

## Revision of the operational rules for sailplanes

OPINION NO 07/2017 - RMT.0698

#### **EXECUTIVE SUMMARY**

This Decision addresses a proportionality issue related to sailplane operations. Its specific objective is to establish simpler and proportionate acceptable means of compliance (AMC) and guidance material (GM) for air operations with sailplanes.

With the new AMC & GM, EASA proposes provisions for air operations with sailplanes which are less complex and which are proportionate to the complexity and risks of such operations.

In summary, the proposed changes are expected to maintain safety while reducing the regulatory burden especially for sailplane pilots.

Action area:	General aviation		
Affected rules:	Regulation (EU) No 965/2012 on air operations;		
	Regulation (EU) 2018/1976 on rules for the operation of sailplanes		
Affected stakeholders:	Sailplane pilots, national aviation authorities (NAAs)		
Driver:	Efficiency/proportionality	Rulemaking group:	No
Impact assessment:	Light	Rulemaking Procedure:	Accelerated







## **Table of contents**

1. About this Decision	3
2. In summary — why and what	4
2.1 Why we need to change the AMC & GM	4
2.2 What we want to achieve — objectives	
2.3 How we want to achieve it — overview of the proposals	4
3. References	9
Related regulations	9
4. Appendix	



## 1. About this Decision

The European Union Aviation Safety Agency (EASA) developed ED Decision 2019/001/R in line with Regulation (EU) 2018/1139<sup>1</sup> and the Rulemaking Procedure<sup>2</sup>.

This rulemaking activity is included in the EASA European Plan for Aviation Safety (EPAS)<sup>3</sup> under rulemaking task RMT.0698. The scope and timescales of the task were defined in the related Terms of Reference<sup>4</sup>.

The draft text of this Decision has been developed by EASA, supported by an expert group. All interested parties were consulted through a focused consultation<sup>5</sup>.

EASA reviewed the comments received during the consultation. Based on the comments received, EASA published Opinion No 07/2017<sup>6</sup> on 29 August 2017, which was addressed to the European Commission. The related Commission Implementing Regulation (EU) 2018/1976<sup>7</sup> was adopted on 14 December 2018<sup>8</sup>.

The final text of this Decision with the AMC & GM has been developed by EASA with the support of the RMT.0698 expert group<sup>9</sup> and by conducting a final focused consultation<sup>10</sup>.

The major milestones of this rulemaking activity are presented on the title page.

<sup>&</sup>lt;sup>10</sup> Written consultation of the Member States' Air Operations Technical Body (Air OPS TeB) from 26 November to 21 December 2018.



<sup>&</sup>lt;sup>1</sup> Regulation (EU) 2018/1139 of the European Parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and amending Regulations (EC) No 2111/2005, (EC) No 1008/2008, (EU) No 996/2010, (EU) No 376/2014 and Directives 2014/30/EU and 2014/53/EU of the European Parliament and of the Council, and repealing Regulations (EC) No 552/2004 and (EC) No 216/2008 of the European Parliament and of the Council and Council Regulation (EEC) No 3922/91 (OJ L 212, 22.8.2018, p. 1) (<u>https://eurlex.europa.eu/legal-content/EN/TXT/?qid=1536149403076&uri=CELEX:32018R1139</u>).

<sup>&</sup>lt;sup>2</sup> EASA is bound to follow a structured rulemaking process as required by Article 115(1) of Regulation 2018/1139. Such a process has been adopted by the EASA Management Board (MB) and is referred to as the 'Rulemaking Procedure'. See MB Decision No 18-2015 of 15 December 2015 replacing Decision 01/2012 concerning the procedure to be applied by EASA for the issuing of opinions, certification specifications and guidance material (<u>http://www.easa.europa.eu/the-agency/management-board/decisions/easa-mb-decision-18-2015-rulemaking-procedure</u>).

<sup>&</sup>lt;sup>3</sup> <u>https://www.easa.europa.eu/document-library/general-publications?publication\_type%5B%5D=2467</u>

<sup>&</sup>lt;sup>4</sup> http://www.easa.europa.eu/document-library/terms-of-reference-and-group-compositions/tor-rmt0674

<sup>&</sup>lt;sup>5</sup> 1-day public workshop on 8.12.2016.

