needed after the DA/H to continue the landing in the visual segment.

(9) The missed approach should be initiated no later than reaching the MAPt or at the DA/H, whichever comes first. The lateral part of the missed approach should be flown via the MAPt unless otherwise stated on the approach chart.

(b) Flight techniques conditions:

(1) The approach should be considered to be fully stabilised when the aeroplane is:

(i) tracking on the required approach path and profile;

(ii) in the required configuration and attitude;

(iii) flying with the required rate of descent and speed; and

(iv) flying with the appropriate thrust/power and trim.

(2) The aeroplane is considered established on the required approach path at the appropriate energy for stable flight using the CDFA technique when:

(i) it is tracking on the required approach path with the correct track set, approach aids tuned and identified as appropriate to the approach type flown and on the required vertical profile; and

(ii) it is at the appropriate attitude and speed for the required target rate of descent (ROD) with the appropriate thrust/power and trim.

(3) Stabilisation during any straight-in approach without visual reference to the ground should be achieved at the latest when passing 1 000 ft above runway threshold elevation. For approaches with a designated vertical profile applying the CDFA technique, a later stabilisation in speed may be acceptable if higher than normal approach speeds are required by ATC procedures or allowed by the OM. Stabilisation should, however, be achieved not later than 500 ft above runway threshold elevation.

(4) For approaches where the pilot has visual reference with the ground, stabilisation should be achieved not later than 500 ft above aerodrome elevation. However, ~~the aeroplane should be stabilised when passing 1 000 ft above runway threshold elevation~~; in the case of circling approaches flown after a CDFA, the aircraft should be stabilised in the circling configuration not later than passing 1 000 ft above the runway elevation.

(5) To ensure that the approach can be flown in a stabilised manner, the bank angle, rate of descent and thrust/power management should meet the following performances:

(i) The bank angle should be less than 30 degrees.

(ii) The target rate of descent (ROD) should not exceed 1 000 fpm and the ROD deviations should not exceed ± 300 fpm, except under exceptional circumstances which have been anticipated and briefed prior to commencing the approach; for example, a strong tailwind. Zero ROD may be used when the descent path needs to be regained from below the profile. The target ROD may need to be initiated prior to reaching the required descent point, typically 0.3 NM before the descent point, dependent upon ground speed, which may vary for each type/class of aeroplane.

(iii) The limits of thrust/power and the appropriate range should be specified in the OM Part B or equivalent document.

(iv) The optimum angle for the approach slope is 3° and should not exceed 4.5°.

(v) The CDFA technique should be applied only to approach procedures based on NDB, NDB/DME, VOR, VOR/DME, LOC, LOC/DME, VDF, SRA, GNSS/LNAV and fulfil the following criteria:

(A) the final approach track off-set ≤ 5° except for Category A and B aeroplanes, where the approach-track off-set is ≤ 15°; and

(B) a FAF, or another appropriate fix, e.g. final approach point, where descent initiated is available; and

(C) the distance from the FAF or another appropriate fix to the threshold (THR) is less than or equal to 8 NM in the case of timing; or

(D) the distance to the THR is available by FMS/GNSS or DME; or

(E) the minimum final-segment of the designated constant angle approach path should not be less than 3 NM from the THR unless approved by the authority.

(7) The CDFA techniques support a common method for the implementation of flight-director-guided or auto-coupled RNAV approaches.

(…)

(65) Amendment of the title of *AMC1 CAT.OP.MPA.140(c) Maximum distance from an adequate aerodrome for two-engined aeroplanes without an ETOPS approval* to include the correct reference of sub-paragraph (d) rather than (c) in the title of the AMC. In addition, a change has been made to provide the correct reference to the current Continuing Airworthiness Regulation.

AMC1 CAT.OP.MPA.140(d~~c~~) Maximum distance from an adequate aerodrome for two-engined aeroplanes without an ETOPS approval

OPERATION OF NON-ETOPS COMPLIANT TWIN TURBO-JET AEROPLANES WITH MOPSC OF 19 OR LESS AND MCTOM LESS THAN 45 360 KG BETWEEN 120 AND 180 MINUTES FROM AN ADEQUATE AERODROME

(a) For operations between 120 and 180 minutes, due account should be taken of the aeroplane's design and capabilities as outlined below and the operator's experience related to such operations. Relevant information should be included in the operations manual and the operator's maintenance procedures. The term 'the aeroplane's design' in this AMC does not imply any additional type design approval specifications beyond the applicable original type certificate (TC) specifications.

(b) Systems capability

Aeroplanes should be certified to CS-25 as appropriate or equivalent (e.g. FAR-25). With respect to the capability of the aeroplane systems, the objective is that the aeroplane is capable of a safe diversion from the maximum diversion distance with particular emphasis on operations with OEI or with degraded system capability. To this end, the operator should give consideration to the capability of the following systems to support such a diversion:

(1) Propulsion systems: the aeroplane engine should meet the applicable specifications prescribed in CS-25 and CS-E or equivalent (e.g. FAR-25, FAR-E), concerning engine TC, installation and system operation. In addition to the performance standards established by the Agency or competent authority at the time of engine certification, the engines should comply with all subsequent mandatory safety standards specified by the Agency or competent authority, including those

necessary to maintain an acceptable level of reliability. In addition, consideration should be given to the effects of extended duration single-engine operation (e.g. the effects of higher power demands such as bleed and electrical).

(2) Airframe systems: with respect to electrical power, three or more reliable as defined by CS-25 or equivalent (e.g. FAR-25) and independent electrical power sources should be available, each of which should be capable of providing power for all essential services which should at least include the following:

(i) sufficient instruments for the flight crew providing, as a minimum, attitude, heading, airspeed and altitude information;

(ii) appropriate pitot heating;

(iii) adequate navigation capability;

(iv) adequate radio communication and intercommunication capability;

(v) adequate flight deck and instrument lighting and emergency lighting;

(vi) adequate flight controls;

(vii) adequate engine controls and restart capability with critical type fuel (from the stand-point of flame-out and restart capability) and with the aeroplane initially at the maximum relight altitude;

(viii) adequate engine instrumentation;

(ix) adequate fuel supply system capability including such fuel boost and fuel transfer functions that may be necessary for extended duration single or dual-engine operation;

(x) such warnings, cautions and indications as are required for continued safe flight and landing;

(xi) fire protection (engines and auxiliary power unit (APU));

(xii) adequate ice protection including windshield de-icing; and

(xiii) adequate control of the flight crew compartment and cabin environment including heating and pressurisation.

The equipment including avionics necessary for extended diversion times should have the ability to operate acceptably following failures in the cooling system or electrical power systems.

For single-engine operations, the remaining power electrical, hydraulic, and pneumatic should continue to be available at levels necessary to permit continued safe flight and landing, and to provide those services necessary for the overall safety of the passengers and crew. As a minimum, following the failure of any two of the three electrical power sources, the remaining source should be capable of providing power for all of the items necessary for the duration of any diversion. If one or more of the required electrical power sources are provided by an APU, hydraulic system or air driven generator/ram air turbine (ADG/RAT), the following criteria should apply as appropriate:

(i) to ensure hydraulic power (hydraulic motor generator) reliability, it may be necessary to provide two or more independent energy sources;

(ii) the ADG/RAT, if fitted, should not require engine dependent power for deployment; and

(iii) the APU should meet the criteria in (b)(3).

(3) APU: the APU, if required for extended range operations, should be certified as an essential APU and should meet the applicable CS-25 and CS-APU provisions or equivalent (e.g. FAR-25).

(4) Fuel supply system: consideration should include the capability of the fuel supply system to provide sufficient fuel for the entire diversion taking account of aspects such as fuel boost and fuel transfer.

(c) Engine events and corrective action

(1) All engine events and operating hours should be reported by the operator to the airframe and engine supplemental type certificate (STC) holders as well as to the competent authority.

