

## Annex IX to ED Decision 2019/019/R

### 'AMC and GM to Part-SPO — Initial issue, Amendment 12'

The Annex to Decision 2014/018/R of 24 April 2014 is hereby amended as follows:

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

- deleted text is marked with ~~strike through~~;
- new or amended text is highlighted in blue;
- an ellipsis '(...)' indicates that the rest of the text is unchanged.

#### **GM1 SPO.GEN.100 Competent authority**

##### **DETERMINING THE PLACE WHERE AN OPERATOR IS RESIDING**

For the purpose of Regulation (EU) No 965/2012, the concept of 'place where the operator is residing' is mainly addressed to a natural person.

The place where the operator resides is the place where the operator complies with his or her tax obligations.

Several criteria can be used to help determining a person's place of residence. These include, for example:

- (a) the duration of a person's presence on the territory of the countries concerned;
- (b) the person's family status and ties;
- (c) the person's housing situation and how permanent it is;
- (d) the place where the person pursues professional or non-profit activities;
- (e) the characteristics of the person's professional activity; and
- (f) the Member State where the person resides for taxation purposes.

#### **GM1 SPO.OP.205 Airborne collision avoidance system (ACAS)**

##### **GENERAL**

- (a) The ACAS operational procedures and training programmes established by the operator should take into account this Guidance Material. It incorporates advice contained in:
  - (1) ICAO Annex 10, Volume IV;
  - (2) ICAO Doc 8168 (PANS-OPS), Volume III~~1~~; and
  - (3) ICAO PANS-ATM~~;~~ and

~~(4) — ICAO guidance material ‘ACAS Performance-Based Training Objectives’ (published under Attachment E of State Letter AN 7/1.3.7.2-97/77).~~

(...)

**AMC1 SPO.IDE.A.120(a)(3) & SPO.IDE.A.125(a)(3) Operations under VFR & operations under IFR — flight and navigational instruments and associated equipment**

**CALIBRATION OF THE MEANS OF MEASURING AND DISPLAYING PRESSURE ALTITUDE**

The instrument measuring and displaying ~~pressure~~ **barometric** altitude should be of a sensitive type calibrated in feet (ft), with a sub-scale setting, calibrated in hectopascals/millibars, adjustable for any barometric pressure likely to be set during flight.

**GM1 SPO.IDE.H.150 Data link recording**

**GENERAL**

(...)

- (b) The definitions of the applications type in Table 1 of ~~AMC1~~ **AMC2** SPO.IDE.H.150 are described in Table 1 below.

(...)

**SUBPART E: SPECIFIC REQUIREMENTS**

(...)

**Section 5 — Maintenance check flights (MCFs)**

**GM1 SPO.SPEC.MCF.105 Flight programme**

**DOCUMENTATION WHEN DEVELOPING A FLIGHT PROGRAMME**

When developing a flight programme, the operator should consider the applicable documentation available from the type certificate holder or other valid documentation such as the Flight Safety Foundation Functional Check Flight Compendium.

**AMC1 SPO.SPEC.MCF.110 Maintenance check flight manual**

**CONTENTS OF THE MAINTENANCE CHECK FLIGHT MANUAL**

The items to be covered in the manual for a ‘Level A’ maintenance check flight (MCF) with complex motor-powered aircraft should be as follows:

(a) General considerations:

- (1) conditions requiring a MCF (e.g. heavy maintenance);
- (2) appropriate maintenance release before the MCF;
- (3) flight authorisation by the operator;
- (4) process to develop a flight programme and procedures;
- (5) relevant procedures to document MCFs in the aircraft records; and
- (6) policy for the determination of a 'Level A' or 'Level B' MCF.

(b) Aircraft status:

- (1) requirements for the status of the aircraft prior to departure (e.g. MEL, CDL and multiple defects) for the purpose of conducting an MCF;
- (2) fuel loading, if applicable;
- (3) mass and balance, if applicable; and
- (4) specific test and safety equipment.

(c) Crew selection and other persons on board:

- (1) qualifications;
- (2) experience and recency;
- (3) training; and
- (4) persons on board.

(d) Briefings:

- (1) briefing participants;
- (2) specific pre-flight briefing topics:
  - (i) aircraft status,
  - (ii) summary of maintenance,
  - (iii) flight programme, specific procedures and limitations,
  - (iv) crew members' responsibilities and coordination, and
  - (v) documents on board;
- (3) information to ATC; and
- (4) post-flight briefing.

(e) Contents of the flight programme and procedures: the flight programme should be thoroughly developed by the operator using applicable current data. It should contain the checks to be performed in-flight and may include 'read and do' checklists where practicable. The following items should be included in the overall procedure:

- (1) in-flight briefings;
- (2) limits (not to be exceeded);

- (3) specific entry conditions;
- (4) task-sharing and call-outs;
- (5) potential risks and contingency plans;
- (6) information to additional crew; and
- (7) adequate available airspace and coordination with ATC.

