

COMMENT RESPONSE DOCUMENT (CRD) TO NOTICE OF PROPOSED AMENDMENT (NPA) 2008-06

for amending

Commission Regulation (EC) No 1702/2003 of 24 September 2003 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations

and

Decision No. 2003/1/RM of the Executive Director of the European Aviation Safety Agency of 17 October 2003 on acceptable means of compliance and guidance material for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations ("AMC and GM to Part 21")

"Restricted type-certificates and restricted certificates of airworthiness"

Explanatory Note

I. General

1. The purpose of the Notice of Proposed Amendment (NPA) 2008-06, dated 10 April 2008 was to propose amendments to Commission Regulation (EC) No 1702/2003 of 24 September 2003 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations and to Decision No. 2003/1/RM of the Executive Director of the European Aviation Safety Agency of 17 October 2003 on acceptable means of compliance and guidance material for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations ("AMC and GM to Part 21")

II. Consultation

2. The draft Opinion for a Commission Regulation amending Regulation 1702/2003 and the draft Executive Director Decision amending Decision N° 2003/01/RM was published on the web site (http://www.easa.europa.eu) on 10 April 2008.

By the closing date of 10 July 2008, the European Aviation Safety Agency ("the Agency") had received 120 comments from 24 National Aviation Authorities, professional organisations and private companies.

III. Publication of the CRD

- 3. All comments received have been acknowledged and incorporated into this Comment Response Document (CRD) with the responses of the Agency.
- 4. In responding to comments, a standard terminology has been applied to attest the Agency's acceptance of the comment. This terminology is as follows:
 - Accepted The comment is agreed by the Agency and any proposed amendment is wholly transferred to the revised text.
 - Partially Accepted Either the comment is only agreed in part by the Agency, or the comment is agreed by the Agency but any proposed amendment is partially transferred to the revised text.
 - Noted The comment is acknowledged by the Agency but no change to the existing text is considered necessary.
 - Not Accepted The comment or proposed amendment is not shared by the Agency

The resulting text highlights the changes as compared to the text of the NPA.

- 5. The Agency's Decision will be issued at least two months after the publication of this CRD to allow for any possible reactions of stakeholders regarding possible misunderstandings of the comments received and answers provided.
- 6. Such reactions should be received by the Agency not later than 21 October 2009 and should be submitted using the Comment-Response Tool at http://hub.easa.europa.eu/crt

IV. Results of the consultation

7. Numerous comments were made by the community of owners of aircraft that are currently flying on a permanent permit to fly and also by national aviation authorities on the deletion of the permit to fly option of 21A.701(15).

The Agency acknowledges that the impact of the proposed measure cannot be fully assessed without having the final results of the NPA 2008-07 and the Commission Regulation amending Regulation 2042/2003 following Agency Opinion 02/2008.

Therefore the Agency has decided to withdraw from this NPA the proposed changes to paragraphs 21A.701, 21A.703, 21A.719, 21A.723, 21B.325 and the related changes in AMC and GM to Part 21.

As a response to other comments the Agency has introduced new provisions in Part-21 that allow for an easy transfer of aircraft from a normal CoA to an R-CoA in case the type becomes "orphan". This however will not solve the continuing airworthiness problems as described by many comment providers, such as the availability of properly certified spare parts.

Notwithstanding the above, the Agency continues to be of the opinion that the permit to fly is not the appropriate airworthiness certificate for aircraft that operate permanently in basically the same configuration and circumstances as explained in the explanatory note to the NPA.

Therefore the Agency intends to initiate a new rulemaking task dedicated to the initial and continuing airworthiness requirements and the appropriate certificates for the aircraft concerned. Such rulemaking task can take due account of the new regulatory situation after the implementation of NPA 2008-07 and Opinion 02/2008 and of the particular problems of aircraft that are currently operating on a permanent permit to fly.

8. The text of the proposals resulting from this review of comments is not included in the CRD but is presented as a consolidated text in an attachment to this CRD to promote readability.

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IV. CRD table of comments, responses and resulting text

(General Comments)

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comment

comment by: CAA CZ

The Civil Aviation Authority of the Czech Republic (CAA CZ) supports and agrees with the draft included in **EASA NPA 06/2008**.

However, CAA CZ experts recommend amending paragraphs 21A.18, 21A.113(b) and 21A.114 in accordance with the modified concept of R-TC/R-STC as follows.

Current paragraph 21A.18

The CAA CZ experts are of an opinion that the environmental protection requirements should be the same for R-TC as well as for TC and therefore propose to include the "restricted type certificate" in the text of 21A.18.

response

Partially accepted

The R-TC should be added to paragraphs 21A.18, 21A.19 and 21A.35. There is no need to add the R-STC to the paragraphs suggested by the comment provider due to the existence of a cross reference from paragraph 21A.113B.

comment

19

comment by: Austro Control GmbH

This NPA contains still some very Generic Questions which are unsolved by this NPA. Any release of this NPA is not supported unless this General Items are solved.

- Purpose Does Special need Resticted CofA 1) an an It is unclear whether an Special Purpose List in 21A.12 and GM needs an RCofA or not. Is a CofA still possible? This is very important and an General (Political) Direction of RCofA. In some countries, such US, some operations such as agricultural or towing always getting an RCofA because this operations are not envisioned in the Certification specification. The current NPA lists some special purposes which are common within the EU and handled with an standard CofA, such as banner towing, glider towing. Other very specific purposed such as Hail prevention flights (handled by RCofA in Austria) are not listed in the GM.
- 2) It is unclear whether an ICAO conforming RCofA is still possible. It should be regulated what minimum standard is required to get an ICAO conforming CofA. For our understanding an RCofA can never been ICAO conforming.
- Multiple Certificates It is common practice that such aircraft can be modifies by simple means (or sometimes without (towing) between an restricted and an unrestricted status). It is unclear how this should be handled by issuing the CofA. Example: An aircraft is used on one flight for towing and the next one will be a primary training flight; this is done very often on the same day and is common practice! How should that be handled? A Multiple CofA might be an solution.

4) Restrictions:

What are the restrictions in the RCofA ? Examples? In Austria it is common practice that a RCofA aircraft has some general restrictions (no over flights of population, no primary training, no commercial transport flights,....) This is very different within the EU states and, as long as EASA is responsible also for operations it must be solved to prevent confusion, an unequal treatment of operators on different registers.

response

Noted

1) Noted

A Restricted Type Certificate (R-TC) may be applied for if a TC is not appropriate and the aircraft is designed for a special purpose. An R-TC is not required for an aircraft which is designed for a special purpose when it can still comply with the essential requirements. Only when compliance with all essential requirements is not possible an R-TC can be issued.

The Agency recognises that the list of examples may be confusing because many of these special purpose operations can also be performed by aircraft that have a full TC. Therefore the examples are deleted and only the general introduction in the relevant Guidance Material (GM) is kept.

2) Noted

An aircraft on an Restricted Certificate of Airworthiness (R-CoA) may still comply with ICAO Annex 8. This is already foreseen in the EASA Form 24. Compliance with ICAO Annex 8 should be recorded in the Type Certificate Data Sheet (TCDS) for the relevant R-TC.

3) Noted

The aircraft can have both a CoA and an R-CoA, but never to be used simultaneously. The CoA becomes invalid as soon as the aircraft is used or modified for the purpose for which the R-TC or the R-STC was issued and becomes valid again if the use/configuration is within the TC. For clarity this will be included in a GM to 21A.181.

4) Noted

The restrictions are determined during certification and depend on the extent of the non-compliance with the essential requirements. They will be recorded in the TCDS for the R-TC, in the Restricted Supplemental Type Certificate (R-STC) or in the design approval based on Specific Airworthiness Specifications (SAS). All these certificates/approvals are issued by the Agency and the restrictions are always determined by the Agency. This will ensure a standardised approach in the EASA countries.

comment

32

comment by: *Luftfahrt-Bundesamt*

The LBA has no comments on NPA 2008-06.

response

Noted

comment

61

comment by: FAA

The FAA has reviewed NPA No. 2008-06 and has no comments.

response

Noted

comment

67

comment by: Airbus

With amendments from EC No.375/2007 the term "Specific Airworthiness Specifications (SAS)" has been introduced into Part 21. At that time, SAS were mentioned only in the context of restricted CofAs.

With this NPA the cases for SAS application shall be expanded. Definitions, AMCs or GMs are needed to clarify the term and to give guidance.

JUSTIFICATION:

Clarity for continued operation and airworthiness of Orphan Aircraft.

response

Noted

The term Specific Airworthiness Specifications (SAS) as introduced by Regulation (EC) No. 375/2007 was replacing the term Specific Certification Specifications which was an incorrect transposition of the term as used in the basic regulation. Therefore the concept of SAS existed already in the initial version of Part 21.

The Specific Airworthiness Specifications are defined in 21A.187 as the applicable specifications for approving the design of an individual aircraft that is eligible for an R-CoA but for which no R-TC is issued. The SAS should be considered as the certification basis for approval of the design of that aircraft.

The new provisions in Subpart H starting with 21A.185 provide the details of the concept of restricted CoA based on SAS.

comment

70

comment by: John Tempest

My particular concern with this NPA is the proposal to transition aircraft that now fall under EASA control, which have operated for many years on a permanent Permit to Fly (P P to F) under national rules, onto restricted Cs of A (R C of A) and Part M requirements.

These aircraft have often been maintained using the same processes as those used for amateur built aircraft, and in the UK, have been maintained under such a system for up to 60 years. There can be no doubt that these aircraft are maintained to a safe standard (fatal accident rate on-par with the GA average). However, the use of owner manufactured spare parts, owner overhauled engines, amateur designed and built engines, propellers and ignition systems, various modifications, etc, albeit under the supervision of the applicable Sporting Body, will cause insummountable problems during the transition. The owners will be happy with the current Sporting-Body-run design approval and inspection regimes and will be disadvantaged by being thrown into the onerous Part M environment. It is likely that the differences between the Body-run system for existing Sporting airworthiness and continued airworthiness and the EASA R C of A under Part 21 and Part M will be irreconsilable.

It would appear that the alleviations hinted at in this NPA are dependent on the Sporting Organisations that currently oversee the affected aircraft becoming QEs, such that the airworthiness and possibly the continued airworthiness of these aircraft can continue under their supervision. However, because, at this

time, it is not clear what regulatory charges will be imposed on the QEs by EASA and the NAAs, and how the QEs will be able to levy fees, it is unclear whether the QEs will be viable or not. The alleviations in Part 21 have yet to be published in the requirements and the alleviations to Part M are not even at the NPA stage. It is therefore too soon to rely on alleviations to justify the transition from P P to F to R C of A.

response

Noted

Numerous similar comments were made by the community of owners of aircraft that are currently flying on a permanent permit to fly and also by national aviation authorities.

The Agency acknowledges that the impact of the proposed measure cannot be fully assessed without having the final results of the NPA 2008-07 and the Commission Regulation amending Regulation 2042/2003 following Agency Opinion 02/2008.

Therefore the Agency has decided to withdraw from this NPA the proposed changes to paragraphs 21A.701, 21A.703, 21A.719, 21A.723 , 21B.325 and the related changes in AMC and GM to Part 21.

As a response to other comments the Agency has introduced new provisions in Part-21 that allow for an easy transfer of aircraft from a normal CoA to an R-CoA in case the type becomes "orphan". This however will not solve the continuing airworthiness problems as described by many comment providers, such as the availability of properly certified spare parts.

Notwithstanding the above, the Agency continues to be of the opinion that the permit to fly is not the appropriate airworthiness certificate for aircraft that operate permanently in basically the same configuration and circumstances as explained in the explanatory note to the NPA.

Therefore the Agency intends to initiate a new rulemaking task dedicated to the initial and continuing airworthiness requirements and the appropriate certificates for the aircraft concerned. Such rulemaking task can take due account of the new regulatory situation after the implementation of NPA 2008-07 and Opinion 02/2008 and of the particular problems of aircraft that are currently operating on a permanent permit to fly.

comment

71

comment by: John Tempest

It is clearly unreasonable that the case for transitioning permanent P to F aircraft onto R Cs of A is based primarily on future relaxation in the design and mainenance requirements which are not yet in place. Indeed in the case of the relaxation of the maintenance requirements in Part M, these changes are not yet even at the NPA stage.

It is unlikely that any amount of relaxation of Part 21 and Part M will result in a smooth transition for aircraft currently operating on a permanent P to F. For the light aircraft affected, any increased costs associated with the transition would be have serious financial implications for the owners.

response

Noted

See response to comment number 70 above.

comment

72

comment by: John Tempest

There can be no safety case for transitioning aircraft currently operating of a permanent P to F onto a R Cof A maintained under the Part M requirements, because the safety of the aircraft concerned is already on par with the GA average.

response

Noted

See response to comment number 70 above.

comment

74

comment by: Airbus

According to Part 21, TCs are granted for aircraft, engines and propellers. The NPA discusses only orphan aircraft. As written it does nowhere cover the case an aircraft keeps its TC, but its engines and/or propellers may become orphan products.

From current part 21 it is understood revocation or surrender of an engine TC would lead to grounding the aircraft, with severe economic and social consequences on design /production/ maintenance organizations and operators. In particular, being required to modify large aeroplanes by installing other engines is unacceptable for industry.

Therefore it is proposed that:

- Primarily, EASA should develop working procedures to take over limited airworthiness oversight for all orphan products like the FAA does, or
- EASA should provide materials to illustrate acceptable means of compliance for alternatives to DOA, in particular with regard to engines and propellers, and EASA should initiate a rulemaking to introduce a kind of certified organization (...a Part M CAMO ++ ?) for airworthiness oversight and support of engines and propellers without a TC-holder.

JUSTIFICATION:

The issue of orphan products is already important and burdening for still-be TC-holders. The NPA as written does not provide sufficient regulatory and quidance material to cover this.

It has to be kept in mind that not only general aviation products may be affected but also engines and propellers used in commercial air transport, with severe economic and social consequences for TC holders and operators in case of grounding a fleet for administrative reasons.

response

Noted

The case of "orphan" engines and propellers is different from the orphan aircraft case because there is no automatic invalidity of the CoA. However if the TC of an engine or propeller would be invalid the Agency will take action at aircraft TC level if the continuing airworthiness for the engine/propeller is not adequately ensured.

The changes to 21A.44, 21A.47 and 21A.51 are also applicable to engine and propeller TCs so should result in less orphans.

The Agency does not see it as its task to take over the responsibilities of TC holders.

Regarding the AMC to alternative procedures for DOA in the case of 21A.44(a) the existing AMC 21A.14(b) can be used as applicable.

comment

102 comment by: René Fournier

This NPA addresses, among others, the important issue of "orphan aircraft" to which I intend to limit myself. As the only natural person who holds TC under the oversight of EASA, please allow me to comment on the three following issues:

response

Noted

See response to comments #100, 101 and 103

TITLE PAGE p. 1

comment

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comment by: Peter Harvey LAA(UK)

Attachment #1

REPORT ON THE EFFECTS OF NPA No. 2008-06 This being the result of working group 21.023(b).

- 1. Working group 21.023(b) was formed to follow on from the work carried out by 21.023 in order to complete the rulemaking activity originally planned for the earlier group. 21.023 should have completed the rulemaking for Permit to Fly (PtF) and for Restricted Certificate of Airworthiness (RCoA), but the time allocated to the group by EASA was insufficient for them to complete the work and the scope was reduced by eliminating the rulemaking activity for RCoA. EASA decided to complete the work for RCoA at a later date, and it is understood that it was for such task that 21.023(b) was formed.
- 2. As part of the initial studies carried out by 21.023 it was realised that there was a group of light aircraft which were not Annex II and which were at that time operating on permanent PtF issued by NAAs. These aircraft were in some cases supported by TC holders and in some cases were Orphans. These aircraft would need to be brought under the control of EASA since they were not Annex II and therefore some provision had to be made within the new part 21 rules to accommodate these types.
- 3. Initially it was proposed to transfer these types to EASA RCoA, but it was then realised that many of these types were unsupported, and had no source of released (form 1) spare parts. Since they had been operated under the NAA rules for PtF the aircraft owners had been able to use parts which, whilst fit for purpose, carried no official release documentation. The modification status of these aircraft was also likely to be uncertain.
- 4. As a result of these problems and also the inability to maintain the aircraft in accordance with part M (a condition of a RCoA) it was agreed that the only level of certification suitable for these aircraft was the PtF. An additional category of aircraft was therefore added to the scope in 21A.701 and 21A.701(15) was written to cover these types. Since the

aircraft were presently on non-expiring PtF in their host country, and the PtF could be transferred with an aircraft when sold, provision was made to cover these eventualities in 21A.719(b) and 21A.723(b).

- 5. At the time that the initial work was carried out for part 21 subpart P it was expected that the number of aircraft then operating on PtF in the UK that would need to transfer to EASA PtF was of the order of 450. However a change to the content of Annex II subsequently reduced the number of aircraft requiring transfer to 46. A programme of work was carried out by UK CAA and PFA (now LAA) to assure approval of the continued airworthiness regime for the aircraft concerned, and the transfer of these types to EASA PtF is presently nearing completion.
- 6. In NPA 2008-06 it is proposed to eliminate 21A.701(15), 21A.719(b) and 21A.723(b), which will effectively disenfranchise all of the 46 aircraft newly transferring to EASA PtF. These aircraft will now be required to change to EASA RCoA, and owners will be required to carry out the maintenance under the provisions of part M, even though many of the types suffer a lack of released spare parts. Since many of these aircraft will not be able to meet the conditions of part 21 without a detailed survey and overhaul to remove non-approved parts (and possibly repair schemes not approved by a DOA), it is expected that the owners may be forced to ground them. This is the scenario foreseen by the original 21.023 working group when making provision for these aircraft under 21A.701(15), 21A.719(b) and 21A.723(b). EASA working group 21.023(b) have reverted to the regime initially put forward by EASA that orphans should be on RCoA and not PtF.
- 7. In the current NPA it is noted that the provisions of 21A.701(15), 21A.719(b) and 21A.723(b) were to be seen as "transitional", but in fact these provisions envisaged a permanent PtF. This is seen as a contradiction.
- 8. Although the number of aircraft affected by these changes to Part 21 subpart P is relatively small, the future effect could be considerably greater. For example there is a large number of orphan aircraft throughout Europe, which are presently in Annex II, and these types are either on national PtF (or its equivalent), or about to be transferred to a national PtF. If (or when) EASA is required to eliminate Annex II, these aircraft will all need to transfer to EASA certification. None of these aircraft will comply with all part 21 requirements, and most will be impossible to maintain in accordance with part M.
- 9. To reinforce this point it should be understood that there are now 949 aircraft (of which 540 are currently airworthy) of 110 different types presently on the UK register alone. There will be many more throughout Europe. The requirement to produce a specific airworthiness specification and approving the issue of RCoA for each of these aircraft will generate a large work load. In many cases it would not even be possible to produce a SAS for all of each type, since most have a totally unique modification and repair status.
- 10. The work carried out to introduce the various categories of RCoA is seen as worthwhile, and a significant step forward in the development of part 21, but since the working group have not followed on from 21.023, and have removed provisions put in place for sound reasons, it

is felt that they have not fulfilled the terms of reference. It is noted that there were no representatives from industry included in the 21.023(b) group, and this has resulted in an impractical set of provisions being proposed. It is important that such working groups should understand fully how the provisions of part 21 are applied to the real world of sporting aviation.

- 11. The changes proposed in NPA2008-06 are seen as a retrograde step for the UK sporting fleet embraced by the proposed affects of this NPA. The new provisions will add cost and complexity to the ongoing airworthiness regime.
- 12. In discussions with EASA, it has been suggested that the aircraft 'caught' in the dilemma of previously operated under a PtF (with LAA approved repairs, modifications, etc), might be transferred as they currently are, under a 'Grandfathering' scheme / CAA exemption. This is rather like the UK British Gliding Association glider fleet scheme whereby all gliders are grandfathered with their existing airworthiness status. This is article 14-6 of the basic regulations, but is normally interpreted to have limited duration. It should be noted that these UK have been operated under the LAA (PFA as was) scheme, so have been subjected to inspection and LAA approved modifications / repairs.
- 13. Of course, if this scheme is not available, then it is very likely that most of the aircraft will not meet the certification criterion, for reasons stated above.
- 14. Also stated by EASA was the probability that these aircraft would enjoy ELA privileges of a lighter maintenance regime as proposed under NPA 2008-07. Clearly it is unreasonable for the 'solution' for these aircraft under this NPA to be contingent upon the outcome of another NPA. This NPA (06) must deal with these aircraft fairly and reasonably, without imposing huge increases in costs, impossibility for compliance with unobtainable parts, or vastly more onerous maintenance regime.
- 15. Transition. If this NPA is implemented, we have to ask when? Clearly, the owners will require notification, time and the opportunity to seek alternatives. We believe that for many of these aircraft, the implementation of the NPA as it is proposed will mean their effective grounding and reduction to zero of their value. We urgently request EASA to reconsider and provide an ongoing PtF for these aircraft.
- 16. Looking forward, if this approach was implemented upon the wider Annex II fleet (but those that were originally certificated types), then the effects, without substantial relaxation of the implementing rules, would be the effective grounding of a large proportion of the fleet across Europe either by inability to comply with initial transfer to RCof A, or by substantially increased maintenance costs.