<sup>&</sup>lt;sup>6</sup> <u>https://www.easa.europa.eu/document-library/opinions/opinion-072017</u>

<sup>&</sup>lt;sup>7</sup> Commission Implementing Regulation (EU) 2018/1976 of 14 December 2018 laying down detailed rules for the operation of sailplanes pursuant to Regulation (EU) 2018/1139 of the European Parliament and of the Council (OJ L 326, 20.12.2018, p. 64).

<sup>&</sup>lt;sup>8</sup> In a parallel process, the Commission adopted Commission Implementing Regulation (EU) 2018/1975 amending Regulation (EU) No 965/2012 as regards air operations requirement for sailplanes and electronic flight bags (OJ L 326, 20.12.2018, p. 53). With this Regulation, the rules for sailplanes are deleted from Regulation (EU) No 965/2012 (except for authority provisions specified in Annex II (Part-ARO)). EASA is covering the deletion of the associated AMC & GM in a separate Decision.

<sup>&</sup>lt;sup>9</sup> After publication of Opinion No 07/2017 on 29 August 2017, mainly dealing with the implementing rules on air operations with sailplanes, one meeting of the expert group on 15 November 2018 was dedicated especially to finalise the development of the associated AMC & GM.

## 2. In summary — why and what

#### 2.1 Why we need to change the AMC & GM

In the past, the European rules for air operations with sailplanes were laid down in Regulation (EU) No 965/2012. This Regulation did not only contain rules on sailplanes, but also the technical requirements and administrative procedures regulating air operations with aeroplanes and helicopters. In this respect, stakeholders have continuously raised the following concerns as regards the sailplane rules:

- Regulation (EU) No 965/2012 is too complex to handle. For different sailplane operations, different parts and different points within the regulation were applicable, sometimes 'hidden' and not easily identifiable.
- Many rules for sailplanes have been 'translated', e.g. even from the rules for large passenger aeroplanes. This resulted in an overregulation for sailplanes, which, compared to large passenger aeroplanes for example, are simple aircraft.
- From the way the rules were written, it was not always clear whether they are applicable to sailplanes, and when they are, to which extent (e.g. rules on the operations manual, on the minimum equipment list (MEL), task specialist, etc.).

In the context of the General Aviation (GA) Road Map<sup>11</sup>, EASA took into consideration the concerns raised by stakeholders and decided to develop simpler and proportionate rules for air operations with sailplanes. This included the following major measures:

- establishing a new regulation for sailplanes; and
- restructuring, amending and simplifying the rules, extracted from Regulation (EU) No 965/2012, to establish a simpler and proportionate regulatory framework for air operations with sailplanes.

As a result, Regulation (EU) 2018/1976, laying down detailed rules for the operation of sailplanes, has now been adopted. Subsequently, simpler and proportionate AMC & GM had to be developed.

#### 2.2 What we want to achieve — objectives

The overall objectives of the EASA system are defined in Article 1 of Regulation (EU) 2018/1139. This Decision will contribute to the achievement of the overall objectives by addressing the issues outlined in Section 2.1.

The specific objective of this Decision is to establish dedicated sailplane operations requirements that are better considering the specificities of sailplanes and are proportionate to the complexity and risks of sailplane flying.

#### 2.3 How we want to achieve it — overview of the proposals

The outcome of the consultation of the major items was discussed in Section 2.3 of Opinion No 07/2017. Thereby, however, emphasis was put on the implementing rules.

http://www.easa.europa.eu/easa-and-you/general-aviation/general-aviation-road-map and http://easa.europa.eu/system/files/dfu/European%20GA%20Safety%20Strategy.pdf



In the present document, **Table A1** in the Appendix provides information on the modifications of the AMC & GM. For Regulation (EU) 2018/1976 as well as for the new Annex II (Part-SAO), this table provides a comparison of each new AMC & GM and the previous AMC & GM to Regulation (EU) No 965/2012.

The major technical changes, compared to the previous AMC & GM to Regulation (EU) No 965/2012, are described below:

- Prescriptive vs performance-based rulemaking: The majority of the expert group members emphasised that for the sailplane community prescriptive, rulemaking may, in many cases, be a better solution, since it gives clear 'instructions', while performance-based rulemaking to some extent may be more difficult to understand and to implement.
- Transfer of previous implementing rules to AMC & GM: In several cases EASA, supported by the expert group members, decided to transfer certain provisions, which were initially laid down as implementing rules in Regulation (EU) No 965/2012, to AMC & GM. The advantages are:
  - The implementing rules are kept short and are focused on the basic requirements.
  - Addressing the more specific items in the AMC & GM means that EASA can amend these items more easily within its own remit by publishing a new Decision.

