

European Aviation Safety Agency

Draft Commission Regulation (EU) .../... laying down detailed rules for the operation of sailplanes pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council

Draft Acceptable Means of Compliance (AMC) and Guidance Material (GM) for the Operation of Sailplanes

Disclaimer

This document, courtesy of EASA, contains the latest draft AMC and GM to the draft Regulation on the operation of sailplanes. It is intended to provide information to stakeholders following the publication of the related EASA Opinion No 07/2017 on the revision of the operational rules for sailplanes (RMT.0698).

EASA does not assume any liability for its contents.

AMC/GM to draft Commission Regulation (EU) .../...

GM1 to Article 3(2)(a);(b) Air operations

DIRECT COST

'Direct cost' means the cost directly incurred in relation to a flight, e.g. fuel or other energy costs of the powered sailplane and the retrieve vehicle directly incurred in relation to a flight, take-off and landing fees, and rental fee for a sailplane. There is no element of profit or salary to the pilot.

GM2 to Article 3(2)(a);(b) Air operations

ANNUAL COST

'Annual cost' means the cost of the sailplane over a period of 1 calendar year. There is no element of profit or salary to the pilot.

GM1 to Article 3(2)(c) Air operations

ORGANISATION CREATED FOR THE PURPOSES OF PROMOTING AERIAL SPORT OR LEISURE AVIATION

An 'organisation created for the purposes of promoting aerial sport or leisure aviation' means a non-profit organisation established under applicable national law for the sole purpose of gathering persons sharing the same interest in general aviation to fly for pleasure or to conduct parachute jumping. The organisation should have sailplanes available.

GM2 to Article 3(2)(c) Air operations

MARGINAL ACTIVITY

The term 'marginal activity' should be understood as representing a very minor part of the overall activity of an organisation, mainly for the purpose of promoting itself or attracting new students or members. An organisation intending to offer such flights as regular business activity is not considered to meet the condition of marginal activity. Also, flights organised with the sole intent to generate income for the organisation are not considered to be a marginal activity.

AMC/GM to Annex II (PART-SAO)

SUBPART GEN

GENERAL REQUIREMENTS

GM1 SAO.GEN.110(b)(2) Demonstration of compliance

ALTERNATIVE MEANS OF COMPLIANCE

An alternative means of compliance (AltMoC):

- (a) ensures full compliance with the implementing rule;
- (b) does not need to be approved by the competent authority; and
- (c) needs, in accordance with point (c) of point SAO.DEC.100, to be notified to the competent authority, when commercial operations requiring a declaration are conducted.

GM1 SAO.GEN.130(a) Responsibilities of the pilot-in-command

GENERAL

In accordance with the essential requirements for air operations, which are laid down in Annex IV to Regulation (EC) No 216/2008¹, the pilot-in-command is responsible for the operation and safety of the sailplane and for the safety of the passenger on board. This includes the following:

- (a) the safety of the passenger on board, as soon as he or she arrives on board until he or she leaves the sailplane at the end of the flight; and
- (b) the operation and safety of the sailplane from the moment the launch procedure is started until the sailplane comes to rest at the end of the flight.

AMC1 SAO.GEN.130(c) Responsibilities of the pilot-in-command

CHECKLISTS

- (a) The pilot-in-command should use the latest checklists provided by the manufacturer or the operator.
- (b) If checks conducted before take-off are suspended at any point, the pilot-in-command should restart them from a safe point prior to the interruption.

AMC1 SAO.GEN.130(f) Responsibilities of the pilot-in-command

DIVING AND BLOOD DONATION

The pilot-in-command should not perform duties on a sailplane until a reasonable time period has elapsed after deep water diving or following blood donation.

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

GM1 SAO.GEN.130(f) Responsibilities of the pilot-in-command

DIVING AND BLOOD DONATION — ELAPSED TIME BEFORE RETURNING TO FLYING DUTY

24 hours is a suitable minimum length of time to allow after normal recreational (sport) diving or normal blood donation before a flight. This is considered when determining a reasonable time period.