Barry Plumb, 29/04/08 Chairman of LAA Engineering sub-committee Formerly a member of EASA working group 21.023

Peter Harvey Chief Executive Officer LAA

See response to comment number 70 above.

A. EXPLANATORY NOTE

p. 3

comment

response

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Noted

comment by: Airbus

When crosschecking with ICAO Annex 8, it seems that ICAO does not use the term "Restricted TC" or "Restricted CofAs". Instead, it is required to clearly determine any limitation or restriction necessary to ensure safe operation of the aircraft. As far as understood, this does not automatically prevent free aircraft operation under ICAO.

FAR 21 also does not use the terms "Restricted TC" or "Restricted CofA". FAR 21 Subpart B contains provision for TCs issued to "restricted category aircraft", Subpart H includes CofAs for "restricted category aircraft". This is understood as restricting the aircraft, not the TC/CofA. Like under ICAO, all limitations/restrictions to ensure safe operation have to be determined.

It may be only an issue of language and terminology, but is an EASA Restricted CofA, issued to an orphan aircraft in international operations, in full compliance with ICAO?

If this should not be the case, the operator would have to seek additional approvals to fly into non-EU countries.

This would be inconsistent with other Airworthiness Authorities including the FAA system where it would appear a full C of A is still given allowing full ICAO rights. Any other approach may create unequal playing fields for EU- and non-EU-operators.

To cover this issue, it is proposed to add guidance materials to the Draft decision, or clarify the EASA restricted CofA status in front of ICAO in the Explanatory note.

As a baseline, at least Orphan aircraft that have had a full TC should be eligible for CofA allowing full ICAO rights to bring consistency to other countries and to not penalize operators.

JUSTIFICATION:

A non-ICAO compliance of EASA R-CofAs (and TCs) would create a particular problem for operators of Commercial Transport Aircraft or Corporate Aircraft when flying outside the EU. Clarification of R-CofA status is not included in this NPA.

response

Noted

An aircraft on an R-CoA may or may not be in compliance with ICAO Annex 8. This will be made clear in the TCDS of the R-TC or in the design approval based on the SAS as applicable. This will be added to Part 21A.41 and 21A.195(a). In addition, to be in compliance with Article 39 of the Chicago Convention, any non-compliance with ICAO Annex 8 will be clearly indicated on the R-CoA (EASA Form 24) which is visible for authorities outside the EU. Currently EU-OPS does not allow commercial air transport with aeroplanes holding a restricted CoA but this is outside the scope of Part 21.

A. Explanatory Note - IV. Content of the draft opinion/decision

p. 4-5

comment

12

comment by: Eurocopter

Explanatory Note, paragraph IV Content of the draft, item 9. states:

"This NPA envisages to add a third option:

- R-CoA based on a TC and a restricted supplemental type-certificate (R-STC): This is intended for aircraft that already have a normal certificate of airworthiness (CoA) based on a normal TC, but which are modified for a special purpose."

Eurocopter would suggest to take advantage of the introduction of the R-STC concept to include provisions for multiple airworthiness certification. This would be particularly useful for helicopters which are multi-purpose by nature and would allow easier conversion from standard category to restricted category and vice-versa.

response

Noted

See response to comment No 19(3)).

comment

14

comment by: SAMA Swiss Aircraft Maintenance Association

SAMA supports EASA's effort to reduce the number of aircraft that shall remain under national airworthiness rules, namely those for which no more TC holder exists. We also consider it beneficial to freedom of movement without compromising safety that the use of of R-CofA shall be extended to cases where 'permanent' permits to fly are required at present.

On the other hand, the procedure to obtain or establish a permit to fly - e.g. for a technical ferry flight - should be simplified in order to be available within reasonably short time. Situations where a p.t.f. is required due to temporarily restricted airworthiness are normally not planned.

response

Noted

This is outside the scope of this NPA.

The current rules for permit to fly have proven to allow issuance of a permit

within a couple of hours in case of urgency.

comment

comment by: CAA-NL

Para 19; replace CoA by STC in the following sentence as this is incorrect: In accordance with the new 21A.174(c) such application only needs to include a recommendation for the issuance of an Airworthiness Review Certificate, which contains the proof that the aircraft is modified in accordance with an approved R-STCCoA.

response

Accepted

33

The reference to R-CoA was incorrect. However, the explanatory note is not corrected after the issuance of the NPA.

comment

comment by: Walter Gessky

General comments:

This NPA contains rules for the issuance of restricted CofA`s and restricted TC`s for which still some generic questions are not solved. Since there is a link to the implementing rules for operation with regard to the use of an aircraft for specific purposes, it would be better to delay the content of the NPA (issuance of a restricted CofA) until the NPA for OPS 0 and 4 which should include rules for operation of an aircraft for a specific purpose (such as towing, crop spraying, external load operation etc.) is available.

I recommend that the working group initially established to draft the NPA should be relaunched again to review the missing link to the OPS regulations.

Any release of this NPA is not supported unless these Ggneral questions are solved or clarified:

1) Does the use for a special purpose require a Restricted CofA?

This is a basic question and reqquires to be clarified?

Is the operation of a products for a special purpose as listed in GM 21A.12 only possible under a restricted CofA?

This is very important question and a general (political) decision is required.

In some countries, such the US, certain kind of operations like agricultural or towing is always under a restricted CofA, because the required technical standard for this operation is not adequately regulated by the relevant technical FAR's (f.e. Part 23).

Is the issuance of a CofA still possible?

The current NPA lists some special purposes for which a standard CofA is issued, such as banner towing, glider towing, because the technical standards required for the aircraft for the kind of operation could be adequately regulated in a special condition.

GM 21A.12 notes the special purposes where deviations from the essential requirements are expected.

2) We still have a problem with a aircraft certified with a restricted CofA, which could be in compliance with ICAO Annex 8. This issue is confusing for third countries and should be avoided. It would be better to define what minimum standard is required to be in compliance with ICAO SARP's to be ready for an ICAO compatible standard CofA.

3) Multiple Certificates

Certain aircraft used for special purposes can be modified by simple means or the required special equipment (f.e. for towing the hook) remains installed. It is unclear how this could be handled - restricted CofA for the special purpose, standard CofA for normal operation.

Example: A Towing is aircraft is used on one flight for towing and the next flight will be primary training flight; this is done very often per day and is common practice! How to handled that? A Multiple CofA (one restricted for the special purpose, on standards CofA) might be an solution when no configuration changes are required to switch the kind of operation. This seams to be common practice.

4) The operation for special purposes might be only possible when taking into consideration certain minimum operational standards.

Sample: for predatory animal control, certification only in the normal category could be a safety problem (due to critical flight maneuvers in the vicinity of ground the bank angle limitation of 60 degree for normal category aircraft could be dangerous). Aircraft used for this purpose must be certified in the Utility category. Special equipment required for towing like towing hook, mirror, tow indicator etc. should be regulated in OPS rules.

This does not require certifying the aircraft in the **restricted category.**

Restrictions:

What are the restrictions in the RCofA ? Examples? In Austria it is common practice that a RCofA aircraft has some general restrictions (no over flights of population, no primary training, no commercial transport flights,....) This is very different within the EU states and, as long as not all implementing rules for operation are in force this must be solved to prevent confusion, and unequal treatment of operators on different registers.

response

Noted

General: Not accepted

This NPA addresses the airworthiness certification of the restricted CoA. The link with the operational requirements is through the limitations on the airworthiness certificate. For example, a possible limitation can be to forbid the use of the aircraft for commercial air transportation. Coordination with the development of the operational requirements is taking place within the Agency.

1) Noted

A Restricted Type Certificate (R-TC) may be applied for if a TC is not appropriate and the aircraft is designed for a special purpose. An R-TC is, however, not required for an aircraft which is designed for a special purpose when it can still comply with the essential requirements. Only when compliance with all essential requirements is not possible an R-TC can be issued.

The Agency recognises that the list of examples may be confusing because many of these special purpose operations can also be performed by aircraft that have a full TC. Therefore the examples are deleted and only the general introduction in the relevant Guidance Material (GM) is kept.

2) Noted

An aircraft on an Restricted Certificate of Airworthiness (R-CoA) may still comply with ICAO Annex 8. This is already foreseen in the EASA Form 24. Compliance with ICAO Annex 8 should be recorded in the Type Certificate Data Sheet (TCDS) for the relevant R-TC.

3) Noted

The aircraft can have both a CoA and an R-CoA, but never to be used simultaneously. The CoA becomes invalid as soon as the aircraft is used or

modified for the purpose for which the R-TC or the R-STC was issued and becomes valid again if the use/configuration is within the TC. For clarity this will be included in a GM to 21A.181.

4) When compliance with the essential requirements can be shown a normal TC can be issued and there is no need to issue an R-TC.

5) Noted

The restrictions are determined during certification and depend on the extent of the non-compliance with the essential requirements. They will be recorded in the TCDS for the R-TC, in the Restricted Supplemental Type Certificate (R-STC) or in the design approval based on Specific Airworthiness Specifications (SAS). All these certificates/approvals are issued by the Agency and the restrictions are always determined by the Agency. This will ensure a standardised approach in the EASA countries. The restriction put by the Agency will have to be included in the relevant R-CoA by the NAA.

comment

53 comment by: Bill Taylor

Paragraph 12 states the reasons why EASA believe that aircraft should not be issued with permanent Permits to Fly (PtF). The reasoning goes on to state that the issue of permanent PtF was to be only a transitional arrangement and was done because of actions under previous national rules. The reasoning goes on to indicate that if the alleviations proposed by MDM032 come to fruition then permanent PtF will not be required. This thinking is fundamentally flawed!

The aircraft currently operated under permanent PtF have done so for very good reasons. Usually, this was because there was no design support and there was no source of approved spare parts. As a result, over a period of time, these aircraft have diverged from what might be called an approved design standard and they have been fitted with a legion of unapproved parts. In some cases engine types have been changed and other significant modifications have been carried, under the auspices of the applicable national rules. These issues saw the adoption of 21A.701(15) etc for very sound and pragmatic reasons, reasons which have not changed in the recent past.

If these aircraft are forced onto the Restricted CofA, and to come under the full auspices of Part M maintenance, the only outcome seems that they will be grounded with immediate effect, to the significant disadvantage of their owners. For many of these aircraft it will be impossible for a CAMO to conduct any form of meaningful Airworthiness Review because of any form of design support and a total lack of significant documentation. Faced with these problems the only option for a CAMO is not to issue an ARC, so grounding the aircraft. To develop a SA for these aircraft might present major difficulties, and a huge amount of work, because most of these aircraft will need their own individual SAS, given their different meodication states and hostory.

Therefore, if this proposal goes ahead it is vital that it is not applied retrospectively to aircraft currently operating on a permanent PtF. Aircraft operating under such Rules should be allowed to continue to operate as before, with the changes to Part 21 introducing some form of grandfather rights scheme to allow this to happen. In fact, rather than make changes, the relevant paragraphs of Part 21 - 21A.701(15), 21A.719(b) and 21A.723(b) - should be retained as permanent measures.

Turning to the comments that future alleviations in Part 21 which arise as a result of the recommendations of MDM 032 are flawed. The proposals of MDM 032 may not survive the consultation proces or they may be changed to have other effects. To try to 'sell' the proposals in this NPA on the basis that another document will provide a more tenable environment id deceitful to say the least. The proposals in this NPA should give the proper solution in its own right, and not rely on some promise of benefit somewhere else.

I strongly recommend that the current rules allowing the use of permanent PtF be retained.

response

Noted

See response to comment number 70 above.

comment

54

comment by: John Tempest

Para. 10.

It is not possible to accept that the Part M maintenance regime would be suitable for a permanent P to F aircraft transitioning to a R C of A aircraft without seeing the final Part M following amendment. I therefore suggest that this NPA be suspended/rejected until the new regulations for Part M have been consulted and published.

We are being led to believe that the new Part M will be much simplified, but unless the changes are very significant and radical, the Part M maintenance environment will be too onorous for aircraft currently operating on a permanent P to F and will be overkill for these simple aircraft.

Certainly for production EASA aircraft currently operating on national Permits to Fly, it is very unlikely that Part M will be a satisfactory maintenance regime for these aircraft, when it considered that they have been maintained in the same way as amateur-built aircraft for up to 60 (sixty) years. There can be no doubt that these aircraft are maintained to a safe standard (fatal accident rate on-par with the GA average). However, the use of owner manufactured spare parts, owner overhauled engines, amateur designed and built engines, propellers and ignition systems, various modifications, etc, albeit under the supervision and approval of the applicable Sporting Body, will cause insummountable problems during the transition. The owners will be happy with the current Sporting-Body-run design approval and inspection regimes and will be disadvantaged by being thrown into the onerous Part M environment. It is likely that the differences between the existing Sporting Body-run system for airworthiness and continued airworthiness and the EASA R C of A under Part 21 and Part M will be irreconsilable.

response

Noted

See response to comment number 70 above.

comment

64 comment by: Michael Allouche IAI

In general, it is felt that additional clarifications (if possible within the rule or guidance material) would be useful with regard to the borderline between two mentioned procedures: RCoA based upon RTC and RCoA based upon design approval attesting compliance with Specific Airworthiness Specifications (see

further comments related to Unmanned Aircraft Specifications under 21A17 and GM21 A12)

response

Noted

More guidance will be developed as necessary. However, because these rules are implemented by the Agency there is no need for guidance to support standardised implementation. This can also be achieved by internal procedures.

comment

66

comment by: Airbus

In the explanatory note, para 11, last sentence reads:

" However, in order to limit the number of 'orphan' aircraft in the future, this NPA envisages additional changes to Part21 promoting the continued support of a TC by its holder."

The only additional changes in this NPA that may encourage a soon-have-been TC holder to continue support for his products can be identified in proposed section 21A.44(a) and GM 21A.44(a). There, EASA indicates that some TC-holder obligations may be continued through alternative procedures to a DOA. Although this may ease the administrative burden, the prerequisite for this would be an industry organization that continues to exist.

This approach does neither cover a bankrupt company nor the fact that any continuation of even limited activities may no longer be economically reasonable. Forcing an industry organization to continue activities may lead to bankruptcy, and subsequent to orphan aircraft.

Therefore it is proposed that:

- Primarily, EASA should develop working procedures to take over limited airworthiness oversight for orphan aircraft like the FAA does, or
- EASA should provide materials to illustrate acceptable means of compliance for those alternatives to DOA, and EASA should initiate a rulemaking to introduce a kind of certified organization (...a Part M CAMO ++ ?) for airworthiness oversight and support of aircraft without a TC-holder.

JUSTIFICATION:

The issue of orphan aircraft is already important and burdening for current TC-holders. The NPA as written does not provide sufficient regulatory and quidance material to cover this.

It has to be kept in mind that not only general aviation aircraft may be affected but also aircraft used in commercial air transport, with severe economic and social consequences for TC holders and operators in case of grounding a fleet for administrative reasons.

response

Noted

There are two measures in the NPA that are intended to reduce the number of orphan aircraft. The change in 21A.44(a) as mentioned by the comment provider and also the deletion of 21A.51(a)(1). The latter change will achieve that there is no more automatic invalidity of the TC; it always requires a legal act from the Agency to invalidate a TC.

The Agency acknowledges that it should be possible to continue operation in

case an aircraft type becomes "orphan". Therefore new provisions in 21A.194A and 21A.194B are introduced. When an aircraft becomes "orphan" it is possible for the owner to obtain a design approval and subsequently a Restricted CoA based on the approval. For aircraft of simple design (21A.194B) the design approval is automatically created by law; for other aircraft (21A.194A) the design approval is granted as soon as the applicant has demonstrated design capability without any need to show compliance of the design.

The proposal from the comment provider that the Agency should take over TC holder's responsibility in case of an orphan aircraft is not accepted. This is not seen as a task of the Agency. Nevertheless when applying the solution of issuing SAS and an individual design approval the Agency is of course responsible for its actions. However, the Agency will not be able to provide the same service as a TC holder can and must. It can only react to unsafe conditions in a negative way. Any design solutions to restore airworthiness must consequently come from the stakeholders.

The solution as proposed by the comment provider to introduce a new kind of certified organisation may deserve further consideration if the current approach appears not to be successful.

comment

93 comment by: *ECOGAS*

Section IV para 12 - While ECOGAS is broadly in support of the proposed NPA, it is important not to overlook the category of historic aircraft which have been operating under NAA 'permits to fly' for several years (re Section IV para 12). In these cases, aircraft will no longer be in accordance with the original TC, and maintenance standards are likely to have diverged from the original requirements, under methods approved by the MS NAA. They will therefore not qualify for an R-CoA.

We believe there are 46 aircraft in this category in the UK alone, which would certainly be grounded if the provision of 21A.701(15) was fully discontinued.

Such aircraft, where a period has elapsed from the discontinuation of validity of the TC, where the ongoing airworthiness has been managed entirely via MS Permits to Fly, will not pass an airworthiness review in accordance with Part M, and will lose their ability to continue flying. These aircraft (small number and quantifiable within the EU), should be given 'grandfather rights' for a permanent Permit to Fly, and be exempted from the processes outlined in this document.

Aircraft with TC discontinuities in future will not need to be exempted, since this sitation only arises if a gap exists between first issuance of a Permit to Fly and introduction of the proposed amendments.

Section IV Para 16 - ECOGAS does not believe that the proposed wording of 21A.44 is sufficient to avoid more 'orphan' aircraft cases in the future. Further research and work is needed on this topic.

response

Noted

Comment to Section IV: Noted.

See response to comment number 70 above.

Comment to Section IV Para 16: Noted

There are two measures in the NPA that are intended to reduce the number of

orphan aircraft. The change in 21A.44(a) and also the deletion of 21A.51(a)(1). The latter change will achieve that there is no more automatic invalidity of the TC; it always requires a legal act from the Agency to invalidate a TC.

The Agency acknowledges that it will not prevent orphan aircraft in all cases, but believes that it is a worthwile contribution to solving the orphan aircraft problem. In addition two new ways to continue operation with orphan aircraft have been introduced (see response to comment Nr. 66).

comment

104

comment by: European Sailplane Manufacturers

The European sailplane manufacturers have in general the following comments regarding NPA 2008-06 "R-TC and R-CoA":

- 1. The situation for certified aircraft without a TC holder ("orphan aircraft") indeed considered unsatisfactory today. to be Owners of such aircraft cannot understand why they should be obliged to conduct something like a design/certification procedure or being allowed provisonal/preliminary operate on а If this NPA with regarding rule changes leads to rectifying this situation this is to be applauded.
- 2. Coupled with this topic is the current situation of organisations which are not manufacturers in the real sense (as they do not produce aircraft) but which feel responsible for taking care of old designs (either produced formerly by themselves or some other organisation). Today such organisations are considered to be TC holder with all the related financial (fees & charges!) and organisatorial (ADOAP / DOA!) burdens.
 - After nearly 5 years of this system it can already be observed that such "type care-takers" (or "Musterbetreuer" as they were known in Germany) cannot afford these burdens. Therefore also a solution is needed for such organisations because they indeed help to keep the level of safety high and they should not bee punished for this.
- 3. For both cases it makes sense to change the actual automatism "no TC holder = no CoA for such aircraft" which luckily was not always applied by EASA and NAA. Therefore especially the amendment of 21A.51 is appreciated.
- 4. Regarding the introduction of R-STC for aircraft which before were fully certified and fulfilling all requirements some critical thoughts have to be offered the manufacturers. by Already the introduction of a STC without co-operation between TC holder and STC holder can trigger ugly questions of responsibility in case of airworthiness problems. But at least the STC holder was forced to show full compliance with the certification basis of the basic design to certified. his If now only partial compliance has to be shown this question "Who is responsible if problems arise?" will get a new Therefore for the manufacturers it would be highly desirable to at least include some automatism which forces the applicant for such an (R-)STC to communicate with the TC holder and where EASA gets insight into the level of co-operation between the two parties.
- 5. Last but not least it has to be said that this NPA 2008-06 has to be seen in context with the ongoing rulemaking activities regarding the ELA processes. Especially the envisaged changes in the minimum

requirements for type certification of an ELA 1 aircraft will result possibly into wider usage of the R-TC / R-STC / R-CoA options as then single persons without having a DOA / ADOA could develop and certify new designs or changes of existing products. Here again the manufacturers are not strikly against such a development.