The transfer of previous implementing rules to AMC & GM has been carried out for the following points (see also Table A1):

- GM1 SAO.GEN.110(b)(2) Demonstration of compliance ALTERNATIVE MEANS OF COMPLIANCE;
- AMC1 SAO.GEN.130(f) Responsibilities of the pilot-in-command DIVING AND BLOOD DONATION
- AMC1 SAO.GEN.150(b) Dangerous goods REASONABLE QUANTITIES
- AMC1 SAO.OP.150 Use of supplemental oxygen GENERAL
- AMC2 SAO.OP.155(b) Sailplane specialised operations CHECKLIST FOR PARACHUTE OPERATIONS
- AMC2 SAO.IDE.120 Life-saving and signalling equipment flights over water SIGNALLING AND LIFE-SAVING EQUIPMENT
- AMC1 SAO.IDE.130 Radio communication equipment GENERAL
- No additional requirements for commercial operations: After a substantial discussion, EASA proposed not to introduce additional requirements for commercial operations, except for requiring a declaration (see below). This proposal is in line with the opinion of the majority of competent authorities and sailplane stakeholders, and in line with simplifications included in Regulation (EU) 2018/1139. More specifically, the main reasons are:
  - Using a risk-based approach, no indication could be identified that a commercial flight with a pilot and one passenger is riskier than the same flight if it would be conducted as a non-commercial one.



- Such additional requirements would mean an unnecessary administrative burden and overregulation.
- For sailplanes, the attractiveness of conducting commercial operations is limited, since only one passenger can be carried.
- Task specialist: The majority of the expert group members agreed with EASA that task specialists do not play an important role for specialised operations with sailplanes. Consequently, EASA decided not to introduce any implementing rules or any AMC & GM for task specialists.
- Minimum equipment list (MEL): For sailplane operations, the importance of the MEL is low, since the manufacturer does not foresee major equipment that may be temporarily inoperative. Contrary to large passenger aeroplanes for example, most of the equipment has to be operative at all times. Consequently, EASA decided not to introduce any implementing rules or any AMC & GM on the MEL.
- Sailplanes registered in another State (AMC1 SAO.GEN.110(a)): In SAO.GEN.105, it is laid down that the competent authority is, if the operator has no principal place of business, the place where the operator is established or resides. This is in line with the corresponding requirement for balloons. However, this differs from Part-NCO of Regulation (EU) No 965/2012, where the competent authority is the authority designated by the Member State where the aircraft is registered.

For sailplanes, it has to be avoided that the competent authority of a Member State is not aware of a sailplane operating in this Member State, but is registered elsewhere. Therefore, AMC, associated with SAO.GEN.110(a), has been introduced to ensure that the operator informs the authority of such operations.

- Designation of persons as crew members (GM1 SAO.GEN.135): Lately, GM has been introduced in the AMC & GM to Regulation (EU) No 965/2012 describing the designation of persons as crew members. EASA decided to add this GM also to the AMC & GM for air operations of sailplanes. The text provides guidance on what needs to be considered, when a person becomes a crew member (e.g. for ground handling).
- Dangerous goods (GM1 SAO.GEN.150 and AMC1 SAO.GEN.150(b)): Dangerous goods are not 'transported' with sailplanes. In addition, during the drafting and the subsequent consultation, it became clear that in general dangerous goods should not be 'carried' on board. Consequently, the AMC & GM on dangerous goods has been adjusted and simplified accordingly. In addition, EASA has introduced new GM, which gives examples of dangerous goods.
- Outlanding (GM1 SAO.OP.100): As regards the use of aerodromes and operating sites, the possibility of an outlanding is introduced in GM1 SAO.OP.100.
- Facilities required (GM1 SAO.OP.120(a)): For clarification, the term 'facilities required', a term used in the corresponding requirement, is described in more detail in GM1 SAO.OP.120(a).
- Safe landing option (GM1 SAO.OP.135): The term 'safe landing option' is used in SAO.OP.135.
  In the corresponding GM, namely GM1 SAO.OP.135, a description of this term and a list of items, to be considered by the pilot-in-command, is provided.