(2) These events should be evaluated by the operator in consultation with the competent authority and with the engine and airframe (S)TC holders. The competent authority may consult the Agency to ensure that worldwide data are evaluated.

(3) Where statistical assessment alone is not applicable, e.g. where the fleet size or accumulated flight hours are small, individual engine events should be reviewed on a case-by-case basis.

(4) The evaluation or statistical assessment, when available, may result in corrective action or the application of operational restrictions.

(5) Engine events could include engine shutdowns, both on ground and in-flight, excluding normal training events, including flameout, occurrences where the intended thrust level was not achieved or where crew action was taken to reduce thrust below the normal level for whatever reason, and unscheduled removals.

(6) Arrangements to ensure that all corrective actions required by the Agency are implemented.

(d) Maintenance

The maintenance programme in accordance with Annex I to Commission Regulation (EU~~C~~) No 1321/2014~~2042/2003~~[12] (Part-M) should be based upon reliability programmes including, but not limited to, the following elements:

(1) engine oil consumption programmes: such programmes are intended to support engine condition trend monitoring; and

(2) engine condition monitoring programme: a programme for each engine that monitors engine performance parameters and trends of degradation that provides for maintenance actions to be undertaken prior to significant performance loss or mechanical failure.

(e) Flight crew training

Flight crew training for this type of operation should include, in addition to the requirements of Subpart FC of Annex III (ORO.FC), particular emphasis on the following:

[12] ~~Commission Regulation (EC) No 2042/2003 of 20 November 2003 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks (OJ L 315, 28.11.2003, p. 1).~~ Commission Regulation (EU) No 1321/2014 of 26 November 2014 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks (OJ L 362, 17.12.2014, p. 1).

(1) Fuel management: verifying required fuel on board prior to departure and monitoring fuel on board en-route~~te~~ including calculation of fuel remaining. Procedures should provide for an independent cross-check of fuel quantity indicators, e.g. fuel flow used to calculate fuel burned compared to indicate fuel remaining. Confirmation that the fuel remaining is sufficient to satisfy the critical fuel reserves.

(2) Procedures for single and multiple failures in-flight that may give rise to go/no-go and diversion decisions — policy and guidelines to aid the flight crew in the diversion decision making process and the need for constant awareness of the closest weather-permissible alternate aerodrome in terms of time.

(3) OEI performance data: drift down procedures and OEI service ceiling data.

(4) Weather reports and flight requirements: meteorological aerodrome reports (METARs) and aerodrome forecast (TAF) reports and obtaining in-flight weather updates on the en-route alternate (ERA), destination and destination alternate aerodromes. Consideration should also be given to forecast winds including the accuracy of the forecast compared to actual wind experienced during flight and meteorological conditions along the expected flight path at the OEI cruising altitude and throughout the approach and landing.

(f) Pre-departure check

A pre-departure check, additional to the pre-flight inspection required by Part-M should be reflected in the operations manual. Flight crew members who are responsible for the pre-departure check of an aeroplane should be fully trained and competent to do it. The training programme required should cover all relevant tasks with particular emphasis on checking required fluid levels.

(g) MEL

The MEL should take into account all items specified by the manufacturer relevant to operations in accordance with this AMC.

(h) Dispatch/flight planning rules

The operator's dispatch rules should address the following:

(1) Fuel and oil supply: an aeroplane should not be dispatched on an extended range flight unless it carries sufficient fuel and oil to comply with the applicable operational requirements and any additional reserves determined in accordance with the following:

(i) Critical fuel scenario — the critical point is the furthest point from an alternate aerodrome assuming a simultaneous failure of an engine and the pressurisation system. For those aeroplanes that are type certificated to operate above flight level 450, the critical point is the furthest point from an alternate aerodrome assuming an engine failure. The operator should carry additional fuel for the worst case fuel burn condition (one engine vs two engines operating) if this is greater than the additional fuel calculated in accordance with the fuel requirements in CAT.OP.MPA, as follows:

(A) fly from the critical point to an alternate aerodrome:

(a) at 10 000 ft;

(b) at 25 000 ft or the single-engine ceiling, whichever is lower, provided that all occupants can be supplied with and use oxygen for the time required to fly from the critical point to an alternate aerodrome; or

(c) at the single-engine ceiling, provided that the aeroplane is type certified to operate above flight level 450;

(B) descend and hold at 1 500 ft for 15 minutes in international standard atmosphere (ISA) conditions;

(C) descend to the applicable MDA/DH followed by a missed approach (taking into account the complete missed approach procedure); followed by

(D) a normal approach and landing.

(ii) Ice protection: additional fuel used when operating in icing conditions (e.g. operation of ice protection systems (engine/airframe as applicable)) and, when manufacturer's data are available, take account of ice accumulation on unprotected surfaces if icing conditions are likely to be encountered during a diversion.

(iii) APU operation: if an APU has to be used to provide additional electrical power, consideration should be given to the additional fuel required.

(2) Communication facilities: the availability of communications facilities in order to allow reliable two-way voice communications between the aeroplane and the appropriate ATC unit at OEI cruise altitudes.

(3) Aircraft technical log review to ensure proper MEL procedures, deferred items, and required maintenance checks completed.

(4) ERA aerodrome(s): ensuring that ERA aerodromes are available for the intended route, within the distance flown in 180 minutes based upon the OEI cruising speed which is a speed within the certificated limits of the aeroplane, selected by the operator and approved by the competent authority, confirming that, based on the available meteorological information, the weather conditions at ERA aerodromes are at or above the applicable minima for the period of time during which the aerodrome(s) may be used.

Table 1: Planning minima

Approach facility	**Alternate aerodrome ceiling**	**Weather minima RVR/VIS**
PA	DA/H +200 ft	RVR/VIS +800 m
NPA Circling approach	MDA/H +400 ft	RVR/VIS +1 500 m

(…)

(66) Amendment of sub-paragraph (d) of *AMC1 CAT.OP.MPA.195 Refuelling/defuelling with passengers embarking, on board or disembarking* for helicopters to ensure that the AMC specifies that procedures apply when rotors are either stopped or rotors are turning.

AMC1 CAT.OP.MPA.195 Refuelling/defuelling with passengers embarking, on board or disembarking
OPERATIONAL PROCEDURES — GENERAL

(a) When refuelling/defuelling with passengers on board, ground servicing activities and work inside the aircraft, such as catering and cleaning, should be conducted in such a manner that they do not create a hazard and allow emergency evacuation to take place through those aisles and exits intended for emergency evacuation.

(b) The deployment of integral aircraft stairs or the opening of emergency exits as a prerequisite to refuelling is not necessarily required.

OPERATIONAL PROCEDURES — AEROPLANES

(c) Operational procedures should specify that at least the following precautions are taken:

(1) one qualified person should remain at a specified location during fuelling operations with passengers on board. This qualified person should be capable of handling emergency procedures concerning fire protection and firefighting, handling communications, and initiating and directing an evacuation;

(2) two-way communication should be established and should remain available by the aeroplane's inter-communication system or other suitable means between the ground crew supervising the refuelling and the qualified personnel on board the aeroplane; the involved personnel should remain within easy reach of the system of communication;

(3) crew, personnel and passengers should be warned that re/defuelling will take place;

(4) 'Fasten Seat Belts' signs should be off;

(5) 'NO SMOKING' signs should be on, together with interior lighting to enable emergency exits to be identified;

(6) passengers should be instructed to unfasten their seat belts and refrain from smoking;

(7) the minimum required number of cabin crew should be on board and be prepared for an immediate emergency evacuation;

(8) if the presence of fuel vapour is detected inside the aeroplane, or any other hazard arises during re/defuelling, fuelling should be stopped immediately;

(9) the ground area beneath the exits intended for emergency evacuation and slide deployment areas should be kept clear at doors where stairs are not in position for use in the event of evacuation; and

(10) provision is made for a safe and rapid evacuation.