In contrary the manufacturers have expressed often that today the lack of motivated and innovative entrepeneurs due to the more stringent Part 21 is detrimental to sailplane development in Europe. (Today such exotic developments are virtually pushed into the Annex II niche offered by the Basic Regulation.) Nevertheless the manufacturers would welcome here also introduction of some obligation for useful communication of developers outside the design organisation of the TC holder and the manufacturer of the regarding product.

response

Noted

1. Noted

See also response to comment nr 100 below: a simplified way for converting a normal CoA into a R-CoA is included in the paragraphs 21A.194A and 21A.194B.

2. Noted.

Fees and charges are outside the scope of this NPA. The "organisational" burden under the new 21A.44(a) alternative procedure will be limited in case of an aircraft which is no longer in production. The procedures will only have to cover the continuing airworthiness activities.

- 3. Noted. Thank you.
- 4. The introduction of the R-STC does not introduce new questions on responsibility. The responsibilities of an R-STC holder are the same as the responsibilities of an STC holder. The R-STC applicant will have to show compliance in principle with the same certification basis (or even later requirements according 21A.101) as the original TC with possibly some exceptions to take into account the special purpose. These will anyhow have to be compensated by additional limitations/restrictions and or alternative specifications. Also the requirements related to the link with the TC holder are the same as for a normal STC.

5. Noted.

The commentors assumption that the introduction of the ELA concept will lead to wider use of R-TC, R-STC and R-CoA is not fully shared by the Agency. However it agrees that the eligibility for an R-CoA based on SAS should be limited. It is made clear in Part 21A.185(a) and GM 21A.185(a)that eligibility for design approval based on SAS is limited to cases where a TC or R-TC is not appropriate.

The proposals of NPA 2008-07 resulting from rulemaking task MDM.0032 are not part of this NPA.

A. Explanatory Note - IV. Content of the draft opinion/decision - Envisaged Changes to Regulation (EC) No 1702/2003 and Agency Decision 2003/1/RM

p. 5-7

comment

55

comment by: John Tempest

Para. 12.

Few of the changes to Part 21 under NPA 2008-07 would make it more likely that an aircraft currently operating under National rules on a permanent Permit to Fly might be more easily transitioned to an EASA R C of A and Part M for maintenance, and the changes proposed will not resolve all likely issues.

These aircraft have been operated for up to 60 years under the supervision and approval of Sporting Bodies using spare parts and maintenance regimes equivalent to those acceptable to an amateur-built aircraft. This includes spare parts provision, engine overhaul, modifications, repairs, amateur designed and built engines, propellers and ignition systems, etc, etc. Clearly these aircraft are capable of safe flight (the safety record for the aircraft concerned is on-par with the GA average), but the regulatory regime that they have operated within up until this NPA is so far removed from the Part 21/Part M environment that the differences will be irreconcilable. The only place for these aircraft would be to remain on a permanent Permit to Fly and outside the requirements of Part M.

The 'intent' of Article 5 of the basic regulation stated in the NPA is purely an interpretation placed on it by EASA. Presumably if EASA puts its mind to it, an aircraft could operate on a permanent P to F. Further, the proposed requirements provide a Permit to Fly which is valid for up to 12 months. A permanent permit to fly still has to be revalidated annually, so from the owner's point of view there seems little difference between a 12 month P to F renewed annually and a permanent P to F revalidated annually. However, the paperwork will no doubt be more onorous in the proposed system!

Much work was carried out by MDM 21.023 on the subject of the Permit to Fly, and it was recognised by that working group that aircraft currently operating on a permanent P to F under national rules must continue to be operated under a permanent P to F, due to the maintenance and airworthiness regimes that these aircraft have operated under for the past 60 years. Nothing has changed to influence this point of view, apart from this MDM 21.023 working-group being replaced by MDM 21.23(b) which did not include industry representation.

It is particularly regrettable that the proposal to move these aircraft onto a R C of A from a permanent P to F is based on planned changes to Part 21 and Part M which are not yet in place, and in the case of Part M, have yet to be consulted upon. It is unlikely that the changes to be made to these implementing rules will properly cater for the transition of aircraft currently operating on a Permanent P to F.

response

Noted

See response to comment number 70 above.

comment

56

comment by: John Tempest

Para 16.

A major disincentive to holding a TC is the charge levied per TC. On the basis that the audit requirements for a company are not dependent on the number of TCs held, I would propose that the annual fees applicable to an organisation holding multiple TCs for light aircraft should be small, and independent of the number of TCs held.

response

Noted

Fees and charges are outside the scope of this NPA

comment

65

comment by: Airbus

Expl. note Para 17 quotes:

"Through an amendment of 21A.51 the TC is no longer automatically invalid if the TC holder is not in compliance with Part21. Instead it will require a positive legal act from the Agency to invalidate the TC in such cases."

Section 21A.51 as proposed says:

"21A.51 Duration and continued validity

- (a) A type certificate and restricted type certificate shall be issued for an unlimited duration. They shall remain valid subject to the certificate not being surrendered or revoked under the applicable administrative procedures established by the Agency.
- (b) Upon surrender or revocation, the type certificate and restricted type certificate shall be returned to the Agency."

The language as proposed is not clear with regard to TC holders who are non-compliant with Part 21.

It is considered necessary to close the gap between the determination of a TC-holder's non-compliance and TC revocation / surrender through an Agency action. As the TC will no longer be automatically invalid in case of non-compliance with Part 21 (see Expl. Note para 17), the Agency has to take over responsibility.

Therefore, it is proposed to revise 21A.51(b) to read:

"(b) upon surrender or revocation, **or in case of a determined and continuing TC-holders's non-compliance with this Part**, the type certificate or restricted type certificate shall be returned to the Agency."

JUSTIFICATION:

The proposed 21A.51 is inconsistent with Para 17 and does not introduce its intent.

response

Not accepted

The case that a TC holder is not in compliance with Part 21 is covered by the possibility for the Agency to revoke the TC. In the previous situation the TC would become invalid automatically with even the smallest non-compliance by the TC holder with Part 21. In the new situation the Agency will decide based on risk assessment whether it is necessary to revoke the TC in case of non-compliance by the TC holder. The Agency can also use other enforcement means to correct the TC holder.

comment

101

comment by: René Fournier

1. The clarification of the requirements applicable to the issuance of R-CoA for aircraft that are not deemed to have a TC is welcome. The original version of Regulation 1702/2003 needed a more detailed wording as it would have been way too disproportionate to ground, for purely administrative reasons, aircraft that had been safely operated for years.

With respect to R-CoA, the envisaged provisions of the new paragraphs 21A.185 et seq. go in the right direction and indeed bring more clarity to this issue.

The wording of Article 2f should be reviewed in cunjuction with that of Articles 2a and 2c (See specific comment below).

2. The introduction last year by means of paragraph 21A.701(a)(15) of Permits to fly issued for an unlimited duration for non complex aircraft used in non commercial activities was a welcome simplification. This provision was particularly welcome since it offered an alternative to the maintenance under Part M. Despite the flexibility that is now envisaged for smaller aircraft, the implementation of Part M will indeed still increase the administrative burden on users, although the EASA itself admits that there was "no evidence pointing to the existence of a safety concern with the current national systems". Although, I am aware and agree with the need to ensure the free movement of such aircraft throughout the EU market, I believe that, in the specific case of old aircraft no longer in production, this objective could have been better achieved through mutual recognition of national maintenance rules. Some of the TCs I hold were issued in the early 1960s. It would have made more sense to apply them national maintenance rules similar to those for Annex II aircraft designed prior to 1955.

For all such reasons, I regret the envisaged deletion of paragraph 21A.701(a)(15).

I hereby welcome the statement made in this paper by EASA in favour of promoting the continued support of a TC by its holder. Beyond the changes to Part 21 envisaged for that purpose, I wish to emphasise that such support should not forget the structure and level of the fees and charges levied by EASA. Ensuring continued airworthiness of old aircraft no longer in production entails costs. Should these increase due to the fees and charges levied, this would certainly lead to a correlative increase of orphan aircraft.

response

Noted

- 1. Noted. Thank you.
- 2. Noted.

See response to comment number 70 above.

Noted.

Fees and charges are outside the scope of this NPA.

A. Explanatory Note - V. Regulatory Impact Assessment

p. 7

comment

110

comment by: DGAC France

The agency prefers option 3b compared to option 3a mainly saying it will be a more consistent and structured approach to certification. Although it is obviously true that one unique rule is more consistent, the adoption of it will create for the agency a huge amount of work to deliver to applicants RCoA for those aircraft currently under permit to fly 21.A.701(15). Definition of SAS and compliance conformity will be a lot of work for not so much a safety improvement.

For instance, EASA has accepted that France issues to old ultra light aircraft (not annex II) EASA permit to fly based on French ultralight regulation and the old DGAC authorisation. To cancel this possibility will ground those aircraft because of :

- absence of approved data;
- absence of approved maintenance organisation with those aircraft types in their scope;
- absence of parts with Form 1;
- - pilot licence issue.

DGAC France stongly recommands to stay with option 3a. Grounding some flying machines due to a rule change without particular immediate safety concerns is unacceptable for DGAC-F.

For those aircraft that are going to get a R-CoA, the issuance process is going to take some time and either a grand father rule should be proposed to help gathering similar cases, or a transitional period to comply is necessary.

response

Noted

See response to comment number 70 above.

A. Explanatory Note - V. Regulatory Impact Assessment - Impacts

p. 8

comment by: ECOGAS

comment

94

overlooks two issues:

The economic impact assessment of the regulation changes proposed

1) The economic impact of bringing an aircraft which has been operating under an NAA 'permit to fly' for several years (re Section IV para 12). In these cases, aircraft will no longer be in accordance with the original TC, and maintenance standards are likely to have diverged from the original requirements, under methods approved by the MS NAA. They will therefore not qualify for an R-CoA, and the economic impact of doing so would invariably be unaffordable, leading to the permanent grounding of the aircraft.

See our comment 93 for proposed solution to this situation.

2) The proposed wording of 21A.44 is insufficiently defined to be able to justify the statement that "more 'orphan' aircraft cases in the future" will be avoided. Further research and work is needed on this topic. Orphan aircraft will only be avoided if a clear positive RIA can be defined.

response

Noted

1 Noted

See response to comment number 70 above.

2. Noted.

There are two measures in the NPA that are intended to reduce the number of orphan aircraft. The change in 21A.44(a) as mentioned by the comment provider and also the deletion of 21A.51(a)(1). The latter change will achieve that there is no more automatic invalidity of the TC; it always requires a legal act from the Agency to invalidate a TC.

A. Explanatory Note - V. Regulatory Impact Assessment - Impacts - a. All identified impacts - i. Safety

p. 8

comment

78 comment by: Bill Taylor

The aircraft currently operated under permanent PtF have done so for very good reasons. Usually, this was because there was no design support and there was no source of approved spare parts. As a result, over a period of time, these aircraft have diverged from what might be called an approved design standard and they have been fitted with a legion of unapproved parts. In some cases engine types have been changed and other significant modifications have been carried, under the auspices of the applicable national rules. These issues saw the adoption of 21A.701(15) etc for very sound and pragmatic reasons, reasons which have not changed in the recent past.

The administrative process introduced by this NPA will put a huge burden on EASA and the aircraft owner for no benefit in terms of aircraft safety. Despite the wooly justification given in this paragraph 26. a. i., where is the unsafe condition of aircraft operated on permanent PtF? This NPA has **not** demonstrated that an unsafe condition exists and has certainly not justified how these proposals overcome any such safety concern.

Therefore, it is vital that this proposal is not applied retrospectively to aircraft currently operating on a permanent PtF. Aircraft operating under such Rules should be allowed to continue to operate as before. Changes should be made to Part 21 introducing some form of grandfather rights scheme to allow this to happen. In fact, rather than make changes, the relevant paragraphs of Part 21 - 21A.701(15), 21A.719(b) and 21A.723(b) - should be retained as permanent measures.

response

Noted

See response to comment number 70 above.

A. Explanatory Note - V. Regulatory Impact Assessment - Impacts - a. All identified impacts - ii. Economic

p. 8

comment

57

comment by: John Tempest

Trying to place an aircraft currently operating on a permanent P to F under national rules onto a R C of A and Part M is likely to result in costs to the aircraft owner which exceed the value of the aircraft. This is seen as an unacceptable cost when the aircraft are demonstrably safe when operating on a Permanent P to F.

The RIA is seriously flawed because it does not consider the costs to the aircraft owner.

It is unlikely that any amount of relaxation of Part 21 and Part M will result in a smooth transition for aircraft currently operating on a permanent P to F. The

value of the affected aircraft is generally relatively low, and any increased costs associated with the transition will have a serious impact on the aircraft owners.

response

Noted

See response to comment number 70 above.

comment

79 comment by: Bill Taylor

The economic impact assessment provided at para 26. a. ii. has failed to consider all the costs which will be faced by aircraft forced to transfer from permanent PtF. Aircraft in this category may have diverged substantially from a common design standard. They will have been fitted with modifications approved by non-EASA design organisation and they will certainly have parts which did not originate with EASA Form One. When absorbed into the Part M system few if any CAMO will be prepared to issue and ARC until these aircraft have undergone engine overhauls at Part 145 premises, unapproved parts have been replaced (that is even if approved parts can be sourced) and 'unapproved' modifications have been reapproved by a Part 21 design organisation. The costs of this process will be collossal, making many aircraft transferred to RCofA an economic total loss.

The economic impact assessment in this NPA is fundamentallly flawed because it has not acknowledged these costs. This NPA must be withdrawn and reconsidered by a Rulemaking Group, this time with a Group having industry representatuion from people who understand the detailed implications of proposals such as these which have been made without proper understanding of their implications.

Better still, this proposal must not be applied retrospectively to aircraft currently operating on a permanent PtF. Aircraft operating under such Rules should be allowed to continue to operate as before. Changes should be made to Part 21 introducing some form of grandfather rights scheme to allow this to happen. In fact, rather than make changes, the relevant paragraphs of Part 21 - 21A.701(15), 21A.719(b) and 21A.723(b) - should be retained as permanent measures.

response

Noted

See response to comment number 70 above.

comment

85

comment by: John Tempest

In view of the incorrect assessment by EASA of the cost/benefit analysis, I suggest that this NPA be cancelled and further development is placed in the hands of working groups with proper industry representation.

response

Noted

See response to comment number 70 above.

A. Explanatory Note - V. Regulatory Impact Assessment - Impacts - a. All identified impacts - iv. Social

p. 8

comment

81

comment by: John Tempest

The assessment that there will be no social effect is incorrect.

Owners will experience costs which in some cases will exceed the value of the aircraft and there will be social effects as well as economic effects in this regard.

The whole principle of operating an aircraft under the supervision of a Sporting Body is to an extent a social activity (the inspection system is effectively volentary, staffed by enthusiasts who are approved by the Sporting Body), and causing a substantial trauma to the light aircraft scene is bound to have a social impact.

response

Noted

See response to comment number 70 above.

comment

86

comment by: John Tempest

In view of the incorrect assessment by EASA of the cost/benefit analysis, I suggest that this NPA be cancelled and further development is placed in the hands of working groups with proper industry representation.

response

Noted

See response to comment number 70 above.

A. Explanatory Note - V. Regulatory Impact Assessment - Impacts - b. Equity and fairness in terms of distribution of positive and negative impacts among concerned sectors

p. 9

comment

87

comment by: John Tempest

See comments raised above under 'economic' and 'social' impacts.

response

Noted

See response to comment number 70 above.

A. Explanatory Note - V. Regulatory Impact Assessment - Summary and Final Assessment

p. 9

comment

88

comment by: John Tempest

See comments above under 'economic' amd 'social' impacts.

In view of the incorrect assessment by EASA of the cost/benefit analysis, I suggest that this NPA be cancelled and further development is placed in the hands of working groups with proper industry representation.

response

Noted

See response to comment number 70 above.

B. Draft Rules - I. Draft Opinion - Regulation (EC) 1702/2003

p. 10

comment

15

comment by: SAMA Swiss Aircraft Maintenance Association

SAMA welcomes that EASA considers to accept exisiting and proven airworthiness specifications as an accepted design approval. Even if such specifications/codes may be rather old, they apply to aircraft designed to technology of that time and therefor shall be accepted.

In order to avoid considerable (national) interpretation variations of what is an accepted SAS, a list of accepted SAS shall be made available.

response

Noted

The aircraft that are currently flying on an R-CoA based on SAS are all included in the lists of products for which the Agency assumes responsibility for oversight of the design. The applicable SAS is included in that list and is the one which is grandfathered. After the date of entry into force of the new rules the list of aircraft will be modified to reflect the grandfathered status.

comment

20

comment by: Austro Control GmbH

Article 2(f):

There is no grandfathering for the existing restricted CofA issued by the NAA's based on their national design assessment before EASA, this must be implemented to prevent an reassessment of the design by EASA after Sept.2008.

response

Partially accepted

All national R-CoAs that were not based on an Agency design approval (R-TC or SAS), were grandfathered as permit to fly on 28 March 2007. So after that date no national R-CoA could exist. Therefore grandfathering of national R-CoAs at this moment is not opportune.

comment

42

comment by: Walter Gessky

Article 2f,

Add the following:

Article 2f

Approval of aircraft design

Specific Airworthiness Specifications issued by the Agency or determined by Regulation (EC) 1702/2003, compliance finding made under Member State procedures for the issuance of a restricted CofA or restricted Type Certificate before the entry into force of this Regulation, shall be deemed to constitute the approval of aircraft design for the related aircraft.

Justification:

There is no grandfathering for the existing restricted CofA issued by the NAÁs based on their national design assessment, this must be implemented to prevent an reassessment of the design by EASA after Sept. 2008.

response

Partially accepted

See response to comment nr. 20

comment

100

comment by: René Fournier

I understand that the intention of this NPA is to treat aircraft for which the TC ceases to be valid because it is voluntarily surrendered the same way as other aircraft eligible for R-CoA.

To avoid risks of regulatory gaps, the wording of Article 2f could therefore be clarified in conjunction with that of Articles 2a and 2c. In its current form, Article 3c indeed seems to apply only to aircraft that were not deemed to have a TC as of 28 September 2003 and there seem to be no provision allowing the issuance of R-CoA for aircraft that were deemed to have a TC pursuant to Article 3a but which might, in the future, cease to have a TC holder.

response

Partially accepted

The Agency acknowledges that it should be possible to continue operation in case an aircraft type becomes "orphan". Therefore new provisions in 21A.194A and 21A.194B are introduced. When an aircraft becomes "orphan" it is possible for the owner to obtain a design approval and subsequently a Restricted CoA based on the approval. For aircraft of simple design (21A.194B) the design approval is automatically created by law (therefore there is no need for an application and subsequent investigation); for other aircraft (21A.194A) the design approval is granted as soon as the applicant has demonstrated design capability without any need to show compliance of the design.

B. Draft Rules - I. Draft Opinion - Part-21

p. 10

comment

comment by: Francis Fagegaltier Services

APU

1

According to 21A.604, paragraphs 21A.17, 21A.21 and 21A.44, which are modified by this NPA, are applicable to APUs as well as Subparts D and E of Part 21.

The effect of all these changes on holders of APU ETSO authorisations should be assessed.

In particular it is noted that 21A.604 (a) contains this : (a) except that an ETSO Authorisation shall be issued in accordance with 21A.606 instead of the type-certificate;

and that 21A.604 (b) contains this : (b) When Subpart E is used, a separate ETSO authorisation shall be issued instead of a supplemental type-certificate.