- In-flight fuel or other energy management for powered sailplanes (GM1 SAO.OP.145): In GM1 SAO.OP.145, the term 'fuel or other energy management' is described for powered sailplanes, highlighting that continuation of the flight in pure gliding includes awareness of the actual range.
- List of sailplane specialised operations (GM1 SAO.OP.155): At the beginning of the rulemaking activity, EASA identified the following sailplane operations to be considered specialised operations<sup>12</sup>, which consequently require a risk assessment and a checklist:
  - parachute operations;
  - sailplane towing;
  - aerial advertising flights, i.e. banner towing with powered sailplanes;
  - aerial photography flights (news media flights, television and movie flights);
  - flying display;
  - competition flights; and
  - aerobatic flights.

During the discussion on this subject, it became clear that sailplane towing, competition and aerobatic flights should not be considered specialised operations due to the following reasons:

- Sailplane towing is a very common launch method. In many flying clubs, it is the only launch method available. It is in no way an unusual or a specialised operation. As for all other normal sailplane operations, pilot licensing requirements, aircraft flight manual (AFM) operating limitations and instructions, and established good practices provide adequate risk mitigation during sailplane towing.
- **Competition flights** are a common part of sailplane operations. A gliding competition is not a classic aeroplane air race; in fact, it is a series of normal cross-country flights involving a number of sailplanes flying a similar route. This holds for both formal competitions and routine/informal competitive flying between sailplane pilots. It can be concluded that extra risk assessments and checklists would bring no safety benefit.
- Aerobatic flights are commonly carried out by trained and qualified pilots during instructional and other flying, and are considered an acknowledged method of improving handling skills of pilots. Limitations and operating instructions are described in the AFM. The range of attitudes routinely adopted by sailplanes is much wider than for other GA aircraft. Simple aerobatics may well occur during a flight without them having been planned before take-off. Requiring formal risk assessments and extra checklists would be unreasonable for sailplane aerobatics outside a display environment.

In summary, introducing specific requirements for such operations in addition to those for normal operations would be disproportionate and of no benefit, and would lead to an additional, unnecessary bureaucratic overhead. Following this approach, EASA proposes to consider sailplane towing, competition and aerobatic flights as normal operations. Therefore,

<sup>&</sup>lt;sup>12</sup> These operations were taken from the list of specialised operations in the GM to Annex VII (Part-NCO) to Regulation (EU) No 965/2012.



the list of specialised operations for sailplanes, provided in the AMC & GM, contains the following flights:

- parachute operations;
- aerial advertising flights, i.e. banner towing with powered sailplanes;
- aerial photography flights (news media flights, television and movie flights); and
- flying display.
- Categorisation of sailplane specialised operations (GM2 SAO.OP.155): Following the discussions within the expert group, whether or not an operation is a specialised operation, EASA decided to include GM for clarification: The pilot-in-command or the operator determines about the main purpose of an operation.
- Checklist for sailplane specialised operations (AMC1 SAO.OP.155(b)): As regards sailplane specialised operations, AMC1 SAO.OP.155(b) has been introduced to:
  - specify that a checklist should take into consideration the latest publications and recommendations; and
  - clarify that an industry standard checklist, developed e.g. by an association, may be acceptable.
- Information on 'permanently installed' (GM1 SAO.IDE.100(a)(3)): For clarification, EASA provided information as regards the term 'permanently installed' in the GM.
- Transponder (GM1 SAO.IDE.135): EASA introduced GM to clarify when a transponder is required.
- Declaration instead of an air operator certificate (AOC) (GM1 SAO.DEC.100): At present there are only very few, if any, commercial operations with sailplanes conducted within the Union. However, to enable the competent authority to obtain an overview on these commercial operations, EASA proposes that the operator of such operations is required to provide a declaration. This approach was supported by the majority of competent authorities, and was accepted also by the sailplane stakeholders. GM1 SAO.DEC.100 clarifies the intent of the declaration.



