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|  | **ENTE NAZIONALE per l'AVIAZIONE CIVILE *ITALIAN CIVIL AVIATION AUTHORITY*** | | | ***Ed.1 Rev.0 26/05/2022*** | |
| **Compliance Checklist for AOC Operations Manual – Part A** | | | | | |
| **Operator Name:** | |  | **Application n. :** | | **Date:** |
| ***Reg. N°965/2012 & related AMCs/GMs***  ***Reg. N°1178/2011 & related AMCs/GMs***  ***Reg. N°2021/2237***  ***Reg. N°2021/1296***  ***Reg. N°2020/2036***  ***Reg. N°2019/1387***  ***Reg. N°2019/1384***  ***Reg No 2018/1042***  ***Reg. N°1332/2011***  ***Reg. N°300/2008***  ***Reg. N°923/2012***  ***Reg. N°376/2014 & 2015/1018*** | | | | | |

### PA = Prior Approval; A = Applicable, NA = Not Applicable; Reference – OM reference; C = Compliant, NC = Not Compliant

| **Item N°** | **Reference** | **Item** | **A/NA** | **Reference** | **Compliance Criteria** | **C/NC**  **ENAC** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | ORO.MLR.100 (k) | The operator shall ensure that all personnel are able to understand the language in which those parts of the OM which pertain to their duties and responsibilities are written. |  |  |  |  |  |
|  | ORO.MLR.100 | The content of the OM shall be presented in a form that can be used without difficulty and observes human factors principles. |  |  |  |  |  |
| **0 ADMINISTRATION AND CONTROL OF THE OPERATIONS MANUAL** | | | | | | | |
|  | AMC3 ORO.MLR.100  ORO.GEN.110 (a)  ORO.MLR.100 | 0.1 *Introduction*  (a) A statement that the manual complies with all applicable regulations and with the terms and conditions of the applicable Air Operator Certificate. |  |  | The content of the OM shall reflect the requirements set out in Annex III (Part-ORO), Annex IV (Part-CAT) and Annex V (Part-SPA), as applicable, and shall not contravene the conditions contained in the operations specifications to the air operator certificate (AOC). |  |  |
|  | AMC3 ORO.MLR.100  ORO.GEN.110 (b) | (b) A statement that the manual contains operational instructions that are to be complied with by the relevant personnel. |  |  | Every flight shall be conducted in accordance with the provision of the ops manual.  All operations personnel shall have easy access to the portions of the OM that are relevant to their duties. |  |  |
|  | AMC3 ORO.MLR.100  ORO.MLR.101 | (c) A list and brief description of the various parts, their contents, applicability and use. |  |  | The main structure of the OM shall be as follows:  (a) Part A: General/Basic, comprising all non-type-related operational policies, instructions and procedures;  (b) Part B: Aircraft operating matters, comprising all type-related instructions and procedures, taking into account differences between types/classes, variants or individual aircraft used by the operator;  (c) Part C: Commercial air transport operations, comprising route/role/area and aerodrome/operating site instructions and information;  (d) Part D: Training, comprising all training instructions for personnel required for a safe operation. |  |  |
|  | AMC3 ORO.MLR.100 | (d) Explanations and definitions of terms and words needed for the use of the manual. |  |  | Definitions to be checked according annex I to regulation 965/2012. |  |  |
|  | AMC3 ORO.MLR.100  ORO.MLR.100 | 0.2 *System of amendment and revision*  (a) Details of the person(s) responsible for the issuance and insertion of amendments and revisions. |  |  | **Procedures regarding items to be notified to the authority shall be approved by the authority.**  For amendments linked to a change required to be notified in accordance with ORO.GEN.115(b) and ORO.GEN.130(c), the operator shall supply the competent authority with intended amendments in advance of the effective date; and  For changes requiring amendments to procedures associated with prior approval items in accordance with ORO.GEN.130, approval shall be obtained before the amendment becomes effective.  When immediate amendments or revisions are required in the interest of safety, they may be published and applied immediately, provided that any approval required has been applied for. |  |  |
|  | AMC3 ORO.MLR.100  ORO.MLR.100 | (b) A record of amendments and revisions with insertion dates and effective dates. |  |  | The operator shall incorporate all amendments and revisions required by the competent authority. |  |  |
|  | AMC3 ORO.MLR.100  ORO.MLR.100 | (c) A statement that handwritten amendments and revisions are not permitted except in situations requiring immediate amendment or revision in the interest of safety. |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  ORO.MLR.100 | (d) A description of the system for the annotation of pages and their effective dates. |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  ORO.MLR.100 | (e) A list of effective pages. |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  ORO.MLR.100 | (f) Annotation of changes (on text pages and, as far as practicable, on charts and diagrams). |  |  | The OM shall be kept up to date. All personnel shall be made aware of the changes that are relevant to their duties. |  |  |
|  | AMC3 ORO.MLR.100  ORO.MLR.100  AMC1 ORO.MLR.100 | (g) Temporary revisions. |  |  | The operator should describe the conditions for temporary revisions. |  |  |
|  | AMC3 ORO.MLR.100  ORO.AOC.150  ORO.MLR.100 | (h) A description of the distribution system for the manuals, amendments and revisions. |  |  | The operator shall be capable of distributing operational instructions and other information without delay.  All operations personnel shall have easy access to the portions of the OM that are relevant to their duties.  The OM shall be kept up to date. All personnel shall be made aware of the changes that are relevant to their duties.  Each crew member shall be provided with a personal copy of the relevant sections of the OM pertaining to their duties. Each holder of an OM, or appropriate parts of it, shall be responsible for keeping their copy up to date with the amendments or revisions supplied by the operator. |  |  |
| **1 ORGANISATION AND RESPONSIBILITIES** | | | | | | | |
|  | AMC3 ORO.MLR.100  ORO.GEN.200  ORO.GEN.210  AMC1 ORO.GEN.200 (a)(1);(2);(3);(5)  AMC1 ORO.GEN.200(a)(1)  AMC1 ORO.GEN.200(a)(2)  AMC1 ORO.GEN.200(a)(3)  AMC1 ORO.GEN.200(a)(4)  AMC1 ORO.GEN.200(a)(5)  AMC1 ORO.GEN.200(a)(6)  AMC1 ORO.GEN.200(b) | * 1. *Organisational structure*.   A description of the organisational structure including the general company organogram and operations department organogram. The organogram must depict the relationship between the Operations Department and the other Departments of the company. In particular, the subordination and reporting lines of all Divisions, Departments etc, which pertain to the safety of flight operations, must be shown. |  |  | Clearly defined lines of responsibility and accountability throughout the operator, including a direct safety accountability of the accountable manager. |  |  |
|  | AMC3 ORO.MLR.100  ORO.GEN.200  ORO.GEN.210  ORO.AOC.135  AMC1 ORO.AOC.135(a)  AMC2 ORO.AOC.135(a) | * 1. *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 must be included. |  |  | Clearly defined lines of responsibility and accountability throughout the operator, including a direct safety accountability of the accountable manager.  The accountable manager shall have the authority for ensuring that all activities can be financed and carried out in accordance with the applicable requirements.  The accountable manager shall be responsible for establishing and maintaining an effective management system.  In accordance with ORO.GEN.210(b), the operator shall nominate persons responsible for the management and supervision of the following areas:  (1) flight operations;  (2) crew training;  (3) ground operations; and  (4) continuing airworthiness |  |  |
|  | AMC3 ORO.MLR.100  ORO.GEN.110  AMC1 ORO.GEN.110 (c)  AMC1 ORO.GEN.110 (e)  ORO.GEN.200  ORO.AOC.135 | * 1. *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. |  |  | It should cover a description of responsibilities concerning the initiation, continuation & termination or diversion of each flight.  Clearly defined lines of responsibility and accountability throughout the operator, including a direct safety accountability of the accountable manager.  The operator shall appoint a sufficient number of personnel supervisors, taking into account the structure of the operator’s organisation and the number of personnel employed.  The duties and responsibilities of these supervisors shall be defined, and any other necessary arrangements shall be made to ensure that they can discharge their supervisory responsibilities. |  |  |
|  | AMC3 ORO.MLR.100  ORO.GEN.110 (b) (f)  CAT.GEN.MPA.105  CAT.GEN.MPA.110  AMC1 CAT.GEN.MPA.110(b)  AMC1 CAT.GEN.MPA.110(c)(1) | * 1. *Authority, duties and responsibilities of the commander*.   A statement defining the authority, duties and responsibilities of the commander. |  |  | Every flight shall be conducted in accordance with the provision of the ops manual.  Procedures shall not require crew members to perform any activities during critical phases of flight other than those required for the safe operation of the aircraft.  Responsibilities of commander shall be compliant with CAT.GEN.MPA.105 (updated in Dec 2015 with regards to the flight recorders). |  |  |
|  | AMC3 ORO.MLR.100  ORO.GEN.110 (f)  CAT.GEN.MPA.100  AMC1 CAT.GEN.MPA.100(b)  AMC1 CAT.GEN.MPA.100(c)(1)  CAT.GEN.MPA.125 | * 1. *Duties and responsibilities of crew members other than the commander.* |  |  | Procedures shall not require crew members to perform any activities during critical phases of flight other than those required for the safe operation of the aircraft.  Crew responsibilities shall be compliant with CAT.GEN.MPA.100. |  |  |
| **2 OPERATIONAL CONTROL AND SUPERVISION** | | | | | | | |
|  | AMC3 ORO.MLR.100  ORO.GEN.110 (c)(d)(e)  AMC1 ORO.GEN.110(c)  AMC1 ORO.GEN.110(e)  ORO.FC.100(c)  AMC1 ORO.FC.100(c) | 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 must show how the safety of flight operations and the qualifications of personnel are supervised. In particular, the procedures related to the following items must be described:  (a) Licence and qualification validity; |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  ORO.GEN.110 (c)  ORO.GEN.110 (e) (g)  AMC1 ORO.GEN.110(c)  AMC1 ORO.GEN.110(e)  AMC2 ORO.GEN.110(e)  AMC1 ORO.GEN.110(c)&(e) (applicable from 30 October 2022) | (b) Competence of operations personnel; and |  |  | The operator shall ensure that all personnel assigned to, or directly involved in, ground and flight operations are properly instructed, have demonstrated their abilities in their particular duties and are aware of their responsibilities and the relationship of such duties to the operation as a whole.  The operator shall ensure that all personnel are made aware that they shall comply with the laws, regulations and procedures of those States in which operations are conducted and that are pertinent to the performance of their duties. |  |  |
|  | AMC3 ORO.MLR.100  ORO.GEN.220  ORO.MLR.115  AMC1 ORO.MLR.115 | (c) Control, analysis and storage of required records. |  |  | (a) The operator shall establish a system of record-keeping that allows adequate storage and reliable traceability of all activities developed, covering in particular all the elements indicated in ORO.GEN.200.  (b) The format of the records shall be specified in the operator’s procedures.  (c) Records shall be stored in a manner that ensures protection from damage, alteration and theft.  The records of the activities referred to in ORO.GEN.200 shall be stored for at least five years. As this requirement could be described in the management system documentation, a reference to it could be made.  The following information used for the preparation and execution of a flight, and associated reports, shall be stored for three months:  (1) the OFP;  (2) NOTAMs and AIS briefing documentation, if edited by the operator;  (3) M&B documentation;  (4) notification of special loads, including written information to the commander about dangerous goods;  (5) the journey log, or equivalent; and  (6) flight report(s) for recording details of any occurrence, or any event that the commander deems necessary to report or record;  Personnel records shall be stored as required in ORO.MLR.115 (c).  Check that the format of the records is defined. |  |  |
|  | AMC3 ORO.MLR.100  ORO.AOC.150 | 2.2 *System of promulgation of additional operational instructions and information.*  A description of any system for promulgating information which may be of an operational nature but is supplementary to that in the OM. The applicability of this information and the responsibilities for its promulgation must be included. |  |  | The operator shall be capable of distributing operational instructions and other information without delay and be capable to determine if the information reach the addressees. |  |  |
|  | AMC3 ORO.MLR.100  ORO.GEN.200  AMC1 ORO.GEN.200 (a)(1);(2);(3);(5)  AMC1 ORO.GEN.200(a)(1)  AMC1 ORO.GEN.200(a)(2)  AMC1 ORO.GEN.200(a)(3)  AMC1 ORO.GEN.200(a)(4)  AMC1 ORO.GEN.200(a)(5)  AMC1 ORO.GEN.200(a)(6)  AMC1 ORO.GEN.200(b)  ORO.AOC.130 + Appendix 1  CAT.GEN.MPA.145  AMC1 CAT.GEN.MPA.145  CAT.OP.MPA.275 | 2.3 *Operational control*.  A description of the procedures and responsibilities necessary to exercise operational control with respect to flight safety. |  |  | ‘operational control’ means the responsibility for the initiation, continuation, termination or diversion of a flight in the interest of safety;  It should include :   * Operational control center procedures * Flights authorization (new destination, charter flight,…) * Control of aircraft based outside the main base |  |  |
|  | AMC3 ORO.MLR.100  CAT.GEN.MPA.205  AMC1 ORO.GEN.110(c)&(e) (applicable from 30 October 2022)  AMC2 ORO.GEN.110(f) (applicable from 30 October 2022) | 2.3 *Operational control*.  Flight tracking |  |  | (a) By 16 December 2018 at the latest, the operator shall establish and maintain, as part of the system for exercising operational control over the flights, an aircraft tracking system, which includes the flights eligible to (b) when performed with the following aeroplanes:  (1) aeroplanes with an MCTOM of more than 27 000 kg, with an MOPSC of more than 19, and first issued with an individual CofA before 16 December 2018, which are equipped with a capability to provide a position additional to the secondary surveillance radar transponder;  (2) all aeroplanes with an MCTOM of more than 27 000 kg, with an MOPSC of more than 19, and first issued with an individual CofA on or after 16 December 2018; and  (3) all aeroplanes with an MCTOM of more than 45 500 kg and first issued with an individual CofA on or after 16 December 2018.  (b) Flights shall be tracked by the operator from take-off to landing, except when the planned route and the planned diversion routes are fully included in airspace blocks where:  (1) ATS surveillance service is normally provided which is supported by ATC surveillance systems locating the aircraft at time intervals with adequate duration; and  (2) the operator has provided to competent air navigation service providers necessary contact information. |  |  |
|  | AMC3 ORO.MLR.100  ORO.GEN.140  CAT.GEN.MPA.190 | 2.5 *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. |  |  | For the purpose of determining compliance with the relevant requirements of BR and its IR, the operator shall grant access at any time to any facility, aircraft, document, records, data, procedures or any other material relevant to its activity subject to certification, whether it is contracted or not, to any person authorised by the competent authority.  Access to the aircraft shall include the possibility to enter and remain in the aircraft during flight operations unless otherwise decided by the commander for the flight crew compartment in accordance with CAT.GEN.MPA.135 in the interest of safety.  SAFA inspections should be addressed separately in this paragraph. |  |  |
| **3 MANAGEMENT SYSTEM** | | | | | | | |
|  | AMC3 ORO.MLR.100ORO.GEN.200 AMC1 ORO.GEN.200 (a)(1);(2);(3);(5)  AMC1 ORO.GEN.200(a)(1)  AMC1 ORO.GEN.200(a)(2)  AMC1 ORO.GEN.200(a)(3)  AMC1 ORO.GEN.200(a)(4)  AMC1 ORO.GEN.200(a)(5)  AMC1 ORO.GEN.200(a)(6)  AMC1 ORO.GEN.200(b)  ORO.GEN.120  AMC1 ORO.GEN.120(a)  ORO.GEN.150  AMC1 ORO.GEN.150(b) | A description of the management system, including at least the following:  (a) Safety policy; |  |  | A description of the overall philosophies and principles of the operator with regard to safety, referred to as the safety policy.  Check content of safety policy with AMC1 ORO.GEN.200(a)(2) & GM1 ORO.GEN.200(a)(2).  Regarding the policy, it should be published in OM A, in addition to the management system manual. |  |  |
|  | AMC3 ORO.MLR.100  ORO.GEN.120  AMC1 ORO.GEN.120(a)  ORO.GEN.150  AMC1 ORO.GEN.150(b)  ORO.GEN.200  AMC1 ORO.GEN.200 (a)(1);(2);(3);(5)  AMC1 ORO.GEN.200(a)(1)  AMC1 ORO.GEN.200(a)(2)  AMC1 ORO.GEN.200(a)(3)  AMC1 ORO.GEN.200(a)(4)  AMC1 ORO.GEN.200(a)(5)  AMC1 ORO.GEN.200(a)(6)  AMC1 ORO.GEN.200(b) | (b) The process for identifying safety hazards and for evaluating and managing the associated risks; |  |  | The identification of aviation safety hazards entailed by the activities of the operator, their evaluation and the management of associated risks, including taking actions to mitigate the risk and verify their effectiveness.  Reference could be made to the management system manual. |  |  |
|  | AMC3 ORO.MLR.100  ORO.GEN.120  AMC1 ORO.GEN.120(a)  ORO.GEN.150  AMC1 ORO.GEN.150(b)  ORO.GEN.200  AMC1 ORO.GEN.200 (a)(1);(2);(3);(5)  AMC1 ORO.GEN.200(a)(1)  AMC1 ORO.GEN.200(a)(2)  AMC1 ORO.GEN.200(a)(3)  AMC1 ORO.GEN.200(a)(4)  AMC1 ORO.GEN.200(a)(5)  AMC1 ORO.GEN.200(a)(6)  AMC1 ORO.GEN.200(b) | c) Compliance monitoring system; |  |  | Compliance monitoring shall include a feedback system of findings to the accountable manager to ensure effective implementation of corrective actions as necessary.  Reference could be made to the management system manual. |  |  |
