



Maldives Civil Aviation Authority
Republic of Maldives

Amendments to:

Maldivian Civil Aviation Regulations

MCAR-Air Operations

22 February 2021

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(1) Amendments to Annex I

(a) The following definitions are deleted:

- i. 'aeroplane';
- ii. 'balloon empty mass';
- iii. 'damp runway';
- iv. 'helicopter'.

(b) The following definitions are inserted:

- i. 'cockpit voice recorder (CVR)' means a crash-protected flight recorder that uses a combination of microphones and other audio and digital inputs to collect and record the aural environment of the flight crew compartment and communications to, from and between the flight crew members;
- ii. *'EFB application' means a software application installed on an EFB host platform that provides one or more specific operational functions which support flight operations;*
- iii. *'EFB host platform' means the hardware equipment in which the computing capabilities and basic software reside, including the operating system and the input/output software;*
- iv. *'EFB system' means the hardware equipment (including any battery, connectivity provisions, input/output components) and software (including databases and the operating system) needed to support the intended EFB application(s);*
- v. *'electronic flight bag (EFB)' means an electronic information system, comprised of equipment and applications for flight crew, which allows for the storing, updating, displaying and processing of EFB functions to support flight operations or duties;*
- vi. 'emergency exit' means an installed exit-type egress point from the aircraft that allows maximum opportunity for cabin and flight crew compartment evacuation within an appropriate time period and includes floor level door, window exit or any other type of exit, for instance hatch in the flight crew compartment and tail cone exit;
- vii. 'flight crew member' means a licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period;
- viii. 'flight data recorder (FDR)' means a crash-protected flight recorder that uses a combination of data sources to collect and record parameters that reflect the state and performance of the aircraft;
- ix. 'flight operations officer' or 'flight dispatcher' means a person designated by the operator to engage in the control and supervision of flight operations, who is suitably qualified, who supports, briefs or assists, or both, the pilot-in-command in the safe conduct of the flight;
- x. 'flight recorder' means any type of recorder that is installed on the aircraft for the purpose of facilitating accident or incident safety investigations;

- xi. 'human-machine interface (HMI)' means a component of certain devices that is capable of handling human-machine interactions. The interface consists of hardware and software that allow user inputs to be interpreted and processed by machines or systems that, in turn, provide the required results to the user;
- xii. 'landing distance at time of arrival (LDTA)' means a landing distance that is achievable in normal operations based on landing performance data and associated procedures determined for the prevailing conditions at the time of landing;
- xiii. 'maintenance check flight ('MCF')' means a flight of an aircraft with an airworthiness certificate or with a permit to fly which is carried out for troubleshooting purposes or to check the functioning of one or more systems, parts or appliances after maintenance, if the functioning of the systems, parts or appliances cannot be established during ground checks and which is carried out in any of the following situations:
 - (a) as required by the aircraft maintenance manual ("AMM") or any other maintenance data issued by a design approval holder being responsible for the continuing airworthiness of the aircraft;
 - (b) after maintenance, as required by the operator or proposed by the organisation responsible for the continuing airworthiness of the aircraft;
 - (c) as requested by the maintenance organisation for verification of a successful defect rectification;
 - (d) to assist with fault isolation or troubleshooting;
- xiv. 'minor failure condition' means a failure condition that would not significantly reduce aircraft safety, and which involves flight crew actions that are well within their capabilities;
- xv. 'misuse of substances' means the use of one or more psychoactive substances by flight crew, cabin crew members and other safety-sensitive personnel in a way that:
 - (a) constitutes a direct hazard to the user or endangers the lives, health or welfare of others; and/or
 - (b) causes or worsens an occupational, social, mental or physical problem or disorder;
- xvi. 'personnel-carrying device system (PCDS)' means a system including one or more devices that is either attached to a hoist or cargo hook or mounted to the rotorcraft airframe during human external cargo (HEC) or helicopter hoist operations (HHO). The devices have the structural capability and features needed to transport occupants external to the helicopter e.g. a life safety harness with or without a quick release and stop with a connector ring, a rigid basket or a cage;
- xvii. 'portable EFB' means a portable EFB host platform, used on the flight deck, which is not part of the configuration of the certified aircraft;
 - (a) is designed to restrain no more than a single person (for instance, hoist or cargo hook operator, task specialist or photographer) inside the cabin, or to restrain no more than two persons outside the cabin;
 - (b) is not a rigid structure such as a cage, a platform or a basket;
- xviii. 'portable electronic device (PED)' means any kind of electronic device, typically but not limited to consumer electronics, brought on board the aircraft by crew members, passengers, or as part of the cargo, that is not included in the configuration of the certified aircraft. It includes

all equipment that is able to consume electrical energy. The electrical energy can be provided from internal sources such as batteries (chargeable or non-rechargeable) or the devices may also be connected to specific aircraft power sources;

- xix. 'psychoactive substances' means alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, with the exception of caffeine and tobacco;
 - xx. 'rules of the air' means the rules established in MCAR 2;
 - xxi. 'runway condition report (RCR)' means a comprehensive standardised report relating to the conditions of the runway surface and their effect on the aeroplane landing and take-off performance, described by means of runway conditions code;
 - xxii. 'safety-sensitive personnel' means persons who might endanger aviation safety if they perform their duties and functions improperly, including flight crew and cabin crew members, aircraft maintenance personnel and air traffic controllers;
 - xxiii. 'simple personnel carrying device system (simple 'PCDS')' means a PCDS that complies with the following conditions:
 - (a) is designed to restrain no more than a single person (for instance, hoist or cargo hook operator, task specialist or photographer) inside the cabin, or to restrain no more than two persons outside the cabin;
 - (b) is not a rigid structure such as a cage, a platform or a basket;
 - xxiv. 'specially prepared winter runway' means a runway with a dry frozen surface of compacted snow or ice which has been treated with sand or grit or has been mechanically treated to improve runway friction;
 - xxv. 'type A EFB application' means an EFB application whose malfunction or misuse has no safety effect;
 - xxvi. 'type B EFB application' means an EFB application:
 - (a) whose malfunction or misuse is classified as minor failure condition or below; and
 - (b) which neither replaces nor duplicates any system or functionality required by airworthiness regulations, airspace requirements, or operational rules;
- (c) Definition of 'category A with respect to helicopters' is replaced by the following:
'category A with respect to helicopters' means a multi-engined helicopter designed with engine and system isolation features specified in the applicable certification specification and capable of operations using take-off and landing data scheduled under a critical engine failure concept that assures adequate designated surface area and adequate performance capability for continued safe flight or safe rejected take-off in the event of engine failure;
- (d) Definition of 'contaminated runway' is replaced by the following:
'contaminated runway' means a runway of which a significant portion of its surface area (whether in isolated areas or not) within the length and width being used is covered by one or more of the substances listed under the runway surface condition descriptors;

- (e) Definition of 'dry runway' is replaced by the following:
 'dry runway' means a runway whose surface is free of visible moisture and not contaminated within the area intended to be used;
- (f) Definition of 'specialised operation' is replaced by the following:
 'specialised operation' means any operation, other than commercial air transport operation, where the aircraft is used for specialised activities such as agriculture, construction, photography, surveying, observation and patrol, aerial advertisement, maintenance check flights;
- (g) Definition of 'wet runway' is replaced by the following:
 'wet runway' means a runway whose surface is covered by any visible dampness or water up to and including 3 mm deep within the area intended to be used.
- (h) All paragraphs are renumbered accordingly.

(2) Amendments to Annex II (Part ERO)

(a) point ERO.GEN.001 Scope, is amended as follows:

2018/394

(i) Paragraphs 1, 3 and 6 are replaced by the following:

1. This Regulation lays down detailed rules for air operations with aeroplanes and helicopters, including ramp inspections of aircraft of operators under the safety oversight of another State when landed at aerodromes located in the Republic of Maldives.
3. This Regulation also lays down detailed rules on the conditions and procedures for the declaration by operators engaged in commercial specialised operations of aeroplanes, helicopters and sailplanes or in non-commercial operation of complex motor-powered aircraft, including non-commercial specialised operations of complex motor-powered aircraft, of their capability and the availability of the means to discharge the responsibilities associated with the operation of aircraft, and for the oversight of such operators.
6. This Regulation shall not apply to air operations with airships.

(ii) The following paragraph 7 is added:

7. This Regulation shall not apply to air operations with balloons and sailplanes. However, in respect of such air operations with balloons, other than tethered gas balloons, and sailplanes, the requirements in respect of oversight shall apply.

(b) point ERO.GEN.105 Air operations, is amended as follows:

2018/394

(i) Paragraph 1 is replaced by the following paragraphs:

1. Operators shall only operate an aeroplane or a helicopter for the purpose of commercial air transport (hereinafter “CAT”) operations as specified in Annexes III (Part-ORO) and IV (Part-CAT).
- 1a. Operators engaged in CAT operations starting and ending at the same aerodrome/operating site with Performance class B aeroplanes or non-complex helicopters shall comply with the relevant provisions of Annexes III (Part-ORO) and IV (Part-CAT).

(ii) In paragraph 2, point (b) is replaced by the following:

- (b) aeroplanes and helicopters used for the transport of dangerous goods (DG);

(iii) Paragraph 4 is replaced by the following:

4. Operators of other-than-complex motor-powered aeroplanes and helicopters involved in non-commercial operations, including non-commercial specialised operations, shall operate the aircraft in accordance with the provisions set out in Annex VII (Part-NCO).

(iv) In paragraph 5, point (b) is replaced by the following:

- (b) other aeroplanes and helicopters in accordance with the provisions specified in Annex VII (Part-NCO).

(v) Paragraph 6 is replaced by the following:

- 6. Operators shall only operate an aeroplane or a helicopter for the purpose of commercial specialised operations in accordance with the requirements specified in Annexes III (Part-ORO) and VIII (Part-SPO).

(c) in point ERO.GEN.106 Derogations, the following paragraph 5 is inserted:

2018/1975

- 5. By way of derogation from ERO.GEN.105 and without prejudice to MCAR 21 concerning the permit to fly, the following flights shall continue to be operated under the requirements specified in the national law, where the operator has its principal place of business or where the operator is established or resides.
 - (a) Flights related to the introduction or modification of aeroplane, helicopter types conducted by design or production organisations within the scope of their privileges.
 - (b) flights carrying no passengers or cargo, where the aeroplane or helicopter is ferried for refurbishment, repair, inspections, delivery, export or similar purposes, provided that the aircraft is not listed on an air operator certificate or on a declaration.

(d) point ERO. GEN.109 Flight crew requirement for maintenance check flights, is inserted: 2019/1387

ERO.GEN.109 Flight crew requirement for maintenance check flights

A pilot having acted, before 20 April 2021, as a pilot-in-command on a maintenance check flight that in accordance with the definition in point SPO.SPEC.MCF.100 in Annex VIII is categorised as a Level A maintenance check flight, shall be given credit for the purpose of complying with point SPO.SPEC.MCF.115(a)(1) of that Annex. In that case, the operator shall ensure that the pilot-in-command receives a briefing on any differences identified between the operating practices established before 20 April 2021 and the obligations provided in Section 5 of Subpart E of Annex VIII to this Regulation including those derived from the related procedures established by the operator.

(3) Amendments to Annex III (Part ORO)

(a) in point ORO.GEN.110, point (h) is replaced by the following: **2019/1384**

- (h) The operator shall establish a checklist for each aircraft type to be used by crew members in all phases of flight under normal, abnormal and emergency conditions in order to ensure that the operating procedures in the operations manual are followed. The design and the usage of checklists shall observe human factors principles and take into account the latest relevant documentation from the design approval holder.

(b) in point ORO.GEN.110, point (k) is replaced by the following: **2018/1975**

- (k) Notwithstanding point (j), operators conducting commercial operations with either of the following aircraft shall ensure that the flight crew has received an appropriate dangerous goods training or briefing, to enable them to recognise undeclared dangerous goods brought on board by passengers or as cargo:
 - (1) a single-engined propeller-driven aeroplane having an MCTOM of 5 700 kg or less and a MOPSC of 5 or less, operated in a flight taking off and landing at the same aerodrome or operating site, under VFR by day;
 - (2) an other-than-complex motor-powered helicopter, single-engined, with an MOPSC of 5 or less, operated in a flight taking off and landing at the same aerodrome or operating site, under VFR by day.

(c) in point ORO.GEN.135, point (a) heading is amended as follows: **2019/1384**

- (a) The operator's certificate shall remain valid subject to all of the following:

(c) in point ORO.GEN.205, point (a) is replaced by the following: **2019/1384**

- (a) When contracting or purchasing any services or products as a part of its activities, the operator shall ensure all of the following:
 - (1) that the contracted or purchased services or products comply with the applicable requirements;
 - (2) that any aviation safety hazards associated with contracted or purchased services or products are considered by the operator's management system.

(d) in Subpart GEN, the following Section 3 is added: **2019/1384 & 2019/1387**

ORO. GEN.310 Use of aircraft listed on an AOC for non-commercial operations and specialised operations

- (a) 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 (Part-SPO);
 - (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.

- (b) 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.(c) The AOC holder shall submit to the competent authority the procedure referred to in point (b) for prior approval.

- (c) The AOC holder shall agree with the competent authority on the means and on the frequency of providing it with information about transfers of operational control in accordance with point ORO.GEN.130(c).
- (d) The continuing airworthiness of the aircraft used in accordance with point (a) shall be managed by the organisation responsible for the continuing airworthiness of the aircraft included in the AOC, in accordance with Regulation MCAR-M.
- (e) The AOC holder providing the aircraft in accordance with point (a) shall:
 - (1) indicate in its operations manual the registration marks of the provided aircraft and the type of operations conducted with those aircraft;
 - (2) remain informed at all times and keep record of each operator that holds the operational control of the aircraft at any given moment until the aircraft is returned to the AOC holder;
 - (3) ensure that its hazard identification, risk assessment and mitigation measures address all the operations conducted with those aircraft.
- (f) For operations under Annex VI (Part-NCC) and Annex VIII (Part-SPO), the operator using the aircraft in accordance with point (a) shall ensure all of the following:
 - (1) that every flight conducted under its operational control is recorded in the aircraft technical log system;
 - (2) that no changes to the aircraft systems or configuration are made;
 - (3) that any defect or technical malfunction occurring while the aircraft is under its operational control is reported to the organisation referred in point (d);
 - (4) that the AOC holder receives a copy of any occurrence report related to the flights performed with the aircraft, completed in accordance with Regulation MCAR-12.

(e) point ORO.AOC.125 is replaced by the following:

2019/1384

ORO.AOC.125 Non-commercial operations of an AOC holder with aircraft listed on its AOC

- (a) The AOC holder may conduct non-commercial operations in accordance with Annex VI (Part-NCC) 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;
 - (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 motor-powered 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 flight-related documents (operational flight plan, loadsheet and other equivalent documents).

