

### **European Union Aviation Safety Agency**

### **Opinion No 07/2019**

### Instructions for continued airworthiness

RMT.0252 (MDM.056)

# Installation of parts and appliances that are released without an EASA Form 1 or equivalent

RMT.0018

#### **EXECUTIVE SUMMARY**

The objective of this Opinion is to mitigate the risks linked to the uncertainty of the status of the instructions for continued airworthiness (ICA) and, therefore, to avoid leaving room for interpretation in the rules, leading to differences in the use of ICA and causing possible safety risks.

In order to achieve this, this Opinion proposes to amend Annex I (Part 21) to Commission Regulation (EU) No 748/2012 to clarify that the ICA are part of the type certificate (TC). It also proposes to merge the requirements related to record keeping, manuals and ICA in the various subparts into a single requirement for each of these aspects in Subpart A (new points 21.A.5, 21.A.6 and 21.A.7).

The proposed amendments are expected to improve the harmonisation of the ICA among the design approval holders (DAHs) in relation to the identification, approval, formatting and availability of the ICA to the end users.

Another objective of this Opinion is to propose more proportionate and efficient requirements by introducing commensurate manufacturing requirements for new spare parts. The need to require a European Union Aviation Safety Agency (EASA) Form 1 to attest manufacturing in accordance with the approved design data is considered disproportionate for certain parts.

In order to achieve this, this Opinion proposes to relax the requirement that all parts installed on an aircraft have to be issued with an EASA Form 1 or equivalent when they are installed during maintenance work. Instead, it is proposed that certain parts that do not impact safety could be manufactured outside the Part 21 production environment and do not require an EASA Form 1 to be installed in a product. Similarly, it is proposed that these parts should be exempted from the requirement to be maintained in a maintenance organisation approved in accordance with Commission Regulation (EU) No 1321/2014.

The proposed amendments are expected to reduce the regulatory burden on maintenance organisations that use these parts during their maintenance work, so they would be able to easily obtain the parts, without decreasing the level of safety.

Action area: Maintenance organisations and manufacturers

Affected rules: Commission Regulation (EU) No 748/2012 (Annex I (Part 21));

Commission Regulation (EU) No 1321/2014 (Annex I (Part-M), Annex II (Part-145) and Annex VI (Part-ML)

Affected stakeholders: DAHs and manufacturers; production organisation approval (POA) holders; aircraft operators; continuing

airworthiness management organisations (CAMOs); approved maintenance organisation (AMOs) (Part-145

and Part-M Subpart F) and maintenance personnel

 Drivers:
 Efficiency/proportionality(RMT.0018); level playing field(RMT.0252 (MDM.056))
 Rulemaking group:
 Yes

 Impact assessment:
 Light (RMT.0018/RMT.0252 (MDM.056))
 Rulemaking Procedure:
 Standard

EASA rulemaking process milestones

Proposal to Adoption by Start Consultation Decision Certification Specifications Terms of **Notice of Proposed** Commission Commission Acceptable Means of Compliance, Reference **Amendment** Opinion **Implementing Rules Guidance Material** Today

RMT.0252 (MDM.056)

15.5.2013 (Issue 1) **29.1.2018 (NPA 2018-01)** 

20.6.2016 (Issue 5) 17.12.2019 2021/Q3 2021/Q3

RMT.0018 14.12.2017 (NPA 2017-19)

6.11.2012

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### 1. About this Opinion

#### 1.1. How this Opinion was developed

The European Union Aviation Safety Agency (EASA) developed this Opinion in line with Regulation (EU) 2018/1139¹ (the 'Basic Regulation') and the Rulemaking Procedure².

#### 1.1.1. Instructions for Continued Airworthiness (ICA) (RMT.0252 (MDM.056))

This rulemaking activity is included in the European Plan for Aviation Safety (EPAS) for 2019-2023<sup>3</sup> under rulemaking task RMT.0252 (MDM.056). The scope and timescales of the task were defined in the related terms of reference (ToR)<sup>4</sup>.