|  | AMC3 ORO.MLR.100  ORO.GEN.120  AMC1 ORO.GEN.120(a)  ORO.GEN.150  AMC1 ORO.GEN.150(b)  ORO.GEN.200  AMC1 ORO.GEN.200 (a)(1);(2);(3);(5)  AMC1 ORO.GEN.200(a)(1)  AMC1 ORO.GEN.200(a)(2)  AMC1 ORO.GEN.200(a)(3)  AMC1 ORO.GEN.200(a)(4)  AMC1 ORO.GEN.200(a)(5)  AMC1 ORO.GEN.200(a)(6)  AMC1 ORO.GEN.200(b) | d) Allocation of duties and responsibilities; |  |  | Senior management should:  (1) continually promote the safety policy to all personnel and demonstrate their commitment to it;  (2) provide necessary human and financial resources for its implementation; and  (3) establish safety objectives and performance standards.  Reference could be made to the section 1 of OM A. |  |  |
|  | AMC3 ORO.MLR.100  ORO.GEN.120  AMC1 ORO.GEN.120(a)  ORO.GEN.130  AMC1 ORO.GEN.130  AMC1 ORO.GEN.130(b)  ORO.GEN.150  AMC1 ORO.GEN.150(b)  ORO.GEN.200  AMC1 ORO.GEN.200 (a)(1);(2);(3);(5)  AMC1 ORO.GEN.200(a)(1)  AMC1 ORO.GEN.200(a)(2)  AMC1 ORO.GEN.200(a)(3)  AMC1 ORO.GEN.200(a)(4)  AMC1 ORO.GEN.200(a)(5)  AMC1 ORO.GEN.200(a)(6)  AMC1 ORO.GEN.200(b) | e) Documentation of all key management system processes. |  |  | Key management system processes include:   * Hazard identification process * Risk assessment & mitigation process * Internal safety investigation * Safety performance monitoring & measurement * Management of change (see also ORO.GEN.130) * Continuous improvement * Process for making personnel aware of their responsibilities * Procedure for amending the documentation of those processes   Reference could be made to the management system manual. |  |  |
| **4 CREW COMPOSITION** | | | | | | | |
|  | AMC3 ORO.MLR.100  ORO.FC.100  AMC1 ORO.FC.100(c)  ORO.FC.105  AMC1 ORO.FC.105(b)(2);(c)  AMC1 ORO.FC.105(c)  AMC2 ORO.FC.105(c)  ORO.FC.200  AMC1 ORO.FC.200(a)  AMC2 SPA.SET-IMC.105(c)  ORO.CC.100  AMC1 ORO.CC.100  ORO.CC.110  ORO.CC.200  AMC1/2 ORO.CC.200(e)  GM1/2 ORO.CC.200(e)  ORO.CC.205  GM1 ORO.CC.205(b)(2)  CAT.GEN.MPA.115 | 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 commander and, if necessitated by the duration of the flight, the procedures for the relief of the 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. |  |  | The composition of the flight crew and the number of flight crew members at designated crew stations shall be not less than the minimum specified in the AFM or operating limitations prescribed for the aircraft.  There shall not be more than one inexperienced flight crew member in any flight crew.  See AMC1 ORO.FC.200(a) for criteria.  Unless the pilot-in-command has a minimum experience of 100 flight hours under IFR with the relevant type or class of aeroplane including LIFUS, the minimum crew should be composed of two pilots.  The number and composition of cabin crew shall be determined in accordance with 7.a of Annex IV to Regulation (EC) No 216/2008, taking into account operational factors or circumstances of the particular flight to be operated. At least 1 CCM shall be assigned for the operation of aircraft with an MOPSC of more than 19 when carrying one or more passenger(s).  See ORO.CC.100 and AMC1 for requirements.  When more than one CCM is required, the composition of the cabin crew shall include a SCCM nominated by the operator.  The operator shall establish procedures to select the most appropriately qualified CCM to act as SCCM if the nominated SCCM becomes unable to operate. Changes to these procedures shall be notified to the competent authority. See AMC1 and AMC2 ORO.CC.200(e) and GM1 and GM2 ORO.CC.200(e).  Reduction of the number of cabin crew during ground operations and in unforeseen circumstances. See ORO.CC.205. See GM1 ORO.CC.205(b)(2) for the unforeseen circumstances explanation.  The operator shall ensure that personnel or crew members, other than operating cabin crew members, carrying out their duties in the passenger compartment of an aircraft:  (a) are not confused by the passengers with operating cabin crew members;  (b) do not occupy required cabin crew assigned stations;  (c) do not impede operating cabin crew members in their duties. |  |  |
|  | AMC3 ORO.MLR.100  ORO.FC.105  AMC1 ORO.FC.105(b)(2);(c)  AMC1 ORO.FC.105(c)  AMC2 ORO.FC.105(c) | 4.2 *Designation of the commander*.  The rules applicable to the designation of the commander. |  |  | Especially when there are several commanders on board (line training/checking flights, augmented crew…)  In accordance with 8.e of Annex IV to Regulation (EC) No 216/2008, one pilot amongst the flight crew, qualified as pilot-in-command in accordance with Annex I (Part-FCL) to Regulation (EU) No 1178/2011, shall be designated by the operator as commander. (applicable until 29 October 2022)  In accordance with point 8.6 of Annex V to Regulation (EU) 2018/1139, one pilot amongst the flight crew, qualified as pilot-in-command in accordance with Annex I (Part-FCL) to Regulation (EU) No 1178/2011, shall be designated by the operator as pilot-in-command or, for commercial air transport operations, as commander. (applicable from 30 October 2022) |  |  |
|  | AMC3 ORO.MLR.100  ORO.GEN.110  AMC1 ORO.GEN110(f)(h)  ORO.FC.A.201 | 4.3 *Flight crew incapacitation*.  Instructions on the succession of command in the event of flight crew incapacitation. |  |  | The role of each crew member should be defined (flight crew, cabin crew, technical crew) together with the sequence of action to be performed. |  |  |
|  | AMC3 ORO.MLR.100  ORO.FC.140  ORO.FC.240  AMC1 ORO.FC.240  AMC2 ORO.FC.240  ORO.CC.250 | 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. |  |  | (a) The procedures or operational restrictions for operation on more than one type or variant established in the OM and approved by the competent authority shall cover:  (1) the FCMs’ minimum experience level;  (2) the minimum experience level on one type or variant before beginning training for and operation of another type  or variant;  (3) the process whereby FC qualified on one type or variant will be trained and qualified on another type or  variant; and  (4) all applicable recent experience requirements for each type or variant.  (b) When a FCM operates both helicopters and aeroplanes, that FCM shall be limited to operations on only one type of aeroplane and one type of helicopter. (applicable until 29 October 2022)  See also AMC1 ORO.FC.240 |  |  |
| **5 QUALIFICATION REQUIREMENTS** | | | | | | | |
|  | AMC3 ORO.MLR.100 | 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 must be given to the aircraft type, kind of operation and composition of the crew. |  |  | Generalities could include the responsibilities for monitoring the validity of qualification. |  |  |
|  | AMC3 ORO.MLR.100  ORO.FC.105  ORO.FC.120  ORO.FC.125  AMC1 ORO.FC.125  ORO.FC.130  ORO.FC.145  AMC1 ORO.FC.145(b)  AMC1 ORO.FC.145(d)  ORO.FC.220  AMC1 ORO.FC.220  AMC2 ORO.FC.220  ORO.FC.230  AMC1 ORO.FC.230  AMC2 ORO.FC.230  ORO.FC.240  AMC1 ORO.FC.240  AMC2 ORO.FC.240  ORO.FC.A.250  ORO.FC.H.250  ORO.FC.A.201  FCL.060(b)(1)(2) ;(c) | 5.2 *Flight crew*  (a) Commander,  (b) Pilot relieving the 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. |  |  | The operator shall only designate a flight crew member to act as commander if he/she has:  (1) the minimum level of experience specified in the operations manual;  (2) adequate knowledge of the route or area to be flown and of the aerodromes, including alternate aerodromes,  facilities and procedures to be used;  (3) in the case of multi-crew operations, completed an operator’s command course if upgrading from co-pilot to commander. (applicable until 29 October 2022)  The operator shall only designate a flight crew member to act as pilot-in-command/commander if all of the following apply:  (1) the flight crew member has the minimum level of experience specified in the operations manual;  (2) the flight crew member has adequate knowledge of the route or area to be flown and of the aerodromes, including alternate aerodromes, facilities and procedures to be used;  (3) in the case of multi-crew operations, the flight crew member has completed an operator’s command course if upgrading from co-pilot to pilot-in-command/commander. (applicable from 30 October 2022)  Requirements regarding commander holding CPL(A) or (H) shall be fulfilled.  The commander may delegate the conduct of the flight to:  (1) another qualified commander; or  (2) for operations only above FL200, a pilot who complies with the following min qualifications:  (i) ATPL;  (ii) conversion training and checking, including type rating training, in accordance with ORO.FC.220;  (iii) all recurrent training and checking in accordance with ORO.FC.230 and ORO.FC.240;  (iv) route/area and aerodrome competence in accordance with ORO.FC.105.  And including the either seat qualification as described in ORO.FC.235 (f) & (g).  The co-pilot may be relieved by:  (1) another suitably qualified pilot;  (2) for operations only above FL 200, a cruise relief co-pilot that complies with the following min qualifications:  (i) valid CPL with an instrument rating;  (ii) conversion training and checking, including type rating training, in accordance with ORO.FC.220 except the  requirement for take-off and landing training;  (iii) recurrent training and checking in accordance with ORO.FC.230 except the requirement for take-off and  landing training.  **Procedures for FCM to operate on more than 1 aircraft type shall be approved by the authority.**  (a) The procedures or operational restrictions for operation on more than one type or variant established in the OM and approved by the competent authority shall cover:  (1) the FCMs’ minimum experience level;  (2) the minimum experience level on one type or variant before beginning training for and operation of another type  or variant;  (3) the process whereby FC qualified on one type or variant will be trained and qualified on another type or  variant; and  (4) all applicable recent experience requirements for each type or variant.  (b) When a FCM operates both helicopters and aeroplanes, that FCM shall be limited to operations on only one type of aeroplane and one type of helicopter.  See also AMC1 ORO.FC.240 |  |  |
|  | AMC3 ORO.MLR.100  ORO.CC.200  ORO.CC.210  ORO.CC.250  AMC1 ORO.CC.250(b)  ORO.CC.255  ORO.CC.110(a) | 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.  (d) Single cabin crew member operations |  |  | The operator shall nominate CCMs to the position of SCCM only if they:  (1) have at least one year of experience as operating cabin crew member; and  (2) have successfully completed a senior cabin crew training course and the associated check.  CCMs shall only be assigned to duties, and operate, on a particular aircraft type or variant if they:  (a) hold a valid attestation issued in accordance with Part-CC;  (b) are qualified on the type or variant in accordance with Part-ORO subpart CC;  (c) comply with the other applicable requirements of Part-ORO & Part-CAT;  (d) wear the operator’s cabin crew uniform.  **Procedures for CCM to operate on 4 aircraft types shall be approved by the authority.**  A CCM shall not be assigned to operate on more than three aircraft types, except that, with the approval of the competent authority, the CCM may be assigned to operate on four aircraft types if for at least two of the types:  (1) safety and emergency equipment and type-specific normal and emergency procedures are similar; and  (2) non-type-specific normal and emergency procedures are identical.  The operator shall select, recruit, train and check the proficiency of CCM to be assigned to single CCM operations according to criteria appropriate to this type of operation.  (b) CCMs who have no previous operating experience as single CCM shall only be assigned to such type of operation after they have:  (1) completed training as required in ORO.CC.255(c) in addition to other applicable training and checking required by Part-ORO subpart CC;  (2) successfully passed the checks verifying their proficiency in discharging their duties and responsibilities in accordance with the procedures specified in the OMs;  (3) undertaken familiarisation flying of at least 20 hours and 15 sectors on the relevant aircraft type under the  supervision of an appropriately experienced CCM. |  |  |
|  | AMC3 ORO.MLR.100  FLIGHT CREW  ORO.FC.120  ORO.FC.125  AMC1 ORO.FC.125  ORO.FC.130  ORO.FC.145  AMC1 ORO.FC.145(b)  AMC1 ORO.FC.145(d)  ORO.FC.205  ORO.FC.215  AMC1 ORO.FC.215  ORO.FC.220  AMC1 ORO.FC.220  AMC2 ORO.FC.220  ORO.FC.230  AMC1 ORO.FC.230  AMC2 ORO.FC.230  ORO.FC.A.245  AMC1 ORO.FC.A.245  AMC1 ORO.FC.A.245(a)  AMC1 ORO.FC.A.245(d)(e)(2)  ORO.FC.A.250  ORO.FC.H.250  ORO.FC.A.201  CABIN CREW  ORO.CC.115  AMC1 ORO.CC.115(c)  AMC1 ORO.CC.115(d)  AMC1 ORO.CC.115(e)  ORO.CC.120  AMC1 ORO.CC.120(a)(1)  ORO.CC.125  AMC1 ORO.CC.125(c)  AMC1 ORO.CC.125(d)  AMC1 ORO.CC.125 & ORO.CC.130  ORO.CC.130  ORO.CC.135  AMC1 ORO.CC.135  ORO.CC.140  AMC1 ORO.CC.140  ORO.CC.145  AMC1 ORO.CC.145  ORO.CC.215 | 5.4 *Training, checking and supervision personnel*.  (a) For flight crew.  (b) For cabin crew. |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  ORO.GEN.110  AMC1 ORO.GEN.110(e)  ORO.TC.105  ORO.TC.110  AMC1 ORO.TC.110  ORO.TC.115  AMC1 ORO.TC.115  ORO.TC.120  AMC1 ORO.TC.120 & 125  AMC2 ORO.TC.120 & 125  ORO.TC.125  ORO.TC.130  ORO.TC.135  AMC1 ORO.TC.135  ORO.TC.140  AMC1 ORO.TC.140 | 5.5 Other operations personnel (including technical crew and crew members other than flight, cabin & technical crew) |  |  | (a) Technical crew members in CAT HEMS, HHO or NVIS operations shall only be assigned duties if they:  (1) are at least 18 years of age;  (2) are physically and mentally fit to safely discharge assigned duties and responsibilities;  (3) have completed all applicable training required by Part-ORO to perform the assigned duties;  (4) have been checked as proficient to perform all assigned duties in accordance with the procedures specified in the OM. |  |  |
| **6 CREW HEALTH PRECAUTIONS** | | | | | | | |
|  | AMC3 ORO.MLR.100  CAT.GEN.MPA.100  AMC1 CAT.GEN.MPA.100(b)  AMC1 CAT.GEN.MPA.100(c)(1)  GM1 CAT.GEN.MPA.100(c)(2) | 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. |  |  | The operator should issue instructions concerning the consumption of alcohol by crew members. The instructions should be not less restrictive than the following:  (a) no alcohol should be consumed less than 8 hours prior to the specified reporting time for a flight duty period or the commencement of standby;  (b) the blood alcohol level should not exceed the lower of the national requirements or 0.2 per thousand at the start of a flight duty period;  (c) no alcohol should be consumed during the flight duty period or whilst on standby.  24 hours is a suitable minimum length of time to allow after normal blood donation or normal recreational (sport) diving before returning to flying duties. This should be considered by operators when determining a reasonable time period for the guidance of crew members. |  |  |
|  | CAT.GEN.MPA.170  CAT.GEN.MPA.175 | The operator shall take all reasonable measures to ensure that no person enters or is in an aircraft when under the influence of psychoactive substances to the extent that the safety of the aircraft or its occupants is likely to be endangered.  The operator shall take all reasonable measures to ensure that no person recklessly, intentionally or negligently acts or omits to act to as to endanger and aircraft or person therein. |  |  | The operator’s policy on prevention of misuse of psychoactive substances should ensure that flight and cabin crew, as well as other safety-sensitive personnel, are dealt with in a consistent, just and fair manner as regards the prevention and detection of misuse of psychoactive substances. |  |  |
|  | CAT.GEN.MPA.215  AMC1 CAT.GEN.MPA.215  AMC2 CAT.GEN.MPA.215  AMC3 CAT.GEN.MPA.215  AMC4 CAT.GEN.MPA.215 | Support Programme  The operator shall enable, facilitate and ensure access to a proactive and non-punitive support programme that will assist and support flight crew in recognising, coping with, and overcoming any problem which might negatively affect their ability to safely exercise the privileges of their  licence. Such access shall be made available to all flight crew. |  |  |  |  |  |
| **7 FLIGHT TIME LIMITATIONS (See specific CCL checklist OM Ch.7)** | | | | | | | |
|  | EU OPS – Subpart Q | *Air Taxi operations*  The scheme developed by the operator in accordance with Subpart Q of EU-OPS OSC 08/08 for air taxi. |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  ORO.FTL.110  AMC1 ORO.FTL.110  AMC1 ORO.FTL.110(a)  AMC1 ORO.FTL.110(j)  ORO.FTL.120  AMC1 ORO.FTL.120(b)(1)  AMC2 ORO.FTL.120(b)(2)  AMC1 ORO.FTL.120(b)(4)  AMC2 ORO.FTL.120(b)(4)  AMC1 ORO.FTL.120(b)(5)  AMC1 ORO.FTL.120(b)(8)  AMC1 ORO.FTL.120(b)(9)  ORO.FTL.125  ORO.FTL.205  AMC1 ORO.FTL.205(f)  ORO.FTL.210  AMC1 ORO.FTL.210(c)  ORO.FTL.225  ORO.FTL.235  AMC1 ORO.FTL.235(b) | 7.1 *Flight and Duty Time Limitations and Rest requirements*. (Scheduled and Charter Operations with aeroplanes MOPSC more than 19).  The scheme developed by the operator in accordance with ORO.FTL and CS.FTL-1 if CAT operator with aeroplanes.  Operators certified by ENAC shall abide and implement an ‘early type’ disruptive schedule. |  |  | Operators shall compile separate Part-FTL compliance checklist for detailed process |  |  |
|  | AMC3 ORO.MLR.100  ORO.FTL.220 | 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. |  |  |  |  |  |
|  | AMC3 ORO.MLR.100 | 7.3 *A description of the fatigue risk management, including at least the following:*  (a) the philosophy and principles;  (b) documentation of processes;  (c) scientific principles and knowledge;  (d) hazard identification and risk assessment processes;  (e) risk mitigation process;  (f) FRM safety assurance processes; and  (g) FRM promotion processes. |  |  |  |  |  |
| **8 OPERATING PROCEDURES** | | | | | | | |