(f) in point ORO.AOC.135, point (4) of paragraph (a) is replaced by the following: 2019/1384

- (4) continuing airworthiness or for the continuing airworthiness management contract in accordance with MCAR-M, as the case may be.

(g) in point ORO.MLR.101, the introductory wording is replaced by the following:

2018/1975 & 2018/394

Except for operations with single-engined propeller-driven aeroplanes with an MOPSC of 5 or less or single-engined non-complex helicopters with an MOPSC of 5 or less, taking off and landing at the same aerodrome or operating site, under VFR by day, the main structure of the OM shall be as follows:

(h) point ORO.SEC.100.A is replaced by the following:

2019/1384

ORO.SEC.100 Flight crew compartment security - Aeroplanes

- (a) In an aeroplane which is equipped with a secure flight crew compartment door, that door shall be capable of being locked, and means shall be provided by which the cabin crew can notify the flight crew in the event of suspicious activity or security breaches in the cabin.
- (b) All passenger-carrying aeroplanes that are engaged in the commercial transportation of passengers shall be equipped with an approved secure flight crew compartment door that is capable of being locked and unlocked from either pilot's station and designed to meet the applicable airworthiness requirements, where such airplanes fall within any of the following categories:
 - (1) aeroplanes with an MCTOM that exceeds 54 500 kg;

- (2) aeroplanes with an MCTOM that exceeds 45 500 kg and have an MOPSC of more than 19; or
- (3) aeroplanes with an MOPSC of more than 60.
- (c) In all aeroplanes which are equipped with a secure flight crew compartment door in accordance with point (b):
 - (1) that door shall be closed prior to engine start for take-off and shall be locked when required so by security procedures or by the pilot-in-command until engine shutdown after landing, except when deemed to be necessary for authorised persons to access or egress in compliance with national civil aviation security programmes;
 - (2) means shall be provided for monitoring from either pilot's station the entire door area outside the flight crew compartment to identify persons that request to enter and to detect suspicious behaviour or potential threat.

(i) point ORO.SEC.100.H is renumbered as ORO.SEC.105.

(j) in point ORO.FC.005, point (b) is replaced by the following:

2018/1975

- (b) SECTION 2 specifying additional requirements applicable to commercial air transport operations, with the exception of commercial air transport operations of passengers conducted under VFR by day, starting and ending at the same aerodrome or operating site and within a local area specified by MCAA, with:
 - (1) single-engined propeller-driven aeroplanes having an MCTOM of 5 700 kg or less and an MOPSC of 5 or less; or
 - (2) other-than-complex motor-powered helicopters, single-engined, with an MOPSC of 5 or less.

(k) point ORO.CC.100, is amended as follows:

2019/1384

ORO.CC.100 Number and composition of cabin crew

- (a) For the operation of aircraft with an MOPSC of more than 19 and 9 for floatplane/amphibian operations, at least one cabin crew member shall be assigned when carrying one or more passenger(s).
- (b) For the purpose of complying with point (a), the minimum number of cabin crew members shall be the greatest number amongst the following:
 - (1) the number of cabin crew members established during the aircraft certification process in accordance with the applicable certification specifications, for the aircraft cabin configuration used by the operator;
 - (2) if the number under point (1) has not been established, the number of cabin crew members established during the aircraft certification process for the maximum certified passenger seating configuration reduced by 1 for every whole multiple of 50 passenger seats of the aircraft cabin configuration used by the operator falling below the maximum certified seating capacity;
 - (3) one cabin crew member for every 50, or fraction of 50, passenger seats installed on the same deck of the aircraft to be operated.
- (c) For operations with more than one cabin crew member, the operator shall nominate one cabin crew member accountable to the pilot-in-command or the commander.

- (d) By way of derogation from point (a), non-commercial operations with aircraft with an MOPSC of more than 19 may be performed without an operating cabin crew member, subject to the prior approval by the competent authority. To obtain the approval, the operator shall ensure that all of the following conditions are fulfilled:
- (1) there are maximum 19 passengers on board;
 - (2) the operator has developed procedures for that operation.

(l) point ORO.CC.205 is replaced by the following:

2019/1384

ORO.CC.205 Reduction of the number of cabin crew during ground operations and in unforeseen circumstances

- (a) Whenever any passengers are on board an aircraft, the minimum number of cabin crew required in accordance with ORO.CC.100 shall be present in aircraft and ready to act.
- (b) By way of derogation from point (a), the minimum number of cabin crew members may be reduced in either of the following cases:
- (1) during normal ground operations not involving refuelling/defuelling when the aircraft is at its parking station; or
 - (2) in unforeseen circumstances if the number of passengers carried on the flight is reduced. In this case a report shall be submitted to MCAA after completion of the flight.
 - (3) for the purpose of providing in-flight rest during the cruise phase, either in accordance with point ORO.FTL.205(e) or as a fatigue mitigation implemented by the operator.
- (c) For the purposes of points (b)(1) and (b)(2), the operator's procedures of the operations manual shall ensure that:
- (1) an equivalent level of safety is achieved with the reduced number of cabin crew, in particular for evacuation of passengers;
 - (2) despite the reduced number of cabin crew members a senior cabin crew member is present in accordance with point ORO.CC.200;
 - (3) at least one cabin crew member is required for every 50, or fraction of 50, passengers present on the same deck of the aircraft;
 - (4) in the case of normal ground operations with aircraft requiring more than one cabin crew member, the number determined in accordance with point (3) shall be increased to include one cabin crew member per pair of floor level emergency exits.
- (d) For the purposes of point (b)(3), the operator shall:
- (1) conduct a risk assessment to determine the number of cabin crew members who are to be present and ready to act at all times during cruise;
 - (2) identify measures to mitigate the effects of having a lower number of cabin crew members being present and ready to act during cruise;
 - (3) establish in the operations manual specific procedures, including for the in-flight rest of the senior cabin crew member, that ensure at all times appropriate passenger handling and efficient management of any abnormal or emergency situations;
 - (4) specify, in the flight time specification scheme in accordance with point ORO.FTL.125, the conditions under which in-flight rest may be provided to the cabin crew members.

(m) in point ORO.FTL.105, the definition of “acclimatised and “flight time” is replaced by the following:
2018/1975

“Acclimatised” means a state in which a crew member’s circadian biological clock is synchronised to the time zone where the crew member is. A crew member is considered to be acclimatised to a 2-hour wide time zone surrounding the local time at the point of departure. When the local time at the place where a duty commences differs by more than 2 hours from the local time at the place where the next duty starts, the crew member, for the calculation of the maximum daily flight duty period, is considered to be acclimatised in accordance with the values in the Table 1.

“Flight time” means, for aeroplanes, the time between an aircraft first moving from its parking place for the purpose of taking off until it comes to rest on the designated parking position and all engines or propellers are shut down.

(n) in point ORO.FTL.305 (b) Table 2, following errors are corrected:

MULTI-CREW OPERATIONS

Start of FDP at reference time	1-8 Sectors	9 Sectors	10 Sectors	11 Sectors	12 Sectors
0630-0759	13:00	12:30	12:00	11:30	11:00
1600-1629	09:30	09:00	09:00	09:00	09:00

(o) Appendix I is replaced by the following:

2019/1384

APPENDIX I to Annex III (Part-ORO)

 MALDIVES CIVIL AVIATION AUTHORITY Republic of Maldives DECLARATION in accordance with MCAR Air Operations	
Operator	
Name:	
Place in which the operator has its principal place of business or, if the operator has no principal place of business, place in which the operator is established or residing and place from which the operations are directed.	
Name and contact details of the accountable manager:	
Aircraft operation	
Starting date of operation or applicability date of the change:	

Information on aircraft, operation and continuing airworthiness management organisation (1):					
Aircraft MSN	Aircraft type	Aircraft registration ⁽²⁾	Main base	Type(s) of operation ⁽³⁾	Organisation responsible for the continuing airworthiness management ⁽⁴⁾
Where applicable, details of approvals held (attach list of specific approvals, including specific approvals granted by a third-country, to the declaration, if applicable).					
Where applicable, details of specialised operations authorisation held (attach authorisations, if applicable).					
Where applicable, list of alternative means of compliance with references to the associated AMCs they replace (attach AltMoC).					
Statements					
<input type="checkbox"/> The operator complies, and will continue to comply with the requirements of Regulation MCAR Air Operations.					
<input type="checkbox"/> The management system documentation including the operations manual reflects the applicable requirements set out in Part-ORO, Part-NCC, Part-SPA and Part-SPO and all flights will be carried out in accordance with the procedures and instructions specified in the operations manual.					
<input type="checkbox"/> All aircraft operated hold a valid certificate of airworthiness and comply with all applicable Regulations.					
<input type="checkbox"/> All flight crew members hold a licence in accordance with MCAR Aircrew as required by point ORO.FC.100(c) of Annex III to Regulation MCAR Air Operations and cabin crew members, where applicable, are trained in accordance with Subpart CC of Annex III to Regulation MCAR Air Operations.					
<input type="checkbox"/> (If Applicable) The operator has implemented and demonstrated conformance to a recognised industry standard.					
Reference of the standard:					
Certifying body:					
Date of the last conformance audit:					
<input type="checkbox"/> The operator will notify to the competent authority any changes in circumstances affecting its compliance with the requirements of Regulation MCAR Air Operations as declared to the competent authority through this declaration and any changes to the information and lists of AltMoC included in and annexed to this declaration, as required by point ORO.GEN.120(a) of Annex III to Regulation MCAR Air Operations.					
<input type="checkbox"/> The operator confirms that the information disclosed in this declaration is correct.					
Date, name and signature of the accountable manager					
(1) If there is not enough space to list the information in the space of the declaration, the information shall be listed in a separate annex. The annex shall be dated and signed.					
(2) If the aircraft is also registered with an AOC holder, specify the AOC number of the AOC holder. 					

(3) "Type(s) of operation" refers to the type of operations conducted with this aircraft, e.g. non-commercial operations or specialised operations such as aerial photography flights, aerial advertising flights, news media flights, television and ¹¹¹_{SEP} movie flights, parachute operations, skydiving, maintenance check flights. ¹¹¹_{SEP}

(4) Information about the organisation responsible for the continuing airworthiness management includes the name of ¹¹¹_{SEP} the organisation, the address and the approval reference.

(4) Amendments to Annex IV (Part CAT)

(a) point CAT.GEN.105 is deleted. 2018/1975

(b) in point CAT.GEN.MPA.100, point (c)(1) is replaced by the following: 2018/1042

- (1) when under the influence of psychoactive substances or when unfit due to injury, fatigue, medication, sickness or other similar causes;

(c) in point CAT.GEN.MPA.105 is amended as follows: 2019/1384

(i) in point (a), the following point (14) is added:

- (14) record, at the termination of the flight, utilisation data and all known or suspected defects of the aircraft in the aircraft technical log or journey log of the aircraft to ensure continued flight safety.

(ii) the following point (e) is added:

- (e) The commander shall, as soon as possible, report to the appropriate air traffic services (ATS) unit any hazardous weather or flight conditions encountered that are likely to affect the safety of other aircraft.

(d) the following point CAT.GEN.MPA.141 is inserted: 2018/1975

- a) Where an EFB is used on board an aircraft, the operator shall ensure that it does not adversely affect the performance of the aircraft systems or equipment, or the ability of the flight crew member to operate the aircraft.
- (b) The operator shall not use a type B EFB application unless it is approved in accordance with Subpart M of Annex V (Part-SPA).

(e) point CAT.GEN.MPA.150 is replaced by the following: 2019/1384

CAT.GEN.MPA.150 Ditching — aeroplanes

The operator shall only operate an aeroplane with a passenger seating configuration of more than 30 on overwater flights at a distance from land suitable for making an emergency landing, greater than 120 minutes at cruising speed, or 400 NM, whichever is less, if the aeroplane complies with the ditching provisions prescribed in the applicable certification specification or specifications.

(f) point CAT.GEN.MPA.170 is replaced by the following: 2018/1042

CAT.GEN.MPA.170 Psychoactive substances

- (a) 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.
- (b) The operator shall develop and implement a policy on the prevention and detection of misuse of psychoactive substances by flight and cabin crew members and by other safety-sensitive

personnel under its direct control, in order to ensure that the safety of the aircraft or its occupants is not endangered.

- (c) Without prejudice to the applicable national legislation on data protection concerning testing of individuals, the operator shall develop and implement an objective, transparent and non-discriminatory procedure for the prevention and detection of cases of misuse of psychoactive substances by its flight and cabin crew and other safety-sensitive personnel.
- (d) In case of a confirmed positive test result, the operator shall inform its competent authority and the authority responsible for the personnel concerned, such as a medical assessor of the licensing authority.

(g) point CAT.GEN.MPA.175 is replaced by the following:

2018/1042

CAT.GEN.MPA.175 Endangering safety

- (a) The operator shall take all reasonable measures to ensure that no person recklessly, intentionally or negligently acts or omits to act so as to:
 - (1) endanger an aircraft or person therein; or
 - (2) cause or permit an aircraft to endanger any person or property.
- (b) The operator shall ensure that flight crew has undergone a psychological assessment before commencing line flying in order to:
 - (1) identify psychological attributes and suitability of the flight crew in respect of the work environment; and
 - (2) reduce the likelihood of negative interference with the safe operation of the aircraft.
- (c) Considering the size, nature and complexity of the activity of an operator, an operator may replace the psychological assessment referred to in point (b) with an internal assessment of the psychological attributes and suitability of flight crew.

(h) point CAT.GEN.MPA.195 is amended as follows:

2019/1387

(i) point (c) is replaced by the following:

- (c) The operator shall ensure that the recordings of flight parameters and data link communication messages required to be recorded on flight recorders are preserved. However, for the purpose of testing and maintaining those flight recorders, up to 1 hour of the oldest recorded data at the time of testing may be erased.

(ii) point (f) is replaced by the following:

- (f) Without prejudice to Regulation:
 - (1) Except for ensuring flight recorder serviceability, audio recordings from a flight recorder shall not be disclosed or used unless all of the following conditions are fulfilled:
 - (i) a procedure related to the handling of such audio recordings and of their transcript is in place;
 - (ii) all crew members and maintenance personnel concerned have given their prior consent;
 - (iii) such audio recordings are used only for maintaining or improving safety.
 - (1a) When inspecting flight recorder audio recordings to ensure flight recorder serviceability, the operator shall protect the privacy of those audio recordings and make sure that they

are not disclosed or used for purposes other than for ensuring flight recorder serviceability.