How does the new concepts of restricted TC and restricted STC apply with regard to APUs ?

response

Partially accepted

The concept of R-STC is intended to be applicable to aircraft only. The texts of 21A.111 and 21A.113B are amended to clarify this.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart B - 21A.12 Restricted type-certificate

p. 11

comment

2

comment by: Francis Fagegaltier Services

21A.12

The wording of 21A.17 (b) does not differentiate between an engine, a propeller, a small helicopter and a general aviation aircraft, but it seems that the concept of restricted type-certificate is limited to aircraft (21A.12). Can the Agency confirm that restricted TC are not intended to be applicable to engines and propellers? Or the opposite?

response

Noted

The restricted TC is only possible for an aircraft; not for engines or propellers. Text of 21A.12 further improved to clarify this (see response to comment 34 below).

comment

21

comment by: Austro Control GmbH

21A.12

See General Comment. The EASA shall determine in detail which Special Operations are required for a RCofA, independent of its technical design, because the operation itself is not envisioned.

response

Not accepted

In 21A.41 it is clarified that the restricted TC will include limitations that are related to the special purpose for which the aircraft is designed and certified. These limitations can include operational restrictions as deemed necessary to compensate for deviations from the essential requirements. They will be determined on a case-by-case basis.

comment

34

comment by: CAA-NL

Add the word aircraft to the title and the sentence to be clear that a Restricted typecertificate is only possible for an aircraft as is also stated in 21A.21:

21A.12 Aircraft Rrestricted typecertificate

A restricted type certificate **for an aircraft** may be applied for when a type certificate is inappropriate and the aircraft is designed for a special purpose for which the Agency agrees it justifies deviations from the essential requirements of Annex I to the Basic Regulation.

response

Accepted

comment

43

comment by: Walter Gessky

1) 21A.12 Restricted type-certificate

Add the following:

21A.12 Restricted type-certificate

A restricted type certificate may **shall** be applied for when a type certificate is inappropriate and the

aircraft is designed for a special purpose for which the Agency agrees it justifies **application of specific airworthiness specifications and** deviations from the essential requirements of Annex I to the Basic Regulation.

Justification:

See General Comment. EASA shall determine in detail for which special purposes (kind of operation) existing certification specifications when applied, does not grant adequate level of safety.

EASA has issued specific airworthiness specifications for the purpose and justifies that deviations from the essential requirements of Annex I to the Basic Regulation have to be granted because adequate level of safety with regard to the purpose is ensured.

Wording from the basic regulation should be used in Art 21A.12.

2)21.16A Airworthiness codes and specific airworthiness specifications Add the following:

"The Agency shall issue in accordance with Article 14 of the basic Regulation airworthiness codes *or if required for specific purposes specific airworthiness specifications* as standard means to show compliance....."

Justification:

It will be beneficial for EASA and the industry when EASA issues for specific purposed specific airworthiness specifications. Text of the paragraph should reflect that too.

response

Not accepted

1. Not accepted.

The word "shall" is not appropriate because in the case that a TC is not appropriate it is also possible to apply for an R-CoA based on SAS.

The concept of SAS should not be introduced in this paragraph as it reflects another route of approving the design of an aircraft without an R-TC.

2. Not accepted.

See above under 1. The intent of the comment provider is already addressed in the provisions related to R-CoA based on SAS and, for the R-TC case by the existing provisions of 21A.16B and 21A.17. In the case of an R-TC the "Specific Airworthiness Specifications" as mentioned in the basic Regulation are those as specified in the certification basis for that R-TC.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart B - 21A.17 Type-certification basis

p. 11-12

comment by: Walter Gessky

comment

44

21A.17 Type-certification basis Add the following:

 (a) 1. The applicable airworthiness code or specific airworthiness specification established by the Agency that is effective on the date of application for that certificate unless:

Justification:

According basic Regulation applicant has to show compliance with specific airworthiness specification for issuance of a restrictive TC or CofA.

(a) 3. For restricted type-certificate, the list of paragraphs of the applicable airworthiness code that the Agency finds inappropriate or a list of deviations from the essential requirements to Annex I to the Basic Regulation for the special purpose for which the aircraft is to be used.

Justification:

According Basic Regulation a restricted CofA may be issued when it is shown that the aircraft comply with specific airworthiness specifications and deviations from the essential requirements but nevertheless adequate safety with regard to the purpose is ensured.

This should be reflected in the IR. Wording of the basic regulation should be used.

• (b) **2.** File for an extension of the original application and comply with the applicable

airworthiness codes *or specific airworthiness specifications* that were effective on a date, to be selected by the applicant, not than the date which precedes the date of issue of the type-certificate...."

Justification:

For restricted TC specific airworthiness specifications may apply. Wording from the Basic Regulation should be used.

(d) If an applicant elects to comply with an amendment to the airworthiness codes *or specific airworthiness specifications* that is effective after the filing of the application for a type-certificat or restricted type-certificate, the applicant shall also comply with any other amendment that the Agency finds is directly related.

Justification.

See above.

The type certification basis for restricted CofA`s are defined as specific airworthiness specifications. Wording from the basic regulation.

response

Partially accepted

The term "Specific Airworthiness Specifications" as used in the basic Regulation is transposed into two possibilities in Part-21: 1. for aircraft for which an R-TC is appropriate (normally when several aircraft of the same design are intended to be produced they are composed of:

- the applicable airworthiness code (e.g. if it is a small aeroplane: CS-23)
- special conditions to address elements of the design not covered by the airworthiness code.
- the paragraphs of the above airworthiness code which are not applicable due to the special purpose for which the aircraft is designed and possible alternative specifications (see revised text of 21A.17(a)(3))
- 2. for aircraft of unique design they are the Specific Airworthiness Specifications established by the Agency for this particular aircraft. (see 21A.187)

comment

62

comment by: Michael Allouche IAI

Justification: There may be some cases where the RCoA based upon RTC procedure could be used (e.g. as suggested by NPA 16/2005 and related CRD - see in particular p. 27, relating to Unmanned Aircraft System Applications where adequate operational limitations can be defined) where the "Restricted Type Certification basis" is not just the "applicable airworthiness code" minus a list of paragraphs find inappropriate, but rather a dedicated set of airworthiness criteria tailored from a reference manned code, with more emphasis e.g. on safety target approach.

Hence it is proposed to write as follows:

21A17 a(3) For restricted type certificate, the list of paragraphs of the applicable airworthiness code that the Agency finds inappropriate for the special purpose *or/and a dedicated set of safety requirements agreed by the Agency considering the limitations for the use related to this special purpose.*

response

Partially accepted

The paragraphs of the applicable airworthiness code that are not applicable can be replaced by alternative specifications as deemed necessary by the Agency to achieve adequate safety. (see revised 21A.17(a)(3))

Any special design features not covered by the applicable airworthiness code shall be addressed by special conditions in accordance with 21A.16B.

Possible limitations to compensate for deviations from the essential requirements will come out of the certification process and will be included in the TCDS for the R-TC. These are not part of the certification basis.

comment

84

comment by: Tamara GOTTESMAN

21A17 (a) 3. Add at the end of the sentence " and the required restrictions, limitations and other mitigating measures to ensure adequate safety". Explenation: This addition will assure the paragraph is in line with the explenation in section IV, paraggraph 8.

response

Partially accepted

Possible limitations to compensate for deviations from the essential requirements will come out of the certification process and will be included in the TCDS for the R-TC. These are not part of the certification basis. See also response to comment nr. 62 above.

resulting

text

21A.17

(a)(3) For restricted type-certificate, excluding the list of paragraphs of the applicable airworthiness code that the Agency finds inappropriate for the special purpose for which the aircraft is to be used and including possible alternative specifications.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart B - 21A.21 Issue of a type-certificate or restricted type-certificate

p. 12

comment

22

comment by: Austro Control GmbH

21A.21(e):

It is unclear whether the case of an orphan engine or propeller TC-Holder will be handled. If an active aircraft TC Holder is present there should be a possibility that he takes over an limited 21.3 activity for the engine and propeller also. Specially if there is no technical problem in accordance to 21.3 (no unsafe condition with the engine or propeller).

response

Noted

This provision is not new; it is copied from the deleted paragraph 21A.23. The intent is to make clear that at the time of issuance of the R-TC the engine or propeller does not necessarily need to have a TC. In that case the aircraft R-TC applicant will have to assume responsibility for the continued airworthiness of the whole aircraft including the engine and propeller.

comment

45

comment by: Walter Gessky

21A.21e,

Add the following:

- **(e)** In the case of an aircraft restricted type-certificate, the engine or propeller, or both, if installed in the aircraft must:
- 1. have a type-certificate issued or determined in accordance with this Regulation; or
- 2. have been shown to be in compliance with the **specific airworthiness** certification specifications necessary to ensure safe flight of the aircraft.
- 3. have been shown that nevertheless of the deviations from the essential requirements adequate safety with regard to the purpose and kind of operation is ensured.

Justification:

This should be clarified for the issuance of a restricted TC that the applicant show compliance against specific certification specifications adopted for the purpose and the deviations from the essential requirements are compensated by an adequate level of safety.

Wording of the basic regulation should be used.

In addition the problem of orphan engine and propeller should be able to be handled by the aircraft restricted TC holder under (e) 2. and 3 specially when no unsafe conditions exists.

response

Not accepted

The term "certification specifications" used here does not necessarily mean the applicable airworthiness code such as CS-E. They can be specifically established for the individual case.

comment

111

comment by: DGAC France

create

21.A.173 c) restricted certificates of airworthiness shall mention whether they

conform with ICAO annexe 8

Create

21.A.21 f) restricted type certificate shall mention whether they conform with ICAO annexe 8

Form 24 should be amended.

Justification:

It should be clear if R-CoA are compliant to ICAO Annex 8 or not. It should be identified on the certificate itself. §21.A.173 should be amended to include such a requirement.

In the same spirit, it might be necessary to clarify if a specific R-TC is ICAO annex 8 compliant or not. In such a case, when an aircraft with a ICAO annex 8 compatible CoA would be implemented with the R-STC, it shall get a R-CoA which would be not any longer ICAO annex 8 compatible. Operator and NAA inspectors should easily know the status and right to travel abroad for the aircraft.

response

Partially accepted

In stead of amending 21A.21 the proposal is included in 21A.41 and for consistency also in 21A.195 for aircraft on a R-CoA based on SAS.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart B - 21A.41 Type-certificate and restricted type-certificate

p. 12-13

comment

23

comment by: Austro Control GmbH

21A.41:

The additional limitations must be identical for each purpose within the EU, see General Comment. So the Technical and Operationa Limitations must be an part of this NPA.

response

Noted

The limitations as mentioned in 21A.41 depend on the particular case but are always established by the Agency and therefore there is no European standardisation issue. For similar cases they will be identical. Limitations can include operational restrictions.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart B - 21A.44 Obligations of the holder

p. 13

comment

66 *

comment by: Airbus

In the explanatory note, para 11, last sentence reads:

" However, in order to limit the number of 'orphan' aircraft in the future, this NPA envisages additional changes to Part21 promoting the continued support of a TC by its holder."

The only additional changes in this NPA that may encourage a soon-have-been

TC holder to continue support for his products can be identified in proposed section 21A.44(a) and GM 21A.44(a). There, EASA indicates that some TC-holder obligations may be continued through alternative procedures to a DOA. Although this may ease the administrative burden, the prerequisite for this would be an industry organization that continues to exist.

This approach does neither cover a bankrupt company nor the fact that any continuation of even limited activities may no longer be economically reasonable. Forcing an industry organization to continue activities may lead to bankruptcy, and subsequent to orphan aircraft.

Therefore it is proposed that:

- Primarily, EASA should develop working procedures to take over limited airworthiness oversight for orphan aircraft like the FAA does, or
- EASA should provide materials to illustrate acceptable means of compliance for those alternatives to DOA, and EASA should initiate a rulemaking to introduce a kind of certified organization (...a Part M CAMO ++ ?) for airworthiness oversight and support of aircraft without a TC-holder.

JUSTIFICATION:

The issue of orphan aircraft is already important and burdening for current TC-holders. The NPA as written does not provide sufficient regulatory and guidance material to cover this.

It has to be kept in mind that not only general aviation aircraft may be affected but also aircraft used in commercial air transport, with severe economic and social consequences for TC holders and operators in case of grounding a fleet for administrative reasons.

response

Noted

There are two measures in the NPA that are intended to reduce the number of orphan aircraft. The change in 21A.44(a) as mentioned by the comment provider and also the deletion of 21A.51(a)(1). The latter change will achieve that there is no more automatic invalidity of the TC; it always requires a legal act from the Agency to invalidate a TC.

The Agency acknowledges that it should be possible to continue operation in case an aircraft type becomes "orphan". Therefore new provisions in 21A.194A and 21A.194B are introduced. When an aircraft becomes "orphan" it is possible for the owner to obtain a design approval and subsequently a Restricted CoA based on the approval. For aircraft of simple design (21A.194B) the design approval is automatically created by law; for other aircraft (21A.194A) the design approval is granted as soon as the applicant has demonstrated design capability without any need to show compliance of the design.

The proposal from the comment provider that the Agency should take over TC holder's responsibility in case of an orphan aircraft is not accepted. This is not seen as a task of the Agency.

Nevertheless when applying the solution of issuing SAS and an individual design approval the Agency is of course responsible for its actions. However the Agency will not be able to provide the same service as a TC holder can and must. It can only react to unsafe conditions in a negative way. Any design solutions to restore airworthiness must consequently come from the stakeholders.

The solution as proposed by the comment provider to introduce a new kind of certified organisation may deserve further consideration if the current approach appears not to be successful.

comment

105

comment by: European Sailplane Manufacturers

Regarding 21A.44 it is important to offer a useful option for holders of a TC which do not longer produce the according product.

Forcing such organisations to have a DOA / ADOA is in many cases too stringent and finacially and/or organisatorial not feasible.

With context to the ongoing ELA 1 discussion (NPA 2008-07) where EASA approval of the certification programme is sufficient a similar option should be given here.

Proposal: In case of an ELA 1 TC to be held it should be sufficient to have an EASA approval for an continuing airworthiness programme for this TC. This could include that the organisation must have sufficient technical documentation, the access to needed production / maintenance documents, the opportunity to take care of spare parts, etc.

If no capability in regard of a design organisation can be offered it should be sufficient to show the possibility to subcontract such a capability.

Experience shows that for sailplanes it is really the exeption rather than the rule that design capability is needed to uphold old TC's.

Additionally such an amendment would make it much more easy to have TC holders instead as of orphan aircraft.

And last but not least:

The existing annual TC fee should be modified that a fee is only billed if EASA really can prove that costs have been triggered by the regarding TC - it cannot be longer the case that these fees have to be paid for without EASA having actual work on the regarding TC's.

response

Noted

The alternative procedure as described in 21A.44(a) is intended for the purpose of maintaining a TC without the need for a DOA or a full AP-DOA in accordance with 21A.14(b). The alternative procedure in this case is not described in detail in GM 21A.44(a) but is basically as described by the comment provider.

The fees and charges are outside the scope of this NPA.

comment

112

comment by: DGAC France

21A.44 Obligations of the holder

Each holder of a type certificate or restricted type certificate shall:

- (a) undertake the obligations laid down in 21A.3, 21A.3B, 21A.4, 21A.55, 21A.57 and 21A.61; and, for this purpose, shall continue to meet the qualification requirements for eligibility under 21A.14 or, as an alternative procedure, seek the Agency agreement for the use of procedures setting out its activities to undertake these obligations; and
- (b) specify the marking in accordance with Subpart Q; and
- (c) report to the Agency any failure to fulfil the obligations imposed on it by this Subpart B.

21A.47 Transferability

Transfer of a type certificate or restricted type certificate may only be made to

a natural or legal person that is able to undertake the obligations under 21A.44, and, for this purpose, has demonstrated its ability to qualify under the criteria of 21A.14 the capability required in 21A.44(a),

except for aircraft defined in 21A.14 (c) the has sought the Agency agreement for the use of procedures setting out its activities to undertake these obligations

Justification:

Paragraph 21.A.47 is modified by both NPA 2008-06 and 2008-07. It seems that the modification within 21.A.44 (a) of this NPA is a duplication of the modification within 21.A.47 from the NPA 2008-07.

Under those circumstances it is recommended to keep the wording from this NPA as above.

response

Accepted

Both proposals address the same issue except that the proposal in NPA 2008-07 is limited to ELA 1. Because the intent is to avoid orphan aircraft in all categories of aircraft the proposal of this NPA 2008-06 is preferred as being the most encompassing.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart B - 21A.47 Transferability

p. 13

comment by: DGAC France

comment

112 *

21A.44 Obligations of the holder

Each holder of a type certificate or restricted type certificate shall:

- (a) undertake the obligations laid down in 21A.3, 21A.3B, 21A.4, 21A.55, 21A.57 and 21A.61; and, for this purpose, shall continue to meet the qualification requirements for eligibility under 21A.14 or, as an alternative procedure, seek the Agency agreement for the use of procedures setting out its activities to undertake these obligations; and
- (b) specify the marking in accordance with Subpart Q; and
- (c) report to the Agency any failure to fulfil the obligations imposed on it by this Subpart B.

21A.47 Transferability

Transfer of a type certificate or restricted type certificate may only be made to a natural or legal person that is able to undertake the obligations under 21A.44, and, for this purpose, has demonstrated its ability to qualify under the criteria of 21A.44 the capability required in 21A.44(a),

except for aircraft defined in 21A.14 (c) the has sought the Agency agreement for the use of procedures setting out its activities to undertake these obligations

Justification:

Paragraph 21.A.47 is modified by both NPA 2008-06 and 2008-07. It seems that the modification within 21.A.44 (a) of this NPA is a duplication of the modification within 21.A.47 from the NPA 2008-07.

Under those circumstances it is recommended to keep the wording from this NPA as above.

response

Accepted

Both proposals address the same issue except that the proposal in NPA 2008-

07 is limited to ELA 1. Because the intent is to avoid orphan aircraft in all categories of aircraft the proposal of this NPA 2008-06 is preferred as being the most encompassing.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart B - 21A.51 Duration and continued validity

p. 13

comment

13

comment by: Ingmar Hedblom

By the suggested change in 21A.51(a)(1), the Type Certificate will not be automatically invalidated if a TC holder disappears or fails to meet the obligations for a TC holder. A legal action is required by EASA. This is a fully supported change.

However, there is a similar need (if not even more needed) for a change in 21.118B(a)(1) regarding Supplemental Type Certificates. As written today the failure of a STC holder to meet the obligations in 21A.118A(a) will result in an automatic invalidity of the STC and therefore all aircraft with such STCs are formally not airworthy until remodified to the standard before the STC was installed or the change is re-evaluated and approved by EASA.

The disappearance of a STC holder is far more common than a TC holder.

response

Noted

The requested change is already part of the NPA.

comment

46

comment by: Walter Gessky

21A.51 Duration and continued validity

Change the following:

(a) A type-certificate and restricted type-ertificate shall be issued for an unlimited duration.

They shall remain valid subject to:

• 1. A TC-holder is available remaining in compliance with this Part; and

Justification:

At least a TC holder (person, legal person or organisation) should be available or a regulation is required what happens when no TC holder is available. Similar to US system where a TC holder must be available even the TC holder has no technical competence, but legal responsibility and liability.

response

Noted

The Agency agrees that a TC needs a holder. However the subpara 21A.51(a)(1) is removed to avoid automatic invalidity in case of non-compliance with Part 21 by the holder. The fact that the TC holder is no longer available may be a reason for the Agency to revoke the TC.

comment

65 *

comment by: Airbus

Expl. note Para 17 quotes:

"Through an amendment of 21A.51 the TC is no longer automatically invalid if the TC holder is not in compliance with Part21. Instead it will require a positive legal act from the Agency to invalidate the TC in such cases." Section 21A.51 as proposed says:

"21A.51 Duration and continued validity

- (a) A type certificate and restricted type certificate shall be issued for an unlimited duration. They shall remain valid subject to the certificate not being surrendered or revoked under the applicable administrative procedures established by the Agency.
- (b) Upon surrender or revocation, the type certificate and restricted type certificate shall be returned to the Agency."

The language as proposed is not clear with regard to TC holders who are non-compliant with Part 21.

It is considered necessary to close the gap between the determination of a TC-holder's non-compliance and TC revocation / surrender through an Agency action. As the TC will no longer be automatically invalid in case of non-compliance with Part 21 (see Expl. Note para 17), the Agency has to take over responsibility.

Therefore, it is proposed to revise 21A.51(b) to read:

"(b) upon surrender or revocation, **or in case of a determined and continuing TC-holders's non-compliance with this Part**, the type certificate or restricted type certificate shall be returned to the Agency."