(f) External conditions:

- (1) weather and light conditions;
- (2) terrain;
- (3) ATC, airspace; and
- (4) airport (runway, equipment)/operating site.

(g) Documentation:

- (1) specific documentation on board;
- (2) in-flight recordings;
- (3) results of the MCF and related data; and
- (4) accurate recording of the required maintenance actions after the flight.

**GM1 SPO.SPEC.MCF.115 and SPO.SPEC.MCF.120 Flight crew requirements for a 'Level A' maintenance check flight and Flight crew training course for Level A maintenance check flights**  
DEFINITION OF AIRCRAFT CATEGORY

In respect of the term 'aircraft category' used in the context of point (a) of SPO.SPEC.MCF.115 and point (c) of SPO.SPEC.MCF.120, it should be understood as 'category of aircraft' as defined in Commission Regulation (EU) No 1178/2011 (the Aircrew Regulation).

**AMC1 SPO.SPEC.MCF.120 Flight crew training course for Level A maintenance check flights**  
COURSE CONSIDERATIONS

- (a) The training course stipulated in point (a) of SPO.SPEC.MCF.120 should comprise ground training followed by a demonstration in a simulator or aircraft of the techniques for the checks in flight and failure conditions. In a demonstration performed in an aircraft, the trainer should not simulate a failure condition that could induce a safety risk.
- (b) The ground training should cover the specified training syllabus (see AMC2 SPO.SPEC.MCF.120).
- (c) The flight demonstration should include the techniques for the most significant checks covered in the ground training. As part of this demonstration, the pilots under training should be given the opportunity to conduct checks themselves under supervision.
- (d) The ground training and flight demonstration should be provided by experienced flight crew with test or MCF experience. Flight demonstrations should be instructed by any of the following persons:
  - (1) a type rating instructor currently authorised by the operator to conduct MCFs; or

- (2) a pilot assigned by an aircraft manufacturer and experienced in conducting pre-delivery check flights; or
- (3) a pilot holding a flight test rating.

(e) Upon successful completion of the training, a record should be kept and a training certificate issued to the trainee.

#### **AMC2 SPO.SPEC.MCF.120 Flight crew training course for Level A maintenance check flights** COURSE SYLLABUS

In the case of aeroplanes and helicopters, the training course syllabus should include the following subjects:

- (a) Legal aspects: regulations concerning MCFs.
- (b) Organisation of MCFs: crew composition, persons on board, definition of tasks and responsibilities, briefing requirements for all participants, decision-making, ATC, development of a flight programme.
- (c) Environmental conditions: weather and light requirements for all flight phases.
- (d) Flight preparation: aircraft status, weight and balance, flight profile, airfield limitations, list of checks.
- (e) Equipment and instrumentation: on-board access to various parameters.
- (f) Organisation on board: CRM, crew coordination and response to emergency situations.
- (g) Ground checks and engine runs: review of checks and associated techniques.
- (h) Taxi and rejected take-off: specifications and techniques.
- (i) Techniques for checks of various systems:
  - (1) **aeroplanes:** flight controls, high-speed and low-speed checks, autopilot and autothrottle, depressurisation, hydraulic, electricity, air conditioning, APU, fuel, anti-icing, navigation, landing gear, engine parameters and relight, air data systems.
  - (2) **helicopters:** flight controls, engine power topping, track and balance, high-wind start, autopilot, performance measurement, hydraulic, electricity, air conditioning, APU, fuel, anti-icing, navigation, landing gear, engine checks and relight, autorotation, air data systems.
- (j) Review of failure cases specific to these checks.
- (k) Post-flight analysis.

#### **GM1 SPO.SPEC.MCF.125 Crew composition and persons on board** TASK SPECIALIST'S ASSIGNED DUTIES, EQUIPMENT AND TRAINING

- (a) The operator should ensure that the task specialist is trained and briefed as necessary to assist the flight crew, including performing functions such as but not limited to:
  - (1) assistance on ground for flight preparation;
  - (2) reading of a MCF checklist; and

- (3) monitoring and recording of relevant aircraft or systems' parameters.
- (b) If a task specialist's assigned duties are not directly related to the flight operation but to the MCF (e.g. reporting from the cabin on a certain vibration or noise), the required training and briefing should be adequate to this function.
- (c) The task specialist should be trained as necessary in crew coordination procedures and emergency procedures and be appropriately equipped.
- (d) Only personnel (crew and task specialists) essential for the completion of the flight should be on board.