- (2) Flight parameters or data link messages recorded by a flight recorder shall not be used for purposes other than for the investigation of an accident or an incident which is subject to mandatory reporting, unless such recordings meet any of the following conditions:
 - (i) are used by the operator for airworthiness or maintenance purposes only;
 - (ii) are de-identified;
 - (iii) are disclosed under secure procedures.
- (3) Except for ensuring flight recorder serviceability, images of the flight crew compartment that are recorded by a flight recorder shall not be disclosed or used unless all of the following conditions are fulfilled:
 - (i) a procedure related to the handling of such image recordings is in place;
 - (ii) all crew members and maintenance personnel concerned have given their prior consent;
 - (iii) such image recordings are used only for maintaining or improving safety.
- (3a) When images of the flight crew compartment that are recorded by a flight recorder are inspected for ensuring the serviceability of the flight recorder, then:
 - (i) those images shall not be disclosed or used for purposes other than for ensuring flight recorder serviceability;
 - (ii) if body parts of crew members are likely to be visible on the images, the operator shall ensure the privacy of those images.

(i) point CAT.GEN.MPA.210 is replaced by the following:

2019/1384

CAT.GEN.MPA.210 Location of an aircraft in distress — Aeroplanes

The following aeroplanes shall be equipped with robust and automatic means to accurately determine, following an accident during which the aeroplane is severely damaged, the location of the point of end of flight:

- (1) 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 1 January 2023; and
- (2) all aeroplanes with an MCTOM of more than 45 500 kg and first issued with an individual CofA on or after 1 January 2023.

(j) The following point CAT.GEN.MPA.215 is inserted:

2018/1042

CAT.GEN.MPA.215 Support programme

- (a) 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.
- (b) Without prejudice to applicable national legislation on the protection of individuals with regard to the processing of personal data and on the free movement of such data, the protection of the confidentiality of data shall be a precondition for an effective support programme as it encourages the use of such a programme and ensures its integrity.

(k) in Subpart A, Section 2 is deleted.

(l) point CAT.OP.MPA.140 is amended as follows:

2019/1387

(i) point (a) is replaced by the following:

- (a) Unless approved by MCAA in accordance with Subpart F of Annex V (Part-SPA), the operator shall not operate a two-engined aeroplane over a route that contains a point further from an adequate aerodrome, under standard conditions in still air, than the appropriate distance for the given type of aeroplane among the following:
 - (1) for performance class A aeroplanes with a maximum operational passenger seating configuration (MOPSC) of 20 or more, the distance flown in 60 minutes at the one-engine-inoperative (OEI) cruising speed determined in accordance with point (b);
 - (2) for performance class A aeroplanes with an MOPSC of 19 or less, the distance flown in 120 minutes or, subject to approval by the competent authority, up to 180 minutes for turbojet aeroplanes, at the OEI cruising speed determined in accordance with point (b);
 - (3) for performance class B or C aeroplanes, whichever is less:
 - (i) the distance flown in 120 minutes at the OEI cruising speed determined in accordance with point (b);
 - (ii) 300 NM.

(ii) point (d) is replaced by the following:

- (d) To obtain the approval referred to in point (a)(2), the operator shall provide evidence that:
 - (1) procedures have been established for flight planning and dispatch;
 - (2) specific maintenance instructions and procedures to ensure the intended levels of continued airworthiness and reliability of the aeroplane including its engines have been established and included in the operator's aircraft maintenance programme in accordance with Annex I (Part-M) to Regulation MCAR-M, including:
 - (i) an engine oil consumption programme;
 - (ii) an engine condition monitoring programme.

(m) in point CAT.OP.MPA.170, point (b) is replaced by the following:

2019/1384

- (b) provided with a safety briefing card on which picture-type instructions indicate the operation of safety and emergency equipment and emergency exits likely to be used by passengers.

(n) point CAT.OP.MPA.300 is replaced by the following:

2019/1387

CAT.OP.MPA.300 Approach and landing conditions — aeroplanes

Before commencing an approach to land, the commander shall:

- (a) be satisfied that, according to the information available to him or her, the weather at the aerodrome and the condition of the runway intended to be used would not prevent a safe approach, landing or missed approach, having regard to the performance information contained in the operations manual (OM);
- (b) carry out a landing distance assessment in accordance with point CAT.OP.MPA.303.

(o) the following point CAT.OP.MPA.301 is inserted:

2019/1387

CAT.OP.MPA.301 Approach and landing conditions — helicopters

Before commencing an approach to land, the commander shall be satisfied that according to the information available to him or her, the weather at the aerodrome and the condition of the final approach and take-off area (FATO) intended to be used would not prevent a safe approach, landing or missed approach, having regard to the performance information contained in the operations manual (OM).

(p) the following point CAT.OP.MPA.303 is inserted:

2019/1387

CAT.OP.MPA.303 In-flight check of the landing distance at time of arrival — aeroplanes

- (a) No approach to land shall be continued unless the landing distance available (LDA) on the intended runway is at least 115 % of the landing distance at the estimated time of landing, determined in accordance with the performance information for the assessment of the landing distance at time of arrival (LDTA) and the approach to land is performed with performance class A aeroplanes that are certified in accordance with either of the following certification specifications, as indicated in the type-certificate:
 - (1) CS-25 or equivalent;
 - (2) CS-23 at level 4 with performance level “High speed” or equivalent.
- (b) For performance class A aeroplanes other than those referred to in point (a), no approach to land shall be continued, except in either of the following situations:
 - (1) the LDA on the intended runway is at least 115 % of the landing distance at the estimated time of landing, determined in accordance with the performance information for the assessment of the LDTA;
 - (2) if performance information for the assessment of the LDTA is not available, the LDA on the intended runway at the estimated time of landing is at least the required landing distance determined in accordance with point CAT.POL.A.230 or point CAT.POL.A.235, as applicable.
- (c) For performance class B aeroplanes, no approach to land shall be continued, except in either

of the following situations:

- (1) the LDA on the intended runway is at least 115 % of the landing distance at the estimated time of landing, determined in accordance with the performance information for the assessment of the LDТА;
 - (2) if performance information for the assessment of the LDТА is not available, the LDA on the intended runway at the estimated time of landing is at least the required landing distance determined in accordance with point CAT.POL.A.330 or point CAT.POL.A.335, as applicable.
- (d) For performance class C aeroplanes, no approach to land shall be continued, except in either of the following situations:
- (1) the LDA on the intended runway is at least 115 % of the landing distance at the estimated time of landing, determined in accordance with the performance information for the assessment of the LDТА;
 - (2) if performance information for the assessment of the LDТА is not available, the LDA on the intended runway at the estimated time of landing is at least the required landing distance determined in accordance with point CAT.POL.A.430 or point CAT.POL.A.435, as applicable.
- (e) Performance information for the assessment of the LDТА shall be based on approved data contained in the AFM. When approved data contained in the AFM are insufficient in respect of the assessment of the LDТА, they shall be supplemented with other data which are either determined in accordance with the applicable certification standards for aeroplanes or determined in line with the AMC's issued by the Agency.
- (f) The operator shall specify in the OM the performance information for the assessment of the LDТА and the assumptions made for its development, including other data that, in accordance with point (e), may be used to supplement that contained in the AFM.

(q) the following point CAT.OP.MPA.311 is inserted:

2019/1387

CAT.OP.MPA.311 Reporting on runway braking action

Whenever the runway braking action encountered during the landing roll is not as good as that reported by the aerodrome operator in the runway condition report (RCR), the commander shall notify the air traffic services (ATS) by means of a special air-report (AIREP) as soon as practicable.

(r) point CAT.OP.MPA.320 is replaced by the following:

2019/1384

CAT.OP.MPA.320 Aeroplane categories

- (a) Aeroplane categories shall be based on the indicated airspeed at threshold (VAT) which is equal to the stalling speed (VSO) multiplied by 1,3 or one-g (gravity) stall speed (VS1g) multiplied by 1,23 in the landing configuration at the maximum certified landing mass. If both

VSO and VS1g are available, the higher resulting VAT shall be used.

(b) The aeroplane categories specified in the table below shall be used.

Table 1: Aeroplane categories corresponding to V_{AT} values

Aeroplane category	V _{AT}
A	Less than 91 kt
B	From 91 to 120 kt
C	From 121 to 140 kt
D	From 141 to 165 kt
E	From 166 to 210 kt

(c) The landing configuration that is to be taken into consideration shall be specified in the operations manual.

(d) The operator may apply a lower landing mass for determining the V_{AT} if approved by the competent authority. Such a lower landing mass shall be a permanent value, independent of the changing conditions of day-to-day operations.

(s) in Subpart B, Section 2 is deleted. **2018/1975**

(t) point CAT.POL.A.105 is amended as follows: **2019/1387**

(i) point (d) is replaced by the following:

(d) The operator shall take account of charting accuracy when assessing the take-off requirements of the applicable chapters.

(ii) point (e) is deleted.

(u) in point CAT.POL.A.215, points (b), (c) and (d) are replaced by the following: **2019/1387**

(b) The gradient of the en-route net flight path shall be positive at least 1 000 ft above all terrain and obstructions along the route within 9,3 km (5 NM) on either side of the intended track.

(c) The en-route net flight path shall permit the aeroplane to continue flight from the cruising altitude to an aerodrome where a landing can be made in accordance with point CAT.POL.A.230 or CAT.POL.A.235, as appropriate. The en-route net flight path shall clear vertically, by at least 2 000 ft, all terrain and obstructions along the route within 9,3 km (5 NM) on either side of the intended track, taking into account the following elements:

- (1) the engine is assumed to fail at the most critical point along the route;
- (2) account is taken of the effects of winds on the flight path;
- (3) fuel jettisoning is permitted to an extent consistent with reaching the aerodrome where

the aeroplane is assumed to land after engine failure with the required fuel reserves in accordance with point CAT.OP. MPA.150, appropriate for an alternate aerodrome, if a safe procedure is used;

- (4) the aerodrome, where the aeroplane is assumed to land after engine failure, shall meet the following criteria:
 - (i) the performance requirements for the expected landing mass are met;
 - (ii) weather reports or forecasts and runway condition reports indicate that a safe landing can be accomplished at the estimated time of landing;
- (5) if the AFM does not contain en-route net flight path data, the gross OEI en-route flight path shall be reduced by a climb gradient of 1,1 % for two-engined aeroplanes, 1,4 % for three-engined aeroplanes, and 1,6 % for four-engined aeroplanes.
- (d) The operator shall increase the width margins provided for in points (b) and (c) to 18,5 km (10 NM) if the navigational accuracy does not meet at least navigation specification RNAV 5.

(v) point CAT.POL.A.220 is replaced by the following:

2019/1387

CAT.POL.A.220 En route — aeroplanes with three or more engines, two engines inoperative

- (a) An aeroplane that has three or more engines shall not be away from an aerodrome at which the requirements of points CAT.POL.A.230 or CAT.POL.A.235(a) for the expected landing mass are met accordingly, at any point along the intended track for more than 90 minutes, with all engines operating at cruising power or thrust, as appropriate, at standard temperature in still air, unless points (b) to (f) of this point are complied with.
- (b) The two-engines-inoperative en-route net flight path data shall allow the aeroplane to continue the flight, in the expected meteorological conditions, from the point where two engines are assumed to fail simultaneously to an aerodrome at which it is possible to land and come to a complete stop when using the prescribed procedure for a landing with two engines inoperative. The en-route net flight path shall clear vertically, by at least 2 000 ft, all terrain and obstructions along the route within 9,3 km (5 NM) on either side of the intended track. At altitudes and in meteorological conditions that require ice protection systems to be operable, the effect of their use on the en-route net flight path data shall be taken into account. If the navigational accuracy does not meet at least navigation specification RNAV 5, the operator shall increase the prescribed width margin provided for in the second sentence to 18,5 km (10 NM).
- (c) The two engines shall be assumed to fail at the most critical point of that portion of the route where the aeroplane is operated for more than 90 minutes, with all engines operating at cruising power or thrust, as appropriate, at standard temperature in still air, away from the aerodrome referred to in point (a).
- (d) The net flight path shall have a positive gradient at 1 500 ft above the aerodrome where the landing is assumed to be made after the failure of two engines.
- (e) Fuel jettisoning shall be permitted to an extent consistent with reaching the aerodrome with the required fuel reserves referred to in point (f), if a safe procedure is used.
- (f) The expected mass of the aeroplane at the point where the two engines are assumed to fail shall not be less than that which would include sufficient fuel to proceed to an aerodrome where the landing is assumed to be made, and to arrive there at an altitude of at least 450 m (1 500 ft) directly over the landing area and thereafter to fly for 15 minutes at cruising power

or thrust, as appropriate.

(w) point CAT.POL.A.230 is replaced by the following:

2019/1387

CAT.POL.A.230 Landing — dry runways

- (a) The landing mass of the aeroplane determined in accordance with point CAT.POL.A.105(a) for the estimated time of landing at the destination aerodrome and at any alternate aerodrome shall allow a full-stop landing from 50 ft above the threshold:
 - (1) for turbojet-powered aeroplanes, within 60 % of the landing distance available (LDA);
 - (2) for turbopropeller-powered aeroplanes, within 70 % of the LDA;
 - (3) by way of derogation from points (a)(1) and (a)(2), for aeroplanes that are approved for reduced landing distance operations under point CAT.POL.A.255, within 80 % of the LDA.
- (b) For steep approach operations, the operator shall use the landing distance data factored in accordance with point (a)(1) or (a)(2), as applicable, based on a screen height of less than 60 ft, but not less than 35 ft, and shall comply with point CAT.POL.A.245.
- (c) For short landing operations, the operator shall use the landing distance data factored in accordance with point (a)(1) or (a)(2), as applicable, and shall comply with point CAT.POL.A.250.
- (d) When determining the landing mass, the operator shall take into account the following:
 - (1) not more than 50 % of the headwind component or not less than 150 % of the tailwind component;
 - (2) corrections as provided in the AFM.
- (e) For dispatching the aeroplane, the aeroplane shall either:
 - (1) land on the most favourable runway, in still air;
 - (2) land on the runway most likely to be assigned, considering the probable wind speed and direction, the ground-handling characteristics of the aeroplane and other conditions such as landing aids and terrain.
- (f) If the operator is unable to comply with point (e)(2) for the destination aerodrome, the aeroplane shall only be dispatched if an alternate aerodrome is designated that allows full compliance with one of the following:
 - (1) points (a) to (d), if the runway at the estimated time of arrival is dry; ^[1]_{SEP}
 - (2) points CAT.POL.A.235(a) to (d), if the runway at the estimated time of arrival is wet or contaminated.