All the interested parties were consulted through NPA 2018-01 'Instructions for continued airworthiness'<sup>5</sup>. 502 comments were received from the interested parties, including industry and national aviation authorities (NAAs).

EASA reviewed the comments received during the public consultation with the support of Review Group (RG) RMT.0252. The comments received and EASA's responses to them are presented in Comment-Response Document (CRD) 2018-01<sup>6</sup>; the comments are summarised in Section 2.4.

The *draft* text of this Opinion has been developed by EASA based in consideration of the recommendations of the RG RMT.0252.

# 1.1.2. Installation of parts and appliances that are released without an EASA Form 1 or equivalent (RMT.0018)

This rulemaking activity is included in EPAS for 2019-2023<sup>7</sup> under rulemaking task RMT.0018. The scope and timescales of the task were defined in the related ToR<sup>8</sup>.

All the interested parties were consulted through NPA 2017-19 'Installation of parts and appliances that are released without an EASA Form 1 or equivalent'<sup>9</sup>. 465 comments were received from the interested parties, including industry and NAAs.

https://www.easa.europa.eu/document-library/notices-of-proposed-amendment/npa-2017-19



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) (https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1535612134845&uri=CELEX:32018R1139).

EASA is bound to follow a structured rulemaking process as required by Article 115(1) of Regulation (EU) 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 (<a href="http://www.easa.europa.eu/the-agency/management-board/decisions/easa-mb-decision-18-2015-rulemaking-procedure">http://www.easa.europa.eu/the-agency/management-board/decisions/easa-mb-decision-18-2015-rulemaking-procedure</a>).

https://www.easa.europa.eu/document-library/general-publications/european-plan-aviation-safety-2019-2023

<sup>4</sup> https://www.easa.europa.eu/document-library/terms-of-reference-and-group-compositions/tor-mdm056-rmt0252

<sup>5 &</sup>lt;u>https://www.easa.europa.eu/document-library/notices-of-proposed-amendment/npa-2018-01</u>

http://easa.europa.eu/document-library/comment-response-documents

https://www.easa.europa.eu/document-library/general-publications/european-plan-aviation-safety-2019-2023

<sup>8</sup> https://www.easa.europa.eu/document-library/terms-of-reference-and-group-compositions/tor-21026-rmt0018-and-rmt0571

EASA reviewed the comments received during the public consultation with the support of RG RMT.0018. The comments received and EASA's responses to clustered comments are presented in CRD 2017-19<sup>10</sup>; the comments are summarised in Section 2.4.

The draft text of this Opinion has been developed by EASA based in consideration of the recommendations of the RG RMT.0018.

The major milestones of these rulemaking activities are presented on the title page.

#### 1.2. The next steps

This Opinion contains the proposed amendments to Commission Regulation (EU) No 748/2012<sup>11</sup> and Commission Regulation (EU) No 1321/2014<sup>12</sup>. It is submitted to the European Commission, which will use it as a technical basis in order to prepare EU regulations.

The Decision that contains the related acceptable means of compliance (AMC) and guidance material (GM) will be published by EASA when the related regulations are adopted by the European Commission.

Commission Regulation (EU) No 1321/2014 of 26 November 2014 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks (OJ L 362, 17.12.2014, p. 1) (https://eurlex.europa.eu/legal-content/EN/TXT/?qid=1574352663938&uri=CELEX:32014R1321).



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http://easa.europa.eu/document-library/comment-response-documents

<sup>11</sup> Commission Regulation (EU) No 748/2012 of 3 August 2012 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations (OJ L 224, 21.8.2012, p. 1) (https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1574352506031&uri=CELEX:32012R0748).

### 2. In summary — why and what

#### 2.1. Why we need to change the rules — issue/rationale

#### 2.1.1. Instructions for continued airworthiness (ICA) (RMT.0252 (MDM.056))

ICA have to be produced by design approval holders (DAHs) as part of the product/part certification which, if properly implemented, should ensure that the product/part remains airworthy during its intended life.

Experience has shown that there is too much room for interpretation in the current rules and standards, leading to differences and possible safety risks. It appears that different type certificate (TC) holders have different interpretations of what is a complete set of ICA and to what level they are required to control the data that constitutes the ICA. The consequence is that maintenance organisations may not have all the necessary data to perform the maintenance in the correct way, which can lead to the use of unapproved methods.

