

**European Union Aviation Safety Agency** 

# **Comment-Response Document 2018-01**

RELATED NPA: 2018-01 — RMT.0252 (MDM.056) — 17.12.2019

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#### 1. Summary of the outcome of the consultation

502 comments were received during the consultation of the NPA. The more relevant comments can be summarised as follows:

- The NPA is missing the necessary period to implement the control of changes to ICA in accordance with Subpart D of Part 21;
- The NPA proposes to merge all the requirements for 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 ICA under the design approval holder, 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 related to the proposed AMC and GM are not included in this CRD; they will be published with the related Decision at a later stage.



#### 2. Individual comments and responses

In responding to the comments, the following terminology has been applied to attest EASA's position:

- (a) **Accepted** EASA agrees with the comment and any proposed amendment is wholly transferred to the revised text.
- (b) **Partially accepted** EASA either agrees partially with the comment, or agrees with it but the proposed amendment is only partially transferred to the revised text.
- (c) **Noted** EASA acknowledges the comment, but no change to the existing text is considered to be necessary.
- (d) Not accepted The comment or proposed amendment is not shared by EASA.

#### (General Comments)

comment	24 comment by: <i>easyJet</i>
	easyJet DOA 21J.088 has reviewed the subject NPA and wish to make a comment regarding the requirement for data availability, for any change or repair which has been inherited by a DOA Holder (due to the original DOA Holder no longer being in existence), in order to effectively manage and implement ICAs.
	Within the subject NPA, reference is made to Part 21 GM 21.B.55 relating to "Record keeping for design approvals transferred to the Agency". This details the documents to be kept for various design approvals when responsibility is transferred to the Agency.
	However, easyJet DOA cannot find any reference to record keeping and transfer of documents from one DOA Holder to another.
	In order to effectively manage and implement ICAs associated with any inherited design change or repair (both major and minor in classification), easyJet DOA believes that the compliance data, documents defining original certification basis, assessment against OSD and any applicable test reports (e.g. burns test) must be transferred to the new owner. Only then can the associated ICAs be effectively implemented to ensure continued airworthiness of the change or repair intended life.
	easyJet DOA kindly request for EASA to review the above comments, with a view to adding GM within Part 21 to address data availability for any change or repair which has been inherited by a DOA Holder, due to the original DOA Holder seizing to exist.
response	Not accepted: The transfer of data among DOAs is subject to an EASA procedure which includes ICA.

In general NHE support the effort to clarify and make ICA documentation		
end user to access, understand	on more eas and	sy for the use.



	The documentation must be made available to the end-user in a simple way, along with the rest of the maintenance documentation (AMM, IPC, EMM etc)
response	Noted
comment	62 comment by: CAA-NL
	<ol> <li>We are of the opinion that it is good that vendors and subcontractors are also covered by this NPA.</li> <li>Several times the proposed text for Part 21 mentions "EASA", but for consistent use or wording this should be "Agency" (e.g. see page page 20, par. (b) and (c) and page 23 par. (f)).</li> </ol>
response	<ol> <li>Noted.</li> <li>Accepted: 'EASA' shall be consistently used.</li> </ol>
comment	81 comment by: Europe Air Sports
	Europe Air Sports (EAS) and the organisations' member federations and unions thank the Agency for the preparation of this NPA.
	Having reviewed the NPA, we have the following comments/questions:
	General Comments:
	<b>1. Legal uncertainty with regard to mandatory and non-mandatory items</b> It is important that the proposed regulations do not lead to legal uncertainty with regard to which maintenance items are considered mandatory, and which aren't.
	As per regulation (EU) no. 1321/2014 Annex I (Part-M) M.A.302 (d), the overarching principle today is that the maintenance programme should include all tasks included in the ICA.
	"(d) The aircraft maintenance programme <b>must establish compliance with</b> :
	<ul> <li>(i) instructions issued by the competent authority;</li> <li>(ii) instructions for continuing airworthiness: <ul> <li>issued by the holders of the type-certificate, restricted type-certificate, supplemental type-certificate, major repair design approval, ETSO authorisation or any other relevant approval issued under Regulation (EU) No 748/2012 and its Annex I (Part-21), and</li> <li>included in the certification specifications referred to in point 21A.90B or 21A.431B of Annex I (Part-21) to Regulation (EU) No 748/2012, if applicable;"</li> </ul> </li> </ul>
	Thanks to the changes to Part-M with regard to the development of the aircraft maintenance programme (AMP) as implemented in regulation (EU) no. 2015/1088 M.A.302 (h) (3), a greater degree of flexibility is now in place: Only those maintenance requirements, which are included in the airworthiness limitations section (ALS) of the ICA – as well as thosed contained in the TCDS – are considered mandatory for ELA-1 aircraft non involved in commercial operations:



"3. The aircraft maintenance programme shall include all the mandatory continuing airworthiness requirements, such as repetitive Airworthiness Directives, **the Airworthiness Limitation Section (ALS) of the Instructions for Continued Airworthiness (ICA)** or specific maintenance requirements **contained in the Type Certificate Data Sheet (TCDS)**."

This same approach is suggested for Part-ML, as per ML.A.302 (c) (4):

"The

AMP:

(...)

(4) shall include all the mandatory continuing-airworthiness information, such as repetitive ADs, the airworthiness limitation section (ALS) of the instructions for continued airworthiness (ICA), and specific maintenance requirements contained in the type certificate data sheet (TCDS);"

Europe Air Sports is concerned that this NPA will lead to a number of maintenance tasks considered non-mandatory according to the above will become compulsory through the draft MPA:

- The draft changes to 21.A.41 means that the type certificate "shall include the type design, the operating limitations, **the instructions for continued airworthiness** (...)". In light of the wording of M.A.302 (h) (3), there is a risk that the regulation will be interpreted to mean that all ICA tasks, whether part of the ALS or not, become mandatory. This would remove a number of flexibility options, such as operating a light aircraft engine past TBO (time between overhaul), defeating the objective of the Part-M proportionality task.
- The definition of ICA in 21.A.7 (a) should also include the differentiation between the "ALS section of the ICA" and "ICA" as such in order to provide better clarity. It is vital that this distinction is not lost due to how ICA is legally defined.

#### 2. What happens with orphan aircraft, which lack ICA documents?

It is important that owners of orphan aircraft are not subject to an undue burden as a consequence of the new requirements.

#### 3. Inconsistency with FAA

Through the US-EU bilateral agreement and its Technical Implementation Procedures (TIP), significant efforts are being made in order to facilitate the free movement of aircraft, parts and appliances between the EU and US. It would be a major step back in terms of harmonisation to introduce new ICA requirements, which are not compatible with the US. This will in particular hit the general aviation market, where the customers have limited resources to fill any regulatory or certification related gaps.

At the same time, EAS notes that FAA harmonisation would be maintained with options 2a or 3. Unfortunately, the Agency has picked option 2b as its preferred solution. This will inevitably lead to a more significant burden for invidual aircraft owners in the light aircraft segment.

EAS would like to propose option 3 for all aircraft with an MTOM of 2,730kg or below. The approach does not lead to FAA harmonisation issues. Moreover, there is a "red thread"



(consistency) with regard to the maintenance programme requirements in ML.A.302 (c) (4) (Part-ML), as well as those requirements already in place through M.A. 302 (h) (3).

#### 4. Lack of proportionality

The analysis with regard to General Aviation and proportionality issues in NPA 2018-01 (Chapter 4.4.5) seems to lack both breadth and substance, as the only consequence noted is that the rule change would benefit "General Aviation stakeholders because of the clarification of the ICA status and their availability".

The requirement to provide "each known owner" with a full set of instructions (21.A.7 (b)), goes much further than necessary, since it can not be concluded that all owners need and/or understand such in-depth instructions. Today, aircraft maintenance manuals (AMMs), etc. are typically held by the CAMO or the maintenance organisations (and by those owners who prepare their own AMP). Keeping an updated registry of each owner is a significant and unnecessary burden for the aircraft/component DAH, as the AMMs can be made available through internet sites. (As is currently the case for a DAH such as Diamond Aircraft Industries.) The requirement is likely to increase the already very high pricing of light aircraft without any significant safety benefit.

Furthermore, the amount of information made available free of charge to the customers could be reduced to what is considered mandatory. For ELA-1 aircraft non involved in commercial operations, that would be those items included in M.A. 302 (h) (3), including the ALS. (The Minimum Inspection Programme would typically replace the remaining ICA items for such aircraft.) In the future, this will be extended as per Part-ML ML.A.302 (c) (4).

Another aspect is that non-ALS ICA are not mandatory, so why maintain a complex change management process for them?

We propose instead :

- Differentiate the ICA approach for aircraft at the Part-ML threshold, i.e. with alleviations applicable to aircraft with an MTOM of up to 2,730 kg, provided that the aircraft is not listed in the Air Operator Certificate of an AOC holder as per regulation (EC) no. 1008/2008 and not classified as complex motor powered aircraft.
- Focus on the ALS items.
- Change the requirement with regard to distribution so that internet site delivery is an acceptable option.
- Apply option 3.
- response 1. Accepted: Revised point M.A.401 clarifies the acceptable maintenance data.

2. Not accepted: This change to Part 21 is not retroactive.

3. Not accepted: The main intent of this proposal is to improve the control of ICA for EU applicants, ICA being part of the TC. The disharmonisation with the FAA should not impact the validation process.

4. Not accepted: Part-ML is outside the scope of this rulemaking task.

comment | 125

comment by: EUROCONTROL



	The EUROCONTROL Agency welcomes the publication of EASA Notice of Proposed Amendment 2018-01 on the 'Instructions for continued airworthiness'. It also thanks EASA for the opportunity that has been given to submit comments. However, the subject of the amendment is considered outside the scope of activities of EUROCONTROL. There is therefore no comments to make. Nevertheless the EUROCONTROL Agency would like to confirm that it will read with interest the comments on the NPA received from stakeholders and the responses given to them by EASA in its future comment-response document (CRD). Like for NPA 2018-01, EUROCONTROL staff will be given access to CRD 2018-01, for their information.
response	Noted
comment	179 comment by: THALES AVS ERANCE SAS
	THALES AVS thanks EASA and the RMT.0252 working group for the quality of the work done for the preparation of this NPA. Even if the primary stakeholders impacted by this NPA are the Design Approval Holders (DAHs) like TC holders, THALES AVS as equipment supplier and ETSO holder is highly interested by the amendment of this regulation and its associated AMC & GM that may improve ICA management. THALES AVS understanding is that ICA requirements are not directly applicable to equipement suppliers and ETSO holders but some of their data may be used or referenced in the ICA of the Design Approval Holders (DAHs). THALES AVS main concern is that the new ICA requirements with the associated interpretative materials should be compatible with the delivery of maintenance data under licence agreement, this must be clarified.
response	Not accepted: Outside the scope of this rulemaking task.
commont	252 commont by: The Norwegian Air Sports Endergtion
comment	The Norwegian Air Sports Federation (Norges Luftsportforbund – NLF) has reviewed the NPA and would like to support the comments provided by Europe Air Sports. In particular, we would like to highlight the following:
	<b>1. Legal uncertainty with regard to mandatory and non-mandatory items</b> It is important to ensure that the proposed regulation does not lead legal uncertainty with regard to which maintenance items are considered mandatory, and which aren't.
	As per regulation (EU) no. 1321/2014 Annex I (Part-M) M.A.302 (d), the overarching principle today is that the maintenance programme should include <u>all tasks</u> included in the ICA.
	Quote:
	"(d) The aircraft maintenance programme <b>must establish compliance with</b> : (i) instructions issued by the competent authority;
	<ul> <li>(ii) instructions for continuing airworthiness:</li> <li> <ul> <li>issued by the holders of the type-certificate, restricted type-certificate, supplemental type-certificate, major repair design approval, ETSO authorisation or any other relevant approval issued under Regulation (EU) No 748/2012 and its Annex I (Part-21), and</li> </ul> </li> </ul>



 included in the certification specifications referred to in point 21A.90B or 21A.431B of Annex I (Part-21) to Regulation (EU) No 748/2012, if applicable;"

Thanks to the changes to Part-M with regard to the development of the aircraft maintenance programme (AMP) as implemented in regulation (EU) no. 2015/1088 M.A.302 (h) (3), a greater degree of flexibility is now in place: Only those maintenance requirements, which are included in the airworthiness limitations section (ALS) of the ICA – as well as thosed contained in the TCDS – are considered mandatory for ELA-1 aircraft non involved in commercial operations:

"3. The aircraft maintenance programme shall include all the mandatory continuing airworthiness requirements, such as repetitive Airworthiness Directives, **the Airworthiness** Limitation Section (ALS) of the Instructions for Continued Airworthiness (ICA) or specific maintenance requirements contained in the Type Certificate Data Sheet (TCDS)."

This same approach is suggested for Part-ML, as per ML.A.302 (c) (4):

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AMP:

(...)

(4) shall include all the mandatory continuing-airworthiness information, such as repetitive ADs, the airworthiness limitation section (ALS) of the instructions for continued airworthiness (ICA), and specific maintenance requirements contained in the type certificate data sheet (TCDS);"

NLF is concerned that this NPA will lead to a number of maintenance tasks considered nonmandatory according to the above will become compulsory through the draft MPA:

- The draft changes to 21.A.41 means that the type certificate "shall include the type design, the operating limitations, **the instructions for continued airworthiness** (...)". In light of the wording of M.A.302 (h) (3), there is a risk that the regulation will be interpreted to mean that all ICA tasks, whether part of the ALS or not, become mandatory. This would remove a number of flexibility options, such as operating a light aircraft engine past TBO (time between overhaul), defeating one of the the objectives of the Part-M proportionality task.
- The definition of ICA in 21.A.7 (a) should also include the differentiation between the "ALS section of the ICA" and "ICA" as such in order to provide better clarity. It is vital that this distinction is not lost due to how ICA is legally defined.

#### 2. What happens with orphan aircraft, which lack ICA documents?

It is important that owners of orphan aircraft are not subject to an undue burden as a consequence of the new requirements.

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Through the US-EU bilateral agreement and its Technical Implementation Procedures (TIP), significant efforts are being made in order to facilitate the free movement of aircraft, parts and appliances between the EU and US. It would be a major step back in terms of harmonisation to introduce new ICA requirements, which are not compatible with the US.



This will in particular hit the general aviation market, where the customers have limited resources to fill any regulatory or certification related gaps.

At the same time, NLF notes that FAA harmonisation would be maintained with options 2a or 3. Unfortunately, the Agency has picked option 2b as its preferred solution. This will inevitably lead to a more significant burden for invidual aircraft owners in the light aircraft segment.

NLF would like to propose <u>option 3</u> for all aircraft with an MTOM of 2,730kg or below. The approach does not lead to FAA harmonisation issues. Moreover, there is a "red thread" with regard to the maintenance programme requirements in ML.A.302 (c) (4) (Part-ML), as well as those requirements already in place through M.A. 302 (h) (3).

#### 4. Lack of proportionality

The analysis with regard to General Aviation and proportionality issues in NPA 2018-01 (Chapter 4.4.5) seems to lack both breadth and substance, as the only consequence noted is that the rule change would benefit "General Aviation stakeholders because of the clarification of the ICA status and their availability".

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Furthermore, the amount of information made available free of charge to the customers could be limited to what is considered mandatory. For ELA-1 aircraft non involved in commercial operations, that would be those items included in M.A. 302 (h) (3), including the ALS. (The Minimum Inspection Programme would typically replace the remaining ICA items for such aircraft.) In the future, this will be extended as per Part-ML MLA.302 (c) (4).

Another aspect is that non-ALS ICA are not mandatory, so why maintain a complex change management process for them?

We propose instead :

- Differentiate the ICA approach for aircraft at the Part-ML threshold, i.e. with alleviations applicable to aircraft with an MTOM of up to 2,730 kg, provided that the aircraft is not listed in the Air Operator Certificate of an AOC holder as per regulation (EC) no. 1008/2008 and not classified as complex motor powered aircraft
- Focus on the ALS items
- Change the requirement with regard to distribution so that internet site delivery is an acceptable option
- Apply option 3

response 1. Accepted: Revised point M.A.401 clarifies the acceptable maintenance data.



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2. Not accepted: This change to Part 21 is not retroactive.

3. Not accepted: The main intent of this proposal is to improve the control of ICA for EU applicants, ICA being part of the TC. The disharmonisation with the FAA should not impact the validation process.

4. Not accepted: Part-ML is outside the scope of this rulemaking task.

comment 275

comment by: FNAM

FNAM (Fédération Nationale de l'Aviation Marchande) is the French Aviation Industry Federation/Trade Association for Air Transport, gathering the following members:

- CSTA: French Airlines Professional Union (incl. Air France)
- SNEH: French Helicopters Operators Professional Union
- CSAE: French Handling Operators Professional Union
- GIPAG: French General Aviation Operators Professional Union
- GPMA: French Ground Operations Operators Professional Union
- EBAA France: French Business Airlines Professional Union

And the following associated members:

- FPDC: French Drone ProfessionalUnion
- UAF: French Airports Professional Union

The comments hereafter shall be considered as an identification of some of the major issues the French industry asks EASA to discuss with third-parties before any publication of the proposed regulation. In consequence, the following comments shall not be considered:

- As a recognition of the third-parties consultation process carried out by the European Parliament and of the Council;
- As an acceptance or an acknowledgement of the proposed regulation, as a whole or of any part of it;
- As exhaustive: the fact that some articles (or any part of them) are not commented does not mean FNAM and GIPAG have (or may have) no comments about them, neither FNAM and GIPAG accept or acknowledge them. All the following comments are thus limited to our understanding of the effectively published proposed regulation, notwithstanding their consistency with any other pieces of regulation.

#### #Introduction/Explanation

FNAM and GIPAG thank EASA for aiming at enhancing safety thanks to more reliable Instructions for Continued Airworthiness (ICAs) as proposed in this NPA. The European proposals aim to ensure harmonization between all ICAs in Europe by detailing the content of these documents. The diffusion of the complete documents and their possible changes also aim to be ensured by the proposed disposals. FNAM and GIPAG understand the needs for precising ICAs requirements.

However, as no sound study is provided on the feasibility and the impact of these new measures on General Aviation Small and Medium Enterprises (SMEs), FNAM and GIPAG fear that an additional administrative burden would stifle SMEs. Indeed, more detailed ICA documents and their requirement for a controlled distribution may represent extra amount of work. The European proposals may require additional staff, time and cost resources for the



Part-21 organizations. Therefore, a more proportionate approach should be promoted for most of the proposed disposals.

Approved Maintenance Organizations (Part-M and Part-145) are also impacted. An issue is raised for operators using orphan aircraft or aircraft without ICAs or expired ICAs. As a result, operators and Approved Maintenance Organizations would have to develop and obtain certification for new ICAs to ensure that maintenance tasks are done correctly. Theoretically, that work would be done by the aircraft manufacturer. Practically, if it is not the case, only operators and Approved Maintenance Organizations may perform that work and this is not realistic neither feasible, above all for SMEs which have limited resources. Moreover, any potential Catch-up by operators and Approved Maintenance Organizations and additional costs.

Nota Bene: Nowadays, several entities are allowed and certified to develop ICAs for the same product. For example, an aircraft design holder and an engine manufacturer could both publish ICAs for the same engine. In that particular case, the priority document should be clarified.

Following the implementation of these requirements, bilateral agreements for maintenance should be reviewed in particular with FAA. EASA's disposals are more stringent than US requirements. This may first result in a competitive distortion, then in implementation issues for FAA certified aircraft flying in Europe. As FAA and EASA requirements are different, European measures should be developed in order to facilitate equivalences between FAA type-certificate and EASA type-certificate. The complexity of such procedure should also be risk-based and adapted in due proportion with SMEs needs and resources.

At last, the European disposals require to add Instructions for Continued Airworthiness in the type-certificate document. FNAM and GIPAG's interpretation is that references to all ICAs would be provided in Type-Certificates. Indeed, it is not clear in the proposal whether references or all ICA documents should be recorded.

#### #To sum up

Since ICAs are a lever for improvement in aviation safety and impact several domains, all requirements should be adapted to the concerned fields and their specificities: Airworthiness (Part-21) and Continuing Airworthiness (Part-M and Part-145). Beside, the proposed European disposals rise some blocking points:

- European disposals should be more proportionate The application of these proposals may require additional staff, time and cost resources which may be a burdenfor SMEs (no sound study provided)
- **Bilateral agreements for maintenance should be reviewed** The application of these proposals might lead to competitive distortions In particular, procedures for FAA certified aircraft flying in Europe should be defined
- Transition measures and potential Catch-up processshould be clarified Deadlines and procedures should be defined to update current ICAs The application of these proposals may raise issues when applied with orphan aircraft and aircraft without ICAs or with expired ICAs



	• Clarification on contents of the type-certificate should be provided Only references to ICAs should be included in type-certificates (TC, STC, ETSO, etc.)
response	Not accepted: A General Aviation approach to ICA is outside the scope of this rulemaking task, and ICA are made part of the TC.
comment	344 comment by: FAA
	1. US-FAA comments focus on provisions that would affect regulatory standards or procedures, especially those that would give rise to additional significant standards differences or additional procedural workload.
	2. A number of comments are applicable to more than one section of this NPA. We will attempt to comment at the most relevant area without necessarily attempting to link all affected areas.
	3. There is concern as to applicability of certain provisions where design approvals exist for the same product (especially type certificates) issued by various national authorities. Specifically, would 21.A.5 and/or 21.A.7(b) apply to US State-of-Design design approval holders who also hold an EU design approval?
	4. There are provisions in this proposed amendment that appear to overlap, and potentially conflict with the requirements of the certification standards. For example proposed GM No. 1 to 21.A.7 and the Instructions for Continued Airworthiness requirements of CS-25 and CS-E.
	5. Definitions do not appear to be consistently established or used. This includes products, parts, articles, appliances, components, and the name of subsidiary documents (Aircraft Maintenance Manual, Component Maintenance Manual, Overhaul Manuals, etc.).
	= 6. NPA 2018-01 is unclear regarding repairs. Specifically, whether repairs are ICA, and the associated requirements for furnishing them and making them available. Instead, the NPA can be an opportunity to clarify EASA's requirements for all approval holders and the expectations for those parties needing to comply with them.
	7. The NPA omits mention of overhaul manuals. Overhaul manuals are FAA required for engines and propellers. The result is that overhaul manuals become a significant standards difference.
response	Noted 1. Opinion No 07/2019 introduces some changes in the European ICA process but they should not impact the validation of products between the EU and the USA. 2. Noted. 3. This text will be applicable to EU State of design DAH. 4. Noted. 5. Noted.
	<ul><li>6. For aircraft, repairs are not ICA; they are though for engines, according to FAR 33.</li><li>7. Overhaul manual is an FAR 33 requirement.</li></ul>

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comment 402

comment by: *Rolls-Royce plc* 

We generally support this NPA, as it appears to be consistent with our understanding of the current requirements and our view of best practice. As a global organisation, seeking to satisfy different regulators with a common corporate system, we note however that there are a few areas where the proposed rules are not consistent with FAA practice, specifically in both the definition and availability of ICA, and we ask both EASA and the FAA to achieve a harmonised position within the constraints of their respective regulatory systems.

The length and complexity of this NPA means that the document has a series of inconsistencies, and while our comments have pointed out many of these, it is strongly recommended that a rigorous edit is undertaken. In particular, it should be established consistently throughout the rule and AMC/GM that ICA are instructions/information, not documents; that repairs are not ICA except in very special circumstances; that it is not required to restore every un-airworthy condition; that ICA related to articles are primarily to ensure the airworthiness of the product; and that non-ICA maintenance data must be properly evaluated by the DAH.

Proposed Solution: Edit required, as described.