### 3. References

#### **Related regulations**

- Commission Implementing Regulation (EU) 2018/1976 of 14 December 2018 laying down detailed rules for the operation of sailplanes pursuant to Regulation (EU) 2018/1139 of the European Parliament and of the Council (OJ L 326, 20.12.2018, p. 64)
- Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 296, 25.10.2012, p. 1))



## 4. Appendix

# Table A1— Comparison between the AMC & GM to the new Regulation (EU) 2018/1976 and the previous AMC & GM to Regulation (EU) No 965/2012

New AMC & GM	Previous AMC & GM or IR <sup>13</sup>	Comparison	
COVER REGULATION			
GM1 Article 3(2)(a);(b) Air operations DIRECT COST	GM2 Article 6.4a(a);(b) Derogations	Text adapted to fit for sailplanes.	
GM2 Article 3(2)(a);(b) Air operations ANNUAL COST	GM3 Article 6.4a(a);(b) Derogations	Text adapted to fit for sailplanes.	
GM1 Article 3(2)(c) Air operations ORGANISATION CREATED FOR THE PURPOSES OF PROMOTING AERIAL SPORT OR LEISURE AVIATION	GM1 Article 6.4a(c) Derogations	Editorial changes.	
GM2 Article 3(2)(c) Air operations MARGINAL ACTIVITY	GM2 Article 6.4a(c) Derogations	No change.	
ANNEX II (PART-SAO)			
Subpart GEN — General requirements	5		
AMC1 SAO.GEN.110(a) Demonstration of compliance SAILPLANES REGISTERED IN ANOTHER STATE	Not applicable	New text as regards notification of the competent authority.	
GM1 SAO.GEN.110(b)(2) Demonstration of compliance ALTERNATIVE MEANS OF COMPLIANCE	ARO.GEN.120; NCO.GEN.101	Guidance for clarification; text transferred from the implementing rules and adapted.	
GM1 SAO.GEN.130(a);(b) Responsibilities of the pilot-in-command GENERAL	GM1 NCO.GEN.105	Editorial changes to the GM related to sailplanes.	
AMC1 SAO.GEN.130(c) Responsibilities of the pilot-in-command CHECKLISTS	AMC1 NCO.GEN.105(c)	In (a) 'operator' has been added.	
AMC1 SAO.GEN.130(d)(4) Responsibilities of the pilot-in-command USE OF OTHER DOCUMENTS	Not applicable	New text for clarification, what to do, when information are not available in the AFM.	
AMC1 SAO.GEN.130(f) Responsibilities of the pilot-in-command DIVING AND BLOOD DONATION	Point (b) of CAT.GEN.NMPA.100	Text transferred from the implementing rules and adapted.	
GM1 SAO.GEN.130(f) Responsibilities of the pilot-in-command	GM1 CAT.GEN.NMPA.100(b)(2)	Text adapted to fit for sailplanes.	

<sup>&</sup>lt;sup>13</sup> IR = implementing rule.



New AMC & GM	Previous AMC & GM or IR <sup>13</sup>	Comparison
DIVING AND BLOOD DONATION – ELAPSED TIME BEFORE RETURNING TO FLYING DUTY		
AMC1 SAO.GEN.130(f) & SAO.GEN.135(b) Responsibilities of the pilot-in-command & responsibilities of crew members	AMC1 CAT.GEN.NMPA.100(b)(1)	Text adapted to fit for sailplanes.
ALCOHOL CONSUMPTION GM1 SAO.GEN.130(f) & SAO.GEN.135(b) Responsibilities of the pilot-in-command & responsibilities of crew members PART-MED	GM1 CAT.GEN.NMPA.100(b)(2	Editorial changes.
GM1 SAO.GEN.130(m) Responsibilities of the pilot-in-command RECORDING UTILISATION DATA	GM1 NCO.GEN.105(a)(8)	Text adapted to fit for sailplanes.
GM2 SAO.GEN.130(m) Responsibilities of the pilot-in-command SERIES OF FLIGHTS	Not applicable.	New text.
AMC1 SAO.GEN.130(p) Responsibilities of the pilot-in-command REPORTING OF HAZARDOUS FLIGHT CONDITIONS	GM1 NCO.GEN.105(d)	Text adapted to fit for sailplanes.
GM1 SAO.GEN.135 Responsibilities of crew members DESIGNATION OF A PERSON AS CREW MEMBERS	GM1.NCO.OP.180	Editorial changes.
GM1 SAO.GEN.145 Portable electronic devices CATEGORIES OF PORTABLE ELECTRONIC DEVICES	GM1 NCO.GEN.125	Text adapted to fit for sailplanes.
GM2 SAO.GEN.145 Portable electronic devices GENERAL	GM2 NCO.GEN.125	Editorial changes.
GM1 SAO.GEN.150 Dangerous goods EXAMPLES	Not applicable.	New text.
AMC1 SAO.GEN.150(b) Dangerous goods REASONABLE QUANTITIES	Point (f) of NCO.GEN.140	Text transferred from the implementing rules and adapted.
AMC1 SAO.GEN.155 Documents, manuals and information to be carried GENERAL	GM1 NCO.GEN.135	Text adapted to fit for sailplanes.
GM1 SAO.GEN.155(a)(1) Documents, manuals and information to be carried	GM1 NCO.GEN.135(a)(1)	Editorial changes.