JUSTIFICATION:

The proposed 21A.51 is inconsistent with Para 17 and does not introduce its intent.

response

Not accepted

The case that a TC holder is not in compliance with Part 21 is covered by the possibility for the Agency to revoke the TC. In the previous situation the TC would become invalid automatically with even the smallest non-compliance by the TC holder with Part 21. In the new situation the Agency will decide based on risk assessment whether it is necessary to revoke the TC in case of non-compliance by the TC holder. The Agency can also use other enforcement means to correct the TC holder.

comment

115

DGAC France supports the deletion of (a) 1. However, it is important to get as soon as possible the procedures established by the agency in order to process the TC and RTC when the applicant stops his activity. DGAC France suggests therefore introducing in work program 2009 the discussion of those procedures with stakeholders. Many aircraft owners may be concerned by these procedures and market of used aircraft is highly dependent on what will be allowed.

response

Noted

The Agency has already published the procedures for revocation, suspension, etc. of certificates.

In addition provisions for conversion of CoA into R-CoA are also added as a result of comment nr. 100 above.

comment by: DGAC France

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart E - 21A.113B Restricted Supplemental Type-Certificate

p. 13-14

comment

3

comment by: Francis Fagegaltier Services

21A.113B

Can the Agency confirm that restricted STC are not intended to be applicable to engines and propellers? Or the opposite? Although there is an "and" between 21A.113B (a)(1) and (2), understood as making then the restricted STC only applicable to "aircraft", the wording of sub-paragraph (4) " in case of an aircraft restricted supplemental type-certificate" is confusing because it implies that there are restricted STC for products which are not "aircraft".

response

Noted

The R-STC is only applicable to aircraft TCs. See response to comment $\#\ 1$ above.

comment

16

comment by: SAMA Swiss Aircraft Maintenance Association

If the modification to be covered by an R-STC is removeable, the aircraft shall carry its unrestricted CofA if the R-STC equipment is not installed.

response

Noted

As explained in the response to comment # 19 above an aircraft can hold a CoA and an R-CoA. Only one of them will be valid at one moment in time. An AMC 21A.181 is drafted to explain this.

comment

18

comment by: CAA CZ

This paragraph should according to our opinion include a reference to 21A.114, to the showing of compliance. In the draft proposal there exists no reference to the showing of compliance for restricted supplemental type-certificates.

Note:

Current paragraph 21A.114

This paragraph should cover also showing of compliance for restricted supplemental type-certificates for the reason already described above.

response

Partially accepted

The showing of compliance is covered by 21A.113B(d)(1) See also response to comment nr. 35 below.

comment

24

comment by: Austro Control GmbH

21A.113B:

The RSTC approach is generally supported.

response

Noted

Thank you.

comment

25

comment by: Austro Control GmbH

21A.113B(d)

versus

21A.21(e)(2):

21A.113B is talking about an "Specific Certification Specification" and 21A.21(e)(2) request to comply with the "Certification Specifications". What is the difference?

response

Noted

The word "specific" is incorrect and can be deleted.

comment

35

comment by: CAA-NL

As para 21A.114 is not applicable by 21A.113B(b), some essential items of para 21A.97 are missing. To resolve this ad the following to 21A.113B(d)1:

- (d) The applicant shall be entitled to have a restricted supplemental typecertificate issued by the Agency after:
 - 1. it is shown that the changed aircraft complies with the specific certification specifications as notified under subparagraph (c) above and the applicable environmental protection requirements **by**
 - (i) submitting to the Agency substantiating data together with any necessary descriptive data for inclusion in the type design;
 - (ii) declare that it has shown compliance with the applicable type-certification basis and environmental protection requirements and shall provide to the Agency the basis on which such a declaration is made;
 - (iii) where the applicant holds an appropriate design organisation approval, make the declaration of subparagraph (a)(3) according to the provisions of Subpart J;
 - (iv) comply with 21A.33 and, where applicable, 21A.35.;

response

Partially accepted

Accepted with slight adaptations.

comment

47

comment by: Walter Gessky

21A.113B

Add the following:

(c) The applicable **specific airworthiness** certification specifications shall be those established in accordance with 21A.101 and shall include the list of paragraphs of the applicable airworthiness code that the Agency finds inappropriate **or a list of deviations from the essential requirements to Annex I to the Basic Regulation** for the special purpose for which the aircraft is to be used.

Justification:

Deviations from the essential requirements of Annex I should also be listed. Wording of basic regulation should be used.

- (d) 1. it is shown that the changed aircraft complies with the specific airworthiness certification specifications as notified under subparagraph (c) above and the applicable environmental protection requirements;
- (d) 3. have been shown that nevertheless of the deviations from the essential requirements adequate safety with regard to the purpose and kind of operation is ensured.

Justification:

This should be clarified for the issuance of a restricted STC that the applicant show compliance against specific certification specifications adopted for the purpose and the deviations from the essential requirements are compensated by an adequate level of safety.

Wrong wording used, 21A.113B(d) versus 21A.173(b) According basic regulation, specific airworthiness specification is the correct wording.

response

Partially accepted

See responses to comments nr 44 and 62 above and resulting text below.

comment

109 comment by: European Sailplane Manufacturers

The manufacturer feel that it is very important to note that here in 21A.113B it is now possible to certify an aircraft without having a TC for engine and/or propeller.

This is appreciated by the manufacturers for several reasons:

- 1. the often very small companies developing propellers / engines have the problem that the required DOA / ADOA approvals are too stringent resulting into lack of new developments
- 2. Before EASA becoming responsible many designs were certified with a new engine / propeller as part of type design without creating a safety problem
- 3. Higher flexibility for the aircraft manufacturer in choosing the propulsion system.

It should be considered in the context of the ELA system to include this possibility there too.

response

Not accepted

Certification of an aircraft with a R-TC was already possible without a TC for the engine or propeller in accordance with the old 21A.23(b)2.

For consistency this is also included in 21A.12.

The R-STC will also be available to ELA.

However, a normal TC for the aircraft is not possible if the engine and/or propeller have no TC. It can therefore not be used to circumvent the standard certification process for "normal" aircraft.

comment

117 comment by: Transport Canada Civil Aviation Standards Branch

On proposed 21A.113B, Restricted Supplemental Type-Certificate, subparagraph (c) states the applicable certification specifications as "...shall

include the lists of paragraphs of the applicable airworthiness code that the Agency finds inappropriate for the special purpose..." Subparagraph (d) 1 further makes reference to compliance with subparagraph c). In both subparagraphs, it appears that the context is in complying with the "appropriate" standards, and so the use of the term "inappropriate" in confusing.

response

Partially accepted

The text is improved to better reflect the intent.

The same comment applies also to the text of 21A.17(a)(3), which is aso improved.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart E - 21A.118A Obligations and EPA marking

comment

68

comment by: Airbus

p. 14

21A.118A, 1st sentence,

21A.118B (a) 1st sentence, and

21A.188B (b) should include the restricted supplemental Type Certificate to read:

"...supplemental type certificate or restricted supplemental type certicate..."

JUSTIFICATION:

Consistency within Part 21 following introduction of new section 21A.113B

response

Accepted

Note: 21A.188B(b) in the comment should read 21A.118B(b)

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart E - 21A.118B Duration and continued validity

p. 14

comment

68 💠

comment by: Airbus

21A.118A, 1st sentence,

21A.118B (a) 1st sentence, and

21A.188B (b) should include the restricted supplemental Type Certificate to read:

"...supplemental type certificate or restricted supplemental type certicate..."

JUSTIFICATION:

Consistency within Part 21 following introduction of new section 21A.113B

Accepted

Note: 21A.188B(b) in the comment should read 21A.118B(b)

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart H - 21A.173 Classification

p. 14

comment

comment by: *INAER*

Add "or" after the second case of applicability of R-CoA:

2. which conform to a type certificate as modified by a restricted supplemental type certificate that have been issued in accordance with this Part; **or** 3. which have

response

Accepted

comment

69 🌣

9

comment by: Airbus

When crosschecking with ICAO Annex 8, it seems that ICAO does not use the term "Restricted TC" or "Restricted CofAs". Instead, it is required to clearly determine any limitation or restriction necessary to ensure safe operation of the aircraft. As far as understood, this does not automatically prevent free aircraft operation under ICAO.

FAR 21 also does not use the terms "Restricted TC" or "Restricted CofA". FAR 21 Subpart B contains provision for TCs issued to "restricted category aircraft", Subpart H includes CofAs for "restricted category aircraft". This is understood as restricting the aircraft, not the TC/CofA. Like under ICAO, all limitations/restrictions to ensure safe operation have to be determined.

It may be only an issue of language and terminology, but is an EASA Restricted CofA, issued to an orphan aircraft in international operations, in full compliance with ICAO?

If this should not be the case, the operator would have to seek additional approvals to fly into non-EU countries.

This would be inconsistent with other Airworthiness Authorities including the FAA system where it would appear a full C of A is still given allowing full ICAO rights. Any other approach may create unequal playing fields for EU- and non-EU-operators.

To cover this issue, it is proposed to add guidance materials to the Draft decision, or clarify the EASA restricted CofA status in front of ICAO in the Explanatory note.

As a baseline, at least Orphan aircraft that have had a full TC should be eligible for CofA allowing full ICAO rights to bring consistency to other countries and to not penalize operators.

JUSTIFICATION:

A non-ICAO compliance of EASA R-CofAs (and TCs) would create a particular problem for operators of Commercial Transport Aircraft or Corporate Aircraft when flying outside the EU. Clarification of R-CofA status is not included in this NPA.

Noted

An aircraft on an R-CoA may or may not be in compliance with ICAO Annex 8. This will be made clear in the TCDS of the R-TC or in the design approval based on the SAS as applicable. This will be added to Part 21A.41 and 21A.191(c). In addition, to be in compliance with Article 39 of the Chicago Convention, any non-compliance with ICAO Annex 8 will be clearly indicated on the R-CoA (EASA Form 24) which is visible for authorities outside the EU.

Currently EU-OPS does not allow commercial air transport with aeroplanes holding a restricted CoA but this is outside the scope of Part 21.

comment | 111 &

comment by: DGAC France

create:

21.A.173 c) restricted certificates of airworthiness shall mention whether they conform with ICAO annexe 8

Create

21.A.21 f) restricted type certificate shall mention whether they conform with ICAO annexe 8

Form 24 should be amended.

Justification:

It should be clear if R-CoA are compliant to ICAO Annex 8 or not. It should be identified on the certificate itself. §21.A.173 should be amended to include such a requirement.

In the same spirit, it might be necessary to clarify if a specific R-TC is ICAO annex 8 compliant or not. In such a case, when an aircraft with a ICAO annex 8 compatible CoA would be implemented with the R-STC, it shall get a R-CoA which would be not any longer ICAO annex 8 compatible. Operator and NAA inspectors should easily know the status and right to travel abroad for the aircraft.

response

Partially accepted

In stead of amending 21A.21 the proposal is included in 21A.41 and for consistency also in 21A.195 for aircraft on a R-CoA based on SAS.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart H - 21A.174 Application p. 14-15

comment

26

comment by: Austro Control GmbH

21A.174(b)(3)(ii):

For RCofA there are no bilateral agreements existing which cover export statements.

response

Noted

The Agency acknowledges that for some imported used aircraft, particularly in the R-CoA category, it may not always be possible to obtain such statement. This is also true for normal CoA. The Agency will initiate another rulemaking task (21.041) to address this and other implementation issues with Subpart H of Part 21.

comment

28

comment by: Austro Control GmbH

21A.174(c):

The application for an RCofA must include the approved SAS and the special purpose for which the SAS ia approved.

response

Not accepted

In the requirements for issuance of the R-CoA it is made clear that the documentation as provided in 21A.174 should show conformity to an approved design, which in the case of an R-CoA will include the special purpose and a reference to the certification specifications on which basis the design was approved.

In the new context the SAS have to be seen as the certification basis.

comment

48

comment by: Walter Gessky

21A.174 (c) Add the following:

(c) Each application for a restricted certificate of airworthiness for an aircraft for which thecertificate of airworthiness has become invalid, shall include **a** statement referred to in subparagraph (b)(2)(i) or (b)(3)(ii) and a recommendation for the issuance of an airworthiness review certificate following an airworthiness review in accordance with PartM.

Justification:

When a restricted CofA becomes invalid it has to be verified why the certificate is not valid any more.

The application for an RCofA must be supported by the approved SAS and the information about the special purpose for which the SAS is approved.

response

Partially accepted

The reason for the invalidity of the CoA should be indicated in the application. The case meant here is always because the aircraft is modified in accordance with a R-STC.

The case of TC invalidation due to absence of TC holder (orphan aircraft) is covered by the new paragraph 21A.194A and 21A.194B. For aircraft of "simple" design as identified in 21A.14(b) the existing TC is automatically transposed into an individual design approval for each of the affected aircraft. The owners will have to apply for an R-CoA.

For other aircraft that become "orphan" there is a need for an application but the only requirement is to demonstrate certain design capability. The approved design is then deemed to be the old TC (see also response to comment Nr. 66 above).

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart H - 21A.180 Inspections

p. 16

comment

36

comment by: CAA-NL

Add the applicant of a CoA next to the holder of a CoA, to provide access to the aircraft as inspection may also be the case for the issue of a CoA under 21B.320.

21A.180 Inspections

The **applicant or** holder of the certificate of airworthiness or a restricted certificate of airworthiness certificate shall provide access to the aircraft for which that airworthiness certificate **will be or** has been issued upon request by the competent authority of the Member State of registry.

response

Accepted

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart H - 21A.181 Duration and continued validity

p. 16

comment

10

comment by: HCAA

We suggest the restricted airworthiness certificate to be issued and renewed by **NAA only**, on annual basis instead of unlimited duration, following the related to subpart "H" procedures .

response

Not accepted

The Community has adopted the concept of certificates of airworthiness with unlimited duration for which the validity is controlled by means of an airworthiness review certificate. This is also applicable to restricted CoA.

comment

29

comment by: Austro Control GmbH

21A.181(a)(5) and 21A.182:

There is a conflict for airplanes operation for multiple purposes (restricted and not restricted). See General Comment.

response

Not accepted

It is possible to hold both a CoA and an R-CoA but at a particular moment in time only one of the certificates can be valid.

comment

49

comment by: Walter Gessky

21A.181(a)5 and 21A.182

There is an conflict for airplanes operation for multiple purposes (restricted and not restricted). See General Comment.

response

Not accepted

It is possible to hold both a CoA and an R-CoA but at a particular moment in time only one of the certificates can be valid.

comment

116

comment by: Transport Canada Civil Aviation Standards Branch

On the proposal to amend 21A.181 to introduce Restricted C-of-A, we believe that an existing aircraft need not lose its standard Certificate of Airworthiness as a consequesnce of its Type Certificate being revoked or surrendered. Those aircraft had an approved type design at the time of issuence of its Certificate of

Airworthiness, and should be able to retain its validity under a combined State and operator continuing airworthiness program. A type certificate constitutes a record of a person responsible for a design, and an approved design configuration. The absence of a certificate holder does not necessarily invalidate an approved design itself. It just means that the holder is no longer part of the support to the continuing airworthiness of the aircraft fleet, leaving that responsibility to both Authority and operators.

response

Not accepted

The type certificate holder plays an important role in Part 21. He is responsible for the continuing airworthiness of the design but also needs to have an arrangement with production organisations who produce spare parts for providing up to date data and supporting the production organisation in all airworthiness issues. In addition the type certificate holder is also expected to support the maintenance organisations by providing up-to-date instructions for continuing airworthiness.

Therefore the Agency believes that the TC needs to be supported by a holder. The Agency can allow the TC to continue for a limited period without a holder but if it decides to revoke the TC after that period it means that it considers that the continuing airworthiness can no longer be ensured in the standard way. In that case the normal CoA based on this TC cannot remain valid and other arrangements to allocate continuing airworthiness responsibilities have to be sought under a Restricted CoA.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart H - 21A.182 Aircraft identification

p. 16

comment

30

comment by: Austro Control GmbH

21A.182:

How should the marking be handled for TC airplanes with a Restricted STC installed? Some countries have clear requirements for outside markings for aircraft operating under an restricted CofA. Example: Canada has the wording "RESTRICTED" in 5cm letter beside the entry as a warning for pilots, crew and passengers. This is a common practice in several countries and useful.

response

Noted

The marking requirements are those as stipulated in Subpart O of Part 21.

If additional marking is deemed necessary this will be required through the limitations/restrictions in the R-CoA on a case-by-case basis.

comment

50

comment by: Walter Gessky

21A.182

Subpart O should be changed.

Add a requirement that aircraft operated with a restricted CofA have to be properly marked with "RESTRICTED".

Justification:

How should the marking be handled for TC airplanes with an Restricted STC installed? Some countries require a clear marking outside for aircraft for operation under a restricted CofA. Example Canada has requires marking "RESTRICTED" in 5cm letter beside the entry as a warning for pilots, crew and

passenger. A common practice is useful.

response

Noted

The marking requirements are those as stipulated in Subpart Q of Part 21.

If additional marking is deemed necessary this will be required through the limitations/restrictions in the R-CoA on a case-by-case basis..

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart H - 21A.185 Restricted certificate of airworthiness based on specific airworthiness specifications

p. 16-17

comment

31

comment by: Austro Control GmbH

21A.185 and 21A.189:

Can the application for a SAS be done by everyone? There is no eligibility requirement for applicants, such as DOA.

response

Noted

After a thorough review of the relevant provisions of the basic regulation, taking into account recent cases of SAS applications and also the current structure of Part 21, the Agency has concluded that eligibility requirements for application a design approval based on SAS are appropriate. A new subparagraph (b) is added for demonstration of capability.

comment

37

comment by: CAA-NL

CAA-NL understands the way the Agency wants to structure this process in line with the regular TC / CofA process. However as there is no TC-holder, we see it as an Agency task to partly take over this role. We agree that as long as there are no complicated airworthiness problems it is safe to let these orphan aircraft fly. When emerging airworthiness problems get to complicate for the agency to resolve the Agency may withdraw the SAS and ground the remaining fleet.

In the suggested articles the owner of a (simple) aircraft for witch there is no TC-holder anymore, is eligible for the application of a design approval and entitled to have such an approval when he shows compliance and declare compliance with the SAS established by the Agency. This may cause the following questions or problems:

- 1. Why would the owner of one aircraft apply for the design approval of an aircraft type, as he only owns an aircraft and not a design?
- 2. Would the owner of one aircraft be able to show compliance with the SAS, as he may not be in a position to submit all the necessary data?
- 3. Will the aircraft owner, as receiver of an aircraft design approval be responsible for that design and what will be his liability as such?
- 4. What is the role of the Agency in the continuous airworthiness of the aircraft flying on the basis of a SAS, as nothing is mentioned in the articles about that?
- 5. Is it correct that 21A191(e) suggests that every single aircraft owner must apply for an approval of the design of an orphan aircraft?

To circumvent the above problems we suggest a solution along the following lines:

1. For aircraft currently having a TC and a TC-holder, when the TC-holder

seizes to exist and there is no one to transfer the ownership of the TC possible, the Agency may decide to transfer the type certification basis and the Agency approval of the aircraft design which complies with this type certification basis, laid down in the TC and TCDS into a SAS. The NAA's then may issue R-CoA to replace the invalidated CoA.

2. For aircraft where the TC-holder or design holder seized to fulfill his responsibilities afther the start of the Agency for aircraft grandfathered into the system, the Agency together with the NAA of the former State of Design could specify the certification basis and the Agency approval of the aircraft design which complies with this certification basis into a SAS on the basis of the former nationally approved design. Again NAA's can replace or issue a R-CoA. This process may be triggered by an application for a R-CoA at a NAA, where the NAA initiates the process within the Agency to come to a SAS or not.

This process relieves the aircraft owner to ask for a design approval of an aircraft type and replaces it with a transfer of the approved design activity by the Agency and/or the former State of Designs NAA.

response

Noted

First of all it has to be noted that the concept of an R-CoA based on SAS is not only applicable to orphan aircraft. It can also be used for aircraft designed for a special purpose for which an R-TC is not appropriate.

In case of orphan aircraft the owner is formally made the holder of the design approval to make clear that he is fully responsible for the (continued) airworthiness. It is recognised that the owner normally does not have the capability to show compliance however for orphan aircraft the initial compliance has already been shown and there is no need to repeat this. The design approval for orphan aircraft of simple design is therefore issued automatically without further verification, but is formally necessary to be transferred to the legal person who also benefits from this approval, i.e. the owner. For orphan aircraft that are not of simple design the design approval for is issued after verification that the holder has design capability to support the continuing airworthiness of the aircraft. The design does not need to be reinvestigated.