This NPA doesn't contain any information about transition of the documentation 'as of today' and the future status of ICA. It should not be expected that all documents will be converted on one day to be in compliance with the new regulation. A transition time should be introduced.

Proposed Solution: Introduce additional information on transition time.

response Noted for the edit.

Accepted for the transition period that is included in Opinion No 07/2019.

comment 428

comment by: Danish Aviation Association

Danish Aviation Association (DAA) appreciates to be able to give comments to this NPA.

DAA supports the comments made by Fédération Nationale de l'Aviation Machande / Ffrench Aviation Industry Federation (FNAM) and the French General Aviation Operators Professional Union (GIPAG).

It is very important for the Small and Medium Enterprises to benifit from risk based and proportionality in rules and regulations, as "One rule fits all" no longer exists.

DAA wants to repeat the main blocking points identified by FNAM and GIPAG:

**European disposals should be more proportionate** The application of these proposals may require additional staff, time and cost resources which may be a burden for SMEs (no sound study provided).

#### Bilateral agreements for maintenance should be reviewed

The application of these proposals might lead to competitive distortions. In particular, procedures for FAA certified aircraft flying in Europe should be defined.



	<b>Transition measures and potential Catch-up process should be clarified</b> Deadlines and procedures should be defined to update current ICAs. The application of these proposals may raise issues when applied with orphan aircraft and aircraft without ICAs or with expired ICAs.
	Clarification on contents of the type-certificate should be provided Only references to ICAs should be included in type-certificates (TC, STC, ETSO, etc.).
response	Not accepted: A General Aviation approach to ICA is outside the scope of this rulemaking task and ICA are made part of the TC.
comment	443 comment by: DGAC France
	In the next steps after this NPA, DGAC would appreciate to further clarify the scope of maintenance data that could be modified by maintenance organisation (145.A.45(d)). In this case, such issues as "which ICA can be modified, by whom, if such modification need to be approved or not" could be solved. A proper link with regulation (EU) n°1321/2014 would be needed.
response	Not accepted: Outside the scope of this rulemaking task.
comment	444 comment by: DGAC France DGAC France is of the opinion that the application of ICA for CS-23 aeroplanes is challenging. DGAC France would be keen to ensure a better level playing field for General Aviation in this NPA, with a specific set of AMC/GM for such TCH of such products.
response	Not accepted: A General Aviation approach to ICA is outside the scope of this rulemaking task.
comment	451 comment by: Martin Ryff
	The Aeroclub of Switzerland thanks EASA for the preparation of the NPA and submitting it for consultation.
	We have the following general comments:
	1. We are still waiting for Part ML, which certainly will have an impact on ICA.
	2. The NPA does not address so-called legacy aircraft, which may not have ICA documents. Are they exempted?
response	Not accepted: Outside the scope of this rulemaking task.
comment	454 comment by: FedEx Express
	In response to Notice of Proposed Amendment 2018-01, FedEx would like to thank EASA for the continued diligence in pursuing the clarification, standardization and regulation of Instructions for Continued Airworthiness (ICA). FedEx agrees with the purpose of the NPA and is concerned as an end user that without the proper guidance required from the design approval holders (DAH) there is additional risk in developing third party procedures to



appropriately maintain the aircraft and aircraft components. This practice also requires an increase in the regulatory oversite efforts as Designated Engineering Representatives (DER) activity is increased.

FedEx believes that sufficient detail of the fundamental maintenance procedures pertaining to the ICA must be included in the Component Maintenance Manual (CMM) or other available documentation from the DAH. Fundamental maintenance would be defined as inspection, troubleshooting, sub component testing, provision of tolerances and/or critical specifications, disassembly, repair, assembly and final operational testing. There also needs to be sufficient focus on off-wing maintenance (i.e. component repairs) to meet type certification. FedEx has reviewed NPA 2018-01 and would like to offer the following comments and feedback on several specific sections as an end user.

response

se Not accepted: NPA 2018-01 improves the link between CMM and TC holder.

Title p. 1		
comment	61 comment by: <i>Erik Brown</i>	
	title looks good	
response	Noted	
Executive summer	p. 1	
comment	1 comment by: Yuksel Kenaroglu	
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response	Noted	
comment	2 comment by: Yuksel Kenaroglu	
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response	Noted	
comment	3 comment by: Yuksel Kenaroglu	
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response	Noted	
comment	25	comment by: René Meier, Europe Air Sports
	bla	
response	Noted	
comment	345	comment by: <i>FAA</i>
	"Standardization among EASA de "harmonization" should be re standards.	esign approval holders" might be more descriptive, for clarity served for use between national authorities and their
response	Noted	

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comment	10 comment by: Lionel Wallace Limited
	The obligations on the Agency (Section B) do not appear to feature as proposed amendments to the Regulation. See TCDS protocols as is AMC21.A.7 (c) Option 2 a(2) and e, Option 3 f, g. for example.
response	Not accepted: Section B was amended by another rulemaking task (RMT).

#### 1. About this NPA

#### р. З

## comment 19 comment by: Royal Netherlands Aviation Organisation Attachments <u>#1</u> <u>#2</u> <u>#3</u> Dear EASA AD support team, I am writing to you in my function as Coordinator Continuing Airworthiness of CAMO NL.MG.8065. The Dutch aeronautical association (KNVVL) represents the General Aviation Sector of which glider clubs and glider pilots are a substantial group. In The Netherlands we have nearly 4000 glider pilots flying out of some 30 local clubs which are all member of the national association KNVVL. The CAMO NL.MG.8065 is run by volunteers and supervised by the National Authority ILenT. Our CAMO annually processes almost 600 ARC (EASA Form 15) for gliders, so called turbo's, selflauchers and touring motor gliders (glider = sailplane in EASA documents), with predominantly PH-registration. ARC and AMP's are checked and released by some 70 AR-inspectors. Among our members are some 200 AML holders (Part 66 or national equivalent). I will only add a general comment and not go in to details with the text proposals. I think this NPA addresses a very important point! There is a lot of confusion about the meaning, interpretation and status of documents and information published by TC holders.



The status of publicationsis a complex matter to deal with. In Part 21 and PART M one finds descriptions of so called ICA (instructions for continued airworthiness). It is clear what an owner/ operator needs to do if an AD is issued or what is required when the TC-holder makes publications officially part of the Airworthiness Limitation data (section) of an approved maintenance manual or TCDS. This means a formal revision of the TCDS or ALS section (Revisions are frequently not made by TC-holders).

TC holders also publish documents that have a less formal status (or unclear and confusing status). These documents are not indicated as ICA. They are not backed by an AD and/or are not made part of the Airworthiness Limitation section of the TCDS and or Maintenance Manual. The TC holder does not change the revision status of TCDS / maintenance manual.

Often these documents are called service bulletins, service information bulletins, service instructions, Technical Notes, etc. One can read in PART M, PART 21 that all this information is to be <u>considered</u> by the owner/operator to fulfill the obligation to maintain continuing airworthiness. But "considering" is not the same as "mandatory".

Where a problem occurs is the situation where the TC holder issues a document and issues it with a marking "MANDATORY" or issues documents with text that seems MANDATORY (like before next flight, before date X). It is my understanding that such documents are not MANDATORY according PART 21 or M but they are very confusing for maintenance staff and owners. It becomes awkward and inconvenient when TC holders persist in their opinion that publications are mandatory while these documents status clearly do NOT comply with EASA regulations.

I would like to ask of EASA to make the playing field very clear so that confusion is no longer possible about something being MANDATORY or VOLUNTARY. Also I would like to suggest that EASA instructs TC holders to comply with uniform names as used in PART 21 /M. Thus ban self-invented names and historic names (like TM or TN).

a few examples (attached):

- DG Flugzeugbau TM 4048: I have been in contact with DG for weeks. DG felt initially a TM as such was sufficient to make the actions described mandatory (this issue is no solved with an AD but there was an eight week period of confusion).
- Service Bulletin by SZD in Poland
- Rotax aircraft engines: an example: SB-912-070 and may other

While reading the NPA and reviewing PART 21 and M I notice a couple of other aspects. For aircraft under CS 25 and other large aircraft PART 21 and M seem quite detailed. Sailplanes / gliders are subject to CS-22. However CS-22 contains much less detail about ICA and documents (if I am reading and interpreting regulations correctly. Perhaps EASA can also speed up the release of the promised PART M Light, to make a clear separation between large complex aircraft and our simple sailplanes etc.

Please instruct TC holders how to unambiguously indentify ICA as being ICA and being mandatory (and based on which regulation, paragraph etc).

I have last concern to share. Many sailplanes are in service for 30 years. Many have manuals and documantaion without formal ALS sections. Please indicate a way how TC holders are expected to deal in these situations so that it is very clear if instruction are ICA, MANDATORY or NOT-MANDATORY.

response Accepted: Revised point M.A.401 clarifies the acceptable maintenance data.



### p. 4-5 In summary – why and what comment 4 comment by: Yuksel Kenaroglu Since I didn't read whole of this NPA, it may be eraly to make this comment: Even though, the certification rule/rules (xx.1529) for ICA in Type Certification rules seems treated equally, supporting documents and actual ICA preparation process treats ICA issues not as a part of Type Certification process, but as an "supporting activity" process... Before defining the DAH responsibilities, this issue needs to be clarified ! Shortly, it should be stated clearly and openly that, "ICA is a part of Type Certification, and, sholud be considered and treated equally in the Type Certification" Since the rules covering ICA will be assumed a part of the Certification Rules, the importance sholud be given to ICA-related work that will be carried out by the panel (sub-working group) equally. (ICA-working group should not be something outside of the certification panels !) What the DAH should do for ICA will come after that ... Not accepted: It is up to the authority to organise its work. response 26 comment comment by: NHF Technical committee 2.1 Agreed in general. Good initiative to clearify documentation. response Noted comment 27 comment by: NHF Technical committee NHF support the list objectives. response Noted comment 63 comment by: CAA-NL Para 2.1, Safety related issues + Para 4.1.1 Safety risk assessment: The Safety Recommendation SR- CLD-2013-001 states that a part was removed from the aircraft but that the specific maintenance was not performed. That maintenance should have been performed off-aircraft, following the CMM. The safety recommendation asked for guiding rules to be set for airframe and engine manufacturers such that maintenance planning documents (MPDs) and engine maintenance manuals (EMMs) clearly include recommended maintenance information from the CMM of subcomponents. However GM No 2 to 21.A.7(a) states: "if supplier's data is required to perform off-aircraft maintenance on an engine, propeller, or other article (i.e. workshop maintenance), then this data is not considered as part of the complete set of ICA for the aircraft. However the removal/installation part of the procedure is part of the aircraft ICA." It is not clear which problem is now solved for this safety recommendation with the information in this NPA; The NPA does not solve the issue that the maintenance was not performed.



response	Not accepted: The link between the TC holder and the CMM is increased with NPA 2018-01.
comment	75 comment by: Pratt@Whitney Rzeszow APUs
	The goal of the comments incorporated in this CRT is to include APU ICAs into provisions of NPA 2018-01 due to requirements of 21.A.604 ETSO (Authorisation for an Auxiliary Power Unit (APU)) that align the APU authorization process with certification process for Type Certificated articles.
	Propose to change from: "It appears that different <u>type certificate (TC)</u> holders have different interpretations () " to "It appears that different approval holders have different interpretations () "
	······································
response	Partially accepted: 'Design approval holder' has been kept for Opinion No 07/2019.
comment	122 comment by: AIRBUS
	1 DARAGRADH / SECTION THE COMMENT IS RELATED TO:
	NPA 2018-01, page 4/37, paragraph 2.1. Why we need to change the rules — issue/rationale
	<ul> <li>2. PROPOSED TEXT / COMMENT: This paragraph states that there is too much room for interpretation in the current rules and standards on what is a complete set of 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 them using unapproved methods". This paragraph gives the impression that no consequences are expected on continuing airworthiness management: e.g. CAMO may not have all the necessary data to develop/revise appropriately the Aircraft Maintenance Programme (incl. the Maintenance Schedule). It is reminded that under Regulation (EU) No 1321/2014, the AMP is the only source for ordering maintenance to Approved Maintenance Organisations. In such a case, AMO could even not receive the order to perform some necessary maintenance.</li> <li>3. RATIONALE / REASON / JUSTIFICATION:</li> </ul>
	This paragraph is one piece of evidences showing the insufficient consideration of requirements from a consistent end to end perspective in the European rulemaking approach. ICA are a key stone at the interface between the Implementing Rules on Initial Airworthiness and Continuing Airworthiness
response	Accepted: Revised point M.A.401 clarifies the acceptable maintenance data.
comment	203 comment by: Jeff Conner
	Section 2.1 states "This NPA addresses both of these SRs by proposing revised GM, which states that DAHs should systematically review the initial maintenance recommendations provided by suppliers and consider them whether they are applicable and effective."



	<b>Recommendation:</b> EASA should provide clarity as to what constitutes a "systematic review" given the stated importance of this action in addressing the referenced SRs. Is the expectation from EASA that updates need to be made to the Quality Management Plan (QMP) to address this "systematic review" requirement?
response	Not accepted: <i>GM No 2 to 21.A.7(a) Determination of which supplier's data are part of ICA</i> and <i>AMC No. 3 to 21.A.7(a) DAH responsibility to check the Supplier's data</i> give the principles to be followed.
comment	205 comment by: Jeff Conner
	"Question to Stakeholders 1) Do you consider that grouping all requirements related to record keeping, manuals and ICAs for holders of design approvals and ETSO authorizations in Subpart A will improve the consistency of Part-21 and the way it is being applied?"
	<b>Comment:</b> - It is not clear that the proposed changes will completely achieve the stated objective of improving the consistency of Part-21 and how it is applied. The proposed change to 21.A.41 to place ICA as part of the TC only addresses ICA associated directly with TC and STCs. As highlighted in the proposed changes to 21.A.7, holders of design approvals required to issue ICA extend beyond TC and STC holders.
	- EASA must ensure that this "grouping" does not create confusion by implying that requirements currently defined for one product or component (e.g. aircraft) are inadvertently applied to another product or component (e.g. propeller).
response	Noted
comment	232 comment by: Dowty Propellers reference section 2.1:
	<b>Recommendation:</b> EASA should provide clarity as to what constitutes a "systematic review" given the stated importance of this action in addressing the referenced SRs. Is the expectation from EASA that updates need to be made to the Quality management system to address this "sytematic review" requirement?
response	Not accepted: <i>GM No 2 to 21.A.7(a) Determination of which supplier's data are part of ICA</i> and <i>AMC No. 3 to 21.A.7(a) DAH responsibility to check the Supplier's data</i> give the principles to be followed.
commont	200 commont hu: Europa Air Sports
comment	Comment to 2.1:
	For aircraft that will be the subject of Part-ML ("light aircraft"), the most significant "room for interpretation" is not in the ICA, but in the lack of clarity in the regulation as to what is mandatory and what is not.
	Opinion 05/2016 Annex I, proposes for ML.A.302(c) that the maintenance programme:



(4) shall include all the mandatory continuing-airworthiness information, such as repetitive ADs, the airworthiness limitation section (ALS) of the instructions for continued airworthiness (ICA), and specific maintenance requirements contained in the type certificate data sheet (TCDS);

This is very poor drafting. If neither the ICA nor other parts of Part-ML *define* what comprises *mandatory* continuing-airworthiness information, it is inappropriate to use this phrase with an exemplar list ("such as"). It must itself define what is mandatory. Hopefully it will be corrected before it becomes law, and it is not within the scope of this NPA.

However, in respect of light aircraft, the role of the amendments to the Part-21 concerning ICA should be to make it easy for Part-ML to define what is mandatory and what is not. This requires only clarity about what is in the ALS section of the ICA, and some change control over it. It does *not* require change control over the other parts of the ICA, which would introduce unnecessary cost.

Further, the Agency's justification for choosing Option 2b is in part consistency with the MRB process, which is not relevant to light aircraft. It is for this reason that we favour Option 2a or Option 3, not Option 2b.

response

Not accepted: Outside the scope of this rulemaking task.

comment	nt 341 comment b					
	Attachment <u>#4</u>	Attachment <u>#4</u>				
	For ease of refe NPA. Portions o	rence, ARSA has uploaded its consolidated com If this letter have also been included as commen	ments to this summary of the ts to the applicable segments.			
response	Noted					
commont	217		commont by: IATA			
comment	IATA General Comment on this NPA					
	Existing Text	Justification				
	General perspective on the NPA approach	The changes proposed by this NPA should reflect that, as far as ICAs are concerned, the relationship between aircraft TCH and its suppliers (including engine or propeller suppliers who are the respective engine or propeller TCH) is that the aircraft TCH should ultimately be responsible for the complete list of ICAs for that aircraft.	The comment is meant to highlight the similarity with the case of the operator being ultimately responsible for the airworthiness of its aircraft.			
	Not accepted: GM No 4 to 21.A.7(b) Integration of ICA between products (aircraft, engine propeller) gives the principles to be followed.					



comment	347   comment by: FAA
	1. It would help the reader if the types of design approvals that may lead to a European Part Approval were explained.
	=
	2. Clarify in this paragraph that this NPA may also apply to EPA (PMA).
response	Not accepted: EPA is used for marking only (for parts which are not designed by the TC holder). There is no European equivalent to PMA.
comment	403 comment by: <i>Rolls-Royce plc</i>
	Part of the rational for changing the rules (as stated within Section 2.1 and elsewhere in 4.1) is to minimise the risk that maintenance organisations might not have all of the necessary data to perform the maintenance in the correct way, which can lead them to using unapproved methods. The Commission Regulations for Continued Airworthiness are foundationally supported by the requirement that maintenance be performed in accordance with the applicable maintenance data defined in M.A.401. A maintenance organisation that lacks the necessary data to perform the maintenance in the correct way, should never lead them (or justify them) to use unapproved methods.
	a failure of maintenance organisations (and others performing maintenance) to use approved methods can be attributable to, or a responsibility of the Design Approval Holder.
	the text ', should ensure that' might be revised to be read as ', should support that', as more factors are contributing to an airworthy condition.
	Proposed Solution: Edit as proposed.
	The text ' DAHs should systematically review provide by suppliers' must be clarified in the way that this should be mandated only when the DAHs has asked for such input from the supplier.
	Proposed Solution: Clarification text requested.
response	Noted
comment	comment by: MARPA

MARPA applauds EASA's efforts to clarify and reform the ICA issue in order to improve aviation safety. Some additional background may be useful and necessary to better help readers of the proposed amendement understand the history of the ICA issue and why it is important to clarify the ICA issue. MARPA suggests including such additional background with any adopted amendment to the regulations, AMC, and GM.

The industry has long relied on product-level mainteancen manuals published by the manufacturers of products. The manuals were intended to provide certain baseline



procedures for accomplishing maintenance and the maintenance industry relied on them for the purpose of accomplishing that maintenance. The ICA rules, as adopted by EASA's predecessor organization, the JAA, reflected the understanding of production and maintenance that existed in the 1980s and 1990s. At the time, the TC holders that produced aircraft, engines, and propellers were largely uninvolved in the performance of maintenance on their respective products. Maintenance was instead performed by the owners of products and separately certificated maintenance providers, who operated under Part 145 approvals. ICAs were required to be produced and made available to persons requried to comply with those instructions in the performance of product maintenance. The TC holders of the era did not perform maintenace, and thus had no incentive to withhold some (or all) maintenance instructions incorporated in ICA, or demand concessions to provide the ICA they were legally required to provide. Instead, they had an incentive to provide the ICA to maintenance providers so that their products would be supported throughout their life-cycle and could be operated safely.

This all changed in the late 90s, when GE acquired Greenwich Air Services, which itself had just taken steps to acquire UNC. With the acquisition of the two companies, GE was overnight not only a major engine TC holder, but also one of the largest providers of engine maintenance. Other TC holders similarly realized there was money to made on the maintenance side of products and similarly began to enter the maintenance field. This quickly changed the incentives to make available the ICA that operators and third party maintenance providers relied on to perform maintenance on their fleets. They were no longer a customer to support, but a competitor in the maintenance industry. Leveraging their position as the holder and thus the entity that controls the ICA, TC holders have taken advantage of the fact that operators and their maintenance providers need the ICA to extract additional concessions from those persons required to comply with the manuals, such as licensing fees, restrictive use agreements (not permitting product owners to share ICA with their chosen maintenance providers), and compelling maintenance providers to become authorized repair facilities in order to gain access to the manuals (whether they want such a "partnership" or not). All of these concessions have been demanded for ICA that the holders are already required to provide under the regulations.

Another ICA that arose was a confusion about the difference between a manufacturer's manual and ICAs. The manufacturing regulations describe ICAs and require them to be produced and distributed. The maintenance regulations occasiaonally make reference to manufacturers manuals. This has led some people to try to posit a difference between the terms (ICAs vs. manuals). The fact is that the difference in terms was not originally meant to have any meaning. ICAs are commonly called maintenance manuals and overhaul manuals. Once again, this was not really a distinction that anyone paid any attention to, until manufacturers started to use their manual systems for competitive advantage (by styling ICA as "CMMs" or "manuals" and thus claiming they were ICA and thus not subject to the ICA availability requirement).

This concern is not illusory. As the need for this NPA makes clear, EASA has wisely identified the fact that TC holders have "different interpretations" of what is a complete set of ICA and as a consequence certain maintenance organizations may not have all the data they need to perform maintenance (and to which they are entitled). This is supported by the the fact that in 2015 the EU Competition Commission launched investigations in alleged anticompetitive behavior relating to the provision of maintenance services by both CFMI and Honeywell. Regardless of those ultimate findings, there is enough of a concern regarding competition in



maintenance that it is of great importance EASA take these steps now to clarify what constitutes ICA and to take appropriate steps to return the industry to the originally intended position: that persons performing maintenance are given the data they need to perform that maintenance correctly in order to safely serve the flying public.

response

Moted. NPA 2018-01 aims to improve the ICA process for safety but not in commercial issues.

#### comment 450

comment by: MARPA

p. 5

Paragraph 2.1 Related Safety Issues related to an Icelandair flight illustrates the importance of clarifying that CMM are ICA. If a maintenance action is required to be performed, it is ICA, and it is in the highest interest of safety that the maintenance instruction be made available to the person performing maintenance regardless of what title it is given (i.e., CMM versus ICA). An operator and/or independent maintenance provider should not be restricted in their ability to perform maintenance actions in accordance with the necessary instructions because the instructions have been withheld for some reason by the TC holder; it must be made clear that any incorporated instructions that are necessary for maintaining airworhtiness, regardless of how they are styled, are ICA and thus must be made available upon request under the regulations (in this case new 21.A.7(b)).

response

Noted. NPA 2018-01 aims to improve the ICA process for safety but not in commercial issues.