| **8.1 Flight preparation instructions (as applicable to the operation)** | | | | | | | |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.145  AMC1 CAT.OP.MPA.145(a)  AMC1.1 CAT.OP.MPA.145(a)  GM1 CAT.OP.MPA.145(a)  CAT.OP.MPA.270 | 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 VFR flights; and |  |  | **Method shall be approved by the authority.**  The operator should take into account the following factors when establishing minimum flight altitudes:  (1) the accuracy with which the position of the aircraft can be determined;  (2) the probable inaccuracies in the indications of the altimeters used;  (3) the characteristics of the terrain, such as sudden changes in the elevation, along the routes or in the areas where operations are to be conducted;  (4) the probability of encountering unfavourable meteorological conditions, such as severe turbulence and descending air currents; and  (5) possible inaccuracies in aeronautical charts.  Examples of methods:   * KSS formula * Jeppesen formula * ATLAS formula * Lido formula   **Descent procedures to fly below the specified minimum altitudes shall be approved by the authority.** |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.145  AMC1 CAT.OP.MPA.145(a)  AMC1.1 CAT.OP.MPA.145(a)  GM1 CAT.OP.MPA.145(a)  CAT.OP.MPA.270 | (b) A procedure to establish the minimum altitudes/flight levels for IFR flights. |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.105  AMC1 CAT.OP.MPA.105  AMC2 CAT.OP.MPA.105  CAT.OP.MPA.106 (applicable until 29 October 2022)  CAT.OP.MPA.107  AMC1 CAT.OP.MPA.107  GM1 CAT.OP.MPA.107  AMC3 SPA.SET-IMC.105(d)(2)  GM1 SPA.SET-IMC.105(d)(2)  AMC7 CAT.OP.MPA.182 (applicable from 30 October 2022) | 8.1.2 *Criteria and responsibilities for the authorisation of the use of aerodromes* |  |  | The operator shall only use aerodromes and operating sites that are adequate for the type(s) of aircraft and operation(s) concerned.  **Use of isolated aerodrome shall be approved by the authority.**  Using an isolated aerodrome as destination aerodrome with aeroplanes requires the prior approval by the competent authority.  The operator shall consider an aerodrome as adequate if, at the expected time of use, the aerodrome is available and equipped with necessary ancillary services such as air traffic services (ATS), sufficient lighting, communications, weather reporting, navigation aids and emergency services. (applicable until 29 October 2022)  The operator shall consider an aerodrome as adequate if, at the expected time of use, the aerodrome is available and equipped with necessary ancillary services such as air traffic services (ATS), sufficient lighting, communications, meteorological reports, navigation aids and emergency services. (applicable from 30 October 2022)  Description of landing site for SET-IMC. |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.110  AMCs1 to 12 CAT.OP.MPA.110  CAT.OP.MPA.115  AMC1 CAT.OP.MPA.115  AMC2 CAT.OP.MPA.115  AMC3 CAT.OP.MPA.115  CAT.OP.MPA.320  CAT.OP.MPA.182  AMC1 CAT.OP.MPA.182  AMCs 2 to 9 CAT.OP.MPA.182 (applicable from 30 October 2022)  CAT.OP.MPA.192 (applicable from 30 October 2022)  AMC1 CAT.OP.MPA.192(a) (from 30 October 2022)  AMC1 CAT.OP.MPA.192(d) (applicable from 30 October 2022) CAT.OP.MPA.303  AMC1 CAT.OP.MPA.303  GM1 CAT.OP.MPA.303  GM2 CAT.OP.MPA.303  GM3 CAT.OP.MPA.303  CAT.OP.MPA.311  AMC1 CAT.OP.MPA.311  CAT.OP.MPA.312 (applicable from 30 October 2022) | 8.1.3 *Methods and responsibilities for establishing aerodrome operating minima*.  Reference must be made to procedures for:   * the determination of the visibility and/or runway visual range (RVR) * the applicability of the actual visibility observed by the pilots, the reported visibility and the reported RVR.   Implementation of LDTA requirements and Global Reporting Format must also be checked. |  |  | The operator shall establish aerodrome operating minima for each departure, destination or alternate aerodrome planned to be used. These minima shall not be lower than those established for such aerodromes by the State in which the aerodrome is located, except when specifically approved by that State. Any increment specified by the competent authority shall be added to the minima. (applicable until 29 October 2022)  The operator shall establish aerodrome operating minima for each departure, destination or alternate aerodrome that is planned to be used in order to ensure separation of the aircraft from terrain and obstacles and to mitigate the risk of loss of visual references during the visual flight segment of instrument approach operations. (applicable from 30 October 2022)  Criteria to be taken into account when establishing aerodrome operating minima are described in CAT.OP.MPA.110(c). (applicable until 29 October 2022)  Criteria to be taken into account when establishing aerodrome operating minima are described in CAT.OP.MPA.110(b). (applicable from 30 October 2022)  The minima for a specific approach and landing procedure shall only be used if all the following conditions are met:  (1) the ground equipment shown on the chart required for the intended procedure is operative;  (2) the aircraft systems required for the type of approach are operative;  (3) the required aircraft performance criteria are met; and  (4) the crew is appropriately qualified. (applicable until 29 October 2022)  Applicable until 29 October 2022:  The operator shall ensure that sufficient means are available to navigate and land at the destination aerodrome or at any destination alternate aerodrome in the case of loss of capability for the intended approach and landing operation.  Applicable from 30 October 2022:  For each IFR flight, the operator shall ensure that sufficient means are available to navigate to and land at the destination aerodrome or at any destination alternate aerodrome in the event of loss of capability for the intended approach and landing operation.  The pilot-in-command should only select an aerodrome as a destination alternate aerodrome if an instrument approach procedure that does not rely on GNSS is available either at that aerodrome or at the destination aerodrome.  Assessment of LDTA at top of descent (if required).  Reporting on runway braking action necessitates flight crew to report runway surface condition in standard terminology used in an AIREP. |  |  |
|  | AMC3 ORO.MLR.100  PART-SERA | 8.1.4 *En-route Operating Minima for VFR.*  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 which permit a safe forced landing. |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.110  AMCs1 to 12 CAT.OP.MPA.110  CAT.OP.MPA.135  CAT.OP.MPA.136  CAT.OP.MPA.137  CAT.OP.MPA.140  CAT.OP.MPA.180 (applicable until 29 October 2022)  CAT.OP.MPA.181 (applicable until 29 October 2022)  CAT.OP.MPA.182 (applicable from 30 October 2022)  CAT.OP.MPA.185 (applicable until 29 October 2022)  CAT.OP.MPA.186 (applicable until 29 October 2022)  CAT.OP.MPA.265  CAT.OP.MPA.305  AMC1 CAT.OP.MPA.305(e)  SPA.PINS-VFR.100 (applicable from 30 October 2022) | 8.1.5 *Presentation and Application of Aerodrome and En-route Operating Minima* |  |  | The operator shall ensure that operations are only conducted along routes, or within areas, for which:  (1) ground facilities and services, including meteorological services, adequate for the planned operation are provided;  (2) the performance of the aircraft is adequate to comply with minimum flight altitude requirements;  (3) the equipment of the aircraft meets the minimum requirements for the planned operation; and  (4) appropriate maps and charts are available.  Maximum distance from an adequate aerodrome for two-engined aeroplanes without an ETOPS approval.  Maximum distance in SET-IMC is 30min flying time at normal cruising speed in still air condition based on the actual take-off mass.  Selection of aerodromes and/or operating sites.  **The procedure for selecting off-shore alternate shall be approved by the competent authority.**  Planning minima for IFR flights. |  |  |
|  | AMC3 ORO.MLR.100 | 8.1.6 *Interpretation of meteorological information*.  Explanatory material on the decoding of MET forecasts and MET reports relevant to the area of operations, including the interpretation of conditional expressions. |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.150 (applicable until 29 October 2022)  AMC1 CAT.OP.MPA.150(b) (applicable until 29 October 2022)  AMC2 CAT.OP.MPA.150(b) (applicable until 29 October 2022)  AMC3 CAT.OP.MPA.150(b) (applicable until 29 October 2022)  CAT.OP.MPA.151 (applicable until 29 October 2022)  CAT.OP.MPA.180 (applicable from 30 October 2022)  AMC1 CAT.OP.MPA.180 (applicable from 30 October 2022)  CAT.OP.MPA.181 (applicable from 30 October 2022)  AMC1 CAT.OP.MPA.191(b)&(c) (applicable from 30 October 2022)  CAT.OP.MPA.260 | 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 must also include instructions on the measurement and distribution of the fluid carried on board. Such instructions must 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 aeroplane's power plants. The system for maintaining fuel and oil records must also be described. |  |  | **The fuel policy and any change to it require prior approval by the competent authority.**  Applicable until 29 October 2022:  The operator shall establish a fuel policy for the purpose of flight planning and in-flight replanning to ensure that every flight carries sufficient fuel for the planned operation and reserves to cover deviations from the planned operation.  The operator shall ensure that the pre-flight calculation of usable fuel required for a flight includes:  (1) taxi fuel;  (2) trip fuel;  (3) reserve fuel consisting of:  (i) contingency fuel;  (ii) alternate fuel, if a destination alternate aerodrome is required;  (iii) final reserve fuel; and  (iv) additional fuel, if required by the type of operation;  and  (4) extra fuel if required by the commander.  Applicable from 30 October 2022:  The operator shall establish, implement, and maintain a fuel/energy scheme that:  (1) is appropriate for the type(s) of operation performed;  (2) corresponds to the capability of the operator to support its implementation; and  (3) is either:  (i) a basic fuel/energy scheme, which shall form the basis for a basic fuel/energy scheme with variations and an individual fuel/energy scheme; the basic fuel/energy scheme derives from a large-scale analysis of safety and operational data from previous performance and experience of the industry, applying scientific principles; the basic fuel/energy scheme shall ensure, in this order, a safe, effective, and efficient operation of the aircraft; or  (ii) a basic fuel/energy scheme with variations, which is a basic fuel/energy scheme where the analysis referred to in point (i) is used to establish a variation to the basic fuel/energy scheme that ensures, in this order, a safe, effective, and efficient operation of the aircraft; or  (iii) an individual fuel/energy scheme, which derives from a comparative analysis of the operator’s safety and operational data, applying scientific principles; the analysis is used to establish a fuel/energy scheme with a higher or equivalent level of safety to that of the basic fuel/energy scheme that ensures, in this order, a safe, effective, and efficient operation of the aircraft. |  |  |
|  | AMC3 ORO.MLR.100  Annex I to 965/2012 | 8.1.8 *Mass and Centre of Gravity*.  The general principles of mass and centre of gravity including:  (a) Definitions; |  |  | ‘dry operating mass’ means the total mass of the aircraft ready for a specific type of operation, excluding usable fuel and traffic load;  ‘take-off mass’ means the mass including everything and everyone carried at the commencement of the take-off for helicopters and take-off run for aeroplanes;  ‘traffic load’ means the total mass of passengers, baggage, cargo and carry-on specialist equipment, including any ballast; |  |  |
|  | AMC3 ORO.MLR.100  CAT.POL.MAB.105 | (b) Methods, procedures and responsibilities for preparation and acceptance of mass and centre of gravity calculations; |  |  | The operator shall establish mass and balance data and produce mass and balance documentation prior to each flight specifying the load and its distribution. The mass and balance documentation shall enable the commander to determine that the load and its distribution is such that the mass and balance limits of the aircraft are not exceeded.  **The use of on-board M&B computer systems shall be approved by the authority.** |  |  |
|  | AMC3 ORO.MLR.100  AMC1 CAT.POL.MAB.100(d) | (c) The policy for using standard and/or actual masses; |  |  | The operator should use the following mass values for crew to determine the dry operating mass:  (1) actual masses including any crew baggage; or  (2) standard masses, including hand baggage, of 85 kg for flight crew/technical crew members and 75 kg for cabin crew members. |  |  |
|  | AMC3 ORO.MLR.100 | (d) The method for determining the applicable passenger, baggage and cargo mass; |  |  | **Standard masses for load items other than standard masses for passengers & checked baggage shall be approved by the authority.** |  |  |
|  | AMC3 ORO.MLR.100  CAT.POL.MAB.100  AMC1 CAT.POL.MAB.100(e)  AMC2 CAT.POL.MAB.100(e) | (e) The applicable passenger and baggage masses for various types of operations and aeroplane type; |  |  | The operator shall establish the mass of the traffic load, including any ballast, by actual weighing or by determining the mass of the traffic load in accordance with standard passenger and baggage masses.  Mass values for passengers and baggage are in AMC1 CAT.POL.MAB.100(e).      For aircraft with 19 passenger seats or less, the actual mass of checked baggage should be determined by weighing.  Aeroplanes. When the total number of passenger seats available on the aeroplane is 20 or more:    Helicopters. When the total number of passenger seats available on the helicopters is 20 or more, the standard mass value for checked baggage should be 13 kg.  Procedure for establishing revised standard mass values for passengers and baggage are in AMC2 CAT.POL.MAB.100(e). |  |  |
|  | AMC3 ORO.MLR.100  CAT.POL.MAB.105 | (f) General instructions and information necessary for verification of the various types of mass and balance documentation in use; |  |  | Content of M&B documentation detailed in CAT.POL.MAB.105 |  |  |
|  | AMC3 ORO.MLR.100  CAT.POL.MAB.105 | (g) Last Minute Changes procedures |  |  | The operator shall specify procedures for last minute changes to the load to ensure that:  (1) any last minute change after the completion of the mass and balance documentation is brought to the attention of the commander and entered in the flight planning documents containing the mass and balance documentation;  (2) the maximum last minute change allowed in passenger numbers or hold load is specified; and  (3) new mass and balance documentation is prepared if this maximum number is exceeded. |  |  |
|  | AMC3 ORO.MLR.100  CAT.POL.MAB.100  GM1 CAT.POL.MAB.100(g) | (h) Specific gravity of fuel, oil and water methanol; |  |  | The operator shall determine the mass of the fuel load by using the actual density or, if not known, the density calculated in accordance with a method specified in the operations manual.  Fuel density are given in GM1 CAT.POL.MAB.100(g) |  |  |
|  | AMC3 ORO.MLR.100  AMC1 CAT.OP.MPA.165  AMC2 CAT.OP.MPA.165  GM2 CAT.OP.MPA.165 | (i) Seating policy/procedures; |  |  | The operator should make provision so that:  (a) a passenger occupies a seat at least on each side in a seat row with direct access to an emergency exit (not staffed by a cabin crew member) during taxiing, take-off and landing unless this would be impracticable due to a low number of passengers or might negatively impact the mass and balance limitations.  (b) those passengers who are allocated seats that permit direct access to emergency exits appear to be reasonably fit, strong and able to assist the rapid evacuation of the aircraft in an emergency after an appropriate briefing by the crew;  (c) in all cases, passengers who, because of their condition, might hinder other passengers during an evacuation or who might impede the crew in carrying out their duties, should not be allocated seats that permit direct access to emergency exits. If procedures cannot be reasonably implemented at the time of passenger ‘check-in’, the operator should establish an alternative procedure which ensures that the correct seat allocations will, in due course, be made.  See also GM2 CAT.OP.MPA.165  The following categories of passengers are among those who should not be allocated to, or directed to, seats that permit direct access to emergency exits:  (a) passengers suffering from obvious physical or mental disability to the extent that they would have difficulty in moving quickly if asked to do so;  (b) passengers who are either substantially blind or substantially deaf to the extent that they might not readily assimilate printed or verbal instructions given;  (c) passengers who because of age or sickness are so frail that they have difficulty in moving quickly;  (d) passengers who are so obese that they would have difficulty in moving quickly or reaching and passing through the adjacent emergency exit;  (e) children (whether accompanied or not) and infants;  (f) deportees, inadmissible passengers or persons in custody; and  (g) passengers with animals. |  |  |
|  | AMC3 ORO.MLR.100 | (j) For helicopter operations, standard load plans. |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.190 (applicable until 29 October 2022)  CAT.OP.MPA.177 (applicable from 30 October 2022)  AMC1 CAT.OP.MPA.190 (applicable until 29 October 2022)  AMC1 CAT.OP.MPA.177 (applicable from 30 October 2022) | 8.1.9 *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. |  |  | (a) If an ATS flight plan is not submitted because it is not required by the rules of the air, adequate information shall be deposited in order to permit alerting services to be activated if required.  (b) When operating from a site where it is impossible to submit an ATS flight plan, the ATS flight plan shall be  transmitted as soon as possible after take-off by the commander or the operator. |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.175 (a)  AMC1 CAT.OP.MPA.175  CAT.OP.MPA.175 (c) | 8.1.10 *Operational Flight Plan*.  Procedures and responsibilities for the preparation and acceptance of the OFP. The use of the OFP should be described including samples of the OFP formats in use. |  |  | The content of the OFP should be compliant with AMC1 CAT.OP.MPA.175(a)  CAT.OP.MPA.175 (c) defines when an OFP is not required. |  |  |