The aim of this proposal is to clarify the status of the ICA in order to improve the continuing airworthiness of all aircraft that are within the scope of the Basic Regulation and, therefore, to improve safety.

# 2.1.2. Installation of parts and appliances that are released without an EASA Form 1 or equivalent (RMT.0018)

To guarantee that new parts to be used during aircraft (or component) maintenance conform to the intended design (including the related manufacturing requirements), the current airworthiness rules stipulate that these parts need to be produced in accordance with the approved design data by following certain requirements ('Production without production organisation approval') or by being produced by an approved organisation ('Production organisation approval'), and need to be released with an EASA Form 1.

However, requiring an EASA Form 1 for all aircraft parts (e.g. parts not designed exclusively for aviation) might be too onerous and unnecessary<sup>13</sup>.

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

The overall objectives of the EASA system are defined in Article 1 of the Basic Regulation. This proposal will contribute to the achievement of the overall objectives by addressing the issues outlined in Section 2.1.

#### 2.2.1. Instructions for continued airworthiness (ICA) (RMT.0252 (MDM.056))

The specific objective of this proposal is to establish clear requirements and responsibilities for all applicants that have to comply with Part 21, and that are involved in the production of ICA, their approval and their implementation.

<sup>13</sup> Current rules already permit certain alleviations to this concept for European light aircraft (ELA) ELA1, ELA2, and gliders.



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# 2.2.2. Installation of parts and appliances that are released without an EASA Form 1 or equivalent (RMT.0018)

The specific objective of this proposal is to provide industry with flexibility for the acceptance of parts and appliances with different production background for installation during maintenance, without decreasing the level of safety.

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

### 2.3.1. Instructions for continued airworthiness (ICA) (RMT.0252 (MDM.056))

It is proposed to include a definition of 'ICA' and to establish ICA as part of the TC (amended point 21.A.41) in order to strengthen the control of the ICA by the DAH, including the amendments of ICA (new point 21.A.90(c)). The definition was agreed with the FAA and the TCCA. Furthermore, it is proposed to consolidate the ICA requirements in one single point (new point 21.A.7).

In addition, in the current Part 21 there is a duplication also of the requirements for manuals and record keeping for each category of certificates or approvals. It is, therefore, proposed to create also for those requirements a single requirement for each of these aspects (new points 21.A.5 and 21.A.6).

As current point M.401 only considers ICA as applicable maintenance data, it is proposed to amend point M.401(b) to clarify which maintenance data is applicable, including the component maintenance manuals (CMM) which are not ICA: most of these documents are used by the maintenance industry and this proposal clarifies that they must be acceptable to the DAH.

## 2.3.2. Installation of parts and appliances that are released without an EASA Form 1 or equivalent (RMT.0018)

The proposal will allow that certain parts that are used during aircraft/component maintenance are manufactured by organisations not holding a POA, or by organisations not working under Part 21 Subpart F provisions. These parts, consequently, will not be accompanied with an EASA Form 1.

In practice, this proposal will allow the DAH (for instance, TC holder) to identify in the ICA parts with a negligible safety effect on the aircraft whenever the installed part does not conform to its approved design. In this respect, the DAH can specify in the ICA certain verification activities that the installer of the part will have to conduct.

The proposal will also allow that, in the case of point 21.A.90B 'Standard changes' or point 21.A.431B 'Standard repairs', parts whose potential non-conformance would have a negligible safety effect can be installed on an aircraft without an EASA Form 1, when they are identified as such in the Certification Specifications for Standard Changes and Standard Repairs (CS-STAN).

The possibility provided in the related NPA that EASA would establish alleviation from the obligation that parts would need to be accompanied with an EASA Form 1 in particular cases has not been retained based on the comments to the NPA as well as RG and internal discussions.