#### 2. In summary – why and what (benefits and drawbacks)

comment 38 comment by: LHT DO Any dis-harmonisation with the US goes into the wrong direction and is unacceptable. Since the proposal is also not fully consistent in itself, we do not support it. If the proposal will be passed, all TC holders (Boeing, Embraer, Bombardier...) will issue different sets of documents. Consequently European operators and DOAs may not approve changes to OEM documentation, but FAA organisations may do. This is a major drawback to the current practice. Besides, we do have the strong opinion that it is better to change documentation under DOA procedures / design assurance system than under any repair station process, not controlled by DOAs. Not accepted: Stand-alone changes to the TC holder's ICA are not ICA but alternative response instructions where a DOA may support the CAMO or the AMO (Part-M and Part-145 to accept such maintenance data). 50 comment comment by: Pilatus Pilatus agrees with the approach and the consistancy will be improved. Noted response comment 65 comment by: CAA-NL



	Paragraph 2.4: Only the BASA is mentioned. However, there are also aircraft manufacturers outside of the EU and the US. Will those other bilaterals also be changed in order to prevent any dis-harmonization?			
response	Noted: The change in the EASA approach to ICA will have to be dealt with all other partners but this rulemaking task aims to improve the control of ICA for EU applicants.			
comment	82 comment hy: Europe Air Sports			
comment	Comment to 2.4:			
	Comment to 2.4.			
	1st paragraph: It is somewhat unclear what the term 'end-user' means in this context.			
	2nd paragraph: We wish to point out that the "need for manufacturers to update the development processes of some ICA" has an associated cost which eventually the aircraft owners and operators have to bear.			
response	Noted: 1. The end user is the operator/CAMO/aircraft owner that must develop its maintenance programme. 2. Noted.			
comment	166 comment by: KLM engineering & maintenance			
	<b>Comment summary</b> Section 2.4 indicates that "this proposal will potentially create dis-harmonisation with the US."			
	Suggested resolution			
	In order to minimize costs for all stake holders, EASA is requested to harmonize all differences between the FAA rules related to ICA and the EASA proposed rule.			
response	Not accepted: Disharmonisation will not prevent the continuing implemention of the BASA, even if harmonisation remains a common goal for EASA and the FAA.			
comment	202 comment by: ARSA			
	The Aeronautical Repair Station Association (ARSA) submits the following consolidated comments to the above-referenced Notice of Proposed Amendment issued by the European Aviation Safety Agency (EASA). Specific portions of this document have been posted in their appropriate location using EASA's Comment Response Tool (CRT). For ease of reference this document was also uploaded to the CRT.			
	Summary			
	Although NPA 2018-01 includes positive measures, it falls significantly short of what is needed to ensure continued airworthiness and address the longstanding disconnect between the design and maintenance rules. The NPA leaves continuing airworthiness management organizations (CAMO) and component maintenance providers in a regulatory "no man's			



land." These organizations are required to possess and follow manufacturer manuals but have no regulatory support to obtain them.

ARSA supports standardizing ICA practices and enhancing the agency's control over ICA by clearly making them part of a product's type certificate. The proposed rules, acceptable means of compliance (AMC) and guidance material (GM) establish general principles that would apply to all design approval holders (DAH) and work in conjunction with the specific ICA requirements in the applicable certification specifications (CS).

For example, the proposal would require the ICA to include actions necessary to restore the product or article to an airworthy condition before its limitations are exceeded or it becomes unairworthy, as an alternative to withdrawing the product or article from service. It correctly recognizes that not all articles must have maintenance instructions if restoration to an airworthy condition is not realistically achievable, i.e., beyond economic repair.

Contrary to the requirement imposed on maintenance providers, instructions for shop maintenance would only be ICA in three situations: (1) when their use was required to comply with an airworthiness limitation or any other requirement of the certification process (as is the case today), (2) when the product's ICA contains "scheduled" maintenance recommendations, and (3) any other supplier data identified by the DAH as containing ICA information. In all other situations, the NPA allows "remove and replace" to be the only method for ensuring a product's continued airworthiness. The third situation ignores the fact that the replacement component, unless it is a new article, is restored to an airworthy condition in a workshop that is required to possess and follow the manufacturer's maintenance instructions.

The NPA continues an unfortunate trend whereby EASA has selectively abdicated its regulatory authority to the DAH.<sup>1</sup> In this case, it continues to allow the DAHs to determine which CMMs are ICA, leaving the vast majority of those manuals outside the "make available" requirement in 21.A.7(b). Considering that the European Commission's anti-competitiveness investigation appears stalled, there's no imminent solution to the government-sponsored monopoly on component maintenance data bestowed on suppliers to the type certificate (TC) holders.

Further, the NPA fails to address questionable practices even when the maintenance data is clearly ICA including restrictions that render the ICA constructively unavailable (such as charging exorbitant prices), removing repairs from maintenance and overhaul manuals, imposing source approval requirements and/or directing that articles be returned to the DAH or PAH for maintenance. The last practice is particularly egregious since the DAH/PAH must have an AMO to work on the article and that AMO must have maintenance instructions.

ARSA addresses the NPA's shortcomings below. Selected NPA segments (i.e., those on which ARSA commented) are repeated here in plain text for ease of reference. ARSA's comments are shown by strike-throughs for deletions and bold text for additions.

\_\_\_\_\_

<sup>1</sup>See NPA 2017-19 in which EASA proposed an entirely new system of documenting new parts for maintenance yet proposed to allow the DAH to opt out of it entirely, thus leaving the current costly, burdensome and dis-harmonized system in place.



response	Not accepted: NPA 2018-01 aims to improve safety but does not address the commercial aspects. Identification of ICA is part of NPA 2018-01.
comment	206 comment by: Jeff Conner
	"The new GM, for their format and their link with supplier's documentation, will increase the consistency of ICA between manufacturers."
	<b>Comments:</b> - EASA efforts should be focused on defining the minimum requirements for ICA rather than mandating a specific format for ICA to "increase consistency of ICA between manufacturers". Existing ICA have been developed by DAHs to meet (and exceed!) ICA content requirements. Individual DAHs have adopted ICA formats based on a range of considerations including internal requirements that ensure the required connectivity between various internal DAH data systems needed to produce ICA.
	- Additionally, those who use the ICA to ensure airworthiness of products/parts are extremely familiar with the existing ICA formats. Forced introduction of new ICA formats on existing products/parts creates significant opportunities for confusion and error that could negatively impact safety - the exact opposite result of what EASA is attempting to accomplish with this NPA.
response	Not accepted: NPA 2018-01 does not mandate a format, but provides some guidance. There is no intention of retroactive implementation.
comment	207 comment by: Jeff Conner
	"The main drawbacks of this proposal are the need for manufacturers to update the development processes of some ICA;"
	<b>Comments:</b> - The potential impact of "the need for some manufacturers to update the development processes of some ICA" should not be underestimated. The time and expense associated with revising technical publication systems for ICA is NOT trivial. Even if EASA implements specific ICA format requirements on a go forward basis only, the industry burden associated with having to maintain two different ICA authoring/updating systems across all DAHs is unprecedented and unsustainable. Manufacturers who currently have processes that currently yield ICA that have been found acceptable to EASA as demonstrating compliance to EASA ICA requirements should NOT be forced to "update the development process".
	- GE and it's JV partners introduced over 9000 changes to ICA in 2017 due to our proactive approach to ensure that operators and maintenance providers have access to the most up to date information.
response	Not accepted: The need to update the development processes of ICA will impact the DOA involved in the ICA development: for applicants outside the EU, it will have to be dealt with in the frame of the bilateral agreement.
comment	299 comment by: FNAM



<b>ISSUE</b> -	<b>Bilateral</b>	agreements	for	maintenance
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	FNAM and GIPAG agree that these proposals may create dis-harmonisation with the US. Following the implementation of these requirements, bilateral agreements for maintenance should be reviewed in particular with FAA. EASA's disposals are more stringent than US requirements. This may first result in a competitive distortion, then in implementation issues for FAA certified aircraft flying in Europe. As FAA and EASA requirements are different, European measures should be developed in order to facilitate equivalences between FAA type-certificate and EASA type-certificate. This procedure should also be proportionate and adapted to the needs and resources of SMEs, otherwise FNAM and GIPAG fear it may be only partially implemented. <b>PROPOSAL</b> Review bilateral agreements in order to facilitate equivalences between FAA type-certificate and EASA type-certificate Existing FAA procedures and documentations may be selected as alternatives for cases not covered by the EASA's disposals. In particular measures for orphan
	aircraft and aircraft without ICAs or with expired ICAs could be developed according to FAA extant solutions. This would also facilitate harmonization between the EASA and FAA regulations in maintenance domain.
response	Not accepted: Disharmonisation will not prevent the continuing implemention of the BASA, even if harmonisation remains a common goal for EASA and the FAA.
comment	348 comment by: FAA
	1. The apparent potential benefits of this amendment are: (1) the standardization of Instructions for Continued Airworthiness (ICA) requirements among the various design approval holders, and (2) the effort to provide objective specificity of what information must be in the ICA, especially for articles (appliances).
	2. The apparent potential drawbacks are: New dis-harmonization with both US design approval ICA requirements and US maintenance standards. US maintenance standards are based on acceptable methods, techniques, and practices, of which the ICA is one source. Inclusion of the ICA in the type certificate, as approved data, would reduce owner/operator flexibility, and would require exclusion of the appropriate portions of the ICA (i.e. non-Airworthiness Limitations) for issuance of the US type certificate. ICA changes to EASA issued type certificates from the US (US State of Design) could be a significant burden to both regulatory agencies, even under the bilateral procedures.
	3. Specifically, would this proposal prohibit operator specific maintenance program adjustment for experience and operating environment?
	<ul><li>=</li><li>4. Clarify or summarize the dis-harmonizations raised by NPA 2018-01.</li></ul>
response	Not accepted. 1. Noted. 2. Noted. 3. No, as a specific maintenance programme is not ICA.

4. Completeness of ICA (FAR 21.50) is the most significant difference at certification.



comment	420	comment by: MITSUBISHI AIRCRAFT CORPORATION		
	Page	Section	Reference	Comment/Reason for Change
	5	2.4		It is recognized by EASA that this Amendment will create dis- harmonization with FAA Part 21. It is true. This is totally in acceptable in essence.
response	Noted	1		

uestion for	r stakeholders	p. 5
comment	37	comment by: <i>LHT DO</i>
	We agree with your proposal to group these requ clear enough that it is addressed to Design Approv	irements. Due to the heading it should be al Holders.
response	Noted	
comment	64	comment by: CAA-NL
	<ul> <li>The proposal is "to create a single requirement CAA-NL agrees with this approach and that it will in way it is applied.</li> <li>In our opinion it is sufficiently clear that the holders en authorities.</li> <li>So the answer to both questions is Yes.</li> </ul>	nt for manuals, ICA & record keeping"; the mprove the consistency of Part-21 and the ese provisions do not apply for POA, PtF
response	Noted	
comment	160 comm	nent by: SAFRAN TRANSMISSION SYSTEMS
	<ul> <li>§2.2</li> <li>The aspects to review are, among others: <ul> <li>the definition and identification of ICA (to be princluding the determination of the relationsh information for ETSO articles;</li> <li>the completeness of ICA (during the certification delivery of the product or issuance of the first airw</li> <li>the certification of ICA by the competent author</li> <li>the availability of ICA for any person required to</li> <li>the acceptance/approval of ICA by organisations</li> <li>undates of ICA throughout the life of the product</li> </ul> </li> </ul>	provided during the certification process), ip between ICA and the maintenance tion process) provided by the DAH upon porthiness certificate; rity (during the certification process); o comply with them; s other than the certification authority; and



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	to add: in respect of Intellectual Properties regulation as defined by UE 2016/943.			
response	Not accepted: Outside the scope of this rulemaking task.			
comment	161   comment by: SAFRAN TRANSMISSION SYSTEMS			
	Question for stakeholders Do you consider that grouping all requirements related to record keeping, manuals and ICAs for holders of design approvals and ETSO authorisations in Subpart A will improve the consistency of Part -21 and the way it is being applied? Is it sufficiently clear that these provisions do not apply to record keeping for production organisations, permit to fly holders, competent authorities (except for design approvals transferred to EASA)?			
	Answer: yes, title is correct: Record keeping for holders of design approvals and ETSO authorisations			
response	Noted			
comment	165   comment by: KLM engineering & maintenance			
	Comment summary:			
	Question for stakeholders Do you consider that grouping all requirements related to record keeping, manuals and ICAs for holders of design approvals and ETSO authorisations in Subpart A will improve the consistency of Part -21 and the way it is being applied? Is it sufficiently clear that these provisions do not apply to record keeping for production organisations, permit to fly holders, competent authorities (except for design approvals transferred to EASA)?			
	Suggested resolution:			
	KLM agrees that that grouping all requirements related to record keeping, manuals and ICAs for holders of design approvals and ETSO authorisations in Subpart A will improve the consistency of Part -21 and the way it is being applied.			
	<ol> <li>However:         <ol> <li>Obligations to comply with point 21.A.6 'Manuals' are missing for holders of minor changes, STC's, major and minor repairs, and ETSO's (refer to separate KLM proposals),</li> <li>To improve clarity, KLM proposes that EASA explicitly states in the proposed rule that these provisions do not apply to record keeping for production organisations, permit to fly holders, competent authorities (except for design approvals transferred to EASA).</li> </ol> </li> </ol>			
response	Partially accepted: 1. Reference to 21.A.5, 21.A.6 and 21.A.7 verified. Some requirements are added to current Part 21.			



TE.RPRO.00064-006 © European Union Aviation Safety Agency. All rights reserved. ISO 9001 certified. Proprietary document. Copies are not controlled. Confirm revision status through the EASA intranet/internet. 2. These requirements clearly refer to design approval holders (DAHs).

comment	180 comment by: THALES AVS FRANCE SAS
	Yes THALES AVS supports the grouping of all requirements related to record keeping, manuals and ICAs for holders of design approvals and ETSO authorisations in Subpart A. It will improve the consistency of Part -21. Yes THALES AVS deems sufficiently clear to which stakeholders these provisions apply.
response	Noted
comment	190 comment by: Antonio PARADIES
	ATR considers that grouping all requirements will improve consistency and readability.
response	Noted
comment	200 comment by: ARSA
	2.5. How we want to achieve it — overview of the proposals
	The main change to Part 21 introduced by this proposal is to clearly place ICA as part of theTC(point21.A.41).The related GM for the scope, availability, publication format, supplier's data, integrationbetween products, of ICA will improve the implementation by the end users.
	Furthermore, the current Part 21 duplicates the requirements for manuals, instructions for continued airworthiness and record-keeping for each category of certificates or approvals: it is therefore proposed to create a single requirement for each of these aspects (new points 21.A.5, 6 and 7).
	Question for stakeholders Do you consider that grouping all requirements related to record keeping, manuals and ICAs for holders of design approvals and ETSO authorizations in Subpart A will improve the consistency of Part -21 and the way it is being applied?
	Is it sufficiently clear that these provisions do not apply to record keeping for production organizations, permit to fly holders, competent authorities (except for design approvals transferred to EASA)?
	ARSA supports making the ICA part of the type certificate to improve standardization of these documents, with respect to preparation and required content. The effort will also provide the necessary controls for the EASA to ensure compliance.
	ARSA answers the two questions in the affirmative.
response	Noted

comment 233

comment by: Dowty Propellers



#### ref section 2.3:

- It is not clear that the proposed changes will completely achieve the stated objective of improving the consistency of Part-21 and how it is applied. The proposed change to 21.A.41 to place ICA as part of the TC only addresses ICA associated directly with TC and STCs. As highlighted in the proposed changes to 21.A.7, holders of design approvals required to issue ICA extend beyond TC and STC holders.

- EASA must ensure that this "grouping" does not create confusion by implying that requirements currently defined for one product or component (e.g. aircraft) are inadvertently applied to another product or component (e.g. propeller).

#### response Not accepted:

1. 21.A.41 makes ICA part of the TC, but 21.A.7 gives DAHs the responsibility to produce ICA when necessary. Thus, ICA are not only for TC and STC holders.

2. Modified Part 21 points are applicable to all types of products: the grouping will not introduce such confusion.

comment	234	comment by: Dowty Propellers
	ref para 2.4, -	
	The potential impact of "the need f processes of some ICA" should not be a revising technical publication systems ICA format requirements on a go for having to maintain two different f unprecedented and unsustainable. currently yield ICA that have been fou EASA ICA requirements should NOT be - In the case of INTENTIONAL dis-harm regulations will be enforced when T agency?	for some manufacturers to update the development underestimated. The time and expense associated with for ICA is NOT trivial. Even if EASA implements specific ward basis only, the industry burden associated with CA authoring/updating systems across all DAHs is Manufacturers who currently have processes that nd acceptable to EASA as demonstrating compliance to e forced to "update the development process". nonization between EASA and the FAA, which agency's Cs issued by one agency are validated by the other
response	Noted for the impact: The transition p Noted: The local agencies' regulations on improving the validation process.	eriod should allow for a smooth adaptation. s will prevail. However, EASA and the FAA are working
comment	235	comment by: Dowty Propellers
	ref para 2.4 -	
	EASA efforts should be focused on de mandating a specific format for manufacturers". Existing ICA have b content requirements. Individual DA considerations including internal re between various internal DAH data sy - Additionally, those who use the ICA t familiar with the existing ICA formats	fining the minimum requirements for ICA rather than ICA to "increase consistency of ICA between been developed by DAHs to meet (and exceed!) ICA AHs have adopted ICA formats based on a range of equirements that ensure the required connectivity stems needed to produce ICA. to ensure airworthiness of products/parts are extremely to. Forced introduction of new ICA formats on existing

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	products/parts creates significant opportunities for confusion and error that could negatively impact safety - the exact opposite result of what EASA is attempting to accomplish with this NPA.
response	Noted: It is not intended to 'force' the change of existing format. The proposed GM is based on most of existing ICA.
comment	263 comment by: <i>Europe Air Sports</i>
	Comment to 2.3 Question for stakeholders: Comment on the first sentence: Grouping will have a positive effect, less search will be required. Consequent updates are a "must", as well as texts not allowing for interpretations.
	Comment on the second sentence: "Sufficiently clear" is not enough, everyone obliged to respect the provisions must have a full understanding of what she/he has to do. "Record keeping" still is, after several years, an open task (RMT.0276, ToR published on 28/11/2011).
response	Noted (RMT.0276 is related to technical records for operators and is outside the scope of this rulemaking task.)
comment	303 comment by: Laurent Lalaque
	SafranHE has no objection to regroup all similar requirements in the Subpart A identical requirements that are currently disseminated in the Part-21. It will emphasize the need for all products.
response	Noted
comment	311 comment by: Zodiac Aerospace - Sell GmbH DOA 21J.067
	Q1: Yes - regrouping all requirements related to record keeping in Subpart A is considered an improvement concerning the consistency of Part-21 and the way it is being applied. Q2: No - there is an additional need to clarify the scope of documentation to be recorded as stipulated in 21.A.5.
response	Noted
comment	330 comment by: Dassault-Aviation
	Question for stakeholder page 5
	1) Dassault-Aviation agree with the proposition of grouping all requirements related to record keeping, manuals and ICAs for holder of design approvals and ETSO authorizations in Subpart A.
	2) DA do not understand the interest of the second question. This point is to be clarified.
response	Noted



comment	349 comment by: FAA
	The response is "yes", however significant standards differences remain between NPA 2018- 01 and the US ICA requirements.
response	Noted
comment	404 comment by: <i>Rolls-Royce plc</i>
	Response to Question for stakeholders: No, we don't agree that the grouping of requirements related to record-keeping, manuals and ICAs in subpart A will improve the consistency of Part 21 and the way it is applied. The requirements are clear in the current organisation of Part 21, and are improved by the definition of ICA added in Subpart A, though this could equally be put in Subpart B with a reference from other sections. The problem with grouping is that the requirements for ICA in particular are slightly (and correctly) different for TC, changes and repairs, and grouping them together will miss the differences, and impose duties that are not required, or create confusion that doesn't exist today. On the second question, it is clear that the grouped requirements do not apply to the nondesign organisations listed in the question, but this is also inconsistent, if the intention is to group generally-applicable requirements such as record keeping into a single section. This illustrates the point made against the first part of the question, as it's even more complicated to create a single rule on record keeping that makes sense to all organisations that need to keep records.  Proposed solution: Keep the original locations for the requirements for manuals, ICA and records. Put the definition of ICA in Subpart B, and refer to it from the requirements to produce ICA in the other Subparts.
response	Noted
comment	471 comment by: Safran Aircraft Engines
	Question for stakeholders Do you consider that grouping all requirements related to record keeping, manuals and ICAs for holders of design approvals and ETSO authorisations in Subpart A will improve the consistency of Part -21 and the way it is being applied? Is it sufficiently clear that these provisions do not apply to record keeping for production organisations, permit to fly holders, competent authorities (except for design approvals transferred to EASA)? Answer Safran AE has no objection to regroup all similar requirements in the Subpart A identical requirements that are currently disseminated in the Part-21. It will emphasize the need for all products.
response	Noted
response	Noted

#### 3. Proposed amendments to Part 21 - 21.A.5 to 21.A.7

р. 6-7

comment 5

comment by: Yuksel Kenaroglu

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	1 In this section or at another place this document a clarification for the usage of the terms "continued" and "continuing" would be beneficial. EASA may not use these two terms together in the rules and documents, but, it is commonly encountered and used in the ICA-related documents, and, it causes some confusion. (For reference, it is explained in UK CAP 722.)
	If it is not mandatory to use only one statement (word) covering all areas of the Certification, using the term "continued" in the PART 21 (rules) and, using the statement "continuing" for stating the processes and process document for ICA (means of compliance documents, such as ICA Procedures, Plan, Maintenance Manuals,) would be considered. EASA's preference needs to be indicated (clarified) on this issue.
	2 Paragraph 21.A.7 (a): "continued airworthiness of the aircraft, engine, propeller" When we use the word, "aircraft" it should include all sub-systems, like engine. But, "un-installed" sub- systems like engine may be stated additionally and seperately.
	3 Delivery time of the ICA Documents may need to be reviewed. "upon the issuance of the first certificate of airworthiness" may be late. If we assume that any person who has an assignment to carry out some ICA work (before issuance of the AW Certificate) on the aircraft he/she should need those documents in advance. Shortly, those documents needs to be delivered no later than aircraft delivery.
	(c):The documents that describes maintenance concept of the aircraft, document that describes maintenance authority levels, should be delivered in the first document package.
respons	<ul> <li>Partially accepted:</li> <li>1. 'Continued' should be used.</li> <li>2. Not agreed: the current wording has been agreed with the rulemaking/review group.</li> <li>3. These deadlines are enforceable: it does not prevent the operator from getting some advance information from the TC holder.</li> </ul>
commer	t 6 comment by: Lionel Wallace Limited
	21.A.7 (d)should be amended to stateshall submit to the Agency, <u>on request</u> , a documentto add sufficient flexibility for compliance on publication of the regulationunless a forward compliance timeframe is intended for implementation.
respons	Accepted: Text modified accordingly.
comment	29 comment by: Luftfahrt-Bundesamt
	Please find the attached commentary to NPA 2018-01 regarding the proposed amendment to Annex I (Part 21) of Regulation (EU) No 748/2012 to clarify that Instructions for Continued Airworthiness (ICA) are part of the Type Certificate (TC), and to develop the related Acceptable Means of Compliance (AMC) and Guidance Material (GM).
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The following changes are proposed for the draft regulation change of Annex I (Part 21) to the Commission Regulation (EU) No 748/2012:

Page No: 6 Section 3.1 Draft regulation (Draft EASA opinion).Paragraph No: 21.A.6 ManualsProposed Text: Add additional text to paragraph 21.A.6 as follows:

#### 21.A.6 Manuals

The holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval or an ETSO authorization shall produce, maintain and update master copies of all manuals or variations in the manuals required by the applicable type certification basis, the applicable operational suitability data certification basis and the environmental protection requirements for the product or article, and provide copies, to the Agency and to the Competent Authorities, on request.

**Reasoning:** In order to facilitate the verification of the continued airworthiness of aircraft through the owner/operator, approved maintenance organisations and Continuing Airworthiness Management Organisations (CAMO) in addition to the Competent Authority the aircraft documentation needs to meet upon an agreed document standard / specification.

Page No: 6 Section 3.1 Draft regulation (Draft EASA opinion).Paragraph No: 21.A.7 Instructions for continued airworthinessProposed Text: Add additional text to paragraph 21.A.7 (a) as follows:

(d) ... The holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval shall submit to the Agency and to the Competent Authorities a document describing the process for how changes to the instructions for continued airworthiness are made available in order to comply with the first sentence.