Operational procedures — helicopters

(d) Operational procedures should specify that either rotors are stopped or rotors are turning and that at least the following precautions are taken:

(1) door(s) on the refuelling side of the helicopter remain closed;

(2) door(s) on the non-refuelling side of the helicopter remain open, weather permitting;

(3) firefighting facilities of the appropriate scale be positioned so as to be immediately available in the event of a fire;

(4) sufficient personnel be immediately available to move passengers clear of the helicopter in the event of a fire;

(5) sufficient qualified personnel be on board and be prepared for an immediate emergency evacuation;

(6) if the presence of fuel vapour is detected inside the helicopter, or any other hazard arises during refuelling/defuelling, fuelling be stopped immediately;

(7) the ground area beneath the exits intended for emergency evacuation be kept clear; and

(8) provision is made for a safe and rapid evacuation.

(…)

(67) Amendment of sub-paragraph (a) of *GM1 CAT.OP.MPA.295 Use of airborne collision avoidance system (ACAS)* to be aligned with ED Decision 2012/002/R on common airspace usage requirements and operating procedures.

GM1 CAT.OP.MPA.295 Use of airborne collision avoidance system (ACAS)
GENERAL

(a) The ACAS operational procedures and training programmes established by the operator should take into account this GM. It incorporates advice contained in:

(1) ICAO PANS-OPS, Volume 1 Flight Procedures, Attachment A (ACAS Training Guidelines for Pilots) and Attachment B (ACAS High Vertical Rate Encounters) to Part III, Section 3, Chapter 3; and

(2) ICAO PANS-ATM Chapters 12 and 15 phraseology requirements.

(3~~1~~) ICAO Annex 10, Volume IV;

(4~~2~~) ICAO PANS-OPS, Volume 1;

(5~~3~~) ICAO PANS-ATM; and

(6~~4~~) ICAO guidance material 'ACAS Performance-Based Training Objectives' (published under Attachment E of State Letter AN 7/1.3.7.2-97/77).

(…)

(68) Amendment of *AMC2 CAT.IDE.A.225 Emergency medical kit* on carriage under secure conditions to provide operators more flexibility by removing the text referring to the EMK in a 'locked compartment' and replacing it with the possibility to store the EMK also in a secure location in the cabin that prevents unauthorised access to it.

AMC2 CAT.IDE.A.225 Emergency medical kit
CARRIAGE UNDER SECURE~~ITY~~ CONDITIONS

The emergency medical kit should be kept ~~in under secure conditions,~~ either in the flight crew compartment or in another ~~locked compartment~~ secure location in the cabin that prevents unauthorised access to it.

(69) Deletion of the third row of the table in GM1 CAT.IDE.A.125 & CAT.IDE.A.130 Operations under VFR by day & Operations under IFR or at night — flight and navigational instruments and associated equipment. This line is not necessary and may be taken erroneously as a reference to the IR paragraphs.

GM1 CAT.IDE.A.125 & CAT.IDE.A.130 Operations under VFR by day & Operations under IFR or at night — flight and navigational instruments and associated equipment

SUMMARY TABLE

Table 1: Flight and navigational instruments and associated equipment

SERIAL		**FLIGHTS UNDER VFR**		**FLIGHTS UNDER IFR OR AT NIGHT**	
INSTRUMENT		SINGLE-PILOT	TWO PILOTS REQUIRED	SINGLE-PILOT	TWO PILOTS REQUIRED
~~(a)~~		~~(b)~~	~~(c)~~	~~(d)~~	~~(e)~~
1	Magnetic direction	1	1	1	1
2	Time	1	1	1	1
3	Pressure altitude	1	2	2 Note (5)	2 Note (5)
4	Indicated airspeed	1	2	1	2
5	Vertical speed	1	2	1	2
6	Turn and slip or turn coordinator	1 Note (1)	2 Note (1) & Note (2)	1 Note (4)	2 Note (4)
7	Attitude	1 Note (1)	2 Note (1) & Note (2)	1	2
8	Stabilised direction	1 Note (1)	2 Note (1) & Note (2)	1	2
9	Outside air temperature	1	1	1	1
10	Mach number indicator	See Note (3)			
11	Airspeed icing protection	1 Note (6)	2 Note (6)	1	2
12	Airspeed icing protection failure indicating			1 Note (7)	2 Note (7)
13	Static pressure source			2	2
14	Standby attitude indicator			1 Note (8)	1 Note (8)
15	Chart holder			1 Note (6)	1 Note (6)

Note (1) For local flights (A to A, 50 NM radius, not more than 60 minutes' duration), the instruments at serials (a)(6) and (a)(8) may be replaced by either a turn and slip indicator, or a turn coordinator, or both an attitude indicator and a slip indicator.

Note (2) The substitute instruments permitted by Note (1) above should be provided at each pilot's station.

Note (3) A Mach number indicator is required for each pilot whenever compressibility limitations are not otherwise indicated by airspeed indicators.

Note (4) For IFR or at night, a turn and slip indicator, or a slip indicator and a third (standby) attitude indicator certified according to CS 25.1303 (b)(4) or equivalent, is required.

Note (5) Except for unpressurised aeroplanes operating below 10 000 ft, neither three pointers, nor drum-pointer altimeters satisfy the requirement.

Note (6) Applicable only to aeroplanes with a maximum certified take-off mass (MCTOM) of more than 5 700 kg, or with an MOPSC of more than 9. It also applies to all aeroplanes first issued with an individual certificate of airworthiness (CofA) on or after 1 April 1999.

Note (7) The pitot heater failure annunciation applies to any aeroplane issued with an individual CofA on or after 1 April 1998. It also applies before that date when: the aeroplane has an MCTOM of more than 5 700 kg and an MOPSC greater than 9.

Note (8) Applicable only to aeroplanes with an MCTOM of more than 5 700 kg, or with an MPSCMOPSC of more than 9.

(…)

(70) Amendment of point (a)(4) of *AMC2 CAT.IDE.A.280 Emergency locator transmitter (ELT)* on TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS to clarify that a water-activated ELT(S) is not an ELT(AP).

AMC2 CAT.IDE.A.280 Emergency locator transmitter (ELT)
TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS

(a) The ELT required by this provision should be one of the following:

(1) Automatic fixed (ELT(AF)). An automatically activated ELT that is permanently attached to an aircraft and is designed to aid search and rescue (SAR) teams in locating the crash site.

(2) Automatic portable (ELT(AP)). An automatically activated ELT, that is rigidly attached to an aircraft before a crash, but is readily removable from the aircraft after a crash. It functions as an ELT during the crash sequence. If the ELT(AP) does not employ an integral antenna, the aircraft-mounted antenna may be disconnected and an auxiliary antenna (stored on the ELT case) attached to the ELT. The ELT can be tethered to a survivor or a life-raft. This type of ELT is intended to aid SAR teams in locating the crash site or survivor(s).

(3) Automatic deployable (ELT(AD))an ELT that is rigidly attached to the aircraft before the crash and that is automatically ejected, deployed and activated by an impact, and, in some cases, also by hydrostatic sensors. Manual deployment is also provided. This type of ELT should float in water and is intended to aid SAR teams in locating the crash site.

(4) Survival ELT (ELT(S)). An ELT that is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and manually activated by a survivor. An ELT(S) may be activated manually or automatically (e.g. by water activation). It should be designed either to be tethered to a life-raft or a survivor. A water-activated ELT(S) is not an ELT(AP).

(b) To minimise the possibility of damage in the event of crash impact, the automatic ELT should be rigidly fixed to the aircraft structure, as far aft as is practicable, with its antenna and connections arranged so as to maximise the probability of the signal being transmitted after a crash.