The proposal, contrary to the proposal of the NPA, permits that the parts that, as per the ICA or CS-STAN, are not required to be issued with as EASA Form 1 when manufactured, are also not required to be issued with an EASA Form 1 after the part undergoes maintenance. This possibility is now considered in the Opinion since the parts affected by this Opinion are only those with a negligible safety effect on the aircraft.

Commission Regulation (EU) No 965/2012<sup>14</sup> (the Air Operations Regulation), in point CAT.IDE.A.100 'Instruments and equipment — general' of Annex IV (Part-CAT), alleviates the need for an airworthiness certificate for certain equipment on board an aircraft. With the proposal of this Opinion, these parts and appliances are explicitly identified in Part 21 as not requiring an EASA Form 1.

#### 2.4. What are the stakeholders' views — outcome of the consultation

#### 2.4.1. Instructions for continued airworthiness (ICA) (RMT.0252 (MDM.056))

502 comments were received during the consultation of NPA 2018-01. The more relevant comments are summarised as follows:

- The NPA is missing the necessary period to implement the control of changes to the ICA in accordance with Subpart D of Part 21.
- The NPA proposes to merge all the requirements for the ICA, manuals and record keeping: the specificities, like for repair design, should not be missed with the grouping.
- The NPA is missing the impact that the proposed amendments will have on Part-M.
- Several commentators are concerned with the strengthening of the control of changes to the ICA under the DAH, considering that it will limit their ability to amend the ICA.
- The NPA proposes to introduce a statement indicating that a document is part of the ICA which could be challenging for documents referred to by several ICA.
- The NPA proposes to add the ICA to the TC, which creates disharmonisation with the FAA.

The comments received on the NPA have been duly considered by EASA in the preparation of this Opinion. In consideration of these comments, a delayed applicability of 1 year has been added to the draft cover regulation, the delay for repair design ICA has been added to point 21.A.7(b), point M.A.401(b) has been amended, and the proposed amendment of point 21.A.265(h) has been removed. In view of the comments received on the potential disharmonisation with the FAA, EASA considers that the addition of the ICA to the TC will improve the control of the ICA in the European system and should not impact the validation of products between EASA and the FAA.

For a detailed list of the comments received and a summary of the comments and responses to them, see CRD 2018-01<sup>15</sup>.

### 2.4.2. Installation of parts and appliances that are released without an EASA Form 1 or equivalent (RMT.0018)

465 comments were received during the consultation of NPA 2017-19. The more relevant comments are be summarised as follows:

 The NPA-proposed classification of the parts into four categories is too complex and will be difficult for stakeholders to use.

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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) (<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1575282835595&uri=CELEX:32012R0965">https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1575282835595&uri=CELEX:32012R0965</a>).

- In the proposal of the NPA, except for the cases where parts still require an EASA Form 1, it cannot be assumed that a relationship exists between the design and production organisations if the latter are not subject to aviation rules. The same applies for the existing reporting obligations to aviation authorities.
- The NPA relied only on industry standards for the control of production processes. This does not guarantee enforcement action by an aviation authority in case of manufacturing flaws.
- The NPA did not relax the requirements for the maintenance of parts. An approved maintenance organisation should not be required to perform the maintenance of parts that did not require an EASA Form 1 for their production.
- The NPA proposed that design approval holders (DAH) could publish a list with the classification
  of the parts. Some commentators requested that DAHs should be required by law to publish
  the classification of the parts.
- Commentators requested that the new system should not be rejected by foreign authorities, so
  potential future amendments to bilateral agreements could recognise the parts produced under
  the new system.

The comments received on the NPA have been duly considered by EASA in the preparation of this Opinion. In this respect, EASA abandons the classification of the parts that was proposed in the NPA and which stakeholders considered it to be complex and difficult to implement. Instead, EASA proposes with this Opinion a criterion that can be used to determine parts with a negligible safety effect on the aircraft operation and for which, consequently, less stringent requirements for the production and maintenance need to be imposed by the corresponding rules.

For a detailed list of the comments received and a summary of the comments and responses to them, see CRD 2017-19<sup>16</sup>.