(x) point CAT.POL.A.235 is replaced by the following:

2019/1387

CAT.POL.A.235 Landing — wet and contaminated runways

- (a) When the appropriate weather reports or forecasts, or both, indicate that the runway at the estimated time ^[1]_{SEP} of arrival may be wet, the LDA shall be one of the following distances:
 - (1) a landing distance provided in the AFM for use on wet runways at time of dispatch, but not less than that required by point CAT.POL.A.230(a)(1) or (a)(2), as applicable;
 - (2) if a landing distance is not provided in the AFM for use on wet runways at time of dispatch, at least 115 % of the required landing distance, determined in accordance with point CAT.POL.A.230(a)(1) or (a)(2), as applicable;

- (3) a landing distance shorter than that required by point (a)(2), but not less than that required by point CAT.POL.A.230(a)(1) or (a)(2), as applicable, if the runway has specific friction-improving characteristics and the AFM includes specific additional information for landing distance on that runway type;
 - (4) by way of derogation from points (a)(1), (a)(2) and (a)(3), for aeroplanes that are approved for reduced landing distance operations under point CAT.POL.A.255, the landing distance determined in accordance with point CAT.POL.A.255(b)(2)(v)(B).
- (b) When the appropriate weather reports or forecasts indicate that the runway at the estimated time of arrival may be contaminated, the LDA shall be one of the following distances:
 - (1) at least the landing distance determined in accordance with point (a), or at least 115 % of the landing distance determined in accordance with approved contaminated landing distance data or equivalent, whichever is greater;
 - (2) on specially prepared winter runways, a landing distance shorter than that required by point (b)(1), but not less than that required by point (a), may be used if the AFM includes specific additional information about landing distances on contaminated runways. Such landing distance shall be at least 115 % of the landing distance contained in the AFM.
- (c) By way of derogation from point (b), the increment of 15 % needs not to be applied if it is already included in the approved landing distance data or equivalent.
- (d) For points (a) and (b), the criteria of points CAT.POL.A.230(b), (c) and (d) shall apply accordingly.
- (e) For dispatching the aeroplane, the aeroplane shall either:
 - (1) land on the most favourable runway, in still air;
 - (2) land on the runway most likely to be assigned, considering the probable wind speed and direction, the ground-handling characteristics of the aeroplane and other conditions such as landing aids and terrain.
- (f) If the operator is unable to comply with point (e)(1) for a destination aerodrome where the appropriate weather reports or forecasts indicate that the runway at the estimated time of arrival may be contaminated and where a landing depends upon a specific wind component, the aeroplane shall only be dispatched if two alternate aerodromes are designated.
- (g) If the operator is unable to comply with point (e)(2) for the destination aerodrome where the appropriate weather reports or forecasts indicate that the runway at the estimated time of arrival may be wet or contaminated, the aeroplane shall only be dispatched if an alternate aerodrome is designated.
- (h) For points (f) and (g), the designated alternate aerodrome or aerodromes shall allow compliance with one of the following:
 - (1) points CAT.POL.A.230(a) to (d), if the runway at the estimated time of arrival is dry;
 - (2) points CAT.POL.A.235(a) to (d), if the runway at the estimated time of arrival is wet or contaminated.

(y) in point CAT.POL.A.250(b) the following point (11a) is inserted as follows:

2019/1387

- (11a) reduced required landing distance operations in accordance with CAT.POL.A.255 are prohibited;

(z) the following point CAT.POL.A.255 is inserted:

2019/1387

CAT.POL.A.255 Approval of reduced required landing distance operations

- (a) An aeroplane operator may conduct landing operations within 80 % of the landing distance available (LDA) ¹_{SEP} if it complies with the following conditions:
- (1) the airplane has an MOPSC of 19 or less;
 - (2) the airplane has an eligibility statement for reduced required landing distance in the AFM;
 - (3) the airplane is used in non-scheduled on-demand commercial air transport (CAT) operations;
 - (4) the landing mass of the aeroplane allows a full-stop landing within that reduced landing distance;
 - (5) the operator has obtained a prior approval of the competent authority.
- (b) To obtain the approval referred to in point (a)(5), the operator shall provide evidence of either of the following circumstances:
- (1) that a risk assessment has been conducted to demonstrate that a level of safety equivalent to that intended by point CAT.POL.A.230(a)(1) or (2), as applicable, is achieved;
 - (2) that the following conditions are met:
 - (i) special-approach procedures, such as steep approaches, planned screen heights higher than 60 ft or lower than 35 ft, low-visibility operations, approaches outside stabilised approach criteria approved under point CAT.OP.MPA.115(a), are prohibited;
 - (ii) short landing operations in accordance with point CAT.POL.A.250 are prohibited;
 - (iii) landing on contaminated runways is prohibited;
 - (iv) an adequate training, checking and monitoring process for the flight crew is established;
 - (v) an aerodrome landing analysis programme (ALAP) is established by the operator to ensure that the following conditions are met:
 - (A) no tailwind is forecast at the expected time of arrival;
 - (B) if the runway is forecast to be wet at the expected time of arrival, the landing distance at dispatch shall either be determined in accordance with point CAT.OP.MPA.303(a) or (b) as applicable, or shall be 115 % of the landing distance determined for dry runways, whichever is longer;
 - (C) no forecast contaminated runway conditions exist at the expected time of arrival;
 - (D) no forecast adverse weather conditions exist at the expected time of arrival;
 - (vi) all the equipment that affects landing performance is operative before commencing the flight;
 - (vii) the flight crew is composed of at least two qualified and trained pilots that have recency in reduced required landing distance operations;
 - (viii) based on the prevailing conditions for the intended flight, the commander shall make the final decision to conduct reduced required landing distance operations and may decide not to do so when he or she considers that to be in the interest of safety;
 - (ix) additional aerodrome conditions, if specified by the competent authority that has certified the aerodrome, taking into account orographic characteristics of the approach area, available approach aids, missed-approach and balked-landing

considerations.

(aa) point CAT.POL.A.330 is replaced by the following:

2019/1387

CAT.POL.A.330 Landing — dry runways

- (a) The landing mass of the aeroplane determined in accordance with point CAT.POL.A.105(a) for the estimated time of landing at the destination aerodrome and at any alternate aerodrome shall allow a full-stop landing from 50 ft above the threshold within 70 % of the LDA.
- (b) By way of derogation from point (a), and where point CAT.POL.A.355 is complied with, the landing mass of the aeroplane determined in accordance with point CAT.POL.A.105(a) for the estimated time of landing at the destination aerodrome shall be such as to allow a full-stop landing from 50 ft above the threshold within 80 % of the LDA.
- (c) When determining the landing mass, the operator shall take the following into account:
 - (1) the altitude at the aerodrome;
 - (2) not more than 50 % of the headwind component or not less than 150 % of the tailwind component;
 - (3) the type of runway surface;
 - (4) the runway slope in the direction of landing.
- (d) For steep approach operations, the operator shall use landing distance data factored in accordance with point (a), based on a screen height of less than 60 ft, but not less than 35 ft, and comply with point CAT.POL.A.345.
- (e) For short landing operations, the operator shall use landing distance data factored in accordance with point (a), and comply with point CAT.POL.A.350.
- (f) For dispatching the aeroplane, the aeroplane shall either:
 - (1) land on the most favourable runway, in still air;
 - (2) land on the runway most likely to be assigned considering the probable wind speed and direction, the ground-handling characteristics of the aeroplane and other conditions such as landing aids and terrain.
- (g) If the operator is unable to comply with point (f)(2) for the destination aerodrome, the aeroplane shall only be dispatched if an alternate aerodrome is designated that permits full compliance with points (a) to (f).

(bb) point CAT.POL.A.335 is replaced by the following:

2019/1387

CAT.POL.A.335 Landing — wet and contaminated runways

- (a) When the appropriate weather reports or forecasts indicate that the runway at the estimated time of arrival may be wet, the LDA shall be one of the following distances:
 - (1) a landing distance provided in the AFM for use on wet runways at time of dispatch, but not less than that required by point CAT.POL.A.330;
 - (2) if a landing distance is not provided in the AFM for use on wet runways at time of dispatch, at least 115 % of the required landing distance, determined in accordance with point CAT.POL.A.330(a);

- (3) a landing distance shorter than that required by point (a)(2), but not less than that required by point CAT.POL.A.330(a), as applicable, if the runway has specific friction improving characteristics and the AFM includes specific additional information for landing distance on that runway type;
- (4) by way of derogation from points (a)(1), (a)(2) and (a)(3), for aeroplanes that are approved for reduced landing distance operations under point CAT.POL.A.355, the landing distance determined in accordance with point CAT.POL.A.355(b)(7)(iii).
- (b) When the appropriate weather reports or forecasts indicate that the runway at the estimated time of arrival may be contaminated, the landing distance shall not exceed the LDA. The operator shall specify in the operations manual the landing distance data to be applied.

(cc) the following point CAT.POL.A.355 is inserted:

2019/1387

CAT.POL.A.355 Approval of reduced required landing distance operations

- (a) Operations with a landing mass of the aeroplane that allows a full-stop landing within 80 % of the landing distance available (LDA) require prior approval by the competent authority. Such approval shall be obtained for each runway on which operations with reduced required landing distance are conducted.
- (b) To obtain the approval referred to in point (a), the operator shall conduct a risk assessment to demonstrate that a level of safety equivalent to that intended by point CAT.POL.A.330(a) is achieved and at least the following conditions are met:
 - (1) the State of the aerodrome has determined a public interest and operational necessity for the operation, either due to the remoteness of the aerodrome or to physical limitations relating to the extension of the runway;
 - (2) short landing operations in accordance with point CAT.POL.A.350 and approaches outside stabilised approach criteria approved under point CAT.OP.MPA.115(a) are prohibited;
 - (3) landing on contaminated runways is prohibited;
 - (4) a specific control procedure of the touchdown area is defined in the operations manual (OM) and implemented; this procedure shall include adequate go-around and balked-landing instructions when touchdown in the defined area cannot be achieved;
 - (5) an adequate aerodrome training and checking programme for the flight crew is established;
 - (6) the flight crew is qualified and has recency in reduced required landing distance operations at the aerodrome concerned;
 - (7) an aerodrome landing analysis programme (ALAP) is established by the operator to ensure that the following conditions are met:
 - (i) no tailwind is forecast at the expected time of arrival;
 - (ii) if the runway is forecast to be wet at the expected time of arrival, the landing distance at dispatch shall either be determined in accordance with point CAT.OP.MPA.303(c), or shall be 115 % of the landing distance determined for dry runways, whichever is longer;

- (iii) no forecast contaminated runway conditions exist at the expected time of arrival;
- (iv) no forecast adverse weather conditions exist at the expected time of arrival;
- (8) operational procedures are established to ensure that:
 - (i) all the equipment that affects landing performance and landing distance is operative before commencing the flight;
 - (ii) deceleration devices are correctly used by the flight crew;
- (9) specific maintenance instructions and operational procedures are established for the aeroplane's deceleration devices to enhance the reliability of those systems;
- (10) the final approach and landing are conducted under visual meteorological conditions (VMC) only;
- (11) additional aerodrome conditions, if specified by the competent authority that has certified the aerodrome, taking into account orographic characteristics of the approach area, available approach aids, missed-approach and balked-landing considerations.

(dd) in point CAT.POL.A.415, points (d) and (e) are replaced by the following: 2019/1387

- (d) The width margins provided for in point (a) shall be increased to 18,5 km (10 NM) if the navigational accuracy does not meet at least navigation specification RNAV 5.
- (e) Fuel jettisoning is permitted to an extent consistent with reaching the aerodrome where the aeroplane is assumed to land after engine failure with the required fuel reserves in accordance with point CAT.OP. MPA.150, appropriate for an alternate aerodrome, if a safe procedure is used.

(ee) point CAT.POL.A.420 is replaced by the following: 2019/1387

CAT.POL.A.420 En route — aeroplanes with three or more engines, two engines inoperative

- (a) An aeroplane that has three or more engines shall not be away from an aerodrome at which the requirements of point CAT.POL.A.430 for the expected landing mass are met, at any point along the intended track for more than 90 minutes with all engines operating at cruising power or thrust, as appropriate, at standard temperature in still air, unless points (b) to (e) of this point are complied with.
- (b) The two-engines-inoperative flight path shall permit the aeroplane to continue the flight, in the expected meteorological conditions, clearing all obstacles within 9,3 km (5 NM) on either side of the intended track by a vertical interval of at least 2 000 ft, to an aerodrome at which the performance requirements applicable for the expected landing mass are met.
- (c) The two engines shall be assumed to fail at the most critical point of that portion of the route where the aeroplane is operated for more than 90 minutes, with all engines operating at cruising power or thrust, as appropriate, at standard temperature in still air, away from the aerodrome referred to in point (a).
- (d) The expected mass of the aeroplane at the point where the two engines are assumed to fail shall not be less than that which would include sufficient fuel to proceed to an aerodrome where the landing is assumed to be made and to arrive there at an altitude of at least 450 m

(1 500 ft) directly over the landing area and thereafter to fly for 15 minutes at cruising power or thrust, as appropriate.

- (e) The available rate of climb of the aeroplane shall be 150 ft per minute less than that specified.
- (f) The width margins provided for in point (b) shall be increased to 18,5 km (10 NM) if the navigational accuracy does not meet at least navigation specification RNAV 5.
- (g) Fuel jettisoning is permitted to an extent consistent with reaching the aerodrome with the required fuel reserves in accordance with point (d), if a safe procedure is used.

(ff) in point CAT.POL.A.430(a), point (4) is replaced by the following: **2019/1387**

- (4) the runway slope in the direction of landing.

(gg) in point CAT.POL.A.435, point (a) is replaced by the following: **2019/1387**

- (a) When the appropriate weather reports or forecasts indicate that the runway at the estimated time of arrival may be wet, the LDA shall be one of the following distances:
 - (1) a landing distance provided in the AFM for use on wet runways at time of dispatch, but not less than that required by point CAT.POL.A.430;
 - (2) if a landing distance is not provided in the AFM for use on wet runways at time of dispatch, at least 115 % of the required landing distance, determined in accordance with point CAT.POL.A.430.

(hh) in point CAT.POL.MAB.105, the following amendments are made: **2018/1975**

(i) point (b) is replaced by the following:

- (b) Where mass and balance data and documentation is generated by a computerised mass and balance system, the operator shall:
 - (1) verify the integrity of the output data to ensure that the data are within AFM limitations; and
 - (2) specify the instructions and procedures for its use in its operations manual.

(ii) point (e) is deleted.

(ii) in Subpart C, Sections 4 and 5 are deleted. **2018/394 & 2018/1975**

(jj) in point CAT.IDE.A.100, point (b) is replaced by the following: **2019/1384**

- (b) Instruments and equipment not required by this Subpart as well as any other equipment which is not required under this Regulation, but carried on a flight, shall comply with the following requirements:
 - (1) the information provided by these instruments, equipment or accessories shall not be used by the flight crew to comply with the applicable airworthiness requirements or CAT.IDE.A.330, CAT.IDE.A.335, CAT.IDE.A.340 and CAT.IDE.A.345; and
 - (2) the instruments and equipment shall not affect the airworthiness of the aeroplane, even in the case of failures or malfunction.