(c) Any ELT carried should operate in accordance with the relevant provisions of ICAO Annex 10, Volume III communications systems and should be registered with the national agency responsible for initiating search and rescue or other nominated agency.

(…)

(71) Deletion of the third row of the table in *GM1 CAT.IDE.H.125 & CAT.IDE.H.130 Operations under VFR by day & Operations under IFR or at night — flight and navigational instruments and associated equipment*. This line is not necessary and may be taken erroneously as a reference to the IR paragraphs.

GM1 CAT.IDE.H.125 & CAT.IDE.H.130 Operations under VFR by day & Operations under IFR or at night — flight and navigational instruments and associated equipment

SUMMARY TABLE

Table 1: Flight and navigational instruments and associated equipment

SERIAL		**FLIGHTS UNDER VFR**		**FLIGHTS UNDER IFR OR AT NIGHT**	
INSTRUMENT		SINGLE-PILOT	TWO PILOTS REQUIRED	SINGLE-PILOT	TWO PILOTS REQUIRED
~~(a)~~		~~(b)~~	~~(c)~~	~~(d)~~	~~(e)~~
1	Magnetic direction	1	1	1	1
2	time	1	1	1	1
3	Pressure altitude	1	2	2 Note (1)	2
4	Indicated airspeed	1	2	1	2
5	Vertical speed	1	2	1	2
6	Slip	1	2	1	2
7	Attitude	1 Note (2)	2 Note(2)	1	2
8	Stabilised direction	1 Note (2)	2 Note(2)	1	2
9	Outside air temperature	1	1	1	1
10	Airspeed icing protection	1 Note (3)	2 Note (3)	1	2
11	Airspeed icing protection failure indicating			1 Note (4)	2 Note (4)

12	Static pressure source			2	2
13	Standby attitude			1 Note (5)	1 Note (5)
14	Chart holder			1 Note (6)	1 Note (6)

Note (1) For single-pilot night operation under VFR, one means of measuring and displaying pressure altitude may be substituted by a means of measuring and displaying radio altitude.

Note (2) Applicable only to helicopters with a maximum certified take-off mass (MCTOM) of more than 3 175 kg; or helicopters operated over water when out of sight of land or when the visibility is less than 1 500 m.

Note (3) Applicable only to helicopters with an MCTOM of more than 3 175 kg, or with an MOPSC of more than 9.

Note (4) The pitot heater failure annunciation applies to any helicopter issued with an individual CofA on or after 1 August 1999. It also applies before that date when: the helicopter has an MCTOM of more than 3 175 kg and an MOPSC of more than 9.

Note (5) For helicopters with an MCTOM of more than 3 175 kg, CS 29.1303(g) may require either a gyroscopic rate-of-turn indicator combined with a slip-skid indicator (turn and bank indicator) or a standby attitude indicator satisfying the requirements. In any case, the original type certification standard should be referred to determine the exact requirement.

Note (6) Applicable only to helicopters operating under IFR.

(…)

(72) Amendment of point (a)(4) of *AMC2 CAT.IDE.H.280 Emergency locator transmitter (ELT)* on TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS to clarify that a water-activated ELT(S) is not an ELT(AP).

AMC2 CAT.IDE.H.280 Emergency locator transmitter (ELT)
TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS

(a) The ELT required by this provision should be one of the following:

(1) Automatic Fixed (ELT(AF)). An automatically activated ELT that is permanently attached to an aircraft and is designed to aid search and rescue (SAR) teams in locating the crash site.

(2) Automatic Portable (ELT(AP)). An automatically activated ELT, which is rigidly attached to an aircraft before a crash, but is readily removable from the aircraft after a crash. It functions as an ELT during the crash sequence. If the ELT does not employ an integral antenna, the aircraft-mounted antenna may be disconnected and an auxiliary antenna (stored in the ELT case) attached to the ELT. The ELT can be tethered to a survivor or a life-raft. This type of ELT is intended to aid SAR teams in locating the crash site or survivor(s).

(3) Automatic Deployable (ELT(AD)). An ELT that is rigidly attached to the aircraft before the crash and that is automatically ejected, deployed and activated by an impact, and, in some cases, also by

hydrostatic sensors. Manual deployment is also provided. This type of ELT should float in water and is intended to aid SAR teams in locating the crash site.

(4) Survival ELT (ELT(S)). An ELT that is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and manually activated by a survivor. An ELT(S) may be activated manually or automatically (e.g. by water activation). It should be designed either to be tethered to a life-raft or a survivor. A water-activated ELT(S) is not an ELT(AP).

(b) To minimise the possibility of damage in the event of crash impact, the automatic ELT should be rigidly fixed to the aircraft structure, as far aft as is practicable, with its antenna and connections arranged so as to maximise the probability of the signal being transmitted after a crash.

(c) Any ELT carried should operate in accordance with the relevant provisions of ICAO Annex 10, Volume III Communications Systems and should be registered with the national agency responsible for initiating search and rescue or other nominated agency.

3.1.5. AMC/GM to Annex V (Part-SPA)

(…)

(73) Development of a new *AMC1 SPA.GEN.105(b)(2) Application for a specific approval* on NON-MANDATORY (RECOMMENDATION) ELEMENTS OF OPERATIONAL SUITABILITY DATA.

AMC1 SPA.GEN.105(b)(2) Application for a specific approval
NON-MANDATORY (RECOMMENDATION) ELEMENTS OF OPERATIONAL SUITABILITY DATA

When developing training programmes and syllabi, the operator should consider the non-mandatory (recommendation) elements for the relevant type that are provided in the operational suitability data established in accordance with Regulation (EU) No 748/2012.

Subpart D – Operations in airspace with reduced vertical separation minima (RVSM)

(74) Insertion of a new sub-paragraph (h) with regard to continuing airworthiness items into *AMC1 SPA.RVSM.105 RVSM operational approval* on the CONTENT OF OPERATOR RVSM APPLICATION.

AMC1 SPA.RVSM.105 RVSM operational approval
CONTENT OF OPERATOR RVSM APPLICATION

The following material should be made available to the competent authority, in sufficient time to permit evaluation, before the intended start of RVSM operations:

(a) Airworthiness documents

Documentation that shows that the aircraft has RVSM airworthiness approval. This should include an aircraft flight manual (AFM) amendment or supplement.

(b) Description of aircraft equipment

A description of the aircraft appropriate to operations in an RVSM environment.

(c) Training programmes, operating practices and procedures

The operator should submit training syllabi for initial and recurrent training programmes together with other relevant material. The material should show that the operating practices, procedures and training items, related to RVSM operations in airspace that requires State operational approval, are incorporated.

(d) Manuals and checklists

The appropriate manuals and checklists should be revised to include information/guidance on standard operating procedures. Manuals should contain a statement of the airspeeds, altitudes and weights considered in RVSM aircraft approval, including identification of any operating limitations or conditions established for that aircraft type. Manuals and checklists may need to be submitted for review by the competent authority as part of the application process.

(e) Past performance

Relevant operating history, where available, should be included in the application. The applicant should show that any required changes have been made in training, operating or maintenance practices to improve poor height-keeping performance.

(f) Minimum equipment list

Where applicable, a minimum equipment list (MEL), adapted from the master minimum equipment list (MMEL), should include items pertinent to operating in RVSM airspace.

(g) Plan for participation in verification/monitoring programmes

The operator should establish a plan for participation in any applicable verification/monitoring programme acceptable to the competent authority. This plan should include, as a minimum, a check on a sample of the operator's fleet by an regional monitoring agency (RMA)'s independent height-monitoring system.

(h) Continuing airworthiness

The amendment to the aircraft maintenance programme and continuing airworthiness procedures in support of the RVSM operations.

(…)

(75) Development of a new *AMC3 SPA.RVSM.105 RVSM operational approval* on CONTINUING AIRWORTHINESS to ensure that AMCs to SPA.RVSM contain specific continuing airworthiness references for the application/approval of RVSM operations and to transpose chapter 10 of JAA's TGL6 to the European Air OPS rules.

