

Instructions for Continued Airworthiness (ICA)

Case of a company being the original equipment manufacturer (OEM) - so supplier for a Type Certificate Holder (TCH) - and having their own DOA. If we take the example of the Component Maintenance Manual (CMM), provided that the CMM is in that case considered as an ICA, could you clarify if the OEM DOA can or cannot make changes to the CMM using e.g. Part 21 / Subpart E?

Answer

The supplier DOA cannot make a stand alone change to the CMM under Subpart E. According to 21.A.90C(b) such stand-alone changes can be made only by the DAH (in this case the TCH).

However, if the DAH has identified the specific CMM as ICA, they may also recognise the updated CMM as ICA (refer also to AMC3 21.A.7(a) DAH responsibility to check the supplier data which is part of the ICA or referenced with the ICA).

If the change to the CMM is not recognised as ICA, it may still be 'acceptable' for the DAH. When the DAH confirms this (see GM3 21.A.7(a)) the respective change to the CMM can be considered applicable maintenance data under M.A.401(b)(4).

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https://www.easa.europa.eu/en/faq/136688

Standalone changes to ICA: could it be clarified which are the expectations in terms of DOA's involvement activities before release of the standalone changes to the ICA (review by compliance verification engineer, other Office of Airworthiness involvement, etc.)?

Answer

When subject to 21.A.90C(c) the stand-alone changes to ICA do not need to be processed as changes to the type design under Part 21/Subpart D, the expected DAH/DOA procedures

should still address:

- preparation;
- proof reading;
- verification of technical consistency;
- · verification of feasibility (when relevant); and
- approval for release.

In such a case, a CVE or airworthiness function involvement is not required. (see GM1 21.A.239(a), para. 3.1.5, Note).

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The applicability of 21.A.7 AMCs/GMs is not clear in the case of TCH without new production. Could you please clarify?

Answer

Indeed, this has not been clarified at the level of the respective AMC/GM. Certain parts of the AMC/GM may raise questions on 'retroactive' application.

- In regard to the topic of ICA identification, AMC2 21.A.7(a) Identification of ICA and AMC 1 21.A.7(b) Identification of a complete set of instructions for continued airworthiness (ICA), should be applied for:
 - new design approvals (TC/STC) certified after the 18th of May 2022
 - for existing design approvals at the next opportunity of a TCDS/STC/STCDS update.
- 2. In regard to the topic of ICA format, GM2 21.A.7(b) ICA format, should be applied for a new design approval (S)TC applied after the 18th of May 2022.

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With reference to AMC2 21.A.7(a) point (d): '(d) If the maintenance data made available by a DAH includes data from an operator (i.e. in order to customise the data for the operator, and created under the authority of the operator),

the operator's data should be identified as such, and the DAH is not required to additionally evaluate it. Could you give an example for operators' data included in ICA?

Answer

Sometimes, the Type Certificate Holder (TCH) offers a service to the operator to publish the ICA for the operator fleet. This fleet may include design changes (e.g. Supplemental Type Certificates) or repairs which have not been developed / approved by the respective TCH but by other design approval holders. If these design changes or repairs have their own ICAs, these ICAs are outside TCH responsibility.

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With reference to GM2 21.A.7(a) point (4): '(4) If the ICA are defined at aircraft level, the following principles apply to the other supplier data that is not related to the ALS nor to scheduled maintenance: (i) If the supplier data includes a maintenance instruction for an action identified in the aircraft-level ICA, including an engine or propeller, this supplier data should be referenced in the aircraft-level ICA and should be made available like any other ICA. As an alternative to linking such supplier data to the aircraft-level ICA (e.g. with cross references), it is possible to include the relevant data directly into the aircraft ICA. In such a case, the supplier data is not part of the aircraft ICA since the aircraft ICA already contain all the required information. [...]' What does it mean "In such case the supplier data is not part of the ICA, since the aircraft ICA already contain all the required information"? Is that avoiding duplication and potential disagreement?

Answer

Indeed, the purpose is to have a better control on supplier data (avoiding duplication and potential disagreements).

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https://www.easa.europa.eu/en/faq/136692

With reference to GM2 21.A.7(a) point (4), what does it mean "In such case the supplier data is not part of the ICA, since the aircraft ICA already contain all the required information"? Is that avoiding duplication and potential disagreement?