The Agency will play its normal role of overseeing the continued airworthiness of the aircraft designs it has approved based on the information as received in compliance with 21A.3, where obligations for the holders of the new design approvals are added. In the case that an unsafe condition is identified and no design solution is provided by the design approval holder or any other person, the Agency will have to revoke that design approval in accordance with 21A.191(d).

comment

51

comment by: Walter Gessky

21A.185 and 21A.189

Can the application for an SAS done by everyone? (Minimum requirement for the applicant DOA, because the change is in any case not Minor)

response

Noted

After a thorough review of the relevant provisions of the basic regulation, taking into account recent cases of SAS applications and also the current structure of Part 21, the Agency has concluded that eligibility requirements for

application a design approval based on SAS are appropriate. A new subparagraph (b) is added for demonstration of capability.

comment

75 comment by: Bill Taylor

The aircraft currently operated under permanent PtF have done so for very good reasons. Usually, this was because there was no design support and there was no source of approved spare parts. As a result, over a period of time, these aircraft have diverged from what might be called an approved design standard and they have been fitted with a legion of unapproved parts. In some cases engine types have been changed and other significant modifications have been carried, under the auspices of the applicable national rules. These issues saw the adoption of 21A.701(15) etc for very sound and pragmatic reasons, reasons which have not changed in the recent past.

Given these circumstances, the proposed 21A.185 allows the applicant for a R CofA to apply for design approval of his aircraft. This is crass because the average owner of an aircraft currently operating on a permanent PtF will have no idea of the design basis of his aircraft. The administrative process will put a huge burden on EASA and the aircraft owner for no benefit is terms of aircraft This NPA has not demonstrated an unsafe condition and has not justified how these proposals overcome any such safety concern.

Therefore, it is vital that this proposal is not applied retrospectively to aircraft currently operating on a permanent PtF. Aircraft operating under such Rules should be allowed to continue to operate as before. Changes should be made to Part 21 introducing some form of grandfather rights scheme to allow this to happen. In fact, rather than make changes, the relevant paragraphs of Part 21 - 21A.701(15), 21A.719(b) and 21A.723(b) - should be retained as permanent measures.

response

Noted

See response to comment nr. 70 above.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart H - 21A.187 Restricted certificate of airworthiness based on specific airworthiness specifications -Designation of specific airworthiness specifications and environmental protection requirements

p. 17

comment

response

38

comment by: CAA-NL

Noted

see under 21A.185

See response to comment nr. 37 above.

comment

76

comment by: Bill Taylor

See my comment No 75. The same concerns apply to this 21A.187 and 21A.189.

response | Noted

See response to comment nr. 70 above.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart H - 21A.189 Restricted certificate of airworthiness based on specific airworthiness specifications - Compliance with the specific airworthiness specifications and environmental protection requirements

p. 17

comment

39

comment by: CAA-NL

see under 21A.185

response

Noted

See response to comment nr. 37 above.

comment

113

comment by: DGAC France

create

21.A.189 c) By derogation to b), in the case of a TC Holder surrendering its TC, the applicant shall reuse all previous approved design data without further certification demonstration. The applicant is responsible for any other design change that he may implement on his aircraft.

Justification:

in the case of a TC Holder surrendering its TC, the authority shall make available to any possible applicant all available data from the TC (datasheet, type basis, manuals, approved modifications and repairs, SB and AD, ...) under a particular referenced "design approval" package. It would therefore limit the burden on all applicants for individual "design approval" for their own aircraft by just reusing that package as being the "specific airworthiness specifications" which they would just complete with dedicated STC if any.

The logic with §21.A.185 to §21.A.191 seems to be more a description of obtaining a R-CofA from scratch. In such a case, it makes sense that the applicant is responsible of those SAS. But when he just happens to have to find a solution (R CofA) for his aircraft due to TCH surrender the TC, it is a non sense for individuals that have no design knowledge to take responsibilities from that process, except recognizing he is the user of a previously approved design.

Than, following this "grand father" principle, the applicant would be responsible of the design for changes or repairs added to the initial definition.

DGAC France is interested to get as soon as possible the procedure to apply for a R CoA as defined in 21.A.185 b).

response

Partially accepted

See response to comment nr. 100 above.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart H - 21A.191 Restricted certificate of airworthiness based on specific airworthiness specifications - p. 17-18 Approval of aircraft design

comment

40

comment by: CAA-NL

see under5 21A.185

Noted

See response to comment nr. 37 above.

comment

52

comment by: Walter Gessky

21A.191

It is assumed that this paragraph is not applicable for the issuance of a restricted CofA not based on a restricted TC.

When this assumptionmis not true than f.e the requirement of (c) 3. approvaL DATA SHEET would be an additional burden than all information required are mentioned in the flight manual. Clarifiation is required.

response

Noted

This paragraph is specifically intended for R-COA not based on an R-TC. The approval data sheet is issued by the Agency as an attachment to the design approval and clarifies what has been approved and possible limitations.

comment

77 comment by: Bill Taylor

The aircraft currently operated under permanent PtF have done so for very good reasons. Usually, this was because there was no design support and there was no source of approved spare parts. As a result, over a period of time, these aircraft have diverged from what might be called an approved design standard and they have been fitted with a legion of unapproved parts. In some cases engine types have been changed and other significant modifications have been carried, under the auspices of the applicable national rules. These issues saw the adoption of 21A.701(15) etc for very sound and pragmatic reasons, reasons which have not changed in the recent past.

The administrative process at 21A.191 will put a huge burden on EASA and the aircraft owner for no benefit is terms of aircraft safety. This NPA has not demonstrated an unsafe condition and has not justified how these proposals overcome any such safety concern.

Therefore, it is vital that this proposal is not applied retrospectively to aircraft currently operating on a permanent PtF. Aircraft operating under such Rules should be allowed to continue to operate as before. Changes should be made to Part 21 introducing some form of grandfather rights scheme to allow this to happen. In fact, rather than make changes, the relevant paragraphs of Part 21 - 21A.701(15), 21A.719(b) and 21A.723(b) - should be retained as permanent measures.

response

Noted

See response to comment nr. 70 above.

comment

114 comment by: DGAC France

Once an aircraft has been issued a R-CoA based on specific airworthiness specifications, the owner gets its design approved with the restricted CoA. When the owner sells his aircraft, it is not clear to DGAC what happens to the design approval: is it transferred to the new owner (in such a case, an amendment to §21.A.179 might clarify the point)? Is it still the responsibility of the initial applicant?

Noted

The design approval is transferred together with the aircraft and its R-CoA. This is made clear in 21A.179.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart H -21A.193 Issue of restricted certificates of airworthiness

p. 18-19

comment

comment by: Francis Fagegaltier Services

21A.193

(a)

(1) and

21A.193

(a)(2)(i)(A).

In 21A.3 (b)(1), the wording is "The holder of a type-certificate, restricted type-certificate, supplemental type-certificate, restricted supplemental type-certificate, ETSO authorisation, major repair design approval or approval of aircraft design in accordance with 21A.191".

In 21A.193, the wording is « design approved by the Agency under a restricted type-certificate, under a type certificate modified by a restricted supplemental type-certificate or in accordance with specific airworthiness specifications ».

It is suggested that the wording of 21A.193 is incorrect because 21A.191 is dealing with more topics than the "specific airworthiness specifications". Suggestion: to use the wording of 21A.3, for consistency and clarity, to read: 21A.193 (a) (1), supplemental type-certificate or in accordance with 21A.191».

The same would apply to 21A.193 (a)(2)(i)(A).

response

Noted

21A.3(b)(1) is addressing the possible holders of design approvals whereas 21A.193(a)(1) is addressing the three possibilities to obtain an R-CoA which are different purposes and therefore consistency is not needed.

However the final text is modified to clarify that the original type certificate is not "modified" by the R-STC but only the finally approved design.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart H - 21A.195 Restricted certificate of airworthiness based on specific airworthiness specifications - Approval of changes to aircraft design

p. 19

comment

comment by: Francis Fagegaltier Services

21A.195

5

"approved ... in accordance with 21A.191", found in 21A.195 (b) and (c), is not 100% clear. Is the intent to state that any change, minor or major, would require a complete "21A.191" process as if it was a new complete aircraft subject to a new approval process?

Noted

Only the change to the design must be approved. This includes the physical change itself and affected areas of the unchanged part of the design. This is added as GM.

comment

| 6

comment by: Francis Fagegaltier Services

21A 195

See also the second comment on 21A.197.

response

Noted

Only the change to the design must be approved. This includes the physical change itself and affected areas of the unchanged part of the design. This is added as GM.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart H - 21A.197 Restricted certificate of airworthiness based on specific airworthiness specifications - Approval of repair design

p. 19

comment

7

comment by: Francis Fagegaltier Services

21A.197

The comment on reference to 21A.191 made against 21A.197 would also be valid here.

response

Noted

Only the change to the design introduced by the repair design must be approved. This includes the physical change itself and affected areas of the unchanged part of the design. This is added as GM.

comment

8

comment by: Francis Fagegaltier Services

21A.197

The Agency should determine the most appropriate references in both 21A.195 and 21A.197 for classification as minor and major. Indeed, 21A.195 refers to 21A.91 when classification is dealt with in 21A.95 and 21A.197 refers to 21A.435, which in turn refers to 21A.91, but has also text equivalent to 21A.95.

In 21A.195, references to "21A.91 and 21A.95" would be equivalent to reference to "21A.435" in 21A.197.

In other words, is the intent to say in 21A.195: "shall be classified as minor and major in accordance with the definitions found in 21A.91 and classified in accordance with 21A.95"? In such case, 21A.197 would be correct and 21A.195 incorrect.

Is the intent to say, in both paragraphs, "shall be classified in accordance with the definitions found in 21A.91"? In such a case, 21A.197 would be incorrect

and 21A.195 correct.

response

Partially accepted

The reference to 21A.435 is changed to 21A.435(a), addressing the classification.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart P - 21A.701 Scope

p. 20

comment

95

comment by: John Tempest

Deletion of paragraph 15 will cause insummountable problems for those EASA light aircraft that have operated on a Permanent P to F under the supervision of a Sporting Body. The working group 21.023 identified that this paragraph was required to cater for these aircraft, and nothing has changed at this time which would affect this decision. What seems to have happened is that a new group 21.023(b) has been formed, without industry representation, which has deleted this important requirement.

These aircraft have often been maintained using the same processes as those used for amateur built aircraft, and in the UK, have been maintained under such a system for 60 years. There can be no doubt that these aircraft are maintained to a safe standard (fatal accident rate on-par with the GA average). However, the use of owner manufactured spare parts, owner overhauled engines, amateur designed and built engines, propellers and ignition systems, various modifications, etc, albeit under the supervision and approval of the applicable Sporting Body, will cause insummountable problems during the transition. The owners will be happy with the current Sporting Body run design approval and inspection regimes and will be disadvantaged by being thrown into the onerous Part M environment. It is likely that the differences between the existing Sporting Body-run system for airworthiness and continued airworthiness and the Part M system will be irreconsilable.

response

Noted

See response to comment nr. 70 above.

comment

108

comment by: European Sailplane Manufacturers

Whereas the manufacturer can understand that the very concept of a permanent Permit to Fly seems not to be a very attractive one to the Agency some word of caution seem appropriate.

This option has been - to the information of the manufacturer - very seldom been used.

Instead the Agency already tried to "go for a CoA or R-CoA" often coupled with SAS.

Therefore it seems prudent not to eliminate this option for a permanent Permit to Fly just to have another change in the regulation.

Obviously the Agency already has some otions to chose in between so why eliminate one of the options?

Noted

See response to comment nr. 70 above.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart P - 21A.703 Eligibility

p. 20

comment

96

comment by: John Tempest

I do not agree with this proposed amendment, see comments raised against 21A.701 above.

response

Noted

See response to comment nr. 70 above.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart P - 21A.719 Transferability

p. 20

comment

97

comment by: John Tempest

I do not agree with this proposed amendment, see comments raised against 21A.701 above.

response

Noted

See response to comment nr. 70 above.

B. Draft Rules - I. Draft Opinion - Part-21 - Subpart P - 21A.723 Duration and continued validity

p. 20

comment

11

21A.723:We suggest the validity of a PtF not to remain valid for more than 30 days. The 12-month period as proposed imposes a huge in-between timeframe, allowing a safety gap to be established in the meantime - e.g.

comment by: HCAA

expired ADs.

response

Not accepted

The comment is outside the scope of this NPA; the maximum duration of 12 months was agreed before. The applicable continuing airworthiness arrangements, approved as part of the flight conditions in accordance with 21A.708 should address the way that urgent continuing airworthiness information such as AD's, is implemented.

comment

98

comment by: John Tempest

I do not agree with this proposed amendment, see comments raised against 21A.701 and also below.

Para 21A.723 a) indicates that EASA is happy for a Permit to Fly to be issued for a maximum of 12 months.

The deleted Para 21A.723(b) removes the ability to have a non expiring Permit to Fly, which I disagree with.

There seems to be little difference between a 12 month P to F that must be renewed annually and a permanent P to F which will need to be revalidated annually, apart from differences in paperwork and fees, perhaps. There is no safety benefit either way.

The consequences of a non-expiring (permanent) Permit to Fly versus a Permit to Fly which is renewed annually seem purely administrative. A non-expiring (permanent) P to F streamlines the process of renewal, as rather than reissuing the Permit to Fly (plus operating limitations and conditions), only a new Certificate of Validity is required annually.

If EASA are happy to enable a Permit to Fly to be issued for a maximum of 12 months before renewal, then surely it should be happy to issue a permanent P to F which will be revalidated annually.

It is suggested that EASA retain aircraft currently on Permits to Fly under the supervision of Sporting Bodies on Permits to Fly, ideally issued permanently to reduce costs. A certificate of validity should be required to be issued annually by the Sporting Body.

Flight testing of these aircraft should remain under national control.

response

Noted

See response to comment nr. 70 above.

B. Draft Rules - II. Draft Decision AMC and GM to Part-21 - GM 21A.12 Justification for restricted type-certificate

p. 23

comment

63

comment by: Michael Allouche IAI

Add (in line with NPA 16/2005 and related CRD) under Examples of Special Purpose

(9) Some Unmanned Aircraft System Applications where appropriate limitations (airspace and/or over flown populations density) are defined

response

Noted

The Agency agrees that some UAS may be in this category because today's use of UAS is for special purposes, but UAS in itself is not a purpose and cannot be in this list. Anyhow, the list of examples is deleted as a result of other comments.

comment

90

comment by: UK CAA

GM21A.12

It is not clear why an aircraft modified for crop spraying, aerial survey, wildlife conservation etc would necessarily be unable to comply in full with the normal certification basis. Such aircraft can be certificated when appropriate special conditions are developed and applied uniformly to EU aircraft. For example, one effect of low level operations such as crop dusting or fire suppression which should be properly accounted for is the profound effect that the changed load spectrum may have on fatigue life. Special conditions covering these operations and banner towing, glider towing, parachuting, etc. can be published (via CRIs etc.) so that they are visible to the industry, to ensure standardisation.

Unmanned aircraft systems could also be added to the list of examples.

In the event that a restricted certificate of airworthiness is appropriate, the Agency is required to establish and notify the specific airworthiness specifications (Article 20 of 216/2008). This could usefully be noted in the quidance material.

It is stated in 21A.12 that a restricted type certificate may be applied for when a type certificate is inappropriate and the aircraft is designed for a special purpose for which the Agency agrees it justifies deviations from the essential requirements of Annex I to the Basic Regulation. GM21A.12 seems to pre-judge that decision.

Justification:

Aircraft should be required to comply with the usual certification basis wherever possible. Where the Agency agrees this is not possible, the Agency should establish and publish appropriate specifications and standards.

Proposed text:

Subject to the agreement of the Agency in each case, examples of special purposes, as intended in 21A.12 may be:

- 1. agricultural: spraying, dusting, seeding, livestock control and predatory animal control;
- 2. fire prevention and suppression;
- 3. aerial surveying;

9. unmanned aircraft systems.

The Agency will establish and notify the specific airworthiness specifications.

response | Partially accepted

An Restricted Type Certificate (R-TC) may be applied for if a TC is not appropriate and the aircraft is designed for a special purpose. An R-TC is not required for an aircraft which is designed for a special purpose when it can still comply with the essential requirements. Only when compliance with all essential requirements is not possible an R-TC can be issued.

The Agency agrees that UAS may be in this category because today's use of UAS is for special purposes, but UAS in itself is not a purpose and cannot be in this list. However, the Agency recognises that the list of examples may be

confusing because many of these special purpose operations can also be performed by aircraft that have a full TC. Therefore the examples are deleted and only the general introduction in the relevant Guidance Material (GM) is kept.

comment

99

comment by: John Tempest

Special provisions should be made for custom-built (commercially built) competition aerobatic aircraft. These aircraft are usually of very limited production runs and are quickly obsolete. Further, flexibility is required to enable a straightforward modification procedure to enable quick development to take place. It is generally not financially viable for top-level competition aircraft to be type certificated or built in an Approved production facility.

Generally, these aircraft should qualify for a permanent Permit to Fly. However, if this is not possible, consideration should be given to granting them R Cs of A.

response

Noted

See response to comment nr. 70 above.

comment

106

comment by: European Sailplane Manufacturers

It is understood that this list in GM 21A.12 has historical roots.

It is further understood that Annex II of the Basic Regulation offers the option to certify aircraft built / modified for scientific / research purposes according to national regulations.

Nevertheless some obervations from the side of the maunfacturers:

- 1. Not all NAA have the capability to certify such scientific / research designs.
- 2. Often such a design or change starts outside of a manufacturer but will later become a future product.
- 3. Sometimes the developer / designer of certain modifications or new products might explicitly whish to co-operate with EASA as this will internationally be beneficiary for his development plans.

Therefore it is proposed to include for the applicants in case of designs or changes made for scientific / research purposes the option to certify either under national regulation (Annex II) or as a R-TC in the context of this NPA 2008-06.

(Of course this comment is only valid if the developer does not go straight in the direction of a normal application for a TC.)

Remark:

This proposal should not be against the intent or sense of the Basic Regulation, because

- the applicant has the choice instead as of being forced into one direction
- the wording in Annex II of 0216/2008 in para (b) includes "and likely to

be produced in very limited numbers" which already is something of a legal back door

Therefor the example list should be amended by "9. research and test purposes"

response

Not accepted

Aircraft designed for scientific / research purposes are considered Annex II aircraft and are outside the scope of EASA. Classification as Annex II is not optional but is determined by law.

B. Draft Rules - II. Draft Decision AMC and GM to Part-21 - GM 21A.44(a) Demonstration of capability

p. 23

comment

66 *

comment by: Airbus

In the explanatory note, para 11, last sentence reads:

" However, in order to limit the number of 'orphan' aircraft in the future, this NPA envisages additional changes to Part21 promoting the continued support of a TC by its holder."

The only additional changes in this NPA that may encourage a soon-have-been TC holder to continue support for his products can be identified in proposed section 21A.44(a) and GM 21A.44(a). There, EASA indicates that some TC-holder obligations may be continued through alternative procedures to a DOA. Although this may ease the administrative burden, the prerequisite for this would be an industry organization that continues to exist.

This approach does neither cover a bankrupt company nor the fact that any continuation of even limited activities may no longer be economically reasonable. Forcing an industry organization to continue activities may lead to bankruptcy, and subsequent to orphan aircraft.

Therefore it is proposed that:

- Primarily, EASA should develop working procedures to take over limited airworthiness oversight for orphan aircraft like the FAA does, or
- EASA should provide materials to illustrate acceptable means of compliance for those alternatives to DOA, and EASA should initiate a rulemaking to introduce a kind of certified organization (...a Part M CAMO ++ ?) for airworthiness oversight and support of aircraft without a TC-holder.

JUSTIFICATION:

The issue of orphan aircraft is already important and burdening for current TC-holders. The NPA as written does not provide sufficient regulatory and quidance material to cover this.

It has to be kept in mind that not only general aviation aircraft may be affected but also aircraft used in commercial air transport, with severe economic and social consequences for TC holders and operators in case of grounding a fleet for administrative reasons.

response

Noted

There are two measures in the NPA that are intended to reduce the number of orphan aircraft. The change in 21A.44(a) as mentioned by the comment

provider and also the deletion of 21A.51(a)(1). The latter change will achieve that there is no more automatic invalidity of the TC; it always requires a legal act from the Agency to invalidate a TC.