AMC1 SAO.GEN.130(f) & SAO.GEN.135(b) Responsibilities of the pilot-in-command & responsibilities of crew members

ALCOHOL CONSUMPTION

The pilot-in-command and any other crew member should observe the following restrictions:

- (a) no alcohol should be consumed less than 8 hours prior to a flight;
- (b) the blood alcohol level should not exceed the lower of the national requirements or 20 milligrammes of alcohol in 100 millilitres of blood at the start of a flight; and
- (c) no alcohol should be consumed during the flight.

GM1 SAO.GEN.130(f) & SAO.GEN.135(b) Responsibilities of the pilot-in-command & responsibilities of crew members

PART-MED

Information on the effects of medication, psychoactive substances and other treatments can be found in Annex IV (Part-MED) to Regulation (EU) No 1178/2011².

GM1 SAO.GEN.130(m) Responsibilities of the pilot-in-command

RECORDING UTILISATION DATA

Where a sailplane conducts a series of flights of short duration and is operated by the same pilot-in-command, the utilisation data for the series of flights may be recorded in the aircraft technical log or journey log as a single entry.

AMC1 SAO.GEN.130(p) Responsibilities of the pilot-in-command

REPORTING OF HAZARDOUS FLIGHT CONDITIONS

- (a) These reports should include any detail which may be pertinent to the safety of other aircraft.
- (b) When unexpected meteorological conditions affecting other aircraft are encountered that, in the opinion of the pilot-in-command, may affect the safety or the efficiency of other aircraft operations, he or she should advise the appropriate air traffic services (ATS) unit as soon as practicable.

GM1 SAO.GEN.135 Responsibilities of crew members

DESIGNATION OF A PERSON AS CREW MEMBER

- (a) The pilot-in-command or the operator may designate any person as a crew member, provided that:
 - (1) the role, according to the reasonable expectation of the pilot-in-command or the operator, will enhance the safety of the flight or achieve an operational objective of the flight;

² Commission Regulation (EU) No 1178/2011 of 3 November 2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 311, 25.11.2011, p. 1).

- (2) the person, according to the reasonable expectation of the pilot-in-command or the operator, is capable of fulfilling the role;
 - (3) the person has been briefed on the role as a crew member and informed that he or she is crew, not a passenger; and
 - (4) the person agrees to the role as crew member.
- (b) A crew member is not considered to be a passenger.
- (c) A crew member may be required, by specific provisions of this Regulation and other implementing rules, to hold licences, ratings or other personnel certificates to fulfil certain roles such as instructor or examiner in certain circumstances.

GM1 SAO.GEN.145 Portable electronic devices

CATEGORIES OF PORTABLE ELECTRONIC DEVICES

Portable electronic devices (PEDs) are any kind of electronic device, typically but not limited to consumer electronics, brought on board the sailplane by any person and that are not included in the approved sailplane configuration. All equipment that is able to consume electrical energy falls under this definition. The electrical energy can be provided from internal sources as batteries (rechargeable or non-rechargeable) or the devices may also be connected to specific sailplane power sources.

PEDs include the following two categories:

- (a) Non-intentional transmitters can non-intentionally radiate radio frequency (RF) transmissions, sometimes referred to as spurious emissions. This category includes but is not limited to calculators, cameras, radio receivers, audio and video players, electronic games and toys; when these devices are not equipped with a transmitting function.
- (b) Intentional transmitters (T-PEDs) radiate RF transmissions on specific frequencies as part of their intended function. In addition, they may radiate non-intentional transmissions like any PED. T-PEDs are transmitting devices such as RF-based remote control equipment, which may include some toys, two-way radios (sometimes referred to as 'private mobile radios'), mobile phones of any type, satellite phones, computers with mobile phone data connection, wireless local area network (WLAN) or Bluetooth capability. After deactivation of the transmitting capability, e.g. by activating the so-called 'flight mode' or 'flight safety mode', the T-PED remains a PED having non-intentional emissions.

GM2 SAO.GEN.145 Portable electronic devices

GENERAL

- (a) PEDs can pose a risk of interference with electronically operated sailplane systems. Those systems could range from the electronic engine control, instruments, navigation or communication equipment to any other type of avionic equipment on the sailplane. The interference can result in on-board systems malfunctioning or providing misleading information and communication disturbance. These can also lead to an increased workload for the flight crew.
- (b) Interference may be caused by transmitters being part of the PED's functionality or by unintentional transmissions from the PED. Due to the likely proximity of the PED to any electronically operated sailplane system and the generally limited shielding found in sailplanes, the risk of interference is to be considered higher than that for larger aircraft with metal airframes.