Answer

The GM2 21.A.7(a) point (4) states:

'(4) If the ICA are defined at aircraft level, the following principles apply to the other supplier data that is not related to the ALS nor to scheduled maintenance:

If the supplier data includes a maintenance instruction for an action identified in the aircraft-level ICA, including an engine or propeller, this supplier data should be referenced in the aircraft-level ICA and should be made available like any other ICA. As an alternative to linking such supplier data to the aircraft-level ICA (e.g. with cross references), it is possible to include the relevant data directly into the aircraft ICA. In such a case, the supplier data is not part of the aircraft ICA since the aircraft ICA already contain all the required information.

[...][']

Indeed, the purpose is to have a better control on supplier data (avoiding duplication and potential disagreements).

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What is the purpose of the point (a)(2)(vii) in the AMC1 21.A.7(c)?

Answer

The AMC1 21.A.7(c), point (a)(2)(vii), states:

'If all ICA are made available to EASA at the time of entry into service, they should also be furnished at this time to the aircraft operator / aircraft owner and made available to any other person(s) required to comply with any of those instructions in accordance with points 21.A.21(c)

(4), 21.A.44 and 21.A.7, without using the provision to delay certain parts of the ICA beyond the entry into service. For an EU holder/applicant, this should be supported as part of the DOA/ADOA procedure.'

The purpose is to ensure that the ICA will be available to the aircraft operator / aircraft owner at the time of entry into service.

AMC1 21.A.7(c) is providing three options for the availability of ICA (depending on the nature of the respective ICA):

- option 1 available at the time of design approval;
- option 2 available at the entry into service; and
- option 3 available after the entry into service.

In all three options, there is a provision making clear that 'availability' refers to availability to the owner / operator - i.e. it will not be sufficient to be available to EASA.

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With reference to AMC1 21.A.7(c) point a3 ix, does that mean EASA wants to see all ICA which are furnished (irrespective what option) at entry into service?

Answer

The AMC1 21.A.7(c), point (a)(3)(ix), states:

It is assumed that for those ICA that are made available to EASA at the time of entry into service, they are also at the same time furnished to the aircraft operator / aircraft owner and made available to any other person(s) required to comply with any of those instructions in accordance with points 21.A.21(c)(4), 21.A.44 and 21.A.7. This is to satisfy EASA that such a delayed publication will not have an adverse effect on the continuing airworthiness of any individual aircraft. To allow the timely review and incorporation of a delayed part of the ICA into continuing airworthiness activities and processes (e.g. amendment of the aircraft Maintenance Programme) by the person or organisation responsible for the aircraft continuing airworthiness or for performing maintenance, the Agency considers that the delayed ICA should typically be made available two years before the actual ICA has to be used, when using normal revisions as a format. However, shorter time margins may be acceptable, provided that the format used

ensures the prompt notification of the availability of the delayed ICA or the ICA itself, but they should not be less than 1 year before the ICA has to be used.'

This quoted point is belonging to Option 3 regarding the ICA availability - i.e. ICA available after the entry into service (EIS). Here the meaning is not that all ICA have to be seen by EASA (even if some are delayed) at EIS but that those which are not delayed - i.e. those available at EIS - should not be available only to EASA but should be available to owners/operators as well (see also the answer to the question 6, above).

EASA does not need to see systematically ICA furnished at EIS, ICA is an obligation of the approval holder. EASA may request involvement in the post-approval activities for ICA via a certification plan or dedicated actions raised.

See also AMC1 21.A.7(c) point a(3) (vi) and (vii).

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Can design approval holder's (DAH's) SB or Vendor Service Bulletins (VSB) be ICA or is this limited to Manuals, like CMMs?

Answer

In general, DAH's SB and VSB could be an ICA, depending on the instructions contained.

The guidance material refers to CMMs as an example for supplier data, but that does not exclude other documents per se (refer to AMC2 21.A.7(a) Identification of ICA, para (b)).

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For scheduled tasks like restoration or functional check, which are performed off-aircraft, are the Aircraft Maintenance Manual "remove" and "install" instructions, as part of the ICA, enough?

Answer

If you have a restoration or a functional check you need accomplishment procedures to perform this task, remove / replace is not enough here (refer to GM1 21.A.7(a) Scope of ICA, their publication format and typical ICA data, para (c) and GM2 21.A.7(a) Determination of which supplier data is part of the ICA, para (a)(2) and (a)(4)(ii)).