AMC3 SPA.RVSM.105 RVSM operational approval
CONTINUING AIRWORTHINESS

(a) Maintenance programme

The aircraft maintenance programme should include the instructions for continuing airworthiness issued by the type certificate holder in relation to the RVSM operations certification as required by AMC1 ACNS.A.GEN.010.

(b) Continuing airworthiness procedures

The continuing airworthiness procedures should establish a process to:

(1) assess any modification or design change which in any way affects the RVSM approval;

(2) evaluate any repairs that may affect the integrity of the continuing RVSM approval, e.g. those affecting the alignment of pitot/static probes, repairs to dents or deformation around static plates;

(3) ensure the proper maintenance of airframe geometry for proper surface contours and the mitigation of altimetry system error, surface measurements or skin waviness as specified in the ICA, to ensure adherence to RVSM tolerances. These checks should be performed following repairs or alterations having an effect on airframe surface and airflow

(c) Additional training may be necessary for continuing airworthiness and maintenance staff to support RVSM approval. Areas that may need to be highlighted for initial and recurrent training of relevant personnel are:

(1) Aircraft geometric inspection techniques.

(2) Test equipment calibration and use of that equipment.

(3) Any special instructions or procedures introduced for RVSM approval.

(d) Test equipment

The operator should ensure that maintenance organisations use test equipment adequate for maintenance of the RVSM systems. The adequacy of the test equipment should be established in accordance with the type certificate holder recommendations and taking into consideration the required test equipment accuracy and the test equipment calibration.

(…)

(76) Amendment of sub-paragraph (b) of *GM1 SPA.RVSM.105(d)(9) RVSM operational approval* on SPECIFIC REGIONAL PROCEDURES to delete the obsolete reference to EUROCONTROL Document ASM ET1.ST.5000 and replace it with the correct reference to ICAO EUR DOC 009 for the European RVSM airspace.

GM1 SPA.RVSM.105(d)(9) RVSM operational approval
SPECIFIC REGIONAL PROCEDURES

(a) The areas of applicability (by Flight Information Region) of RVSM airspace in identified ICAO regions is contained in the relevant sections of ICAO Document 7030/4. In addition, these sections contain operating and contingency procedures unique to the regional airspace concerned, specific flight planning requirements and the approval requirements for aircraft in the designated region.

(b) Comprehensive guidance on operational matters for European RVSM airspace is contained in ICAO EUR Doc 009 entitled 'Guidance material on the implementation of a 300 m (1 000 ft) vertical separation minimum in the European RVSM airspace' ~~EUROCONTROL Document ASM ET1.ST.5000 entitled "The ATC Manual for a Reduced Vertical Separation (RVSM) in Europe"~~ with further material included in the relevant State aeronautical publications.

(77) Amendment of *GM1 SPA.LVO.120 Flight crew training and qualifications* on FLIGHT CREW TRAINING to include the correct reference to AMC1 SPA.LVO.120(f)(1) on the number of approaches regarding flight crew training.

GM1 SPA.LVO.120 Flight crew training and qualifications
FLIGHT CREW TRAINING

The number of approaches referred to in AMC1 SPA.LVO.120 (fg)(1) includes one approach and landing that may be conducted in the aircraft using approved CAT II/III procedures. This approach and landing may be conducted in normal line operation or as a training flight.

(…)

(78) Amendment of sub-paragraph (f) of *AMC1 SPA.DG.105(a) Approval to transport dangerous goods* on TRAINING PROGRAMME to achieve alignment with the respective requirements in ICAO's Technical Instructions for the Safe Transport of Dangerous Goods (Part 1;4, in 4.2.3), to reward those operators who are planning in advance recurrent training on dangerous goods.

AMC1 SPA.DG.105(a) Approval to transport dangerous goods
TRAINING PROGRAMME

(a) The operator should indicate for the approval of the training programme how the training will be carried out. For formal training courses, the course objectives, the training programme syllabus/curricula and examples of the written examination to be undertaken should be included.

(b) Instructors should have knowledge of training techniques as well as in the field of transport of dangerous goods by air so that the subject is covered fully and questions can be adequately answered.

(c) Training intended to give general information and guidance may be by any means including handouts, leaflets, circulars, slide presentations, videos, computer-based training, etc., and may take place on-the-job or off-the-job. The person being trained should receive an overall awareness of the subject. This training should include a written, oral or computer-based examination covering all areas of the training programme, showing that a required minimum level of knowledge has been acquired.

(d) Training intended to give an in-depth and detailed appreciation of the whole subject or particular aspects of it should be by formal training courses, which should include a written examination, the successful passing of which will result in the issue of the proof of qualification. The course may be by means of tuition, as a self-study programme, or a mixture of both. The person being trained should gain sufficient knowledge so as to be able to apply the detailed rules of the Technical Instructions.

(e) Training in emergency procedures should include as a minimum:

(1) for personnel other than crew members:

(i) dealing with damaged or leaking packages; and

(ii) other actions in the event of ground emergencies arising from dangerous goods;

(2) for flight crew members:

(i) actions in the event of emergencies in flight occurring in the passenger compartment or in the cargo compartments; and

(ii) the notification to ATS should an in-flight emergency occur;

(3) for crew members other than flight crew members:

(i) dealing with incidents arising from dangerous goods carried by passengers; or

(ii) dealing with damaged or leaking packages in flight.

(f) Training should be conducted at intervals of no longer than 2 years. If the recurrent training is undertaken within the last 3 calendar months of the validity period, the new validity period should be counted from the original expiry date.

(…)

(79) Amendment of *AMC5 SPA.LVO.105 LVO approval* to provide the correct reference to the current Continuing Airworthiness Regulation.

AMC5 SPA.LVO.105 LVO approval
MAINTENANCE OF CAT II, CAT III AND LVTO EQUIPMENT

Maintenance instructions for the on-board guidance systems should be established by the operator, in liaison with the manufacturer, and included in the operator's aircraft maintenance programme in accordance with Annex I to Commission Regulation (EU~~C~~) No 1321/2014~~2042/2003~~. (Part-M).

3.1.6. AMC/GM to Annex VI (Part-NCC)

(80) Amendment of *AMC1 NCC.GEN.140(a)(3) Documents, manuals and information to be carried* on CERTIFICATE OF AIRWORTHINESS to delete the wrong reference to permit to fly (PtF). The reference to PtF has been deleted to avoid a misunderstanding of the relationship between a CofA and a PtF, since a PtF is not similar to a CofA.

AMC1 NCC.GEN.140(a)(3) Documents, manuals and information to be carried
CERTIFICATE OF AIRWORTHINESS

The certificate of airworthiness should be a normal certificate of airworthiness~~,~~ or a restricted certificate of airworthiness ~~or a permit to fly~~ issued in accordance with the applicable airworthiness requirements.

(…)

(81) Development of a new *GM1 NCC.IDE.A.100(b) Instruments and equipment — general* on REQUIRED INSTRUMENTS AND EQUIPMENT THAT DO NOT NEED TO BE APPROVED IN ACCORDANCE WITH THE APPLICABLE AIRWORTHINESS REQUIREMENTS. This new GM mirrors the respective GM in Part-NCO and Part-SPO.

GM1 NCC.IDE.A.100(b) Instruments and equipment — general
REQUIRED INSTRUMENTS AND EQUIPMENT THAT DO NOT NEED TO BE APPROVED IN ACCORDANCE WITH THE APPLICABLE AIRWORTHINESS REQUIREMENTS

The functionality of non-installed instruments and equipment required by this Subpart and that do not need an equipment approval, as listed in SPO.IDE.A.100(b), should be checked against recognised industry standards appropriate to the intended purpose. The operator is responsible for ensuring the maintenance of these instruments and equipment.