Reasoning: For accuracy and clarity

response Not agreed: The oversight of a CAMO does not fall under Part 21.

comment 35

comment by: LHT DO

#### 21.A.6:

Please define the difference between ICA data and Manuals. With the current definition, all manuals indicated in the TCDS are ICA in full.

This differentiation is essential to allow deviations to manuals without changing the required ICA data!

Please amend that the TC Holder has to issue a set of the approved ICA data in addition to their integration into manuals.

#### 21.A.7 (c)

This section is required for STC holders as well. Text should read "The DAH may delay the availability of a portion of the instructions for continued airworthiness..." In the specific case



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of aircraft completions not all parts of the ICA may be finalized during the layover and before<br/>approval. Therefore, a provision to delay data issue is required.responseNot accepted:<br/>1. 21.A.6 deals with manuals that are required by the type-certificate basis (such as AFM,<br/>etc.); 21.A.7 deals with ICA which may be one of the manuals.<br/>2. The rulemaking/review group considers that a delay cannot be granted to an STC holder.

comment	48 comment by: Francis Fagegaltier Services
	In the European Part 21, in 21.A.31 §(a)(3) we find reference to " an approved airworthiness limitations section of the instructions for continued airworthiness" which does not appear in current 21.A.61 or in the proposed 21.A.7 but appears in the guidance material proposed in this NPA (see for example, GM n°2 to 21.A.7 (b)).
	In other words, this NPA proposes interpretation / guidance on something which is not identified in the proposed Part 21, 21.A.7 : the possible existence of such an airworthiness limitations section should be known when reading 21.A.7.
response	Not accepted:
	ALS do not need to appear in 21.A.7 as this point does not address the content of ICA.
	ALS are referenced by 21.A.31 and defined in the certification specifications (CSs) related to the product.
comment	66 comment by: CAA-NL
	Point 21.A.7.(a) Stated that ICA can also be referenced. In the new AMC No 2 to 21.A.7(a).2 it is mentioned that referenced ICA will also become part of the complete set of ICA. Then, in 21.A.265 it is stated that all maintenance data that is part of the complete set of ICA (thus also the referenced ICA) should reference the product for which the maintenance data was developed. In our understanding, this means that all manufacturers of components should refer in their maintenance data the product on which their component is to be installed. This puts a burden on the component manufacturers of which the benefits are unclear. Should a list of referenced CMM's in the aircraft ICA not be sufficient?
response	Accepted: The 21.A.265 requirement is not kept in Opinion No 07/2019.
comment	67 comment by: CAA-NL
	Point 21.A.7(d): the first line mentions "as established in accordance with (b)". However, para (b) only deals with the obligation to supply these instructions to those who need them. The reference seems to be incorrect or we do not understand this relation between (d) and (b).
response	Accepted: 'established' is replaced by 'furnished'.
comment	89 comment by: AIRBUS

#### 1. PARAGRAPH / SECTION THE COMMENT IS RELATED TO:

#### Page 6 : 21.A.7 Instructions for continued airworthiness

"(b) The holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval shall furnish at least one set of complete instructions for continued airworthiness to each known owner of one or more products upon its delivery or upon the issuance of the first certificate of airworthiness for the affected aircraft, whichever occurs later, and thereafter make those instructions available on request to any other person required to comply with any of the terms of those instructions."

#### 2. PROPOSED TEXT / COMMENT:

How export control regulations may interfere with respect to this Part 21 requirement? In case of conflicting requirements is it basically recognized that export control regulations take precedence over Part 21 requirements? If not then it is suggested to update 21.A.7(b) to refer to export control regulations.

#### 3. RATIONALE / REASON / JUSTIFICATION:

Export control regulations must be applied by industry and may conflict with Part 21.A.7(b).

response Noted: Outside the remit of the rulemaking/review group.

106   comment by: AIRBUS
1. PARAGRAPH / SECTION THE COMMENT IS RELATED TO:
Page 6; 21.A.7 ICA
 (d) Changes to the instructions for continued airworthiness as established in accordance with (b) shall be made available to all known operators of the product affected by the change and shall be made available on request to any person required to comply with any of the terms of those changes to the instructions."
2. PROPOSED TEXT / COMMENT:
It is proposed to state that <i>"The availability of ICAs/data could be subject to specific agreement with the DAH holder"</i> . This can be added in a GM to 21.A.7(d).
3. RATIONALE / REASON / JUSTIFICATION:
It is understood that "shall be made available" does not preclude that there is an agreement with DAH in order to get the ICA changes.
Not accepted: The rulemaking/review group considers that the current wording encompasses such an agreement.
107 comment by: AIRBUS

#### 1. PARAGRAPH / SECTION THE COMMENT IS RELATED TO:



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Page 6; 21.A.5 Record keeping for holders of design approvals and ETSO authorisations

All relevant design information and supporting documentation, drawings and test reports, including inspection records for the specimen and prototype or article tested, shall be held by the holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval or an ETSO authorisation at the disposal of the Agency and shall be retained in order to provide the information necessary to ensure the continued airworthiness, continued validity of the operational suitability data and continued compliance with the applicable environmental protection requirements of the product or the article.

#### 2. PROPOSED TEXT / COMMENT:

#### It is proposed to update the text as follows:

21.A.5 Record keeping for holders of design approvals and ETSO authorisations All relevant design information and supporting documentation, drawings and test reports, including inspection records for the specimen and prototype or article tested for certification purpose, shall be held by the holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval or an ETSO authorisation at the disposal of the Agency and shall be retained in order to provide the information necessary to ensure the continued airworthiness, continued validity of the operational suitability data and continued compliance with the applicable environmental protection requirements of the product or the article.

#### 3. RATIONALE / REASON / JUSTIFICATION:

Supplementing "All relevant design information" with "supporting documentation" raises questions without bringing additional clarifications. In addition the current wording "All relevant design information" can be already interpreted as encompassing supporting documentation.

For inspection records of specimen, prototype or article, the requirement is not clear that it relates to specimen, prototype or article to be used for certification test purpose only. The requirement is not applicable to research and/or development tests.

response |

Accepted: Text modified accordingly.

comment | 123

comment by: AIRBUS

#### 1. PARAGRAPH / SECTION THE COMMENT IS RELATED TO:

NPA 2018-01, page 6/37, point 21.A.6

#### 2. PROPOSED TEXT / COMMENT:

This point states that the holder of a design approval shall produce, maintain and update master copies of all required manuals or variations in the required manuals. Manuals do not necessarily exist in today's technical data products; this is explained in the GM No.1 to 21.A.7(a). Reference should be made to "document or Data Sets/Modules".

#### 3. RATIONALE / REASON / JUSTIFICATION:

Self Explanatory.

#### response | Partially accepted.



TE.RPRO.00064-006 © European Union Aviation Safety Agency. All rights reserved. ISO 9001 certified. Proprietary document. Copies are not controlled. Confirm revision status through the EASA intranet/internet. GM to 21.A.6 may extend the concept explained in GM No 1 to 21.A.7(a) to manuals.

comment	124 comment by: AIRBUS					
	<ol> <li>PARAGRAPH / SECTION THE COMMENT IS RELATED TO: NPA 2018-01, page 6/37, point 21.A.7</li> </ol>					
	2. PROPOSED TEXT / COMMENT:					
	The paragraph (a) of this point defines the term ICA: they are the instructions and information that are necessary for the continued airworthiness of the aircraft, engine, propeller, parts and appliances, which must be developed or referenced by the design approval holder in accordance with the applicable certification basis. It is proposed to update this definition to emphasize the link with continuing airworthiness from a performance based point of view: The objective of ICA is to ensure that the aircraft type certification airworthiness standard is maintained throughout the operational life of the aircraft by enabling organisations and personnel involved in Continuing Airworthiness to maintain the aircraft in an airworthy condition. As a result the following is proposed:					
	"21.A.7 (a) Instructions for continued airworthiness are the instructions and information that are necessary for the continued airworthiness of the aircraft, engine, propeller, parts and appliances, which must be developed or referenced by the design approval holder in accordance with the applicable certification basis. The final objective of Instructions for Continued Airworthiness is to ensure that the aircraft type certification airworthiness standard is maintained throughout the operational life of the aircraft by enabling organisations and personnel involved in Continuing Airworthiness to maintain the aircraft in an airworthy condition."					
	Should not the final definition be included in the Implementing Rules on Initial Airworthiness and Continuing Airworthiness?					
	3. RATIONALE / REASON / JUSTIFICATION:					
	The paragraph 2.2. 'What we want to achieve — objectives' of this NPA states that the specific objective of this RMT is to establish clear requirements and responsibilities for <u>all</u> parties involved in the production of ICA, their approval <u>and their implementation</u> . It implies that this definition should consider the term from a consistent end to end perspective. ICA are a key stone at the interface between the Implementing Rules on Initial Airworthiness and Continuing Airworthiness.					
response	Not accepted. The link between Part 21 and Part-M is ensured by Regulation (EU) 2018/1139 (the Basic Regulation).					
comment	126 comment by: AIRBUS					
	1. PARAGRAPH / SECTION THE COMMENT IS RELATED TO: NPA 2018-01, page 6/37, point 21.A.7					
	2. PROPOSED TEXT / COMMENT:					



	It is proposed to modify the paragraph (b) of this point to read: "(b) [] shall furnish at least one set of complete instructions for continued airworthiness to each known owner <b>and operator</b> of one or more products []."
	<b>3. RATIONALE / REASON / JUSTIFICATION:</b> In the paragraph (d) of point 21.A.7, reference is made to operators, in this paragraph to owners. It is proposed to refer to owners and operators (will better align with point M.A.201(b), for example).
response	Not accepted: The operator may not be known at delivery and it is consistent with MA.201(a).
comment	127 comment by: AIRBUS
	1. PARAGRAPH / SECTION THE COMMENT IS RELATED TO: NPA 2018-01, page 6/37, point 21.A.7
	<ul> <li><b>2. PROPOSED TEXT / COMMENT:</b>         The paragraph (b) of this point defines the time for the initial delivery of ICA, i.e. upon delivery of the product(s) or upon the issuance of the first certificate of airworthiness for the affected aircraft, whichever occurs later.     </li> <li>The point of repair embodiment is a better reference for a holder of an approval for a repair design.</li> </ul>
	<b>3. RATIONALE / REASON / JUSTIFICATION:</b> The delivery of a product or the issuance of the first certificate of airworthiness for the affected aircraft may be seen as irrelevant for a holder of an approval for a repair design. As other people and authorities will read and interpret Part-21, not just the EASA and the DAHs, it would be appropriate to be precise in order to prevent misinterpretations.
response	Accepted: The case of design changes and repairs is better reflected in Opinion No 07/2019.
comment	128 comment by: AIRBUS
	1. PARAGRAPH / SECTION THE COMMENT IS RELATED TO: NPA 2018-01, page 6/37, point 21.A.7
	<ul> <li><b>2. PROPOSED TEXT / COMMENT:</b> It is proposed to modify the paragraph (c) of this point to read:         "(c) The type certificate,—or restricted type certificate holder may delay the availability of a portion of the instructions for continued airworthiness, dealing with long lead accomplishment instructions of a scheduled nature overhaul or other forms of heavy maintenance, until after the product or modified product has entered into service, but shall make those instructions available before the use of these data is required for the product or modified product requires such overhaul or heavy maintenance."     </li> </ul>
	3. RATIONALE / REASON / JUSTIFICATION:
	Repair design approval holders are currently also allowed, under point 21.A.449, to delay the issuance of some ICA. Apparently, no reason is provided in this NPA justifying a different approach for repair design approval holders. The AMC 21.A.7(c) states in the paragraph 1) for the option 3, on page 22:



"Point 21.A.7(c) contains a provision that certain ICA dealing with the 'overhaul or other forms of heavy maintenance' may be delayed until after the entry into service. Although there is no definition of what is meant by the 'overhaul or other forms of heavy maintenance', the intention of the rule is to provide flexibility to the applicants/holders for long lead ICA of a scheduled nature." Is an overhaul always heavy maintenance? Probably not, so keeping 'overhaul or other forms of heavy maintenance' would imply that the term overhaul can no longer be used for overhauls that are not heavy maintenance. Further, it would require defining the other forms of heavy maintenance on the basis of the term 'maintenance' (as defined in Regulation (EU) No 1321/2014). response Partially accepted: 1. Extending the delay possibility to the repair design approval: it is considered that the delay possibility should stay with the TC holder. 2. Text amended accordingly. 129 comment comment by: AIRBUS 1. PARAGRAPH / SECTION THE COMMENT IS RELATED TO: NPA 2018-01, page 7/37, point 21.A.7 2. PROPOSED TEXT / COMMENT: It is proposed to modify the paragraph (d) of this point to read: "(d) Changes to the instructions for continued airworthiness as established in accordance with (b) or (c) shall be made available to all known owners and operators of the product affected by the change and shall be made available on request to any person or organisation required to comply with any of the terms of those changes to the instructions. [...]." 3. RATIONALE / REASON / JUSTIFICATION: Reference to paragraph (c) is added for to ensure consistency with a previous comment. In the paragraph (b) of point 21.A.7, reference is made to owners, in this paragraph to operators. It is proposed to refer to owners and operators (will better align with point M.A.201(b), for example). Reference to organisations is added to ensure consistency with Part-M. Not accepted: Organisation explained in the GM. response comment 130 comment by: AIRBUS 1. PARAGRAPH / SECTION THE COMMENT IS RELATED TO: NPA 2018-01, page 7/37, point 21.A.41 **PROPOSED TEXT / COMMENT:** 2.

> The Airworthiness Limitation Section is part of the type design (point 21.A.31) and of the Instructions for Continued Airworthiness (e.g. CS-25, Appendix H, paragraph H25.4). Now that ICA are part of the Type Certificate, will the ALS be removed from the type design? In other words, what are the differences between ICA of the type design (and of the Type Certificate) and ICA of the Type Certificate (only)?

\* \* \* TE.R \* \* \* An agency of the European Union

	Should the ALS be kept as part of the type design, the development of GM for points 21.A.31 and/or 21.A.41 would be necessary to explain the differences.					
	3. RATIONALE / REASON / JUSTIFICATION:					
	For sake of understanding.					
response	Not accepted. ALS is part of the type design as they must be available at TC issuance, whereas the remaining ICA may be released at a later stage.					
comment	162 comment by: SAFRAN TRANSMISSION SYSTEMS					
	21.A.7 Instructions for continued airworthiness (a) Instructions for continued airworthiness are the instructions and information that are necessary for the continued airworthiness of the aircraft, engine, propeller, parts and appliances, which must be developed or referenced by the design approval holder in accordance with the applicable certification basis. ICAs could be splitted in 2 categories:					
	<ol> <li>generic data providing all necessary informations and requirements to achieve Continued Airworthiness of the parts.</li> <li>specific data providing advanced informations and repair solutions requiring skilled operators and approved processes. These data are mostly subject to IP and need to be adressed accordingly.</li> </ol>					
	Comment: IP recognition must be introduced in the Basic regulation ICAs Categories could be introduced in the AMC and GM					
response	Not accepted: Outside the scope of this rulemaking task.					
comment	163comment by: SAFRAN TRANSMISSION SYSTEMS21.A.7 Instructions for continued airworthiness					
	(b) The holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval shall furnish at least one set of complete instructions for continued airworthiness to each known owner of one or more products upon its delivery or upon the issuance of the first certificate of airworthiness for the affected aircraft, whichever occurs later, and thereafter make those instructions available on request to any other person required to comply with any of the terms of those instructions.					
	Comment: To add: ICA distribution to any other person required to comply, in respect of IP regulations UE 2016/943.					
response	Not accepted: Outside the scope of this rulemaking task.					



comment	164	comment by: SAFRAN TRANSMISSION SYSTEMS			
	21.A.7 Instructions for continued airworthiness				
	(d) Changes to the instructions for continued (b) shall be made available to all known oper shall be made available on request to any per those changes to the instructions. The holder supplemental type certificate, design change Agency a document describing the process for airworthiness are made available in order to	airworthiness as established in accordance with ators of the product affected by the change and son required to comply with any of the terms of of a type certificate, restricted type certificate, e or repair design approval shall submit to the r how changes to the instructions for continued comply with the first sentence.			
	Comments: to remove "with <del>any</del> of the terms				
	to add: to any other person required to comp	ly, in respect of IP regulations UE 2016/943.			
response	Not accepted: The proposal does not improve	e the text.			
	[				
comment	176 comment	by: Zodiac Aerospace - Sell GmbH DOA 21J.067			
	An appropriate definition of Manuals and allocate "Manuals" vs. "ICA", since various IC. The title of 21.A.6 will lead to ambiguities maintained and thus jeopardize the intention named "manual". Note: the term "manual" is organization manuals and not manuals relate 1 to 21.A.239(a) describes manuals as "appro Airworthiness Limitations section of the Ins Certification Maintenance Requirements (CM However, to be consistent with the Type Cert the title and content of 21.A.6 should be revi Note: as per GM No.1 to 21.A.7(a) the Wei should be clarified if the WBM is part of the I	A are designated "Manual". concerning the manuals to be produced and of this rule since not all related instructions are s also used in 21.A.125A, 21.A.143 and refers to d to product, part or appliance; whereas GM No oved by the Agency (Aircraft Flight Manual, the tructions for Continued Airworthiness and the IR) document, where applicable)." tificate Data Sheets issued by EASA and 21.A.7 sed accordingly. ght and Balance Manual is considered ICA but nstructions for Operation ("Manual").			
	21.A.6 <i>Instructions for Operation and Continu</i> . The holder of a type certificate, shall proc <i>instructions for operation and continued ai</i> required by	ned Airworthiness Huce, maintain and update master copies of all rworthiness or variations in those instructions			
response	Not accepted: The intention of the grouping is not to make n some provisions which are duplicated.	nanuals as ICA. It is just the opportunity to group			
comment	189	comment by: Antonio PARADIFS			
	EASA should clarify that availability of the ICA them, does not imply that it shall be free of c	to all known operators required to comply with harges.			



	EASA should clarify the meaning of "complete" instruction for continued airworthiness and how this point can be fulfilled if some ICA are made available after delivery, as allowed in (c) and in the GM/AMC.				
response	Not accepted: 1. Commercial aspects are not addressed by this proposal. 2. 'Complete' is defined in the GM.				
comment	208 comment by: Jeff Conner				
	<b>Comment:</b> Wording proposed in this new section is a modification of wording currently in 21.A.55. The phrase "product tested" that is in the current 21.A.55 has been omitted in the proposed 21.A.5.				
	<b>Recommendation:</b> Add the word "product" to the opening sentence of 21.A.5 such that it reads: "All relevant design information and supporting documentation, drawings and test reports, including inspection records for the <b>product</b> , specimen, prototype or article tested, shall be held "				
response	Accepted: Text amended accordingly.				
comment	209 comment by: Jeff Conner				
	necessary to ensure the continued airworthiness "				
	<b>Comment:</b> No time limit is provide here for retention of the referenced documents. What time limit is required by EASA? Will EASA document retention requirements align with FAA document retention requirements?				
response	Not accepted. There is no time limit mentioned in the regulation; however, as it is formulated, the retention period lasts as long the certificate is valid.				
comment	210 comment by: Jeff Conner				
	"The holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval or an ETSO authorization shall produce, maintain and update master copies of all manuals,"				
	<b>Comment:</b> GE Aviation appreciates the clarity provided by EASA that all design approval holders have a responsibility to "produce, maintain and update" ICA for the designs for which they hold approval rather than referencing ICA produced by a different design approval holder thus avoiding the regulatory obligation to produce ICA.				
	<b>Question:</b> How will EASA deal with confusion associated with acceptance of Parts Manufacturer Approval (PMA) and repair approvals granted by the FAA - and accepted by EASA under bilateral agreements - where the FAA allows the design approval holder to "state or show" that another DAH's ICA should be used for the PMA or repair?				
response	Not accepted.				

\*\*\*\* \* \* \*\*\*

There is no confusion: EASA accepts the FAA approvals and does not expect US applicants to comply with the EASA Part 21. comment 211 comment by: Jeff Conner "(b) The holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval shall furnish at least one set of complete instructions for continued airworthiness to each known owner of one or more products . . . " **Comment:** If someone who does not own an aircraft - for example a company that stocks used equipment but holds no maintenance privileges - purchases an engine, propeller, part or appliance, this individual or entity is not "required to comply with any of the terms of those instructions" and therefore has no need to comply with the ICA and thus no right to request ICA access. Recommendation: EASA needs to clearly define the term "owner" in the context of regulatory requirement to furnish ICA. Not accepted: The term 'owner' has been used since the creation of Part 21. response comment 212 comment by: Jeff Conner "... before the product or modified product requires such overhaul or heavy maintenance." **Comment:** The terms "overhaul" and "heavy maintenance" need to be defined or existing definitions referenced. Partially accepted: Text modified. response comment 213 comment by: Jeff Conner "The holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval shall submit to the Agency a document describing the process for how changes to the instructions for continued airworthiness are made available in order to comply with the first sentence." Comment: The current wording in 21.A.61 "A programme showing how changes to the instructions for continued airworthiness are distributed shall be submitted to the Agency" is both more concise and less open to confusion with respect to whether the required "document" is a simple document or something more comprehensive (i.e. programme). **Recommendation:** We recommend modifying the current sentence to read as follows: "The holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval, shall submit to the Agency a programme describing the process for how changes to the instructions for continued airworthiness are made available to comply with the first sentence." response Not accepted: The term 'document' gives the flexibility for the applicant to describe 'the process for how changes to the instructions for continued airworthiness are made available to comply with the first sentence'.



comment 236

comment by: Dowty Propellers

#### ref 3.1.1 21.A.5,

Wording proposed in this new section is a modification of wording currently in 21.A.55. The phrase "product tested" that is in the current 21.A.55 has been omitted in the proposed 21.A.5.

**Recommendation:** Add the word "product" to the opening sentence of 21.A.5 such that it reads: "All relevant design information and supporting documentation, drawings and test reports, including inspection records for the product, specimen, prototype or article tested, shall be held ... "

"All relevant design information . . . shall be retained in order to provide the information necessary to to ensure the continued airworthiness . . . "see comment

**Comment**: No time limit is provide here for retention of the referenced documents. What time limit is required by EASA? Will EASA document retention requirements align with FAA document retention requirements? See comment

ref 3.1.1 21.A.6,

"The holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval or an ETSO authorization shall produce, maintain and update master copies of all manuals, . . ."

#### Comments:

- Dowty appreciates the clarity provided by EASA that all design approval holders have a responsibility to "produce" ICA for the designs for which they hold approval rather than referencing ICA produced by a different design approval holder and avoiding the regulatory obligation to produce ICA.

- How will EASA deal with confusion associated with acceptance of Parts Manufacturer Approval (PMA) and repair approvals granted by the FAA - and accepted by EASA under bilateral agreements - where the FAA allows the design approval holder to "state or show" that another DAH's ICA should be used for the PMA or repair? See comment

ref 3.1.1 21.A.7.b,

"(b) The holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval shall furnish at least one set of complete instructions for continued airworthiness to each known owner of one or more products . . . "

**Comment:** If someone who does not own an aircraft - for example a company that stocks used equipment but holds no maintenance privileges - purchases an engine, propeller, part or appliance, this individual or entity is not "required to comply with any of the terms of those instructions" and therefore has no need to comply with the ICA and thus no right to request ICA access.

Recommendation: EASA needs to clearly define the term "owner" in the context of regulatory requirement to furnish ICA. See comment

ref 3.1.1 21.A.7.c,

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TE.RPRO.00064-006 © European Union Aviation Safety Agency. All rights reserved. ISO 9001 certified. Proprietary document. Copies are not controlled. Confirm revision status through the EASA intranet/internet. "... before the product or modified product requires such overhaul or heavy maintenance."