New AMC & GM	Previous AMC & GM or IR <sup>13</sup>	Comparison
AFM OR EQUIVALENT DOCUMENT(S)		
AMC1 SAO.GEN.155(a)(3) Documents, manuals and information to be carried CURRENT AND SUITABLE AERONAUTICAL CHARTS	AMC1 NCO.GEN.135(a)(10)	Text adapted to fit for sailplanes.
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	GM1 NCO.GEN.135(a)(13)	Editorial changes.
GM1 SAO.GEN.155(a)(5) Documents, manuals and information to be carried PROCEDURES AND VISUAL SIGNALS FOR USE BY INTERCEPTING AND INTERCEPTED AIRCRAFT	GM1 NCO.GEN.135(a)(11)	Text adapted to fit for sailplanes.
AMC1 SAO.GEN.155(c)(2) Documents, manuals and information to be carried CERTIFICATE OF AIRWORTHINESS	AMC1 NCO.GEN.135(a)(3)	No change.
GM1 SAO.GEN.155(c)(7) Documents, manuals and information to be carried JOURNEY LOG OR EQUIVALENT	GM1 NCO.GEN.135(a)(8)	Editorial changes.
AMC1 SAO.GEN.160 Journey log GENERAL	AMC1 NCO.GEN.150	Editorial changes.
Subpart OP — Operating procedures		
GM1 SAO.OP.100 Use of aerodromes and operating sites GENERAL	Not applicable.	New text.
AMC1 SAO.OP.110 Passenger briefing GENERAL	AMC1 NCO.OP.130	Text adapted to fit for sailplanes.
GM1 SAO.OP.110 Passenger briefing GENERAL	Not applicable.	New text.
GM1 SAO.OP.120(a) Flight preparation FACILITIES REQUIRED	Not applicable.	New text.
GM1 SAO.OP.135 Meteorological conditions SAFE LANDING OPTION	Not applicable.	New text.
GM1 SAO.OP.145 In-flight fuel or other energy management – powered sailplanes GENERAL	Not applicable.	New text.
AMC1 SAO.OP.150 Use of supplemental oxygen GENERAL	NCO.OP.190	Text transferred from the implementing rules and adapted.



New AMC & GM	Previous AMC & GM or IR <sup>13</sup>	Comparison	
AMC1 SAO.OP.155 Sailplane specialised operations CRITERIA FOR SAILPLANE SPECIALISED OPERATIONS	AMC1 NCO.SPEC.100	Text adapted to fit for sailplanes.	
GM1 SAO.OP.155 Sailplane specialised operations LIST OF OPERATIONS	GM1 NCO.SPEC.100	Text adapted to fit for sailplanes.	
GM2 SAO.OP.155 Sailplane specialised operations CATEGORISATION OF OPERATIONS	Not applicable.	New text.	
AMC1 SAO.OP.155(b) Sailplane specialised operations CHECKLIST – GENERAL	Not applicable.	New text.	
AMC2 SAO.OP.155(b) Sailplane specialised operations CHECKLIST FOR PARACHUTE OPERATIONS	NCO.SPEC.PAR.100	Text transferred from the implementing rules and adapted.	
GM1 SAO.OP.155(b) Sailplane specialised operations DEVELOPMENT OF CHECKLIST	GM1 NCO.SPEC.105	Text transferred from GM to AMC and adapted to fit for sailplanes.	
Subpart POL — Performance and operating limitations			
GM1 POL.100 Weighing INSTRUCTIONS FOR CONTINUING AIRWORTHINESS AND PERSONNEL REQUIRED	Not applicable.	New text to provide reference to Regulation (EU) No 1321/2014.	
Subpart IDE — Instruments, data and	equipment		
GM1 SAO.IDE.100 Instruments and equipment — general INSTRUMENTS AND EQUIPMENT NOT REQUIRED	GM1 NCO.IDE.S.100(c)	Text adapted.	
GM1 SAO.IDE.100(a)(3) Instruments and equipment - general PERMANENTLY INSTALLED	Not applicable.	New text to clarify, what 'permanently installed' means.	
AMC1 SAO.IDE.105 Flight and navigational instruments INTEGRATED INSTRUMENTS	AMC1 NCO.IDE.S.115 & NCO.IDE.S.120	Text adapted.	
AMC1 SAO.IDE.105(a)(1) Flight and navigational instruments MEANS OF MEASURING AND DISPLAYING THE TIME	AMC1 NCO.IDE.S.115(a)(2) & NCO.IDE.S.120(b)	Text adapted.	
AMC1 SAO.IDE.105(a)(2) Flight and navigational instruments	AMC1 NCO.IDE.S.115(a)(3) & NCO.IDE.S.120(c)	Text adapted.	