(…)

(82) Amendment of *GM1 NCC.IDE.A.100(b)&(c) Instruments and equipment — general*. The changes are on the numbering of the GM and on the subtitle, which now specifies that this GM only applies to NON-REQUIRED INSTRUMENTS AND EQUIPMENT THAT DO NOT NEED TO BE APPROVED IN ACCORDANCE WITH THE APPLICABLE AIRWORTHINESS REQUIREMENTS, BUT ARE CARRIED ON A FLIGHT.

GM~~1~~2 NCC.IDE.A.100~~(b)&~~(c) Instruments and equipment — general
NON-REQUIRED INSTRUMENTS AND EQUIPMENT THAT DO NOT NEED TO BE APPROVED IN ACCORDANCE WITH THE APPLICABLE AIRWORTHINESS REQUIREMENTS, BUT ARE CARRIED ON A FLIGHT ~~INSTRUMENTS AND EQUIPMENT THAT DO NOT NEED TO BE APPROVED~~

(a) The provision of this paragraph does not exempt the item of equipment from complying with the applicable airworthiness requirements if the instrument or equipment is installed in the aeroplane. In this case, the installation should be approved as required in the applicable airworthiness requirements and should comply with the applicable airworthiness codes.

(b) The functionality of non-installed instruments and equipment required by this Part that do not need an equipment approval should be checked against recognised industry standards appropriate for the

intended purpose. The operator is responsible for ensuring the maintenance of these instruments and equipment.

(c) The failure of additional non-installed instruments or equipment not required by this Part or by the applicable airworthiness requirements or any applicable airspace requirements should not adversely affect the airworthiness and/or the safe operation of the aircraft. Examples are the following:

(1) instruments supplying additional flight information (e.g. stand-alone global positioning system (GPS));

(2) mission dedicated equipment (e.g. radios); and

(3) non-installed passenger entertainment equipment.

(…)

(83) Amendment of point (a)(4) of *AMC2 NCC.IDE.A.215 Emergency locator transmitter (ELT)* on TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS to clarify that a water-activated ELT(S) is not an ELT(AP).

AMC2 NCC.IDE.A.215 Emergency locator transmitter (ELT)
TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS

(a) The ELT required by this provision should be one of the following:

(1) Automatic Fixed (ELT(AF)). An automatically activated ELT that is permanently attached to an aircraft and is designed to aid search and rescue (SAR) teams in locating the crash site.

(2) Automatic Portable (ELT(AP)). An automatically activated ELT, which is rigidly attached to an aircraft before a crash, but is readily removable from the aircraft after a crash. It functions as an ELT during the crash sequence. If the ELT does not employ an integral antenna, the aircraft-mounted antenna may be disconnected and an auxiliary antenna (stored in the ELT case) attached to the ELT. The ELT can be tethered to a survivor or a life-raft. This type of ELT is intended to aid SAR teams in locating the crash site or survivor(s).

(3) Automatic Deployable (ELT(AD)). An ELT that is rigidly attached to the aircraft before the crash and that is automatically ejected, deployed and activated by an impact, and, in some cases, also by hydrostatic sensors. Manual deployment is also provided. This type of ELT should float in water and is intended to aid SAR teams in locating the crash site.

(4) Survival ELT (ELT(S)). An ELT that is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and manually activated by a survivor. An ELT(S) may be activated manually or automatically (e.g. by water activation). It should be designed either to be tethered to a life-raft or a survivor. A water-activated ELT(S) is not an ELT(AP).

(b) To minimise the possibility of damage in the event of crash impact, the automatic ELT should be rigidly fixed to the aircraft structure, as far aft as is practicable, with its antenna and connections arranged so as to maximise the probability of the signal being transmitted after a crash.

(c) Any ELT carried should operate in accordance with the relevant provisions of ICAO Annex 10, Volume III Communications Systems and should be registered with the national agency responsible for initiating search and rescue or other nominated agency.

(…)

(84) Development of a new *GM1 NCC.IDE.H.100(b) Instruments and equipment — general* on REQUIRED INSTRUMENTS AND EQUIPMENT THAT DO NOT NEED TO BE APPROVED IN ACCORDANCE WITH THE APPLICABLE AIRWORTHINESS REQUIREMENTS. This new GM mirrors the respective GM in Part-NCO and Part-SPO.

GM1 NCC.IDE.H.100(b) Instruments and equipment — general
REQUIRED INSTRUMENTS AND EQUIPMENT THAT DO NOT NEED TO BE APPROVED IN ACCORDANCE WITH THE APPLICABLE AIRWORTHINESS REQUIREMENTS

The functionality of non-installed instruments and equipment required by this Subpart and that do not need an equipment approval, as listed in SPO.IDE.A.100(b), should be checked against recognised industry standards appropriate to the intended purpose. The operator is responsible for ensuring the maintenance of these instruments and equipment.

(85) Amendment of *GM1 NCC.IDE.H.100(b)&(c) Instruments and equipment — general*. The changes are on the numbering of the GM and on the subtitle, which now specifies that this GM only applies to NON-REQUIRED INSTRUMENTS AND EQUIPMENT THAT DO NOT NEED TO BE APPROVED IN ACCORDANCE WITH THE APPLICABLE AIRWORTHINESS REQUIREMENTS, BUT ARE CARRIED ON A FLIGHT.

GM~~1~~2 NCC.IDE.H.100~~(b)&~~(c) Instruments and equipment — general
NON-REQUIRED INSTRUMENTS AND EQUIPMENT THAT DO NOT NEED TO BE APPROVED IN ACCORDANCE WITH THE APPLICABLE AIRWORTHINESS REQUIREMENTS, BUT ARE CARRIED ON A FLIGHT ~~INSTRUMENTS AND EQUIPMENT THAT DO NOT NEED TO BE APPROVED~~

(a) The provision of this paragraph does not exempt the item of equipment from complying with the applicable airworthiness requirements if the instrument or equipment is installed in the aeroplane. In this case, the installation should be approved as required in the applicable airworthiness requirements and should comply with the applicable airworthiness codes.

(b) The functionality of non-installed instruments and equipment required by this Part that do not need an equipment approval should be checked against recognised industry standards appropriate for the intended purpose. The operator is responsible for ensuring the maintenance of these instruments and equipment.

(c) The failure of additional non-installed instruments or equipment not required by this Part or by the applicable airworthiness requirements or any applicable airspace requirements should not adversely affect the airworthiness and/or the safe operation of the aircraft. Examples are the following:

(1) instruments supplying additional flight information (e.g. stand-alone global positioning system (GPS));

(2) mission dedicated equipment (e.g. radios); and

(3) non-installed passenger entertainment equipment.

(…)

(86) Amendment of *AMC1 NCC.IDE.H.115 Operating lights* to clarify that the landing light should be trainable, at least in the vertical plane, or optionally be an additional fixed light or lights positioned to give a wide spread of illumination.

AMC1 NCC.IDE.H.115 Operating lights
LANDING LIGHT

The landing light should be trainable, at least in the vertical plane or optionally be an additional fixed light or lights positioned to give a wide spread of illumination.

(…)

(87) Development of a new *GM1 NCC.IDE.H.125(a)(3) Operations under IFR — flight and navigational instruments and associated equipment*. This GM mirrors the respective GM in Part-NCO and Part-SPO and ensures consistency amongst the different Parts.

GM1 NCC.IDE.H.125(a)(3) Operations under IFR — flight and navigational instruments and associated equipment
ALTIMETERS

Altimeters with counter drum-pointer or equivalent presentation are considered to be less susceptible to misinterpretation for helicopters operating above 10 000 ft.

(…)

(88) Amendment of point (a)(4) of *AMC2 NCC.IDE.H.215 Emergency locator transmitter (ELT)* on TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS to clarify that a water-activated ELT(S) is not an ELT(AP).