**Comment:** The terms "overhaul" and "heavy maintenance" need to be defined or existing definitions referenced. See comment

ref 3.1.1 21.A.7.d,

"The holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval shall submit to the Agency a document describing the process for how changes to the instructions for continued airworthiness are made available in order to comply with the first sentence."

**Comment:** The current wording in 21.A.61 "A programme showing how changes to the instructions for continued airworthiness are distributed shall be submitted to the Agency" is both more concise and less open to confusion with respect to whether the required "document" is a simple document or something more comprehensive (i.e. programme).

**Recommendation:** We recommend using the above sentence from 21.A.61 in this section.

See comment

response | Partially accepted: Text is amended accordingly.

comment	264 comment by: Europe Air Sports
	21.A.7 (b) "The holder shall furnish to each known user" EAS would like to add that "being informed" is an owner/operator task as well, not only a TC/STC ect. holder duty. Think of SIBs or NOTAMs
	(d) also to be adjusted accordingly.
response	Not accepted: The duties of the operator are covered in Part-M.

comment	276 comment by: FNAM
	<ul> <li>21.A.7(b) &amp; (d)</li> <li>ISSUE.1 - Online and digital ICAs</li> <li>FNAM and GIPAG thank EASA to stipulate that complete ICAs and their changes are provided to owners and any persons who request ICAs. Indeed, the holder of type-certificate, supplemental certificate, design change or repair design approval shall make complete ICAs and their changes available on request to any persons required to comply with any terms of those instructions. In that way, free digital and online versions should be strongly advised.</li> <li>(See Comments 285, 288)</li> <li>PROPOSAL</li> </ul>
	Free complete ICAs should be available online without any restricted access in order to ensure access for all persons who need maintenance instructions (ex: Maintenance Organizations).



Changes should be also notified online and amended versions underlining all modification should be made available online.

response Not accepted: Part 21 deals with the obligations of design holders but not with the commercial aspects.

comment 278

comment by: FNAM

#### 21.A.7

#### ISSUE.2 - Transition measures and Catch-up process

An issue is raised for operators using orphan aircraft or aircraft without ICAs or expired ICAs. As a result, operators and Approved Maintenance Organizations would have to develop and obtain certification for new ICAs to ensure that maintenance tasks are done correctly. Theoretically, that work would be done by the aircraft manufacturer. Practically, if it is not the case, only operators and Approved Maintenance Organizations may perform that work and this is not realistic neither feasible, above all for SMEs which have limited resources. Moreover, any potential Catch-up by operators and Approved Maintenance Organizations would cause administrative burden and additional costs.

Nota Bene: Nowadays, several entities are allowed and certified to develop ICAs for the same product. For example, an aircraft design holder and an engine manufacturer could both publish ICAs for the same engine. In that particular case, the priority document should be clarified.

(See Comments 279, 282, 283, 291)

#### PROPOSAL

FNAM and GIPAG understand the needs for precising ICAs requirements but as no sound study is provided on the feasibility and the impact of these new measures on General Aviation SMEs, FNAM and GIPAG promote that new ICAs disposals should be mandatory only for newly certified aircraft for flexibility reasons.

response

Accepted: Implementation transition is addressed in Opinion No 07/2019.

comment 312

comment by: Zodiac Aerospace - Sell GmbH DOA 21J.067

In 21.A.5 referring to the general terms "design information and supporting documentation" will lead to ambiguities concerning the data and documents to be recorded and thus jeopardize the intention of this rule. To have a clear and unambiguous definition of data and documentation requiring record keeping, reference to the type design as per 21.A.31 should be introduced and related terms should be adapted accordingly:

- "design information" to be replaced by "design data" to be consistent with Part 21.A.31, 21.A.131 and 21.A.804, [Note: "design information" is used in Part 21 for Record keeping only, e.g. 21.A.55, 21.A.105, 21.A.447, 21.A.613)
- 2. "supporting documentation" to be replaced by "compliance documentation" since supporting documentation is not used in Part 21 and term should be consistent with e.g. Part 21.A.20.

This proposal will prevent additional burden that additional or optional maintenance information not considered as ICA have to be recorded.

In addition this proposal is also in line with GM 21.A.5 and thus with AMC 21.A.433(a).



	Proposed text:					
	All relevant design data and compliance documentation compiling the type design,					
response	Accepted:	Text modified	accordingly.			
comment	nent 313 comment by: Zodiac Aerospace - Sell GmbH DO.					
	The restric certificate continued	ction in 21.A.7( , design chang airworthiness	c) to TC or RTC holder has e or repair design approv dealing with overhaul or o	to be remo al may as v ther forms	ved since a supplemental type vell affect the instructions for of heavy maintenance.	
	Proposed (c) The ho design cho	text: Ider of a type ange or repair o	certificate, restricted type design approval may delay	<i>certificate,</i> the	supplemental type certificate,	
response	Not accepted. The rulemaking/review group considers that the applicant, not being TC/RTC holder, should not delay the ICA.					
comment	343				comment by: IATA	
	IATA Com	ment:				
	Existing Comment / Proposed Text				Justification	
	21.A.5,6 and 7	7.6 The inclusion of the provisions in Subpart A General Provisions of Section A is clearly indicating the overall applicability of the new provisions and the titles and wording of the new provisions are acceptably clear in specifying the relevance and allocating the provisions to categories of stakeholders.			The answer to the two questions addressed by the Agency to stakeholders (see page 5 of 37 of this NPA) is YES from our perspective.	
response	Noted					
comment	346				comment by: IATA	
	IATA Comment					
	Exis	ting Text	Comment / Proposed Text	Justification		
	21.A.7 (b)" shall furnish at least one set of complete		21.A.7 (b) " shall furnish at least one set of complete instructions	With the high percentage of world's fleet having the "leased" status the proposed addition of "operator"		



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	instructions for continued airworthiness to each known owner of one or more products upon its delivery"	for continued airworthiness to each known owner <b>and/or</b> <b>operator</b> of one or more products upon its delivery"	category to that of "owner" category would be justified to ensure that the operator, who is actually responsible for the aircraft safe operation, would have unhindered access to the set of ICAs. The proposed addition is also justified by the fact that delivery of the aircraft is done to the operator (who in many cases is different from the owner). Even in the body of this NPA proposal the preferred owner/operator wording is already used – see e.g. AMC 21.A.7(c) 1) Option 3 (i)			
response	Not accepted: The opera	tor may not be known at d	elivery.			
comment	350		comment by: <b>FAA</b>			
	1. Are any of these points intended to apply directly to US State-of-Design, or other than EU, design approval holders? If so, they should be specifically identified.					
	2. The broad applicability of 21.A.7, ranging from complete aircraft to detail parts, makes the proposed language in (a) ambiguous.					
	3. The proposed standard for Instructions for Continued Airworthiness (ICA) in 21.A.7(a) of "necessary" is not consistent with the standards of "essential," and "recommended" in the certification standards (CS-25 and CS-E for example) and the US-FAA airworthiness standards.					
	4. Delayed ICA, as described in 21.A.7 (c), is not consistent with US requirements. Delayed ICA would be difficult to address through significant standards differences, and may be a barrier to validation actions requiring US regulatory changes.					
	5. Relying on a list of known operators for change distribution may not be sufficiently reliable. Additional methods of providing notice should be considered.					
	6. Under US regulations mandatory changes to ICA, including Airworthiness Limitations, must be prescribed through specific rulemaking. There is a significant regulatory burden that would accompany a system that relies on progressive issue of additional ICA for products and articles in service. Applicability of revised ICA could be difficult in the US system when they are not mandatory and subject to an AD					
	7. The meaning of the terms "furnish," "made available," and "any other person" are problematic in the application of the existing ICA regulations. See discussion under the respective AMC and GM sections.					
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8. Include EPA (PMA) among those approval holders affected by record keeping requirements. (21.A.5) 9. Include EPA (PMA) among those approval holders affected by manual requirements. (21.A.6) 10. Include EPA (PMA) among those approval holders affected by ICA requirements. (21.A.7) 11. Note: Allows delay of ICA until overhaul or heavy maintenance is required... an existing Significant Standards Difference with the FAA. (21.A.7) response Noted 1. No, EASA Part 21 is not applicable to non-EU DAHs when there is a BASA. 2. The text has been expanded for the various DAHs. 3. This definition is the result of a consensus reached between the FAA and TCCA: EASA suggests to keep the definition as it is. 4. SSD between EASA and the FAA rules are dealt with in the frame of the TIP: delayed ICA is already an identified SSD which is dealt with when European products are validated by the FAA. 5. Noted. 6. Noted. 7. Noted. 8. There is no PMA in Europe. 9. There is no PMA in Europe. 10. There is no PMA in Europe. 11. Same as 4 above. comment 379 comment by: Pratt & Whitney Canada **Regarding:** 21.A.7(b): "The holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval shall furnish at least one set of complete instructions

for continued airworthiness to each known owner of one or more products upon its delivery or upon the issuance of the first certificate of airworthiness for the affected aircraft, whichever occurs later, and thereafter make those instructions available on request to any other person required to comply with any of the terms of those instructions."

#### Comment:

The term "required" is too vague, and does not clearly distinguish between commercial contractual requirements and regulatory obligations.

Suggest use of TCCA text, with cross reference link to persons relevant to regulatory requirement. TCCA clearly : 1) States that the relevant person is the one PERFORMING the maintenance 2) Said person shall hold appropriate Certification.

response Not accepted: The GM clarifies who these persons are.

comment 406

comment by: *Rolls-Royce plc* 

Point 21.A.7 (b) requires a holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval" to "furnish at least one copy of set of complete instructions for continued airworthiness to each known owner



of one or more products upon its delivery or the issuance of the first certificate of airworthiness for the affected aircraft, whichever occurs later,..." This instruction appears to require the holder of a repair or change design approval to furnish a complete set of ICA before the aircraft gets a CofA. The "complete set of ICA" refers to the product, and so this requirement is clearly wrong for those only holding change approvals, and is a function of using the language originally intended for type certificate holders' duties.

Secondly, as repair and change approval holders have to hold their approvals after the type certificate is awarded, it is not clear whether their initial ICA referred to in a) (which are in fact changes to the TC ICA) should be made available to owners, as for the first ICA of the TC holder or operators, as for subsequent changes to the ICA. We believe it is the second of these, as in todays rules, in which case this requirement should be in b).

<u>Proposed Solution</u>: Define the duties of repair and change approval holders to relate to the creation of ICAs before the change/repair is embodied, and the aircraft returns to service. This would be better put in SubParts D and M respectively.

Point 21.A.7 (b) requires a holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval" to "furnish at least one copy of set of complete instructions for continued airworthiness to each known owner of one or more products upon its delivery or the issuance of the first certificate of airworthiness for the affected aircraft, whichever occurs later,..." The use of the term "design change" is inconsistent with SubPart D, which describes changes as "changes to the type certificate". Other sorts of change may generate ICA.

<u>Proposed Solution</u>: Replace design change with "change to the type certificate" Accepted

Point 21.A.7 (b) requires a holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval" to "furnish at least one copy of set of complete instructions for continued airworthiness to each known owner of one or more products upon its delivery or the issuance of the first certificate of for airworthiness the affected aircraft, whichever occurs later,..." This new rule requires the holder of a change approval, or a repair approval to furnish ICA to all known operators (irrespective of whether they have embodied the change/repair...). The current rules require the ICA to be furnished to the aircraft where the change/repair is embodied. There is no point to distributing ICA changes to aircraft for which it is not needed, which was recognised by the original rule, and we ask that this principle is restored..

<u>Proposed Solution</u>: Define the duties of repair and change approval holders to relate to furnishing ICAs only to the operator of the aircraft embodying the change/repair. This would be better put in SubParts D and M respectively.

21.A.7 (b) is adequate for TC and RTC. But for STC, design change and repair design the text should be amended

The holder of a supplemental type certificate, design change or repair design approval shall furnish at least one set of complete instructions for continued airworthiness related to this design to each known owner of a product on which this design is to be installed, and thereafter make those instructions available on request to any other person required to comply with any of the terms of those instructions.



	Point 21.A.7 (b) requires a holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval" to "furnish at least one copy of set of complete instructions for continued airworthiness to each known owner of one or more products upon its delivery or the issuance of the first certificate of airworthiness for the affected aircraft, whichever occurs later," This new rule requires the holder of a change approval, or a repair approval to furnish a complete set of ICA - surely this should only be to furnish the changes to the ICA related to the change or repair?						
	<u>Propo</u> furnis put in	<u>Proposed Solution</u> : Define the duties of repair and change approval holders to relate to furnishing only changes to the ICA resulting from the change or repair. This would be better put in SubParts D and M respectively.					
	Point 21.A.5 requires a holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval" to "hold "all relevant design information, and supporting documents" and retain this information. The use of the term "design change" is inconsistent with SubPart D, which describes changes as "changes to the type certificate". Other sorts of change to the TC should generate supporting documentation and definitions of the change, and therefore the same requirement should apply to these changes too.						
	<u>Propo</u>	sed Solu	<u>tion</u> : Replace	e design change with "change to the type certificate"			
	The text under 21.A.5 ' information necessary to ensure the continued airworthiness' should be revised to be read as ' information necessary to ensure the support of continued airworthiness', as man more factors are contributing to the continued airworthiness condition.						
	<u>Proposed Solution</u> : Edit as requested. The last sentence in 21.A.7(d) appears to be superfluous. The applicant must demonstrate to the Agency how all applicable requirements are met, so it is unnecessary to highlight just this one requirement.						
	<u>Proposed Solution</u> : Delete last sentence. This sentence is not necessary for DOA: however this hook was transferred from CS 2! may be useful for organisations without DOA (foreign applicant) Transfer in AMC? Or delete it or keep it						
response	Partia	lly accep	ted: Text am	ended accordingly.			
	424						
comment	421			comment by: MITSUBISHI AIRCRAFT CORPORATION			
	Page	Section	Reference	Comment/Reason for Change			
	6	3.1.1	21.A.5 and	21.A.5 and A6 are totally unclear. They shall be totally reworded to differentiate responsibilities of TC owners, STC			

owners, ETSO etc....The only things which are clear is the EASA

goal to transfer part of their responsibilities .....



21.A.6

response	Partia the sp	lly accep pecificitie	ted: The wo	ording will be reviewed for still simplifying Part 21 but without losing b each category of approval holder.
comment	477			comment by: MITSUBISHI AIRCRAFT CORPORATION
connent	Dest	Castian	Defenses	Comment (Dessen for Change
	Page	Section	Reference	Comment/Reason for Change
	6	3.1.1	21.A.7 (b)	a set which does not specified the domain of the requirement. And referring to make these sets of documents available to other person required to comply with any of the term of those instruction is unclear and abusiveand even uncontrolable
response	Not a	ccepted:	The aim is t	o improve the identification of ICA but not to mandate their format.
comment	423			comment by: MITSUBISHI AIRCRAFT CORPORATION
	Page	Section	Reference	Comment/Reason for Change
	7	3.1.1	21.A.7 (d)	EASA must list the required instructions first and not referring to a set which does not specified the domain of the requirement. And referring to make these sets of documents available to other person required to comply with any of the term of those instruction is unclear and abusiveand even uncontrolable
response	Not accepted: The aim is to improve the identification of ICA but not to mandate their format.			
comment	445			comment by: DGAC France
	DGAC France proposes to add a new paragraph b)1) to 21.A.7 reflecting the following idea : The set of ICA shall highlight critical tasks defined by the TCH. Element of those critical tasks shall be provided to maintenance organisation, in order for them to process those tasks in accordance with 145.A.48 of Regulation (EU) n°1321/2014 (we would have then a "master list" of critical tasks issued by the TCH, that shall be performed by the maintenance organisation and other additionnal critical tasks that could be identified and performed by the maintenance organisation).			
response	Not accepted: According to Part-145, it is up to the maintenance organisation to establish the list of critical tasks.			
comment	462			comment by: MARPA



Proposed 21.A.5 would require that "all relevant design information [etc.]... be held by the holder of a type certificate [etc.]... and shall be retained in order to provide the information necessary to ensure the continued airworthiness, continued validity of the operational suitability data and continued compliance with the applicable environmental protection requirements of the product or the article." Although it would consitute a slightly increased burden to EASA, we suggest that all such data should, in addition to being retained by the Holder, be submitted to, and retained by EASA.

The benefits of this would be two-fold: First, it would allow EASA to ensure that all such data would be held in perpetuity by the regulator. This would be particularly valuabe in the case of products manufactured by Holders that subsequently went out of business, merged, or ended production of a product, and thus become more susceptible to eltting lapse their requirements to support those products, including retaining necessary data. This would ensure that there remained at least one source of this necessary data.

Second, with data in hand, EASA could then act as a repository of all such ICA data that is required to be furnished to each owner or made available to those required to comply with the instructions, and could act as a source of last resort for those persons entitled to the data that have been unable to obtain such data from the Holder. Such a resource repository would solve many of the problems related to actual availability of maintenance data that have given rise to the need for this NPA, because there could be no method by which a Holder could restrict access to ICA, once those ICA were established and submitted to EASA.

We recognize that this would constitute an increased burden to EASA, however in the digital age it is unlikley to be a substantial or insurmountable burden, as most data can be transmitted and stored electronically. Thus, while some additional server space may ultimately be necessary to retain the data, EASA would not be faced with the daunting prospect of retaining vast file cabinents of manuals and data. It would also make a significant contribution to the overall safety of the aviation industry by ensuring that those persons with a need to comply with instructions had a source of last resort from which to obtain the necessary data. Access to the data could even be made contingent upon a showing that all reasonable efforts to obtain the data from the Holder had been exhausted.

Recommendation: We recommend EASA consider developing a repository for all relevant data required to be retained under proposed 21.A.5 so that EASA could ensure that such data was properly retained.

Not accepted: This responsibility is clearly a design holder responsibility.

response

### comment 463

#### comment by: MARPA

Proposed 21.A.7(a) states that "Instructions for continued airworthiness are the instructions and information that are necessary for the continued airworthiness of the aircraft, engine, propeller, parts and appliances, which must be developed or referenced by the design approval holder . . . ." It must be made abundantly clear that ICA constitutes <u>ALL</u> necessary instructions and information. History has shown that any ambiguity in the regulation will be exploited to withhold necessary information and gain a competitive advantage and the cost of safety.



We recommend replacing the word "the" with the word "all" to make clear that all data is necessary for a complete set of ICA, as follows: "Instructions for continued airworthiness are *all the* instructions and information that are necessary for the continued airworthiness of the aircraft, engine, propeller, parts and appliances ... "

We will have further recommendations for clarification of what constitutes ICA in the GM and AMC related to 21.A.7(a).

response Not

Not accepted

comment 464

#### comment by: MARPA

Proposed 21.A.7(b) largely reflects the current ICA requirements. It reads: "The holder of a type certificate, restricted type certificate, supplemental type certificate, design change or repair design approval shall furnish at least one set of complete instructions for continued airworthiness to each known owner of one or more products upon its delivery or upon the issuance of the first certificate of airworthiness for the affected aircraft, whichever occurs later, and thereafter make those instructions available on request to any other person required to comply with any of the terms of those instructions." We believe two steps could make this language substantially more effective in ensuring that ICA are distributed and subsequently complied with.

First, it must be made clear that *any* owner of a product is entitled to ICA. In some cases, we have heard of TC holders stating that they would not provide the ICA to certain product owners because they purchased the product used. This is obviously a problem for anyone who purchases an aircraft that was originally leased, or purchases a used aircraft or other product because owners are making fleet changes or otherwise selling products. We recommend inserting the following language to make this point clear:

"... shall furnish at least one set of complete instructions for continued airworthiness to each known owner of one or more products, *however acquired*, upon its delivery or upon the issuance of the first certificate of airworthiness for the affected aircraft ... "

Second, EASA must be ready to enforce 21.A.7(b) and compel Holders to provide the required instructions. As stated above, the language of 21.A.7(b) largely reflects the current requirements. Unfortunately, many Holders have ignored those requirements or demanded that persons entitled to instructions agree to pay fees or sign restrictive or highly burdensome license and other agreements. Such roadblocks inhibit safety by making instructions difficult to obtain. We respectfully request that EASA consider imposing severe penalties on Holder who refuse to furnish or make available ICA to product owners and those persons required to comply with the instructions.

response

Not accepted: This comment is related to commercial issues rather than to regulatory issues.

#### comment 465

comment by: MARPA

Proposed 21.A.7(d) requires changes to ICA to "be made available to <u>all known operators</u> of the product affected by the change and shall be <u>made available on request to any person</u> <u>required to comply</u> with any of the terms of those changes to the instructions." We believe this is valuable and important language to ensure that all persons entitled to ICA receive the most updated revisions. However, as in our previous comment [464] we respectfully request



that EASA be prepared to levy penalties against any Holders that refuse to comply with this requirement, as such provisions have been ignored or delberately flouted in the past, to the detriment of aviation safety.

response Not accepted

21.A.41

## p. 7 comment by: Yuksel Kenaroalu

comment	7 comment by: Yuksel Kenaroglu			
	21A.41: "operating limitations, the instructions for continued airworthiness" If "operating instructions" is a part of the ICA, it should be stated accordingly throught the document.			
response	Not accepted: Operating limitations are not part of ICA.			
comment	32 comment by: LHT DO			
	21.A.31 defines the approved airworthiness limitations sections of ICA as type design; From that we conclude that 21.A.41 only means all other sections of the ICA as part of the type certificate. Is that correct? The distinction is not entirely clear in all articles related to ICA:			
	- Please provide an excact definition of the Type Certificate related ICA versus Type Design			
	- Please use this distinction thruoghout the whole document.			
	To our view the AFM is a part of the Type Certificate. Please clarify or amend.			
response	Not accepted: Only ALS are part of the type design.			
comment	49 comment by: Francis Fagegaltier Services			
	The "type certificate" includes the "type design" (21.A.41) which includes the "airworthiness limitation section of the instruction for continued airworthiness" (21.A.31). To add that the type certificate includes the "instructions for continued airworthiness" renders 21 A 31 (a)(3).			
	unnecessary : an additional change to 21.A.31 would be logical.			
response	unnecessary : an additional change to 21.A.31 would be logical. Not accepted: Only ALS are part of the type design.			
response	unnecessary : an additional change to 21.A.31 would be logical. Not accepted: Only ALS are part of the type design.			
response comment	type certificate includes the instructions for continued in worthiness renders 21.9.131 (d)(s) unnecessary : an additional change to 21.A.31 would be logical.         Not accepted: Only ALS are part of the type design.         184         comment by: Textron Aviation			
response comment	type certificate includes the instructions for continued an worthiness renders 21.9.131 (d)(s) unnecessary : an additional change to 21.A.31 would be logical.         Not accepted: Only ALS are part of the type design.         184         with all ICA information that is included with the type-certificate, will all ICA information be considered 'approved data' like airworthiness limitations are with the FAA?			
response comment	type certificate includes the instructions for continued an worthiness renders 21.8.131 (d)(s) unnecessary : an additional change to 21.A.31 would be logical.         Not accepted: Only ALS are part of the type design.         184         with all ICA information that is included with the type-certificate, will all ICA information be considered 'approved data' like airworthiness limitations are with the FAA?         Suggest adding additional detail about non-airworthiness limitation ICA to clarify.			



Making ICA part of the TC will change the ICA approval process in Europe but not their 'mandatory' status.

Making ICA part of the TC implies that some major changes (Appendix A to GM 21.A.91) will be approved by EASA but most of the ICA content will be approved by the DOA (such as in 21.A.90(c)), which could be seen as equivalent to the FAA acceptance.