#### 2.5. What are the expected benefits and drawbacks of the proposals

#### 2.5.1. Instructions for continued airworthiness (ICA) (RMT.0252 (MDM.056))

This proposal reinforces the status of the ICA, making them part of the TC. The clearer identification of the ICA by the DAH will improve their availability to end users. Being part of the TC, the amendments to the ICA will have to be dealt with in accordance with Part 21 Subpart D, strengthening their control by the DAH.

Furthermore, the revised applicable maintenance data in Part-M will be clarified for the end users.

The main drawbacks of this proposal are the need for manufacturers to update the development processes of some ICA; in addition, this proposal will potentially create disharmonisation with the FAA, which does not consider the ICA as part of the TC.

# 2.5.2. Installation of parts and appliances that are released without an EASA Form 1 or equivalent (RMT.0018)

The proposal will achieve the establishment of balanced requirements that are proportionate to the safety effects of the parts on the operation of the aircraft. Persons and organisations conducting

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maintenance will benefit from a less stringent system that eliminates the systematic need for an EASA Form 1 or equivalent for the acceptance of all parts to be installed on aircraft during maintenance, while permitting the DAH to retain the application of the criterion that discriminates which parts need to be manufactured under the requirements of Subparts F or G of Annex I (Part 21) to Commission Regulation (EU) No 748/2012 or that can be manufactured beyond these requirements.

#### 2.6. How we monitor and evaluate the rules

#### 2.6.1. Instructions for continued airworthiness (ICA) (RMT.0252 (MDM.056))

EASA continuously monitors the implementation of Part 21 through feedback from stakeholders and via its Advisory Bodies.

Various tools will be used to further monitor the present proposal, e.g. surveys to collect data on the level of consistency and coherence of the ICA requirements.

In addition, Part 21 will be subject to an evaluation, which is already planned in EASA's European Plan for Aviation Safety (EPAS). The evaluation should assess the production of ICA by DAHs if the above-mentioned monitoring results show a need to do so.

# 2.6.2. Installation of parts and appliances that are released without an EASA Form 1 or equivalent (RMT.0018)

The implementation of the proposed amendments to Commission Regulation (EU) No 748/2012 and Commission Regulation (EU) No 1321/2014, aiming to alleviate the requirement for an EASA Form 1 for certain parts to be used during maintenance, will be monitored and evaluated through the continued exchange of information between EASA and the Member States during EASA Advisory Body meetings as well as during standardisation inspections and assessing feedback from industry stakeholders.

Based on the monitoring results, EASA may undertake an evaluation of the impact of the adopted rules. This evaluation shall assess the impact of the amendments versus the expected consequences, and shall conclude on the overall relevance, effectiveness and efficiency of the rules.

In addition to the expected gains in efficiency for the overall aviation system thanks to the proposed amendments, EASA will be alert in case a part that did not require an EASA Form 1 contributes to an increase in the number of reported events in a fleet.

Cologne, 17 December 2019

Patrick KY

**Executive Director** 

#### 3. References

#### 3.1. Affected regulations

- Commission Regulation (EU) No 748/2012 of 3 August 2012 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations (OJ L 224, 21.8.2012, p. 1)
- Commission Regulation (EU) No 1321/2014 of 26 November 2014 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks (OJ L 362, 17.12.2014, p. 1)

#### 3.2. Related decisions

- ED Decision N° 2012/020/R of the Executive Director of the Agency of 30 October 2012 on acceptable means of compliance and guidance material for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations ('AMC and GM to Part 21') repealing Decision No 2003/01/RM of the Executive Director of the Agency of 17 October 2003
- ED Decision 2015/029/R of 17 December 2015 issuing acceptable means of compliance and guidance material to Part-M, Part-145, Part-66, and Part-147 of Regulation (EU) No 1321/2014 and repealing Decision 2003/19/RM of the Executive Director of the Agency of 28 November 2003 'AMC and GM to the Annexes to Regulation (EU) No 1321/2014 Issue 2'

#### 3.3. Other reference documents

- CRD to NPA 2017-19 'Installation of parts and appliances that are released without an EASA Form 1 or equivalent' (RMT.0018)
- CRD to NPA 2018-01 'Instructions for continued airworthiness' (RMT.0252 (MDM.056))