(kk) in point CAT.IDE.A.105, point (b) is replaced by the following: **2019/1384**

- (b) the operator is approved by MCAA to operate the aeroplane within the constraints of the master minimum equipment list (MMEL), in accordance with point ORO.MLR.105(j) of Annex III.

(ll) point CAT.IDE.A.125 is amended as follows: **2019/1384**

(i) in point (a)(1), point (iii) is replaced by the following:

- (iii) Barometric altitude;

(ii) in point (b), point (1) is replaced by the following:

- (1) Barometric altitude;

(mm) point CAT.IDE.A.130 is amended as follows: **2019/1384**

(i) point (b) is replaced by the following:

- (b) Two means of measuring and displaying barometric altitude.

(ii) in point (h), point (1) is replaced by the following:

- (1) Barometric altitude;

(nn) in point CAT.IDE.A.150, the following point (c) is added: **2018/1042**

- (c) Turbine-powered aeroplanes for which the individual certificate of airworthiness (CofA) was first issued after 1 January 2019 and having an MCTOM of 5 700 kg or less and an MOPSC of six to nine shall be equipped with a TAWS that meets the requirements for Class B equipment, as specified in an acceptable standard.

(oo) in point CAT.IDE.A.185, the following point (i) is added: **2019/1387**

- (i) Aeroplanes with an MCTOM of over 27 000 kg and first issued with an individual CofA on or after 5 September 2022 shall be equipped with an alternate power source to which the CVR and the cockpit-mounted area microphone are switched automatically in the event that all other power to the CVR is interrupted.

(pp) the following point CAT.IDE.A.191 is inserted: **2019/1387**

CAT.IDE.A.191 Lightweight flight recorder

- (a) Turbine-engined aeroplanes with an MCTOM of 2 250 kg or more and aeroplanes with an MOPSC of more than 9 shall be equipped with a flight recorder if all of the following conditions are met:
 - (1) they are not within the scope of point CAT.IDE.A.190(a);
 - (2) they are first issued with an individual CofA on or after 5 September 2022.
- (b) The flight recorder shall record, by means of flight data or images, information that is sufficient to determine the flight path and aircraft speed.

- (c) The flight recorder shall be capable of retaining the flight data and the images recorded during at least the preceding 5 hours.
- (d) The flight recorder shall automatically start to record prior to the aeroplane being capable of moving under its own power and shall stop automatically after the aeroplane is no longer capable of moving under its own power.
- (e) If the flight recorder records images or audio of the flight crew compartment, then a function shall be provided which can be operated by the commander and which modifies image and audio recordings made before the operation of that function, so that those recordings cannot be retrieved using normal replay or copying techniques.

(qq) point CAT.IDE.A.205 is amended as follows:

2019/1384

(i) in point (a), point (3) is replaced by the following:

- (3) a seat belt with upper torso restraint system on each passenger seat and restraining belts on each berth in the case of aeroplanes with an MCTOM of 5 700 kg or less and with an MOPSC of nine or less, having an individual CofA first issued on or after 8 April 2015;

(ii) in point (b), point (3) is replaced by the following:

- (3) on flight crew members' seats and on any seat alongside a pilot's seat, either of the following:
 - (i) two shoulder straps and a seat belt that may be used independently;
 - (ii) a diagonal shoulder strap and a seat belt that may be used independently for the following aeroplanes:
 - (A) aeroplanes with an MCTOM of 5 700 kg or less and with an MOPSC of nine or less that are compliant with the emergency landing dynamic conditions defined in the applicable certification specification;
 - (B) aeroplanes with an MCTOM of 5 700 kg or less and with an MOPSC of nine or less that are not compliant with the emergency landing dynamic conditions defined in the applicable certification specification and having an individual CofA first issued before 28 October 2014;
 - (C) aeroplanes certified in accordance with CS-VLA or equivalent and CS-LSA or equivalent.

(rr) in point CAT.IDE.A.230 points (b) and (d) are replaced by the following:

2019/1387

- (b) The oxygen supply referred to in (a) shall be sufficient for the remainder of the flight after cabin depressurisation when the cabin altitude exceeds 8 000 ft but does not exceed 15 000 ft, for at least 2 % of the passengers carried, but in no case for less than one person.
- (d) The first-aid oxygen equipment shall be capable of generating a mass flow to each person.

(ss) in point CAT.IDE.A.245, point (d) is replaced by the following:

2019/1384

- (d) Aeroplanes shall be equipped with an additional portable PBE installed adjacent to the hand fire extinguisher referred to in points CAT.IDE.A.250 (b) and (c), or adjacent to the entrance of the cargo compartment, in case the hand fire extinguisher is installed in a cargo compartment.

(tt) in point CAT.IDE.A.275, points (c) and (d) are replaced by the following:

2019/1384

- (c) For aeroplanes with an MOPSC of 19 or less and type certified on the basis of the Agency's certification specification, the emergency lighting system referred to in point (a) shall include the equipment referred to in points (1), (2) and (3) of point (b).
- (d) For aeroplanes with an MOPSC of 19 or less that are not certified on the basis of the Agency's certification specification, the emergency lighting system referred to in point (a) shall include the equipment referred to in point (b)(1).

(uu) in point CAT.IDE.A.285, point (c) is replaced by the following:

2019/1384

- (c) Seaplanes operated over water shall be equipped with the following:
 - (1) a sea anchor and other equipment necessary to facilitate mooring, anchoring or manoeuvring the seaplane on water, appropriate to its size, mass and handling characteristics;
 - (2) equipment for making the sound signals as prescribed in the International Regulations for Preventing Collisions at Sea, where applicable.

(vv) point CAT.IDE.A.345 is amended as follows:

2019/1387

i. The title of the article is replaced by the following:

CAT.IDE.A.345 Communication, navigation and surveillance equipment for operations under IFR or under VFR over routes not navigated by reference to visual landmarks

ii. point (a) is replaced by the following:

- (a) Aeroplanes operated under IFR or under VFR over routes that cannot be navigated by reference to visual landmarks shall be equipped with radio communication, navigation and surveillance equipment in accordance with the applicable airspace requirements.

iii. point (c) is replaced by the following:

2019/1384

- (c) Notwithstanding (b), aeroplanes operated for short haul operations in the North Atlantic high-level (NAT HLA) airspace and not crossing the North Atlantic shall be equipped with at least one long range communication system, in case alternative communication procedures are published for the airspace concerned.

(ww) point CAT.IDE.H.100 is amended as follows:

2019/1384

(i) point (a) is replaced by the following:

- (a) Instruments and equipment required by this Subpart shall be approved in accordance with the applicable airworthiness requirements, except for the following items:
 - (1) Independent portable lights;
 - (2) An accurate time piece;
 - (3) Chart holder;
 - (4) First-aid kit;
 - (5) Megaphones;
 - (6) Survival and signalling equipment;
 - (7) Sea anchors and equipment for mooring;
 - (8) Child restraint devices.

(ii) point (b) is replaced by the following:

- (b) Instruments and equipment not required under this Annex (Part-CAT) as well as any other equipment which is not required under this Regulation, but are carried on a flight, shall comply with the following:
 - (1) the information provided by those instruments, equipment or accessories shall not be used by the flight crew members to comply with Airworthiness requirements, or points CAT.IDE.H.330, CAT.IDE.H.335, CAT.IDE.H.340 and CAT.IDE.H.345 of this Annex;
 - (2) the instruments and equipment shall not affect the airworthiness of the helicopter, even in the case of failures or malfunction.

(xx) in point CAT.IDE.H.105, point (b) is replaced by the following:

2019/1384

- (b) the operator is approved by the competent authority to operate the helicopter within the constraints of the MMEL in accordance with point ORO.MLR.105(j) of Annex III.

(yy) point CAT.IDE.H.125 is amended as follows:

2019/1384

(i) in point (a)(1), point (iii) is replaced by the following:

- (iii) Barometric altitude;

(ii) in point (b), point (1) is replaced by the following:

- (1) Barometric altitude;

(zz) point CAT.IDE.H.130 is amended as follows:

2019/1384

(i) point (b) is replaced by the following:

- (b) Two means of measuring and displaying barometric altitude. For single-pilot operations under VFR at night one pressure altimeter may be substituted by a radio altimeter.

(ii) in point (h), point (1) is replaced by the following:

- (1) Barometric altitude;

(aaa) the following point CAT.IDE.H.191 is inserted:

2019/1387

CAT.IDE.H.191 Lightweight flight recorder

- (a) Turbine-engined helicopters with an MCTOM of 2 250 kg or more shall be equipped with a flight recorder if all of the following conditions are met:
 - (1) they are not within the scope of point CAT.IDE.H.190(a);
 - (2) they are first issued with an individual CofA on or after 5 September 2022.
- (b) The flight recorder shall record, by means of flight data or images, information that is sufficient to determine the flight path and aircraft speed.
- (c) The flight recorder shall be capable of retaining the flight data and the images recorded during at least the preceding 5 hours.
- (d) The flight recorder shall automatically start to record prior to the helicopter being capable of moving under its own power and shall stop automatically after the helicopter is no longer capable of moving under its own power.
- (e) If the flight recorder records images or audio of the flight crew compartment, then a function shall be provided which can be operated by the commander and which modifies image and audio recordings made before the operation of that function, so that those recordings cannot be retrieved using normal replay or copying techniques.

(bbb) in point CAT.IDE.H.315, point (a) is replaced by the following: 2019/1384

- (a) a sea anchor and other equipment necessary to facilitate mooring, anchoring or manoeuvring the helicopter on water, appropriate to its size, mass and handling characteristics; and

(ccc) in point CAT.IDE.H.320, the phrase “airworthiness code” is replaced by the phrase “certification specification”, for both occurrences. 2019/1384

(ddd) point CAT.IDE.H.345 is amended as follows: 2019/1387

- i. The title of the article is replaced by the following:**

CAT.IDE.H.345 Communication, navigation and surveillance equipment for operations under IFR or under VFR over routes not navigated by reference to visual landmarks

- ii. point (a) is replaced by the following:**

- (a) Helicopters operated under IFR or under VFR over routes that cannot be navigated by reference to visual landmarks shall be equipped with radio communication, navigation and surveillance equipment in accordance with the applicable airspace requirements.

(eee) in Subpart D, Section 3 and Section 4 is deleted. 2018/394 & 2018/1975

(5) Amendments to Annex V (Part SPA)

(a) in point SPA.GEN.100 point(b), point (4) is inserted:

2019/1384

(4) low visibility operations (LVO).

(b) in point SPA.DG.110, point (e) is replaced by the following:

2019/1384

- (e) ensure that a copy of the information to the pilot-in-command or the commander is retained on the ground and that that copy, or the information contained in it, is readily accessible to the flight operations officer, flight dispatcher, or the designated ground personnel responsible for their part of the flight operations, until after the completion of the flight to which the information refers;

(c) in point SPA.NVIS.110, point (b) is replaced by the following:

2019/1384

- (b) *Radio altimeter*. The helicopter shall be equipped with a radio altimeter capable of emitting an audio warning below a pre-set height and an audio and visual warning at a height selectable by the pilot, instantly discernible during all phases of NVIS flight.

(d) point SPA.HHO.110 is replaced by the following:

2019/1384

SPA.HHO.110 Equipment requirements for HHO

- (a) The installation of all helicopter hoist equipment other than a simple PCDS, including any radio equipment to comply with point SPA.HHO.115, and any subsequent modifications, shall have an airworthiness approval appropriate to the intended function. Ancillary equipment shall be designed and tested to the appropriate standard as required by the competent authority.
- (b) Maintenance instructions for HHO equipment and systems shall be established by the operator in liaison with the manufacturer and included in the operator's helicopter maintenance programme as provided for by Regulation MCAR-M.

(e) the following Subpart M is inserted:

2018/975

SUBPART M: ELECTRONIC FLIGHT BAGS (EFBs)

SPA.EFB.100 Use of electronic flight bags (EFBs) — operational approval

- (a) A commercial air transport operator shall only use a type B EFB application if the operator has been granted an approval by MCAA for such use.

- (b) In order to obtain an operational approval from MCAA for the use of a type B EFB application, the operator shall provide evidence that:
- (1) a risk assessment related to the use of the EFB device that hosts the application and to the EFB application and its associated function(s) has been conducted, identifying the associated risks and ensuring that they are appropriately managed and mitigated;
 - (2) the human-machine interfaces of the EFB device and the EFB application have been assessed against human factors principles;
 - (3) it has established an EFB administration system and that procedures and training requirements for the administration and use of the EFB device and the EFB application have been established and implemented; these shall include procedures for:
 - (i) operating the EFB;
 - (ii) the management of changes to the EFB;
 - (iii) the management of EFB data;
 - (iv) EFB maintenance; and
 - (v) EFB security;
 - (4) the EFB host platform is suitable for the intended use of the EFB application. This demonstration shall be specific to the EFB application and the EFB host platform on which the application is installed.

(6) Amendments to Annex VI (Part NCC)

(a) Point NCC.GEN.101 is inserted: 2019/1387

NCC.GEN.101 Additional requirements for flight training organisations

Approved training organisations that are required to comply with this Annex shall also comply with:

- (a) ORO.GEN.310, as applicable; and
- (b) ORO.MLR.105.

(b) in point NCC.GEN.105, point (e)(2) is replaced by the following: 2018/1042

- (2) when under the influence of psychoactive substances or for other reasons as referred to in 7.g of the Essential Requirements (Part ERO).

(c) the following point NCC.GEN.131 is inserted: 2018/1975

NCC.GEN.131 Use of electronic flight bags (EFBs)

- (a) Where an EFB is used on board an aircraft, the operator shall ensure that it does not adversely affect the performance of the aircraft systems or equipment, or the ability of the flight crew member to operate the aircraft.
- (b) Prior to using a type B EFB application, the operator shall:
 - (1) conduct a risk assessment related to the use of the EFB device that hosts the application and to the EFB application concerned and its associated function(s), identifying the associated risks and ensuring that they are appropriately managed and mitigated; the risk assessment shall address the risks associated with the human-machine interface of the EFB device and the EFB application concerned; and
 - (2) establish an EFB administration system, including procedures and training requirements for the administration and use of the device and the EFB application.