ALS are part of the type design and are approved by EASA as the FAA: changes to the ALS are approved by EASA, or by the DOA for minor changes.

comment	214 comment by: Jeff Conner
	"The type-certificate and restricted type-certificate shall include the type design, the operating limitations, the instructions for continued airworthiness, "
	<b>Comment:</b> The proposed addition of ICA to the Type-Certificate raises multiple questions that are not addressed in this NPA.
	<b>Q1</b> - What impact will the divergence of EASA ICA requirements verses FAA/NAA regulations have on future validation efforts? For example, will EASA change their approach to validation of FAA/NAA TCs that do not include ICA in the type certificate?
	<b>Q2</b> - If FAA/NAA issued type-certificates are validated by EASA, how will changes to the ICA that occur after the validation be handled? Will the TC Holder be held to the ICA standards set by the FAA/NAA or to the new EASA ICA requirements where the ICA must be added to the TC?
	<b>Q3</b> - Will EASA seek to apply the requirement for ICA to be part of the type certificate to type certificates issued by FAA/NAA that have been validated by EASA prior to this change? If so, when will this requirement be enforced? (For example, the next time TC Holder makes changes to existing ICA?)
	<b>Q4</b> - How will EASA deal with the confusion created by having some ICA defined as part of the type certificate while others are not?
	<b>Q5</b> - Once defined as part of the type certificate, do all ICA become mandatory such that operators do not have the flexibility to customize maintenance plans?
	<b>Q6</b> - When the TC or RTC holder makes voluntary changes to ICA (i.e. changes not mandated by a safety concern), do such changes represent a change in design such that a new showing of compliance for the product is required?
	<b>Q7</b> - Are new approval processes required - including more EASA involvement - each and every time changes are made to ICA defined as part of the TC?
	<b>Q8</b> - Will existing EASA DOAs require changes to align with the proposed changes in 21.A.41?
response	Noted
	Q1: The disharmonisation with the FAA should not impact the validation process.
	Q2: US DAHs will have to follow the US rules.



Q3: This proposal is neither retroactive nor applicable to US DAHs.

Q4: All ICA will be part of the TC.

Q5: ICA, being part of the TC, improve the control of ICA but do not impact the maintenance programmes.

Q6: As detailed in 21.A.90(c), only some changes to the ICA will require a new demonstration of compliance.

Q7: New approval processes will be required, mainly under the DOA.

Q8: Yes, the DOA will have to implement the changes to the ICA approval process.

comment 238

comment by: Dowty Propellers

ref 3.1.2, 21.A.41

"The type-certificate and restricted type-certificate shall include the type design, the operating limitations, the instructions for continued airworthiness, . . . "

**Comment:** The proposed addition of ICA to the Type-Certificate raises multiple questions that are not addressed in this NPA.

Q1 - What impact will the divergence of EASA ICA requirements verses FAA/NAA regulations have on future validation efforts? Will EASA change their approach to validation of FAA/NAA TCs that do not include ICA in the type certificate?

Q2 - If FAA/NAA issued type-certificates are validated by EASA, how will changes to the ICA that occur after the validation be handled? Will the TC Holder be held to the ICA standards set by the FAA/NAA or to the new EASA ICA requirements where the ICA must be added to the TC?

Q3 - Once defined as part of the type certificate, do all ICA become mandatory such that operators do not have the flexibility to customize maintenance plans?

Q4 - Will EASA apply the requirement for ICA to be part of the type certificate to products, specimens and articles that have previously been approved by EASA? If so, when will this requirement be enforced? (For example, the next time TC Holder makes changes to existing ICA?) And how will EASA deal with the confusion created by having some ICA defined as part of the type certificate while others are not?

Q5 - Will EASA seek to apply the requirement for ICA to be part of the type certificate to type certificates issued by FAA/NAA that have been validated by EASA prior to this change?

Q6 - When the TC or RTC holder makes voluntary changes to ICA (i.e. changes not mandated by a safety concern), do such changes represent a change in design such that a new showing of compliance for the product is required?

Q7 - Are new approval processes required - including more EASA involvement - each and every time changes are made to ICA defined as part of the TC or RTC?

Q8 - Will existing EASA DOAs require changes to align with the proposed changes in 21.A.41?

#### response Noted

Q1: The disharmonisation with the FAA should not impact the validation process.

Q2: US DAHs will have to follow the US rules.

Q3: This proposal is neither retroactive nor applicable to US DAHs.

Q4: All ICA will be part of the TC.



TE.RPRO.00064-006 © European Union Aviation Safety Agency. All rights reserved. ISO 9001 certified. Proprietary document. Copies are not controlled. Confirm revision status through the EASA intranet/internet. Q5: ICA, being part of the TC, improve the control of ICA but do not impact the maintenance programmes.

Q6: As detailed in 21.A.90(c), only some changes to the ICA will require a new demonstration of compliance.

Q7: New approval processes will be required, mainly under the DOA.

Q8: Yes, the DOA will have to implement the changes to the ICA approval process.

comment	277 comment by: <i>FNAM</i>
	<b>ISSUE.1 - Certificate size</b> The European disposals require to add Instructions for Continued Airworthiness in the type- certificate document. FNAM and GIPAG's interpretation is that references to all ICAs would be provided in Type-Certificates. Indeed, it is not clear in the proposal whether references or all ICA documents should be recorded. <b>PROPOSAL</b>
	Clarify that only references should be included in Type-Certificates
response	Not accepted: All ICA will be listed or referenced in the TCDS.
comment	279 comment by: FNAM
	ISSUE.2 - Transition measures and Catch-up process Idem Comment 278
response	Noted: Transition measures will be included in the final text (see Opinion No 07/2019).

comment	351		comment by: IATA	
	IATA Comment			
	Existing Text	Comment / Proposed Text	Justification	
	21.A.41 Type certificate	Having the "instructions for continued airworthiness" clearly spelled out as part to be included in the type certificate is a fair addition to the existing text.	Clarifies the ICA report with the TC and implicitly the TCH and CA commitment. Even if some redundancy with other regulatory provisions in the same Part 21 could be invoked, the wording is justified.	
response	Noted			
comment	352		comment by: <i>FAA</i>	

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	1. Inclusion of all Instructions for Continued Airworthiness (ICA) in the type certificate is a new significant standards difference. Processing design changes could present a substantial ongoing procedural workload between regulatory agencies.
	2. The majority of ICA data are "acceptable" in the US-FAA regulatory structure. Inclusion of ICA in the type certificate would make it "approved." Substantial care will be required to assure that approved ICA and "additional or optional" ICA are properly identified and separated between various design approvals. This content differentiation would have different application in EU ICA and US ICA.
response	Not accepted: This proposal intends to improve the ICA process for EU applicants.
comment	373 comment by: <i>Embraer S.A.</i>
	Embraer understands that a change to the definition of Type Certificate is not desirable, since it is an important concept used during international validations, which could lead to misunderstands due to the lack of harmonization between EASA and other authorities.
	Therefore, we suggest to remove the proposed change for 21.A.41.
	21.A.41 Type-certificate The type-certificate and restricted type-certificate shall include the type design, the operating limitations, the instructions for continued airworthiness, the type-certificate data sheet for airworthiness and emissions, the applicable type-certification basis, and environmental protection requirements with which the Agency records compliance, and any other conditions or limitations prescribed for the product in the applicable certification specifications and environmental protection requirements. The aircraft type certificate and restricted type-certificate, in addition, shall both include the applicable operational suitability data certification basis, the operational suitability data and the type-certificate data sheet for noise. The engine type-certificate data sheet shall include the record of emission compliance.
response	Not accepted: This proposal intends to improve the ICA process for EU applicants.
comment	405 comment by: <i>Rolls-Royce plc</i>
	Regarding 21.A.41, and noting our general comment, please advise what benefit is gained by disharmonizing with FAA practise by including the ICA as part of the type certificate?
	Clarification requested
	Regarding 21.A.41, and noting our general comment on harmonisation, please advise what benefit is gained by disharmonizing with FAA practise by including the ICA as part of the type certificate?
	Clarification requested
response	Not accepted: Disharmonisation is limited to the ICA approval process between the EU and the USA but it does not impact the validation/acceptance of ICA approved in a foreign system.



#### 21.A.44

comment	407 comment by: <i>Rolls-Royce plc</i>
	The last sentence in 21.A.7(d) appers to be superflouous. The applicant must demonstrate to the Agency how all applicable requirements are met, so it is unnecessary to highlight just this one requirement.
	Proposed Solution: Delete last sentence.
response	Not accepted: This document will ensure that changes to the ICA are adequately distributed.

#### 21.A.55, 21.A.57 and 21.A.61 are deleted

p. 7-8

p. 7

comment	331 comment by: Dassault-Aviation
	§ 3.1 page 8/37 21.A.90C Stand-alone changes for ICA
	<u>Text:</u> (b) Stand-alone changes to instructions for continued airworthiness can only be made by the holder of the design approval for which those instructions have been established.
	<u>Comment:</u> DA disagree with statement (b) / DA consider that a DOA can be authorized to modify the ICA related to a design for which it is not the design holder.
response	Not accepted: As ICA are part of the TC and listed or referenced in the TCDS, a change to the ICA by other than the design holder will be confusing.

# 21.A.90C p. 8 comment 8 comment by: Lionel Wallace Limited The concept of Stand-Alone Changes to ICA should be carefully considered. If CS2X.1529 and

Appendix H forms part of the Type Certification Basis then all such data will be taken to be part of the Certification Standard. Is this provision intended to deal with occassions when there is a change to the ICA without any associated design change?

This concept is exactly introduced for changes to the ICA without any associated design change.

comment	31 comment by: SUNAERO
	21.A.90C states that « Stand-alone changes to instructions for continued airworthiness can only be made by the holder of the design approval for which those instructions have been established".



	Our company, SUNAERO ASIA based in Malaysia, belonging to SUNAERO Group (in France), is <b>EASA DOA</b> .
	SUNAERO has developed ICA for fuel leak detection with its own technologies and equipment, since more than 20 years, more particularly for AIRBUS aircraft family (ICA already included in AMM), and holds the full competence on this technical field.
	Today, SUNAERO ASIA is EASA DOA approved to design repairs following leaks, limited to fuel bladders, including the issuance of corresponding ICA. Our initial request was also to develop stand-alone changes to ICA, that was excluded of the scope of our application since we are not the holder of the design approval. Our intention was to avoid <b>uncontrolled use of our technologies</b> as an alternative to standard methods of leak detection <b>by the MRO</b> , on any types of aircraft, since they currently do not have the competence to evaluate the feasibility of the process (validation tests needed, design of new interface tools).
	Consequently, we would like to know if, in such conditions, you may grant another DOA with ad-hoc competences, to make stand-alone changes to ICA, even if it is not the holder of the design approval.
response	Not accepted. The intent is to limit the possibility to issue stand-alone changes to the ICA you have produced with your repair design, and not changes to the TC holder's ICA.
comment	33 comment by: LHT DO
	(a) Does not make sense for ICA as part of the type design, please clarify.
	(b) Stand alone changes of ICA: Any approved design organisation should be allowed to create a stand-alone change to ICA analagous to stand-alone changes to AFM or OSD according to approved DOA procedures. Please amend. <b>This limitation cannot be acceptable for airlines.</b>
	(c) - Please explain, why you see 21.A.91 and 109 to be not applicable. The sense of this paragraph is to classify the ICA change consistent with Part 21 philosophy.
response	Not accepted: Airlines do not produce ICA. They adapt their maintenance programmes to their needs.
comment	47 comment by: <i>Francis Fagegaltier Services</i>
	The proposed 21.A.90C uses the wording "instruction for continued airworthiness" when the existing 21.A.90B uses the wording "instruction for continuing airworthiness".
	It is suggested using this NPA to clarify the use of "continued airworthiness" and "continuing airworthiness" throughout Part 21.
	It is noted that the consolidated version of "Part-21 Implementing Rules and related Acceptable Means of Compliance and Guidance Material" issued in November 2015 contains in the cover regulation article 1, §1 (d) the following definiton : 'Part M' means the applicable continuing airworthiness requirements adopted in pursuance of Regulation (EC) No 216/2008.



	Do we need two definitions, one for dealing with in-service unsafe or potentially unsafe conditions (see 21.A.3A : this would be "continued airworthiness") and one for dealing with maintenance matters (this would be "continuing airworthiness") ?			
response	Accepted. The intent is to use continued airworthiness in Part 21.			
comment	56 comment by: Christopher BERRY			
	Does this mean that 21.A.91 to 21.A.109 is not applicable to changes to the ALS that do not require additional work to demonstrate compliance with certification basis (such as editorial revisions or corrections)?			
response	Not accepted. ALS stand-alone changes are systematically classified Major/Minor and approved. These paragraphs are always applicable to ALS stand-alone changes.			
comment	94 comment by: AIRBUS			
	1. PARAGRAPH / SECTION THE COMMENT IS RELATED TO: Page 8			
	21.A.90C Stand-alone changes to ICA			
	<ul> <li>(a) Stand-alone changes to instructions for continued airworthiness are changes that are not directly prepared together with a change to the type design.</li> <li>(b) Stand-alone changes to instructions for continued airworthiness can only be made by the holder of the design approval for which those instructions have been established.</li> <li>(c) For stand-alone changes to instructions for continued airworthiness that: <ul> <li>do not affect the airworthiness limitations section of the instructions for continued airworthiness, or</li> <li>do not require additional work to demonstrate compliance with the certification basis,</li> </ul> </li> </ul>			
	continued airworthiness will be approved by the holder of the design approval under a procedure agreed with the Agency.			
	2. PROPOSED TEXT / COMMENT:			
	Add new bullet 'c' and change existing 'c' to 'd'			
	<ul> <li>(c) Stand-alone changes to instructions for continued airworthiness may be developed through an Agency accepted process (e.g. MRB Process) and handled under 21.A.91 to 21.A.109 as for changes to type design</li> <li>(d) For stand-alone changes to instructions for continued airworthiness that:</li> </ul>			
	3. RATIONALE / REASON / JUSTIFICATION:			
	Bullet (c) in the NPA addresses stand-alone changes to non-ALS ICA that do not require additional work to demonstrate compliance with the certification basis. However the particular case of the standalone changes to the MRB Report is not sufficiently addressed. It			



	could thus be interpreted that such changes will be approved by the holder of the design approval under a procedure agreed with the Agency (as for other ICA data such as that included in AMM, IPC, WBM, etc).	
	While this may be acceptable to some DAHs, Airbus consider that this is not appropriate and thus proposes the addition of another bullet that provides clear indication that stand alone changes may be classified in the same way as changes to type design. This then provides the possibility to classify them as Minor or Major which opens up the potential for the use of privileges under the DAH's DOA.	
response	Not accepted: This addition is not considered necessary in this paragraph as it has been introduced some alleviation for stand-alone changes, which is not the case for the proposed new (c).	
comment	131 comment by: AIRBUS	
	1. PARAGRAPH / SECTION THE COMMENT IS RELATED TO: NPA 2018-01, page 8/37, point 21.A.90C	
	2. PROPOSED TEXT / COMMENT:	
	The paragraph (a) needs to better define what stand-alone changes are. This definition should consider the term from a consistent end to end perspective. Is it necessary to put this definition in the hard law?	
	3. RATIONALE / REASON / JUSTIFICATION:	
	The current text gives the possibility to interpret as not just changes to ICA developed in the frame of the TC, changes to the Type Certificate, or Supplemental Type Certificate, but also changes to ICA related to repair designs. As other people and authorities will read and interpret Part-21, not just the EASA and the DAHs, it would be appropriate to be precise in order to prevent misinterpretations.	
response	Accepted: Text modified accordingly.	
comment	132 comment by: AIRBUS	
	1. PARAGRAPH / SECTION THE COMMENT IS RELATED TO: NPA 2018-01, page 8/37, point 21.A.90C	
	2. PROPOSED TEXT / COMMENT:	
	The definition in the paragraph (a) refers to changes that are not directly prepared together with a change to the type design. Does it mean that no change to the ALS, including for the purposes of making corrections or improvements to introduce feedback from users, can be addressed under this provision (the ALS being part of the type design)? This should be made more explicit.	
	3. RATIONALE / REASON / JUSTIFICATION:	
	For sake of understanding.	



	Note: What is a change to type design? Part-21 subpart D refers to changes to type certificates and restricted type certificates.
response	Noted. Per point 21.A.31, any change to the ALS is a change to the TD that will be dealt with in accordance with Subpart D and cannot benefit from the simplified treatment introduced for stand-alone changes.
comment	133 comment by: AIRBUS
	1. PARAGRAPH / SECTION THE COMMENT IS RELATED TO: NPA 2018-01, page 8/37, point 21.A.90C
	2. PROPOSED TEXT / COMMENT:
	With regard to the paragraph (b), only the holder of the design approval can alter the ICA for which the approval has been issued. What about ETSO data that other holders of a design approval have adapted due to the impact on integration into their product?
	How does the CAMO identify which changes are stand-alone changes? (and therefore need to get changes to ICA by the relevant holder of the design approval)
	3. RATIONALE / REASON / JUSTIFICATION:
	As other people and authorities will read and interpret Part-21, not just the EASA and the DAHs, it would be appropriate to be precise in order to prevent misinterpretations. There are ICA developed in the frame of a design before damage and some others for a design after damage.
response	Not accepted: This provision is limited to DAHs.
comment	167 comment by: <i>KLM engineering &amp; maintenance</i>
	<b>Comment summary</b> The proposed rule states that stand-alone changes to ICA can only be made by the holder of the design approval.
	<b>Suggested resolution</b> KLM proposes that stand-alone changes to ICA, that do not affect the airworthiness limitation section, can also be approved by the Agency or by a DOA, that is not the design approval holder, through a procedure approved by the Agency.
response	Not accepted: This provision is limited to DAHs.
comment	280 comment by: FNAM



	ISSUE.1 - Stand-alone process for orphan aircraft or aircraft without ICAs or expired ICAs An issue is raised for operators using orphan aircraft or aircraft without ICAs or expired ICAs. In that case, only operators or Approved Maintenance Organizations may be able to create Stand-alone changes to ICAs. This option is not considered in the proposed European disposals. <b>PROPOSAL</b> Regarding the Stand-alone changes process, another option should be considered for orphan aircraft or aircraft without ICAs or expired ICAs . In some particular cases (orphan aircraft, no ICAs, etc.), Operators and Approved Maintenance Organizations should be authorized to propose Stand-alone changes for ICAs to the Agency without the approval of the manufacturer or the holder of the design approval.
response	Not accepted: This provision is limited to DAHs.
comment	292comment by: Europe Air SportsComment on 21.A.90C(c):
	For the reasons outlined in our comment on section 2.1, we believe that there should be no requirement that stand-alone changes to instructions for continued airworthiness will be approved by the holder of the design approval under a procedure approved by EASA for aircraft falling within the scope of Part-ML (< 2730 kg). Only changes that affect the ALS should be subject to Part-21 subpart D.
response	Not accepted: This provision is limited to DAHs.
comment	309 comment by: Laurent Lalaque
	This NPA will significantly increase the workload of the type certificate holders, by requiring the same formal processes on a significant part of the ICA as the ones applicable to design changes. This is due to the fact that " <i>do require additional work to demonstrate compliance with the certification basis</i> " can be interpreted as applicable to the majority of the ICA. This is not acceptable. SafranHE proposes to reduce the impact on this workload to changes that are considered major in the proposed NPA, which would remain an acceptable compromise.
	Proposed text: 21.A.90C Stand-alone changes to ICA
	(a) Stand-alone changes to instructions for continued airworthiness are changes that are not directly prepared together with a change to the type design. (b) Stand-alone changes to instructions for continued airworthiness can only be made by the holder of the design approval for which those instructions have been established.
	<ul> <li>(c) For stand-alone changes to instructions for continued airworthiness that:</li> <li>do not affect the airworthiness limitations section of the instructions for continued airworthiness, or</li> <li><u>do not require additional work to demonstrate compliance with the certification basis</u>,</li> </ul>
	<ul> <li>do not adversely affect the certification assumptions, and</li> <li>that are not related to accomplishment instructions (e.g. to the aircraft maintenance manual) related to the CDCCL, or the EWIS ICA, when changing the technical content (e.g. gaps, steps) of the procedures, and</li> </ul>



	- that are not related to the introduction of novel technology for inspection purposes related		
	noints 21 A 91 to 21 A 109 are not applicable		
response	Not accepted.		
	Wording of the rule to be kept; please refer to the existing GM.		
comment	314 comment by: Zodiac Aerospace - Sell GmbH DOA 21J.067		
	This proposal in 21.A.90C(b) is not consistent with Part 21 since stand-alone changes are well supported by Part 21, e.g. for OSD, and will lead to discrimination of industry stakeholders with potential adverse impacts on economics and safety, if instructions for continued airworthiness are not appropriately updated.		
	Thus DOAs with appropriate competences should be allowed to produce, approve and issue stand-alone changes to ICAs. This will avoid		
	<ul> <li>discrimination of DOAs having appropriate competences,</li> </ul>		
	• a limitation in Part 21 for ICAs which is not existing for OSDs.		
	In addition EASA has not justified by any rationale for such limitation and thus an unequal treatment of ICAs and OSD		
	Thus 21.A.90C(b) should be removed allowing stand-alone changes to ICAs by competent		
	DOAs.		
	Proposal: Remove 21.A.90C(b)		
response	Not accepted: This provision is limited to DAHs.		
comment	353 comment by: FAA		
	1. Would the addition or deletion of repair information, without a design change, be considered a Stand-alone change to Instructions for Continued Airworthiness (ICA) for engines and propellers?		
	2. Would the Stand-alone change process described in (c) apply to US-FAA (and other non-EASA) type certificate holders? Would US-FAA design approval holders be eligible for a change approval process under this point?		
	3. Would changes to supplier's data be considered Stand-alone changes? The number of such changes could be burdensome to track as type certificate changes.		
	= 4. Clarify "stand-alone changes". Are repairs and alterations "stand-alone changes"?		
	5. If stand-alone changes are repairs and alterations, then only a DAH can develop repairs and alterations. Instead allow other persons, such as repair stations, to develop repairs and alterations.		
response	Not accepted: This provision is limited to DAHs that must comply with Part 21, i.e. EU applicants.		

comment 362

comment by: IATA

An agency of the European Union

#### IATA Comment:

	Existing Text	Comment / Proposed Text	Justification	
	21.A.90C (c) For stand-alone changes to instructions for continued airworthiness that: — do not affect the airworthiness limitations section of the instructions for continued airworthiness, or — do not require additional work to demonstrate compliance with the certification basis, points 21.A.91 to 21.A.109 are not applicable. The stand- alone changes to instructions for continued airworthiness will be approved by the holder of the design approval under a procedure agreed with the Agency.	Who makes the decision of compliance or non-compliance with 21.A.90C (c) when a stand- alone change to an ICA is assessed? Would the "approval under a procedure agreed with the Agency" address that? There is no clarification brought by GM 21.A.90C (see page 25 of 37 of this NPA).	The responsibility to decide if a stand- alone change is falling or not under the 21.A.90C (c) should be clearly allocated.	
response	Not accepted: This provision is limited to DAHs.			
comment	374 comment by: Embraer S.A			
	In addition to our comment for 21.A.41, we believe that the new requirement proposed in section 21.A.90 turns explicit the impacts that the inclusion of the ICA in Type Certificate concept would bring to the international validations. The stand-alone change to ICA proposed by EASA is not present in any other foreign regulation. Therefore, since the other authorities do not require the implementation of such process to the non-EU DAH, there are the following possible consequences: EU will have to revise all bilateral agreements to accommodate the proposed changes presented in this NPA, where the other authorities will be required to review and approve stand-alone changes to ICA. While EASA can treat this process under the authority of a DOA, the other authorities do not have the same delegation option, what could lead to the same problems observed in the implementation of the Permit to Fly rules, where unilateral certification requirement was fundamentally incompatible with the regulatory and delegation framework of the EU bilateral nartners.			
response	partners. Not accepted: This provision is applicants.	s limited to DAHs that must comp	y with Part 21, i.e. EU	

comment 378 comment by: SIRIUM AEROTECH



The text includes a restriction of stand alone changes to DAH only: "Stand-alone changes to instructions for continued airworthiness can only be made by the holder of the design approval for which those instructions have been established" It is not justified the need for such restriction in terms of safety. Any DOA should be allowed to issue stand alone approvals under Part 21 D whenever is able to show compliance with certification basis. The text should consider principles laid down in articles 101 and 102 of the EU Treaty.

response Not accepted: This provision is limited to DAHs.

comment	380	comment by: Pratt & Whitney Canada	
	Regarding: 21.A.90C <i>"Stand-alone changes to instructions for</i> <i>holder of the design approval for which th</i> Comment: This is at odds with TCCA, which places of Certificate holders. Recommend providing clarification and g	continued airworthiness can only be made by the nose instructions have been established" bligations for ICA revisions on STC, PMA and Repair uidance.	
response	Not accepted: This provision is limited applicants.	to DAHs that must comply with Part 21, i.e. EU	
comment	408	comment by: <i>Rolls-Royce plc</i>	
	21.A.90C (a) defines stand-alone changes to ICA as " changes that are not directly associated with a change to the type design". This definition should also cover changes that are not directly associated with a repair design. This is also true of the GM to this section on page 25.		
	<u>Proposed Solution</u> : Suggest the sentence associated with a change or repair to the GM 21.A.90C also needs the same change	is changed to read: " changes that are not directly type design".	
	21.A.90C (b) limits standalone changes to large number of standalone ICA changes holder, provision is needed for other orga We have seen at least one example of modify load limits on cargo compartment accepted by authorities.	b ICA to the holder of the design approval. While a will be generated by the original design approval anisations to generate standalone changes to ICA. a supplemental type certificate has been used to ints, so there is precedent for such changes being	
	Proposed Solution: Additional requirement changes by non DAHs.	ents are needed to cover the creation of standalone	
response	Not accepted: This provision is limited to	DAHs.	
comment	474	comment by: MITSUBISHI AIRCRAFT CORPORATION	

by: MITSUBISHI AIKCKAFT CUKPUKATIUN



	Page	Section	Reference	Comment/Reason for Change	Change Proposal
	8	3.1.5	21.A.90C (a)	sentence shall be modified as followed	"stand-alone changes to instructions for continued airworthiness are changes that are not <u>systematically</u> directly prepared together with a change to the type design."
response	e Not accepted: This addition does not clarify the sentence.		entence.		