|  | AMC3 ORO.MLR.100  PART-M | 8.1.11 *Operator's Aeroplane Technical Log.*  The responsibilities and the use of the operator's Aeroplane Technical Log should be described, including samples of the format used. |  |  | Check that the tech log described in OM A is the one approved by airworthiness department |  |  |
|  | AMC3 ORO.MLR.100  ORO.MLR.110  AMC1 ORO.MLR.110  CAT.GEN.MPA.180  AMC1 CAT.GEN.MPA.180(a)(18) (applicable from 30 October 2022) | 8.1.12 *List of documents, forms and additional information to be carried.* |  |  | Check compliance with CAT.GEN.MPA.180 |  |  |
|  | AMC3 ORO.MLR.100  AMC1/2/3 SPA.SET-IMC.105(d)(2) | 8.1.13 *For commercial air transport operations with single-engined turbine aeroplanes in instrument meteorological conditions or at night (CAT SETIMC) approved in accordance with Subpart L (SET-IMC) of Annex V (Part-SPA) to Regulation (EU) No 965/2012:*  (a) the procedure for route selection with respect to the availability of surfaces, which permits a safe forced landing; |  |  | Check compliance with AMC1 and AMC2 and AMC3 SPA.SET-IMC.105(d)(2) |  |  |
|  | AMC3 ORO.MLR.100  AMC1/2/3 SPA.SET-IMC.105(d)(2) | (b) the instructions for the assessment of landing sites (elevation, landing direction, and obstacles in the area); and |  |  | Check compliance with AMC1 and AMC2 and AMC3 SPA.SET-IMC.105(d)(2) |  |  |
|  | AMC3 ORO.MLR.100  AMC1/2/3 SPA.SET-IMC.105(d)(2) | (c) the instructions for the assessment of the weather conditions at those landing sites. |  |  | Check compliance with AMC1 and AMC2 and AMC3 SPA.SET-IMC.105(d)(2) |  |  |
|  | CAT.GEN.MPA.185 | *Information to be retained on ground.* |  |  | Check compliance with CAT.GEN.MPA.185. |  |  |
|  | CAT.GEN.MPA.175 (b) | *Commencement of a flight.* |  |  | The flight shall not be commenced unless the commander is satisfied that:  (1) all items stipulated in 2.a.3 of Annex IV to Regulation (EC) No 216/2008 concerning the airworthiness and  registration of the aircraft, instrument and equipment, mass and centre of gravity (CG) location, baggage and  cargo and aircraft operating limitations can be complied with;  (2) the aircraft is not operated contrary to the provisions of the configuration deviation list (CDL);  (3) the parts of the operations manual that are required for the conduct of the flight are available;  (4) the documents, additional information and forms required to be available by CAT.GEN.MPA.180 are on board;  (5) current maps, charts and associated documentation or equivalent data are available to cover the intended  operation of the aircraft including any diversion that may reasonably be expected;  (6) ground facilities and services required for the planned flight are available and adequate;  (7) the provisions specified in the operations manual in respect of fuel, oil, oxygen, minimum safe altitudes,  aerodrome operating minima and availability of alternate aerodromes, where required, can be complied with  for the planned flight; and  (8) any additional operational limitation can be complied with. |  |  |
|  | CAT.OP.MPA.175  AMC1 CAT.OP.MPA.175 | *Flight preparation for PBN operations* |  |  | The flight shall not be commenced unless the commander is satisfied that any navigational database required for performance-based navigation is suitable and current.  (a) The flight crew should ensure that RNAV 1, RNAV 2, RNP 1 RNP 2, and RNP APCH routes or procedures to be used for the intended flight, including for any alternate aerodromes, are selectable from the navigation database and are not prohibited by NOTAM.  (b) The flight crew should take account of any NOTAMs or operator briefing material that could adversely affect the aircraft system operation along its flight plan including any alternate aerodromes.  (c) When PBN relies on GNSS systems for which RAIM is required for integrity, its availability should be verified during the preflight planning. In the event of a predicted continuous loss of fault detection of more than five minutes, the flight planning should be revised to reflect the lack of full PBN capability for that period.  (d) For RNP 4 operations with only GNSS sensors, a fault detection and exclusion (FDE) check should be performed. The maximum allowable time for which FDE capability is projected to be unavailable on any one event is 25 minutes. If predictions indicate that the maximum allowable FDE outage will be exceeded, the operation should be rescheduled to a time when FDE is available.  (e) For RNAV 10 operations, the flight crew should take account of the RNAV 10 time limit declared for the inertial system, if applicable, considering also the effect of weather conditions that could affect flight duration in RNAV 10 airspace. Where an extension to the time limit is permitted, the flight crew will need to ensure that en route radio facilities are serviceable before departure, and to apply radio updates in accordance with any AFM limitation. |  |  |
|  | CAT.OP.MPA.175  AMC2 CAT.OP.MPA.175 | *Flight preparation – Nav data base* |  |  | The flight shall not be commenced unless the commander is satisfied that any navigational database required for performance-based navigation is suitable and current.  (a) The flight crew should check that any navigational database required for PBN operations includes the routes and procedures required for the flight.  (b) The database validity (current AIRAC cycle) should be checked before the flight.  (c) Navigation databases should be current for the duration of the flight. If the AIRAC cycle is due to change during flight, the flight crew should follow procedures established by the operator to ensure the accuracy of navigation data, including the suitability of navigation facilities used to define the routes and procedures for the flight.  (d) An expired database may only be used if the following conditions are satisfied:  (1) the operator has confirmed that the parts of the database which are intended to be used during the flight and any contingencies that are reasonable to expect are not changed in the current version;  (2) any NOTAMs associated with the navigational data are taken into account;  (3) maps and charts corresponding to those parts of the flight are current and have not been amended since the last cycle;  (4) any MEL limitations are observed; and  (5) the database has expired by no more than 28 days. |  |  |
| **8.2 Ground handling instructions (as applicable to the operation)** | | | | | | | |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.200  AMC1 CAT.OP.MPA.200 (applicable from 30 October 2022)  AMC2 CAT.OP.MPA.200 (applicable from 30 October 2022)  AMC3 CAT.OP.MPA.200 (applicable from 30 October 2022) | 8.2.1 *Fuelling procedures*.  A description of fuelling procedures, including:  (a) Safety precautions during refuelling and defuelling including when an APU is in operation or when rotors are running or when an engine is or engines are running and the prop-brakes are on; (applicable until 29 October 2022)  (a) safety precautions during refuelling and defuelling including when an aircraft auxiliary power unit is in operation or, for helicopters, when rotors are turning or, for aeroplanes, when an engine is running; (applicable from 30 October 2022) |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.195 (applicable until 29 October 2022)  CAT.OP.MPA.200 (applicable from 30 October 2022)  AMC1 CAT.OP.MPA.195 (applicable until 29 October 2022)  AMCs 4 - 7 CAT.OP.MPA.200 (applicable from 30 October 2022) | (b) Refuelling and defuelling when passengers are embarking, on board or disembarking; and |  |  | (a) An aircraft shall not be refuelled/defuelled with Avgas (aviation gasoline) or wide-cut type fuel or a mixture of these types of fuel, when passengers are embarking, on board or disembarking.  (b) For all other types of fuel, necessary precautions shall be taken and the aircraft shall be properly manned by qualified personnel ready to initiate and direct an evacuation of the aircraft by the most practical and expeditious means available.  Operational procedures are detailed in AMC1 CAT.OP.MPA.195 (applicable until 29 October 2022)  Operational procedures are detailed in AMC6 CAT.OP.MPA.200 (applicable from 30 October 2022) |  |  |
|  | AMC3 ORO.MLR.100 | (c) Precautions to be taken to avoid mixing fuels. |  |  |  |  |  |
|  | CAT.OP.MPA.200 (applicable until 29 October 2022)  GM1 CAT.OP.MPA.200  AMC8 CAT.OP.MPA.200 (applicable from 30 October 2022) | *Refuelling/defuelling with wide-cut fuel* |  |  | Refuelling/defuelling with wide-cut fuel shall only be conducted if the operator has established appropriate procedures taking into account the high risk of using wide-cut fuel types.  Procedures are detailed in GM1 CAT.OP.MPA.200 |  |  |
|  | AMC3 ORO.MLR.100  AMC2 ORO.GEN.110(e) | 8.2.2 *Aircraft, passengers and cargo handling procedures related to safety*.  A description of the handling procedures to be used when allocating seats and embarking and disembarking passengers and when loading and unloading the aircraft.  Further procedures, aimed at achieving safety whilst the aircraft is on the ramp, must also be given.  Handling procedures should include: |  |  | Ground operations with passengers on board in the absence of flight crew:  For ground operations, whenever passengers are embarking, on board or disembarking in the absence of flight crew members, the operator should:  (a) establish procedures to alert the aerodrome services in the event of ground emergency or urgent need; and  (b) ensure that at least one person on board the aircraft is qualified to apply these procedures and ensure proper coordination between the aircraft and the aerodrome services. |  |  |
|  | AMC3 ORO.MLR.100  CAT.GEN.MPA.165  CAT.OP.MPA.155  AMC1 CAT.OP.MPA.155(b)  AMC2 CAT.OP.MPA.155(b)  AMC3 CAT.OP.MPA.155(b)  GM1 CAT.OP.MPA.155(b)  GM2 CAT.OP.MPA.155(b)  GM3 CAT.OP.MPA.155(b)  GM4 CAT.OP.MPA.155(b)  AMC1 CAT.OP.MPA.155(c)  AMC2 CAT.OP.MPA.155(c)  GM1 CAT.OP.MPA.155(c)  GM2 CAT.OP.MPA.155(c) | (a) Special categories of passengers, including children/infants, persons with reduced mobility, inadmissible passengers, deportees and persons in custody; |  |  | SCPs shall be carried under conditions that ensure the safety of the aircraft and its occupants according to procedures established by the operator.  SCPs shall not be allocated, nor occupy, seats that permit direct access to emergency exits or where their presence  could:  (1) impede crew members in their duties;  (2) obstruct access to emergency equipment; or  (3) impede the emergency evacuation of the aircraft.  The commander shall be notified in advance when SCPs are to be carried on board.  The operator procedures on information provided to the SCP should specify the timing and methods on how and when the information can be provided (see GM1 and GM2).  Conditions of safe carriage for unaccompanied children:  (a) When carrying an unaccompanied child that is not self-reliant, the operator should assess the safety risks to ensure that the child is assisted in case of an emergency situation.  (b) A child under the age of 12 years, separated from the accompanying adult, who is travelling in another cabin class, should be considered as an unaccompanied child in order to ensure that the child is assisted in case of an emergency situation (see GM3 & GM4).  Seating procedure (see also GM1 & GM2):  When establishing SCP seating procedures, the operator should take into account the following factors:  (a) If the SCP travels with an accompanying passenger, the accompanying passenger should be seated next to the SCP.  (b) If the SCP is unable to negotiate stairs within the cabin unaided, he/she should not be seated on the upper deck of a multi-deck aircraft if the exits are not certified for emergency evacuation on both land and water.  Seating allocation of scp with a disability and/or restraint aid:  (a) A disability and/or restraint aid that requires to be secured around the back of the seat should not be used if there is a person seated behind unless the seating configuration is approved for the use of such devices. This is to avoid the changed dynamic seat reactions with the disability and/or restraint aid, which may lead to head injury of the passenger seated behind.  (b) If the seat design or installation would prevent head contact of the person seated behind, then no further consideration is necessary. |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.160 | (b) Permissible size and weight of hand baggage; |  |  | The operator shall establish procedures to ensure that only hand baggage that can be adequately and securely stowed is taken into the passenger compartment. |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.160  AMC1 CAT.OP.MPA.160  AMC2 CAT.OP.MPA.160 | (c) Loading and securing of items in the aircraft; |  |  | The operator shall establish procedures to ensure that all baggage and cargo on board that might cause injury or damage, or obstruct aisles and exits if displaced, is stowed so as to prevent movement.  See AMC1 for more details regarding stowage procedures. |  |  |
|  | AMC3 ORO.MLR.100 | (d) Positioning of ground equipment; |  |  |  |  |  |
|  | AMC3 ORO.MLR.100 | (e) Operation of aircraft doors; |  |  |  |  |  |
|  | AMC3 ORO.MLR.100 | (f) Safety on the aerodrome/operating site, including fire prevention, blast and suction areas; |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  CAT.GEN.MPA.130  CAT.OP.MPA.205  AMC1 CAT.OP.MPA.205 | (g) Start-up, ramp departure and arrival procedures, including for aeroplanes push-back and towing operations; |  |  | A helicopter rotor shall only be turned under power for the purpose of flight with a qualified pilot at the controls.  Push back and towing procedures specified by the operator shall be conducted in accordance with established aviation standards and procedures.  See AMC1 CAT.OP.MPA.205 for barless towing. |  |  |
|  | AMC3 ORO.MLR.100 | (h) Servicing of aircraft ; |  |  |  |  |  |
|  | AMC3 ORO.MLR.100 | (i) Documents and forms for aircraft handling; |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  CAT.POL.MAB.100 | (j) Special loads and classification of load compartments; and |  |  |  |  |  |
|  | AMC3 ORO.MLR.100 | (k) Multiple occupancy of aircraft seats. |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  CAT.GEN.MPA.105  CAT.GEN.MPA.170 | 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. |  |  | The operator shall take all reasonable measures to ensure that no person enters or is in an aircraft when under the influence of alcohol or drugs to the extent that the safety of the aircraft or its occupants is likely to be endangered. |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.250  GM1 CAT.OP.MPA.250  GM2 CAT.OP.MPA.250  GM3 CAT.OP.MPA.250 | 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 must be given including:  (a) Proprietary or commercial names;  (b) Characteristics;  (c) Effects on aircraft performance;  (d) Hold-over times;  (e) Precautions during usage. |  |  | (a) The operator shall establish procedures to be followed when ground de-icing and anti-icing and related inspections of the aircraft are necessary to allow the safe operation of the aircraft.  (b) The commander shall only commence take-off if the aircraft is clear of any deposit that might adversely affect the performance or controllability of the aircraft, except as permitted under (a) and in accordance with the AFM.  Guidance on procedures are given in GM1/2/3 CAT.OP.MPA.250  As AEA HOT tables are not published anymore, FAA HOT tables can be used (TCCA are also acceptable) |  |  |
| **8.3 Flight procedures (as applicable to the operation)** | | | | | | | |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.100 | 8.3.1 *VFR/IFR Policy*.  A description of the policy for allowing flights to be made under VFR, or of requiring flights to be made under IFR, or of changing from one to the other. |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.135  SPA.PBN.100  SPA.PBN.105 | 8.3.2 *Navigation Procedures*.  A description of all navigation procedures relevant to the type(s) and area(s) of operation. 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; |  |  | For stabilized approaches, guidance can be found: <http://www.skybrary.aero/index.php/Stabilised_Approach> |  |  |
|  | AMC3 ORO.MLR.100  SPA.MNPS.100  SPA.MNPS.105  AMC1 SPA.MNPS.105 | (b) RNP, MNPS and POLAR navigation and navigation in other designated areas; |  |  |  |  |  |