- (c) During certification of the sailplane, when qualifying the sailplane functions, consideration may only have been made of short-term exposure to a high radiating field, with an acceptable mitigating measure being a return to normal function after removal of the threat. This certification assumption may not be true when operating the transmitting PED on board the sailplane.
- (d) It has been found that compliance with the electromagnetic compatibility (EMC) Directive 2004/108/EC³ and related European standards, as indicated by the CE marking, is not sufficient to exclude the existence of interference. A well-known interference is the demodulation of the transmitted signal from GSM (global system for mobile communications) mobile phones leading to audio disturbances in other systems. Similar interferences are difficult to predict during the PED design, and protecting the sailplane's electronic systems against the full range of potential interferences is practically impossible. Therefore, not operating PEDs on board the sailplane is the safest option, especially as effects may not be identified immediately but under the most inconvenient circumstances.
- (e) Guidance to follow in case of fire caused by PEDs is provided by the International Civil Aviation Organization, 'Emergency response guidance for aircraft incidents involving dangerous goods', ICAO Doc 9481-AN/928.

GM1 SAO.GEN.150 Dangerous goods

EXAMPLES

Dangerous goods include the following:

- (a) explosives (fireworks, flares, detonators, fuses, dynamite, ammunition and materials for fireworks in general);
- (b) compressed or refrigerated liquid, or dissolved gases (aerosols, self-defence sprays, camping gas, extinguishers, cryogenic liquids, bottles with cooling gases and compressed gas cylinders in general);
- (c) flammable liquids and solids (fuel, equipment containing fuel, adhesives, solvents, paint, petrol, varnish, torches, cigarette lighters and lighter refills);
- (d) substances that emit flammable gases in contact with water;
- (e) oxidisers and organic peroxides (oxygen generators and bleaching powder); and
- (f) substances liable to spontaneous combustion (strike-anywhere matches and phosphorous).

AMC1 SAO.GEN.150(b) Dangerous goods

REASONABLE QUANTITIES

The carriage of reasonable quantities of articles and substances should be permitted regardless of whether or not such articles and substances are required to be carried or intended to be used in connection with a particular flight. The packing and loading on board should be performed, under the responsibility of the pilot-in-command, in such a way as to minimise the risks posed to crew members, passengers or the sailplane during operation.

³ Directive 2004/108/EC of the European Parliament and of the Council of 15 December 2004 on the approximation of the laws of the Member States relating to electromagnetic compatibility and repealing Directive 89/336/EEC (OJ L 390, 31.12.2004, p. 24).

AMC1 SAO.GEN.155 Documents, manuals and information to be carried

GENERAL

- (a) In case of loss or theft of documents, the operation may continue until the flight reaches the base or a place where a replacement document can be provided.
- (b) The documents, manuals and information may be available in a form other than on printed paper. An electronic storage medium should be acceptable if accessibility, usability and reliability can be assured.

GM1 SAO.GEN.155(a)(1) Documents, manuals and information to be carried

AFM OR EQUIVALENT DOCUMENT(S)

- (a) 'AFM or equivalent document(s)' means the flight manual for the sailplane or other documents containing information required for the operation of the sailplane within the terms of its certificate of airworthiness.
- (b) At least the operating limitations, normal and emergency procedures is available to the pilot during operation by providing the specific sections of the AFM or by other means (e.g. placards, quick reference cards) that effectively accomplish the purpose.