AMC2 NCC.IDE.H.215 Emergency locator transmitter (ELT)
TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS

(a) The ELT required by this provision should be one of the following:

(1) Automatic Fixed (ELT(AF)). An automatically activated ELT that is permanently attached to an aircraft and is designed to aid search and rescue (SAR) teams in locating the crash site.

(2) Automatic Portable (ELT(AP)). An automatically activated ELT, which is rigidly attached to an aircraft before a crash, but is readily removable from the aircraft after a crash. It functions as an ELT during the crash sequence. If the ELT does not employ an integral antenna, the aircraft-mounted antenna may be disconnected and an auxiliary antenna (stored in the ELT case) attached to the ELT. The ELT can be tethered to a survivor or a life-raft. This type of ELT is intended to aid SAR teams in locating the crash site or survivor(s).

(3) Automatic Deployable (ELT(AD)). An ELT that is rigidly attached to the aircraft before the crash and that is automatically ejected, deployed and activated by an impact, and, in some cases, also by hydrostatic sensors. Manual deployment is also provided. This type of ELT should float in water and is intended to aid SAR teams in locating the crash site.

(4) Survival ELT (ELT(S)). An ELT that is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and manually activated by a survivor. An ELT(S) may be activated manually or

automatically (e.g. by water activation). It should be designed either to be tethered to a life-raft or a survivor. A water-activated ELT(S) is not an ELT(AP).

(b) To minimise the possibility of damage in the event of crash impact, the automatic ELT should be rigidly fixed to the aircraft structure, as far aft as is practicable, with its antenna and connections arranged so as to maximise the probability of the signal being transmitted after a crash.

(c) Any ELT carried should operate in accordance with the relevant provisions of ICAO Annex 10, Volume III Communications Systems and should be registered with the national agency responsible for initiating search and rescue or other nominated agency.

(…)

(89) Amendment of *AMC1 NCC.IDE.H.235 All helicopters on flight over water – ditching* to introduce a subtitle to the AMC reading 'EMERGENCY FLOTATION EQUIPMENT'.

AMC1 NCC.IDE.H.235 All helicopters on flight over water – ditching
EMERGENCY FLOTATION EQUIPMENT

The same considerations of AMC1 NCC.IDE.H.231 should apply in respect of emergency flotation equipment.

3.1.7. AMC/GM to Annex VIII (Part-NCO)

(…)

(90) Development of a new *GM1 NCO.OP.200 Simulated situations in flight* on DESIGNATION OF PERSONS AS CREW MEMBERS to ensure that this item of the 'issues list' of December 2012 in response to the EASA GA Safety Strategy, identified by Europe Air Sports at the request of the General Aviation community, is included in the NPA. This GM ensures that an accompanying pilot can be considered as part of the crew.

GM1.NCO.OP.180 Simulated situations in flight
DESIGNATION OF PERSONS AS CREW MEMBERS

(a) The operator may designate any person as a crew member (including task specialists) provided that:

(1) the role, according to the reasonable expectation of the operator, will enhance the safety of the flight or achieve an operational objective of the flight;

(2) the person, according to the reasonable expectation of the operator, is capable of fulfilling the role;

(3) the person has been briefed on the role as a crew member and informed that they are crew, not a passenger; and

(4) the person agrees to the role as crew member.

(b) Crew members are not considered to be passengers.

(c) Crew members may be required, by specific provisions of this Regulation and other Implementing Rules, to hold licences, ratings or other personnel certificates to fulfil certain roles such as instructor, examiner or flight engineer in certain circumstances.

(…)

(91) Amendment of point (a)(4) of *AMC2 NCO.IDE.A.170 Emergency locator transmitter (ELT)* on TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS to clarify that a water-activated ELT(S) is not an ELT(AP).

AMC2 NCO.IDE.A.170 Emergency locator transmitter (ELT)
TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS

(a) The ELT required by this provision should be one of the following:

(1) Automatic Fixed (ELT(AF)). An automatically activated ELT that is permanently attached to an aircraft and is designed to aid search and rescue (SAR) teams in locating the crash site.

(2) Automatic Portable (ELT(AP)). An automatically activated ELT, which is rigidly attached to an aircraft before a crash, but is readily removable from the aircraft after a crash. It functions as an ELT during the crash sequence. If the ELT does not employ an integral antenna, the aircraft-mounted antenna may be disconnected and an auxiliary antenna (stored in the ELT case) attached to the ELT. The ELT can be tethered to a survivor or a life-raft. This type of ELT is intended to aid SAR teams in locating the crash site or survivor(s).

(3) Automatic Deployable (ELT(AD)). An ELT that is rigidly attached to the aircraft before the crash and that is automatically ejected, deployed and activated by an impact, and, in some cases, also by hydrostatic sensors. Manual deployment is also provided. This type of ELT should float in water and is intended to aid SAR teams in locating the crash site.

(4) Survival ELT (ELT(S)). An ELT that is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and manually activated by a survivor. An ELT(S) may be activated manually or automatically (e.g. by water activation). It should be designed either to be tethered to a life-raft or a survivor. A water-activated ELT(S) is not an ELT(AP).

(b) To minimise the possibility of damage in the event of crash impact, the automatic ELT should be rigidly fixed to the aircraft structure, as far aft as is practicable, with its antenna and connections arranged so as to maximise the probability of the signal being transmitted after a crash.

(c) Any ELT carried should operate in accordance with the relevant provisions of ICAO Annex 10, Volume III Communications Systems and should be registered with the national agency responsible for initiating search and rescue or other nominated agency.

(…)

(92) Amendment of point (a)(4) of *AMC2 NCO.IDE.H.170 Emergency locator transmitter (ELT)* on TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS to clarify that a water-activated ELT(S) is not an ELT(AP).

AMC2 NCO.IDE.H.170 Emergency locator transmitter (ELT)
TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS

(a) The ELT required by this provision should be one of the following:

(1) Automatic Fixed (ELT(AF)). An automatically activated ELT that is permanently attached to an aircraft and is designed to aid search and rescue (SAR) teams in locating the crash site.

(2) Automatic Portable (ELT(AP)). An automatically activated ELT, which is rigidly attached to an aircraft before a crash, but is readily removable from the aircraft after a crash. It functions as an ELT during the crash sequence. If the ELT does not employ an integral antenna, the aircraft-mounted antenna may be disconnected and an auxiliary antenna (stored in the ELT case) attached to the ELT. The ELT can be tethered to a survivor or a life-raft. This type of ELT is intended to aid SAR teams in locating the crash site or survivor(s).

(3) Automatic Deployable (ELT(AD)). An ELT that is rigidly attached to the aircraft before the crash and that is automatically ejected, deployed and activated by an impact, and, in some cases, also by hydrostatic sensors. Manual deployment is also provided. This type of ELT should float in water and is intended to aid SAR teams in locating the crash site.

(4) Survival ELT (ELT(S)). An ELT that is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and manually activated by a survivor. An ELT(S) may be activated manually or automatically (e.g. by water activation). It should be designed either to be tethered to a life-raft or a survivor. A water-activated ELT(S) is not an ELT(AP).

(b) To minimise the possibility of damage in the event of crash impact, the automatic ELT should be rigidly fixed to the aircraft structure, as far aft as is practicable, with its antenna and connections arranged so as to maximise the probability of the signal being transmitted after a crash.

(c) Any ELT carried should operate in accordance with the relevant provisions of ICAO Annex 10, Volume III Communications Systems and should be registered with the national agency responsible for initiating search and rescue or other nominated agency.

3.1.8. AMC/GM to Annex VII (Part-SPO)

(…)

(93) Development of a new *GM1 SPO.OP.185 Simulated situations in flight* on DESIGNATION OF PERSONS AS CREW MEMBERS to ensure that this item of the 'issues list' of December 2012 in response to the EASA GA Safety Strategy, identified by Europe Air Sports at the request of the General Aviation community, is included in the NPA. This GM ensures that an accompanying pilot can be considered as part of the crew.