|  | CAT.OP.MPA.126  AMC1 CAT.OP.MPA.126  AMC2 CAT.OP.MPA.126  AMC3 CAT.OP.MPA.126  AMC4 CAT.OP.MPA.126  AMC5 CAT.OP.MPA.126  AMC6 CAT.OP.MPA.126  AMC7 CAT.OP.MPA.126 | *RNP: Operating procedures* |  |  | The operator shall ensure that, when performance-based navigation (PBN) is required for the route or procedure to be flown:  (a) the relevant PBN navigation specification is stated in the AFM or other document that has been approved by the certifying authority as part of an airworthiness assessment or is based on such approval; and  (b) the aircraft is operated in conformance with the relevant navigation specification and limitations in the AFM or other document referred above.  For operations where a navigation specification for PBN has been prescribed and no specific approval is required in accordance with SPA.PBN.100, the operator should:  (a) establish operating procedures specifying:  (1) normal, abnormal and contingency procedures;  (2) electronic navigation database management; and  (3) relevant entries in the minimum equipment list (MEL);  (b) specify the flight crew qualification and proficiency constraints and ensure that the training programme for relevant personnel is consistent with the intended operation; and  (c) ensure continued airworthiness of the area navigation system.  Monitoring and verification:  (a) Preflight and general considerations  (1) At navigation system initialisation, the flight crew should confirm that the navigation database is current and verify that the aircraft position has been entered correctly, if required.  (2) The active flight plan, if applicable, should be checked by comparing the charts or other applicable documents with navigation equipment and displays. This includes confirmation of the departing runway and the waypoint sequence, reasonableness of track angles and distances, any altitude or speed constraints, and, where possible, which waypoints are flyby and which are fly-over. Where relevant, the RF leg arc radii should be confirmed.  (3) The flight crew should check that the navigation aids critical to the operation of the intended PBN procedure are available.  (4) The flight crew should confirm the navigation aids that should be excluded from the operation, if any.  (5) An arrival, approach or departure procedure should not be used if the validity of the procedure in the navigation database has expired.  (6) The flight crew should verify that the navigation systems required for the intended operation are operational.  (b) Departure  (1) Prior to commencing a take-off on a PBN procedure, the flight crew should check that the indicated aircraft position is consistent with the actual aircraft position at the start of the take-off roll (aeroplanes) or lift-off (helicopters).  (2) Where GNSS is used, the signal should be acquired before the take-off roll (aeroplanes) or lift-off (helicopters) commences.  (3) Unless automatic updating of the actual departure point is provided, the flight crew should ensure initialisation on the runway or FATO by means of a manual runway threshold or intersection update, as applicable. This is to preclude any inappropriate or inadvertent position shift after take-off.  (c) Arrival and approach  (1) The flight crew should verify that the navigation system is operating correctly and the correct arrival procedure and runway (including any applicable transition) are entered and properly depicted.  (2) Any published altitude and speed constraints should be observed.  (3) The flight crew should check approach procedures (including alternate aerodromes if needed) as extracted by the system (e.g. CDU flight plan page) or presented graphically on the moving map, in order to confirm the correct loading and the reasonableness of the procedure content.  (4) Prior to commencing the approach operation (before the IAF), the flight crew should verify the correctness of the loaded procedure by comparison with the appropriate approach charts. This check should include:  (i) the waypoint sequence;  (ii) reasonableness of the tracks and distances of the approach legs and the accuracy of the inbound course; and  (iii) the vertical path angle, if applicable.  (d) Altimetry settings for RNP APCH operations using Baro VNAV  (1) Barometric settings  (i) The flight crew should set and confirm the correct altimeter setting and check that the two altimeters provide altitude values that do not differ more than 100 ft at the most at or before the final approach fix (FAF).  (ii) The flight crew should fly the procedure with:  (A) a current local altimeter setting source available — a remote or regional altimeter setting source should not be used; and  (B) the QNH/QFE, as appropriate, set on the aircraft’s altimeters.  (2) Temperature compensation  (i) For RNP APCH operations to LNAV/VNAV minima using Baro VNAV:  (A) the flight crew should not commence the approach when the aerodrome temperature is outside the promulgated aerodrome temperature limits for the procedure unless the area navigation system is equipped with approved temperature compensation for the final approach;  (B) when the temperature is within promulgated limits, the flight crew should not make compensation to the altitude at the FAF and DA/H;  (C) since only the final approach segment is protected by the promulgated aerodrome temperature limits, the flight crew should consider the effect of temperature on terrain and obstacle clearance in other phases of flight.  (ii) For RNP APCH operations to LNAV minima, the flight crew should consider the effect of temperature on terrain and obstacle clearance in all phases of flight, in particular on any step-down fix.  (e) Sensor and lateral navigation accuracy selection  (1) For multi-sensor systems, the flight crew should verify, prior to approach, that the GNSS sensor is used for position computation.  (2) Flight crew of aircraft with RNP input selection capability should confirm that the indicated RNP value is appropriate for the PBN operation.  Managament of the navigation database:  (a) For RNAV 1, RNAV 2, RNP 1, RNP 2, and RNP APCH, the flight crew should neither insert nor modify waypoints by manual entry into a procedure (departure, arrival or approach) that has been retrieved from the database. User-defined data may be entered and used for waypoint altitude/speed constraints on a procedure where said constraints are not included in the navigation database coding.  (b) For RNP 4 operations, the flight crew should not modify waypoints that have been retrieved from the database. User-defined data (e.g. for flex-track routes) may be entered and used.  (c) The lateral and vertical definition of the flight path between the FAF and the missed approach point (MAPt) retrieved from the database should not be revised by the flight crew.  Displays and automation:  (a) For RNAV 1, RNP 1, and RNP APCH operations, the flight crew should use a lateral deviation indicator, and where available, flight director and/or autopilot in lateral navigation mode.  (b) The appropriate displays should be selected so that the following information can be monitored:  (1) the computed desired path;  (2) aircraft position relative to the lateral path (cross-track deviation) for FTE monitoring;  (3) aircraft position relative to the vertical path (for a 3D operation).  (c) The flight crew of an aircraft with a lateral deviation indicator (e.g. CDI) should ensure that lateral deviation indicator scaling (full-scale deflection) is suitable for the navigation accuracy associated with the various segments of the procedure.  (d) The flight crew should maintain procedure centrelines unless authorised to deviate by air traffic control (ATC) or demanded by emergency conditions.  (e) Cross-track error/deviation (the difference between the area-navigation-system-computed path and the aircraft-computed position) should normally be limited to ± ½ time the RNAV/RNP value associated with the procedure. Brief deviations from this standard (e.g. overshoots or undershoots during and immediately after turns) up to a maximum of 1 time the RNAV/RNP value should be allowable.  (f) For a 3D approach operation, the flight crew should use a vertical deviation indicator and, where required by AFM limitations, a flight director or autopilot in vertical navigation mode.  (g) Deviations below the vertical path should not exceed 75 ft at any time, or half-scale deflection where angular deviation is indicated, and not more than 75 ft above the vertical profile, or halfscale deflection where angular deviation is indicated, at or below 1 000 ft above aerodrome level. The flight crew should execute a missed approach if the vertical deviation exceeds this criterion, unless the flight crew has in sight the visual references required to continue the approach.  Vectoring and positioning:  (a) ATC tactical interventions in the terminal area may include radar headings, ‘direct to’ clearances which bypass the initial legs of an approach procedure, interceptions of an initial or intermediate segments of an approach procedure or the insertion of additional waypoints loaded from the database.  (b) In complying with ATC instructions, the flight crew should be aware of the implications for the navigation system.  (c) ‘Direct to’ clearances may be accepted to the IF provided that it is clear to the flight crew that the aircraft will be established on the final approach track at least 2 NM before the FAF.  (d) ‘Direct to’ clearance to the FAF should not be acceptable. Modifying the procedure to intercept the final approach track prior to the FAF should be acceptable for radar-vectored arrivals or otherwise only with ATC approval.  (e) The final approach trajectory should be intercepted no later than the FAF in order for the aircraft to be correctly established on the final approach track before starting the descent (to ensure terrain and obstacle clearance).  (f) ‘Direct to’ clearances to a fix that immediately precede an RF leg should not be permitted.  (g) For parallel offset operations en route in RNP 4 and A-RNP, transitions to and from the offset track should maintain an intercept angle of no more than 45° unless specified otherwise by ATC.  Alerting and abort:  (a) Unless the flight crew has sufficient visual reference to continue the approach operation to a safe landing, an RNP APCH operation should be discontinued if:  (1) navigation system failure is annunciated (e.g. warning flag);  (2) lateral or vertical deviations exceed the tolerances;  (3) loss of the on-board monitoring and alerting system.  (b) Discontinuing the approach operation may not be necessary for a multi-sensor navigation system that includes demonstrated RNP capability without GNSS in accordance with the AFM.  (c) Where vertical guidance is lost while the aircraft is still above 1 000 ft AGL, the flight crew may decide to continue the approach to LNAV minima, when supported by the navigation system.  Contingency procedures:  (a) The flight crew should make the necessary preparation to revert to a conventional arrival procedure where appropriate. The following conditions should be considered:  (1) failure of the navigation system components including navigation sensors, and a failure effecting flight technical error (e.g. failures of the flight director or autopilot);  (2) multiple system failures affecting aircraft performance;  (3) coasting on inertial sensors beyond a specified time limit; and  (4) RAIM (or equivalent) alert or loss of integrity function.  (b) In the event of loss of PBN capability, the flight crew should invoke contingency procedures and navigate using an alternative means of navigation.  (c) The flight crew should notify ATC of any problem with PBN capability.  (d) In the event of communication failure, the flight crew should continue with the operation in accordance with published lost communication procedures.  For detailed procedures, see EASA AMC 20-12 (RNP10), EASA AMC 20-4 (RNAV5), EASA AMC 20-27 (RNP APCH), EASA AMC 20-28 (RNP APCH LPV), EASA AMC 20-26 (RNP AR APCH) and the related CCL RNP checklist. |  |  |
|  | SPA.RVSM.100  SPA.RVSM.105  AMC1 SPA.RVSM.105  AMC2 SPA.RVSM.105  SPA.RVSM.110  AMC1 SPA.RVSM.110(a)  SPA.RVSM.115 | *MNPS/NAT HLA: Operating procedures* |  |  | For MNPS, the following shall be established:  (1) flight crew composition and experience requirements;  (2) normal procedures;  (3) contingency procedures;  (4) monitoring and incident reporting.  For detailed procedures, check the last edition of ICAO NAT Doc 007 and the MNPS/NAT HLA checklist. |  |  |
|  |  | *POLAR Operations* |  |  | For polar operations, guidance can be found in the FAA AC 120-42B chapter 6. |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.150 (applicable until 29 October 2022)  CAT.OP.MPA.181 (applicable from 30 October 2022)  CAT.OP.MPA.260 | (c) In-flight re-planning; |  |  | Applicable until 29 October 2022:  The operator shall ensure that in-flight replanning procedures for calculating usable fuel required when a flight has to proceed along a route or to a destination aerodrome other than originally planned includes:  (1) trip fuel for the remainder of the flight; and  (2) reserve fuel consisting of:  (i) contingency fuel;  (ii) alternate fuel, if a destination alternate aerodrome is required;  (iii) final reserve fuel; and  (iv) additional fuel, if required by the type of operation;  (3) extra fuel if required by the commander.  Applicable from 30 October 2022:  The operator shall:  (1) establish a fuel/energy planning and in-flight re-planning policy as part of the fuel/energy scheme;  (2) ensure that the aeroplane carries a sufficient amount of usable fuel/energy to safely complete the planned flight and to allow for deviations from the planned operation;  (3) develop procedures for the fuel/energy planning and in-flight re-planning policy that shall be contained in the operations manual.  (4) ensure that the fuel/energy planning of the flight is based on:  (i) current aircraft-specific data derived from a fuel/energy consumption monitoring system or, if not available;  (ii) data provided by the aeroplane manufacturer.  The commander shall only continue the flight in the event of in-flight replanning when satisfied that the aircraft carries at least the planned amount of usable fuel/energy (applicable from 30 October 2022) and oil to complete the flight safely, taking into account the expected operating conditions. |  |  |
|  | AMC3 ORO.MLR.100 | (d) Procedures in the event of system degradation; and |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  SPA.RVSM.105  AMC2 SPA.RVSM.105  SPA.RVSM.110  SPA.RVSM.115 | (e) RVSM for aeroplanes. |  |  | Operating procedures shall include:  (1) the equipment to be carried, including its operating limitations and appropriate entries in the MEL;  (2) flight crew composition and experience requirements;  (3) flight planning;  (4) pre-flight procedures;  (5) procedures prior to RVSM airspace entry;  (6) in-flight procedures;  (7) post-flight procedures;  (8) incident reporting (see SPA.RVSM.115);  (9) specific regional operating procedures.  See AMC2 SPA.RVSM.105 for more details and the related RVSM checklist. |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.101 (applicable from 30 October 2022) | 8.3.3 *Altimeter setting procedures*  Including use, where appropriate, of :  - Metric altimetry and conversion tables, and  - QFE operating procedures. |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  CAT.IDE.A.140  SPA.RVSM.115 | 8.3.4 *Altitude alerting system procedures for aeroplanes or audio voice alerting devices for helicopters* |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.290  GM1 CAT.OP.MPA.290 | 8.3.5 *Ground Proximity Warning System procedures / Terrain Avoidance Warning System 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). |  |  | When undue proximity to the ground is detected by a flight crew member or by a ground proximity warning system, the pilot flying shall take corrective action immediately to establish safe flight conditions.  More details are described in GM1 CAT.OP.MPA.290 |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.295  GM1 CAT.OP.MPA.295 | 8.3.6 *Policy and procedures for the use of TCAS/ACAS for aeroplanes and, when applicable for helicopters.* |  |  | The operator shall establish operational procedures and training programmes when ACAS is installed and serviceable. When ACAS II is used, such procedures and training shall be in accordance with Commission Regulation (EU) No 1332/2011.  More details are described in GM1 CAT.OP.MPA.295  Check also compliance with EASA SIBs on TCAS. |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.280 (applicable until 29 October 2022)  CAT.OP.MPA.185 (applicable from 30 October 2022)  AMC1 CAT.OP.MPA.185(a) (applicable from 30 October 2022)  AMC2 CAT.OP.MPA.185(a) (applicable from 30 October 2022)  AMC3 CAT.OP.MPA.185(a) (applicable from 30 October 2022)  CAT.OP.MPA.191 (applicable from 30 October 2022)  CAT.OP.MPA.192 (applicable from 30 October 2022)  CAT.OP.MPA.195 (applicable from 30 October 2022)  AMC1 CAT.OP.MPA.195 (applicable from 30 October 2022)  CAT.OP.MPA.281 (applicable until 29 October 2022)  AMC1 CAT.OP.MPA.281 (applicable until 29 October 2022) | 8.3.7 *Policy and procedures for in-flight fuel management* |  |  | For aeroplanes, the operator shall establish a procedure to ensure that in-flight fuel checks and fuel management are carried out according to the criteria in CAT.OP.MPA.280 (applicable until 29 October 2022)  For aeroplanes, the operator should establish a procedure to ensure that in-flight fuel checks are carried out at regular intervals or at specified points indicated in the operational flight plan (one check at least every 60 minutes). (applicable from 30 October 2022)  For helicopters, the operator shall establish a procedure to ensure that in-flight fuel checks and fuel management are carried out according to the criteria in CAT.OP.MPA.281 and AMC1. (applicable until 29 October 2022) |  |  |
|  | AMC3 ORO.MLR.100  CAT.IDE.A.160  AMC1CAT.IDE.A.160 | 8.3.8 *Adverse and potentially hazardous atmospheric conditions*.  Procedures for operating in, and/or avoiding, adverse and potentially hazardous atmospheric conditions including:  (a) Thunderstorms; |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.255  AMC1 CAT.OP.MPA.255  AMC2 CAT.OP.MPA.255 | (b) Icing conditions; |  |  | (a) The operator shall establish procedures for flights in expected or actual icing conditions.  (b) The commander shall only commence a flight or intentionally fly into expected or actual icing conditions if the aircraft is certified and equipped to cope with such conditions.  (c) If icing exceeds the intensity of icing for which the aircraft is certified or if an aircraft not certified for flight in known icing conditions encounters icing, the commander shall exit the icing conditions without delay, by a change of level and/or route, if necessary by declaring an emergency to ATC.  See AMC1 & 2 CAT.OP.MPA.255 for more details regarding the procedures. |  |  |
|  | AMC3 ORO.MLR.100 | (c) Turbulence |  |  |  |  |  |
|  | AMC3 ORO.MLR.100 | (d) Windshear |  |  |  |  |  |
|  | AMC3 ORO.MLR.100 | (e) Jetstream; |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  GM3 ORO.GEN.200(a)(3) | (f) Volcanic ash clouds; |  |  | The operator should have documented procedures for the management of operations into airspace forecast to be or aerodromes/operating sites known to be contaminated with volcanic ash.  These procedures should ensure that, at all times, flight operations remain within the accepted safety boundaries as established through the management system allowing for any variations in information sources, equipment, operational experience or organisation. Procedures should include those for flight crew, flight planners, dispatchers, operations, continuing airworthiness personnel such that they are in a position to evaluate correctly the risk of flights into airspace forecast to be contaminated by volcanic ash and to plan accordingly.  The operator should retain sufficient qualified and competent staff to generate well supported operational risk management decisions and ensure that its staff are appropriately trained and current. It is recommended that the operator make the necessary arrangements for its relevant staff to take up opportunities to be involved in volcanic ash exercises conducted in their areas of operation.  More details regarding the procedures could be found in GM3 ORO.GEN.200(a)(3) and in the ICAO Doc 9974. |  |  |