21.A.109	p. 9		
comment	134   comment by: AIRBUS		
	1. PARAGRAPH / SECTION THE COMMENT IS RELATED TO: NPA 2018-01, page 9/37, point 21.A.109		
	2. PROPOSED TEXT / COMMENT:		
	Reference to point 21.A.6 is missing in the paragraph (a).		
	3. RATIONALE / REASON / JUSTIFICATION: Self-explanatory.		
response	Not accepted: There is no requirement for a manual.		
comment	168comment by: KLM engineering & maintenance		
	<b>Comment summary</b> The proposed rule does not include obligations to the holder of a minor change approval to a type certificate to comply with point 21.A.6 "Manuals".		
	<b>Suggested resolution</b> KLM proposes that EASA includes in the proposed rule the obligations to the holder of a minor change approval to a type certificate to comply with point 21.A.6 "Manuals".		
response	Not accepted: There is no requirement for a manual.		
comment	354 comment by: FAA		
	Define EPA within the document. US readers may not be familiar with this term and fail to associate it with PMA.		

Not accepted: EPA is for marking and is not equivalent to PMA. response

#### 21.A.118A



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comment	169			comment by: KLM	engineering & maintenance
	<b>Comn</b> The p certifi	nent sun proposed cate to d	nmary I rule does comply with	not include obligations to the hold point 21.A.6 "Manuals".	der of a supplemental type
	Sugge KLM   supple	e <b>sted res</b> proposes emental	olution that EASA type certific	includes in the proposed rule the ol cate to comply with point 21.A.6 "Man	oligations to the holder of a uals".
response	Accep	ted: Tex	t modified a	accordingly.	
comment	195				comment by: AIRBUS
	<ol> <li>PARAGRAPH / SECTION THE COMMENT IS RELATED TO: NPA 2018-01, page 9/37, point 21.A.118A</li> <li>PROPOSED TEXT / COMMENT: Reference to point 21.A.6 is missing in the paragraph (a). Reference to point 21.A.119 should be removed as the point is deleted later in the NPA.</li> <li>RATIONALE / REASON / JUSTIFICATION: Self-explanatory</li> </ol>				
response	Accep	ted: Tex	t modified a	accordingly.	
comment	409				comment by: Rolls-Royce plc
	Regarding 21.A.118A Obligations and EPA marking. Shouldn't reference to 21.A.119 be deleted (assuming 21.A.119 is being deleted)?			t reference to 21.A.119 be	
	Propo	sed Solu	ition: Typog	raphical correction	
response	Accep	ted: Tex	t modified a	accordingly.	
comment	425			comment by: MITSUBIS	SHI AIRCRAFT CORPORATION
	Page	Section	Reference	Comment/Reason for Change	Change Proposal
	9	3.1.8	21.A.118A	21.A.119 shall be deleted, replace it with 21.A.6.	21.A.5, <u>21.A.6</u> , 21.A.7, <del>21.A.119</del> ,
response	Accep	oted: Tex	t modified a	accordingly.	

21.A.265

p. 10



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comment	9 comment by: Lionel Wallace Limited
	This should say ' <b>Unless otherwise stated herein</b> , this document is part of the ICA for product [yyyy]' to ensure no conflict with the ability for the provisions of GM No. 2 to 21.A.7(a) et al, to be adopted.
response	Accepted: This requirement has been removed in Opinion No 07/2019.
comment	20 comment by: Royal Netherlands Aviation Organisation
	Great! Add This document is part of the ICA for xyz
	BUT ALSO make clear: part of TC (TCDS ALS) and or ALS section of Maintenance MANUAL. Indicate new revision status of these documents
	AND ALSO MAKE CLEAR: MANDATORY or NOT MANDATORY, Applicability of ALTMOC.
	USE Standard identifiers for documents. SERVICE BULLETIN or SERVICE INFORMATION BULLETIN (Never Mandatory).
response	Not accepted: This requirement has been removed from Opinion No 07/2019.
comment	22 comment by: <i>KID-Systeme GmbH</i>
	The extended statement 'This document is part of the ICA for product [yyy]' might be redundant and misplaced. Normally, if the ICA is assigned to a certain product, there shall be a dedicated chapter within the ICA declaring the product effectivity. For instance as suggested by ATA iSPEC 2200. Inline with the iSPEC 2200 there is also an dedicated chapter for the approval statement. The mixture of product effectivity under the approval statement, might lose sight of this important information. So it is recommended to place the content of product effectivity under a dedicated chapter.
response	Accepted: This requirement has been removed from Opinion No 07/2019.
comment	34 comment by: LHT DO
	The Approval Statement should read: "This document contains portions of the ICA for product [].
	Only the data relevant for certification - and this specific data only - should be marked as ICA in the manuals in order to allow corrections or improvements of processes by others than the TC holder. Identification of such portions to be determined.
response	Accepted: This requirement has been removed from Opinion No 07/2019.
comment	51 comment by: Pilatus
	21.A.265 (h) requires the DOA holder to "designate data and information issued under the authority of the approved DO [by] this document is approved."



	The newly added part "If the issued data and information is part of the ICA for a product, the holder of the DO approval shall add the following statement: 'This document is part of the ICA for product[yyyy]"". This leads to the interpretation that all ICA (and changes thereof) are approved data, i.e. the entire AMM (not only scheduled maintenance requirements in Chapter 5 or the ALS Section), Parts Catalogues, Tooling Manuals (Tool and Equipment Manual), etc), as well as supplier documentation. This is also supported by the last paragraph of AMC 21.A.7(b). This would incur a significant increase in cost for an aircraft TC holder.
	Pilatus suggests to better clarify the information which is considered to be "approved data".
	Is the statement of 21.263(c)(3) still required and and is f so it means that two statements must be in the manuals?
response	Accepted: This requirement has been removed from Opinion No 07/2019.
comment	68 comment by: CAA-NL
	Point 21.A.265(h). It is not mentioned in the NPA that for this point it elaborates on the text proposed to be included in Part 21 with opinion 7/2016, although the text marked as unchanged in this NPA does not equal the proposed text of the Opinion. We agree with the suggested text, only the marking should be adequate and a reference to Opinion 7/2016 included for clarity of the source.
response	Accepted: This requirement has been removed from Opinion No 07/2019.
comment	95       Comment by: ARBOS         1. PARAGRAPH / SECTION THE COMMENT IS RELATED TO:         Page 10
	21.A.265 Obligations of the holder
	The holder of a design organisation approval shall: []
	(h) designate data and information issued under the authority of the approved design organisation within the scope of its terms of approval as established by EASA with the following statement: 'The technical content of this document is approved. It is issued under the authority of the DOA ref. EASA. 21J.[XXXX]. If the issued data and information is part of the instructions for continued airworthiness for a product, the holder of the design organisation approval shall add the following statement: 'This document is part of the ICA for product [yyyy]'.
	2. PROPOSED TEXT / COMMENT:
	Instead of 'This document is part of the ICA for product [yyyy]', it is proposed to write 'This document <b>includes data that</b> is part of the ICA for product [yyyy]'
	In addition, it is not evident how a supplier can accept this requirement from the TCH if the same equipment is installed on multiple aircraft types, each having different MRB/ALS requirements. This would lead to a requirement to customise each CMM according to the



aircraft type it is fitted on. Note that this can occur when identical equipment is used on different types from one TCH as well as on types from different TCHs. On page 18, GM N°3 to 21.A.7(b) this situation is addressed with respect to approval of the manual. It is suggested that consideration should be given to introducing a similar provision in 21.A.265 relating to the identification of TCH ICAs within the CMM.

# 3. RATIONALE / REASON / JUSTIFICATION:

It is understood that this has to be written in each CMM that includes instructions to satisfy an MRBR/ALS task. It is only this data within the CMM that will be declared as an aircraft level ICA by the TCH.

response Accepted: This requirement has been removed from Opinion No 07/2019.

comment 135

comment by: AIRBUS

1. PARAGRAPH / SECTION THE COMMENT IS RELATED TO: NPA 2018-01, page 10/37, point 21.A.265

# 2. PROPOSED TEXT / COMMENT:

It is proposed to modify the paragraph (h) of this point to read:

"(h) designate data and information issued under the authority of the approved design organisation within the scope of its terms of approval as established by EASA with the following statement: 'The technical content of this-**document set/module of data** is approved. It is issued under the authority of the DOA ref. EASA. 21J.[XXXX]. If the issued data **and information is are** part of the instructions for continued airworthiness for a product, the holder of the design organisation approval shall add the following statement: 'This document is part of the ICA for [product/component **f**yyyy]'."

# 3. RATIONALE / REASON / JUSTIFICATION:

Manuals do not necessarily exist in today's technical data products; this is explained in the GM No.1 to 21.A.7(a). Reference should be made to Data Sets/Modules, it would avoid missing this statement on all documents providing approved ICA data that are not regarded as manuals (e.g. RDAS, TA, etc...).

The term 'information' is routinely provided by holders of a design approval to the operators and is not considered as requiring any approval (not ICA). The use of the term 'information' may trigger a huge flow of questions towards holders of a design approval about the nature of all of this data provided on a daily basis to customers. As other people and authorities will read and interpret Part-21, not just the EASA and the DAHs, it would be appropriate to be precise in order to prevent misinterpretations. With regard to the term 'information', some consideration should be given to CS contents, e.g. the content of CS-25 Appendix H, which refers also to information (e.g. it refers to servicing information).

The second statement should allow the holder of a design organisation approval to use the term 'aircraft', 'engine', 'propeller' or 'component' (e.g. for repair design-related ICAs for Removable Structural Component) instead of Product.

response Accepted: This requirement has been removed from Opinion No 07/2019.

comment 170

comment by: KLM engineering & maintenance



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	Comment summary The proposed rule introduces a new statement: 'This document is part of the ICA for product [yyyy]'. This statement appears to be in contradiction with GM1 to 21.A.7(a)2 which defines that 'the data containing the instructions itself is the ICA, not any particular type of publication'. KLM agrees with the definition of ICA in GM1 to 21.A.7(a)2, and therefore KLM suggests that the new statement is not correct. Suggested resolution KLM proposes to EASA to change the new statement in the proposed rule to 'This document contains data that is part of the ICA for product [yyyy]'
response	Accepted: This requirement has been removed from Opinion No 07/2019.
comment	185 comment by: Textron Aviation
	Paragraph (h) was revised to add the statement ' <i>This document is part of the ICA for product</i> [ <i>yyyy</i> ]' if the issued data and information is part of the instructions for continued airworthiness for a product. It is not clear if this applies to engineering data used to create ICA or to every ICA document relevant to a product.
	Suggest rewording or adding additional detail to clarify intent. Does this apply to referenced supplier produced ICA?
response	Accepted: This requirement has been removed from Opinion No 07/2019.
comment	215 comment by: Jeff Conner
	The proposed change includes a requirement to mark data issued under an EASA DOA that is part of ICA for a product with the statement "This document is part of the ICA for product [yyyy]".
	<b>Comment:</b> As written, this statement would be required to be added to ANY document that is part of the ICA for a product regardless of whether the document in question was issued before or after enactment of the changes defined in NPA 2018-01.
	<b>Q1</b> - Is EASA's intent to require that this statement be added to ICA accepted/approved by EASA PRIOR to the introduction of this change?
	<b>Q2</b> - If the answer to Q1 is yes, is the expectation that all documents that comprise the ICA must be remarked even when a change is made to just one of the previously accepted/approved ICA documents for a given product?
	<b>Q3</b> - How does this marking requirement align with the proposed new AMC No. 2 to 21.A.7(a.) which states that "The instructions for continued airworthiness may be provided in the documents containing other, additional or optional, maintenance information, as described in 21.A.6,"? Clearly "additional or optional" maintenance information that is not part of the ICA should not be identified as "part of the ICA for product [yyyy]". Will EASA require the addition of the new statement to individual paragraphs or sentences contained in documents that include optional maintenance information?



response	Accepted: This requirement has been removed from Opinion No 07/2019.
comment	239 comment by: Dowty Propellers
	The proposed change includes a requirement to mark data issued under an EASA DOA that is part of ICA for a product with the statement "This document is part of the ICA for product [yyyy]".
	<b>Comment:</b> As written, this statement would be required to be added to ANY document that is part of the ICA for a product regardless of whether the document in question was issued before or after enactment of the changes defined in NPA 2018-01. Q1 - Is EASA's intent to require that this statement be added to ICA accepted/approved by EASA PRIOR to the introduction of this change? Q2 - If the answer to Q1 is yes, is the expectation that all documents that comprise the ICA must be remarked even when a change is made to just one of the previously accepted/approved ICA documents for a given product? Q3 - How does this marking requirement align with the proposed new AMC No. 2 to 21.A.7(a.) which states that "The instructions for continued airworthiness may be provided in the documents containing other, additional or optional, maintenance information, as described in 21.A.6,, "? Clearly "additional or optional" maintenance information that is not part of
	the ICA should not be identified as "part of the ICA for product [yyyy]". Will EASA require the addition of the new statement to individual paragraphs or sentences contained in documents that include optional maintenance information?
response	Accepted: This requirement has been removed from Opinion No 07/2019.
comment	281 comment by: FNAM
	<b>PROPOSAL.1</b> Proposed 21.A.265(h) states adding "This document is part of the ICA for product [yyyy]" where appropriate. This is really welcomed and FNAM and GIPAG suggest to add that same statement in AMC 21.A.14(b) for ICAs issued by APDOA.
response	Not accepted: This requirement has been removed from Opinion No 07/2019.
comment	282 comment by: FNAM
	ISSUE.2 - Transition measures and Catch-up process Idem Comment 278
response	Accepted: This requirement has been removed from Opinion No 07/2019.
comment	295 comment by: Europe Air Sports
	Comment on 21.A.265:
	It is not clear what the intention is for existing TCs and existing ICA. Is the DAH required to make changes to existing document? If so on what timescale? If the obligations only apply to new designs, this should be clarified. If the obligations apply only when a change is made



to an existing design, this may have an unintended consequence of discouraging design changes, which may have negative safety impact.			
Accepted: This requirement has been removed from Opinion No 07/2019.			
315 comment by: Zodiac Aerospace - Sell GmbH DOA 21J.067			
<ul> <li>The proposed statement does not consider following conditions to be met:</li> <li>the document is applicable for more than one product</li> <li>the document may be used in products for more than one DAH.</li> </ul>			
The proposed text should prevent that the same (basic) document has to be produced, maintained and updated as multiple document, i.e. one document for each DAH and each product, and thus will lead to unnecessary burden and cost for industry without improving safety. Thus, it should be considered that one document is produced and is covered by related approval statements of each Design Approval Holder or Applicant.			
Proposed text: 'The technical content of this document ( <u>or</u> the document ref. [ZZZZ]) is approved. It is issued under the authority of the DOA ref. EASA.21J.[XXXX].' If the issued data and information is part of the instructions for continued airworthiness for a product, the holder of the design organisation approval shall add the following statement: 'This document is part of the ICA for product(s) [yyyy], [vvvv]'.			
Accepted: This requirement has been removed from Opinion No 07/2019.			
332comment by: Dassault-Aviation§ 3.1 page 10/3721.A.265 Obligations of the holder			
Iext: The holderof a designorganisation organisation approval shall: [](h)designate data and information information issued under the 			

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response	Accepted: This requirement has been removed from Opinion No 07/2019.		
comment	368 comment by: IATA		
	Existing Text	Comment / Proposed Text	Justification
	21.A.265 Obligations of the holder " following statement: 'The technical content of this document is approved. It is issued under the authority of the DOA ref. EASA. 21J.[XXXX]. If the issued data and information is part of the instructions for continued airworthiness for a product, the holder of the design organisation approval shall add the following statement: 'This document is part of the ICA for product [yyyy]'."	How would a DAO Holder comply with the requirement if he is issuing a document containing only some section(s) which constitute(s) an ICA? Would that ICA identification statement be applied only locally to the section(s) or would the whole document be identified as part of the ICA? The latter approach would not be accurate for the non-ICA part(s)/section(s) of the document.	
response	Accepted: This requirement has been	removed from Opinion No 07/2019.	
commont	410	commont by P	alla Daviaa pla
comment	ment       410       comment by: Rolls-R         21.A.265 (h) requires the following to be stated on data and information issued unauthority of the DOA: "The technical content of this document is approved. It is issued the authority of the DOA ref.EASA.21J.[XXXX].         There is a missing (") after the second square bracket, which is needed to close the comment of the close the comment of the close the comment of the close the cl		ed under the sissued under the quote.
	Proposed Solution: Typographical corr	rection	
	21.A.265 (h) requires the following to authority of the DOA: "The technical of the authority of the DOA ref.EASA.21J	1.A.265 (h) requires the following to be stated on data and information issued under the authority of the DOA: " The technical content of this document is approved. It is issued under he authority of the DOA ref.EASA.21J.[XXXX].	
	The inserted text attempts to change text required a declaration that the te the authority of the DOA - in other we declare it approved, and if another par information outside the scope of the D and an alternate form of words to id version of the text seems to permit ar is approved. If this is an intended cons Can several DOA holders declare the s to permit traceability to the organisat	s the emphasis of the required statement echnical content of the document was ap ords, if the DOA could approve the data, arty needed to approve it (eg EASA for a n DOA), then the prescribed statement could entify the source of approval must be u by DOA to declare any data as approved, i sequence, what does the 'authority of the ame data as approved? Isn't the point of t ion that has approved the data?	t. The original proved under then it could najor mod, or d not be used, sed. The new f it believes it e DOA' mean? the statement



<u>Proposed Solution</u>: The purpose of the declaration, and the circumstances under which it can be used needs to be clarified in the rule.

21.A.265 (h) requires the following to be stated on data and information issued under the authority of the DOA, if the issued data is part of ICA " This document is part of the ICA for product [yyyy]".

It is important to consistently state that documents themselves are not ICA. It is the information that is ICA, and a document can contain ICA, or not, or may contain a mixture of ICA and non-ICA information. (See also GM No 1 to 21.A.7(a) point 2))The prescribed statement is therefore incorrect.

<u>Proposed Solution</u>: One solution might be to revise the statement to be "This document contains ICA for product [yyyy]"

21.A.265 (h) requires the following to be stated on data and information issued under the authority of the DOA, if the issued data is ICA " This document is part of the ICA for product [yyyy]".

GM No 3 to 21.A.7(b) advises that in cases of a document containing ICA for more than one product, an alternate to placing several DOA statements on the same document, a DOA-managed listing of ICA may be more practical. This is a good idea, but it contradicts the 21.A.265(h) requirement, and therefore this alleviation, and any others considered as a practical alternative, need to be written into the rule. Alternately, the statement should be removed in favour of a requirement to identify that the document contains ICA, but without a prescriptive form of words.

<u>Proposed Solution</u>: Suggest removing the statement in favour of a requirement to identify that the document contains ICA, but without a prescriptive form of words.

21.A.265 (h) requires the following to be stated on data and information issued under the authority of the DOA, if the issued data "is part of the ICA for the product" " This document is part of the ICA for product [yyyy]".

The rule should not state "if the issued data... is part of the ICA", as this implies that the whole of the issued data (etc) is part of the ICA. The rule needs to accommodate that the issued data etc may contain ICA, but doesn't have to contain only ICA.

<u>Proposed Solution</u>: The rule will need to be "if the issued data and instructions contain part of the ICA..."

The text under 21.A.265(h) '... ICA for product [yyy].' should be revised to be read as '... ICA for Type Design [yyy].' to be consistent.

Proposed Solution: Edit as proposed.

response Accepted: This requirement has been removed from Opinion No 07/2019.

comment 446

comment by: DGAC France



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	ICA issued by the TCH need to be very precise on the content or the related content of such instruction. Specifically, content issued by component manufacturer (CMM) need to be clearly identified within ICA (especially within the AMM), and if modified by the TCH, such modification need to be highlighted.
response	Accepted: This requirement has been removed from Opinion No 07/2019.
comment	447 comment by: DGAC France
	Proposed 21.A.265(h) states adding " <i>This document is part of the ICA for product [yyyy]</i> " where appropriate. This is really welcomed and DGAC France suggests to add that same statement in AMC 21.A.14(b) for ICAs issued by APDOA.
response	Accepted: This requirement has been removed from Opinion No 07/2019.

comment	69 comment by: CAA-NL
	<ul> <li>Point 21.A.451(a)1.(i) a reference to 21.A.6 needs to be included as 21.A.6 includes a reference to the holders of a repair design approval.</li> <li>(i) laid down in points 21.A.3A, 21.A.3B, 21.A.4, 21.A.5, 21.A.6, 21.A.7, 21.A.439, 21.A.441, and 21.A.443, 21.A.447 and 21.A.449;</li> </ul>
	When accepted it may have consequences for the related AMC/GM, those may need to be updated.
response	Not accepted: No requirement for a manual for repairs.
comment	136 comment by: AIRBUS
	1. PARAGRAPH / SECTION THE COMMENT IS RELATED TO: NPA 2018-01, page 11/37, point 21.A.451
	2. PROPOSED TEXT / COMMENT:
	Reference to point 21.A.6 is missing in the paragraph (a)1.(i).
	<b>3.</b> RATIONALE / REASON / JUSTIFICATION: Self-explanatory.
response	Not accepted: No requirement for a manual for repairs.
comment	171 comment by: <i>KLM engineering &amp; maintenance</i>
	Comment summary
	1. Under point 21.A.451(a) the proposed rule does not include obligations to the holder of a major repair design approval to comply with point 21.A.6 "Manuals".
	2. Under point 21.A.451(b) the proposed rule does not include obligations to the holder

of a minor repair design approval to comply with point 21.A.6 "Manuals".