AMC1 SAO.GEN.155(a)(3) Documents, manuals and information to be carried

CURRENT AND SUITABLE AERONAUTICAL CHARTS

- (a) The aeronautical charts carried should contain data appropriate to the applicable air traffic regulations, rules of the air, flight altitudes, area, route, and nature of the operation. Due consideration should be given to the carriage of textual and graphic representations of:
 - (1) aeronautical data, including, as appropriate for the nature of the operation:
 - (i) airspace structure;
 - (ii) communication frequencies;
 - (iii) prohibited, restricted and danger areas; and
 - (iv) sites of other relevant activities that may hazard the flight; and
 - (2) topographical data, including terrain and obstacle data.
- (b) A combination of different charts and textual data may be used to provide adequate and current data.
- (c) The aeronautical data should be appropriate for the current aeronautical information regulation and control (AIRAC) cycle.
- (d) The topographical data should be reasonably recent, having regard to the nature of the planned operation.

GM1 SAO.GEN.155(a)(4) Documents, manuals and information to be carried

DOCUMENTS THAT MAY BE PERTINENT TO THE FLIGHT OR REQUIRED BY THE STATES CONCERNED WITH THE FLIGHT

- (a) Any other documents that may be pertinent to the flight or are required by the States concerned with the flight may include, for example, forms to comply with reporting requirements.
- (b) The States concerned are those of origin, overflight and destination of the flight.

GM1 SAO.GEN.155(a)(5) Documents, manuals and information to be carried

PROCEDURES AND VISUAL SIGNALS FOR USE BY INTERCEPTING AND INTERCEPTED AIRCRAFT

The procedures and the visual signals information for use by intercepting and intercepted aircraft are those contained in Regulation (EU) No 923/2012⁴ (the standardised European rules of the air (SERA)).

AMC1 SAO.GEN.155(c)(2) Documents, manuals and information to be carried

CERTIFICATE OF AIRWORTHINESS

The certificate of airworthiness should be a normal certificate of airworthiness, a restricted certificate of airworthiness or a permit to fly issued in accordance with the applicable airworthiness requirements.

GM1 SAO.GEN.155(c)(7) Documents, manuals and information to be carried

JOURNEY LOG OR EQUIVALENT

'Journey log or equivalent' means that the required information may be recorded in documentation other than a logbook, such as the operational flight plan or the sailplane technical log.

AMC1 SAO.GEN.160 Journey log

GENERAL

- (a) The journey log, or equivalent, should include the following items, where applicable:
- (1) sailplane nationality and registration;
 - (2) date;
 - (3) name of flight crew member(s);
 - (4) duty assignments of crew member(s), if applicable;
 - (5) place of departure;
 - (6) place of arrival;
 - (7) time of departure;
 - (8) time of arrival;
 - (9) hours of flight;
 - (10) nature of flight;
 - (11) incidents and observations, if any; and
 - (12) signature of the pilot-in-command.
- (b) The information or parts thereof may be recorded in a form other than on printed paper. Accessibility, usability and reliability should be assured.

⁴ Commission Implementing Regulation (EU) No 923/2012 of 26 September 2012 laying down the common rules of the air and operational provisions regarding services and procedures in air navigation and amending Implementing Regulation (EU) No 1035/2011 and Regulations (EC) No 1265/2007, (EC) No 1794/2006, (EC) No 730/2006, (EC) No 1033/2006 and (EU) No 255/2010 (OJ L 281, 13.12.2012, p. 1).

GM1 SAO.GEN.160 Journey log
SERIES OF FLIGHTS

- (a) 'Series of flights' means consecutive flights, which begin and end:
 - (1) within a 24-hour period; and
 - (2) at the same operating site or remain within a local area.
- (b) The term 'series of flights' is used to facilitate a single set of documentation.

For information only

SUBPART OP
OPERATING PROCEDURES

AMC1 SAO.OP.100 Use of aerodromes and operating sites

GENERAL

If the pilot-in-command cannot fly safely to an aerodrome or operating site, he or she may decide to conduct an outlanding.

GM1 SAO.OP.100 Use of aerodromes and operating sites

GENERAL

‘Outlanding’ means a landing at an unprepared site.

AMC1 SAO.OP.110 Passenger briefing

GENERAL

The passenger briefing should include the locations and use of safety belts and, if applicable:

- (a) emergency canopy opening;
- (b) parachute;
- (c) oxygen dispensing equipment; and
- (d) other emergency equipment provided for individual passenger use.

GM1 SAO.OP.110 Passenger briefing

GENERAL

The pilot-in-command or a person designated by the operator is carrying out the passenger briefing.