|  | AMC3 ORO.MLR.100 | (g) Heavy precipitation; |  |  |  |  |  |
|  | AMC3 ORO.MLR.100 | (h) Sand storms; |  |  |  |  |  |
|  | AMC3 ORO.MLR.100 | (i) Mountain waves; and |  |  |  |  |  |
|  | AMC3 ORO.MLR.100 | (j) Significant Temperature inversions. |  |  |  |  |  |
|  | SIB 2015-13 | Adverse Convective Weather and the Inter-Tropical Convergence Zone |  |  | Check that SIB 2015-13 is reflected. It could also be in OM C if not in OM A. |  |  |
|  | AMC3 ORO.MLR.100 | 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. |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.210  AMC1 CAT.OP.MPA.210(b)  SIB 2016-09 | 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 also include procedures for controlled rest on the flight crew compartment. |  |  | FCM:  (1) During take-off and landing each flight crew member required to be on duty in the flight crew compartment shall  be at the assigned station.  (2) During all other phases of flight each flight crew member required to be on duty in the flight crew compartment shall remain at the assigned station, unless absence is necessary for the performance of duties in connection with the operation or for physiological needs, provided at least one suitably qualified pilot remains at the controls of the aircraft at all times.  (3) During all phases of flight each flight crew member required to be on duty in the flight crew compartment shall  remain alert. If a lack of alertness is encountered, appropriate countermeasures shall be used. If unexpected fatigue is experienced, a controlled rest procedure, organised by the commander, may be used if workload permits.  Controlled rest taken in this way shall not be considered to be part of a rest period for purposes of calculating flight time limitations nor used to justify any extension of the duty period.  CCM:  During critical phases of flight, each cabin crew member shall be seated at the assigned station and shall not perform any activities other than those required for the safe operation of the aircraft.  Minimum Cockpit Occupancy:  CAT.OP.MPA.210 stipulates that flight crew members required to be on duty in the flight crew compartment shall remain at the assigned station, unless absence is necessary for the performance of duties in connection with the operations or for physiological needs, provided at least one suitably qualified pilot remains at the controls of the aircraft at all times.  In such cases, the Agency recommends operators to assess the safety and security risks associated with a flight crew member remaining alone in the flight crew compartment.  This assessment should take the following elements into account:  1) the operator’s psychological and security screening policy of flight crews;  2) employment stability and turnover rate of flight crews;  3) access to a support programme, providing psychological support and relief to flight crew when needed; and  4) ability of the operator’s management system to mitigate psychological and social risks.  If the assessment leads the operator to require two authorised persons in accordance with CAT.GEN.MPA.135 to be in the flight crew compartment at all times, operators should ensure that:  (a) the role of the authorised person, other than the operating pilot, in the flight crew compartment is clearly defined, considering that his/her main task should be to open the  secure door when the flight crew member who left the compartment returns;  (b) only suitably qualified flight crew members are allowed to sit at the controls;  (c) safety and security procedures are established for his/her presence in the flight crew compartment (e.g. operation of the flight deck, specific procedure for entry, use of observer seat and oxygen masks, avoidance of distractions etc.);  (d) training needs are addressed and identified as appropriate;  (e) safety risks stemming from the authorised person leaving the passenger cabin are assessed and mitigated, if necessary; and  (f) resulting procedures are detailed in the Operations Manual and, when relevant, the related security reference documents. |  |  |
|  | ORO.GEN.110(f)  AMC1 ORO.GEN.110(f)  GM1 ORO.GEN.110(f) | Sterile flight crew compartment  Procedures and instructions for a sterile flight crew compartment shall also be included. |  |  | (a) Sterile flight crew compartment procedures should ensure that:   1. flight crew activities are restricted to essential operational activities; and 2. cabin crew and technical crew communications to flight crew or entry into the flight crew compartment are restricted to safety or security matters.   (b) The sterile flight crew compartment procedures should be applied:   1. during critical phases of flight; 2. during taxiing (aeroplanes); 3. below 10 000 feet above the aerodrome of departure after take-off and the aerodrome of destination before landing, except for cruise flight; and 4. during any other phases of flight as determined by the pilot-in-command or commander.   (c) All crew members should be trained on sterile flight crew compartment procedures established by the operator, as appropriate to their duties.  See GM1 ORO.GEN.110(f) for more details. |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.225 | 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. |  |  | Crew members:  (1) During take-off and landing, and whenever decided by the commander in the interest of safety, each crew member shall be properly secured by all safety belts and restraint systems provided.  (2) During other phases of the flight, each flight crew member in the flight crew compartment shall keep the assigned station safety belt fastened while at his/her station.  Passengers:  (1) Before take-off and landing, and during taxiing, and whenever deemed necessary in the interest of safety, the commander shall be satisfied that each passenger on board occupies a seat or berth with his/her safety belt or restraint system properly secured.  (2) The operator shall make provisions for multiple occupancy of aircraft seats that is only allowed on specified seats.  The commander shall be satisfied that multiple occupancy does not occur other than by one adult and one infant who is properly secured by a supplementary loop belt or other restraint device. |  |  |
|  | AMC3 ORO.MLR.100  CAT.GEN.MPA.135  AMC1 CAT.GEN.MPA.135(a)(3) | 8.3.12 *Admission to Flight crew compartment.*  The conditions for the admission to the flight deck of persons other than the flight crew. The policy regarding the admission of Inspectors from an Authority should also be included. |  |  | (a) The operator shall ensure that no person, other than a flight crew member assigned to a flight, is admitted to, or  carried in, the flight crew compartment unless that person is:  (1) an operating crew member;  (2) a representative of the competent or inspecting authority, if required to be there for the performance of his/her official duties; or  (3) permitted by and carried in accordance with instructions contained in the OM.  (b) The commander shall ensure that:  (1) admission to the flight crew compartment does not cause distraction or interference with the operation of the  flight; and  (2) all persons carried in the flight crew compartment are made familiar with the relevant safety procedures.  (c) The commander shall make the final decision regarding the admission to the flight crew compartment. |  |  |
|  | AMC3 ORO.MLR.100 | 8.3.13 *Use of vacant crew seats*.  The conditions and procedures for the use of vacant crew seats. |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  ORO.GEN.110f,h  AMC1 ORO.GEN.110(f)(h) | 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. |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.230  ORO.CC.205  AMC1 ORO.CC.205(c)(1)  CAT.IDE.A.100 | 8.3.15 *Cabin Safety Requirements*.  Procedures covering:  (a) Cabin preparation for flight, in-flight requirements and preparation for landing including procedures for securing the cabin and galleys; |  |  | (a) The operator shall establish procedures to ensure that before taxiing, take-off and landing all exits and escape paths are unobstructed.  (b) The commander shall ensure that before take-off and landing, and whenever deemed necessary in the interest of safety, all equipment and baggage are properly secured. |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.165  AMC1 CAT.OP.MPA.165  AMC2 CAT.OP.MPA.165 | (b) Procedures 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; |  |  | See AMC1 and AMC2 CAT.OP.MPA.165 for procedures details. |  |  |
|  | AMC3 ORO.MLR.100 | (c) Procedures to be followed during passenger embarkation and disembarkation; |  |  |  |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.195 (applicable until 29 October 2022)  AMC1 CAT.OP.MPA.195 (applicable until 29 October 2022)  CAT.OP.MPA.200 (applicable from 30 October 2022)  AMC6 CAT.OP.MPA.200 (applicable from 30 October 2022) | (d) Procedures when refuelling/defuelling with passengers embarking, on board or disembarking; |  |  | (a) An aircraft shall not be refuelled/defuelled with Avgas (aviation gasoline) or wide-cut type fuel or a mixture of these types of fuel, when passengers are embarking, on board or disembarking.  (b) For all other types of fuel, necessary precautions shall be taken and the aircraft shall be properly manned by qualified personnel ready to initiate and direct an evacuation of the aircraft by the most practical and expeditious means available.  Operational procedures are detailed in AMC1 CAT.OP.MPA.195 (applicable until 29 October 2022)  Operational procedures are detailed in AMC6 CAT.OP.MPA.200 (applicable from 30 October 2022) |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.155  AMC1 CAT.OP.MPA.155(b) | (e) Procedures covering the carriage of special categories of passengers; |  |  | SCPs shall be carried under conditions that ensure the safety of the aircraft and its occupants according to procedures established by the operator.  SCPs shall not be allocated, nor occupy, seats that permit direct access to emergency exits or where their presence  could:  (1) impede crew members in their duties;  (2) obstruct access to emergency equipment; or  (3) impede the emergency evacuation of the aircraft.  The commander shall be notified in advance when SCPs are to be carried on board. |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.240 | (f) Procedures covering smoking on board; |  |  | The commander shall not allow smoking on board:  (a) whenever considered necessary in the interest of safety;  (b) during refuelling and defuelling of the aircraft;  (c) while the aircraft is on the surface unless the operator has determined procedures to mitigate the risks during ground operations;  (d) outside designated smoking areas, in the aisle(s) and lavatory(ies);  (e) in cargo compartments and/or other areas where cargo is carried that is not stored in flame-resistant containers or covered by flame-resistant canvas; and  (f) in those areas of the passenger compartment where oxygen is being supplied. |  |  |
|  | AMC3 ORO.MLR.100 | (g) Procedures covering the handling of suspected infectious diseases. |  |  | See the following document on skybrary:  GUIDELINES FOR STATES CONCERNING THE MANAGEMENT OF COMMUNICABLE DISEASE POSING A SERIOUS PUBLIC HEALTH RISK |  |  |
|  | CAT.GEN.MPA.140  AMC1 CAT.GEN.MPA.140 | *Procedures regarding the use of portable electronic devices (PED).* |  |  | Procedures for the use of PEDs in the passenger compartment.  Procedures for the use of PEDs in the flight compartment.  Procedures addressing PEDs not accessible during flight.  See AMC1 CAT.GEN.MPA.140 for more details. |  |  |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.170  AMC1 CAT.OP.MPA.170  AMC1.1 CAT.OP.MPA.170  AMC3 CAT.OP.MPA.170  GM1/GM2 CAT.OP.MPA.170(a) | 8.3.16 *Passenger briefing procedures*.  The contents, means and timing of passenger briefing in accordance with Part-CAT. |  |  | See AMC1 CAT.OP.MPA.170 for briefing content (updated in 2017).  See also GM1/GM2 CAT.OP.MPA.170(a) for the safety briefing material. |  |  |
|  | AMC3 ORO.MLR.100  Directive 96/26 (EURATOM) | 8.3.17 *Procedures for aeroplanes operated whenever required cosmic or* *solar radiation detection equipment is carried*. |  |  | Procedures for the use of cosmic or solar radiation detection equipment and for recording its readings including actions to be taken in the event that limit values specified in the Operations Manual are exceeded. In addition, the procedures, including ATS procedures, to be followed in the event that a decision to descend or re-route is taken. |  |  |
|  | AMC3 ORO.MLR.100  EASA SIB 2010-33 | 8.3.18. *Policy on the use of Autopilot and Autothrottle.* |  |  | See EASA SIB 2010-33 for more details. |  |  |
|  | CAT.GEN.MPA.124  CAT.GEN.MPA.125  AMC1 CAT.GEN.MPA.124  GM1/2 CAT.GEN.MPA.125 | *Taxiing of aircraft*  *The operator shall establish procedures for taxiing of aircraft in order to ensure safe operation and in order to enhance runway safety.*  *The operator shall ensure that an aeroplane is only taxied on the movement area of an aerodrome if the person at the controls:*  *(a) is an appropriately qualified pilot; or*  *(b) has been designated by the operator and:*   1. *is trained to taxi the aircraft;* 2. *is trained to use the radio telephone;* 3. *has received instruction in respect of aerodrome layout, routes, signs, marking, lights, air traffic control (ATC) signals and instructions, phraseology and procedures;* 4. *is able to conform to the operational standards required for safe aeroplane movement at the aerodrome.* |  |  | Procedures for taxiing should include at least the following:  (a) application of the sterile flight crew compartment procedures;  (b) use of standard radio-telephony (RTF) phraseology;  (c) use of lights;  (d) measures to enhance the situational awareness of the minimum required flight crew members. The following list of typical items should be adapted by the operator to take into account its operational environment:   1. each flight crew member should have the necessary aerodrome layout charts available; 2. the pilot taxiing the aircraft should announce in advance his/her intentions to the pilot monitoring; 3. all taxi clearances should be heard and should be understood by each flight crew member; 4. all taxi clearances should be cross-checked against the aerodrome chart and aerodrome surface markings, signs, and lights; 5. an aircraft taxiing on the manoeuvring area should stop and hold at all lighted stop bars, and may proceed further when an explicit clearance to enter or cross the runway has been issued by the aerodrome control tower, and when the stop bar lights are switched off; 6. if the pilot taxiing the aircraft is unsure of his/her position, he/she should stop the aircraft and contact air traffic control; 7. the pilot monitoring should monitor the taxi progress and adherence to the clearances, and should assist the pilot taxiing; 8. any action which may disturb the flight crew from the taxi activity should be avoided or done with the parking brake set (e.g. announcements by public address);   (e) subparagraphs (d)(2) and (d)(7) are not applicable to single-pilot operations. |  |  |
|  | CAT.OP.MPA.215  CAT.OP.MPA.216 | *Use of headset* |  |  | Each flight crew member required to be on duty in the flight crew compartment shall wear a headset with boom microphone or equivalent. The headset shall be used as the primary device for voice communications with ATS.  See detailed requirements for aeroplanes in CAT.OP.MPA.215 |  |  |
|  | CAT.OP.MPA.275 | *Simulated abnormal situations in flight* |  |  | The operator shall ensure that when carrying passengers or cargo the following are not simulated:  (a) abnormal or emergency situations that require the application of abnormal or emergency procedures; or  (b) flight in IMC by artificial means. |  |  |
|  | CAT.POL.A.240 | *Operations with increased bank angles* |  |  | **Operations with increased bank angles require prior approval by the competent authority.**  Conditions for approval are defined in CAT.POL.A.240. |  |  |
|  | CAT.POL.A.245  CAT.POL.A.345 | *Steep approach operations* |  |  | **Steep approach operations using glideslope angles of 4,5° or more and with screen heights of less than 60ft, but not less than 35ft, require prior approval by the competent authority.**  Conditions for approval are defined in CAT.POL.A.245/345. |  |  |
|  | CAT.POL.A.250  CAT.POL.A.350 | *Short landing operations* |  |  | **Short landing operations require prior approval by the competent authority.**  Conditions for approval are defined in CAT.POL.A.250/350. |  |  |
|  | CAT.POL.H.305 | *Operations without an assured safe forced landing capability* |  |  | **Operations without an assured safe forced landing capability during the take-off and landing phases shall only be conducted if the operator has been granted an approval by the competent authority.**  Conditions for approval are defined in CAT.POL.H.305. |  |  |
|  | CAT.POL.H.420 | *Helicopter operations over a hostile environment located outside a congested area* |  |  | **Operations over a non-congested hostile environment without a safe forced landing capability with turbine-powered helicopters with an MOPSC of six or less shall only be conducted if the operator has been granted an approval by the competent authority**, following a safety risk assessment performed by the operator. Before such operations take place in another Member State, the operator shall obtain an endorsement from the competent authority of that State.  Conditions for approval are defined in CAT.POL.H.420. |  |  |

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|  | CAT.POL.H.225 | *Helicopter operations to/from a public interest site* |  |  | | **Helicopter operations to/from a public interest site require prior approval by the competent authority.**  Conditions for approval are defined in CAT.POL.H.225. | |  | |  | |