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With reference to GM1 21.A.90C Stand-alone changes "[...] When a non-ALS ICA change is triggered by a change to the type design, this does not affect the overall classification of the type certificate change as per point 21.A.91 [...]." What is the purpose of this paragraph?

Answer

This is a simplification. For non-ALS ICA update/amendments resulting or done as part of a physical/functional change, this would not have in itself an impact on the classification of this change to type certificate - e.g. if the type certificate change is minor (based on the design / functional criteria) it remains minor regardless the impact on non-ALS ICAs.

However, as a stand-alone non-ALS ICA change this may have an impact on the classification (see Appendix A to GM 21.A.91 Examples of major changes per discipline).

Note: For an ALS ICA update (either as standalone or as part of a change) this will typically trigger the major classification.

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With reference to GM1 21.A.90C 'Also, when the ICA are completed after the product (or change to the product) was approved, this is considered to be a stand-alone change to the ICA.' Is this to be understood that non-ALS ICA provided at EIS (and even after EIS) should be handled as standalone?

Answer

Indeed, this is correct.

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Does point 21.A.90C(c) imply that we may encounter non-ALS changes which can be minor with/without additional work to demonstrate compliance and major? Should a TCH process start with the identification of the affected requirements, to determine, for non-ALS ICA changes, if they can take benefit of point 21.A.90C(c)?

Answer

In general, type certificate changes can be minor without showing of compliance, minor with showing of compliance and major.

For non-ALS ICA changes, the GM1 21.A.90C is proposing a different perspective on how the stand-alone changes have to be considered:

[...] Stand-alone changes are usually straightforward changes, and are not considered to require additional work in order to show compliance. However, they must be managed in accordance with a process accepted by EASA under point 21.A.239 or point 21.A.14(b), for discharging the obligation to keep the ICA up to date and to cover aspects like preparation/verification/release in accordance with their respective AMC/GM material.

Examples of changes that may require additional activities in order to show compliance are changes to the CDCCL, and EWIS ICA.'

Also, App. A to GM 21.A.91, section 10, is listing cases where compliance needs to be demonstrated (in this respect, the section contains examples of **major changes**).

The TCH process may document this kind of approach - i.e. a list of examples of stand-alone changes which require additional compliance demonstration as either major or minor. When a change is within the list, a classification on airworthiness criteria should be performed (with the identification of applicable requirements).

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With reference to GM1 21.A.90C, what is meant by the terminology "to provide alternatives"?

Answer

The GM1 21.A.90C states:

'Changes to the ICA are considered to be stand-alone changes when they are not directly prepared together with a change to the type design. Stand-alone changes to the ICA are usually prepared and issued, for example, for the purpose of making corrections, improvements, to include feedback from users, or **to provide alternatives**.

[...]'

'to provide alternatives' should be understood, for example, to provide alternative ways to execute certain tasks.

It is to be noted that AMC2 21.A.7(a) is mentioning 'additional or optional maintenance information'. The distinction between such information and 'alternative' may not always be clear and the DAH should clarify this by indicating if the 'alternative' is ICA or is actually non-ICA. This distinction will dictate the treatment under 21.A.7 requirements or not (e.g. availability).

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How does a Part 145 Maintenance Organisation know, if a Component Maintenance Manual (CMM) is released / approved by the design approval holder (DAH)?

Answer

A CMM is becoming ICA only when identified as such by the DAH - see AMC2 21.A.7(a), point (b)

When a CMM is identified as ICA, the DAH should perform the necessary verifications as for any other ICAs, however may choose to rely, in whole or in part, on the supplier's process under certain conditions - see AMC3 21.A.7(a). The provision '[...] may carry out a complete check[...]' should not be seen out of its context. In the case the DAH is not doing the check they are relying on their supplier to do this check (to say this differently: the DAH will authorise the

supplier to do the check). The activity will be controlled under 'supplier control processes'. Similar methodology may be used for non-ICA supplier data but referenced together with the ICA - see GM3 21.A.7(a). For other non-ICA supplier data not referenced, but which can be used, the acceptability methodology is not further defined in GM3 21.A.7(a), however, this acceptability status may be documented in the form of a list.

The identification of the approval status of the manual for a component or article through a 21.A.265(h) statement in the CMM is not preferred as one CMM may potentially be recognised by several DAHs (e.g. same equipment used by different TCHs). However, this approval status may be then displayed on the level of a list - see GM3 21.A.7(b).

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