GM1 SAO.OP.120(a) Flight preparation

FACILITIES REQUIRED

Facilities include:

- (a) required communication facilities and navigation aids;
- (b) global navigation satellite system (GNSS), if applicable; and
- (c) access to airspace required for the flight.

GM1 SAO.OP.135 Meteorological conditions

SAFE LANDING OPTION

- (a) ‘Safe landing option’ means an aerodrome, operating site or an outlanding that can be reached and used safely in accordance with normal operating procedures and the applicable rules of the air. The safe landing option may be the point of departure.
- (b) In order to focus on a safe landing option, the pilot-in-command considers, among other things:
 - (1) the suitability and operating requirements of the chosen landing site;

- (2) the technical suitability of the sailplane; and
- (3) his or her experience, including outlanding training, when applicable.

GM1 SAO.OP.145 In-flight fuel or other energy management — powered sailplanes

GENERAL

‘Fuel or other energy management’ means that the pilot-in-command is aware of the fuel or other energy state of the powered sailplane. If the pilot-in-command intends continuation of the flight in pure gliding, this includes awareness of actual range with or without expected thermals or other sources of updraft.

AMC1 SAO.OP.150 Use of supplemental oxygen

GENERAL

When the pilot-in-command cannot determine how the lack of oxygen might affect the persons on board, he or she should ensure that all occupants use supplemental oxygen for any period when the pressure altitude is above 10 000 ft.

AMC1 SAO.OP.155 Sailplane specialised operations

CRITERIA FOR SAILPLANE SPECIALISED OPERATIONS

The pilot-in-command or the operator should consider the following criteria to determine whether an activity falls within the scope of sailplane specialised operations:

- (a) special equipment affecting the behaviour of the sailplane in flight is necessary to fulfil the task; or
- (b) persons leave the sailplane during flight.

AMC2 SAO.OP.155 Sailplane specialised operations

CHECKLIST — GENERAL

- (a) The checklist should take into consideration the latest technical publications and recommendations from the:
 - (1) type certification holder;
 - (2) Agency; and
 - (3) competent authority.
- (b) The use of an industry standard checklist, for example one developed by an association, should be acceptable, provided the pilot-in-command adapts it, if required, to address specific or local risks.

AMC3 SAO.OP.155 Sailplane specialised operations

CHECKLIST FOR PARACHUTE OPERATIONS

The checklist for parachute operations should contain:

- (a) normal, abnormal and emergency procedures;
- (b) relevant performance data;
- (c) required equipment;
- (d) any limitations such as maximum take-off mass and minimum landing mass; and

- (e) responsibilities and duties of the pilot-in-command and, if applicable, of any other crew member.

GM1 SAO.OP.155 Sailplane specialised operations

LIST OF OPERATIONS

- (a) Sailplane specialised operations include the following activities:
- (1) parachute operations;
 - (2) aerial advertising flights, i.e. banner towing with powered sailplanes;
 - (3) news media flights, television and movie flights; and
 - (4) flying display.
- (b) The following operations are not considered sailplane specialised operations, but normal operations:
- (1) sailplane towing;
 - (2) competition flights; and
 - (3) aerobatic flights.

GM2 SAO.OP.155 Sailplane specialised operations

CATEGORISATION OF OPERATIONS

The pilot-in-command or the operator determines whether the activity falls within the scope of a sailplane specialised operation. For this determination, the pilot-in-command or the operator applies the criteria in point AMC1 SAO.OP.155 and the activities listed in point (a) of point GM1 SAO.OP.155.

GM3 SAO.OP.155 Sailplane specialised operations

DEVELOPMENT OF CHECKLIST

In order to develop a checklist, the pilot-in-command or the operator takes into account at least the following items:

- (a) nature and complexity of the activity:
- (1) the nature of the flight and risk exposure;
 - (2) the complexity of the activity taking into account the necessary pilot skills and level of experience, ground support, safety, and individual protective equipment;
 - (3) the operational environment and geographical area; and
 - (4) the result of the risk assessment and evaluation;
- (b) sailplane and equipment:
All equipment required for the activity should be listed;
- (c) crew member(s):
- (1) crew composition;
 - (2) duties of the crew member(s);
 - (3) minimum crew experience and training provisions; and
 - (4) recency provisions;

- (d) normal, abnormal and emergency procedures:
 - (1) operating procedures for the flight crew; and
 - (2) ground procedures for the crew member(s); and
- (e) records:

It should be determined which records specific to the flight(s) are to be kept, such as task details, sailplane registration, pilot-in-command, flight times, weather and any remarks, including a record of occurrences affecting flight safety or the safety of persons or property on the ground.