(d) Point NCC.GEN.145 is replaced by the following: 2019/1387

NCC.GEN.145 Handling of flight recorder recordings: preservation, production, protection and use

- (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 of the flight recorders for a period of 60 days or until otherwise directed by the investigating authority.
- (b) The operator shall conduct operational checks and evaluations of recordings to ensure the continued service-ability of the flight recorders which are required to be carried.
- (c) The operator shall ensure that the recordings of flight parameters and data link communication messages required to be recorded on flight recorders are preserved. However, for the purpose of testing and maintaining those flight recorders, up to 1 hour of the oldest recorded data 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 raw flight data into flight parameters expressed in engineering units.
- (e) The operator shall make available any flight recorder recordings that have been preserved, if so determined by the competent authority.
- (f) Without prejudice to other Regulations:
 - (1) Except for ensuring flight recorder serviceability, audio recordings from a flight recorder shall not be disclosed or used unless all of the following conditions are fulfilled:
 - (i) a procedure related to the handling of such audio recordings and of their transcript is in place;
 - (ii) all crew members and maintenance personnel concerned have given their prior consent;
 - (iii) such audio recordings are used only for maintaining or improving safety.
 - (1a) When flight recorder audio recordings are inspected for ensuring flight recorder serviceability, the operator shall protect the privacy of those audio recordings and make sure that they are not disclosed or used for purposes other than ensuring flight recorder serviceability.
 - (2) Flight parameters or data link messages recorded by a flight recorder shall not be used for purposes other than for the investigation of an accident or an incident which is subject to mandatory reporting, unless such recordings meet any of the following conditions:
 - (i) are used by the operator for airworthiness or maintenance purposes only;
 - (ii) are de-identified;
 - (iii) are disclosed under secure procedures.
 - (3) Except for ensuring flight recorder serviceability, images of the flight crew compartment that are recorded by a flight recorder shall not be disclosed or used unless all the following conditions are fulfilled:
 - (i) a procedure related to the handling of such image recordings is in place;
 - (ii) all crew members and maintenance personnel concerned have given their prior consent;
 - (iii) such image recordings are used only for maintaining or improving safety.
 - (3a) When images of the flight crew compartment that are recorded by a flight recorder are inspected for ensuring the serviceability of the flight recorder, then:
 - (i) those images shall not be disclosed or used for purposes other than for ensuring flight recorder serviceability;
 - (ii) if body parts of crew members are likely to be visible on the images, the operator shall ensure the privacy of those images.

(e) in point NCC.OP.200, point (b) is replaced by the following:

2018/1975

- (b) Notwithstanding point (a), when training flights are conducted by a training organisation, such situations may be simulated with student pilots on board.

(f) point NCC.OP.225 is replaced by the following:

2019/1387

NCC.OP.225 Approach and landing conditions — aeroplanes

Before commencing an approach to land, the pilot-in-command shall be satisfied that, according to the information available, the weather at the aerodrome or the operating site and the condition of the runway intended to be used would not prevent a safe approach, landing or missed approach.

(g) the following point NCC.OP.226 is inserted: 2019/1387

NCC.OP.226 Approach and landing conditions — helicopters

Before commencing an approach to land, the pilot-in-command shall be satisfied that, according to the information available, the weather at the aerodrome or the operating site and the condition of the final approach and take-off area (FATO) intended to be used would not prevent a safe approach, landing or missed approach.

(h) in point NCC.IDE.A.100, point (c) is replaced by the following: 2019/1384

- (c) Instruments and equipment or accessories not required under this Annex as well as any other equipment which is not required under this Regulation, but carried on a flight, shall comply with the following requirements:
 - (1) the information provided by those instruments, equipment or accessories shall not be used by the flight crew members to comply with Airworthiness requirements or NCC.IDE.A.245 and NCC.IDE.A.250 of this Annex;
 - (2) the instruments and equipment shall not affect the airworthiness of the aeroplane, even in the case of failures or malfunction.

(i) in point NCC.IDE.A.105, point (b) is replaced by the following: 2019/1384

- (b) the operator is approved by the competent authority to operate the aeroplane within the constraints of the master minimum equipment list (“MMEL”) in accordance with point ORO.MLR.105(j) of Annex III; or

(j) point NCC.IDE.A.120 is amended as follows: 2019/1384

(i) in point (a), point (3) is replaced by the following:

- (3) barometric altitude;

(ii) in point (c), point (1) is replaced by the following:

- (1) barometric altitude;

(k) point NCC.IDE.A.125 is amended as follows: 2019/1384

(i) in point (a), point (3) is replaced by the following:

(3) barometric altitude;

(ii) in point (c), point (1) is replaced by the following:

(1) barometric altitude;

(iii) point (h) is replaced by the following:

(h) an emergency power supply, independent of the main electrical generating system, for the purpose of operating and illuminating an attitude indicating system for a minimum period of 30 minutes. The emergency power supply shall be automatically operative after the total failure of the main electrical generating system and clear indication shall be given on the instrument or on the instrument panel that the attitude indicator is being operated by emergency power.

(l) in point NCC.IDE.A.180, point (b) is replaced by the following:

2019/1384

(b) A seat belt with upper torso restraint system shall have:

- (1) a single point release;
- (2) on the seats for the minimum number of required cabin crew members, two shoulder straps and a seat belt that may be used independently;
- (3) on flight crew members seats and on any seat alongside a pilot's seat, either of the following:
 - (i) two shoulder straps and a seat belt that may be used independently; or
 - (ii) a diagonal shoulder strap and a seat belt that may be used independently for the following aeroplanes:
 - (A) aeroplanes with an MCTOM of 5 700 kg or less and with an MOPSC of nine or less that are compliant with the emergency landing dynamic conditions defined in the applicable certification specification;
 - (B) aeroplanes with an MCTOM of 5 700 kg or less and with an MOPSC of nine or less that are not compliant with the emergency landing dynamic conditions defined in the applicable certification specification and having an individual CofA first issued before 25 August 2016.

(m) in point NCC.IDE.A.250, the following point (e) is added:

2019/1384

(e) Aeroplanes shall be equipped with surveillance equipment in accordance with the applicable airspace requirements.

(n) in point NCC.IDE.H.100 (c), point (1) is replaced by the following:

2019/1384

- (1) the information provided by those instruments, equipment or accessories shall not be used by the flight crew members to comply with Airworthiness requirements or points NCC.IDE.H.245 and NCC.IDE.H.250 of this Annex;

(o) in point NCC.IDE.H.105, point (b) is replaced by the following: **2019/1384**

- (b) the operator is approved by the competent authority to operate the helicopter within the constraints of the master minimum equipment list (“MMEL”) in accordance with point ORO.MLR.105(j) of Annex III; or

(p) point NCC.IDE.H.120 is amended as follows: **2019/1384**

- (i) in point (a), point (3) is replaced by the following:
 - (3) barometric altitude;
- (ii) in point (c), point (1) is replaced by the following:
 - (1) barometric altitude;

(q) point NCC.IDE.H.125 is amended as follows: **2019/1384**

- (i) in point (a), point (3) is replaced by the following:
 - (3) barometric altitude;
- (ii) in point (c), point (1) is replaced by the following:
 - (1) barometric altitude;

(r) in point NCC.IDE.H.235, the phrase “airworthiness code” is replaced by the phrase “certification specifications”. **2019/1384**

(s) in point NCC.IDE.H.250, the following point (e) is added: **2019/1384**

- (e) Helicopters shall be equipped with surveillance equipment in accordance with the applicable airspace requirements.

(7) Amendments to Annex VII (Part NCO)

(a) point NCO.GEN.102 is deleted. **2018/1975**

(b) in point NCO.GEN.103, point (a) is replaced by the following: **2018/1975**

(a) start and end at the same aerodrome or operating site;

(c) the following point NCO.GEN.104 is inserted: **2019/1384**

NCO.GEN.104 Use of aircraft included in an AOC by an NCO operator

(a) An NCO operator may use other than complex motor-powered aircraft listed on an operator's AOC to conduct non-commercial operations in accordance with this Annex.

(b) The NCO operator using the aircraft in accordance with point (a) shall establish a procedure:

(1) clearly describing how operational control of the aircraft is transferred between the AOC holder and the NCO operator, as referred to in point ORO.GEN.310 of Annex III;

(2) describing the handover procedure of the aircraft upon its return to the AOC holder.
That procedure shall be included in a contract between the AOC holder and the NCO operator.

The NCO operator shall ensure that the procedure is communicated to the relevant personnel.

(c) The continuing airworthiness of the aircraft used pursuant to point (a) shall be managed by organisation responsible for the continuing airworthiness for the aircraft included in the AOC, in accordance with Regulation MCAR-M.

(d) The NCO operator using the aircraft in accordance with point (a) shall ensure the following:

(1) that every flight conducted under its operational control is recorded in the aircraft technical log system;

(2) that no changes to the aircraft systems or configuration are made;

(3) that any defect or technical malfunction occurring while the aircraft is under its operational control is reported to the organisation referred to in point (c) immediately after the flight;

(4) that the AOC holder receives a copy of any occurrence report related to the flights performed with the aircraft, completed in accordance with Regulation MCAR-12.

(d) point NCO.GEN.105 is amended as follows: **2018/394 & 2018/1975**

(i) in point (a)(4), points (iii) and (iv) are replaced by the following:

(iii) instruments and equipment required for the execution of that flight are installed in the aircraft and are operative, unless operation with inoperative equipment is permitted by the minimum equipment list (MEL) or equivalent document, if applicable, as provided for in points NCO.IDE.A.105 or NCO.IDE.H.105;

- (iv) the mass of the aircraft and the centre of gravity location are such that the flight can be conducted within limits prescribed in the airworthiness documentation;

(ii) In point (f), point (1) is replaced by the following:

- (1) keep his/her safety belt fastened while at his/her station; and

(e) point NCO.GEN.106 is deleted. **2018/394**

(f) point NCO.GEN.125 is replaced by the following: **2018/1975**

NCO.GEN.125 Portable electronic devices

The pilot-in-command shall not permit any person to use a portable electronic device (PED) on board an aircraft, including an electronic flight bag (EFB) that could adversely affect the performance of the aircraft systems and equipment or the ability of the flight crew member to operate the aircraft.

(g) in point NCO.GEN.135, point (c) is deleted and renumbered point (d) as point (c). **2018/1975**

(h) in point NCO.OP.120, the title is replaced by the following: **2018/1975**

NCO.OP.120 Noise abatement procedures — aeroplanes and helicopters

(i) point NCO.OP.121 is deleted. **2018/394**

(j) point NCO.OP.127 is deleted. **2018/394**

(k) point NCO.OP.150 is replaced by the following: **2018/394**

NCO.OP.150 Carriage of passengers

The pilot-in-command shall ensure that, prior to and during taxiing, take-off and landing, and whenever deemed necessary in the interest of safety, each passenger on board occupies a seat or berth and has his/her safety belt or restraint device properly secured.

(l) point NCO.OP.156 is deleted. **2018/1975**

(m) point NCO.OP.176 is deleted. **2018/394**

(n) in point NCO.OP.180, point (b) is replaced by the following: **2018/1975**

- (b) Notwithstanding (a), when training flights are conducted by a training organization in accordance with the Regulation MCAR-Aircrew, such situations may be simulated with student pilots on board.

(o) point NCO.OP.185 is replaced by the following: **2018/394**

NCO.OP.185 In-flight fuel management

The pilot-in-command shall check at regular intervals that the amount of usable fuel remaining in flight is not less than the fuel required to proceed to a weather-permissible aerodrome or operating site and the planned reserve fuel as required by points NCO.OP.125 or NCO.OP.126.

(p) point NCO.OP.205 is replaced by the following: **2019/1387**

NCO.OP.205 Approach and landing conditions — aeroplanes

Before commencing an approach to land, the pilot-in-command shall be satisfied that, according to the information available, the weather at the aerodrome or the operating site and the condition of the runway intended to be used do not prevent a safe approach, landing or missed approach.

(q) the following point NCO.OP.206 is inserted:

2019/1387

NCO.OP.206 Approach and landing conditions — helicopters

Before commencing an approach to land, the pilot-in-command shall be satisfied that, according to the information available, the weather at the aerodrome or the operating site and the condition of the final approach and take-off area (FATO) intended to be used do not prevent a safe approach, landing or missed approach.

(r) point NCO.OP.215 is deleted.

2018/394

(s) in point NCO.POL.100, point (a) is replaced by the following:

2018/394

- (a) During any phase of operation, the loading, the mass and the centre of gravity (CG) position of the aircraft shall comply with any limitation specified in the AFM or equivalent document.

(t) point NCO.POL.105 is replaced by the following:

2018/394 & 2018/1975

NCO.POL.105 Weighing

- (a) The operator shall ensure that the mass and the CG of the aircraft have been established by actual weighing prior to the initial entry into service of the aircraft. The accumulated effects of modifications and repairs on the mass and balance shall be accounted for and properly documented. Such information shall be made available to the pilot-in-command. The aircraft shall be reweighed if the effect of modifications on the mass and balance is not accurately known.
- (b) The weighing shall be accomplished by the manufacturer of the aircraft or by an approved maintenance organisation.

(u) point NCO.IDE.A.100 is amended as follows:

2019/1384

(i) in point (b), point (8) is inserted;

- (8) a simple PCDS used by a task specialist as a restraint device.

(ii) point (c) is replaced by the following:

- (c) Instruments and equipment not required under Annex VII (Part-NCO) as well as any other equipment that is not required under this Regulation, but is carried on a flight, shall comply with the following requirements:
 - (1) the information provided by those instruments or equipment shall not be used by the flight crew members to comply with –Airworthiness requirements or points NCO.IDE.A.190 and NCO.IDE.A.195 of Annex VII;

- (2) the instruments and equipment shall not affect the airworthiness of the aeroplane, even in the case of failures or malfunction.

(v) in point NCO.IDE.A.120(a), point (3) is replaced by the following: **2019/1384**

- (3) barometric altitude;

(w) in point NCO.IDE.A.125(a), point (3) is replaced by the following: **2019/1384**

- (3) barometric altitude;

(x) in point NCO.IDE.A.140(a), point (2) is replaced by the following: **2019/1384**

- (2) a seat belt on each seat and restraining belts for each berth;

(y) in point NCO.IDE.A.160, point (a) is replaced by the following: **2018/1975**

- (a) Aeroplanes, except ELA1 aeroplanes, shall be equipped with at least one hand fire extinguisher:
- (1) in the flight crew compartment; and
 - (2) in each passenger compartment that is separate from the flight crew compartment, except if the compartment is readily accessible to the flight crew.

(z) in point NCO.IDE.A.195, the following point (e) is added: **2019/1384**

- (e) Aeroplanes shall be equipped with surveillance equipment in accordance with the applicable airspace requirements.

(aa) in point NCO.IDE.H.100, is amended as follows: **2019/1384**

(i) in point (b), point (7) is inserted:

- (7) a simple PCDS used by a task specialist as a restraint device.

(ii) point (c) is replaced by the following:

- (c) Instruments and equipment or accessories not required under Annex VII (Part-NCO), as well as any other equipment that is not required under this Regulation, but carried on a flight, shall comply with the following requirements:
- (1) the information provided by those instruments, equipment or accessories shall not be used by the flight crew members to comply with Airworthiness requirements or points NCO.IDE.H.190 and NCO.IDE.H.195 of Annex VII;
 - (2) the instruments and equipment shall not affect the airworthiness of the helicopter, even in the case of failures or malfunction.