|  | CAT.OP.MPA.120 | *Airborne radar approaches - Helicopters* |  |  | | **Airborne radar approaches shall be approved by the competent authority.**  Conditions for approval are defined in CAT.OP.MPA.120. | |  | |  | |
| **8.4 Low visibility operations (LVO)** | | | | | | | | | | | |
|  | AMC3 ORO.MLR.100 | A description of the operational procedures associated with LVO. |  |  | |  | |  | |  | |
|  | SPA.LVO.100  AMCs SPA.LVO.100 | *Description of the different types of LVO* |  |  | | * LVTO * LTS CAT I * CAT II * OTS CAT II * CAT III * EVS (applicable until 29 October 2022)   Details can be found in the relative AMCs. | |  | |  | |
|  | CAT.OP.MPA.125  CAT.OP.MPA.265  CAT.OP.MPA.300  AMC1 CAT.OP.MPA.300  CAT.OP.MPA.310  SPA.LVO.100  AMC1 SPA.LVO.100  AMC2 SPA.LVO.100  AMC3 SPA.LVO.100  AMC4 SPA.LVO.100  AMC5 SPA.LVO.100  AMC6 SPA.LVO.100  AMC7 SPA.LVO.100  SPA.LVO.105  AMC1 SPA.LVO.105  AMC2 SPA.LVO.105  AMC3 SPA.LVO.105  AMC4 SPA.LVO.105  AMC5 SPA.LVO.105  AMC6 SPA.LVO.105  SPA.LVO.110  SPA.LVO.115 (applicable until 29 October 2022)  SPA.LVO.125  AMC1 SPA.LVO.125 | *Operating procedures for LVO* |  |  | | Procedures should cover at least:  (i) checks for the satisfactory functioning of the aircraft equipment, both before departure and in flight;  (ii) effect on minima caused by changes in the status of the ground installations and airborne equipment;  (iii) procedures for the take-off, approach, flare, hover, landing, rollout and missed approach;  (iv) procedures to be followed in the event of failures, warnings to include HUD/HUDLS/EVS and other non-normal situations;  (v) the minimum visual reference required;  (vi) the importance of correct seating and eye position;  (vii) action that may be necessary arising from a deterioration of the visual reference;  (viii) allocation of crew duties in the carrying out of the procedures according to (b)(2)(i) to (iv) and (vi), to allow the pilot-in-command/commander to devote himself/herself mainly to supervision and decision making;  (ix) the rule for all height calls below 200 ft to be based on the radio altimeter and for one pilot to continue to monitor the aircraft instruments until the landing is completed;  (x) the rule for the localiser sensitive area to be protected;  (xi) the use of information relating to wind velocity, wind shear, turbulence, runway contamination and use of multiple RVR assessments;  (xii) procedures to be used for:  (A) LTS CAT I;  (B) OTS CAT II;  (C) approach operations utilising EVS; and  (D) practice approaches and landing on runways at which the full CAT II or CAT III aerodrome procedures are not in force;  (xiii) operating limitations resulting from airworthiness certification; and  (xiv) information on the maximum deviation allowed from the ILS glide path and/or localiser. | |  | |  | |
| **8.5 Extended-range operations with two-engined aeroplanes (ETOPS)** | | | | | | | | | | | |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.140  AMC1 CAT.OP.MPA.140(c)  SPA.ETOPS.100  SPA.ETOPS.105  SPA.ETOPS.110 | A description of the ETOPS operational procedures. (See EASA AMC 20-6). |  |  | |  | |  | |  | |
|  | AMC 20-6 | a. Introduction  (1) Brief description of ETOPS |  |  | |  | |  | |  | |
|  | AMC 20-6 | (2) Definitions |  |  | | * Approved One-Engine-Inoperative Cruise Speed * Dispatch * ETOPS significant system * Extended Range Entry Point * In-flight Shutdown (IFSD) * Operator’s Approved Diversion Time * System (Airframe System-Propulsion System) * … | |  | |  | |
|  | AMC 20-6 | b. Operations approval  (1) Criteria |  |  | |  | |  | |  | |
|  | AMC 20-6 | (2) Assessment |  |  | |  | |  | |  | |
|  | AMC 20-6 | (3) Approved diversion time |  |  | | The procedures established by the operator should ensure that ETOPS is only planned on routes where the Operator’s Approved Diversion Time to an Adequate ETOPS en-route alternate Aerodrome can be met. | |  | |  | |
|  | AMC 20-6 | c. Training and Checking |  |  | | An operator should ensure that prior to conducting ETOPS, each crew member has completed successfully ETOPS training and checking in accordance with a syllabus compliant with Appendix 7 to the AMC 20-6, approved by the Competent Authority and detailed in the OM D.  This training should be type and area specific in accordance with the applicable operational requirements.  The operator should ensure that crew members are not assigned to operate ETOPS routes for which they have not successfully passed the training. | |  | |  | |
|  | AMC 20-6 | d. Operating procedures |  |  | |  | |  | |  | |
|  | AMC 20-6 | e. ETOPS operational procedures |  |  | |  | |  | |  | |
|  | AMC 20-6 | f. ETOPS Flight Preparation and Planning  (1) Aeroplane serviceability |  |  | |  | |  | |  | |
|  | AMC 20-6 | (2) ETOPS Orientation charts |  |  | |  | |  | |  | |
|  | SPA.ETOPS.110  SPA.ETOPS.115  AMC 20-6 | (3) ETOPS alternate aerodrome selection |  |  | | To conduct an ETOPS flight, the ETOPS en-route alternate aerodromes, should meet the weather requirements of planning minima for an ETOPS en-route alternate aerodromes contained in the applicable operational requirements. ETOPS planning minima apply until dispatch. The planned en-route alternates for using in the event of propulsion system failure or aeroplane system failure(s) which require a diversion should be identified and listed in the cockpit documentation (e.g. computerised flight plan) for all cases where the planned route to be flown contains an ETOPS point.  To list an aerodrome as an ETOPS en-route alternate, the following criteria should be met:  a. The landing distances required as specified in the AFM for the altitude of the aerodrome, for the runway expected to be used, taking into account wind conditions, runway surface conditions, and aeroplane handling characteristics, permit the aeroplane to be stopped within the landing distance available as declared by the aerodrome authorities and computed in accordance with the applicable operational requirements.  b. The aerodrome services and facilities are adequate to permit an instrument approach procedure to the runway expected to be used while complying with the applicable aerodrome operating minima.  c. The latest available forecast weather conditions for a period commencing at the earliest potential time of landing and ending one hour after the latest nominated time of use of that aerodrome, equals or exceeds the authorised weather minima for en-route alternate aerodromes as provided for by the increments listed in Table 1 of this Appendix. In addition, for the same period, the forecast crosswind component plus any gusts should be within operating limits and within the operators maximum crosswind limitations taking into account the runway condition (dry, wet or contaminated) plus any reduced visibility limits.  d. In addition, the operator’s programme should provide flight crews with information on adequate aerodromes appropriate to the route to be flown which are not forecast to meet en-route alternate weather minima. Aerodrome facility information and other appropriate planning data concerning these aerodromes should be provided to flight crews for use when executing a diversion. | |  | |  | |
|  | SPA.ETOPS.115  AMC 20-6 | (4) En-route alternate weather requirements for planning |  |  | | An aerodrome may be nominated as an ETOPS en-route alternate for flight planning and release purposes if the available forecast weather conditions for a period commencing at the earliest potential time of landing and ending one hour after the latest nominated time of use of that aerodrome, equal or exceed the criteria required by Table 1 of AMC 20-6 appendix 6 or SPA.ETOPS.115.  When determining the usability of an Instrument Approach (IAP), forecast wind plus any gusts should be within operating limits, and within the operators maximum crosswind limitations taking into account the runway condition (dry, wet or contaminated) plus any reduced visibility limits. Conditional forecast elements need not be considered, except that a PROB 40 or TEMPO condition below the lowest applicable operating minima should be taken into account. | |  | |  | |
|  | AMC 20-6 | (5) ETOPS computerised Flight Plans |  |  | | The type of operation (i.e. ETOPS, including the diversion time used to establish the plan) should be listed on the operational flight plan as required by the applicable operational requirements. | |  | |  | |
|  | AMC 20-6 | g. Flight Crew Procedures  (1) Dispatch |  |  | | If the dispatch of a flight is delayed by more than one hour, pilots and/or operations personnel should monitor weather forecasts and airport status at the nominated en-route alternates to ensure that they stay within the specified planning minima requirements until dispatch. | |  | |  | |
|  | AMC 20-6 | (2) Re-routing or diversion decision-making |  |  | | An aeroplane whether or not dispatched as an ETOPS flight may not re-route post-dispatch without meeting the applicable operational requirements and satisfy by a procedure that dispatch criteria have been met. The operator should have a system in place to facilitate such re-routes.  Post-dispatch, weather conditions at the ETOPS en-route alternates should be equal to or better than the normal landing minima for the available instrument approach.  Operators shall establish procedures for flight crew, outlining the criteria that indicate when a diversion or change of routing is recommended whilst conducting an ETOPS flight. For an ETOPS flight, in the event of the shutdown of an engine, these procedures should include the shutdown of an engine, fly to and land at the nearest aerodrome appropriate for landing.  Factors to be considered when deciding upon the appropriate course of action and suitability of an aerodrome for diversion may include but are not limited to:  a. Aircraft configuration/weight/systems status;  b. Wind and weather conditions en route at the diversion altitude;  c. Minimum altitudes en route to the diversion aerodrome;  d. Fuel required for the diversion;  e. Aerodrome condition, terrain, weather and wind;  f. Runways available and runway surface condition;  g. Approach aids and lighting;  h. RFFS capability at the diversion aerodrome;  i. Facilities for aircraft occupants - disembarkation & shelter;  j. Medical facilities;  k. Pilot’s familiarity with the aerodrome;  l. Information about the aerodrome available to the flight crew.  Contingency procedures should not be interpreted in any way that prejudices the final authority and responsibility of the pilot-in-command for the safe operation of the aeroplane.  Note: for an ETOPS en-route alternate aerodrome, a published RFFS category equivalent to ICAO category 4, available at 30 minutes notice, is acceptable. | |  | |  | |
|  | AMC 20-6 | (3) ETOPS verification (following maintenance) flight requirements |  |  | |  | |  | |  | |
|  | AMC 20-6 | (4) En-route Monitoring |  |  | | During the flight, the flight crew should remain informed of any significant changes in conditions at designated ETOPS en-route alternate aerodromes. Prior to the ETOPS Entry Point, the forecast weather, established aeroplane status, fuel remaining, and where possible field conditions and aerodrome services and facilities at designated ETOPS en-route alternates are to be evaluated. If any conditions are identified which could preclude safe approach and landing on a designated en-route alternate aerodrome, then the flight crew should take appropriate action, such as re-routing as necessary, to remain within the operator’s approved diversion time of an en-route alternate aerodrome with forecast weather to be at or above landing minima. In the event this is not possible, the next nearest en-route alternate aerodrome should be selected provided the diversion time does not exceed the maximum approved diversion time. This does not override the pilot in command’s authority to select the safest course of action. | |  | |  | |
|  | AMC 20-6 | Flight preparation & in-flight procedures:   * Communication & navigation facilities |  |  | | For releasing an aeroplane on an ETOPS flight, the operators should ensure that:  a. Communications facilities are available to provide under normal conditions of propagation at all planned altitudes of the intended flight and the diversion scenarios, reliable two-way voice and/or data link communications;  b. Visual and non-visual aids are available at the specified alternates for the anticipated types of approaches and operating minima. | |  | |  | |
|  | AMC 20-6 | Flight preparation & in-flight procedures:   * Fuel supply |  |  | | * Critical Fuel Reserve * Critical Fuel Scenario * Icing | |  | |  | |
| **8.6 Use of MEL and CDL** | | | | | | | | | | | |
|  | AMC3 ORO.MLR.100  ORO.MLR.105  AMC1 ORO.MLR.105(c)  AMC1 ORO.MLR.105(d)  AMC1 ORO.MLR.105(d)(1)  AMC1 ORO.MLR.105(d)(3)  AMC2 ORO.MLR.105(d)(3)  AMC1 ORO.MLR.105(f)  AMC1 ORO.MLR.105(g)  AMC1 ORO.MLR.105(h)  AMC1 ORO.MLR.105(j)  SPA.LVO.130 | 8.6 *Use of the Minimum Equipment and Configuration Deviation List(s)* |  |  | |  | |  | |  | |
| **8.7 Non-commercial Operations** | | | | | | | | | | | |
|  | ORO.AOC.125  AMC2 ORO.AOC.125(a)  AMC 1 ORO.AOC.125(a)(2)  AMC2 ORO.AOC.125(a)(2)  GM1 ORO.AOC.125(a)(2) | An AOC holder should apply either of the options below to its non-commercial operations:  (a) the same operational procedures as those used for its CAT operations. In this case, the AOC holder should state this option in the operations manual and ensure that the procedures comply with Part-CAT. No further descriptions are required; or  (b) different operational procedures from those used for its CAT operations. In this case, the procedures should comply with Part-ORO, except for Subpart-DEC, and Part-NCC for complex motor-powered aircraft or with Part-NCO for other than complex motor-powered aircraft, as appropriate.  Different Operating Operating Procedures for Non-commercial Operations.  Planning Flights with an increased level of risk. |  |  | | **Non-commercial operations by AOC holders shall be approved by the authority.**  (a) The AOC holder may conduct non-commercial operations in accordance with Annex VI (PartNCC) or Annex VII (Part-NCO) with aircraft listed in the operations specifications of its AOC or in its operations manual, provided that the AOC holder describes such operations in detail in the operations manual, including the following:  (1) an identification of the applicable requirements;  (2) a description of any differences between operating procedures used when conducting CAT operations and non-commercial operations;  a)2 ORO.AOC.125 (3) means of ensuring that all personnel involved in the operations are fully familiar with the associated procedures;  (b) An AOC holder shall comply with:  (1) Annex VIII (Part-SPO) when conducting maintenance check flights with complex motorpowered aircraft;  (2) Annex VII (Part-NCO) when conducting maintenance check flights with other than complex motor- powered aircraft.  (c) An AOC holder conducting operations referred to in points (a) and (b) shall not be required to submit a declaration in accordance with this Annex.  (d) The AOC holder shall specify the type of flight, as listed in its operations manual, in the flightrelated documents (operational flight plan, loadsheet and other equivalent documents). | |  | |  | |
|  | AMC1 ORO.AOC.125(a) | Flight And Duty Time Limitations |  |  | | When aircrew members are assigned to perform a series of flights that combine several types of operation (CAT, NCC/NCO), the operator should:  (a) comply at any time with the provisions of ORO.FTL.210 ‘Flight times and duty periods’ or, as applicable, the provisions of Council Regulation (EEC) No 3922/91 (EU-OPS, Subpart Q), to ensure compliance with Subpart FTL for any CAT operation; and  (b) include any combination of types of operation in its safety risk management process to ensure that the fatigue risks arising from such operations do not affect the CAT operation. | |  | |  | |
|  | AMC3 ORO.MLR.100  ORO.AOC.125 | Procedures and limitations for the following:  (a) training flights; |  |  | |  | |  | |  | |
|  | AMC3 ORO.MLR.100 ORO.AOC.125 | (b) Flights at the end of lease or upon transfer of ownership ; |  |  | |  | |  | |  | |
|  | AMC3 ORO.MLR.100  ORO.AOC.125 | (c) Delivery flights; |  |  | |  | |  | |  | |
|  | AMC3 ORO.MLR.100  ORO.AOC.125 | (d) Ferry flights; |  |  | |  | |  | |  | |
|  | AMC3 ORO.MLR.100  ORO.AOC.125 | (e) Demonstration flights; |  |  | |  | |  | |  | |
|  | AMC3 ORO.MLR.100  ORO.AOC.125 | (f) Positioning flights; and |  |  | |  | |  | |  | |
|  | AMC3 ORO.MLR.100  ORO.AOC.125  SPO.SPEC.MCF.100  AMC1 SPO.SPEC.MCF.110 | (g) Other non-commercial flights, |  |  | | The conduct of maintenance check flights shall be done i.a.w. SPO.SPEC.MCF requirements. OAN 07/19 provides further guidance on compliance methods. | |  | |  | |
|  | ORO.GEN.310  AMC1 ORO.GEN.310(b);(e)  AMC1 ORO.GEN.310(b);(d);(f) | Use of aircraft listed on an AOC for non-commercial operations and specialised operations  Responsibilities of the AOC Holder  Responsibilities of the Other Operator |  |  | | Aircraft listed on an operator's AOC may remain on the AOC if it is operated in any of the following situations:  (1) by the AOC holder itself, for specialised operations in accordance with Annex VIII (PartSPO);  (2) by other operators, for non-commercial operations with motor-powered aircraft or for specialised operations performed in accordance with Annex VI (Part-NCC), Annex VII (Part-NCO) or Annex VIII (Part-SPO), provided that the aircraft is used for a continuous period not exceeding 30 days.  When the aircraft is used in accordance with point (a)(2), the AOC holder providing the aircraft and the operator using the aircraft shall establish a procedure:  (1) clearly identifying which operator is responsible for the operational control of each flight and to describe how the operational control is transferred between them;  (2) describing the handover procedure of the aircraft upon its return to the AOC holder. That procedure shall be included in the operations manual of each operator or in a contract between the AOC holder and the operator using the aircraft in accordance with point (a)(2).  The AOC holder shall establish a template of such contract. Point ORO.GEN.220 shall apply to the record-keeping of those contracts. The AOC holder and the operator using the aircraft in accordance with point (a)(2) shall ensure that the procedure is communicated to the relevant personnel. | |  | |  | |