The proposal from the comment provider that the Agency should take over TC holder's responsibility in case of an orphan aircraft is not accepted. This is not seen as a task of the Agency. Nevertheless when applying the solution of issuing SAS and an individual design approval the Agency is taking part of the former TC holders responsibility. However the Agency will not be able to provide the same service as a TC holder can and must. It can only react to unsafe conditions in a negative way. Any design solutions to restore airworthiness shall come from the stakeholders.

The solution as proposed by the comment provider to introduce a new kind of certified organisation may deserve further consideration if the current approach appears not to be successful.

B. Draft Rules - II. Draft Decision AMC and GM to Part-21 - GM 21A.173(b)(3) Restricted Certificate of Airworthiness based on specific airworthiness specifications

p. 23

comment

69 *

comment by: Airbus

When crosschecking with ICAO Annex 8, it seems that ICAO does not use the term "Restricted TC" or "Restricted CofAs". Instead, it is required to clearly determine any limitation or restriction necessary to ensure safe operation of the aircraft. As far as understood, this does not automatically prevent free aircraft operation under ICAO.

FAR 21 also does not use the terms "Restricted TC" or "Restricted CofA". FAR 21 Subpart B contains provision for TCs issued to "restricted category aircraft", Subpart H includes CofAs for "restricted category aircraft". This is understood as restricting the aircraft, not the TC/CofA. Like under ICAO, all limitations/restrictions to ensure safe operation have to be determined.

It may be only an issue of language and terminology, but is an EASA Restricted CofA, issued to an orphan aircraft in international operations, in full compliance with ICAO?

If this should not be the case, the operator would have to seek additional approvals to fly into non-EU countries.

This would be inconsistent with other Airworthiness Authorities including the FAA system where it would appear a full C of A is still given allowing full ICAO rights. Any other approach may create unequal playing fields for EU- and non-EU-operators.

To cover this issue, it is proposed to add guidance materials to the Draft decision, or clarify the EASA restricted CofA status in front of ICAO in the Explanatory note.

As a baseline, at least Orphan aircraft that have had a full TC should be eligible for CofA allowing full ICAO rights to bring consistency to other countries and to not penalize operators.

JUSTIFICATION:

A non-ICAO compliance of EASA R-CofAs (and TCs) would create a particular problem for operators of Commercial Transport Aircraft or Corporate Aircraft

when flying outside the EU. Clarification of R-CofA status is not included in this NPA.

response

Noted

An aircraft on an R-CoA may or may not be in compliance with ICAO Annex 8. This will be made clear in the TCDS of the R-TC or in the design approval based on the SAS as applicable. This will be added to Part 21A.41 and 21A.195(a). In addition, to be in compliance with Article 39 of the Chicago Convention, any non-compliance with ICAO Annex 8 will be clearly indicated on the R-CoA (EASA Form 24) which is visible for authorities outside the EU.

Currently EU-OPS does not allow commercial air transport with aeroplanes holding a restricted CoA but this is outside the scope of Part 21.

comment

107

comment by: European Sailplane Manufacturers

The last paragrph of GM 21A.173(b)(3) refers to ex-prototypes which do not conform to the finally approved (serial) design.

Such aircraft are known only too well by the manufucters.

As not all developments result into a finally approved design wording should be added that this option (R-CoA based on SAS) is generally possible for such prototypes (with or without a later approved design).

Normally the manufacturers will seek to include such aircraft into a later series by certification of this serial number via a change but not always this is easily be done.

Therefore either a R-TC (see our proposal for GM 21A.12) or a R-CoA (this proposal) should be possible for such ex-prototypes.

Otherwise manufacturers might be forced to start new projects first on a national level under Annex II ("research, experimental or scientific") in order to guarantee later certification of prototypes.

This is highly inefficient because of parallel communication / different administrative procedures between EASA and NAA.

response

Noted

This is the intent of this provision and explanation in the GM.

B. Draft Rules - II. Draft Decision AMC and GM to Part-21 - GM 21A.174(c)

p. 23

comment

89

comment by: Tamara GOTTESMAN

Add additional example:

9. Unmaned Aircraft Systems (UAS)

Explanation: UAS are an exmple were the manned airworthiness requirements are used to defin a certification basis through a tailoring process. Thus, according to the explanation in Paragraph 15, certain certification specifications cannot be compliated with, but are mittigated by imposed limitations.

response | Noted

The Agency agrees that some UAS may be in the category of restricted CoA because today's use of UAS is for special purposes. However, UAS is not a special purpose in itself and cannot be in this list. Anyhow, the list of examples is deleted as result of other comments.

B. Draft Rules - II. Draft Decision AMC and GM to Part-21 - GM 21A.701(a) Permit to fly when certificate of airworthiness or restricted certificate of airworthiness is not appropriate

p. 23-24

comment

103

comment by: René Fournier

I regret the envisaged deletion of paragraph 21A.701(a)(15). This provision was particularly welcome since it offered an alternative to the maintenance under Part M. In the specific case of old aircraft no longer in production, free movement of goods could have been better achieved through mutual recognition of national maintenance rules.

response

Noted

See response to comment nr. 70 above.

B. Draft Rules - II. Draft Decision AMC and GM to Part-21 - GM 21A.710 Approval of flight conditions

p. 24

comment

91

comment by: John Tempest

I do not agree with this proposed amendment, see comments raised against 21A.701.

response

Noted

See response to comment nr. 70 above.

B. Draft Rules - II. Draft Decision AMC and GM to Part-21 - GM 21A.719 Transfer of a permit to fly

p. 24

comment

92

comment by: John Tempest

I do not agree with this proposed amendment, see comments raised against 21A.701.

response

Noted

See response to comment nr. 70 above.

Appendix A - Resulting text after CRD

B DRAFT OPINION AND DECISION

The text of the amendment is arranged to show deleted text, new text or new paragraph as shown below:

- deleted text is shown with a strike through: deleted
- new text is highlighted with grey shading: new
-

Indicates that remaining text is unchanged in front of or following the reflected amendment.

I Draft Opinion

Regulation (EC) 1702/2003

Article 2f

Approval of aircraft design

Specific Airworthiness Specifications issued by the Agency or determined by Regulation (EC) 1702/2003 before [the entry into force of this amending Regulation], shall be deemed to constitute the approval of aircraft design for the related aircraft.

ANNEX to Regulation (EC) 1702/2003: PART 21

SUBPART A - GENERAL PROVISIONS

21A.3 Failures, malfunctions and defects

- (a) System for Collection, Investigation and Analysis of Data. The holder of a type-certificate, restricted type-certificate, supplemental type-certificate, European Technical Standard Order (ETSO) authorisation, or major repair design approval or any other relevant approval deemed to have been issued under this Regulation—shall have a system for collecting, investigating and analysing reports of and information related to failures, malfunctions, defects or other occurrences which cause or might cause adverse effects on the continuing airworthiness of the product, part or appliance covered by the type-certificate, restricted type-certificate, supplemental type-certificate, restricted supplemental type-certificate, ETSO authorisation, or major repair design approval or any other relevant approval deemed to have been issued under this Regulation. Information about this system shall be made available to all known operators of the product, part or appliance and, on request, to any person authorised under other associated implementing Regulations.
- (b) Reporting to the Agency.
 - The holder of a type-certificate, restricted type-certificate, supplemental type-certificate, restricted supplemental type-certificate, ETSO authorisation, major repair design approval or approval of aircraft design in accordance with 21A.191any other relevant approval deemed to have been issued under this Regulation shall report to the Agency any failure, malfunction, defect or other occurrence of which it is aware related to a product, part, or appliance covered by the type-certificate, restricted type-certificate, supplemental type-certificate, ETSO authorisation, major repair design

- approval or approval of aircraft design in accordance with 21A.191 any other relevant approval deemed to have been issued under this Regulation, and which has resulted in or may result in an unsafe condition.
- 2. These reports shall be made in a form and manner established by the Agency, as soon as practicable and in any case dispatched not later than 72 hours after the identification of the possible unsafe condition, unless exceptional circumstances prevent this.
- (c) Investigation of Reported Occurrences.
 - 1. When an occurrence reported under paragraph (b), or under 21A.129(f)(2) or 21A.165(f)(2) results from a deficiency in the design, or a manufacturing deficiency, the holder of the type-certificate, restricted type-certificate, supplemental type-certificate, restricted supplemental type-certificate, major repair design approval, ETSO authorisation, or approval of aircraft design in accordance with 21A.191 any other relevant approval deemed to have been issued under this Regulation, or the manufacturer as appropriate, shall investigate the reason for the deficiency and report to the Agency the results of its investigation and any action it is taking or proposes to take to correct that deficiency.
 - 2. If the Agency finds that an action is required to correct the deficiency, the holder of the type-certificate, restricted type-certificate, supplemental type-certificate, restricted supplemental type-certificate, major repair design approval, ETSO authorisation, or approval of aircraft design in accordance with 21A.191any other relevant approval deemed to have been issued under this Regulation, or the manufacturer as appropriate, shall submit the relevant data to the Agency.

SUBPART B - TYPE CERTIFICATES AND RESTRICTED TYPE-CERTIFICATES

21A.12 Aircraft restricted type-certificate

A restricted type certificate for an aircraft may be applied for when a type certificate is inappropriate and the aircraft is designed for a special purpose for which the Agency agrees it justifies deviations from the essential requirements of Annex I to the Basic Regulation, or the engine or propeller installed in the aircraft does not hold a type certificate.

21A.17 Type-certification basis

- (a) The type-certification basis to be notified for the issuance of a type-certificate or a restricted type-certificate shall consist of:
 - 1. The applicable airworthiness code established by the Agency that is effective on the date of application for that certificate:
 - (i) Unless otherwise specified by the Agency; or
 - (ii) Unless compliance with later effective amendments is elected by the applicant or required under paragraphs (c) and (d); or
 - (iii) For restricted type-certificates, excluding the paragraphs of the applicable airworthiness code that the Agency finds inappropriate for the special purpose for which the aircraft is to be used and including possible alternative specifications.
 - 2. Any special condition prescribed in accordance with 21A.16B(a).
- (b) An application for a type-certificateion or a restricted type-certificate offor large aeroplanes and large rotorcraft shall be effective for five years and an application for any other type-certificate or restricted type-certificate shall be effective for three years, unless an applicant shows at the time of application that its product requires a longer period of time for design, development, and testing, and the Agency approves a longer period.

- (c) In the case where a type-certificate or restricted type-certificate has not been issued, or it is clear that a type-certificate or restricted type-certificate will not be issued, within the time limit established under paragraph (b); the applicant may:
 - 1. File a new application for a type-certificate or restricted type-certificate and comply with all the provisions of paragraph (a) applicable to an original application; or
 - 2. File for an extension of the original application and comply with the applicable airworthiness codes that were effective on a date, to be selected by the applicant, not earlier than the date which precedes the date of issue of the type-certificate or restricted type-certificate by the time limit established under paragraph (b) for the original application.
- (d) If an applicant elects to comply with an amendment to the airworthiness codes that is effective after the filing of the application for a type-certificate or restricted type-certificate, the applicant shall also comply with any other amendment that the Agency finds is directly related.

21A.18 Designation of applicable environmental protection requirements and certification specifications

- (a) The applicable noise requirements for the issue of a type-certificate or restricted type-certificate for an aircraft are prescribed according to the provisions of Chapter 1 of Annex 16, Volume I, Part II to the Chicago Convention and:
- (b) The applicable emission requirements for the issue of a type-certificate or restricted typecertificate for an aircraft and engine are prescribed in Annex 16 to the Chicago Convention:

.....

21A.19 Changes requiring a new type-certificate or restricted type-certificate

Any natural or legal person proposing to change a product shall apply for a new type-certificate or restricted type-certificate if the Agency finds that the change in design, power, thrust, or mass is so extensive that a substantially complete investigation of compliance with the applicable type-certification basis is required.

21A.21 Issue of a type-certificate or restricted type-certificate

The applicant shall be entitled to have a product type-certificate or an aircraft restricted type-certificate issued by the Agency after:

- (a) demonstrating its capability in accordance with 21A.14;
- (b) submitting the declaration referred to in 21A.20(b); and
- (c) t is shown that:
 - 1. The product to be certificated meets the applicable type-certification basis and environmental protection requirements designated in accordance with 21A.17 and 21A.18;
 - 2. Any airworthiness provisions not complied with are compensated for by factors that provide an equivalent level of safety;
 - 3. No feature or characteristic makes it unsafe for the uses for which certification is requested; and
 - 4. The type-certificate or restricted type-certificate applicant has expressly stated that it is prepared to comply with 21A.44.
- (d) In the case of an aircraft type-certificate, the engine or propeller, or both, if installed in the aircraft must have a type-certificate issued or determined in accordance with this Regulation.

- (e) In the case of an aircraft restricted type-certificate, the engine or propeller, or both, if installed in the aircraft must:
 - 1. have a type-certificate issued or determined in accordance with this Regulation; or
 - 2. have been shown to be in compliance with the certification specifications necessary to ensure safe flight of the aircraft.

21A.23 Issue of a restricted type-certificate

- (a) For an aircraft that does not meet the provisions of 21A.21(c), the applicant shall be entitled to have a restricted type-certificate issued by the Agency after:
 - 1. complying with the appropriate type-certification basis established by the Agency ensuring adequate safety with regard to the intended use of the aircraft, and with the applicable environmental protection requirements;
 - 2. expressly stating that it is prepared to comply with 21A.44.
- (b) The engine or propeller installed in the aircraft, or both, shall:
 - 1. have a type-certificate issued or determined in accordance with this Regulation; or
 - 2. have been shown to be in compliance with the certification specifications necessary to ensure safe flight of the aircraft.

21A.35 Flight Tests

(a) Flight testing for the purpose of obtaining a type-certificate or restricted type-certificate shall be conducted in accordance with conditions for such flight testing specified by the Agency.

.....

21A.41 Type-certificate and restricted type-certificate

The type-certificate and restricted type-certificate are both considered to include the type design, the operating limitations, 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, and in the case of a restricted type-certificate, any additional limitations for the use related to the special purpose and any non-compliance with Annex 8 to the Chicago Convention. The aircraft type-certificate and restricted type-certificate, in addition, both include the type-certificate data sheet for noise. The engine type-certificate data sheet includes the record of emission compliance.

21A.44 Obligations of the holder

Each holder of a type-certificate or restricted type-certificate shall:

- (a) undertake the obligations laid down in 21A.3, 21A.3B, 21A.4, 21A.55, 21A.57 and 21A.61; and, for this purpose, shall continue to meet the qualification requirements for eligibility under 21A.14 or, as an alternative procedure, seek the Agency agreement for the use of procedures setting out its activities to undertake these obligations; and
- (b) specify the marking in accordance with Subpart Q; and
- (c) report to the Agency any failure to fulfil the obligations imposed on it by this Subpart B.

21A.47 Transferability

Transfer of a type-certificate or restricted type-certificate may only be made to a natural or legal person that is able to undertake the obligations under 21A.44, and, for this purpose, has

demonstrated its ability to qualify under the criteria of 21A.14 the capability required in 21A.44(a).

21A.51 Duration and continued validity

- (a) A type-certificate and restricted type-certificate shall be issued for an unlimited duration. They shall remain valid subject to:
 - 1. The holder remaining in compliance with this Part; and
 - 2. The certificate not being surrendered or revoked under the applicable administrative procedures established by the Agency.
- (b) Upon surrender or revocation, the type-certificate and restricted type-certificate shall be returned to the Agency.

SUBPART E - SUPPLEMENTAL TYPE-CERTIFICATES AND RESTRICTED SUPPLEMENTAL TYPE-CERTIFICATES

21A.111 Scope

This Subpart establishes the procedure for the approval of major changes to the type design under supplemental type certificates procedures and for the approval of major changes to an aircraft under restricted supplemental type-certificates, and establishes the rights and obligations of the applicants for, and holders of, those certificates.

21A.113B Restricted Supplemental Type-Certificate

- (a) A restricted supplemental type-certificate for a major change to an aircraft type design may be applied for when
 - 1. a supplemental type-certificate or major change approval is inappropriate; and
 - 2. the aircraft is modified for a special purpose for which the Agency agrees it justifies deviations from the essential requirements of Annex I to the Basic Regulation.
- (b) Paragraphs 21A.112, 21A.112B, 21A.113, 21A.116, 21A.117, 21A.118A, 21A.118B, 21A.119 and 21A.120 shall apply to applications for a restricted supplemental type-certificate.
- (c) The applicable certification specifications shall be those established in accordance with 21A.101 excluding the paragraphs of the applicable airworthiness code that the Agency finds inappropriate for the special purpose for which the aircraft is to be used and including possible alternative specifications.
- (d) The applicant shall be entitled to have a restricted supplemental type-certificate issued by the Agency after:
 - it is shown that the changed aircraft complies with the certification specifications as notified under subparagraph (c) above and the applicable environmental protection requirements, by:
 - (i) submitting to the Agency substantiating data together with any necessary descriptive data for supplementing the type design;
 - (ii) declaring that it has shown compliance with the applicable certification specifications and environmental protection requirements and providing to the Agency the basis on which such a declaration is made;
 - (iii) where the applicant holds an appropriate design organisation approval, making the declaration of subparagraph (d)(1)(ii) according to the provisions of Subpart J;
 - (iv) complying with 21A.33 and, where applicable, 21A.35.
 - 2. demonstrating its capability in accordance with 21A.112B;

- 3. where, under 21A.113(b), the applicant has entered into an arrangement with the type-certificate holder,
 - (i) The type-certificate holder has advised that its has no technical objection to the information submitted under 21A.93; and
 - (ii) The type-certificate holder has agreed to collaborate with the supplemental type-certificate holder to ensure discharge of all obligations for continued airworthiness of the changed product through compliance with 21A.44 and 21A.118A.
- 4. In the case of an aircraft restricted supplemental type-certificate, related to engine or propeller installation, the engine or propeller, or both, must:
 - (i) have a type-certificate issued or determined in accordance with this Regulation; or
 - (ii) have been shown to be in compliance with the certification specifications necessary to ensure safe flight of the aircraft.
- (e) The restricted supplemental type-certificate shall specify any additional limitations for the use related to the special purpose.

21A.118A Obligations and EPA marking

Each holder of a supplemental type-certificate or restricted supplemental type-certificate shall:

(c) report to the Agency any failure to fulfil the obligations imposed on it by this Subpart E.

21A.118B Duration and continued validity

- (a) A supplemental type-certificate or restricted supplemental type-certificate shall be issued for an unlimited duration. It shall remain valid subject to:
 - 1. The holder remaining in compliance with this Part; and
 - 2. the certificate not being surrendered or revoked under the applicable administrative procedures established by the Agency.
- (b) Upon surrender or revocation, the supplemental type-certificate or restricted supplemental type-certificate shall be returned to the Agency.

SUBPART H - CERTIFICATES OF AIRWORTHINESS AND RESTRICTED CERTIFICATES OF AIRWORTHINESS

21A.173 Classification

Airworthiness certificates shall be classified as follows:

- (a) Certificates of airworthiness shall be issued to aircraft which conform to a type-certificate that has been issued in accordance with this Part.
- (b) Restricted certificates of airworthiness shall be issued to aircraft:
 - 1. which conform to a restricted type-certificate that has been issued in accordance with this Part; or
 - 2. which conform to a type-certificate as supplemented by a restricted supplemental type-certificate that have been issued in accordance with this Part; or
 - 23. which have been shown to the Agency to comply with specific airworthiness specifications ensuring adequate safety.