(bb) in point NCO.IDE.H.120(a), point (3) is replaced by the following: **2019/1384**

- (3) barometric altitude;

(cc) in point NCO.IDE.H.125(a), point (3) is replaced by the following: **2019/1384**

- (3) barometric altitude;

(dd) in point NCO.IDE.H.140(a), points (1) and (2) are replaced by the following: **2019/1384**

- (1) a seat or berth for each person on board who is aged 24 months or more, or a station for each crew member or task specialist on board;
- (2) a seat belt on each passenger seat and restraining belts for each berth, and restraint devices for each station;

(ee) point NCO.IDE.H.185 is replaced by the following: **2019/1384**

NCO.IDE.H.185 All helicopters on flights over water — ditching

Helicopters flying over water in a hostile environment beyond a distance of 50 NM from land shall be either of the following:

- (a) designed for landing on water in accordance with the relevant certification specifications;
- (b) certified for ditching in accordance with the relevant certification specifications;
- (c) fitted with emergency flotation equipment.

(ff) in point NCO.IDE.H.195, the following point (e) is added: **2019/1384**

- (e) Helicopters shall be equipped with surveillance equipment in accordance with the applicable airspace requirements.

(gg) in Subpart D, Sections 3 and 4 are deleted. **2018/394 & 2018/1975**

(hh) NCO.SPEC.115 is amended as follows:

(i) point (b) is replaced by the following: **2018/394**

- (b) During critical phases of the flight or whenever deemed necessary by the pilot-in-command in the interest of safety, the crew member shall be restrained at his/her assigned station, unless otherwise specified in the checklist.

(ii) in point (e), point (2) is replaced by the following: **2018/1042**

- (2) when under the influence of psychoactive substances or for other reasons as referred to in 7.g of ERO.OPS. 120 Essential Requirements (Part ERO).

(ii) in NCO.SPEC.120, point (b) is replaced by the following: **2019/394**

- (b) During critical phases of the flight or whenever deemed necessary by the pilot-in-command in the interest of safety, the task specialist shall be restrained at his/her assigned station, unless otherwise specified in the checklist.

(jj) in point NCO.SPEC.HEC.105, point (b) is replaced by the following:

2019/1384

- (b) The installation of all hoist and cargo hook equipment other than a simple PCDS, and any subsequent modifications shall have an airworthiness approval appropriate to the intended function.

(kk) in point NCO.SPEC.PAR.120 is replaced by the following:

2019/1384

NCO.SPEC.PAR.120 Transport and release of dangerous goods

Notwithstanding point NCO.SPEC.160, parachutists may carry smoke trail devices and exit the aircraft for the purpose of parachute display over congested areas of cities, towns or settlements or over an open-air assembly of persons, provided those devices are manufactured for that purpose.

(ll) in Subpart E, the following Section 6 is added:

2019/1384

SECTION 6 - Maintenance check flights (MCFs)

NCO.SPEC.MCF.100 Levels of maintenance check flights

Before conducting a maintenance check flight, the operator shall determine the applicable level of the maintenance check flight as follows:

- (a) a “Level A” maintenance check flight for a flight where the use of abnormal or emergency procedures, as defined in the aircraft flight manual, is expected, or where a flight is required to prove the functioning of a backup system or other safety devices;
- (b) a “Level B” maintenance check flight for any maintenance check flight other than a “Level A” maintenance check flight.

NCO.SPEC.MCF.105 Operational limitations

- (a) By way of derogation from point NCO.GEN.105(a)(4) of this Annex, a maintenance check flight may be conducted with an aircraft that has been released to service with incomplete maintenance in accordance with the regulation MCAR –M and MCAR-145.
- (b) By way of derogation from point NCO.IDE.A.105 or NCO.IDE.H.105, the pilot-in-command may conduct a flight with inoperative or missing items of equipment or functions required for the flight if those inoperative or missing items of equipment or functions have been identified in the checklist referred to in point NCO.SPEC.MCF.110.

NCO.SPEC.MCF.110 Checklist and safety briefing

- (a) The checklist referred to in point NCO.SPEC.105 shall be updated as needed before each maintenance check flight and shall consider the operating procedures that are planned to be followed during the particular maintenance check flight.

- (b) Notwithstanding point NCO.SPEC.125(b), a safety briefing of the task specialist shall be required before each maintenance check flight.

NCO.SPEC.MCF.120 Flight crew requirements

When selecting a flight crew member for a maintenance check flight, the operator shall consider the aircraft complexity and the level of the maintenance check flight as defined in point NCO.SPEC.MCF.100.

NCO.SPEC.MCF.125 Crew composition and persons on board

- (a) The pilot-in-command shall identify the need for additional crew members or task specialists, or both, before each intended maintenance check flight, taking into consideration the expected flight crew member or task specialist workload and the risk assessment.
- (b) The pilot-in-command shall not allow persons on board other than those required under point (a) during a “Level A” maintenance check flight.

NCO.SPEC.MCF.130 Simulated abnormal or emergency procedures in flight

By way of derogation from point NCO.SPEC.145, a pilot-in-command may simulate situations that require the application of abnormal or emergency procedures with a task specialist on board if the simulation is required to meet the intention of the flight and if it has been identified in the check list referred to in point NCO.SPEC.MCF.110 or in operating procedures.

NCO.SPEC.MCF.140 Systems and equipment

When a maintenance check flight is intended to check the proper functioning of a system or equipment, that system or equipment shall be identified as potentially unreliable, and appropriate mitigation measures shall be agreed prior to the flight in order to minimise risks to flight safety.

(8) Amendments to Annex VIII (Part SPO)

(a) point SPO.GEN.005 is amended as follows:

(i) point (a) is replaced by the following: 2019/1384

This Annex applies to any specialised operation where the aircraft is used for specialised activities such as agriculture, construction, photography, surveying, observation and patrol, aerial advertisement or maintenance check flights.;

(ii) point (c)(2) is replaced by the following: 2019/1975

(2) parachute dropping, sailplane towing with an aeroplane or aerobatic flights performed either by a training organisation having its principal place of business in the Maldives and approved in accordance with MCAR Aircrew, or by an organisation created with the aim of promoting aerial sport or leisure aviation, on the condition that the aircraft is operated by the organisation on the basis of ownership or dry lease, that the flight does not generate profits distributed outside of the organisation, and that whenever non-members of the organisation are involved, such flights represent only a marginal activity of the organisation.

(b) point SPO.GEN.102 is deleted. 2019/1975

(c) in point SPO.GEN.105 is amended as follows: 2018/394 & 2018/1042

(i) point (b) is replaced by the following:

(b) During critical phases of the flight or whenever deemed necessary by the pilot-in-command in the interest of safety, the crew member shall be restrained at his/her assigned station, unless otherwise specified in the SOP.

(ii) point (e)(2) is replaced by the following:

(2) when under the influence of psychoactive substances or for other reasons as referred to in 7.g of the Essential Requirements (Part ERO).

(d) in point SPO.GEN.106, point (b) is replaced by the following: 2018/394

(b) During critical phases of the flight or whenever deemed necessary by the pilot-in-command in the interest of safety, the task specialist shall be restrained at his/her assigned station, unless otherwise specified in the SOP.

(e) in point SPO.GEN.107(a)(4), points (iii) and (iv) are replaced by the following: 2018/394 & 2019/1975

(iii) instruments and equipment required for the execution of that flight are installed in the aircraft and are operative, unless operation with inoperative equipment is permitted by the minimum equipment list (MEL) or equivalent document, if applicable, as required in points SPO.IDE.A.105 or SPO.IDE.H.105;

- (iv) the mass of the aircraft and the centre of gravity location are such that the flight can be conducted within the limits prescribed in the airworthiness documentation;

(f) point SPO.GEN.108 is deleted.

2018/394

(g) the following point SPO.GEN.131 is inserted:

2019/1975

SPO.GEN.131 Use of electronic flight bags (EFBs)

- (a) Where an EFB is used on board an aircraft, the operator shall ensure that it does not adversely affect the performance of the aircraft systems or equipment, or the ability of the flight crew member to operate the aircraft.
- (b) Prior to using a type B EFB application, the operator shall:
 - (1) conduct a risk assessment related to the use of the EFB device that hosts the application, to the EFB application concerned and its associated function(s), identifying the associated risks and ensuring that they are appropriately mitigated; the risk assessment shall address the risks associated with the human– machine interface of the EFB device and the EFB application concerned; and
 - (2) establish an EFB administration system, including procedures and training requirements for the administration and use of the EFB device and the EFB application.

(h) in point SPO.GEN.140, point (c) is deleted, and the subsequent paragraphs renumbered accordingly.

2019/1975

(i) point SPO.GEN.145 is replaced by the following:

2019/1387

SPO.GEN.145 Handling of flight recorder recordings: preservation, production, protection and use

- (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 of the flight recorders for a period of 60 days or until otherwise directed by the investigating authority.
- (b) The operator shall conduct operational checks and evaluations of recordings to ensure the continued service ability of the flight recorders which are required to be carried.
- (c) The operator shall ensure that the recordings of flight parameters and data link communication messages required to be recorded on flight recorders are preserved. However, for the purpose of testing and maintaining those flight recorders, up to 1 hour of the oldest recorded data 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 raw flight data into flight parameters expressed in engineering units.
- (e) The operator shall make available any flight recorder recordings that have been preserved, if so determined by the competent authority.
- (f) Without prejudice to other Regulations:
 - (1) audio recordings from a flight recorder shall not be disclosed or used unless all the following conditions are fulfilled:
 - (i) a procedure related to the handling of such audio recordings and of their transcript is

- in place;
- (ii) all crew members and maintenance personnel concerned have given their prior consent;
- (iii) such audio recordings are used only for maintaining or improving safety.
- (1a) When flight recorder audio recordings are inspected for ensuring flight recorder serviceability, the operator shall protect the privacy of those audio recordings and make sure that they are not disclosed or used for purposes other than ensuring flight recorder serviceability.
- (2) Flight parameters or data link messages recorded by a flight recorder shall not be used for purposes other than for the investigation of an accident or an incident that is subject to mandatory reporting. That limitation shall not apply, unless such recordings meet any of the following conditions:
 - (i) are used by the operator for airworthiness or maintenance purposes only;
 - (ii) are de-identified;
 - (iii) are disclosed under secure procedures.
- (3) Except for ensuring flight recorder serviceability, images of the flight crew compartment that are recorded by a flight recorder shall not be disclosed or used unless all of the following conditions are fulfilled:
 - (i) a procedure related to the handling of such image recordings is in place;
 - (ii) all crew members and maintenance personnel concerned have given their prior consent;
 - (iii) such image recordings are used only for maintaining or improving safety.
- (3a) When images of the flight crew compartment that are recorded by a flight recorder are inspected for ensuring the serviceability of the flight recorder, then:
 - (i) those images shall not be disclosed or used for purposes other than ensuring flight recorder service ability;
 - (ii) if body parts of crew members are likely to be visible on the images, the operator shall ensure the privacy of those images.

(j) point SPO.OP.121 is deleted. **2018/394**

(k) point SPO.OP.132 is deleted. **2018/394**

(l) point SPO.OP.160 is replaced by the following: **2018/394**

SPO.OP.160 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 and use it as the primary device to communicate with ATS, other crew members and task specialists.

(m) point SPO.OP.181 is deleted. **2018/394**

(n) point SPO.OP.210 is replaced by the following: **2019/1387**

SPO.OP.210 Approach and landing conditions — aeroplanes

Before commencing an approach to land, the pilot-in-command shall be satisfied that, according to the information available, the weather at the aerodrome or the operating site and the condition of the runway intended to be used would not prevent a safe approach, landing or missed approach.

(o) the following point SPO.OP.211 is inserted:

2019/1387

SPO.OP.211 Approach and landing conditions — helicopters ^[SEP]

Before commencing an approach to land, the pilot-in-command shall be satisfied that, according to the information available, the weather at the aerodrome or the operating site and the condition of the final approach and take-off area (FATO) intended to be used would not prevent a safe approach, landing or missed approach.

(p) point SPO.OP.225 is deleted.

2018/394

(q) in point SPO.POL.100, point (a) is replaced by the following:

2018/394

- (a) During any phase of operation, the loading, the mass and the centre of gravity (CG) position of the aircraft shall comply with any limitation specified in the appropriate manual.

(r) point SPO.POL.105 is replaced by the following:

2018/394 & 2018/1975

SPO.POL.105 Mass and balance

- (a) The operator shall ensure that the mass and the CG of the aircraft have been established by actual weighing prior to the initial entry into service of the aircraft. The accumulated effects of modifications and repairs on the mass and balance shall be accounted for and properly documented. Such information shall be made available to the pilot-in-command. The aircraft shall be reweighed if the effect of modifications on the mass and balance is not accurately known.
- (b) The weighing shall be accomplished by the manufacturer of the aircraft or by an approved maintenance organisation.

(s) in point SPO.POL.110, point (a) heading is replaced by the following:

2019/1384

- (a) The operator shall establish a mass and balance system in order to determine for each flight or series of flights the following:

(t) point SPO.IDE.A.100 is amended as follows:

(i) in point (b), point (8) is inserted:

2019/1384

- (8) a simple PCDS used by a task specialist as a restraint device.

(ii) point (c) is replaced by the following:

2019/1384

- (c) Instruments, equipment or accessories not required under this Annex (Part-SPO) as well as any other equipment which is not required under this Regulation, but carried on a flight, shall comply with the following requirements:
 - (1) the information provided by those instruments, equipment or accessories shall not be used by the flight crew members to comply with Airworthiness requirements or points SPO.IDE.A.215 and SPO.IDE.A.220 of this Annex;
 - (2) the instruments, equipment or accessories shall not affect the airworthiness of the aeroplane, even in the case of failures or malfunction.

(u) point SPO.IDE.A.105 is replaced by the following:

2019/1384

SPO.IDE.A.105 Minimum equipment for flight

A flight shall not be commenced when any of the aeroplane's instruments, items of equipment or functions required for the intended flight are inoperative or missing, unless either of the following conditions is fulfilled:

- (a) the aeroplane is operated in accordance with the minimum equipment list (MEL);
- (b) for complex motor-powered aeroplanes and for any aeroplane used in commercial operations, the operator is approved by the competent authority to operate the aeroplane within the constraints of the master minimum equipment list (MMEL) in accordance with point ORO.MLR.105(j) of Annex III;
- (c) the aeroplane is subject to a permit to fly issued in accordance with the applicable airworthiness requirements.