For information only

SUBPART IDE

INSTRUMENTS, DATA AND EQUIPMENT

GM1 SAO.IDE.100 Instruments and equipment — general

INSTRUMENTS AND EQUIPMENT NOT REQUIRED

- (a) Non-required instruments and equipment do not need to be approved in accordance with airworthiness requirements. However, their installation needs to be approved in accordance with these requirements, as part of which the instrument or equipment is accepted for installation on a non-hazard basis.
- (b) The failure of additional, non-installed instruments or equipment not required by this Annex or by the applicable airworthiness requirements or any applicable airspace requirements should not adversely affect the airworthiness or the safe operation of the sailplane. Examples may be PEDs carried by a crew member or a passenger.

AMC1 SAO.IDE.105 Flight and navigational instruments

INTEGRATED INSTRUMENTS

- (a) Individual equipment requirements may be met by combinations of instruments or by integrated flight systems or by a combination of parameters on electronic displays. The information so available to each required pilot should not be less than that required in the applicable operational requirements, and the equivalent safety of the installation should be approved during type certification of the sailplane for the intended type of operation.
- (b) The means of measuring and indicating turn and slip and sailplane attitude may be met by combinations of instruments, provided that the safeguards against total failure, inherent in the three separate instruments, are retained.

AMC1 SAO.IDE.105(a)(1) Flight and navigational instruments

MEANS OF MEASURING AND DISPLAYING THE TIME

A means of measuring and displaying the time in hours and minutes may be a wrist watch capable of the same functions.

AMC1 SAO.IDE.105(a)(2) Flight and navigational instruments

CALIBRATION OF THE MEANS FOR MEASURING AND DISPLAYING PRESSURE ALTITUDE

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

AMC1 SAO.IDE.105(a)(3) Flight and navigational instruments

CALIBRATION OF THE INSTRUMENT INDICATING AIRSPEED

- (a) The instrument indicating airspeed should be calibrated in kilometres per hour (kph).
- (b) Calibration in knots (kt) or in miles per hour (mph) is also acceptable.

AMC1 SAO.IDE.105(a)(4);(b)(2) Flight and navigational instruments
MEANS OF MEASURING AND DISPLAYING MAGNETIC HEADING

The means of measuring and displaying magnetic direction should be a magnetic compass or equivalent.

GM1 SAO.IDE.105(b) Flight and navigational instruments

CONDITIONS WHERE THE SAILPLANE CANNOT BE MAINTAINED IN A DESIRED ATTITUDE WITHOUT REFERENCE TO ONE OR MORE ADDITIONAL INSTRUMENTS

Sailplanes operating in conditions where the sailplane cannot be maintained in a desired attitude without reference to one or more additional instruments means a condition where the sailplane is still operating under VFR (under visual meteorological conditions (VMC)), though where there is no external reference such as the natural horizon or a coastline, that would allow the attitude to be maintained. Such conditions may occur over water, in a desert or in snow-covered areas where the colour of the surface cannot be distinguished from the colour of the sky and therefore no external reference is available. Cloud flying is not considered to be one of these conditions.

AMC1 SAO.IDE.105(b)(1) Flight and navigational instruments

SLIP INDICATION

The means of measuring and displaying slip may be a yaw string for operations under VFR.

AMC1 SAO.IDE.120 Life-saving and signalling equipment — flights over water

RISK ASSESSMENT

In order to determine the risk, the pilot-in-command should take the following operating environment and conditions into account:

- (a) water state;
- (b) water and air temperatures;
- (c) the distance from land suitable for making an emergency landing; and
- (d) the availability of search and rescue facilities.