	<ol> <li>Suggested resolution         <ol> <li>Under point 21.A.451(a), KLM proposes that EASA includes in the proposed rule the obligations to the holder of a major repair design approval to comply with point 21.A.6 "Manuals".</li> <li>Under point 21.A.451(b), KLM proposes that EASA includes in the proposed rule the obligations to the holder of a minor repair design approval to comply with point 21.A.6 "Manuals".</li> </ol> </li> </ol>
response	Not accepted: No requirement for a manual for repairs.
comment	217 comment by: Jeff Conner
	"Obligations and EPA Marking"
	<b>Comment:</b> GE Aviation appreciates the clarity provided by EASA that holders of both major and minor repair design approvals have a responsibility to develop ICA for the designs for which they hold approval rather than referencing ICA produced by a different design approval holder and avoiding the regulatory obligation to develop ICA.
response	Noted
comment	242 comment by: Dowty Propellers
	"Obligations and EPA Marking"
	<b>Comment:</b> Dowty appreciates the clarity provided by EASA that holders of both major and minor repair design approvals have a responsibility to develop ICA for the designs for which they hold approval rather than referencing ICA produced by a different design approval holder and avoiding the regulatory obligation to develop ICA.
response	Noted
commont	255 commont by 544
comment	Comment by: FAA
response	Not accepted: EPA is for marking and is not equivalent to PMA.

21.A.609	p. 11

# comment

comment by: CAA-NL

# 70

Point 21.A.609(f)

We think a reference to 21.A.6 needs to be included in the obligations of the holder of an ETSO authorization preferably under (f) as he/she is referred to in 21.A.6 itself. (f) comply with points 21.A.3A, 21.A.3B, 21.A.4 and 21.A.6;

When accepted it may have consequences for the related AMC/GM, those may need to be updated.



response	Not accepted: There is no requirement for a manual in Part 21.
comment	172 comment by: <i>KLM engineering &amp; maintenance</i>
	<b>Comment summary</b> The proposed rule does not include obligations to the holders of ETSO authorisations to comply with point 21.A.6 "Manuals".
	<b>Suggested resolution</b> KLM proposes that EASA includes in the proposed rule the obligations to the holder of ETSO authorisations to comply with point 21.A.6 "Manuals".
response	Not accepted: There is no requirement for a manual in Part 21.
comment	356 comment by: FAA
	Is this point intended to apply to US State-of-Design, design approval holders?
response	Not accepted: This requirement is not applicable to US DAHs.

# 4. Impact assessment

comment	21 comment by: Royal Netherlands Aviation Organisation
	A point of cencern.
	EASA should keep oversight / veto right on ICA issued as MANDATORY by TC holders. For some TC holders it may be tempting to issue a MANDATORY ICA, that requires swapping of parts or modifications which is not necessarily driven by "SAFETY" but merely by COMMERCIAL Interest (selling parts and maintenance contract).
response	Noted
comment	105 comment by: AIRBUS
	1. PARAGRAPH / SECTION THE COMMENT IS RELATED TO: Page 30
	SR ICLD-2013-001: Boeing 757-200 TF-FIJ, Icelandair, 85 NM south-south-east of London Gatwick Airport on June 4, 2009.
	Smoke on the flight deck and in the cabin was followed by an engine shut down and an emergency landing because a maintenance action from a component maintenance manual (CMM) had not been performed.
	A safety recommendation asked for guiding rules to be set for airframe and engine manufacturers such that maintenance planning documents (MPDs) and engine maintenance manuals (EMMs) clearly include recommended maintenance information from the CMM of subcomponents.



p. 30-34

# 2. PROPOSED TEXT / COMMENT:

It is proposed to add:

It is understood by the Agency that, during application of the MRB Process, the mentioned maintenance action should have been identified as an applicable and effective task leading to its inclusion as an ICA in the MRBR (and MPD).

#### 3. RATIONALE / REASON / JUSTIFICATION:

As written, this example does not necessarily support the NPA. For it to be seen as a valid reason for writing the NPA, it should be made clear that the maintenance action in the CMM should have been identified as an MRB Report task and declared by the DAH as an ICA.

The MRB Process requires all vendor scheduled maintenance recommendations to be reviewed. In practice, the majority are not determined to be MRBR tasks (ICAs) and hence would not be included in the DAH's MPD.

The safety recommendations addressed to EASA would seem to be asking for all vendor recommendations to be identified as ICAs (and thus make them eligible for inclusion in the MPD). The process by which such recommendations are elevated to ICA status is not the subject of this NPA.

Since the Agency will not wish to delete this example, it is recommended that a statement is added to the effect that the CMM maintenance action should have been identified as an applicable and effective task to satisfy MSG-3 logic and thus be identified as an MRB task. Unless this is achieved, the task will not be included in the MPD. Note also that neither the AMM nor the EMM should contain scheduling information.

response Noted

# comment 201

comment by: ARSA

4.1. What is the issue

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

Ther	iere are				several			I	important						ques	tions:
—	v	what are		the		c	contents			of		the		ICA?		
—	what	is	the	level	of	EASA	ve	rifica	tion	and	or	appro	oval	of	the	ICA?
—	wh	nen		do	th	ne	IC	A	ne	ed	te	0	be		avai	lable?
—	to		who	m	sho	uld	t	he	IC	Ą	be	n	nade		avai	lable?
—	how	are	the	e ICA	u	sed	by	ope	rators	5 /	ma	intena	nce	org	anizat	ions?
— aı	re there	e any	, possi	ible oth	er is	sues t	hat h	ave r	not ye	t beer	ı ider	ntified	?			



The answers to these questions are already contained in the relevant certification specifications, and in Part 21, in Part-M and in Part-145. However, experience has shown that there is much room for interpretation in the current rules and standards, leading to differences and possible safety risks. It appears that different TC holders have different interpretations of what a complete set of ICA is and to what level they are required to control the data that constitutes the ICA. The consequence is that maintenance organizations may not have all the necessary data to perform the maintenance in the correct way, which can lead to them using unapproved methods. (emphasis added)

4.1.1. Safety risk assessment

As the status of ICA (their scope, approval/verification, format, availability) is unclear with the current Part 21 and related GM, potential safety risks exist due to possible misinterpretation of the implementing rules and airworthiness codes.

These risks have been identified in the investigations of two accidents, which lead to the following safety recommendations being addressed to EASA:

 — SR ICLD-2013-001: Boeing 757-200 TF-FIJ, Icelandair, 85 NM south-south-east of London Gatwick Airport on June 4, 2009.

Smoke on the flight deck and in the cabin was followed by an engine shut down and an<br/>emergency landing because a maintenance action from a component maintenance manual<br/>(CMM)hadnotperformed.

A safety recommendation asked for guiding rules to be set for airframe and engine manufacturers such that maintenance planning documents (MPDs) and engine maintenance manuals (EMMs) clearly include recommended maintenance information from the CMM of subcomponents.

 — SR UNKG-2007-004: Piper PA-28R-201T G-JMTT, near 9 NM south of Oban Airport, Argyll (Scotland) on April 9, 2007

The aircraft crashed after a loss of control in instrument meteorological conditions due to a defective vacuum pump because its maintenance had not been performed.

A safety recommendation asked EASA to comply with vacuum pump maintenance and replacement requirements to ensure that aircraft fitted with vacuum-driven attitude indicators can be safely operated in instrument meteorological conditions when aircraft are certified to do so.

This NPA addresses both of these safety recommendations by proposing revised GM, according to which the DAH should systematically review the initial maintenance recommendations provided by suppliers and consider whether they are applicable and effective. This review also includes ETSO articles where DAHs or DAAs may have to incorporate certain maintenance instructions into the ICA of a product, to ensure that the ETSO article continues to satisfy the terms of its ETSO authorization after installation.



ARSA supports the proposal to require each DAH to review a supplier's initial maintenance recommendations to determine their applicability and effectiveness. Unfortunately, this proposal doesn't go far enough.

EASA cites the above accidents for the proposition that failure to perform maintenance on components (or performing it improperly) can have serious safety consequences. Yet, in the vast majority of cases it continues to allow DAHs to determine whether a particular CMM is ICA (unless compliance with the CMM is mandated by the Airworthiness Limitations or contains scheduled maintenance requirements).

At the same time, the Agency mandates that CAMOs and maintenance providers have and follow the very manuals that are apparently not important enough to be ICA. The Part-M and Part-145 requirements are not limited to components referenced in airworthiness limitations or those having a recommended scheduled maintenance interval in the product's ICA. They apply to all components.

Following the NPA to its logical conclusion, most CMMs are not and will not be ICA and therefore need not be created under the regulations. Even if they exist due to contractual requirements, they are not required to be made available to maintenance providers. If a CAMO or Part-145 organization is unable to obtain them, it is prohibited from exercising the privileges of those certificates unless it develops and obtains approval of its own repair designs. This would lead to the proliferation of numerous non-standard maintenance procedures for the same workscope. Unfortunately, in the vast majority of cases, the maintenance provider must rely on the component manufacturer's willingness to provide this information at a fair and reasonable price. If the manufacturer believes this is contrary to its best interests, it will not happen, despite or in spite of the safety implications. Therefore, it is incumbent upon the aviation safety agency to ensure the proper information is created and provided—the decision should not be left to the design approval holder.

Left unchecked, the component manufacturers will eventually perform all the maintenance on their articles and the government-imposed monopoly represented by a design approval will be perpetuated. The industry is clearly heading in this direction. Respondents to a recent ARSA member survey identified the availability of maintenance information as one of the top two concerns impacting their company's future.

### **Conclusion**

With today's focus on State Safety Programs, Safety Management Systems and system safety, the disconnect between the design and maintenance rules is obvious. The regulatory framework links design, production, operations and maintenance. Together, they comprise a system for which airworthiness is the common principle and mandate. The agency has an obligation to ensure its regulatory scheme flows seamlessly from one certificate holder to the next. That means it must ensure the information required to be provided by the design approval holder will establish compliance with the maintenance providers' obligations.

The certification specifications apply to all aircraft systems, assemblies and subassemblies and, with few exceptions, each item of installed equipment must function as intended to obtain a design approval (see, for example, CS 25.1309). They must continue to conform to the approved design during the product's operating life.



	The ICA are the primary method for maintaining continued airworthiness. They provide the important link between design and maintenance just as the Airplane or Rotorcraft Flight Manual links design and operations. The regulations do not allow the withholding of normal operating procedures from an aircraft flight manual, which must be furnished with each aircraft. (see CS 25.1581 and 25.1585(a)(1). Why are normal maintenance procedures, such as instructions for accomplishing basic repairs and overhauls to components, any different?
	By perpetuating the decades old notion that "remove and replace" is an acceptable method for ensuring airworthiness, the NPA ignores the realities of developing, managing and following an approved maintenance program for all items of installed equipment. Important component maintenance is performed in a workshop as mandated by Part-M and Part-145, and it is not limited to compliance with airworthiness limitations and "scheduled" maintenance, which can change according to the operator's maintenance program.
	When EASA first initiated this rulemaking project, it held a public meeting in which one of its managers referred to ICA as the "Secrets for Continued Airworthiness." Unfortunately, he wasn't joking. What began with much promise appears to have succumbed to the regulator's propensity to abdicate its responsibility when commercial realities interfere with a clear aviation safety requirement.
response	Noted
comment	228 comment by: Jeff Conner
	This section states that "Part 21 Subpart D would be partially applicable for non-ALS ICA."

Recommendation: Given that EASA has elected to pursue Option 2b (see Section 4.5.1 on Page 33), additional explanation should be given via a GM or AMC to help industry stakeholders better understand the boundaries of this partial applicability.

response

Noted: GM will be developed accordingly.

229 comment comment by: Jeff Conner "Also, the outcome for all options would be that ICA should be made available to more parties than they are today, and also that the ICA would include all component maintenance manuals, thus increasing their cost of distribution." Comments: - GE has a robust process for ensuring that complete ICA are made available to those who have a regulatory need to comply with our ICA including CMMs incorporated by reference. It is not clear to GE that the changes proposed in this NPA would increase the number of parties to which ICA are made available. - EASA needs to ensure that the changes proposed in this NPA do not (1) erode the ability of ICA producers to protect intellectual property contained in the ICA, and (2) impact the ability of ICA producers to be compensated for "increasing their cost of distribution".



	<b>Recommendation:</b> The language "ICA would include all component maintenance manuals" needs to be modified to read "ICA would include all component maintenance manuals referenced in the ICA" to be consistent with the changes proposed in this NPA.
response	Partially accepted: Opinion No 07/2019 makes it clear that not all CMM are ICA.
comment	230 comment by: Jeff Conner
	<b>Comment:</b> Not addressed in this simplified "economic impact" assessment is the potential financial impact to TC Holders that proactively update ICA beyond regulatory requirements to ensure that owners, operators and maintenance providers have easy access to "real time" updated ICA. In 2017, GE and GE partner companies introduced over 9000 changes to ICA. Applying the changes defined in this NPA to existing ICA could have substantial unintended consequences including a reduction in the frequency in which DAHs update ICA due to "requiring additional resources from ICA producers".
response	Partially accepted: Even if this change will impact EU applicants, it should be noted that a transition period is included in Opinion No 07/2019.
comment	231 comment by: Jeff Conner
	" furthermore, the new regulatory differences would have to be addressed in the FAA/EASA Technical Implementation Procedures (TIP) of the US/EU Bilateral Aviation Safety Agreement (BASA)."
	Comments:
	<b>Q1</b> - Will EASA delay the implementation of the proposed rule change on ICA until such a time as the TIP is updated to address the dis-harmonization created by EASA actions?
	<b>Q2</b> - For the unique case of CFM International where both EASA and FAA issue a Type Certificate for CFM products, how will the difference in ICA regulations be addressed? The FAA approves the TC but accepts the ICA (Post Amendment 6) while EASA would require approval the ICA as part of the TC.
	<b>Q3</b> - GE holds an FAA Organization Designation Authorization (ODA) that includes Code 8180 - Perform Review and Acceptance of Instructions for Continued Airworthiness. When exercising their privileges under the ODA, GE does not approve ICA as part of the type design. On a go forward basis, will EASA accept changes to ICA on GE products that have been validated by EASA when the changes to ICA are accepted through GE's ODA rather than approved by EASA?
	<b>Q4</b> - If a TC Holder elects to transfer the TC from the FAA to EASA, how will EASA handle the difference in how ICA were developed and accepted by the FAA versus the new EASA requirement that ICA be approved as part of the TC?
response	Not accepted: Opinion No 07/2019 introduces changes to the ICA control process, which are applicable to EU applicants.
comment	250 comment by: Dowty Propellers
	ref 4.3 option 2b:



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	This section states to Recommendation: pursued (see Section AMC to help induced applicability.	hat "Part 21 Su Given that EA on 4.5.1 on Pag Istry stakehold	ubpart D would b SA has elected t e 33), additional ders better und	e partially applica to pursue Option explanation shou lerstand the bou	able for no 2b as the uld be give undaries	on-ALS ICA." e option to be en via a GM or of this partial				
response	Noted: GM will be c	leveloped acco	ordingly.							
comment	251			comme	ent by: <i>Do</i>	wty Propellers				
	ref 4.4.4									
	"Also, the outcome for all options would be that ICA should be made available to more parties than they are today, and also that the ICA would include all component maintenance manuals, thus increasting their cost of distribution."									
	Comments: - Dowty Propellers has a robust process for ensuring that complete ICA are made available to those who have a regulatory need to comply with our ICA. It is not clear to GE that the changes proposed in this NPA would increase the number of parties to which ICA are made available. - EASA needs to ensure that the changes proposed in this NPA do not (1) erode the ability of ICA producers to protect intellectual property contained in the ICA, and (2) impact the ability of ICA producers to be componented for "increasing their cost of distribution"									
	<b>Recommendation:</b> needs to be modif refrenced in the ICA	The language ied to read "I " to be consist	"ICA would inclu ICA would includ ent with the cha	de all componen de all componen nges proposed in	t mainten t mainten this NPA.	ance manuals" ance manuals				
response	Partially accepted: (	Opinion No 07/	2019 makes it cl	ear that not all CN	MM are IC	Α.				
comment	270			comme	ent by: <i>Eur</i>	ope Air Sports				
	4.1.1. Safety risk ass The status of the "c hereby presented r wordings open for i	sessment old ICA" may h new texts do r nterpretation.	ave been somew not necessarily ir	what unclear, the ancrease clarity as	applicabili they con	ty as well. The tain too many				
response	Not accepted: This	proposal will n	ot be retroactive							
comment	273			comment by: 7	THALES AV	'S FRANCE SAS				
	§4.1.2									
	Proposed modificat	tion		c						
	таріе — т	"Prod "C	ucers holders	OT and		ICA":				
	- S	TC	holders	and		applicants,				
	Minor	change	approval	holders	and	applicants.				
	— Repair	design	approval	holders	and	applicants.				
			- 1, 1			- 1-1				



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	– ETSO authorisation holders and applicants,
	<ul> <li>suppliers of components to the above approval holders</li> </ul>
	Rationale According to 21.A.7(b), ETSO autorisation holders and applicants are not required to produce ICA, it is confusing to separate ETSO holders from other suppliers
response	Accepted: Text modified accordingly.
comment	293 comment by: FNAM
	<b>4.4.4 Economic Impact</b> The European proposals may require additional staff, time and cost resources for Part-21 organizations and Part-145/Part-M organizations in case of Catch-up for orphan aircraft or aircraft with no existing/expired ICAs. A deeper analysis on the economic impact, especially on SMEs would be much appreciated. As no sound study is provided on the feasibility and the impact of these new measures, FNAM and GIPAG promote the fact that new ICAs disposals should be mandatory only for newly certified aircraft for flexibility reasons and asks for more proportionate disposals for Small and Medium Part-21 organizations.
response	Noted
comment	294 comment by: FNAM
	<b>4.4.5 General Aviation and proportionality issues</b> A deeper analysis would be appreciated, as this chapter has not been fulfilled by EASA for the purpose of this NPA.
response	Noted
comment	302 comment by: GE Aviation Czech s.r.o.
	Section 4.3 Option 2b: This section states that "Part 21 Subpart D would be partially applicable for non-ALS ICA."
	Recommendation: Given that EASA have elected Option 2b as the option to be pursued (see Section 4.5.1 on Page 33), additional explanation should be given via a GM or AMC to help industry stakeholders better understand the boundaries of this partial applicability.
response	Noted: GM will be developed accordingly.
	270
comment	370 comment by: FAA
	1. The inclusion of Instructions for Continued Airworthiness (ICA) in the type design will require close scrutiny of a much larger volume of information. The shift of this information from "recommended" to "necessary" will require a more rational evaluation of the needs and methods to accomplish what now would be mandatory tasks, and will shift responsibility from owners, operators, and maintainers, to the design approval holders and regulators.
	2. Diligent evaluation of airframe and system design and then application of the results to the development of inspection and other scheduled maintenance tasks is a necessary step in



	prom anoth comp timing	oting saf Ier recog rehensiv g, and pr	ety and reli mized step e ICA by the ocedures to	ability. Adjusting the maintenance program based on experience is toward these goals. Still, the development and maintenance of e design approval applicant(s)/holder(s) is the best source of tasks, o form a continued airworthiness program.
	= 3. Pag	ge 31, 4tl	n paragraph	and 4.1.2 Comment: Include EPA holders.
response	Not a	ccepted.		
	1. Add	dition of	ICA to the 1	TC is the aim of Opinion No 07/2019 to improve the control of ICA.
	2. The which	e mainte will help	nance prog o end users	ramme is not ICA: Opinion No 07/2019 improves the status of ICA to improve their maintenance programmes.
	3. EPA	A is not P	MA.	
	440			
comment	419			comment by: Danish Aviation Association
	DAA v The p into 2	would lik rocess to a and 2b	e to add coi o define opt o.	mments on the 4.5 Conclusions: tions has resulted in four main options, where option two was split
	4.5.1 but w fact th DAA r	Compari vith this o hat this c ecomme	son of optio option ther option is not ends to adju	ons shows that during the review option 2b was the desired option, e was dissenting views about dis-harmonisation with FAA and the t fully consistent with Part 21 principles. Ist option 2b to eliminate the dis-harminisation with FAA.
response	Noted	ł		
comment	434			comment by: MITSUBISHI AIRCRAFT CORPORATION
	Page	Section	Reference	Comment/Reason for Change
	32	4.3		MITAC ISC co-chair supports option 2a. As long as MRBR is approved outside of the TC activity, the task requirement should be revised and approved by MRB.
response	Noted	ł		
comment	440			comment by: Dassault-Aviation
	9 4.5 <u>Text:</u> §4.3 F	How it co	uld be achi	eved-Options
	 Optio obliga 	n 2: ICA ation for	would be a design ap	included in the TC but with a 'special treatment' as ICA are an proval holder (DAH).



	<u>Comment:</u> DA don't understand the concept of "'special treatment'" .
	This topic needs to be clarified
response	Noted: New point 21.A.90(c) illustrates this special treatment.
comment	441 comment by: Dassault-Aviation
	§ 4.5 page 34 <u>Text:</u> § 4.5 Conclusion
	4.5.2. Option chosen EASA reviewed the proposal from the RMG and its dissenting views, and decided to propose option 2b.
	Comment:Regarding option 2b, this option can be interesting, however the wording "subpart D wouldbepartiallyapplicable"needtobeclarified.DA concerns is if EASA decide to propose only option 2b in the rules.DA suggest that the NPA allows a choice between option 1 (the most consistent with Part 21principles) and option 2b choosen by the RMT.
response	Not accepted: Option 2b is the option kept in Opinion No 07/2019.
comment	452 comment by: Martin Ryff The text in para 4.4.5. is not very convincing.
response	Noted
comment	479 comment by: MARPA
	Paragraph 4.1.3 discuss how the current problem could evolve. Other considerations include the risk of increased industry consolidation or monopolization with greater expense being passed to the flying public, and less choice existing in maintenance organizations for owner/operators seeking higher quality performance of repairs, if Holders are permitted to continue withholding key elements of ICA or continue to distribute partial/incomplete ICA.
response	Noted
comment	480 comment by: MARPA Paragraph 4.4.4 discusses the economic impact, but only considers the (minimal) cost to ICA
	available data via a portal that already exists. The economic <u>benefits</u> of greater availability of complete ICA is that there would be increased competition in the maintenance market, leading to price competition and greater choice in the quality of work and service offered by maintenance providers to owner/operators. This would correspondingly lead to lower prices



p. 35

for the flying public. The economic benefits of ICA availability and competition appear to outweigh the burdens of making available maintenance data (in the form of ICA) that Holders and suppliers already have anyway.

response Noted

# 5. Proposed actions to support implementation

comment 18 comment by: Cameron Balloon Ltd Option 2a or 3 would be the preferred options for Cameron Balloons, but Option 2b would be satisfactory. response Noted 371 comment comment by: FAA It is not clear how implementation of these changes would occur. Some questions include (1) effective date, (2) provisions for existing approvals, and (3) effect on pending applications. There would be substantial effort to bring existing approvals into compliance. Confusion could existing approvals are not brought into compliance with the new standards. Noted: This proposal will not be retroactive. response

# 3. Appendix A — Attachments

SZD Puchacs.pdf Attachment #1 to comment <u>#19</u>

Attachment #2 to comment #19

TM4048 FE-29-01-01a TN.pdf Attachment #3 to comment #19

ARSA-comments-ICA-NPA-2018-01-final-20180529.pdf Attachment #4 to comment <u>#341</u>



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