(v) point SPO.IDE.A.120 is amended as follows:

2019/1384

(i) in point (a), point (3) is replaced by the following:

- (3) barometric altitude,

(ii) in point (e), point (1) is replaced by the following:

- (1) barometric altitude,

(w) point SPO.IDE.A.125 is amended as follows:

2019/1384

(i) in point (a), point (3) is replaced by the following:

- (3) barometric altitude,

(ii) in point (c), point (1) is replaced by the following:

- (1) barometric altitude,

(iii) in point (e), point (4) is replaced by the following:

- (4) an emergency power supply, independent of the main electrical generating system, for the purpose of operating and illuminating an attitude indicating system for a minimum period

of 30 minutes. The emergency power supply shall be automatically operative after the total failure of the main electrical generating system and clear indication shall be given on the instrument or on the instrument panel that the attitude indicator is being operated by emergency power.

(x) point SPO.IDE.A.130 is replaced by the following:

2018/1042

SPO.IDE.A.130 Terrain awareness warning system (TAWS)

- (a) Turbine-powered aeroplanes with a maximum certified take-off mass (MCTOM) of more than 5 700 kg or an MOPSC of more than nine shall be equipped with a TAWS that meets the requirements for:
 - (1) class A equipment, as specified in an acceptable standard, in the case of aeroplanes for which the individual certificate of airworthiness (CofA) was first issued after 1 January 2011; or
 - (2) class B equipment, as specified in an acceptable standard, in the case of aeroplanes for which the individual CofA was first issued on or before 1 January 2011.
- (b) When used in commercial operations, turbine-powered aeroplanes for which the individual CofA was first issued after 1 January 2019 and having an MCTOM of 5 700 kg or less and an MOPSC of six to nine shall be equipped with a TAWS that meets the requirements for class B equipment, as specified in an acceptable standard.

(y) the following point SPO.IDE.A.146 is inserted:

2019/1387

SPO.IDE.A.146 Lightweight flight recorder

- (a) Turbine-engined aeroplanes with an MCTOM of 2 250 kg or more and aeroplanes with an MOPSC of more than 9 shall be equipped with a flight recorder if all the following conditions are met:
 - (1) they are not within the scope of point SPO.IDE.A.145(a);
 - (2) they are used for commercial operations;
 - (3) they are first issued with an individual CofA on or after 5 September 2022.
- (b) The flight recorder shall record, by means of flight data or images, information that is sufficient to determine the flight path and aircraft speed.
- (c) The flight recorder shall be capable of retaining the flight data and the images recorded during at least the preceding 5 hours.
- (d) The flight recorder shall automatically start to record prior to the aeroplane being capable of moving under its own power and shall stop automatically after the aeroplane is no longer capable of moving under its own power.
- (e) If the flight recorder records images or audio of the flight crew compartment, then a function shall be provided which can be operated by the pilot-in-command and which modifies image and audio recordings made before the operation of that function, so that those recordings cannot be retrieved using normal replay or copying techniques.

(z) in point SPO.IDE.A.160, point (e) is replaced by the following:

2019/1384

- (e) The seat belt with upper torso restraint system required under point (d) shall have:
 - (1) a single point release;
 - (2) on flight crew members seats and on any seat alongside a pilot's seat, either of the following:
 - (i) two shoulder straps and a seat belt that may be used independently;
 - (ii) a diagonal shoulder strap and a seat belt that may be used independently for the following aeroplanes:
 - (A) aeroplanes with an MCTOM of 5 700 kg or less and with an MOPSC of nine or less that are compliant with the emergency landing dynamic conditions defined in the applicable certification specification;
 - (B) aeroplanes with an MCTOM of 5 700 kg or less and with an MOPSC of nine or less that are not compliant with the emergency landing dynamic conditions defined in the applicable certification specification and having an individual CofA first issued before 25 August 2016.

(aa) in point SPO.IDE.A.180, point (a) heading is replaced by the following:

2018/1975

- (a) Aeroplanes, except ELA1 aeroplanes, shall be equipped with at least one hand fire extinguisher:

(bb) in point SPO.IDE.A.220, the following point (e) is added:

2019/1384

- (e) Aeroplanes shall be equipped with surveillance equipment in accordance with the applicable airspace requirements.

(cc) point SPO.IDE.H.100 is amended as follows:

2019/1384

(i) in point (b), point (7) is inserted by the following:

- (7) a simple PCDS used by a task specialist as a restraint device.

(ii) point (c) is replaced by the following:

- (c) Instruments, equipment or accessories not required under this Annex (Part-SPO), as well as any other equipment that is not required under this Regulation, but carried on a flight, shall comply with the following requirements:
 - (1) the information provided by those instruments, equipment or accessories shall not be used by the flight crew members to comply with Airworthiness requirements or points SPO.IDE.H.215 and SPO.IDE.H.220 of this Annex;
 - (2) the instruments, equipment or accessories shall not affect the airworthiness of the helicopter, even in the case of failures or malfunction.

(dd) point SPO.IDE.H.105 is replaced by the following:

2019/1384

SPO.IDE.H.105 Minimum equipment for flight

A flight shall not be commenced when any of the helicopter's instruments, items of equipment or functions required for the intended flight is inoperative or missing, unless either of the following conditions is fulfilled:

- (a) the helicopter is operated in accordance with the minimum equipment list (MEL);
- (b) for complex motor-powered helicopters, and for any helicopter used in commercial operations, the operator is approved by the competent authority to operate the helicopter within the constraints of the master minimum equipment list (MMEL) in accordance with point ORO.MLR.105(j) of Annex III;
- (c) the helicopter is subject to a permit to fly issued in accordance with the applicable airworthiness requirements.

(ee) point SPO.IDE.H.120 is amended as follows:

2019/1384

(i) in point (a), point (3) is replaced by the following:

(3) barometric altitude,

(ii) in point (d), point (1) is replaced by the following:

(1) barometric altitude,

(ff) point SPO.IDE.H.125 is amended as follows:

2019/1384

(i) in point (a), point (3) is replaced by the following:

(3) barometric altitude,

(ii) in point (c), point (1) is replaced by the following:

(1) barometric altitude,

(gg) the following point SPO.IDE.H.146 is inserted:

2019/1387

SPO.IDE.H.146 Lightweight flight recorder

- (a) Turbine-engined helicopters with an MCTOM of 2 250 kg or more shall be equipped with a flight recorder if all the following conditions are met:
 - (1) they are within the scope of point SPO.IDE.H.145(a);
 - (2) they are used for commercial operations;
 - (3) they are first issued with an individual CofA on or after 5 September 2022.
- (b) The flight recorder shall record, by means of flight data or images, information that is sufficient to determine the flight path and aircraft speed.
- (c) The flight recorder shall be capable of retaining the flight data and the images recorded during at least the preceding 5 hours.

- (d) The flight recorder shall automatically start to record prior to the helicopter being capable of moving under its own power and shall stop automatically after the helicopter is no longer capable of moving under its own power.
- (e) If the flight recorder records images or audio of the flight crew compartment, then a function shall be provided which can be operated by the pilot-in-command and which modifies image and audio recordings made before the operation of that function, so that those recordings cannot be retrieved using normal replay or copying techniques.

(hh) in point SPO.IDE.H.220, the following point (e) is added:

2019/1384

- (e) Helicopters shall be equipped with surveillance equipment in accordance with the applicable airspace requirements.

(ii) in Subpart D, Section 3 and 4 is deleted.

2018/394 & 2018/1975

(jj) point SPO.SPEC.HESLO.100 is replaced by the following:

2019/1384

SPO.SPEC.HESLO.100 Standard operating procedures

The standard operating procedures for HESLO shall specify:

- (a) the equipment to be carried, including its operating limitations and appropriate entries in the MEL, as applicable;
- (b) crew composition and experience requirements of crew members and task specialists;
- (c) the relevant theoretical and practical training for crew members to perform their tasks, the relevant training for task specialists to perform their tasks, and the qualification and nomination of persons providing such training to crew members and task specialists;
- (d) responsibilities and duties of crew members and task specialists;
- (e) helicopter performance criteria necessary to be met to conduct HESLO operations;
- (f) normal, abnormal and emergency procedures.

(kk) point SPO.SPEC.HEC.100 is replaced by the following:

2019/1384

SPO.SPEC.HEC.100 Standard operating procedures

The standard operating procedures for HEC shall specify:

- (a) the equipment to be carried, including its operating limitations and appropriate entries in the MEL, as applicable;
- (b) crew composition and experience requirements of crew members and task specialists;

- (c) the relevant theoretical and practical training for crew members to perform their tasks, the relevant training for task specialists to perform their tasks, and the qualification and nomination of persons providing such training to crew members and task specialists;
- (d) responsibilities and duties of crew members and task specialists;
- (e) helicopter performance criteria necessary to be met to conduct HEC operations;
- (f) normal, abnormal and emergency procedures.

(II) in point SPO.SPEC.HEC.105, point (b) is replaced by the following: **2019/1384**

- (b) The installation of all hoist and cargo hook equipment other than a simple PCDS, and any subsequent modifications shall have an airworthiness approval appropriate to the intended function.

(mm) point SPO.SPEC.PAR.120 is deleted. **2018/394**

(nn) point SPO.SPEC.PAR.125 is replaced by the following: **2019/1384**

SPO.SPEC.PAR.125 Releasing of dangerous goods

Notwithstanding point SPO.GEN.155, parachutists may exit the aircraft for the purpose of parachute display over congested areas of cities, towns or settlements or over an open-air assembly of persons whilst carrying smoke trail devices, provided those are manufactured for that purpose.

(oo) in Subpart E, the following Section 5 is added: **2019/1384 & 2019/1387**

SECTION 5 - Maintenance check flights (MCFs)

SPO.SPEC.MCF.100 Levels of maintenance check flight

Before conducting a maintenance check flight, the operator shall determine the applicable level of the maintenance check flight as follows:

- (a) “Level A” maintenance check flight for a flight where the use of abnormal or emergency procedures, as defined in the aircraft flight manual, is expected, or where a flight is required to prove the functioning of a backup system or other safety devices;’.
- (b) a “Level B” maintenance check flight for any maintenance check flights other than a “Level A” maintenance check flight.

SPO.SPEC.MCF.105 Flight programme for a “Level A” maintenance check flight

Before conducting a Level A maintenance check flight with a complex motor-powered aircraft, the operator shall develop and document a flight programme.

SPO.SPEC.MCF.110 Maintenance check flight manual for a “Level A” maintenance check flight

The operator conducting a “Level A” maintenance check flight shall:

- (a) describe those operations and associated procedures in the operations manual referred to in point ORO.MLR.100 of Annex III or in a dedicated maintenance check flight manual;
- (b) update the manual when necessary;
- (c) inform all affected personnel of the manual and of its changes that are relevant to their duties;
- (d) provide the competent authority with the manual and its updates.

SPO.SPEC.MCF.115 Flight crew requirements for a “Level A” maintenance check flight

- (a) The operator shall select adequate flight crew members considering the aircraft complexity and the level of the maintenance check flight. When selecting flight crew members for a “Level A” maintenance check flight with a complex motor-powered aircraft, the operator shall ensure all of the following:
 - (1) that the pilot-in-command has followed a training course in accordance with point SPO.SPEC.MCF.120; if the training has been conducted in a simulator, the pilot shall conduct at least one “Level A” maintenance check flight as a pilot monitoring or as an observer before flying as a pilot-in-command on a “Level A” maintenance check flight;
 - (2) that the pilot-in-command has completed on aircraft of the same aircraft category as the aircraft to be flown a minimum of 1 000 flight hours, of which at least 400 hours as a pilot-in-command in a complex motor-powered aircraft and at least 50 hours on the particular aircraft type.

Notwithstanding point (2) of the first paragraph, if the operator introduces a new aircraft type to its operation and has assessed the pilot's qualifications in accordance with an established assessment procedure, the operator may select a pilot having less than 50 hours experience on the particular aircraft type.

- (b) Pilots holding a flight test rating in accordance with Regulation MCAR Aircrew shall be given full credit for the training course stipulated in point (a)(1) of this point, provided that the pilots holding a flight test rating have obtained the required initial and recurrent crew resource management training in accordance with points ORO.FC.115 and ORO.FC.215 of Annex III.
- (c) A pilot-in-command shall not perform a “Level A” maintenance check flight on a complex motor-powered aircraft unless the pilot-in-command has carried out a “Level A” maintenance check flight within the preceding 36 months.
- (d) Recency as pilot-in-command on a “Level A” maintenance check flight is regained after performing a “Level A” maintenance check flight as an observer or a pilot monitoring, or after acting as the pilot-in-command in a “Level A” maintenance check flight in a simulator.

SPO.SPEC.MCF.120 Flight crew training course for Level A maintenance check flights

- (a) The training course required for a “Level A” maintenance check flight shall be conducted in accordance with a detailed syllabus.

- (b) The flight instruction for the training course shall be conducted in either of the following ways:
 - (1) in a simulator which, for training purposes, adequately reflects the reaction of the aircraft and its systems to the checks being conducted;
 - (2) during a flight in an aircraft demonstrating maintenance check flight techniques.
- (c) A training course followed on one aircraft category is considered valid for all aircraft types of that category.
- (d) When considering the aircraft used for the training and the aircraft to be flown during the maintenance check flight, the operator shall specify whether differences or familiarisation training is required and describe the contents of such a training.

SPO.SPEC.MCF.125 Crew composition and persons on board

- (a) The operator shall establish procedures to identify the need for additional task specialists.
- (b) For a “Level A” maintenance check flight, the operator shall define in its manual the policy for other persons on board.
- (c) For a “Level A” maintenance check flight, a task specialist or additional pilot is required in the flight crew compartment to assist the flight crew members, unless the aircraft configuration does not permit it or the operator can justify, considering the flight crew members workload based on the flight programme, that the flight crew members does not require additional assistance.

SPO.SPEC.MCF.130 Simulated abnormal or emergency procedures in flight

By way of derogation from point SPO.OP.185 a task specialist may be on board a “Level A” maintenance check flight if the task specialist is required to meet the intention of the flight and has been identified in the flight programme.

SPO.SPEC.MCF.135 Flight time limitations and rest requirements

When assigning crew members to maintenance check flights, operators subject to Subpart FTL of Annex III (Part-ORO) shall apply the provisions of that Subpart.

SPO.SPEC.MCF.140 Systems and equipment

When a maintenance check flight is intended to check the proper functioning of a system or equipment, that system or equipment shall be identified as potentially unreliable and appropriate mitigation measures shall be agreed prior to the flight in order to minimise risks to flight safety.

SPO.SPEC.MCF.145 Cockpit voice recorder, flight data recorder and data link recording requirements for AOC holders

For a maintenance check flight of an aircraft otherwise used for CAT operations, the provisions for cockpit voice recorders (CVR), flight data recorders (FDR) and data link recorders (DLR) of Annex IV (Part-CAT) shall continue to apply.