AMC2 SAO.IDE.120 Life-saving and signalling equipment — flights over water

SIGNALLING AND LIFE-SAVING EQUIPMENT

Based on the risk assessment, the pilot-in-command should determine the carriage of:

- (a) a life jacket or equivalent individual flotation device for each person on board that should:
 - (1) be worn or stowed in a position that is readily accessible from the seat of the person for whose use it is provided; and
 - (2) be equipped with a means of electric illumination for the purpose of facilitating the location of persons;
- (b) an emergency locator transmitter (ELT) or a personal locator beacon (PLB), carried by the pilot-in-command, any other crew member or a passenger, capable of transmitting simultaneously at 121.5 and 406 MHz; and
- (c) signalling equipment for making distress signals.

AMC3 SAO.IDE.120 Life-saving and signalling equipment — flights over water
BRIEFING ON PLB USE

When a passenger carries a PLB, he or she should be briefed on its characteristics and use by the pilot-in-command or a person designated by the operator before the flight.

AMC4 SAO.IDE.120 Life-saving and signalling equipment — flights over water
ELT AND PLB REGISTRATION AND OPERATION PROVISIONS

- (a) Any ELT and PLB carried should be registered with the national agency responsible for initiating search and rescue, or another nominated agency.
- (b) Any ELT carried should operate in accordance with the relevant provisions of Volume III of ICAO Annex 10 to the Chicago Convention, 'Aeronautical telecommunications'.

GM1 SAO.IDE.120 Life-saving and signalling equipment — flights over water
TERMINOLOGY

- (a) An ELT is a generic term describing equipment that broadcasts distinctive signals on designated frequencies and, depending on application, may be activated by impact or may be manually activated.
- (b) A PLB is an emergency beacon, other than an ELT, that broadcasts distinctive signals at designated frequencies, is stand-alone, portable, and is manually activated by the survivors.

AMC1 SAO.IDE.125 Life-saving and signalling equipment — search and rescue difficulties
GENERAL

Sailplanes operated across land areas in which search and rescue would be especially difficult should be equipped with the following:

- (a) at least one ELT or a PLB;
- (b) signalling equipment for making distress signals; and
- (c) additional survival equipment for the route to be flown taking account of the number of persons on board.

GM1 SAO.IDE.125 Life-saving and signalling equipment — search and rescue difficulties
AREAS IN WHICH SEARCH AND RESCUE WOULD BE ESPECIALLY DIFFICULT

The phrase 'areas in which search and rescue would be especially difficult' means:

- (a) areas so designated by the authority responsible for managing search and rescue; or
- (b) areas that are largely uninhabited and where the authority referred to in (a):
 - (1) has not published any information to confirm whether search and rescue would be or would not be especially difficult; and
 - (2) does not, as a matter of policy, designate areas as being especially difficult for search and rescue.

GM2 SAO.IDE.125 Life-saving and signalling equipment — search and rescue difficulties
SIGNALS

The signals for making distress signals are described in Regulation (EU) No 923/2012.

AMC1 SAO.IDE.130 Radio communication equipment

GENERAL

When radio communication equipment is required, it should:

- (a) be capable of conducting two-way communication with those aeronautical stations or those frequencies to meet airspace requirements; and
- (b) provide for communication on the aeronautical emergency frequency 121.5 MHz.

AMC1 SAO.IDE.135 Transponder

GENERAL

- (a) The secondary surveillance radar (SSR) transponders of sailplanes being operated under European air traffic control should comply with any applicable single European sky legislation.
- (b) If the single European sky legislation is not applicable, the SSR transponders should operate in accordance with the relevant provisions of Volume IV of ICAO Annex 10 to the Chicago Convention, 'Aeronautical telecommunications'.

For information only

SUBPART DEC
DECLARATION

GM1 SAO.DEC.100 Declaration
GENERAL

The intent of the declaration is to:

- (a) have the operator acknowledge its responsibilities under the applicable safety regulations and that it holds all necessary approvals;
- (b) inform the competent authority of the existence of an operator; and
- (c) enable the competent authority to fulfil its oversight responsibilities.

AMC1 SAO.DEC.105(a) Changes to the declaration and cessation of commercial operations
CHANGES

The new declaration should be submitted before the change becomes effective, indicating the date as of which the change would apply.

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