New AMC & GM	Previous AMC & GM or IR <sup>13</sup>	Comparison
CALIBRATION OF THE MEANS FOR MEASURING AND DISPLAYING PRESSURE ALTITUDE		
AMC1 SAO.IDE.105(a)(3) Flight and navigational instruments CALIBRATION OF THE INSTRUMENT INDICATING AIRSPEED	AMC1 NCO.IDE.S.115(a)(4) & NCO.IDE.S.120(d)	Text adapted.
AMC1 SAO.IDE.105(a)(4);(b)(3) Flight and navigational instruments MEANS OF MEASURING AND DISPLAYING MAGNETIC HEADING	AMC1 NCO.IDE.S.115(a)(1) & NCO.IDE.S.120(a)	No change.
GM1 SAO.IDE.105(b) Flight and navigational instruments CONDITIONS WHERE THE SAILPANE CANNOT BE MAINTAINED IN A DESIRED ATTITUDE WITHOUT REFERENCE TO ONE OR MORE ADDITIONAL INSTRUMENTS	GM1 NCO.IDE.S.115(b)	Editorial changes.
AMC1 SAO.IDE.120 Life-saving and signalling equipment – flights over water RISK ASSESSMENT	AMC1 NCO.IDE.S.135	Text adapted.
AMC2 SAO.IDE.120 Life-saving and signalling equipment – flights over water SIGNALLING AND LIFE-SAVING EQUIPMENT	NCO.IDE.S.135	Text transferred from the implementing rules and adapted.
AMC3 SAO.IDE.120 Life-saving and signalling equipment – flights over water BRIEFING ON PLB USE	AMC4 NCO.IDE.S.135(b)	Text adapted.
AMC4 SAO.IDE.120 Life-saving and signalling equipment – flights over water ELT AND PLB REGISTRATION AND OPERATION PROVISION	AMC2 NCO.IDE.S.135(b); AMC3 NCO.IDE.S.135(b)	Text simplified.
GM1 SAO.IDE.120 Life-saving and signalling equipment – flights over water TERMINOLOGY	GM1 NCO.IDE.S.135(b)	Editorial changes.
AMC1 SAO.IDE.125 Life-saving and signalling equipment – search and rescue difficulties GENERAL	AMC1 NCO.IDE.S.140	Editorial changes.
GM1 SAO.IDE.125 Life-saving and signalling equipment – search and rescue difficulties AREAS IN WHICH SEARCH AND RESCUE WOULD BE ESPECIALLY DIFFICULT	GM2 NCO.IDE.S.140	Text adapted.



New AMC & GM	Previous AMC & GM or IR <sup>13</sup>	Comparison
GM2 SAO.IDE.125 Life-saving and signalling equipment – search and rescue difficulties SIGNALS	GM1 NCO.IDE.S.140	Text has been modified to provide reference to Regulation (EU) No 923/2012.
AMC1 SAO.IDE.130 Radio communication equipment GENERAL	NCO.IDE.S.145	Text transferred from the implementing rules and adapted.
GM1 SAO.IDE.135 Transponder GENERAL	Not applicable.	Text introduced to clarify when a transponder is required.
Subpart DEC — Declaration		
GM1 SAO.DEC.100 Declaration GENERAL	GM1 ORO.DEC.100	No changes, except for deleting the references.
AMC1 SAO.DEC.105(a) Changes to the declaration and cessation of commercial operations CHANGES	AMC1 ORO.DEC.100(d)	No change.