21A.174 Application

- (a) Pursuant to 21A.172, an application for an certificate of airworthiness or a restricted certificate of airworthiness certificate shall be made in a form and manner established by to the competent authority of the Member State of registry in a form and manner established by that authority.
- (b) Each application for a certificate of airworthiness or a restricted certificate of airworthiness shall include:
 - 1. the class of airworthiness certificate applied for;
 - 2. with regard to new aircraft:
 - (i) A statement of conformity:
 - issued under 21A.163(b), or
 - issued under 21A.130 and validated by the Competent Authority,
 - or, for an imported aircraft, a statement signed by the exporting authority that the aircraft conforms to a design approved by the Agency
 - (ii) A weight and balance report with a loading schedule.
 - (iii) The flight manual, when required by the applicable airworthiness code for the particular aircraft.
 - 3. with regard to used aircraft:
 - (i) originating from a Member State, an airworthiness review certificate issued in accordance with Part M.
 - (ii) originating from a non-member state:
 - a statement by the competent authority of the State where the aircraft is, or was, registered, reflecting the airworthiness status of the aircraft on its register at time of transfer.
 - a weight and balance report with a loading schedule.
 - the flight manual, when required by the applicable airworthiness code for the particular aircraft.
 - historical records to establish the production, modification, and maintenance standard of the aircraft, including all limitations associated with a restricted certificate of airworthiness under 21A.184(c) applicable to the aircraft under the rules of the State where the aircraft is or was registered.
 - a recommendation for the issuance of a certificate of airworthiness or restricted certificate of airworthiness and an airworthiness review certificate following an airworthiness review in accordance with Part M.
- (c) Each application for a restricted certificate of airworthiness for an aircraft for which the certificate of airworthiness has become invalid due to the embodiment of a restricted supplemental type certificate, shall include a recommendation for the issuance of an airworthiness review certificate following an airworthiness review in accordance with Part-M.
- (ed)Unless otherwise agreed, the statements referred to in subparagraphs (b)(2)(i) and (b)(3)(ii) shall be issued no more than 60 days before presentation of the aircraft to the competent authority of the Member State of registry.

21A.177 Amendment or modification

An certificate of airworthiness or a restricted certificate of airworthiness certificate may be amended or modified only by the competent authority of the Member State of registry.

21A.179 Transferability and re-issuance within Member States

- (a) Where ownership of an aircraft has changed:
 - 1. if it remains on the same register, the certificate of airworthiness, or the restricted certificate of airworthiness conforming to a restricted type-certificate only, shall be transferred together with the aircraft;
 - 2. if the aircraft is registered in another Member State, the certificate of airworthiness, or the restricted certificate of airworthiness conforming to a restricted type-certificate only, shall be issued:
 - (i) upon presentation of the former certificate of airworthiness or restricted certificate of airworthiness and of a valid airworthiness review certificate issued under Part M, and
 - (ii) when satisfying 21A.175.
- (b) Where ownership of an aircraft has changed, and the aircraft has a restricted certificate of airworthiness based on a design approval issued or established in accordance with 21A.191, 21A.194A or 21A.194B the design approval shall also be transferred to the new owner. not conforming to a restricted type certificate, such airworthiness certificates shall be transferred together with the aircraft provided the aircraft remains on the same register, or issued only with the formal agreement of the competent authority of the Member State of registry to which it is transferred.

21A.180 Inspections

The applicant or holder of the certificate of airworthiness or a restricted certificate of airworthiness certificate shall provide access to the aircraft for which that airworthiness certificate will be or has been issued upon request by the competent authority of the Member State of registry.

21A.181 Duration and continued validity

- (a) An certificate of airworthiness certificate shall be issued for an unlimited duration. It shall remain valid subject to:
 - 1. compliance with the applicable approved design type design and continuing airworthiness requirements; and
 - 2. the aircraft remaining on the same register; and
 - 3. the type-certificate or restricted type-certificate under which it is issued not being previously surrendered or revoked under 21A.51.
 - 4. the certificate not being surrendered, suspended or revoked under 21B.330.
 - 5. the aircraft not being modified in accordance with a restricted supplemental typecertificate.
- (b) A restricted certificate of airworthiness shall be issued for an unlimited duration. It shall remain valid subject to:
 - 1. compliance with the applicable approved design and continuing airworthiness requirements; and
 - 2. the aircraft remaining on the same register; and
 - 3. the design approvals under which it is issued not being previously surrendered or revoked under 21A.51, 21A.118B or 21A191(d) as applicable; and
 - 4. the certificate not being surrendered, suspended or revoked.
- (bc)Upon surrender or revocation, the certificate shall be returned to the competent authority of the Member State of registry.

21A.182 Aircraft identification

Each applicant for an certificate of airworthiness or restricted certificate of airworthiness certificate under this Subpart shall demonstrate that its aircraft is identified in accordance with Subpart Q.

21A.185 Restricted certificate of airworthiness based on specific airworthiness specifications – Application for design approval

- (a) When a type-certificate and restricted type-certificate are not appropriate, the applicant for a restricted certificate of airworthiness based on specific airworthiness specifications shall be eligible for an application for design approval under this paragraph.
- (b) The applicant shall demonstrate its capability by holding a design organisation approval, issued by the Agency in accordance with Subpart J. As an alternative procedure to demonstrate its capability the applicant may seek Agency agreement for the use of procedures setting out the specific design practices, resources and sequence of activities necessary to comply with paragraphs 21A.189, 21A.191, 21A.192, 21A.195, 21A.196 and 21A.197. (c) An application for the design approval of an aircraft eligible for a restricted certificate of airworthiness based on specific airworthiness specifications shall be made in a form and manner established by the Agency.
- (d) The application shall include a three-view drawing of that aircraft and preliminary basic data, including the proposed operating characteristics and limitations.

21A.187 Restricted certificate of airworthiness based on specific airworthiness specifications - Designation of specific airworthiness specifications and environmental protection requirements

- (a) For the design approval of an aircraft eligible for a restricted certificate of airworthiness based on specific airworthiness specifications the Agency shall notify specific airworthiness specifications ensuring adequate safety;
- (b) The applicable environmental protection requirements and certification specifications are those specified in 21A.18.

21A.189 Restricted certificate of airworthiness based on specific airworthiness specifications - Compliance with the specific airworthiness specifications and environmental protection requirements

- (a) The applicant for the design approval of an aircraft eligible for a restricted certificate of airworthiness based on specific airworthiness specifications shall show compliance with the specific airworthiness specifications and environmental protection requirements designated in accordance with 21A.187 and shall provide to the Agency the means by which such compliance has been shown.
- (b) The applicant shall declare that it has shown compliance with the specific airworthiness specifications and environmental protection requirements designated in accordance with 21A.187.
- (c) The declaration of subparagraph (b) shall be made according to the provisions of Subpart J or of the alternative procedures to design organisation approval.

21A.191 Restricted certificate of airworthiness based on specific airworthiness specifications - Design approval of the aircraft

The applicant shall be entitled to have a design approval of the aircraft issued by the Agency after:

- (a) submitting the declaration referred to in 21A.189(b); and
- (b) it is shown that:
 - 1. the aircraft to be approved meets the specific airworthiness specifications and environmental protection requirements designated in accordance with 21A.187;
 - 2. no feature or characteristic makes it unsafe for the uses for which approval is requested; and
 - 3. the engine or propeller, or both, if installed in the aircraft:
 - (i) have a type-certificate issued or determined in accordance with this Regulation; or
 - (ii) have been shown to comply with specific airworthiness specifications ensuring adequate safety.

21A.192 Restricted certificate of airworthiness based on specific airworthiness specifications – Obligations of the holder of the design approval

- (a) The holder of a design approval of an aircraft shall report to the Agency any failure, malfunction, defect or other occurrence of which it is aware related to the aircraft covered by the design approval, and which has resulted in or may result in an unsafe condition. These reports shall be made in a form and manner established by the Agency, as soon as practicable and in any case dispatched not later than 72 hours after the identification of the possible unsafe condition, unless exceptional circumstances prevent this.
- (b) When an occurrence reported under paragraph (a) results from a deficiency in the design, the holder of the design approval shall investigate the reason for the deficiency and report to the Agency the results of its investigation and any action it is taking or proposes to take to correct that deficiency. If the Agency finds that an action is required to correct the deficiency, the holder of design approval, shall submit the relevant data for approval to the Agency.
- (c) The holder of a design approval of an aircraft shall:
 - 1. Retain as appropriate all relevant design information, drawings and test reports, in order to provide the information necessary to ensure the continued airworthiness and compliance with applicable environmental protection requirements of the aircraft.
 - 2. Produce, maintain or update as appropriate all necessary manuals, and provide copies, on request, to the Agency.
 - 3. Produce, maintain or update as appropriate instructions for continued airworthiness.

21A.18493 Issue of restricted certificates of airworthiness

- (a) The competent authority of the Member State of registry shall issue a restricted certificate of airworthiness for:
 - 1. new aircraft, upon presentation of the documentation required by 21A.174(b)(2) demonstrating that the aircraft conforms to a design approved by the Agency under a restricted type-certificate, under a type certificate supplemented by a restricted supplemental type-certificate or in accordance with specific airworthiness specifications, and is in condition for safe operation.
 - 2. used aircraft:
 - (i) upon presentation of the documentation required by 21A.174(b)(3) demonstrating that:
 - (A) the aircraft conforms to a design approved by the Agency under a restricted type-certificate, under a type certificate supplemented by a restricted supplemental type-certificate or in accordance with specific airworthiness specifications; and

- (B) the applicable airworthiness directives have been complied with; and
- (C) the aircraft has been inspected in accordance with the appropriate provisions of Part M; and
- (ii) when the competent authority of the Member State of registry is satisfied that the aircraft conforms to the approved design and is in condition for safe operation. This may include inspections by the competent authority of the Member State of registry.
- (b) For an aircraft that cannot comply with the essential requirements referred to in the Basic Regulation and which is not eligible for a restricted type-certificate, the Agency shall, as necessary to take account of deviations from these essential requirements:
 - 1. issue and check compliance with specific certification specifications ensuring adequate safety with regard to the intended use, and
 - 2. specify limitations for use of this aircraft.
- (b) The competent authority of the Member State of registry shall issue a restricted certificate of airworthiness for a used aircraft for which the certificate of airworthiness has become invalid due to the embodiment of a restricted supplemental type certificate,
 - 1. upon presentation of the documentation required by 21A.174(c) demonstrating that:
 - (i) the aircraft conforms to a design approved by the Agency under a type certificate supplemented by a restricted supplemental type-certificate; and
 - (ii) the applicable airworthiness directives have been complied with; and
 - (iii) the aircraft has been inspected in accordance with the appropriate provisions of Part-M; and
 - 2. when the competent authority of the Member State of registry is satisfied that the aircraft conforms to the approved design and is in condition for safe operation. This may include inspections by the competent authority of the Member State of registry.
- (c) The restricted certificate of airworthiness shall specify the limitations for use defined in accordance with 21A.41, 21A.113B(e) or 21A.191(c). will be associated with restricted certificates of airworthiness, including airspace restrictions as necessary to take account of deviations from essential requirements for airworthiness laid down in the Basic Regulation.

21A.194A Restricted certificate of airworthiness based on specific airworthiness specifications - Issue of design approval and restricted certificate of airworthiness in case of revocation or surrender of the type certificate

By derogation from 21A.174, 21A.185, 21A.187, 21A.189, 21A.191 and 21A.193:

- (a) For aircraft for which the (restricted) type certificate is surrendered or revoked for a reason not related to the safety of the design, the person under whose name the aircraft is registered may apply for a design approval of that aircraft.
- (b) The applicant for a design approval shall demonstrate its capability by holding a design organisation approval, issued by the Agency in accordance with Subpart J. As an alternative procedure to demonstrate its capability the applicant may seek Agency agreement for the use of procedures setting out the specific activities necessary to comply with paragraphs 21A.192, 21A.196 and 21A.197.
- (c) When the Agency is satisfied that the applicant complies with subparagraph (b) it shall issue the design approval for the aircraft which shall be the (restricted) type certificate before it was revoked or surrendered plus the then applicable airworthiness directives, unless the Agency determines that such design approval does not ensure adequate safety. The original type certification basis is considered to be the specific airworthiness specifications under which the design is approved.

- (d) Pursuant to 21A.172, an application for a restricted certificate of airworthiness shall be made to the competent authority of the Member State of registry in a form and manner established by that authority.
- (e) The competent authority of the Member State of registry shall issue a restricted certificate of airworthiness upon presentation of the previously valid certificate of airworthiness, unless the competent authority has determined that the aircraft does not conform to the design approval as established under subparagraph (c) or is not in a condition for safe operation.

21A.194B Restricted certificate of airworthiness based on specific airworthiness specifications - Issue of restricted certificate of airworthiness resulting from revocation of the type certificate

By derogation from 21A.174, 21A.185, 21A.187, 21A.189, 21A.191, 21A.193 and 21A.194A:

- (a) For aircraft identified in 21A.14(b) for which the (restricted) type certificate is revoked due to the absence of a type certificate holder, a design approval of the aircraft shall be deemed to have been issued to the owner of the aircraft. The design approval shall consist of the (restricted) type certificate before it was revoked plus the then applicable airworthiness directives, unless the Agency determines that such design approval does not ensure adequate safety. The specific airworthiness specifications under which the design is deemed to be approved are considered to be the original type certification basis.
- (b) Pursuant to 21A.172, an application for a restricted certificate of airworthiness shall be made to the competent authority of the Member State of registry in a form and manner established by that authority.
- (c) The competent authority of the Member State of registry shall issue a restricted certificate of airworthiness upon presentation of the previously valid certificate of airworthiness, unless the competent authority has determined that the aircraft does not conform to the design approval as established under subparagraph (a) or is not in a condition for safe operation.

21A.195 Restricted certificate of airworthiness based on specific airworthiness specifications -Design approval of the aircraft contents and validity

- (a) The design approval of the aircraft is considered to include:
 - the design data;
 - 2. the operating limitations;
 - 3. an approval data sheet for airworthiness, noise and emissions. When the engine has no type-certificate, the data sheet also includes the record of emission compliance. The data sheet shall list any non-compliance with Annex 8 to the Chicago Convention;
 - 4. as applicable, the specific airworthiness specifications and environmental protection requirements with which the Agency records compliance;
 - 5. any other conditions or limitations prescribed for the aircraft and, as applicable, the engine and propeller, in the specific airworthiness specifications and environmental protection requirements; and
 - 6. any additional limitations for use associated with the restricted certificate of airworthiness.
- (b) A design approval of the aircraft shall be issued for an unlimited duration. It shall remain valid subject to it not being surrendered or revoked under the applicable administrative procedures established by the Agency.
- (c) Upon surrender or revocation, the attestation of the design approval of the aircraft shall be returned to the Agency.

21A.196 Restricted certificate of airworthiness based on specific airworthiness specifications - Approval of changes to aircraft design

- (a) Changes to the design of an aircraft which has been issued a restricted certificate of airworthiness based on specific airworthiness specifications shall be classified as minor and major in accordance with 21A.91.
- (b) Major changes shall be approved by the Agency in accordance with 21A.191.
- (c) Minor changes shall be approved by the Agency or an appropriately approved design organisation in accordance with 21A.191.

21A.197 Restricted certificate of airworthiness based on specific airworthiness specifications - Approval of repair design

- (a) Repair designs for an aircraft which has been issued a restricted certificate of airworthiness based on specific airworthiness specifications shall be classified as minor and major in accordance with 21A.435(a).
- (b) Major repair designs shall be approved by the Agency in accordance with 21A.191.
- (c) Minor repair designs shall be approved by the Agency or an appropriately approved design organisation in accordance with 21A.191.

SUBPART I - NOISE CERTIFICATES

21A.211 Duration and continued validity

- (a) A noise certificate shall be issued for an unlimited duration. It shall remain valid subject to:
 - $1. \quad \text{compliance with the applicable approved design} \quad \frac{\text{type-design}}{\text{design}}, \quad \text{environmental protection and continuing airworthiness requirements; and}$

.....

Section B

SUBPART A - GENERAL PROVISIONS

21B.325 Issue of airworthiness certificates

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(c) In addition to a restricted certificate of airworthiness for a used aircraft for which the certificate of airworthiness has become invalid, the competent authority of the Member State of registry shall issue a new airworthiness review certificate (EASA Form 15a, see Appendix).

II Draft Decision AMC and GM to Part-21

GM 21A.12 Justification for restricted type-certificate

In considering an application for a restricted type-certificate, a type-certificate is deemed inappropriate when the Agency agrees that the aircraft is designed intentionally for use under defined conditions that will justify permanent deviations from the essential requirements of Annex I to the Basic Regulation.

GM 21A.44(a) Demonstration of capability

A type-certificate holder required to have a design organisation approval issued in accordance with Subpart J to obtain a type-certificate, in accordance with 21A.14, may convert its DOA into alternative procedures if the nature of remaining activities justifies it. Such justifications could be for example continued airworthiness activities only, without design change activity.

GM 21A.173(b)(3) Restricted Certificate of Airworthiness based on specific airworthiness specifications

This category of R-CoA is intended for individual aircraft that for various reasons cannot comply with the applicable airworthiness requirements but for which adequate safety can nevertheless be ensured through restrictions, limitations and other mitigating measures; for example aircraft without active TC holder ('orphan' aircraft).

It can also be used for a special purpose aircraft as intended in 21A.12 when only one or a very limited number of aircraft of the same design will be produced.

This category of R-CoA can also be used for aircraft that were built as prototypes of a new design, but the design of which differs so much from the finally approved design that it is not possible to make them conforming to that approved design (see also GM 21A.185)

GM 21A.174(c) Aircraft modified by a Restricted Supplemental Type Certificate

The term "aircraft for which the certificate of airworthiness (CoA) has become invalid" is used to refer to the case where an aircraft that already had a normal CoA is modified for a special purpose by implementing an R-STC. As a result of 21A.181(a)(5) the CoA will then become invalid.

GM 21A.181 Validity of Certificate of Airworthiness and Restricted Certificate of Airworthiness

An aircraft can have both a Certificate of Airworthiness (CoA) and a Restricted Certificate of Airworthiness (R-CoA) at the same time, but never to be used simultaneously. The CoA becomes invalid as soon as the aircraft is used or modified for the purpose for which the Restricted Type Certificate (R-TC) or the Restricted Supplemental Type Certificate (R-STC) was issued and becomes valid again if the use/configuration is within the Type Certificate (TC). If an aircraft has this possibility for "dual use" a supplement to the flight manual should make clear in exactly which configuration or for which purpose(s) the CoA is not valid and consequently the R-CoA and associated conditions/limitations are applicable.

GM 21A.185(a) Design approval of an aircraft based on specific airworthiness specifications

A design approval based on specific airworthiness specifications is intended for exceptional cases when an aircraft cannot comply with all essential requirements and when it concerns one

or few aircraft of the same design. It is not intended to be an alternative approval route for manufacturers of series aircraft in stead of a type-certificate or restricted type certificate.

In addition, a design approval based on SAS can be applied for in case of a development aircraft or an aircraft that was used for showing of compliance which cannot conform to the EASA type certificate.

Paragraphs 21A.185, 21A.187, 21A.189, 21A.191, 21A.193, 21A.195, 21A.196 and 21A.197 are applicable to the issuance of design approvals for aircraft based on specific airworthiness specifications and changes thereto, its holders and the related restricted certificates of airworthiness.

The special case of aircraft for which the (R-)TC was surrendered or revoked is covered by paragraphs 21A.194A and 21A.194B.

GM 21A.194A and 21A.194B Design approval of an aircraft based on specific airworthiness specifications -Aircraft for which the TC was revoked or surrendered

A design approval based on specific airworthiness specifications can also be established by the Agency or by law in the special case that an aircraft is of a type for which the TC was surrendered or revoked for a reason other than safety of the design.

21A.194A covers all cases and requires an application from a person or organisation who has demonstrated design capability. However, since the design of the aircraft was already approved before there is no need to show compliance of the design with the applicable specifications. The Agency will issue the design approval as soon as the applicant has demonstrated its capability.

21A.194B is for the specific case where the aircraft is of simple design and the TC is revoked due to the absence of a TC holder (orphan aircraft). The design approval is automatically created by law and does not require an application. The aircraft owner shall nevertheless apply for an R-CoA to replace the normal CoA.

GM 21A.196 Restricted certificate of airworthiness based on specific airworthiness specifications - Approval of changes to aircraft design

Only the change to the design must be approved. This includes the physical change itself and affected areas of the unchanged part of the design. For a definition of affected areas refer to GM 21A.101.

GM 21A.197 Restricted certificate of airworthiness based on specific airworthiness specifications - Approval of repair design

Only the change to the design introduced by the repair design must be approved. This includes the physical change itself and affected areas of the unchanged part of the design. For a definition of affected areas refer to GM 21A.101.

GM 21B.330 Suspension and revocation of airworthiness certificates

If a Certificate of Airworthiness is revoked in accordance with subparagraph (a) in the cases covered by 21A.194A(a) or 21A.194B(a), the competent authority of the Member State of registry should inform the registered owners of the affected aircraft of the possibility to apply for a design approval or a restricted certificate of airworthiness as appropriate.

Appendix B - Attachments

LAA-NPA-2008-06response.pdf
Attachment #1 to comment #58

LAA-NPA-2008-06response.pdf
Attachment #2 to comment #60