| **8.8 Oxygen requirements** | | | | | | | | | | | |
|  | AMC3 ORO.MLR.100  CAT.IDE.A.235 and related AMCs  CAT.OP.MPA.285 | 8.8.1 An explanation of the conditions under which oxygen should be provided and used. |  |  | | Check that requirements of CAT.IDE.A.235 and related AMCs are fulfilled. | |  | |  | |
|  | AMC3 ORO.MLR.100  CAT.OP.MPA.285  CAT.IDE.A.235 | 8.8.2 The oxygen requirements specified for:  (a) Flight crew; |  |  | | The commander shall ensure that flight crew members engaged in performing duties essential to the safe operation of an aircraft in flight use supplemental oxygen continuously whenever the cabin altitude exceeds 10 000 ft for a period of more than 30 minutes and whenever the cabin altitude exceeds 13 000 ft.  For pressurized aeroplanes:  (a) The entire flying time when the cabin pressure altitude exceeds 13 000 ft.  (b) The remainder of the flying time when the cabin pressure altitude exceeds 10 000 ft but does not exceed 13 000 ft, after the initial 30 minutes at these altitudes, but in no case less than:  (1) 30 minutes’ supply for aeroplanes certified to fly at altitudes not exceeding 25 000 ft; and  (2) 2 hours’ supply for aeroplanes certified to fly at altitudes of more than 25 000 ft. | |  | |  | |
|  | AMC3 ORO.MLR.100  CAT.IDE.A.235  AMC1 CAT.IDE.A.235  AMC2 CAT.IDE.A.235  AMC1 CAT.IDE.A.235(e)  CAT.IDE.A.240  AMC1 CAT.IDE.A.240  CAT.IDE.A.245  AMC1 CAT.IDE.A.245 | (b) Cabin crew; |  |  | | For pressurized aeroplanes:  (a) The entire flying time when the cabin pressure altitude exceeds 13 000 ft, but not less than 30 minutes’ supply. (b) The remainder of the flying time when the cabin pressure altitude exceeds 10 000 ft but does not exceed 13 000 ft, after the initial 30 minutes at these altitudes. | |  | |  | |
|  | AMC3 ORO.MLR.100  CAT.IDE.A.235  AMC2 CAT.IDE.A.235  AMC1 CAT.IDE.A.235(e)  CAT.IDE.A.240  AMC1 CAT.IDE.A.240 | (c) Passengers. |  |  | | For pressurized aeroplanes:  100% of pax : The entire flying time when the cabin pressure altitude exceeds 15 000 ft, but in no case less than 10 minutes’ supply.  30% of pax: The entire flying time when the cabin pressure altitude exceeds 14 000 ft but does not exceed 15 000 ft.  10% of pax: The remainder of the flying time when the cabin pressure altitude exceeds 10 000 ft but does not exceed 14 000 ft, after the initial 30 minutes at these altitudes. | |  | |  | |
|  | AMC3 ORO.MLR.100  CAT.GEN.MPA.141  AMC2 CAT.GEN.MPA.141(b)  AMC3 CAT.GEN.MPA.141(b)  SPA.EFB  AMC SPA.EFB.100(b)(3)  GM1/2/3 SPA.EFB.100(b)(3) | *8.9 Procedures related to the use of Type B EFB applications* |  |  | | Procedures for the use of Type B EFB applications may be documented in this part of OM or referred to a separate manual or guide.  Operators shall compile separate Part-EFB compliance checklist form 0166 for detailed process | |  | |  | |
| **9 DANGEROUS GOODS AND WEAPONS** | | | | | | | | | | | |
|  | AMC3 ORO.MLR.100  ORO.GEN.110(j)  CAT.GEN.MPA.200  AMC1 CAT.GEN.MPA.200(e)  SPA.DG.100  SPA.DG.105  AMC1 SPA.DG.105(a)  AMC1 SPA.DG.105(b)  SPA.DG.110  AMC1 SPA.DG.110(a)  AMC1 SPA.DG.110(b) | 9.1 Information, instructions and general guidance on the transport of dangerous goods, in accordance with Part-SPA.DG including:  (a) Operator's policy on the transport of dangerous goods; |  |  | | It should include:   * Exceptions * Items that may be carried by pax and crew * Provision of information to pax * Marking & labelling | |  | |  | |
|  | AMC3 ORO.MLR.100  CAT.GEN.MPA.200  AMC1 CAT.GEN.MPA.200(e)  SPA.DG.100  SPA.DG.105  AMC1 SPA.DG.105(a)  AMC1 SPA.DG.105(b)  SPA.DG.110  AMC1 SPA.DG.110(a)  AMC1 SPA.DG.110(b) | (b) Guidance on the requirements for acceptance, labelling, handling, stowage and segregation of dangerous goods; |  |  | | Check compliance with ICAO Doc 9284.  It should include:   * Duties of personnel involved * Acceptance (if DG approved) * Recognition of hidden DG * Inspection for damage & leakage (if DG approved) * Segregation & separation (if DG approved) * Loading procedures (dry-ice, magnetized, CAO, DG in cabin, radioactive…) (if DG approved) * NOTOC (if DG approved) * … | |  | |  | |
|  | AMC3 ORO.MLR.100  CAT.GEN.MPA.200  AMC1 CAT.GEN.MPA.200(e)  SPA.DG.100  SPA.DG.105  AMC1 SPA.DG.105(a)  AMC1 SPA.DG.105(b)  SPA.DG.110  AMC1 SPA.DG.110(a)  AMC1 SPA.DG.110(b) | (c) Special notification requirements in the event of an accident or occurrence when dangerous goods are being carried. |  |  | | AMC1 CAT.GEN.MPA.200(e) gives further details on reporting. | |  | |  | |
|  | AMC3 ORO.MLR.100  CAT.GEN.MPA.200  AMC1 CAT.GEN.MPA.200(e)  SPA.DG.100  SPA.DG.105  AMC1 SPA.DG.105(a)  AMC1 SPA.DG.105(b)  SPA.DG.110  AMC1 SPA.DG.110(a)  AMC1 SPA.DG.110(b) | (c) Procedures for responding to emergency situations involving dangerous goods; |  |  | | Check compliance with ICAO Doc 9284 & 9481. | |  | |  | |
|  | AMC3 ORO.MLR.100  CAT.GEN.MPA.200  AMC1 CAT.GEN.MPA.200(e)  SPA.DG.100  SPA.DG.105  AMC1 SPA.DG.105(a)  AMC1 SPA.DG.105(b)  SPA.DG.110  AMC1 SPA.DG.110(a)  AMC1 SPA.DG.110(b) | (d) Duties of all personnel involved; and |  |  | |  | |  | |  | |
|  | AMC3 ORO.MLR.100  CAT.GEN.MPA.200  AMC1 CAT.GEN.MPA.200(e)  SPA.DG.100  SPA.DG.105  AMC1 SPA.DG.105(a)  AMC1 SPA.DG.105(b)  SPA.DG.110  AMC1 SPA.DG.110(a)  AMC1 SPA.DG.110(b) | (e) Instructions on the carriage of the operator's personnel on cargo aircraft when dangerous goods are being carried. |  |  | | Check compliance with ICAO Doc 9284. | |  | |  | |
|  | CAT.GEN.MPA.200  AMC1 CAT.GEN.MPA.200(e)  SPA.DG.100  SPA.DG.105  AMC1 SPA.DG.105(a)  AMC1 SPA.DG.105(b)  SPA.DG.110  AMC1 SPA.DG.110(a)  AMC1 SPA.DG.110(b) | *An operator shall establish procedures to ensure that all reasonable measures are taken to prevent dangerous goods from being carried on board inadvertently.* |  |  | | Check compliance with ICAO Doc 9284. | |  | |  | |
|  | AMC3 ORO.MLR.100  CAT.GEN.MPA.155  GM1 CAT.GEN.MPA.155  CAT.GEN.MPA.160  GM1 CAT.GEN.MPA.160  CAT.GEN.MPA.161  AMC1 CAT.GEN.MPA.161  ANO Article 42 | 9.2 The conditions under which weapons, munitions of war and sporting weapons may be carried. |  |  | | Weapons of war or munitions of war  (a) The operator shall only transport weapons of war or munitions of war by air if an approval to do so has been granted by all States whose airspace is intended to be used for the flight.  (b) Where an approval has been granted, the operator shall ensure that weapons of war and munitions of war are:   1. stowed in the aircraft in a place that is inaccessible to passengers during flight; and 2. in the case of firearms, unloaded.   (c) The operator shall ensure that, before a flight begins, the commander is notified of the details and location on board the aircraft of any weapons of war and munitions of war intended to be carried.  In accordance with Regulation (EC) No 300/2008, weapons of war may be carried on board an aircraft, in a place that is not inaccessible, if the required security conditions in accordance with national laws have been fulfilled and authorisation has been given by the States involved.  Sporting weapons and ammunition  (a) The operator shall take all reasonable measures to ensure that any sporting weapons intended to be carried by air are reported to the operator.  (b) The operator accepting the carriage of sporting weapons shall ensure that they are:   1. stowed in the aircraft in a place that is inaccessible to passengers during flight; and 2. in the case of firearms or other weapons that can contain ammunition, unloaded.   (c) Ammunition for sporting weapons may be carried in passengers’ checked baggage, subject to certain limitations, in accordance with the technical instructions.  In accordance with Regulation (EC) No 300/2008 sporting weapons may be carried on board an aircraft, in a place that is not inaccessible, if the required security conditions in accordance with national laws have been fulfilled and authorisation has been given by the States involved. | |  | |  | |
| **10 SECURITY** | | | | | | | | | | | |
|  | AMC3 ORO.MLR.100  ORO.SEC.100.A  ORO.SEC.100.H | Security instructions,  Security guidance,  Security procedures,  Security training and  Security responsibilities  Taking into account Regulation (EC) 300/2008.  Some parts of the security instructions and guidance may be kept confidential. |  | |  | |  | |  | |  |
| **11 HANDLING, NOTIFYING AND REPORTING ACCIDENTS, INCIDENTS AND OCCURRENCES AND USING THE CVR RECORDING** | | | | | | | | | | | |
|  | AMC3 ORO.MLR.100  ORO.GEN.160  AMC1 ORO.GEN.160  CAT.GEN.MPA.200  AMC1 CAT.GEN.MPA.200(e) | *Procedures for the handling, notifying and reporting of occurrences*.  This section should include:  (a) Definitions of accident, incident and occurrences and the relevant responsibilities of all persons involved; |  |  | | The operator shall report to the competent authority, and to any other organisation required by the State of the operator to be informed, any accident, serious incident and occurrence as defined in Regulation (EU) No 376/2014 of the European Parliament and of the Council and Commission Implementing Regulation (EU) 2015/1018 of 29 June 2015 laying down a list classifying occurrences in civil aviation to be mandatorily reported.  The operator shall report to the competent authority and to the organisation responsible for the design of the aircraft any incident, malfunction, technical defect, exceeding of technical limitations, occurrence that would highlight inaccurate, incomplete or ambiguous information contained in data established in accordance with Commission Regulation (EC) No 748/2012 or other irregular circumstance that has or may have endangered the safe operation of the aircraft and that has not resulted in an accident or serious incident.  Voluntary reporting: Each organisation established in a Member State that is not certified or approved by the Agency shall, in a timely manner, report to the competent authority of that Member State the details of occurrences and other safety-related information which have been collected and which may involve an actual or potential aviation safety risk. | |  | |  | |
|  | AMC3 ORO.MLR.100  ORO.GEN.160  AMC1 ORO.GEN.160  CAT.GEN.MPA.200  AMC1 CAT.GEN.MPA.200(e) | (b) Illustrations of forms used for reporting all types of accidents, incidents and occurrences (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; |  |  | | The reports shall be made in a form and manner established by the competent authority and contain all pertinent information about the condition known to the operator.  Reports shall be made as soon as practicable, but in any case within 72 hours of the operator identifying the condition to which the report relates, unless exceptional circumstances prevent this. | |  | |  | |
|  | AMC3 ORO.MLR.100  ORO.GEN.160  AMC1 ORO.GEN.160  CAT.GEN.MPA.200  AMC1 CAT.GEN.MPA.200(e) | (c) In the event of an accident, descriptions of which departments, Authorities and other organisations that have to be notified, how this will be done and in what sequence; |  |  | |  | |  | |  | |
|  | AMC3 ORO.MLR.100  ORO.GEN.160  AMC1 ORO.GEN.160  CAT.GEN.MPA.200  AMC1 CAT.GEN.MPA.200(e) | (d) Procedures for verbal notification to air traffic service units of incidents involving ACAS RAs, bird hazards, dangerous goods and hazardous conditions; |  |  | |  | |  | |  | |
|  | AMC3 ORO.MLR.100  ORO.GEN.160  AMC1 ORO.GEN.160  CAT.GEN.MPA.200  AMC1 CAT.GEN.MPA.200(e) | (e) Procedures for submitting written reports on air traffic incidents, ACAS RAs, bird strikes, dangerous goods incidents or accidents, and unlawful interference; |  |  | |  | |  | |  | |
|  | AMC3 ORO.MLR.100  ORO.GEN.160  AMC1 ORO.GEN.160  CAT.GEN.MPA.200  AMC1 CAT.GEN.MPA.200(e) | (f) Reporting procedures.  These procedures must include internal safety related reporting procedures to be followed by crew members, designed to ensure that the commander is informed immediately of any incident that has endangered, or may have endangered, safety during flight and that he is provided with all relevant information. |  |  | | The list of the mandatory occurrences to be reported is in regulation 2015/1018. | |  | |  | |
|  | AMC3 ORO.MLR.100  ORO.GEN.160  AMC1 ORO.GEN.160  CAT.GEN.MPA.200  AMC1 CAT.GEN.MPA.200(e)  CAT.GEN.MPA.195  AMC1 CAT.GEN.MPA.195(a)  AMC1 CAT.GEN.MPA.195(b)  AMC1 CAT.GEN.MPA.195(f)(1)  AMC1 CAT.GEN.MPA.195(f)(1a) | (g) Procedures for the preservation of recordings of the flight recorders following an accident or a serious incident or when so directed by the investigating authority.  These procedures should include:  (1) a full quotation of CAT.GEN.MPA.195(a); and  (2) instructions and means to prevent inadvertent reactivation, repair or reinstallation of the flight recorders by personnel of the operator or of third parties, and to ensure that flight recorder recordings are preserved for the needs of the investigating authority. |  |  | | (a) Following an accident, a serious incident or an occurrence identified by the investigating authority, the operator of an aircraft shall preserve the original recorded data for a period of 60 days or until otherwise directed by the investigating authority.  (b) The operator shall conduct operational checks and evaluations of flight data recorder (FDR) recordings, cockpit voice recorder (CVR) recordings and data link recordings to ensure the continued serviceability of the recorders.  (c) The operator shall save the recordings for the period of operating time of the FDR as required by CAT.IDE.A.190 or CAT.IDE.H.190, except that, for the purpose of testing and maintaining the FDR, up to one hour of the oldest recorded material at the time of testing may be erased.  (d) The operator shall keep and maintain up-to-date documentation that presents the necessary information to convert FDR raw data into parameters expressed in engineering units.  (e) The operator shall make available any flight recorder recording that has been preserved, if so determined by the competent authority.  (f) Without prejudice to Regulation (EU) No 996/2010:  (1) Except for ensuring the CVR serviceability, CVR recordings shall not be disclosed or used  unless:  (i) a procedure related to the handling of CVR recordings and of their transcript is in place;  (ii) all crew members and maintenance personnel concerned have given their prior consent; and  (iii) they are used only for maintaining or improving safety.  (1a) When a CVR recording is inspected for ensuring the CVR serviceability, the operator shall ensure the privacy of the CVR recording and the CVR recording shall not be disclosed or  used for other purposes than ensuring the CVR serviceability.  (2) FDR recordings or data link recordings shall only be used for purposes other than for the investigation of an accident or an incident which is subject to mandatory reporting, if such  records are:  (i) used by the operator for airworthiness or maintenance purposes only; or  (ii) de-identified; or  (iii) disclosed under secure procedures. | |  | |  | |
|  | AMC3 ORO.MLR.100  CAT.GEN.MPA.195  AMC1 CAT.GEN.MPA.195(a)  AMC1 CAT.GEN.MPA.195(b)  AMC1 CAT.GEN.MPA.195(f)(1)  AMC1 CAT.GEN.MPA.195(f)(1a) | (h) Procedures required by CAT.GEN.MPA.195 for using the CVR recording or its transcript without prejudice to Regulation (EU) No 996/210, when applicable. |  |  | |  | |  | |  | |
|  | AMC2 ORO.GEN.160 | Reportable events of PBN operations |  |  | | (a) A reportable event should be an event that adversely affects the safety of the operation and may be caused by actions or events external to the functioning of the aircraft navigation system.  (b) Technical defects and the exceedance of technical limitations, including:  (1) significant navigation errors attributed to incorrect data or a database coding error;  (2) unexpected deviations in lateral/vertical flight path not caused by flight crew input or erroneous operation of equipment;  (3) significant misleading information without a failure warning;  (4) total loss or multiple navigation equipment failure; and  (5) loss of integrity, e.g. RAIM function, whereas integrity was predicted to be available during preflight planning, should be considered a reportable event.  (c) The operator should have in place a system for investigating a reportable event to determine if it is due to an improperly coded procedure or a navigation database error. The operator should initiate corrective actions for such an event. | |  | |  | |
| **12 RULES OF THE AIR** | | | | | | | | | | | |
|  | AMC3 ORO.MLR.100  CAT.GEN.MPA.180  AMC1 CAT.GEN.MPA.180  AMC1 CAT.GEN.MPA.180(a)(13)  SERA  RAIT | (a) Visual and instrument flight rules; |  |  | |  | |  | |  | |
|  | (b) Territorial application of the Rules of the Air; |  |  | |  | |  | |  | |
|  | (c) Communication procedures including COM-failure procedures; |  |  | |  | |  | |  | |
|  | (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 pilots observing an accident or receiving a distress transmission; |  |  | |  | |  | |  | |
|  | (k) The ground/air visual codes for use by survivors, description and use of signal aids; and |  |  | |  | |  | |  | |
|  | (l) Distress and urgency signals. |  |  | |  | |  | |  | |

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| **13 LEASING AND CODE-SHARE** | | | | | | | |
|  | AMC3 ORO.MLR.100  ORO.AOC.110  ORO.AOC.115  AMC1 ORO.AOC.115(a)(1)  AMC1 ORO.AOC.115(b)  AMC2 ORO.AOC.115(b)  1008/2008 | A description of the operational arrangements for leasing and code-share, associated procedures and management responsibilities. |  |  | Leasing:  Wet lease-in, dry lease-in, dry lease-out, wet lease-out.  Check compliance with ORO.AOC.110 and related AMCs.  Code-share:  Only with third country operators.  Check compliance with ORO.AOC.115 and related AMCs. |  |  |

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| **REMARKS** | | | | |
| **OPERATOR Declaration of compliance** | | | | |
| **Compliance Monitoring Manager name and signature: \_\_** | | | | |
|  |  |  |  | **Place \_**  **Date \_** |