GM1.SPO.OP.185 Simulated situations in flight
DESIGNATION OF PERSONS AS CREW MEMBERS

(a) The operator may designate any person as a crew member (including task specialists) provided that:

(1) the role, according to the reasonable expectation of the operator, will enhance the safety of the flight or achieve an operational objective of the flight;

(2) the person, according to the reasonable expectation of the operator, is capable of fulfilling the role;

(3) the person has been briefed on the role as a crew member and informed that they are crew, not a passenger; and

(4) the person agrees to the role as crew member.

(b) Crew members are not considered to be passengers.

(c) Crew members may be required, by specific provisions of this Regulation and other Implementing Rules, to hold licences, ratings or other personnel certificates to fulfil certain roles such as instructor, examiner or flight engineer in certain circumstances.

(…)

(94) Amendment of point (a)(4) of *AMC2 SPO.IDE.A.190 Emergency locator transmitter (ELT)* on TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS to clarify that a water-activated ELT(S) is not an ELT(AP).

AMC2 SPO.IDE.A.190 Emergency locator transmitter (ELT)

TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS

(a) The ELT required by this provision should be one of the following:

(1) Automatic Fixed (ELT(AF)). An automatically activated ELT that is permanently attached to an aircraft and is designed to aid search and rescue (SAR) teams in locating the crash site.

(2) Automatic Portable (ELT(AP)). An automatically activated ELT, which is rigidly attached to an aircraft before a crash, but is readily removable from the aircraft after a crash. It functions as an ELT during the crash sequence. If the ELT does not employ an integral antenna, the aircraft-mounted antenna may be disconnected and an auxiliary antenna (stored in the ELT case) attached to the ELT. The ELT can be tethered to a survivor or a life-raft. This type of ELT is intended to aid SAR teams in locating the crash site or survivor(s).

(3) Automatic Deployable (ELT(AD)). An ELT that is rigidly attached to the aircraft before the crash and that is automatically ejected, deployed and activated by an impact, and, in some cases, also by hydrostatic sensors. Manual deployment is also provided. This type of ELT should float in water and is intended to aid SAR teams in locating the crash site.

(4) Survival ELT (ELT(S)). An ELT that is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and manually activated by a survivor. An ELT(S) may be activated manually or automatically (e.g. by water activation). It should be designed either to be tethered to a life-raft or a survivor. A water-activated ELT(S) is not an ELT(AP).

(b) To minimise the possibility of damage in the event of crash impact, the automatic ELT should be rigidly fixed to the aircraft structure, as far aft as is practicable, with its antenna and connections arranged so as to maximise the probability of the signal being transmitted after a crash.

(c) Any ELT carried should operate in accordance with the relevant provisions of ICAO Annex 10, Volume III Communications Systems and should be registered with the national agency responsible for initiating search and rescue or other nominated agency.

(…)

(95) Amendment of point (a)(4) of *AMC2 SPO.IDE.H.190 Emergency locator transmitter (ELT)* on TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS to clarify that a water-activated ELT(S) is not an ELT(AP).

AMC2 SPO.IDE.H.190 Emergency locator transmitter (ELT)
TYPES OF ELT AND GENERAL TECHNICAL SPECIFICATIONS

(a) The ELT required by this provision should be one of the following:

(1) Automatic Fixed (ELT(AF)). An automatically activated ELT that is permanently attached to an aircraft and is designed to aid search and rescue (SAR) teams in locating the crash site.

(2) Automatic Portable (ELT(AP)). An automatically activated ELT, which is rigidly attached to an aircraft before a crash, but is readily removable from the aircraft after a crash. It functions as an ELT during the crash sequence. If the ELT does not employ an integral antenna, the aircraft-mounted antenna may be disconnected and an auxiliary antenna (stored in the ELT case) attached to the ELT. The ELT can be tethered to a survivor or a life-raft. This type of ELT is intended to aid SAR teams in locating the crash site or survivor(s).

(3) Automatic Deployable (ELT(AD)). An ELT that is rigidly attached to the aircraft before the crash and that is automatically ejected, deployed and activated by an impact, and, in some cases, also by hydrostatic sensors. Manual deployment is also provided. This type of ELT should float in water and is intended to aid SAR teams in locating the crash site.

(4) Survival ELT (ELT(S)). An ELT that is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and manually activated by a survivor. An ELT(S) may be activated manually or automatically (e.g. by water activation). It should be designed either to be tethered to a life-raft or a survivor. A water-activated ELT(S) is not an ELT(AP).

(b) To minimise the possibility of damage in the event of crash impact, the automatic ELT should be rigidly fixed to the aircraft structure, as far aft as is practicable, with its antenna and connections arranged so as to maximise the probability of the signal being transmitted after a crash.

(c) Any ELT carried should operate in accordance with the relevant provisions of ICAO Annex 10, Volume III Communications Systems and should be registered with the national agency responsible for initiating search and rescue or other nominated agency.

4. References

4.1. Related regulations

Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 296, 25.10.2012, p. 1).

4.2. Affected CS, AMC, and GM

— Decision 2014/019/R of the Executive Director of the Agency of 24 April 2014 adopting Guidance Material to Regulation (EU) No 965/2012 'GM to Regulation (EU) No 965/2012'

— Decision N° 2012/015/Directorate R of the Executive Director of the Agency of 24th October 2012 on Acceptable Means of Compliance and Guidance Material to Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council 'Guidance Material to Annex I – Definitions'

— Decision 2014/025/R of the Executive Director of the Agency of 28 July 2014 adopting Acceptable Means of Compliance and Guidance Material to Part-ARO of Regulation (EU) No 965/2012 and repealing Decision 2014/014/R of the Executive Director of the Agency of 24 April 2014 'AMC and GM to Part-ARO — Issue 3'

— Decision 2014/017/R of the Executive Director of the Agency of 24 April 2014 adopting Acceptable Means of Compliance and Guidance Material to Part-ORO of Regulation (EU) No 965/2012 and repealing Decision 2012/017/R of the Executive Director of the Agency of 24 October 2012 'AMC and GM to Part-ORO — Issue 2'

— Decision 2014/002/R of the Executive Director of the agency of 31 January 2014 adopting Certification Specifications and Guidance Material to Annex III (Part ORO) of Commission Regulation (EU) No 965/2012 'CS-FTL.1 — Initial Issue'

— Decision 2014/015/R of the Executive Director of the Agency of 24 April 2014 adopting Acceptable Means of Compliance and Guidance Material to Part-CAT of Regulation (EU) No 965/2012 and repealing Decision 2012/018/R of the Executive Director of the Agency of 24 October 2012 'AMC and GM to Part-CAT — Issue 2'

— Decision N° 2012/019/Directorate R of the Executive Director of the Agency of 24th October 2012 on Acceptable Means of Compliance AND Guidance Material to Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council 'Acceptable Means of Compliance and Guidance Material to Part-SPA'

— Decision N° 2013/021/Directorate R of the Executive Director of the Agency of 23 August 2013 on adopting Acceptable Means of Compliance and Guidance Material for Non-commercial operations with complex motor-powered aircraft (Part-NCC)

— Decision 2014/016/R of the Executive Director of the Agency of 24 April 2014 adopting Acceptable Means of Compliance and Guidance Material to Part-NCO of Regulation (EU) No 965/2012 and repealing Decision 2013/022/R of the Executive Director of the Agency of 23 August 2013 'AMC and GM to Part-NCO — Issue 2'

— Decision 2014/018/R of the Executive Director of the Agency of 24 April 2014 adopting Acceptable Means of Compliance and Guidance Material to Part-SPO of Regulation (EU) No 965/2012 'AMC and GM to Part-SPO'